APPENDIX A

Initial Study, Notice of Preparation (NOP), NOP Comments, Scoping Meeting Materials, and Scoping Meeting Comments

Agencies and Interested Parties

ATA
7337 West Washington St.
Indianapolis, IN 92631-1300

Alliance for a Regional Solution to Airport Congestion
Attn:Denny Schneider, President
7929 Breen Avenue
Los Angeles, CA 90045

Bauchalter Namer
Attn:Barbara Lichman, Counsel for Cityof Ingelwood, Culver City and County of LA
18400 Von Karman Ave, Suite 800
Irvine, CA 92612

BOAC Office
Attn:Sandy Miller, Executive Assistant II
1 World Way, 1st Floor
Los Angeles, CA 90045

Cal Trans - District 7
Attn:IGR/CEQA Program Manager
100 S. Main Street
Transportation Planning Office, 1-1-C
Los Angeles, CA 90012

Cal Trans - Division of Aeronautics
1120 N. Street, Room 3300
Sacramento, CA 94274

Chatten-Brown & Carstens
Doug Carstens, Counsel for ARSAC
2200 Pacific Coast Hwy, Suite 90254
Hermosa Beach, CA 90254

City of Culver City
Attn:Carol Schwab, City Attorney
9770 Culver Boulevard 3rd Floor
Culver City, CA 90232

City of Culver City
Attn:David McCarthy, Deputy City Attorney
9770 Culver Boulevard
3rd Floor
Culver City, CA 90232

City of Culver City
Attn:City Manager
9770 Culver Blvd.
Culver City, CA 90232

City of El Segundo
Attn:Carl Jacobson, Mayor
350 Main Street
El Segundo, CA 90245

City of El Segundo
Attn:Greg Carpenter, City Manager
350 Main Street
El Segundo, CA 90245

City of Inglewood
Attn:Mayor
One Manchester Boulevard, 9th Floor
Inglewood, CA 90312

City of Inglewood
Attn:Cal Saunders, City Attorney
One Manchester Boulevard
Inglewood, CA 90312

City of Los Angeles, Bureau of Engineering
Environmental Group
1149 S. Broadway, 6th Floor, Suite 600
Los Angeles, CA 90015-2213

City of Los Angeles
Department of Building and Safety
Attn:General Manager
201 N. Figueroa Street
Los Angeles, CA 90012

Initial Study Distribution List

City of Los Angeles
Los Angeles World Airports
Attn:Gina-Marie Linsey, Executive Director
1 World Way, 2nd Floor
Los Angeles, CA 90045

City of Los Angeles
Los Angeles World Airports
Attn:Suzanne Tracy, City Attorney
1 World Way, 1st Floor
Los Angeles, CA 90045

City of Los Angeles, Mayors Office
Attn:Jim Bickhart, Associate Director, Transportation
200 N. Spring Street, Room 303
Los Angeles, CA 90012

City of Los Angeles, Council District 11
Attn:Mike Bonin, Chief of Staff
200 N. Spring Street, Room 415
Los Angeles, CA 90012

City of Los Angeles, Fire Department
Attn:Construction Services Unit
200 N. Main Street
Los Angeles, CA 90012

City of Los Angeles Planning Department
Attn:Michael LoGrande, Planning Director
200 N. Spring Street, 5th Floor
Los Angeles, CA 90012

Council District 11 - Field Office
Attn:Chad Molnar, Community Liaison
7166 W. Manchester Ave.
Los Angeles, CA 90045

County of Los Angeles
Attn:William Fujioka, CEO
648 Kenneth Hahn Hall of Administration
500 West Temple Street.
Los Angeles, CA 90012-2713

County of Los Angeles
Attn:John Sanabria, Director of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

County of Los Angeles Department of Regional Planning
Attn:Impact Analysis Section
320 W. Temple St., Room 1348
Los Angeles, CA 90012

County of Los Angeles
Attn:John F. Kraptli, Principal Deputy County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Los Angeles
Attn:Lawerence Hefetz, Assistant County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Los Angeles
Attn:Elaine Lemke, County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Orange
Attn:County Executive Officer
333 W. Santa Ana Blvd.
Santa Ana, CA 92701

County of San Bernardino
Attn:Christine Kelly, Director of Land Use Services
385 N. Arrowhead Ave., 1st Floor
San Bernardino, CA 92415

County of Ventura
Attn:Michael Powers, Executive Officer
800 S. Victoria Ave.
Ventura, CA 93009

Initial Study Distribution List

County Supervisor - 1st District
Attn:Hon. Supervisor
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 856
Los Angeles, CA 90012

County Supervisor - 2nd District
Attn:Hon. Supervisor
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 866
Los Angeles, CA 90012

County Supervisor - 3rd District
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822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 821
Los Angeles, CA 90012

County Supervisor - 4th District
Attn:Hon. Supervisor
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Los Angeles, CA 80012

County Supervisor - 4th District, Torrance District Office
Attn:Steve Napolitano
825 Maple Ave.
Torrance, CA 90503

County Supervisor - 5th District
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Los Angeles, CA 90012

Department of Public Works, Bureaus of Sanitation - Solid Waste Division
Attn:Environmental Supervisor
1149 South Broadway, 10th Floor
Los Angeles, CA 90015

Department of Water & Power
Attn:Supervisor of Environmental Assessment
111 N. Hope Street, Room 1044
Los Angeles, CA 90012

Federal Aviation Administration
Attn:Ruben Cabalbag
15000 Aviation Blvd., Suite 3024
Lawndale, CA 90261

Gateway to LA Airport Business District
Attn:Laurie Hughes, Executive Director
6151 W. Century Blvd., Suite 121
Los Angeles, CA 90045

Los Angeles County
Department of Public Works
Attn:Land Development Division
P.O. Box 1460
Alhambra, CA 91802-1460

Los Angeles Department of Transportation
Attn:Jay Kim, Principal Transportaiton Engineer
100 S. Main Street, 9th Floor
Los Angeles, CA 90012

Los Angeles County Department of Beaches and Harbors
Planning Division
13483 Fiji Way, TR. #3
Marina Del Rey, CA 90292

Los Angeles County Department of Public Works
Planning Division
900 S. Fremont Ave., 11th Floor
Alhambra, CA 91803

Los Angeles Department of Transportation
West Los Angeles Development Review
7166 W. Manchester Ave., 10th Floor
Los Angeles, CA 90045

Los Angeles Fire Department
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200 N. Main Street, Room 1800
Los Angeles, CA 90012

MTA
Metro CEQA Review Coordination
One Gateway Plaza
Los Angeles, CA 90012

Neighborhood Council of Westchester/Playa
8726 S. Sepulveda Blvd., PMB 191A
Los Angeles, CA 90045

SCAG
Inter-Governmental Review
818 W. 7th Street, 12th Floor
Los Angeles, CA 90017

SCAQMD
Attn:Steve Smith,
21865 Copley Drive
Diamond Bar, CA 91765

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Attn:E. Clement Shute, Counsel
396 Hayes Street
San Francisco, CA 94102

Shute, Mihaly & Weinberger LLP
Attn:Osa Wolff, Counsel
396 Hayes Street
San Francisco, CA 94102

Shute, Mihaly & Weinberger LLP
Attn:Gabriel Ross, Counsel
396 Hayes Street
San Francisco, CA 94102

Stakeholder Liaison Office
Attn:Brenda Martinez-Sidhom, LAX Stakeholder Liaison
1 World Way, Suite 219
Los Angeles, CA 90045

State Clearinghouse
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

Westchester Town Center Business Improvement District
Attn:Karen Dial, President
8929 S. Sepulveda Blvd., Suite 130
Westchester, CA 90045

Libraries

Dr. Mary McLeod Bethune Regional Branch Library
Attn:Senior Librarian
3900 S. Western Avenue
Los Angeles, CA 90062

Hawthorne Library
Attn:Senior Librarian
12700 Grevillea Avenue
Hawthorne, CA 90250

Culver City Library
Attn:Senior Librarian
4975 Overland Avenue
Culver City, CA 90230

Inglewood Library
Attn:Senior Librarian
101 W. Manchester Boulevard
Inglewood, CA 90301

El Segundo Library
Attn:Senior Librarian
111 W. Mariposa Avenue
El Segundo, CA 90245

Westchester-Loyola Village Branch Library
Attn:Senior Librarian
7114 W. Manchester Ave.
Los Angeles, CA 90045

September 14, 2012

NOTICE OF PREPARATION AND NOTICE OF PUBLIC SCOPING MEETING FOR AN ENVIRONMENTAL IMPACT REPORT

PROJECT NAME: Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project (proposed Project")
PROJECT LOCATION/ADDRESS: On the LAX property, in the southwestern portion of the airfield area. The Project site is generally bounded by World Way West to the north, an LAX employee parking lot to the south, Taxiway AA to the east, and Pershing Drive to the west.
COMMUNITY PLANNING AREA: LAX Plan
COUNCIL DISTRICT: 11- Rosendahl
DUE DATE FOR PUBLIC COMMENTS: October 15, 2012

Los Angeles World Airports (LAWA), a proprietary department of the City of Los Angeles, will be the lead agency and will prepare a project-level Environmental Impact Report (EIR) for the project identified above (proposed Project). LAWA requests your comments as to the scope and content of the EIR. The purpose of the scoping meeting, as further described below, is also focused on receiving input from the public as to what areas the EIR should study.

The Project description, requested permits and approvals, and the potentially significant environmental effects of the proposed Project are set forth below. Also included below is the date, time and location of the scoping meeting that will be held in order to solicit input regarding the content of the Draft EIR. The scoping meeting will be in an open house format. A copy of the Initial Study prepared for the proposed Project is available for review at the LAX website at: http://www.ourlax.org and at the locations listed below:

Westchester-Loyola
Village Branch Library
7114 W. Manchester Ave.
Los Angeles, CA 90045

Dr. Mary McLeod Bethune
Regional Branch Library
3900 S. Western Avenue
Los Angeles, CA 90062

Culver City Library
4975 Overland Avenue
Culver City, CA 90230

El Segundo Library
111 W. Mariposa Avenue
El Segundo, CA 90245

Hawthorne Library
12700 Grevillea Avenue
Hawthorne, CA 90250

Inglewood Library
101 W. Manchester Boulevard
Inglewood, CA 90301

PROJECT DESCRIPTION: The intent of the proposed West Aircraft Maintenance Area Project ("proposed Project") is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport (LAX) property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas, and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in

size to and including Boeing 737's). Specifically, the proposed Project would include: (1) approximately 50 acres of aircraft apron for ADG VI aircraft as well as smaller airline aircraft that may require Remain Over Night (RON) and Remain All-Day (RAD) parking, or those aircraft being serviced at the current aircraft maintenance hangars; (2) a ground run-up enclosure (GRE) that would provide a three-sided unroofed facility for ground run-up testing of aircraft engines required for jet engine maintenance testing and analysis, with the ingress/egress facing the prevailing winds of the site; (3) aircraft maintenance hangar(s), capable of accommodating a wide range of existing aircraft up to and including existing ADG VI aircraft, as well as a maintenance shop and supporting office space within the hangar; (4) approximately 300 employee parking spaces; (5) ancillary facilities (e.g., ground service equipment (GSE) storage and maintenance areas/facilities, aircraft wash racks, RON kits providing ground power, potable water, and pre-conditioned air, necessary utilities and infrastructure and possibly water storage tank(s) for fire protection); (6) a storm drainage filter and/or infiltration basin and connections to existing adjacent utility lines and storm drains; (7) a concrete batch plant would be installed on the site for construction of the proposed Project with removal planned after the final phase of construction (concrete batch plants are permitted on and have been operating on the site in recent years); and, (8) extension of Taxiway B westward to the western limits of the site (designated on-site as Taxilane AA1) to provide primary egress from the Project area, with access to the site via Taxiway AA from a point approximately 830 feet north of Taxiway C (designated on-site as Taxilane AA2). It should be noted that the proposed Project would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX compared to the existing airfield conditions.

In addition, as part of the proposed Project, existing contractor staging yards and associated equipment on the Project site would be relocated to existing LAX staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard. Stockpiled materials (consisting of uncharacterized soil and construction rubble) currently existing within and immediately adjacent to the Project site, would be re-used on-site as backfill material and/or exported off-site to permitted landfills.

It is anticipated that the proposed Project would be completed in approximately eight to ten years.

REQUESTED PERMITS/APPROVALS: LAWA has principal responsibility for approving and carrying out the proposed Project. Approvals required for implementation of the proposed Project may include, but are not limited to, the following: U.S. Department of Transportation Federal Aviation Administration (FAA) approval of an FAA Notice of Construction or Alteration; Consultation with the U.S. Fish and Wildlife Service; South Coast Air Quality Management District (SCAQMD) review; Consultation with the California Department of Fish and Game; Permits or approvals from the SWRCB and/or RWQCB which may include a General Construction Storm Water Permit, Standard Urban Stormwater Mitigation Plan, and submittal of a Recycled Water Report; LAWA LAX Specific Plan Compliance Review; Certification of the Project Final EIR and associated Mitigation Monitoring and Reporting Program; Los Angeles Bureau of Sanitation approval of a Project-Specific Storm Water Management Plan or Standard Urban Storm Water Mitigation Plan; Los Angeles Fire Department approval; Los Angeles Bureau of Engineering (BOE) "B" Permit, sewer and storm drain permits; Los Angeles Department of Building and Safety grading and building permits; Los Angeles Department of Public Works permits for infrastructure improvements; and other Federal, State, or local approvals, permits, or actions that may be deemed necessary for the proposed Project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Transportation/Circulation, and Mandatory Findings of Significance are proposed to be addressed in the EIR. Impacts to Aesthetics, Agricultural and Forest Resources, Biological Resources, Cultural

Resources, Geology/Soils, Mineral Resources, Population/Housing, Public Services, Recreation, and Utilities/Service Systems have been found to be less than significant through the analysis provided in the Initial Study and are not proposed for further analysis in the EIR.

PUBLIC SCOPING MEETING DATE AND LOCATION: A public Scoping Meeting in an open house format will be held to receive public comment regarding the scope and content of the environmental information to be included in the EIR. LAWA encourages all interested individuals and organizations to attend the meeting. The location, date, and time of the Scoping Meeting for this proposed Project is as follows:

Date and Time:	October 4, 2012, 6:00 pm - 8:00 pm Arrive any time to speak one-on-one with LAWA staff and Project consultants.
Location:	Flight Path Learning Center 6661 West Imperial Highway Los Angeles CA 90009

LAWA welcomes all comments regarding the content and scope of environmental issues to be addressed in the EIR. **All comments will be considered in the preparation of the EIR. Written comments must be submitted to this office by October 15, 2012.** Written comments will also be accepted at the Scoping Meeting described above.

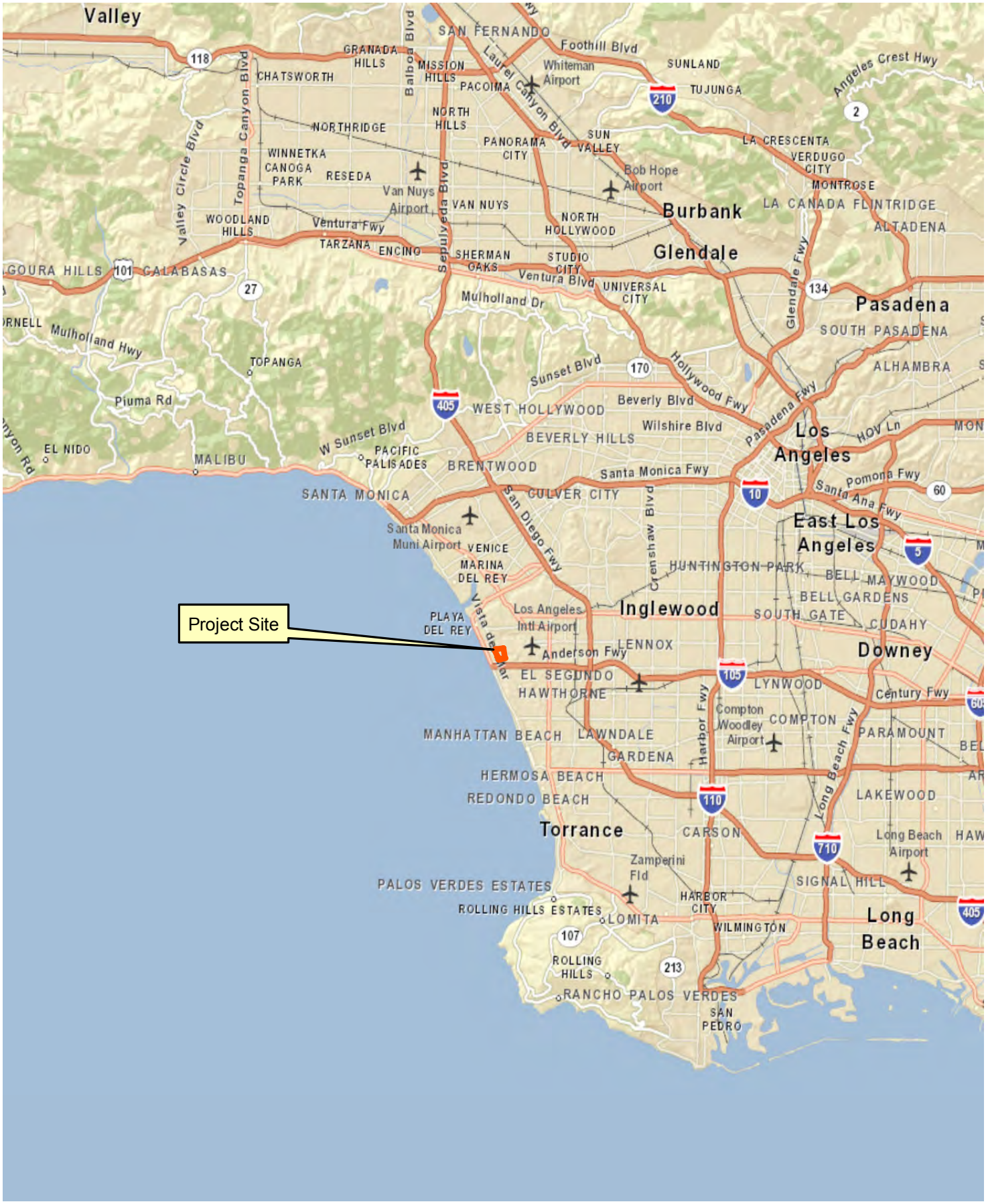
Please direct your comments to:
Herb Glasgow, Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045
Phone: (424) 646-5180
Email:hglasgow@lawa.org

Herbert Glasgow

HERB GLASGOW
Chief of Airport Planning I

Enclosures:

Figure 1: Regional Map
Figure 2: Aerial Photograph
Figure 3: Project Layout
Figure 4: Scoping Meeting Location Map



N

0 5 Miles

Notice of Preparation

Regional Map

West Aircraft Maintenance Area Project

Source: ESRI Street Map, 2009; PCR Services Corporation, 2012.

FIGURE

1

N

0 350 Feet

Notice of Preparation

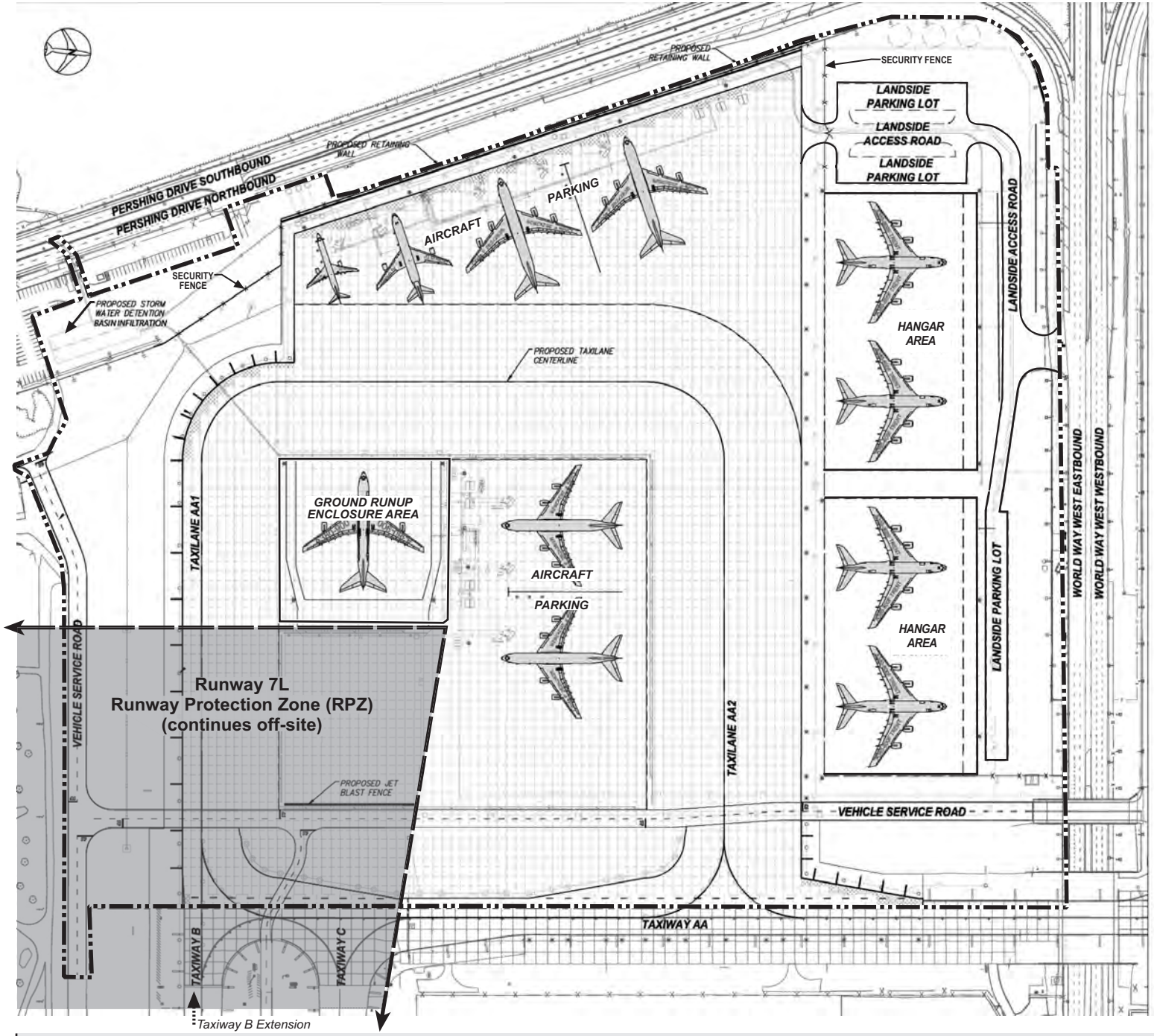
Aerial Photograph

West Aircraft Maintenance Area Project

Source: Google Earth, 2011; PCR Services Corporation, 2012.

FIGURE

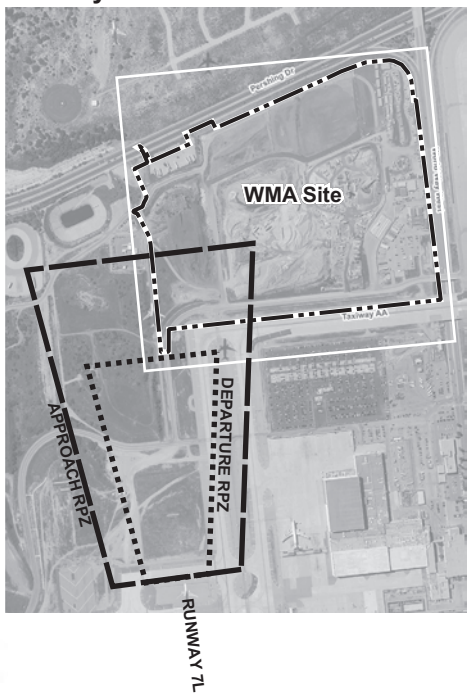
2



Legend

- Project Limits
- Portion of Runway 7L Approach RPZ
  - Building Restrictions
  - Aircraft Parking Restrictions

Runway 7L RPZ Detail



0 300 Feet

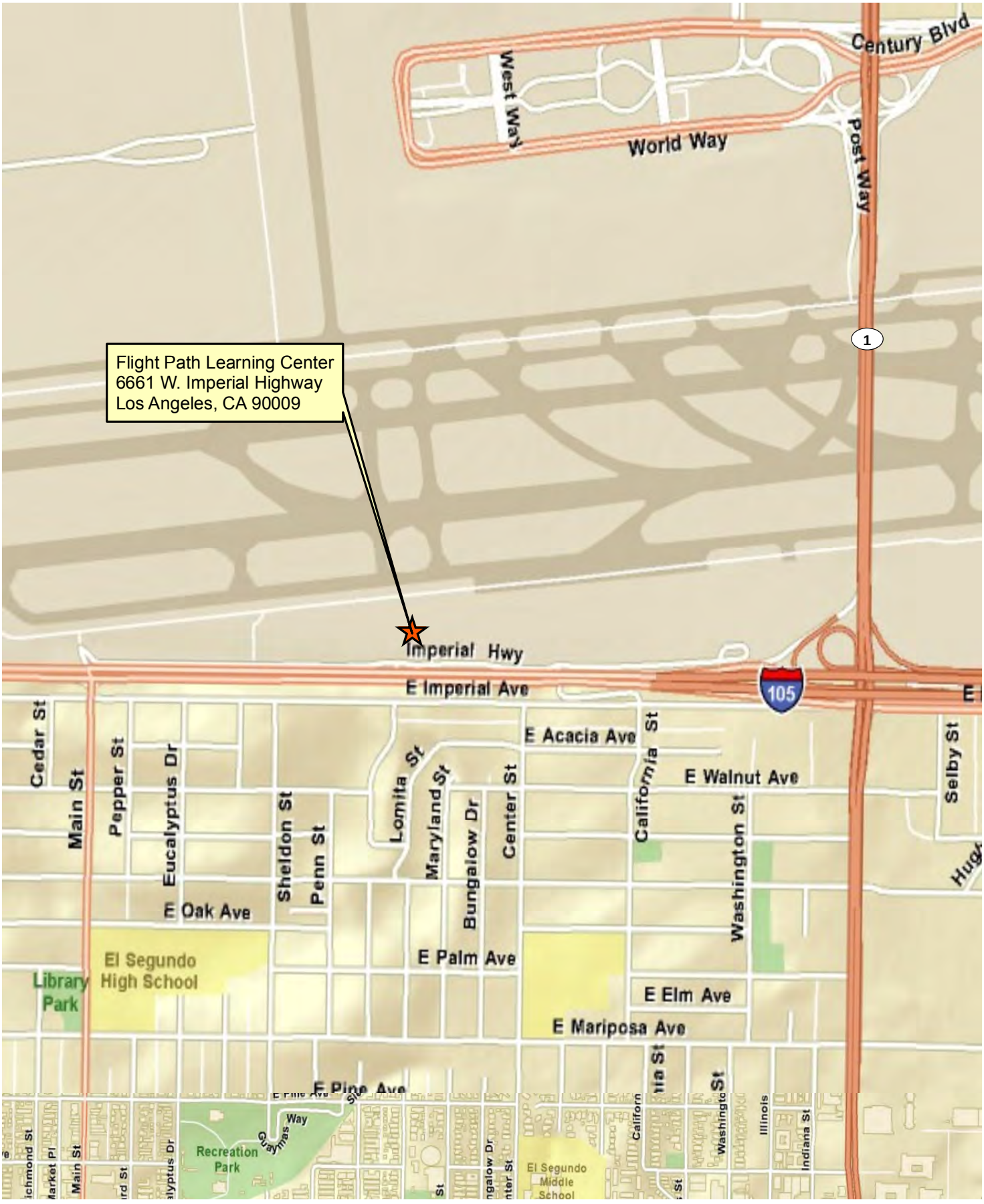
Conceptual Site Plan

FIGURE 3

Notice of Preparation

West Aircraft Maintenance Area Project

Source: LAWA and Atkins, 2012.



0 1,000 Feet

Notice of Preparation

Scoping Meeting Location
Flight Path Learning Center

West Aircraft Maintenance Area Project

Source: ESRI Street Map, 2009; PCR Services Corporation, 2012.

FIGURE
4

1. INITIAL STUDY CHECKLIST

LEAD CITY AGENCY	COUNCIL DISTRICT	DATE
Los Angeles World Airports (LAWA)	Council District 11	September 14, 2012

RESPONSIBLE AGENCIES

U.S. Department of Transportation Federal Aviation Administration (FAA);U.S. Fish and Wildlife Service; South Coast Air Quality Management District (SCAQMD); California Department of Fish and Game; SWRCB and/or RWQCB; Los Angeles Bureau of Sanitation; Los Angeles Fire Department; Los Angeles Bureau of Engineering; Los Angeles Department of Building and Safety; Los Angeles Department of Public Works and other agencies as applicable.

PROJECT TITLE/NO.	CASE NO. 12-002-AD
LAX West Aircraft Maintenance Area Project	

PREVIOUS ACTIONS CASE NO.	
Los Angeles International Airport Master Plan Case No. CF-00-1774-S4 and CPC 2003-4647 GPA/ZC/CA/MPR LAX Master Plan EIR/EIS (SCH#1997061047)	☐ **DOES have significant changes from previous actions.** ☒ **DOES NOT have significant changes from previous actions.**

PROJECT DESCRIPTION:

The intent of the proposed West Aircraft Maintenance Area Project ("proposed Project") is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport (LAX) property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas, and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's). Specifically, the proposed Project would include: (1) approximately 50 acres of aircraft apron for ADG VI aircraft as well as smaller airline aircraft that may require Remain Over Night (RON) and Remain All-Day (RAD) parking, or those aircraft being serviced at the current aircraft maintenance hangars; (2) a ground run-up enclosure (GRE) that would provide a three-sided unroofed facility for ground run-up testing of aircraft engines required for jet engine maintenance testing and analysis, with the ingress/egress facing the prevailing winds of the site; (3) aircraft maintenance hangar(s), capable of accommodating a wide range of existing aircraft up to and including existing ADG VI aircraft, as well as a maintenance shop and supporting office space within the hangar; (4) approximately 300 employee parking spaces; (5) ancillary facilities (e.g., ground service equipment (GSE) storage and maintenance areas/facilities, aircraft wash racks, RON kits providing ground power, potable water, and pre-conditioned air, necessary utilities and infrastructure and possibly water storage tank(s) for fire protection); (6) a storm drainage filter and/or infiltration basin and connections to existing adjacent utility lines and storm drains; (7) a concrete batch plant would be installed on the site for construction of the proposed Project with removal planned after the final phase of construction (concrete batch plants are permitted on and have been operating on the site in recent years); and, (8) extension of Taxiway B westward to the western limits of the site (designated on-site as Taxilane AA1) to provide primary egress from the Project area, with access to the site via Taxiway AA from a point approximately 830 feet north of Taxiway C (designated on-site as Taxilane AA2). It should be noted that the proposed Project would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX compared to existing airfield conditions.

In addition, as part of the proposed Project, existing contractor staging yards and associated equipment on the Project site would be relocated to existing LAX staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard. Stockpiled materials (consisting of uncharacterized soil and construction rubble) currently existing within and immediately adjacent to the Project site, would be re-used on-site as backfill material and/or exported off-site to permitted landfills.

ENVIRONMENTAL SETTING:

The 75-acre Project site is located in the southwest portion of LAX, immediately south of World Way West between Taxiway AA and Pershing Drive. Existing adjacent uses include: World Way West, the West Remote Pads/Gates and aircraft aprons to the north; an airport employee parking lot and vacant airport property to the south; Taxiway AA, an American Airlines employee parking lot and the Continental Airlines maintenance hangars to the east; and Pershing Drive followed by the Los Angeles/El Segundo Dunes and El Segundo Blue Butterfly Habitat Restoration Area to the west. The site is currently used as a construction staging area for airport construction projects. Existing on-site uses include a rock crushing station, debris and soil stockpiles, modular construction trailers/offices and an associated surface parking lot, an airfield access security post, several paved roads, a small LAWA Police Department/Transportation Security Administration (LAWA Police Department/Transportation Security Administration) canine "walk" area, and several paved and unpaved outdoor storage areas.

PROJECT LOCATION

The Project site is located in the southwest portion of LAX, immediately south of World Way West, between Taxiway AA and Pershing Drive.

PLANNING DISTRICT		**STATUS:**
Los Angeles International Airport Plan (LAX Plan)		☐ **PRELIMINARY** ☐ **PROPOSED** _____ ☒ **ADOPTED** **December 14, 2004**
EXISTING ZONING	**MAX. DENSITY ZONING**	☒ **DOES CONFORM TO PLAN** Proposed use permitted under existing zoning.
LAX - A Zone: Airport Airside Subarea	N/A	
PLANNED LAND USE & ZONE	**MAX. DENSITY PLAN**	☐ **DOES NOT CONFORM TO PLAN**
Airport-aircraft parking and maintenance	N/A	
SURROUNDING LAND USES	**PROJECT DENSITY**	
North - Road (World Way West) East - Airfield (Taxiway AA) South – Parking lot, vacant West – Road (Pershing Drive)	N/A	

☞ **DETERMINATION (To be completed by Lead Agency)**

On the basis of this initial evaluation:

c) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe mitigation measures.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A sources list should be attached.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects.

9) The explanation of each issue should identify: (1) the significance criteria or threshold, if any, used to evaluate each question; and (2) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☒ Hazards & Hazardous Materials	☐ Public Services
☐ Agricultural Resources	☒ Hydrology/Water Quality	☐ Recreation
☒ Air Quality	☒ Land Use/Planning	☒ Transportation/Traffic
☐ Biological Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Cultural Resources	☒ Noise	☒ Mandatory Findings of Significance
☐ Geology/Soils	☐ Population/Housing	
☒ Greenhouse Gas Emissions		

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

☞ **BACKGROUND**

PROPONENT NAME	**PHONE NUMBER**
Los Angeles World Airports	424-646-5180
PROPONENT ADDRESS	
1 World Way, Room 218B, Los Angeles, CA 90045	
AGENCY REQUIRING CHECKLIST	**DATE SUBMITTED**
Los Angeles World Airports	September 14, 2012
PROPOSAL NAME (If Applicable)	
Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project	

☞ **ENVIRONMENTAL IMPACTS** (Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the South Coast Air Quality Management Plan?	☒	☐	☐	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment (ozone, carbon monoxide, PM10, and PM2.5) under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5?	☐	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
VI. GEOLOGY AND SOILS. Would the project:				
a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Los Angeles Building Code (2002), creating substantial risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	☒	☐	☐	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☒	☐	☐	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐
f. Otherwise substantially degrade water quality?	☒	☐	☐	☐
g. Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood plain structures which would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐
XI. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XII. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b. Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☒	☐
e. Other governmental services (including roads)?	☐	☐	☒	☐
XV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/CIRCULATION. Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or exceed wastewater conveyance capacity?	☐	☐	☒	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?	☐	☐	☒	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts which 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 projects, the effects of other current projects, and the effects of probable future projects).	☒	☐	☐	☐
c. Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

☞ **DISCUSSION OF THE ENVIRONMENTAL EVALUATION (Attach additional sheets if necessary)**

(See Section 3: Explanation of Initial Study Checklist Determinations)

2. PROJECT DESCRIPTION

2.1 INTRODUCTION

The Los Angeles World Airports (LAWA) proposes the Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project (referred to hereafter as the proposed Project).

The intent of the proposed Project is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). Routine aircraft maintenance and remain overnight (RON) and remain all day (RAD) aircraft parking are regular functions at a major airport such as LAX. Currently these functions occur in multiple areas of the airport on both the east and west side. At each of these areas routine aircraft maintenance is performed, including engine run-up testing, when required. In addition, the maintenance areas contain apron space for RON/RAD aircraft parking, which provides extended layover space for aircraft that cannot be accommodated at terminal area contact gates.

The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the airfield. The proposed Project includes aircraft parking apron areas, maintenance hangar(s), a ground run-up enclosure, employee parking areas, and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's). The proposed Project would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX compared to existing airfield conditions.

2.2 ENVIRONMENTAL SETTING

2.2.1 Project Location

LAX encompasses approximately 3,660 acres and is situated at the western edge of the City of Los Angeles, as shown in **Figure 1**, *Regional Map*. The 75-acre Project site is located within the southwest portion of LAX immediately south of World Way West between Taxiway AA and Pershing Drive. (**Figure 2**, *Aerial Photograph*). Existing adjacent uses include: World Way West, the West Remote Pads/Gates and aircraft aprons to the north; an airport employee parking lot and vacant airport property to the south; Taxiway AA, an American Airlines employee parking lot and the Continental Airlines maintenance hangars to the east; and Pershing Drive followed by the Los Angeles/El Segundo Dunes to the west. The Los Angeles/El Segundo Dunes is a former residential area that consists of open space/coastal dunes, with navigational aids, minor ancillary airport and utility improvements, abandoned residential streets, and the El Segundo Blue Butterfly Habitat Restoration Area. To the north of LAX is the community of Westchester (part of the City of Los Angeles), to the south is the City of El Segundo, to the east is the City of Inglewood, and to the west is the Pacific Ocean.

2.3 LAND USE AND ZONING DESIGNATION

The Project site is located entirely within the City of Los Angeles LAX Plan area, as well as the LAX Specific Plan area, and is designated in the LAX Plan as "Airport Airside." Permitted uses include, but are not limited to, runways,

taxiways, aircraft gates, maintenance areas, airfield operation areas, air cargo areas, passenger handling facilities, fire protection facilities, and other ancillary airport facilities. The LAX Specific Plan establishes the zoning and development regulations and standards consistent with the LAX Plan for the airport. Existing zoning within the LAX Specific Plan is Airport Airside (LAX-A Zone). Permitted uses in LAX-A Zone include, but are not limited to: surface and structured parking lots; aircraft under power; airline maintenance and support; air cargo facilities; commercial passenger vehicle staging and holding area; helicopter operations; navigational aids; runways, taxiways, aircraft parking aprons, and service roads; passenger handling facilities; run-up enclosures; and other ancillary airport facilities.

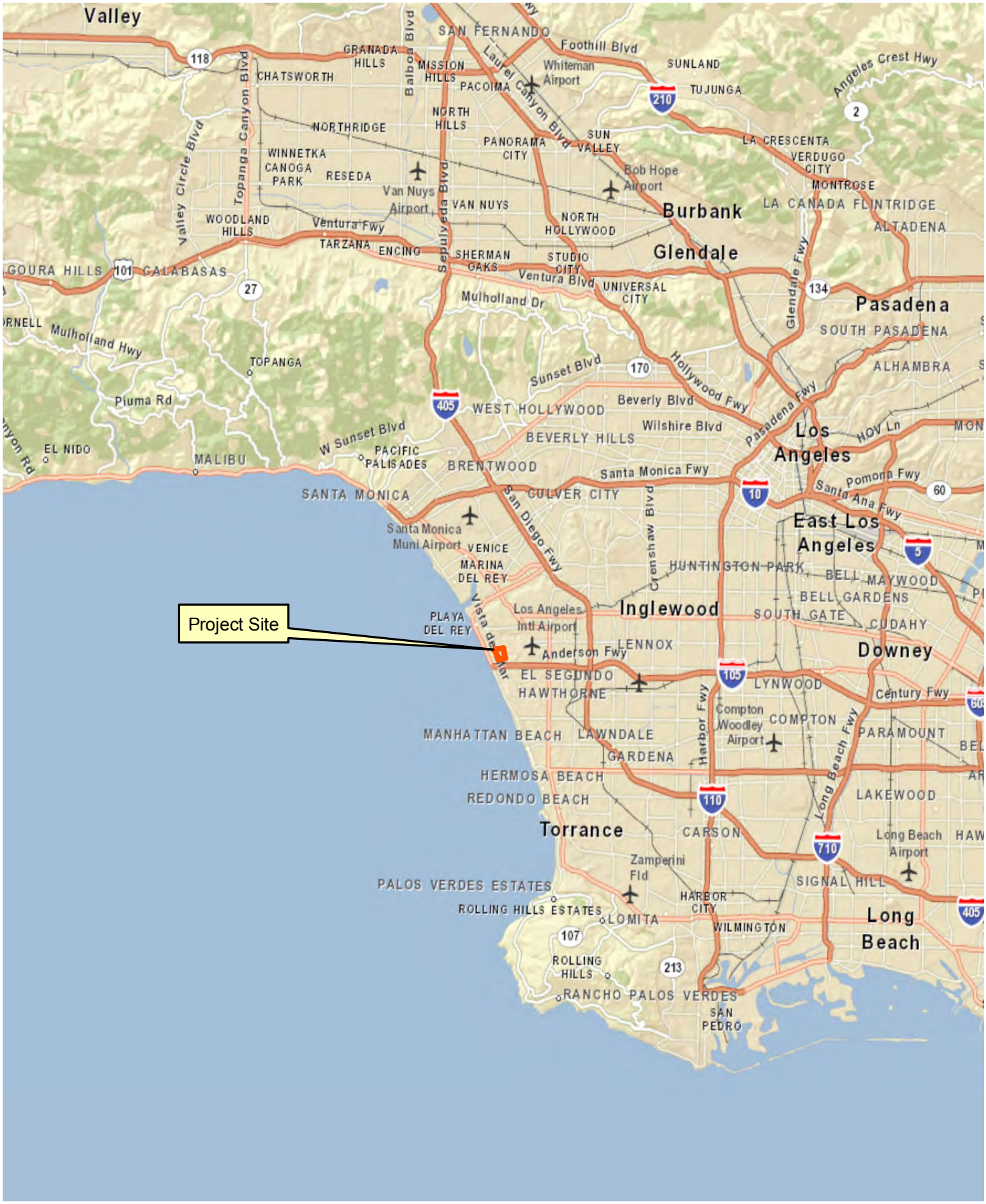
2.4 EXISTING PROJECT SITE CONDITIONS

The Project site is currently used as a staging area for airport construction projects, and includes: soil stockpiles, modular construction trailers/offices and an associated surface parking area, an airfield access security post (Guard Post 21), a small LAWA Police Department/Transportation Security Administration (LAWAPD/TSA) canine "walk" area, several paved roads, and several paved and unpaved outdoor loading and storage areas. The Project site is permitted to accommodate and has at various times supported a batch plant, although a batch plant is not currently located on the Project site.

2.5 LAX MASTER PLAN

The 2004 LAX Master Plan is the comprehensive development program for LAX properties, including runway and taxiway system modernization, redevelopment of terminal areas, airport maintenance areas, airport access improvement and passenger safety, security, and convenience enhancements. The proposed Project responds to the development framework set forth for LAX in the Master Plan with incorporation of certain refinements reflected in the engineering, design, and construction specifications for the project. The LAX Master Plan allowed for the replacement of existing hangars in the midfield area through the construction of three hangar/maintenance facilities dispersed in the western portion of the airport. The proposed Project is a refinement of certain projects contemplated in the LAX Master Plan. Specifically, the proposed Project would transpose an area identified for aircraft apron and maintenance on the east side of Taxiway AA with an area identified for employee parking (West Employee Parking) on the west side of Taxiway AA. Both facilities would remain in the southwest portion of the airport, south of World Way West as proposed under the LAX Master Plan, with access routes to and from each facility remaining essentially unchanged Neither these refinements nor construction of the proposed Project as a whole, would affect the number of operations at LAX, which is determined by market demand and supply considerations. The proposed Project would however, allow for more efficient and effective maintenance of aircraft while at LAX.

The Final EIR for the LAX Master Plan (California State Clearinghouse Project No. 1997061047) included analysis of the environmental impacts of future development at LAX, including aircraft maintenance areas at LAX. The LAX Master Plan Final EIR contains Master Plan commitments and mitigation measures that apply to the LAX property, including the Project site.



N

0 5 Miles

Initial Study

Regional Map

West Aircraft Maintenance Area Project

Source: ESRI Street Map, 2009; PCR Services Corporation, 2012.

FIGURE

1

N

0 350 Feet

Initial Study

Aerial Photograph

West Aircraft Maintenance Area Project

Source: Google Earth, 2011; PCR Services Corporation, 2012.

FIGURE

2

2.6 WEST AIRCRAFT MAINTENANCE AREA EIR

Consistent with the California Environmental Quality Act (Public Resources Code §21000 et seq., "CEQA") and the CEQA Guidelines (California Code of Regulations title 14, §15000 et seq.), LAWA is preparing a project-level Environmental Impact Report (EIR) to evaluate the environmental impacts of the proposed Project.[1] The West Aircraft Maintenance Area EIR will evaluate the environmental impacts of the proposed Project. This Initial Study Checklist has been prepared for the proposed Project to focus the issues that will be studied in further detail in the EIR by identifying the resource areas that could be subject to significant impacts from the proposed Project, and that would require incorporation of mitigation measures where feasible. The Initial Study also identifies resource areas where the environmental effects of the proposed Project would be less than significant or where no impacts are anticipated. These resource areas will not be evaluated further in the EIR. Based on a preliminary review of the Project site and in consideration of the proposed Project and associated activities, LAWA has determined that potentially significant effects may occur in the following areas: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Transportation/Circulation, and Mandatory Findings of Significance. These issues will be evaluated further in the EIR.

LAWA has determined that no significant impacts would occur for the following resource areas: Aesthetics, Agricultural and Forest Resources, Biological Resources, Cultural Resources, Geology and Soils, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. These topics will not be evaluated further in the EIR unless new information affecting these determinations arises during the 30-day scoping period associated with circulation of the Notice of Preparation for the EIR.

2.7 PROJECT CHARACTERISTICS

2.7.1 Overview

The proposed Project would consolidate, relocate, and modernize existing aircraft maintenance facilities allowing for more efficient and effective maintenance of aircraft while at LAX. The proposed Project would provide facilities and areas for aircraft maintenance and maintenance hangar(s), as well as parking areas for existing aircraft and employees. The proposed Project would be able to accommodate up to eight (8) Airplane Design Group (ADG) VI aircraft (such as the Airbus A380 and Boeing 747-8) simultaneously, or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's). Proposed facilities would include: (1) approximately 50 acres of aircraft apron for ADG VI aircraft as well as smaller airline aircraft that may require Remain Over Night (RON) and Remain All-Day (RAD) parking, or those aircraft being serviced at the current aircraft maintenance hangars; (2) a ground run-up enclosure (GRE) that would provide a three-sided unroofed facility for ground run-up testing of aircraft engines required for jet engine maintenance testing and analysis, with the ingress/egress facing the prevailing winds of the site; (3) aircraft maintenance hangar(s), capable of accommodating a wide range of existing aircraft up to and including existing ADG VI aircraft, as well as a maintenance shop and supporting office space within the hangar; (4) approximately 300 employee parking spaces; (5) ancillary facilities (e.g., ground service equipment (GSE) storage and maintenance

[1] *A portion of the currently proposed Project, specifically 18 acres of new apron area in the eastern portion of the site, was previously planned to accommodate four parking positions for existing ADG-VI aircraft, along with other related improvements, which were collectively referred to as the "Southwest RON Apron Project". A Draft Initial Study/Mitigated Negative Declaration for the Southwest RON Apron Project was completed and distributed for public review in February 2011, but never completed. The current proposed Project incorporates, supersedes and replaces the improvements previously proposed for the Southwest RON Apron Project.*

areas/facilities, aircraft wash racks, RON kits providing ground power, potable water, and pre-conditioned air, necessary utilities and infrastructure and possibly water storage tank(s) for fire protection); (6) a storm drainage filter and/or infiltration basin and connections to existing adjacent utility lines and storm drains; (7) a concrete batch plant would be installed on the site for construction of the proposed Project with removal planned after the final phase of construction (concrete batch plants are permitted on and have been operating on the site in recent years); and, (8) extension of Taxiway B westward to the western limits of the site (designated on-site as Taxilane AA1) to provide primary egress from the Project area, with access to the site via Taxiway AA from a point approximately 830 feet north of Taxiway C (designated on-site as Taxilane AA2). **Figure 3**, *Conceptual Site Plan*, presents the proposed layout of the proposed Project.

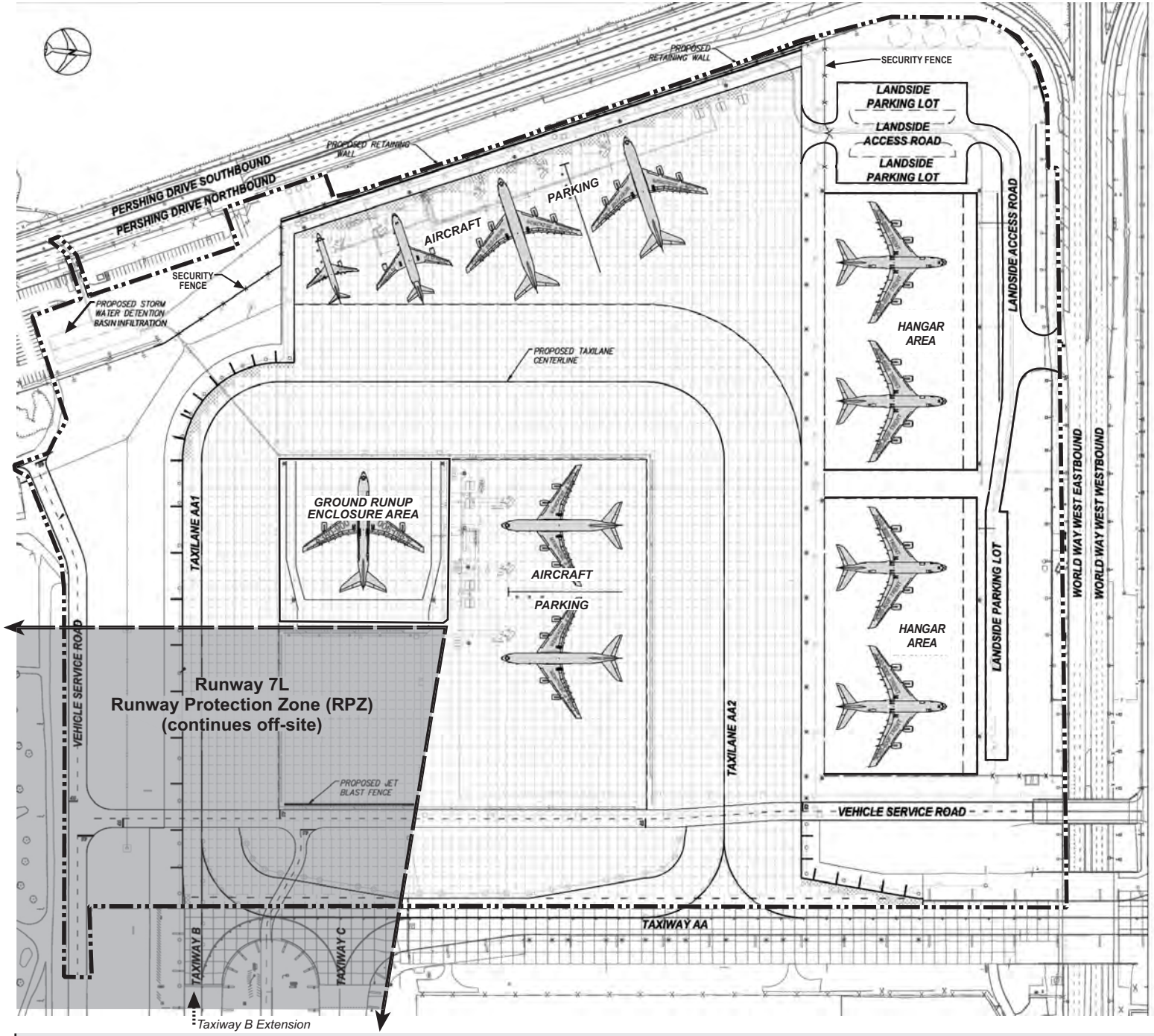
2.7.2 Aircraft Parking Apron

The proposed Project includes the construction of an aircraft parking apron on approximately 50 acres of the Project site. An aircraft parking apron is a large flat concrete surface remote from the terminal area where aircraft that RON/RAD are towed to can either be maintained or parked until their next scheduled flight at which time they would be towed to their appropriate terminal area gate. The footprint of aircraft hangars and employee parking are not included in the 50 acres, and represent additional area to be developed as part of the proposed Project. Unlike certain existing maintenance areas that do not fully accommodate all aircraft at LAX, the proposed Project would fully accommodate ADG VI aircraft, as well as smaller commercial aircraft that may require RON/RAD parking, or aircraft being serviced at the aircraft maintenance hangars.

Primary access to the apron would be via Taxiway AA, with the exact points of access and aircraft routing pattern to be determined in coordination with the FAA. It is anticipated that Taxiway B would be extended westward to the western limits of the site (designated on-site as Taxilane AA-1) to provide primary airfield access to the Project area. The apron would also serve as a location for a ground run-up enclosure, storage and support area for Ground Service Equipment (GSE), and supporting structures or facilities. Supporting facilities include aircraft wash racks that would include RON/RAD kits that provide 400 Hz ground power, pre-conditioned air and potable water to parked aircraft, allowing full aircraft functionality without running auxiliary power units. A portion of the Runway 7L Runway Protection Zone (RPZ) overlies a part of the apron. The FAA recommends clearing of incompatible objects and activities within the RPZ. It is not intended to park aircraft within the RPZ and this area would be used for circulation of aircraft, GSE storage and other non-permanent staging of ground equipment. Construction of the apron area and other infrastructure would occur during the initial phase of the proposed Project.

2.7.3 Aircraft Maintenance Hangars

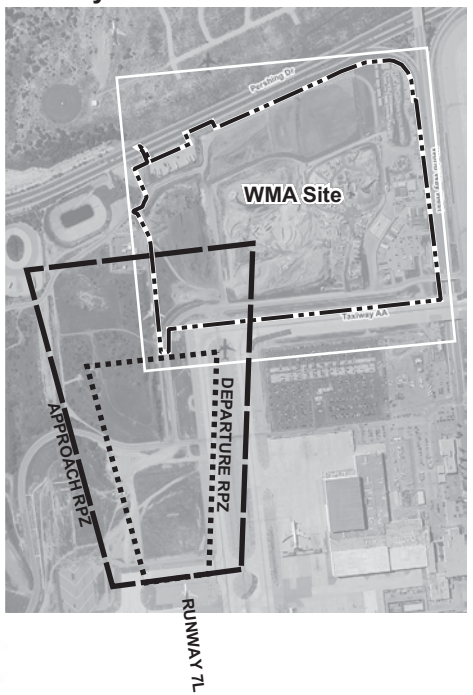
The proposed Project includes construction of aircraft maintenance hangar(s), capable of accommodating a wide range of existing aircraft up to and including ADG VI aircraft. The proposed hangar area, including employee parking and other associated paved areas, in addition to aircraft apron areas described previously that may overlap, is estimated to encompass approximately 15 acres of the Project site. The purpose of the aircraft hangar(s) would be to provide area for routine aircraft maintenance while the aircraft is not at a contact terminal gate, scheduled line maintenance, and other higher levels of scheduled and unscheduled aircraft maintenance. Unlike the former TWA Hangar of approximately 268,000 square feet and the American Airlines High Bay Hangar of approximately 255,000 square feet,



Legend

- Project Limits
- Portion of Runway 7L Approach RPZ
  - Building Restrictions
  - Aircraft Parking Restrictions

Runway 7L RPZ Detail



0 300 Feet

Conceptual Site Plan

FIGURE 3

Initial Study

West Aircraft Maintenance Area Project

Source: LAWA and Atkins, 2012.

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the new hangar(s) would be fully capable of servicing the largest aircraft that currently serve LAX and would contain state of the art features to enable the effective servicing of existing aircraft.

Approximately 400,000 square feet of hangar bay space (floor area) with a maximum estimated height of approximately 150 feet can be accommodated on the Project site. Hangar(s) would typically have a sliding hangar door to fully enclose aircraft within the hangar. Typical equipment (subject to user requirements of the eventual tenant) may include an internal crane to hoist aircraft or parts, 400 Hz power and pre-conditioned air, a compressed air system to include drop down reels and/or floor mounted receptacles that are retractable, explosion proof outlets and/or plugs installed in drop down reels and/or floor mounted that are retractable, foundation able to handle point loading for jacks, trench drain to include oil/water separators and grease traps, foam fire protection system, water sprinkler or deluge system, test bed for testing equipment and parts, ground water storage tank, phone, intercom, and internet installed throughout the entire hangar, lighting in both (hangar and office) to include 3-phase power, auxiliary back-up power, office support space for administrative functions, conference rooms, kitchen, break and restrooms, warehouse shipping/receiving, vehicle service bays, tool storage, welding shop, and flammable/hazardous materials storage. Typically, hangar(s) also include a maintenance shop and supporting office space.

The initial phase of the proposed Project would involve construction of a portion of the proposed hangar area along with an employee parking lot. The remainder of the hangar(s) and additional employee parking would be constructed in one or more later phases of the proposed Project. It is possible that during the phasing of the proposed Project a relocatable structure(s) may be constructed to provide covered maintenance space until such time as permanent hangar(s) are developed. Relocatable structures would typically feature a high strength PVC coated polyester membrane cladding that is tensioned over an engineered structural steel frame system which provides the airport the ability to cost effectively relocate the structure as operational needs change.

2.7.4 Ground Run-up Enclosure (GRE)

Unlike the current maintenance areas at LAX where engine testing is performed in the open, the proposed Project includes a state of the art ground run-up enclosure (GRE) intended to mitigate noise from these engine tests. The GRE will be approximately 330 feet wide and 355 feet long, encompassing approximately 120,000 square feet, which would accommodate all commercial aircraft including A380 and B747-8. The height of the GRE is anticipated to be between 50 and 60 feet. The most common GRE configuration is a three-sided unroofed facility. The GRE is constructed with noise absorbing panels lining the side and rear walls. The panels are specifically designed to provide sound absorption at the lower frequencies, characteristic of engine test procedures. Typical insertion loss characteristics of a standard 3-sided GRE are a loss of 15 dBA at directions from 60 degrees to 300 degrees (0 degrees equating to the noise of the aircraft) at a distance of 400 feet from the source. The GRE may also be used as a wash rack location to provide a location for the high pressure washing of aircraft and the capture of the associated run-off. The GRE would be located outside of, but adjacent to, the Runway 7L Runway Protection Zone (RPZ) restricted development area. The GRE would be constructed during the initial phase of the proposed Project.

2.7.5 Employee Parking Lot

The proposed Project includes construction of employee parking areas to accommodate aircraft maintenance technicians and management staff. Such parking is planned to occur immediately north and west of the hangar area and is anticipated to provide approximately 300 parking spaces. The size of the employee parking lot would be based on tenant requirements, but is not expected to exceed 300 spaces. Access to and from the parking lot would be via

World Way West. The employee parking area would include area illumination, paint/stripes for vehicle stalls, and an Air Operations Area (AOA) security fence to separate airside and landside activities. During the initial phase of the proposed Project, parking would be provided to support the first phase of hangar development and the support requirements for the RON/RAD apron.

2.7.6. Ancillary Facilities and Features

Ground service equipment (GSE) storage and maintenance areas/facilities are proposed as part of the Project, including electrical charging stations. RON kits are also proposed, as well as wash racks that would include a recycling system to minimize flows to the sewer system. The hangar(s) described above would require provisions for fire protection, including possibly water storage for a deluge system.

2.7.7 Relocation and Demolition of Existing On-site Uses

Development of the Project site would include removal or relocation of existing on-site uses. Existing construction staging yards and associated equipment would be relocated to other existing staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard, however, staging for the proposed Project would occur on-site. The existing small fenced area used by LAWAPD and TSA as a canine "walk" area would be relocated in an area in the southern area of the airport, west of Runway 7R. Guard Post 21 would be demolished. Existing utility lines serving the site would either be preserved, adjusted/strengthened, or removed. The Project site is permitted to accommodate a batch plant. The concrete batch plant would be installed on the site and utilized for construction of the proposed Project. During the various phases of the Project's development, the concrete batch plant site would likely be relocated to several locations within the limits of the Project site. While the concrete batch plant would be utilized during the Project's development period, it would be removed prior to full buildout of the site. Stockpiled soil and construction rubble stockpiles existing within and immediately adjacent to the site would be re-used on-site as backfill material and/or exported off-site to permitted landfills.

2.7.8 Utilities

The proposed Project would connect to existing water, sanitary sewer, storm drain, electricity, gas and communications lines located within the World Way West and Pershing Drive right-of-ways (ROWs). Multiple existing utility lines also bisect the Project site, and would either be preserved, adjusted/strengthened, or abandoned/removed. The proposed Project would connect to existing adjacent utility lines and drainage lines in World Way West and Pershing Drive. In addition, to safely convey runoff from the Project site under the proposed Project, the following drainage improvements would be constructed: (1) an on-site storm drainage system; (2) connection of this system to the existing storm drains in World Way West and Pershing Drive; (3) development of a detention/infiltration basin in the southwest corner of the Project site (within an existing LAX employee surface parking lot); and (4) the development of on-site water quality improvements (e.g., wash rack recycling system, oil-water separator, use of porous pavement or media filters, etc.) to reduce urban pollutants in Project stormwater runoff.

Construction Schedule/Phasing

It is anticipated that the proposed Project would be completed over the next eight to ten years.

2.8 REQUIRED APPROVALS/CONSULTATIONS

Implementation of the proposed Project would require approvals from and consultation with Federal, State, and regional/local agencies. The EIR will be used by the following agencies in connection with permits and approvals necessary for the construction and operation of the proposed Project. Federal, State, and regional/local agency actions required for the construction and operation of the proposed Project may include, but are not limited to, those described below. This EIR may also be used in connection with other Federal, State, or regional/local approvals, permits, or actions that may be deemed necessary for the proposed Project, but which are not specifically identified below.

2.8.1 Federal

- U.S. Department of Transportation Federal Aviation Administration (FAA) approval of an FAA Notice of Construction or Alteration, to ensure safe and efficient use of navigable airspace with consideration of the project and during the construction of the West Aircraft Maintenance Area Project. LAWA and its selected contractor would submit a FAA Form 7460-1 "Notice of Proposed Construction or Alteration".
- Consultation with the U.S. Fish and Wildlife Service.

2.8.2 State

- South Coast Air Quality Management District (SCAQMD) review of any permits required under the Clean Air Act for stationary sources;
- Consultation with the California Department of Fish and Game.
- The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) administer regulations regarding water quality in the State. Permits or approvals required from the SWRCB and/or RWQCB may include but are not be limited to: (1) General Construction Storm Water Permit; (2) Standard Urban Stormwater Mitigation Plan; and (3) Submittal of a Recycled Water Report to the RWQCB for the use of recycled water as a dust control measure for construction.

