



Part 161 Study for Los Angeles International Airport

Los Angeles World Airports

**Public Workshop
November 13, 2012**



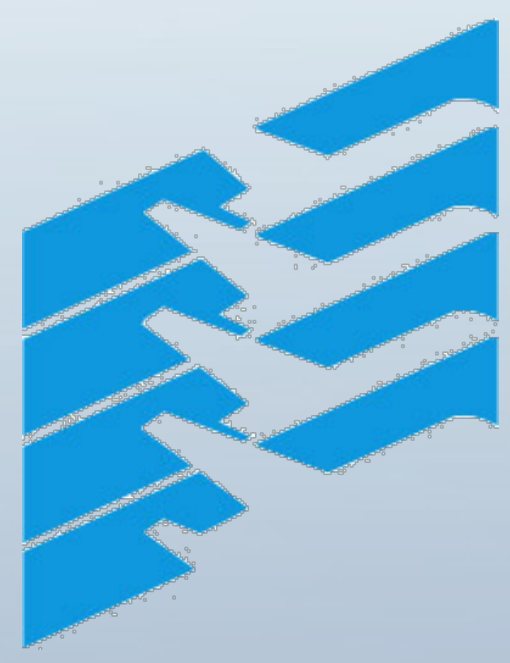


Proposed Restriction

www.hmmh.com

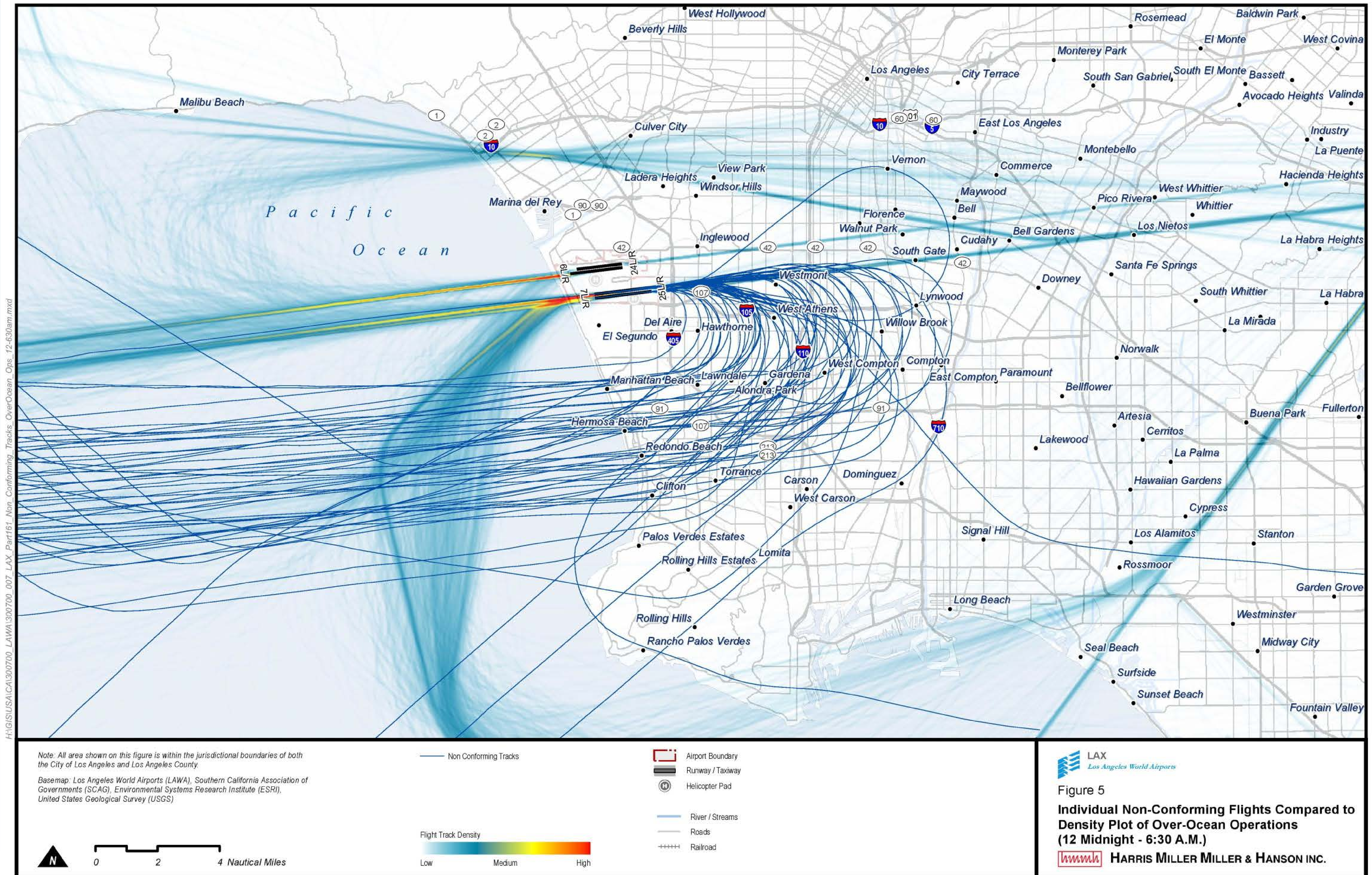
- LAWA proposes to:
 - Restrict the easterly departure of aircraft, with certain exemptions, from midnight to 6:30 a.m. when the airport is in Over-Ocean Operations or Westerly Operations.

