



# **Part 161 Study for Los Angeles International Airport**

## **Los Angeles World Airports**

**LAX/Community Noise Roundtable  
Briefing**

**March 14, 2012**





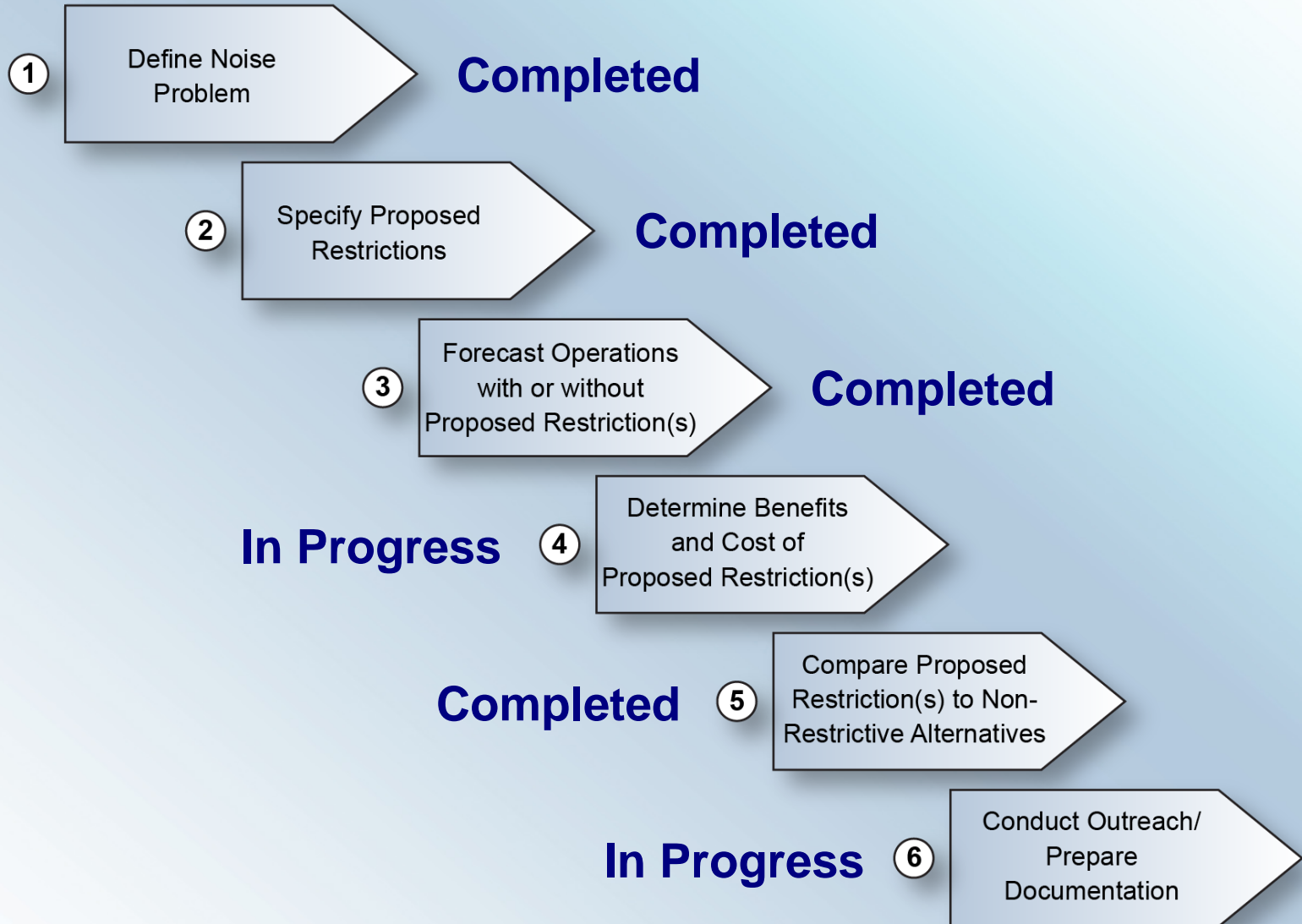
# What is a Part 161 Study?