2.8.3 Regional/Local

- LAX Certification of the Final EIR for the LAX West Aircraft Maintenance Area Project;
- LAX Specific Plan Compliance Review in accordance with Section 7 of the Specific Plan;
- Preparation of a Project-Specific Storm Water Management Plan or Standard Urban Storm Water Mitigation Plan for approval by the Bureau of Sanitation, Watershed Protection Division;
- Los Angeles Fire Department approval;
- Los Angeles Bureau of Engineering (BOE) "B" Permit for the GRE to be located within the North Central Outfall Sewer (NCOS) easement;
- Grading permits, building permits, and other permits issued by the Department of Building and Safety for the Project and any associated Department of Public Works permits for infrastructure improvements;

3. EXPLANATION OF INITIAL STUDY CHECKLIST DETERMINATIONS

The following analysis provides supporting documentation for the determinations presented in the Initial Study Checklist presented in Section 2 of this document. Each response provided below evaluates how the West Aircraft Maintenance Area Project (proposed Project) as defined in the Project Description may affect existing environmental conditions at the Project site and in the surrounding area. The Environmental Impact Report (EIR) will further evaluate topics where the potential for a significant impact has been identified. The EIR will analyze the identified potentially significant impacts and, where appropriate, identify mitigation measures, and explain how such measures would reduce significant impacts.

The proposed Project is located within the LAX property, and is subject to the requirements and mitigation measures of several LAX plans and CEQA documents, including but not limited to: (1) the 2005 LAX Street Frontage & Landscape Development Plan Update; (2) the 2004 Los Angeles International Airport Proposed Master Plan Improvements (LAX Master Plan); and (3) the 2004 Final EIS/EIR for the Los Angeles International Airport Master Plan Proposed Improvements (SCH #1997061047). Where necessary to support the conclusions made in this Initial Study, the information, requirements and mitigation measures from these documents are referenced in the Initial Study responses, as is information from other relevant CEQA documents and technical studies associated with other LAWA projects at LAX.

I. AESTHETICS.

Would the Project:

a. Have a substantial adverse effect on a scenic vista?

a. Less Than Significant Impact. The Project site is located within the western portion of the Los Angeles Basin, and broad scenic vistas of the Santa Monica Mountains in the distance are available across the Project site and other areas of LAX from the El Segundo residential neighborhood located 0.41 miles to the south. Most of the north-facing residences at lower elevations within the neighborhood have their northerly views blocked or obstructed by a landscaped and treed berm located along the south side of Imperial Highway. However, north-facing residences at higher elevations within the neighborhood where intervening residences are not present, enjoy views of the Santa Monica Mountains on clear days. The proposed Project would include hangars which could reach up to 150 feet in height that would be visible from some of these north-facing, upper elevation residences. However, given the substantial distance between these residences and the Project site, the higher elevations of these residences relative to the Project site, and the small portion of the total field of view which would be occupied by the proposed hangars as seen from the residences, the hangars would not have a substantial adverse effect on scenic vistas of the Santa Monica Mountains. A less than significant impact would occur, and no mitigation measures are required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?

b. No Impact. The Transportation Element, an element of the City of Los Angeles General Plan adopted in 1999, includes Scenic Highways policies which supersede the City's 1978 Scenic Highways Plan. According to Chapter VI,

Section D and Figure E of the Element, Vista del Mar between Culver Avenue and the City Boundary, south of Grand Avenue, is the closest Scenic Highway to the Project site, and thus affords the closest scenic vistas.[2] The Vista del Mar corridor is valued for beach, sand dune, and ocean views, and while a corridor plan has not yet been developed for Vista del Mar, Section D of the Element outlines aesthetics-related interim guidelines for development within the corridor.[3] However, the Project site is not located within or visible from the corridor as it is blocked from view by the intervening Los Angeles /El Segundo Dunes. The Project site also does not contain scenic resources, such as trees, rock outcroppings, historic buildings, or other locally recognized desirable aesthetic features. Therefore, no impact would occur to scenic vistas or to scenic resources within a city-designed scenic highway, and no mitigation is required.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Under the proposed Project, the existing construction staging operations at the Project site would be relocated to Los Angeles World Airports (LAWA) Construction Staging Area A, with the exception of Guard Post 21 which would be demolished at some point after completion of the initial phase of the proposed Project. Construction Staging Area A is located in the northwestern portion of the airport property, immediately south of Westchester Parkway between Pershing Drive and Lincoln Boulevard, and accommodates construction staging for several on-going Los Angeles International Airport (LAX) Master Plan projects including the Bradley West Terminal project. The western half of Construction Staging Area A currently contains construction trailers, storage areas, loading areas, etc., and over 30-pole mounted lights in the interior. The eastern half of the staging area has been graded and a portion of it is currently being used as a stockpile area. It has over 40 pole-mounted perimeter fence lights running along the entire northern boundary with intervening features between the staging area and the residential and school uses located between approximately 250 and 650 feet to the north, including semi-opaque construction fencing, several berms, Westchester Parkway and associated lighting, trees, and vacant airport property. Relocating existing on-site construction staging operations to Construction Staging Area A would be less than significant for the following reasons: (1) Construction Staging Area A is already the site of existing construction staging activities and does not contain features that contribute to valued aesthetic character; (2) the intervening features between Construction Staging Area A and the residential and school uses to the north block many of the views of the construction staging area from the north; and (3) the relocated construction staging activities would be subject to LAX Master Plan Mitigation Measure DA-1, which requires construction fencing to block most views of construction activities from adjacent properties, in this case, most views of Construction Staging Area A from the residences within the Westchester neighborhood to the north. No additional mitigation measures to address relocation of staging activities are required.

The 75-acre Project site is highly disturbed and surrounded on three sides by airport uses and on the fourth by Pershing Drive. Most of the Project site is currently being used as a construction staging area and contains a rock crushing station, debris and soil stockpiles, construction trailers/offices, an airfield access security post, several paved roads, and several paved and unpaved outdoor storage areas. While the Project site has several small patches of ruderal weedy vegetation, mostly occurring as strips between the other uses and along both Pershing Drive and Taxiway AA, the site has no landscaping or other features of aesthetic value, nor is it located adjacent to or within the viewshed of a designated scenic highway or scenic vista (see response above). Adjacent uses include the West Remote Pads/Gates

[2] *City of Los Angeles Planning Department, Transportation Element of the Los Angeles City General Plan, adopted September 1999.*

[3] *Ibid.*

and aircraft aprons to the north, across World Way West, an airport employee parking lot and vacant airport land to the south, Taxiway AA, American Airlines employee parking and the Continental Airlines maintenance hangars to the east, and the Los Angeles/El Segundo Dunes across Pershing Drive to the west.

Construction and operation of the proposed Project at the Project site would be consistent in visual character with existing airport-related uses to the north, south and east, and would be an aesthetic improvement over the existing uses at the Project site which include large stockpiles, portable trailers, construction equipment and storage areas. Furthermore, the proposed Project would be required to comply with applicable LAX Street Frontage & Landscape Development Plan Update[4] requirements and LAX Master Plan[5] commitments and mitigation measures which have been designed to ensure aesthetic and visual compatibility with adjacent development and public streets. Applicable aesthetics and visual Master Plan commitments and mitigation measures are listed below. Compliance with these would ensure that Project construction activities and the operation of the proposed improvements incorporate the necessary screening, buffering, landscaping, and other design measures to avoid significant adverse aesthetics impacts on the Westchester neighborhood to the north, the El Segundo neighborhood to the south, or to travelers on Pershing Drive.

- **LAX Street Frontage & Landscape Development Plan Update Policy 1.3:** Parking areas should be landscaped in accordance with LAWA standards and shall comply with the requirements of Airport Security. Areas should be screened from streets by 3-to 8-foot high decorative walls, berms, landscaping, or other appropriate screening mechanisms, as feasible and practical.
- **LAX Street Frontage & Landscape Development Plan Update Policy 1.4:** Storage and industrial uses such as fueling, loading, and maintenance at cargo areas shall comply with the requirements of Airport Security, and should be screened from streets by decorative walls, berms, and/or appropriate landscaping, as feasible and practical.
- **LAX Street Frontage & Landscape Development Plan Update Policy 1.5:** Open areas not used for buildings, driveways, or parking lots should be planted, irrigated, and/or maintained on a regular basis.
- **LAX Street Frontage & Landscape Development Plan Update Policy 1.7:** Vegetation should be used to soften solid screening walls as feasible and practical, and shall comply with the requirements of Airport Security.
- **LAX Street Frontage & Landscape Development Plan Update Policy 6.1:** Master Plan Projects shall be subject to LAX Plan Compliance Review for LAWA approval.
- **LAX Street Frontage & Landscape Development Plan Update Policy 6.2:** Perimeter landscape areas shall comply with the City of Los Angeles Landscape Ordinance as outlined by the LAX Specific Plan and all other applicable local codes and regulations, as feasible and practical.
- **LAX Street Frontage & Landscape Development Plan Update Landscape Profile 4.8.3:** This land use classification includes facilities such as aircraft maintenance hangars, Central Utility Plant, Compressed Natural Gas and/or Liquid Natural Gas facility, fuel farm, ground handling services, ground run-up enclosures,

[4] *City of Los Angeles, Los Angeles World Airports (LAWA), LAX Street Frontage & Landscape Development Plan Update, March 2005.*

[5] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, April 2004.*

and the Automated People Mover (APM) maintenance facility. These areas are located between the two runway complexes west of the passenger terminals, on the south side of Century Boulevard and east of Sepulveda Boulevard, on the north side of Imperial Highway and on the west side of Aviation Boulevard. These uses are sometimes considered unsightly and require visual screening from public view to maintain neighborhood compatibility. When they are located on the airport perimeter or are visible from public roads or private property the perimeter treatment shall include solid walls or opaque planting to screen views into the facilities as permitted by Airport Security requirements. Landscape setback areas shall be 15 to 20 feet in typical areas, and 50 feet wide where steep slopes exist. Landscape setback areas shall include solid walls, with earth berms or shrub planting to soften the appearance of the walls. Walls may be vine covered or have hedges or other shrubs and trees planted along the entire face. Ground planes/areas shall be planted and maintained with ground covers, shrubs and trees. Where facilities are located on the airport interior, fencing will be allowed in place of solid walls.

- **LAX Street Frontage & Landscape Development Plan Update Landscape Profile 4.9.3:** Facilities within this classification include a surface parking lot at La Cienega Boulevard, rental car parking, employee parking lots, parking structures at the and Ground Transportation Center and Intermodal Transportation Center, and parking lots in service, maintenance and other ancillary facilities. Surface parking lots and the first level of parking structures may require visual screening from public view to maintain neighborhood compatibility. When they are located on the airport perimeter or are visible from public roads or private property, landscape areas shall be planted with shrub masses, hedges or groves of low branching trees, to the extent feasible and practical to screen views into the facilities. Landscape setback areas shall be 15 to 20 feet in typical areas. Parking facilities may be secured through the use of 8-foot height fencing and planting along public streets. Where parking facilities are adjacent to public parks or located across from residences, solid walls shall be constructed for effective screening. Setback areas shall include earth berms or shrub planting to soften the appearance of walls. Walls may be vine covered or have hedges or other shrubs and trees planted along the entire face. All areas not used for vehicular parking and circulation in surface parking lots shall be planted and maintained with ground covers, shrubs and trees. Where facilities are located on the airport interior, fencing will be allowed in place of solid walls.

- **LAX Street Frontage & Landscape Development Plan Update Section 6.1.7 (Surface Parking Areas and Parking Structures Standards):** Landscape setbacks surrounding surface parking areas and parking structures require planting, irrigation and security fencing or walls. The minimum setback for all parking facilities shall be 15 feet from the street right of way line unless otherwise specified. These areas shall be screened from adjacent streets or highways by solid walls in residential areas and berms, fencing with planting or walls in commercial, open space or other uses. At least 4 percent of the parking lot interior (not including setback areas) shall be permanently landscaped. Tree species shall be selected to create shade, reduce glare and heat. Care shall be taken to assure that trees do not drop sticky flowers or fruits onto paved surfaces or vehicles. Trees shall not be weak wooded or prone to wind damage. Trees shall have a minimum planted area of 50-square feet when surrounded by paving or walls. Long term parking areas shall be fenced or walled on all perimeters to maintain security as required by the Airport Security requirements. Employee parking areas may be unfenced. In cases where parking facilities adjoin the AOA, the perimeter security barrier fence shall be required. Parking lots shall conform to the applicable sections of the City of Los Angeles Landscape Ordinance as authorized by the LAX Specific Plan. This ordinance establishes standards to reduce glare, ambient temperatures and water use in parking lot and landscape areas.

- **LAX Master Plan Mitigation Measure MM-DA-1. Construction Fencing:** Construction fencing and pedestrian canopies shall be installed by LAWA to the degree feasible to ensure maximum screening of areas

under construction along major public approach and perimeter roadways, including Sepulveda Boulevard, Century Boulevard, Westchester Parkway, Pershing Drive, and Imperial Highway west of Sepulveda Boulevard. Along Century Boulevard, Sepulveda Boulevard, and in other areas where the quality of public views are a high priority, provisions shall be made by LAWA for treatment of the fencing to reduce temporary visual impacts.

Finally, the Project would include some landscaping (xeriscaping or drought-tolerant plantings). Thus, the proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings, impacts on visual character would be less than significant, and no mitigation measures are required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. As indicated in *Response I.c* above, Construction Staging Area A is already a lit construction staging area which is partially buffered from view by the residential and school uses to the north due to topography and other intervening features. The proposed relocation of construction staging operations from the Project site to Construction Staging Area A could potentially result in a small incremental increase in lighting in that staging area, depending on the timing of construction activities occurring in construction Staging Area A related to other airport projects. However, any incremental increase in lighting would be small given the high light levels already existing in the area, and little of any such increase in lighting would be visible from the residential and school uses to the north given intervening features and existing lighting. Furthermore, the relocated construction staging activities would be subject to LAX Master Plan Mitigation Measure DA-1 (full text provided in *Response I.c*) requiring construction fencing which would help buffer associated lighting from view. Therefore, the proposed relocation of construction staging operations would not create new sources of substantial light or glare which would adversely affect day or nighttime views in the area, and the impact would be less than significant. No additional mitigation measures are required.

The Project site is located within an urban area with existing sources of ambient light and glare, including street lights along World Way West and Pershing Drive to the north and west, aircraft apron lighting to the north, American Airlines employee parking lot and airport facility lighting to the east, and aviation beacon lighting within the Los Angeles/El Segundo Dunes to the west. Outdoor lighting is also currently present at the Project site itself, primarily in the northern and western portions of the sites at the rock crushing station, truck staging areas, Guard Post 21, and near the construction trailers/offices.

As a part of the proposed Project, eight new 70-foot tall high-mast pole light assemblies consisting of six to eight 1,000-watt metal halide lamps each would be installed to illuminate each of the proposed aircraft parking positions, taxiway edge lighting would be installed from Taxiways AA and B, parking lot lighting would be installed per City standards at the employee parking lot, lights would be mounted at the exterior entrances to the ground run-up enclosure (GRE) and proposed aircraft hangars, security and foot perimeter/parapet lights would be installed, and light would likely emanate from the interiors of the proposed GRE and aircraft maintenance hangars (when open). However, such lighting would be directed downward toward the immediate area of the Project site and would not

result in light spillover[6] at the nearest sensitive receptors (i.e., the El Segundo Blue Butterfly Habitat Restoration Area within the Los Angeles/El Segundo Dunes located approximately 170 feet west of the Project site along the west side of Pershing Drive, the residential uses located approximately 0.41 miles to the south along the south side of West Imperial Avenue, and the residential uses located approximately 0.97 miles to the north, north of the airport property). The proposed lighting would also be consistent with the type of lighting already present at the Project site and found elsewhere in the western portion of the airport (i.e., at the West Remote Pads/Gates, American Airlines employee parking lot, etc.). Project lighting would be in compliance with applicable Federal Aviation Administration (FAA) standards and in conformance with relevant LAWA light and glare guidelines. Furthermore, Project compliance with Master Plan Commitments LI-2 and LI-3 would ensure that no light sources or building materials would be introduced which interfere with nighttime views in the area.

In addition, the light and glare analysis in the 2004 Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) prepared for the LAX Proposed Master Plan Improvements included a quantitative analysis of the increase in ambient light levels in adjacent sensitive areas associated with the development of urban uses at the Project site, and determined that light from such development would increase by well below the 2.0 footcandle LAMC threshold at the nearest light sensitive uses.[7] The 2004 Final /EIS/EIR determined that lighting in the western portion of the airport property under the Master Plan, similar to the type of lighting currently proposed, would have a less than significant impact on the El Segundo Blue Butterfly within the El Segundo Blue Butterfly Habitat Restoration Area.[8] Finally, Project lighting and building façade materials would be designed and selected in accordance with LAWA guidelines and requirements (e.g., LAX Street Frontage and Landscape Development Plan, LAX Master Plan commitments and mitigation measures, etc.) adopted to avoid light spillover and the generation of substantial light and glare. These Master Plan commitments and mitigation measures are listed below. Compliance with these would ensure that the proposed Project incorporates landscaping, walls and/or other buffering and non-glare building materials, and that lighting is shielded/focused downward, in such a way as it does not spill over onto, interfere with the views of, or otherwise adversely impact light-sensitive uses including the El Segundo Blue Butterfly Habitat Restoration area to the west, the Westchester neighborhood to the north, or the El Segundo neighborhood to the south. Please see *Response IV.a-b,e* for additional discussion of the potential for lighting related impacts on the El Segundo Blue Butterfly.

- **LAX Street Frontage & Landscape Development Plan Update Landscape Profile 4.8.3:** See Response I.c. for text.
- **LAX Street Frontage & Landscape Development Plan Update Landscape Profile 4.9.3:** See Response I.c for text.
- **LAX Master Plan Commitment LI-2. Use of Non-Glare Generating Building Materials:** Prior to approval of final plans, LAWA will ensure that proposed LAX facilities will be constructed to maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass.

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[6] *Light spillover refers to direct illumination of the ground surface whereby a distinct boundary between the illuminated and non-illuminated ground surface can be distinguished. This is a separate issue from ambient light levels which refers to light levels at a particular location measured in footcandles.*

[7] *City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Statement / Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, April 2004.*

[8] *Ibid.*

- **LAX Master Plan Commitment LI-3. Lighting Controls:** Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations. Plan reviews will also ensure, where feasible, that lighting is shielded and focused to avoid glare or unnecessary light spillover. In addition, LAWA or its designee will undertake consultation in selection of appropriate lighting type and placement, where feasible, to ensure that new lights or changes in lighting will not have an adverse effect on the natural behavior of sensitive flora and fauna within the Habitat Restoration Area.

For all the reasons stated above, the proposed Project would not create a new source of substantial light or glare at the Project site which would adversely affect day or nighttime views in the area and the light and glare impacts of the Project would be less than significant. No mitigation measures are required.

II. AGRICULTURAL AND FOREST RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California agricultural land evaluation and site assessment model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract?

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

a-e. No Impact. The Project site is located within a developed airport and is surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and no forest resources exist at the Project site or surrounding areas. Further, there are no Williamson Act contracts in effect for the Project site or surrounding areas.[9] The proposed Project would replace existing temporary construction staging uses at the Project site with airport uses, and would neither convert farmland to non-agricultural use or result in conflicts with existing zoning for agricultural use or a Williamson Act contract. Similarly, it would not result in the conversion of forest land to non-forest use. Therefore, no impacts to agricultural or forest resources would occur, and no mitigation measures are required.

[9] *City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.16, April 2004.*

III. AIR QUALITY.

The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the Project result in:

a. Conflict with or obstruct implementation of the South Coast Air Quality Management Plan?

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment (ozone, carbon monoxide, PM_{10}, and $PM_{2.5}$) under an applicable federal or state ambient air quality standard?

d. Expose sensitive receptors to substantial pollutant concentrations?

e. Create objectionable odors affecting a substantial number of people?

a-e. Potentially Significant Impact. The project site is located within the South Coast Air Basin (Basin) which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). At the federal level, the Basin is designated as a nonattainment area for ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb). At the state level, the Basin is designated as nonattainment for O_3, PM_{10}, $PM_{2.5}$, Pb, and nitrogen dioxide (NO_2). The nearest existing sensitive receptors are the residential uses located along the south side of Imperial Highway in the City of El Segundo, 0.41 miles to the south.

The proposed Project would convert an existing, largely unpaved, 75-acre construction staging area into paved RON/RAD apron areas, a GRE, aircraft hangars, and employee parking. These activities would generate both construction air emissions associated with Project development, and operational air emissions from aircraft maintenance, aircraft engine run-up activities, and employee motor vehicles. While the proposed Project would primarily relocate activities that already generate operational air emissions from other areas of the airport to the Project site (and in the case of construction staging emissions, from the Project site to other existing airport construction staging areas), the EIR will evaluate whether the Project construction or operation could potentially: (1) conflict with or obstruct implementation of the South Coast Air Quality Management Plan; (2) violate air quality standards or contribute to an existing or Project air quality violation; (3) result in a cumulatively considerable adverse net increase in air pollutants; (4) expose sensitive receptors to substantial pollutant concentrations; and/or (455) create objectionable odors (aircraft engine exhaust, diesel emissions, etc.) that could affect a substantial number of people. Project air emissions will be modeled and compared to applicable quantified air quality thresholds.

IV. BIOLOGICAL RESOURCES.

Would the Project:

a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

a-b, e. Less Than Significant. The Project site is located within an area that has been used for construction trailers/offices and construction storage and staging for several years. It is graded, highly disturbed, and largely devoid of vegetation other than some small ruderal weedy areas; the loss of which would be considered a less-than-significant impact. Based on a review of biological surveys previously performed for the LAX Master Plan, a biological field survey of the unpaved/undeveloped portions of the LAX property conducted for the LAX Specific Plan Amendment Study,[10] a review of the California Natural Diversity Database (CNDDB)[11], and a review of the California Native Plant Society Inventory of Rare and Endangered Plans of California,[12] there are no known riparian areas, wetland areas, or trees on or immediately adjacent to the Project site,[13] and sensitive plant, wildlife and fish species are not known to occur on or otherwise utilize the Project site. Also, while five ephemerally wetted areas on the Project site were found in 2001 to contain embedded cysts of the Riverside Fairy Shrimp, a federally-listed endangered species: (1) field surveys of these areas in 2003 concluded that these areas did not represent either federally protected wetlands or wetted areas subject to California Department of Fish and Game (CDFG) jurisdiction;[14] and (2) the cysts were subsequently removed from the site, and the top layer of soil from occupied ponds was removed to prevent future formation of shrimp habitat, in July and August 2005 pursuant to Master Plan Mitigation Measure LU-8 and 2004 and 2005 Biological Opinions from the United States Fish and Wildlife Service (USFWS).[15] Also, habitat assessments conducted in fall 2011 of the airport property, including the Project site, detected no new ephemerally ponded areas on the airport property (including on the Project site) that could support fairy shrimp.[16] Therefore, the Project would not directly impact sensitive species or their habitat, riparian habitat, other sensitive natural communities, federally protected wetlands, or wetted areas subject to CDFG jurisdiction, and no mitigation measures are required.

The Project site is located across Pershing Drive from the El Segundo Blue Butterfly Habitat Restoration Area (Habitat Restoration Area) which is habitat for the El Segundo Blue Butterfly, a federally-listed endangered species. Project construction and/or operational activities would generate dust, light/glare, and noise which could be perceptible from the Habitat Restoration Area. However, the Project site is the location of existing construction staging activities which already generate dust, light/ glare and noise, and the proposed Project would replace these uses with other uses that generate dust, light/glare and noise. Also, the Project site and adjacent area is already subject to high ambient noise

[10] *Glen Lukos & Associates, Biological Resources Technical Report for the LAX Specific Plan Amendment Study, May, 2012.*

[11] *California Department of Fish and Game, California Natural Diversity Database, Rarefind 3, Sacramento, 2011.*

[12] *California Native Plant Society, Online Inventory of Rare and Endangered Plans of California, 8th Edition, Available: http://www.cnps.org/cnps/rareplants/inventory/, accessed November 2011.*

[13] *There are no jurisdictional wetlands on the Project site per a formal jurisdictional wetlands delineation completed in 2009 for the western portion of LAX (Los Angeles World Airports, Final Environmental Impact Report for LAX Bradley West Project, SCH #2008121080, September 2009).*

[14] *Los Angeles World Airports, Draft Environmental Impact Report for LAX Bradley West Project, SCH #2008121080, page 5-60, May 2009.*

[15] *Sapphos Environmental, Inc. Documentation of Salvage and Storage of Riverside Fairy Shrimp Cyst-Bearing Soil in Support of the April 20, 2004 Biological Opinion for Alternative D and the April 8, 2005 Biological Opinion for Operations and Maintenance. 2005*

[16] *Glen Lukos & Associates, Biological Resources Technical Report for the LAX Specific Plan Amendment Study, May, 2012.*

levels from aircraft noise and from vehicular noise along surrounding roadways, particularly Pershing Drive and Vista del Mar. Furthermore, the LAX Master Plan contains Master Plan commitments and mitigation measures a number of which are applicable to the proposed Project that would minimize dust, light/glare and noise effects, including effects in the Habitat Restoration Area, including:

- **LAX Master Plan Mitigation Measure MM-AQ-2. Mitigation Plan for Air Quality - Construction-Related Mitigation Measures.** This measure describes numerous specific actions to reduce fugitive dust emissions and exhaust emissions from on-road and off-road mobile and stationary sources used in construction. These actions are listed in the table below.

Measure	Type of Measure
Post a publically visible sign with the telephone number and person to contact regarding dust complaints; this person shall respond and take corrective action within 24 hours.	Fugitive Dust
Prior to final occupancy, the applicable demonstrates that all ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions.	Fugitive Dust
All roadways, driveways, sidewalks, etc., being installed as part of the project should be completed as soon as possible; in addition, building pads should be laid as soon as possible after grading.	Fugitive Dust
Pave all construction access roads at least 100 feet on to the site from the main road.	Fugitive Dust
To the extent feasible, have construction employees' work/commute during off-peak hours.	On-Road Mobile
Make available on-site lunch trucks during construction to minimize off-site worker vehicle trips.	On-Road Mobile
Prohibit staging and parking of construction vehicles (including workers' vehicles) on streets adjacent to sensitive receptors such as schools, daycare centers, and hospitals.	Nonroad Mobile
Prohibit construction vehicle idling in excess of ten minutes.	Nonroad Mobile
Utilize on-site rock crushing facility, where feasible, during construction to reuse rock/concrete and minimize off-site truck haul trips.	Nonroad Mobile
Specify combination of electricity from power poles and portable diesel- or gasoline-fuel generators using "clan burning diesel" fuel and exhaust emission controls.	Stationary Point Source Controls
Suspend use of all construction equipment during a second-stage smog alert in the immediate vicinity of LAX.	Mobile and Stationary
Utilize construction equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for intended job).	Mobile and Stationary
Require that all construction equipment working on-site is properly maintained (including engine tuning) at all times in accordance with manufacturers' specifications and schedules.	Mobile and Stationary
Prohibit tampering with construction equipment to increase horsepower or to defeat emission control devices.	Mobile and Stationary
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.	Administrative

- **LAX Mitigation Measure MM-ET-3. El Segundo Blue Butterfly Conservation – Dust Control.** To reduce the transport of fugitive dust particles related to construction activities, soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented with a goal to reduce fugitive dust emissions by 90 to 95 percent during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of occupied habitat of the El Segundo blue butterfly.
- **LAX Mitigation Measure MM-DA-1. Construction Fencing.** Construction fencing and pedestrian canopies shall be installed by LAWA to the degree feasible to ensure maximum screening of areas under construction along major public approach and perimeter roadways, including Sepulveda Boulevard, Century Boulevard, Westchester Parkway, Pershing Drive, and Imperial Highway west of Sepulveda Boulevard. Along Century Boulevard, Sepulveda Boulevard, and in other areas where the quality of public views are a high priority, provisions shall be made by LAWA for treatment of the fencing to reduce temporary visual impacts.
- **LAX Mitigation Measure LI-3. Light Controls.** Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations. Plan reviews will also ensure, where feasible, that lighting is shielded and focused to avoid glare or unnecessary light spillover. In addition, LAWA or its designee will undertake consultation in selection of appropriate lighting type and placement, where feasible, to ensure that new lights or changes in lighting will not have an adverse effect on the natural behavior of sensitive flora and fauna within the Habitat Restoration Area.
- **LAX Master Plan Mitigation Measure MM-N-10. Construction Scheduling:** The timing and/or sequence of the noisiest on-site construction activities shall avoid sensitive times of the day, as feasible (9 p.m. to 7 a.m. Monday - Friday; 8 p.m. to 6 a.m. Saturday; anytime on Sunday or Holidays).
- **LAX Master Plan Commitment N-1. Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program:** All components of the current airport noise abatement program that pertain to aircraft noise will be maintained.

Concerning project dust emissions, adherence to LAX Master Plan Mitigation Measures AQ-2 and ET-3 would require the implementation of fugitive dust control measures which would reduce Project construction-related fugitive dust emissions by 90 to 95 percent. Hence, proposed Project construction-related fugitive dust emissions would be minimized, and would potentially be below the levels currently generated by the existing on-site construction staging activities.

Concerning project light/glare, the light analysis in the LAX Master Plan EIR found that increased light levels associated with Master Plan development would have a less than significant impact on the El Segundo blue butterfly as the butterfly is a diurnal species, does not exhibit flight-to-light behavior, and remains perched at night. Furthermore, adherence to LAX Master Plan Mitigation Measures DA-1 and LI-3 which require construction fencing to visually shield construction activities/lighting from adjacent properties and the shielding and focusing of light downward, combined with the 135 foot distance between the Project site and the Habitat Restoration Area, together would avoid Project light spillover into the Habitat Restoration Area.

Concerning proposed Project construction noise, as indicated previously, existing construction staging activities at the Project site already generate noise, and it is not expected that Project construction activities would result in a

substantial increase in this existing construction-related noise. Also, adherence to LAX Master Plan Mitigation Measure N-10 would limit proposed Project construction activities during nighttime hours when low ambient noise levels would otherwise make proposed Project construction noise more noticeable in the Habitat Restoration Area. Finally, noise levels from the noisiest outdoor construction activities (e.g., excavation and grading) are typically 86 dBA Leq at 50 feet from the noise source, and since this noise would attenuate to approximately 81.5 dBA at a distance of 100 feet and as discussed in the LAX Master Plan EIR, the level at which a noise event becomes a disturbance to sensitive species such as the El Segundo blue butterfly is generally 95 dBA Lmax.

Concerning proposed Project operational noise, aircraft taxiing already occurs in the vicinity of the Project site on Taxiway AA, and the Project site and Habitat Restoration Area are both located at the western edge of the south airfield runways, and thus the Habitat Restoration Area already experiences substantial aircraft noise, including noise from overflights. Furthermore, the proposed Project would be required to adhere to LAX Master Plan commitment N-1 which requires compliance with the LAX Aircraft Noise Abatement Program which has been formulated to minimize aircraft noise impacts on adjacent uses. In addition, the proposed GRE would not include operations during nighttime hours when low ambient noise levels would otherwise make GRE noise more noticeable in the Habitat Restoration Area. Finally, while it is estimated that the 80 dBA Lmax noise contour from the GRE would extend into the Habitat Restoration Area, as discussed in the paragraph above, noise generally only becomes a disturbance to sensitive species such as the El Segundo blue butterfly when it approaches 95 dBA Lmax.

Based on the above, the indirect biological resources impacts of the proposed Project on the El Segundo blue butterfly and associated habitat would be less than significant, and no mitigation measures are required.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

c. No Impact. As indicated in *Response IV.a-b, e* above, the Project site does not contain federally protected wetlands. No federally protected wetlands occur in the area to be potentially impacted, and even if wetlands did occur in the area, the Project would not include construction activities within the Los Angeles/El Segundo Dunes. Therefore, no impact would occur, and no mitigation measures are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

d, f. No Impact. The Project site is surrounded by existing airport uses, streets and fencing. It is a highly disturbed area and subject to daily construction staging activities. It is not bisected by waterways, riparian threads, or forest habitat which could be used as movement corridors by wildlife. Furthermore, the previous biological studies discussed under *Response IV.a-c, e* above, have not identified the Project site as being within an area used for movement by native or migratory fish or wildlife species. Therefore, the proposed Project would not interfere substantially with native resident or migratory fish or wildlife species movement or impede the use of native wildlife nursery sites. Similarly, the Project site is not located within an area subject to a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, no impacts would occur in terms of these issues, and no mitigation is required.

V. CULTURAL RESOURCES.

Would the Project:

a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?

No Impact. The LAX Master Plan EIR/EIS included historical resources surveys, and none of the identified resources are located on or near the Project site.[17] Therefore, no impacts to historic resources would occur, and no mitigation is required.

b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5?

d. Disturb any human remains, including those interred outside of formal cemeteries?

b,d. Less Than Significant Impact with Mitigation Incorporated. PCR Services Corporation (PCR) conducted a cultural resources assessment in 2011 for a Project that was previously proposed on 18 acres in the eastern portion of the Project site named the Southwest Remain Overnight Apron (RON) Project.[18] The cultural assessment identified a 78-acre Area of Potential Effect (APE) around the previously proposed Southwest RON Project which included the 75-acre Project site, and evaluated both the potential for the APE to contain cultural resources and the potential for the previously proposed Southwest RON Project to impact any such resources. The scope of work for the assessment included a cultural resources records search through the California Historical Resources Information System-South Central Coastal Information Center (CHRIS-SCCIC), a Sacred Lands File (SLF) search through the California Native American Heritage Commission (NAHC), review of historic topographic maps and aerials, review of a recent paleontological records search from the Natural History Museum of Los Angeles County (LACM), and a pedestrian survey of the APE. Because the assessment covered the Project site, and because the depth of excavations under the previously proposed Southwest RON Project would be similar to those under the proposed Project, the findings of the 2011 cultural resources assessment, as set forth below, are applicable to the proposed Project.

No historical resources, archaeological resources, or human remains have been previously recorded within the Project site, and no new such resources were identified by PCR during the pedestrian survey. There are no historic buildings or structures presently located within the Project site, and the proposed Project would not cause an adverse effect to a listed historic property or archaeological site. The negative results of the archaeological survey were a direct result of the poor surface visibility within the majority of the Project site that may have obstructed the identification of resources on the surface. However, historic period resources and prehistoric archaeological resources have been recorded within a half-mile radius of the Project site, which confirms historic and prehistoric occupation in the surrounding vicinity.

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[17] *City of Los Angeles, Los Angeles World Airports (LAWA), LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.9.1, April 2004.*

[18] *PCR Services Corporation, Cultural Resources Assessment for Southwest Remain Overnight Apron Project at Los Angeles International Airport; City of Los Angeles, California. Prepared for the Federal Aviation Administration and Camp Dresser and McKee, Inc., August 2011.*

According to LAWA engineers, there is approximately 11 feet of artificial fill that underlies the Project site. Given the limited potential to encounter buried historical and/or archaeological resources in fill soils, the majority of the excavations associated with the proposed Project would likely not encounter any buried historic or archaeological resources that may be present. However, the Project includes a proposal for hangars, a GRE, and eight high mast apron lights, and the excavations for these elements could extend into previously undisturbed native soils and therefore would have a potential to encounter buried historic or archaeological resources at depth. Any such impact would be less than significant with implementation of the mitigation measure listed below which outlines the archaeological monitoring, notification, and treatment requirements for development at LAX. Compliance with this mitigation measure would ensure that Project construction activities are monitored for the potential to uncover buried archaeological resources and human remains, and that if such resources/human remains are uncovered, they are studied and treated in accordance with applicable regulations.

- **Mitigation Measure ARCHAEO-1:** Prior to initiation and construction activities, LAWA will retain an on-site Cultural Resources Monitor (CRM), as defined in the LAX Master Plan MMRP Archaeological Treatment Plan (ATP), who will determine if the project site is subject to archaeological monitoring. As defined in the ATP, areas are not subject to archaeological monitoring if they contain redeposited fill or have previously been disturbed. LAWA shall retain an archaeologist to monitor excavation activities in native or virgin soils in accordance with the detailed monitoring procedures and other procedures outlined in the ATP regarding treatment for archaeological resources that are accidentally encountered during construction. In accordance with the methods and guidelines provided in the ATP, the CRM will compare the known depth of redeposited fill or disturbance to the depth of planned grading activities, based on a review of construction plans. If the CRM determines that the Project site is subject to archaeological monitoring, a qualified archaeologist (an archaeologist who satisfies the Secretary of the Interior's Professional Qualifications Standards [36 CFR 61]) shall be retained by LAWA to inspect excavation and grading activities that occur within native material. The extent and frequency of inspection shall be defined based on consultation with the archaeologist. Following initial inspection of excavation materials, the archaeologist may adjust inspection protocols as work proceeds. Identification, evaluation, and recovery of cultural resources shall be conducted in accordance with the methods, guidelines, and measures established in the ATP. If Native American cultural resources are encountered, LAWA shall comply with guidance established in the ATP for retaining a Native American monitor. If human remains are found, LAWA shall comply with the State Health and Safety Code regarding the appropriate treatment of those remains as outlined in the ATP. Reporting shall be completed in conformance with the requirements established in the ATP to document the archaeological monitoring effort and guidance as to the proper curation and archiving of artifacts in accordance with industry and federal standards.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact with Mitigation Incorporated. Per the cultural resources assessment, several fossil localities have been identified in the region from 13 to 40 feet below the ground surface in deposits that currently exist at the surface and at depth within the Project site. No paleontological resources were identified by PCR during the pedestrian survey, although this is a direct result of the poor surface visibility within the majority of the site. According to the LACM, deep excavations associated with the proposed Project would likely encounter paleontological resources (vertebrate fossils). As discussed above, excavations for the high mast poles would extend into previously undisturbed native soils, and therefore would have a potential to encounter buried paleontological resources at depth, including potentially unique paleontological resources. Any such impact would be less than

significant with implementation of the mitigation measures listed below which outline the paleontological monitoring and treatment requirements for the proposed Project. Compliance with the following mitigation measures would ensure that Project construction activities are monitored for the potential to uncover buried paleontological resources, and that if such resources are uncovered, they are studied and treated in accordance with applicable regulations.

- **Mitigation Measure PALEO-1. Conformance with LAX Master Plan Paleontological Management Treatment Plan: (PMTP):** Prior to the initiation of grading and construction activities, LAWA will retain a professional paleontologist, as defined in the Final LAX Master Plan MMRP PMTP, who will determine if the Project site exhibits a high or low potential for subsurface resources. If the Project site is determined to exhibit a high potential for subsurface resources, paleontological monitoring will be conducted in accordance with the procedures stipulated in the PMTP. If the Project site is determined to exhibit a low potential for subsurface deposits, excavation need not be monitored as per the PMTP. In the event that paleontological resources are discovered, the procedures outlined in the PMTP for the identification of resources will be followed to ensure that unique paleontological resources are studied and treated in accordance with applicable regulations and procedures such that significant impacts are avoided.
- **Mitigation Measure PALEO 2. Construction Personnel Briefing:** In accordance with the PMTP, construction personnel will be briefed by the consulting paleontologist in the identification of fossils or fossilferous deposits and in the correct procedures for notifying the relevant individuals should such a discovery occur.

VI. GEOLOGY AND SOILS.

Would the Project:

a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Fault rupture is the surface displacement that occurs along the surface of a fault during an earthquake. As indicated in the LAX Master Plan Final EIR, while the Project site is located within the seismically active southern California region, it is not located within an Alquist-Priolo Special Study Zone.[19] Geotechnical literature indicates that the Charnock Fault, a potentially active fault, may be located near or through the eastern portions of LAX property (although the Project site is located approximately 1.8 miles further west). However, as stated in the LAX Master Plan EIR/EIS, the Charnock Fault is considered to have low potential for surface rupture independently or in conjunction with movement on the Newport-Inglewood Fault Zone, which is located approximately three miles east of LAX (approximately 4.8 miles from the Project site).[20] Therefore, impacts to people

[19] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.22, April 2004.*

[20] *Ibid.*

or structures resulting from rupture of a known earthquake fault are considered less than significant, and no mitigation measures are required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. As indicated in the LAX Master Plan Final EIR, the Project site is located in the seismically active southern California region; however, there is no evidence of faulting on the site, and the site is not located within an Alquist-Priolo Special Study Zone.[21] Further, all construction would be designed in accordance with the provisions of the Los Angeles Building Code (LABC), the requirements of which are more stringent than California's Uniform Building Code (UBC) and have been formulated to allow structures to withstand the seismic ground shaking levels expected in the region. Therefore, potential impacts associated with strong seismic ground shaking would be less than significant, and no mitigation measures are required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a seismic hazard that occurs when strong ground shaking causes saturated granular soil (such as sand) to liquefy and lose strength. The susceptibility of soil to liquefy tends to decrease as the density of the soil increases and the intensity of ground shaking decreases. As indicated in the LAX Master Plan EIR/EIS, the depth to groundwater at LAX is generally greater than 90 feet, which would indicate that the site has a very low susceptibility to liquefaction. While perched groundwater has been documented at a depth of approximately 40 feet below the surface of the Project site, the overall potential for liquefaction at LAX is considered low.[22]

Strong ground shaking will also tend to densify loose to medium dense deposits of partially saturated granular soils and could result in seismic settlement of foundations and the ground surface at LAX. Due to variations in material type, seismic settlements would tend to vary considerably across LAX, but are generally estimated to be between negligible and 0.5 inches, which is a low level of settlement; hence, the overall potential for damaging seismically-induced settlement is considered to be low.[23]

Seismically-induced ground shaking can also cause slope-related hazards through various processes including slope failure, lateral spreading,[24] flow liquefaction, and ground lurching.[25] Because the Project site is relatively flat (except for the debris and soil stockpiles which will be removed and/or reused as backfill material on-site) and existing slopes

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[21] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.22, April 2004*

[22] *Ibid.*

[23] *Ibid.*

[24] *Lateral Spreading: Deformation of very gently sloping ground (or virtually flat ground adjacent to an open body of water) that occurs when cyclic shear stresses caused by an earthquake induce liquefaction, reducing the shear strength of the soil and causing failure and "spreading" of the slope.*

[25] *Ground Lurching: Ground lurching (and related lateral extension) is the horizontal movement of soil, sediments, or fill located on relatively steep embankments or scarps as a result of earthquake-induced ground shaking. Damage includes lateral movement of the slope in the direction of the slope face, ground cracks, slope bulging, and other deformations.*

in the LAX vicinity are relatively small in area and of low angle and height (less than 15 feet), the overall potential for such failures is considered to be low.[26]

The California Department of Conservation (CDC) is mandated by the Seismic Hazards Act of 1990[27] to identify and map the state's most prominent earthquake hazards in order to help avoid damage resulting from earthquakes. The CDC's Seismic Hazard Zone Mapping Program charts areas prone to liquefaction and earthquake-induced landslides throughout California's principal urban and major growth areas. According to the Seismic Hazard Map for the Inglewood Quadrangle, no potential liquefaction zones are located within the LAX area. Isolated zones of potential seismic slope instability are identified within the Los Angeles/El Segundo Dunes, but the Los Angeles/El Segundo Dunes are located west of the Project site, across Pershing Drive.[28] Given the Project site's flat topography (after proposed removal of the debris and soil stockpiles), it would not be subject to slope instability, and the potential instability within the Los Angeles/El Segundo Dunes to the west would not pose a risk to the Project site.

In summary, the potential for seismic-related ground failure at the Project site is considered low, and the proposed Project would be designed in accordance with the provisions of the LABC, both of which have been formulated to avoid substantial seismic-related ground failure. Therefore, potential impacts associated with seismic-related ground failure would be less than significant, and no mitigation measures are required.

iv. Landslides?

No Impact. The Project site is flat (except for the gravel and soil stockpiles which will be removed and/or used as backfill material on-site), and the City of Los Angeles Landslide Inventory and Hillside Areas map does not identify any areas in the vicinity of the Project site as representing unstable slopes which may be prone to landslides.[29] Implementation of the proposed Project would not result in the exposure of people or structures to the risk of landslides. Therefore, no impacts resulting from landslides would occur, and no mitigation measures are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed Project would require grading of the 75-acre Project site, the reuse/relocation/disposal of stockpiled soil and debris, and trenching for utility and storm drain lines. As indicated in the 2004 LAX Master Plan Final EIS/EIR, the potential for soil erosion is low at LAX due to the flat topography of the LAX property (including the Project site).[30] Conformance with LABC 7000 Sections 91.7001 – 91.7016, which include construction requirements for grading, excavation, and use of fill, would reduce the potential for wind or waterborne erosion. In addition, the LABC requires an erosion control plan that is reviewed by the Department of

[26] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.22, April 2004.*

[27] *California Public Resources Code, §2690-2699.6 (Seismic Hazards Mapping Act).*

[28] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.22, April 2004.*

[29] *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit C, Landslide Inventory & Hillside Areas In the City of Los Angeles, June 1994.*

[30] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, p. 4-1246, April 2004.*

Building and Safety prior to construction should grading exceed 200 cubic yards and occur during the rainy season (between November 1 and April 15). LAWA would be required to prepare an erosion control plan to avoid substantial soil erosion. Therefore, proposed Project impacts related to soil erosion would be less than significant, and no mitigation measures are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. Settlement of foundation soils beneath engineered structures or fills typically results from the consolidation and/or compaction of the foundation soils in response to the increased load induced by the structure or fill. As indicated in the 2004 LAX Master Plan Final EIS/EIR, the presence of undocumented and typically weak artificial fill at LAX creates the potential for settlement.[31] LAX is also underline by some silt and clay layers prone to settlement.[32] However, design features and construction methods can reduce the potential for excessive settlement at LAX, and the overall potential for damaging settlement is considered low. Also, the proposed Project would be subject to the LABC requirements which have been formulated to avoid issues related to unstable soils including landslides, lateral spreading, subsidence, liquefaction and collapse. Furthermore, Project design and construction would be required to adhere to engineering and design recommendations of a geological and/or soils report required by LAMC Section 91.7006.2. Therefore, issues related to unstable soils would be less than significant, and no mitigation measures are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the Los Angeles Building Code (2002), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils are typically composed of certain types of silts and clays that have the capacity to shrink or swell in response to changes in soil moisture content. Shrinking or swelling of foundation soils can lead to damage to engineered structures including tilting and cracking. As indicated in the LAX Master Plan Final EIS/EIR, fill materials located in some portions of the LAX area could be prone to expansion.[33] However, all construction would occur in accordance with the LAMC Sections 91.7001 through 91.7016 and with the Los Angeles Department of Building and Safety requirements, which include construction requirements for grading, excavation, and foundation work, and the requirement to prepare a geological and/or soils report and adhere to all the engineering and design recommendations made in the report). Therefore, proposed Project implementation would not result in significant impacts associated with expansive soils, no substantial risks to life or property would occur, and no mitigation measures are required.

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[31] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, p. 4-1246, April 2004.*

[32] *Ibid.*

[33] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.22, April 2004.*

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project site is located in an urbanized area where wastewater infrastructure is currently in place. The proposed Project would not use septic tanks or alternative wastewater disposal systems. Therefore, the ability of on-site soils to support septic tanks or alternative wastewater systems would not be relevant to the proposed Project, and thus no impact would occur and no mitigation measures are required.

VII. GREENHOUSE GAS EMISSIONS.

Would the Project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

a-b. Potentially Significant Impact. The proposed Project would convert an existing, largely unpaved, 75-acre construction staging area into an area with an aircraft parking apron for RON/RAD use, a GRE, aircraft maintenance hangar(s), an employee parking lot, and other facilities for the parking, maintenance, and washing of aircraft. These activities/uses would not be expected to result in a large net increase in air emissions (including GHG emissions) as they would largely represent a consolidation of existing aircraft washing and maintenance operations from other areas of the airport. However, in order to provide a conservative analysis, the EIR will evaluate whether the proposed Project could potentially: (1) generate greenhouse gas emissions (GHGs), either directly or indirectly, that may have a significant impact on the environment; and/or (2) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHGs. Project GHG emissions will be modeled.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the Project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

a -b. Potentially Significant Impact. The construction staging area on the Project site contains stockpiled materials which would be re-used on-site as fill material and/or transported off-site to a landfill permitted to accept such materials. A portion of the stockpiled materials may have petroleum hydrocarbons (TPH) associated with a pavement recycling area and fragments of asphaltic material. Further investigation will be undertaken of the stockpiled materials, and means for segregating and disposing of impacted materials will be identified as may be warranted. In addition, the Project site has a history of use, and further investigation, including the performance of a Phase 1 Environmental Site Assessment, will be undertaken to determine whether the Project site contains other hazardous materials contamination. The Project site contains two groundwater monitoring wells that are part of remediation efforts at the upstream Continental site. Although the proposed Project would not effect groundwater or interfere with

these remediation efforts, should the two monitoring wells be affected by construction or site development, any impacts would be addressed in accordance with the requirements of the Los Angeles Regional Water Quality Control Board Vacuum Enhanced Free Product Recovery (VEFPR) System Monitoring Plan with Continental Airlines, dated 10 March 2006. Although the proposed Project would be subject to a substantial number of federal, state and local regulations that control hazardous materials use, storage, transport, and disposal, the potential for the Project to present a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, will be evaluated further in an EIR.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project site is not located within one-quarter mile of an existing or proposed school. The nearest existing school is St. Bernard High School located 0.88 miles to the north, and no schools are proposed within one-quarter mile of the Project site. Therefore, no impact would occur, and no mitigation measures are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to the California Department of Toxic Substances Control (DTSC) EnviroStor Database, groundwater contamination has occurred associated with Continental Airline maintenance activities upstream (northeast) of the Project site 34, remediation of this groundwater contamination is underway at the Continental Site, and groundwater quality monitoring is occurring downstream of the Continental site including at the Project site (although groundwater contamination does not extend to the Project site).[35] In addition, according to SWRCB's GeoTracker Database, several permitted underground storage tanks (USTs) occur along World Way West in the vicinity of the Project site.36 Finally, there is a stockpile (approximately 25,000-30,000 cubic yards of material) on the Project site located just south of Guard Post 21 which is partially contaminated with hydrocarbons. However, the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact to a listed hazardous materials site would occur, and no mitigation measures are required.

e. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?

No Impact. A portion of the apron area for the proposed Project lies within a portion of the Runway Protection Zone (RPZ) for Runway 7L. No aircraft parking would occur in this area, and it would be restricted from incompatible

[34] *State Water Resources Control Board, GeoTracker System, http://geotracker.waterboards.ca.gov, accessed by PCR on May 31, 2012.*

[35] *Ibid*

[36] *Ibid.*

objects and activities pursuant to FAA requirements. Therefore, no impact related to safety hazards for people residing or working in the Project area would occur and no mitigation measures are required.

f. For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for the people residing or working in the area?

No Impact. The Project site is not located within the vicinity of a private airstrip but rather within a public airport as discussed under *Response No. VIII.a-e, g* above. No impact would occur, and no mitigation measures are required.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed Project would not include the closure of existing adjacent streets during either construction or operation, would not impede access to the Project site or adjacent properties, and would not generate a substantial increase in the demand for emergency response or evacuation planning. Therefore, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, no impact would occur, and no mitigation measures are required.

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The Project site is located within a developed airport and is surrounded by airport uses, streets and the Los Angeles/El Segundo Dunes. It is not within a City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan.[37] Therefore, implementation of the proposed Project would not result in the exposure of people or structures to hazards associated with wildland fires, and no mitigation measures are required.

IX. HYDROLOGY AND WATER QUALITY.

Would the Project:

a. Violate any water quality standards or waste discharge requirements?

b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

[37] *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit D, Selected Wildfire Hazard Areas In the City of Los Angeles, April 1996.*

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f. Otherwise substantially degrade water quality?

a-f. Potentially Significant Impact. The 75-acre Project site is located within the western portion of the 700-acre Pershing Sub-basin which covers the southwest quarter of the airport property. Runoff from the Pershing Sub-basin flows to City of Los Angeles storm drains in World Way West and Pershing Drive, and then to a County of Los Angeles storm drain in Imperial Highway before being discharged to Santa Monica Bay via the County's Imperial Outfall. Runoff from the Project site currently sheet flows to the Pershing and World Way West drains (or to a drainage ditch along the east side of the site which flows to World Way West). Approximately 10% of the Project site is covered with impervious surfaces (primarily asphalt). The site does not contain streams or rivers, and is not located within a 100-year floodplain.[38]

The proposed Project would generate wet- and dry-weather flows from the development of additional impervious surfaces, and include water use which could potentially: (1) violate water quality standards or waste discharge requirements; (2) substantially deplete groundwater supplies or interfere with groundwater recharge; (3) substantially alter the existing drainage pattern of the site or area, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (4) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; and/or (65) otherwise substantially degrade water quality. Therefore, these issues will be evaluated further in an EIR. A drainage report will be prepared, and pollutant loading in Project runoff will be analyzed.

g. Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h. Place within a 100-year flood plain structures which would impede or redirect flood flows?

g-h. No Impact. As indicated in the LAX Master Plan EIR/EIS, no 100-year floodplain areas are located within the LAX Master Plan boundaries (including the Project site).[39] Furthermore, the proposed Project would not involve the construction of housing. Therefore, no impacts resulting from the placement of housing or other structures within a 100-year floodplain would occur, and no mitigation measures are required.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. As indicated in *Response No. IX.g-h* above, the Project site is not located within a 100-year floodplain and thus is not subject to flooding. In addition, as delineated on the City of Los Angeles Inundation and Tsunami Hazard

[38] *City of Los Angeles, West Maintenance Area Drainage Design Report, prepared for Los Angeles World Airports by Atkins, April 13, 2012.*

[39] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.13, April 2004.*

Areas map,[40] the Project site is not located within a boundary of an inundation area from a flood control basin. Further, the Project site is not located within the downstream influence of any levee or dam. Therefore, no impacts due to the exposure of people or structures to a risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam would occur, and no mitigation measures are required.

j. Inundation by seiche, tsunami, or mudflow?

No Impact. The Project site is located approximately 0.5 mile east of the Pacific Ocean and is not delineated as a potential inundation or tsunami impacted area in the City of Los Angeles Inundation and Tsunami Hazard Areas map.[41] Mudflows are not a risk as the Project site is located on, and is generally surrounded by, relatively level terrain and urban development. Therefore, no impacts resulting from inundation by seiche, tsunami, or mudflow would occur, and no mitigation measures are required.

X. LAND USE AND PLANNING.

Would the Project:

a. Physically divide an established community?

No Impact. The Project site is located entirely within the boundaries of a developed airport in an urbanized area and development of the site would not disrupt or divide the physical arrangement of an established community. Thus, the proposed Project would not divide an established community, and no mitigation measures are required.

b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the Project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. Land use designations and development regulations applicable to LAX, including the Project site, are set forth in the LAX Plan[42] and the LAX Specific Plan.[43] The Project site is in an area designated in the LAX Plan as "Airport Airside." Within the LAX Specific Plan, the Project Site is in an area designated as within the Airport Airside subarea and zoned "LAX - A Zone, Airport Airside Sub-Area."

The aircraft parking and maintenance uses associated with the proposed Project are permitted uses on the Project site under the Airport Airside designation and LAX – A Zone. However, further analysis is required to assess Project consistency with the land use goals, policies, objectives and requirements of the LAX Master Plan, LAX Plan, and LAX Specific Plan. This will be evaluated further in an EIR.

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[40] *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas In the City of Los Angeles, March 1994.*

[41] *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas In the City of Los Angeles, March 1994.*

[45] *City of Los Angeles, Los Angeles World Airports, LAX Plan, September 29, 2004.*

[43] *City of Los Angeles, Los Angeles World Airports, Los Angeles International Airport Specific Plan, September 29, 2004.*

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less Than Significant Impact. The Project site is located across Pershing Drive from the Los Angeles El Segundo Dunes Specific Plan Area, a designated Los Angeles County Significant Ecological Area and City of Los Angeles Ecologically Important Area, within which is located a Dunes Habitat Preserve area for the El Segundo Blue Butterfly, a federally-listed endangered species. The proposed Project would not include construction activities within any of these areas. Furthermore, while the proposed Project would include construction and operational activities perceptible from these areas, and while these activities would generate dust, light/glare and noise, the impacts of these on the El Segundo Blue Butterfly, its habitat, and the above iconological areas would be less than significant for the same reasons discussed under *Response IV,a,b,e.* Therefore, the proposed Project would not conflict with an applicable habitat conservation plan or natural community conservation plan.

XI. MINERAL RESOURCES.

Would the Project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The State Mining and Geology Board classifies mineral resource zones (MRZs) throughout the State. As indicated in the LAX Master Plan Final EIR, the Project site is contained within a MRZ-3 zone, which represents areas with mineral deposits whose significance cannot be evaluated from available data.[44] The Project site is within the boundaries of the airport and surrounded by airport-related uses. There are no actively-mined mineral resources on the Project site, nor is the site available for mineral resource extraction given the existing airport use. Therefore, the proposed Project would not affect access to or the availability of valued mineral resources, and no mitigation measures are required.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The Project site is not within an area delineated on the City of Los Angeles Oil Field & Oil Drilling Areas map in the City of Los Angeles General Plan Safety Element.[45] Furthermore, the Project site is disturbed and in an area that is not available for mineral resource extraction due to the construction staging uses. Therefore, the proposed Project would not affect the availability of a locally-important mineral resource recovery site, and no mitigation measures are required.

[44] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH #1997061047, Section 4.17, April 2004.*

[45] *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit E, Oil Field & Oil Drilling Areas in the City of Los Angeles, May 1994.*

XII. NOISE.

Would the Project result in:

a. Exposure of persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?

c. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

d. A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

e. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

a-e. Potentially Significant Impact. The Project site is located within the western portion of the LAX property, within an area well removed from existing noise-sensitive uses (e.g., residential, schools, churches, etc.). The nearest noise-sensitive land uses are the El Segundo residential neighborhood located 0.41 miles to the south, and the Westchester residential neighborhood located approximately 0.97 miles to the north. The Project site and adjacent area is currently subject to high ambient noise levels resulting from a combination of noise sources, including on-site construction staging activities, aircraft taxiing along Taxiway AA and other nearby taxiways, aircraft takeoffs and landings from the south airfield runways, and motor vehicle traffic along Pershing Drive, Imperial Highway and Westchester Parkway.

The proposed Project would generate construction noise associated with both on-site construction activities and the proposed relocation of existing on-site construction staging activities associated with other projects to an existing LAX construction staging area located along the south side of Westchester Parkway, immediately east of Pershing Drive and extending to Lincoln Boulevard. The proposed Project would also generate operational noise associated with the proposed Project, particularly aircraft engine run-ups at the proposed GRE.

Because the Project site is the location of existing construction staging activities, it is not anticipated that Project construction activities at the Project site would result in any substantial change in existing noise emanating from the Project site. Similarly, because the proposed Project would consolidate existing aircraft maintenance, washing, and engine testing operations at the Project site from other areas of the airport, and would not result in an increase airport employees, and because most Project employees already access the airport property from Pershing Drive and World Way West such that there would not be a major shift in airport employee traffic patterns under the proposed Project, the proposed Project is not anticipated to result in a substantial change in traffic noise. However, for the balance of the anticipated proposed Project noise sources (e.g., noise from relocated construction staging activities at the northerly construction staging area across the street from the Westchester neighborhood, and noise from on-site engine run-up and other maintenance activities), the proposed Project could potentially result in the: (1) exposure of persons to, or the generation of noise levels in excess of, applicable noise standards; (2) exposure of people to or generation of excessive groundborne vibration or groundborne noise levels (at the northerly construction staging area only); (3) a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the Project vicinity above levels

existing without the proposed Project; and (4) exposure of people residing or working in the Project area to excessive noise levels. Therefore, these issues will be evaluated further in an EIR.

f. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. As discussed under *Response No. XII.e* above, the Project site is located within an airport land use plan area and not within the vicinity of a private airstrip. Therefore, the proposed Project would not have the potential to expose people residing or working within the area of a private airstrip to excessive noise levels, and no mitigation measures are required.

XIII. POPULATION AND HOUSING.

Would the Project:

a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would provide an area with an aircraft parking apron for RON/RAD use, a GRE, aircraft maintenance hangar(s), an employee parking lot, and other facilities ancillary to aircraft maintenance. The proposed Project would consolidate existing aircraft washing and parking which currently occurs at other locations on the airport property. The proposed Project would not include the types of development (such as residential or business development) that often has associated with it large resident or employee populations. Also, the employees that would work at the Project site are existing airport employees that would move to the Project site from other areas of the airport property rather than represent new employees. The proposed Project would also not increase the passenger or cargo capacity of the airport as it would not include passenger or cargo gates or other passenger and cargo facilities, and would not extend roads or other infrastructure to un-served areas. Thus, the proposed Project would not induce substantial population growth in the area either directly or indirectly. Thus, the impact would be less than significant, and no mitigation measures are required.

b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

b-c. No Impact. The proposed Project is located within a public airport and accommodates existing construction staging activities; the proposed Project would not displace any existing housing or people, and would not necessitate the construction of replacement housing elsewhere. Thus, no impact would occur, and no mitigation measures are required.

XIV. PUBLIC SERVICES.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to

maintain acceptable service ratios, response times or other performance objectives for any of the public services?

a. Fire protection?

Less Than Significant Impact. The City of Los Angeles Fire Department (LAFD) provides fire protection services throughout LAX, including the Project site. Three LAFD fire stations are located on the LAX property (Fire Station Nos. 80, 51, and 95), with the new Fire Station No. 80 located less than one mile to the east of the Project site within the airfield. The proposed Project would consolidate aircraft parking and maintenance operations already occurring in other areas of the airport property. Also, while the proposed RON and RAD aprons and GRE would represent new facilities, they would be replacing existing structures and thus would not pose a substantial increase in fire risk or generate a substantial increase in demand for fire protection services. Furthermore, the Project includes a proposal for a fully integrated fire water pipe and hydrant system connecting to the existing LADWP 24-inch high-pressure water pipeline in Pershing Drive and meeting LAFD requirements, and LAWA has committed to developing a water storage tank on the Project site and "deluge systems" within the proposed hangars for fire suppression, if required. Finally, the proposed Project would comply with all applicable LAWA, City, state, and federal fire codes and ordinances, including but not limited to the LAX Master Plan commitment identified below, which have been formulated to ensure that proper fire protection features, emergency access, fire flow, etc., are incorporated into the development:

- **LAX Master Plan Commitment FP-1. LAFD Design Recommendations:** During the design phase prior to initiating construction of a Master Plan component, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD, and listed below:
    - Emergency Access. During Plot Plan development and the construction phase, LAWA will coordinate with LAFD to ensure that access points for off-airport LAFD personnel and apparatus are maintained and strategically located to support timely access. In addition, at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided.
    - Fire Flow Requirements. Proposed Master Plan development will include improvements, as needed, to ensure that adequate fire flow is provided to all new facilities. The fire flow requirements for individual Master Plan improvements will be determined in conjunction with LAFD and will meet, or exceed, fire flow requirements in effect at the time.
    - Fire Hydrants. Adequate off-site public and on-site private fire hydrants may be required, based on determination by the LAFD upon review of proposed plot plans.
    - Street Dimensions. New development will conform to the standard street dimensions shown on the applicable City of Los Angeles Department of Public Works Standard Plan.
    - Road Turns. Standard cut-corners will be used on all proposed road turns.
    - Private Roadway Access. Private roadways that will be used for general access and fire lanes shall have at least 20 feet of vertical access. Private roadways will be built to City of Los Angeles standards to the satisfaction of the City Engineer and the LAFD.
    - Dead-End Streets. Where fire lanes or access roads are provided, dead-end streets will terminate in a cul-de-sac or other approved turning area. No fire lane shall be greater than 700 feet in length unless secondary access is provided.

