The San Diego Region’s Air Transportation *Future*

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San Diego County Regional Airport Authority
Presentation Overview

1. The law
2. The ballot measure
3. The regional asset
4. At risk: the regional economy
5. Lindbergh’s limitations
6. SDIA concepts
7. Airport site selection process
8. Miramar feasibility
9. Your questions
The authority shall adopt a comprehensive plan on the future development of San Diego's regional international airport. In developing its plan, the authority shall review all options of alternative sites, including, but not limited to:

- expansion of the existing airport site
- use of current military installations that may become available for civilian or mix-use
- and other development options available to address future airport needs.
The Ballot Measure

On June 5, 2006, the Airport Authority Board adopted a resolution to place the following measure on the November 7, 2006 county-wide ballot:

“To provide for San Diego’s long-term air transportation needs, shall the Airport Authority and government officials work to obtain approximately 3,000 of 23,000 acres at MCAS Miramar by 2020 for a commercial airport, provided
– necessary traffic and freeway improvements are made
– military readiness is maintained without expenses to the military for modifying or relocating operations
– no local taxes are used on the airport
– overall noise impacts are reduced
– and necessary Lindbergh Field improvements are completed?”
The Regional Asset

- Tiny Lindbergh Field fuels the regional economy.
- An airport designed to fully meet the region’s long-term air transportation needs would fuel the regional economy even more with
  - Visitor spending by air passengers
  - Contribution to the Gross Regional Product
  - Creation of airport-related jobs

Source: 2006 HR&A Airport Economic Analysis
The Regional Asset

Visitor spending by air travelers

- SDIA in 2005: $2.6 billion
- Constrained airport in 2035: $4.8 billion
- Unconstrained airport in 2035: $5.7 billion

Source: 2006 HR&A Airport Economic Analysis
The Regional Asset

Airport’s contribution to the Gross Regional Product

* Assuming lost air cargo capacity is not replaced by other means

Source: 2006 HR&A Airport Economic Analysis
The Regional Asset

Airport-related jobs in San Diego County

- **115,070 jobs**
- **125,370 jobs**
- **163,480 jobs**

**SDIA in 2005**

- **Constrained airport in 2035**
- **Unconstrained airport in 2035**

* Assuming lost air cargo capacity is not replaced by other means

Source: 2006 HR&A Airport Economic Analysis
• What damage will be done to the San Diego region’s economy and residents if future air transportation needs are not fully met?

• A 2005-2035 Airport Economic Analysis projects the following losses if nothing is done:
  ✓ Lost personal income
  ✓ Lost Gross Regional Product
  ✓ Lost jobs

Source: 2006 HR&A Airport Economic Analysis
At Risk: The Regional Economy

Job losses in 2035 would be equivalent to some of the region’s largest employers

<table>
<thead>
<tr>
<th>Projected job losses, 2035</th>
<th>Region’s largest employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>38,100</td>
<td>10 largest defense contractors</td>
</tr>
<tr>
<td>27,185</td>
<td>UCSD</td>
</tr>
<tr>
<td>22,600</td>
<td>All Federal employees</td>
</tr>
<tr>
<td>0%*</td>
<td>50%*</td>
</tr>
<tr>
<td>75%*</td>
<td></td>
</tr>
</tbody>
</table>

* Percentage of foregone cargo exports using other modes

Source: 2006 HR&A Airport Economic Analysis
At Risk: The Regional Economy

Losses to the Gross Regional Product in 2035 would approach or exceed the 2004 annual revenues of two of the region’s largest public companies.

- 0%  $12.73 billion
- 50%  $7.22 billion
- 75%  $4.47 billion

Projected loss to GRP, 2035

Source: 2006 HR&A Airport Economic Analysis
Lindbergh’s Limitations

• Lindbergh Field cannot meet the region’s long-term air transportation needs.

• Why not?
  ✓ Single runway
  ✓ Limited-capacity runway
  ✓ Small footprint
  ✓ Geographic constraints
Lindbergh’s Limitations

- Limited-capacity runway

* Due to terrain and other obstructions, only 7,590 feet of SDIA’s runway is usable for landings
Lindbergh’s Limitations

✓ Geographic constraints

- SDIA sits in a bowl, with terrain obstructions off both ends of the runway
- SDIA has the steepest approach angles for landing aircraft allowed by the FAA
- Fully loaded 747’s bound for Europe or Asia cannot take off from SDIA
More operations are projected than Lindbergh Field can handle.

