

# **LAX Specific Plan Amendment Study (SPAS) Final EIR and Related Actions**

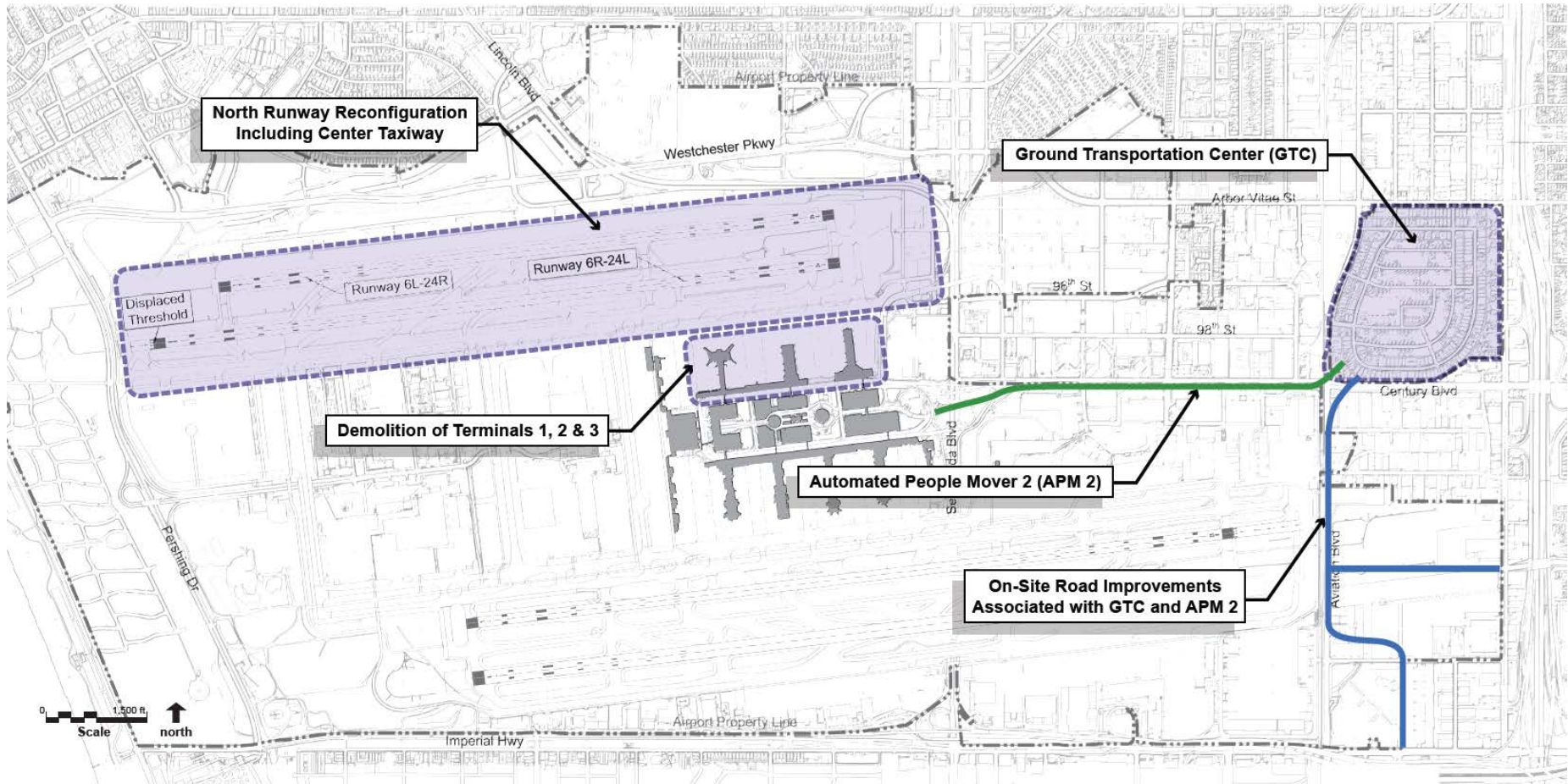
Joint TCT/PLUM Committee Meeting  
April 9, 2013

# Background

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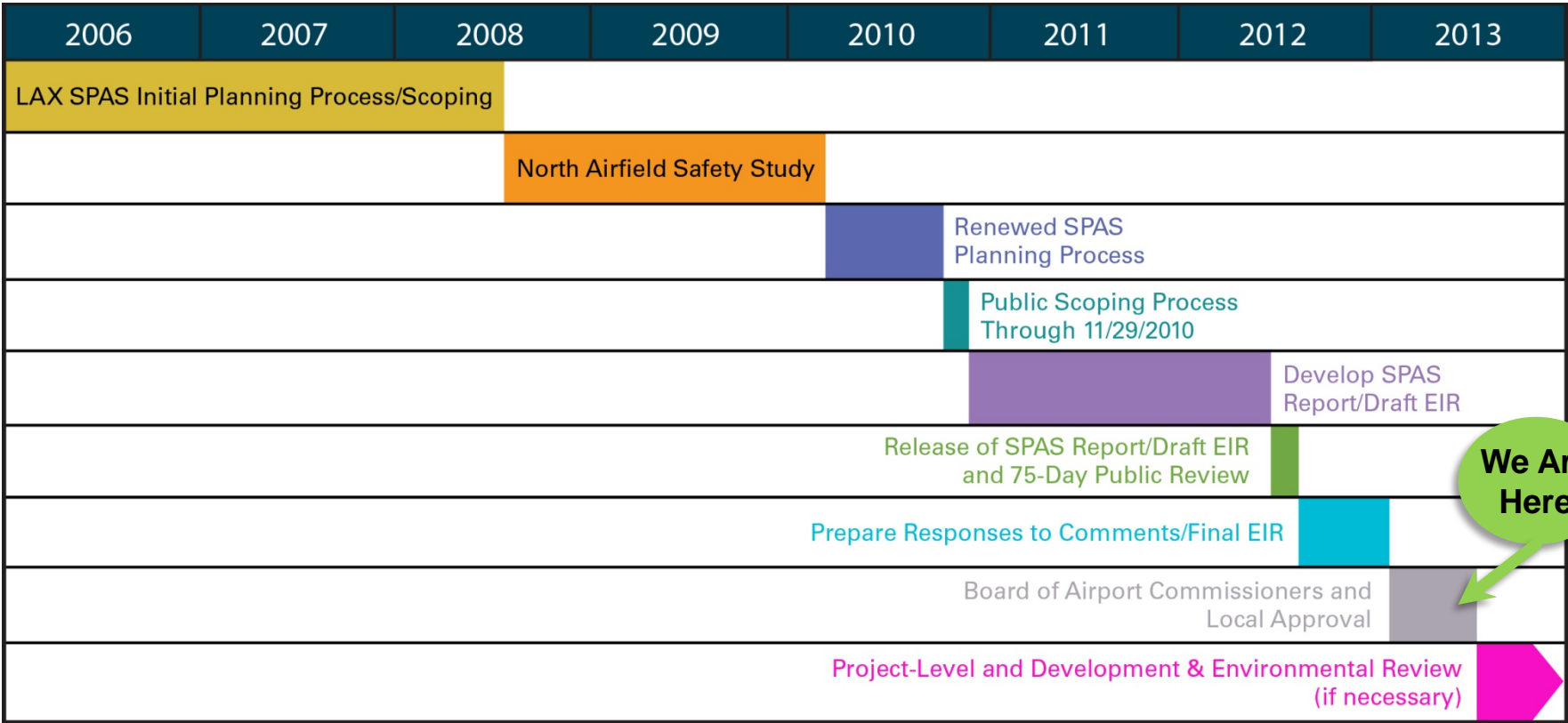
- The LAX Master Plan was adopted in December 2004
  - However, pursuant to the LAX Specific Plan adopted by the City Council, certain “Yellow Light” projects required additional study prior to final approval.
  - The LAX Specific Plan and LAX Master Plan Stipulated Settlement Agreement defined how this LAX Specific Plan Amendment Study (SPAS) was conducted.
- The “Yellow Light” Designated Projects are:
  - Reconfiguration of North Airfield
  - Ground Transportation Center (GTC)
  - Automated People Mover (APM) between Central Terminal Area (CTA) and GTC
  - Demolition of Terminals 1, 2 and 3
  - Roadways associated with GTC and APM