[www.hmmh.com](http://www.hmmh.com)

- **Part 161 of the Federal Aviation Regulations specifies procedures that must be followed by any airport intending to implement a proposed noise rule**
  
- **Part 161 requirements include:**
  - **Cost and benefit analyses of the proposed rule**
  - **Examination of alternatives**
  - **Public notification and opportunity for public comment**
  - **Establishment of a public docket**
  
- **FAA headquarters must approve the study and restriction before the proposed rule can be put into effect**



# Part 161 Process





# Proposed Restriction for LAX

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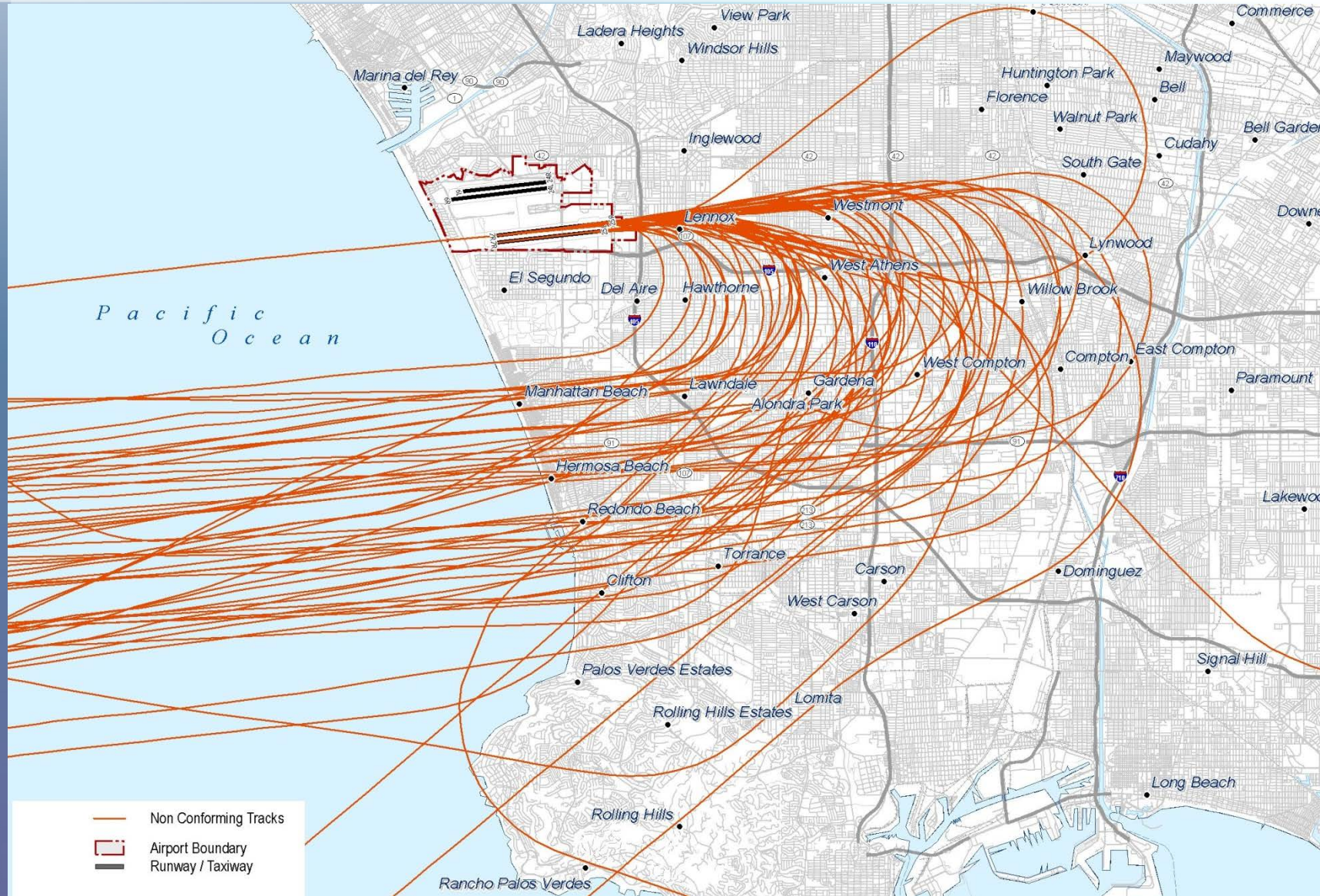
*Prohibit the easterly departure of aircraft, with certain exemptions, between the hours of midnight and 6:30 a.m. when the Airport is in Over Ocean Operations, or when it remains in Westerly Operations*





