Specific Plan Amendment Study
South Airfield Improvement Project
Community Outreach Meeting

Los Angeles World Airports

July 26, 2006

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Agenda

- Community Outreach
- Project Purpose
- Aircraft Operations
- Aircraft Noise
- Runway Construction
- Project Mitigation
- Contact Information

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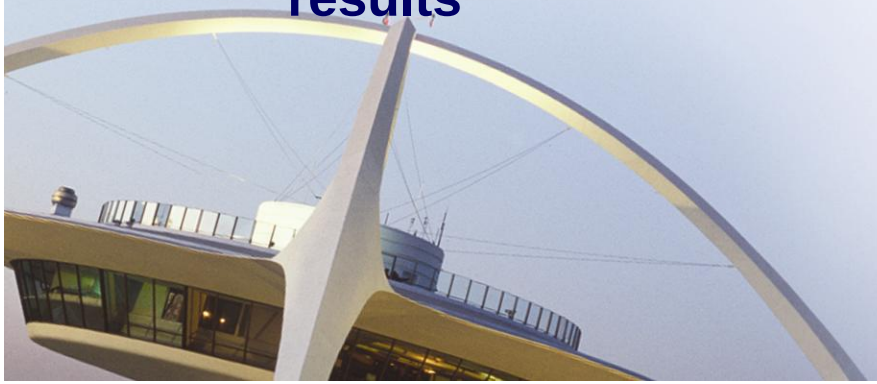
Community Outreach

Tonight is the first in a series of three meetings regarding the SAIP

- **First Meeting – Prior to Runway Closure July 06**
  - **Construction Schedule, Mitigation Measures, Noise Monitoring programs**
- **Second Meeting – During Runway Closure July 06 – March 07**
  - **Updated Construction Schedule, Comments on Mitigation Measures effectiveness, Updated Noise Monitoring programs**
- **Third Meeting – After reopening of Runway 25L**
  - **Comments on Mitigation Measures, Updated Noise Monitoring results**



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Project Purpose

Safety- eliminate or reduce the number of runway incursions

Air Quality – Reduce the aircraft idle and taxi time

South Airfield project is not to accommodate new large aircraft (A380). The A380 could operate on the south side without the project

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Roles and Responsibilities

- **Federal Aviation Administration**
  - **Control of aircraft on the ground and in the air**
    - **Aircraft on ramps, taxiways and runways**
    - **Aircraft departure and arrival procedures (routes and altitudes) as well as enroute procedures**
- **LAWA**
  - **Maintenance of airport facilities (landside and airside)**
    - **Parking, terminals, leaseholds**
    - **Runways, taxiways, etc.**
  - **Airport Planning**
  - **Airport Facilities Development**

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LAX Airport Operations

- **Normal Procedures**
  - **Westerly Operations (6:30 a.m. to Midnight)**
    - **Aircraft depart and arrive to the west**
  - **Over Ocean Operations (Midnight to 6:30 a.m.)**
    - **Aircraft arrive to the east from over the ocean and depart to the west over the ocean**
- **Atypical Procedures**
  - **Easterly Operations**
    - **Aircraft depart and arrive to the east**
  - **Go-Arounds**

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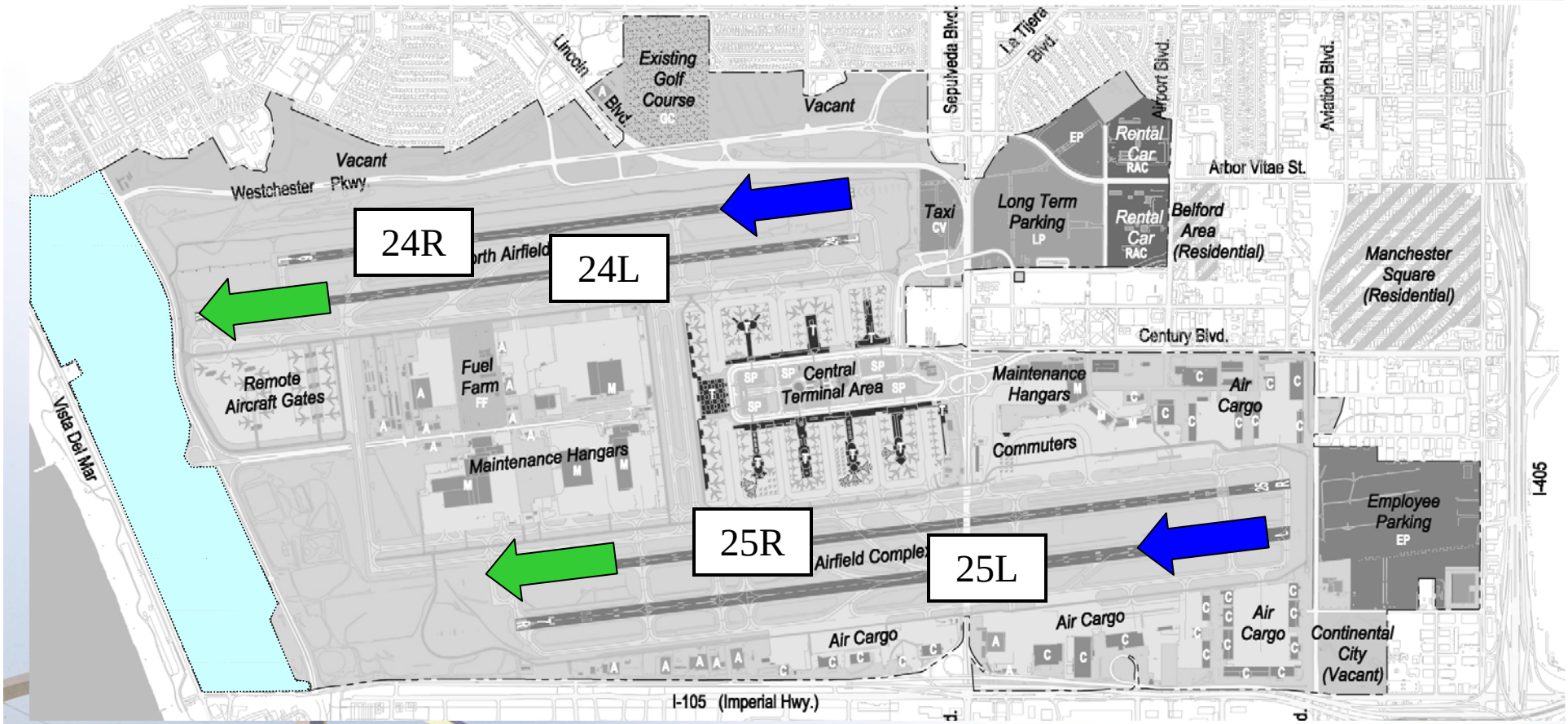
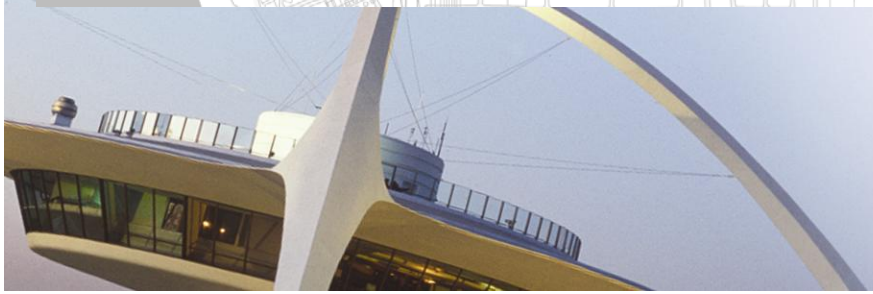
Normal Aircraft Operations-Primary Uses





Departures

Arrivals

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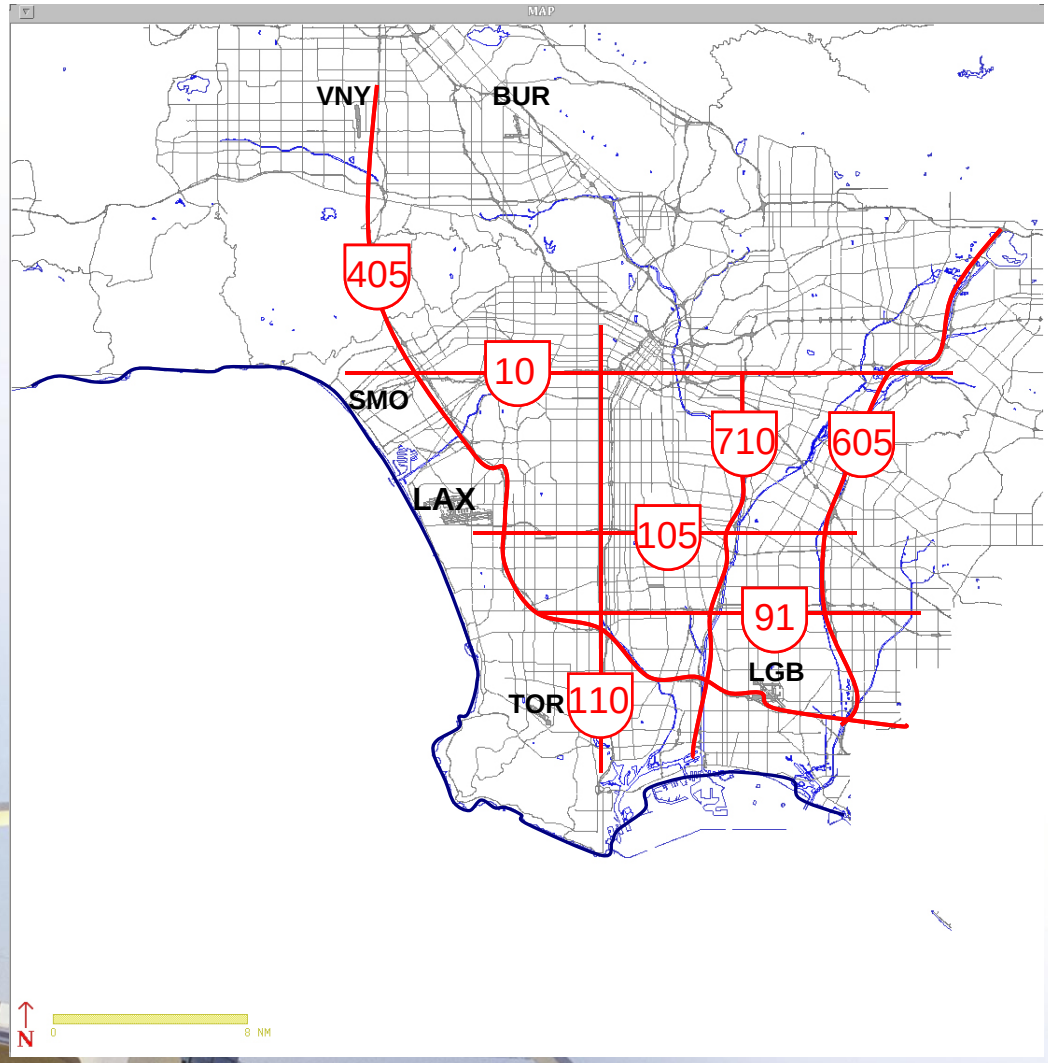
Westerly Operations