# Yellow Light Projects



## **SPAS Process**

# SPAS Process



**We Are Here**

# SPAS Alternatives Summary

Alternative Designation	Former References or “Description”
<b>Integrated Alternatives</b>	
Alternative 1	“260’ N” with “Busway/No Consolidated Rent-A-Car (CONRAC) Facility”
Alternative 2	“No Increased Separation” with “Busway/No CONRAC”
Alternative 3	Master Plan/ “Alternative D”
Alternative 4	“No Yellow Light Projects”
<b>Airfield Alternatives</b>	
Alternative 5	“350’ N”
Alternative 6	“100’ N”
Alternative 7	“100’ S”
<b>Ground Transportation Alternatives</b>	
Alternative 8	“Busway/CONRAC”
Alternative 9	“Automated People Mover (APM)/CONRAC”

# SPAS Project Objectives

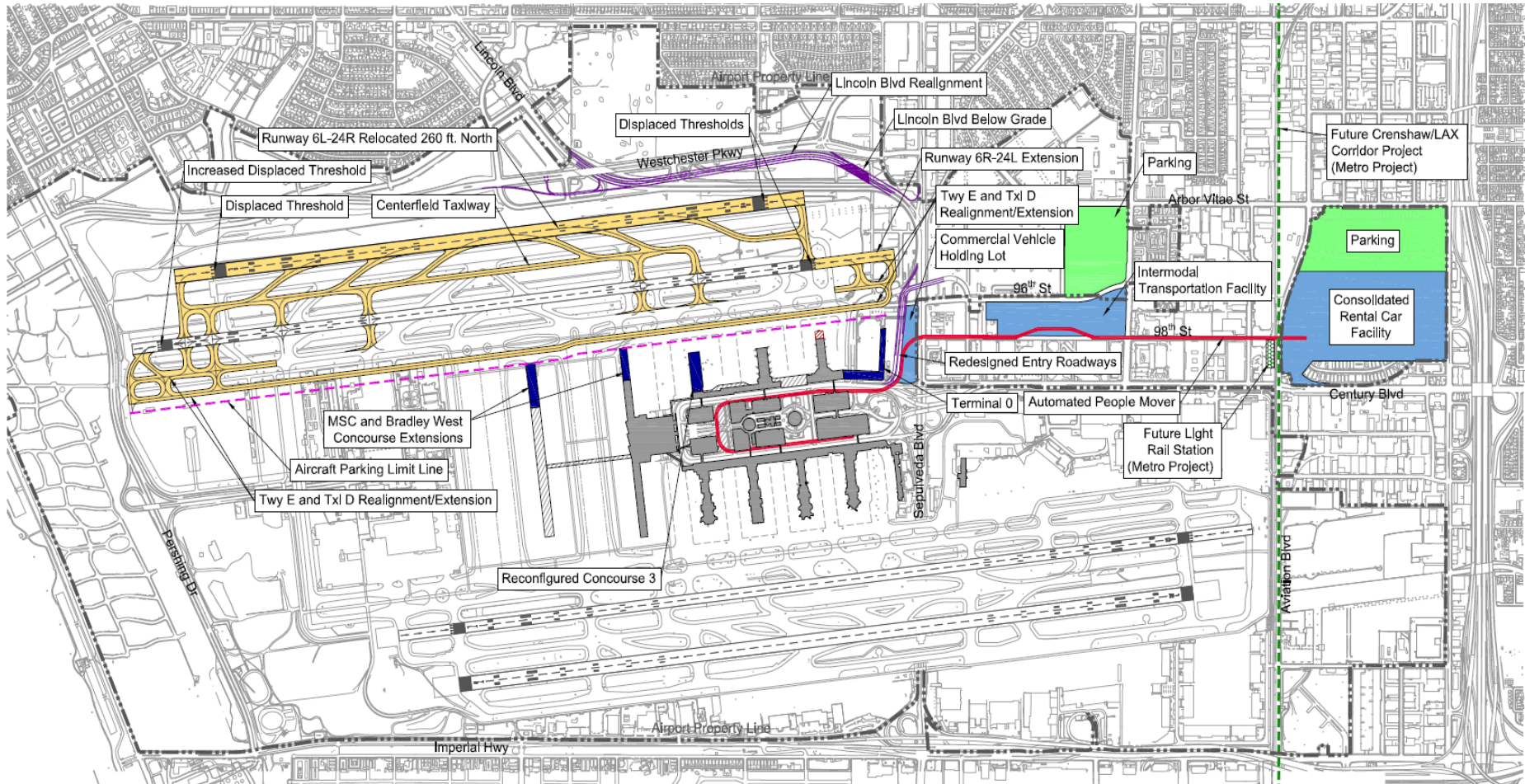
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1. Provide North Airfield Improvements That Support Safe and Efficient Movement of Aircraft
2. Improve Ground Access System to Better Accommodate Airport Traffic
3. Maintain LAX's Position as International Gateway to Southern California
4. Plan Improvements That Do Not Result in More Than 153 Passenger Gates at 78.9 MAP
5. Enhance Safety and Security at LAX
6. Minimize Environmental Impacts on Surrounding Communities
7. Produce an Improvement Program that is Sustainable, Feasible, and Fiscally Responsible