- If FAA approves the proposed restriction, LAWA will proceed with
 - Environmental analysis under CEQA
 - BOAC and City Council approval of a City Ordinance



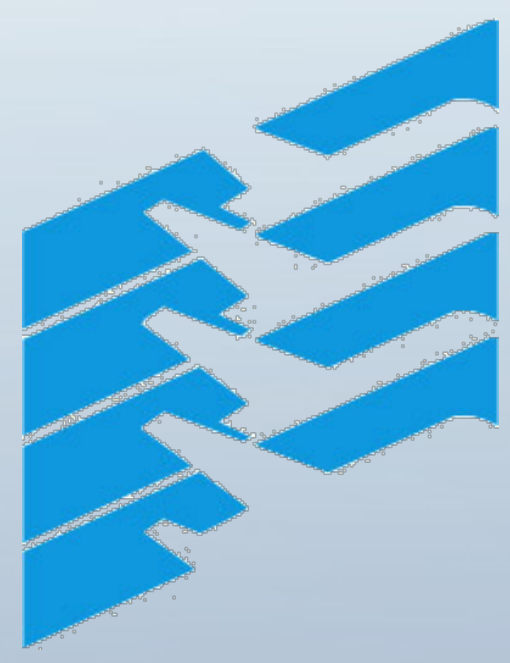
Proposed Restriction – Affected Flights

www.hmmh.com



H:\GIS\USA\CA\300700_007_LAX_Part161_Non_Conforming_Tracks_OverOcean_Ops_12-630am.mxd

