Regional Aviation Strategic Plan

Project Overview and Regional Demand Forecast

March 12, 2009
Presentation Agenda

- Project Overview
  - Project Team
  - Rasp Objectives
  - Work Plan
  - Key Stakeholders

- Regional Forecast Summary
  - Airports Involved
  - Forecast Assumptions
  - Commercial Passengers Forecast
  - Cargo Tonnage Forecast
  - General Aviation Forecast
  - Forecast Summary
RASP Consultant Team Organization

San Diego County Regional Airport Authority

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George Mazur (CSI)

All staff are Jacobs Consultancy unless otherwise noted.
PN = Porter Novelli   CSI = Cambridge Systematics, Inc.   JDA = Jacobsen/Daniels Associates, LLC.   SVB = SVB Strategies, LLC.
The Successful RASP Will . . .

- Identify strategies to improve the performance of the regional airport system in San Diego County
  - Identify and assess aviation and surface transportation assets
  - Determine opportunities and constraints with respect to accommodating future aviation demand
  - Identify synergies between aviation and surface transportation

- Prepare a clear program of improvements and strategies to optimize aviation assets

- Maximize opportunities for external (federal, state, and local) funding sources and identify innovative financing options (public-private partnerships, etc.)

- Offer opportunities to understand stakeholder needs and issues

- Comply with California Senate Bill 10
Key Project Challenges

Goal—develop strategies to maximize the efficiency and effectiveness of existing and planned facilities

Key Challenges

- Development constraints at existing airports and related infrastructure
- Changing demographic and economic trends
- Volatility of the airline industry
- Military airspace capacity
- Emerging environmental issues
- Likelihood, capacities, and timing of other transportation infrastructure
- Competition from neighboring regions
- Community concerns and issues
- Diversification of funding sources

Recommended Regional Aviation Strategic Plan
Integrated Planning Approach

Technical approach; not reinventing the wheel

- Data-driven and technical analysis
- Leveraging prior analysis and models
  - Destination Lindbergh
  - Existing planning studies
  - California High-Speed Rail studies
  - SANDAG Regional Transportation Model
- Focus on broader implications of policy decisions and infrastructure choices
- Visual communications tools to facilitate decision making
Generalized Work Plan

30-month work plan culminating in June 2011

Phase I
Data Gathering and Model Development
March – Oct 2009

Phase 2
System Concepts and Strategies
Nov 2009 – Sept 2010

Phase 3
Regional Aviation Strategic Plan

- Focus on passenger and air cargo demand and GA activity
- “Airport System” defined by 12 civilian airports in San Diego County, in addition to Tijuana
- Forecasts prepared for Destination Lindbergh study; planning horizon 2030 consistent with the AMAP

Project management and coordination
Stakeholder outreach support
Task-specific documentation and deliverables
Phase 1 – Data Gathering and Model Development

Scope tasks and objectives

Phase 1
Data Gathering and Model Development

1. **Inventory** – Gather and prepare data for subsequent tasks/ phases
2. **Forecasts** – Confirm aviation demand forecasts prepared for *Destination Lindbergh*
3. **Demand/Capacity** – Document the existing and planned capacity of airports and key transportation facilities
4. **Facility Requirements** – Identify Airport System facility requirements necessary to accommodate future demand
5. **Demand Model** – Develop the aviation demand model for use in subsequent Phases

Phase 2
System Concepts and Strategies

Phase 3
Regional Aviation Strategic Plan
Importance of Aviation Demand Forecast

- Facilitates identification of
  - Improvements and appropriately sized facilities
  - Plans and probable timing of improvements
- Establishes baseline for financial analyses
Phase 2 and 3 Primary Objectives

- **Phase 2 – System Concepts and Strategies (November 2009)**
  - Alternative airport system concepts
  - Concept assessments and evaluation
  - Implementation strategies

- **Phase 3 – Regional Aviation Strategic Plan (October 2010)**
  - Aviation facilities improvement program
  - Financing opportunities
  - Final report and summary materials

- **Continued stakeholder coordination and task-specific deliverables**
Key Stakeholders

Work plan includes coordination and outreach with the following:

- San Diego County Regional Airport Authority
- All 18 cities in San Diego County (represented by SANDAG)
- Civilian airport operators in San Diego County (and Tijuana)
  - City of San Diego
  - County of San Diego
  - City of Oceanside
- Federal and state agencies (FAA, Caltrans)
- Regional transportation agencies (MTS, NCTD)
- Public and airport-specific stakeholders
Generalized Phase I Schedule

**SCHEDULE MILESTONES**

- RASP Subcommittee Meeting
- Task Deliverable / Working Paper
Near-term Deliverables

Primary work efforts through May 2009

- Aviation demand forecasts
  - Coordination with DL Team, review, and confirmation
  - Subcommittee Meeting #1 (today)