# Representative Non-Conforming Flight Tracks

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- Non Conforming Tracks
- Airport Boundary
- Runway / Taxiway





# Why a Part 161 Study for LAX?

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- **To reduce the nighttime noise burden for the communities most affected by non-conforming easterly departures**
  - From midnight to 6:30 am
  
- **LAX/Community Noise Roundtable Work Program**
  - Item A2 states that aircraft departing to the east between midnight and 6:30 a.m. create a serious noise disturbance to residents
  - Roundtable recommended LAWA initiate a Part 161 Study
  
- **Master Plan Mitigation Measure (MM-N-5)**
  - Initiate a Part 161 Study seeking federal approval of a locally-imposed restriction
  - Submit application to FAA or execute a voluntary agreement between LAWA and the airlines







# Why a Part 161 Study for LAX?

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- **Stipulated Settlement Agreement**
  - Complete a Part 161 Study
  - Seek FAA approval for a restriction with penalties for violations
  
- **Community Benefits Agreement (CBA)**
  - Perform study per Part 161 and submit application to FAA
  - Maintain records of nighttime eastbound departures
  - Report annually to the LAX Coalition
  - Upon FAA approval, implement proposed restriction



# Six “statutory conditions” Required for FAA Approval

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**FAA requires demonstration that the proposed rule:**

- **Is reasonable, nonarbitrary and nondiscriminatory**
- **Will not create an unreasonable burden on interstate or foreign commerce**
- **Will maintain safe and efficient use of navigable airspace**
- **Will not conflict with any existing federal statute or regulation**
- **Does not create unreasonable burden on the national aviation system**
- **Was the subject of adequate public notice and opportunity for public comment**





