

LAX Specific Plan Amendment Study (SPAS) Overview

City Planning Commission
February 14, 2013

SPAS Alternatives Summary

Alternative Designation	Former References or “Description”
Integrated Alternatives	
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”
Airfield Alternatives	
Alternative 5	“350’ N”
Alternative 6	“100’ N”
Alternative 7	“100’ S”
Ground Transportation Alternatives	
Alternative 8	“Busway/CONRAC”
Alternative 9	“Automated People Mover (APM)/CONRAC”

SPAS Project Objectives

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

Key Issues Analyzed in SPAS EIR

Airfield Safety

- The NASS 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.
- The EIR itemized safety enhancements included in each Alternative in accordance with North Airfield Planning Objectives.

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	✈	✈	✈ ¹		✈ ¹	✈	✈ ¹
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	✈		✈		✈	✈ ²	✈ ²
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

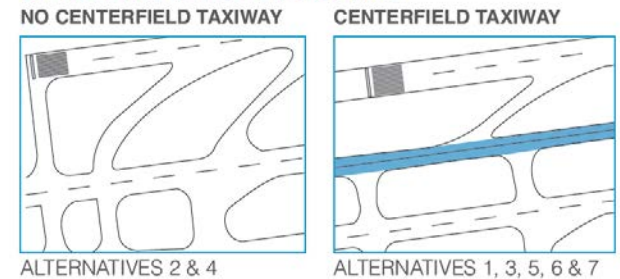
Safety (cont.) – Safety Features And Other Enhancements

- Safety Features included in the Staff-Recommended 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.