- Fire Lanes. All new fire lanes will be at least 20 feet wide. Where a fire lane must accommodate a LAFD aerial ladder apparatus or where a fire hydrant is installed, the fire lane will be at least 28 feet wide.
- Building Setbacks. New buildings will be constructed no greater than 150 feet from the edge of the roadways of improved streets, access roads, or designated fire lanes.
- Building Heights. New buildings exceeding 28 feet in height may be required to provide additional LAFD access.
- Construction/Demolition Access. During demolition and construction activities, emergency access will remain unobstructed.
- Aircraft Fire Protection Systems. Effective fire protection systems will be provided to protect the areas beneath the wings and fuselage portions of large aircraft. This may be accomplished by incorporating foam-water deluge sprinkler systems with foam-producing and oscillating nozzle (per NFPA 409, aircraft hangars for design criteria).

Therefore, the proposed Project would not result in any substantial increase in demand for fire protection services that may result in the need for new or altered fire protection facilities. Accordingly, no significant impacts related to fire protection services are anticipated, and no mitigation measures are required.

b. Police protection?

Less Than Significant Impact. The Los Angeles World Airports Police Division (LAWAPD), the City of Los Angeles Police Department LAX Detail (LAPD LAX Detail), and the Los Angeles Police Department (LAPD) provide police protection services to LAX, including the Project site. The LAWAPD is located just east of the CTA and the LAPD LAX Detail station is also located on the east side of the airport. Demand for on-airport police protection services is typically determined by increases in aircraft activity and employees. As discussed in *Response No. XIII.a.* above, the proposed Project would not result in any increase in existing airport employment, and would not increase passenger or cargo capacity at LAX. Therefore, the proposed Project would not necessitate new or physically altered police protection facilities, the provision of which would result in substantial adverse physical impacts. Accordingly, no significant impacts related to police protection services are anticipated, and no mitigation measures are required.

c. Schools?

No Impact. As discussed in *Response No. XIII.a*. above, the proposed Project would not increase existing passenger or cargo capacity at the airport, would not result in an increase in existing airport employment, and would not include residential development. As a result, the proposed Project would not result in a substantial direct or indirect increase in demand for schools, the provision of which could result in substantial adverse physical impacts. Accordingly, no significant impacts related to school facilities or services are anticipated, and no mitigation measures are required.

d. Parks?

Less Than Significant Impact. As discussed in *Response No. XIII.a*. above, the proposed Project would not increase employment or existing passenger or cargo capacity at the airport, and would not include residential development. As a result, the proposed Project would not result in a substantial direct or indirect increase in demand for parks, the

provision of which could result in substantial adverse physical impacts. Accordingly, no significant impacts related to parks would occur, and no mitigation measures are required.

e. Other governmental services (including roads)?

Less Than Significant Impact. The proposed Project does not include residential development, and thus would not contribute to a direct increase in demand for other governmental services (e.g., libraries. or roadway capacity). Also, the proposed Project would not result in increases in passenger or cargo capacity at the airport, or result in an increase in airport employment. Therefore, the proposed Project would not induce substantial population growth in the area or indirectly result in a demand for other governmental services. No significant impacts to other governmental facilities would occur, and no mitigation measures are required.

XV. RECREATION.

a. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

a-b. No Impact. As discussed in *Response No. XIII.a*. above, the proposed Project would not include residential development, increase passenger or cargo capacity, or increase employment at LAX. Therefore, the proposed Project would not result in an increase in demand for existing neighborhood and regional parks or other recreational facilities, and thus would not result in or contribute to substantial physical deterioration of park or recreational facilities. Furthermore, because the proposed Project does not include the construction of new recreational facilities or expansion of existing recreational facilities, no adverse physical effects associated with such development would occur. Based on the above, no impacts would occur, and no mitigation measures are required.

XVI. TRANSPORTATION/CIRCULATION.

Would the Project:

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b. Conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards (LOS) and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

a-b. Potentially Significant Impact. The Project site is located on the western side of the LAX airport property. Regional access is provided by Interstate 405 (I-405) and Interstate 105 (I-105), area access is by Pershing Drive via Imperial Highway and Westchester Parkway, and site access is from driveways along World Way West. Existing traffic on the western side of the airport is restricted largely to airport employee/delivery traffic and general traffic

between the west sides of the City of El Segundo and the community of Westchester/Playa del Rey. Airport travelers do not access LAX from the west. Existing traffic at the Project site is restricted to airport construction worker and airport construction vehicle traffic. Peak hour traffic conditions on the western side of the airport is currently uncongested (e.g., within acceptable levels of service).[46] Peak hour level of service at intersections on the eastern side of the airport is currently congested during peak hours.[47]

The proposed Project would generate construction- and operations-related traffic. The proposed Project would not result in an increase in LAX flights, operations, or employees, and thus would not result in a net increase in operational airport traffic on the area's roadways and freeways. Therefore, the Project would not result in significant operational traffic, and no mitigation is required.

The proposed Project would include both on-site construction activities which would generate temporary traffic on the local roadways. In addition, the proposed relocation of existing on-site construction staging activities to an existing LAX construction staging area located in the northwest corner of the airport property would generate temporary traffic. It is thus conservatively assumed in this analysis that Project construction traffic could: (1) conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system; and (2) conflict with an applicable CMP or other standards established by the county congestion management agency for designated roads or highways. Therefore, these issues will be evaluated further in an EIR, and a traffic study will be prepared.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?

No Impact. The proposed Project would provide an area for maintenance and parking of aircraft, but would not change air traffic patterns or increase air traffic levels. The Project would also include extension of Taxiway B into the Project site (designated on-site as Taxilane AA1) to provide aircraft with access to the proposed maintenance facilities, but this would not increase or change the location of air traffic patterns. Therefore, the proposed Project would not result in a change in air traffic patterns that could result in substantial safety risks, no significant impacts would occur, and no mitigation measures are required.

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e. Result in inadequate emergency access?

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact: The proposed Project would not change existing road alignments or geometrics, would not include new public streets, and would not remove existing public streets. Furthermore, the proposed Project would not change existing bicycle or pedestrian facilities, and would not create new demand for bicycle, pedestrian, or transit facilities and services (given the lack of a net increase in airport employees under the Project). Therefore, the proposed project

[46] *Ibid.*

[47] *Ibid.*

would not: (1) substantially increase hazards due to a design feature; (2) result in inadequate emergency access; or (3) conflict with adopted polices, plans, programs regarding public transit, bicycle, pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No impact would occur, and no mitigation measures are required.

XVII. UTILITIES.

Would the Project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB), or exceed wastewater conveyance capacity?

Less Than Significant. Sanitary wastewater generated by activities at LAX is treated at the Hyperion Treatment Plant (HTP) just to the southwest of LAX. The City of Los Angeles has an approved plan (Integrated Resources Plan or IRP) to accommodate future and cumulative wastewater treatment capacity, and is implementing the components that comprise its plan through the monitoring of triggers (i.e., population growth, regulatory changes, and other policy decisions) as part of their implementation strategy.[48] As discussed in *Response No. XIII.a.*, the proposed Project would not increase passenger or cargo capacity at LAX, would not include residential development, and would not increase airport employment. Also, while aircraft wash racks would be installed as part of the proposed Project, these racks would be largely relocated from other areas of the airport property, and water used at the racks would be collected and recycled (where not all existing LAX wash racks currently have recycling systems), both of which would serve to reduce the incremental increase in wash water entering the sewer system. Therefore, the proposed Project would not substantially increase wastewater generation, and thus would not have the potential to exceed the wastewater treatment requirements of the applicable RWQCB. Hence, no significant impacts with regard to wastewater generation and treatment would occur, and no mitigation measures are required.

The proposed Project would include bathrooms for on-site employees, and wash racks for the washing of aircraft. Flows from both of these sources would require conveyance by the local Los Angeles Bureau of Sanitation (LA BOS) sanitary sewer system. The employee bathroom would be connected to either the 8- or 10-inch sewer lines in World Way West, and the wash rack area would be connected to the existing 8-inch sewer line in Pershing Drive. The increase in wastewater flows to the existing sewer lines would be minimal given that Project employees and most of the wash racks would be relocated from other areas of the airport property, and given that the wash racks would be developed with a recycling system to minimize flows to the sewer system. Furthermore, the City's IRP would ensure the development of increased City wastewater treatment capacity, when required.[49] This is especially true of the City's regional trunk lines which feed into the HTP, including those which would be utilized by the proposed Project (Pershing main, etc.).[50] Therefore, a less than significant impact would occur, and no mitigation measures are required.

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[48] *City of Los Angeles, Final Environmental Impact Report for the LAX CUP Replacement Project, SCH #2009041043, Appendix A, Initial Study, page A-37, July 2009.*

[49] *Ibid.*

[50] *City of Los Angeles, Initial Study for the LAX CUP Replacement Project, SCH #2009041043, April 1, 2009.*

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. As discussed in *Response No. XIII.a.*, the proposed Project would not increase passenger or cargo capacity at LAX, and would not result in an increase in airport employees. Therefore, while the proposed Project would require water and sewer connections to the existing adjacent LADWP water and LA BOS sewer lines in World Way West and Pershing Drive, the proposed Project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. No population-related impact to water or wastewater facilities would occur, and no mitigation measures are required.

The proposed Project would include wash racks for the washing of aircraft. While the washing of aircraft and associated water use already occurs on the airport property, some incremental increase in aircraft washing activities and associated water use could occur. However, because Project washing operations would represent a small incremental increase in airport-wide washing activities, if any, and would utilize recycled water, they would not create a substantial increase in demand for new or expanded domestic water treatment facilities. Therefore, no impacts would occur, and no mitigation measures are required.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Impact. The proposed Project would replace approximately 10 acres of impervious surfaces existing at the Project site with approximately 75 acres of impervious surfaces. This would increase the quantity of stormwater runoff generated within the Project site. To safely convey runoff from the Project site under the proposed Project, the following drainage improvements are proposed: (1) an on-site storm drainage system; (2) connection of this system to the existing storm drains in World Way West and Pershing Drive; (3) development of a small detention/infiltration basin in the southwest corner of the Project site (within an existing airport employee parking lot); and (4) the development of on-site water quality improvements (e.g., wash rack recycling system, oil-water separator, use of porous pavement or media filters, etc.) to reduce urban pollutants in Project stormwater runoff. As this Initial Study assumes and evaluates 100 percent development of the Project site, the environmental effects associated with the development of these improvements are already evaluated throughout this Initial Study, and no additional significant impacts would occur.

d. Have sufficient water supplies available to serve the Project from existing entitlements and resource, or are new or expanded entitlements needed?

Less Than Significant Impact. The LADWP is the water purveyor for LAX. LADWP is responsible for supplying, treating, and distributing water within the City. According to LADWP, it has met the immediate needs of its customers and is well positioned to continue to do so in the future.[51] LAX is served by a 36-inch trunk line in Sepulveda Boulevard that distributes water to a combination of 12-inch and 16-inch transmission lines running along the airport perimeter and 8-inch and 10-inch transmission lines primarily along the perimeter of the airport terminals.

[51] *City of Los Angeles Department of Water and Power, Urban Water Management Plan, 2005.*

The proposed Project would provide water line hook ups to airplanes parked on the proposed RON and RAD aprons, GRE and maintenance hangars, and to the proposed supporting office space within the hangars, with this water supplied via connection to the existing LADWP 12-inch high-pressure water line in Pershing Drive.

Because the majority of the proposed Project would involve the consolidation of existing LAX aircraft maintenance and washing operations at the Project site rather than represent new such uses, and because Project employees would be existing airport employees who relocate from other areas of the airport to the Project site, any incremental increase in water use associated with the proposed Project would be minimal, and would be accommodated by existing airport water entitlements. Also, the proposed wash racks would be designed to collect and re-use water, thereby reducing overall water consumption. Furthermore, the LADWP performed an evaluation of water availability for the LAX Master Plan in June 2003 (Water Supply Availability Assessment for the Los Angeles World Airport – LAX Master Plan project – Alternative D) and determined that adequate water supplies would be available to meet water demands under the Master Plan.[52] Therefore, since the proposed Project would be generally consistent with the uses proposed within the Master Plan, it too would fall within the range of the UWMP. Therefore, no new or expanded water entitlements would be required, no significant impacts with respect to water supply would occur, and no mitigation measures are required.

e. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. As discussed in *Response Nos. XVII.a. and b*. above, the proposed Project would not result in a substantial increase in wastewater generation, and existing wastewater treatment facilities are adequate to serve the proposed Project. Therefore, impacts to wastewater treatment facilities would not be significant, and no mitigation measures are required.

f. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

g. Comply with federal, state, and local statutes and regulations related to solid waste?

f-g. Less Than Significant Impact. The proposed Project would result in the installation of paving on undeveloped land on a largely unpaved lot currently used for rock crushing and construction staging activities. The site contains apparatus, construction office trailers, construction machinery, and both debris and soil stockpiles. There are no existing structures to be demolished and a minimal amount of paving that would require removal. As such, only minimal construction waste would be generated as a result of construction activities. Existing contractor staging yards and associated equipment would be relocated to existing LAX staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard. Stockpiled materials (consisting of uncharacterized soil and construction rubble) currently existing within and immediately adjacent to the Project site, would be re-used on-site as backfill material and/or exported off-site to permitted landfills. Under the proposed Project, it is anticipated the Project construction and operational waste would be disposed of at Sunshine Canyon Landfill (Class III, Sylmar, 82 miles from LAX), while hazardous waste would be disposed of at the Kettlemen Hills Landfill (Class I/II, Kettleman City

[52] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Statement/Environmental Impact Report for the Los Angeles International Airport Proposed Master Plan Improvements, SCH # 1997061047, page 4-1503, April 2004.*

174 miles from LAX). The County of Los Angeles currently has adequate inert (construction) waste capacity. The County's Annual Report on the Countywide Summary Plan and Siting Element estimated the total remaining permitted inert waste capacity in Los Angeles County to be approximately 60.2 million tons.[53] Therefore, there is anticipated to be no shortfall in disposal capacity for inert waste within the County. Furthermore, because the proposed Project would not increase passenger/gate capacity or increase flights/operations at the airport, it would not generate an incremental increase in solid waste generation. In addition, the LAX Master Plan EIR/EIS found that, with implementation of Master Plan Mitigation Measures HA-4 through -10 and Master Plan Commitments SW-1 through -3, the Master Plan would result in a less than significant solid waste impact. Since the activities associated with the proposed Project were anticipated in the LAX Master Plan, and would be subject to these same Master Plan mitigation measures and commitments, impacts would be less than significant. In addition, all waste disposal would occur in compliance with federal, state, City and LAWA statutes and regulations related to solid waste, including waste stream diversion requirements. The following Master Plan commitments formulated to avoid solid waste impacts due to new development at LAX are applicable to the proposed Project:

- **LAX Master Plan Commitment SW-1. Implement an Enhanced Recycling Program:** LAWA will enhance their existing recycling program, based on successful programs at other airports and similar facilities. Features of the enhanced recycling program will include: expansion of the existing terminal recycling program to all terminals, including new terminals; development of a recycling program at LAX Northside/Westchester Southside; lease provisions requiring that tenants meet specified diversion goals; and preference for recycled materials during procurement where, practical and appropriate.

  Note: Subsequent to the approval of the LAX Master Plan, LAWA adopted the "LAWA Sustainable Airport Planning, Design and Construction Guidelines" for implementation on all airport projects. These Guidelines provide goals and performance standards for recycling of materials during both construction and operation of airport facilities in accordance with the provisions of Master Plan Commitment SW-1. LAWA has also implemented an enhanced recycling program at LAX as outlined in the "LAX Recycling Plan" which provides updated guidelines for recycling operations at LAX.

- **LAX Master Plan Commitment SW-2. Requirements for the Use of Recycled Materials during Construction:** LAWA will require, where feasible, that contractors use a specified minimum percentage of recycled materials during construction of LAX Master Plan improvements. The percentage of recycled materials required will be specified in the construction bid documents. Recycled materials may include, but are not limited to, asphalt, drywall, steel, aluminum, ceramic tile, cellulose insulation, and composite engineered wood products. The use of recycled materials in LAX Master Plan construction will help to reduce the project's reliance upon virgin materials and support the recycled materials market, decreasing the quantity of solid waste requiring disposal.
- **LAX Master Plan Commitment SW-3. Requirements for the Recycling of Construction and Demolition Waste:** LAWA will require that contractors recycle a specified minimum percentage of waste materials generated during demolition and construction. The percentage of waste materials required to be recycled will be specified in the construction bid documents. Waste materials to be recycled may include, but are not limited to, asphalt, concrete, drywall, steel, aluminum, ceramic tile, and architectural details.

[53] *County of Los Angeles, Department of Public Works, Annual Report on the 2010 Countywide Integrated Waste Management Plan, October, 2011.*

Given the above, the impact would be less than significant.

Under the proposed Project, an existing on-site stockpile partially contaminated with hydrocarbons may require remediation and would either be reused on-site as backfill material or exported to a landfill licensed to accept such waste. As indicated in *Response VIII.a,b,d,e,g*, this issue will be evaluated further in the Hazards/Hazardous Materials section of the EIR.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

a. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Impact. The proposed Project is located on a highly disturbed site within a developed airport. There are no listed endangered, threatened or special status species, riparian/wetland areas, trees, or wildlife movement corridors known to occur at the Project site, and fairy shrimp cysts, which were documented on the Project site and at other locations within the airport property in the past, have been removed and relocated from the Project site (see *Response Nos. IV.a-f, e*). Furthermore, the proposed Project would not result in significant indirect impacts (e.g., dust, light/glare and noise impacts) on the El Segundo Blue Butterfly given a suite of applicable LAX Master Plan mitigation measures and other factors (see *Response Nos IV.a-f, e)*. Therefore, the proposed Project would not have the potential to result in significant biological resources impacts, and no mitigation measures are required.

As discussed under *Response V.a*, historical surveys previously conducted of the airport property have not identified any historic resources on the Project site, and there are no buildings on the Project site and thus no potential for the presence of historical resources on-site. Therefore, no impact would occur to historic resources, and no mitigation measures are required.

There are no known archaeological or paleontological resources located on the Project site, and the disturbed nature of the site make the site's sensitivity to such resources low. Nonetheless, as discussed under *Response Nos. V.b-d*, archaeological and paleontological resources have been found at other locations within the airport property, and the potential exists for the destruction of buried archaeological or paleontological resources at the Project site during construction, if such resources are present. Still, with the implementation of the mitigation measures identified in *Response Nos. V.b-d*, potential impacts to archaeological and paleontological resources would be less than significant.

b. Does the Project have impacts which 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 Projects, the effects of other current Projects and the effects of probable future Projects).

Potentially Significant Impact. As indicated in the previous responses in this Initial Study, the proposed Project would have the potential to result in potentially significant impacts in the areas of air quality, GHGs, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, and transportation. In order to provide a conservative analysis, this Initial Study assumes that the proposed Project could have impacts which are individually

limited but cumulatively considerable in each of these issue areas. Therefore, the cumulative impacts in terms of each of these impact areas will be evaluated in an EIR. For the other environmental issues, the proposed Project would be located too far away from sensitive uses, and/or result in such minor impacts, that it would not have the potential to generate cumulatively considerable impacts in combination with the limited number of other past, current or probable future projects in the vicinity of the Project site.

c. Does the Project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impacts. Implementation of the proposed Project may result in adverse environmental effects in terms of the environmental issues listed under *Response No. XVIII.b* above which could potentially result in substantial adverse effects on human beings. The potential for the proposed Project to result in such impacts will be evaluated further in an EIR. For the other environmental issues, the proposed Project would be located too far away from sensitive uses, and/or result in such minor impacts, that it would not have the potential to generate environmental effects which could cause substantial adverse effects on human beings, either directly or indirectly.

4. REFERENCES

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5. PREPARERS AND PERSONS CONTACTED

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Salar D. Niku, Ph.D., PE, Program Manager

September 14, 2012

NOTICE OF PREPARATION AND NOTICE OF PUBLIC SCOPING MEETING FOR AN ENVIRONMENTAL IMPACT REPORT

PROJECT NAME: Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project (proposed Project")
PROJECT LOCATION/ADDRESS: On the LAX property, in the southwestern portion of the airfield area. The Project site is generally bounded by World Way West to the north, an LAX employee parking lot to the south, Taxiway AA to the east, and Pershing Drive to the west.
COMMUNITY PLANNING AREA: LAX Plan
COUNCIL DISTRICT: 11- Rosendahl
DUE DATE FOR PUBLIC COMMENTS: October 15, 2012

Los Angeles World Airports (LAWA), a proprietary department of the City of Los Angeles, will be the lead agency and will prepare a project-level Environmental Impact Report (EIR) for the project identified above (proposed Project). LAWA requests your comments as to the scope and content of the EIR. The purpose of the scoping meeting, as further described below, is also focused on receiving input from the public as to what areas the EIR should study.

The Project description, requested permits and approvals, and the potentially significant environmental effects of the proposed Project are set forth below. Also included below is the date, time and location of the scoping meeting that will be held in order to solicit input regarding the content of the Draft EIR. The scoping meeting will be in an open house format. A copy of the Initial Study prepared for the proposed Project is available for review at the LAX website at: http://www.ourlax.org and at the locations listed below:

Westchester-Loyola Village Branch Library 7114 W. Manchester Ave. Los Angeles, CA 90045	Dr. Mary McLeod Bethune Regional Branch Library 3900 S. Western Avenue Los Angeles, CA 90062	Culver City Library 4975 Overland Avenue Culver City, CA 90230
El Segundo Library 111 W. Mariposa Avenue El Segundo, CA 90245	Hawthorne Library 12700 Grevillea Avenue Hawthorne, CA 90250	Inglewood Library 101 W. Manchester Boulevard Inglewood, CA 90301

PROJECT DESCRIPTION: The intent of the proposed West Aircraft Maintenance Area Project ("proposed Project") is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport (LAX) property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas, and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in

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Check	$75.00

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September 14, 2012

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Westchester-Loyola
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Los Angeles, CA 90045

Dr. Mary McLeod Bethune
Regional Branch Library
3900 S. Western Avenue
Los Angeles, CA 90062

Culver City Library
4975 Overland Avenue
Culver City, CA 90230

El Segundo Library
111 W. Mariposa Avenue
El Segundo, CA 90245

Hawthorne Library
12700 Grevillea Avenue
Hawthorne, CA 90250

Inglewood Library
101 W. Manchester Boulevard
Inglewood, CA 90301

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size to and including Boeing 737's). Specifically, the proposed Project would include: (1) approximately 50 acres of aircraft apron for ADG VI aircraft as well as smaller airline aircraft that may require Remain Over Night (RON) and Remain All-Day (RAD) parking, or those aircraft being serviced at the current aircraft maintenance hangars; (2) a ground run-up enclosure (GRE) that would provide a three-sided unroofed facility for ground run-up testing of aircraft engines required for jet engine maintenance testing and analysis, with the ingress/egress facing the prevailing winds of the site; (3) aircraft maintenance hangar(s), capable of accommodating a wide range of existing aircraft up to and including existing ADG VI aircraft, as well as a maintenance shop and supporting office space within the hangar; (4) approximately 300 employee parking spaces; (5) ancillary facilities (e.g., ground service equipment (GSE) storage and maintenance areas/facilities, aircraft wash racks, RON kits providing ground power, potable water, and pre-conditioned air, necessary utilities and infrastructure and possibly water storage tank(s) for fire protection); (6) a storm drainage filter and/or infiltration basin and connections to existing adjacent utility lines and storm drains; (7) a concrete batch plant would be installed on the site for construction of the proposed Project with removal planned after the final phase of construction (concrete batch plants are permitted on and have been operating on the site in recent years); and, (8) extension of Taxiway B westward to the western limits of the site (designated on-site as Taxilane AA1) to provide primary egress from the Project area, with access to the site via Taxiway AA from a point approximately 830 feet north of Taxiway C (designated on-site as Taxilane AA2). It should be noted that the proposed Project would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX compared to the existing airfield conditions.

In addition, as part of the proposed Project, existing contractor staging yards and associated infrastructure equipment on the Project site would be relocated to existing LAX staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard. Stockpiled materials (consisting of uncharacterized soil and construction rubble) currently existing within and immediately adjacent to the Project site, would be re-used on-site as backfill material and/or exported off-site to permitted landfills.

It is anticipated that the proposed Project would be completed in approximately eight to ten years.

REQUESTED PERMITS/APPROVALS: LAWA has principal responsibility for approving and carrying out the proposed Project. Approvals required for implementation of the proposed Project may include, but are not limited to, the following: U.S. Department of Transportation Federal Aviation Administration (FAA) approval of an FAA Notice of Construction or Alteration; Consultation with the U.S. Fish and Wildlife Service; South Coast Air Quality Management District (SCAQMD) review; Consultation with the California Department of Fish and Game; Permits or approvals from the SWRCB and/or RWQCB which may include a General Construction Storm Water Permit, Standard Urban Stormwater Mitigation Plan, and submittal of a Recycled Water Report; LAWA LAX Specific Plan Compliance Review; Certification of the Project Final EIR and associated Mitigation Monitoring and Reporting Program; Los Angeles Bureau of Sanitation approval of a Project-Specific Storm Water Management Plan or Standard Urban Storm Water Mitigation Plan; Los Angeles Fire Department approval; Los Angeles Bureau of Engineering (BOE) "B" Permit, sewer and storm drain permits; Los Angeles Department of Building and Safety grading and building permits; Los Angeles Department of Public Works permits for infrastructure improvements; and other Federal, State, or local approvals, permits, or actions that may be deemed necessary for the proposed Project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Transportation/Circulation, and Mandatory Findings of Significance are proposed to be addressed in the EIR. Impacts to Aesthetics, Agricultural and Forest Resources, Biological Resources, Cultural

Resources, Geology/Soils, Mineral Resources, Population/Housing, Public Services, Recreation, and Utilities/Service Systems have been found to be less than significant through the analysis provided in the Initial Study and are not proposed for further analysis in the EIR.

PUBLIC SCOPING MEETING DATE AND LOCATION: A public Scoping Meeting in an open house format will be held to receive public comment regarding the scope and content of the environmental information to be included in the EIR. LAWA encourages all interested individuals and organizations to attend the meeting. The location, date, and time of the Scoping Meeting for this proposed Project is as follows:

Date and Time: October 4, 2012, 6:00 pm - 8:00 pm

Arrive any time to speak one-on-one with LAWA staff and Project consultants.

Location: Flight Path Learning Center
6661 West Imperial Highway
Los Angeles CA 90009

LAWA welcomes all comments regarding the content and scope of environmental issues to be addressed in the EIR. **All comments will be considered in the preparation of the EIR. Written comments must be submitted to this office by October 15, 2012.** Written comments will also be accepted at the Scoping Meeting described above.

Please direct your comments to:
Herb Glasgow, Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045
Phone: (424) 646-5180
Email:hglasgow@lawa.org

Herbert Glasgow

HERB GLASGOW
Chief of Airport Planning I

Enclosures:

Figure 1: Regional Map
Figure 2: Aerial Photograph
Figure 3: Project Layout
Figure 4: Scoping Meeting Location Map

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: West Aircraft Maintenance Area Project

Lead Agency: Los Angeles World Airports (LAWA) Contact Person: Herb Glasgow

Mailing Address: 1 World Way, Room 218B Los Angeles, CA 90045 Phone: 424-646-5180

City: Los Angeles Zip: 90025 County: Los Angeles

Project Location: County: Los Angeles City/Nearest Community: Los Angeles

Cross Streets: The Project site is bounded by World Way West (north) and Pershing Drive (west) Zip Code: 90045

Longitude/Latitude (degrees, minutes and seconds): 33 ° 56 ′ 18.58 ″ N / 118 ° 25 ′ 46.68 ″ W Total Acres: 75

Assessor's Parcel No.: 4129-026-911, 4126-026-90, 4126-026-912. Section: _____ Twp.: _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: S-1, I-105 Waterways: Pacific Ocean

Airports: LAX Railways: Metro Schools: See attached page

Document Type:

CEQA: ☒ NOP ☐ Draft EIR NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) _____ ☐ Draft EIS ☐ Other: _____
☐ Mit Neg Dec Other: _____ ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☒ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other: _____

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____ ☐ Transportation: Type _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____ ☐ Mining: Mineral _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____ ☐ Power: Type _____ MW _____
☐ Educational: _____ ☐ Waste Treatment: Type _____ MGD _____
☐ Recreational: _____ ☐ Hazardous Waste: Type _____
☐ Water Facilities: Type _____ MGD _____ ☒ Other: Aircraft Maintenance Facilities

Project Issues Discussed in Document:

☐ Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☐ Vegetation
☐ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☐ Archeological/Historical ☐ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☐ Biological Resources ☐ Minerals ☐ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Land Use
☒ Drainage/Absorption ☐ Population/Housing Balance ☒ Toxic/Hazardous ☒ Cumulative Effects
☐ Economic/Jobs ☐ Public Services/Facilities ☒ Traffic/Circulation ☒ Other: GHG

Present Land Use/Zoning/General Plan Designation:

LAX - A Zone: Airport Airside Subarea

Project Description: *(please use a separate page if necessary)*
See attached page.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board		Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency		Parks & Recreation, Department of
	California Highway Patrol		Pesticide Regulation, Department of
S	Caltrans District #7		Public Utilities Commission
S	Caltrans Division of Aeronautics	X	Regional WQCB #4
	Caltrans Planning		Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region #5		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
	Forestry and Fire Protection, Department of		Water Resources, Department of
	General Services, Department of		
	Health Services, Department of		Other:
	Housing & Community Development		Other:
	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date September 14, 2012 Ending Date October 15, 2012

Lead Agency (Complete if applicable):

Consulting Firm:
Address:
City/State/Zip:
Contact:
Phone:

Applicant: LAWA
Address: 1 World Way, Room 218B
City/State/Zip: Los Angeles, CA, 90045
Phone: 424-646-5180

Signature of Lead Agency Representative: [signature] **Date:** 09/13/12

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Notice of Preparation

To: State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814
(Address)

From: Herb Glasgow, Chief of Airport Planning I
Los Angeles World Airports (LAWA)
1 World Way, Los Angeles, CA 90045
(Address)

Subject: Notice of Preparation of a Draft Environmental Impact Report

Los Angeles World Airports (LAWA) will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Herb Glasgow, Chief of Airport Planning I at the address shown above. We will need the name for a contact person in your agency.

Project Title: West Aircraft Maintenance Area Project

Project Applicant, if any: LAWA

Date 09/13/2012

Signature Herbert W. Glasgow

Title Chief of Airport Planning I

Telephone 424-646-5180

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

Notice of Preparation

September 14, 2012

To: Reviewing Agencies

Re: West Aircraft Maintenance Area Project
SCH# 2012091037

Attached for your review and comment is the Notice of Preparation (NOP) for the West Aircraft Maintenance Area Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Herb Glasgow
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90025

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Los Angeles
World Airports

October 15, 2012

SUBJECT: **Notice of Extended Review Period**
Notice of Preparation for an Environmental Impact Report (EIR) for the Los Angeles International Airport (LAX) West Aircraft Maintenance Area project (*SCH No. 2012091037*)

To Whom It May Concern:

Extended Public Review Period: On September 14, 2012 a Notice of Preparation (NOP) and Notice of Public Scoping Meeting, and an Initial Study were issued for a Draft Environmental Impact Report for the West Aircraft Maintenance Area Project ("proposed Project"). The NOP set a public review period that was to end on October 15, 2012. LAWA has extended the public review period for the NOP by 15 days. Comments on the NOP and Initial Study will now be accepted until 5:00 p.m. on October 30, 2012.

Proposed Project: The intent of the proposed Project is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's).

Availability of Document: The NOP (which includes more information regarding the proposed Project) and Initial Study will continue to be available online at www.OurLAX.org and at the following library branches: Westchester-Loyola Village Branch; Dr. Mary McLeod Bethune Regional Branch; El Segundo Library; Inglewood Library; Hawthorne Library; and, Culver City Library.
If you wish to submit comments on the NOP and Initial Study, please reference the project name and submit them to Mr. Herb Glasgow, Chief of Airport Planning by **October 30, 2012** at City of Los Angeles, Los Angeles World Airports, 1 World Way, Room 218B, Los Angeles, CA 90045, or by phone at **(424) 646-5180.**

Sincerely,

Lisa Trifiletti

Lisa Trifiletti
Director of Special Projects
Environmental & Land Use Planning

LLT:bms

Agency
First Last, Title
Address
City, State Zip

Alliance for a Regional Solution to Airport Congestion
Denny Schneider, President
7929 Breen Avenue
Los Angeles, CA 90045

ATA
7337 West Washington St.
Indianapolis, IN 92631-1300

Bauchalter Namer
Barbara Lichman,
18400 Von Karman Ave, Suite 800
Irvine, CA 92612

BOAC Office
Sandy Miller, Executive Assistant II
1 World Way, 1st Floor
Los Angeles, CA 90045

Bureau of Engineering
ATTENTION: Environmental Group
1149 S. Broadway, 6th Floor, Suite 600
Los Angeles, CA 90015-2213

Cal Trans - District 7
ATTENTION: IGR/CEQA Program Manager
100 S. Main Street
Transportation Planning Office, 1-1-C
Los Angeles, CA 90012

Cal Trans - Division of Aeronautics
1120 N. Street, Room 3300
Sacramento, CA 94274

Chatten-Brown & Carstens
Doug Carstens
2200 Pacific Coast Hwy, Suite 90254
Hermosa Beach, CA 90254

City of Culver City
Carol Schwab, City Attorney
9770 Culver Boulevard, 3rd Floor
Culver City, CA 90232

City of Culver City
David McCarthy, Deputy City Attorney
9770 Culver Boulevard, 3rd Floor
Culver City, CA 90232

City of Culver City
ATTENTION: City Manager
9770 Culver Blvd.
Culver City, CA 90232

City of El Segundo
Carl Jacobson, Mayor
350 Main Street
El Segundo, CA 90245

City of El Segundo
Greg Carpenter, City Manager
350 Main Street
El Segundo, CA 90245

City of Inglewood
Cal Saunders, City Attorney
One Manchester Boulevard
Inglewood, CA 90312

City of Inglewood
Hon. Mayor
One Manchester Boulevard, 9th Floor
Inglewood, CA 90312

City of Los Angeles - LAWA
Gina-Marie Lindsey, Executive Director
1 World Way, 2nd Floor
Los Angeles, CA 90045

City of Los Angeles - LAWA
Suzanne Tracy, City Attorney
1 World Way, 1st Floor
Los Angeles, CA 90045

City of Los Angeles
Department of Building & Safety
ATTENTION: General Manager
201 N. Figueroa Street
Los Angeles, CA 90012

City of Los Angeles Mayors Office
Jim Bickhart, Associate Director Transportation
200 N. Spring Street, Room 303
Los Angeles, CA 90012

City of Los Angeles, Council District 11
Mike Bonin, Chief of Staff
200 N. Spring Street, Room 415
Los Angeles, CA 90012

City of Los Angeles, Fire Department
ATTENTION: Construction Services Unit
200 N. Main Street
Los Angeles, CA 90012

Council District 11 - Field Office
Chad Molnar, Community Liaison
7166 W. Manchester Ave.
Los Angeles, CA 90045

County of Los Angeles
John F. Kraptli, Principal Deputy County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Los Angeles
William Fujioka, CEO
648 Kenneth Hahn Hall of Administration
500 West Temple Street.
Los Angeles, CA 90012-2713

County of Los Angeles
ATTENTION: Director of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

County of Los Angeles
Lawerence Hefetz, Assistant County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Los Angeles
Elaine Lemke, County Counsel
500 West Temple Street
Los Angeles, CA 90012

County of Los Angeles
Department of Regional Planning
ATTENTION: Impact Analysis Section
320 W. Temple St., Room 1348
Los Angeles, CA 90012

County of Orange
ATTENTION: County Executive Officer
333 W. Santa Ana Blvd.
Santa Ana, CA 92701

County of San Bernardino
Christine Kelly, Director of Land Use Services
385 N. Arrowhead Ave., 1st Floor
San Bernardino, CA 92415

County of Ventura
Michael Powers, Executive Officer
800 S. Victoria Ave.
Ventura, CA 93009

County Supervisor - 1st District
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 856
Los Angeles, CA 90012

County Supervisor - 2nd District
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 866
Los Angeles, CA 90012

County Supervisor - 3rd District
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 821
Los Angeles, CA 90012

County Supervisor - 4th District
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 822
Los Angeles, CA 80012

County Supervisor - 4th District, Torrance District Office
Steve Napolitano,
825 Maple Ave.
Torrance, CA 90503

County Supervisor - 5th District
822 Kenneth Hahn Hall of Administration
500 West Temple Street, Rm 869
Los Angeles, CA 90012

Department of Public Works
Bureau of Sanitation - Solid Waste Division
ATTENTION: Environmental Supervisor
1149 South Broadway, 10th Floor
Los Angeles, CA 90015

Department of Water & Power
ATTENTION: Supervisor of Environmental Assessment
111 N. Hope Street, Room 1044
Los Angeles, CA 90012

FAA
Ruben Cabalbag
15000 Aviation Blvd., Suite 3024
Lawndale, CA 90261

Gateway to LA Airport Business District
Laurie Hughes, Executive Director
6151 W. Century Blvd., Suite 121
Los Angeles, CA 90045

L.A. County, Department of Public Works
ATTENTION: Land Development Division
P.O. Box 1460
Alhambra, CA 91802-1460

L.A. dept. of Transportation
Jay Kim, Principal Transportaiton Engineer
100 S. Main Street, 9th Floor
Los Angeles, CA 90012

LA County Dept.of Beaches & Harbors
ATTENTION: Planning Division
13483 Fiji Way, TR. #3
Marina Del Rey, CA 90292

Los Angeles County Department of Public Works
ATTENTION: Planning Division
900 S. Fremont Ave., 11th Floor
Alhambra, CA 91803

Los Angeles Department of Transportation
West Los Angeles Development Review
7166 W. Manchester Ave., 10th Floor
Los Angeles, CA 90045

Los Angeles Fire Department
Brian L. Cummings, Chief
200 N. Main Street, Room 1800
Los Angeles, CA 90012

Los Angeles Planning Dept.
Michael LoGrande, Planning Director
200 N. Spring Street, 5th Floor
Los Angeles, CA 90012

MTA
ATTENTION: Metro CEQA Review Coordination
One Gateway Plaza
Los Angeles, CA 90012

Neighborhood Council of Westchester/Playa
8726 S. Sepulveda Blvd., PMB 191A
Los Angeles, CA 90045

SCAG
ATTENTION: Inter-Governmental Review
818 W. 7th Street, 12th Floor
Los Angeles, CA 90017

SCAQMD
Steve Smith
21865 Copley Drive
Diamond Bar, CA 91765

Shute, Mihaly & Weinberger LLP
E. Clement Shute, Counsel
396 Hayes Street
San Francisco, CA 94102

Shute, Mihaly & Weinberger LLP
Osa Wolff, Counsel
396 Hayes Street
San Francisco, CA 94102

Shute, Mihaly & Weinberger LLP
Gabriel Ross, Counsel
396 Hayes Street
San Francisco, CA 94102

Stakeholder Liaison Office
Brenda Martinez-Sidhom, LAX Stakeholder Liaison
1 World Way, Suite 219
Los Angeles, CA 90045

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Westchester Town Center Business Improvement District
Karen Dial, President
8929 S. Sepulveda Blvd., Suite 130
Westchester, CA 90045

Dr. Mary McLeod Bethune Regional Branch Library
ATTENTION: Sr. Librarian
3900 S. Western Avenue
Los Angeles, CA 90062

Hawthorne Library
ATTENTION: Sr. Librarian
12700 Grevillea Avenue
Hawthorne, CA 90250

Culver City Library
ATTENTION: Sr. Librarian
4975 Overland Avenue
Culver City, CA 90230

Inglewood Library
ATTENTION: Sr. Librarian
101 W. Manchester Boulevard
Inglewood, CA 90301

El Segundo Library
ATTENTION: Sr. Librarian
111 W. Mariposa Avenue
El Segundo, CA 90245

Westchester-Loyola Village Branch Library
ATTENTION: Sr. Librarian
7114 W. Manchester Ave.
Los Angeles, CA 90045

EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

KEN ALEX
DIRECTOR

Memorandum

Date: October 15, 2012

To: All Reviewing Agencies

From: Scott Morgan, Director

Re: SCH # 2012091037
West Aircraft Maintenance Area Project

Pursuant to the attached letter, the Lead Agency has *extended* the review period for the above referenced project to **October 30, 2012** to accommodate the review process. All other project information remains the same.

cc: Herb Glasgow
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90025

NOTICE OF EXTENDED PUBLIC REVIEW PERIOD

NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE LOS ANGELES INTERNATIONAL AIRPORT (LAX) WEST AIRCRAFT MAINTENANCE AREA PROJECT

SCH No. 2012091037

Extended Public Review Period: On September 14, 2012 a Notice of Preparation (NOP) and Notice of Public Scoping Meeting, and an Initial Study were issued for a Draft Environmental Impact Report for the West Aircraft Maintenance Area Project ("proposed Project"). The NOP set a public review period that was to end on October 15, 2012. LAWA has extended the public review period for the NOP by 15 days. Comments on the NOP and Initial Study will now be accepted until 5:00 p.m. on October 30, 2012.

Proposed Project: The intent of the proposed Project is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas and related storage, equipment and facilities. The proposed Project would be able to accommodate up to 8 ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's).

Availability of Document: The NOP (which includes more information regarding the proposed Project) and Initial Study will continue to be available online at www.OurLAX.org and at the following library branches: Westchester-Loyola Village Branch; Dr. Mary McLeod Bethune Regional Branch; El Segundo Library; Inglewood Library; Hawthorne Library; and, Culver City Library.

If you wish to submit comments on the NOP and Initial Study, please reference the project name and submit them to Mr. Herb Glasgow, Chief of Airport Planning by **October 30, 2012** at City of Los Angeles, Los Angeles World Airports, 1 World Way, Room 218B, Los Angeles, CA 90045, or by phone at **(424) 646-5180.**

Document Details Report
State Clearinghouse Data Base

SCH# 2012091037
Project Title West Aircraft Maintenance Area Project
Lead Agency Los Angeles World Airports

Type NOP Notice of Preparation

Description The intent of the proposed West Aircraft Maintenance Area Project ("proposed Project") is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements. The consolidation, relocation and modernization of these facilities would allow for more efficient and effective maintenance of existing aircraft at the airport, including Aircraft Design Group (ADG) VI aircraft (Airbus A380s and Boeing 747-8s). The proposed Project would be developed on an approximately 75-acre site in the southwestern portion of the Los Angeles International Airport property and would include aircraft parking and maintenance facilities, a ground run-up enclosure, employee parking areas and related storage, equipment facilities. ADG VI aircraft simultaneously or 18 ADG III aircraft (aircraft similar in size to and including Boeing 737's).

Lead Agency Contact

Name Herb Glasgow
Agency Los Angeles World Airports
Phone 424 646 5180 **Fax**
email
Address 1 World Way, Room 218B
City Los Angeles **State** CA **Zip** 90025

Project Location

County Los Angeles
City Los Angeles, City of
Region
Cross Streets The Project site is bounded by World Way West (north) and Pershing Drive (west)
Lat / Long 33° 56' 18.58" N / 118° 25' 46.68" W
Parcel No. 4129-026-911, 4126-026-90, 4126-026-912
Township **Range** **Section** **Base**

Proximity to:

Highways S-1, I-105
Airports LAX
Railways Metro
Waterways Pacific Ocean
Schools
Land Use LAX - A Zone: Airport Airside Subarea

Project Issues Air Quality; Drainage/Absorption; Noise; Toxic/Hazardous; Traffic/Circulation; Water Quality; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; CA Department of Public Health; Native American Heritage Commission; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Air Resources Board, Airport/Energy Projects; State Water Resources Control Board, Divison of Financial Assistance; Department of Toxic Substances Control; Department of Fish and Game, Region 4

Date Received 09/14/2012 **Start of Review** 09/14/2012 **End of Review** 10/15/2012

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

NOP 10.15.12

September 20, 2012

Mr. Herb Glasgow, Project Planner
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90025

Re: SCH#2012091037; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the **"West Aircraft Maintenance Area);"** located at Los Angeles International Airport (LAX) in Los Angeles County, California

Dear Mr. Glasgow:

The Native American Heritage Commission (NAHC) is the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604).

This letter includes state and federal statutes relating to Native American historic properties or resources of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC recommends that the lead agency request that the NAHC do a Sacred Lands File search as part of the careful planning for the proposed project.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties, including archaeological studies. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

West Aircraft Maintenance Area Project

Factsheet

LAX Los Angeles World Airports

IMPROVED AIRCRAFT MAINTENANCE AT LAX

Maintenance facilities at Los Angeles International Airport (LAX) will be consolidated and modernized with the proposed new West Aircraft Maintenance Area Project. The new facility will be located on 75-acres in the southwestern portion of LAX, adjacent to Pershing Drive and south of World Way West.

What new facilities are proposed?

The project would replace existing facilities and consolidate maintenance operations. It includes paved areas for aircraft parking, maintenance hangars, a 300-space employee parking lot, storage, equipment, related facilities, and a ground run-up enclosure (GRE). A GRE is a state-of-the-art structure designed to reduce sound from engine tests, which are currently performed in the open. It is typically a 3-sided unroofed facility, approximately 50 to 60 feet tall, with the open side oriented toward prevailing winds. The GRE will be oriented towards the ocean with the inside walls lined with noise absorbing panels specifically designed to provide sound absorption at the lower frequencies characteristic of jet engine tests. Access to the site will continue to be from World Way West.

What is the purpose of the project?

The proposed new maintenance facility would consolidate and modernize existing facilities. It is designed to provide more efficient and effective maintenance of existing aircraft. It will not increase passenger or gate capacity, and will not increase flights or aircraft operations at LAX. It will also not increase the number of employees on-site or the amount of traffic on local roadways.

What is on the site now?

The project site is currently used as a staging area for airport construction projects. There are soil stockpiles, a rock-crushing station, modular construction trailers serving as offices, parking areas, an airfield access security post, a small LAWA Police Department/Transportation Security Administration dog walking area, and outdoor loading and storage areas.

Is it part of the LAX Specific Plan?

The West Aircraft Maintenance Area Project is consistent with the LAX Specific Plan zoning and development regulations. A Draft Environmental Impact Report (DEIR) will be prepared to analyze any potential impacts associated with it. The public will have opportunities to comment on the project and the environmental analysis, and to have questions answered at community meetings.

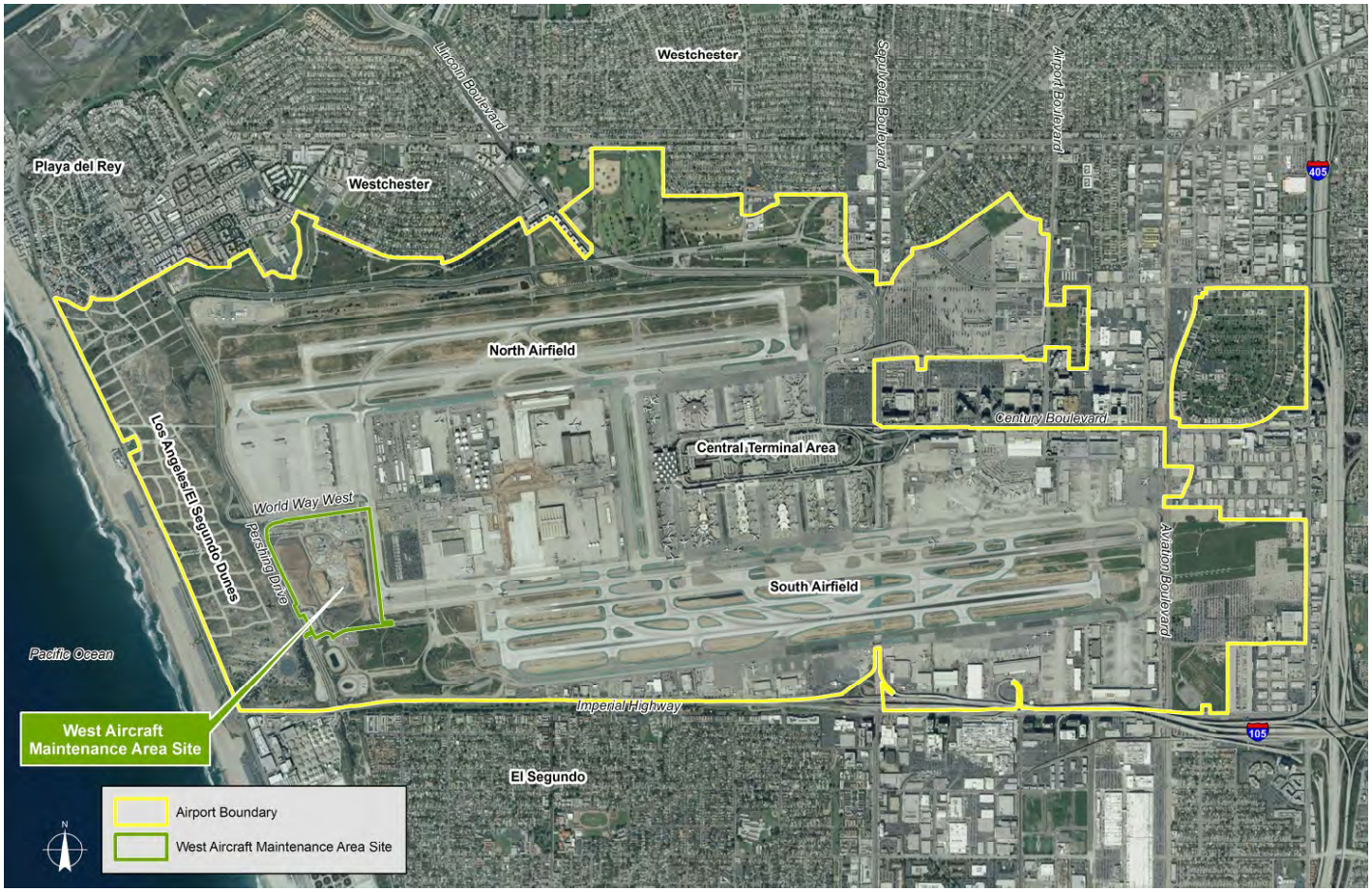
Process and schedule.

A Notice of Preparation indicating that an EIR will be prepared to evaluate the West Aircraft Maintenance Area Project was issued on September 14, 2012 to begin the environmental review process. To allow for additional time for input, LAWA has extended the comment period by 15 days to end on October 30, 2012. The Draft EIR will further analyze any potential environmental impacts which the project may have in the areas of Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, and Transportation. The public will have an opportunity to provide comments on any areas of concern at a scoping meeting held on October 4, 2012, and then again when the Draft EIR is completed and circulated for review and comment. A Final EIR that responds to comments on the Draft EIR will then be prepared and presented to the decision makers as they consider approval of the Project. After all applicable approvals are secured, construction would begin and it is estimated that the project would be completed over an eight to ten year period.

A copy of the Initial Study prepared for the proposed Project is available at the LAX website at ***http://www.ourlax.org.***

For further information contact: Lisa Trifiletti at ***ltrifiletti@lawa.org 424.646.5186***

Aerial View of Airport



Conceptual Site Plan

AERIAL VIEW OF AIRPORT

West Aircraft Maintenance Area Project

LAX
Los Angeles World Airports

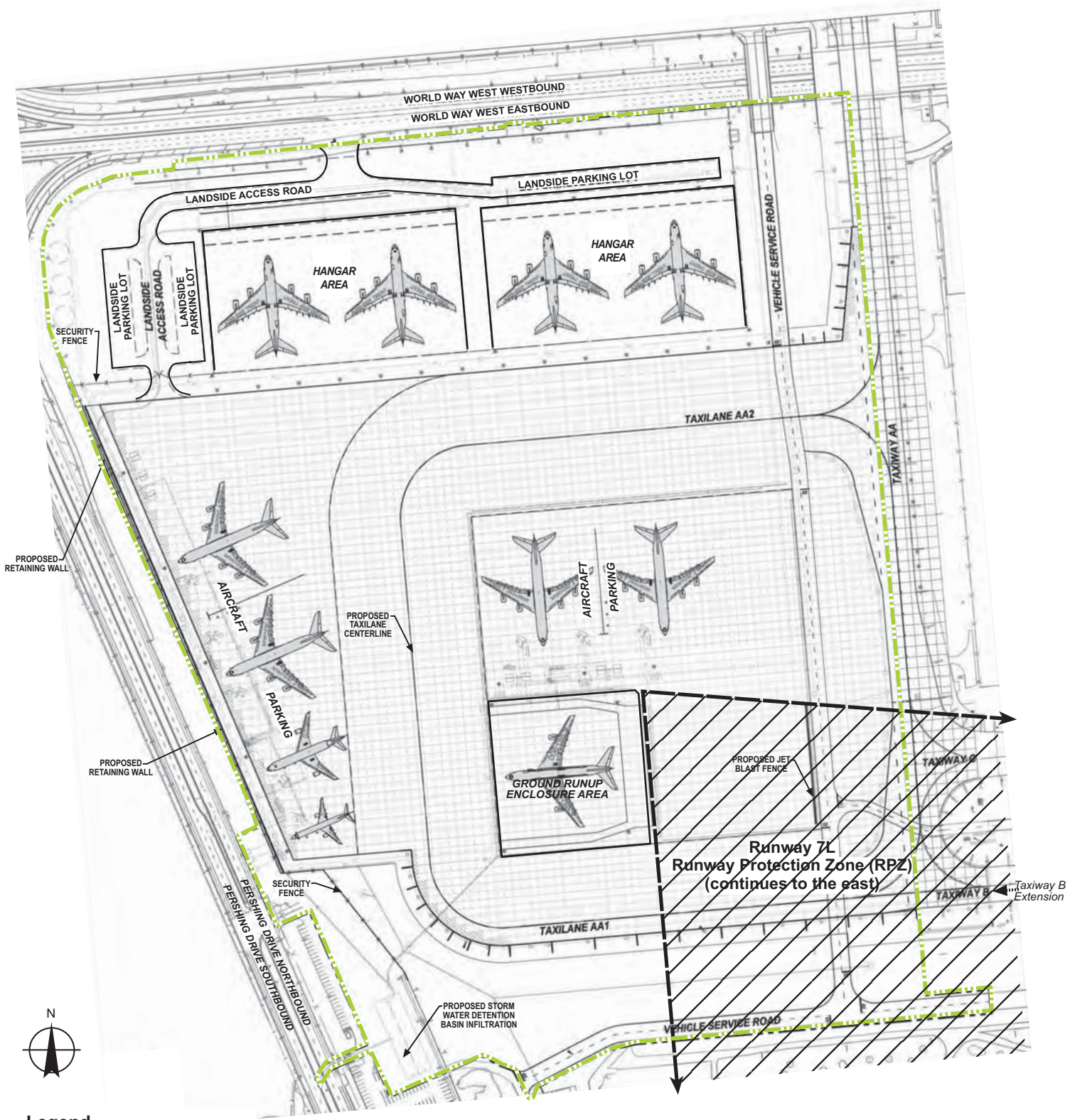
AERIAL VIEW OF PROJECT SITE

CONCEPTUAL SITE PLAN

Legend

- Project Limits
- Portion of Runway 7L Approach RPZ
  - Building Restrictions
  - Aircraft Parking Restrictions
- Paved Area for Aircraft Parking
- Ground Runup Enclosure
- Hangar Areas
- Vehicle Parking Areas

CONCEPTUAL SITE PLAN



Legend

- Project Limits
- Portion of Runway 7L Approach RPZ
  - Building Restrictions
  - Aircraft Parking Restrictions

Environmental (CEQA) Process

Notice of Preparation of EIR

Public Review
September 14, 2012 to October 15, 2012
LAWA extended comment period by 15 Days to October 30, 2012

EIR Scoping Meeting

October 4, 2012

45-Day Public Comment Period on Draft EIR

Public Review
1st Quarter 2013

Final EIR

Summer 2013

Certification of Final EIR

Public Hearings
Fall 2013

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

- **Purpose: to inform public agency decision-makers and the public of the environmental effects of a project**
- **Applies to discretionary projects**
- **Identifies potential impacts on the environment**
- **Identifies ways to avoid or reduce potential impacts through mitigation measures or alternatives**

SCOPING MEETING OBJECTIVES

- **Provide information on the Environmental Impact Report (EIR) Process**
- **Provide information about the West Aircraft Maintenance Area Project**
- **Identify areas that will be further analyzed in the EIR**
- **Collect community input on issues they would like to see analyzed in the EIR**

PUBLIC COMMENTS

- **Public Comments**
  - Comments tonight
  - Leave written comment form
  - Mail written comment form
  - Mail comments
  - Email comments

- **Comments accepted through**

  October 30, 2012

CONTACT INFORMATION

Please direct your comments to:

Herb Glasgow, Chief of Airport Planning

City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, California 90045

Phone: (424) 646-5180
Email: hglasgow@lawa.org

Please write **"West Aircraft Maintenance Area Project"** in the subject line

INITIAL STUDY IMPACT DETERMINATIONS

No Impacts (No further study)	Less Than Significant Impacts (No further study)	Potentially Significant Impacts (for EIR Analysis)
Agriculture and Forest Resources	Aesthetics	Air Quality
Mineral Resources	Biological Resources	Greenhouse Gas Emissions
Recreation	Cultural Resources	Hazards and Hazardous Materials
	Geology and Soils	Hydrology and Water Quality
	Population and Housing	Land Use and Planning
	Public Services	Noise
	Utilities	Transportation

PROJECT SUMMARY

Purpose

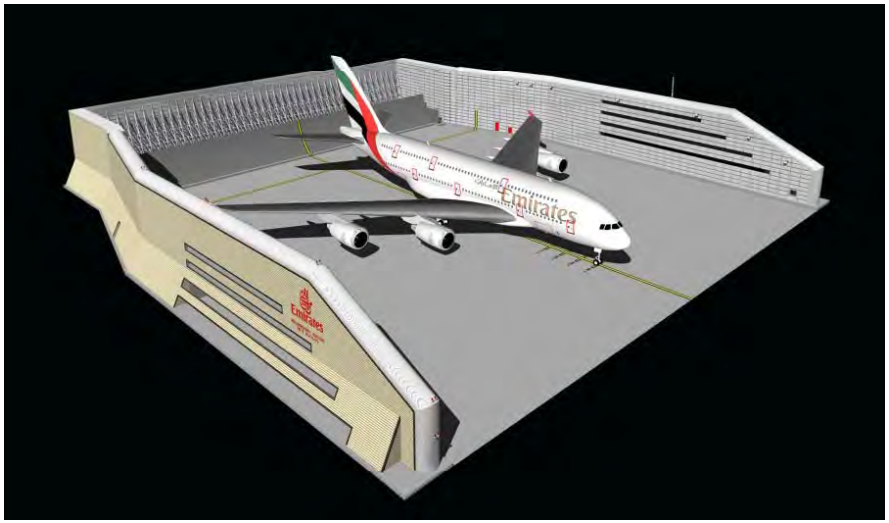
To consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX. Project would not increase passenger or gate capacity or flights/aircraft operations or increase airport employees.

Project Components (See Conceptual Site Plan)

- Paved areas for aircraft parking
- Ground run-up enclosure (GRE)
- Aircraft maintenance hangar(s)
- Approximately 300 employee parking spaces
- Ancillary facilities (e.g., equipment storage and maintenance areas/facilities, aircraft wash racks, utilities and infrastructure)
- Storm drainage filter and/or infiltration basin
- Concrete batch plant installed for project construction, to be removed after construction
- Access to site from World Way West
- Taxiway B extended westward (Taxilane AA1) to provide primary egress from Project area

GROUND RUN-UP ENCLOSURE (GRE)

- The project will implement a required GRE to preform routine aircraft testing.
- The GRE is typically a 3-sided unroofed facility, approximately 60 feet tall, with the open side oriented towards the ocean. It is designed to provide a noise barrier during the testing of aircraft engines, completed as part of aircraft servicing and maintenance activities.
- A GRE has noise absorbing lining specifically designed to reduce jet engine noise. Typical insertion loss characteristics are a loss of 15 dBA at directions from 60 degrees to 300 degrees (0 degrees equating to the noise of the aircraft) at a distance of 400 feet from the source.
- Approximate dimensions – 330 feet wide, 355 feet long, 60 feet high.