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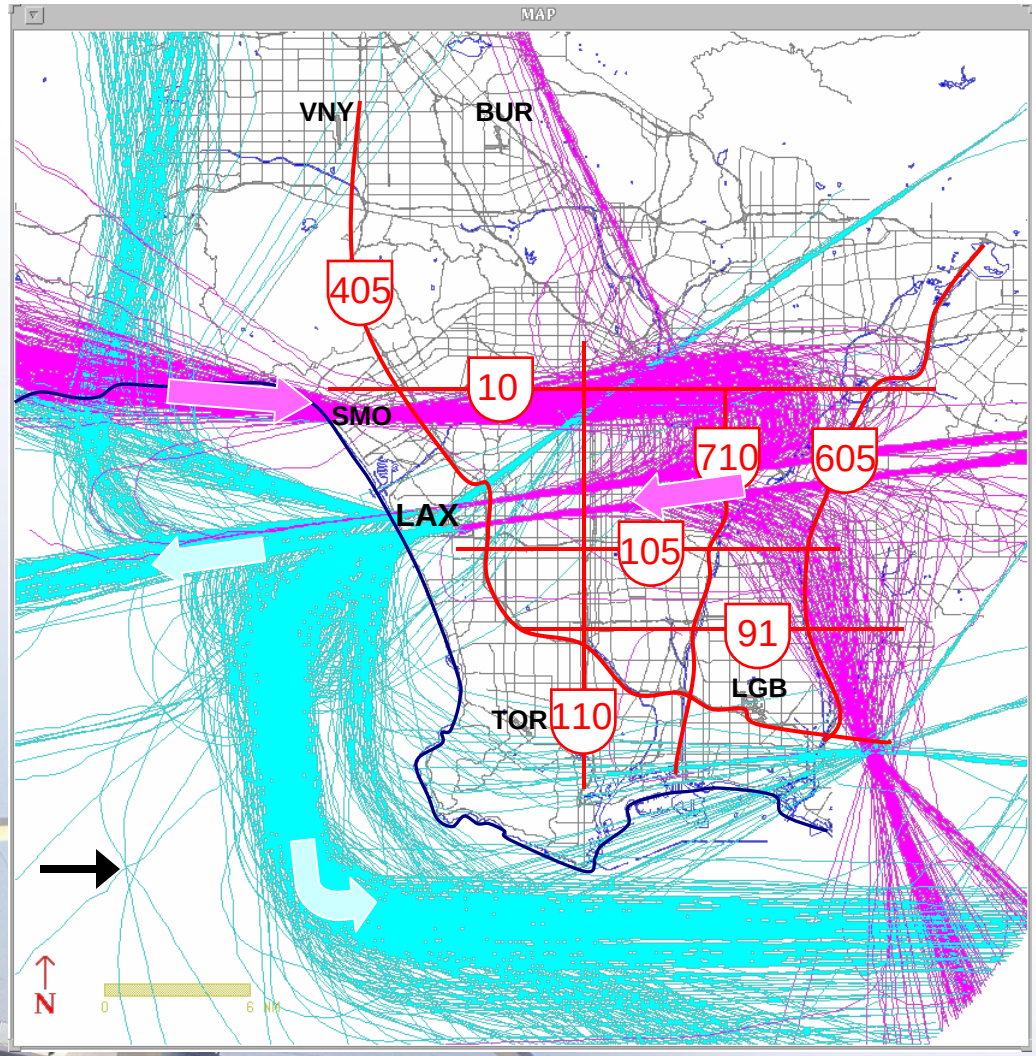
Westerly Operations



April 27, 2006

(6:30 a.m. to Midnight)

Purple Tracks – Arrivals

Blue Tracks - Departures

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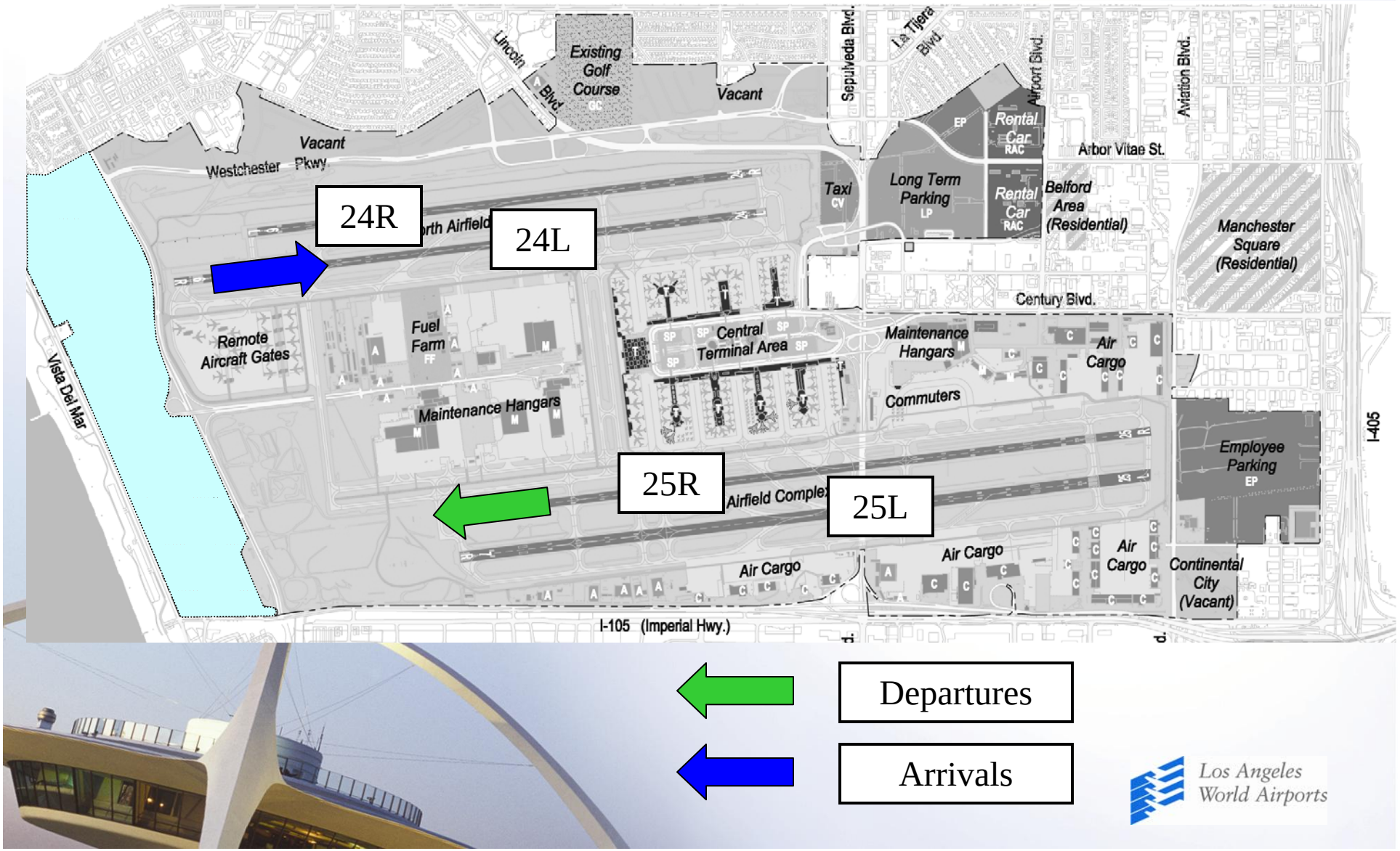
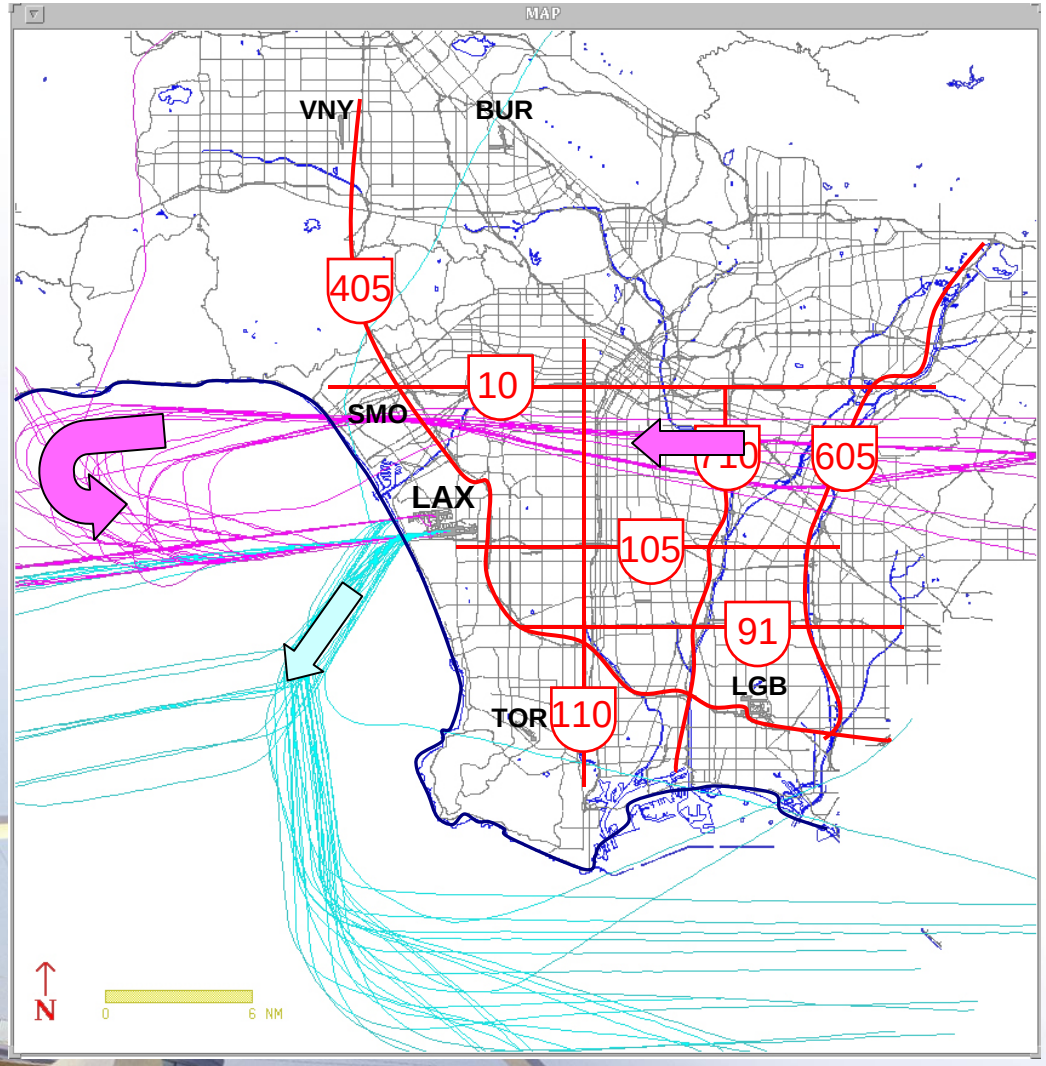
Over Ocean Operations 12:00 a.m. - 6:00 a.m.



Over Ocean Operations



April 27, 2006

(Midnight to 6:30 a.m.)