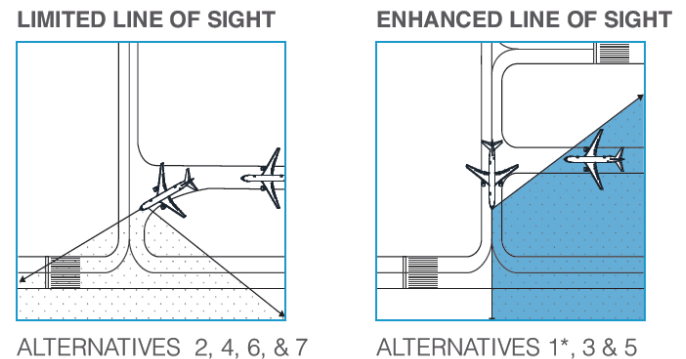
STANDARDIZED RUNWAY OPERATIONS



CENTERFIELD TAXIWAY



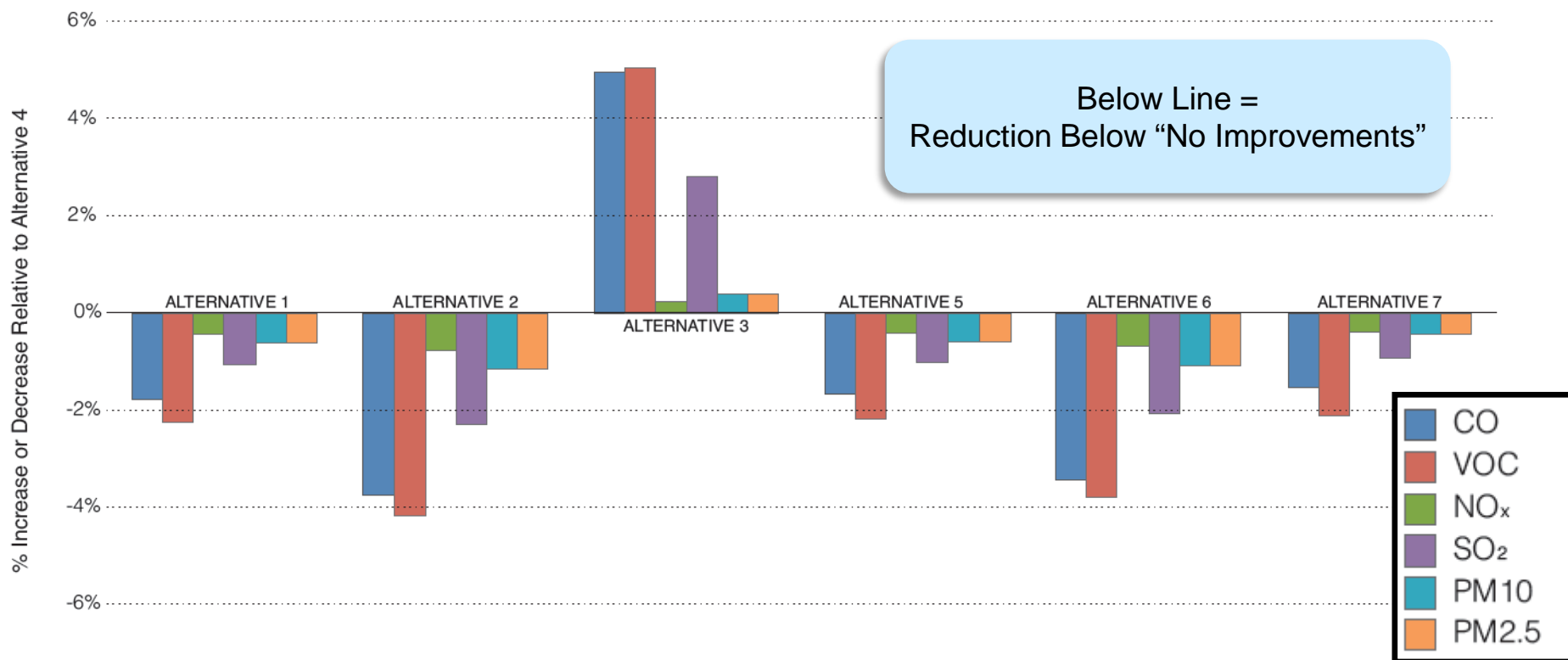
AIRCRAFT LINE OF SIGHT



* Does not apply to Group 6 Aircraft

