California Environmental Quality Act

NOTICE OF PREPARATION

To: Responsible or Trustee Agency
Interested Parties

From: City of Los Angeles
Los Angeles World Airports
1 World Way, Room 218
Los Angeles, CA 90045

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Proposed Interim Taxiways Safety Improvement Project (ITSIP)

Project Title: Interim Taxiways Safety Improvement Project

Project Location: Los Angeles International Airport in the City of Los Angeles, County of Los Angeles

The City of Los Angeles – Los Angeles World Airports (LAWA) will be the Lead Agency and will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Interim Taxiways Safety Improvement Project (ITSIP, or "proposed project") at Los Angeles International Airport (LAX).

LAWA, as the Lead Agency, must prepare and distribute a Notice of Preparation (NOP) after it decides to prepare an EIR. LAWA, through the NOP, solicits participation in determining the scope of the EIR from responsible public agencies (those which may have discretionary approval power over the proposed project or an aspect of it), trustee agencies (agencies with jurisdiction over a natural resource held in public trust that the project may affect), and from local governments, regional agencies, private individuals and organizations which may have concerns about the proposed project. This NOP is intended to inform all those parties of LAWA's intent to prepare a draft EIR on the proposed project. The NOP solicits comments regarding the proposed scope and content of the environmental studies and other information that will be included in the EIR. LAWA has prepared this NOP in accordance with the State CEQA Guidelines and the City of Los Angeles CEQA Guidelines.

On receipt of comments on the NOP, LAWA will consider those comments and prepare the draft EIR. The EIR will analyze the potential adverse impacts that are anticipated to result from the proposed project, identify potential mitigation measures where reasonable and feasible, and analyze reasonable and feasible alternatives to the proposed project that could reduce or avoid identified impacts of the proposed project while still feasibly achieving most of the basic project objectives.

LAWA is requesting input from interested government and quasi-government agencies, other organizations and private citizens regarding the scope and content of environmental information to be included in the EIR. In the future, public agencies receiving this notice may need to use the Interim Taxiway Safety Improvement Project

EIR prepared by LAWA when considering their permits or other approvals for the proposed project.

The project description and maps of the proposed project location are attached to the end of this NOP. A discussion of the project's potential environmental effects is contained in the attached Initial Study.

Any public agencies that respond to this Notice are requested, at a minimum, to:

1. Describe significant environmental issues, reasonable alternatives and mitigation measures which they would like to have addressed in the EIR.

2. State whether they are a responsible or trustee agency for the proposed project, explain why, and note the specific project elements that are subject to their regulatory authority.

3. Provide the name, address and phone number of the person who will serve as their point of contact throughout the environmental review process for this project.

Your response to this NOP should be sent at the earliest possible date and must be received by LAWA no later than 5 pm, Monday, July 12, 2010.

Please send your response to Mr. Herb Glasgow, Chief of Airport Planning I, City of Los Angeles, Los Angeles World Airports, 1 World Way, Room 218, Los Angeles, CA 90045.

Signature: Herbert W. Glasgow
Name: Herb Glasgow
Title: Chief of Airport Planning I
Date:
Telephone: 424-646-5180

Proposed Project Description

The proposed Interim Taxiways Safety Improvement Project (ITSIP, or "proposed project") is located on the North Airfield of Los Angeles International Airport (LAX) (refer to Figure 1: Regional Location Map; and Figure 2: LAX, Aerial Photograph) in the City of Los Angeles. During west flow operations, aircraft arriving on Runway 24R primarily use Taxiways Y, Z, and AA, and during east flow operations, aircraft arriving on Runway 6L use Taxiways Y, V and W (refer to Figure 3: LAX Existing North Airfield). The proposed project would replace westbound exits Taxiways Y and Z with new Taxiways AA-1 and Z and would relocate the eastbound exit, Taxiway Y, easterly (refer to Figure 4: ITSIP Proposed Project). It is possible that given operational and other considerations, this project may be phased.

Background Information

The existing North Airfield has two parallel runways (refer to Figure 3: Existing North Airfield). Runway 6R-24L is 10,285 feet long and Runway 6L-24R is 8,925 feet long, and both are 150 feet wide. The runway centerlines are separated by 700 feet. There are six taxiway exits for Runway 6L-24R. There is no centerfield taxiway between the runways. For aircraft landing on Runway 6L-24R, which is the predominant arrival runway on the North Airfield, there are four runway exits available (Taxiways Y, Z, AA, and BB). Note that Taxiways Y and Z cross through the middle third (yellow area) of Runway 6R-24L. Each runway and taxiway is lighted and equipped with navigational aids.

The Los Angeles World Airport (LAWA) and the Federal Aviation Administration (FAA) place runway safety as one of their highest priorities and both continue to work together in a collaborative effort to reduce the potential and likelihood of compromising airfield safety. LAWA is enhancing safety by planning for and implementing long-term and short-term improvements. Related to the long-term improvements at LAX (including the North Airfield), LAWA has conducted a number of evaluations and assessments to identify the most-effective means to enhance safety based on current and future fleet mix and operational characteristics. These assessments include:

- LAX Final Master Plan[1]
- LAX North Airfield Special Peer Review[2]
- Supplemental North Airfield Assessment Reconfiguration Options[3]
- LAX North Airfield Safety Risk Assessment[4]
- Independent Analysis of the LAX North Airfield Alternatives[5]
- Aviation Industry Assessment of the North Airfield[6]
- Los Angeles International Airport North Airfield Safety Study[7]

[1] LAWA. *LAX Final Master Plan*. April 2004.
[2] DMJM Harris-AECOM and Peer Review Group. *LAX North Airfield Special Peer Review*. March 2007.
[3] URS Corporation. *Los Angeles International Airport North Airfield Assessment*. May 2007.
[4] Washington Consulting Group, Inc. *LAX North Airfield Proposed Runway Configuration – Safety Risk Assessment*. May 2007.
[5] International Aviation Management Group, Inc. *Analysis of LAX North Airfield Alternatives*. May 2007.
[6] Airline Pilots Association. *Los Angeles International Airport Modernization – Tomorrow is Now*. May 2007.
[7] Barnett, Dr. Arnold, et. al, *Los Angeles International Airport North Airfield Safety Study. Preliminary Report*. February 19, 2010.

The proposed project is an example of short-term improvements. Ultimately, long-term improvements related to the North Airfield will be further evaluated via the Specific Plan Amendment Study, which is currently underway. The main focus of the proposed project is to identify and implement, as soon as possible, changes to the existing North Airfield that will mitigate hazards identified in the *LAX North Airfield Safety Risk Assessment* report to, at most, a medium-risk level. In 2007, the FAA released an engineering brief that contains several design recommendations that are intended to prevent runway incursions between taxiways and runways.[8] The FAA defines a runway incursion as: "Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft."[9] A specific recommendation applicable to the proposed project is the following FAA recommendation from page 3 of that brief: "The risk of a Category A or B (severe loss of separation between two aircraft) incursion is higher for crossings occurring in the first third of the runway and lower in the last two thirds. Since it is not possible to entirely eliminate runway-crossing situations, establishing designs and associated surface traffic flow strategies keeping taxiway-runway crossings by aircraft in the last two thirds of the runway (as measured from the arrival threshold) significantly reduces the risk. *The preference is for aircraft to cross in the last third of the runway whenever possible* (emphasis added), since within the middle third of the runway the arriving/departing aircraft is usually on the ground and traveling at a high rate of speed. The studies also indicated a larger propensity for Category A and B incursions when the angle of intersection of the taxiway and runway is not at a 90-degree angle or when the taxiway is very wide, than those occurring at 90-degree intersection with normal widths."

The premise behind the first element (crossing at the last third of the runway) is to provide more time for the system (air traffic control and pilots) to react to a potential imminent incursion or collision. The second element, a 90-degree angle at the intersection of a taxiway and runway, is intended to provide a pilot in an aircraft that is about to cross a runway increased ability to look down the runway to visually confirm it is safe to cross. The proposed project is needed to address both of these elements.

Project Objectives

The overall objective of the proposed project is to improve safety for aircraft arriving, departing, and taxiing on the North Airfield. The specific objectives of the proposed project are as follows:

- Enable aircraft that land on Runway 6L-24R to cross at the last third of Runway 6R-24L. This improvement is needed to enable aircraft taxiing operations to be consistent with FAA guidelines and to allow more time for a pilot controlling an aircraft on a departing runway to react to an accidental incursion of another aircraft onto that runway during a takeoff roll.
- Maintain the time it takes for an aircraft to land and exit Runway 6L-24R at approximately 50 seconds, which would continue to allow for final approach separation of two and half miles between sequential arrivals, a local FAA Tower regulation, thereby maintaining current efficiency and throughput.

[8] Federal Aviation Administration. *Engineering Brief 75: Incorporation of Runway Incursion Prevention into Taxiways and Aprons*. November 19, 2007.

[9] Federal Aviation Administration, *Annual Runway Safety Report*. 2009.

- Maintain at least the same number of available runway exits for Runway 6L-24R arrivals as there are in the current system, thereby maintaining existing capacity and minimizing adverse effects on runway occupancy time.