Purple Tracks – Arrivals

Blue Tracks - Departures

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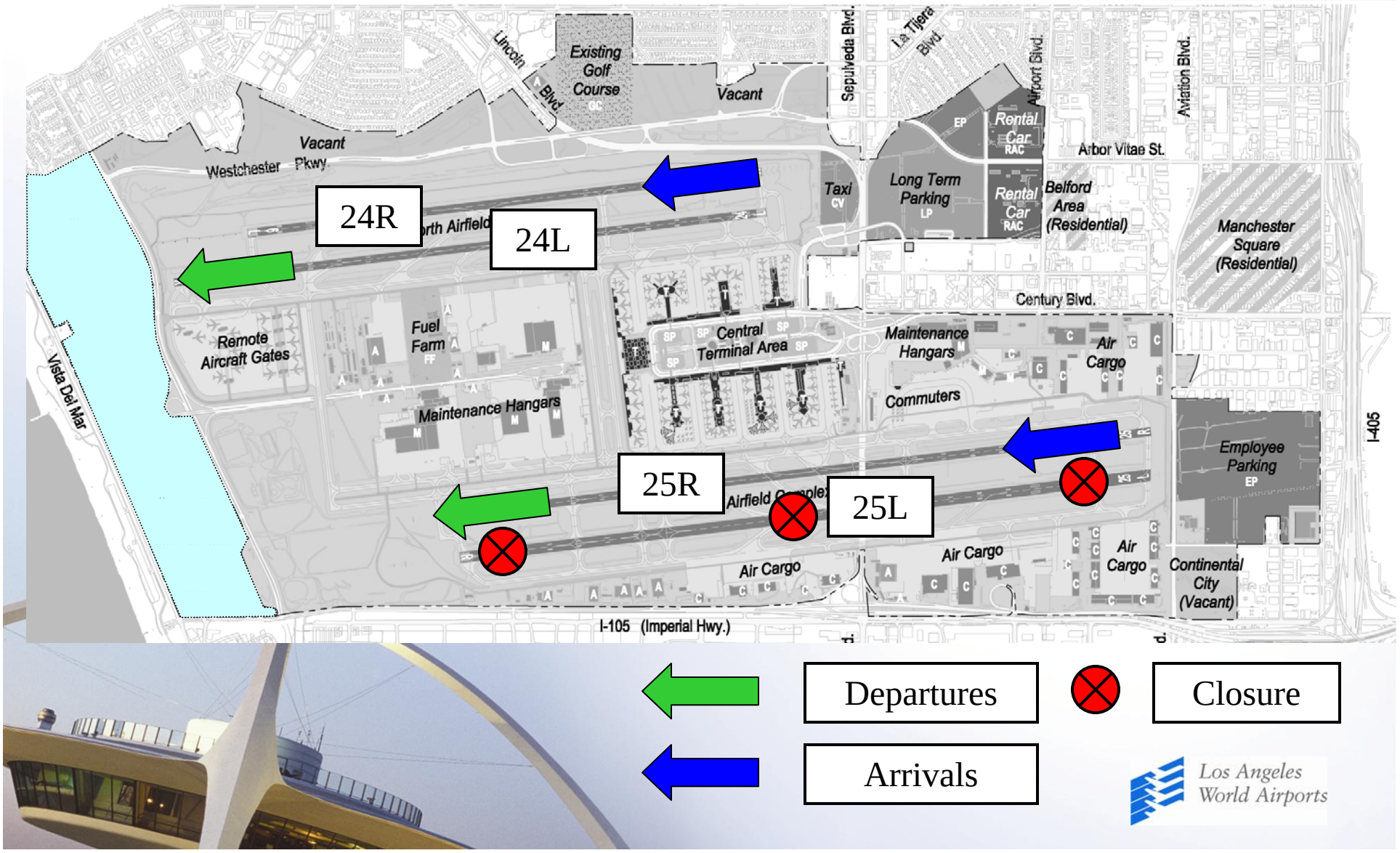
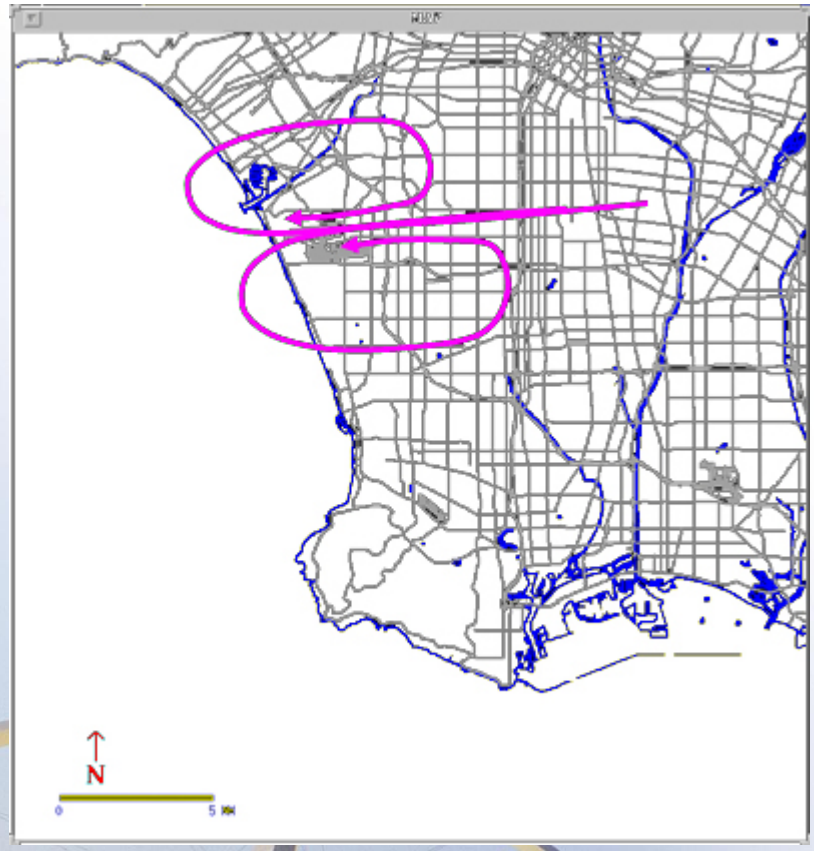
Operations During Runway 25L Closure



Go-Arounds



- Go-arounds or missed approaches occur when an aircraft cannot land and has to go back around and try again
- Causes or reasons for a go-around/missed approach is case specific
  - Pilot initiated (too high or fast)
  - FAA initiated (previous arrival, etc)
- Aircraft usually maintain runway heading until vectored (turned to a specified heading) by the FAA controller to make a U-turn to re-enter the arrival route

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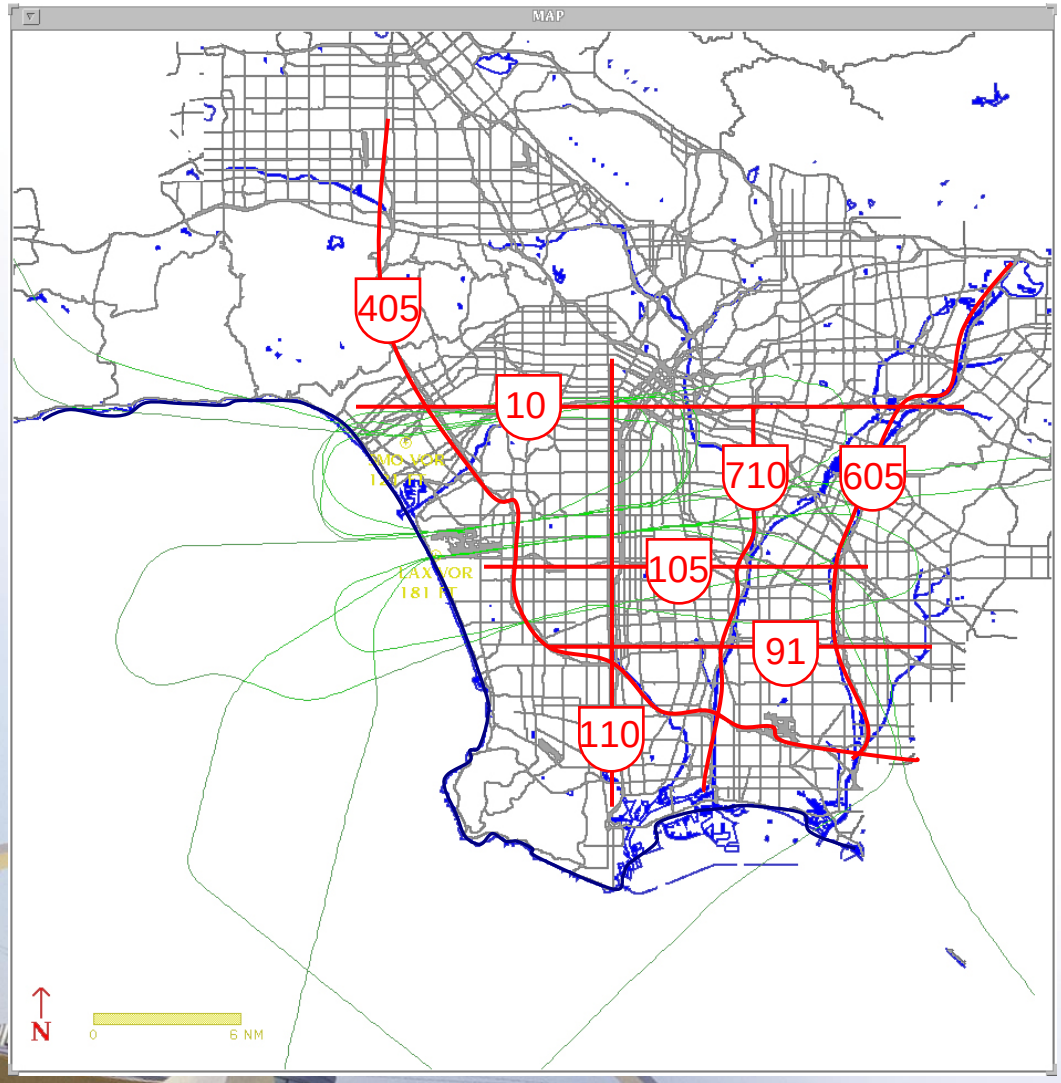
Go-Arounds



April 3, 2006 – 6 Missed Approaches/Go Arounds

Runway 24R

1 Missed Approach (Pilot initiated)

2 Go Arounds (Controller initiated)

Runway 25L

3 Missed Approaches (Pilot initiated)

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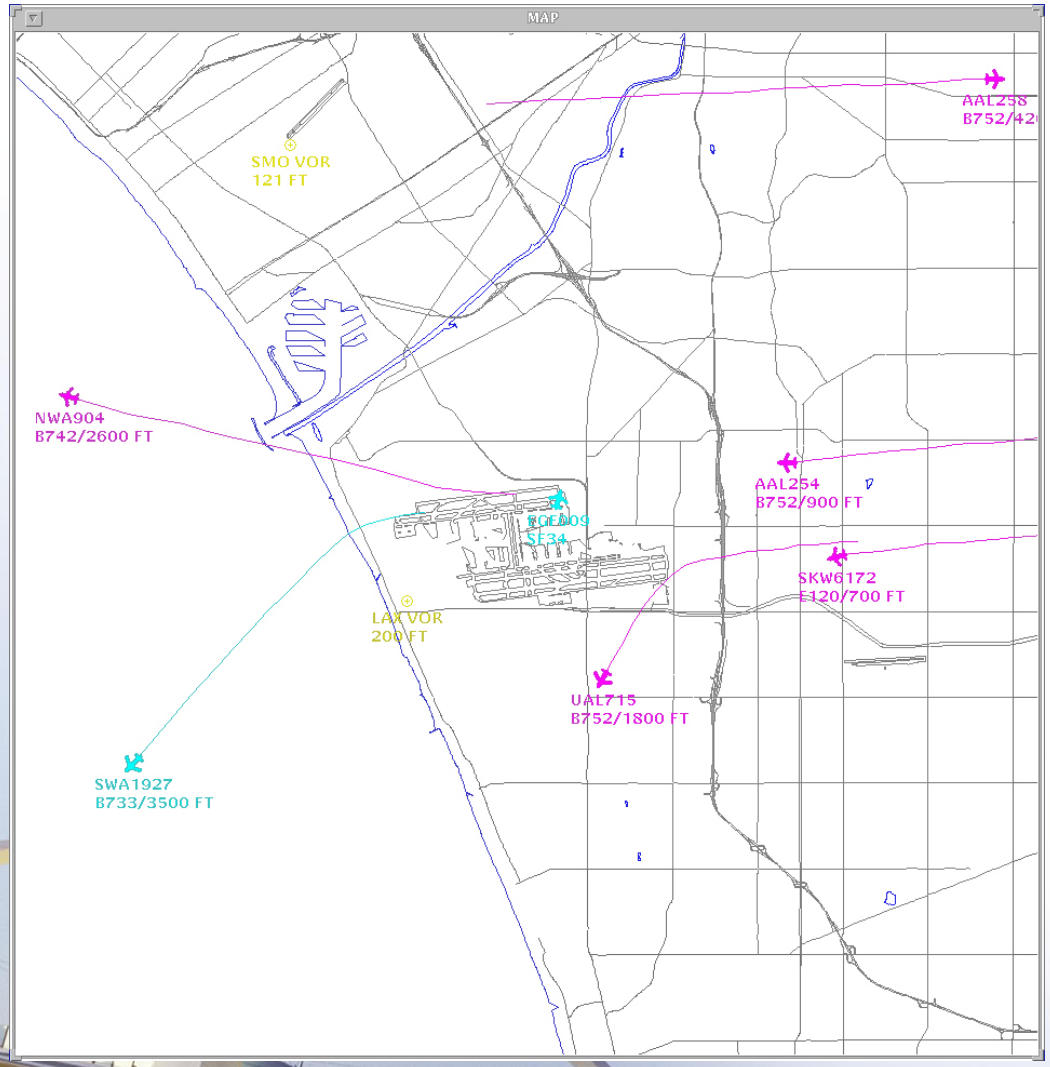
Go-Arounds



March 17, 2006 9:28 p.m.