**Lindbergh’s Limitations**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>SH&amp;E (High)</th>
<th>SH&amp;E (Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>150,000</td>
<td>200,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2000</td>
<td>200,000</td>
<td>250,000</td>
<td>150,000</td>
</tr>
<tr>
<td>2005</td>
<td>250,000</td>
<td>300,000</td>
<td>200,000</td>
</tr>
<tr>
<td>2015</td>
<td>300,000</td>
<td>350,000</td>
<td>250,000</td>
</tr>
<tr>
<td>2020</td>
<td>350,000</td>
<td>400,000</td>
<td>300,000</td>
</tr>
</tbody>
</table>

Note: Operating thresholds based on SH&E Capacity/Delay Analysis & FAA Guidelines.
Lindbergh’s Limitations

In four decades (1990-2030) passenger demand at SDIA is projected to triple

* All-time record highs

Source: SH&E Analysis
Lindbergh’s Limitations

Nationwide, passenger demand is projected to increase more than 3% each year

Source: FAA Aerospace Forecasts 2006-2017
Lindbergh’s Limitations

Since 2004, annual percentage growth in passenger volumes at SDIA has surpassed projections

Projected average annual % increase

Actual annual % increase

Sources: SH&E, SDIA, FAA
Numerous concepts examining how Lindbergh Field could be expanded to serve the region’s long-term air transportation needs have been thoroughly analyzed.

None have proven feasible without extraordinary community impacts.
SDIA Concepts, 2001 Master Plan
SDIA Concepts, ASSP

Concept 1

Concept 2

Concept 3

Concept 4

Concept 5

Concept 6
Airport Site Selection Process

• Comprehensive comparative analysis of all options in the region
• Extensive stakeholder involvement
  – 32-member Public Working Group suggested criteria and thresholds for potential airport sites
• Three technical peer review groups
  – Environmental
  – Airspace
  – Ground Access
• Extensive public outreach & input
• Airports Council International-North America (ACI-NA) peer review
• Transparent & thorough process
Airport Site Selection Process

An airport to serve the region’s long-term air transportation needs requires:

- Two runways for simultaneous takeoffs & landings
- 12,000 ft. runways to handle all aircraft types
- FAA-required 4,300 ft. separation between runways for dual independent flight operations
- At least 3,000 acres to address capacity demands
- Efficient mass transit system for airport access
- Ability to serve 35 million passengers annually
  - Will accommodate natural population growth of the region
The Long-Term Solution
Airport Site Selection Program

- The Airport Authority is mandated by state law to plan for the Region’s long-term air transportation needs.
- Comprehensive comparative analysis of all options in the region
- 32-member Public Working Group – suggested criteria and thresholds for potential airport sites
- Three technical peer review groups
  - Environmental
  - Airspace
  - Ground Access
- Geographic Information System (GIS)-based search – identified additional sites
## Limiting Criteria

<table>
<thead>
<tr>
<th>Limiting Criteria</th>
<th>Threshold</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Terrain Obstructions – Topography</strong></td>
<td>Significant</td>
<td>Excludes sites that have significant terrain obstructions</td>
</tr>
<tr>
<td><strong>Existing Residential Population to be Relocated</strong></td>
<td>No greater than 5,000</td>
<td>Excludes sites causing the relocation of 5,000 or more residents</td>
</tr>
<tr>
<td><strong>Existing Noise Impacted Population</strong></td>
<td>No greater than 10,000</td>
<td>Excludes sites resulting in more than 10,000 people being impacted by noise</td>
</tr>
<tr>
<td><strong>Mitigation Acreage for Coastal Wetlands/ Vernal Tide Pools</strong></td>
<td>No greater than 1,000 acres</td>
<td>Excludes sites requiring more than 1,000 acres to be mitigated</td>
</tr>
<tr>
<td><strong>Mitigation Acreage for Wetlands/Marine areas</strong></td>
<td>No greater than 1,000 acres</td>
<td>Excludes sites requiring more than 1,000 acres to be mitigated</td>
</tr>
<tr>
<td><strong>Fill required for developing the site</strong></td>
<td>No greater than 100 million cubic yards (net)</td>
<td>Excludes sites requiring more than 100 million cubic yards of fill (net) to develop the site</td>
</tr>
</tbody>
</table>
Campo Search Area
Borrego Springs Search Area
The Long-Term Solution
Airport Site Selection Program

