

# Part 161 Study for Los Angeles International Airport

**Los Angeles World Airports** 

LAX Part 161 Application for a Proposed Noise Rule
November 2012

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## What is a Part 161 Study?

- Title 14, Part 161 of the Code of Federal Regulations specifies procedures that an airport must follow to implement a noise or access restriction affecting most types of civilian jets
- Part 161 requirements include:
  - Analysis of the benefits and costs of the proposed rule
  - Examination of alternatives
  - Public notification and opportunity for public comment
  - Establishment of a public docket
- FAA must approve the study and restriction before implementation





## What is a Part 161 Application?

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# In simple terms, it addresses six "statutory conditions" required for FAA approval:

- 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 an unreasonable burden on the national aviation system
- Was the subject of adequate public notice and opportunity for public comment





## Why is LAWA completing a Part 161 Study for LAX?

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To reduce the occurrence and frequency of awakenings for residents living near LAX by restricting non-conforming easterly departures between midnight and 6:30 a.m. when the airport is in Over-Ocean Operations or Westerly Operations

- LAWA has committed to pursue this objective in several agreements and public initiatives:
  - LAX/Community Noise Roundtable Work Program, Item A2
  - Master Plan Mitigation Measure (MM-N-5)
  - Stipulated Settlement Agreement
  - Community Benefits Agreement (CBA)





#### **Part 161 Process**

www.hmmh.com **Define Noise** (1) Problem **Specify Proposed** 2 Restrictions **Forecast Operations** 3 with or without Proposed Restriction(s) **Determine Benefits (4)** and Cost of Proposed Restriction(s) **Compare Proposed** (5) Restriction(s) to Non-**Restrictive Alternatives** Conduct Outreach/ **(6)** Prepare Documentation

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#### 1 – Define Noise Problem

- From midnight to 6:30 a.m., LAX typically operates in either:
  - Over-Ocean Operations
    - Aircraft arrive and depart over the ocean
    - Requires calm winds of 10 knots or less
    - This is the preferred nighttime runway use
  - Westerly Operations
    - Aircraft arrive from the east and depart over the ocean
    - Occurs with steady winds from the west are above 10 knots
- When wind is steady from the east, LAX operates in:
  - Easterly Operations
    - Aircraft arrive over the ocean and depart to the east
    - Easterly departures are only expected in these conditions
  - Occurs during Santa Ana winds or strong Pacific storms





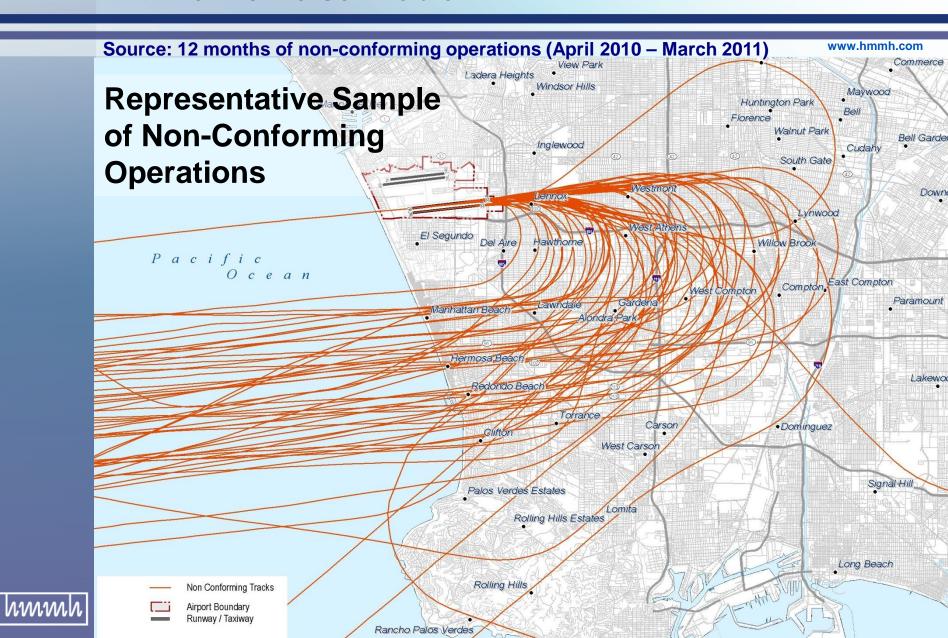
#### 1 - Define Noise Problem

- During late night hours when the airport is in either Over-Ocean or Westerly Operations, the FAA must grant pilot requests to depart to the east, even when they:
  - Are contrary to the flow of the airport at the time
  - Result in aircraft departing over highly populated communities that expect these operations only during Santa Ana conditions or strong Pacific storms
  - Awaken and highly annoy thousands of residents, predominantly minority and/or low income
- Since LAWA began monitoring "non-conforming" operations during Over-Ocean or Westerly Operations (in September 2000), on average these easterly departures:
  - Have occurred on only 30 nights per year
  - Represent a total of 65 takeoffs per year





#### 1 – Define Noise Problem





# 2 - Specify Proposed Restriction

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Restrict easterly departures 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