Missed Approach Runway 24R

NWA B747 – Pilot initiated due to Aircraft Equipment (gear) problem. Turn north due to previous departure on 24L.

Go Around Runway 25L

United B757 – Controller initiated (previous arrival lost radio contact crossing between runways). Turn south due to previous departure on 24L.

Purple Tracks – Arrivals

Blue Tracks - Departures

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- Aircraft Noise
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Questions?

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Noise Monitoring

- **Normal Procedures**
  - **Westerly Operations (6:30 a.m. to Midnight)**
    - **Aircraft depart and arrive to the west**
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Basics of Sound

- ***Sound*** **– minute vibrations that can be sensed by the human ear through air or water**
- ***Noise*** **– "unwanted" sound that disturbs our activities and/or quiet time**
- ***Decibel*** **(dB) – logarithmic unit of measure for sound (addition of sounds: 70 dB + 70 dB = 73 dB)**

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Basics of Sound

- ***Intensity*** **– a measure of acoustic energy of sound vibrations (Volume)**
  - **A 10 dB increase is a doubling of acoustic energy/volume**
- ***Frequency*** **– number of times per second the air vibrates (Pitch)**
  - **Lower frequency sounds go through walls and windows causing rattling**
  - **Higher frequency sounds usually stopped by walls and double paned/sound insulation type windows**

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Reaction to Changes in Sound

Change in Level, dB	Subjective Reaction
1	**Imperceptible (except for tones)**
3	**Just barely noticeable**
6	**Clearly noticeable**
10	**About twice (or half) as loud**

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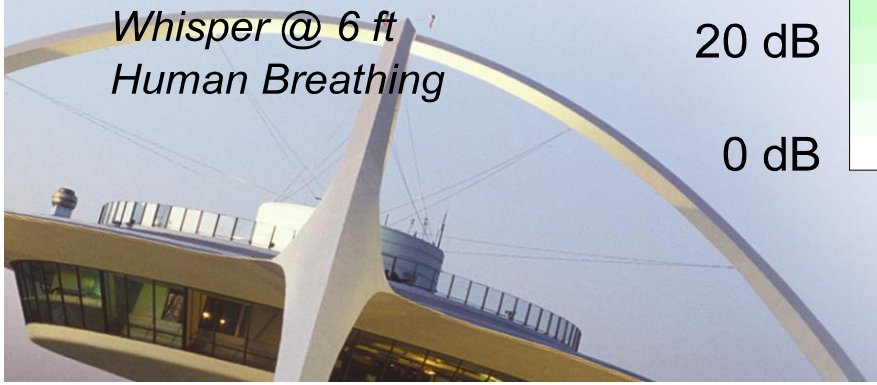
Examples of Sound Levels

Noise Source	*Sound Level*	*Subjective Description*
Amplified Rock & Roll	120 dB	*Deafening*
Jet Takeoff @ 200 ft		
Busy Urban Street	100 dB	*Very Loud*
	80 dB	*Loud*
Freeway Traffic @ 50 ft		
Conversation @ 6 ft	60 dB	*Moderate*
Typical Office Interior		
Soft Radio Music	40 dB	*Faint*
Residential Interior		
Whisper @ 6 ft	20 dB	*Very Faint*
Human Breathing	0 dB	



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Noise Metrics

- **Community Noise Equivalent Level (CNEL)**
  - **24 Hour Weighted Average**
  - **Weighting for Evening (x3) and Night (x10) where noise is perceived to be louder**

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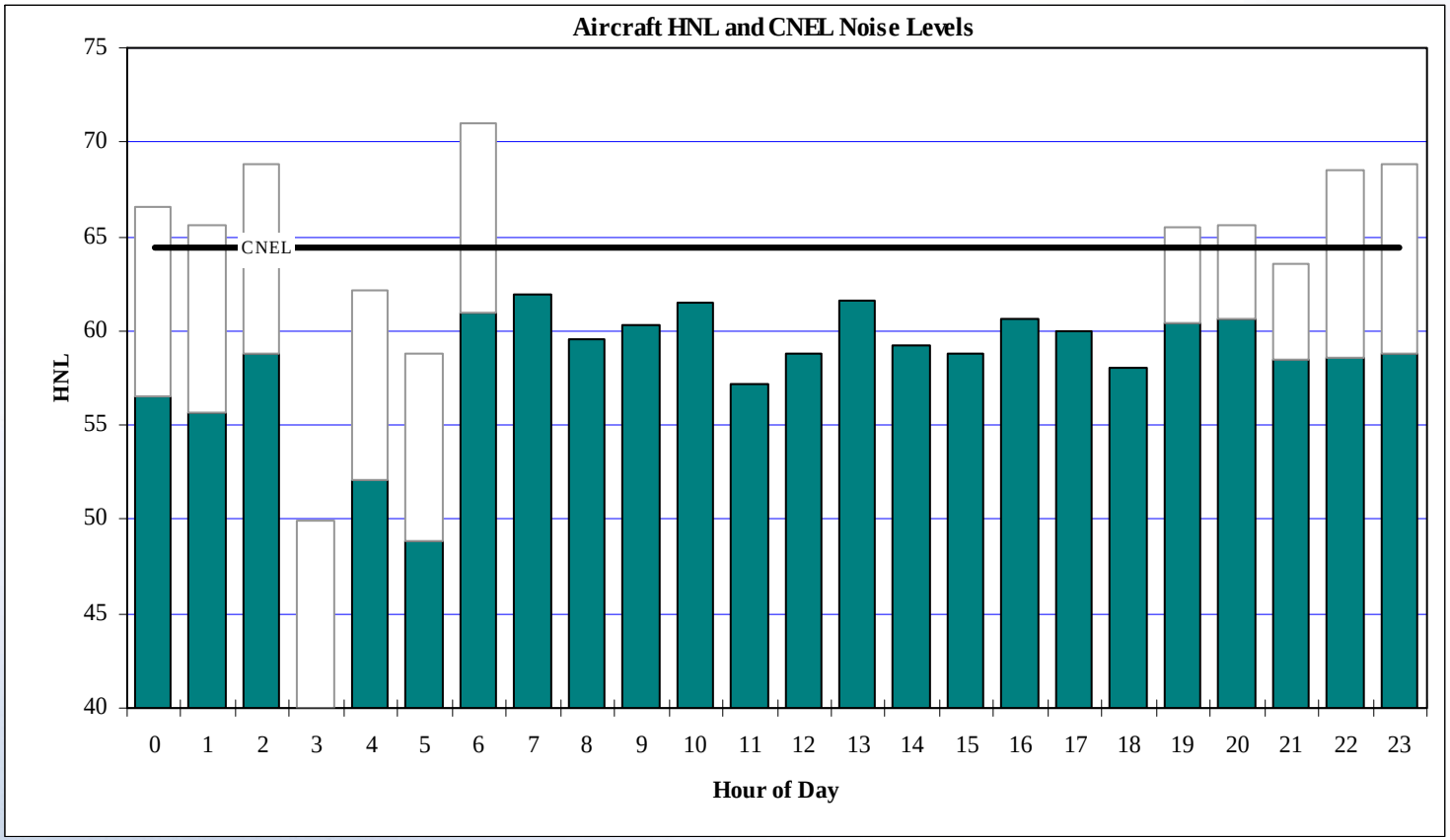
Daily CNEL – ES3



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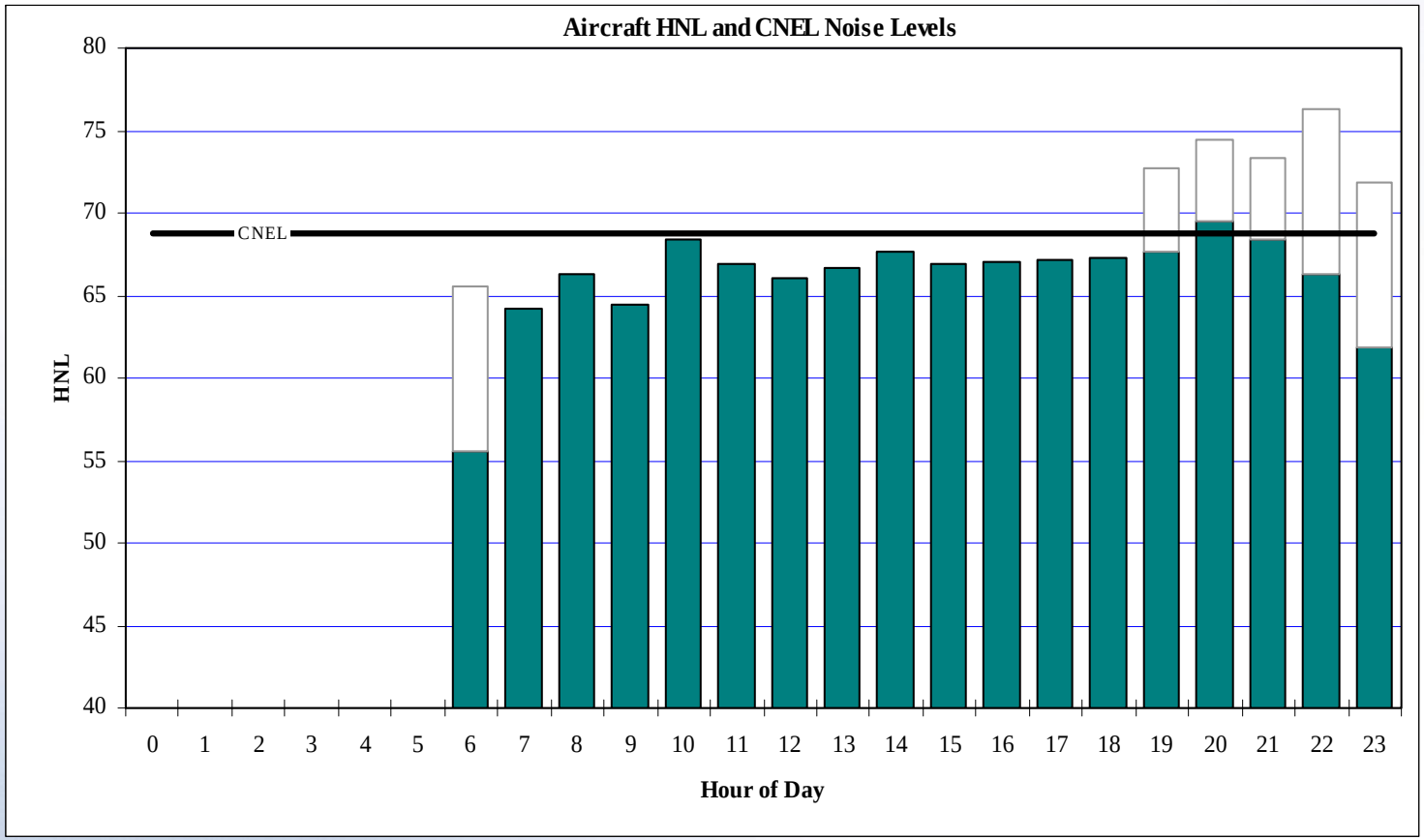
Daily CNEL – IN3