- Inventory existing assets

- Initiate development of demand models

- Strategic assessment

- Meetings with technical advisors
  - Informal group comprised of representatives from County System airport and other technical stakeholders including SANDAG
  - Milestone-driven meeting
  - Review/vet materials prior to Subcommittee meetings
FORECAST SUMMARY
Regional Aviation Strategic Plan
16 Airports in San Diego County

Note: Tijuana International Airport not located in San Diego County; depicted for information purposes only.
## Current Airport Roles

<table>
<thead>
<tr>
<th>Operating Entity</th>
<th>Airport</th>
<th>Code</th>
<th>Role</th>
<th>2007 operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Authority</td>
<td>San Diego International Airport</td>
<td>SAN</td>
<td>Large hub commercial</td>
<td>229,486</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>McClellan-Palomar Airport</td>
<td>CRQ</td>
<td>Non-hub commercial</td>
<td>212,023</td>
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<tr>
<td>City of San Diego</td>
<td>Montgomery Field Airport</td>
<td>MYF</td>
<td>Reliever</td>
<td>222,492</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>Gillespie Field Airport</td>
<td>SEE</td>
<td>Reliever</td>
<td>295,652</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>Brown Field Municipal Airport</td>
<td>SDM</td>
<td>Reliever</td>
<td>145,661</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>Ramona Airport</td>
<td>RNM</td>
<td>Reliever</td>
<td>164,699</td>
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<tr>
<td>City of Oceanside</td>
<td>Oceanside Municipal Airport</td>
<td>OKB</td>
<td>General aviation</td>
<td>14,128</td>
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<tr>
<td>County of San Diego</td>
<td>Fallbrook Community Airpark</td>
<td>L18</td>
<td>General aviation</td>
<td>33,286</td>
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<tr>
<td>County of San Diego</td>
<td>Borrego Valley Airport</td>
<td>L08</td>
<td>General aviation</td>
<td>26,251</td>
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<tr>
<td>County of San Diego</td>
<td>Agua Caliente Airport</td>
<td>L54</td>
<td>Limited use - GA</td>
<td>4,400</td>
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<tr>
<td>County of San Diego</td>
<td>Ocotillo Airport</td>
<td>L90</td>
<td>Limited use - GA</td>
<td>800</td>
</tr>
<tr>
<td>County of San Diego</td>
<td>Jacumba Airport</td>
<td>L78</td>
<td>Limited use - GA</td>
<td>325</td>
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</table>
Overarching Forecast Assumptions

- Airports assumed to maintain existing roles
- Forecast for SDIA and Gillespie Field adopted from previous planning efforts
- Forecasts based on information from County, City, Airport Authority, and FAA sources
- Forecasts account for and consider the following:
  - Continued congestion at San Diego International
  - Planned improvements at San Diego International, McClellan-Palomar, Montgomery, Gillespie Field, and Brown Field
  - Oceanside airport leased to private operator
- Forecasts reflect *unconstrained* conditions at each facility
Commercial Passenger Forecast Assumptions

- Analysis of historical traffic shows that yield (airfare) and personal income are two potential predictors of demand

- Yield is affected by
  - Price of oil / carbon cost
  - Airline operations - domestic capacity, airline mergers, alliances, bankruptcies, etc.

- Personal income is a function of
  - Local and national economic factors
  - Tourism, convention and cruise industry

- Population and per capita income data based on SANDAG projections
County-Wide Commercial Passenger Forecast

Average annual growth approximately 1.9%

County-Wide Passenger Aircraft Operations Forecast

Average annual growth approximately 1.0%

County-Wide Air Cargo Tonnage Forecast

Average annual growth approximately 1.2%

## General Aviation Forecast Assumptions

Planned improvements and foreseeable changes

<table>
<thead>
<tr>
<th>Airport</th>
<th>Planned or recent improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>McClellan-Palomar</td>
<td>Runway extension under consideration since 2003</td>
</tr>
<tr>
<td></td>
<td>New terminal constructed</td>
</tr>
<tr>
<td></td>
<td>New 38,000 sq ft hangar in 2009</td>
</tr>
<tr>
<td>Montgomery Field</td>
<td>Modify displaced threshold and pavement rehabilitations for over 100 aircraft parking positions</td>
</tr>
<tr>
<td>Gillespie Field</td>
<td>Environmental Assessment (EA) underway for 70 acre hangar development</td>
</tr>
<tr>
<td>Brown Field Municipal</td>
<td>Planned development of GA center, FBO, and firefighting base</td>
</tr>
<tr>
<td></td>
<td>Planned development of commercial, industrial, and hotel</td>
</tr>
<tr>
<td>Ramona</td>
<td>Planned public-private development of hangars for 96 aircraft</td>
</tr>
</tbody>
</table>