EXAMPLES OF EXISTING CONSTRUCTION-RELATED MASTER PLAN COMMITMENTS/MITIGATION MEASURES

As a standard practice, LAWA implements numerous measures to address impacts associated with construction activities at LAX. The following are a few representative examples of construction mitigation measures required at LAX, additional measures will be developed in association with the Draft EIR:

- ***MM-N-7. Construction Noise Control Plan.***
  A Construction Noise Control Plan will be prepared to provide feasible measures to reduce significant noise impacts throughout the construction period for all projects near noise sensitive uses. E.g. noise control devices shall be used and maintained, such as equipment mufflers, enclosures, and barriers. Natural and artificial barriers such as ground elevation changes and existing buildings may be used to shield construction noise.
- ***MM-N-8. Construction Staging.***
  Construction operations shall be staged as far from noise-sensitive uses as feasible.
- ***MM-N-10. Construction Scheduling.***
  The timing and/or sequence of the noisiest on-site construction activities shall avoid sensitive times of the day, as feasible (9 p.m. to 7 a.m. Monday - Friday; 8 p.m. to 6 a.m. Saturday; anytime on Sunday or Holidays).
- ***ST-18. Construction Traffic Management Plan.***
  A complete construction traffic plan will be developed to designate detour and/or haul routes, variable message and other sign locations, communication methods with airport passengers, construction deliveries, construction employee shift hours, construction employee parking locations and other relevant factors.
- ***MM-ET-3. El Segundo Blue Butterfly Conservation – Dust Control.***
  Soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented with a goal to reduce fugitive dust emissions by 90 to 95 percent during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area. To the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of occupied habitat of the El Segundo blue butterfly.
- ***MM-LI-3. Light Controls.***
  LAWA or its designee will undertake consultation in selection of appropriate lighting type and placement, where feasible, to ensure that new lights or changes in lighting will not have an adverse effect on the natural behavior of sensitive flora and fauna within the Habitat Restoration Area.
- ***MM-AQ-2. Construction-Related Measure: Fugitive Dust Source Controls.***
  - All ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions.
  - 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.
- ***MM-AQ-2. Construction-Related Measure: On-Road Mobile Source Controls.***
  To the extent feasible, have construction employees work/commute during off-peak hours. Make available on-site lunch during construction to minimize off-site vehicle trips

Los Angeles International Airport (LAX) West Maintenance Area Project

Public Scoping Meeting

Thursday, October 4, 2012

SIGN – IN
Public/*Registro de Público*

Name/*Nombre*	Organization/*Organización*	Address/*Domicilio*	Phone/*Teléfono*	Fax	E-mail/*Correo electrónico*
Darren Burgett	ERM	2875 Michelle Dr, Suite 200 Irvine, CA 92606	949.623.4705		darren.burgett@erm.com
TERRENCE ROAN	SELF	4539 W. 170TH ST. LAWNDALE, CA 90260	310-370-2075		
Salar Niku	Tetra Tech	3475 E. Foothill Blvd Pasadena, CA 91107	626-470 2462		salar.niku@Tetratech.com
Steve Munson		770 W. Imperial Ave. #47 EL Segundo, CA 90245			
KristenShryock	Kilroy Realty Corp	909 N. Sepulveda Blvd, Suite 250 El Segundo, CA 90245	310.524-0800		Kshryock@kilrayrealty.com
RosySlefanakis	Resident	770 W. Imperial Ave # 68 El Segundo CA 90245	323-646-5809		RosyStef@gmail.com
Cheryl Frick	Resident	770 W IMPERIAL AVE #41 EL SEGUNDO, CA 90245	424 249 1109		Cfrick@SBCGLOBAL.net

Los Angeles International Airport (LAX) West Maintenance Area Project

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Name/*Nombre*	Organization/*Organización*	Address/*Domicilio*	Phone/*Teléfono*	Fax	E-mail/*Correo electrónico*
Bruce Neuschaefer	ERM	2875 Michelle Dr. #200 Irvine CA 92606	949 623-4700	949 623-4711	bruce.neuschaefer@erm.com
Angie DiBernardo	LAWA	2003 Huntington Ln Redondo Beach, CA 90278	(310) 721-9698		angie.dibo@gmail.com
LARRY POWELL	LAWA	5416 RAINTREE CIRCLE CULVER CITY, CA 90230	(310)559-1996		LPOWELL@LAWA.ORG
JANET SAND		770 W IMPERIAL AVE HWY EL SEGUNDO 90245	310 322 2463		
Kean McCauly	Atlas	122d Wilshire Blvd	310-[illegible]-2131		[illegible]@atlas[illegible].com
Peter Snow		6763 West 86th Place Los Angeles CA 90045	310/645-3115		snow.peter.nt@gmail.com
GORAN LAZAREVIC		4451 W. 172ND ST. LAWNDALE CA 90260			

Los Angeles International Airport (LAX) West Maintenance Area Project

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Name/*Nombre*	**Organization/***Organización*	**Address/***Domicilio*	**Phone/***Teléfono*	**Fax**	**E-mail/***Correo electrónico*
[illegible]		4539 [illegible] Lawndale	819[illegible] 310		
Paul Schmidt		770 W Imperial Ave			PSEFFECTS@SBCGLOBAL.NET
Ryan Knapp	Resident	770 W. Imperial Ave #68 El Segundo	586 746 9572		Ryan@[illegible]
[illegible]	"	" ↓ #10	310-322-5621		DIANEWILSKI@NETZERO.NET
Sam Lee	City of E.S		310 524 2345		SLEE@ELSEGUNDO.ORG
Bruce Schelden	Resident				
Diane Hewitt		770 W. Imperial Ave Unit 34	310 3347653		dahewitt555@yahoo.com

Los Angeles International Airport (LAX) West Maintenance Area Project

Public Scoping Meeting

Thursday, October 4, 2012

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Name/*Nombre*	Organization/*Organización*	Address/*Domicilio*	Phone/*Teléfono*	Fax	E-mail/*Correo electrónico*
BRYAN HUGHES	BURNS & MCDONNELL	1 POINTE DR STE 540 BREA 92821	714/256-1595	256-1764	brhughes@burnsmcd.com
Jan Green Rebstock	PCRA				
CHRIS M. GARRETT	Pacific Sands	770 W Imperial Ave #455	(310) 640.8886		chi.omega.USC@gmail.com

Los Angeles International Airport (LAX) West Maintenance Area Project

Public Scoping Meeting

Thursday, October 4, 2012

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Public/*Registro de Público*

Name/*Nombre*	Organization/*Organización*	Address/*Domicilio*	Phone/*Teléfono*	Fax	E-mail/*Correo electrónico*
Annette Snow		6763 W. 86th Place	310-698-8121		stemydius@ca.rr.com
Kimberly Christensen	City of El Segundo Planning + Building Safety Dept.	350 Main Street El Segundo, CA 90245	310-524-2340		kchristensen@elsegundo.org
Conor Loyd		505 Virginia St.	(310) 322 1231		conorloyd2@gmail.com

Summary of Comments Received on the NOP and Initial Study for the West Aircraft Maintenance Area Project

Letter/ Comment No. and Date	Commenter	Project Description	Aesthetics	Air Quality/ GHG	Biological Resources	Cultural Resources	Hazards	Hydrology	Land Use	Noise	Traffic	Cumulative Impacts	Other/Notes
NOP and IS Comments													
State Agency													
1 (9/20/12)	Dave Singleton, Program Analyst Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814					X Consultation with Native American tribes and CHRIS							
Regional Agency													
2 (10/11/12)	Ian MacMillan, Program Supervisor CEQA Inter-Governmental Review Planning, Rule Development & Areas Sources South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4182			X AQ Analysis; Mitigation Measures; Data Sources									
Local Agencies													
3 (10/11/12)	Ruben Cruz, P.E. County of Los Angeles Department of Public Works Land Development Division rcruz@dpw.lacounty.gov							X Potential impacts to water quality, groundwater recharge, drainage patterns, runoff and storm facilities; Inclusion of hydrology study and mitigation in DEIR; LACFCD references					
4 (10/30/12)	Carmen Sainz, Supervising Regional Planner Los Angeles County Department of Regional Planning Community Studies East Section/Airport Land Use 320 W. Temple Street, 13th Floor Los Angeles, CA 90012								X Potential ALUC Review of proposed Project	X Inclusion of noise contour maps, section-elevation with notated flight paths,			

Summary of Comments Received on the NOP for the West Aircraft Maintenance Area Project (Continued)

Letter/ Comment No. and Date	Commenter	Project Description	Aesthetics	Air Quality/ GHG	Biological Resources	Cultural Resources	Hazards	Hydrology	Land Use	Noise	Traffic	Cumulative Impacts	Other/Notes
5 (10/30/12)	City of Inglewood, City of Culver City, and City of Ontario, prepared by Barbara Lichman, Buchalter Nemer 18400 Von Karman Avenue, Suite 800 Irvine, CA 92612			X Potential Significant Impacts to AQ/GHG; use of FAA's Emissions and Dispersion Modeling System (EDMS)						X Noise Impacts	X Long term construction impacts	X Noise, AQ/GHG	
6 (10/30/12)	City of El Segundo, prepared by Osa L. Wolff, Shute, Mihaly & Weinberger LLP 396 Hayes Street San Francisco, CA 94102	X Replacement of existing facilities; GRE design; phasing plan; Qantas hanger configuration							X LAX Master Plan consistency	X Noise consultant collaboration; operational noise; GRE design and evaluation; rules for GRE use; single event noise analysis; evaluating GRE noise reduction; evaluating noise and terrain; CNEL impacts; wind direction and speed	X Truck routes	X Cumulative projects list	X Alternative locations for project site; Use of Western Remote Gates Area; second GRE
Organizations													

Summary of Comments Received on the NOP for the West Aircraft Maintenance Area Project (Continued)

Letter/ Comment No. and Date	Commenter	Project Description	Aesthetics	Air Quality/ GHG	Biological Resources	Cultural Resources	Hazards	Hydrology	Land Use	Noise	Traffic	Cumulative Impacts	Other/Notes
7 (10/30/12)	Denny Schneider, President Alliance for a Regional Solution to Airport Congestion 322 Culver Boulevard, #231 Playa del Rey, CA 90293	X Other locations for WAMA; replacement of existing maintenance facilities; tenants; lease agreements; relationship to cross field taxiways R and S; hours of operation; type of work conducted; contaminants at project site	X Control of lighting; lighting distraction for pilots; lighting impacts on residences		X Impact on biological resources including the El Segundo Blue Butterfly/ Riverside Fairy Shrimp;		X Contamination; preventative measures; mitigation measures; emergency spill response plan;	X Filtering of runoff and storm water		X Mitigation for noise related to the GRE (enclosed GRE; orientation of project to minimize noise; installation of noise monitoring equipment; ground electric power); Noise evaluation to include enclosed and non-enclosed GRE	X Ingress and egress		X Location of other GREs; status of gate electrification at other areas of LAX; status of ground power outlets at cargo terminals; list of maintenance area spaces electrified
Individuals													
8 (10/30/12)	Joyce Dillard P.O. Box 31377 Los Angeles, CA 90031							X Flooding hazards; inclusion of pollutant loads, monitoring and mitigation					
9 (10/22/12)	Cheryl Frick 770 W. Imperial Avenue, #44 El Segundo, CA 90245			X Exposure of residents to pollutants and odors; violations of SCAQMD air quality standards						X Exposure/ Generation of noise and vibration in excess of standards; permanent increase in ambient noise levels; excessive noise levels		X	X Property values diminished by project

Summary of Comments Received on the NOP for the West Aircraft Maintenance Area Project (Continued)

Letter/ Comment No. and Date	Commenter	Project Description	Aesthetics	Air Quality/ GHG	Biological Resources	Cultural Resources	Hazards	Hydrology	Land Use	Noise	Traffic	Cumulative Impacts	Other/Notes
10 (9/22/12)	Edward G. Keating 8707 Falmouth Avenue, #216 Playa del Rey, CA 90293-8297												X Support of the proposed project; support of Northside Area Plan Update
11 (10/30/12)	Mr. and Mrs. Vittorio Mendola 8172 Manitoba Street #2 Playa del Rey, CA, 90293			X Air pollution						X Noise levels; nighttime noise	X Congestions; truck-related traffic		X Over expansion of LAX
Scoping Meeting Comments													
1 (10/04/12)	Ryan Knapp 770 W. Imperial Avenue, #68 El Segundo, CA 90245			X Pollution increase									X Decrease in property values
2 (10/04/12)	Steve Munson smunsonsteve@earthlink.net									X Potential noise monitoring station; potential noise measurement quantity			
3 (10/04/12)	Rosy Stefanatos 770 W. Imperial Avenue, #68 El Segundo, CA 90245									X Towing of aircraft to site			X Adequate notification; alternative sites

STATE OF CALIFORNIA Edmund G. Brown, Jr., *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

September 20, 2012

Mr. Herb Glasgow, Project Planner
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90025

Re: SCH#2012091037; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the **"West Aircraft Maintenance Area);"** located at Los Angeles International Airport (LAX) in Los Angeles County, California

Dear Mr. Glasgow:

The Native American Heritage Commission (NAHC) is the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604).

This letter includes state and federal statutes relating to Native American historic properties or resources of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC recommends that the lead agency request that the NAHC do a Sacred Lands File search as part of the careful planning for the proposed project.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties, including archaeological studies. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

Native American Contacts
Los Angeles County
September 20, 2012

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Gabrielino Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
3094 Mace Avenue, Apt. B Gabrielino
Costa Mesa, , CA 92626
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Bernie Acuna
1875 Century Pk East #1500 Gabrielino
Los Angeles , CA 90067
(619) 294-6660-work
(310) 428-5690 - cell
(310) 587-0170 - FAX
bacuna1@gabrieinotribe.org

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Pk East #1500 Gabrielino
Los Angeles , CA 90067
lcandelaria1@gabrielinoTribe.org
626-676-1184- cell
(310) 587-0170 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012091037; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the West Aircraft Maintenance Area Project; located at Los Angeles International Airport (LAX); Los Angeles County, California.

Native American Contacts
Los Angeles County
September 20, 2012

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
(626) 926-4131
gabrielenoindians@yahoo.com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012091037; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the West Aircraft Maintenance Area Project; located at Los Angeles International Airport (LAX); Los Angeles County, California.

State of California
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

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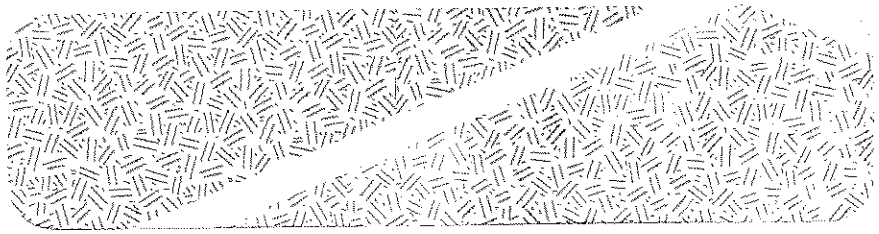

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

October 11, 2012

Herb Glasgow, Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045

Notice of Preparation of a CEQA Document for the
Los Angeles International Airport West Aircraft Maintenance Area Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. The lead agency may wish to consider using land use emissions estimating software such as the recently released CalEEMod. This model is available on the SCAQMD Website at: http://www.aqmd.gov/ceqa/models.html.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM2.5 emissions from construction and operational activities and processes. In connection with developing PM2.5 calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM2.5 emissions and compare the results to the recommended PM2.5 significance thresholds. Guidance for calculating PM2.5 emissions and PM2.5 significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. If you have any questions regarding this letter, please call Ian MacMillan, Program Supervisor, CEQA Section, at (909) 396-3244.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

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From: Cruz, Ruben [RCRUZ@dpw.lacounty.gov]
Sent: Thursday, October 11, 2012 5:04 PM
To: GLASGOW, HERB
Cc: Ibrahim, Amir; Enriquez, Renee; Yanez, Jarrett
Subject: RE: LAX West Aircraft Maintenance Area- Los Angeles World Airports- IS/NOP- Due: 10/04/12

Mr. Herb Glasgow,

Thank you for the opportunity to review the IS/NOP for the LAX West Aircraft Maintenance Area Project. The project is to consolidate, relocate, and modernize existing aircraft maintenance facilities at LAX, particularly those that need to be replaced in conjunction with LAX Master Plan improvements.

The following are County of Los Angeles, Department of Public Works comments and are for your consideration and relate to the environmental document only:

Hydrology and Water Quality

We reviewed the IS/NOP and concur that an EIR is required. A complete hydrology study including drainage maps and hydrograph is required and all required mitigations therein should be included as part of the EIR. All references to Los Angeles County drains should be revised and referenced as Los Angeles County Flood Control District (LACFCD) in the EIR. The project could have potentially significantly impacts on water quality, groundwater recharge, drainage patterns, increased runoff, and downstream storm facilities. The LAFCD expects to see further details on drainage and water quality impacts and mitigation measures in the forthcoming EIR and would be better able to comment at that time.

If you have any questions, please call or email me.

Ruben Cruz, P.E.
County of Los Angeles,
Department of Public Works
Land Development Division
(626) 458-4910
rcruz@dpw.lacounty.gov

From: Carmen Sainz [mailto:csainz@planning.lacounty.gov]
Sent: Tuesday, October 30, 2012 5:11 PM
To: GLASGOW, HERB
Subject: COMMENTS Notice of Preparation and Notice of Public Scoping Meeting for an Environmental Impact Report (EIR)

Dear Mr. Glasgow:

RE: Notice of Preparation and Notice of Public Scoping Meeting for an Environmental Impact Report (EIR)

Thank you for the opportunity to comment on the Notice of Preparation and Notice of Public Scoping Meeting for an EIR for the Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project (referred to hereafter as the Project). Please see our comments below:

Los Angeles County Airport Land Use Plan (ALUP)
Policy Concerns:

- Policy G-5 – Airport proprietors should achieve airport/community land use compatibility by adhering to the guidelines of the California Noise Standards
  - *The Initial Study stated that there are Potentially Significant Noise Impacts but the material did not include Noise Contour maps.*

- Policy N-1 – Use the Community Noise Equivalent Level (CNEL) method for measuring noise impacts near airports in determining suitability for various types of land uses.
  - *The Initial Study stated that there are Potentially Significant Noise Impacts. Noise Contour maps were not included.*

- Policy N-3 – Utilize the Table Listing Land Use Compatibility for Airport Noise Environments in evaluating projects within the planning boundaries.
  - *The Initial Study stated that there are Potentially Significant Noise Impacts. Noise Contour maps were not provided.*

- Policy S-4 – Prohibit, within a designated runway protection zones, the erection or growth of objects which rise above an approach surface unless supported by evidence that it does not create a safety hazard and is approved by the FAA.
  - *In the Conceptual Site Plan provided in the Initial Study, the Ground Runup Enclosure Area is directly adjacent to the Runway Protection Zone (RPZ) for Runway 7L. Please provide a section-elevation (fully-dimensioned) with the flight paths notated or something similar.*

FAR Part 77 (Federal Aviation Regulations)
Policy Concerns:

- Policy 77.9 (b)(2) – 77.9: Construction or alteration requiring notice.
  (b): Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes.
  (2): 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,000 ft. in actual length, excluding heliports.
  (d) Any construction or alteration on any of the following airports and heliports:
  (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications
    - *In the Conceptual Site Plan provided in the Initial Study, the Ground Runup Enclosure Area is directly adjacent to the Runway Protection Zone (RPZ) for Runway 7L. Please provide a section-elevation (fully-dimensioned) with the flight paths notated or something similar.*

- Policy 77.13(b) – 77.13: Applicability. This subpart describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. These standards apply to the following:
  (b): The alteration of any permanent or temporary existing structure by a change in its height, including appurtenances, or lateral dimensions, including equipment or material used therein.
    - *This policy clearly describes that the Federal Aviation Regulations are applicable to any alteration of any permanent or temporary existing structure as stated above. If this Project is an amendment to the adopted Master Plan, ALUC review is required.*

- Policy 77.17 (a) (4) – 77.17: Obstruction Standards
  (a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
  (4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.
    - *In the Conceptual Site Plan provided in the Initial Study, the Ground Runup Enclosure Area is directly adjacent to the Runway Protection Zone (RPZ) for Runway 7L. Please provide a section-elevation (fully-dimensioned) with the flight paths notated or something similar.*

If you have any questions please contact me or Jennifer Lee at (213) 974-6425 or at jlee@planning.lacounty.gov Monday through Thursday from 7:00 a.m. to 6:00 p.m. The Department is closed on Fridays.

Thank you.

CARMEN SAINZ | Supervising Regional Planner
Community Studies East Section/Airport Land Use
Los Angeles County Department of Regional Planning
320 W. Temple Street, 13th Floor | Los Angeles, CA 90012
Phone 213.974.6425 | Fax 213.626.0434 | TDD 213.617.2292
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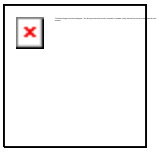

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October 30, 2012

VIA E-MAIL (HGLASGOW@LAWA.ORG)

Herb Glasgow
Chief of Airport Planning
City of Los Angeles
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045

Re: Notice of Preparation and Notice of Public Scoping Meeting for an Environmental Impact Report - Los Angeles International Airport (LAX) - Comments of City of Inglewood, City of Culver City and City of Ontario

Dear Mr. Glasgow:

The following are the comments of the City of Inglewood, City of Culver City and City of Ontario ("Cities") concerning the Notice of Preparation and Notice of Public Scoping Meeting for an Environmental Impact Report – Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project ("NOP"). Cities' chief concerns relate to the close relationship that the West Aircraft Maintenance Area Project ("Project") documented in the NOP, and its impacts, bears to the LAX Specific Plan Amendment Study ("SPAS") and the recently issued SPAS DEIR. Specifically, as the project site is located within the LAX Specific Plan area, NOP, § 2, subsection 2.3, p. 2-1, Cities perceive potential synergistic impacts in, among others, the areas of noise, air quality, land use and planning and surface traffic impacts.

I. THE NOISE IMPACTS OF THE COMPLEX OF PROJECTS NOW, OR ABOUT TO BE, UNDERWAY AT LAX WILL BE EXACERBATED BY THE PROJECT

The NOP acknowledges that the Project will create increased noise from temporary construction activities moved to airport locations closer to the Westchester residential communities on the south side of Westchester Parkway, NOP, § XII, p. 3-25, and additional engine run-up noise from the new three-sided, unroofed engine run-up facility which accommodates as many as six to eight A380, new large aircraft at a time, less than ½ mile from the City of El Segundo. NOP, § XII, p. 3-25.

Nevertheless, the NOP implies that, because of already existing noise sources, and because the activities planned for the Project, including, in addition to the engine run-up facility,

(1) approximately 50 acres of aircraft apron for design group VI aircraft such as the A380, the largest aircraft currently in production; (2) aircraft maintenance hangars; (3) approximately 300 employee parking spaces; (4) facilities for Ground Support Equipment and rest overnight kits; (5) a concrete batch plant; and (6) extension of taxiway V westward to the western limits of the site, NOP, § 2, subsection 2.7.1, pp. 2-5, 2-6, would be relocated from other areas within the airport where they already generate noise impacts, the impacts of the Project would somehow be attenuated.

Cities disagree for two reasons. First, the consolidated, and, therefore, potentially more intense noise on the Project site has the potential to create greater noise impacts together than the currently disbursed noise sources do separately, particularly on proximate receptors that must be taken into account.

Second, and despite the short shrift given to cumulative noise impacts in the NOP, taken together with those of the SPAS, as well as other concurrent projects, the potential exists for even greater cumulative noise impacts than the NOP or SPAS DEIR individually indicate. Finally, and despite the recommended format, very little, if any, space is afforded to mitigation measures for these cognizable noise impacts.

II. THE PROJECT'S AIR QUALITY IMPACTS WILL BE SIGNIFICANT AND DESERVING OF SUBSTANTIAL ANALYSIS, BOTH INDIVIDUALLY AND/OR CUMULATIVELY

The NOP acknowledges that the Project will not only generate "temporary" construction air emissions, but also permanent emissions of criteria pollutants ozone, PM_{10}, $PM_{2.5}$ and lead, from employee motor vehicles, and aircraft maintenance, including highly emitting engine run-up activities. Leaving aside the fact that the so-called "temporary" construction activities are expected to last as much as 10 years, NOP, p. 2-10, during which time they will be substantial independent emitters, these impacts should also be analyzed in the context of the larger, potentially even more impactful SPAS project. Given the patent deficiencies in the DEIR for the SPAS project, *see*, "Draft Environmental Impact Report for the Los Angeles International Airport Specific Plan Amendment Study – Comments of City of Inglewood, City of Culver City, City of Ontario and County of San Bernardino," October 10, 2012, attached to this letter as Attachment 1, § IV, there is a firm rationale for expecting that a substantive air quality analysis will reveal, at minimum, significant air quality impacts from this Project, as well as cumulatively with the SPAS.

Finally, the greenhouse gas evaluation in the NOP, Chapter VII, suffers from the same flaw as that which characterizes the noise evaluation and other sections, *i.e.*, the assumption that because the activities which give rise to GHGs are currently occurring on other parts of the airport, they will somehow be submerged in the larger scope of emissions and be found insignificant.

This assumption ignores the "dispersion" component of FAA's Emissions and Dispersion Modeling System ("EDMS") which is required by FAA to be used in analyzing the air quality impacts of airport projects. FAA Order 1050.1E, App. A, § 2, subsection 2.2c, p. A-7. Because of the location of the Project in close proximity to areas already impacted by aircraft emissions such as El Segundo, incorporating dispersion analysis is likely to reveal the existence of far more significant air quality impacts on areas closer to the Project location, as well as significant cumulative impacts throughout the airport vicinity.

III. THE NOP APPEARS TO UNDERESTIMATE THE PROJECT'S POTENTIAL FOR GENERATING LOCAL TRAFFIC

The NOP again downplays the Project's impact generating potential by concluding that "[t]he proposed Project would include both [sic] on-site construction activities which would generate temporary traffic on the local roadways." NOP, § XVI, subsection b, p. 3-30 [emphasis added]. In addition, the NOP recognizes that "the proposed relocation of existing on-site construction staging activities to an existing LAX construction staging area located in the northwest corner of the airport property would generate temporary traffic." *Id.* [emphasis added]. Nevertheless, the NOP opines that it is "conservative" to assume that construction traffic would have significant adverse impacts on existing circulation plans.

Cities strongly disagree. First, as the Project's duration is estimated to be between 8 and 10 years, the term "temporary" is something of an understatement. Moreover, 8 to 10 years of construction traffic on streets that normally accommodate only limited traffic from "airport employee/delivery traffic and general traffic between the west sides of City of El Segundo and the community of Westchester/Playa del Rey," NOP, § XVI, subsection b, pp. 3-29, 3-30, clearly has the potential for significant impacts. Cities therefore look forward to a full exposition and analysis of those long term construction and other traffic impacts in a full EIS.

Cities appreciate this opportunity to comment and look forward to a complete analysis of the potentially significant impacts of the Project, both individually and cumulatively.

Sincerely,

BUCHALTER NEMER
A Professional Corporation

By Barbara E. Lichman

Barbara Lichman

Attachment

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October 10, 2012

VIA E-MAIL (SPASEIRCOMMENTS@LAWA.ORG)

Los Angeles World Airports
Facilities Planning Division
Attn: Diego Alvarez
1 World Way
Los Angeles, CA 90045-5803

Re: Draft Environmental Impact Report for the Los Angeles International Airport Specific Plan Amendment Study - Comments of City of Inglewood, City of Culver City, City of Ontario and County of San Bernardino

Dear Mr. Alvarez:

The following are the comments of the City of Inglewood, City of Culver City, City of Ontario and County of San Bernardino (collectively "Cities/County") concerning the Draft Environmental Impact Report for the Los Angeles International Airport Specific Plan Amendment Study ("DEIR"). From a global perspective, Cities/County view the DEIR as just the latest illustration of the ancient adage – "The more things change, the more they stay the same," where the DEIR reflects the same analytic deficiencies as Cities brought to the attention of Los Angeles World Airports ("LAWA") in their comments on the environmental review of the Draft and Supplemental Draft Environmental Impact Report/Environmental Impact Statement, Los Angeles International Airport Proposed Master Plan and Master Plan Addendum in 2003 and comments on the Notice of Preparation of Draft Environmental Impact Report (SCH No. 1997061047) – Los Angeles International Airport Specific Plan Study on June 17, 2008 and Revised Notice of Preparation of Draft Environmental Impact Report (SCH No. 1997061047) – Los Angeles International Airport Specific Plan Study on November 29, 2010, which are attached to this letter as Exhibits 1, 2 and 3 respectively, and incorporated in it by reference.

Specifically, the DEIR continues LAWA's long tradition of:

(1) Failing to designate a "project," substituting instead an array of project components, leaving it up to the reviewer to aggregate and analyze the collective impacts of the various ground and air components, in defiance of the mandate of the California Environmental Quality Act, Cal. Pub. Res. Code § 21000 *et seq.*, ("CEQA") for an "accurate, stable and finite description." *See, e.g., Planning and Conservation League v. Castaic Lake Water Agency*, 180 Cal.App.4th 210, 234 (2010);

(2) Failing to designate a proper "No Project" Alternative where Alternative 3, the existing, approved Master Plan, still includes the "Yellow Light" projects that were required by a settlement of the case of *City of El Segundo, et al. v. City of Los Angeles, et al.*, Riverside County Superior Court Case No. RIC426822 ("Settlement") to be replaced by other projects that serve the same purposes, and over which Settlement the Court still retains jurisdiction;

(3) Disclaiming the manifest capacity enhancing impacts, both on and off-airport, of the project, including potential shifting of flight paths over the proximate communities of Inglewood and Culver City, despite FAA's definition of capacity as "throughput rate, i.e., the maximum number of operations that can take place in an hour," FAA Advisory Circular 150/5060-5, § 3, and despite the DEIR's long discussion of the way in which greater runway separation will facilitate greater efficiency, and, thus, "throughput" by, among other things, providing an airfield "consistent with FAA design standards for the largest aircraft types currently in service . . . for all weather conditions," and "[m]inimize modifications of standards, waivers, or operational restrictions, all of which reduce airfield efficiency and level of service." DEIR, § 1.2.1.1, p. 1-11; and

(4) Failing to adequately analyze the project's air quality, greenhouse gas, noise, land use and planning, and surface transportation impacts.

I. THE DEIR DOES NOT COMPORT WITH CEQA'S MANDATE TO DESIGNATE AN ACCURATE, STABLE AND FINITE PROJECT DESCRIPTION

In a new twist on the same old theme, the DEIR fails to designate a project at all. Rather, it states that LAWA will choose a "project" at the conclusion of public comments and in the Final EIR ("FEIR"), *see, e.g.*, § 1-26, 1.2.3 ["more detailed evaluation of that relationship [between each project objective and each SPAS alternative] will be completed in conjunction with further evaluation of the alternatives through preparation of the Final EIR and during the public hearings process."].

In lieu of a "project," the DEIR provides an array of airfield and surface traffic choices from which the public can choose "one from Column A and two from Column B" and, thereby, purportedly, compute the environmental impacts of each. In taking this approach, the DEIR flies in the face of judicial authority which unanimously requires not only that a project include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change . . ." CEQA Guidelines § 15378(a); *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora*, 155 Cal.App.4th 1214, 1222 (2007), but also that the scope of the environmental review conducted, even for the Initial Study, "must include the entire project. Specifically, '[a]ll phases of project planning, implementation, and operation must be considered'" as early as in the Initial Study of the project." CEQA Guidelines § 15063(a)(1); *Tuolumne, supra*, 155 Cal.App.4th at 1222. Therefore, whether a program or project EIR is contemplated, by the time the DEIR stage is reached, a coherent whole must be presented to the public, not interchangeable parts in as yet indeterminate combination.

Here, in direct contravention of these unequivocal requirements, the DEIR presents nine options from which the public may choose. The options are not "alternatives" to one another in the standard sense, because only options 1 through 4 are complete projects, *i.e.*, include both airfield components and off-airfield surface traffic components. Alternatives 5 through 7 omit any mention of associated surface traffic or its impacts. Conversely, options 8 through 9 evaluate only surface traffic, and omit any mention of airfield improvements. Apparently, this approach was chosen on the assumption that the impacts of various components are additive, *e.g.*, the air quality and noise impacts of Alternative 5 can simply be added to those of Alternatives 8 or 9 as assumed in the EIR. Certain impacts, however, such as noise are evaluated logarithmically. That means the noise impacts from the surface traffic discussed in Alternatives 8 and 9 may be subsumed within the far greater noise impacts calculated from airfield operations when the two are added together, masking the true impacts of both.

Nor can the DEIR's approach be justified on the ground that the airfield and surface traffic options have "independent utility," *see, e.g., Planning and Conservation League, supra,* 180 Cal.App.4th at 237, and would occur with or without the project. It is clear from the DEIR that surface traffic improvements are critical to the stated purpose of the project as a whole, the replacement of the "Yellow Light" projects, as defined in the Settlement, which includes both airfield and surface traffic projects. *See, e.g.*, DEIR, Project Description, § 2.2, Objective No. 2, "Improve the Ground Access System at LAX to Better Accommodate Airport-Related Traffic, Especially as Related to the Central Terminal Area." [Emphasis added.]

In short, the DEIR fails to designate a "project" or preferred alternative at all. Rather, it confronts the public with four "projects" and five components of a single project, and asks it to evaluate several in combination, all with the same level of specificity, as any one or more may be chosen to be implemented. The same sort of obfuscation was summarily rejected by the court in *Woodward Park Homeowners Association, Inc. v. City of Fresno*, 150 Cal.App.4th 683, 711 (2007). In that case, the court rejected the use of a baseline predicated on a previously approved project, rather than the existing physical condition of the property, which would have required the public to research prior published documents to create a relevant comparison with project impacts. Its holding applies to the complex conglomeration of options at issue here including the synergistic impacts of each of those options with those projects of Alt. D, the current Master Plan, which are still being implemented. "The sum of the earlier identified impacts and those identified now would be the actual impacts of the present project. . . Even assuming this [addition] would have been possible, an agency cannot satisfy its CEQA obligations by imposing a burden of that kind on the public." *Id.* at 711.

II. THE DEIR INCORRECTLY RELIES ON ALTERNATIVE 3 AS THE "NO PROJECT" ALTERNATIVE WHERE IT INCLUDES IMPLEMENTATION OF THE "YELLOW LIGHT" PROJECTS THAT WERE ELIMINATED BY THE SETTLEMENT

The purpose of the "no project" alternative is to allow a comparison of the environmental impacts of approving the proposed project with the effects of maintaining the status quo. CEQA Guidelines § 15126.6(e)(1). When the project involves revisions of an existing plan, policy, or

ongoing operation, the "projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan." CEQA Guidelines § 15126.6(e)(3)(A). *See also, Woodward Park Homeowners, supra*, 150 Cal.App.4th at 711. CEQA Guidelines § 15126.6(e)(3)(C) further provides that the lead agency "should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." In addition, an EIR's analysis of the no project alternative must also include a discussion of conditions existing at the time the notice of preparation is published, or, in the alternative, upon commencement of the environmental analysis. CEQA Guidelines § 15126.6(e)(2).

In this case, Alternative 3 does seem to meet the basic definition, *i.e.*, the situation on the ground including all previously approved projects. However, this is not a conventional case. Alternative 3 here includes "Yellow Light" projects which, according to the Settlement, are to be replaced with other projects which serve the same purpose. Therefore, Alternative 3 actually includes more components than are currently permitted or can be expected to be implemented.

In this unique situation, Alternative 4 would seem to be the appropriate "No Project" Alternative. That is because Alternative 4 represents the "project" with "Yellow Light" projects, *i.e.*, those that cannot "reasonably be expected to occur in the foreseeable future if the project were not approved," CEQA Guidelines § 15126.6(e)(3)(C), eliminated.

It is also notable that Alternative 4 is used as the benchmark of analysis in the air quality analysis, Table 4.2-14, as the closest to the "no Yellow Light" condition. ["Of the nine alternatives, Alternative 4 has the least amount of improvements and most closely represents a future (2025) 'no Yellow Light Projects' scenario. . ."]. DEIR, p. 4-121. In summary, the existing Master Plan represented by Alternative 3 is not, in this peculiar case, the proper No Project Alternative against which to benchmark the impacts of the project.

III. THE DEIR IMPROPERLY DISCOUNTS THE CAPACITY ENHANCING POTENTIAL OF THE PROJECT

As was true with respect to the 2003 Master Plan EIR, the DEIR here strongly emphasizes the safety enhancing purposes of the project, and downplays its capacity enhancing potential. In fact, the DEIR emphasizes that a 30-40% increase in aircraft and passenger activity is projected to occur regardless of the project (*i.e.*, would occur if none of the SPAS alternatives was implemented). DEIR, p. 1-47, § 1.4. Nevertheless, the proposed "safety" improvements, including increased runway separations and extension eastward for the north runways, the addition of centerline taxiways, and high speed runway exits, to accommodate departures of the New Large Aircraft ("NLA") and other aircraft that cannot currently access the North Airfield without delay, are inextricably linked to capacity, defined by FAA as "throughput rate, i.e., the maximum number of operations that can take place in an hour." FAA Advisory Circular 150/5060-5, § 3.

The DEIR itself does not disclaim this link to capacity enhancement. It makes clear that the further separation of the north runways is necessary to efficiently accommodate NLAs, and to allow for some larger aircraft currently using the South Complex to use the North Complex as well. *See, e.g.*, DEIR, pp. 1-10, 2-2. Nevertheless, aircraft activity is held constant across all evaluated runway alternatives. In other words, the number of flights into and out of LAX is identical (2053 operations per peak day), as is the aircraft fleet mix through which those flights are conducted. By assuming constant aircraft activity in 2025 under all four runway "integrated" alternatives, the DEIR is implying that LAX can handle the forecasted aircraft demand – even that related to the new generation of NLA – regardless of whether any redesign of the northernmost runways is implemented. That is, the DEIR assumes that the same aircraft, in the same numbers, will fly into and out of LAX whether the runways are moved or left as is, whether or not more efficient runway exits are constructed, and whether or not taxiways are or are not reconfigured. The explicit assumption is that the potential improvements will enhance the safety of these aircraft operations. However, in this case the improvements made to enhance safety also enhance effective runway capacity. It is this additional capacity that should allow for differential levels of activity under the various alternatives.

However, and despite the DEIR's admission that the various airfield alternatives will have differential operational effects, depending on the type of aircraft, time of day and weather, the capacity enhancing impacts of these differential operational effects remain stubbornly unanalyzed because of "budget considerations."[1] Neither the CEQA Guidelines nor the courts recognize such budget constraints on reasonable analyses, fundamental to a complete picture of project impacts. Until such analyses are conducted and their results reported, including an analysis of the differential operational characteristics of options 1 through 7, and their resulting capacity enhancing characteristics, including the potential for more divergent flight paths taking additional aircraft over proximate communities such as Culver City and Inglewood than currently exist, the DEIR will remain fatally defective.

IV. THE DEIR AIR QUALITY SECTION OMITS DATA AND ANALYSIS CRITICAL TO A DETERMINATION OF THE IMPACTS OF THE VARIOUS ALTERNATIVES

In another exercise in "déjà vu all over again," the DEIR air quality analysis omits both the data and analysis necessary to fully and accurately disclose the air quality impacts of any of the potential alternatives.

[1] *See* LAX Specific Plan Amendment Study Report, Appendix F-2, p. 1: "For the purposes of developing detailed airside design assumptions that could be utilized in modeling a reasonable range of airfield configuration options, and do so in an efficient and cost-effective manner taking into account contract scope and budget considerations, the simulation analysis focused on only Alternatives 1 through 4. Based on the detailed information developed for those alternatives, the SPAS Environmental Team was able to estimate performance assumptions and projections for Alternatives 5 through 7, as utilized in the aircraft noise and air quality analyses."

A. The DEIR Presents Supporting Data Insufficient to Allow the Public to Verify the Accuracy of the DEIR's Analysis

As a threshold matter, the DEIR only reflects air quality modeling for options 1 through 4 (the integrated alternatives). For options 5 through 7, specific aircraft modeling (*e.g.*, runway assignments, delay times, etc.) was not performed. Instead, results were apparently inferred from modeling data for Alternatives 1 through 4, again for "budget considerations." LAX Specific Plan Amendment Study Report, Appendix F-2, p. 1. Moreover, the "inferred" data are not presented in either the main body of the DEIR or the appendices, and, therefore, it is not possible to evaluate the purported "inferences," even if they had been documented with data. This is especially true for Alternative 5 which proposes to move Runway 24R 350 feet to the north, essentially requiring extrapolation of the data beyond the 260 foot northward movement of Runway 24R proposed in Alternative 1.

In addition, the data that is provided is inadequate to assess even the impacts of the "modeled" Alternatives 1 through 4. First, under the constant activity approach discussed in Section III above, the only variables that should affect airside emissions are taxi time and delay time. Aircraft approach, takeoff and climbout emissions should be identical across the evaluated alternatives, as should Ground Support Equipment ("GSE") and Auxiliary Power Unit ("APU") emissions. The DEIR, however, fails to present aircraft emissions by operating mode, making it impossible to confirm the expected consistency using presented data.

Specifically, the DEIR contains no comparative tables either listing or summarizing the way in which GSE and APU populations were estimated, the way in which those populations were assigned activity estimates, or the way emissions were calculated from the activity. Instead, there is the cursory discussion referencing:

(1) A purported survey of data on specific GSE types and their times in mode for servicing common aircraft types, although the discussion does not reveal how "common types" were chosen, why the analysis did not apply to all aircraft using GSE, and what times in mode are applicable to GSE;

(2) Use of the FAA's Emissions Dispersion Modeling System ("EDMS") to supplement site specific data, without complete disclosure of the "site specific" data supplemented and the analytic interaction between the site specific data and the EDMS assumptions;

(3) General use of emissions factors from the California Air Resources Board ("CARB") OFFROAD2007 Model and 2011 Inventory Model for In-Use Off-Road Equipment in the analysis of GSE emissions without revealing the way in which each was used and the specific emissions factors derived from either. This is in spite of the fact that the DEIR acknowledges that "future year inventories of alternative-fueled GSE were based on these evaluations and LAX environmental policies." DEIR, p. 4-92; and

(4) For APU emissions rates, use of emissions factors from EDMS without disclosing the way in which the assumption that all gates would be equipped with preconditioned air (making APU use less necessary) was reached, the numerical impacts of that assumption, or the data or analysis underlying the assumption. DEIR, p. 4-93.

Finally, the aircraft emissions data that is presented in the DEIR reveals a fundamental inconsistency between Alternatives 3, Master Plan Alternative D, and Alternative 4, the "No Project" Alternative for air quality purposes (*see, e.g.*, Table 4.2-14). Presented data for Alternative 4 indicates 27.72 minutes per landing/takeoff cycle ("LTO"), and for Alternative 3, Alt. D, 29.56 minutes, *i.e.*, more aircraft emissions for the same total traffic. The 2003 Master Plan EIR, however, reached precisely the opposite conclusion with the taxi and delay times for the "No Action" Alternative exceeding that of Alt. D by 3%, and Alt. D exhibiting airside emissions generally 5% lower than those of the "No Action" Alternative.[2]

B. Reverse Thrust Emissions are Omitted from the Air Quality Analysis

Just as in the 2003 Master Plan EIR, and as addressed in Inglewood's comments on that document attached, emissions associated with reverse thrust operations are not considered in the current DEIR. The bottom line then, as now, is that reverse thrust operations are common at LAX under all alternatives (*see, e.g.*, DEIR, p. 4-829), and there is an accepted procedure for estimating them. They are, moreover, a high thrust, high nitrogen oxide ("NO_x") mode of operation. Thus, even though short in duration (normally 15 to 20 seconds per arrival), a high amount of NO_x is produced, all of which is emitted at ground level. The absence of any analysis of reverse thrust, therefore, casts doubt on the aggregate analysis of NO_x emissions from all project alternatives.

C. The DEIR Omits Critical Engine Assignments

The DEIR contains no information regarding the specific engine types used in the modeling of aircraft operations.[3] As a result, it is impossible to evaluate whether the selection methodology and resulting emissions estimates are accurate. This omission is important because aircraft engines available and employed by different airlines for a given airframe can differ dramatically in their emissions profiles. Thus, the selection of specific engine types can have a significant bearing on the overall air quality impacts of any alternative that affects aircraft operations. As with the issue of reverse thrust emissions, aircraft engine selection was addressed in detail in Inglewood's comments on the 2003 Master Plan EIR. At minimum, the DEIR should provide a list of the engine assignments utilized in the air quality modeling so that the potential significance of the engine differentials can be determined. The omission of that data renders the DEIR air quality analysis deficient.

[2] The total taxi and delay times for Alternative D (in the 2003 Master Plan EIR (then the Preferred Alternative)) was 31 minutes per LTO cycle, compared to 29.6 minutes per LTO cycle in the current DEIR.
[3] *See also* comments on noise analysis which suffers from the same omission.

D. The DEIR Lacks Any Evaluation of the Project's Greenhouse Gas Impacts

Greenhouse gas ("GHG") emissions from APU are not estimated in the DEIR, on the premise that "[a]lthough operations of APUs are expected to contribute to GHG emissions, EDMS does not estimate CO_2 emissions or fuel consumption; therefore, APUs are not included in the emissions inventory," DEIR, p. 4-390. It is true that EDMS does not provide such capability, but that does not lead to the conclusion that GHG emissions cannot be estimated. While no formal model may be available, there are brake specific fuel consumption data available for APU engines. These data, combined with APU design and operational characteristics, and the carbon content of jet fuel, can be used to generate CO_2 emissions estimates for APU engines. Methane and nitrous oxide emissions may be less certain, but "typical" emissions factors for similarly operating engines can be applied without inordinate error (as methane and nitrous oxide emissions constitute only a few percent of total GHG emissions for typical mobile sources). In reality, the use of zero as a "default" emission rate for GHGs (an assumption implicit in cases where non-zero emissions are not estimated) reflects an analytic error that is grossly more significant than the error that might be associated with an imprecise, but non-zero, GHG emission estimation methodology.

The failure to analyze GHG emissions is legally insupportable as well. In *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70 (2010), the court found the City of Richmond's initial failure to conduct any GHG analysis on a proposed refinery, as well as its ultimate failure, once analysis was conducted, to prescribe mitigation measures, rendered the EIR defective. *Id.* at 93.

E. The DEIR Omits from its Evaluation of Construction Emissions the Realignment of Lincoln Boulevard

While the DEIR addresses construction impacts at some length, it appears to omit a significant component of those impacts, the reconstruction, including undergrounding, of portions of Lincoln Boulevard. Options 1, 5 and 6, which include relocation of Runway 6L/24R to the north, include, of necessity, the relocation of 6,080 feet of Lincoln Boulevard, and, to varying degrees, its depression into a tunnel.[4]

Nevertheless, and despite the substantial construction activity required to realign, and tunnel to accommodate, a major thoroughfare, the DEIR entirely omits to study, or report on, the construction related impacts of the reconstruction of more than a mile of proximate roadway. *See, e.g.*, DEIR, p. 4-88.[5] The remainder of the DEIR's discussion of construction emissions

[4] "Alternative" 1 requires 250 linear feet of tunnel; "Alternative" 5, 765 feet; and "Alternative" 6, 540 feet.
[5] "Construction activities were assumed to be located on the north airfield and at the north terminals, in the Central Terminal Area (CTA), at Manchester Square, in the current Parking Lot C, at the proposed Intermodal Transportation Facility (ITF) site just south of Lot C, on the east side of Aviation Boulevard south of Century Boulevard, on the Automated People Mover (APM) routes along Century Boulevard and 98th Street, and on the west side where batch plant operations permitted by the SCAQMD and USEPA and project support activities could occur."

suffers from the same deficiencies. *See also*, DEIR, pp. 4-112 and 4-118 re: emissions for Alternative 5, which alternative involves in the most radical realignment of Lincoln Boulevard.

F. The DEIR Lacks Any Data or Analysis of Sulfur Dioxide Emissions

Finally, emissions of sulfur dioxide ("SO_2") do not appear to have been estimated for GSE, motor vehicles, or stationary sources, based on the omission of any SO_2 data from the "detailed" operational emissions tables included in DEIR Appendix C (*see, e.g.*, Table 21, Operational Concentrations). SO_2 emissions are exclusively a function of the sulfur content of fuel, which is relatively easily assessed, leaving no stated reason for their omission, but a gaping hole in the analysis.

In summary, budget constraints are not a sufficient excuse for depriving the public of the requisite air quality analysis and complete disclosure under CEQA. Moreover, this project will eventually require FAA funding. In order to obtain it, the project must comply with the conformity requirements of 42 U.S.C. § 7506(c), and its implementing regulation, 40 C.F.R. 93.150, *et seq.* Compliance will require that the project not exceed the emissions thresholds set forth in that section. It is Cities/County's position that LAWA will be unable to establish the requisite conformity absent the filling of the data void specified here. And any reliance on a previous finding of conformity, based on the 2003 Master Plan EIR and associated conformity analysis, is seriously misplaced. That analysis never established conformity methodologically, but relied on an "exemption" provided by Southern California Air Quality Management District ("SCAQMD"), which was not delegated the duty of granting such an "exemption" under the then existing statutory regime. Thus, Cities/County strongly recommend the DEIR be revised to provide a thorough disclosure of the various options' air quality impacts, in order to satisfy both Federal and State unequivocal mandates.

V. THE DEIR FAILS TO ADEQUATELY DISCLOSE THE PROJECT'S NOISE IMPACTS

The DEIR is dramatically deficient in its purported analysis of the noise impacts of the various alternatives. Notably, none of the noise contours depicted in the DEIR include the 1992 contour employed by LAWA for sound insulation purposes in Inglewood, *see* DEIR, p. 4-665.

Perhaps most notably, the noise analysis does not appear to have been based on the Integrated Noise Model ("INM"), the model required for use by FAA. FAR Part 150, Appendix A, § A150.103(a); FAA Order 1050.1E, § 14.2b. Instead, the flight tracks depicted in the EIR and used in the noise analysis appear to be radar tracks, wholly independent of the INM protocol.

Moreover, the noise analysis lacks critical fundamental data concerning types of aircraft, numbers of each type of aircraft projected, the number of operations anticipated for each aircraft type, and the source of the data in the DEIR database. Instead, the DEIR substitutes percentages without revealing the source or calculation of those percentages. Given the differential noise

signatures of the various aircraft, the absence of such critical raw data alone renders the noise analysis entirely inadequate.

Finally, the DEIR fails to explain why "Alternative" 5, with the greatest runway displacement of 350 feet, results in the least population exposed to the 65 CNEL contour, and the third least exposed to an increase of 1.5 decibels within the 65 CNEL contour, DEIR, p. 4-738, § 4.9.6.5, despite the fact that the "Alternative" 5 noise contour contains the second highest population newly exposed to the 75 decibel noise contour, DEIR, p. 1-83. Similarly, the DEIR concludes, without explanation, that "Alternative" 2, which does not contemplate any runway displacement, implicates more impacted land use than any other alternative, DEIR, p. 4-706, § 4.9.6.2.

These apparent, but unexplained inconsistencies, are merely systematic of a larger issue within the DEIR. While the DEIR cavalierly reaches numerous conclusions, not merely about noise, but also about air quality and other impacts, those conclusions are never fully explained either in the body of the DEIR or in its associated appendices. Thus, while the DEIR's noise analysis is notable for its lack of underlying data and coherent analysis, its failure to explain its conclusions in such a way as to allow the public to adequately evaluate them is endemic to the entire DEIR.

VI. THE DEIR'S LAND USE AND PLANNING ANALYSIS SIGNIFICANTLY MISSTATES THE IMPACTS OF, AND MITIGATION POTENTIAL FOR, THE PROJECT

The DEIR relies on its land use and planning analysis as the bulk of its mitigation for the yet to be fully analyzed noise impacts of the various project options. That reliance is misplaced, not only from a substantive perspective, because the noise impacts still remain to be accurately analyzed, but also from a procedural perspective, as implementation of the FAA purchase and sound insulation programs upon which LAWA relies for mitigation, are years, even decades in the future, and, under recently published FAA policies, may never be applicable at all for a substantial portion of the impacted population.

The DEIR's land use impacts analysis, § 4.9.6, p. 4-689, is procedurally flawed in several ways. First, it benchmarks the consistency of its alternatives to the existing LAX Specific Plan, recognizing at the same time that it is the fundamental purpose of the DEIR to document the amendment of the existing Specific Plan. Thus, the DEIR creates a moving target as a benchmark for analysis.

Second, with respect to the potential acquisition of property as mitigation for noise impacts, the DEIR indefinitely and impermissibly defers evaluation of the need for acquisition associated with changes in Runway 6L/24R's Runway Protection Zone ("RPZ"), brought about by the runway's movement north, despite the identification in § 4.7.2 of land uses in the RPZs for all options, thus leaving potential mitigation requirements unsatisfied. *Communities for a*

Better Environment, supra, 184 Cal.App.4th at 92, citing CEQA Guidelines § 15126.4(a)(1)(b) ["Formulation of mitigation measures should not be deferred until some future time."].

In doing so, the DEIR may be incorrectly relying on the claim that, in gaining compliance with the "clear zone" requirements for the RPZ, and included Runway Safety Area ("RSA"), FAA has the option of redirecting or removing an object. Page 4-512, § 4.7.2.6.1. FAA has no such option, because only the local land use jurisdiction possesses such power.

Moreover, the DEIR disclaims the need for any acquisition under options 5 through 7, purportedly because only airfield projects are at issue in those options, not the "integrated" options 1 through 4, thus disavowing the need for mitigation. The basis for this disclaimer is not discernible, in that the DEIR makes clear that it is the movements of the runways under options 5 and 6, as well as 1 and 3, that create the need for acquisition of property in the RPZ in the first instance, not the surface traffic options that are "integrated" into options 1 through 4.

From a substantive perspective, the DEIR omits relevant factors in the calculation of land use impacts resulting from the project. First, it entirely omits from its land use impacts analysis the Westchester Business District, part of which may be affected by the RPZ for one or more of the alternatives, without accompanying explanation. Second, it deceptively portrays the City of Los Angeles as the jurisdiction with the greatest existing impacted total land area, DEIR, p. 4-668, *see also* Table 4.9-4, by including the land mass of the airport in the calculation. If the calculation were not arbitrarily skewed by including the land area of the airport, the origin of the impact, in the determination of the impact's scope, it is the City of Inglewood that would have, by far, the greatest land area impacted.[6] The analysis, as well as the planning, should be predicated on that assumption alone.

Finally, the DEIR asserts that the impacts of noise can be mitigated to insignificance by sound insulation, as set forth in MM-LU-1. The DEIR ignores the fact that a sound insulation program encompassing the vast area already exposed to LAX's noise impacts, as well as new areas in surrounding communities, will take decades to implement, if it is funded by FAA at all. And the totality of that funding is now in question. FAA recently published Program Guidance Letter 12-09, "AIP Eligibility and Justification Requirements for Noise Insulation Projects," August 17, 2012 ("PGL") which will limit the access of populations newly brought into the 65 CNEL contour, or affected by an increase of 1.5 dB or more, to sound insulation of all but a small percentage of homes with an average, across all habitable rooms, of less than 45 dB interior noise levels (*see*, September 17, 2012 letter to FAA regarding "Program Guidance Letter – 12-09 – AIP Eligibility and Justification Requirements for Noise Insulation Projects," attached to this letter as Exhibit 4). This means, among other things, that those who are newly impacted by the project, but also who, in good faith, installed sound insulation with their own funds in some rooms; or who could afford to sound insulate bedrooms but not public spaces; or whose dwellings were below the 45 dB interior noise standard under the former operational

[6] Table 4.9-2 seems to indicate that Inglewood has the greatest existing land area of noise impacted uses, in direct contradiction to the statement that "[t]he jurisdiction with the greatest total area (on- and off-airport) within the 65 CNEL or higher noise contour is the City of Los Angeles . . .," DEIR, p. 4-668.

configuration but will be changed under the new regimen, may be left without mitigation, at least for the foreseeable future, a salient fact that is not acknowledged, let alone discussed or analyzed in the DEIR.

In summary, even though noise mitigation is alleged to be feasible, the DEIR is inadequate, both because necessary mitigation measures are entirely omitted with respect to the impacts of property acquisition; and because, in the alternative, even where mitigation measures are provided (although vague), "mandatory performance standards to ensure that the measures, as implemented, will be effective," *Communities for a Better Environment, supra*, 184 Cal.App.4th at 94, are similarly absent.

VII. The DEIR Does Not Adequately Analyze or Mitigate the Project's Admittedly Significant Surface Traffic Impacts

In spite of the DEIR's acknowledgment of the significance of the project's direct and indirect impacts on various intersections within the study area, it relegates those impacts to the category of "significant but unavoidable." It is Cities/County's position, however, that not only are those impacts, in fact, more extensive than reported in the DEIR, but also avoidable through the application of reasonable mitigation measures not offered in the DEIR.

A. The DEIR Does Not Fully Delineate or Mitigate the Surface Traffic Impacts of the Project on Culver City

First, the criteria used in the DEIR for calculating the project's intersection impacts on Culver City is inaccurate. More than five years ago, Culver City requested that LAWA and City of Los Angeles Department of Transportation ("LADOT") use "thresholds of significant transportation impact identified in LADOT's traffic impact analysis guidelines to analyze the impact on intersections and streets in Culver City." (*See,* letter of October 31, 2006 from Charles Herbertson, Culver City Director of Public Works and City Engineer to Jim Richie, LAWA, attached to this letter as Exhibit 5).

The rationale behind Culver City's request is directly related to the SPAS. "This will simplify the preparation and review of the LAX Specific Plan traffic study, since the City of Los Angeles and Culver City share jurisdiction of several intersections that will be analyzed as part of the study." (*See also*, letter to Gloria Jeff, General Manager, City of Los Angeles Department of Transportation, October 31, 2006, attached to this letter as Exhibit 6).

Nevertheless, the traffic study used Culver City's, not City of Los Angeles' traffic impact analysis criteria to assess the impact of the project on Culver City intersections. Use of Culver City criteria significantly understates the project's impacts on those intersections. For instance, using LADOT criteria, the intersections of Centinela/Washington Boulevard (Intersection No. 30), Overland/Culver (Intersection No. 43) and Sepulveda/Slauson (Intersection No. 130) would, in fact, be impacted, as would the non-signalized intersections of Overland/Sawtelle (Intersection No. 154) and Walgrove/Washington (Intersection No. 156) which are already revealed as

impacted in the DEIR. Despite the acknowledged significance of the impacts on the latter intersections, however, the DEIR states that they already meet the Manual of Uniform Traffic Control Devices ("MUTCD") warrants for the installation of these traffic signals and, therefore, Culver City should be fully responsible for the installation of the traffic signals. In this instance, as the project contributes to the significant impacts on those intersections, it stands to reason that Los Angeles should be responsible for the installation of traffic signals to mitigate the impacts.

Further, the DEIR traffic study, DEIR, p. 4-1301, indicates the project would have a significant impact at the intersection of Lincoln Boulevard and Washington Boulevard (Intersection No. 110), which is not in Culver City, but in the City of Los Angeles. The DEIR indicates that the addition of a southbound through lane would fully mitigate the project at this location. However, adding a southbound lane would require widening of the southbound approach and departure and is not considered feasible. In addition, the DEIR finds that there are no other feasible improvements that could fully mitigate the project's impacts , and, thus, declines to mitigate, leaving the impact on that intersection significant and unavoidable.

With respect to the intersection of Lincoln Boulevard and Washington Boulevard, as with respect to other intersections within the project study area of which the DEIR deems the impacts "unavoidable," there are, in fact, feasible mitigation measures that would alleviate these impacts. For example, with respect to northbound Lincoln Boulevard to westbound Washington Boulevard, the County of Los Angeles' SR90 connector road to Admiralty Way would mitigate the project's impact at this intersection as it would reduce the left turn traffic demand. Similarly, the Costco project at the intersection of Lincoln Boulevard and Washington Boulevard was required to pay Culver City $1.5 million toward the SR90 connector road to Admiralty Way to mitigate Costco's impact at this intersection. In the same way, LAWA should be responsible for contributing toward the SR90 connector road to Admiralty Way to mitigate the SPAS project's significant impacts that, with the named mitigation, would be avoidable.

B. The DEIR Does Not Fully Delineate or Mitigate the Surface Traffic Impacts of the Project on Inglewood

The traffic analysis is flawed as it relates to Inglewood as well. First, although the Future (2025) with Alternative Impact Analysis Summary Table lists 25 of the 29 Inglewood intersections studied as having significant traffic impacts with one or more alternatives, the DEIR indicates that some potential intersection improvements such as those for the intersection of Arbor Vitae Street and Aviation Boulevard are not feasible (*see, e.g.*, § 4.12.2.6.4, p. 4-1283; § 4.12.2.7, p. 4-1285; and § 4.12.2.7.1, p. 4-1291). The DEIR does not, however, set forth the specific criteria upon which that determination was based. This is despite the fact that lack of right of way was cited as one factor of concern, but the acquisition of right of way is common as an element of intersection capacity improvement. The inevitable conclusion is that, even though Inglewood is a significant, perhaps primary conduit, for airport directed traffic, the DEIR shortchanges the manifest traffic, as well as other, impacts on Inglewood as well as on Culver City.

In summary, the DEIR's inadequacies are no less substantial and significant for being, in many cases, repeats of old errors, because the public living and working in the project study area will be the ultimate victims of these analytic deficiencies. From a more global perspective, the DEIR represents not only a flawed attempt to implement an as-yet undesignated project with as-yet unanalyzed environmental impacts, but, insofar as LAWA's efforts go exclusively toward the expansion of capacity and associated improvements at LAX, also a patent abnegation of responsibility under the Settlement to regionalize air travel for the purpose of mitigating LAX's impacts on close-in populations, while providing increased air travel opportunities to the rest of Southern California. Due to the DEIR's manifest inadequacies, Cities/County strongly recommend LAWA revise and recirculate the DEIR in strict compliance with CEQA's unequivocal mandates.

Sincerely,

BUCHALTER NEMER
A Professional Corporation

By Barbara Lichman

Barbara Lichman

Attachments

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 1A

November 4, 2003

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

Mr. David B. Kessler, AICP, AWP 611.2
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P.O. Box 92007
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Los Angeles, CA 90009-2007

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

Dear Mr. Ritchie and Mr. Kessler:

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

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

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

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

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

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

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

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

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

I. THE SEIR'S PROJECT DEFINITION IS INCOMPLETE.

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

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

A. The SEIR Improperly Attenuates Analysis of the "Whole" Project.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. The SEIR Appears Methodologically Flawed.

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

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

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

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

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

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

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

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

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

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

It is above dispute that, in general, the potential impacts of airport noise on children, and particularly children in a learning environment, are of critical importance, not only to the children and their families, but to society as a whole. Of particular importance to Inglewood, however, is that, as set forth in SEIR, App. SC-1, Alternative D will result in12 additional schools in Inglewood exposed to single event noise levels sufficient to disrupt classes, as compared to noise levels in 1996. Nevertheless, the SEIR disaffirms significant impact from the increased exposure. SEIR Section 4.1.2.1.2, Project 4-11. ["no reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools" has been established.]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[5] The exceptions to the use of the CNEL metric is to assess noise impacts on schools and awakenings.

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

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

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

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

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

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

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

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

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

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

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

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

The SEIR employs a methodology whereby future year background concentrations, excluding PM_{10}s, are determined by adjusting base year concentrations by the ratio of future

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

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

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

National Weather Service data for 1984 through 1992 at LAX demonstrates the likelihood that these monitoring data are not significantly impacted by LAX emissions. Winds are out of the west or southwest 48 ± 6% (or approximately ½) of all hours in that period. To get a better idea of the significance of this distribution, if a circle were centered at LAX and split into 16 equal "slices", the wind would be blowing off the ocean through only two of those 16 slices for fully ½ of all hours. Moreover, these winds would be blowing in a direction such that LAX emissions would have no influence on the off-site monitoring station and little, if any, influence on the on-site measurement. Perhaps most tellingly, winds moved in a prevailing south to north direction (from the bottom half of the circle to the top half) 82 ± 3% of all hours between 1984

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

In summary, as a result of employing the specified methodology, 2015 background concentrations are potentially reduced by 50% for NO_2, 60% for CO, and 30-80% for PM_{10}. Clearly, these reductions provide substantial "headroom" for local emissions increases within the confines of the AAQS. Furthermore, these reductions appear to represent the most significant influence on forecasted pollutant concentrations in the years 2005 and 2015.

The overall sensitivity of the air quality analyses to the background concentration reduction is perhaps best recognized in examining the forecasted 2015 pollutant concentrations. Despite the 50% background concentration reductions for NO_2, annual average on-site NO_2 concentrations are forecasted to increase between 1996 and 2015. While the forecasted increase is not sufficient to cause a violation of the NO_2 AAQS, that may be entirely the result of the reduced background concentrations resulting from the flawed methodology employed. Clearly, the integrity of the AAQS compliance status hinges on the proper demonstration of background concentration propriety. Since this is the case, it is critical that assumed background concentrations be supported with appropriate analyses, and those analyses are currently lacking in both the DEIR and SEIR.