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Noise Monitoring

- LAX currently has 25 permanent noise monitors positioned around LAX collecting data 24 hrs per day, 365 days per year
- Noise Monitoring System correlates FAA radar flight track operation information to measured noise levels to determine aircraft noise
- Measured aircraft noise levels are used to adjust the Integrated Noise Model (INM) contours to depict the Annual Average 65 dB CNEL noise contour

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Existing Noise Monitoring Site

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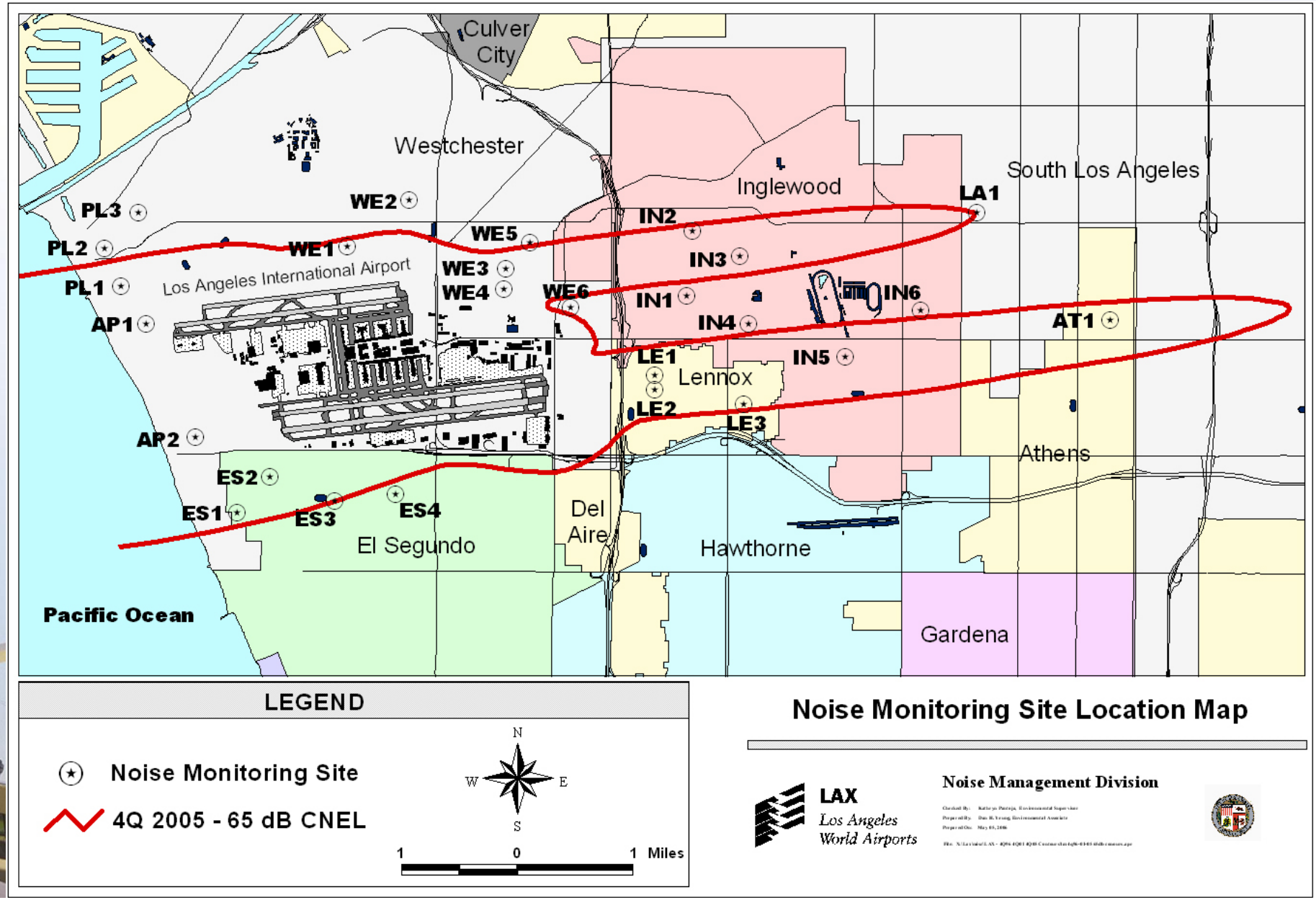
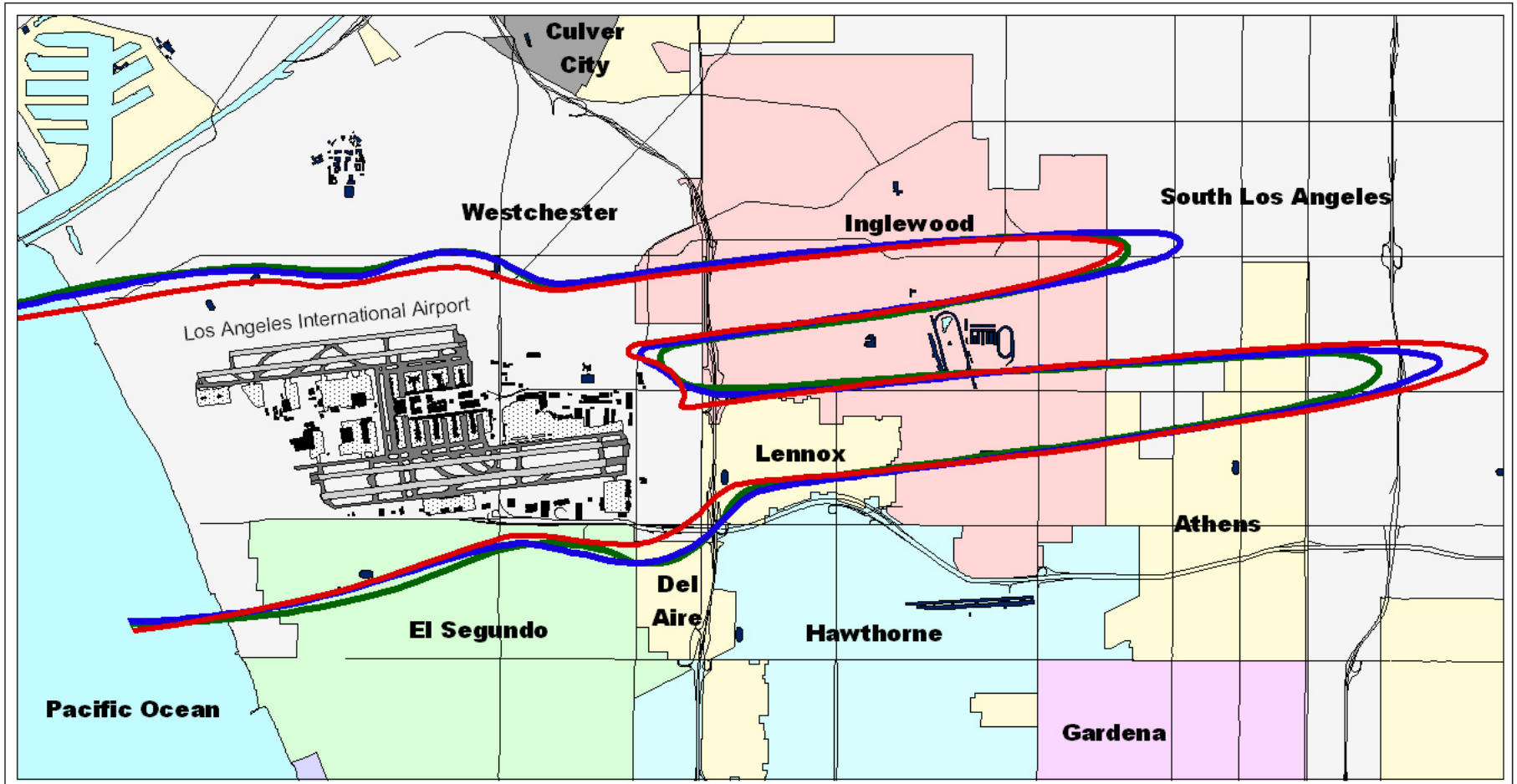
Existing Noise Monitoring Site Location



History of Noise Footprint



4Q1992 vs. 4Q2005 65CNEL

Questions?

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South Airfield Improvement Project Construction

Jake Adams, P.E.

LAWA Program Manager

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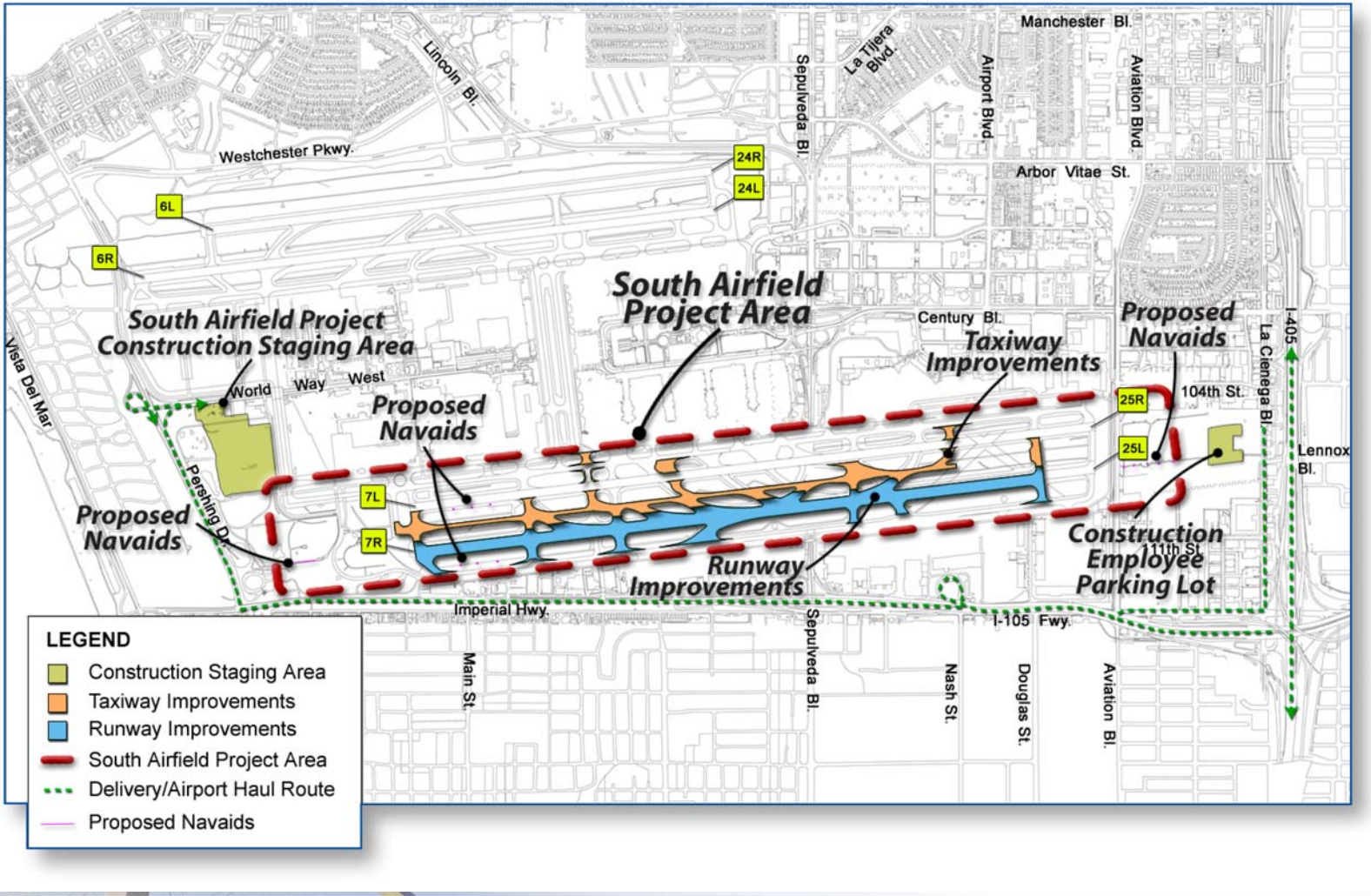
SAIP – Project Elements/Setting