## **BOAC-Selected Alternative**



# BOAC-Selected Alternative

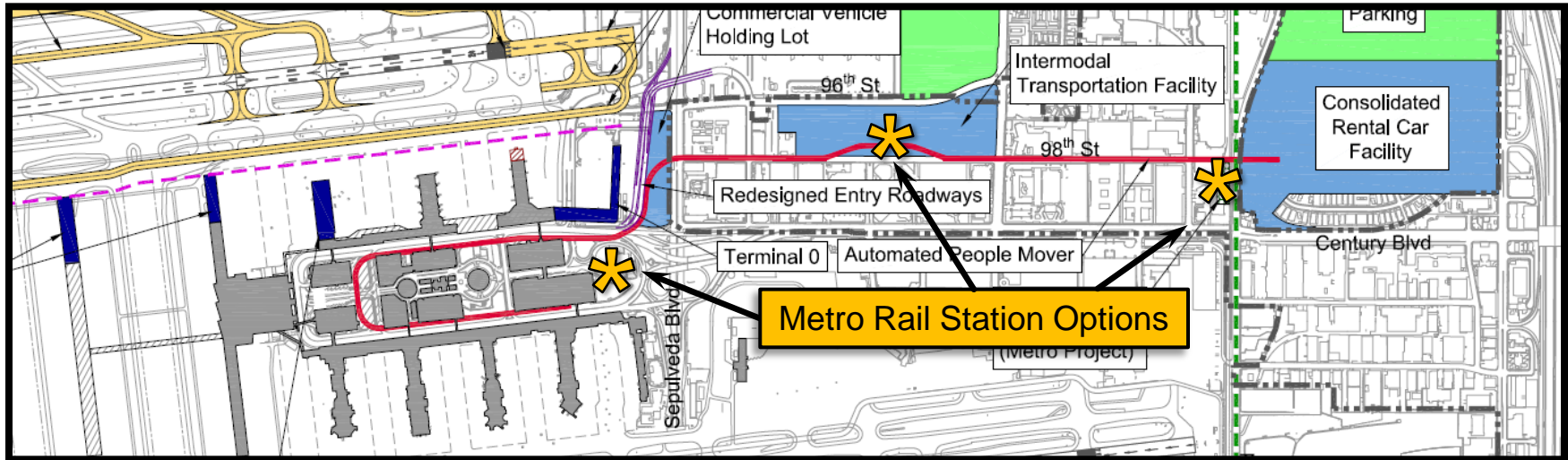


# Key Features of BOAC-Selected Alternative

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- **Airfield/Terminal Features:**
  - Achieves centerline taxiway with a movement of arrivals runway 260' north.
  - Supports standard operations on the North Airfield, except for Group 6 aircraft when visibility is less than ½ mile.
  - Provides pilot line-of-sight to end of departures runway for all except Group 6 operations.
  - Addresses Runway Safety Area and Taxiway/Taxilane deficiencies.
  - Allows redevelopment or extension to north terminal facilities, including Terminal 0, TBIT and the Midfield Satellite Concourse (MSC)
  - 153 passenger gates.
- **Ground Transportation Features**
  - Significant new facilities to be developed based on airport ground transportation and passenger conveyance needs. Including:
    - Intermodal Transportation Facility (ITF)
    - Consolidated Rent-A-Car Facility (CONRAC)
    - Automated People Mover system (APM)
  - Service to Metro facilities in Lot C and at Century/Aviation to be provided by airport circulator

# Transit Connections at LAX – Light Rail and Metro



- The BOAC-Selected Alternative includes an Automated People Mover (APM) to circulate within the CTA and to other airport facilities and serve private and public transit users.
- In a parallel effort, LAWA is collaborating with Metro to identify convenient connections to LAX. As part of the Airport Metro Connector project, LAWA is working with Metro examining potential methods to connect Crenshaw/LAX Corridor and Green Line passengers “to the airport”.
- The BOAC-Selected Alternative preserves two additional opportunities to connect Metro light rail directly “to the airport”.

## **Addressing Common Misconceptions About SPAS**

# Addressing Common Misconceptions About SPAS

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- All of the SPAS Alternatives were designed to have the same practical capacity as the LAX Master Plan – 78.9 million annual passengers (MAP).
- The vast majority of significant impacts identified in the SPAS EIR are the result of the growth in passenger activity to 78.9 MAP, and would occur regardless of the choice of Alternative.
- LAWA cannot require airlines or passengers to use another airport.
- The implementation of the airfield included in the BOAC-Selected Alternative (“260’ North”) would not result in the taking of any homes.
- None of the Alternatives would move the runway north of Westchester Parkway or beyond the outer perimeter fence.
- Implementation of the BOAC-Selected Alternative is not expected to result in the closure of Lincoln Blvd. for an extended amount of time.
- Additional project-level design and engineering review is required before construction could start on any SPAS project element.
- The construction of SPAS improvements would be financed with proprietary airport funds and user fees, and would not impact the City’s general fund.

## Key Issues

# SPAS EIR Design/ Methodology

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- Elements of Alternatives analyzed at a “program level”
  - Concepts developed to a level of detail sufficient for meaningful environmental analysis
    - Provide understanding of the relationship between facilities
    - Facilities not designed or engineered
    - General construction impacts
    - Analysis in the final year of build-out - 2025
  - All SPAS project elements would require additional environmental analysis and approval before construction could begin
    - Detailed design and engineering
    - Project-Level analysis under CEQA
    - Environmental evaluation under NEPA

# Airfield Safety

- The EIR itemized safety enhancements included in each Alternative in accordance with North Airfield Planning Objectives.
- The North Airfield Safety Study concluded that operations on the existing airfield are already extremely safe.
- All Safety Studies concluded that safety on the north airfield would be enhanced by separating the north runways and installing a centerline taxiway.
- The FAA stated that airfield safety would be greatly improved by separating the runway and building a centerfield taxiway.

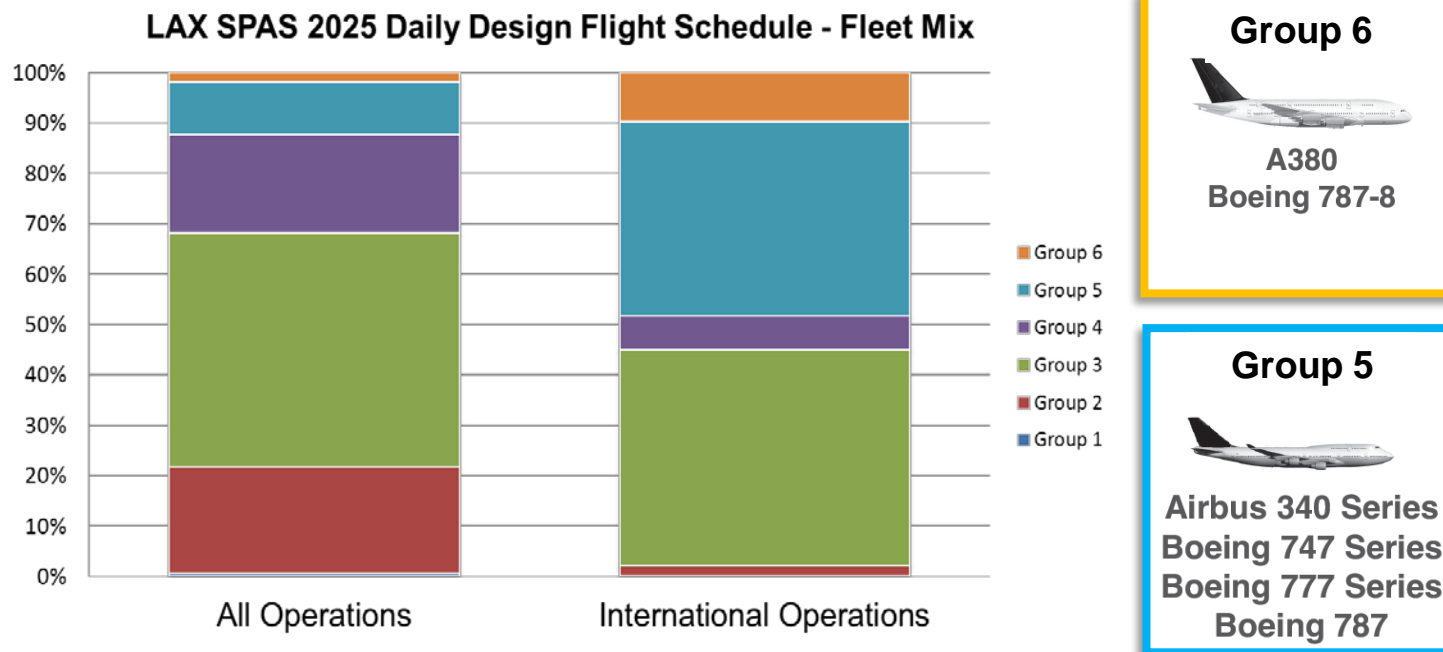
ENHANCEMENT	ALTERNATIVE						
	1	2	3	4	5	6	7
Achieves full Runway Safety Area (RSA) compliance	✈	✈	✈	✈	✈	✈	✈
Shifts the arrival Runway Protection Zone (RPZ) for Runway 24R westward, resulting in residences and the vehicle staging area west of Sepulveda Boulevard no longer being located within the RPZ	✈				✈	✈	
Provides greater amount of runway and taxiway facilities that meet FAA Airport Design Standards for ADG 5 and 6 aircraft, particularly as it relates to separation requirements	✈	✈	✈ <sup>1</sup>		✈ <sup>1</sup>	✈	✈ <sup>1</sup>
Reduces the need for special operations restrictions, modifications of standards, and waivers from FAA	✈	✈	✈		✈	✈	✈
Provides increased separation between runways and between runways and taxiways, which better enables taxiing and holding aircraft to stay clear of runway OFZ and RSA surfaces	✈		✈		✈	✈	✈
Allows addition of a centerfield parallel taxiway with high-speed exits from Runway 6L/24R, which provides more time and options for FAA air traffic controllers to handle aircraft exiting the runway; more time and distance for the pilot of an arriving aircraft to exit the runway, slow down and hold before crossing Runway 6R/24L; and reduces the potential for safety hazards/incursions.	✈		✈		✈	✈	✈
Improves the locations and design of crossing points (i.e., 90-degree crossing angle) at Runway 6R/24L, which provides better pilot visibility down Runway 6R/24L before crossing	✈		✈		✈	✈ <sup>2</sup>	✈ <sup>2</sup>
Realigns/straightens Taxiway D to provide a full-length parallel taxiway designed for ADG 5 aircraft	✈	✈	✈		✈	✈	✈
Realigns/straightens Taxiway D to provide a full-length parallel taxiway designed for ADG 6 aircraft			✈		✈		
Relocates vehicle service road adjacent to Taxiway E and Taxiway D out from between two active surfaces	✈	✈			✈	✈	✈
Provides more aircraft holding areas near the end of runways, improving the ability for sequencing departures	✈	✈	✈		✈	✈	✈
Improves high-speed exit locations from Runway 6L/24R and improves crossing angles at Runway 6R/24L with better pilot visibility down Runway 6R/24L before crossing	✈	✈	✈		✈	✈	✈