B. The SEIR Understates Aircraft Emissions.

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

1. The SEIR Air Quality Analysis Utilizes Incorrect Aircraft PM_{10} Emission Factors.

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

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

This alternative approach to PM emission factor estimation is based on a strong statistical relationship between measured PM and the inverse of measure NO_x (with co-efficients significant at 99+% confidence levels). With such a relationship, the entire existing database of aircraft NO_x emissions rates can be evaluated to develop aircraft engine and operating mode specific PM emissions rates. This approach produces PM emissions rates that range from 4 to 37 times higher (depending on operating mode) than those used in the DEIR and SEIR. The smallest differentials are observed at the highest thrust modes. For a typical landing/takeoff ("LTO") cycle at LAX (*i.e.*, using local times in mode), the SEIR appears to underpredict the aggregate PM emission factor by a factor of about 17. The effect on related PM air quality analysis is obvious.[6]

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

2. The SEIR Inaccurately Represents Aircraft Taxi Times.

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

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

TABLE 1

	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM-10 (tpy)
Taxi Emissions - NA/NP Alternative	723.3	794.9	4,381.6	89.9	17.8
Taxi Emissions - Alternative D	659.2	707.6	3,956.6	80.9	14.6
Taxi Emissions Difference	-64.1	-87.3	-425	-9	-3.2
Aircraft Emissions - NA/NP Alternative	5,154.9	1,204.1	6,668.7	232.5	70.2
Aircraft Emissions - Alternative D	5,171.7	1,111.2	6,240.7	223.7	62.0
Aircraft Emissions Difference	16.8	-92.9	-428.0	-8.8	-8.2
Percent of Total Difference Due to Taxi	-382%	94%	99%	102%	39%

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

As the bulk of aircraft VOC and CO emissions are generated during taxi; and although NO_x emissions rates are low during taxi, the amount of time spent in taxi mode results in a significant contribution to overall aircraft NO_x emissions, it is important that taxi time be accurately modeled. The SEIR contains insufficient information to allow an appropriate evaluation.

3. The SEIR Utilizes Incorrect Default Aircraft Engine Assignments.

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 2

	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM-10 (tpy)
NA/NP Alternative	618.7	240.4	5,685.9	11.4	24.0
Alternative D	135.5	88.1	1,523.2	1.4	30.8
Percent Change	-78%	-63%	-73%	-88%	28%

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

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

TABLE 3

	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM-10 (tpy)
NA/NP Alternative	6,278.8	1,775.0	14,413.1	251.8	170.0
Alternative D	5,746.5	1,625.0	9,660.3	246.4	187.1
Total Emissions Difference	-532.3	-150.0	-4,752.8	-5.4	17.1
GSE Emissions Difference	-483.2	-152.3	-4,162.7	-10.0	6.8
Percent of Total Difference Due to GSE	91%	102%	88%	185%	40%
Aircraft Taxi Difference	-64.1	-87.3	-425.0	-9.0	-3.2
Percent of Total Difference Due to Taxi	12%	58%	9%	167%	-19%
Percent of Total Difference Due to GSE and Taxi	103%	160%	97%	352%	21%

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

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

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

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

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

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

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

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

Perhaps the most surprising omission from the SEIR's air quality analysis is from the assumed fleet mix for vehicles on all airport roadway links, set forth in SEIR, App. S-4, Attachment J, which lacks any accounting for heavy duty truck travel. As Alternative D includes 3.1 million square feet of cargo space on airport property, not to speak of the cargo space that may be utilized off airport by cargo carriers; as Federal Express and other cargo carriers operate substantial fleets of heavy duty diesel trucks; and as heavy duty diesel trucks are large emitters of NO_x and other pollutants, omission of heavy duty trucks from the on road fleet mix will have a substantial impact on the estimation of NO_x emissions from Alternative D and other build alternatives which may render the SEIR's air quality analysis inadequate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 1
COMPARISON
LEVEL OF SERVICE PROJECTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

populations may be more severely affected because they may be more susceptible to asthma and other chronic respiratory illnesses trigger by the high O_3 levels in the area; children within minority communities may be particularly susceptible to health effects of PM_{10}, ozone and NO_2, and thus may be more severely affected than other communities exposed to equivalent level of those pollutants; and children living in poverty who lack access to adequate health care may be especially at risk. [SEIR, p. 4-330]

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

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

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

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

the use of airport revenues for jobs programs. In other words, if the FAA does no approve the use of airport revenues, the entire jobs program collapses.

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

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

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

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

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

1. OPERATIONAL MITIGATION.

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

2. NOISE COMPATIBILITY PLANNING AND IMPLEMENTATION.

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

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

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

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

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

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

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

(ii) FUNDING FOR CENTURY BOULEVARD CORRIDOR IMPLEMENTATION PROJECT - A firm, binding commitment to provide funding to complete the major study and improvement design for the Century Boulevard corridor, particularly between La Cienega and Prairie Avenue, including conversion of currently noise impacted single and multi-family residential buildings to commercial uses;

(iii) BUSINESS PARKS - A firm, binding commitment to provide planning and development funds for business and industrial parks, consistent with the development study currently underway by HNTB and the recently completed economic impact analysis by Kosmont Partners, along Century Boulevard between I-405 and Prairie Avenue, with specific emphasis on the area closest to the new GTC;

(iv) PUBLIC PARKS, GOLF COURSE, NATURE CENTER - A firm, binding commitment to provide funding for conversion of incompatible residential and other uses, other than those redeveloped for commercial purposes to public parks, a municipal golf course, and/or nature center;

(v) BRANDING, SIGNAGE AND WAY FINDING - A firm, binding commitment to provide adequate signage for those accessing LAX and the amenities of the City of Inglewood including Hollywood Park and Daniel Freeman and Centinella Hospitals.

(vi) LIBRARIES - A firm, binding commitment to fund the replacement of libraries to be impacted by the project, and the expansion of Inglewood's library system to accommodate increased student populations;

(vii) YMCA - A firm, binding commitment to fund the replacement of the existing YMCA at 102nd Street and Prairie Avenue;

(viii) HEAD START CHILD DEVELOPMENT FACILITIES - A firm, binding commitment to fund the development of new childcare and education centers in compliance with the requirements of the new General Plan;

(ix) SENIOR CITIZEN HOUSING - a firm, binding commitment to fund new senior housing and assisted living communities consistent with the requirements of the new General Plan.

(g) PROVISION OF FUNDS FOR ACQUISITION AND RELOCATION - A firm, binding commitment to provide funding for the acquisition of all properties falling within any of the criteria of significant noise impact in the SEIR and of funding for relocation housing and expenses;

(h) JOB TRAINING - A firm, binding commitment to begin immediate training of Inglewood residents in: (a) construction related skills necessary to participate in the construction phase of the project; and (b) skills necessary to obtain long term employment at LAX, including, but not limited to, the creation of a new vocational school dedicated to preparing students for careers in aviation industries and emerging hi-tech industries of aviation maintenance, as required in concept by the MOU;

(i) FUNDS FOR JOB TRAINING - A firm, binding commitment to provide local funding for jobs training programs, either to augment Federal funds provided for training, or to fund the training program in its entirety if the FAA does not authorize the use of airport revenue for training purposes;

(j) MODIFICATION OF THE MOU - A firm, binding commitment to extend the MOU at least through the year 2015, concurrent with the implementation of the LAX Master Plan, including, but not limited to, the abrogation of the requirement to dedicate avigation easements; acknowledgment that easements as yet unrecorded will not be re-recorded at the expiration of the MOU, and the reconveyance of all easements previously recorded.

3. ADDITIONAL RESEARCH.

In addition to all other studies specified in the DEIR and SEIR, a study be conducted of the incidence of air pollutants, resulting from aircraft operations, traffic and other sources related to LAX, and their health effects, both generally and on residences of the City of Inglewood specifically.

In summary, while Inglewood appreciates the efforts that have been made by Los Angeles to cope with the difficult problems of limitation of airport operations and environmental compatibility with surrounding communities, more clearly needs to be done to remedy the problems that fall squarely on the shoulders of Inglewood and particularly its low income and minority residents. Inglewood looks forward to continuing its ongoing cooperation with Los Angeles in fostering both economic growth and improved quality of life for all citizens of Los Angeles and its neighboring communities.

Inglewood thanks Los Angeles for this opportunity to comment.

Sincerely,

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 1B

ATTACHMENT 1

DRAFT ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT,
LOS ANGELES INTERNATIONAL AIRPORT
PROPOSED MASTER PLAN IMPROVEMENTS -
COMMENTS RE: ALTERNATIVES A THROUGH C

The following constitutes comments, pursuant to the requirements of the California Environmental Quality Act, Public Resources Code § 21000, et seq., ("CEQA") and the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., ("NEPA"), concerning the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR") for the Los Angeles International Airport ("Airport") Proposed Master Plan Improvements ("Project"), prepared jointly by the Federal Aviation Administration ("FAA") and the City of Los Angeles ("Los Angeles"),[1] and Alternatives A through C presented therein.

The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

(I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;

(II) the discussion of the Project's surface traffic impacts is misleading;

(III) the noise impacts of the Project are inadequately addressed;

(IV) the potential air quality impacts of the Project are not fully disclosed;

(V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport's airside and groundside facilities are the sole way to meet future demand;

(VI) the LAX Master Plan and Draft EIS/EIR fail to satisfy applicable law because they do not conform to other relevant plans;

(VII) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them;

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[1] The FAA and Los Angeles shall, for the remainder of these comments, be referred to collectively as "Project Proponents".

(VIII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA;

(IX) the Draft EIS/EIR does not meet environmental justice requirements; and

(X) the Draft EIS/EIR fails to adequately account for human health risks.

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.[2]

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, "analysis of impacts, mitigation measures and project alternatives becomes impossible." County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that "a baseline figure must represent an environmental condition existing on the property prior to the project." Save Our Peninsula Committee, et al. v. Monterey County Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. § 15000, et seq., ("CEQA Guidelines") are specific as to the definition of "prior to the project":

> "An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a).

While the courts have taken the position that the "date for establishing a baseline cannot be a rigid one", Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that "an EIR must focus on impacts to the existing environment, not hypothetical situations", County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

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[2] Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

A. The Draft EIS/EIR's Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis ("Master Plan") is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., § 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not "be set a number of years earlier than the commencement of the current project". Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full year's worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.[3] In short, the

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[3] The Draft EIS/EIR also states that its use of earlier years results in a more "conservative" analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the

nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan, § 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, § 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System ("ACARS"), and Official Airline Guide ("OAG") data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as "the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft." (Master Plan, § 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.[4]

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analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.

[4] When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.[5]

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model ("SIMMOD"), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay

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and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

[5] In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, § 2.1.3, pages II-2.5 - II-2.6)

modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

The accuracy of SIMMOD's results depends on an accurate "description" of the "airport's operating environment". (Master Plan, § 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the "description" is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, § 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that "a standard definition of acceptable delay is not used in the industry" (Master Plan, § 2.1.3, page II-2.5), it then concludes that "delay levels of six to ten minutes indicate the need for additional facilities"; that "as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems"; "as delay approaches ten minutes per operation, further increases in demand are limited", and, "flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation." (Master Plan, § 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use "zero variance" as a standard for "on time" performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that "based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive" (Master Plan, § 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflown, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations

long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.

4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from "August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes" (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area ("TRACON"); and (2) gate capacity for future scenarios.

1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, § 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft

arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible "intrail", it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, intrail restrictions though an en route sector or intrail restrictions required for an airport approach control facility and other variables cause the in trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.[6] (Master Plan, § 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission ["The inability to model gate operations in detail does not impact the results of

[6] Performance measures contained in the Master Plan, § 2.5.1, include "outbound ground delay" which, in turn, appear to include gate related variables such as "gate push-back delay". This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, § 2.5.1, page II-2.97)

the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint . . ." Master Plan, § 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan's model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the "radar" screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure's implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project's delay reducing, and capacity enhancing benefits.

E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model's outcome in significant ways.

For example, the Master Plan defines aircraft demand as "a 24-hour flight schedule representative of design day activity." (Master Plan, § 2.1.2, page II-2.3) The "24-hour flight schedule" definition is almost identical to the definition of "capacity", "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan, § 2, page II-2.1) The two variables, therefore, vary together, i.e., as "capacity" increases, "demand" will also increase, rendering demand useless as a

predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model's results.

II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT'S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR's off airport surface traffic analysis adequately depicts some aspects of the Project's surface traffic generation potential, it is notably deficient in the following ways: (1) the use of the Adjusted Environmental Baseline for comparison with the Project's surface traffic impacts creates a misleading picture of the magnitude of those impacts; (2) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (3) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (4) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (5) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

A. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The "constrained" alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of "Existing Condition/Environmental Baseline" on which it is purportedly based. There are significant differences between the 1995 data concerning the "Existing Condition/Environmental Baseline" contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the "Existing Conditions/Environmental Baseline" between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the "adjustments" to the "Existing Conditions/Environmental Baseline" involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these "adjustments" is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: "A list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279)" [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: "A list of planned development projects was developed . . ." (Technical Report, § 3b, page 2-3)" [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report,

3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects ". . . currently funded and approved or which have a high probability for completion by 2015 . . ." Clearly, the distinction between "approved" and "planned" projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project's impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a "preliminary list of related projects" that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as "the basis of comparison under CEQA for future mitigation for the three build alternatives" (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the

Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

B. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan § 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.[7] Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

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[7] "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects." (CEQA Guidelines, § 15355(b))

Intersection[8]	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (*w/mit*) V/C(LOS)	Difference (*w*) Existing	Difference (*w*) Adjusted
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	+.050	+.007
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-.122	-.264
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)	+.292	-.029
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)	+.073	+.031
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	+.023	-.032
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)	-.02	-.189
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)	+.438	-.195

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.[9]

C. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By "reconstituting" the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

[8] Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

[9] Note that if the comparison had been between Alternative C and the No-Project/No-Action Alternative, the difference would have been even greater, as the No-Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.

	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Alternative C	Adjusted Baseline	No Project	Alternative C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a "Master Plan commitment" that:

> "To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained." (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be "updated, revised or determined infeasible" if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based. While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR's purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic

generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan's ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

D. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.[10] If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out ("worst case") impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR's discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

E. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

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[10] The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway. Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the ". . . Traffic Coordination Office . . . " to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that "construction traffic . . . can be managed . . ." (Draft EIS/EIR, page 4-320), and "traffic patterns around the airport for the general public would be largely maintained . . ." (Id.), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states "however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport." (Id.) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project's purported mitigation will be insufficient to restore stability.

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (Id.). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

In summary, while "the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins . . ." (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.[11] As a

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[11] The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the

consequence of the above omissions, the Draft EIS/EIR's analysis of construction traffic impacts is materially deficient.

F. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled "Environmental Action Plan". It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines § 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S AIRCRAFT NOISE IMPACTS.

A. The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline.

As noted earlier, a threshold issue in environmental analysis is the establishment of a "baseline". The function of a "baseline" is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) "No-Project" baseline for 2005 (and 2015) which includes "natural" growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C "would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year." (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out

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period anticipated in the Draft EIS/EIR.

in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the "reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets," and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's "Average Annual Day Operations and Fleet Mix - Environmental Baseline" (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, supra, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

B. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Improperly Analyzes the Health Effects of Aircraft Noise.

1. The Draft EIS/EIR Must Consider the Health Effects of Aircraft Noise.

The Draft EIS/EIR must fully consider all of the adverse health effects of aircraft noise. LAWA admits that its LAX Master Plan will create increased noise impacts upon the residents of the City of Inglewood. "Under Alternative C, which does not add a new runway, a decrease in noise exposure would occur in the City of El Segundo and the community of Del Aire with increases in portions of the community of Westchester and the City of Inglewood." Draft EIS/EIR Section 4.24.2 page 4-1040. There is strong scientific evidence of the adverse health effects of noise pollution on humans. Studies have shown clear health effects on animals, and these studies indicate the certainty of such effects on humans as well.

> "A study sponsored by the EPA, constituting one of the most notable studies of animal noise exposure, examined cardiovascular effects of noise on monkeys. This research demonstrated that monkeys subjected to industrial noise at levels between 85 to 90 dba for several months developed significant elevations of systolic and diastolic blood pressure. It is particularly notable that these changes persisted long after exposure ceased, demonstrating that noise has a chronic effect on blood pressure."

Fred M. Svinth, Illingworth & Rodkin, Inc. "The Effects of LAX Aircraft Noise on Local Communities," January 2001, p. 9, attached hereto as Exhibit "I". LAWA admits that such studies exist and that noise has effects, but refused to seriously consider such reports. Instead, LAWA simply concludes that such studies are controversial and, therefore, that no in-depth analysis is required.

> "Some studies suggest that there are indicators that high noise levels, particularly from aircraft, may have a detrimental effect on the cardiovascular system, mortality rates, birth defects, achievement scores, psychiatric admissions, sleep disturbance, and overall psychological well being; others show no conclusive evidence of these effects. However, the results of such studies continue to be controversial and are not accepted by the general scientific community at this time. Specifically, the scientific community has cited methodological and epidemiological problems with the studies and none of the studies has gained the universal acceptance from researchers that would allow them to be used as a basis for impact assessment."

Draft EIS/EIR Section 4.24.2 page 4-1041.

However, LAWA argues that it is impossible to "quantify" the relationship between noise and adverse human health effects. LAWA argues that no "threshold of significance" exists:

> "Although there is consensus that noise has some health effects, there is no agreement as to the degree of the effects or the level at which they become significant. The scientific community and regulatory agencies have not developed numerical thresholds beyond which the health effects of noise are considered to be significant."

Draft EIS/EIR Section 4.24.2 page 4-1046.

In other words, LAWA takes the position that the absence of a specific threshold absolves it from having to address this issue in any meaningful way in the Draft EIS/EIR. Instead, LAWA focused on overall noise exposure caused by its expansion plan. "Since it is not possible to quantify noise health impacts for a population, such as the people who live in the vicinity of an airport, this analysis focused by necessity on quantifying overall noise exposure." Draft EIS/EIR Section 4.24.2 page 4-1039.

LAWA's admitted inability to fully analyze the Health Effects of Aircraft Noise itself renders the planned expansion violative of existing law. LAWA improperly fails to consider the admitted potentially significant adverse health effects of noise. "Significant and unavoidable impacts associated with aircraft noise are expected to occur. Such noise exposure is considered to pose a potential significant and unavoidable impact relative to health effects of noise, to the extent there is such a relationship between the two." Draft EIS/EIR Section 4.24.2 page 4-1050.

> "The U.S. Environmental Protection Agency (USEPA) has taken the following position: 'Research implicates noise as one of several factors producing stress-related health effects such as heart disease, high blood pressure and stroke, ulcers and other digestive disorders. The relationship between noise and these effects has not yet been quantified.'"

Draft EIS/EIR Technical Report 14b. Health Effects of Noise Technical Report. No Master Plan Commitments for the health effects of noise are proposed. Draft EIS/EIR Section 4.24.2 page 4-1046. LAWA must fully examine the health effects or aircraft noise in order to fulfill the requirements of NEPA and CEQA.

2. The Draft EIS/EIR NEEDS TO ADDRESS Aircraft Noise Interference with Classroom Activities and Sleep.

The Draft EIS/EIR fails to adequately address the interference of aircraft noise upon classroom activities and sleep. Interference with classroom activities and sleep are two of the most sensitive impacts of aircraft noise. LAWA admits the problem of interference with classroom activities, but fails to analyze this problem to the degree required under CEQA. According to LAWA:

> "Interference with classroom activities and learning from aircraft noise has been the subject of much recent research. Several studies have been performed, including studies at LAX, London's Heathrow Airport, and Munich International Airport. These studies indicate that a relationship between aircraft-related noise and learning effects does exist, but that additional research is required to clarify how close the relationship is and at what noise levels the relationship appears. The relationship has been

> particularly difficult to document due to the confounding factors of background noise, school quality, and socioeconomic status. Additional research is being performed to try to account for these factors."

Draft EIS/EIR Section 4.24.2 page 4-1043. Similarly, LAWA admits but dismisses summarily the very real problem of sleep disturbance caused by aircraft noise. LAWA states:

> "Generally, laboratory studies have shown considerably more disturbance than field studies, perhaps due to the subject's lack of familiarity with the location and experience. Sleep disturbance studies have also involved the collection of cumulative data from subjects.... A review of existing studies and literature indicates that additional research is required to clarify the relationships between aircraft-related noise and sleep disturbance."

Draft EIS/EIR Section 4.24.2 page 4-1044.

LAWA tries to minimize the sleep disturbance caused by aircraft operations at LAX. LAWA states, "LAX undertakes a different operational procedure for takeoffs and landings between midnight and 6:30 a.m. These 'over-ocean' procedures route both arrivals and departures over Santa Monica Bay, directing aircraft noise away from residential areas to the east of LAX during nighttime hours." Draft EIS/EIR Section 4.24.2 page 4-1045. However, due to constraints caused repeatedly by weather conditions, residents of Inglewood and other nearby communities are subjected to late night overflights. The Draft EIS/EIR fails to adequately analyze these issues.

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR's air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project's air quality impacts are not claimed to be insignificant (see 42 U.S.C. § 7506[12]). The absence of a conformity analysis necessarily renders the following comments preliminary.

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[12] "No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan . . ." (42 U.S.C. § 7506(c)(1))

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented (Draft EIS/EIR, page ES-9). Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the preferred expanded capacity scenario (Alternative C). Furthermore, air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative. At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors.

Basic economic theory, however, dictates that under free market conditions, demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,[13] the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air quality conditions under any of the various alternatives.

Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to

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[13] The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.

airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to "flow" improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards ("NAAQS/CAAQS") compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR presumes the latter (Draft EIS/EIR, Technical Appendix G, page 46), it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District ("SCAQMD") monitoring facility (Hawthorne) located near, but southeast of the Airport (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).

However, the prevailing wind direction for the Airport area is southwest to northeast (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that crosses Airport property to the north of the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background

concentrations used in the Draft EIS/EIR and associated documents, which are not comparable to the data for the onsite monitoring station).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations (Draft EIS/EIR, Technical Appendix G, pages 45-46) are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows from the southwest to the northeast, the Pacific Ocean represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data (Draft EIS/EIR, Technical Report 4, Attachment A, page 4). Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times (Draft EIS/EIR, Technical Appendix G, page 4). Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x. For example, at a commonly utilized reverse thrust mode time of 15 seconds, increased NO_x emissions would be equivalent to the NO_x produced by increasing overall takeoff time by 35 percent (0.7 minutes plus 0.25

minutes versus 0.7 minutes). Since takeoff accounts for about 35 percent of total aircraft NO_x (Draft EIS/EIR, Technical Report 4, Attachment C), the overall aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions alone. Without some affirmative determination that such operations will be prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005 (Draft EIS/EIR, Technical Appendix G, page 3). Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This "requirement" raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+NO_x standard (that is the basis for the 2.5 g/bhp-hr NO_x assumption) for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment for Airport work at an accelerated schedule beginning in 2001 may or may not be successful, but clearly requires some statement of commitment by the regulated parties. Voluntary, so-called "Blue Sky Series," engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines, averaging programs which are currently relied on by all heavy duty engine manufacturers for emissions standards compliance). In reality, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory "clean engine" standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO_x, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction equipment engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., allow use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for engines meeting these stringent standards) are subject to both malperformances and

malmaintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

E. General Emission Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing aircraft Ground Support Equipment ("GSE") operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board's ("CARB") OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency ("EPA"). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR (Draft EIS/EIR, Technical Report 4, Attachment A), such as the EPA's AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD's CEQA Handbook, employ less developed and, in many cases, seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of the FAA's Emissions Dispersion and Modeling System ("EDMS") to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.[14] A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO_x, and 4 to 5 times greater for SO_2. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO_x, and 2 to 4 times greater for SO_2. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

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[14] This situation may be improved in the latest version of EMDS, which was released subsequent to the completion of the Draft EIS/EIR.

F. Ground Support Equipment Populations Are Not Appropriately Specified.

As stated above, the Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions (Draft EIS/EIR, Technical Report 4, Attachment A). Inherent within this approach is an assumption that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative (Draft EIS/EIR, Technical Report 4, Attachment L). While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR (pages 4-514 through 4-519), it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. Required infrastructure modifications are relatively modest, with no dependency on the expansions associated with any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the "unmitigated" emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification as is claimed in the proposed list of mitigation measures.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the aircraft PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the supporting analysis undertaken to develop those factors (Draft EIS/EIR, Technical Report 4, Attachment H). Second, it appears that the approach used to

develop PM emission factors for aircraft[15] produces estimates that are not consistent with previous PM emission testing results.[16]

Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM (Draft EIS/EIR, Technical Report 4, Attachment H). This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.[17] Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available aircraft PM emissions testing database is both small and dated. However, the Draft EIS/EIR (Technical Report 4, Attachment H) statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental physical and chemical combustion characteristics that give rise to PM formation have not. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is also without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires just such an assumption of equivalency between total PM and PM-10 (as stated in Technical Report 4, Attachment H).

If relationships between aircraft PM and another routinely measured pollutant can be developed for one or more of the standard aircraft operating modes, then measured values for this "independent" pollutant can be used to estimate PM emission rates in that mode (or modes). Such a statistical approach can take advantage of the limited existing PM emissions database,

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[15] The International Civil Aviation Organization ("ICAO") emissions certification process for aircraft does not include PM, so alternative emission factor estimation approaches are required.

[16] Adjustments not employed in the Draft EIS/EIR may compensate for most of this deficiency.

[17] This calculation is based on data presented in the Draft EIS/EIR (Technical Report 4, Attachment H).

while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such relationships consider possible operating mode-specific differences in any identified PM relationship, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, PM would be expected to be high in low efficiency combustion modes. In short, it should not be expected that the significance of any inter-species relationship(s) is/are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard aircraft operating modes (approach, takeoff, and climbout), with coefficient t-statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO_x (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode, and is 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as the best basis for an overall relationship, as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). Using this takeoff mode PM-to-NO_x relation as a means to estimate aircraft takeoff PM emission rates for each of the engines with NO_x measurements in the overall ICAO emissions database, PM emission rates for the other three operating modes (climbout, approach, and taxi) can be developed based on observed statistical relationships between mode-specific PM and takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for observed variance at greater than 99 percent confidence.

Using existing ICAO emissions measurement statistics, this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes. The differentials grow with reducing thrust possibly because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate aircraft PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.[18]

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[18] Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR (Technical Report 4, Attachment H), the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of

I. Aircraft SO_2 Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO_2 emissions (Draft EIS/EIR, Technical Appendix G, page 4). This model underestimates aircraft SO_2 emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the emission factor was developed without accounting for the factor of two ratio between SO_2 mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO_2 concerns, those concerns will be exacerbated by this underprediction.

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE (Draft EIS/EIR, Technical Appendix G, page 10). Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO_2 and PM Not Considered.

APU emission factors for both SO_2 and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO_2 emissions are a function of fuel sulfur content, so that emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

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17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.[19] It can be deduced from the included emissions estimates for aircraft taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emission rates are low during taxiing, the amount of time spent in taxi mode results in a significant taxi contribution to overall NO_x emissions. Most critically, it is expected that virtually all of the aircraft emissions differential between the project baseline and the project alternatives is due to assumed reductions in aircraft idle time. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling was performed.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and therefore, the calculation methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed (Draft EIS/EIR, page 4-459). Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR (Draft EIS/EIR, page 4-460). Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

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[19] The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

N. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Does Not Adequately Address the Impact of Toxic Air Pollutants.

1. The Draft EIS/EIR Lacks A Proper Baseline Regarding Air Toxics.

The Draft EIS/EIR does not contain a proper baseline for air toxics emissions from LAX and LAX-related sources. As a result, it does not adequately address the effects of toxic air pollutants upon human health, including the health of the residents of the City of Inglewood.

CEQA requires that an EIR includes a description of the environment in and around the project at the time of the Notice of Preparation. CEQA Guidelines §15125(a). Such a description, or baseline, serves as the basis for the EIR's analysis of the environmental impacts of a project. CEQA also requires that detailed analysis of the potential environmental impacts from each of the projects contained in the aviation alternatives cannot be deferred to subsequent environmental documents. Public Resources Code § 21100; Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App.4th 182. The Draft EIS/EIR does not contain an adequate basis from which to determine the current impact on human health of air toxics emitted by LAX. "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." Calkins Phase I Report, p. 8. As noted by Mr. Calkins, this oversight means that LAWA does not provide a sufficient baseline from which to draw later conclusions. Without a baseline, LAWA cannot adequately assess the environmental effects of its plans to expand LAX.

2. LAWA Failed To Properly Study Toxic Air Emissions.

The Draft EIS/EIR does not properly study toxic air emissions related to LAX. LAWA's Health Risk and AirToxics evaluation is deficient due to the failure to organize and complete a study, such as the Air Quality and Source Apportionment Study, prior to the release of the Draft EIR/EIS. The Air Quality and Source Apportionment Study are not yet complete. This study will shed important information on the health impacts to the surrounding community as well as identify mitigation measures. It will also determine the contribution of various airport-related activities on selected air pollutant concentrations in relation to those pollutants caused by other, non-airport sources in the surrounding community without the Source Apportionment study. LAWA cannot assess the incremental impact of LAX operations on local air quality. Therefore, LAWA has failed to investigate this area fully before preparing the Draft EIS/EIR. A prudent course of action would be to place any LAX expansion plans on hold until completion of this study. This would allow proper consideration of the serious human health issues addressed in this study. Without this study, the Draft EIS/EIR will not withstand scrutiny under CEQA and NEPA.

3. LAWA's Health Risk Assessment Does Not Adequately Factor Time as a Variable.

The Heath Risk Assessment in the Draft EIS/EIR should be extended to consider a longer time period. There do not appear to be any tables or data in the Draft EIS/EIR on cancer and non-

cancer health risks for any year after 2015. However, the operation of the expanded airport during those latter years may well have continuing impacts on the residents of the surrounding communities. Health impacts are often seen in the resident population over a much longer time span than the 15-20 years assessed in the Draft EIS/EIR tables. Other major planning assessments, such as the RTP (2025) and the AQMP (2030), examine impacts of their action over a much longer time frame. Calkins Phase II Report p. 22. The Health Risk Assessment in the Draft EIS/EIR should be extended to conform to this model.

4. LAWA's Study Of Air Pollutants Fails to Consider Relevant Issues.

It is unclear in the Draft EIS/EIR what LAWA's criteria are for determining net change in chronic and acute hazard indices for air pollutants. LAWA does not include the criteria pollutants in this analysis, and this is a critical, indeed fatal, omission. The results of the Source Apportionment study, which was only recently initiated, would have provided valuable input to assessing criteria (NAAQS) as well as various toxic air pollutant impacts on health, if it were available to the LAWA at the time of preparation of the Draft EIS/EIR. The Draft EIS/EIR also appears to ignore the incremental cancer and non-cancer risks to people who do not "receive a certain hazard level criterion." Calkins Phase II Report p. 22. These issues must be addressed and resolved in the Draft EIS/EIR.

V. THE DRAFT EIS/EIR DOES NOT MEET THE REQUIREMENTS FOR ALTERNATIVES ANALYSIS OF EITHER CEQA OR NEPA.

A. The Draft EIS/EIR Alternatives Analysis Does Not Conform to the Requirements of CEQA.

The LAX Master Plan and Draft EIS/EIR fail to conform to CEQA because they do not properly consider alternatives to expansion at LAX. Proposals that entail expansion at other airports instead of LAX should have been analyzed and considered. Instead of considering only three "build" alternatives, each of which called for massive expansion of LAX (in comparison to a flawed No Action/No Project Alternative), LAWA and the FAA should have considered alternatives that included expansion and/or construction at Ontario Airport, El Toro Marine Corps Air Station, Palmdale Airport and March Air Force Base.

In discussing alternative locations for a project, the CEQA Guidelines state, "The key question and first step in analysis is whether any of the significant effects on the project would be avoided or substantially lessened by putting the project in another location." CEQA Guidelines § 15126.6(f)(2). The CEQA Guidelines further state:

> "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or

substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project."

CEQA Guidelines §§ 15126.6(a), (f).

According to LAWA, its "preferred" alternative, Alternative "C", causes fewer substantial impacts to the environment surrounding LAX than its other alternatives, "A" and "B." However, the impacts that it does cause are substantial. Moreover, the analysis does not consider whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location, as required by CEQA Guidelines, Section 15126.6(f)(2) cited above. The CEQA Guidelines state that alternatives that cause less environmental harm must be considered. Accordingly, inasmuch as the Draft EIS/EIR fails to consider another location, i.e., Ontario, Palmdale, El Toro, etc., the Draft EIS/EIR fails to follow the CEQA Guidelines.

Feasible alternatives to massive expansion of LAX do exist. The Guidelines set forth a number of factors to consider when determining whether or not an alternative is feasible.

> "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)."

CEQA Guidelines section 15126.6.

Considering these feasibility factors in connection with expansion at LAX illustrates why the LAX Master Plan and the Draft EIS/EIR are not consistent with CEQA. LAX is located in the midst of a heavily populated residential area. The area is not well suited for the airport operations that currently exist, let alone massive expansion. LAX is economically viable, but expansion of LAX offers little, if any, additional economic benefit regionally when compared to other expansion scenarios considered by the planning body for Southern California, the Southern California Association of Governments ("SCAG"). "Southern California Aviation Industry Impact Analysis," CIC Research, Inc., July 11, 2000, p. v, attached hereto as Exhibit "C". The LAX Master Plan contemplates massive construction at LAX because, as it stands today, the infrastructure at LAX is not sufficient to handle the expanded operations in the plan. In reality, however, this places LAX in a similar position to that of every other airport in the area. If LAX

is to expand, massive construction will have to take place. The LAX Master Plan is simply not consistent with other plans, in particular SCAG's 2001 Regional Transportation Plan ("RTP") (see below for further discussion) and the 1999 and 2001 Air Quality Maintenance Plan's ("AQMP's"). Lastly, the LAX Master Plan virtually ignores the regional approach to airport expansion, by failing to fully analyze any alternative that does not call for massive expansion at LAX. Given the fact that LAWA owns several of the other airports in the region meets or exceeds the feasibility of expansion of LAX, when considering the factors mandated by CEQA.

B. The Draft EIS/EIR's Alternatives Fail to Satisfy the "Purpose and Need" for the Project.

The mandate to evaluate and compare alternatives is the "heart" of an EIS (CEQ Quidelines, § 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.[20]

The Draft EIS/EIR's alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general "[p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region." (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) "to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand"; (2) "to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital"; and (3) "to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles."[21]

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project's stated purposes. For example, all three of the Project's objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the

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[20] See, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.32 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471 (1990).

[21] Id.

Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither addresses nor incorporates the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.[22]

Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing "sufficient airport capacity for passengers and freight in the Los Angeles region" (Draft EIS/EIR, Volume 1, page 2-1), in an "efficient and cost effective" way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating "New Large Aircraft" ("NLA") that, with their long haul capabilities, would potentially serve the Airport in order to "sustain and advance the international trade component of the regional economy." (Draft EIS/EIR, page 2-1)[23]

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

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[22] Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, § 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

[23] The Draft EIS/EIR comes close to admitting as much: "Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA." (Draft EIS/EIR, page 2-11)

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities as lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the "heart" of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

VI. THE LAX MASTER PLAN AND DRAFT EIS/EIR FAIL TO SATISFY APPLICABLE LAW BECAUSE THEY DO NOT CONFORM TO OTHER RELEVANT PLANS.

Federal regulations require that all airport development conform to local plans. The FAA's Airport Environmental Handbook clearly states that any airport plan must conform to the local air emissions plans:

> "Section 176(c) of the Clean Air Act Amendments of 1977 states in part that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to a State Implementation Plan after it has been approved or promulgated under section 110 of that Act. It is FAA's responsibility to assure that Federal airport actions conform to state Plans for controlling area wide air pollution impacts."

Airport Environmental Handbook, Chapter 5, p. 12. In addition, the Airport Environmental Handbook states that the 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is a "reasonable assurance" that the project will be located, designed, constructed, and operated in compliance with applicable air and water quality standards. Airport Environmental Handbook Chapter 5 p. 14. Finally, the FAA's Airport Environmental Handbook states that all airport development must conform to local plans:

> "For all airport development there shall be evidence to support the following Airport Improvement Program grant assurances as required by the 1982 Airport Act.
>
> (a) The project is reasonably consistent with existing plans of public agencies for development of the area (section 509(b)(1)(A));
>
> (b) Fair consideration has been given to the interest of communities in or near the project location (section 509(b)(4)); ...
>
> (d) Appropriate air and water quality certificates have been or will be obtained for projects involving airport location, runway location, or a major runway extension (section 509(b)(7))."

Airport Environmental Handbook, Chapter 9, p. 3.

The LAX Master Plan and Draft EIS/EIR fail to conform to two key local plans. How the Master Plan and EIS/EIR fail to conform is discussed in the two paragraphs that immediately follow. However, it should be noted as an initial point that since the Master Plan and EIS/EIR fail to conform to two key local plans, they violate Section (a) referred to immediately above.

First, the LAX Master plan fails to conform to the relevant Air Quality Maintenance Plan. Mr. David Calkins, an expert in air emissions planning and compliance issues, reviewed the LAX Master Plan and Draft EIS/EIR. His reports are attached hereto as Exhibits "E" and "F". In his report, Mr. Calkins states, "Review of Chapter 4.6 found several inconsistencies in LAWA's reference to the conformity and SIP planning process." Calkins Phase I Report, p. 11.

Second, Mr. Calkins has found that the Draft EIS/EIR fails to conform to the Regional Transportation Plan ("RTP") in at least eight different ways. These differences are discussed in detail below. In addition to the Federal law requirements discussed above, under CEQA an EIR must discuss any inconsistencies between the proposed project and applicable general plans and

regional plans. CEQA Guidelines § 15125(d). The Draft EIS/EIR fails to meet these requirements.

A. The LAX Master Plan Fails to Conform to the Air Quality Maintenance Plan.

The LAX Master Plan does not conform to the local air pollution reduction plan. Southern California is designated a "non-attainment area"[24] under the 1990 Clean Air Act. Therefore all major projects must be constructed with assurance to the Federal Government that the project fits into the current air pollution reduction plan, known as the Air Quality Maintenance Plan ("AQMP"). See Calkins Phase II Report pp. 11-12. Mr. Calkins has determined that the LAX Master Plan Draft EIS/EIR fails to conform to the relevant AQMP in regards to the following:

1. Emission Inventory - the 2001 AQMP, currently in development, will require changes to the Draft EIS/EIR's emission inventory.

2. Mitigation Measures - LAWA's failure to commit to specific mitigation measures in the Draft EIS/EIR inhibits development of the 2001 AQMP.

3. Baseline Issues - use of the "adjusted" environmental baseline for off-airport traffic impacts does not allow comparison of the Draft EIS/EIR alternatives with current conditions, but actually compares the alternatives to a future condition.

4. Aircraft Mix - the Draft EIS/EIR assumes an aircraft mix of mostly jumbo airliners, in conflict with the adopted 2001 RTP calculations, which will cause differences in projected emissions between the Draft EIS/EIR and the AQMP.

5. Stationary Source Emissions - LAWA's alternatives do not take into account the increase in nearby, off-airport stationary source emissions, despite LAWA's assertions to the contrary; thus, it cannot conform to the regional plan.

6. Ground Support Equipment - LAWA failed to follow the California Air Resources Board's ("CARB") latest off-road emission model when concluding that emissions for future Ground Support Equipment would be zero.

Calkins Phase II Report at 13-14. These are serious conformance problems that must be first detailed, then remedied by LAWA before any action can be taken on the LAX Master Plan or its Draft EIS/EIR.

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[24] A "non-attainment area" has monitored air pollution levels in excess of the National Ambient Air Quality Standards ("NAAQS").

B. The LAX Master Plan Fails to Conform to SCAG's 2001 Regional Transportation Plan.

The LAX Master Plan does not conform to the local Regional Transportation Plan ("RTP"). The Southern California Association of Governments ("SCAG") is the main planning body for Southern California. At least every three years, SCAG adopts a RTP for the area, which sets forth its plan for the foreseeable future, usually 25 years. SCAG adopted a new RTP in April 2001. This RTP replaced SCAG's previous plan, which was adopted in 1998. The Final RTP has not yet been formally released, but its contents in most areas relevant to LAX are known.

As discussed in the Calkins Phase II Report, attached as Exhibit F, the LAX Master Plan Draft EIS/EIR fails to conform to the RTP as follows:

1. Projected Passenger Load - the LAX Master Plan Draft EIS/EIR projects LAX handling over 92 million annual passengers ("MAP") in 2015; the RTP limits LAX to handling what is considered to be its current physical capacity of 78 MAP.

2. On-Road Emissions Factors - The Draft EIS/EIR utilizes EMFAC2000, but the RTP uses emission factors based upon EMFAC7G. This inconsistency makes it quite difficult to compare the air quality impacts of the Draft EIS/EIR upon the RTP.

3. Different Model Years - The Draft EIS/EIR models years 2005 and 2015, but the RTP models 2025 as its model year.

4. Market Incentives - There are significant differences between the two plans in choice of market incentives, which causes potential conflicts between the two plans.

5. Aircraft and Passenger Characteristics - These differ in regards to projected aircraft types and passenger growth during the relevant periods.

6. Cargo Handling Projections - The Draft EIS/EIR projects much larger cargo handling for LAX than that planned for in the RTP.

7. High Speed Rail Projections - The Draft EIS/EIR rejects this project as too speculative, but the RTP bases projections on passenger and cargo demand in part upon the inclusion of this transportation mode.

8. Funding Projections - The RTP does not include the Ring Road, 105 Freeway extension, or 405 Freeway Connector Projects in its funding projections. The

Draft EIS/EIR plans for funding of all these projects, presumably from Federal Highway funds.

Calkins Phase II Report at pp. 9-10.

LAWA's failure to even discuss these issues is a serious deficiency in the Draft EIS/EIR. The Draft EIS/EIR cannot be acted upon until it is modified to conform to the RTP, assuming that is possible to do without simply scratching the entire analysis and starting over. If it is possible to salvage some small part of the plan, such as the mitigation measures, then the Draft EIS/EIR must be reissued for public comment.[25]

VII. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines §15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines §15126.4(a)(1)(B) mandates that the "[f]ormulation of mitigation measures should not be deferred until some further time." While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, "A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR." (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public's opportunity comment will have been attenuated.

B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code §21081.6 requires that a public agency "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project

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[25] When new significant information becomes available after the public review period, Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5 required re-circulation of an EIR prior to certification.

implementation." (Cal. Pub. Resources Code §21081.6 (a)(1)). If an EIR "identifies one or more significant environmental effects of the project," CEQA Guidelines §15091(a) requires an agency to "make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding." With these findings, the CEQA Guidelines mandate that "the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures." (CEQA §15091(d))

The Draft EIS/EIR violates CEQA Guidelines §1509(d) and California Public Resources Code § 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the "permit conditions, agreements, or other measures" (CEQA Guidelines § 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

VIII. THE UNRELATED ISSUE OF "SAFETY" SHOULD NOT BE USED AS A SMOKESCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project's "improvements" are critical to remedying the adverse safety conditions.

Contrary to the FAA's contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.[26]

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[26] A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA[27] are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.[28] In fact, even the FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue.[29]

While recent incidents have made runway incursions a "hot button" in the eyes of the public, Congress, and aviation organizations, this recently surfaced "safety" issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

IX. THE DRAFT EIS/EIR IS INSUFFICIENT AS A MATTER OF LAW BECAUSE IT DOES NOT SATISFY ENVIRONMENTAL JUSTICE REQUIREMENTS.

A. The Master Plan and EIS/EIR Unfairly Burden the Minority and Lower-Income Communities Surrounding LAX in Violation of Federal and California Law.

Federal law requires that each federal agency "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order 12898, February 11, 1994). Environmental Justice is also a requirement of California law. Cal. Pub. Res. Code §72000-72001. Under California law Environmental Justice means "the fair treatment of all people of all

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[27] Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the "FAA's director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations." The Washington Post Company, "Runway Alert", page A22, July 7, 2001.

[28] "It's the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision." CNN, "Close Calls on Runways Alarm Aviation Experts", June 27, 2001.

[29] The Director of the FAA's Runway Safety Office, Mr. Bill Davis, expressed that "he needs additional authority to coordinate and speed up technological improvements." The Washington Post Company, "Runway Alert", page A22, July 7, 2001.

races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies." Cal. Pub. Res. Code § 72001. The California Environmental Protection Agency is charged with the responsibility to "[P]romote enforcement of all health and environmental statues within its jurisdiction in an manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state." Cal. Pub. Res. Code §72000(b). These requirements imposed on LAWA the responsibility to consider the impacts of LAX expansion on lower income and minority communities.

Several of the communities surrounding LAX, and to the east of LAX, in particular, contain predominantly minority populations and lower income populations. The Draft EIS/EIR contains a demographic analysis of the communities surrounding LAX that will be impacted by the LAX Master Plan. LAWA analyzed seventy census tracts, comprising parts of the City of Los Angeles, El Segundo, Inglewood, Hawthorne, and unincorporated areas of Los Angeles County. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, pp. 5-6. Fifty-four of the seventy census tracts within the study area are considered to be predominantly minority. A tract is so defined when more than fifty percent of the population is minority. Id.. at 10.

Similarly, thirty-three of the seventy census tracts within the Impact Study Area are considered to be low-income. Low-income is defined as having more than 15% of the resident population below the poverty level. Id. Thirty-two of the thirty-three census tracts identified as low-income are predominantly minority. Id. at 15.

LAWA's analysis shows that the distribution of minority and non-minority populations may cause differential impacts between these two groups:

> "This data reveals a readily discernible pattern of minority and low-income communities in the areas surrounding LAX. While the areas to the north and south of LAX are predominantly non-minority, the area east of I-405 within the study area is predominantly minority. Furthermore, within these areas east of I-405 minority populations are heavily concentrated: 39 of the 70 minority census tracts with the study area have minority percentages greater than 90 percent. The uneven distribution of minorities throughout the study area, as evidenced by the data showing that most census tracts have less than 20 percent or greater than 90 percent minorities, increased the potential for differential impacts on minorities and non-minorities."

Id.

Minority and low-income populations are and have been disproportionately burdened by the impacts of LAX long before the massive expansion planned under the LAX Master Plan:

> "[M]inority and low-income residential communities within the study area are currently concentrated east of LAX, separated from the airport by predominantly commercial and industrial airport-related land uses and the I-405 freeway. In contrast, residential areas of El Segundo and Playa Del Rey/Westchester, to the immediate north and south of the airport, do not have high concentrations of minority and low-income populations. LAX has always had an east-west runway configuration to take advantage of the prevailing wind pattern and to maximize efficient use of airspace. The combination of the long-standing runway orientation and more recent changes in the demographic patterns in the area around LAX means that minority and low-income residential communities are directly under the primary arrival flight path The primary impacts on minority and low-income communities from current airport operations are therefore most associated with aircraft noise and air emissions. While residential areas of El Segundo and Playa Del Rey/Westchester directly adjacent to the airport are also exposed to high levels of side-line noise, the areas of exposure are much smaller in comparison to the noise-impacted residential communities to the east."

Id. at 16.

Inglewood is one of the predominantly minority communities located east of LAX which receives a disproportionate share of the impacts of LAX. Inglewood's population is 46.4% African-American, 46% Hispanic, 4.1% White, 1.6% Multi-racial, 1.1% Asian, 0.3% Pacific Islander, 0.2% Native American, and 0.2% Other. California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000, "Table Two, Population by Race/Ethnicity, Incorporated Cities by County, p. 5, attached hereto as Exhibit "A". In addition, a large percentage of the low-income census tracts in LAWA's study area are located in Inglewood. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, Figure 3, "Low-Income Census Tracts Within the Study Area."

LAWA's plan for massive expansion of LAX unfairly burdens the minority and lower-income communities surrounding LAX. LAWA failed to consider alternatives that would have shifted burdens away from minority or low-income populations, or that would at least have distributed the burdens and benefits of expansion more equitably. Instead of planning for massive expansion of LAX, LAWA should have considered alternatives to massive expansion of LAX.

LAWA admits that its Master Plan for expansion of LAX imposes a disproportionate burden of noise impacts upon persons of color and/or low income, and that it does not know if the Plan also imposes a disproportionate burden of toxic air emissions on those same groups. LAX Master Plan Draft EIS/EIR, Chapter 4.4.3 Environmental Justice, p. 4-395. As discussed in the report of Dale Hattis, PhD., attached hereto as Exhibit "B," if LAWA had chosen to seriously consider alternatives that did not include massive expansion at LAX, LAWA would have been able to consider alternatives that would reduce the human health risk overall and spread the environmental burden more equitably among the general population of Southern California. Hattis Report p. 3. Dr. Hattis observes:

> "The framing of the options for analysis in the current draft is exclusively focused on engineering changes. Future "demand" for air services is estimated from a single set of assumptions about future population and economic growth in Southern California, and future national average costs of air travel in revenue per seat-mile, and then "build" options are designed to meet this projected "demand" either in full or in part. There is no apparent recognition or analysis of the possibility that at least some of the growth in "demand" for air services could be shifted to outlying airports downwind of major population concentrations (or out of the South Coast Air Basin entirely, in the case of connecting flights) by changes in economic pricing such as airport user fees. Such economic measures might not completely avoid the need to expand capacity at LAX, but they seem worthy of explicit consideration at least as supplements to the existing engineering options..."

Hattis Report p. 3.

For these reasons, LAWA should have considered alternatives to massive expansion of LAX. Dr. Hattis notes three specific reasons why such an analysis of alternatives should take place: (1) User fees, in addition to re-directing demand, could be used for mitigation measures; (2) This approach would allow LAWA to slow growth at LAX, which would allow expansion at a much slower pace, which, in turn, will reduce congestion and, therefore, the significant impacts on the environment from construction; and (3) without such fees the real beneficiaries could be the airlines rather than the flying public. Hattis Report p. 3. LAWA should immediately and seriously consider other alternatives and analyze them to the same degree that it analyzed Alternatives A, B, and C in its current Master Plan. Anything less fails to adequately address Environmental Justice, as required by law.

B. The EIS/EIR Fails to Disclose LAWA's Economic Gain from the Proposed Expansion at the Expense of Surrounding Minority and Low Income Populations.

The LAX Master Plan Draft EIS/EIR fails to disclose the increased revenues that LAWA and the City of Los Angeles expect from the massive expansion plan, or that it comes at the expense of local low income and minority communities. As Dr. Hattis notes:

> "[T]here are some glaring omissions of important effects from the economic impact analysis. Economic impacts are assessed in terms of changes in employment, and overall economic activity, for the South Coast as a whole, Los Angles County, and the City of Los Angeles. Changes in on-airport employment are also described, as are the expected capital costs of the various policy options. Unaccountably, there does not seem to be any readily locatable presentation of expected effects on operating revenues and costs for the major economic actors that are directly affected by the proposed project LAWA itself, the City of Los Angeles as owner and taxing authority, and the airlines. Projections of these expected impacts must exist. Moreover, they are highly relevant to judgments of the equity (fairness) of the distribution of expected good and bad effects on the different policy options for different groups, including an expanded Environmental Justice analysis."

Hattis Report p. 6.

LAWA and the City of Los Angeles stand to reap tremendous financial benefits from LAX expansion. Since these benefits are not specified, the comparative benefit to local low income and minority communities--or the lack thereof--cannot be and has not been evaluated. LAWA must disclose these figures for a meaningful analysis of the relative benefits and burdens to be considered.

C. The Master Plan Creates a Disproportionate And Unfair Distribution of Incremental an Total Direct Job Impacts.

The LAX Master Plan does not fairly distribute new jobs among local minority and low-income communities. According to LAWA's own economic analysis, cities in the "Primary LAX Area" (El Segundo, Hawthorne, Inglewood, Del Aire and Lennox) receive only 3.8% of the incremental "direct jobs" at LAX due to expansion. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 46, "Distribution of Incremental Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 1996-2015", p. 95. This same area also receives only 3.4% of the total direct job impacts from LAX in 2015. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 47, "Distribution

of Total Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 2015," p. 96. Compared to the year 1996, the City of Inglewood shows a net increase of only 489 jobs in "LAX- Related Employment" if LAWA adopts Alternative C. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 48, "LAX-Related Employment in the South Bay and North Bay Cities and Communities For the LAX Master Plan EIS/EIR Alternatives, 1996, 2005, and 2015," p. 97. Conversely, the environmental burdens of LAX fall most directly upon those living in its immediate vicinity, like Inglewood. LAWA should make firm commitments to take all reasonably practical steps to ensure that a proportionate share of the economic benefits of LAX also reach those communities. Under the LAX Master Plan, according to LAWA's own jobs projections, that does not occur.

D. The Economic Benefits Of The LAX Master Plan Are Not Proportionate to the Environmental Burdens it Imposes on Surrounding Minority and Low Income Communities.

LAWA should share the economic benefits that flow from LAX with the surrounding communities to the same degree that the environmental burdens are borne by those communities. Offsetting environmental burdens with economic benefits is an important part of Environmental Justice: "In making determinations regarding disproportionately high and adverse effects ... mitigation and enhancement measures ... and all offsetting benefits to the affected minority may be taken into account." Department of Transportation Order 5610.2 - Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, April 15, 1997. Firm commitments in this regard should be made by LAWA in the Draft EIS/EIR. For example, regarding increased cargo capacity at LAX, the Draft EIS/EIR states:

> "It is possible that some of the increased demand [for cargo handling] could be met nearby in Inglewood where the City's General Plan indicates a priority for expanding existing industrial firms and providing increased employment opportunities while mitigating residential areas significantly impacted by aircraft noise."

Draft EIS/EIR "Induced Socio-Economic Impacts," Section 4.5, page 4-446.

Although it acknowledges the potential symbiosis of cargo expansion for LAWA and Inglewood, the Draft EIS/EIR fails to incorporate a reasonable and proportionate distribution of the economic benefits of LAX expansion. If the burdens of LAX expansion are to be thrust upon the City of Inglewood, fair treatment requires that efforts be made to direct potential benefits to the communities impacted by those effects--effects that are significant and cannot and will not be mitigated. The proposed redevelopment along Century Boulevard is a good first step in this direction; however, more needs to be done. LAWA should make concrete commitments to address this issue, and it's failure to do so renders the EIS/EIR insufficient as a matter of law.

X. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES HUMAN HEALTH RISKS.

A. LAWA's Study does not Adequately Factor Time as a Variable.

LAWA analyzes environmental health impacts for two years - 2005 and 2015; however, the environmental health impacts will occur over time. Accordingly, LAWA's analysis inaccurately minimizes certain risks and fails to consider numerous cumulative impacts.

Further, as noted by Dr. Hattis, "2005 does not represent even the peak year for construction-related impacts." Hattis Report p.4. In fact, emissions of particulate matter in year 2004 are expected to be more that twice those in 2005 (approximately 44,000 lbs/day versus 19,000 lbs/day). For a proper analysis, LAWA should "analyze and express impacts in terms of both peak-year and integrated bottom-line measures of effect over a reasonably foreseeable extended time over which the facilities will be built and operated." Hattis Report p. 4.

B. The Draft EIS/EIR Fails to Adequately Delineate Health Risks.

The increased health risks associated with the LAX Master Plan should be set forth with more clarity and specificity in the Draft EIS/EIR. Impacts are expressed primarily in terms of "significance" of effects for the most exposed individual, or, when considering certain carcinogenic effects, in terms of the areas or numbers of people exposed to concentrations expected to exceed a 1/100,000 lifetime incremental cancer risk criterion or an unusual criterion for non-cancer effects of a hazard index of 5. Hattis Report p. 4.
However, the usual criterion used in many impact assessments under other environmental statutes, including Superfund, is a hazard index of 1.5.[30] Id. Dr. Hattis notes:

> "These ways of expressing health impact results are of some relevance because they help the audience judge the fairness of the burden of extra risk imposed for residents of the areas most affected by the project options. However, exclusive definition of impacts in terms of the area or number of people who receive an increment of risk or (for non-carcinogenic agents) exposure to pollutants from LAX-related sources alone that is deemed to exceed a single bright line of 'significance' ignores the incremental cancer and non-cancer risks to people who do not happen to be moved across such a criterion level. Further, these ways of summarizing impacts can not, by themselves, give decision-makers

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[30] The difference between a hazard index of I and 5 is fivefold in the toxicity-weighted concentrations of the pollutants covered by the index in terms of risk. The fraction of people who suffer irritation and other non-cancer effects is likely to be larger than fivefold, depending on the shape of the dose response relationship.

> and the public a sufficient description of the overall health impacts to arrive at a reasoned judgment of whether the mix of economic, human health, and environmental impacts of the proposed "build" option is more desirable overall than the comparable impacts of other options. The current analysis of economic activity describes projected aggregate changes in jobs and overall economic activity for the City of Los Angeles, Los Angeles County, and the whole Southern California area. To be comparable with these aggregate economic impacts, aggregate measures of health impacts must be created and the current artificial limitation of the study area for quantifying air pollution impacts must be transcended."

Hattis Report pp. 4-5.

Decision-makers and the public should be informed of the differences among options in overall cases of cancer that are expected to arise over the lifetimes of the individuals exposed over particular periods of construction and operation of the proposed facilities. This should be done for the entire geographic area of the South Coast Air Basin that receives incremental changes in exposures. Hattis Report p. 5. Human health impacts can and should be expressed in aggregate incremental cancer cases, aggregate incremental deaths, aggregate incremental hospitalizations and aggregate incremental asthma effects for the entire Los Angeles basin associated with the LAX Master Plan. Hattis Report p. 5. These calculations are certainly feasible and would inform the decision makers and the public of the true human health effects of the project. Until this is done, the document is deficient in addressing this topic.

C. The Draft EIS/EIR Fails to Consider Health Risks on a Regional Basis.

The Draft EIS/EIR's human health risk assessment should study risks created by the Master Plan in the entire Southern California region, not simply in those areas immediately surrounding LAX. Failure to so conceals the advantages in terms of health risks from expanding other airports instead of LAX. As Dr. Hattis notes:

> "Were the analysis expanded to include some options shifting additional air service to outlying airports (as recommended above), continued use of the more localized health impact analysis method would cause analysts to miss important benefits that would accrue from placing emissions downwind rather than upwind of the major population centers of the Los Angeles area."

Hattis Report p. 5. Restricting the environmental impact analyses to the immediate LAX area and the options considered only to expansion of LAX prevents considering the relative burdens of LAX expansion on minority and lower-income communities versus expansion of air service at other airports. The City of Inglewood appears to be substantially included in the

existing boundaries of the air dispersion modeling study, but it is important to have impacts broken down by various political jurisdictions covering the most affected communities. Hattis Report pp. 5-6. LAWA's current approach on this risk assessment fails to fully capture all relevant data.

D. LAWA Failed to Conduct a Sensitivity Analysis of Its Human Health Risk Assessment.

LAWA failed to conduct a sensitivity analysis of its health risk assessment. This failure means that the health risk assessment does not attempt to assess and communicate uncertainties in a quantitative way. Whether through sensitivity analysis, or use of a more sophisticated model, such analysis can be and is used to inform interested parties of the uncertainties in key results. Hattis Report p. 6. One aspect of the modeling that needs such analysis is the assumed behavior responses of airlines to increasing delays as the intensity of usage of airport facilities increases. Id. This variable affects "capacity" calculations, emissions estimates and economic results. LAWA should perform such sensitivity analysis of its methods and conclusions.

XI. CONCLUSIONS.

Based on the above analyses, the Draft EIS/EIR does not serve its most fundamental purpose as an "environmental alarm bell" to "alert the public and responsible officials to environmental changes before they have reached ecological points of no return." (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. Absent further revision of the analyses set forth in the Draft EIS/EIR as set forth above (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981), the public will have been denied its statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the Draft EIS/EIR, and to make informed judgments as to their validity, in direct contravention of CEQA requirements.

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 2

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Re: Notice of Preparation of Draft Environmental Impact Report (SCH No. 1997061047) - Los Angeles International Airport Specific Plan Study

Dear Mr. Glasgow:

The following are the comments of the Cities of Inglewood and Culver City ("Cities") concerning the Notice of Preparation ("NOP") for the Los Angeles International Airport ("LAX") Specific Plan Amendment Study ("SPAS"). The NOP commences the environmental review of the implementation of five development activities at LAX, including construction of the Ground Transportation Center ("GTC"), Automated People Mover ("APM") from the GTC to the Central Terminal Area ("CTA"), and associated on-site road improvements; demolition of Terminals 1, 2 and 3; and reconfiguration and separation of Runways 6L/24R and 6R/24L on the North Runway Complex (these activities, taken together will be referred to as "Project"). Cities regard the Project as a component of a more comprehensive expansion plan, including, but not limited to, construction of Midfield Satellite Terminal, a Crossfield Taxiway, and additional gates at the Tom Bradley International Terminal ("TBIT").

As a threshold issue, please be advised that Cities respond to Question No. 2, NOP, p. 2, as follows: neither City falls within the category of "responsible agency" or "trustee agency," as those terms are defined in 14 Cal.Code Regs. §§ 15096, 15381, and 15386.[1] Please be further advised that the following comments concerning significant environmental issues raised by the Project, alternatives and mitigation measures are necessarily preliminary, due to the attenuated

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[1] CEQA's implementing regulations will be referred to throughout these comments as "CEQA Guidelines".

character of the NOP. Cities therefore reserve their right to supplement these comments in response to future environmental documents.

Finally, Cities attach to these comments as Exhibit A "Petitioners' Overview of Guiding Principles for Environmental Analysis: LAX Specific Plan Amendment Study EIR" ("Guiding Principles"). Exhibit A represents the general approach to evaluation of the proposed development offered jointly by Petitioners in the case of *City of El Segundo, et al. v. City of Los Angeles, et al.*, Riverside County Superior Court Case No. RIC 426822, the settlement of which gave rise to the Project.

I. THE "TIERING" OF THE NOP ON THE "APPROVED MASTER PLAN" RESULTS IN IMPROPERLY ATTENUATED ENVIRONMENTAL REVIEW.

The NOP states that the SPAS EIR will be a Supplemental EIR tiered from the LAX Master Plan EIR (NOP, p.4), "providing new or revised analyses of the environmental impacts specific to the alternatives associated with the SPAS EIR..." LAWA, in its NOP for the Crossfield Taxiway Project (which was almost contemporaneous with the publication of this NOP), justified expedited environmental review on the premise that adequate environmental review was already completed during the prior Master Plan environmental review.

While the Legislature has directed local agencies to "tier" EIR's whenever feasible..., the utility of tiering is limited to those situations where the individual projects are consistent with the larger project such as the approved Master Plan project which has already been environmentally reviewed. "Tiering is a process by which agencies can adopt programs, plans, policies, or ordinances with EIRs focusing on the 'big picture' and can then use streamlined CEQA review for individual projects that are consistent with such...[first tier decisions]...." Koster v. County of San Joaquin, 47 Cal.App.4th 29, 36 (1996). [Emphasis added.]

Despite the fact that the "approved Master Plan" remains in place, many of its most salient features, such as off-site ticketing facility; closure of the CTA to surface traffic; and movement of Runway 6R/24L 340 feet to the south, thus necessitating the restructuring of Terminals 1 through 3, have been replaced by the Project currently being evaluating under this NOP. These radical changes significantly differ from the projects and environmental impacts originally evaluated in conjunction with the approved Master Plan. As an example, the proposed movement of Runway 6R/24L 340 feet north is a radical departure from the movement contemplated in the Master Plan, possibly impacting, among other things, the size and location of the noise contours and the Runway Protection Zone ("RPZ"). This change in preference, including the City of Los Angeles' decision to effectively eliminate the options of moving

Runway 6R/24L 340 feet south, demolition of Terminals 1 through 3, and movement of passenger check-in off site, severely attenuates the previous attributes of Alternative D. Thus, it is questionable that the original Master Plan project, characterized as Alternative D, actually exists as an alternative for purposes of the environmental and development process.