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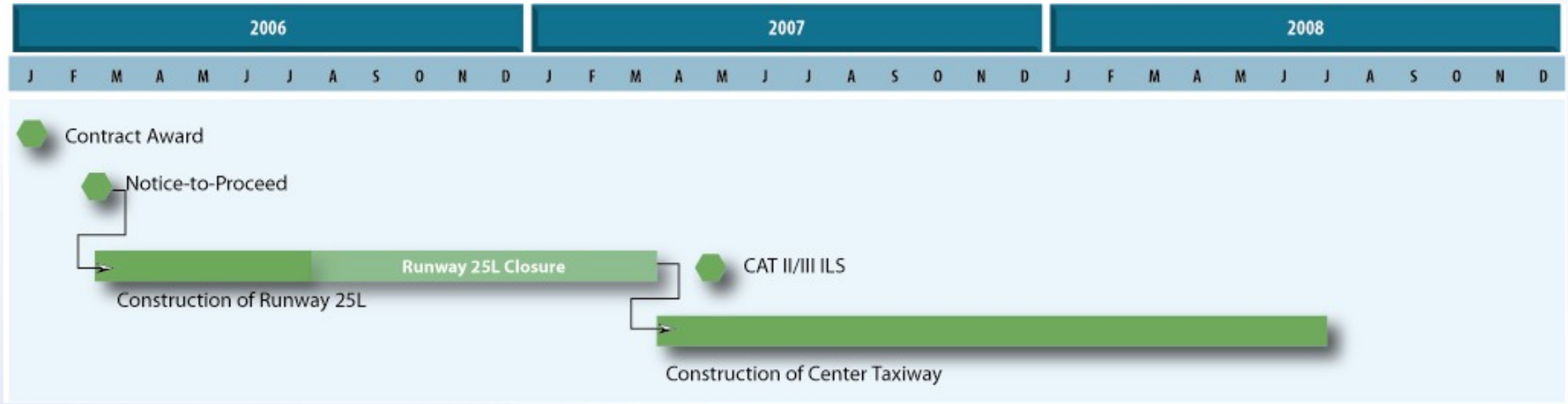
SAIP Overall Project Schedule



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Phase 1 – Batch Plant

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Phase 1 – Test Strip

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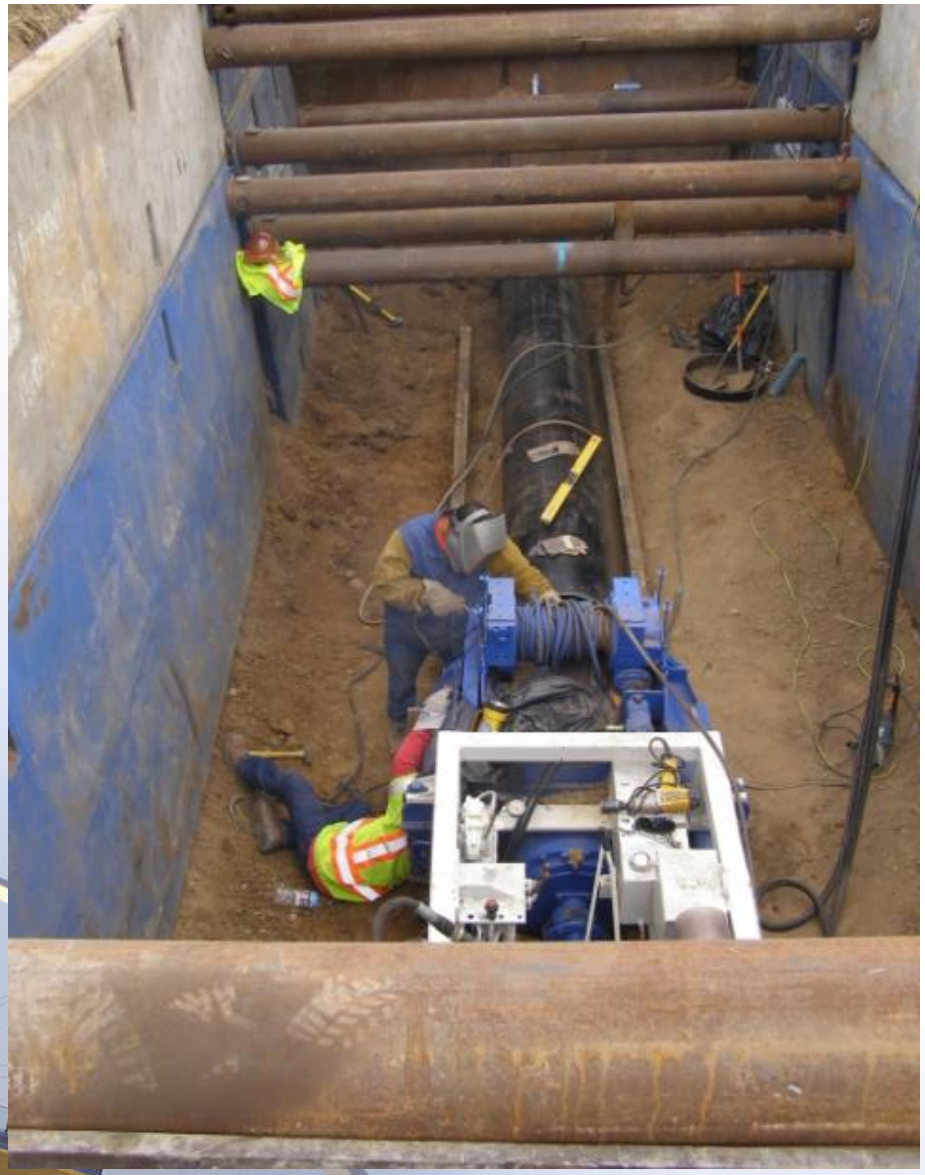
Phase 1 – Utility Installations



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Phase 1 – Temporary Taxiway

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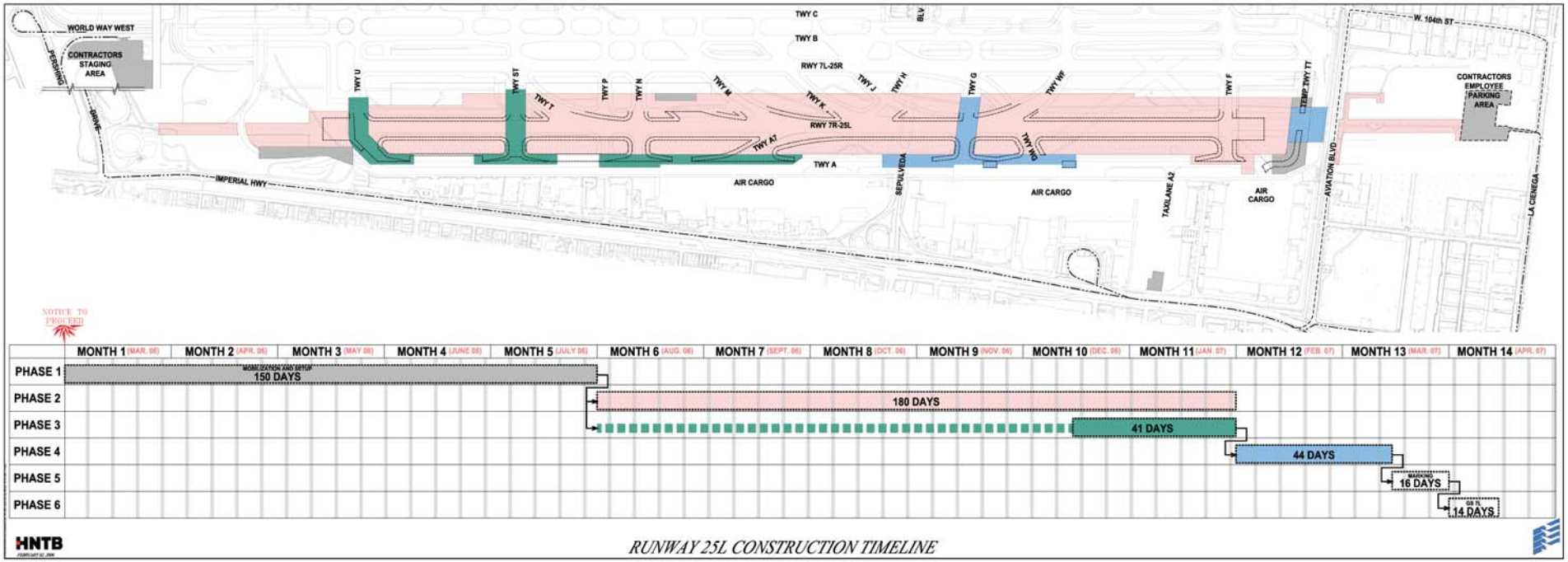
Package 1 – Phase/Schedule



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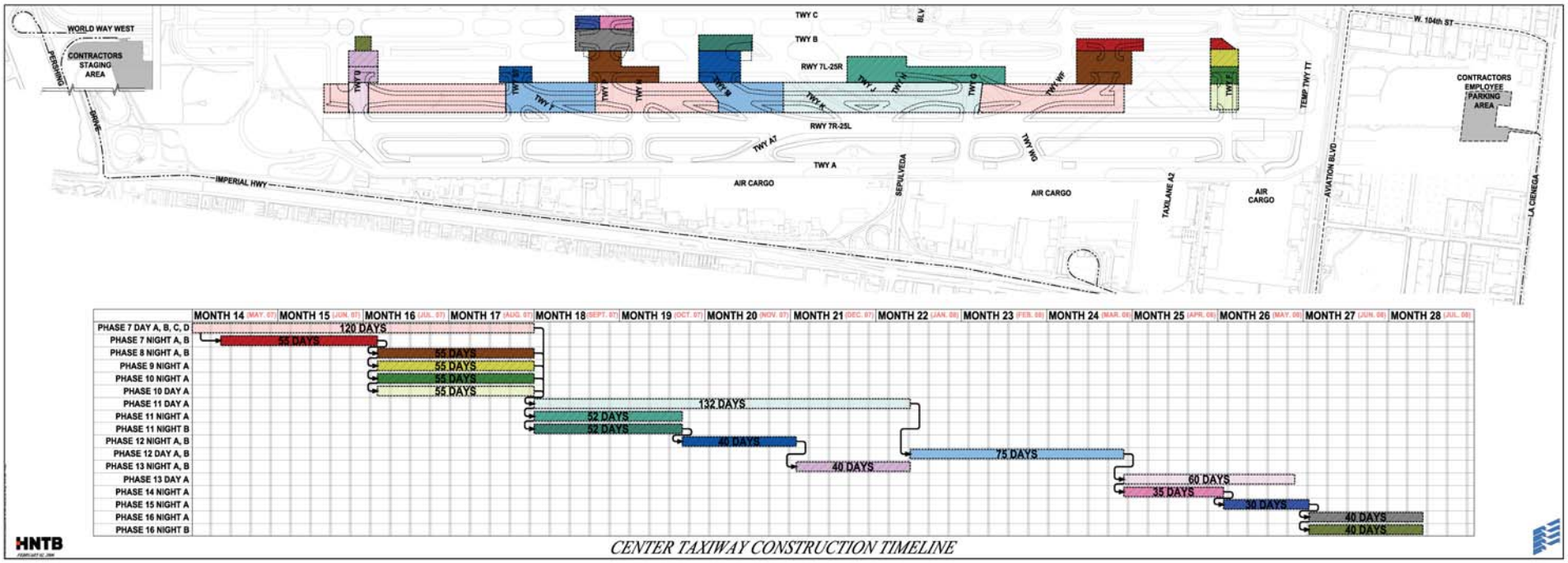
Package 2 – Phasing/Schedule