Notes: RSA = Runway Safety Area    RPZ = Runway Protection Zone    ADG = Aircraft Design Group    OFZ = Obstacle Free Zone  
 1- Improves to a greater degree than Alternatives 1, 2 and 6  
 2- Improves to a more limited degree than Alternatives 1, 3 and 5



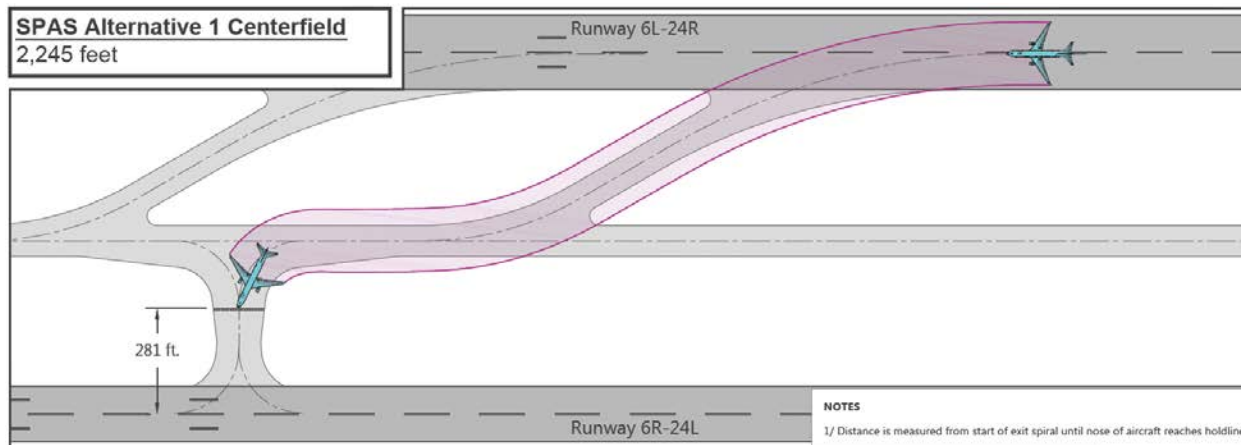
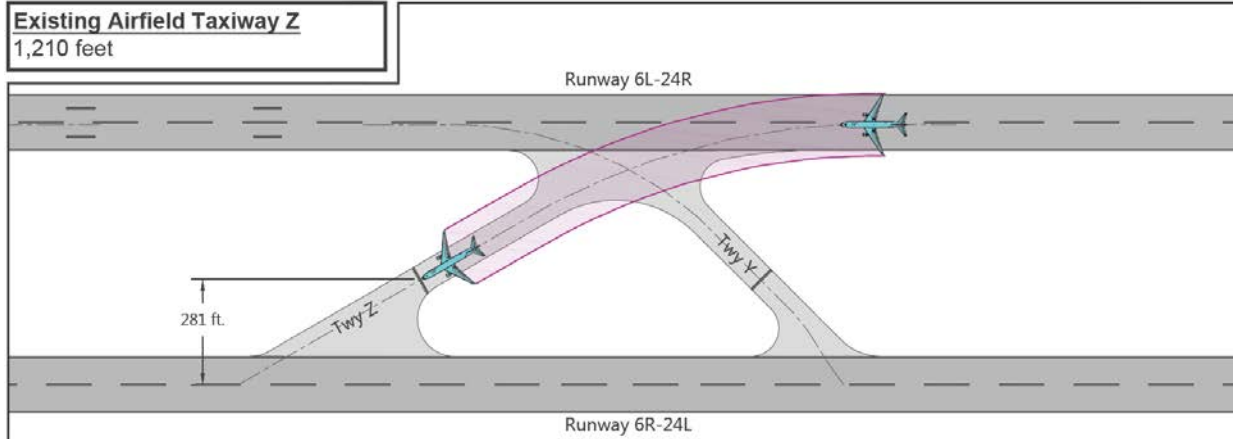
# Airfield Safety (cont.) – Standardizing Operations

- The current airfield was designed in the 1960s and does not meet FAA standards for Group 5 or 6 aircraft.



- Under the projected 2025 fleet mix for LAX, Group 5 aircraft make up more than 10% of all operations, and almost 40% of the international operations.
- The BOAC-Selected Alternative would standardize all operations except for Group 6 aircraft when visibility is less than ½ mile.

# Airfield Safety (cont.) – Centerfield Taxiway



SOURCE: Los Angeles International Airport, Specific Plan Amendment Draft Environmental Impact Report, July 2012; Ricondo & Associates, Inc., March 2013.  
PREPARED BY: Ricondo & Associates, Inc., March 2013.

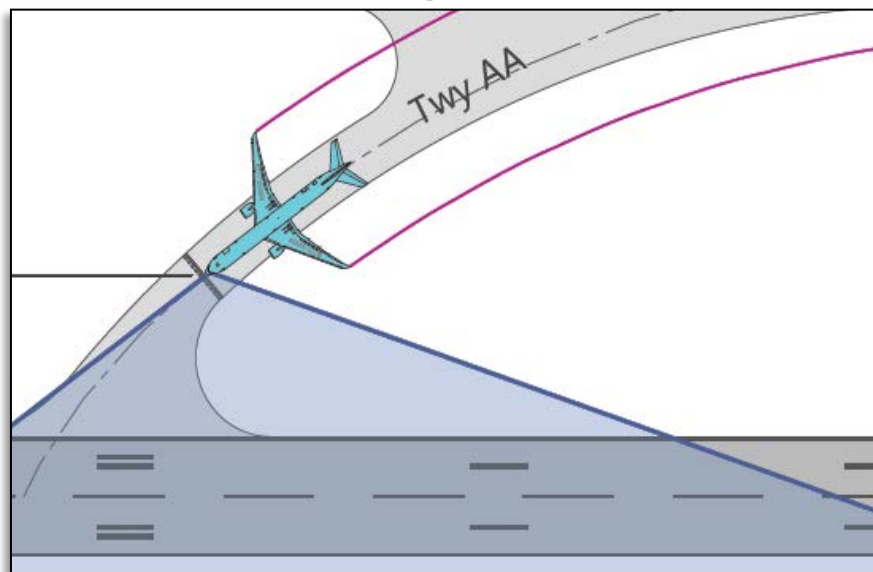
A centerfield taxiway provides:

- More time and options for air traffic control to handle aircraft exiting the arrivals runway; and
- More time and distance for a pilot to exit the arrivals runway, slow down, and hold, before crossing the departures runway.