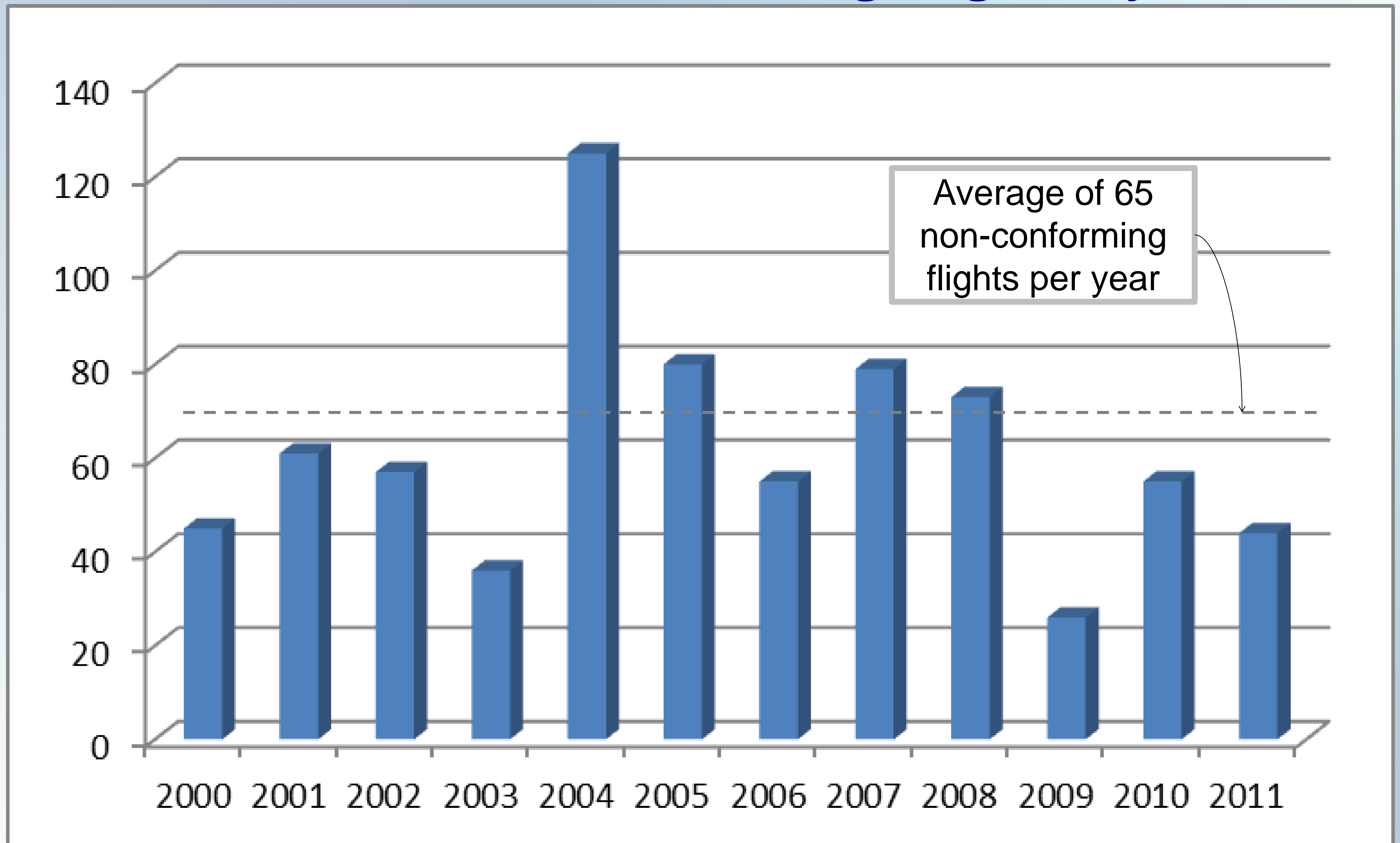




Proposed Restriction – Affected Flights

www.hmmh.com

Number of Non-conforming Flights by Year



Note: Year 2000 includes data only from June through December



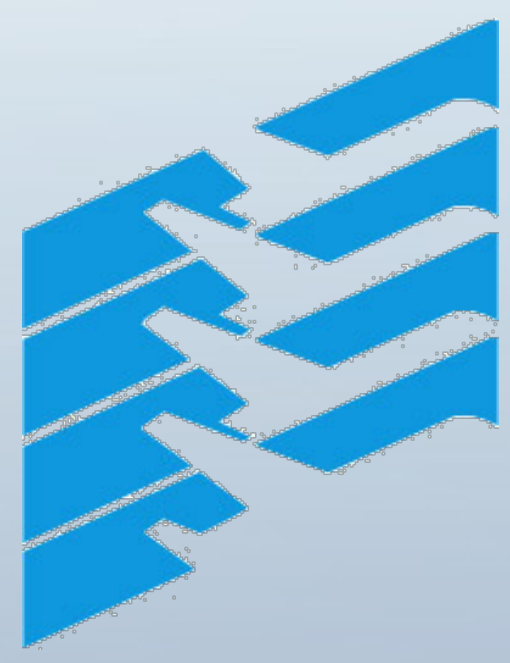


Proposed Restriction – Statutory Conditions

www.hmmh.com

FAA requires that the proposed restriction:

- ✓ is reasonable, nonarbitrary, and nondiscriminatory
- ✓ would not create an undue burden on interstate or foreign commerce
- ✓ would maintain safe and efficient use of navigable airspace
- ✓ would not conflict with any existing federal statute or regulation
- ✓ was subject to adequate opportunity for public comment
- ✓ does not create an undue burden on the national aviation system



Nonrestrictive Alternatives

www.hmmh.com

Continue to pursue voluntary compliance through:

- Over-Ocean operations from midnight to 6:30 am
 - Weather and operational conditions permitting
- Continuous monitoring and reporting of east departures at night when in
 - Over-Ocean operations
 - Westerly operations
- Regular communication with and education of operators
- As recommended by the LAX/Community Roundtable
 - LAWA sends letters to operators that depart east during Over-Ocean or Westerly operations that request an explanation
 - Started September 2011

LAWA concludes that nonrestrictive mechanisms are insufficient to obtain compliance with this measure.