# Expected Analysis Results of the Proposed Restriction

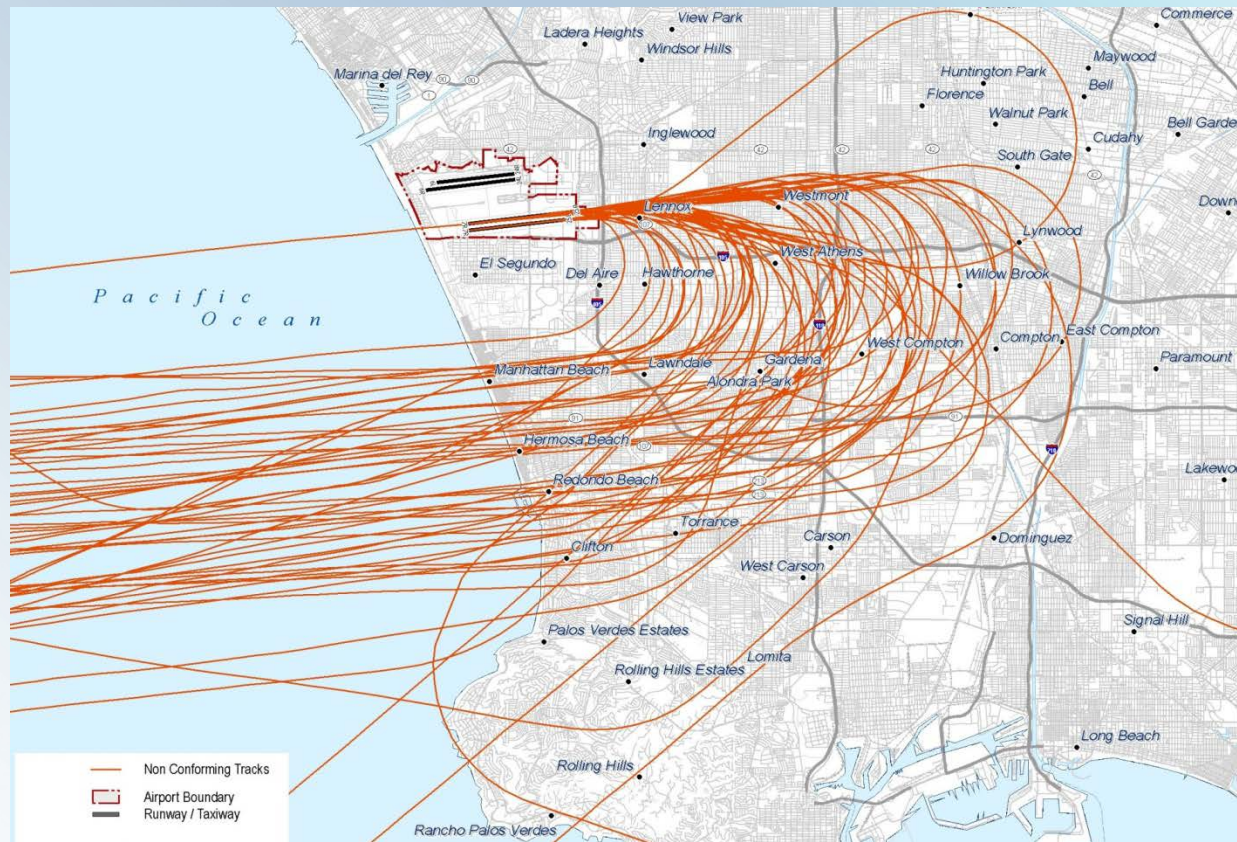
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- ✓ **Is reasonable, nonarbitrary and nondiscriminatory.**
- ✓ **Will not create an unreasonable burden on interstate or foreign commerce**
- ✓ **Will maintain safe and efficient use of navigable airspace.**
- ✓ **Will not conflict with existing federal statutes or regulations.**
- ✓ **Does not create unreasonable burden on national aviation system.**
- ✓ **Will be subject of adequate public notice and comment opportunities.**



# Flights Affected by Proposed Restriction

- 65 non-conforming flights per year (10-year average)
- Air carrier user class of aircraft
  - Boeing 747, 767 and 777
  - Airbus A330 and A380





# Costs of the Proposed Restriction

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- **Operators are expected to limit takeoff weight**
  - **Cargo and/or baggage over standard passenger allotment**
  
- **Estimated range of revenue associated with affected cargo and baggage to limit takeoff weight on 65 annual departures**
  - **Actual cost determination still in progress**
  - **We expect limited costs given only 65 flights annually**
  
- **No other costs are expected as a result of the proposed restriction**





# Benefits of the Proposed Restriction

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- **Reduction in the number of people potentially awakened**
- **Removal of 12 dwelling units from the 65 dB CNEL contour, which are not in the Airport Noise Mitigation Program (ANMP) boundary:**
  - **\$507,920 benefit, based on estimated cost to sound insulate the units as an alternative to the restriction**
- **Potential fuel savings to aircraft operators:**
  - **Non-conforming flights depart east and turn to head west resulting in longer flight tracks than if they departed west**
  - **\$129,000 to \$429,000 over 5- to 15 year analysis period**

*Note: Dollar values are net present value in 2013, the projected year of implementation*