Air Quality

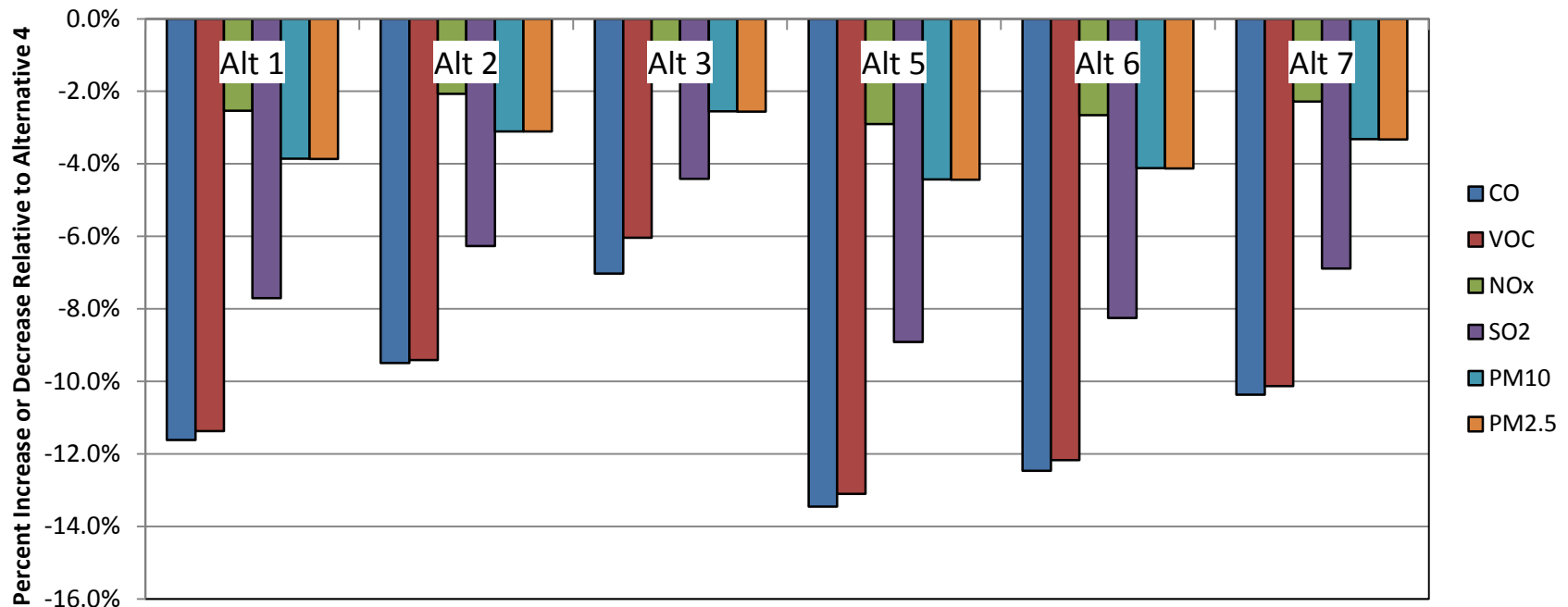
Relative Change in APU/GSE/Aircraft Emissions Compared to No Airfield Improvements (Alt. 4) – Visual Flight Rules (VFR)