The proposed project is needed to address certain safety concerns on the North Airfield identified by the 2007 *LAX North Airfield Safety Risk Assessment* report.[10] Changes to the existing North Airfield are needed to lessen the degree of known safety hazards. The proposed project would enhance safety on the North Airfield while maintaining efficient movement of aircraft and would reduce aircraft incursion risk levels while maintaining airfield operational efficiency pending the ultimate North Airfield configuration decisions. With the runway locations remaining at the existing positions, two high-severity hazards identified by the *LAX North Airfield Safety Risk Assessment* could be reduced if Taxiways Y and Z were either removed or relocated. The proposed project would reduce hazards that are directly related to the existing high-speed taxiway locations:

- Hazard LAX 001 – Aircraft crossing at Taxiways Z or Y (non-heavy aircraft departing Runway 24L) resulting in a high-severity operational error
- Hazard LAX 002 – Aircraft crossing at Taxiways Z or Y (heavy aircraft departing Runway 24L) resulting in a high-severity operational error

Project Description

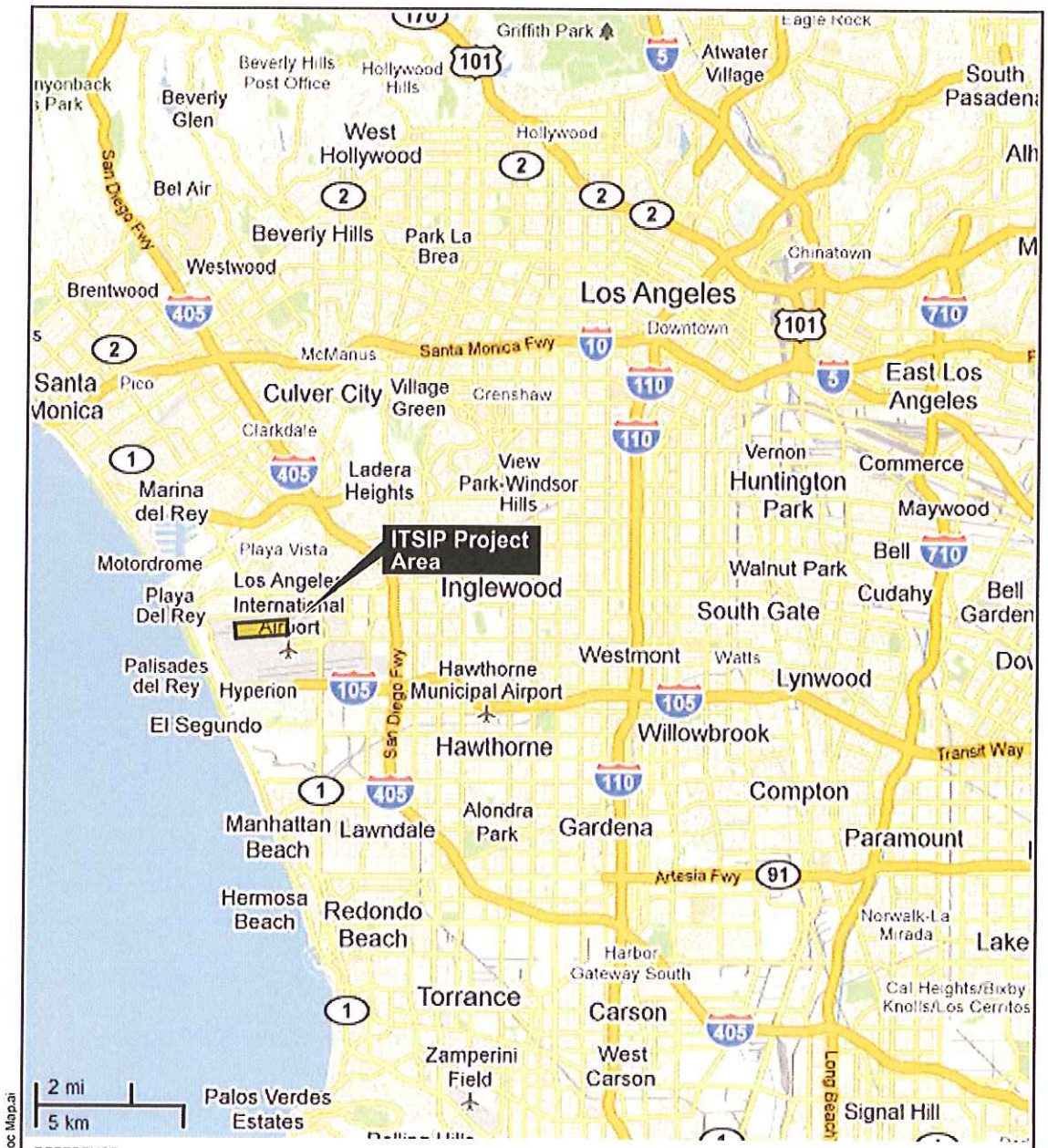
Physically, after all phases are completed, the proposed project would:

- Relocate exit Taxiways Y and Z
- Construct a new exit Taxiway AA-1
- Construct associated connector taxiways from Runway 6R-24L to Taxiway E
- Close existing exit Taxiways Y and Z

Operationally, the proposed project would enable all Runway 6L-24R arrivals to cross the adjacent Runway 6R-24L farther down the runway (in the 3rd third of Runway 6L-24L) rather than using existing Taxiways Y and Z (located in the middle third of Runway 6L-24L). The proposed project would also:

- Provide more distance between aircraft departing on Runway 6R-24L and the point where aircraft that land on Runway 6L-24R would cross Runway 6R-24L.
- Create high-speed exits that would enable aircraft to cross Runway 6R-24L in as close to a perpendicular manner as possible so that pilots can see down Runway 6R-24L when crossing.
- Substantially maintain the current level of efficiency of the North Airfield. With the proposed project, the average unimpeded taxi time and delay are expected to increase by less than one minute for each aircraft using North Airfield runways and taxiways.
- Maintain existing capacity.

[10] Washington Consulting Group, Inc. *LAX North Airfield Proposed Runway Configuration – Safety Risk Assessment*. May 2007.


ITSIP Project Area
Griffith Park
Beverly Hills Post Office
Hollywood Hills
Atwater Village
Eagle Rock
South Pasadena
Beverly Glen
West Hollywood
Hollywood
Bel Air
Beverly Hills
Park La Brea
Westwood
Brentwood
Los Angeles
Downtown
Chinatown
East Los Angeles
McManus
Santa Monica Fwy
Santa Monica
Pico
Culver City
Village Green
Crenshaw
Clarkdale
Ladera Heights
View Park-Windsor Hills
Vernon
Commerce
Huntington Park
Maywood
Marina del Rey
Playa Vista
Motordrome
Los Angeles International Airport
Inglewood
Bell
Walnut Park
Playa Del Rey
Cudahy
Bell Garden
South Gate
Palisades del Rey
Hyperion
Hawthorne Municipal Airport
Westmont
Watts
Lynwood
El Segundo
Hawthorne
Willowbrook
Transit Way
Compton
Manhattan Beach
Lawndale
Alondra Park
Gardena
Paramount
Artesia Fwy
Hermosa Beach
Redondo Beach
Norwalk-La Mirada
Lake
Harbor Gateway South
Cal Heights/Bixby Knolls/Los Cerritos
Torrance
Carson
Zamperini Field
West Carson
Long Beach
Signal Hill
Palos Verdes Estates
San Diego Fwy
2 mi
5 km
REFERENCE:
Google Maps, 2010
N
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URS
Project No.: 29405567
Regional Location Map
Date: May 2010
Figure 1

REFERENCE:
Google Maps, 2010

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URS	Project No.: 29405567	Los Angeles International Airport Aerial Photograph	Date: May 2010 Figure 2

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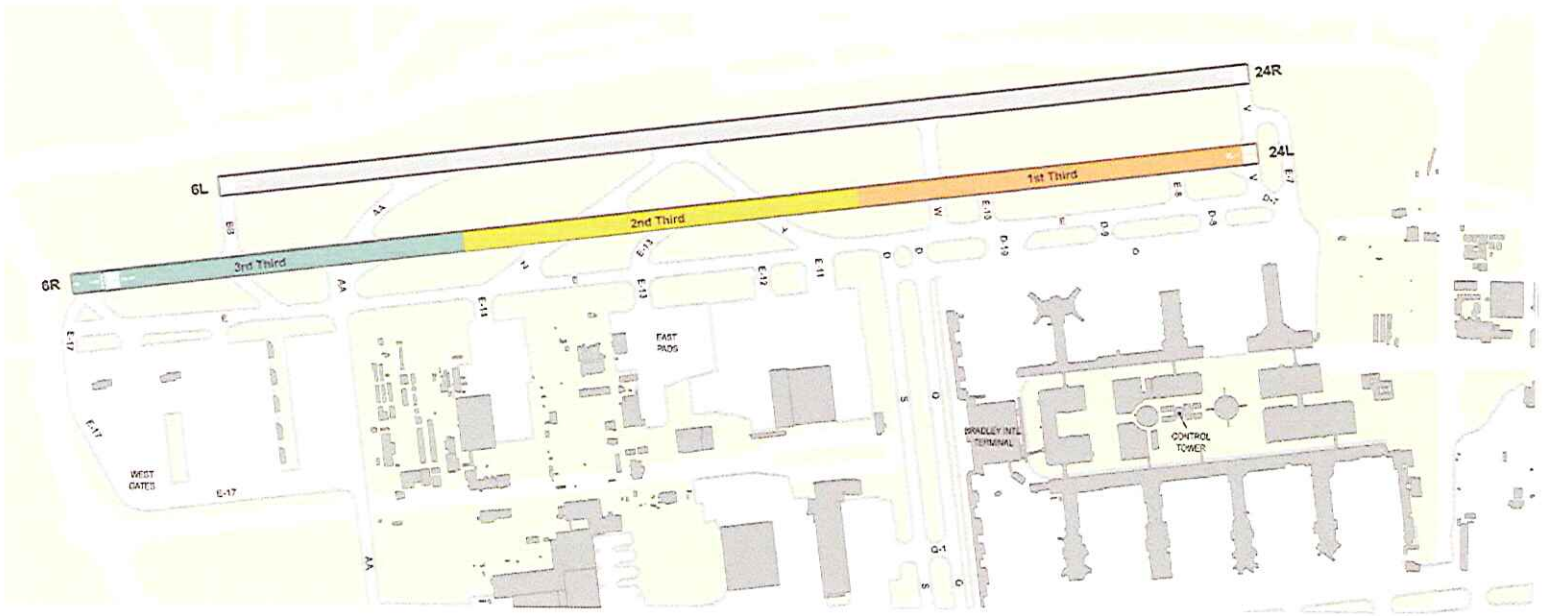
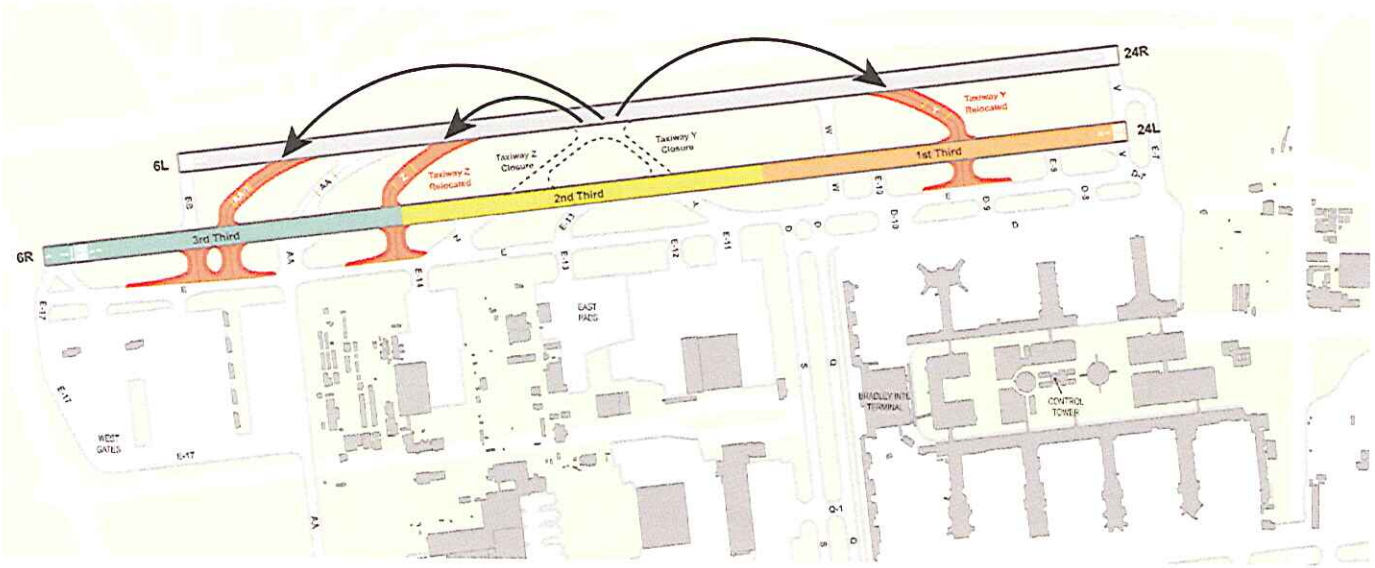