Aircraft Operations Forecast – 2012 and 2017

www.hmmh.com

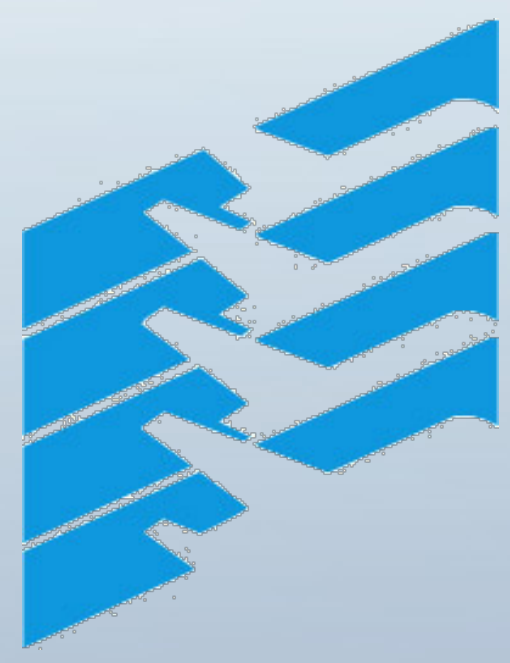
- Projected annual operations
 - 2013: 594,000
 - 2018: 649,000
- Forecasts used multiple data sources
 - LAX airport records
 - U.S. Department of Transportation data
 - Passenger and all-cargo aircraft schedules
 - Multiple FAA sources
 - Airline fleet data
 - Industry forecast from Boeing, Airbus and the FAA
- FAA found the forecasts were consistent with its December 2011 Terminal Area Forecast (TAF)



Benefits and Costs of Restriction

www.hmmh.com

- Potential benefits include
 - Fewer people exposed to aircraft noise overall
 - Fewer people awakened
 - Reduced fuel consumption from more direct routing
- Potential costs include
 - Revenue associated with the offloading of cargo or passenger baggage to reduce takeoff weight so aircraft can safely depart to the west with slight tailwind
 - Offloaded cargo and/or baggage would fly on a later flight

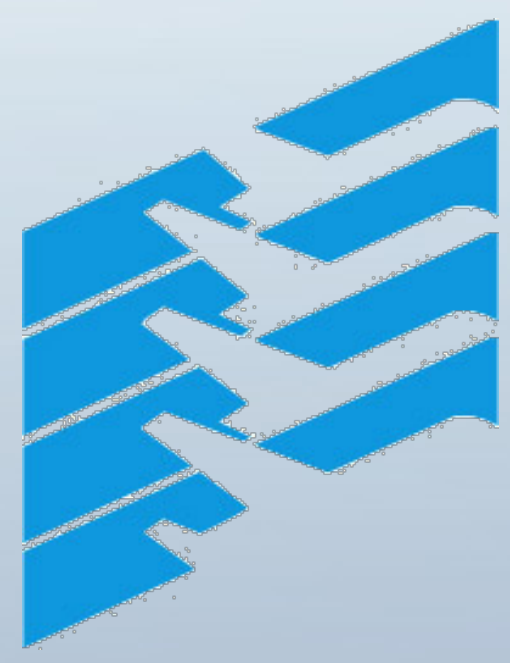


Supplemental Analysis

www.hmmh.com

- Sleep Disturbance – Estimated Annual Awakenings
 - Based on American National Standards Institute (ANSI) Standard S12.9-2008/Part 6
 - “Methods for Estimation of Awakenings Associated with Outdoor Noise Events Heard in Homes”
 - Up to 185,000 fewer awakenings annually
 - Over 8,000 awakenings on particular nights with non-conforming operations

- Environmental Justice
 - No significant change to 65 dB CNEq contour
 - Reduced awakenings with proposed restriction
 - Approximately 60% of the people potentially awakened by non-conforming flights are minority or low income



