WELCOME

Please Sign In

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For more information, please visit
www.SDAirportPlans.com
Meeting Format
Project Team Introductions
Presentation Overview

1. Master Plan Overview, Purpose and Schedule
2. Noise / Air Quality Overview
3. Economic Impact Analysis
4. Introduction to Draft Alternatives
   1. Airside
   2. Landside
5. Next Steps
1. Master Plan Overview, Purpose and Schedule
What is a Master Plan

“...a comprehensive study of an airport [that] usually describes the short-, medium-, and long-term development plans to meet future aviation demand.”

- FAA Advisory Circular 150/5070–6B, Airport Master Plans
Why now?

› Last City adopted Master Plan was completed in 1980
› Recommended in City Performance Audit
› New FAA Design Standards
› Transformational changes in aviation
› Updated and approved Airport Layout Plan required for FAA funding
Master Plan Objectives

1. What do you have?
   - Existing conditions
   - Inventory of assets
   - Obtain stakeholder input

2. What do you need or want?
   - Aviation forecasts (FAA reviews and approves)
   - Demand and capacity analysis
   - Obtain stakeholder and public input

3. How do you get it?
   - Determine alternatives
   - Select the best alternative
   - Prepare an implementation plan
   - Obtain stakeholder and public input
Master Plan Steps

1. Data Collection
   - Airport inventory
   - Environmental setting
   - Related studies
   - Historical activity review

2. Forecast
   - Aircraft operations
   - Fleet mix/based aircraft
   - Peaking characteristics
   - FAA approval

3. Facility Requirements
   - Airfield design
   - Landside development/support
4. Alternatives
Reasonable and practical
Formulate evaluation criteria
Matrix evaluation

5. Preferred alternative / CEQA analysis
City selects preferred alternative
Conduct CEQA analysis
Financial plan

Master plan adoption and ALP approval
City adopts the plan
FAA approves Airport Layout Plan
Roles and Responsibilities

City of San Diego
- Airport Sponsor
- Provides Historical Data
- Converges Community Input
- CEQA Lead Agency
- Adopts Master Plan

FAA
- Provides Grant Funding
- Gives Technical Guidance
- Approves the Forecast
- Reviews Work Product
- Approves Airport Layout Plan
Roles and Responsibilities

**Community**
- Shares Ideas
- Reviews Work Product
- Offers Recommendations and Suggestions

**Advisory Committee**
- Advise Study Team
- Promote Planning Process to Others
- Collaborate on Key Issues
- Reviews Work Product
2. Noise / Air Quality Overview
Outline

› Modeling Approach
› Noise Metric Definitions
› Noise Results
  › Annual Average Day Operations
  › CNEL 2017 Baseline Noise Contours
› Air Quality Results
Modeling Approach

› Noise and air quality modeled using Aviation Environmental Design Tool

› Required Modeling Inputs
  › Airport Configuration
  › Fleet Mix and Operations
  › Runway Use
  › Model Flight Tracks
  › Flight Track Use
  › Meteorological Conditions
  › Terrain
Sound is pressure variation our ears can detect
  An objective quantity
Noise is “unwanted sound”
  A subjective quantity
We relate sound and noise by considering effects
  Annoyance
  Speech interference
  Sleep disruption
We use a logarithmic scale – decibels, or dB to express sound levels and noise levels.

Our ear is not equally sensitive to all frequencies.

A-weighted decibels (dB) measure sound the way we “hear” it.

The simplest way to describe a noise “event” is its maximum sound level, Lmax.

A longer event may seem “noisier,” even if it has a lower or equal maximum level.
Noise Metric Definitions

SEL measures the total “noisiness” of an event by taking duration into account.
Noise Metric Definitions

- **Community Noise Equivalent Level (CNEL)**
  - Describes 24-hour noise exposure
  - Noise from 7 PM – 10 PM is factored up by 4.77 dB
  - Noise from 10 PM – 7 AM is factored up by 10 dB
    - This “penalty” is equal to counting each night aircraft 10 times

<table>
<thead>
<tr>
<th>Qualitative Description</th>
<th>CNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Noise (Downtown Major Metropolis)</td>
<td>100</td>
</tr>
<tr>
<td>Very Noisy Urban</td>
<td>90</td>
</tr>
<tr>
<td>Noisy Urban</td>
<td>80</td>
</tr>
<tr>
<td>Urban</td>
<td>70</td>
</tr>
<tr>
<td>Suburban</td>
<td>60</td>
</tr>
<tr>
<td>Small Town</td>
<td>50</td>
</tr>
<tr>
<td>Quiet Suburban</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Representative Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles - 3rd Floor Apartment next to Freeway</td>
</tr>
<tr>
<td>Los Angeles - Downtown with some Construction Activity</td>
</tr>
<tr>
<td>Harlem - 2nd Floor Apartment</td>
</tr>
<tr>
<td>Boston - Row Housing on Major Avenue</td>
</tr>
<tr>
<td>Los Angeles - Old Residential Area</td>
</tr>
<tr>
<td>Fillmore - Small Town Cul-de-sac</td>
</tr>
<tr>
<td>San Diego - Wooded Residential</td>
</tr>
<tr>
<td>California - Tomato Field on Farm</td>
</tr>
</tbody>
</table>
Average Annual Day Operations

- Arrivals: 52
- Departures: 52
- Circuits: 131
- Subtotal: 235

Total Number of Operations

SD Airports
2017 Baseline CNEL Noise Contour
The EPA has also identified Criteria Pollutants to be part of the National Ambient Air Quality Standards (NAAQS), which are protective of human health.