Source: Los Angeles World Airports, June 2003 (Airport Layout Plan); Ricondo & Associates, Inc., October 2009 (Preferred Alternative highspeed taxiway layout)
Prepared by Ricondo & Associates, Inc., October 28 2009.

K:\2010\LAX ITSIP\Figure 3 Existing North Airfield.ai

URS	Project No.: 29405567	Los Angeles International Airport Existing North Airfield	Date: May 2010 Figure 3



Sources: URS, May 2010 (Alternative 6 exit geometry); Ricondo & Associates, Inc., (graphical depiction of airfield)
Prepared by: Ricondo & Associates, Inc., May 2010

URS	Project No.: 29405567	Interim Taxiway Safety Improvement Project (ITSIP)	Date: May 2010 Figure 4

K:\2010\LAX IRSIP\Figure 4 ITSIP Proposed Projectt Phase 1.ai

CEQA ENVIRONMENTAL CHECKLIST

PROJECT DESCRIPTION AND BACKGROUND

Project Title	Interim Taxiways Safety Improvement Project (ITSIP, or "proposed project")
Lead agency name and address	Los Angeles World Airports (LAWA) 1 World Way, 2nd Floor Los Angeles, CA 90045-5803
Contact person and phone number	Herb Glasgow Chief of Airport Planning I Phone: 424-646-5180 HGLASGOW@lawa.org
Project location	Los Angeles International Airport (LAX): This proposed project is located on the North Airfield of LAX, generally south of Westchester Parkway, west of Interstate 405, north of Imperial Highway, and east of Pershing Drive.
Project sponsor's name and address	Los Angeles World Airports 1 World Way, 2nd Floor Los Angeles, CA 90045-5803
General plan designation	City of Los Angeles Planning District: Los Angeles International Airport (LAX) Plan, adopted December 14, 2004. Airport-related airfield, access, and ground transportation facilities.
Zoning	LAX-A Zone: Airport Airside Sub-Area
Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)	The proposed project consists of: • Relocating Taxiway Y and Z high-speed exits; • Constructing a new Taxiway AA-1; • Constructing associated connector taxiways from Runway 6R-24L to Taxiway E; and • Closing existing exit Taxiways Y and Z. *Please see the accompanying Notice of Preparation for additional information regarding the Project Description.*
Surrounding land uses and setting; Briefly describe the project's surroundings.	Environmental Setting: The project site is located within a highly developed, urbanized area consisting of airport, commercial, transportation (i.e., interstate highways), and residential uses. West of the project site are the Los Angeles/El Segundo Dunes, a designated Ecologically Sensitive Habitat Area. West of the dunes is the Pacific Ocean. Surrounding Land Uses: North – Vacant, Recreation and Residential; East – Airport, Commercial, Industrial, and Residential; South – Airport; West – Runway Safety Area/open space.
Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreements)	Federal Aviation Administration (FAA) – LAWA has requested the FAA to modify the Airport Layout Plan for Los Angeles International Airport (LAX) to incorporate the proposed project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 4 for additional information.

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

DETERMINATION

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☒	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Herbert H. Glasgow	Date: 6/10/10
Printed Name: Herb Glasgow	For:

CEQA Environmental Checklist

The potential environmental impacts of the proposed project are characterized below as being potentially significant, less than significant with mitigation, less than significant, or no impact. Impacts that would have no impact will not be addressed in the EIR. Following CEQA Guidelines, impacts that would be less than significant will be discussed but not evaluated in detail. Impacts that would be less than significant with mitigation will be evaluated unless the impact and mitigation measures are already adequately discussed in previous EIRs. Potentially significant impacts will be evaluated in detail in the EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	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 within a state 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?	☐	☐	☒	☐

a, b, and c) *No Impact.* The proposed project is located in the North Airfield Complex of LAX and would be located in paved and highly disturbed, bare ground areas. The proposed project is not located within a scenic vista or a state scenic highway corridor, and does not contain any scenic resources, significant landscaping features, rock outcroppings, or historic buildings. The project site is surrounded by airport facilities and related uses to the south and east. To the north and west is vacant, open land that serves as a buffer area between the community of Westchester and Dockweiler State Beach. The vacant land to the north and west was formerly a residential area.[11] The northern buffer area is currently entitled for development as the LAX Northside Project. This future development would be designed to serve as a visual buffer between the community of Westchester and the airport. Westchester Parkway, located on the LAX Northside Project property, is a fully improved and landscaped parkway. Views from the parkway of the airport are mostly obscured by landscaped berms. Views of the airport and project site from residential uses east of Westchester Golf Course are screened by a 20-foot tall buffer consisting of an architectural masonry wall atop a landscaped berm. Views of the airport and project site from residential uses west of Lincoln Boulevard are limited. The western buffer area includes the LAX/El Segundo Dunes and the Habitat Restoration Area. Views of the airport and the project site from the western buffer area are obscured by the hilly terrain and the dunes. Vista del Mar, a City of Los Angeles Scenic Highway, is located between the western buffer area and

[11] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.21, Design, Art, and Architecture Application/Aesthetics. April 2004.

Dockweiler State Beach. Views of the airport and project site from Vista del Mar are not possible because of the dunes.

The project site does not have features that are aesthetically valued and the proposed project would not contrast with the existing aesthetic conditions of the airport. Project components are consistent with the existing industrial character of the airport and would not introduce any new visual components to the site or to the surrounding area. Thus, the proposed project would not impact a scenic vista or any scenic resources, and would not substantially degrade the existing visual character or quality of the site or its surroundings. Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *Less Than Significant Impact.* The project site has an existing airfield lighting system which consists of taxiway edge lights, taxiway center lights, and guidance signs. The terminal gates south of Runway 6R-24L are also well lit and are visible at night from viewers north of the airport. Any additional light sources as a result of the proposed project would be similar to the current lighting on the project site and would therefore likely cause minimal additional light spillover to residential areas. Existing berms to the north of the project site would prevent project lighting from impacting residential uses in those areas. Construction may include nighttime activities that would require work area lighting. However, construction lighting would be directed downward and away from residential uses north of the project site. In addition, construction activities would comply with municipal code requirements to ensure that the proposed project would not result in significant impacts to sensitive uses. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY 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 Dept. 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 the 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 (Farmland), 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 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 and b) *No Impact.* The proposed project is located within a developed airport and is surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. No agricultural resources or operations currently exist or have existed in the recent past at the project site or surrounding areas.[12] There are no farmlands in the vicinity of the proposed project area, including prime or unique farmlands[13] or farmland of statewide or local importance. The proposed project would not remove any farmland from active production or otherwise adversely affect farmland, including prime or unique farmlands, or soil types designated by the U.S. Department of Agriculture, Natural Resources Conservation Service. Furthermore, there are no Williamson Act contracts in effect for the project site or surrounding areas. The proposed project would not convert farmland to non-agricultural use nor would it result in any conflicts with existing zoning for agricultural use or a Williamson Act contract. Therefore, no impacts to agricultural resources would occur with implementation of the proposed project, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

c, d, and e) *No Impact.* The proposed project is located within a developed airport and is surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. No forest or timberland land resources exist at the project site or in the vicinity of the proposed project area. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Furthermore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use or 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. No impacts to forest land resources would occur with implementation of the proposed project, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

[12] Los Angeles International Airport. LAX Master Plan Final EIS/EIR. Part 1, Volumes 1 – 5, April 2004.