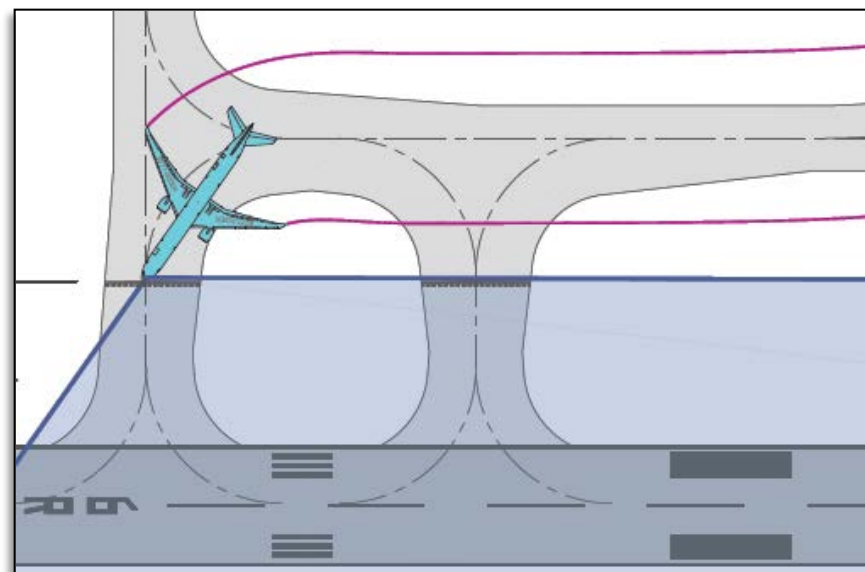
The BOAC-Selected Alternative would provide 1100' more distance to the hold bar than the existing airfield, and 1005' more than Alternative 2.

# Airfield Safety (cont.) – Pilot Line of Sight

**Limited Line of Sight – Existing Airfield**

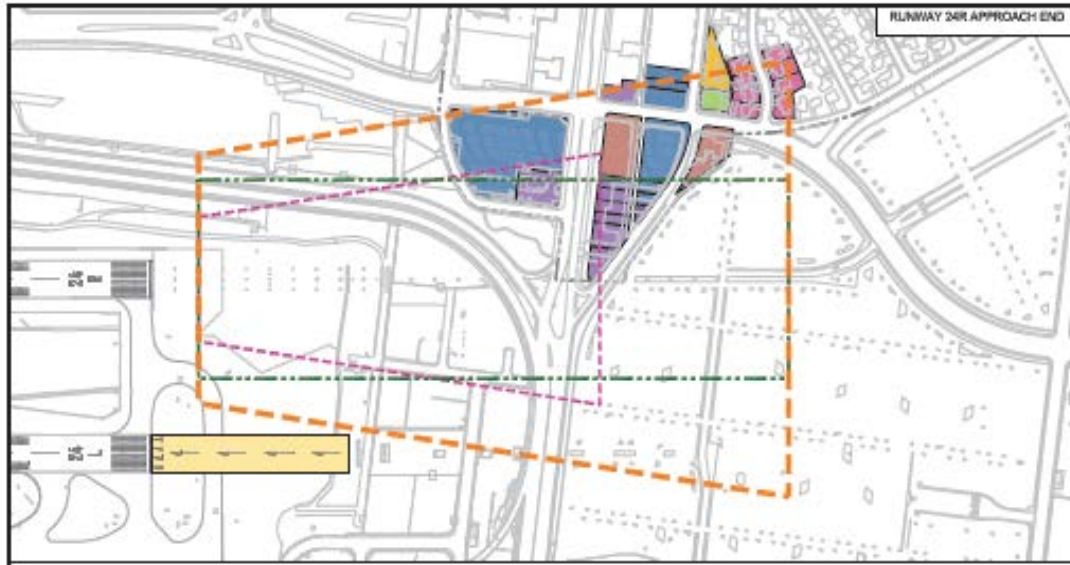


**Enhanced Line of Sight – BOAC-Selected Alternative**



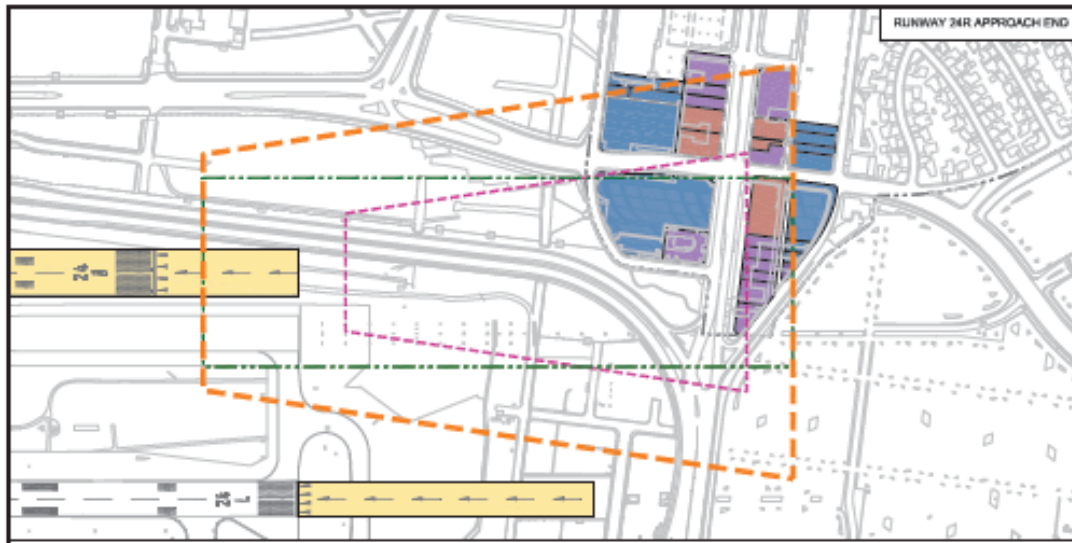
- The FAA recommends that taxiways provide the best visual perspective to pilots holding to cross in order to optimize pilots' recognition of entry into an active runway.
- The BOAC-Selected Alternative provides enhanced line of sight (to the end of the runway) for all aircraft, except the Airbus A380 and Boeing 747-8.

