WELCOME

Please Sign In

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For more information about the project, please visit www.SDAirportPlans.com
Meeting Format
Presentation Overview

› Master Plan Overview, Purpose and Schedule
› Noise / Air Quality Overview
› Economic Impact Analysis
› Introduction to Draft Alternatives
  › Airside
  › Landside
› Next Steps
1. Master Plan Overview, Purpose and Schedule
“...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

Airport Master 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
- Advises Study Team
- Promotes Planning Process to Others
- Collaborates on Key Issues
- Reviews Work Product
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
2. Noise / Air Quality Overview
Outline

› Modeling Approach
› Noise Metric Definitions
› Noise Results
   › Annual Average Day Operations
   › CNEL 2017 Baseline Noise Contours
   › CNEL 2017 Baseline and Alternative 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
Noise Metric Definitions

- 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, A\text{max}.

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

Single Event Noise Equivalency Level (SENEL) 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
Annual Average Day Operations

- Arrivals: 140
- Departures: 140
- Circuits: 270
- Subtotal: 550

Graph showing the number of operations for different categories.
2017 Baseline
CNEL Noise Contour
2017 Baseline and Alternative CNEL Noise Contour Comparison
The EPA has 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 nonattainment areas. Typically 100 tons per year

^US Environmental Protection Agency. https://www.epa.gov/general-conformity/de-minimis-tables
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.
Air Quality Results

Compared to EPA de minimis levels, MYF emissions fall well below the limits for the baseline; impacts are considered insignificant.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Co</th>
<th>No_x</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>MYF Aircraft – Total</td>
<td>4.233</td>
<td>0.011</td>
<td>0.005</td>
<td>0.005</td>
<td>0.005</td>
<td>0.103</td>
<td>1.442</td>
<td>14.287</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.

Source: HMMH 2017
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
Economic Measures

- Jobs
- Industry Output
- Labor Income

Economic Effects
Airport Operations

- 46 On-Site Jobs
- Industry Output: $8.2 million
- Labor Income: $2.7 million
Multipliers: Airport Operations

- 46 On-Site Jobs = 110 Total Jobs
- Industry Output: $8.2M On-Site = $17.5M Total
- Labor Income: $2.7M On-Site = $6.5M Total
Tenant Operations

- 694 On-Site Jobs
- Largest Employers
  - Administrative/Support Services
  - Transportation Support Services
  - Hospitality
  - Educational Services
  - Professional Services
- Industry Output: $75.7 million
- Labor Income: $35.8 million
Multipliers: Tenant Operations

- 694 On-Site Jobs = 1,279 Total Jobs
- Industry Output: $75.7M On-Site = $161.8M Total
- Labor Income: $35.8M On-Site = $69.2M Total
Overall MYF Operations

- 740 On-Site Jobs, 1,390 Total Jobs
- Industry Output: $83.9M On-Site, $179.3M Total
- Labor Income: $38.5M On-Site, $75.7M Total
Largest Secondary Effects

› Public Sector
› Health Care
› Administrative/Support Services
› Retail Trade
› Professional Services
› Hospitality (Accommodation and Food Service)
Next Steps

› Future Impacts

› Fiscal Impact Analysis
4. Introduction to Draft 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 Alternatives
Alternative #1 – No Action
DRAFT Alternative #2
DRAFT Alternative #3
DRAFT Alternative #4
Landside Alternatives
Alternative #1 – No Action
DRAFT Alternative #3
5. Next Steps
Project Schedule

 existing conditions analysis
 forecasting & facility requirements
 alternatives evaluation & FFA
 preferred alternative & CEQA analysis
 master plan adoption & ALP approval

 Spring 2017
 Ongoing Public Outreach
 Summer 2018

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.
Work Stations