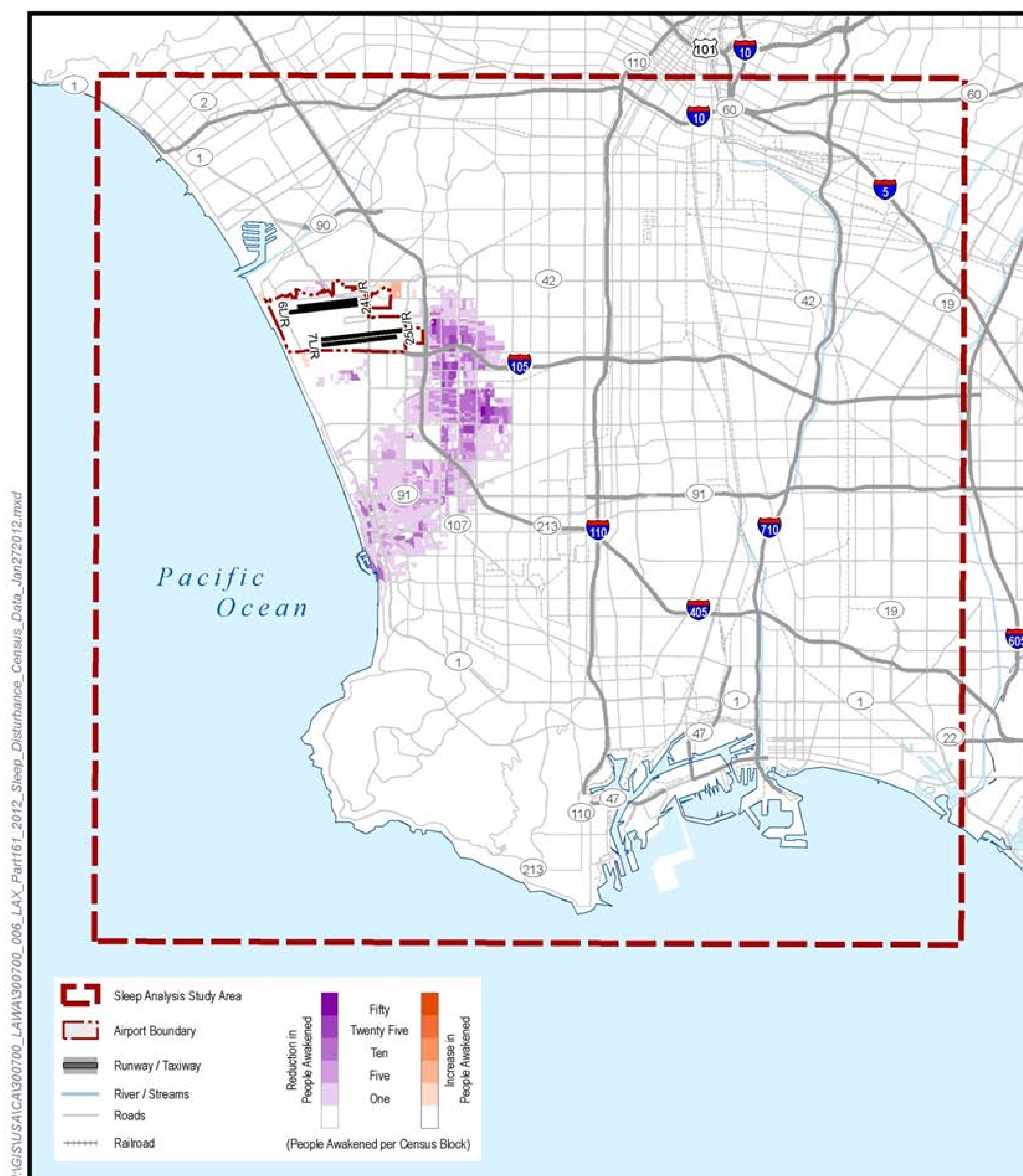
Supplemental Analysis

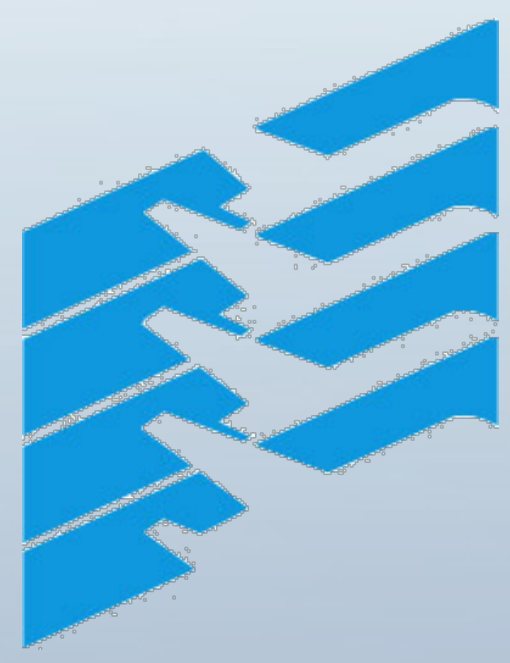
Geographic distribution of changes in awakenings