# Safety (cont.) - Runway Protection Zones



## Existing Conditions

RUNWAY 24R	
PARCEL USE	NUMBER OF PARCELS IN RPZ
Parking	7
Sales & Service	8
Office	2
Residential- Single	8
Residential-Multi	1
Vacant	4
Government	1
<b>24R TOTAL</b>	<b>31</b>



## BOAC-Selected Alternative

RUNWAY 24R	
PARCEL USE	NUMBER OF PARCELS IN RPZ
Parking	12
Sales & Service	12
Office	5
Vacant	1
<b>24R TOTAL</b>	<b>30</b>

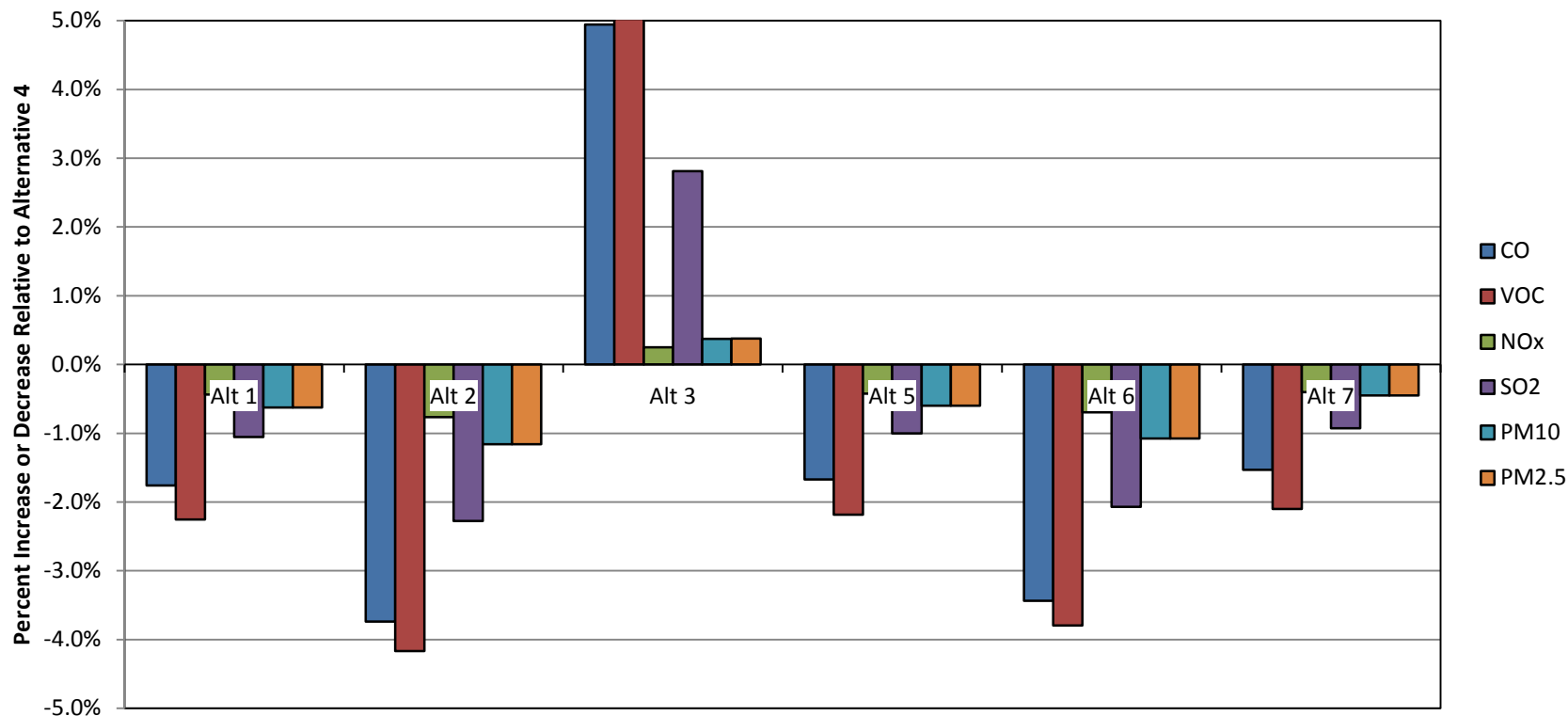
## Airfield Safety (cont.) – Safety Enhancements

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- Safety Features included in the BOAC-Selected Alternative:
  - 99.87% of operations on north airfield standardized
  - Centerline taxiway
  - Pilot line-of-sight for aircraft up through Group 5
  - Relocated/Redesigned Crossing Taxiways
  - Runway Safety Area (RSA) compliance
  - No residential uses in the Runway Protection Zone (RPZ)
- Staff supports other safety enhancements, such as Runway Status Lights and full Air Traffic Controller staffing. However, they are not substitutes for runway separation and a centerline taxiway.

# Air Quality

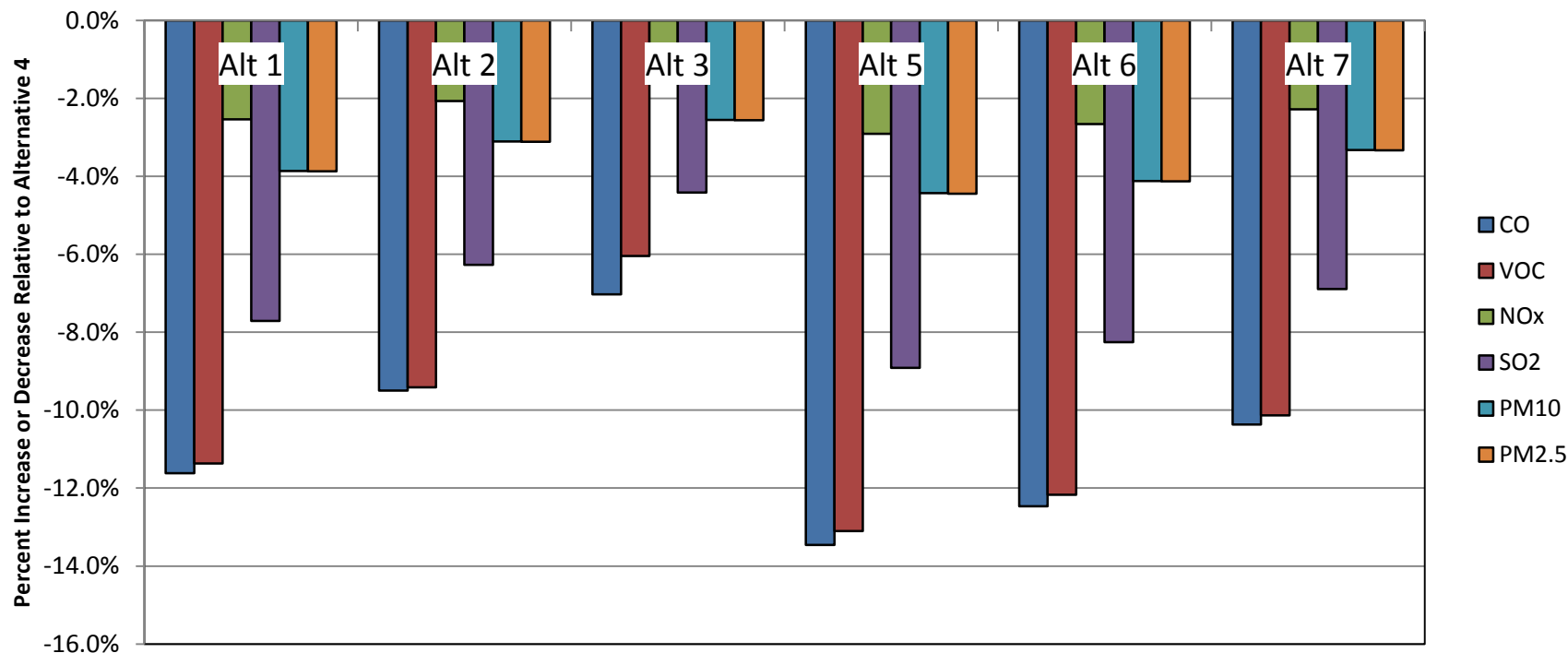
## Relative Increase/Decrease in Aircraft/APU/GSE Emissions in 2025 Compared to Alternative 4 Emissions in 2025 - VFR Conditions



- On a typical day, the airfield in Alt. D (Alt. 3) would have the highest emissions of all Alternatives, including the “No Airfield Improvements” Alt. (Alt. 4).
- Alt. 2 would have the lowest emissions, but would be lower than the BOAC-Selected Alternative by only .3% to 2%.