[13] Farmland can be designated as prime, unique, or of statewide or local importance. Prime Farmland is land that "has the best combination of physical and chemical characteristics for producing food, feed, and fiber…without intolerable soil erosion" as determined by the California Secretary of Agriculture. Unique farmland is land other than prime farmland that is used for production of specific high value food and fiber crops, as determined by the California Secretary of Agriculture.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
III.AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality 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 project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

a, b, and c) *Potentially Significant Impact.* Emissions from construction of the proposed project are expected to exceed Southern California Air Quality Management District (SCAQMD) thresholds. Recent LAWA California Environmental Quality Act (CEQA) documents that assessed construction-related air-quality impacts from projects at LAX included the LAX Crossfield Taxiway Project Draft EIR, Central Utility Plant Replacement Project EIR, and Bradley West Project EIR. Construction impacts were found to be significant in each case. Since the proposed project would involve similar maximum daily construction activities, significant impacts from the proposed project may occur from project construction emissions of carbon monoxide (CO), reactive organic gas (ROG), and nitrogen oxide (NO_x), cumulative construction emissions of ROG, NO_x, CO, PM_{10} (particulate matter with a diameter of less than 10 micrometers [microns]), and $PM_{2.5}$ (particulate matter with a diameter of less than 2.5 micrometers [microns]). These results are expected to apply even after including the extensive measures to control air emissions LAWA currently employs. The quantities of construction emissions from the proposed project will be evaluated in the ITSIP EIR.

d) *Less than Significant Impact.* No substantial pollutant concentrations would occur from the construction equipment that would be used by the proposed project. LAWA's standard measures would be employed to control emissions from this project. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *Less than Significant Impact.* The proposed project is not expected to create objectionable odors affecting a substantial number of people since no additional odors are anticipated from what is already present at the airport. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or 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 local or regional plans, policies, regulations, or by the California Department of Fish and Game or US 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 a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☒	☐

a-b) *Less Than Significant Impact.* Based on previous analysis, it is not expected that the proposed project would affect any fish, wildlife, or plants protected by state or federal law.[14] The proposed project area is maintained in order to comply with FAA mandates for safe airport operations.[15] Maintenance activities include controlling and reducing vegetation and wildlife attractants. The proposed project area does not contain any suitable habitat for any federally-listed, sensitive, threatened, or endangered species. Two such species have been identified outside the project area: the El Segundo blue butterfly and the Riverside fairy shrimp. These species would not be affected by the proposed project, as explained below.

[14] Los Angeles International Airport. LAX Master Plan Final EIS/EIR. Part 1, Volumes 1 – 5, Section 4.11, Endangered and Threatened Species of Flora and Fauna. April 2004.

[15] Federal Aviation Administration, in cooperation with the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services. Wildlife Hazard Management at Airports. Second edition. July, 2005.

El Segundo Blue Butterfly

The El Segundo blue butterfly, a federally listed endangered wildlife species, is not present within the immediate area of the proposed project.[16] The El Segundo blue butterfly is present, however, within extant and restored Southern Foredune and Southern Dune Scrub habitats within the Los Angeles/El Segundo Dunes, approximately 2,400 feet from the nearest portion of the proposed project.[17] The El Segundo blue butterfly is endemic to coastal sand dunes that contain its host food plant, coast buckwheat (*Eriogonum parvifolium*). The Los Angeles/El Segundo Dunes occupy a 307-acre site immediately west of LAX (and the proposed project area), and constitute one of the last remaining vestiges of the once-extensive southern California coastal sand dunes.[18] The Los Angeles/El Segundo Dunes, managed by LAWA, support the largest of four remaining occupied habitats for the El Segundo blue butterfly. Within the 307-acre Los Angeles/El Segundo Dunes, the City has designated an approximately 200-acre Habitat Restoration Area pursuant to City Ordinance 167940 for the long-term conservation of the El Segundo blue butterfly. There are currently 150.2 acres of occupied habitat for the El Segundo blue butterfly within the Los Angeles/El Segundo Dunes.

Indirect impacts to the El Segundo blue butterfly Habitat Restoration Area are not expected to occur from increased air and light emissions from construction of proposed taxiways since that area is located at least 2,400 feet from the proposed project. Impacts from construction activities, including staging and stockpiling of materials, would be minor.[8] Activities that may have the potential to result in deposition of fugitive dust within occupied habitat of the El Segundo blue butterfly, would be avoided with implementation of the standard dust control measures already employed. Jet exhaust emissions resulting from the proposed project are not expected to affect the El Segundo blue butterfly because the proposed project would not increase aircraft capacity at LAX. ITSIP would relocate the western-most high speed taxi exit (AA-1) to the west in the North Airfield. This exit would be used infrequently, and operations on it would be at least 2,400 feet from the Habitat Restoration Area. For this reason, no adverse effects are expected. Additional field lighting associated with construction and operation of the proposed safety improvements would also not be expected to impact the El Segundo blue butterfly due to distance. The proposed project would not involve conversion of occupied habitat for the El Segundo blue butterfly since it would not require relocation of navigational aides currently located within El Segundo blue butterfly habitat. Therefore, this impact will not be evaluated in the ITSIP EIR.

Riverside Fairy Shrimp

The proposed project is located approximately 1,200 feet from ephemerally wetted (EW) areas (i.e., wetlands) formerly containing cysts of the Riverside fairy shrimp, a federally-listed endangered wildlife species. In the past, Riverside fairy shrimp cysts have been found in soil samples taken during dry season sampling at nine EW areas within the LAX Airport

[16] Los Angeles International Airport. LAX Master Plan Final EIS/EIR. Part 1, Volumes 1 – 5, Section 4.11, Endangered and Threatened Species of Flora and Fauna. April 2004.
[17] U.S. Fish and Wildlife Service. Recovery Plan for the El Segundo Blue Butterfly (Euohlotes battoides allynt). 1998.
[18] Environmental Science Associates. *Long-Term Habitat Management Plan for Los Angeles Airport El Segundo Dunes*. June 23, 1994.

Operations Area.[19] Two of the EW areas (identified as EW1 and EW2) were located 1,200 feet northwest of the proposed project area. The permanent conversion of Riverside fairy shrimp wetland habitat (including EW1 and EW2) as a result of construction staging, airfield operations and maintenance activities, and airfield improvements was analyzed and triggered the need for Section 7 consultation with the USFWS. As a result of this consultation, the April 20, 2004 Biological Opinion for the LAX Master Plan stated that soils bearing embedded cysts of the Riverside fairy shrimp from EW1 and EW2 were to be salvaged and stored. Subsequently, the Riverside fairy shrimp at LAX (and in the vicinity of the proposed project) was removed in accordance with the federal Biological Opinion. On April 12, 2005, the USFWS excluded LAX from critical habitat for the Riverside fairy shrimp because the primary constituent elements required for the Riverside fairy shrimp to complete its life cycle are not met at LAX.[20] Current critical habitat for the Riverside fairy shrimp does not contain any areas on or adjacent to LAX (or the proposed project); therefore, the proposed project would not affect this species. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *Less than Significant Impact.* A number of small EW areas exist within LAX boundaries that are subject to the U.S. Army Corps of Engineers' jurisdiction. These jurisdictional wetlands were identified in the western portion of the north and south airfields.[21] According to the LAX Master Plan Final EIS/EIR, wetlands near the project site included EW Areas 1-5. However, a Jurisdictional Delineation Report prepared for the Tom Bradley International Terminal Reconfiguration Project (Bradley West Project) and Airfield Operations Area[22] found that EW Areas 1-5 no longer exist due to these areas being developed as a construction staging/parking area. In addition, the Jurisdictional Delineation Report for the Bradley West Project determined that EW Areas 1-5 "have no hydrologic connection to any stream, creek, or river that would ultimately connect to a downstream TNW [traditional navidable waters]. These sites are also not adjacent to a tributary that could significantly affect the chemical, physical, or biological integrity of a downstream TNW. Based on these conditions, these sites would likely have been determined by the USACE to be non-jurisdictional under the recent Rapanos decision." Therefore no wetland areas exist within or near the project site. No wetland areas would be affected by the proposed project. This impact will not be evaluated in the ITSIP EIR.

d) *Less than Significant Impact.* Please see response to a and b, above. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *Less than Significant Impact.* Please see response to a and b, above. Therefore, this impact will not be evaluated in the ITSIP EIR.

[19] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR*, Part 1, Volumes 1 – 5, Section 4.11, Endangered and Threatened Species of Flora and Fauna. April 2004.

[20] 70 *Federal Register* (FR) 19154. "Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Riverside Fairy Shrimp (Streptocephalus woottoni)." Final Rule: April 12, 2005.

[21] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR,* Part 1, Volumes 1 – 5, Section 4.12, Wetlands. April 2004.

[22] BonTerra Consulting. Jurisdictional Delineation Report Tom Bradley International Terminal Reconfiguration Project (Bradley West Project) and Airfield Operations Area. June 2009.

f) *Less than Significant Impact.* Please see response to a and b, above. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 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?	☐	☐	☒	☐

a and b) *Less than Significant Impact.* The proposed project is not expected to cause a substantial adverse change in the significance of a historical resource or of an archaeological resource. There are no historic resources located in the proposed project area.[23] The closest historic resource to the proposed project is the Theme Building, which is eligible for placement on the National Register. This property is approximately 0.25 mile from the proposed project site, south of Runway 6R/24L. The proposed action is not expected to cause any construction or operational related impacts that would affect this resource. Therefore, this impact will not be evaluated in the ITSIP EIR.

