

Regional Aviation Strategic Plan

# Project Overview and Regional Demand Forecast

March 12, 2009



# Presentation Agenda

## ■ Project Overview

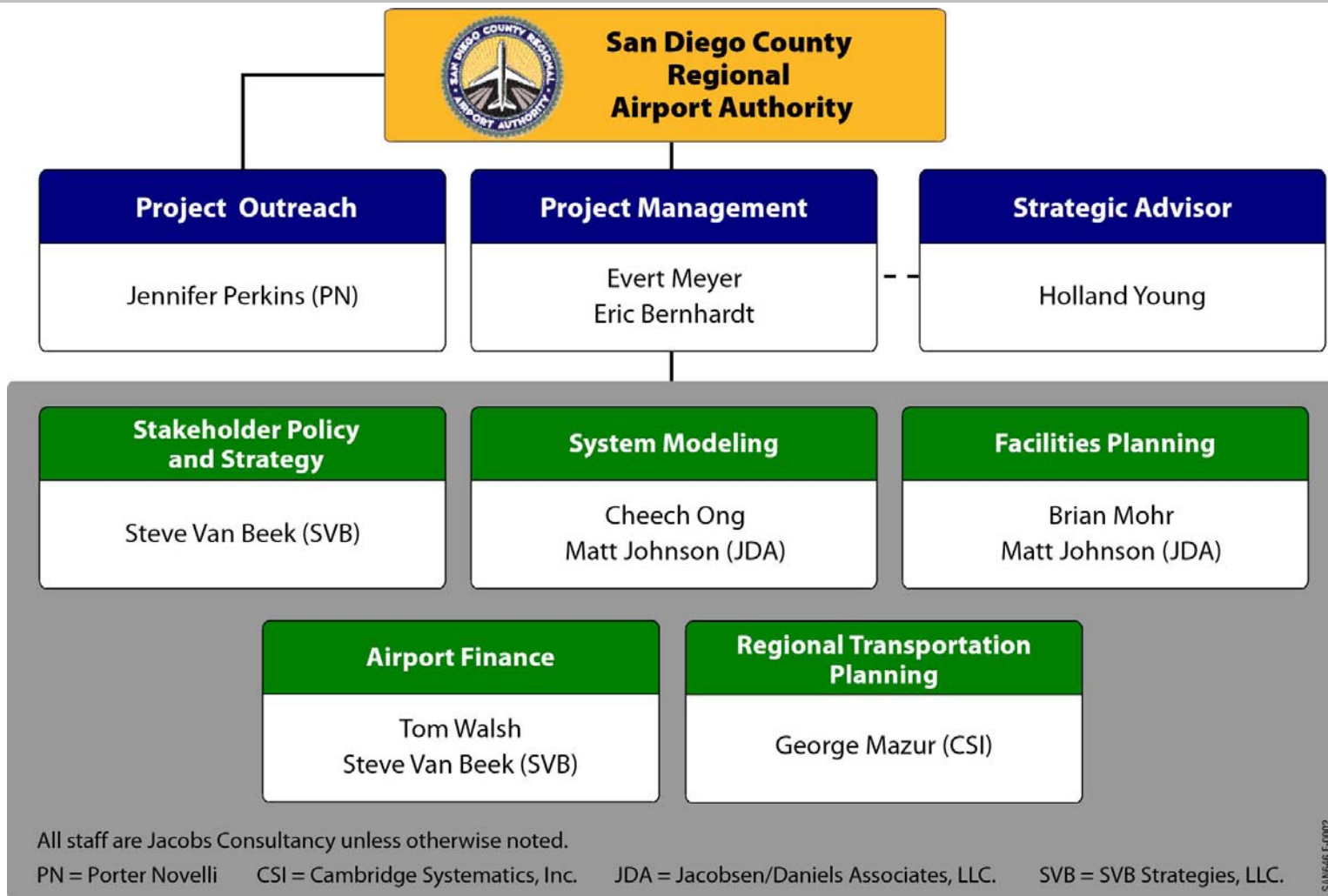
- Project Team
- Rasp Objectives
- Work Plan
- Key Stakeholders

## ■ Regional Forecast Summary

- Airports Involved
- Forecast Assumptions
- Commercial Passengers Forecast
- Cargo Tonnage Forecast
- General Aviation Forecast
- Forecast Summary