# Air Quality (cont.)

**Relative Change in Aircraft/APU/GSE Emissions in 2025 Compared to No Airfield Improvements (Alt. 4) Emissions – ILS Flight Rules**



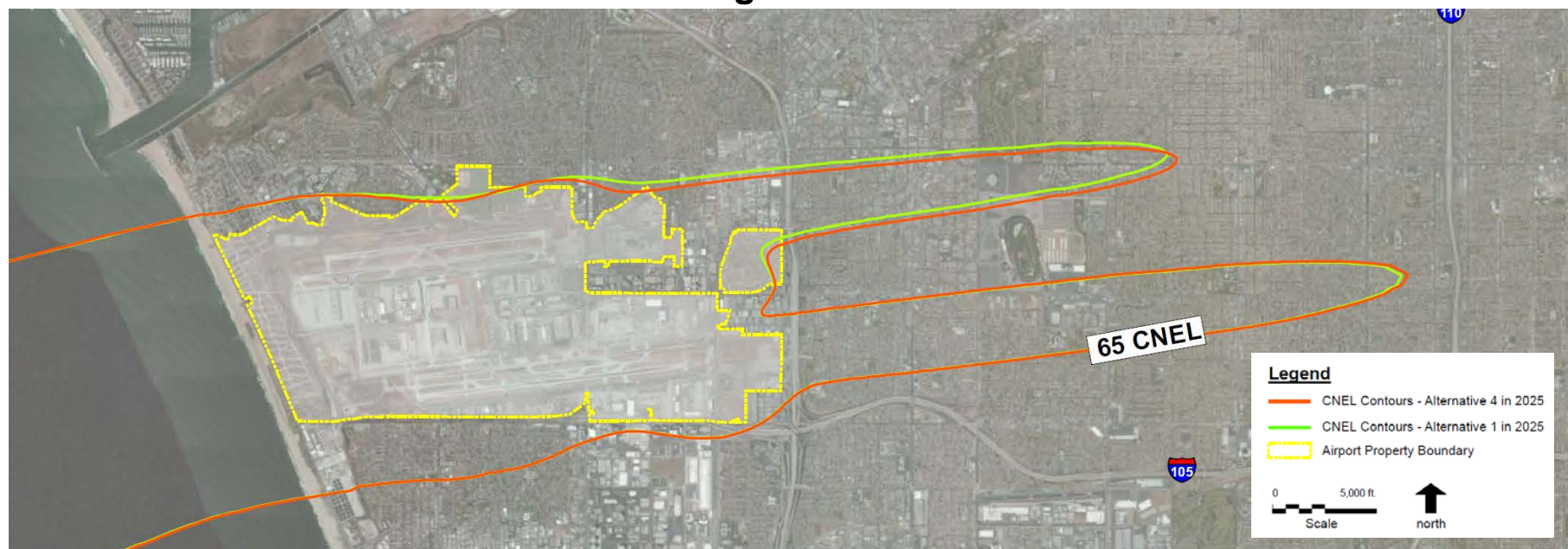
- While it occurs infrequently, the highest airfield emissions occur when visibility is limited (i.e. the airfield operates under instrument flight rules).
- Under these conditions, all Alternatives showed reduced emissions compared to the “No Airfield Improvements” scenario (Alt. 4). However, under these conditions, the BOAC-Selected Alternative performed better than Alt. 2.

# Aircraft Noise

Key results from the Integrated Noise Model (INM):

- The impacts identified in the EIR come predominantly from the increase in aircraft operations expected in 2025, as opposed to the configuration of the airfield.
- Changes in the location of the arrivals runway tend to influence the noise contour eastward and not northward.
- The EIR indicates that the BOAC-Selected Alternative would provide fewer aircraft noise impacts when compared to Alt. 2 (“No Increased Separation”) or Alt. 4 (“No Yellow Lights”).

## Noise Contour – Existing Airfield and BOAC-Selected Alt.

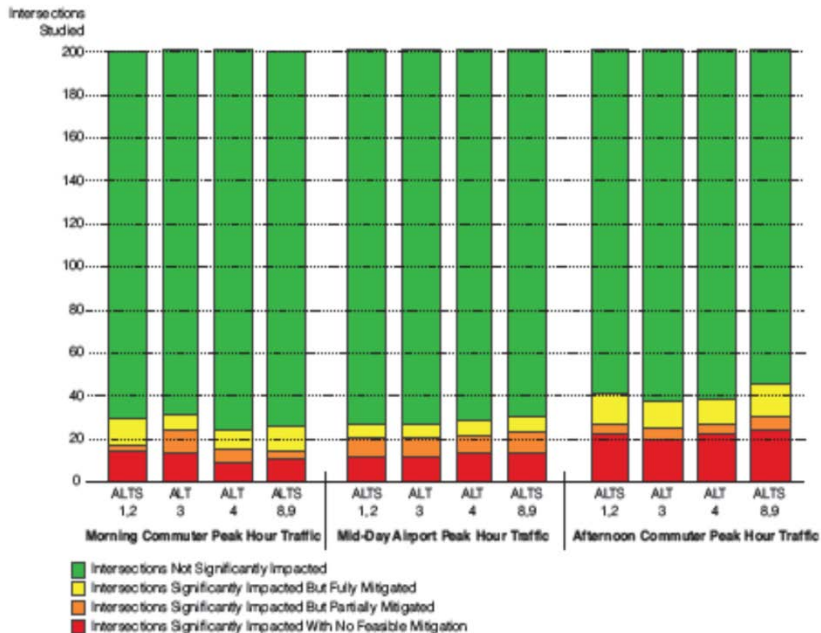




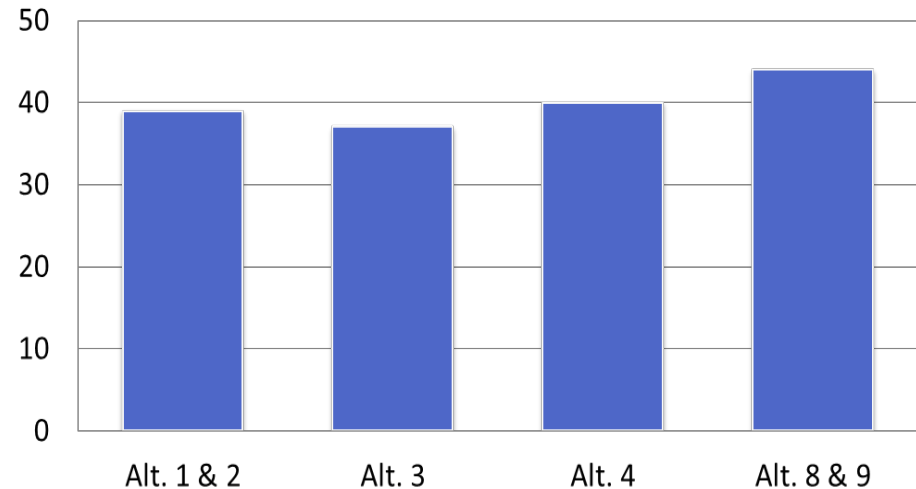
# Off-Airport Traffic

## Off-Airport Intersection Impacts in 2025

Including ambient growth in regional traffic and growth in airport activity projected for 2025