Extensive areas receive benefit

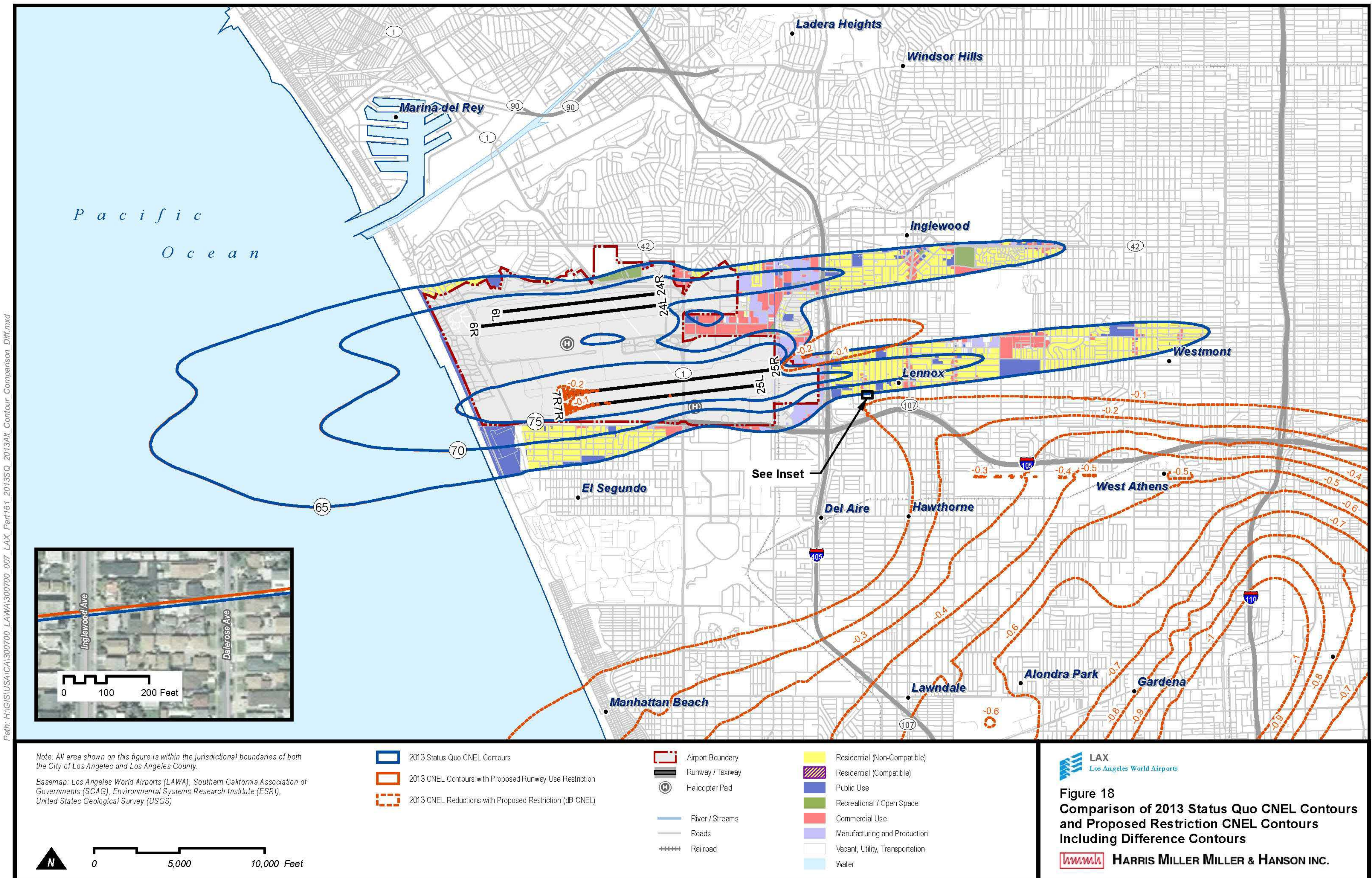
Darker areas are closer to the airport and under the most common flight paths

Graphic depicts estimated number of awakenings from the non-conforming operations on January 27, 2012.