Construction-related excavation and grading activities in the North Airfield have the potential to affect three documented archaeological sites and one isolate.[24] However, these sites, CA-LAN-1118, which consist of a shell midden with lithic debitage; CA-LAN-691, which consists of a shell scatter; CA-LAN-*1H, consisting of a wide scatter of historic debris; and Isolate 1, a prehistoric tool made of felsite porphyry, have all been recorded and determined to be ineligible for federal, state, and local designations. While these documented archaeological sites would not be affected by ITSIP, the potential exists for finding archaeological/cultural resources within the North Airfield. This suggests that discoveries may occur from ITSIP construction-related activities such as grading and excavation. Standard measures that apply to other LAWA projects would be applied to ITSIP. Since ITSIP would not require excavation deeper than about five feet, and since the proposed action would affect an area between taxiways and runways that has been previously disturbed, no impacts to historic, architectural, or cultural resources are expected from ITSIP. Standard measures would be implemented to ensure that impacts to archaeological resources are less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *Less than Significant Impact.* Construction-related activities involving depths greater than six feet are likely to expose potentially important fossils on the project site.[25] The proposed project would not require excavation deeper than approximately five feet. In addition, the

[23] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.9, Historic/Architectural and Archaeological/Cultural and Paleontological Resources. April 2004.
[24] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.9, Historic/Architectural and Archaeological/Cultural and Paleontological Resources. April 2004.
[25] Ibid.

proposed project would affect areas that have been previously disturbed. Standard measures already employed would ensure that in the event of paleontological discoveries during construction activities, impacts to paleontological resources would be reduced to a less than significant level. The proposed project would comply with these measures. Thus, impacts are considered less than significant and this impact will not be evaluated in the ITSIP EIR.

d) *Less Than Significant Impact.* The proposed project is not located within any known formal cemeteries. Proper procedures would be followed in the event that human remains are discovered during construction activities and that any potential impacts are reduced to a less than significant level. The proposed project would comply with these standard measures. Thus, impacts are considered less than significant and this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose 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 Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a) i. *Less than Significant Impact.* Fault rupture is the surface displacement that occurs along the surface of a fault during an earthquake. While the site is located within the seismically active southern California region, it is not located within an Alquist-Priolo Special Study Zone.[26] Geotechnical literature indicates the Charnock Fault, a potentially active fault, may be located near or through the eastern potions of the LAX property. However, recent evaluation indicates that the Charnock Fault is considered

[26] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

to have low potential for surface rupture independently or in conjunction with movement of the Newport-Inglewood Fault Zone, which is located approximately three miles east of LAX.[27] Therefore, the potential for impacts to people or structures resulting from rupture of a known earthquake fault are considered low, and no special mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

ii. *Less than Significant Impact.* The proposed project site is located in the seismically active southern California region; however, there is no evidence of faulting at the proposed project site, and it is not located within an Alquist-Priolo Special Study Zone.[28] Nevertheless, all construction would be designed in accordance with the provisions of the Uniform Building Code (UBC) and the City of Los Angeles Building Code (LABC). Since the proposed project would comply with UBC and LABC requirements, potential impacts associated with strong seismic ground-shaking would be less than significant, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

iii. *Less than Significant Impact.* Liquefaction is a seismic hazard that occurs when strong ground-shaking causes saturated granular soil 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. The depth to groundwater at LAX is generally greater than 90 feet, which would indicate that the proposed project site has a very low susceptibility to liquefaction. However, perched groundwater[29] conditions have been noted in the upper 20 to 60 feet at some locations at LAX, and the density of sand deposits in the upper 30 feet is generally considered to be low to medium dense. Therefore, liquefaction could occur in very localized areas; however, the overall potential for liquefaction at LAX is considered low.[30]

Seismically induced ground-shaking can also cause slope-related hazards through various processes including slope failure, lateral spreading,[31] flow liquefaction, and ground-lurching.[32] Because existing slopes 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.[33]

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[27] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

[28] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

[29] Groundwater, generally shallow, that is isolated and not connected to an aquifer.

[30] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

[31] 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.

[32] 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.

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

The California Department of Conservation (CDC) is mandated by the Seismic Hazards Act of 1990[34] 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 near the western edge of the airport, within the dune area.[35]

In summary, the potential for seismic-related ground failure at the proposed project site is considered low. As part of the proposed project, all construction would be designed in accordance with the provisions of the UBC and the LABC. Since the proposed project would comply with UBC and LABC requirements, potential impacts associated with seismic-related ground failure would be less than significant, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

iv. *No Impact.* The proposed project site and vicinity are relatively flat and are primarily surrounded by existing airport and urban development. Furthermore, the City of Los Angeles Landslide Inventory and Hillside Areas map does not identify any areas in the vicinity of the proposed project site that contain unstable slopes which may be prone to seismically produced landslides.[36] Implementation of the proposed project would not result in the exposure of people or structures to the risk of landslides during a seismic event. No impacts resulting from landslides would occur, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

b) *Less than Significant Impact.* The potential for soil erosion on the proposed project site is low due to the generally level topography of the proposed project site. In addition, the majority of the proposed project site is developed and covered with impervious surfaces. The proposed project would result in grading, excavation and use of fill during construction. Conformance with LABC Sections 91.7000 through 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 Building and Safety prior to construction if grading exceeds 200 cubic yards and occurs during the rainy season (between November 1 and April 15). LAWA would prepare an erosion control plan to reduce soil erosion. Therefore, proposed project impacts related to soil erosion are anticipated to be less than significant, and no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *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. The presence of

[34] Public Resources Code 2690–2699.6.

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

[36] City of Los Angeles Planning Department. "Exhibit C, Landslide Inventory and Hillside Areas in the City of Los Angeles." *Safety Element of the City of Los Angeles General Plan.* June 1994.

undocumented and typically weak artificial fill at LAX creates the potential for settlement. The Lakewood Formation also includes some silt and clay layers prone to settlement. However, foundation design features and construction methods can reduce the potential for excessive settlement at LAX, and the overall potential for damaging settlement is considered low.[37] Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *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 foundations and engineered structures including tilting and cracking. Fill materials located in some portions of the LAX area could be prone to expansion, and some portions of the Lakewood Formation found beneath the eastern portion of LAX may also be susceptible, due to their high content of clay and silt.[38] As project construction would occur in accordance with the LABC Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and foundation work, the potential for hazards to occur as a result of expansive soils would be minimized. Therefore, proposed project implementation would not result in significant impacts associated with expansive soils, and no substantial risks to life or property would occur. No mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *No Impact.* The proposed 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 no mitigation measures are required. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 and b) *Potentially Significant Impact.* Since the proposed project would involve similar maximum daily construction activities as other similar projects, significant impacts from the proposed project may occur from project construction emissions of carbon dioxide (CO_2), a greenhouse gas. These results are expected to apply even after including the extensive

[37] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

[38] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.22, Earth/Geology (CEQA). April 2004.

measures to control air emissions LAWA currently employs. The quantities of greenhouse gas emissions from construction of the proposed project will be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	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 people residing or working in the project 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?	☐	☐	☐	☒

a and b) *Less than Significant Impact.* Reconfiguration and addition of taxiways within the North Airfield for safety purposes would not require changes in the routine transport, use, or disposal of hazardous materials during operations. Construction and operation of the proposed project may involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. Compliance with existing federal, state, and local regulations[39] would reduce the potential for accidental release of hazardous materials. Implementation of the proposed project would not alter the current use of the project site. Thus, the risk of hazardous materials would not increase beyond existing activities.

[39] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR*. Part 1, Volumes 1 – 5, Section 4.23, Hazardous Materials. April 2004.

Proposed project impacts are considered less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *Less than Significant Impact.* The project site is located within a quarter mile of St. Bernard High School. Although the proposed project does not include the use or storage of substantial amounts of hazardous materials, substances, or waste, the school may be adversely impacted by hazardous air emissions from aircraft and airport-related vehicles.[40] The proposed project would not result in an increase of aircraft and airport-related vehicles. Thus, no new impacts are anticipated as a result of this proposed project, and impacts are considered less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *Less than Significant Impact.* The project site is not included on any agency's list of hazardous materials sites.[41] No hydrocarbons have been found in geotechnical investigations of the project site.[42] Impacts involving public hazards are considered less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *Less than Significant Impact.* The proposed project is designed to reduce safety hazards for people residing or working in the project area. Therefore, this impact will not be evaluated in the ITSIP EIR.

f) *No Impact.* The project site is located within a public airport and is not within the vicinity of a private airstrip. Therefore, this impact will not be evaluated in the ITSIP EIR.

g) *Less than Significant Impact.* The proposed project would not alter existing emergency response plans.[43] Thus, no new impacts are anticipated as a result of this proposed project, and impacts are considered less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

h) *No Impact.* The project site is located in an urbanized area, is heavily developed and paved. There are no wildlands in the area. Furthermore, the project site is not within a City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan. Therefore, the proposed project would not expose people or structures to significant lost, injury, or death due to wildland fires. No impacts are expected. Therefore, this impact will not be evaluated in the ITSIP EIR.

[40] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.27, Schools (CEQA). April 2004.
[41] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.23, Hazardous Materials. April 2004.
[42] URS. *Interim Taxiway Safety Improvement Project 30 Percent Design – Geotechnical Report.* Page 10. May, 2010.
[43] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.26, Public Services (CEQA). April 2004.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 substantially 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 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?	☐	☐	☒	☐
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 hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

a, f) *Less than Significant Impact.* During project design, LAWA would conform to the City of Los Angeles requirements for preparation of a project-specific Standard Urban Stormwater Mitigation Plan (SUSMP) that would address project related pollutants and would incorporate permanent (post-construction) Best Management Practices (BMPs). The BMPs included in the project design would maintain or reduce peak storm water runoff discharge rates and volume and would minimize or prevent storm water pollution. With conformance to the SUSMP requirements, no post-construction impacts to water quality are anticipated. Therefore, these impacts will not be evaluated in the ITSIP EIR.

b) *Less than Significant Impact.* The proposed project involves taxiway improvements for aircraft arrivals and departures. There would be no groundwater pumping associated with the proposed project. Thus, no depletion of groundwater supplies or interference with groundwater recharge is anticipated. Therefore, this impact will not be evaluated in the ITSIP EIR.

c, d, and e) *Less than Significant Impact.* The existing area drainage pattern would not be altered with the proposed project. The project site is located in the existing North Airfield at LAX approximately one mile east of the Pacific Ocean and Dockweiler State Beach. The two major receiving waters for LAX are Dominguez Channel and the Santa Monica Bay. In general, Sepulveda Boulevard divides the drainage pattern of the airport, with the area west of Sepulveda Boulevard draining to Santa Monica Bay and the area east of Sepulveda Boulevard draining to the Dominguez Channel.[44] The airport lies within the Santa Monica Bay Watershed. Existing surface drainage at LAX is conveyed to storm drains and flood control structures that ultimately discharge to the Santa Monica Bay, the Dominguez Channel, the Argo Drain, the Imperial Drain, and the Culver Drain. The proposed project is located in the North Airfield area that drains to the Argo Drain outfall which discharges to Santa Monica Bay via the Los Angeles County outfall. Existing beneficial uses for receiving waters at Dockweiler Beach have been designated as industrial service supply, navigation, water and non-water contact recreation, commercial and sport fishing, marine habitat, wildlife habitat, and potentially as spawning, reproduction, and/or early development habitat. Project construction and operation would not impact existing beneficial uses of nearby receiving waters.