In short, the significant differences between Alternative D, the "No Project/No SPAS Alternative (Approved Master Plan)," and the actual "No Project Alternative" raises the question of what is left of the original Master Plan, in terms of viable project alternatives, to make tiering an appropriate option. Given these circumstances, the Cities question the appropriateness of the "tiering" of the NOP projects upon the Master Plan EIR.

II. THE NOP'S PROJECT DEFINITION IS INCOMPLETE.

The five components of the Project being environmentally reviewed are apparently derived from the Stipulated Settlement between Petitioners in *El Segundo, et al. v. City of Los Angeles* ("Settlement"), § V which provides for "potential alternative designs, technologies, and configurations for the LAX Master Plan program that would provide solutions to the problems that the yellow light projects were designed to address consistent with a practical capacity of LAX at 78.9 million annual passengers (the 'Alternative Projects')." Stipulated Settlement, § V.D.2.

First, it should be noted that the Project's five components actually boil down to only two: (1) the North Airfield Reconfiguration; and (2) the proposed GTC. This is because the APM and onsite road improvements are necessitated by, and part and parcel of, the proposed GTC. It also appears, according to the description of the various components and their alternatives in the NOP, that the APM and onsite road improvements would only occur for the purpose of linking the GTC and CTA. Thus, if the GTC were not built (the existing condition), the ancillary transportation improvements would not occur either.

In addition, the options relating to the demolition of Terminals 1 through 3 are constrained to "yes" or "no". As there is no off-site ticketing facility proposed, as there was in Alternative D, there is, in reality, no "yes" option, because such an option would effectively obliterate 30% of the airport's terminal capacity, without any potential replacement.

Moreover, at least one of the two remaining components, the North Airfield Runway Reconfiguration, is inextricably linked to other projects either in planning or ongoing at LAX, but excluded from the NOP's current project definition. For example, it has long been conceded by LAWA that one of the principal purposes of the North Airfield Reconfiguration is to provide

sufficient runway separation to allow unencumbered access by New Large Aircraft ("NLA"), expected to begin service at LAX in 2010, and thereby to equalize operations between the two runway complexes. The Crossfield Taxiway Project, being evaluated concurrently but separately with this NOP, has substantially the same purpose, *i.e.*, to allow free access for NLAs and effective passage between the South and North Airfields (Crossfield Taxiway NOP, p. 4).

For purposes of CEQA review, a "project" is "the whole of an action which has potential for resulting in either a direct physical change to the environment or a reasonably foreseeable indirect change." CEQA Guidelines § 15378(a). "A public agency may not divide a single project into smaller individual projects in order to avoid its responsibility to consider the environmental impacts of the project as a whole." *Sierra Club v. Westside Irrigation District*, 128 Cal.App.4th 690, 698 (2005).[2]

Here, the synergistic impacts of the various projects is beyond question. The Crossfield Taxiway is a necessary component of access to and from the North Airfield with impacts that are not addressed in this NOP. Similarly, the new midfield satellite terminal, and the gate additions at the TBIT are intimately related to the changes in the North Airfield Complex, as the new, associated taxiway system appears to encourage expedited access from the North Airfield Complex, without which the North Airfield Complex would become a victim of the same airfield gridlock that LAWA now purports to foresee for the whole airport, if the Project is not implemented.

Although "where the second activity is independent of, and not a contemplated future part of, the first activity, the two activities may be reviewed separately, even though they may be similar in nature," *Sierra Club*, 128 Cal.App.4th at 699, *i.e.*, have independent utility, that circumstance does not exist here. Even now, the above specified projects are moving forward at the same time, toward a single, connected goal, the enhancement of the LAX airfield capacity, with particular emphasis on NLA serving the international market. It is therefore Cities' position that the various planned projects should be included in the Project Definition for the NOP and evaluated in the same EIR.

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[2] The National Environmental Policy Act, 42 U.S.C. § 4321, *et seq.*, ("NEPA"), under which this Project must also be reviewed in order for LAWA to obtain Federal funding for its implementation, further requires that the environmental analysis of multiple actions must be included in a single document "when the record raises 'substantial questions' about whether there will be 'significant environmental impacts' from the collection of anticipated projects." *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 999 (9th Cir. 2004).

III. THE EIR'S CUMULATIVE IMPACT ANALYSIS SHOULD AT MINIMUM INCLUDE ALL PROJECTS NOT INCLUDED IN THE SPAS.

Even if, for argument's sake, the myriad of projects currently planned or being implemented at LAX were not part of a larger project "the agency may prepare one EIR for all projects, or one for each project, but shall in either case comment upon the cumulative effect," CEQA Guidelines § 15165. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project, when added to other closely related past, present and reasonably foreseeable probable future projects." CEQA Guidelines § 15355.

It is beyond dispute that the complex of projects at issue in this NOP are "closely related" both to each other, as well as to other "present", or, at minimum, "reasonably foreseeable future" projects such as the Midfield Satellite Terminal and the Crossfield Taxiway. Their collective scope, however, requires more than a simple "comment". If the projects are not evaluated as part of the same project, substantially the same attention should be paid to their impacts in the cumulative impacts analysis. Absent the requisite attention to the collective effects of the myriad of projects that are or will shortly be implemented to enhance "throughput rate", *i.e.*, capacity, FAA Advisory Circular 150/5060-5, page 1, on the LAX airfield, the EIR will be inadequate.

IV. THE NOP FAILS TO ADDRESS SURFACE TRAFFIC IMPACTS RESULTING FROM THE PROJECT.

Cities are concerned about the Project's potentially significant impacts on surface traffic, not merely in areas immediately contiguous to LAX, but also on routes frequently traveled to get there. Cities are already suffering from the surface traffic generated by current operations, most, if not all, of which remains unmitigated. As passenger traffic and capacity at LAX increases, so does traffic on the surface streets and interstates (I-405, I-105) used to access it. As the traffic on the freeways becomes more congested, travelers exit these freeways seeking alternative routes which usually end up being the surface streets of Inglewood, Culver City and Westchester, in particular Sepulveda Blvd.(N/S) as far north as Slauson Ave. & Centinela Ave.; La Cienega (N/S) from Centinela to Imperial Highway; as well as Manchester and Century Blvds. (E/W) and Imperial Hwy. (E/W).

The proposed Project has the potential to cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. It may easily exceed the level of service standard established by the county Congestion Management Agency for designated roads and highways; cause a substantial increase in hazards; and increase demand for

off-street parking. This increased surface traffic also has strong potential to adversely affect the infrastructure of the streets, as well as air quality, in neighborhoods in the proximity of the airport as well as throughout the region. Those impacts must be addressed in the EIR, not only because they are a direct result of the Project individually, but also because there will be additional contributions from other projects, "past, present and reasonably foreseeable" cumulatively.

In addressing such impacts, it is important that consideration is given to appropriate avoidance and mitigation measures that take into consideration the "actual" traffic patterns and impacts on the surface traffic in Cities and neighboring communities. Cities strongly urge LAWA to develop effective surface traffic mitigation such as that previously proposed in detail during the SPAS process, including, but not limited to, an additional off ramp on the northbound 405 freeway south of LAX ("Lennox off ramp") to offload traffic directly into the airport before it enters Culver City, and another off ramp on the south bound 405 freeway directly into the Manchester Square development. It appears the "Keep Access to CTA - Building Transportation Centers at Manchester Square and at Aviation/Imperial and Provide Drop Off/Pick Up Area East of Terminal 1" option, as part of the 100 feet to the North alternative takes traffic off the 405 freeway northbound, but not southbound. The Cities (and their consultants) are looking forward to working closely with LAWA on developing and implementing reasonable mitigation measures and alternatives to address surface traffic..

V. THE PROPOSED MOVEMENT OF RUNWAY 6L/24R 340 FEET NORTH HAS SIGNIFICANT CAPACITY AND NOISE ENHANCING POTENTIAL.

The NOP proposes an alternative that moves Runway 6L/24R 340 feet to the North, as well as an extension of approximately 1495 feet west, with the width increased by 50 feet, and a new Modified Group VI parallel center taxiway 520 feet south of relocated Runway 6L/24R and 520 feet north of Runway 6R/24L. The NOP suggests that the planned reconfiguration is designed to address safety issues, e.g., "reduce the risk of runway incursions, enhance the safety of aircraft operations at LAX, and provide a better balance in operations between the North Airfield and the South Airfield."

Leaving aside the obvious, that a firm conclusion on the runway reconfiguration's safety effects cannot be definitively determined until the North Airfield Safety Study, currently being conducted by LAWA, is completed and evaluated by the public, analyses performed by consultants on behalf of Cities already indicates that: (1) there exist numerous measures that are more efficient in effecting safety goals, such as improved runway lighting and marking, especially since only a small proportion of the total incursions and incidents at LAX occurred on the North Airfield; and (2) the proposed separation has significant capacity enhancing potential,

particularly that of allowing triple simultaneous arrivals to both the North and South Runway Complexes.

Moreover, the reconfiguration will likely affect the size and location of the noise contours, moving them north and east, beyond the scope of the relatively extensive 1992 noise contour used by LAWA for the determination of sound-mitigation construction funding for Inglewood. The reconfiguration may also displace overflights on approach to relocated Runway 6L/24R to the north, thereby bringing increased noise impacts, as well as air quality and other impacts not only to Inglewood, but to Culver City as well. Finally, the NOP gives little attention to the environmental impacts of the original impetus for the runway separation, *i.e.*, to accommodate the NLA which have a wing span of 262 feet and carry up to 800 passengers.

It should be noted that neither NOP Figure 5, nor Figure 11, fully depicts the configuration of the North Airfield, as both omit: (1) the displaced threshold intended for use on Runway 6L/24R, to ensure arrivals at the same runway point as on the current runway length; and (2) the Runway Protection Zones ("RPZ") for both runways. The latter are important because of the constraints on the use of the land that falls within them. Specifically, FAA regulations require that RPZ property belonging to the airport be kept largely clear of structures in order to "enhance the protection of people and property on the ground." FAA Advisory Circular 150/5300-13, § 212. Moreover, to the extent that property within other jurisdictions such as Westchester fall within the RPZ, the ALUCP for LAX may constrain the reuse of such property by its owners, California *Public Utilities Code* § 21675(a).

In summary, the proposed runway reconfiguration is potentially damaging to Cities. Cities have, instead, offered, in partnership with co-Petitioners El Segundo and ARSAC, and continue to support, the alternative which allows movement of Runway 6L/24R 100 feet to the north. (*See*, NOP, Figure 11). Petitioners offer this alternative in recognition of LAWA's need to facilitate operations on the airfield, but with the equivalent understanding that such improvement need not come at Petitioners' environmental expense. Movement of Runway 6L/24R 100 feet to the north will allow the same runway separation as now exists on the South Runway Complex, the current targeted recipient complex for all NLA traffic, which LAWA has deemed "safe" for that purpose. The 100 feet north alternative would, thus, allow precisely the same balance between the runway complexes as that articulated as a primary goal in the LAX Master Plan § 1.1, Goal 7, while, at the same time, providing environmental mitigation to surrounding communities.

In short, the alternative that allows movement of Runway 6L/24R 100 feet to the north offers LAWA the same benefits it sought for the South Complex, without either the adverse

impacts, or potential controversy that will unavoidably accompany the increased capacity, air and surface traffic, and environmental impacts attendant upon movement of Runway 6L/24R 340 feet to the north. Petitioners strongly urge that the alternative of moving Runway 6L/24R 100 feet to the north be adopted as the EIR's preferred alternative.

Cities appreciate this opportunity to comment and look forward to partnering with LAWA to implement a mutually acceptable and environmentally sensitive airport development.

Sincerely,

CHEVALIER, ALLEN & LICHMAN, LLP

Barbara Lichman

Barbara E. Lichman, Ph.D.

cc: Mayor Roosevelt Dorn, City of Inglewood
Timothy Wanamaker, City Manager, City of Inglewood
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Petitioners' Overview of Guiding Principles for Environmental Analysis: LAX Specific Plan Amendment Study EIR

Submitted by Petitioners: City of El Segundo, City of Inglewood, City of Culver City, County of Los Angeles, and Alliance for a Regional Solution to Airport Congestion (ARSAC).

Background: In January of 2005, Petitioners filed lawsuits challenging the approval of the LAX Master Plan Program and the associated Environmental Impact Report (EIR) prepared by Los Angeles World Airports (LAWA) under the California Environmental Quality Act (CEQA). These suits were resolved by a 2006 Stipulated Settlement between LAWA and Petitioners. In response to the Notice of Preparation (NOP) recently released by LAWA for the Specific Plan Amendment Study (SPAS) Draft EIR, Petitioners now jointly submit this overview of principles that should guide LAWA in that environmental review process. Petitioners will also submit detailed individual comments.

LAWA's Obligation to Avoid and Reduce Impacts to Surrounding Communities. As LAWA proceeds with refinement and analysis of options as part of the SPAS process, it must continually recognize its obligation to avoid and mitigate impacts to the communities that surround LAX. Options under consideration must be evaluated and ranked based on how they would impact the environment, public health and safety in surrounding communities (e.g., noise, air quality, traffic). All alternatives should be subject to a full and fair evaluation in the SPAS DEIR and LAWA should remain open to options that would avoid or mitigate impacts to its neighbors, taking care not to prematurely select a preferred alternative.

Continued Consultation with Surrounding Communities. The alternatives described in the SPAS NOP were developed and selected by LAWA during a lengthy consultation process with Petitioners. That consultation process grew out of the 2006 Stipulated Settlement, which states, in relevant part, that "An LAX Specific Plan Amendment Process Advisory Committee shall be created consisting of representatives of the City of Los Angeles, County of Los Angeles, El Segundo, Inglewood, Culver City, and ARSAC. LAWA shall consult with the Committee during each significant step of the LAX Specific Plan Amendment Process." Petitioners wish to recognize LAWA's compliance to date with this provision of the Stipulated Settlement. LAWA must now ensure that it continues to consult with Petitioners as the EIR process proceeds and the SPAS alternatives are developed in more detail. In particular, LAWA should take care to consult with Petitioners regarding the details and analysis of the alternatives supported by any Petitioner.

Extension of Gate Constraint. LAWA, FAA and the Petitioners all agree that limiting the number of gates at LAX will promote efficient passenger operations and encourage other airports in the Los Angeles basin to increase capacity to serve aviation demand. Accordingly, the long term success of the regional approach to serving aviation demand depends on maintaining appropriate gate constraints at LAX. The 2006 Stipulated Settlement between LAWA and the Petitioners limits the number of permissible gates at LAX to 163 and, commencing in 2010, requires LAWA to begin reducing the number of operating gates at LAX to 153. This settlement provision is operative through December 31, 2020. As part of the SPAS process, LAWA must analyze the continuation of the LAX gate constraints beyond 2020, as well as the possible

EXHIBIT A

enhancement of those constraints at a level that will efficiently serve up to 78.9 million annual passengers at LAX, while encouraging growth elsewhere in the region, including at the other airports owned and operated by LAWA.

Airfield Balance. In the NOP, LAWA indicates that under the LAX Master Plan, one of its goals is to "provide a better balance in operations between the North Airfield and the South Airfield." Petitioners support this goal and urge LAWA to conduct a full analysis of whether and to what extent each of the proposed SPAS alternatives would help achieve better airfield balance. Petitioners agree that total flight operation balance can lead to less operational crowding, which is good for all.

Regional Approach. Petitioners strongly support a regional approach to accommodating passenger and cargo aviation demand throughout Southern California. Because the area around LAX is fully developed, and because we must reduce vehicle miles traveled to improve air quality, decrease greenhouse gases, and increase productivity, a regional solution to serving aviation demand is essential. The regional approach, which is fully supported by the Southern California Association of Governments, must be a key component of everything LAWA does, including in the SPAS process. LAWA should vigorously pursue accommodating aviation demand at Palmdale and Ontario, and work aggressively with other airport operators and local governments to advance the regional approach.

DEIR Public Review Period. The NOP indicates that LAWA intends to provide just 45 days for public review and comment on the Draft SPAS EIR. In light of the complexity of this project and LAWA's tendency to produce lengthy CEQA documents, Petitioners anticipate that 45 days will not be sufficient.

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 3

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November 29, 2010

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Re: Revised Notice of Preparation of Draft Environmental Impact Report (SCH No. 1997061047) - Los Angeles International Airport Specific Plan Amendment Study - Comments by Cities of Inglewood and Culver City

Dear Mr. Glasgow:

The following are the comments of the Cities of Inglewood and Culver City ("Cities") concerning the Revised Notice of Preparation ("Revised NOP") for the Los Angeles International Airport ("LAX") Specific Plan Amendment Study ("SPAS").[1] The Revised NOP commences the environmental review of proposed alternatives to the implementation of five development projects at LAX, including a Ground Transportation Center ("GTC"), Automated People Mover ("APM") from the GTC to the Central Terminal Area ("CTA"), and associated on-site road improvements; demolition of Terminals 1, 2 and 3; and reconfiguration and separation of Runways 6L/24R and 6R/24L on the North Runway Complex (these activities, taken together will be referred to as "Project"). Cities regard the Project as a component of a more comprehensive expansion plan, including, but not limited to, construction of Midfield Satellite Terminal, a Crossfield Taxiway, and redesign and addition of gates at the Tom Bradley International Terminal ("TBIT").

As a threshold issue, please be advised that Cities respond to Question No. 2, Revised NOP, p. 2, as follows: Cities do not fall within the category of "responsible agency" or "trustee

[1] Cities of Inglewood and Culver City are Petitioners and Settling Parties in the case of *El Segundo, et al. v. City of Los Angeles, et al.*, Riverside County Superior Court Case No. RIC 426822.

agency," as those terms are defined in 14 Cal.Code Regs. §§ 15096, 15381, and 15386.[2] Please be further advised that the following comments concerning significant environmental issues raised by the Project, alternatives and mitigation measures are necessarily preliminary, due to the attenuated character of the Revised NOP. Cities therefore reserve their right to supplement these comments in response to future environmental documents.

I. THE REVISED NOP STILL CONTEMPLATES "TIERING" OF THE NOP ON THE "APPROVED MASTER PLAN" WHICH WILL RESULT IN IMPROPERLY ATTENUATED ENVIRONMENTAL REVIEW.

The Revised NOP continues to state, despite Cities' prior comments on the Original NOP concerning the pitfalls of this approach, that the SPAS EIR will be a Supplemental EIR tiered from the LAX Master Plan EIR (NOP, p.5), "providing new or revised analyses of the environmental impacts specific to the alternatives associated with the Yellow Light Project options. . ." Moreover, LAWA, in its NOP for the Crossfield Taxiway Project (which was published contemporaneously with the publication of the Original NOP), justified expedited environmental review on the premise that adequate environmental review was already completed during the prior Master Plan environmental review. While the Legislature has directed local agencies to "tier" EIRs whenever feasible, the utility of tiering is limited to those situations where the individual projects are consistent with the larger project such as the approved Master Plan project which has already been environmentally reviewed. "[T]iering is a process by which agencies can adopt programs, plans, policies, or ordinances with EIRs focusing on 'the big picture,' and can then use streamlined CEQA review for individual projects that are consistent with such . . . [first tier decisions]. . ." Koster v. County of San Joaquin, 47 Cal.App.4th 29, 36 (1996). [Emphasis added.]

In this case, despite the fact that the "approved Master Plan" remains in place, many of its most salient features, such as the Ground Transportation Center ("GTC"); closure of the CTA to surface traffic; and movement of Runway 6R/24L 340 feet to the south, necessitating the restructuring of Terminals 1 through 3, are being replaced by the Projects currently being evaluated under this Revised NOP. Thus, because of the proposed amendments, the components of the proposed Airport Master Plan differ materially from the project originally evaluated in the approved Master Plan and cannot serve as a "baseline" for analysis. As an example, the proposed movement of Runway 6R/24L 400 feet north is a radical departure from the movement

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[2] CEQA's implementing regulations will be referred to throughout these comments as "CEQA Guidelines."

contemplated in the Master Plan 340 feet south, possibly impacting, among other things, the size and location of the noise contours and the Runway Protection Zone ("RPZ").

Moreover, the inclusion of alternatives reflecting the Yellow Light Projects, the original components of the Airport Master Plan, does not rectify the problem. The Yellow Light Projects are "yellow light" because the Settlement between the parties in the above-referenced action contemplates their replacement.[3] Therefore, the yellow light projects cannot serve as the basis for either the "Existing Condition Alternative," or the "No Project Alternative" because the Settlement ensures that they do not exist in the Airport Master Plan now, and that they will not in the future.

In short, the significant differences between the "No Project/No SPAS Alternative (Approved Master Plan)," and the actual "No Project Alternative" raises the question of what is left of the original Master Plan, in terms of viable project alternatives, to make tiering an appropriate option. Given these circumstances, the Cities question the appropriateness of the "tiering" of the Revised NOP projects upon the Master Plan EIR.

II. THE PROJECT DOES NOT CREATE CONDITIONS THAT ENCOURAGE AIRLINES TO GO TO OTHER AIRPORTS IN THE REGION.

Cities submit that the Revised NOP contemplates projects which, when taken together, defy the Settlement's mandate that the SPAS will, among other things, "creat[e] conditions that encourage airlines to go to other airports in the region." Settlement, § V.C. As an example, the Revised NOP acknowledges that the most extreme alternatives for the North Airfield reconfiguration, and particularly the 400 foot north alternative, are explicitly aimed at "accommodat[ing] the largest aircraft types currently in service and anticipated for the future (Group V and Group VI aircraft) . . ." Revised NOP, p. 6, by creating a "Modified Group VI airfield," *Id.*, which can operate the largest aircraft models substantially without operational restrictions. By doing so, Los Angeles World Airports ("LAWA") staff is overtly setting the

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[3] *See, e.g.*, Settlement, § V.D.1. ["Potential alternative designs, technologies, and configurations for the LAX Master Plan Program that would provide solutions to the problems that the Yellow Light Projects were designed to address . . ." [Emphasis added.]] and Settlement, § V.D.3 ["Potential environmental impacts that could result from replacement of the Yellow Light projects with the Alternative Projects, and potential mitigation measures that could provide a comparable level of mitigation to that described for the Yellow Light Projects . . ." [Emphasis added.]]

stage for the exacerbation of the outflow of airline traffic and passengers from other LAWA operated airports, particularly Ontario International Airport ("ONT"), and into LAX.

ONT has lost 22 years of traffic growth since 2007, a loss of $400 million to the Inland Empire economy and more than 8,000 jobs. Moreover, airlines are continuing to downsize ONT and it lost its last international passenger flight in February, 2010. Certainly, part of the problem can be attributed to the current state of the national economy, but by no means all, as other airports in the region such as Palm Springs, Long Beach and John Wayne actually gained passengers during the period 2000-2009. While passenger traffic at ONT declined 27.7% between the years 2000 and 2009, LAX itself lost comparatively fewer passengers at 9%.

The best explanation lies in ONT's cost structure when compared with that of LAX and surrounding airports, as well as LAWA's de-emphasis on encouraging growth. For example, ONT's airline costs per passenger are higher than at any other secondary airport in Southern California or the United States (the second highest airport costs for Southwest Airlines after New York's LaGuardia). Moreover, L.A.'s Living Wage Ordinance for airport workers add significant cost burden to airlines serving ONT.

Equally important is the LAWA staff's emphasis on supporting LAX. When ONT lost its last international passenger flight, LAWA staff publicly stated that ONT would not receive international flights in the future. In addition, L.A. Airport Commissioners have publicly spoken on the need to make LAX the priority for restoring passenger traffic to the region. To add insult to injury, no credible marketing plan has been introduced for ONT or airports under LAWA sponsorship other than LAX. In 2010, for example, LAWA will spend $6.4 million marketing LAX, but only $450,000 marketing ONT.

This trend, and its encouragement by the dramatic reconfiguration of the North Airfield, has impacts not only for the Inland Empire, but for residents living around LAX as well. While the Settlement requires that the SPAS, among other things, "identify specific plan amendments that . . . minimiz[e] environmental impacts on surrounding communities," Settlement § V.C., it is clear that the dramatic reconfiguration of the airfield necessary to accommodate Category VI aircraft will affect the size and location of the LAX noise contours, moving them north and east; potentially displace overflight on approach to the north; and realign Runway Protection Zones at each end of the North Airfield runways, causing additional, hitherto unanalyzed constraints on land use in communities to the north and east.

III. THE "REVISIONS" TO THE NOP APPEAR LITTLE MORE THAN JUSTIFICATIONS FOR "PRE-COMMITMENT" TO THE MOST EXTREME ALTERNATIVE(S) FOR NORTH AIRFIELD RECONFIGURATION.

Agencies may not "pre-commit" to project approval because "[a] fundamental purpose of [CEQA review] is to provide decision-makers with information they can use in deciding whether to approve a proposed project . . ." *Laurel Heights Improvement Association v. Regents of the University of California*, 47 Cal.3d 376, 394 (1988) [emphasis in original]. Here, with the exception of some prefatory comments, a substantial component of the changes memorialized in the Revised NOP go to justify adoption of the most draconian alternatives proposed for the reconfiguration of the North Airfield.

First, it should be noted that the Project's five components still actually boil down to two: (1) the North Airfield Reconfiguration; and (2) the proposed GTC. This is because the APM and on-site road improvements are necessitated by, and part and parcel of, the proposed GTC. It also appears, according to the description of the various components and their alternatives in the Revised NOP, that the APM and on-site road improvements would only occur for the purpose of linking the GTC and CTA. Thus, if the GTC were not built (the existing condition), the ancillary transportation improvements would not be necessary.

In addition, the alternatives relating to the demolition of Terminals 1 through 3 are constrained to "yes" or "no." As, under the express terms of the Settlement, alternatives to the GTC must be found and evaluated, there is, in reality, no "yes" option, because such an option would effectively obliterate 30% of the airport's terminal capacity, without any potential replacement.

Moreover, the NOP revisions appear to be largely aimed at justifying the most extreme alternative for reconfiguration of the North Airfield. On the one hand, the Revised NOP dismisses the conclusions of the North Airfield Safety Study ("Safety Study") regarding the purported contribution of the Project to airfield safety.[4] While it is true that the Safety Study did find that the existing runway configuration already provides a high level of safety, it went on to state that the Project could not be justified on safety grounds.

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[4] "Completion of LAX North Airfield Safety Study (February 19, 2010), which found that, although the current north airfield configuration provides a high level of safety, changes to the configuration by further separating the runways could create even greater safety and might significantly reduce airport congestion during peak hours." Revised NOP, p. 4.

Apparently, at least partially relinquishing the safety justification, the Revised NOP emphasizes instead the attributes of a "Modified Group VI airfield . . . designed to accommodate the new generation of wide-bodied airplanes that began to operate at LAX in 2008," Revised NOP, p. 6. The rationale articulated in the Revised NOP is that "the North Airfield configuration set forth in the approved LAX Master Plan [movement of Runway 6L/24R 340 feet south] was designed to accommodate the largest aircraft types . . . reduce the risk of runway incursions, enhance the safety and efficiency of aircraft operations at LAX, and provide a better balance in heavy aircraft operations between the North Airfield and the South Airfield," Revised NOP, p. 6.

In taking that position, the Revised NOP ignores the data arising from the first four years of the Specific Plan Amendment Study process, in which Petitioners participated, and during which it was determined that less extreme alternatives such as movement of Runway 6L/24R 100 feet to the north could also accommodate centerline taxiway and other airfield improvements, Revised NOP, p. 6, increase the length of Runway 24L, *Id.*, and, thus, also reduce the risk of runway incursions, enhance safety and efficiency of aircraft operations and provide a better balance between runway complexes.

In summary, given LAWA's apparent continuing dedication to the attributes of the Project set forth in the approved Master Plan, and reconfirmed in the Original NOP, it appears from the Revised NOP that the Project has fallen victim to the flaw of "pre-commitment" that will render the EIR based on it, inadequate.

IV. THE EIR'S CUMULATIVE IMPACT ANALYSIS SHOULD, AT MINIMUM, INCLUDE ALL PROJECTS PLANNED OR RECENTLY IMPLEMENTED AND NOT INCLUDED IN THE SPAS.

"The agency may prepare one EIR for all projects, or one for each project, but shall in either case comment upon the cumulative effect," CEQA Guidelines § 15165. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." CEQA Guidelines § 15355(b).

Here, the synergistic impacts of the various projects is beyond question. The Crossfield Taxiway is a necessary component of access to and from the North Airfield. Similarly, the new Midfield Satellite Terminal, and the reconstruction and addition of gates at the TBIT are intimately related to the changes in the North Airfield complex, as the new, associated taxiway system appears to encourage expedited access from the North Airfield complex, without which

the North Airfield complex would become a victim of the same airfield gridlock that LAWA now purports to foresee for the whole airport if the Project is not implemented.

It is beyond dispute that the complex of projects currently being implemented or contemplated in the Revised NOP are "closely related" to other "present", or, at minimum, "reasonably foreseeable future" projects such as the Midfield Satellite Terminal and the Crossfield Taxiway. Their collective scope, however, requires more than a simple "comment." As the projects were not evaluated as part of the same project, substantially the same attention should be paid to their impacts in the cumulative impacts analysis. Absent the requisite attention to the collective effects of the myriad of projects that are or will shortly be implemented to enhance "throughput rate", *i.e.*, capacity, FAA Advisory Circular 150/5060-5, page 1, on the LAX airfield, the EIR will not adequately disclose the Project's capacity enhancing potential and concomitant environmental impacts.

V. THE PROPOSED MOVEMENT OF RUNWAY 6L/24R 400 FEET NORTH HAS ADDITIONAL CAPACITY AND NOISE ENHANCING POTENTIAL.

The Revised NOP, after more than five years of discussion of the Specific Plan Amendment, at this late date reveals an entirely new set of alternatives for the North Airfield Reconfiguration that include an even more extreme alternative than the movement of Runway 6L/24R 340 feet north in the Original NOP. This proposed increased runway separation will have a concomitantly increased impact on surrounding communities.

Most notably, the reconfiguration will almost certainly affect the size and location of the noise contours, moving them north and east, beyond the scope of the relatively extensive 1992 noise contour used by LAWA for the determination of sound mitigation construction funding for Inglewood. The reconfiguration may also displace overflights on approach to relocated Runway 6L/24R to the north thereby bringing increased noise impacts, as well as air quality and other impacts, not only to Inglewood but to Culver City as well. Finally, the Revised NOP gives little attention to the potential impacts of the original impetus for the runway separation, *i.e.*, to accommodate the New Large Aircraft ("NLA") which have a wingspan of 262 feet and carry up to 800 passengers.

It should be noted that none of the figures in the Revised NOP depicting the options for reconfiguration of the North Airfield contain the accompanying Runway Protection Zones ("RPZ"). Depiction of RPZs is important because of the constraint on the use of land that falls within them. Specifically, FAA regulations require that RPZ property belonging to the airport be kept largely clear of structures in order to "enhance the protection of people and property on the

ground." FAA Advisory Circular 150/5300-13, § 212. Moreover, to the extent that property within other jurisdictions such as Westchester falls within the RPZ, the ALUCP for LAX may dramatically constrain the use of such property by its owners, *see*, Cal. Pub. Util. Code § 21675(a).

In summary, the revised alternatives for runway reconfiguration in the Revised NOP are, in large part, damaging to Cities. Cities have, instead, offered, in partnership with co-Petitioners El Segundo and ARSAC, and continue to support, the alternative which allows movement of Runway 6L/24R 100 feet to the north. (*See*, Revised NOP, Figure 7). Petitioners offer this alternative in recognition of LAWA's need to facilitate operations on the airfield but with equivalent understanding that such improvements need not come at Petitioners' environmental expense. Movement of Runway 6L/24R 100 feet to the north will allow the same runway separation as now exists on the South Runway Complex, the current targeted recipient complex for NLA traffic; is sufficient to accommodate a center taxiway to enhance efficiency and expedite movement of the NLAs; and has been deemed "safe" by LAWA for that purpose. The 100 feet north alternative would, thus, allow precisely the same balance between the runway complexes as that articulated as a primary goal in the LAX Master Plan, § 1.1, Goal 7, while, at the same time, providing environmental mitigation to surrounding communities.

In short, the alternative that allows movement of Runway 6L/24R 100 feet to the north offers LAWA substantially the same benefits it sought for the South Complex, without either the adverse impacts or potential controversy that will unavoidably accompany the increased capacity, air and surface traffic, and environmental impacts attendant upon movement of Runway 6L/24R to the north in accordance with the most extreme alternatives proposed in the Revised NOP. Petitioners strongly urge that the alternative of moving Runway 6L/24R 100 feet to the north be adopted as the EIR's Preferred Alternative.

Cities appreciate this opportunity to comment and look forward to partnering with LAWA to implement a mutually acceptable and environmentally sensitive airport development.

Sincerely,

CHEVALIER, ALLEN & LICHMAN, LLP

Barbara Lichman

Barbara E. Lichman, Ph.D.

cc: Mayor Daniel K. Tabor, City of Inglewood
Mark Weinberg, Acting City Administrator, City of Inglewood
Cal Saunders, City Attorney, City of Inglewood
Mayor Christopher Armenta, City of Culver City
John Nachbar, City Manager, City of Culver City
Carol Schwab, City Attorney, City of Culver City

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 4

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September 17, 2012

VIA FACSIMILE ((202)267-5302 AND (202)267-5383)

Ralph Thompson
Manager, Airport Planning & Environmental
Program, APP-400
Attn: Nancy S. Williams
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue SW
Washington, D.C. 20591

Re: Program Guidance Letter - 12-09 - AIP Eligibility and Justification Requirements for Noise Insulation Projects

Dear Mr. Thompson:

We represent the City of Inglewood, California, participant in the Los Angeles World Airports ("LAWA") Sound Insulation Program for Los Angeles International Airport ("LAX"), and signator on the 2006 Settlement of *City of El Segundo, et al. v. City of Los Angeles, et al.*, Riverside County Superior Court Case No. RIC426822 ("Settlement"), guaranteeing substantial additional sound insulation benefits for settling parties, the Cities of Inglewood, El Segundo and County of Los Angeles.

This letter concerns the above-entitled Program Guidance Letter 12-09 ("PGL"), published by FAA on August 17, 2012, purporting to amend FAA Order 5100.38C, § 812, and specifically establishing a "second step" of a two-step requirement for AIP eligibility whereby not only must structures be located in the 65 dB CNEL contour (a continuing condition Inglewood does not question here), but also be subject to or exceed 45 dB interior sound levels in habitable rooms even if located within the 65 dB CNEL noise contour.

Please be advised that Inglewood, although it has already complied with the required preliminary steps of providing a detailed report concerning those projects already in process, reluctantly views the PGL as posing some significant due process issues, as well as difficult operational and practical dilemmas.

I. THE PGL DID NOT ALLOW FOR ADEQUATE NOTICE AND COMMENT BY AFFECTED JURISDICTIONS

Inglewood is concerned about the absence of the notice and comment process for the PGL that would normally accompany the amendment of an order through the official rulemaking process, which includes publication in the Federal Register. The PGL states that Attachment 1 "contains the replacement paragraph 812 Noise Insulation Projects of FAA Order 5100-38C, the AIP Handbook, in its entirety, effective as of the date of this PGL." PGL, p. 2, ¶ 5. However, the law requires that "Each agency shall separately state and currently publish in the Federal Register for the guidance of the public -- (D) substantive rules of general applicability adopted as authorized by law, and statements of general policy or interpretations of general applicability formulated and adopted by the agency; and (E) each amendment, revision, or repeal of the foregoing," 5 U.S.C. § 552(a)(1)(D) and (E) ("Administrative Procedures Act").

The PGL fits directly into the categories covered by the above sections of the Administrative Procedures Act. It is an amendment to a "substantive rule of general applicability," *i.e.*, FAA Order 5100.38C, originally adopted in accordance with regulatory procedures "as authorized by law," including publication in the Federal Register. Moreover, the same publication procedure would be required even if the PGL were not so manifestly regulatory, but were simply "a statement of general policy" or an "interpretation of general applicability."

Perhaps most notably, "except to the extent that a person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published." Administrative Procedures Act § 552(a)(1). In this case, neither Inglewood nor any other affected jurisdiction received notice or an opportunity to be heard before the PGL became effective, by its own terms, "as of the date of this PGL." PGL, p. 2, ¶ 5. Despite the absence of the notice and opportunity to be heard so fundamental to due process, Inglewood wants to continue to work cooperatively with FAA and LAWA. Toward that end, Inglewood anticipates that FAA, for its part, will make some accommodation to Inglewood's operational concerns and the practical issues posed by LAWA's and Inglewood's obligations under their 2006 Settlement Agreement as set forth below.

II. PGL CREATES SIGNIFICANT PRACTICAL ISSUES THAT GO TO THE HEART OF COMPLIANCE

In addition to its manifest procedural deficiencies, the PGL creates practical problems for jurisdictions responsible for providing their citizens with adequate protection from airport noise impacts. First, the PGL creates the hard standard of 45 dB interior sound level below which a residence's original condition cannot fall and still be eligible for insulation. On its face, the regulation does not provide for any standard deviation, so that a residence that falls even slightly below the facial standard, *e.g.*, 44.5 dB, would arguably be excluded from the insulation program. And even if, for argument's sake, the PGL and its attached revision to FAA Order

5100.38C could be construed to include provision for administrative approval of such deviations, the burden such administrative discretion at the Federal level would impose on project implementation at the local level would be substantial and time consuming.

Second, the PGL and its attached revision give short shrift to sound insulation which is approved in a ROD as a mitigation measure for significant noise impacts caused by a Federal project. While the PGL affirms that "airport sponsors have a reasonable period of time to implement substantial multi-year noise insulation projects that were a condition of approval in a ROD . . .," PGL, ¶ 10, n. 3, it also purports to require that structures covered by the mitigation commitment that no longer "meet the qualifying criteria" must be prepared to show "that flexibility is needed to reasonably fulfill commitments in an environmental record of decision." *Id.* However, the mere requirement of a subsequent discretionary act by FAA to ensure compliance with the express terms of the ROD appears to be, in and of itself, a breach of those contractual commitments.

The potential for such breach is amply illustrated with respect to the above referenced settlement between Inglewood, among others, and LAWA. A substantial commitment was made in that Settlement to comprehensive sound insulation for Inglewood; the City Council approved the Settlement, based on that commitment; and the Court still retains jurisdiction to enforce compliance with the Settlement Agreement. Moreover, the citizens of Inglewood accepted the noise impacts of the LAX expansion project based substantially on that commitment. Nothing in the Settlement, or the prior version of FAA Order 5100.38C, allows withdrawal of funding at FAA's discretion for those residences which can't quality under the new standard, at least for some "lesser level of noise insulation." FAA Order 5100.38C, 2005, § 812.b.(1).

Finally, while the PGL provides for a minimal level of flexibility in allowing for "special circumstances," presumably such as settlement or ROD commitments, revised Order 5100.38C § 812.d., Table 4, to enhance "neighborhood equity," it also emphasizes that this condition applies where only a "few residences that do not meet the interior noise level requirements are scattered among residences that do meet interior noise level criteria," and affirmatively limits the number of such exceptions to "20 residences total in a phase of the noise insulation program." *Id.* This limitation on numbers of properties diverging from the standard and still entitled to sound insulation, in programs the size of Inglewood's, is no "neighborhood equity" at all.

Among those induced to agree to the Settlement by the prospect of sound insulation are an as yet unascertained number of property owners in Inglewood whose properties, because of their location within the expanded 65 dB CNEL contour caused by the project, and because of the owners' earlier responsible private acts of sound insulation, are below an "average" of 45 dB interior noise for all habitable rooms. Inglewood and those property owners correctly understood the Settlement to be governed by the FAA orders and guidance in effect when Inglewood approved it, which would have allowed those properties to be insulated, at least at "a lesser level of noise insulation," Order 5100.38C, 2005, § 812.b.(1). In addition to such justified reliance, those changes FAA seeks to apply to the properties previously approved for the program but as yet waiting to be insulated are "post facto," and, thus, arguably, both constitutionally and legally

impermissible.

In summary, the PGL "guidance" still leaves open questions with respect to its proper applicability to, and coordination with, the currently existing regulations governing sound insulation projects. Inglewood looks forward to FAA's responses to its inquiries for clarification, and to working with FAA and LAWA to resolve these pending issues.

Sincerely,

BUCHALTER NEMER
A Professional Corporation

By Barbara Lichman

Barbara Lichman

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 5

Culver CITY
PUBLIC WORKS DEPARTMENT
9770 CULVER BOULEVARD, CULVER CITY, CALIFORNIA 90232-0507
(310) 253-5635 • FAX (310) 253-5628

CHARLES D. HERBERTSON
Public Works Director
and City Engineer

October 31, 2006

Mr. Jim Richie
Los Angeles World Airports
One World Way, 10th Floor
Los Angeles, CA 90045

TRAFFIC IMPACT ANALYSIS FOR DEVELOPMENT PROJECTS IN THE CITY OF LOS ANGELES THAT POTENTIALLY IMPACT CULVER CITY

Dear Mr. Richie:

As Mr. Barry Kurtz, our traffic engineering consultant, discussed with Mr. Pat Tomcheck of your staff, the City of Culver City is in the process of updating our guidelines for preparing traffic impact studies. In the interim, for development projects in the City of Los Angeles, we have requested that as of this date, LADOT require traffic consultants to use thresholds of significant transportation impact identified in LADOT's traffic impact analysis guidelines to analyze the impact on intersections and streets in Culver City. Therefore, the LAX Specific Plan Amendment Study should use LADOT guidelines to analyze intersections in Culver City. This will simplify the preparation and review of the LAX Specific Plan traffic study, since the City of Los Angeles and Culver City share jurisdiction of several intersections that will be analyzed as part of the study.

If you have any questions please call Mr. Barry Kurtz at (310) 253-5625.

Sincerely,

Charles Herbertson
Director of Public Works and City Engineer

Bc: Thomas Gorham
Barry Kurtz
Max Paetzold
Joseph Montoya

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOS ANGELES INTERNATIONAL AIRPORT SPECIFIC PLAN AMENDMENT STUDY

COMMENTS OF CITY OF INGLEWOOD, CITY OF CULVER CITY, CITY OF ONTARIO AND COUNTY OF SAN BERNARDINO

EXHIBIT 6

Culver CITY
PUBLIC WORKS DEPARTMENT
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CHARLES D. HERBERTSON
Public Works Director
and City Engineer

October 31, 2006

Ms. Gloria J. Jeff
General Manager
City of Los Angeles Department of Transportation
100 S. Main Street
Los Angeles, CA 90012

TRAFFIC IMPACT ANALYSIS FOR DEVELOPMENT PROJECTS IN THE CITY OF LOS ANGELES THAT POTENTIALLY IMPACT CULVER CITY

Dear Ms. Jeff:

For developments in the City of Los Angeles that potentially impact intersections in Culver City, the City of Los Angeles Department of Transportation (LADOT) presently refers the traffic consultants to Culver City, and we do the same for developments in Culver City. This process has benefited both the City of Los Angeles and Culver City as it has resulted in development projects being responsible to mitigate their impact regardless of jurisdictional boundaries. To strengthen this arrangement, we request that the LADOT require developers to include Culver City in the scoping process for the traffic impact analysis of any City of Los Angeles development that could potentially impact locations in Culver City. Culver City will do the same for developments in our City that could potentially impact locations in the City of Los Angeles.

The City of Culver City is in the process of updating our guidelines for preparing traffic impact studies. In the interim, for development projects in the City of Los Angeles, we request that as of this date, the LADOT require traffic consultants to use thresholds of significant transportation impact identified in LADOT's traffic impact analysis guidelines to analyze the impact on intersections and streets in Culver City. This will simplify the preparation and review of traffic impact studies, since we share jurisdiction of many intersections with the City of Los Angeles. We have sent similar letters to the County of Los Angeles Department of Public Works, the City of Inglewood and several traffic consultants.

If you have any questions please call our traffic engineering consultant, Mr. Barry Kurtz at (310) 253-5625.

Sincerely,

Charles Herbertson
Director of Public Works and City Engineer

Bc: Thomas Gorham
Barry Kurtz
Max Paetzold
Joseph Montoya

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October 30, 2012

Via email to hglasgow@lawa.org and U.S. Mail

Mr. Herb Glasgow
Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Rm. 218B
Los Angles, CA 90045

Re: LAX West Aircraft Maintenance Area -- Notice of Preparation

Dear Mr. Glasgow:

On behalf of the City of El Segundo, thank you for the opportunity to review the Notice of Preparation ("NOP") for the LAX West Aircraft Maintenance Area Project ("WAMA" or "Project"). We also want to extend our thanks to LAWA staff for holding an initial meeting with El Segundo in connection with the WAMA NOP. With this Project, LAWA is proposing to relocate/consolidate aircraft maintenance activities/facilities in a new location that would bring those activities closer to some El Segundo residents. This is troubling to El Segundo due to potential noise and other impacts, so the City expects to be actively involved in the California Environmental Quality Act ("CEQA") process. We look forward to continued cooperation with LAWA as that process proceeds.

Noise Consultant Collaboration. El Segundo requested and LAWA has agreed to have its CEQA noise consultant (Ricondo and Associates) meet with El Segundo representatives during the CEQA process to discuss modeling inputs and results. To get that cooperative process started, El Segundo has asked LAWA to set up a "kick-off" meeting as soon as possible between El Segundo's noise consultant (Sanford Fidell) and Ricondo. El Segundo has directed its consultant to work cooperatively with Ricondo to ensure the CEQA process for the Project evaluates potential noise impacts in El Segundo clearly/fully and identifies any feasible Project improvements and alternatives (e.g., repositioning and/or placing a roof on the GRE) that would result in noise relief for El Segundo. El Segundo envisions this cooperative arrangement between LAWA and El Segundo technical consultants as similar to that in the ongoing air quality and source apportionment study.

Master Plan Consistency. The adopted LAX Master Plan calls for construction of new aircraft maintenance facilities at the neighboring Continental hangar site, not the WAMA site identified now by LAWA.[1] The WAMA Initial Study released by LAWA states as follows in section 2.5: "The proposed Project is a refinement of certain projects contemplated in the LAX Master Plan. Specifically, the proposed Project would transpose an area identified for aircraft apron and maintenance on the east side of Taxiway AA with an area identified for employee parking (West Employee Parking) on the west side of Taxiway AA. Both facilities would remain in the southwest portion of the airport, south of World Way West as proposed under the LAX Master Plan, with access routes to and from each facility remaining essentially unchanged." This language implies that if the WAMA proceeds as planned, LAWA would use the Continental hangar site for employee vehicle parking and would not install any additional aircraft maintenance facilities there. El Segundo seeks assurances regarding the enforceability of such an arrangement.

Specifically, please provide additional details regarding what process would LAWA go through to amend the Master Plan and/or FAA-approved Airport Layout Plan for LAX to reflect the above-described changes. El Segundo is interested in ensuring that if the proposed WAMA is constructed, the vacant land at the Continental hangar site is never developed with aircraft maintenance facilities. To address this concern, LAWA would have to put in place enforceable constraints/commitments to ensure that if the Continental hangar area is ever subject to further development, it would be with employee parking only.

Additionally, the NOP indicates that LAWA is not proceeding with the project on the Continental hangar site at this point because that site is contaminated. The NOP does not make clear, however, when LAWA expects that contamination to be cleaned up enough for the site to be usable. Please provide that information.

Alternative locations. El Segundo respectfully requests that LAWA evaluate one or more alternatives in the Draft Environmental Impact Report ("DEIR") that sites the new aircraft maintenance facilities somewhere other than near El Segundo's residential community (i.e., away from the southwestern area of LAX). Consideration should be given to locations that are

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[1] El Segundo has consistently objected to LAWA's departures from the adopted Master Plan. For example, as we noted in our comments on the CEQA documents for the Bradley West Project, LAWA cannot legally depart from the approved Master Plan in a substantial way without formally amending that plan and conducting the necessary CEQA analysis. Put another way, LAWA cannot continue to tier off the LAX Master Plan EIR if it is no longer proceeding in a manner consistent with the Master Plan.

further north and east, away from residential uses (e.g., the Western Remote Gate Area discussed below).

Use of Western Remote Gates Area. In discussions with El Segundo, LAWA staff has indicated that LAWA considered locating this proposed WAMA facility at the current location of the Western Remote Gates, but rejected that possibility due to space and timing constraints. While El Segundo understands that some of the Western Remote Gates area must remain intact until after the proposed Midfield Satellite Concourse ("MSC") is complete, a portion of that area would be available for construction of aircraft maintenance facilities (e.g., a hangar, some Remain Overnight ("RON") spots, some Remain All-Day ("RAD") parking, and/or the Ground Run-up Enclosure ("GRE")). To address that possibility, LAWA should provide a drawing showing some of the proposed WAMA facilities superimposed on the Western Remote Gates area. LAWA should also make clear its phasing plan for the timing/relationship of the WAMA, MSC and decommissioning of the Western Remote Gates.

Replacement of Existing Facilities. The NOP does not make clear exactly which maintenance facilities the WAMA will replace. El Segundo would like to know the location, orientation, tenant(s) and size of each such facility (including maintenance hangars, blast fences used for run-ups, etc.). El Segundo has asked LAWA to produce a drawing/map showing those things. Clear documentation is critical here to ensure that the maintenance facilities slated for replacement are actually decommissioned and do not continue to be operated following WAMA completion. Additionally, the DEIR's noise analysis should include a comparative analysis of the noise impacts associated with the proposed Project relative to existing conditions.

Operational Noise. The City of El Segundo has concerns regarding potentially significant operational noise impacts caused by aircraft operations at the GRE and in the WAMA generally (including in and around the aircraft maintenance hangars, on the aprons and during taxiway movements). El Segundo's noise standards (attached) should be utilized in the analysis and the Project should not create noise impacts to residential uses in the neighborhoods along northern El Segundo.

GRE Design. El Segundo looks forward to working with LAWA on the proposed design specifications for the GRE (and receiving any additional design information already developed by/for LAWA). We understand that historically, the principal purveyor of GREs in the United States has been Blast Deflectors, Inc. ("BDI"). Although LAWA may intend/propose to use a standard product from BDI (or some other company), El Segundo encourages LAWA to engage in a competitive (rather than sole source) procurement process. Such a process should seek to maximize the degree to which the final GRE structure attenuates/absorbs sound through customization of components to meet specifications developed in consultation with El Segundo's noise consultant.

GRE Evaluation. The noise from ground run-ups associated with maintenance activities at the WAMA is likely to cause significant single event noise impacts for El Segundo residences. This is due in part to the static nature and long duration of run-ups, particularly when compared with normal aircraft departures, which are non-static and shorter in duration. As such, it is critical that LAWA conduct a comprehensive single event noise analysis as part of the DEIR. Additionally, LAWA should consider the possibility of a roof on the proposed ground run-up enclosure (GRE) and be sure that the walls are thick enough to attenuate low-frequency noise.

Rules for GRE Use. The NOP does not make clear what rules would apply to use of the GRE. For example, would all run-ups in the WAMA need to take place in the GRE or could some occur in the maintenance hangers or elsewhere on the site or airport? Would aircraft undergoing maintenance outside the WAMA area be brought to the WAMA to use the GRE or would they continue to engage in run-ups at other locations around LAX using blast fences or other facilities. During what hours could run-ups take place at the GRE/WAMA? How would GRE use restrictions be enforced by LAWA? What would the penalties be for violations? Would the proposed maintenance facility include noise monitors to detect run-ups? Would LAWA modify the noise abatement procedures contained in its published rules for LAX to address GRE use?

Evaluating GRE Noise Reduction. We understand that A-weighted noise reductions for GREs at other airports can be on the order of up to 20 dB (or less). A-weighted noise reductions are most greatly influenced by acoustic energy in the two octaves above 1 kHz. A good part of the noise exposure problem in El Segundo, however, is caused by lower frequency energy. Low frequency energy can cause rattling noises in homes. *See* attached articles by Fidell et al. (1998, 2002), which have shown that many people in El Segundo and elsewhere are highly annoyed by such rattling sounds.

Large jet engines create appreciable acoustic energy in the six one-third octave bands centered at 25, 31.5, 40, 50, 63, and 80 Hz. The A-weighting network, however, discriminates against acoustic energy at 50 Hz by more than 44 dB. Thus, a GRE that reduces A-weighted sound levels of engine run-ups by 20 dB may reduce low frequency sound levels by far less. The DEIR must take this into account in evaluating the single event and other noise impacts associated with the WAMA/GRE.

Evaluating Noise and Terrain. The DEIR must also take into account the terrain surrounding the proposed WAMA and the relative elevation of the proposed WAMA as compared to nearby residences in El Segundo.[2] Portions of residential areas in El Segundo are elevated above airport terrain. The standard GRE design may therefore not be able to provide much attenuation of run-up noise for such residences, underscoring the need for a custom GRE. It is critically important that the specifications, design criteria, and acceptance testing for the GRE include measurements of attenuation not only at ground level, but also at elevations of as much as a few hundred feet. Additionally, noise testing must take place at some points actually located in the residential areas of El Segundo. We look forward to working with LAWA and its technical consultants on these issues.

Wind Direction. Since many residents of El Segundo live in areas that can be downwind of the proposed GRE location, it is also important that the DEIR analysis and GE design specifications take wind direction and speed into consideration. A GRE that provides useful amounts of noise reduction in still air may provide far less noise reduction under downwind propagation conditions.

Evaluating CNEL Impacts. In addition to conducting single-event noise analysis for the Project, the DEIR must estimate the expected impacts of WAMA (including GRE) operation on the community noise exposure level (i.e., the noise contours around LAX). Engine run-ups are often conducted in conjunction with other nighttime aircraft maintenance. As such, many may be subject to the 10 dB nighttime penalties of the CNEL and DNL noise metrics. LAWA's DEIR should quantify any changes in CNEL/DNL associated with the proposed Project at several points in El Segundo via noise modeling. This analysis should also look at how noise exposure reductions might be achieved (e.g., through use of an alternative site and/or design).

Second GRE. LAWA is obligated to construct two GREs. Where and when is LAWA proposing to install the second GRE?

Phasing Plan. The NOP indicates that it will take 8-10 years to implement the WAMA, but does not make clear why it will take so long. In discussions with LAWA staff, El Segundo learned that while the complete WAMA Project will take 8-10 years to implement, initially, only some of the proposed facilities will be built (e.g., one of the proposed hangars). The DEIR

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[2] The NOP does not make clear how much fill LAWA proposing at the project site. At our meeting, LAWA staff indicated that LAWA would be leveling out existing dirt piles at the project site as part of WAMA. In order to understand how noise will propogate from the site, El Segundo would like to know the finished grade elevation LAWA expects to achieve as part of the WAMA Project.

should provide a phasing plan showing how and when LAWA anticipates building out the WAMA project over the 8-10 year period. LAWA must also make clear whether and to what extent, during the build-out period, it will continue to use the proposed WAMA site for construction staging for other projects at LAX. Finally, LAWA must keep its proposed phasing plan in mind as it evaluates the feasibility of possible alternative sites (e.g., the Western Remote Gates Area).

Qantas Hangar Configuration. In discussions with El Segundo, LAWA staff indicated that Qantas (one of the future WAMA tenants) is proposing a hangar configuration slightly different from that shown in the NOP. The DEIR should obviously evaluate the facilities actually being proposed.

Cumulative Projects List. The most recent version of the cumulative projects list (October 2012) generated by the City of El Segundo is attached for your reference. Please incorporate this data into your cumulative projects analysis.

Truck Routes. El Segundo's General Plan Circulation Element establishes truck haul routes through the City (see attached Circulation Element Exhibit C-13). The City of El Segundo requests that truck trips during construction avoid the City of El Segundo, however, if any travel through the City occurs, that it must be in compliance with the City's adopted truck routes.

Thank you for the opportunity to comment on the LAX West Aircraft Maintenance Area Project. We look forward to commencing the cooperative process between our noise consultant and LAWA's. Please advise when you are ready to set up the "kick off" meeting between Ricondo & Associates and Sanford Fidell. Finally, we request that this firm and the City of El Segundo Planning and Building Safety Department receive a copy of the Draft EIR.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Osa L. Wolff

cc: City Council
Greg Carpenter, City Manager
Sam Lee, PBS Director
Kimberly Christensen, AICP, Planning Manager

Attachments:

1. Articles by Fidell et al. (1998, 2002).
2. City of El Segundo Cumulative Projects List dated October 2012.
3. General Plan Circulation Element Truck Haul Route Map (Exhibit C-13)
4. General Plan Circulation Element Excerpts (Goals, Policies, and Objectives)
5. El Segundo Municipal Code Chapter 7-2 "Noise and Vibration"
6. General Plan Noise Element Excerpts (Goals, Policies, and Objectives)

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ATTACHMENT 1

Field study of the annoyance of low-frequency runway sideline noise

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Noise from aircraft ground operations often reaches residences in the vicinity of airports via grazing incidence paths that attenuate high-frequency noise more than air-to-ground propagation paths, thus increasing the relative low-frequency content of such noise with respect to overflight noise. Outdoor A-weighted noise measurements may not appropriately reflect low-frequency noise levels that can induce potentially annoying secondary emissions inside residences near runways. Contours of low-frequency noise levels were estimated in a residential area adjacent to a busy runway from multi-site measurements of composite maximum spectra of runway sideline noise in the one-third octave bands between 25 and 80 Hz, inclusive. Neighborhood residents were interviewed to determine the prevalence of annoyance attributable to runway sideline noise at frequencies below 100 Hz, and of its audible manifestations inside homes. Survey respondents highly annoyed by rattle and vibration were concentrated in areas with low-frequency sound levels due to aircraft operations in excess of 75 to 80 dB. [S0001-4966(99)01909-8]

PACS numbers: 43.50.Lj, 43.50.Qp, 43.50.Sr [MRS]

INTRODUCTION

Studies of community response to aircraft noise have generally focused on effects of overflights of neighborhoods near runway ends (cf. those reviewed by Finegold *et al.*, 1994 and by Fidell *et al.*, 1991), both because of the high A-weighted sound levels produced by direct flyovers, and because of the sizable residential populations exposed to aircraft approach and departure noise. Quantitative relationships between noise exposure and the prevalence of noise-induced annoyance in communities are characterized in A-weighted units which are little affected by energy at frequencies below about 100 Hz. As the proportion of quieter transport aircraft in the commercial fleet has increased in recent years, interest in noise created by aircraft ground operations at large civil airport has grown. These concerns include effects of noise produced behind departing aircraft (sometimes termed "backblast"), engine run-ups for maintenance purposes, and runway sideline noise (taxiing, queuing, acceleration during takeoff, and thrust reverser application on landing).

Because such aircraft noise often reaches communities by overground rather than air-to-ground paths, it can contain proportionately less high-frequency energy than overflight noise, due to "excess" attenuation from ground effects (Piercy and Embleton, 1977; Sutherland and Daigle, 1997) beyond that attributable to atmospheric absorption. Aircraft ground operation noise is characteristically described in complaints as a dull rumbling sound with a slow onset time. Aircraft ground noise may be distinctively audible at considerable distances from airports, particularly at night, when less masked by other urban noise sources (cf. Fidell *et al.*, 1981).

Questions about the utility of representing low-frequency aircraft ground noise in A-weighted units, and about the adequacy of standard interpretive criteria for assessing community response to low-frequency noises, are becoming increasingly common. However, much of what is known about the annoyance of low-frequency noise has been derived from studies of indoor noise sources, or in nonresidential settings (Broner, 1978; Berglund *et al.*, 1996). Although Berglund *et al.* cite several studies as demonstrating greater annoyance for sounds with greater low-frequency noise than for sounds of equivalent loudness but less low-frequency energy, the circumstances of noise exposure in these studies tend to differ from those in residential areas.

One aspect of particular concern with respect of low-frequency noise effects is the annoyance of secondary emissions (rattling sounds of household paraphernalia) that may be induced inside residences. Measurements of the low-frequency noise produced by aircraft ground operations (Lind *et al.*, 1997) indicate that sufficient low-frequency energy may sometimes be produced to induce secondary emissions in nearby residences, as described by Hubbard (1982). Noise descriptors useful for predicting rattle focus on maximum (rather than average) sound levels in particular low-frequency bands (rather than frequency-weighted, broadband levels).

This field study of the annoyance of low-frequency runway sideline noise sought to determine the prevalence of annoyance associated with aircraft-induced rattle and vibration by means of direct questioning of residents of a community that has long experienced runway sideline noise.

I. METHOD

A. Simultaneous multi-point outdoor measurements

Outdoor ambient noise levels due to aircraft activity were measured at several simultaneous combinations of seven positions in El Segundo, CA, south of runway 25L at Los Angeles International Airport (LAX), as shown in Fig.

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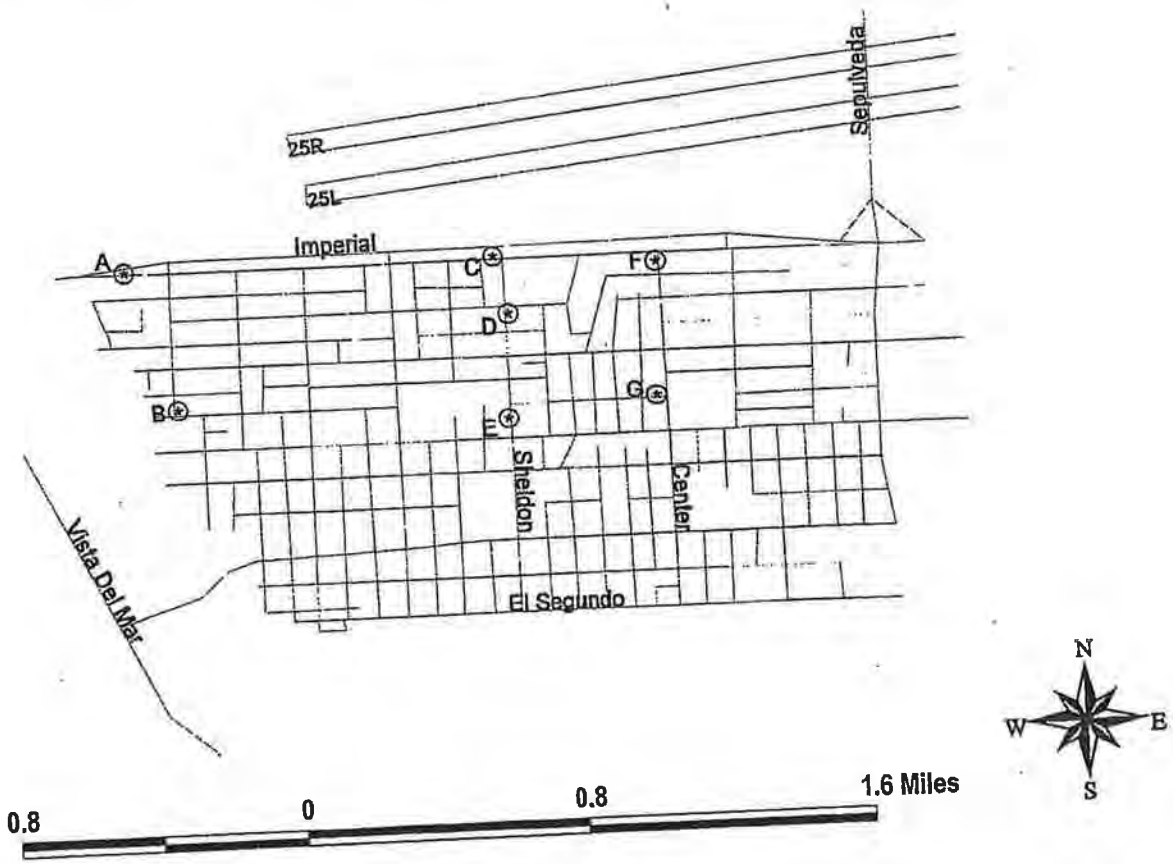

FIG. 1. Locations of monitoring positions in relationship to LAX runways 25R and 25L.