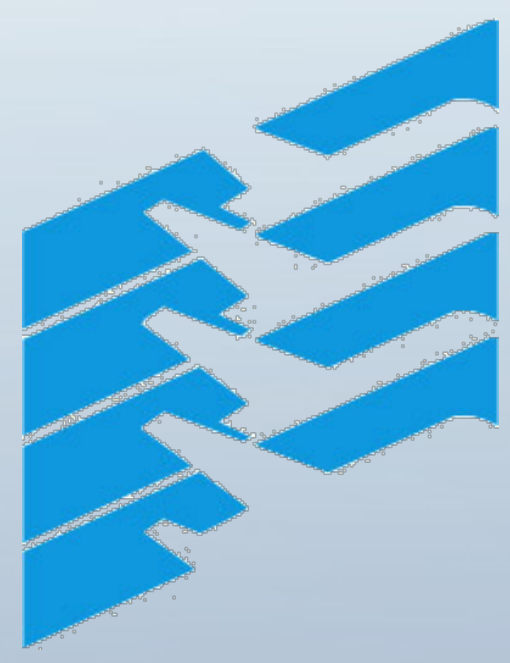




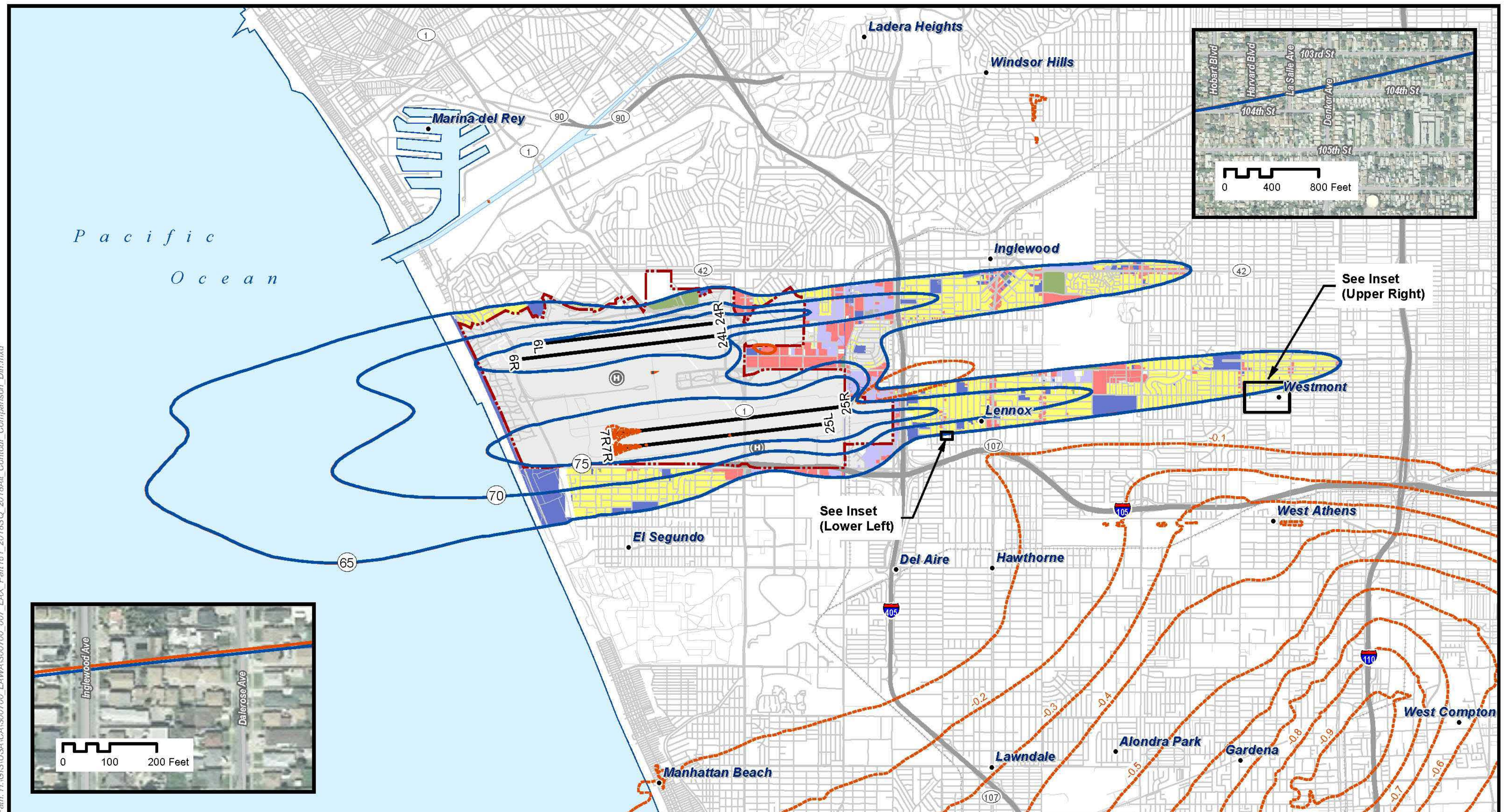
Noise Contours – 2013



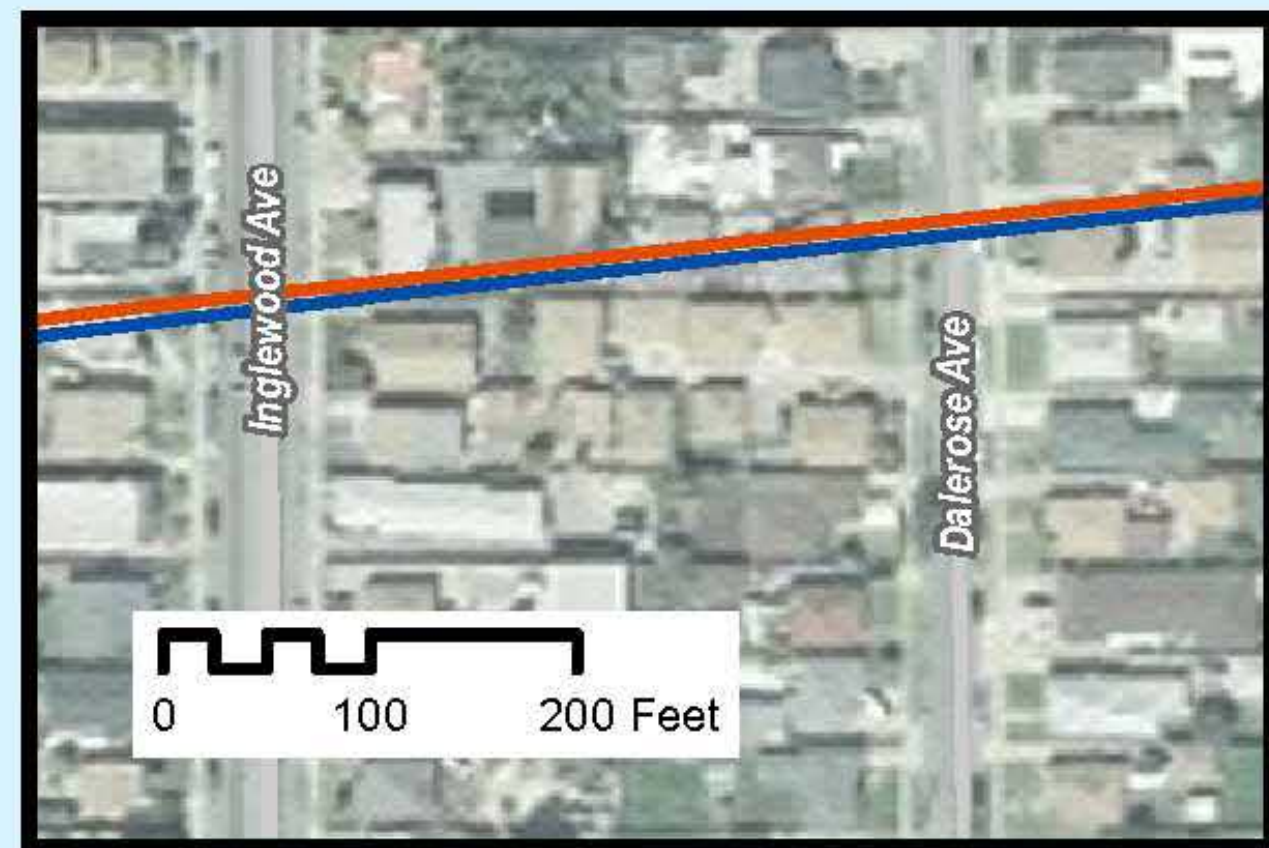
Path: H:\GIS\USA\CA\300700_LAWA\300700_007_LAX_Perf161_2013SQ_2013All_Cntour_Comparison_Diff.mxd



Noise Contours – 2018



Path: H:\GIS\USA\CA\300700_LAWA\300700_007_LAX_Par161_2018SQ_2018All_Contour_Comparison_Diff.mxd



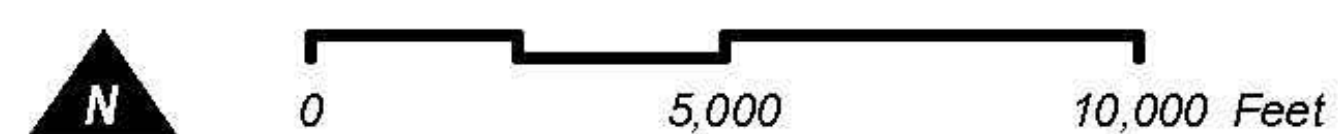
Note: All area shown on this figure is within the jurisdictional boundaries of both the City of Los Angeles and Los Angeles County.

Basemap: Los Angeles World Airports (LAWA), Southern California Association of Governments (SCAG), Environmental Systems Research Institute (ESRI), United States Geological Survey (USGS)

- 2018 Status Quo CNEL Contours
- 2018 CNEL Contours with Proposed Runway Use Restriction
- 2018 CNEL Reductions with Proposed Restriction (dB CNEL)

- Airport Boundary
- Runway / Taxiway
- Helicopter Pad
- River / Streams
- Roads
- Railroad

- Residential (Non-Compatible)
- Residential (Compatible)
- Public Use
- Recreational / Open Space
- Commercial Use
- Manufacturing and Production
- Vacant, Utility, Transportation
- Water



DRAFT

LAX
Los Angeles World Airports

Figure 19
Comparison of 2018 Status Quo CNEL Contours and Proposed Restriction CNEL Contours Including Difference Contours

HARRIS MILLER MILLER & HANSON INC.





Part 161 Study for Los Angeles International Airport

Los Angeles World Airports

**Public Comments
November 13, 2012**