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Basis for Development of SAIP MMRP

- **Settlement Agreement**
- **LAX Master Plan MMRP**
- **SAIP Project-Level Tiered Environmental Impact Report**
- **Other Mitigation Measures identified for SAIP Construction**
  - **Included as mandatory requirements in the construction contract.**
  - **Failure to meet requirements carry financial penalties (fines)**

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Specific Project Mitigation Measures

- **The SAIP MMRP focuses on:**
  - **Air Quality**
  - **Construction Noise**
  - **Construction Traffic**

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Air Quality Measures

- **Vehicle idling rules**

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Air Quality Measures

- **Proper maintenance of construction equipment**
- **Cleaner Burning Diesel Fuel – ULSD**
- **Diesel Emission Reduction – Where feasible, use of available BACT devices, for diesel equipment**
- **Replace older equipment**

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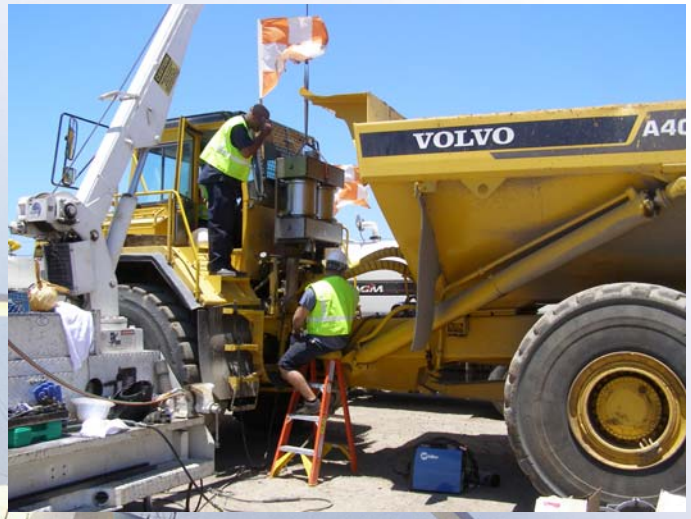
Air Quality Measures – BACT Devises



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Air Quality Measures – New Equipment

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Air Quality Measures

- **Fugitive Dust Control Plan – complies with AQMD Rule 403**
  - **Soil Stabilizers**
  - **Designated Stockpile locations and dust controls**
  - **15 mph speed limit on unpaved areas**
  - **Proper maintenance of haul and delivery routes**
  - **Street Sweeping and Vacuuming**
  - **Watering**

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Air Quality – Fugitive Dust

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Air Quality – Public Input

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Construction Noise Measures

- **Mandatory Construction Noise Control Plan (CNCP)**
  - **Schedule noisiest construction activities outside noise sensitive times. (9pm-7am Weekdays; before 8am and after 9pm on Sat; anytime on Sundays or Holidays)**

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Contruction Noise – Pavement Breaker

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Construction Noise – Hoe Ram

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Construction Noise Measures

- **Mandatory Construction Noise Control Plan (CNCP)**
  - **Locate staging areas and batch plant away from noise sensitive areas**

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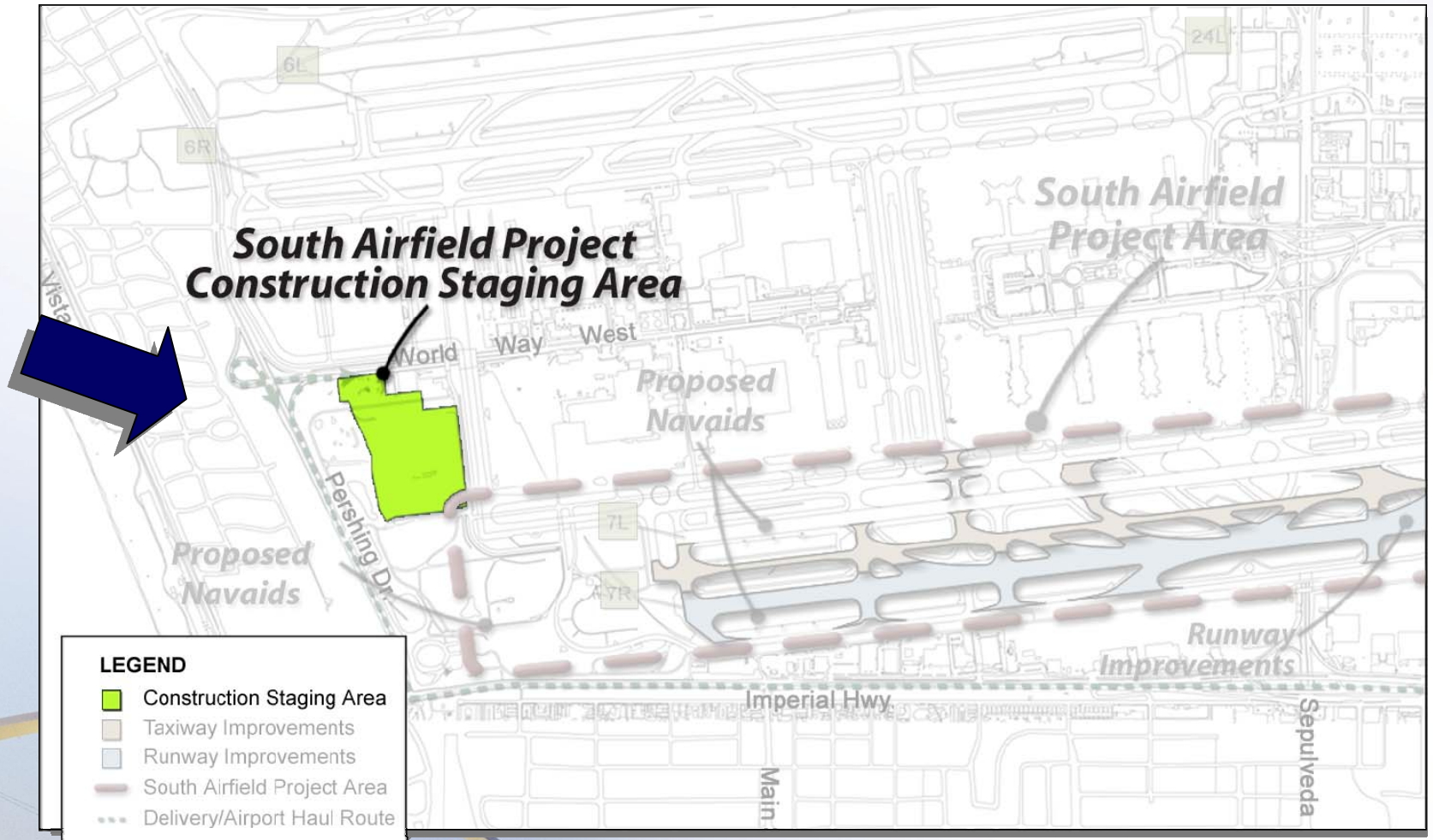
Construction Noise – Staging Area



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Construction Noise Measures

- **Mandatory Construction Noise Control Plan (CNCP)**
  - **Monitoring construction noise levels at various locations in the City of El Segundo**

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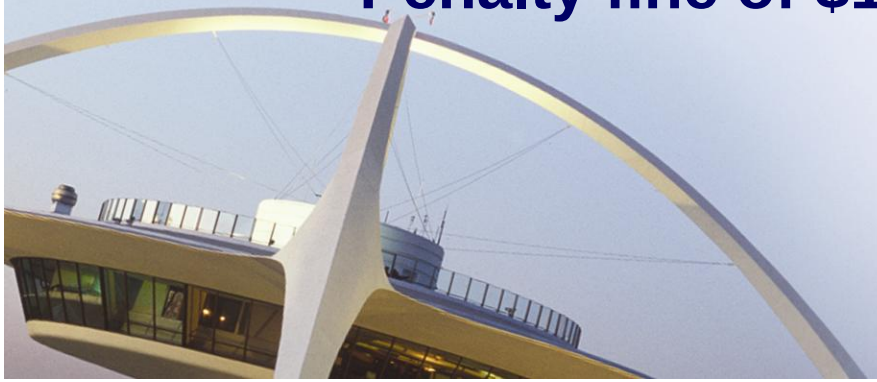
Construction Noise – Sensitive Areas

Construction Noise Measures

- **Mandatory Construction Noise Control Plan (CNCP)**
  - **Violations of the CNCP will subject the Contractor to corrective measures and penalty fines**
    - **Equipment Mufflers**
    - **Enclosures/Barriers**
    - **Rectify or replace noisy equipments**
    - **Penalty fine of $1,000 per day per occurrence**



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Construction Traffic Measures

- **Mandatory Construction Traffic Management Plan.**
- **Additional Signage and Striping prior to construction**
- **Restrict Construction Delivery Times (avoid peak traffic periods of 7am-9am and 4:30pm-6:30pm)**
- **Construction employee shifts scheduled to avoid peak traffic periods.**
- **Construction employee parking offsite and shuttles to jobsite**

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Construction Traffic – Shuttle Bus

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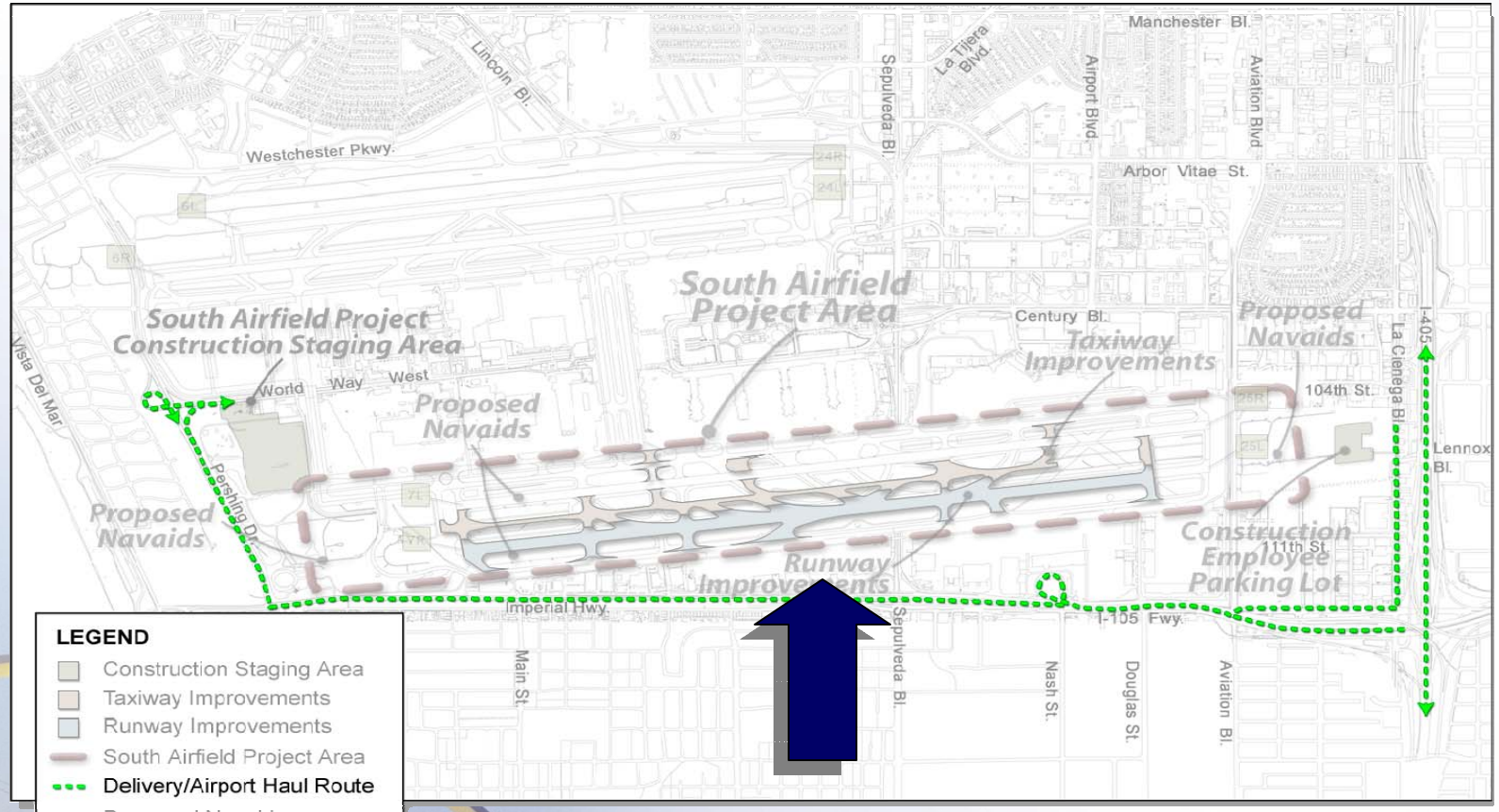
Construction Traffic – Haul Routes