1. Microphones were tripod mounted at a height of approximately 1.7 m above the ground plane. Ground cover between the measurement positions and the runways varied from pavement to grass, as did ground surfaces in the immediate vicinity of measurement locations. Runway 25R was in use for departures and 25L for arrivals during the measurement period. Time-synchronized, wideband recordings of aircraft noise were made with digital tape recorders at six of the seven locations. At the seventh location (C), only the A-weighted level and low-frequency composite levels were measured, with a real-time spectrum analyzer and sound level meter.

B. Population of interest

The target population was adult English-speaking residents of an area of El Segundo between 1000 to 5000 ft south of the southern runway complex at LAX. "Sampling" was exhaustive: attempts were made to conduct an interview with one adult member of each of the 1262 eligible households with listed telephone numbers found in this area. Since Fields (1993) has shown that demographic variables such as age, sex, social status, income, education, home ownership, dwelling type, and length of residence have no documentable effect on noise-induced annoyance, interviewers were instructed to conduct the interview with any adult, verified household member. Residential construction in the interviewing area included a mixture of single-family detached dwellings and higher density, two-and three-story buildings.

C. Interviewing procedures

A structured questionnaire with thirteen closed response category items and 8–18 information requests (contingent on responses to branching items) was administered by telephone. The Appendix contains the questionnaire items. Many of these items had been posed to residents of airport neighborhoods elsewhere.

The interview was introduced as a study of neighborhood living conditions. The first three questionnaire items were preliminary questions about duration of residence and about the most and least favored aspects of neighborhood living conditions. These were intended to confirm the eligibility of respondents for interview, and to provide an opportunity for spontaneous mention of aircraft noise as the least favored aspect of neighborhood living conditions. The first explicit mention of noise occurred in item 4 ("Would you say that your neighborhood is quiet or noisy?"). The intent of this item was to solicit an overall assessment of neighborhood noisiness prior to any mention of aircraft noise in particular.

Item 5 inquired about annoyance due to street traffic noise. This item provided a context for subsequent questions regarding annoyance due to aircraft noise in the next six items:

(i) Item 6 inquired about annoyance due to aircraft noise in general.

(ii) Item 7 asked whether airplanes produced vibration and rattling sounds in respondents' homes.

(iii) Item 8 asked for a category scale rating of annoyance due to such vibration and rattle.
(iv) Item 9 sought information about frequency of notice of vibration and rattle.
(v) Item 10 asked for the identity of vibrating and rattling objects.
(vi) Item 11 sought information about actions taken to lessen vibration or rattling noises.

Respondents were constrained to reply to questions about intensity of annoyance by selecting one of the following response categories: "not at all annoyed," "slightly annoyed," "moderately annoyed," "very annoyed," and "extremely annoyed." No time frame (e.g., last week, last year, etc.) was specified for these items, because maximum low-frequency aircraft ground noise levels in the interviewing area were believed to have varied little within the last several years; because it was considered counterproductive for the purposes of the present study to draw respondents' attention to particular historical periods; and because a response based on respondents' general long-term experiences was preferred to a response based on any particular recent instances of vibration or rattle. Items 12 and 13 asked about complaints concerning vibration, rattling, and aircraft noise in general.

Interviewing was conducted under central supervision by computer-assisted means. Software automatically selected telephone numbers for dialing, stored responses to questionnaire items, time-stamped interviews, and scheduled callbacks. A dozen interviewers were trained to conduct the interview in accordance with written instructions reviewed during briefing sessions prior to the start of interviewing. Nine contact attempts (an initial attempt followed by as many as eight callbacks as needed) were budgeted for each eligible household in an effort to exhaustively sample household opinion throughout the interviewing area.

II. RESULTS

A. Summary of low-frequency aircraft noise measurements

Most of the low-frequency noise events measured at each microphone position were of similar origin. The microphone positions closest to the runway threshold were more influenced by the high-power settings characteristic of the start of takeoffroll of aircraft departing on runway 25R, and less influenced by the lower noise levels created by aircraft landing on runway 25L. Microphone positions nearer to the center of the runway pair were influenced both by the high-power settings of departing aircraft accelerating past them, and by thrust reverser applications by landing aircraft. Microphone positions closer to the departure end of the runways were most influenced by noise of near-ground but airborne aircraft. All aircraft movements, including the near-ground flight path segments of arrival and departure operations, were considered aircraft noise events.

Data reduction procedures were modeled on those of Part 36 of the U.S. Federal Aviation Regulations. Half-second time series of sound levels in one-third octave bands centered at frequencies between 25 and 10 kHz were derived from the field recordings by means of a software-controlled Brüel and Kjær 2134 sound intensity analyzer. A single-event, low-frequency sound level (LFSL) descriptor was defined in preference to a cumulative or average metric to represent low-frequency aircraft noise, on the grounds that secondary emissions audible within structures are caused by instantaneous excitation, not by long-term average levels. Such a maximum band level descriptor is intentionally insensitive to noise event duration since its intended use is as a predictor of the simple occurence of rattle.

Maximum sound levels were identified in each of the one-third octave bands centered at 25–80 Hz in the 30 s prior to and following the (unweighted) maximum noise level of each aircraft noise event recorded in the field. These maximum sound levels were (energy) summed to construct a total maximum low-frequency sound level for each aircraft noise event at each measurement site.

Arithmetic averages of LFSL values for each aircraft overflight event at each of the seven measurement sites were calculated next. These averages of LFSL and maximum A-weighted (MXSA) aircraft noise event values are summarized in Table I. The product–moment correlation between these noise metrics for aircraft noise events ($r=0.69$) accounted for less than half of the variance in predictions of LFSL values from MXSA values by linear regression (LFSL=0.82*MXSA+15.52).

A spatial interpolation (spline) algorithm was applied to the LFSL values measured at each measurement point to generate a set of contours from which LFSL could be estimated at each street address in the interviewing area. The algorithm treated the LFSL values as pseudo-elevation information to fit a surface through the measurement points. The algorithm in effect draped a rubber sheet over the measurement area in a manner that both preserved the LFSL values observed at the measurement sites and minimized the total curvature of the resulting surface.

Figure 2 shows contours of aircraft-produced LFSL throughout the interviewing area. The LFSL values diminished by about 7 dB per 1000 ft orthogonally to the runway sideline within the interviewing area. (This site-specific empirical value is not necessarily applicable near runways elsewhere.)

TABLE I. Average A-weighted and low-frequency aircraft noise at measurement locations.

Measurement locations	Average of maximum A-weighted aircraft noise events (dB)	Average "low-frequency" content of aircraft noise events[a] (dB)
A	86.0	88.2
B	76.2	72.3
C (first time period)	83.4	90.9
C (second time period)	84.1	91.7
C (third time period)	84.5	93.2
D	75.4	82.2
E	73.8	71.1
F	79.6	86.9
G	69.4	67.9

[a]Adjusted by proportion of operations conducted on runways 25R and 25L.

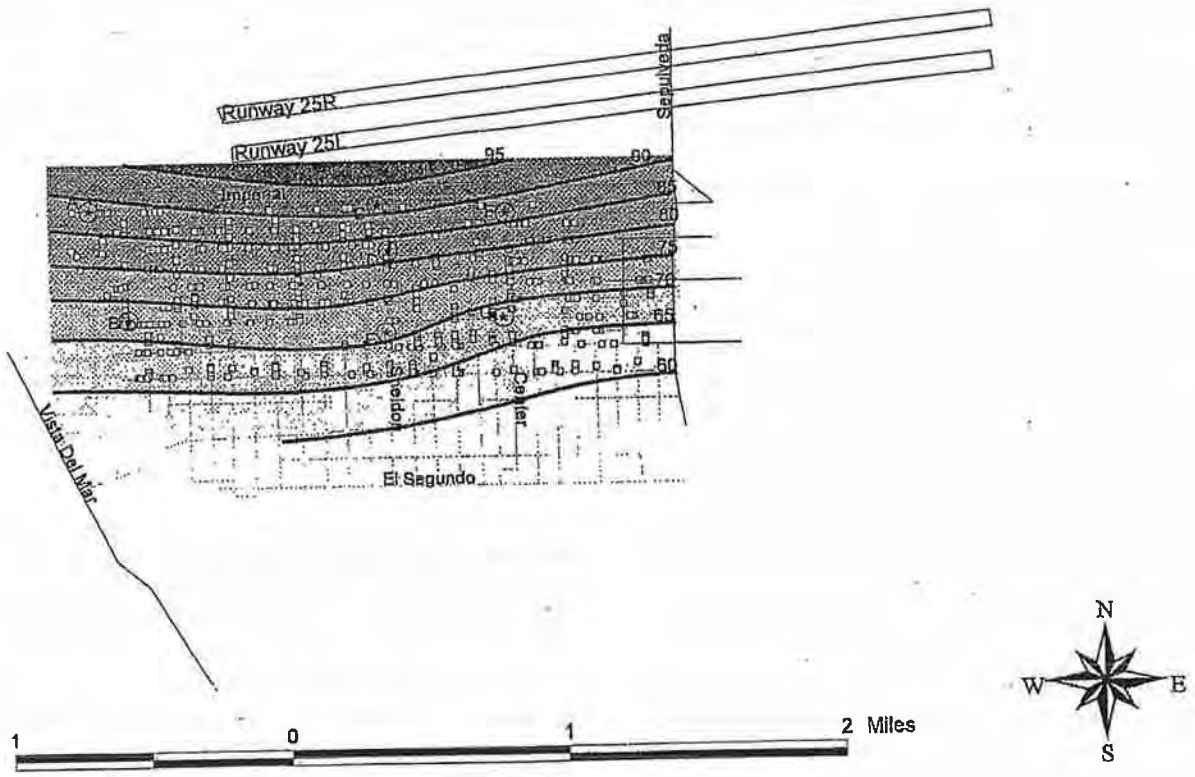

FIG. 2. Contours of low-frequency aircraft noise levels throughout the interviewing area. Shading changes occur in 5-dB intervals.

B. Summary of interviewing process

Table II documents the results of the interviewing process. In all, 644 interviews were conducted with a refusal rate of only 13%. Fifty-six percent of the respondents completing interviews were female, while 44% were male.

Figure 2 also locates households from which completed interviews were obtained with respect to the low-frequency noise contours. The density of completed interviews was fairly uniform throughout the interviewing area. Figure 3 shows the cumulative distribution of the numbers of respondents who lived in households with given low-frequency noise levels. About half of the respondents lived at addresses with low-frequency aircraft noise levels greater than 75 dB.

TABLE II. Accounting for the results of contact attempts from the sampling frame.

Disposition of telephone numbers	
Total No. in sampling frame	1665
Nonsample numbers	
Disconnect	156
Business	64
Fax/modem	54
Wrong	55
Non-English speaking	10
Number changed	64
Total Nonsample	403
Noncontact numbers	
Answering machine	64
Retired numbers (8 callbacks)	336
No answer	115
Not available	5
Total Noncontact	520
Total numbers available for interview [Total−(Nonsample+Noncontact)]	742
Number of completed interviews	644
Number of refusals	98
Completion rate [644/742]	0.87
Refusal rate [98/742]	0.13

C. Responses to questionnaire items

1. Relationships between annoyance due to aircraft noise in general and annoyance due to vibration vibration or rattle

Of the 644 respondents who completed interviews, 29%(185) described themselves as highly ("very" or "ex-

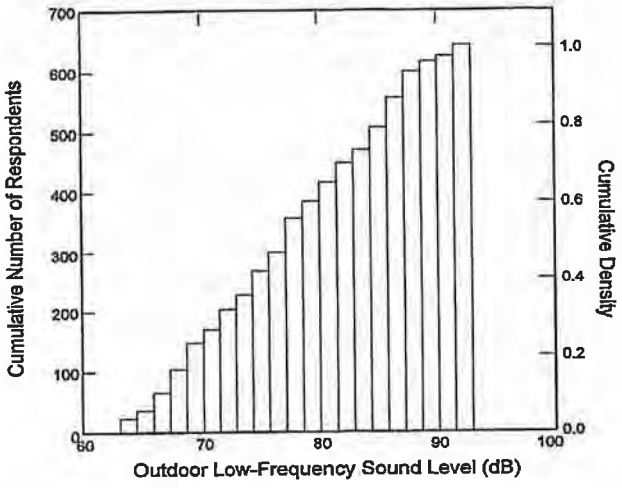

FIG. 3. Cumulative distribution of respondents by outdoor low-frequency noise levels.

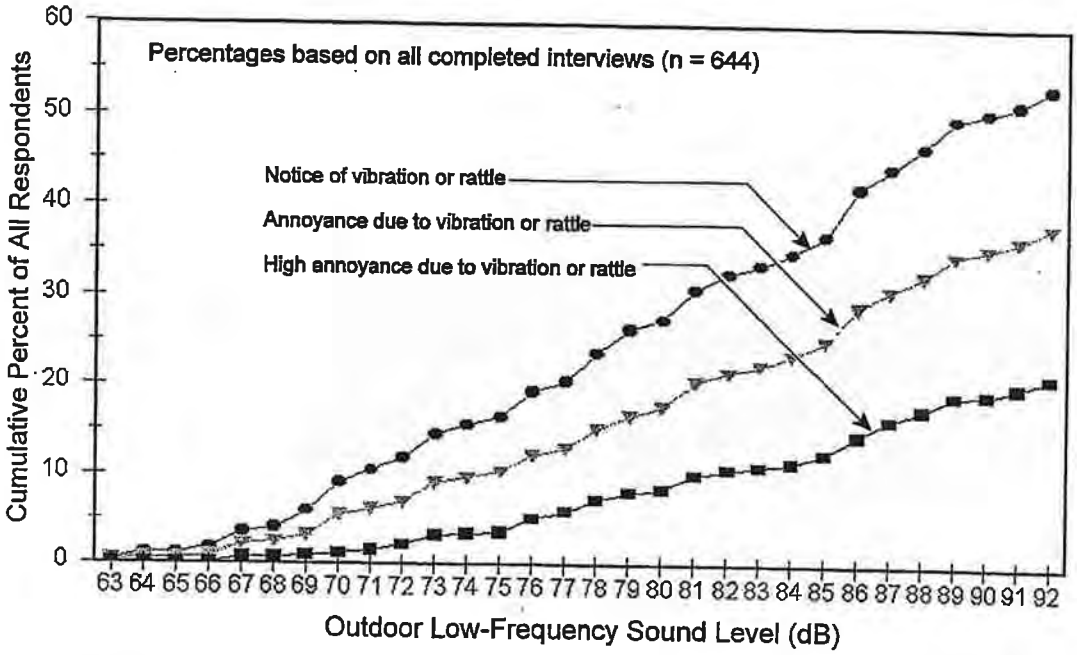

FIG. 4. Cumulative percentages of respondents noticing, annoyed by, and highly annoyed by aircraft-induced vibration or rattle, with respect to outdoor low-frequency noise level.

tremely") annoyed by aircraft noise in general, while 21%(136) described themselves as highly annoyed by aircraft-induced vibration or rattling sounds in their homes. Of the 136 respondents who described themselves as highly annoyed by vibration or rattling sounds, 23%(25) were **not** highly annoyed by aircraft noise in general. A χ^2 contingency test indicates that this difference is unlikely to have arisen by chance alone ($\chi^2_{(df=1)}=236$, $p<0.01$). Thus, annoyance associated with secondary emissions is not completely subsumed by annoyance due to aircraft noise in general.

2. Relationship of the prevalence of notice and annoyance of vibration or rattle to low-frequency noise levels

Figure 4 compares the cumulative percentages of respondents who noticed, were annoyed in any degree, and were highly annoyed by aircraft-induced vibration or rattle in their homes. The denominator for all of the percentages shown in this figure is 644, the total number of respondents who completed interviews. Information about the distributions of notice, annoyance in any degree, and a consequential degree of annoyance is displayed in Fig. 4 in cumulative form to emphasize the orderliness and straightforward interpretability of the relationships among these variables with respect to outdoor LFSL, to compare their respective slopes, and to illustrate the lack of well-defined breakpoints.

3. Prevalence of aircraft noise annoyance associated with A-weighted cumulative noise exposure

Version 5.1 of the FAA's Integrated Noise Model (Fleming *et al.*, 1997; Olmstead *et al.*, 1995) was used to construct annual day-night average sound level (DNL) contours due to aircraft activity on the southern pair of runways at LAX. These contours were overlaid on the interviewing area so that individual residences could be associated with A-weighted aircraft noise exposure levels. The resulting relationship between the prevalence of a consequential degree of annoyance with aircraft noise and annual DNL (in 4 dB-wide intervals) is shown in Fig. 5 with respect to the dosage–response relationship preferred by FICON (1992). The proximity of the data points from the current study to the FICON curve indicates that the prevalence of annoyance with aircraft noise in general among respondents near LAX is well predicted by this relationship.

4. Relationship between complaints due to aircraft noise in general versus rattle or vibration

About 29% of the respondents who were annoyed by aircraft noise had complained to the airport about aircraft noise in general. A somewhat smaller percentage (25%) of

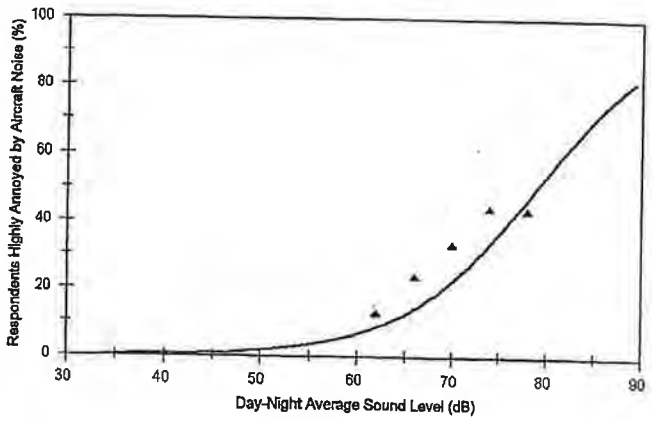

FIG. 5. Prevalence among respondents of a consequential degree of annoyance with aircraft noise.

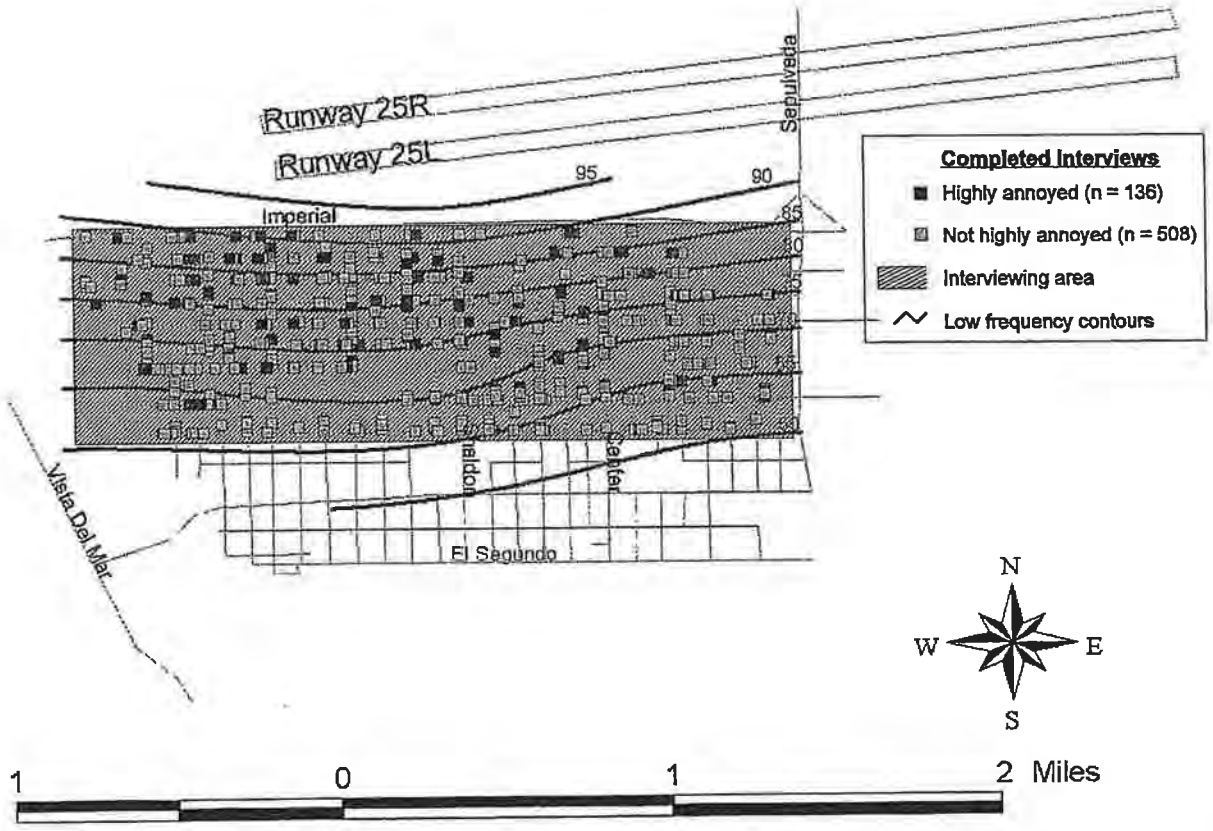

FIG. 6. Locations of households containing respondents highly annoyed and not highly annoyed by rattle or vibration due to low-frequency runway sideline noise.

the respondents who noticed vibrations or rattling sounds in their homes had complained to the airport about aircraft noise. About 30% of the respondents who noticed vibrations or rattling sounds had complained to the airport about them.

III. DISCUSSION AND CONCLUSIONS

Figure 6 shows the locations of households reporting high annoyance due to rattle or vibration as well as the lo-

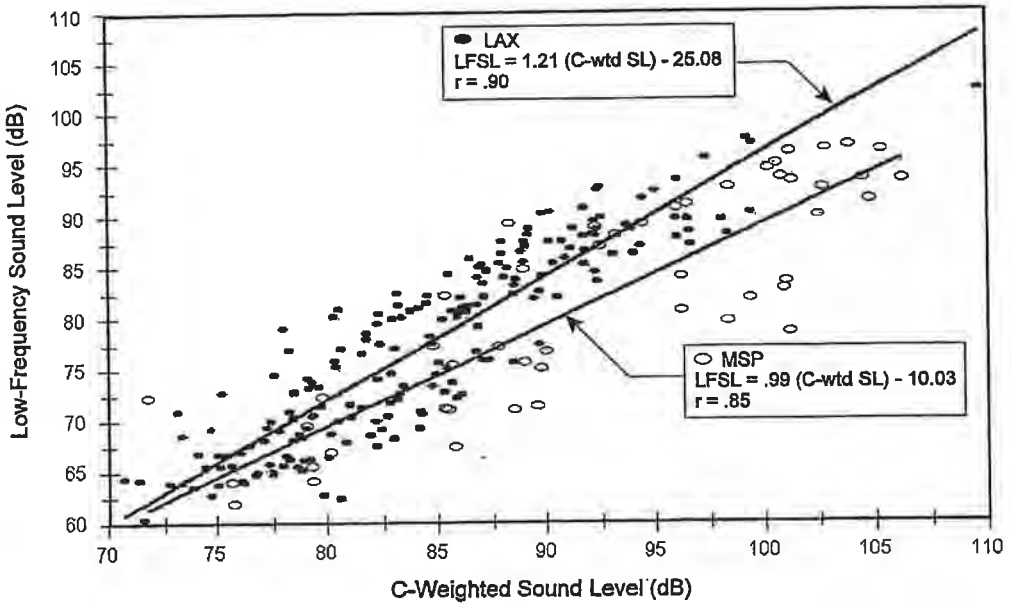

FIG. 7. Linear regressions relating low-frequency sound levels of aircraft ground noise to C-weighted levels at two airports.

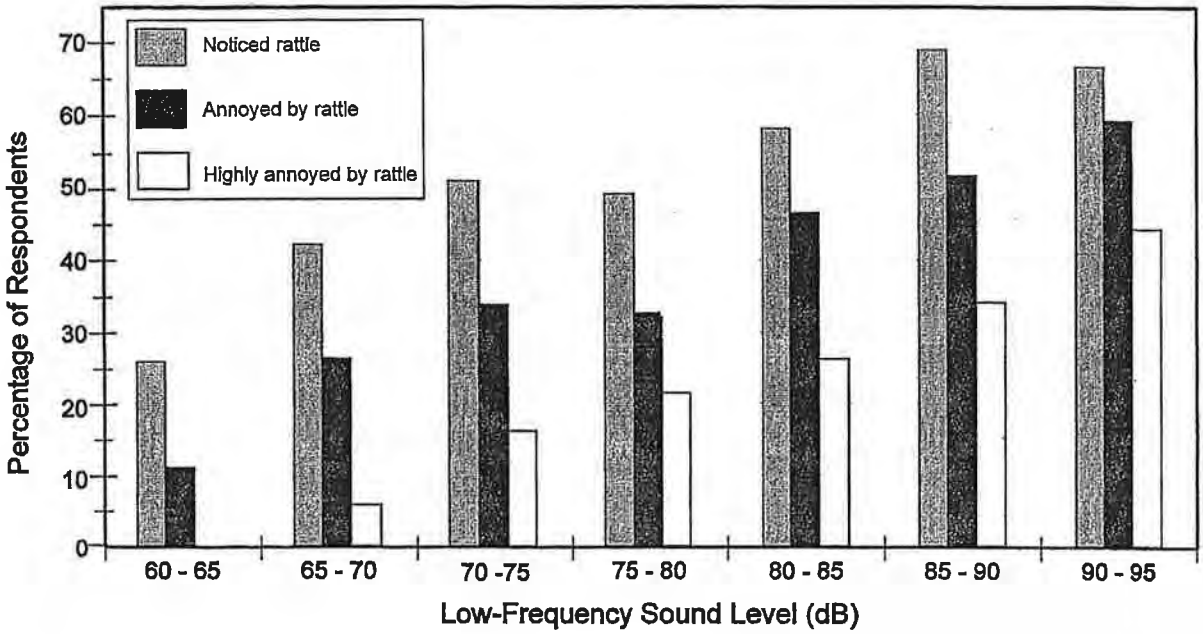

FIG. 8. Percentages of respondents who noticed rattle or vibration, were annoyed in any degree by rattle or vibration, and were highly annoyed by rattle or vibration.

cations of households not reporting high annoyance due to rattle or vibration. Simple visual inspection suggests that residents highly annoyed by low-frequency sideline noise are concentrated in areas with LFSL values in excess of 75 to 80 dB. These levels are consistent with Hubbard's (1982) estimates of low-frequency airborne sound levels capable of inducing secondary emissions in light architectural elements.

Care is required in converting a low-frequency aircraft noise level as characterized for present purposes into a C-weighted sound level due to lack of uniqueness and linearity. The uniqueness issue is that the low-frequency content of noise produced by aircraft equipped with turbofan and other engines of different power ratings may vary considerably even though they share similar C-weighted sound levels. The linearity issue is that increases in C-weighted sound levels may not yield proportionate increases in secondary emissions and, hence, annoyance due to rattle or vibration.

Notwithstanding these cautions, linear regressions displayed in Fig. 7 were performed to relate LFSL values to C-weighted levels for two sets of field observations: those described above at LAX, and those of Lind *et al.* (1997) at MSP. The slopes and intercepts of these relationship will vary for other sets of operations by different aircraft fleets at other airports.

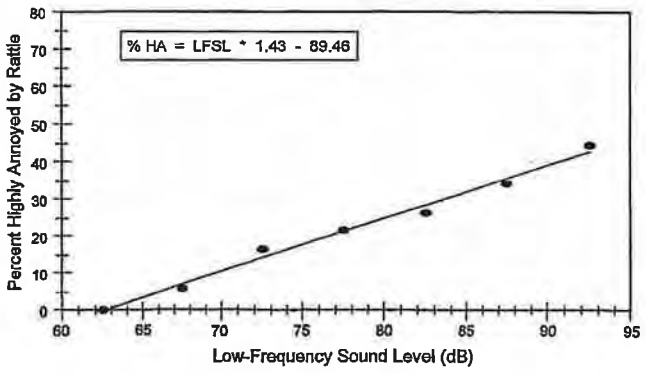

FIG. 9. Relationship between outdoor low-frequency sound levels of aircraft ground noise and the prevalence of a consequential degree of annoyance with rattle or vibration.

Figure 8 compares percentages of respondents who noticed rattle or vibration, were annoyed in any degree by rattle or vibration, and were highly annoyed by rattle or vibration, as aggregated within 5-dB intervals of LFSL. Figure 9 displays a linear regression to the findings about the prevalence of a consequential degree of annoyance within 5-dB LFSL intervals. The product moment correlation of this fit ($r = 0.99$) accounts for essentially all of the variance in the relationship between LFSL and the prevalence of annoyance with runway sideline noise. These data should not be overinterpreted as a fully generalizable dosage-response relationship, since they reflect only the reactions of residents of a single airport neighborhood.

It is nonetheless possible to interpret these initial findings in a manner similar to that adopted by FICON (1992). FICON has identified a value of $L_{dn} = 65$ dB as a threshold of residential land use compatibility. The corresponding prevalence of consequential annoyance in communities according to FICON's dosage-response relationship is 12.3%. The same prevalence of annoyance in the present data set occurs at a LFSL value slightly greater than 71 dB.

ACKNOWLEDGMENTS

The authors are grateful to the respondents for their participation in this study; to the City of Richfield, MN, for sponsoring this study; to Harvey Holden for assistance in estimating A-weighted aircraft noise exposure levels in El

Segundo; to Dr. Norman Broner for an (ill-timed) discussion of the low-frequency noise effects literature; and to Mr. Richard Horonjeff for suggesting the analysis summarized in Fig. 9.

APPENDIX: QUESTIONNAIRE ITEMS

ITEM 1. About how long have you lived at [street address]?

ITEM 2. What do you like best about living conditions in your neighborhood?

ITEM 3. What do you like least about living conditions in your neighborhood?

ITEM 4. Would you say that your neighborhood is quiet or noisy?

SKIP TO ITEM 5 if response to Item 4 was "quiet."

Follow up question if response to Item 4 was "noisy" or "quiet, except for airplanes":

ITEM 4A. Would you say that your neighborhood is slightly noisy, moderately noisy, very noisy, or extremely noisy?

ITEM 5. While you're at home are you bothered or annoyed by street traffic noise in your neighborhood?

SKIP TO ITEM 6 if response to Item 5 was "no."

Follow up question if response to Item 5 was "yes":

ITEM 5A. Would you say that you are slightly annoyed, moderately annoyed, very annoyed, or extremely annoyed by street traffic noise in your neighborhood?

ITEM 6. While you're at home are you bothered or annoyed by aircraft noise?

SKIP TO ITEM 7 if response to Item 6 was "no."

Follow up question if response to ITEM 6 was "yes":

ITEM 6A. Would you say that you are slightly annoyed, moderately annoyed, very annoyed, or extremely annoyed by aircraft noise while at home?

ITEM 7. Do airplanes make vibrations or rattling sounds in your home?

SKIP TO ITEM 13 if response to Item 7 was "no."

Ask Items 8 through 13 if response to ITEM 7 was "yes":

ITEM 8. Are you bothered or annoyed by these vibrations or rattling sounds in your home?

SKIP TO ITEM 9 if response to Item 8 was "no."

Follow up question if response to ITEM 8 was "yes":

ITEM 8A. Would you say that you are slightly annoyed, moderately annoyed, very annoyed, or extremely annoyed by vibrations or rattling sounds in your home?

ITEM 9. About how often do you notice vibrations or rattling sounds in your home made by airplanes?

ITEM 10. What sorts of things vibrate or rattle in your home?

ITEM 11. Have you tried to do anything in your home to reduce vibrations or rattling sounds made by airplanes?

SKIP TO ITEM 12 if response to Item 11 was "no."

Follow up question if response to ITEM 11 was "yes":

ITEM 11A. Have the vibrations or rattling sounds made by airplanes been lessened by the things you have done?

ITEM 12. Have you ever complained to the airport about vibrations or rattling sounds in your home made by airplanes?

ITEM 13. Have you ever complained to the airport about aircraft noise in general?

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Relationship between low-frequency aircraft noise and annoyance due to rattle and vibration

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A near-replication of a study of the annoyance of rattle and vibration attributable to aircraft noise [Fidell *et al.*, J. Acoust. Soc. Am. **106**, 1408–1415 (1999)] was conducted in the vicinity of Minneapolis-St. Paul International Airport (MSP). The findings of the current study were similar to those reported earlier with respect to the types of objects cited as sources of rattle in homes, frequencies of notice of rattle, and the prevalence of annoyance due to aircraft noise-induced rattle. A reliably lower prevalence rate of annoyance (but not of complaints) with rattle and vibration was noted among respondents living in homes that had been treated to achieve a 5-dB improvement in A-weighted noise reduction than among respondents living in untreated homes. This difference is not due to any substantive increase in low-frequency noise reduction of acoustically treated homes, but may be associated with installation of nonrattling windows. Common interpretations of the prevalence of a consequential degree of annoyance attributable to low-frequency aircraft noise may be developed from the combined results of the present and prior studies. © *2002 Acoustical Society of America.* [DOI: 10.1121/1.1448339]

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I. INTRODUCTION

The annoyance of transportation noise is commonly assessed in the United States for environmental disclosure and policy analysis purposes by means of a relationship published by the Federal Interagency Committee on Noise (FICON, 1992). Day–night average sound level (DNL), a time-weighted average sound level devised as a generic descriptor of long-term, cumulative environmental noise exposure (EPA, 1974), is the customary predictor variable for relationships such as FICON's. As noted by Job (1988) and others, this relationship between a measure of cumulative noise exposure and the prevalence of annoyance, as well as its predecessors and successors (e.g., relationships described by Schultz, 1978; Fidell, Barber, and Schultz, 1991; and Miedema and Vos, 1998), leave much of the variance in annoyance prevalence rates unexplained.

As an A-weighted metric, DNL discriminates heavily against low-frequency noise—a reasonable strategy as a generality, given the disparity of direct contributions of low- and high-frequency noise to annoyance (Kryter and Pearsons, 1963). Secondary emissions of light architectural elements of residences (e.g., rattling windows, ductwork, and doors) and of household paraphernalia (e.g., pictures, mirrors, and bric-a-brac) may be annoying, however, even when the low-frequency sources that induce such rattling are not directly annoying. Thus, some of the apparent underestimation by FICON of the annoyance of aircraft noise exposure as measured outdoors that Miedema and Vos (1998) and others note might be associated with the annoyance of indoor secondary emissions.

Efforts to relate the annoyance of rattle to low-frequency environmental noise sources have concentrated on the noise of high-energy impulses, such as those reviewed by CHABA (1996). Schomer and Neathammer (1998) have documented the ability of helicopters to cause annoying rattle in residences, however, and Fidell *et al.* (1999) have described a relationship between an event-based metric of low-frequency aircraft noise and annoyance due to rattle and vibration. The latter association between nonimpulsive noise of aircraft ground operations and annoyance is distinguishable from that between cumulative, A-weighted aircraft noise exposure and annoyance.

DNL values due to aircraft operations are often considerably lower in runway sideline neighborhoods than in neighborhoods near extended runway centerlines, because A-weighted noise exposure gradients orthogonal to runways are steep, and because runway sideline areas at large airports are not often exposed to the noise of large numbers of low-altitude aircraft overflights. Large jet transports nonetheless create substantial noise at low frequencies in areas adjacent to runways during takeoff run and application of reverse thrust. Thus, low-frequency noise to which DNL is insensitive can produce secondary emissions that may be annoying both in their own right, and to the extent that they may call further attention to aircraft noise events. The present study was undertaken as an empirical test of whether differences in lifestyle and housing construction in different climates affected the generality or applicability of the findings of Fidell *et al.* (1999).

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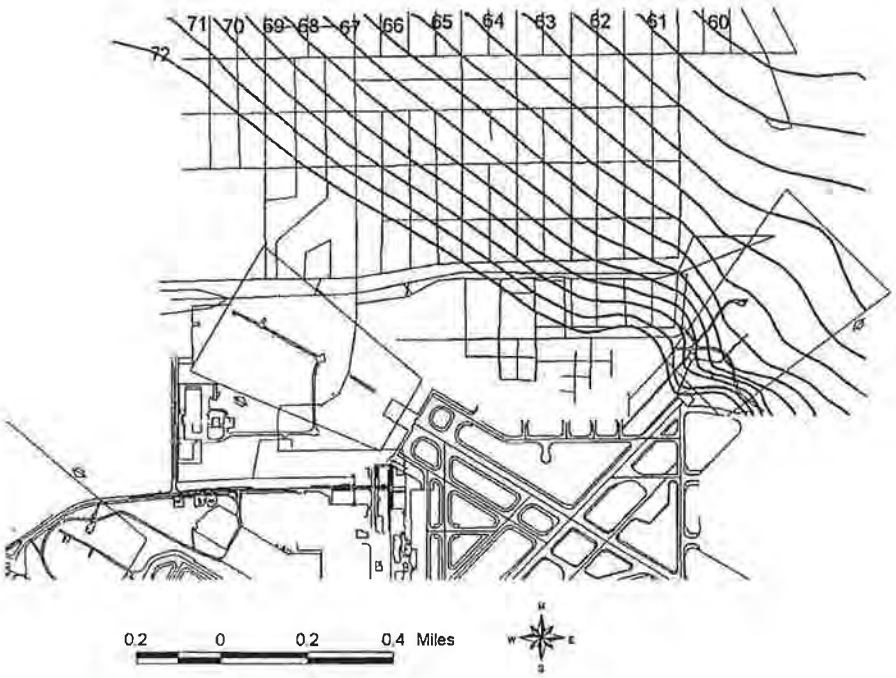

FIG. 1. INM 6.0 prediction of DNL contours in the interviewing area at MSP.

II. METHOD

A. Selection of interviewing area

A residential area to the north of the intersection of Runways 4/22 and 12/30 at MSP was identified as a neighborhood of low-density housing (primarily single-family detached wood-frame dwellings) that is not directly overflown at low altitude, but that is close enough to runway sidelines to be exposed to low-frequency aircraft noise. Surface traffic noise in this area is that produced on a grid of two-lane secondary streets. A multilane thoroughfare north of the runway intersection is depressed below grade level throughout much of the southerly portion of the interviewing area.

Version 6.0 of the Federal Aviation Administration's INTEGRATED NOISE MODEL (INM) software was used to calculate DNL and maximum C-weighted aircraft single-event level contours from operational information provided by the Metropolitan Airports Commission. Contours computed at 1-dB intervals were overlaid on a base map of residences to identify street address ranges with similar expected aircraft noise, as shown in Figs. 1 and 2 for DNL and C-weighted maximum sound levels, respectively.

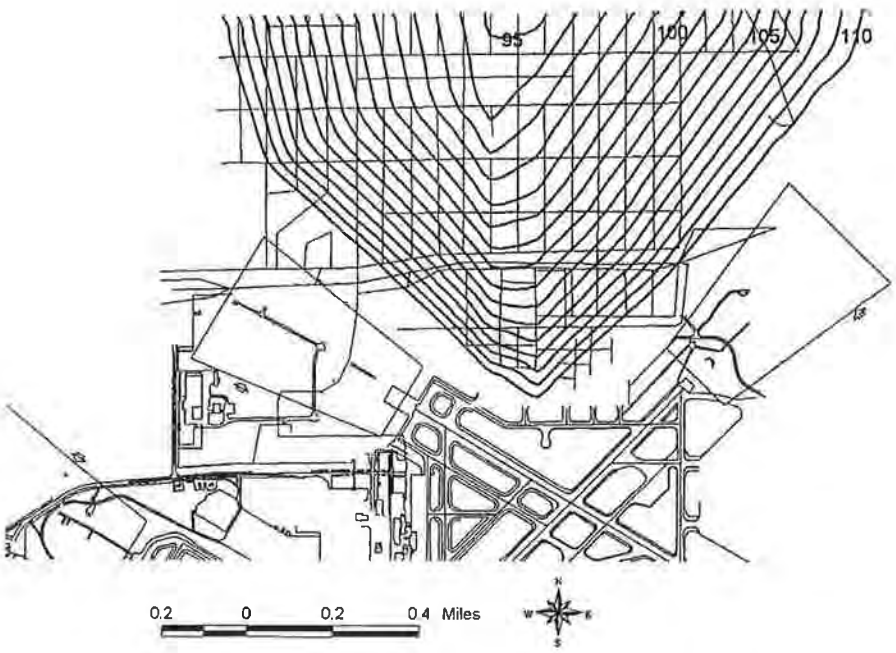

FIG. 2. INM 6.0 prediction of C-weighted maximum contours in the interviewing area at MSP.

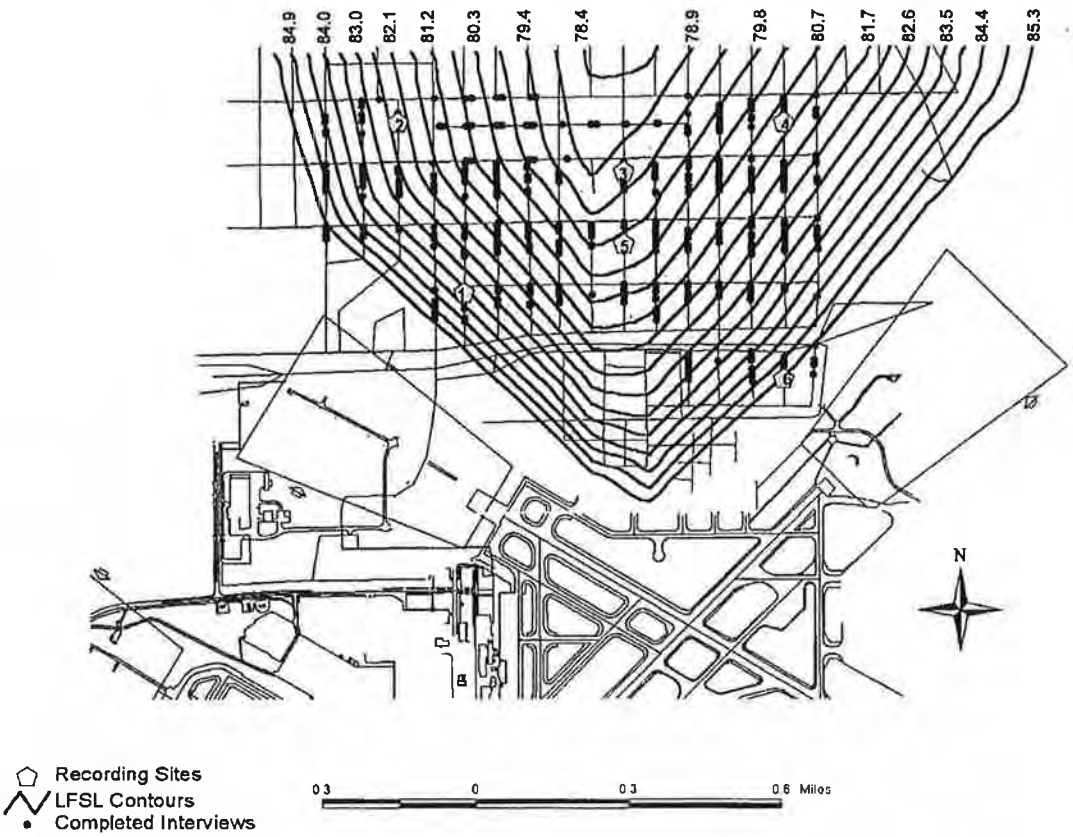

FIG. 3. Noise measurement and completed interview sites, with estimated LFSL contours.

B. Measurement of low-frequency aircraft noise levels

Unattended wideband digital recordings were made at six sites within the interviewing area (as shown in Fig. 3) to characterize low-frequency sound levels due to aircraft operations. These measurements were made during 12 daylight and evening hours per day over the course of 4 days to yield a total of 288 h of recordings for subsequent analysis of low-frequency aircraft noise events.

C. Sampling and interviewing procedures

A sampling frame of 1003 households with listed telephone numbers was assembled from digital reverse directories and an MSP-provided database of residences that had received airport-sponsored acoustic insulation treatments. Potential respondents were identified by simple random selection from the sampling frame at the time of interviewing. On 10 June 1999, 12 centrally supervised telephone interviewers began ten contact attempts: an initial attempt, followed by nine callbacks at different times of day over an 8-day interviewing period. The opinions of one English-speaking, verified adult household member were sought from each selected household. All interviewers read a training manual and underwent half an hour of training, including practice interviews, prior to conducting interviews.

D. Questionnaire

A brief, structured questionnaire composed of two open-response items and several closed-response category items was administered. The wording and order of questionnaire items was taken from that of Fidell *et al.* (1999). Two items were added to the end of the questionnaire about awareness and satisfaction with the airport-sponsored acoustic-insulation program. Respondents were constrained to reply to questions about intensity of annoyance by selecting one of the following response categories: "not at all annoyed," "slightly annoyed," "moderately annoyed," "very annoyed," or "extremely annoyed." The latter two response categories were considered to represent a consequential (or "high") degree of annoyance.

The interview was introduced as a study of neighborhood living conditions. The first explicit mention of noise occurred in item 4 ("*Would you say that your neighborhood is quiet or noisy*?"), following preliminary questions about duration of residence, and about the most and least-favored aspects of neighborhood living conditions. The next two items inquired about annoyance with street traffic noise and aircraft noise. Respondents were next asked whether airplanes made vibrations or rattling sounds in their homes. Respondents who had noticed rattling in their homes were asked five additional questions about how annoyed they were with the rattling sounds, how often they noticed the rattling sounds, what objects rattled in their homes, whether they had tried to do anything to reduce the rattling in their homes, and whether they had ever complained to the airport about the rattling.

TABLE I. Disposition of telephone interview contact attempts.

	Final status
Total telephone numbers in sampling frame	1003
Nonsample[a]	143
Noncontacts[b]	248
Refusals	117
Completed interviews	495
Completion rate[c]	0.809

[a]Includes disconnects; nonresidential telephones, fax machines, modem lines, wrong addresses, changed numbers, and non-English-speaking households.

[b]Includes busy, no answer, not available, call blocked, or answering machine after ten contact attempts.

[c]Completion rate calculated as: completed interviews÷[completed interviews+refusals].

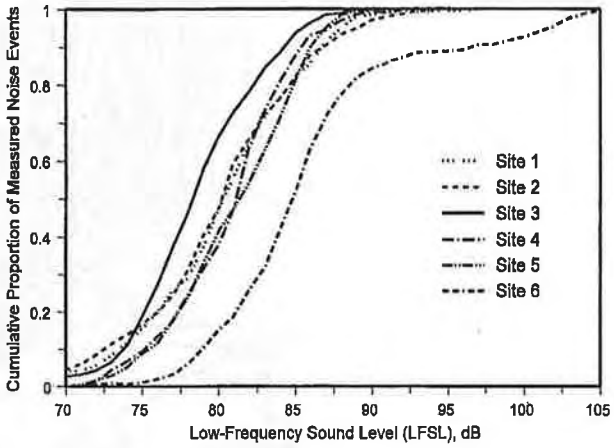

FIG. 5. Cumulative distributions of low-frequency sound levels of aircraft noise events at six measurement sites within the interviewing area.

III. RESULTS

A. Summary of results of interviewing

Table I summarizes the mechanics of data collection. Interviews were completed at 495 residences, as shown in Fig. 3, for an interview completion rate of 81%. The bulk (79%) of the nonsample telephone numbers were disconnected and changed telephone numbers. Failure to complete an interview was due mostly to refusals and noncontacts after ten attempts. The average length of the interview was 6 min. Of the completed interviews, 177 were conducted in households that had been acoustically treated, and 318 were conducted in households that had not been so treated.

B. Measurements of low-frequency aircraft sound levels

Panel A of Fig. 4 is a spectrogram of a typical time-history segment as recorded in the interviewing area, color-coded to help identify the low-frequency content of the noise events. The concentration of low-frequency energy shortly after the peak of the prominent noise event in the time-history trace shown in panel (B) is characteristic of an aircraft noise event. The noise event that occurred about 5 min later, which lacks the characteristic concentration of low-frequency noise, is a vehicle pass-by on a nearby street. The color-coding of the time-history trace distinguishes C-weighted levels between 75 and 80 dB (a range of levels within which the likelihood of rattle due to low-frequency noise increases notably) from higher and lower levels.

Statistical distributions of low-frequency sound level (LFSL) values for screened aircraft noise events were computed as described by Fidell *et al.* (1999) at the time of the

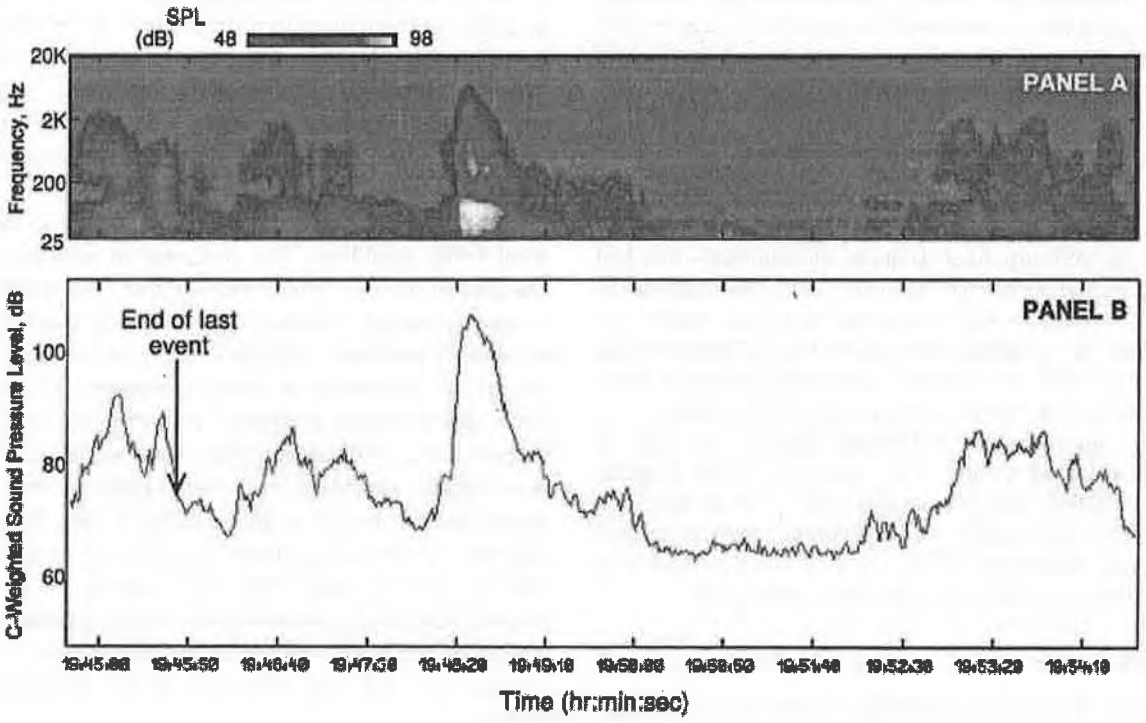

FIG. 4. Typical time history [panel (B)] and spectrogram [panel (A)] of aircraft noise events recorded at a site within the interviewing area.

TABLE II. Summary of distributions of low-frequency sound levels measured at the C-weighted maxima of aircraft noise events at six sites within the interviewing area.

Site	C-Max (per INM)	Mean (dB)	Median (dB)	n	σ (dB)	L_{10} (dB)	L_5 (dB)	L_1 (dB)
1	106.2	81.3	83.2	654	7.5	89.2	90.0	91.5
2	103.4	81.8	83.0	504	7.2	90.1	91.0	93.1
3	96.3	77.5	78.0	493	5.5	84.1	85.3	86.9
4	100.6	81.6	82.1	220	3.9	86.1	88.1	89.9
5	97.9	82.0	82.3	378	4.0	87.0	87.8	89.1
6	110.2	86.9	85.9	411	6.5	97.9	102.8	104.9

maximum C-weighted single-event level, by summing the energy in the one-third-octave bands centered at 25 through 80 Hz, inclusive. Figure 5 displays cumulative LFSL distributions for these aircraft noise events at each of the six measurement sites.

C. Estimation of LFSL values for individual respondents

Table II summarizes maximum C-weighted levels predicted by INM 6.0 and LFSL distribution information for each measurement site. A linear regression equation relating average measured LFSL values to INM-predicted maximum C-weighted aircraft noise levels ($\text{LFSL}=0.46*L_{\text{C max}}+34.8$ dB) was applied to maximum C-weighted values calculated for the street address of each completed interview. The regression accounts for 65% percent of the variance in the measured LFSL values. The LFSL value assigned to each respondent's street address was the arithmetic mean of the maxima of measured LFSL values of aircraft noise events in excess of 75 dB. (Since the bulk of the aircraft noise event maxima exceeded 75 dB, the average LFSL value of the event maxima in excess of 75 dB differed little from the average of aircraft noise events with LFSL values in excess of 60 dB.) Note that the LFSL value so estimated is *not* the greatest single aircraft noise event level at a respondent's home, but rather a lower value consistent with the "few times a day" to "few times an hour" modal responses to the frequency of notice questions in the current and LAX surveys. Figure 3 shows INM-produced maximum C-weighted noise level contours relabeled with estimated LFSL values.

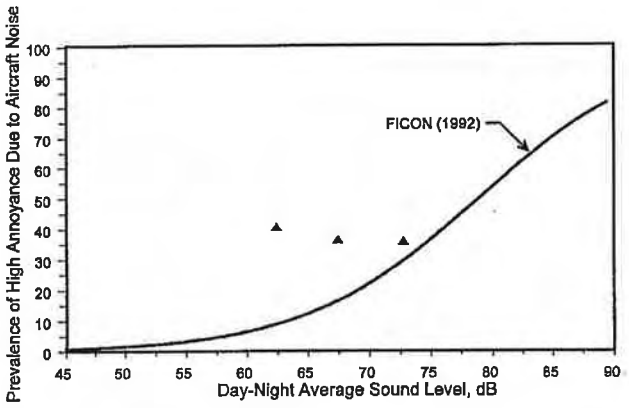

FIG. 6. Relationship between DNL and prevalence of a consequential degree of aircraft noise-induced annoyance.

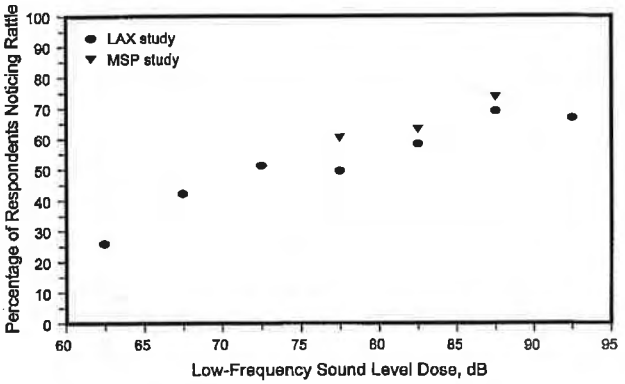

FIG. 7. Percentage of respondents noticing aircraft-induced rattle in LAX and MSP surveys as a function of LFSL.

D. Responses to primary questionnaire items

The questionnaire items of principal concern were items 6 through 10. Item 6 ("*While you're at home are you bothered or annoyed by aircraft noise in your neighborhood*?") inquired about respondents' annoyance due to aircraft noise in general. Three groups of respondents with similar noise exposure (±2.5 dB) were formed: $60.0 \leqslant L_{\text{dn}} \leqslant 65$ dB, $65 \leqslant L_{\text{dn}} \leqslant 70$, and $70 \leqslant L_{\text{dn}} \leqslant 75$ dB. Of the 157 respondents with the least noise exposure, 64 (40.1%) described themselves as highly annoyed by aircraft noise; 96 of 263 respondents (36.5%) in the group with intermediate exposure described themselves as highly annoyed by aircraft noise; and 27 of 75 respondents (36%) in the group with the greatest noise exposure described themselves as highly annoyed by aircraft noise. Figure 6 compares these annoyance prevalence rates, plotted at the midpoints of the noise exposure intervals, with the FICON (1992) dosage-response relationship.

Item 7 ("*Do airplanes make vibrations or rattling sounds in your home*?") inquired about notice of aircraft-induced secondary emissions. More than half of the respondents (58% in acoustically insulated homes and 65% in noninsulated homes) reported that airplanes made rattling sounds in their homes. Of those respondents who noticed rattle, 67% in acoustically insulated homes and 79% in noninsulated homes reported annoyance in some degree due to vibrations or rattling sounds (item 8), while 35% and 45% of these respondents, respectively, reported that they were very or

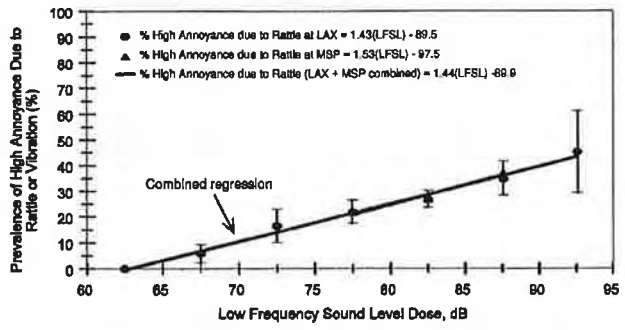

FIG. 8. Relationship between low-frequency sound levels of aircraft at two airports and prevalence of annoyance due to vibrations or rattling sounds. Error bars mark the width of 90% confidence intervals of the underlying data sets.

TABLE III. Observed prevalence of annoyance with rattle at midpoints of LFSL exposure intervals.

Midpoint of LFSL interval (dB)	Percent of respondents highly annoyed by rattle	
	LAX	MSP
62.5	0%	
67.5	5.8%	
72.5	16.3%	
77.5	21.5%	21.6%
82.5	26.2%	26.6%
87.5	34.1%	36.8%
92.5	44.4%	

highly annoyed. Figure 7 compares the percentages of respondents who reported noticing rattling sounds in the MSP and LAX surveys as a function of LFSL.

Item 9 ("*About how often do you notice vibrations or rattling sounds in your home made by airplanes*?") inquired about frequency of notice of rattling noises. About 30% of all respondents who noticed rattling sounds in their homes reported that they noticed vibrations or rattling sounds several times an hour. About 14% of all respondents who noticed rattling sound in their homes reported noticing rattle once an hour. Item 10 ("*What sorts of things vibrate or rattle in your home*?") inquired about the sources of rattling noises. The most common source of rattle, reported by 61% of all respondents, was windows. Other commonly reported sources of rattle included walls (16%) and pictures (14%).

Items 12 and 13 ("*Have you ever complained to the airport about vibrations or rattling sounds in your home made by airplanes*?" and "*Have you ever complained to the airport about aircraft noise in general*?") inquired about complaints due to rattling noises and aircraft noise in general. Less than a third of the respondents who reported rattling sounds in their homes had complained to the airport about them. Less than a quarter of all respondents in both acoustically insulated and noninsulated homes had complained to the airport about aircraft noise in general.

IV. DISCUSSION

A. Relationship between LFSL and the prevalence of annoyance due to rattle

Figure 8 shows linear regressions for grouped data (see Table III) within 5-dB LFSL intervals and the prevalence of aircraft-induced rattle and vibration for the combined data sets. The linear regression accounts for 93% of the variance in the combined data set. The error bars plotted at the midpoints of the 5-dB LSFL intervals show the upper and lower bounds of 90% confidence intervals on the proportions of highly annoyed respondents in the combined LAX and MSP data sets.

B. Geographic association of prevalence of high annoyance due to low-frequency aircraft noise and runway sideline distances

Three decades of contouring A-weighted aircraft noise at major airports has led to widespread appreciation of exposure gradients and distances along extended runway centerlines at which annoyance due to overflights may be expected. This information is of considerable utility for purposes such as land-use planning and estimation of the magnitude of potential aircraft noise mitigation projects. Comparable information about low-frequency sound levels and their effects is not as well appreciated. It is therefore of some interest to note runway sideline distances at which low-frequency noise effects are likely to be observed in residential areas, even though the geographic association itself is inherently noncausal. The information summarized in such a geographic association is intended to complement rather than supplant the dosage-response analysis illustrated in Fig. 8. Although the relationship is necessarily site-specific to some degree, it may nonetheless be of interest for general planning purposes at large airports contemplating runway expansion projects.

Figure 9 plots the prevalence of high annoyance with rattle or vibration with respect to runway sideline distance intervals. The relationships displayed in Fig. 9 were developed in three steps. First, the distance was determined from each household at which an interview was completed to the centerline (or extended centerline, as necessary) of the nearest runway at LAX or MSP. Second, the distances from households to runway centerlines were grouped in 500-ft. intervals. Third, the percentage of respondents describing themselves as very or extremely annoyed by aircraft-induced rattle and vibration was calculated for each distance interval.

Although the geographic association between sideline distance from runways and their extended centerlines and the prevalence of annoyance due to rattle has obvious limitations, it does *not* rely upon measurement or estimation of any acoustic quantities, and is independent of the distance from homes to points of brake release or thrust reverser application, and of fleet mix, propagation, and residential construction factors. The independence of this association from acoustic quantities and aircraft operational factors is important for two reasons. First, the association reflects the net effect of all of the interacting influences of low-frequency source levels and acoustic propagation into residences, as well as the potential influences of nonacoustic factors. Second, it is not heir to any of the uncertainties of acoustic measurement or aircraft operation.