Nine sites on the list

- Detailed analysis on two civilian sites: Campo/ Boulevard & Imperial County – COMPLETED

- Joint (military/civilian) use analysis on three military sites – COMPLETED
Civilian Site Concepts
Campo/Boulevard
Civilian Site Concepts
Desert Site in Imperial County
Civilian Site Concepts
SDIA Concept 6

ELIMINATED 10/05
Steve Breen  SAN DIEGO UNION-TRIBUNE

THE MILITARY HAS PROMISED US A QUICK RESPONSE TO OUR PROPOSAL....

MIRAMAR DUAL-USE PLAN

AIRPORT SITE SELECTION PROGRAM
MCAS Miramar Concept
List of Site Study Elements

- Meteorological Conditions
- Airport Facilities and Operational Efficiency
- Joint Use Evaluation
- Airspace
- Ground Access
- Utilities
- Land Acquisition/Relocation
- Noise
- Air Quality
- Geological/Geotechnical/Seismic
- Hydrology
- Water Quality
- Biological Communities
- Endangered and Threatened Species
- Wetlands
- Floodplains
- Historical, Architectural, Archaeological, Paleontological
- Coastal Zone Management
- Prime/Unique Farmland
- Light Emissions
- Visual Impacts
- DOT Section 4(f)
- Energy Supply and Natural Resources
- Solid/Hazardous Waste Handling
- Land Use
- Community Disruption
- Induced Socio-Economic Impacts
- Housing Impacts
- Mitigation
- Implementation Requirements
- Cost Estimates
Miramar Feasibility

Five feasibility criteria analyzed

<table>
<thead>
<tr>
<th>Aeronautical</th>
<th>Environmental</th>
<th>Noise</th>
<th>Market</th>
<th>Military</th>
<th>Financial</th>
</tr>
</thead>
</table>

1. **Aeronautical** – does the site meet basic airport planning criteria?
2. **Environmental** – what impact will an airport at this site have on the natural environment?
3. **Noise** – how many residents will be impacted by noise from an airport at this site?
4. **Market** – how attractive and accessible will the site be to airlines and passengers?
5. **Military** – what impacts will an airport at this site have on military operations?
6. **Financial** – how much will it cost to build an airport at this site?
Market Accessibility

Most U.S. Airports are located 5 to 20 miles from the City Center

Only Denver (25.4 miles) and Dulles (26.6 miles) are farther than 25 miles.
## Airport Site Selection Process

### Summary Comparison – Final Sites

<table>
<thead>
<tr>
<th></th>
<th>CBS</th>
<th>ICDS</th>
<th>NAS NI/SDIA</th>
<th>MCB CP</th>
<th>MCAS Miramar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aeronautical</strong></td>
<td>Meets need</td>
<td>Meets needs with issues</td>
<td>Major issues</td>
<td>Meets need</td>
<td>Meets need</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>Issues</td>
<td>Issues</td>
<td>Coastal issues</td>
<td>Issues</td>
<td>Issues</td>
</tr>
<tr>
<td><strong>Market</strong></td>
<td>Not acceptable</td>
<td>Not acceptable</td>
<td>Strong</td>
<td>Acceptable</td>
<td>Strong</td>
</tr>
<tr>
<td><strong>Military</strong></td>
<td>No military issues</td>
<td>Airspace changes required</td>
<td>Unmitigatable impacts</td>
<td>Joint use appears possible</td>
<td>Joint use appears possible</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>Somewhat Questionable</td>
<td>Least viable</td>
<td>Somewhat questionable</td>
<td>Potentially viable</td>
<td>Potentially viable</td>
</tr>
</tbody>
</table>
Who Pays?

- No local taxes pay for airport facilities
- Funds come from a variety of outside sources:
  - FAA (ticket tax)
  - Existing passenger facility charge ($4.50 per ticket)
  - Airport revenue bonds
  - Airlines and concessionaires
- Local taxes may be needed for new transportation infrastructure
  - Additional onramps & offramps
  - Additional roadway lanes
  - Shifting portions of freeways
Stay Informed!

www.san.org/siteselection

Questions?