## Off-Airport Traffic (2025) - Significant and Unavoidable Intersection Impacts



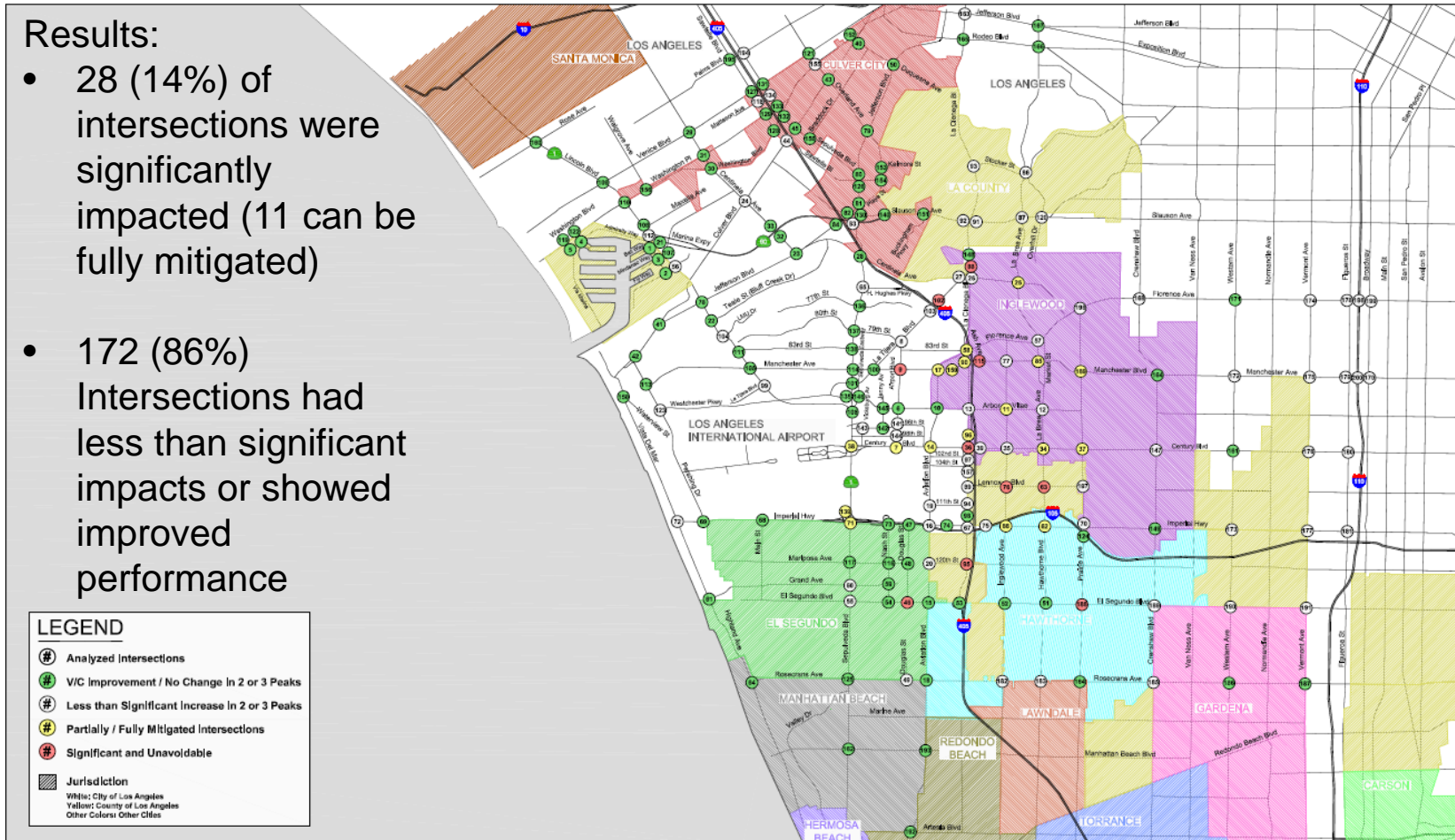
- Most identified off-airport traffic impacts occur regardless of Alternative selected.
- The BOAC-Selected Alternative includes 32 off-airport traffic mitigation measures.

# Traffic (Cont.)

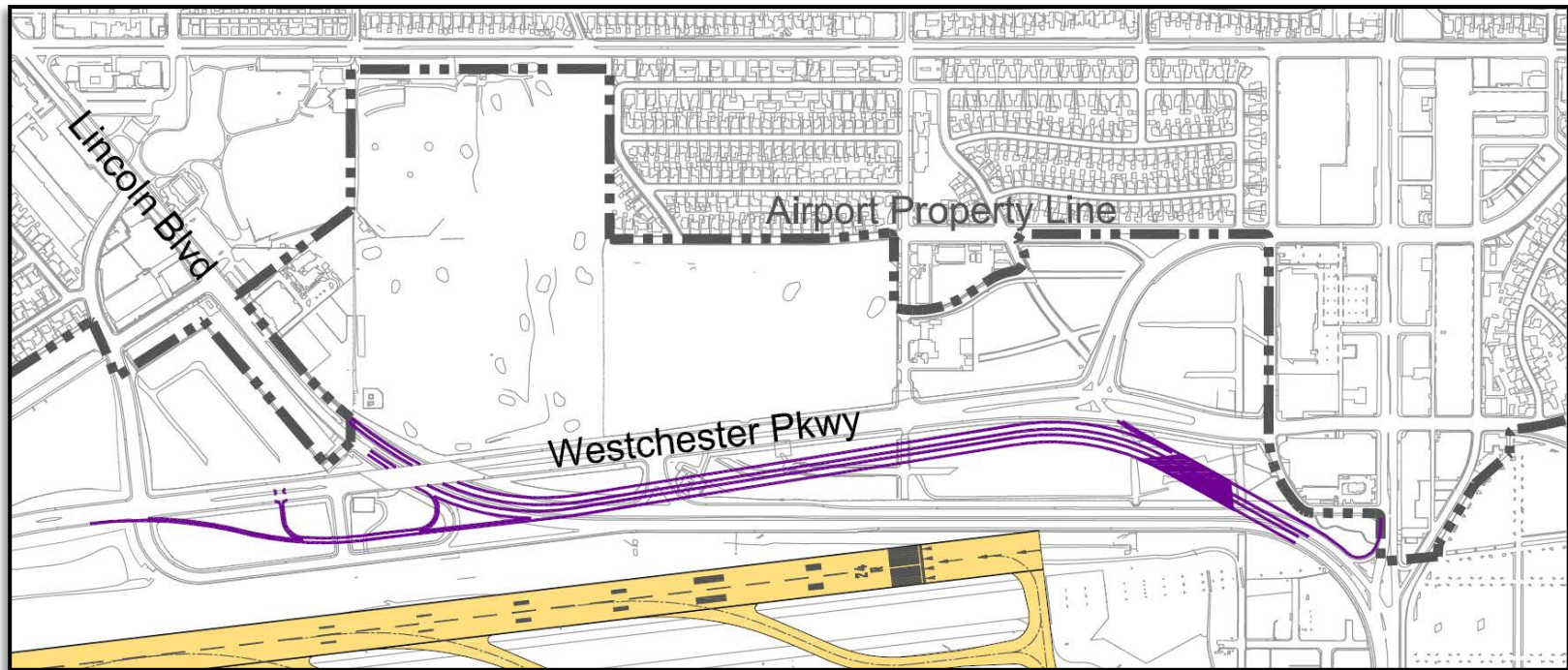
- LAWA prepared an analysis that looked at 2025 traffic, with airport growth in the background, for conditions with or without the BOAC-Selected Alternative to demonstrate how traffic would be redistributed.

## Results:

- 28 (14%) of intersections were significantly impacted (11 can be fully mitigated)
- 172 (86%) Intersections had less than significant impacts or showed improved performance



# Lincoln Blvd. Realignment Concept



- The SPAS Lincoln realignment concept was developed to preserve existing capacity and vehicular movements on Lincoln while avoiding impacts to non-airport properties.
- Viable construction scenarios exist that would avoid complete closures of Lincoln Blvd.
- A large segment of the realigned Lincoln can be constructed on airport property without impacting traffic. Partial closures could be utilized to tie the new segment into existing lanes.
- LAWA has adopted mitigation measures that would reduce impacts on traffic, and additional mitigations will be analyzed during the project-level CEQA process.