Table includes only airports with documented improvements

Forecast growth from 1.0 million to about 1.5 million by 2030

2008 TOTAL: 1.02 MILLION

2015 TOTAL: 1.13 MILLION

2030 TOTAL: 1.48 MILLION

Notes: General aviation airports include Borrego Valley, Fallbrook, and Oceanside.
Limited use general aviation airports include Agua Caliente, Ocotillo, and Jacumba airports.
Notes: General aviation airports include Borrego Valley, Fallbrook, and Oceanside. Limited use general aviation airports include Agua Caliente, Ocotillo, and Jacumba airports. Airfield capacity constraints are not considered for forecast operations. Source: Source: Landrum & Brown Inc., RASP Forecast, December 2008.
Forecast of Military Operations at Civilian Airports

Flat growth and no significant change in share by airport

2008 TOTAL: 14,400

2030 TOTAL: 12,600

Notes: General aviation airports include Borrego Valley, Fallbrook, and Oceanside.
Limited use general aviation airports include Agua Caliente, Ocotillo, and Jacumba airports.
## Forecast Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Passenger Enplanements (a)</th>
<th>Air Cargo Tonnage (b)</th>
<th>Passenger (a)</th>
<th>Cargo (b)</th>
<th>GA / air taxi</th>
<th>Military (e)</th>
<th>Total</th>
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<tr>
<td>Historical</td>
<td></td>
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<tr>
<td>2005</td>
<td>8,741,621</td>
<td>187,705</td>
<td>193,144</td>
<td>7,206</td>
<td>1,038,847</td>
<td>10,515</td>
<td>1,249,712</td>
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<tr>
<td>2006</td>
<td>8,809,826</td>
<td>207,992</td>
<td>195,150</td>
<td>6,592</td>
<td>1,075,995</td>
<td>12,335</td>
<td>1,290,072</td>
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<tr>
<td>2007</td>
<td>9,219,875</td>
<td>154,689</td>
<td>204,261</td>
<td>6,682</td>
<td>1,121,013</td>
<td>17,247</td>
<td>1,349,203</td>
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<tr>
<td>2008 (c)</td>
<td>9,300,682</td>
<td>157,200</td>
<td>204,500</td>
<td>6,600</td>
<td>1,023,525</td>
<td>14,478</td>
<td>1,249,103</td>
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<td>Forecast</td>
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<tr>
<td>2010</td>
<td>9,336,400</td>
<td>164,200</td>
<td>196,200</td>
<td>6,500</td>
<td>1,057,425</td>
<td>12,600</td>
<td>1,272,725</td>
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<tr>
<td>2015</td>
<td>10,386,300</td>
<td>172,400</td>
<td>209,400</td>
<td>6,700</td>
<td>1,129,425</td>
<td>12,600</td>
<td>1,358,125</td>
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<tr>
<td>2020</td>
<td>11,751,200</td>
<td>188,200</td>
<td>234,000</td>
<td>7,100</td>
<td>1,211,725</td>
<td>12,600</td>
<td>1,465,425</td>
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<td>2025</td>
<td>13,063,300</td>
<td>205,900</td>
<td>257,400</td>
<td>7,700</td>
<td>1,326,625</td>
<td>12,600</td>
<td>1,604,325</td>
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<tr>
<td>2030</td>
<td>14,533,000</td>
<td>225,600</td>
<td>283,500</td>
<td>8,400</td>
<td>1,476,325</td>
<td>12,600</td>
<td>1,780,825</td>
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<tr>
<td>CAGR (d)</td>
<td>2005 - 2008</td>
<td>-5.7%</td>
<td>1.9%</td>
<td>-2.9%</td>
<td>-0.5%</td>
<td>11.2%</td>
<td>0.0%</td>
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<tr>
<td></td>
<td>2008 - 2020</td>
<td>1.5%</td>
<td>1.1%</td>
<td>0.6%</td>
<td>1.4%</td>
<td>-1.2%</td>
<td>1.3%</td>
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<tr>
<td></td>
<td>2008 - 2030</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.1%</td>
<td>1.7%</td>
<td>-0.6%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

(a) Enplanement and passenger operations total includes SDIA baseline and CRQ high scenario forecast.
(b) Cargo tonnage and operations total for SDIA baseline forecast.
(c) Landrum and Brown estimate for 2008.
(d) Compound annual growth rate
(e) Forecast at civilian airports

Further Information is on the Internet

- **Additional forecast documentation**
  - *San Diego County Regional Aviation Strategic Plan, Aviation Demand Forecasts*, Draft December 2008
  - *Preliminary Forecasts, San Diego County Airports*, November 2008
  - *Destination Lindbergh, Aviation Activity Forecast*, August 2008

- **Additional project information**
  - [www.san.org](http://www.san.org)
  - [www.sdrasp.com](http://www.sdrasp.com)