# Sleep Disturbance

- People report being awakened by non-conforming flights at night
- ANSI S12.9-2008 Part 6 was used to estimate the reduction in the number of people potentially awakened if the proposed restriction is implemented

## Number of People Potentially Awakened

Year	Total Population	Status Quo	With Restriction	Change
2012	3,697,193	91,774	91,255	-519
2017	3,697,193	91,215	90,777	-438

Note: The reported number of people potentially awakened represents the average daily awakenings

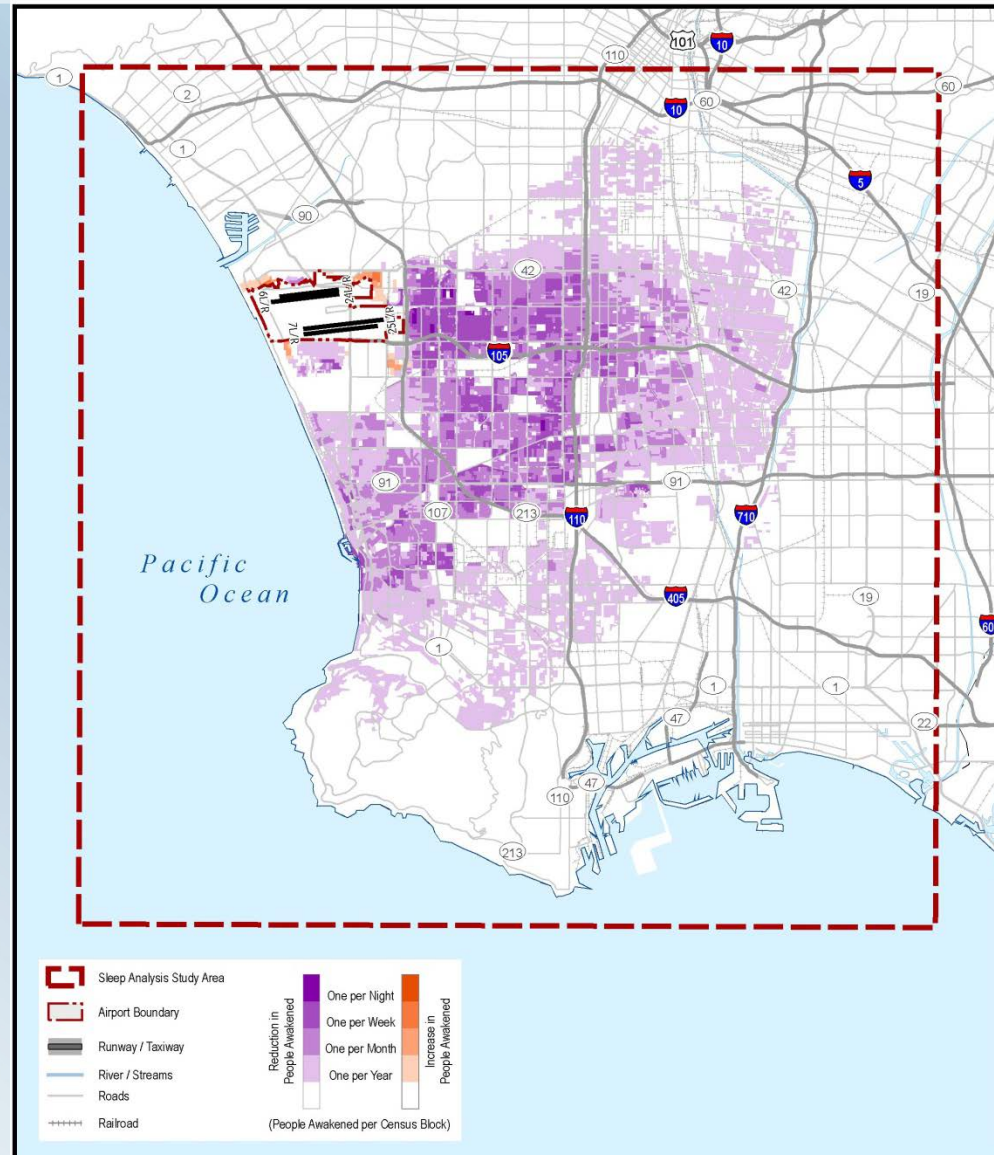




# Sleep Disturbance

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- Reduction in number of people potentially awakened if restriction is in effect in 2017