Each state or region can specify their own pollutant levels (that may be more stringent) with mandated levels set by EPA as minimum requirements.

De minimus levels define threshold of increased pollutants indicating impacts in non attainment areas.1
- Typically 100 tons per year
Air Quality Results

Criteria Air Pollutants

- Carbon monoxide (CO)
- Nitrogen dioxide (NO2)
- Particulate matter (PM10)
- Particulate matter (PM2.5)
- Sulfur dioxide (SO2)
- Lead (Pb)
- Ozone (O3)

Note: Ozone is an indirect or secondary pollutant that occurs due to chemical reactions primarily between NO2 and volatile organic compounds (VOCs). As a result, volatile organic compounds (VOCs) and NO2, the primary precursors to ozone formation, provide surrogate information for assessing ozone levels.
Compared to EPA de minimis levels, SDM emissions fall well below the limits for the baseline; impacts are considered insignificant.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Co</th>
<th>No₅</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO₂</th>
<th>VOC</th>
<th>Lead (Pb)</th>
<th>CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDM Aircraft – Total</td>
<td>1.537</td>
<td>0.018</td>
<td>0.002</td>
<td>0.002</td>
<td>0.004</td>
<td>0.049</td>
<td>0.572</td>
<td>11.240</td>
</tr>
</tbody>
</table>

Notes:
1. Results expressed in metric tons.
2. Carbon dioxide (CO₂) emissions as a greenhouse gas, though this estimation does not account for the varying greenhouse gases and their associated emissions factors in comparison to CO₂.
3. Economic Impact Analysis
Economic Impact Analysis

- Airport and Tenant Operations
- Multipliers: On-Site Activity -> Off-Site Activity
  - Local effect (MYF) leads to regional effect (SD County)
- Methodology
  - Input-Output Modeling
  - Primary and Secondary Data
  - Site Visits
Multiplier Effects

Direct Effect

Indirect Effect

Suppliers

Business to Business

Induced Effect

Other Household Needs

Education

Stores

Services

Health Care

Household Spending
Economic Measures

Economic Effects

Jobs

Industry Output

Labor Income
Airport Operations

- 25 On-Site Jobs
- Industry Output: $4.3 million
- Labor Income: $1.5 million
Airport Operations

- 25 On-Site Jobs = 60.1 Total Jobs
- Output: $4.3M On-Site = $9.4M Total
- Income: $1.5M On-Site = $3.6M Total
Tenant Operations

- 35 On-Site Jobs
- Industry Output: $4.8 million
- Labor Income: $1.9 million
Tenant Operations

- 35 On-Site Jobs = 74 Total Jobs
- Output: $4.8M On-Site = $10.5M Total
- Income: $1.9M On-Site = $4.2M Total
Overall Operations

- 60 On-Site Jobs, 134 Total Jobs
- Output: $9.2M On-Site, $19.8M Total
- Income: $3.4M On-Site, $7.7M Total
Largest Secondary Effects

- Public Sector
- Transportation and Warehousing
- Health Care
- Retail Trade
- Professional Services
- Hospitality (Accommodation and Food Service)
Next Steps

› Future Impacts

› Fiscal Impact Analysis
4. Introduction to Alternatives
Alternatives Analysis

Evaluation
- Identifies best options to meet existing and forecast aviation activity

Sources
- Working Papers 2 and 3 – Forecast of Aviation Demand and Facility Requirements

Elements
- Airside and Landside Considerations

Application
- Preferred Alternative Selection
Airside vs. Landside
Airside Draft Alternatives
Alternative #1
No Action
DRAFT
Alternative #2
DRAFT
Alternative #3
Landside Draft Alternatives
Alternative #1
No Action
DRAFT
Alternative #3

- Customs Facility Expansion ±1,100 SF
- 29 Hangars
- New Terminal and Maintenance Building ±22,000 SF
- Vehicle Parking Expansion ±45 Spaces

Otty Mesa Rd.
5. Next Steps
Next Steps

We Are Here

Spring 2017
- Existing Conditions Analysis
- Forecasting & Facility Requirements
- Alternatives Evaluation & FFA

Summer 2018
- Preferred Alternative & CEQA Analysis
- Master Plan Adoption & ALP Approval

Ongoing Public Outreach

ALP – Airport Layout Plan
CEQA – California Environmental Quality Act
FFA – Financial Feasibility Analysis
Next Steps

Preferred Alternative → Working Paper 5 – Alternatives Analysis → ALP Development

CEQA
Q&A
Ground Rules

› Speak Clearly and Slowly
› State Your Name and Association
› One Question Per Person
› Help Us Stay on Track
› Focus on New Input

Verbal comments and questions are *not* being recorded. Please provide your comments in writing for consideration and evaluation by the project team.