The general groundwater flow direction in the project area is westward towards the Pacific Ocean.[45] The West Coast Subbasin, of the Coastal Plain of Los Angeles Basin, underlies LAX. Recharge to the basin is primarily from underflow from surrounding groundwater basins. Freshwater injection wells operated to prevent seawater intrusion also create a north-south trending mound from LAX south to Palos Verdes Hills. According to the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan, the beneficial uses of groundwater within the West Coast Subbasin are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.[46]

Drainage runoff calculations were developed during project design to characterize the flows resulting from the taxiway improvements to ensure that any increase in runoff volume generated by the proposed project can be adequately conveyed to the appropriate Los Angeles County Flood Control District drainage system. BMPs would be incorporated into the proposed project's design to reduce water quality impacts by considering post-construction potential pollutants that may be generated by the proposed project and the pollutants that are causing impairments to downstream receiving waters. Storm-water runoff conveyance structures would be designed to accommodate any increased runoff volume generated by the proposed project. The proposed project would comply with regulatory

[44] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.7, Hydrology and Water Quality. April 2004.

[45] Department of Water Resources. *California's Groundwater Bulletin 118: South Coast Hydrologic Region, Coastal Plain of Los Angeles Groundwater Basin.* 2004.

[46] Los Angeles Regional Water Quality Control Board (LARWQCB). *Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.* 1994.

provisions, and thus, no impact to surface flows, drainage, or discharges to downstream waterbodies would occur. Drainage runoff calculations were developed during project design to characterize the flows resulting from the taxiway improvements to ensure that any increase in runoff volume generated by the proposed project can be adequately conveyed to the appropriate Los Angeles County Flood Control District drainage system. BMPs would be incorporated into the proposed project's design to reduce water quality impacts by considering post-construction potential pollutants that may be generated by the proposed project and the pollutants that are causing impairments to downstream receiving waters. Storm water runoff conveyance structures would be designed to accommodate any increased runoff volume generated by the proposed project. The proposed project would comply with regulatory provisions, and thus, no impact to surface flows, drainage, or discharges to downstream water bodies would occur. Therefore, this impact will not be evaluated in the ITSIP EIR.

g, h, and i) *No Impact.* The proposed project is located in Zone C of the FEMA Flood Insurance Map, an area of minimal flooding;[47] therefore, flood hazards are not expected. The proposed project does not involve development of housing units or structures of any kind, therefore no flood hazard or floodplain impacts would occur. Therefore, this impact will not be evaluated in the ITSIP EIR.

j) *No Impact.* LAX is not located within the tsunami inundation zone and the proposed project would not be considered at risk for impacts from seiches or tsunamis.[48] Mudflows would also not be considered a risk due to the proposed project's existing geology and topography. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any 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, local 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?	☐	☐	☒	☐

a) *No Impact.* The proposed project would be developed entirely within an existing airfield on airport property. No land use acquisition or new facilities are proposed that would

[47] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.7, Hydrology and Water Quality. April 2004.

[48] State of California Emergency Management Agency, California Geological Survey, and University of Southern California. *Tsunami Inundation Map for Emergency Planning Venice Quadrangle.* March 1, 2009.

physically divide an established community. Therefore, this impact will not be evaluated in the ITSIP EIR.

b) *Potentially Significant Impact.* The LAX Master Plan Final EIS/EIR evaluated the land use impacts of the Master Plan alternatives. However, the proposed project configuration was not included in the LAX Master Plan Final EIS/EIR. In addition, there may be changes in the environmental setting or baseline condition since the certification of the LAX Master Plan Final EIS/EIR. The proposed project has the potential to create new or substantially different/increased land use impacts than those addressed in the LAX Master Plan Final EIS/EIR. The ITSIP EIR will update the evaluation of land use impacts in the LAX Master Plan Final EIS/EIR and subsequent environmental documents.

c) *Less than Significant Impact.* The Los Angeles/El Segundo Dunes, managed by LAWA, support the largest of the four remaining occupied habitats for the El Segundo blue butterfly. Within the 307-acre Los Angeles/El Segundo Dunes, the City has designated an approximately 200-acre Habitat Restoration Area pursuant to City Ordinance 167940 for the long-term conservation of the El Segundo blue butterfly. There are currently 150.2 acres of occupied habitat for the El Segundo blue butterfly within the Los Angeles/El Segundo Dunes. Indirect impacts to the El Segundo blue butterfly Habitat Restoration Area are not expected to occur from construction of proposed taxiways because that area is located at least 2,400 feet from the proposed project. Impacts from construction activities, including staging and stockpiling of materials that may have the potential to result in deposition of fugitive dust within occupied habitat of the El Segundo blue butterfly would be avoided with standard dust control measures that would be employed as part of the proposed project. The proposed project would relocate the western-most high-speed taxi exit (AA-1) to the west in the North Airfield. This exit would be used infrequently, and operations on it would be at least 2,400 feet from the Habitat Restoration Area. For this reason, no adverse effects are expected. The proposed project would not involve conversion of occupied habitat for the El Segundo blue butterfly because it would not require relocation of navigational aides currently located in El Segundo blue butterfly habitat. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

a and b) *No Impact.* The State Mining and Geology Board classifies mineral resource zones throughout the State. As indicated in the LAX Master Plan Final EIS/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.[49] The project site is developed with airport-related or other urban uses that are mostly paved with some disturbed open space and limited landscaping. There are no actively-mined mineral resources on the project site. Therefore, the proposed project would not affect access to or the availability of valued mineral resources. The proposed 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.[50] Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne 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?	☒	☐	☐	☐
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?	☐	☐	☐	☒

a) *Potentially Significant Impact.* Regarding construction, the only agency standards involving construction noise that pertain to the proposed project are standards established by Chapter XI of the Los Angeles Municipal Code (LAMC) Section 41.40. These regulations prohibit construction activity:

- That involve construction, repair, or excavation work with any construction type device, or job-site delivering of construction materials, without a Police Commission permit
- Between the hours of 9:00 p.m. and 7:00 a.m.

[49] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.17.2, Natural Resources. April 2004.

[50] 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.

- In any residential zone, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday, nor at any time on any Sunday
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area

The potential exposure of persons by the proposed project to noise from construction activities in excess of these standards will be evaluated in the ITSIP EIR.

There would be no changes to the arrival or departure flight patterns nor runway usage from the proposed project. Changes to noise levels observed off the airport due to aircraft taxiing on the new runway configuration would not be noticeable considering the much louder noise that is generated by arriving and departing aircraft. Consequently, standards involving operational noise at airports would not be affected by the proposed project. Therefore, this impact will not be evaluated in the ITSIP EIR.

b) *Less than Significant Impact.* The proposed project would not involve any construction activity that would increase ground-borne noise or vibration. No vibratory or pile driving equipment would be required, since only surface paving improvements are planned. It is anticipated that ground-borne noise or vibration would be localized to the construction area, and would not be perceived off site. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *No Impact.* The proposed project would not alter long-term aircraft operations since runways would not be altered. There would be no observable change to long-term noise levels resulting from the taxiway improvements. Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *Potentially Significant Impact.* As noted above under XII a), the project would temporarily increase ambient noise from construction equipment. The significance of this increase is unknown at this time. Therefore, temporary impacts from construction equipment noise will be evaluated in the ITSIP EIR.

The proposed project would cause temporary increases in noise levels in the vicinity of the South Airfield due to the need to temporarily relocate flight operations from the North Airfield to the South Airfield from time to time during construction. As specified in FAA Order 1050.1E, Environmental Impacts, Policies and Procedures, Change 1, FAA uses a screening threshold of 1.5 dB to determine whether potential noise impacts from airport projects should be assessed further. While this threshold is generally intended to apply to changes in operations that may occur after a project is constructed, LAWA also considers this level to be useful in considering the significance of temporary changes. Based on application of FAA's Area Equivalent Method noise screening tool (see Attachment 1), the increases expected from the proposed project were found not to exceed 1.5 dBA. Since no significant noise impacts are expected to occur, temporary impacts from aircraft noise will not be evaluated in the ITSIP EIR.

e) *Potentially Significant Impact.* As noted above under XII a), the project would temporarily increase ambient noise from construction equipment. The significance of this increase is

unknown at this time. Therefore, exposure of residents and workers in the area to construction equipment noise from the proposed project will be evaluated in the ITSIP EIR.