# Environmental Justice

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- **According to EPA**
  - Environmental Justice is the fair treatment and meaningful involvement of all people regardless of:
    - race, color, national origin or income
  - With respect to the development, implementation and enforcement of environmental laws, regulations and policies, “fair treatment” means:
    - no group of people should bear a disproportionate share of the negative environmental consequences...
- **EPA goal:**
  - To provide an environment where all people enjoy the same degree of protection from environmental and health hazards...





# Environmental Justice

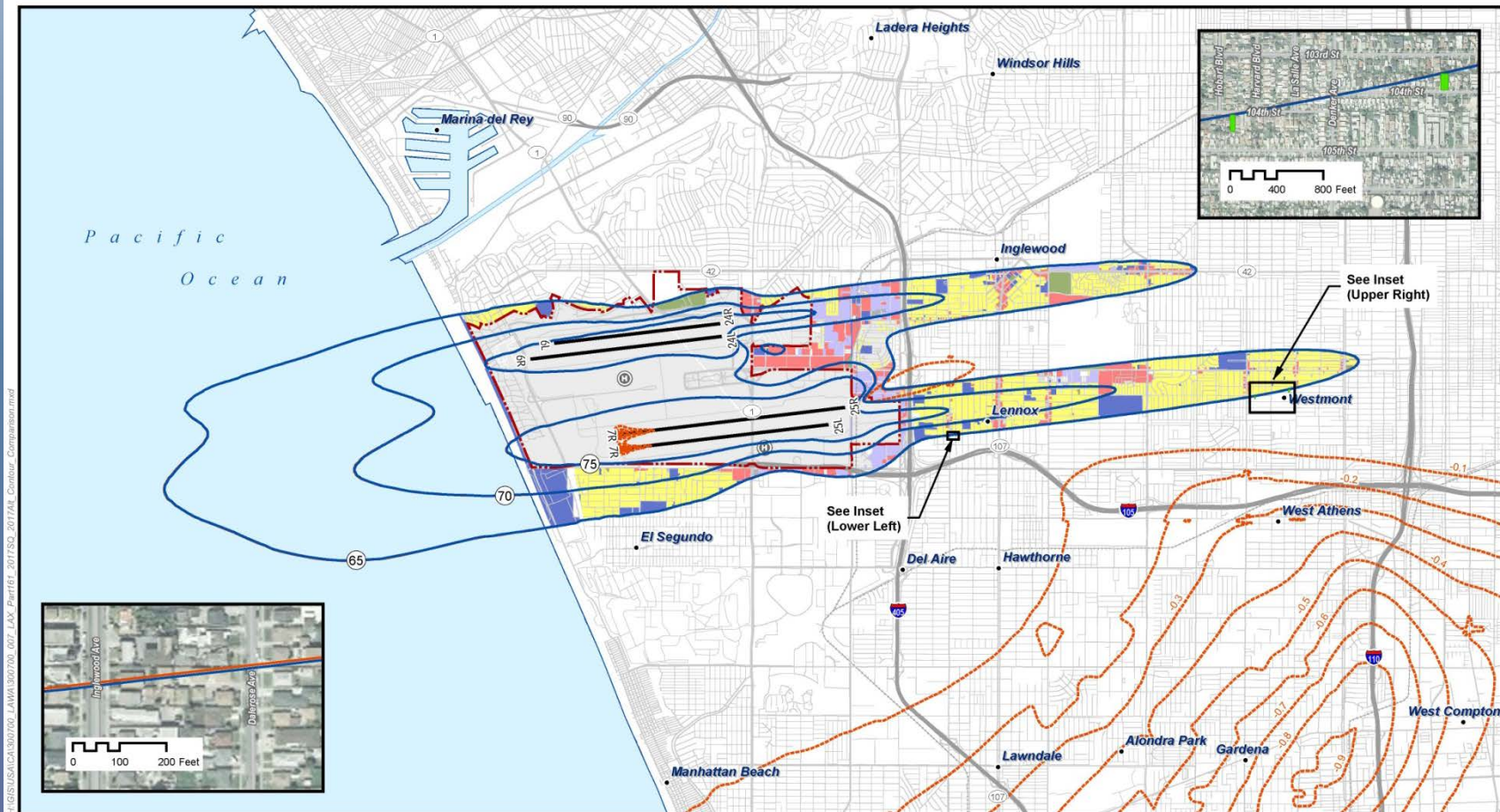
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- **Early indication is that potential awakenings occur disproportionately to minority and low income populations without the restriction**