- **Defined Haul Routes**



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Contact Information for Public Comments

- **Dust Complaints – (310) 491-3100**
  Active
- **Construction Noise – (866) 758-LAWA(5292)**
  Will be activated on 7/28/06
- **Aircraft Noise - 310-646-9410 or 310-646-6473**
  Active
- **Construction Traffic – (310) 417-2311**
  Active
- **Website – www.LAWA.org**
  Click on “LAX” then
  Click on “SAIP Construction” on left side of page
  Site will be activated on 7/28/06

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Questions?

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Airport Noise Standards

- **California Code of Regulations, Title 21, Subchapter 6**
  - **Noise Problem Airport**
  - **Standard metric for reporting: CNEL**
  - **Noise Impact Boundary: 65 dB CNEL noise contour**
  - **Noise Impact Area: Incompatible land uses within Noise Impact Boundary**
  - **Requires noise monitoring and submittal of quarterly reports**
  - **Variance requirements**

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State Noise Variance

- Noise Problem airport required to apply for a Title 21 Variance to continue operating
- Process administered by State of California
  - Negotiation
  - Public Hearing
    - Legal procedure before Administrative Law Judge
    - Public represented by Intervenors
  - Maximum term of Variance is 3 years

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State Noise Variance

Current LAX Variance:

- **Stipulated Variance issued June 21, 2005**
- **LAWA agreed to the following:**
  - **Report on progress of mitigation programs**
  - **Continue all existing noise abatement policies**
  - **Additional reports, including runway usage**
  - **Reports of enforcement actions related to maintenance curfew**
  - **Providing additional information re: A380 when available**

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Glossary

SPAS -	**Specific Plan Amendment Study**
SAIP -	**South Airfield Improvement Program**
MMRP -	**Mitigation Monitoring and Reporting Program**
(CNCP) -	**Mandatory Construction Noise Control Plan**
CNEL-	**Community Noise Equivalent Level**

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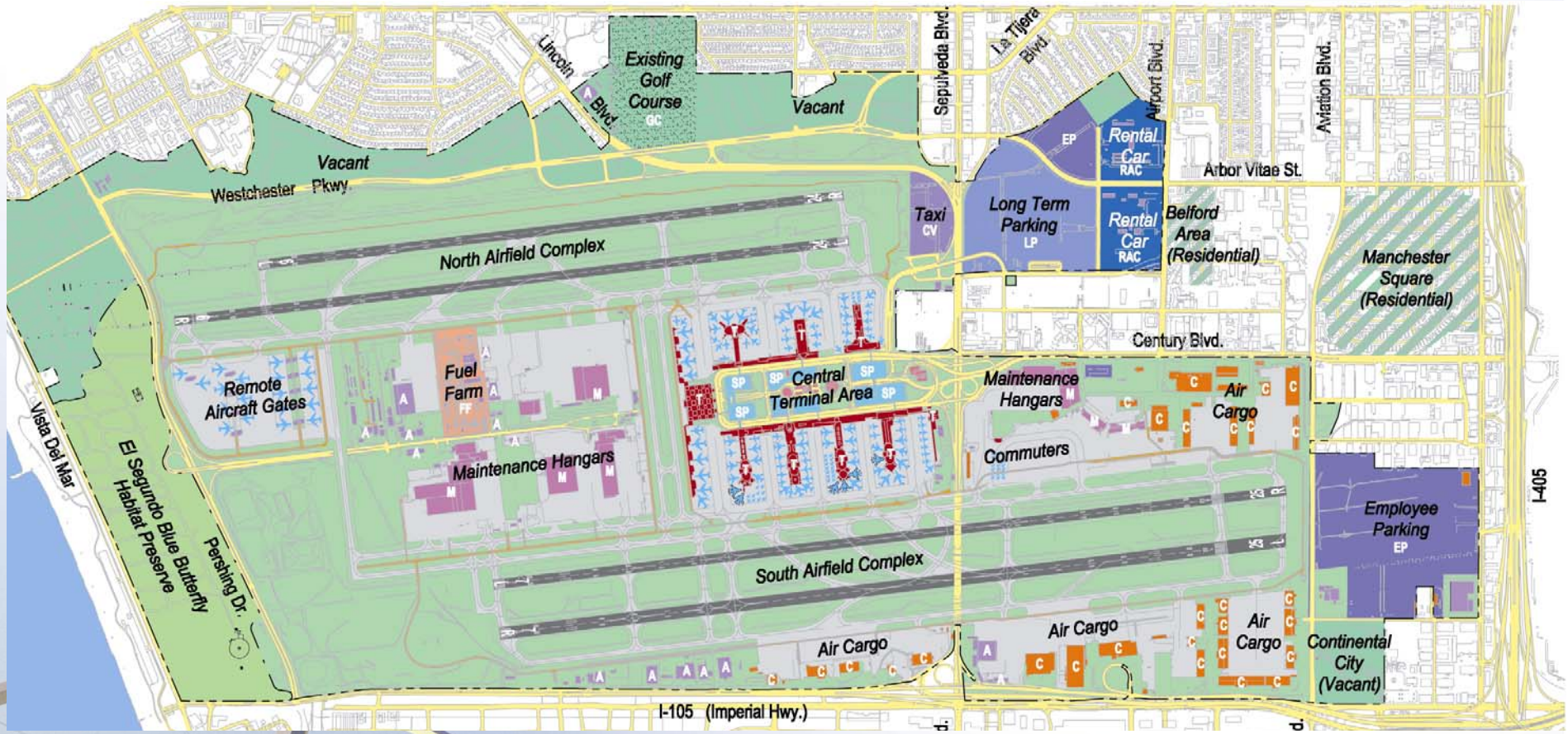
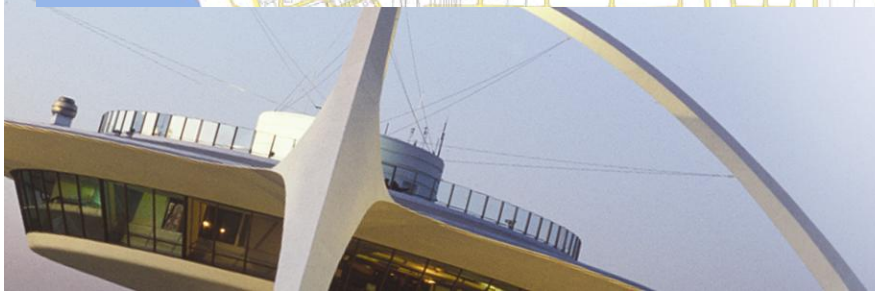
Existing Conditions





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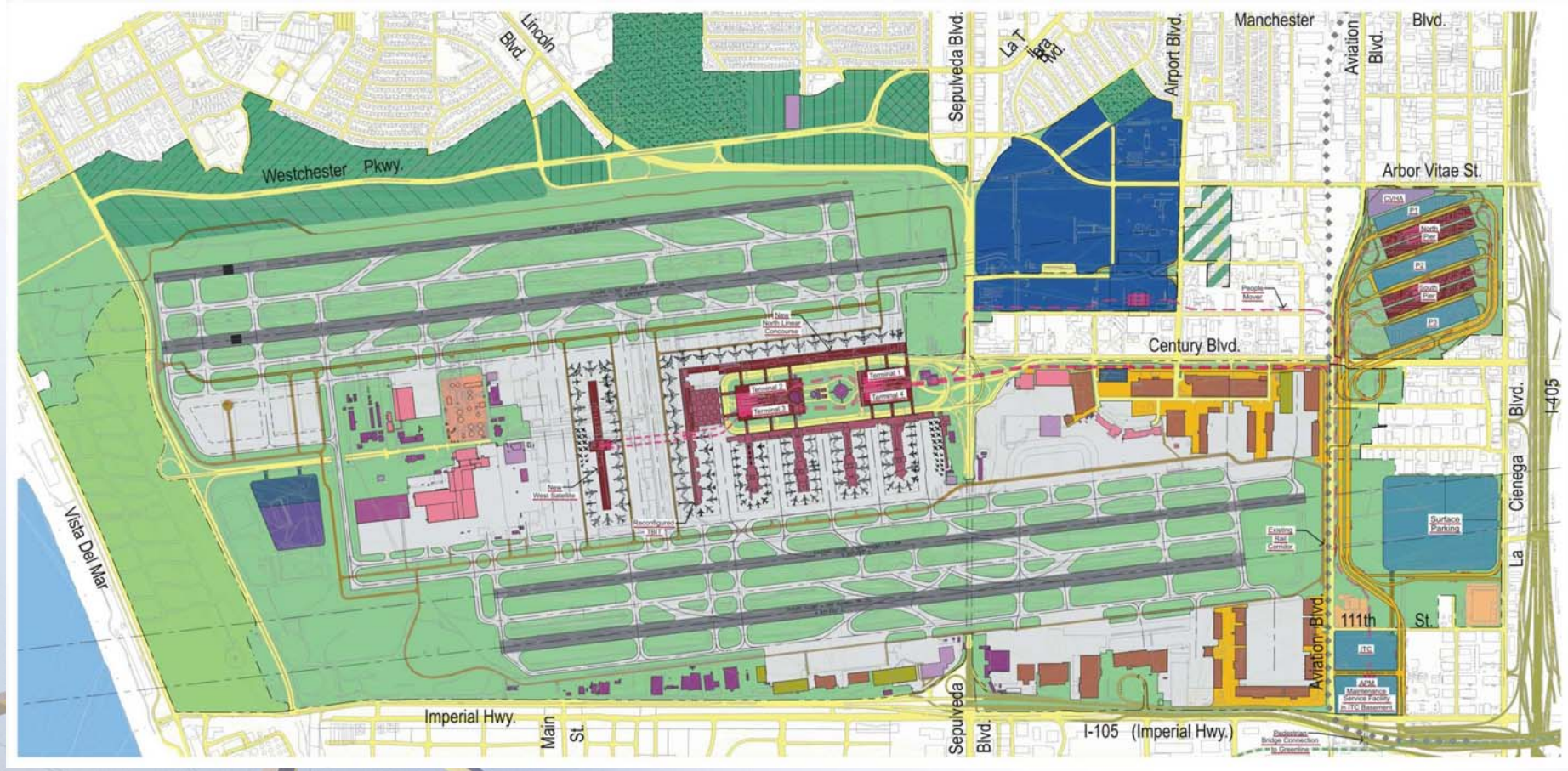
Alternative D



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