f) *No Impact.* Not applicable. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

a-c) *No Impact.* The proposed project does not include residential or business development, and would not displace any existing housing or people. Therefore the proposed project would not result in any impacts related to population and housing. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the 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:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) *No Impact.* Implementation of the proposed project is not expected to increase the capacity of the airport operations, traffic congestion, or passenger population. Reconfiguration and improvements to the LAX Northfield Complex would not result in the need for new or expanded fire or police facilities, nor would an increase in fire and police services be required for the passenger population and the population of the surrounding area. Generally, airport passengers are temporary visitors to the area and would not

contribute to a population increase in the surrounding area. Thus, increases in the demand for school, park facilities, and other facilities are not anticipated. All current service ratios are expected to remain. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 and b) *No Impact.* The proposed project would not increase the current capacity of the airport. The proposed project is not expected to result in an increase in airport employees, passengers, or other possible users of recreational facilities in the area. Furthermore, the majority of the airport passengers would be temporary visitors to the area. Thus, there would be no additional demand for recreational facilities beyond the existing demand and no physical deterioration of recreational areas would occur. The proposed project would not increase the use of existing parks or recreational facilities and does not include the construction or expansion of recreational facilities. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC: 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 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?	☐	☐	☐	☒

a and b) *Potentially Significant Impact.* Construction of the proposed project would generate traffic associated with workers traveling to and from the construction employee parking area, and the associated shuttle trips between the parking area and the construction site, truck haul/delivery trips, and miscellaneous construction-related travel. These vehicle trips could result in traffic impacts on the local roadway system during the construction period. The construction of the proposed project would increase traffic volumes on the surrounding area roadway network. Since the significance of this impact on existing plans and standards is not known at this time, this impact will be evaluated in the ITSIP EIR.

c) *Less than Significant Impact.* The proposed reconfiguration alternatives are designed to improve aviation safety. Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *No Impact.* The proposed project would mitigate safety hazards at the North Airfield. No adverse impacts are anticipated. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *No Impact.* The proposed project would not increase surface vehicle traffic nor modify the vehicular circulation and access systems to the airport. There would be no change in emergency access. Therefore no impacts are anticipated. Therefore, this impact will not be evaluated in the ITSIP EIR.

f) *No Impact.* The proposed project would not modify the use of alternative transportation at LAX. Therefore, no impacts are anticipated. Therefore, this impact will not be evaluated in the ITSIP EIR.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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 storm water 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 resources, 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?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

a and b) *No Impact.* The proposed project does not include the addition of new uses or components that would increase expand the airfield or generate in an increase in population. Thus, project construction and operation would not result in the need for new water supply or water or wastewater treatment facilities. Therefore, this impact will not be evaluated in the ITSIP EIR.

c) *Less than Significant Impact.* The proposed project would not result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, this impact will not be evaluated in the ITSIP EIR.

d) *No impact.* Water supplies are available to accommodate water demand at LAX.[51] Reconfiguration and addition of taxiways within the LAX Northfield Complex for safety purposes would not increase airport capacity or population. Construction activities would require water usage; however, adequate water supply would be available and reclaimed water would be used for dust suppression whenever feasible. Thus, no impacts would occur to water supplies. Therefore, this impact will not be evaluated in the ITSIP EIR.

e) *No Impact.* Please see response to a-c) above. Therefore, this impact will not be evaluated in the ITSIP EIR.

f and g) *Less than Significant Impact.* There are eight major landfills and several smaller landfills currently accepting municipal solid waste in Los Angeles County. Disposal capacity is anticipated to be available well beyond 2015.[52] Construction and demolition activities for the proposed project would generate a substantial amount of solid waste. However, the proposed project would adhere to LAWA's recycling program and mitigation measures, which are intended to comply with AB 939. Removed pavement from the project site would be used as filler below new paving and any suitable materials would be reused to the extent possible. Thus, solid waste impacts are expected to be less than significant. Therefore, this impact will not be evaluated in the ITSIP EIR.

[51] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.25.1, Water Use. April 2004.

[52] Los Angeles International Airport. *LAX Master Plan Final EIS/EIR.* Part 1, Volumes 1 – 5, Section 4.19, Solid Waste. April 2004.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially 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 that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a 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 will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) *Less than Significant Impact.* The proposed project has the potential to affect the quality of the environment and has the potential to affect biological resources. However, existing measures are in place that would prevent these impacts from being significant.

b) *Potentially Significant Impact.* Implementation of the proposed project may result in cumulative impacts when considered with other past, present, and probable future projects on the airport and in the surrounding area. The potential for the proposed project to contribute to cumulative adverse environmental impacts will be evaluated in the ITSIP EIR.

c) *Potentially Significant Impact.* Construction of the proposed project may cause adverse effects on human beings involving noise, air emissions, and other impacts of the proposed project. These impacts will be evaluated in the ITSIP EIR.

NOISE SCREENING ANALYSIS - ESTIMATED CHANGE IN NOISE LEVELS DURING CONSTRUCTION OF INTERIM TAXIWAY SAFETY IMPROVEMENT PROJECT

Introduction

This analysis describes the potential noise impacts associated with the proposed project using the methodologies developed by the FAA and published in FAA Order 1050.1E, Environmental Impacts, Policies and Procedures, Change 1. In accordance with FAA Order 1050.1E, Change 1, Appendix A, Section 14.3 and 14.4c, a proposed action would be considered to have a significant impact with regard to aviation noise, when compared to the No-Action Alternative for the same time frame, if it would:

- Cause noise sensitive areas located at or above DNL 65 dB to experience a noise increase of at least DNL 1.5 dB.
- Cause an increase of DNL 1.5 dB that introduces new noise sensitive areas to exposure levels of DNL 65 dB or more.

In a report dated August 1992, the Federal Interagency Committee on Noise (FICON) along with FAA Order 1050.1E, recommended the use of Area Equivalent Method (AEM) as a screening tool to determine the need for additional environmental noise analysis. The AEM is an appropriate screening method for projects that do not involve changes in flight tracks, aircraft flight procedures, or changes in aircraft stage length.

FAA Order 1050.1E and FICON establish an increase of 17 percent or more in contour area as the threshold of significance for AEM within a DNL 65 dBA contour. A 17 percent increase indicates that the proposed action could result in a DNL 1.5 dBA or greater increase at a noise sensitive area and that further analysis is required. Conversely, if the screening process shows less than a 17 percent increase, it may be concluded that there are no significant impacts on a noise sensitive area.

Methodology

AEM 7.0 is used to evaluate potential changes in noise exposure due to the proposed project. The AEM is a screening tool used to simplify the assessment step in determining the need for an EIS or further analysis with the Integrated Noise Model. The purpose of the AEM is to show change in airport DNL noise contour area relative to a change in aircraft mix and number of operations. AEM determines the DNL noise contour area in square miles for a mix and number of aircraft types by using linear regressions that relate DNL noise contour area as a function of the number of annual daily average operations.

The proposed project would not alter long-term airport operations and noise exposure in the arrival and departure corridors will be unchanged before and after the project. The project may produce a long-term noise benefit in areas north of the airport. This decrease in noise is attributable to the reduced need for the use of reduced thrust during landing

roll for aircraft arriving Runways 24 L & R. This is due to the increased distance from the touchdown zone to the taxiways.

Short-term increases in noise exposure may be experienced in the arrival and departure corridors of Runways 7/25 L & R as aircraft operations are relocated from the North Field to the South Field during project construction. As described in the Interim Taxiways Safety Improvement Program (ITSIP) Construction Phasing Report, there are two alternative methods for constructing the project. The first method would be to close each runway for the entire duration necessary to complete construction. The total maximum duration of runway closure would be about 20 days. This would typically consist of an 11 day closure of Runway 6L-24R followed by a 9 day closure of Runway 6R-24L.

The second method would close each runway once per week for a 52 hour period to accommodate construction for the respective runway. The work would begin with Runway 6L-24R. Runway 6L-24R would be closed for four 52 hour periods. Work would then progress to Runway 6R-24L. Runway 6R-24L would be closed for five 52 hour periods.

Both phasing alternatives require the closure of Runway 6L-24R and Runway 6R-24L for extended periods. During these periods, aircraft operations would be moved to alternative runways. Runway utilization during runway closures would be determined by air traffic control (ATC) and is influenced by runway capacity, hourly operations, and terminal and gate parking assignments and associated taxi time.

While precise operational requirements during runway closures have not been determined, it is possible to determine basic runway utilization for purposes of this screening level noise analysis. These assumptions are used in the AEM to determine change in noise exposure during project construction. Because aircraft operations would be relocated from the North Field to the South Field during project construction, the noise exposure from the North Field and South Field are analyzed separately.

Aircraft Operational Assumptions

Aircraft types, number of aircraft operations, and time of day of aircraft operations are critical for determining cumulative noise exposure. Six months of aircraft operational data for the period January 1, 2009 through June 30, 2009 was obtained from the LAX Noise Office. The data included the number of aircraft operations by aircraft type, time of day, and runway. These data were annualized and grouped by airfield. These results are shown in Table 1.

Table 1. Los Angeles International Airport 2009 Annual Operations by Aircraft Type, Airfield, and Time of Day

Aircraft Type	Number of Annual Operations						
	North Field		South Field		Total		Grand
	Day	Night	Day	Night	Day	Night	Total
717200	30	-	162	-	192	-	192
727EM1	2	-	10	8	12	8	20
727EM2	64	28	290	102	354	130	484
727QF	4	-	2	2	6	2	8
737300	11,712	644	1,312	64	13,024	708	13,732
7373B2	9,654	676	1,028	48	10,682	724	11,406
737400	5,064	402	358	52	5,422	454	5,876
737500	1,964	214	472	30	2,436	244	2,680
737700	39,770	3,908	6,194	2,122	45,964	6,030	51,994
737800	8,702	944	15,330	3,890	24,032	4,834	28,866
737N17	2	2	4	-	6	2	8
737N9	-	2	-	-	-	2	2
74710Q	-	-	-	16	-	16	16
747200	8	-	2	14	10	14	24
74720A	4	-	2	22	6	22	28
74720B	4,292	616	4,864	3,838	9,156	4,454	13,610
747400	2,056	274	2,250	1,740	4,306	2,014	6,320
757300	1,420	388	1,926	508	3,346	896	4,242
757PW	5,208	1,204	19,142	5,916	24,350	7,120	31,470
757RR	2,598	500	9,514	2,494	12,112	2,994	15,106
767300	2,520	546	10,092	3,148	12,612	3,694	16,306
767400	8	8	186	30	194	38	232
767CF6	336	114	2,950	782	3,286	896	4,182
767JT9	224	76	2,036	594	2,260	670	2,930
777200	2,308	308	4,154	540	6,462	848	7,310
777300	4	2	6	-	10	2	12
A300	4	8	228	274	232	282	514
A30062	16	56	482	748	498	804	1,302
A310	88	36	344	136	432	172	604
A319	11,382	2,474	8,888	2,446	20,270	4,920	25,190
A320	7,576	1,442	4,910	1,078	12,486	2,520	15,006
A32023	9,282	2,092	5,772	1,474	15,054	3,566	18,620
A32123	3,698	1,278	870	204	4,568	1,482	6,050
A330	202	-	76	-	278	-	278
A33034	70	-	6	-	76	-	76
A340	2,282	60	2,078	194	4,360	254	4,614
BEC58P	208	6	298	24	506	30	536
C130	12	-	8	-	20	-	20
CIT3	8	-	110	6	118	6	124
CL600	10,400	774	9,758	692	20,158	1,466	21,624
CL601	9,364	740	19,170	2,094	28,534	2,834	31,368
CNA172	248	2	294	6	542	8	550
CNA206	182	4	242	4	424	8	432