# Comparison of 2017 Status Quo vs. Restriction



H:\GIS\USG\CA1300100\_LAMM\3007200\_007\_LAX\_Perf161\_2017SD\_2017AE\_Corridor\_Comparison.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)

- |  |                  |                                 |
|--|------------------|---------------------------------|
| 2017 Status Quo CNEL Contours                            | Airport Boundary | Residential (Non-Compatible)    |
| 2017 CNEL Contours with Proposed Runway Use Restriction  | Runway / Taxiway | Residential (Compatible)        |
| 2017 CNEL Reductions with Proposed Restriction (dB CNEL) | Helicopter Pad   | Public Use                      |
| Parcels Eligible for Mitigation                          | River / Streams  | Recreational / Open Space       |
|  | Roads            | Commercial Use                  |
|  | Railroad         | Manufacturing and Production    |
|  |                  | Vacant, Utility, Transportation |
|  |                  | Water                           |

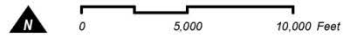


Figure 9  
**Comparison of 2017 Status Quo CNEL Contours and Proposed Restriction CNEL Contours Including Difference Contours**  
 HARRIS MILLER MILLER & HANSON INC.





# Analysis Results of the Proposed Restriction

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- **We expect all six statutory conditions of Part 161 will be met**
  
- **The benefits of the proposed restriction outweigh its costs**
  - **Fewer potential nighttime awakenings from aircraft noise**
  - **Reduced potential awakenings for minority and low-income residents**
  - **Reduced fuel consumption**



# Public Outreach

[www.hmmh.com](http://www.hmmh.com)

- **LAX/Community Noise Roundtable briefings**
- **Public workshops:**
  - **South Los Angeles, Inglewood, Lennox – November 2006**
  - **Final workshop, Flight Path Center – April 2012 (tentative)**
- **Handouts on Noise Effects and FAQs**
- **Part 161 website: [www.laxpart161.com](http://www.laxpart161.com)**
- **Toll-free hotline: (866) 441-4664**
- **Spanish language translations of web site and handouts;  
Spanish translators at study introduction public workshops**





# Documentation

[www.hmmh.com](http://www.hmmh.com)

- **Draft document available to the public**
  - **April 2012 (tentative)**
  
- **Public comment opportunities**
  - **45-day public review period**
    - **Expected to begin in April 2012**
  - **Comment docket for public inspection established at the start of the comment period and continued as long as LAWA pursues or enforces the restriction**





## Next Steps (dates tentative)

[www.hmmh.com](http://www.hmmh.com)

- **Finalize draft document for release to the public – April 2012**
- **45-day public review period begins – April 2012**
- **Public Workshop – April 2012**
- **Roundtable Briefing – May 9, 2012**
- **Final document for LAWA review and approval – June 2012**
- **LAWA submits Part 161 document to FAA – June 2012**



# **Part 161 Study for Los Angeles International Airport**

## **Los Angeles World Airports**

**Questions**