- 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 Alt. 1 by only .3% to 2%.

Air Quality (cont.)

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

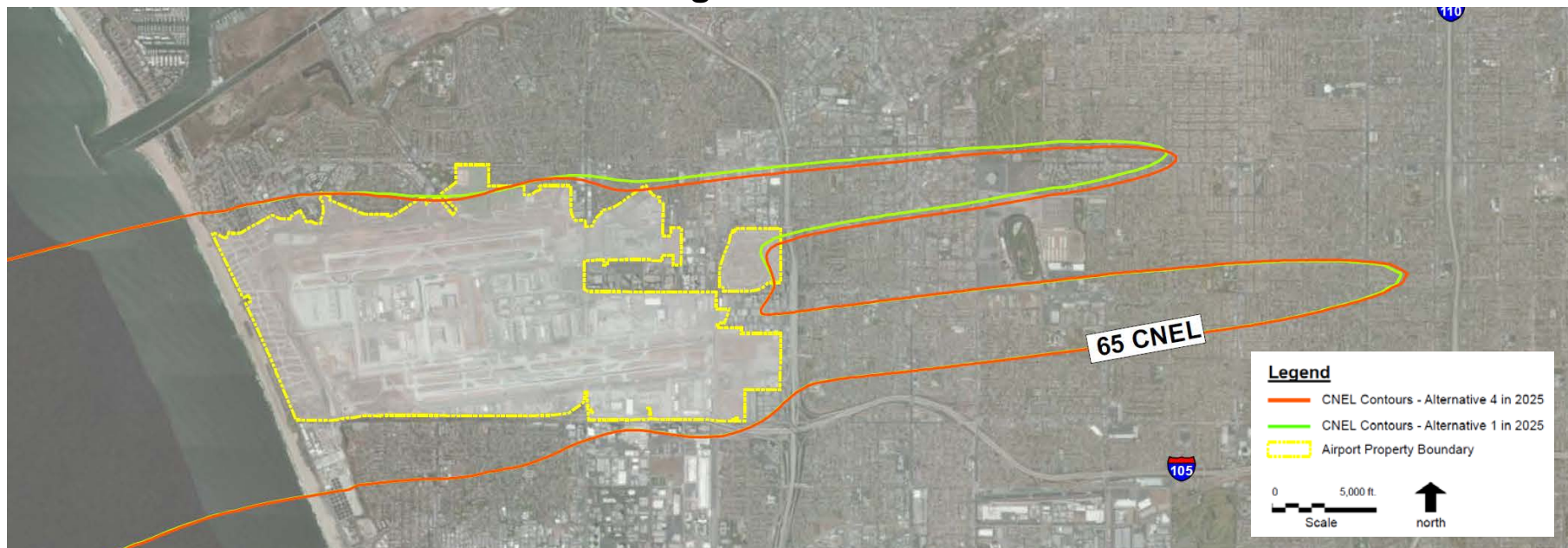


- While it occurs infrequently, the highest airfield emissions occur when visibility is limited (i.e. the airfield operates under instrument flight rules).
- Under these conditions, all Alternatives showed reduced emissions compared to the “No Airfield Improvements” scenario (Alt. 4). However, under these conditions, Alt. 1 performed better than Alt. 2.

Aircraft Noise

- The aircraft noise analysis in the EIR was developed using the Integrated Noise Model (INM). That model:
 - Takes into account topography
 - Assigns greater weight to evening/nighttime noise
- The INM model can distinguish the differences between noise resulting from departures and arrivals. Changes in the location of the arrivals runway tend to influence the noise contour eastward and not northward.

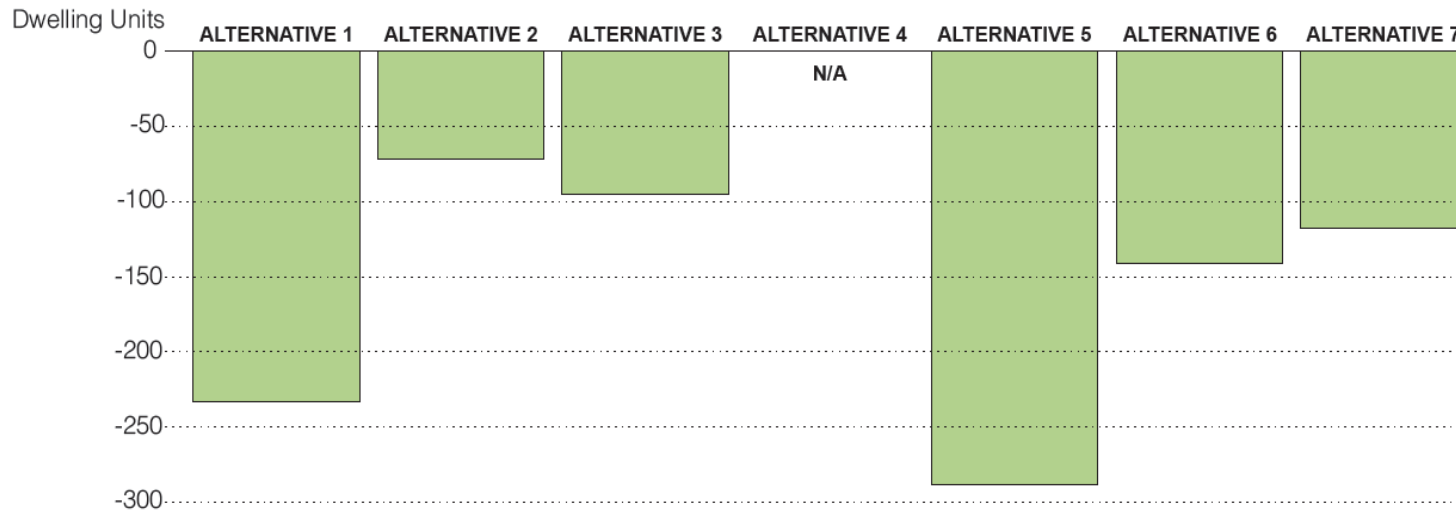
Noise Contour – Existing Airfield and Staff-Recommended Alt.



Aircraft Noise

Change in Number of Dwelling Units Exposed to ≥ 65 CNEL

Year 2025 Conditions With Alternative Versus Without Airfield Improvements



- 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.
- The EIR indicates that the Staff-Recommended Alternative would provide fewer aircraft noise impacts when compared to Alt. 2 (“No Increased Separation”) or Alt. 4 (“No Yellow Lights”).