CNA20T	70	-	114	14	184	14	198
CNA441	18,322	2,556	17,700	7,126	36,022	9,682	45,704
CNA500	86	2	274	44	360	46	406
CNA750	152	12	912	88	1,064	100	1,164
DC1010	44	102	548	520	592	622	1,214
DC1030	74	116	1,044	578	1,118	694	1,812
DC1040	6	10	104	92	110	102	212
DC6	2	-	2	-	4	-	4
DC870	8	42	350	170	358	212	570
DC93LW	2	-	10	-	12	-	12
DC95HW	-	2	4	-	4	2	6
DHC6	378	44	992	582	1,370	626	1,996
DHC8	2	-	6	-	8	-	8
DHC830	8,486	218	64	12	8,550	230	8,780
EMB120	14,216	1,752	20,250	2,136	34,466	3,888	38,354
EMB14L	18	2	622	52	640	54	694
EMB170	3,674	124	366	-	4,040	124	4,164
FAL20	6	2	86	12	92	14	106
FAL50	14	2	150	16	164	18	182
FAL900	48	-	426	46	474	46	520
GASEPF	100	-	152	2	252	2	254
GASEPV	366	10	430	24	796	34	830
GII	10	-	50	28	60	28	88
GIIB	20	-	98	28	118	28	146
GIV	196	16	1,420	172	1,616	188	1,804
GV	128	10	972	142	1,100	152	1,252
IA1125	72	4	500	38	572	42	614
J328	-	-	2	-	2	-	2
L10115	2	-	-	-	2	-	2
LEAR25	-	-	48	2	48	2	50
LEAR35	308	36	1,824	222	2,132	258	2,390
MD11GE	42	110	280	572	322	682	1,004
MD11PW	50	76	258	536	308	612	920
MD81	4	-	2	22	6	22	28
MD82	2,068	60	5,914	402	7,982	462	8,444
MD83	1,348	48	4,930	994	6,278	1,042	7,320
MD9025	116	2	670	134	786	136	922
MD9028	2	-	40	6	42	6	48
MU3001	268	18	1,166	104	1,434	122	1,556
SD330	94	2	224	22	318	24	342
Total	**203,778**	**25,206**	**198,824**	**50,278**	**402,602**	**75,484**	**478,086**

The data shown in Table 1 indicate that LAX operations in Calendar Year 2009 totaled 478,086 annual operations. North Field operations totaled 228,984 (48 percent of total operations) and South Field operations totaled 249,102 (52 percent of total operations).

Analysis and Results

The data shown in Table 1 were used to establish existing conditions and serve as the basis for evaluating changes in noise exposure associated with the change in aircraft operations due to project construction. As a conservative (worst case) assumption, it is assumed that seventy-five percent of North Field operations will be relocated to the South Field during runway closures. The continuous closure method is used for this analysis as this approach requires a slightly longer duration of closure. The resulting aircraft operational data are shown in Table 2. It is anticipated that the actual number of North Field operations relocated to the South Field will be less due to operational constraints.

Table 2. Los Angeles International Airport Annual Operations During Project Construction by Aircraft Type, Airfield, and Time of Day

Aircraft Type	Number of Operations						
	North Field		South Field		Total		Grand
	Day	Night	Day	Night	Day	Night	Total
717200	29	-	163	-	192	-	192
727EM1	2	-	10	8	12	8	20
727EM2	61	27	293	103	354	130	484
727QF	4	-	2	2	6	2	8
737300	11,231	618	1,793	90	13,024	708	13,732
7373B2	9,257	648	1,425	76	10,682	724	11,406
737400	4,856	385	566	69	5,422	454	5,876
737500	1,883	205	553	39	2,436	244	2,680
737700	38,136	3,747	7,828	2,283	45,964	6,030	51,994
737800	8,344	905	15,688	3,929	24,032	4,834	28,866
737N17	2	2	4	0	6	2	8
737N9	-	2	-	0	-	2	2
74710Q	-	-	-	16	-	16	16
747200	8	-	2	14	10	14	24
74720A	4	-	2	22	6	22	28
74720B	4,116	591	5,040	3,863	9,156	4,454	13,610
747400	1,972	263	2,334	1,751	4,306	2,014	6,320
757300	1,362	372	1,984	524	3,346	896	4,242
757PW	4,994	1,155	19,356	5,965	24,350	7,120	31,470
757RR	2,491	479	9,621	2,515	12,112	2,994	15,106
767300	2,416	524	10,196	3,170	12,612	3,694	16,306
767400	8	8	186	30	194	38	232
767CF6	322	109	2,964	787	3,286	896	4,182
767JT9	215	73	2,045	597	2,260	670	2,930

777200	2,213	295	4,249	553	6,462	848	7,310
777300	4	2	6	0	10	2	12
A300	4	8	228	274	232	282	514
A30062	15	54	483	750	498	804	1,302
A310	84	35	348	137	432	172	604
A319	10,914	2,372	9,356	2,548	20,270	4,920	25,190
A320	7,265	1,383	5,221	1,137	12,486	2,520	15,006
A32023	8,901	2,006	6,153	1,560	15,054	3,566	18,620
A32123	3,546	1,225	1,022	257	4,568	1,482	6,050
A330	194	-	84	-	278	-	278
A33034	67	-	9	-	76	-	76
A340	2,188	58	2,172	196	4,360	254	4,614
BEC58P	199	6	307	24	506	30	536
C130	12	-	8	-	20	-	20
CIT3	8	-	110	6	118	6	124
CL600	9,973	742	10,185	724	20,158	1,466	21,624
CL601	8,979	710	19,555	2,124	28,534	2,834	31,368
CNA172	238	2	304	6	542	8	550
CNA206	175	4	249	4	424	8	432
CNA20T	67	-	117	14	184	14	198
CNA441	17,569	2,451	18,453	7,231	36,022	9,682	45,704
CNA500	82	2	278	44	360	46	406
CNA750	146	12	918	88	1,064	100	1,164
DC1010	42	98	550	524	592	622	1,214
DC1030	71	111	1,047	583	1,118	694	1,812
DC1040	6	10	104	92	110	102	212
DC6	2	-	2	-	4	-	4
DC870	8	40	350	172	358	212	570
DC93LW	2	-	10	-	12	-	12
DC95HW	-	2	4	0	4	2	6
DHC6	362	42	1,008	584	1,370	626	1,996
DHC8	2	-	6	-	8	-	8
DHC830	8,137	209	413	21	8,550	230	8,780
EMB120	13,632	1,680	20,834	2,208	34,466	3,888	38,354
EMB14L	17	2	623	52	640	54	694
EMB170	3,523	119	517	5	4,040	124	4,164
FAL20	6	2	86	12	92	14	106
FAL50	13	2	151	16	164	18	182
FAL900	46	-	428	46	474	46	520
GASEPF	96	-	156	2	252	2	254
GASEPV	351	10	445	24	796	34	830
GII	10	-	50	28	60	28	88
GIIB	19	-	99	28	118	28	146
GIV	188	15	1,428	173	1,616	188	1,804
GV	123	10	977	142	1,100	152	1,252

IA1125	69	4	503	38	572	42	614
J328	-	-	2	-	2	-	2
L10115	2	-	0	-	2	-	2
LEAR25	-	-	48	2	48	2	50
LEAR35	295	35	1,837	223	2,132	258	2,390
MD11GE	40	105	282	577	322	682	1,004
MD11PW	48	73	260	539	308	612	920
MD81	4	-	2	22	6	22	28
MD82	1,983	58	5,999	404	7,982	462	8,444
MD83	1,293	46	4,985	996	6,278	1,042	7,320
MD9025	111	2	675	134	786	136	922
MD9028	2	-	40	6	42	6	48
MU3001	257	17	1,177	105	1,434	122	1,556
SD330	90	2	228	22	318	24	342
Total	**195,404**	**24,170**	**207,198**	**51,314**	**402,602**	**75,484**	**478,086**

The data shown in Table 2 indicate that total LAX operations during the construction year will be unchanged from existing (2009) operations and will total 478,086 annual operations. North Field operations are expected to total 219,574 (46 percent of total operations) and South Field operations are expected to total 258,512 (54 percent of total operations). During the year of project construction, North Field annual operations are expected to decrease by 9,410 operations and South Field operations will correspondingly increase.

The data shown in Table 1 and Table 2 were input into the AEM in order to evaluate the change in noise exposure. Based upon this analysis, the South Field 65 DNL contour area would increase from 14.8 square miles (sq. mi.) to 15.0 sq. mi. This represents a 1.4 percent increase in contour area and is far below the 17 percent increase threshold established by FAA Order 1050.1E and FICON. The North Field 65 DNL contour would be reduced from 7.1 sq. mi to 6.9 sq. mi. This represents a decrease of 3.4 percent.

Based on AEM analysis as recommended by FAA Order 1050.1E and the temporary nature of the change in noise exposure, increases in aircraft noise levels attributable to project construction would not be significant, and the project does not require detailed analysis of aviation noise.