#### 3 – Forecast Operations

- Aircraft operations forecast was completed for two periods:
  - 2013 expected year of implementation and application submittal to the FAA
  - 2018 five years after the year of expected implementation
- Forecasts are consistent with FAA's December 2011
   Terminal Area Forecast (TAF) and received FAA approval
- Total aircraft operations are not expected to change with the implementation of the proposed restriction
- Operators are expected to:
  - Delay flight until unfavorable winds subside
  - Offload cargo and/or passengers to meet weight requirements
  - Accommodate restriction through flight planning





#### 4 - Determine Benefits and Costs

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 Expected upper bound costs to the operators to offload payload (net present value (NPV) in 2013 dollars):

Annual Growth in Cargo Rates	Period NPV is Calculated	Payload Reduction of 10,000 lbs.	Payload Reduction of 20,000 lbs.
No increase	5 years	\$3,249,000	\$9,591,000
	10 years	\$5,566,000	\$16,430,000
	20 years	\$8,395,000	\$24,782,000
3% Increase	5 years	\$3,539,000	\$10,448,000
	10 years	\$6,465,000	\$19,084,000
	20 years	\$10,881,000	\$32,122,000
	in Cargo Rates  No increase	in Cargo RatesCalculated5 yearsNo increase10 years20 years5 years3% Increase10 years	in Cargo Rates         Calculated         of 10,000 lbs.           5 years         \$3,249,000           No increase         10 years         \$5,566,000           20 years         \$8,395,000           5 years         \$3,539,000           3% Increase         10 years         \$6,465,000

Source: SH&E

- Estimates represent upper bound since some or all of the affected payloads will be transferred to other flights operated by the same carrier with no net loss in revenue
- No other costs are expected





#### 4 - Determine Benefits and Costs

- Estimated benefits include the following:
  - Aircraft operational efficiencies
    - Estimated 219,000 lbs. of carbon dioxide emissions saved per year
    - \$500,000 in fuel costs over 20 years (in 2013 dollars)
  - Environmental justice
    - Without restriction, approximately 60% of awakenings are to minority or low-Income residents
  - Quality of life
    - Fewer annual awakenings
      - Over 8,000 fewer awakenings on some nights



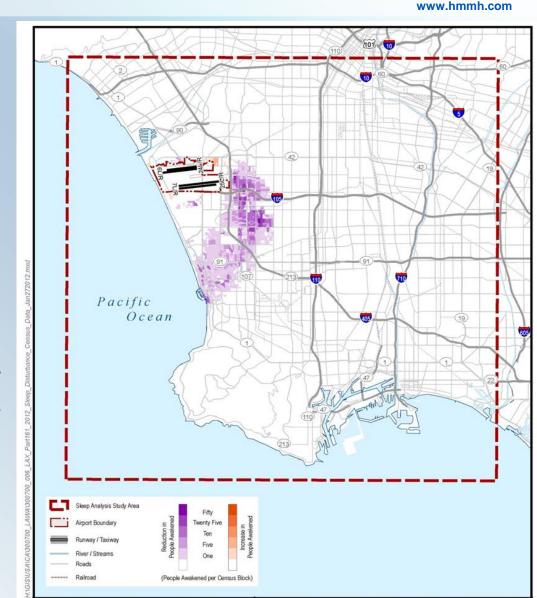


## 4 - Sleep Disturbance - Benefit

#### **An example:**

On January 27, 2012, seven non-conforming operations occurred during between midnight and 1 a.m.

If the restriction had been in place, it would have resulted in an estimated reduction of over 8,000 awakenings that night.







#### 5 – Compare Restriction to Nonrestrictive Alternatives

- The Board of Airport Commissioners (BOAC) has addressed easterly departures during late night hours in four formal resolutions since 1972
- The State of California Noise Variances, including the most recent effective February 2011, state that LAX is to:
  - "...continue in full force ... and enforcement of" the noise abatement policies that includes the Over-Ocean Operations between midnight and 6:30 a.m.
- LAWA monitors, identifies and contacts operators of each non-conforming operation, and requests a response





#### 5 - Compare Restriction to Nonrestrictive Alternatives

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The City concludes that nonrestrictive mechanisms are insufficient and that a formal runway use restriction is the only feasible course of action to reduce non-conforming operations from awakening thousands of residents each night they occur.





#### 6 - Conduct Outreach

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





#### 6 - Prepare Documentation

- Draft document available to the public November 2012
- 45-day public review period to obtain public comments during November and December 2012
- Comment docket for public inspection established at the start of the public comment period
  - Will continue as long as LAWA pursues or enforces the restriction





# **Analysis Results of the Proposed Restriction**

- ✓ 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 an unreasonable burden on the national aviation system
- ✓ Will be subject of adequate public notice and comment opportunities





## **Next Steps**

- 45-day public review period:
  - November 1, 2012 through December 17, 2012
- Public Workshop:
  - November 13, 2012
- LAWA submits Part 161 document to FAA:
  - January 2013
- FAA decision within 180 days of accepting the application





# Part 161 Study for Los Angeles International Airport

**Los Angeles World Airports** 

**Thank You** 



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