C. Effects of acoustic insulation on annoyance and complaints about rattle

The prevalence of high annoyance due to vibrations or rattling sounds was 20.3% among respondents living in acoustically insulated homes and 29.2% in noninsulated homes. This difference ($\chi^2_{(df=1)}=4.7$, $p=0.03$) was unlikely to have arisen by chance alone. Since the noise exposure of respondents living in acoustically treated homes was greater than that of respondents living in untreated homes (mean $L_{dn}=71$ and 65 dB, respectively), it is apparent that the treatments afforded some reduction in annoyance due to secondary emissions. Noise reduction measurements reported in Fidell *et al.* (2000) show that standard acoustic insulation treatments provided to single-family homes at MSP have no appreciable effect on their noise reductions at frequencies

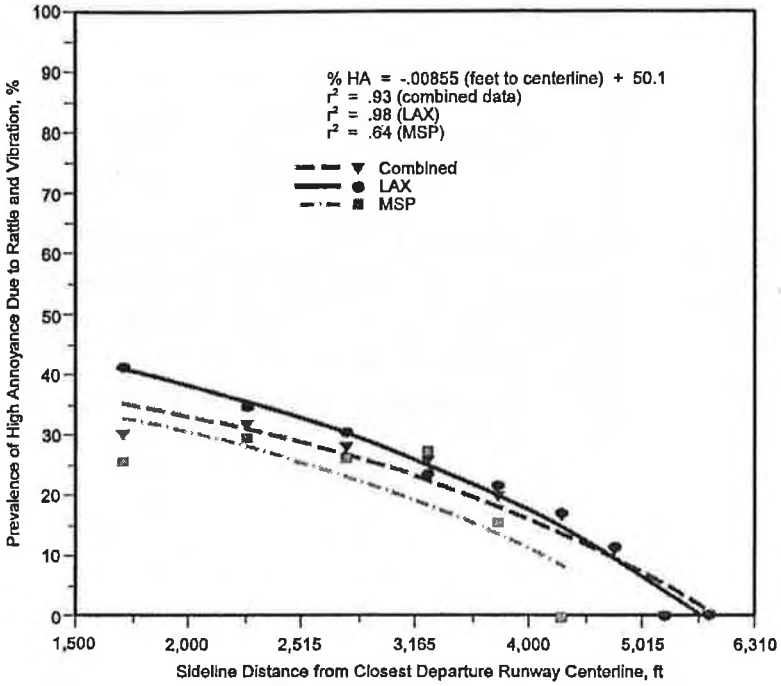

FIG. 9. Relationships between runway sideline distances and prevalence of annoyance due to rattle and vibration.

below about 100 Hz. The reduction in annoyance due to rattle is therefore likely to be attributable to the relatively recent installation of tightly fitted (nonrattling) windows as part of the standard acoustic treatment package.

Respondents who had noticed aircraft-induced rattling sounds in their homes were asked whether they had complained to the airport about them. Of the respondents living in acoustically insulated homes who had noticed rattle, 24.3% had complained to the airport about the rattling sounds in their homes, whereas 32.7% of the respondents in noninsulated homes had complained to the airport. This difference was not statistically significant ($\chi^2_{(df=1)}=2.3$, $p=0.13$). The percentages of respondents in acoustically insulated and noninsulated homes who had complained to the airport about aircraft noise in general were 19% and 24%, respectively. This difference was not statistically significant ($\chi^2_{(df=1)}=1.6$, $p=0.21$).

D. Potential nonacoustic influences on annoyance judgments

Self-reports of annoyance attributed to rattle and vibration are as susceptible to nonacoustic influences as self-reports of annoyance due to other forms of aircraft noise exposure. Fields (1993) has analyzed an extensive literature on demographic, attitudinal, and situational factors that may affect such reports. Fidell, Schultz, and Green (1988) and Baird, Harder, and Preis (1997) have suggested various other nonacoustic factors that may influence self-reports of annoyance. No effort was made in the present study to identify any such specific effects.

V. CONCLUSIONS

Figure 8 summarizes findings about the prevalence of annoyance associated with rattle and vibration due to low-frequency aircraft noise in runway sideline neighborhoods near two large civil airports. Until refined by further information, this relationship can complement interpretations of the annoyance of A-weighted aircraft noise. The geographic association summarized in Fig. 9 may also be of interest for general land-use planning purposes.

ACKNOWLEDGMENTS

This study was sponsored by the City of Richfield, Minnesota and the Minneapolis Metropolitan Airports Commission (MAC). Mr. Richard Horonjeff and Mr. Andrew Harris of Harris Miller Miller & Hanson supervised field measurements and data reduction of aircraft noise levels at three sites, and conducted low-frequency noise reduction measurements of homes in the interviewing area. The present findings about low-frequency sound levels in the interviewing area are based on further analyses of the acoustic measurements contained in the report of the Low-Frequency Noise Expert Panel of the Richfield-MAC Noise Mitigation Agreement of 17 December 1998 (Fidell, Harris, and Sutherland, 2000).

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ATTACHMENT 2

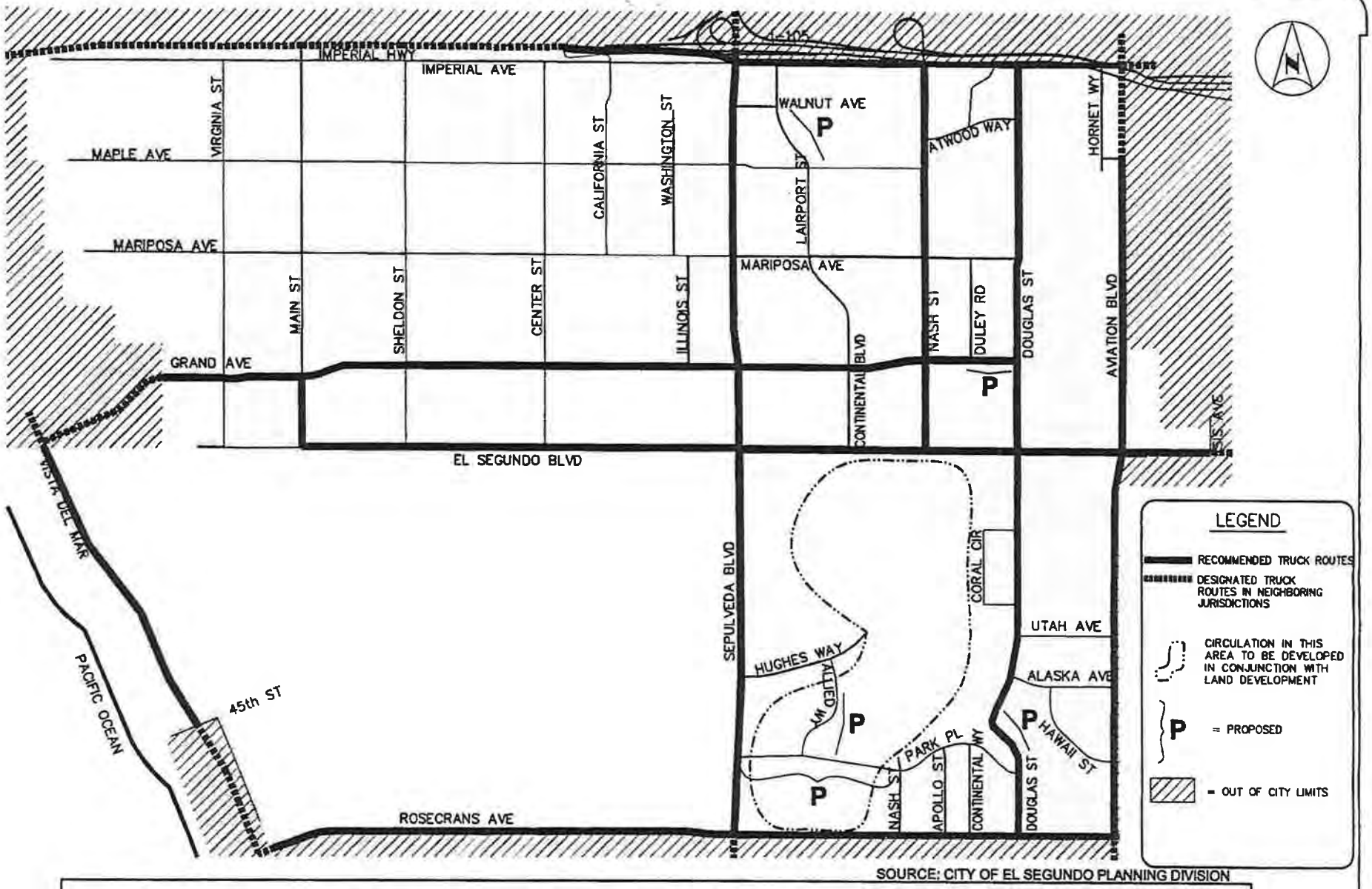
CITY OF EL SEGUNDO CUMULATIVE PROJECTS LIST
(MAJOR PROPOSED & APPROVED BUT NOT CONSTRUCTED PROJECTS)
October 2012

No.	EA #	Ord # / Reso	Address	Existing Gross sq. ft.	Existing Use	Approved/ Proposed Gross sq. ft. *	Approved/ Proposed Use	Approval & Expiration
1	548	Ord. 1345 CC Reso. 4241	700 N. Nash 800 N. Nash El Segundo Corporate Campus	0	Vacant	1,740,000 87,000 100,000 248,000 5 acre	Office, Hotel Light Industrial / R & D Commercial Retail Park	Approved; 197,300 sf Office/Light Industrial - Occupied 18,700 Retail - Occupied 83,855 sf Hotel - Under Construction
2	N/A		301 Vista Del Mar		Power Plant		Redevelopment of power plant Units 1 and 2	Approved by CEC – Under construction
3	781		301,303,305 Palm Avenue		9 apts	14,313 sf	7-Unit Residential Condominium	Approved by Planning Commission on Feb. 12, 2009. Pending plan check submittal
4	784		445 N. Douglas Street	223,000 (106,000 Office; 117,000 Warehouse)	Industrial	332,137 sf	Data Center	Approved –October 23, 2008. Under construction, 158,624 sf complete.
5	836		Two potential locations: 301 Maryland St or 219 W Mariposa Av.	0	Various	4,500 – 6,000 s.f. bldg. & 1-2 pools	Municipal Pool	Decision on location not made yet
6	844	Ord. 1441 Reso. 4647	101 Continental Blvd.		Parking Lot	71,005 sf	152 Room Hotel	Approved – Pending Plan Check Submittal
7	865	Reso 2677	105 Vista Del Mar	0	None	1,400 s.f.	Lifeguard Station	Approved, under construction
8	890		540 E Imperial Ave	22,500 s.f.	School	58- 304 residential units (Up to 175,000 s.f.)	304 Senior Housing / Assisted Living Facility or 58 Single and Multi-Family Residential Units	Application Approved – Pending Plan Check Submittal
9	899		116 W El Segundo Blvd	0	Oil Refinery Site	38,000 s.f.	Office / Operations Center	Approved – Under Construction
10	905		2100 E El Segundo Blvd	2,089,090 s.f.	Light Industrial/Office	2,089,090 s.f. existing 2,142,457 s.f. proposed Total 4,231,547 s.f	Office, Retail, Warehouse, Light Industrial	Application submitted Full build-out projected by 2022
11	912		600-630 Sepulveda	7,100 s.f.	Sit down Dining (Sizzler)	3714 s.f. and 1921 s.f. of outdoor dining	Fast Food w Drive Through (In-n-out)	Application Submitted

No.	EA #	Ord # / Reso	Address	Existing Gross sq. ft.	Existing Use	Approved/ Proposed Gross sq. ft. *	Approved/ Proposed Use	Approval & Expiration
12	958	Reso 2722	1700 E Mariposa Ave	0	N/A	9 residential condo units	9-unit subdivision for residential condos	Application Approved -. Pending plan check review and approval
13	959	Reso. 4779 and Ord. 1470	222 Kansas St	0	N/A	Office: 30,660 s.f USDA facility: 45,152 s.f. (40.6% office, 31.13% lab, 28.27% warehouse)	Two office buildings, each divided into 10 condominium units and an animal and plant inspection facility.	Approved USDA facility under construction, completion expected Fall 2013 Office construction completion expected Winter 2013
14	961		130 Arena St	0	N/A	386 s.f. office and 3019 s.f. warehouse	Office and warehouse	Application approved – Under construction
15	971		444 N Nash St	116,756 s.f.	Data Center	Demo: 11,769 New const.: 75,435 s.f. New total: 180,422 s.f.	Data Center	Application submitted – Pending Review (Also see No. 10 – EA-786)
16	974		324 West El Segundo Boulevard	126,000 s.f.	Tool Room, Storehouse, Electrical Shop	102,000 s.f.	Central Reliability Center, Central Tool Room	Application submitted – Pending Review
17	981		1700 East Imperial Avenue	168,811 square feet	Office	194,119 square feet	Office	Application submitted – Pending Review
18	986		455 Continental Blvd and 1955 E Grand Ave	55,000 s.f.	Office	300,000 s.f. R&D & office 810-space parking structure	R&D and office and Parking structure	Application Submitted
19	993		820-850 South Sepulveda	0	Vacant	92,000 s.f.	Shopping Center, Office uses	Application submitted
20	997		888 North Sepulveda	0	Vacant	107,090 s.f.	5-story, 190-room hotel	Application submitted September 11, 2012
21	1001		2355 Utah and 2383 Utah Ave.	2355 Utah 12,671 office 29,877 industrial 2383 Utah: 51,209 Office 101,297 Industrial	Vacant	2355 Utah: Convert to all office add 1687 square-feet 2383 Utah Convert to all office, add 6850 square-feet	Creative Office	Plan Check approved, under construction.

*** NOTE:** The Approved/Proposed sq. ft. column indicates the total expected development on the site taking into account any existing buildings to remain or to be demolished. It is not in addition to any existing buildings, but the aggregate.

ATTACHMENT 3



SOURCE: CITY OF EL SEGUNDO PLANNING DIVISION

CITY OF EL SEGUNDO · GENERAL PLAN

Recommended Truck Routes

exhibit
C-13

ATTACHMENT 4

Goals, Objectives, and Policies

Circulation goals, objectives, and policies are presented as part of the Circulation Element for the City of El Segundo to guide policy makers and City staff in the planning and provision of the City's circulation system. The goals, objectives, and policies were developed through consideration of existing circulation issues, projected circulation needs associated with the Land Use Element, growth outside of the City, and the interests of the residents and businesses of El Segundo. Each of the goals identifies the general direction for the City's circulation system. The objectives outline more specific circulation guidelines for the City's decision makers and staff to work toward. The implementation policies are actions or policies that will assist the City in achieving the identified goals and objectives.

Goal C1: Provision for a Safe, Convenient, and Cost Effective Circulation System

Provide a safe, convenient, and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.

Objective C1-1 Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.

Policy C1-1.1
Maintain and update the citywide traffic model as needed for purposes of evaluating project-related and external traffic impacts on the City circulation system.

Policy C1-1.2
Pursue implementation of all Circulation Element policies such that all Master Plan roadways are upgraded and maintained at acceptable levels of service.

Policy C1-1.3
Provide adequate roadway capacity on all Master Plan roadways.

Policy C1-1.4
Construct missing roadway links to complete the roadway system designated in the Circulation Element when needed to improve traffic operating conditions and to serve development.

Policy C1-1.5
Implement roadway and intersection upgrades to full Circulation Element standards when needed to improve traffic operating conditions and to serve development.

Policy C1-1.6
Ensure that planned intersection improvements are constructed as designated in Exhibit C-9 to achieve efficient operation of the circulation system at a Level of Service "D" or better where feasible.

Policy C1-1.7
Provide adequate intersection capacity to the extent feasible on Major, Secondary, and Collector Arterials to maintain LOS D and to prevent diversion of through traffic into local residential streets.

Policy C1-1.8
Provide all residential, commercial, and industrial areas with efficient and safe access to the major regional transportation facilities.

Policy C1-1.9
Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy C1-1.10
Ensure that new roadway links are constructed as designated in the Master Plan and link with existing roadways within the City such that efficient operation of the circulation system is maintained at an operating Level of Service of "D" or better.

Policy C1-1.11
Ensure that the transition from any Master Plan roadway to another Master Plan roadway at a higher classification operates safely and efficiently, incorporating the appropriate intersection configuration and any turn lanes that are necessary.

Policy C1-1.12
Convert Nash Street and Douglas Street from a one-way couplet to a two-way roadway operation between El Segundo Boulevard and Imperial Highway, incorporating appropriate signage, traffic controls, and other modifications to ensure motorist and pedestrian safety and efficient traffic operations.

Policy C1-1.13
Establish and maintain a citywide traffic count program, to ensure the availability of data needed to identify circulation problems and to evaluate potential improvements.

Policy C1-1.14
Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system, intersection improvements, and other measures. Mitigation measures shall be provided by or paid for by the project developer.

Policy C1-1.15
Pursue and protect adequate right-of-way to accommodate future circulation system improvements.

Policy C1-1.16
Encourage the widening of substandard streets and alleys to meet City standards wherever feasible.

Policy C1-1.17
Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.

Policy C1-1.18
Review future developments to ensure uniformity of street naming and avoidance of name duplication or name inconsistencies on a continuous link.

Policy C1-1.19
Continue to monitor the impacts of the I-105 Freeway on local El Segundo streets. If it is determined that freeway traffic is using local streets like California Street as a short cut through the City, evaluate potential mitigations.

Objective C1-2 Provide a circulation system consistent with current and future engineering standards to ensure the safety of the residents, workers, and visitors of El Segundo.

Policy C1-2.1
Develop and maintain a circulation system which shall include a functional hierarchy and classification system of arterial highways that will correlate capacity and service function to specific road design and land use requirements.

Objective C1-3 Ensure that the City's Master Plan Truck Route System efficiently serves the shipping needs of the commercial and industrial land uses in El Segundo while balancing potential conflicts with residential and recreational land uses throughout the City.

Policy C1-3.1
Ensure that the City's designated truck routes provide efficient access to and from the I-105 Freeway.

Policy C1-3.2
Ensure that the development review process incorporates consideration of off-street commercial loading requirements for all new projects.

Policy C1-3.3
Require that all new construction on streets or corridors that are designated truck routes have a Traffic Index calculation as stated by the State Department of Transportation in order to provide a roadway structural section that will accommodate the projected truck volumes and weights.

Policy C1-3.4
Prohibit parking within the public right-of-way on either side two-way alleys. Parking on one side of a one-way alley could be allowed if the alley width is a minimum of 19 feet.

Policy C1-3.5
Ensure that the trucks from the cargo facility north of Imperial Highway at Main Street stay on the City truck route system and do not travel along Main Street.

Goal C2: Provisions for Alternative Modes of Transportation

Provide a circulation system that incorporates alternatives to the single-occupant vehicle, to create a balance among travel modes based on travel needs, costs, social values, user acceptance, and air quality considerations.

Objective C2-1 Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.

Policy C2-1.1
Encourage the development of pedestrian linkages to and from the Metro Green Line stations to encourage and attract intermodal transit/ walking trips.

Policy C2-1.2
Develop a citywide system of pedestrian walkways, alleviating the conflict between pedestrians, autos, and bicyclists throughout the City.

Policy C2-1.3
Encourage new developments in the City to participate in the development of the citywide system of pedestrian walkways and require participation funded by the project developer where appropriate.

Policy C2-1.4
Ensure the installation of sidewalks on all future arterial widening or new construction projects, to establish a continuous and convenient link for pedestrians.

Policy C2-1.5
Encourage the continued use of the 1911 Act to provide missing sidewalk sections where applicable in residential and commercial areas.

Policy C2-1.6
Encourage shopping areas to design their facilities for ease of pedestrian access.

Policy C2-1.7
Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.

Objective C2-2 Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.

Policy C2-2.1
Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises; i.e., through development, private grants, signing of shared routes.

Policy C2-2.2
Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.

Policy C2-2.3
Develop off-street bicycle paths in corridors where appropriate throughout the City.

Policy C2-2.4
Encourage the use of bicycles for trips to and from elementary, middle, and high schools in the area as well as parks, libraries, and other public facilities.

Policy C2-2.5
Continue coordination of bicycle route planning and implementation with adjacent jurisdictions and regional agencies.

Policy C2-2.6
Encourage design of new streets with the potential for Class I or Class II bicycle routes that separate the automobile, bicycle, and pedestrian to the maximum extent feasible.

Policy C2-2.7
Although Hillcrest Street is closed between Imperial Avenue and Imperial Highway to allow emergency vehicular access only, ensure that the link in the Master Plan of Bicycle Routes is maintained, via the Hillcrest Street right-of-way or any appropriate alternative route.

Policy C2-2.8
Evaluate bikeway system links with the Metro Green Line rail stations and improve access wherever feasible.

Objective C2-3 Ensure the provision of a safe and efficient transit system that will offer the residents, workers, and visitors of El Segundo a viable alternative to the automobile.

Policy C2-3.1
Work closely with the Los Angeles County Metropolitan Transportation Authority (MTA), Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA), and private businesses to expand and improve the public transit service within and adjacent to the City.

Policy C2-3.2
Ensure that transit planning is considered and integrated into all related elements of City planning.

Policy C2-3.3
Evaluate and implement feeder bus service through the City where appropriate. Feeder bus service could potentially take commuters from the fixed transit services (rail and bus) in the eastern portion of the City to the industrial and commercial areas to the west. In addition, midday shuttling of workers east of Sepulveda Boulevard to the Downtown retail area should also be maintained.

Policy C2-3.4
Pursue potential Proposition A and Proposition C funds for bus transit shelters, signing, advertising, and bus turnouts to encourage bus ridership.

Policy C2-3.5
Continue the Dial-a-Ride operation and City subsidy to serve all residents of El Segundo, especially the elderly and handicapped.

Policy C2-3.6
Continue to support the Downtown Lunchtime shuttle operation.

Policy C2-3.7
Explore the feasibility of using excess government right-of-way, purchased property, or land use arrangements for multiple use of existing facilities, in order to establish or construct park-and-ride services of benefit to El Segundo residents and employees.

Policy C2-3.8
Encourage the implementation of park-and-ride facilities proximate to the I-405 and I-105 Freeways for shuttle service into El Segundo.

Policy C2-3.9
Investigate all MTA programs which may be beneficial to the City.

Policy C2-3.10
Encourage the MTA to provide bike storage facilities at the Metro Green Line rail stations.

Objective C2-4 Ensure the use of Transportation System Management (TSM) measures throughout the City, to ensure that the City's circulation system is as efficient and cost effective as possible.

Policy C2-4.1
Establish and maintain a citywide traffic count program to ensure the availability of data needed to identify necessary operational improvements to the roadway system.

Policy C2-4.2
Continue to increase operational efficiencies of the transportation system by implementing all appropriate Transportation System Management (TSM) measures, including but not limited to improving design standards, upgrading and coordination of traffic control devices, controlling on-street parking, and using sophisticated electronic control methods to supervise the flow of traffic.

Objective C2-5 Ensure the use of Transportation Demand Management (TDM) measures throughout the City, where appropriate, to discourage the

single-occupant vehicle, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.

Policy C2-5.1
Ensure that Transportation Demand Management (TDM) measures are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

Policy C2-5.2
Coordinate activities with neighboring jurisdictions and the El Segundo Employers Association (ESEA) to optimize the effectiveness of Transportation Demand Management (TDM) activities.

Policy C2-5.3
Encourage the provision of preferential parking for high occupancy vehicles wherever possible.

Goal C3: Development of Circulation Policies that are Consistent with other City Policies

Develop a balanced General Plan, coordinating the Circulation Element with all other Elements, ensuring that the City's decision making and planning activities are consistent among all City departments.

Objective C3-1 Ensure that potential circulation system impacts are considered when the City's decision makers and staff are evaluating land use changes.

Policy C3-1.1
Require all new development to mitigate project-related impacts on the existing and future circulation system such that all Master Plan roadways and intersections are upgraded and maintained at acceptable levels of service through implementation of all applicable Circulation Element policies. Mitigation measures shall be provided by or paid for by the project developer.

Policy C3-1.2
The minimum acceptable level of service (LOS) at an intersection is LOS D. Intersections operating at LOS E or F shall be considered deficient. If traffic caused by a development project is forecast to result in an intersection level of service change from LOS D or better to LOS E or F, then the development impact shall be considered

significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS E or F, the impact shall be considered significant.

Policy C3-1.3
Limit intersection improvements to feasible improvements that do not affect buildings, freeway supports, or railroad rights-of-way. Such improvements should not include more than three left-turn lanes, four through lanes, and two right-turn lanes on any approach to an intersection

Policy C3-1.4
Encourage development projects that effectively integrate major transportation facilities with land use planning and the surrounding environment. These joint uses will obtain economic and aesthetic benefits of coordinated design, achieve land conservation in space-short urban areas of El Segundo, and maintain neighborhood continuity in built-up areas affected by future major transportation routes.

Policy C3-1.5
Ensure that transit planning is considered and integrated into all related elements of City planning.

Policy C3-1.6
Apply planning principles and Circulation Element goals, objectives, and policies should apply consistently to all land uses in the City.

Policy C3-1.7
Require submittal and implementation of a Transportation Management Plan (TMP) for all projects within the Urban Mixed-Use area, and encourage a TMP for all projects within the northeast quadrant.

Policy C3-1.8
Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.

Policy C3-1.9
Ensure that the driveway stacking distance for multi-family housing is evaluated during the development review process.

Objective C3-2 Ensure the consideration of the impacts of land use decisions on the City's parking situation.

Policy C3-2.1
Ensure the provision of sufficient on-site parking in all new development.

Policy C3-2.2
Ensure that the City's parking codes and zoning ordinances are kept up-to-date.

Goal C4: Compliance with all Federal, State, and Regional Regulations

Ensure that the City remains in compliance with all Federal, State, and Regional regulations, remains consistent with the plans of neighboring jurisdictions and thus remains eligible for all potential transportation improvement programs.

Objective C4-1 Cooperate to the fullest extent possible with State, County, and regional planning agencies responsible for maintaining and implementing the Circulation Element to ensure an orderly and consistent development of the entire South Bay region.

Policy C4-1.1
Actively participate in various committees and other planning forums associated with County, Regional, and State Congestion Management Programs.

Policy C4-1.2
Ensure that the City remains in compliance with the County, Regional, and State Congestion Management Programs (CMP) through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes of Sepulveda Boulevard, the I-105 Freeway, and the I-405 Freeway.

Policy C4-1.3
Investigate and evaluate the feasibility and merits of adding more routes that are impacted by external traffic sources, to the County CMP highway system.

Objective C4-2 Ensure that the City's circulation system is consistent with those of neighboring jurisdictions.

Policy C4-2.1
Ensure that new roadway links are constructed as designated in the Circulation Element and link with existing roadways in neighboring jurisdictions to allow efficient access into and out of the City.

Policy C4-2.2
Carefully assess adjacent local agencies' plans to ensure compatibility across political boundaries. This does not imply that such compatibility is a requirement for adoption of the Circulation Element.

Policy C4-2.3
Continuously monitor and evaluate Los Angeles International Airport (LAX) master planning and evaluate the impacts of LAX on the City's Circulation Element.

Policy C4-2.4
Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.

Objective C4-3 Establish the City's short-term (5-year) Capital Improvement Program (CIP) consistent with the Circulation Element and the entire General Plan, and ensure that the CIP incorporates adequate funding for the City's circulation needs.

Policy C4-3.1
Identify and evaluate potential revenue sources for financing circulation system development and improvement projects.

Policy C4-3.2
Update the City's 1996 Traffic Congestion Mitigation Fee Program, to reflect changes in planned improvements requiring funding changing needs and changes in the construction cost index.

ATTACHMENT 5

Chapter 2
NOISE AND VIBRATION

7-2-1: DECLARATION OF POLICY:

It is hereby declared to be the policy of the City to prohibit unnecessary, excessive and annoying noises and vibrations from all sources subject to its police power. Therefore, the City Council does ordain and declare that creating, maintaining, causing or allowing to be created, caused or maintained, any noise or vibration in a manner prohibited by or not in conformity with the provisions of this Chapter, is a public nuisance as well as an infraction and shall be punishable as such. (Ord. 1242, 1-16-1996)

7-2-2: DEFINITIONS:

As used in this Chapter, unless the context otherwise clearly indicates, the words and phrases used are defined as follows:

"A" WEIGHTED SOUND LEVEL (dBA): The total sound level in decibels of all sound as measured with a sound level meter with a reference pressure of twenty (20) micro-pascals using the "A" weighted network scale at slow response. The unit of measurement shall be defined as dBA.

AMBIENT NOISE LEVEL: The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources at the location and approximate time at which a comparison with an intrusive noise is to be made.

CONSTRUCTION: Any site preparation, grading, demolition, assembly, erection, repair, alteration, or similar action, for or of public or private rights of way, structures, utilities or similar property.

DECIBEL (dB): A unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is twenty (20) micro-pascals.

EMERGENCY MACHINERY, VEHICLE, WORK OR ALARM: Any machinery, vehicle, work or alarm used, employed, performed or operated in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

FIXED NOISE SOURCE: A stationary device which creates sounds while fixed or motionless including, but not limited to, residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment.

IMPULSIVE NOISE: A noise of short duration usually less than one second and of high intensity, with an abrupt onset and end.

INTRUSIVE NOISE LEVEL: The total sound level, in decibels (dBA), created, caused, maintained or originating from an alleged offensive source measured at a specific location while the alleged offensive source is in operation.

NOISE: Any sound which annoys or disturbs humans of normal sensitivity or which causes or tends to cause an adverse psychological or physiological effect on humans of normal sensitivity.

NOISE CONTROL OFFICER: The Director of Community, Economic and Development Services.

RESIDENTIAL PROPERTY: A parcel of real property which is developed and used either in part or in whole for residential purposes.

SOUND AMPLIFICATION EQUIPMENT: Any device which produces, reproduces, or amplifies sound.

SOUND LEVEL METER: An instrument meeting American National Standard Institute's Standard S1-4-1971 or most recent revision thereof for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

VIBRATION: Mechanical motion of the earth or ground, building, or other type of structure induced by the operation of any mechanical device or equipment. (Ord. 1242, 1-16-1996; amd. Ord. 1315, 1-18-2000)

7-2-3: SOUND LEVEL MEASUREMENT CRITERIA:

Any sound level measurement made pursuant to the provisions of this Chapter shall be measured with a sound level meter using the "A" weighted scale at slow response for continuous sound levels or at fast response for impulsive sounds. (Ord. 1242, 1-16-1996)

7-2-4: NOISE STANDARDS:

No person shall, at any location within the City, create any noise, nor shall any person allow the creation of any noise within the person's control on public or private property (hereinafter "noise source"), which causes the noise level when measured on any other property (hereinafter "receptor property"), to exceed the applicable noise standard, except as set forth in subsection C1 of this Section.

A. Residential Property: Five (5) dBA above the ambient noise level.

B. Commercial and Industrial Property: Eight (8) dBA above the ambient noise level.

C. Adjustments:

1. Increases to the noise standards as set forth in subsections A and B of this Section may be permitted in accordance with the following:

NOISE STANDARDS ADJUSTMENTS

Permitted Increase (dBA)	Duration of Increase (minutes)*
0	30
5	15
10	5
15	1
20	less than 1

* Cumulative minutes during any one hour.

2. If the receptor property is located on a boundary between two (2) different noise zones, the lower noise level standard applicable to the quieter zone shall apply. (Ord. 1242, 1-16-1996)

7-2-5: NOISE LEVEL MEASUREMENT:

The location selected for measuring exterior noise levels shall be at any point on the receptor property, and at least four feet (4') above the ground and five feet (5') from the nearest structure or wall. Interior noise measurements shall be made within the receptor residential unit. The measurements shall be made at a point at least four feet (4') from the wall, ceiling or floor nearest the noise source with windows and doors in a closed position. (Ord. 1242, 1-16-1996)

7-2-6: LOUD, UNUSUAL AND UNNECESSARY NOISES PROHIBITED:

Consistent with other provisions of this Chapter, and in addition thereto, it shall be unlawful for any person to wilfully make, produce, suffer or allow to be produced by human voice, machine, animal, or device, or any combination of same, any loud, unusual, or unnecessary noise which disturbs the peace, quiet, and comfort of any neighborhood, or which causes discomfort or annoyance to any reasonable person of normal sensitivity in the area. (Ord. 1242, 1-16-1996)

7-2-7: STANDARDS; CRITERIA:

The standards which shall be considered in determining whether a violation of the provisions of Section 7-2-6 of this Chapter exists shall include, but shall not be limited to, the following criteria:

A. The frequency of the noise;

B. The intensity of the noise;

C. Whether the nature of the noise is usual or unusual;

D. The ambient noise level;

E. The proximity of the noise to residential sleeping facilities;

F. The nature and zoning of the area within which the noise emanates;

G. The density of the inhabitation of the area within which the noise emanates;

H. The time of the day or night the noise occurs;

I. The duration of the noise;

J. Whether the noise is recurrent, intermittent or constant; and

K. Whether the noise is produced by a commercial or noncommercial activity. (Ord. 1242, 1-16-1996)

7-2-8: SPECIFIC PROHIBITIONS:

The following acts, and the causing thereof, are declared to be in violation of this Chapter if they occur in such a manner as to disturb the peace, quiet and comfort of any reasonable person of normal sensitivity residing in the area; and occur:

A. Between The Hours Of 10:00 P.M. And 7:00 A.M:

1. Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier, or similar device which produces, reproduces or amplifies sound.

2. Using or operating any loudspeaker, public address system or similar device.

3. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects.

4. Repairing, building, rebuilding, adjusting or testing any motor vehicle.

B. Between The Hours Of 8:00 P.M. And 7:00 A.M:

1. Refuse Collection Vehicles:

   a. Collection of refuse with a collection vehicle in a residential area or within five hundred feet (500') thereof;

   b. Operation or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse in a residential area or within five hundred feet (500') thereof.

2. Loudspeakers/Public Address Systems: Using or operating for any commercial purpose any loudspeaker, public address system, or similar device on a public right of way or public space.

3. Powered Model: Operating or permitting the operation of powered models. (Ord. 1242, 1-16-1996)

7-2-9: VIBRATION:

Notwithstanding other sections of this Chapter, a person shall not create, maintain or cause any ground vibration which is perceptible, without the use of instruments, to any reasonable person of normal sensitivity at any point on any affected property. (Ord. 1242, 1-16-1996)

7-2-10: EXEMPTIONS:

The following activities shall be exempted from the provisions of this Chapter:

A. School And Park Facilities: Authorized activities conducted on public school grounds and City park facilities, associated with normal operation of the facilities including, but not limited to, school and public athletic and entertainment events.

B. Mechanical Or Electronic Devices: Any mechanical or electronic device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within fifteen (15) minutes of its activation.

C. Public Speaking Or Assemblies: Noncommercial public speaking and public assembly activities conducted on any public space or public right of way without the use of sound amplification equipment.

D. Construction Noise: Noise sources associated with or vibration created by construction, repair, or remodeling of any real property, provided said activities do not take place between the hours of six o'clock (6:00) P.M. and seven o'clock (7:00) A.M. Monday through Saturday, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of sixty five (65) dBA plus the limits specified in subsection 7-2-4C of this Chapter as measured on the receptor residential property line and provided any vibration created does not endanger the public health, welfare and safety.

E. Real Property Maintenance: Noise sources associated with the maintenance of real property, provided said activities take place between the hours of seven o'clock (7:00) A.M. and eight o'clock (8:00) P.M. on any day except Sunday, or between the hours of nine o'clock (9:00) A.M. and eight o'clock (8:00) P.M. on Sunday.

F. Activities Preempted By State Or Federal Law: Any activity to the extent regulation thereof has been preempted by State or Federal law, including, but not limited to, aircraft, motor vehicles, railroads and other interstate carriers. (Ord. 1242, 1-16-1996)

7-2-11: PERMITS:

A. Circumstances For Issuance: The noise control officer may grant amplified sound or noise permits to applicants who cannot comply with the requirements of this Chapter if the applicant can show that compliance with this Chapter would constitute an unreasonable hardship on the applicant, on the community as a whole, or on other individuals, or that compliance would be impractical. If the noise control officer determines that sufficient controversy may exist regarding an application, the application shall be referred to the City Council. A permit shall not be granted to waive compliance with Section 7-2-15 of this Chapter.

B. Determination: In determining whether to grant or deny the application, the noise control officer shall balance the hardship to the applicant, the community as a whole, and other individuals, of not granting the permit against the adverse impact on the health, safety, and welfare of persons affected; the adverse impact on property affected; and any other adverse impacts of granting the permit. Applicants for permits may be required to submit any information the noise control officer may reasonably require. The noise control officer shall retain on public file a copy of the decision which shall include a statement of the reason for the decision.

C. Granting Of Permit; Conditions: Permits shall be granted by written notice to the applicant containing all necessary conditions, including a time limit on the permitted activity. The time limit shall be for a maximum time period not to exceed one year. The permit shall not become effective until the applicant agrees to all conditions. In the case of noncompliance with any condition imposed, the permit shall immediately terminate, and the noise source shall be subject to the provisions of this Chapter.

D. Application For Change Of Conditions: Application for extension of time limits specified in subsection C of this Section or for modification of other substantial conditions shall be treated as an initial application for a permit.

E. Guidelines: The noise control officer may issue guidelines defining the procedures to be followed in applying for a permit.

F. Activities Requiring Permit: Unless otherwise specifically exempted by this Chapter, permits shall be required for all exterior activities which utilize amplified sound; such as, but not limited to, outdoor gatherings, dances, shows, performances or carnivals.

G. Appeal: An appeal of the decision of the noise control officer with respect to any amplified sound or noise permit may be made to the City Council in writing within ten (10) days after the action of the noise control officer has been communicated to the applicant. (Ord. 1242, 1-16-1996)

7-2-12: ENFORCEMENT:

A. Responsible Official: The noise control officer is directed to enforce the provisions of this Chapter. During times the noise control officer is not on duty, enforcement shall be the responsibility of the Chief of Police.

B. Interference: No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this Chapter while such person is engaged in the performance of his duty. (Ord. 1242, 1-16-1996)

7-2-13: IMMEDIATE THREATS TO HEALTH AND WELFARE:

A. Order Immediate Halt: The noise control officer may order an immediate halt to any sound which exposes any person to continuous sound levels in excess of those shown in Table A in subsection D of this Section, or impulsive sounds in excess of Table B in subsection D of this Section. Within two (2) working days following issuance of such an order, the noise control officer shall apply to the appropriate court for an injunction to replace the order.

B. Exceptions To Issuance Of Order: No order pursuant to subsection A of this Section shall be issued if the only persons exposed to sound levels in excess of those listed in Tables A and B of subsection D of this Section are exposed as a result of:

1. Trespass;

2. Invitation upon private property by the person causing or permitting the sound; or

3. Employment by the person or a contractor of the person causing or permitting the sound.

C. Remedial Action: Any person subject to an order issued by the noise control officer pursuant to this Section shall comply with such order until:

1. The sound is brought into a compliance with the order, as determined by the noise control officer; or

2. A judicial order has superseded the noise control officer order.

D. Prohibited Sound Level: The sound levels which pose an immediate threat to health and welfare are:

TABLE A

CONTINUOUS SOUND LEVELS
(Measured At 50 Feet Or 15 Meters)

Sound Level Limit (dBA)	Duration
90	8 hours
95	4 hours
100	2 hours
105	1 hour
110	30 minutes

TABLE B

IMPULSIVE SOUND LEVELS
(Measured At 50 Feet Or 15 Meters)

Sound Level Limit (dB)	Number of Repetitions Per 24-Hour Period
145	1
135	10
125	100

(Ord. 1242, 1-16-1996)

7-2-14: USE OF POLICE AT PARTIES; SECOND RESPONSE:

A. Threat To Public Peace: When a party or gathering occurs at a premises and a police officer at the scene determines that there is a threat to the public peace, health, safety or general welfare, the person in charge of the premises and the person responsible for the event, or if either of those persons is a minor, then the parents or guardians of that minor, will be held jointly and severally liable for the cost of providing police personnel on special security assignment over and above the services normally provided by the Department.

B. Special Security Assignment: The police personnel utilized during a second response after a first warning, to control the threat to the public peace, health, safety or general welfare, shall be deemed to be on special security assignment over and above the services normally provided.

C. Costs Assessed: The costs of such special security assignment may include minor damages to City property and/or injuries to City personnel. The fee charged shall be fixed and established from time to time by resolution of the City Council and shall include a minimum charge. These costs are in addition to any penalties or other remedies set forth in this Chapter and the City reserves its legal options to elect any other legal remedies when said costs or damage exceed the amount fixed and established. (Ord. 1242 , 1-16-1996)

7-2-15: PENALTY; ADDITIONAL REMEDY:

A. Violation; Penalty; Infraction:

1. Any person convicted of an infraction for a violation of this Chapter is punishable by a fine of one hundred dollars ($100.00) per violation.

2. Each such person shall be guilty of a separate offense if, after receiving a written warning or infraction citation, the person commits or continues to commit a violation of this Chapter.

3. If a person is found to be in violation of this Chapter, the noise control officer shall issue a written warning of the violation. If the person continues to be in violation of this Chapter, the noise control officer shall issue an infraction citation. Every violation within a thirty (30) day period after the first written warning is issued shall be considered an infraction.

B. Public Nuisance: Notwithstanding the provisions of subsection A of this Section, as an additional remedy, any violation of the provisions of this Chapter, which causes discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health, or peace of residents in the area, shall be deemed, and is declared to be, a public nuisance and may be subject to abatement summarily in the manner provided in Chapter 1 of this Title. (Ord. 1242, 1-16-1996)

ATTACHMENT 6

Both Southern Pacific and Santa Fe Railroads operate daily to Chevron and other industries within El Segundo. Although this is a periodic source of noise rather than continuous, like vehicular traffic, railroads typically produce high magnitudes of noise. Currently, the railroads in El Segundo do not travel through residential areas; however, any land use changes must consider these railroad lines as a significant source of noise.

In addition to mobile sources, stationary noise sources, particularly from industry, contribute to ambient noise levels in the City. General population noise and the short-term noise generated by construction are also important sources.

Along with the identification of noise sources and noise impacted areas, planning for new development and transportation should always consider noise-sensitive land uses (schools, hospitals, etc.). The City of El Segundo has adopted exterior and interior noise standards for various land uses and conditions which are contained in Resolution No. 3691 and in Chapter 9.06 of the Municipal Code.

In light of the existing and foreseeable noise environment in the City of El Segundo, and pursuant to Section 65302 (g) of the California Government Code, the City has adopted a goal with policies and programs designed to minimize the effects of these multiple sources of noise.

Goal N1: Provision of a Noise-Safe Environment

Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise.

Objective N1-1

It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Policy N1-1.1

Continue to work for the elimination of adverse noise sources, especially from Los Angeles International Airport West Imperial Terminal, and from helicopter and aircraft flyovers.

Program N1-1.1A

The City shall implement the Airport Abatement Policy and Program (City Council Resolution No. 3691, adopted May 21,

1991, or any future revisions thereto) in its efforts to minimize noise impacts caused by LAX.

Policy N1-1.2
Play an active role in the planning process associated with preparation of the Los Angeles International Airport Master Plan.

Program N1-1.2A
Encourage the City of Los Angeles Department of Airports to adopt and maintain a passenger service level goal and implementation program which will minimize the noise impacts to the City of El Segundo.

Policy N1-1.3
Continue to work with the City of Los Angeles Department of Airports to reduce the noise-impacted area around Los Angeles International Airport to zero.

Program N1-1.3A
Where feasible, the City should use noise barriers to mitigate noise problems that cannot be reduced at their source. Sound walls, berms, and dense landscaping shall be used to reduce exterior noise to levels specified in the City's Noise Ordinance.

Program N1-1.3B
Encourage the implementation of an Airport Mitigation Monitor to be funded by the City of Los Angeles, for the purpose of monitoring the negative impacts of LAX on the City of El Segundo.

Program N1-1.3C
Encourage the City of Los Angeles Department of Airports to pay the additional costs for new residential construction to provide acoustical treatment to mitigate noise impacts to a level that meets land use compatibility standards.

Policy N1-1.4
Consider noise impacts from traffic arterials and railroads, as well as aircraft, when identifying potential new areas for residential land use.

Program N1-1.4A
All plans submitted for development review shall depict the Department of Airport's latest available noise contours for LAX and citywide noise contours.

Policy N1-1.5
Encourage state inspection and enforcement of noise standards for motor vehicles, including those involved in public transit.

Program N1-1.5A
To the degree feasible, monitor noise levels along Sepulveda Boulevard (State Route 1) and, if warranted, work with the state to ensure inspection and enforcement of noise standards for motor vehicles, including public transit.

Policy N1-1.6
Encourage the State Department of Transportation (DOT) to conduct an active highway noise abatement program with scenic/aesthetic consideration for Sepulveda Boulevard (State Route 1).

Program N1-1.6A
To the degree feasible, the City shall participate with DOT in the development of a highway noise abatement program for Sepulveda Boulevard (State Route 1).

Policy N1-1.7
Monitor California Department of Transportation and Los Angeles County Transportation Commission noise abatement measures aimed at minimizing noise impacts associated with the I-105 Freeway and the Metro Rail Green Line.

Program N1-1.7A
Existing and projected noise environments shall be evaluated when considering alterations to the City circulation system.

Program N1-1.7B
Where feasible, the City shall provide adequate setbacks or require noise abatement barriers along the I-105 Freeway in order to protect new development from noise levels above exterior standards.

Program N1-1.7C
All new roadways shall incorporate the following noise mitigation measures into their design: alignment, barriers, vertical profile, and lateral separation.

Policy N1-1.8
Continue to develop zoning, subdivision, and development controls to prevent future encroachment of noise-sensitive uses into present or planned industrial or transportation system noise-impacted zones where adverse effects cannot be adequately mitigated.

Policy N1-1.9
Require review of all new development projects in the City for conformance with California Airport Noise Regulations and California Noise Insulation Standards (CCR Title 24) to ensure interior noise will not exceed acceptable levels.

Program N1-1.9A
All new habitable residential construction in areas of the City with an annual CNEL of 60 dBA or higher shall include all mitigation measures necessary to reduce interior noise levels to minimum state standards. Post construction acoustical analysis shall be performed to demonstrate compliance.

Policy N1-1.10
Continue to develop and implement City programs to incorporate noise reduction measures into existing residential development where interior noise levels exceed acceptable standards.

Objective N1-2 It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1
Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A
Address noise impacts in all environmental documents for discretionary approval projects, to insure that noise sources meet City Noise Ordinance standards. These sources may include: mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

Program N1-2.1B
The City shall establish criteria for determining the type and size of projects that should submit a construction-related noise mitigation plan. Noise mitigation plans shall be submitted to the City Engineer for his review and approval prior to issuance of a grading permit. The plan must display the location of construction equipment and how this noise will be mitigated. These mitigation measures may involve noise suppression equipment and/or the use of temporary barriers.

Program N1-2.1C
The City shall strictly enforce the El Segundo Municipal Code's time-dependent noise standards for stationary sources. Two of the

major sources which shall be closely monitored are industrial facilities and construction activities.

Objective N1-3 It is the objective of the City of El Segundo that the City maintain intergovernmental coordination and public information programs which are highly efficient in their noise abatement efforts.

Policy N1-3.1
Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Program N1-3.1A
Noise regulations and standards shall be developed or updated in conformance with the findings of the General Plan.

Program N1-3.1B
The City shall conduct an educational campaign to inform the public of the consequences of noise and the actions each person can take to help reduce noise. The City shall provide, if appropriate, educational material, group presentations, news releases, studies, and reports to raise public awareness of the adverse effects of noise.

Policy N1-3.2
Work to remove non-conforming land uses (mixed usage such as residential uses in commercial or industrial land use designations) which result in noise incompatibility.

Program N1-3.2A
The City shall develop strategies for the orderly implementation of mitigation measures for present noise-impacted areas, such as residential uses adjacent to the industrial uses.

Policy N1-3.3
Employ effective noise mitigation techniques through appropriate provisions in the building code, subdivision procedures, and zoning and noise ordinances.

Program N1-3.3A
The City shall review and, if necessary, revise the City Noise Ordinance to ensure that proper regulations are being enforced to protect City residents from excessive noise levels from stationary noise sources.

Program N1-3.3B
Noise-related zoning regulations shall be revised to be consistent with the Noise Element.

Program N1-3.3C
When appropriate, the City shall allocate noise impact mitigation costs to the agency or party responsible for the noise incompatibility.

Program N1-3.3D
The City shall use police power to vigorously enforce existing laws relative to noise.

Policy N1-3.4
Urge continued federal and state research into noise problems and recommend additional research programs as problems are identified.

Program N1-3.4A
The City shall apply for the technical, procedural, and funding assistance available at the state and federal level for noise reduction measures.

Policy N1-3.5
Support a continuous effort to evaluate noise levels in the City of El Segundo and to reduce unacceptable noise levels through the planning process.

Program N1-3.5A
The City shall join adjacent jurisdictions (e.g. City of Los Angeles, City of Hawthorne, City of Manhattan Beach) and other agencies involved in noise mitigation in a cooperative effort to lessen adverse impacts and reduce noise incompatibilities across city boundaries.

Alliance for a Regional Solution to Airport Congestion
322 Culver Boulevard, #231 Playa del Rey, CA 90293
info@regionalsolution.org

October 30, 2012

Mr. Herb Glasgow
Senior City Planner, City of Los Angeles
Los Angeles World Airports
1 World Way, Room 218
Los Angeles, CA 90045

Re: West Aircraft Maintenance Project SCH# 2012091037 NOP

Dear Mr. Glasgow,

We appreciate the opportunity to comment on this Notice of Preparation for the West Aircraft Maintenance Area (WAMA).

ARSAC strongly supports the modernization of LAX to improve the competitive position of the Southern California region and to maintain excellence in support of the customer airlines at LAX. With that in mind, we present these comments to ensure integrity in the project development and evaluation process.

We have a general concern about the integrity of the approval mechanisms in place by LAWA used for this and other projects in process at LAX. Each project environmental review is tiered to an Alternative D Master Plan EIR which does not contain or reference many of the elements of these projects. Alternative D Master Plan is so fragmented and convoluted by a lack of specificity that it provides neither a road map for future growth nor insight into what is being planned. It appears to be incremental expansion run amuck instead of effective planning.

We ask that strict mitigation measures for the WAMA, especially the Ground Run-up Enclosure (GRE) area be identified to minimize noise and pollution including.

1. A fully enclosed GRE, or "hush house", such as that in use at Tokyo Narita Airport.
2. Ensure operating aircraft engine noise do not face El Segundo, Playa del Rey or Westchester.
3. Ensure use of ground electrical power so that aircraft do not have to use their APU's.
4. Install noise monitoring equipment, and clearly identify and enforce rules and penalties for noise violations in the maintenance area.
5. Validate a Contamination prevention plan and a response plan for WAMA structures and enforce penalties for contamination.
6. Provide filtering of all runoff and wastewater.

Are the proposed WAMA facilities to replace existing maintenance facilities? If so, which ones? Who will be the tenants? Will the WAMA be under exclusive leases (e.g. to one airline or group of airlines)?

What other locations did LAWA consider for WAMA? Why were those locations rejected? How does this integrate with the cross field taxiways R and S and their build/repair schedule?

Under the Noise Variance issued by the California Department of Transportation (CalTrans), LAWA is obligated to install three GRE by 2015. Will LAWA incorporate its noise variance obligations into the EIR for the WAMA to show how this will be met? What are the locations LAWA planned for the second and third GRE?

Engine run-ups generate loud bursts of jet noise audible in El Segundo, Westchester and Playa del Rey. Will LAWA add fully enclosed Ground Run-up Enclosure (GRE) similar to the fully enclosed hangar GRE in use at Tokyo Narita Airport (NRT)? Please compare the noise suppression abilities of a fully enclosed GRE versus the LAWA proposed GRE.

The Continental Airlines hangar site is known to be contaminated. This is the same location used to prepare the Space Shuttle Endeavour for its journey across Westchester, Inglewood and South Los Angeles to its final home at the California Science Center. What are the containments at this location? What is LAWA doing to clean-up the containments? Will any of the containments used at the Continental hangar also be used at WAMA? What mitigation measures will LAWA put in place at WAMA to prevent similar contamination? What construction techniques, operational procedures and safety training will be used to prevent contamination? What are the emergency spill response plans?

In the proposed site plan, there is a proposed storm water collector along the western edge of the site. In aircraft maintenance operations, many hazardous substances are used, including, but not limited to, aviation kerosene, oils, lubricants, solvents and paints. Will LAWA filter all wastewater and all storm runoff water to prevent soil and water contamination?

What will be the hours of operation of the hangars? What types of work will be performed and during what time frames during a 24 hour day?

In the LAX Master Plan and the LAX Coalition settlement agreements, LAWA committed to gate electrification at the passenger terminals and cargo areas. Will the hangars, adjoining ramp area and GRE be supplied with ground electrical power? Has LAWA completed gate electrification at all LAX terminals? If not, when will the gate electrification work be completed? Please provide a list of gates electrified. Has LAWA completed ground power outlets at all LAX cargo terminals? If not, when will the cargo electrification work be completed? Please provide a list of cargo ramp spaces electrified. Has LAWA completed ground power outlets at all LAX maintenance? If not, when will the maintenance area electrification work be completed? Please provide a list of maintenance area spaces electrified.

We are concerned about ingress and egress. Ground traffic ingress and egress for the proposed site plan shows an entrance and exit to the hangar parking lot where traffic going north on Pershing Drive dumps onto World Way West. Traffic extends south on Pershing Drive and exiting on World Way West also dumps into the traffic merging from Pershing North. How will traffic going south on Pershing and exiting on World Way West safely access the hangar parking lot? The exit from the WAMA parking lot appears to force drivers to continue east on World Way West and then proceed to some point to turnaround to go west again. Where will this turnaround point be located? Will drivers be able to immediately turn left out of the WAMA parking lot? Will the entrance to the proposed WAMA parking be placed before or behind the existing vehicle checkpoint on World Way West?

How will lighting in this area be controlled? Considering that the proposed project site is near an active runway, what measures has LAWA considered to prevent lighting from distracting pilots landing,

taxiing or taking off on the south runways? In westerly operations? In easterly operations? In over-ocean operations? How will LAWA conceal lighting in this area from radiating out to residences in El Segundo, Playa del Rey and Westchester?

Is the proposed WAMA site home to any endangered species such as the El Segundo Blue Butterfly or the Riverside Fairy Shrimp? Are there other plants, animals, insects or organisms likely to be affected by the proposed project?

Please contact me with any questions: (213) 675-1817 or denny@welivefree.com

Sincerely,

Denny Schneider
President, Alliance for a Regional Solution to Airport Congestion

From: Joyce Dillard [mailto:dillardjoyce@yahoo.com]
Sent: Tuesday, October 30, 2012 4:13 PM
To: GLASGOW, HERB
Subject: Comments to LAWA West Aircraft Maintenance Area Project due 10.30.2012

Under Hydrology and Water Quality, please address the Total Daily Maximum Load TMDL Pollutant Loads, Monitoring and Mitigation.

Two hundred (200) year floodplains are being addressed by the Department of Water Resources. Please cover in the Draft EIR. Also address Sea-Level Rise and potential Flooding.

Joyce Dillard

P.O. Box 31377

Los Angeles, CA 90031

LAX
Los Angeles
World Airports

WRITTEN COMMENT FORM

SCOPING MEETING FOR THE WEST AIRCRAFT MAINTENANCE AREA PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

The purpose of the scoping process and the meeting is to hear from the public and responsible agencies what significant environmental issues and alternatives they think should be analyzed in the Draft EIR for the West Aircraft Maintenance Area Project. Written comments can be submitted at the Public Scoping meeting or mailed no later than 5:00 p.m. on **October 30, 2012**. In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR for the proposed Project. Your comments will then be considered during preparation of the Draft EIR.

Date: OCT 22, 2012

Name: CHERYL FRICK

Organization:

Address: 770 W. IMPERIAL AVE #44 EL SEGUNDO, CA 90245

Comment:

LAX West Aircraft Maintenance Area Project
Comments:
770 W. Imperial Ave is the property that will be directly impacted by this project. Both quality of Life and Property Values for 770 W. Imperial Ave, El Segundo CA will be significantly impacted and my hope is you reconsider and come up with an alternative plan that will not impact the home owners in this building and in the area.
Main Concerns:

1) Air Quality
Expose our building and other multiple family housing/homeowners in the area to substantial pollutant concentrations
Create objectionable odors affecting a substantial number of people.
Conflicts with/obstructs SCAQMD air quality mgmt plan
Violate air quality standards

2) Noise
Exposure/generation of noise in excess of standards including excessive groundborne vibration/noise levels.
A substantial permanent increase in ambient noise levels
Within an airport land use plan, within 2 miles the project would expose people residing or working in the project area to excessive noise levels.

As noted in Mandatory Findings of Significance, the project has impacts that are individually limited but cumulatively considerable and worse:
The project will have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly. I have lived at 770 W. Imperial Ave for 18 years. I own my unit and I ask that you reconsider for these very strong reasons and not proceed with this project.

Please di
mail to:

All comments must be received no later than 5:00 p.m., October 30, 2012.

This form can simply be folded and placed in a mailbox. Please remember to add postage.

Edward G. Keating
8707 Falmouth Ave. #216
Playa del Rey, CA
90293-8297

September 22, 2012

Dear Mr. Glasgow:

As a neighbor of Los Angeles International Airport, I wanted to convey to use the positive impression I have of the LAX West Aircraft Maintenance Area Project, in particular, and the LAX Master Plan, in general.

The proposed West Aircraft Maintenance Area Project sounds as if it will bring increased business and jobs to LAX while simultaneously improving airport safety and operations by improving the quality and timeliness of aircraft maintenance.

On a related note, I have been very impressed by LAX's proactive steps to keep neighbors informed about the ongoing Northside Plan Update. Like the West Aircraft Maintenance Area Project, the Northside Plan Update sounds to me as if it will bring increased jobs to the region and increase property values for those of us proximate to it. LAX has clearly bent over backward to keep neighbors informed and be responsive to concerns. I appreciate those efforts.

Sincerely,

Edward G. Keating

Edward G. Keating
8707 Falmouth Ave. Unit 216
Playa Del Rey, CA 90293

LOS ANGELES CA 900

24 SEP 2012 PM 4 L

Herb Glasgow
Chief of Airport Planning
City of Los Angeles, LAWA
1 World Way, Room 218B
Los Angeles, CA
90045

90045$5603

From: Vittorio Mendola [mailto:vmendola1@me.com]
Sent: Tuesday, October 30, 2012 5:48 PM
To: GLASGOW, HERB
Subject: Lax

Dear Mr.Glasgow!

Thank you to listening. I app resisted that you personally answered to my call.
As I was telling you Sir in our conversation,myself my husband and our neighbors we are deeply Concerned about the lax expansions.
We live here in Playa del Rey science 1983. this was a little very quite community.
over the years it get noisier and noisier now we have air traffic at night many times from 11pm to 2am very frequently.
the car traffic is almost like on the 405 fwy.
I going every morning on Pershing to imperial highway and traffic is very heavy. Mostly Trucks With workers who are going to work to the airport.
The air is polluted all ready, the noise level is many times almost unbearable.
Night time to sleep is very difficult. sSir, If it will be add an other runway, this community will go to be ruined for ever.Our life will be destroyed
Thousand of people life will be ruined for ever.
we are not rich we love where we live, please do not distort it.
Building a new service station for repairing aircrafts(AA) is make the noise level and car traffic Enormously. LAX is all ready over expended and we really hope you we mean the city and the-planning comity not going to destroy our life.

Thank you Mr. Glassgow
A concerned citizen

mrs mr Vittorio Mendola
8172 Manitoba str.#2
Playa Del Rey, California, 90293

310 823 1587

LAX
Los Angeles
World Airports

WRITTEN COMMENT FORM

SCOPING MEETING FOR THE WEST AIRCRAFT MAINTENANCE AREA PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

The purpose of the scoping process and the meeting is to hear from the public and responsible agencies what significant environmental issues and alternatives they think should be analyzed in the Draft EIR for the West Aircraft Maintenance Area Project. Written comments can be submitted at the Public Scoping meeting or mailed no later than 5:00 p.m. on **October 30, 2012**. In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR for the proposed Project. Your comments will then be considered during preparation of the Draft EIR.

Date: Oct 4, 2012

Name: Rosy Stefanatos

Organization:

Address: 770 W Imperial Ave #6 El Segundo 90245

Comment: The homeowners at 770 W Imperial Ave in El Segundo received no mailings or notifications regarding this project. We should not have to find out from the Daily Breeze article. We have 100 units - Everyone should get mailings Unit 1, Unit 2, Unit 3 — 97 Unit 100 Zip 90245 thank you

Please drop completed form into the box marked "COMMENTS" at the October 4, 2012 public meeting or mail to:

Herb Glasgow, Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045

All comments must be received no later than 5:00 p.m., October 30, 2012.

This form can simply be folded and placed in a mailbox. Please remember to add postage.

LAX
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World Airports

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Date: 10/8/2012

Name: Rosy Stefanatos

Organization:

Address: 770 W. Imperial Ave. #108, El Segundo, 90245

Comment: How about some other options from the one location you are proposing? Alternatives? or just maintain status quo?

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Date: 10/4/12

Name: Ryan Knapp

Organization: Resident

Address: 770 W. Imperial Ave 90245
UNIT G8

Comment:
Will: - Property Value decrease?

- Noise Levels increase?

- Polution increase

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Date: 10/4/12

Name: Rosy Stefanatos

Organization: Resident

Address: 710 W. Imperial Ave # 68 El Segundo 90245

Comment:

Why not two planes in and out of GRE maintenance area? Less Noise!!!

Thank you

Please drop completed form into the box marked "COMMENTS" at the October 4, 2012 public meeting or mail to:

Herb Glasgow, Chief of Airport Planning
City of Los Angeles, Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045

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10/04/2012

Example for LAX Noise Monitoring

LAX is a noisy environment. The primary source of noise is the engines of jet aircraft. It is highly desirable for communities surrounding LAX to have stations to monitor this noise. The cost of building and maintaining these stations could be made the responsibility of LAX (LAWA) by requiring them as conditions to any future LAX construction.

What is presented here is a rough draft of ideas and language for such Noise Monitoring. It is intended only to stimulate further thinking.

For example, LAX is currently proposing a 400,000-square-foot joint-use hanger and other structures including a jet engine testing enclosure. The proposed location of this facility would have greatest impact on the northwest corner of El Segundo city. For the sake of simplicity, I will describe a single noise-monitoring installation that would serve that community. This is intended only as an example.

Noise monitoring equipment could be placed on the unused telephone pole at the top of the hill opposite 770 W. Imperial Ave. It would consist of two redundant units. Each unit would have a roughly conical "listening zone" which would encompass the boundaries of LAX. Each unit would be in continuous operation; failure of any unit or disagreement between the units should schedule immediate repair.

Any noise-monitoring unit (NMU) would be connected to the Internet. This would allow LAX, citizens, or any interested party to keep continuous records. Sampling rates are T.B.D. (to be defined).

One interesting quantity to measure might be the Average Loud Aircraft Noise (ALAN). This would typically be caused by the takeoff of heavily laden, four engine jets and would be at its peak for several seconds for each jet. The minimum threshold for qualifying as an ALAN, the appropriate units of measurement, and the duration are all examples of quantities that are T.B.D. An ALAN could be calculated for each day and for other time intervals of interest.

Other interesting quantities to measure might be jet takeoff noise after ALAN has been subtracted, or background noise that is left after all jet takeoff noise has been subtracted (this assumes that one can distinguish a jet-takeoff by its duration and other characteristics).

Thus, one could specify that the noise produced by a jet-engine testing facility must not exceed a certain threshold with respect to ALAN or with respect to background noise, etc. Such thresholds are T.B.D.

The noise produced by any proposed facility at LAX could be estimated before the facility is constructed, and limits, similar to those expressed in the preceding paragraph, could be written into the contract for construction and operation of any proposed facility.

Steve Munson
smunsonsteve@earthlink.net