# RASP Consultant Team Organization



# 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



# Integrated Planning Approach

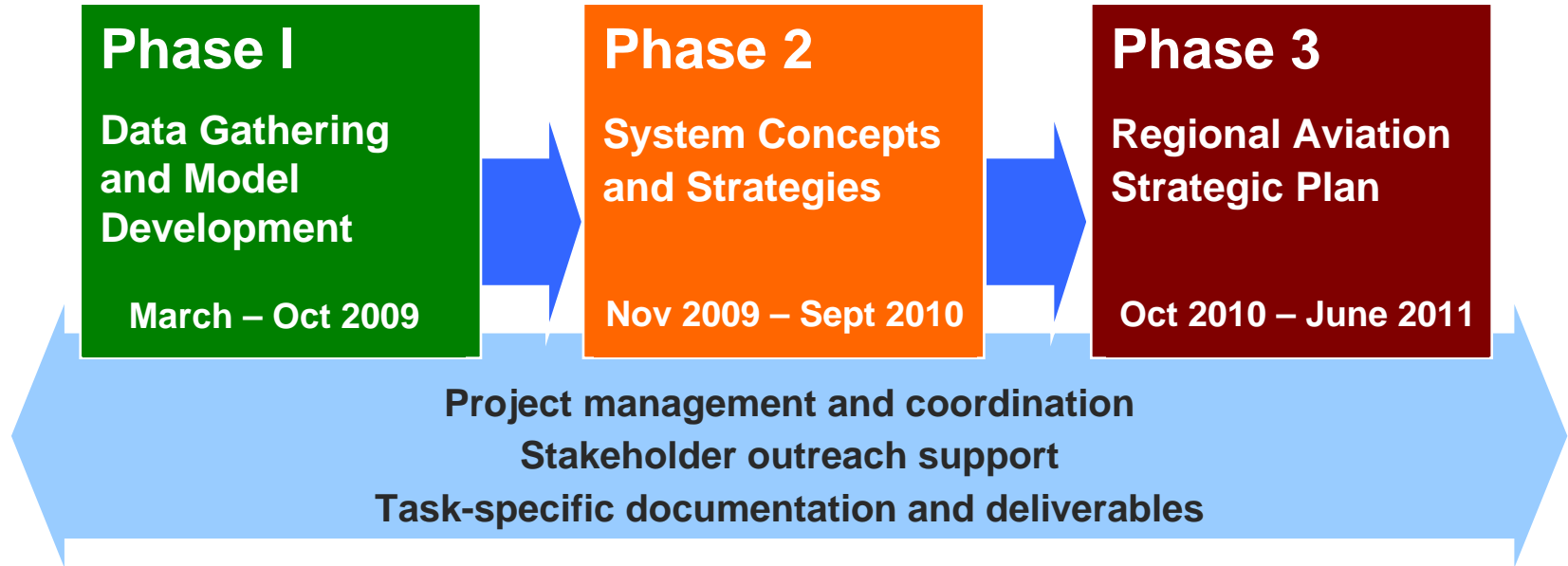
Technical approach; not reinventing the wheel

- **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

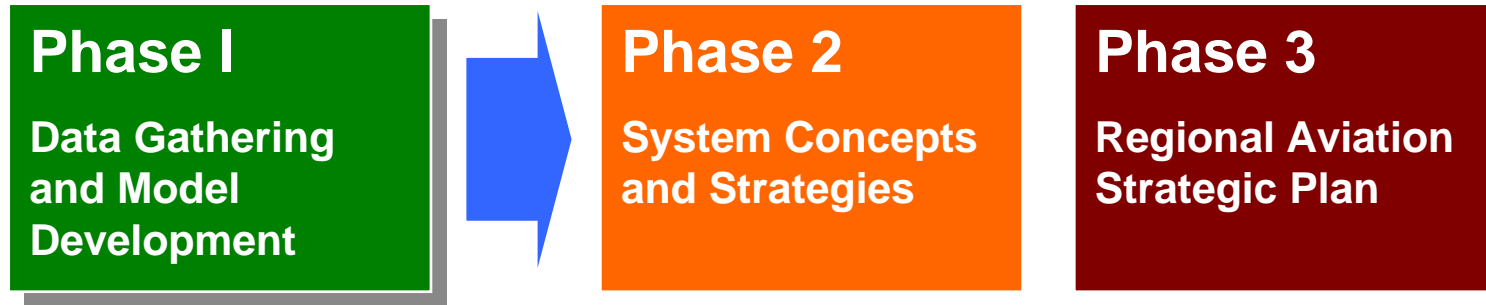


- Focus on passenger and air cargo demand and GA activity
- “Airport System” defined by 12 civilian airports in San Diego County, in addition to Tijuana
- Forecasts prepared for *Destination Lindbergh* study; planning horizon 2030 consistent with the AMAP



# Phase 1 – Data Gathering and Model Development

## Scope tasks and objectives

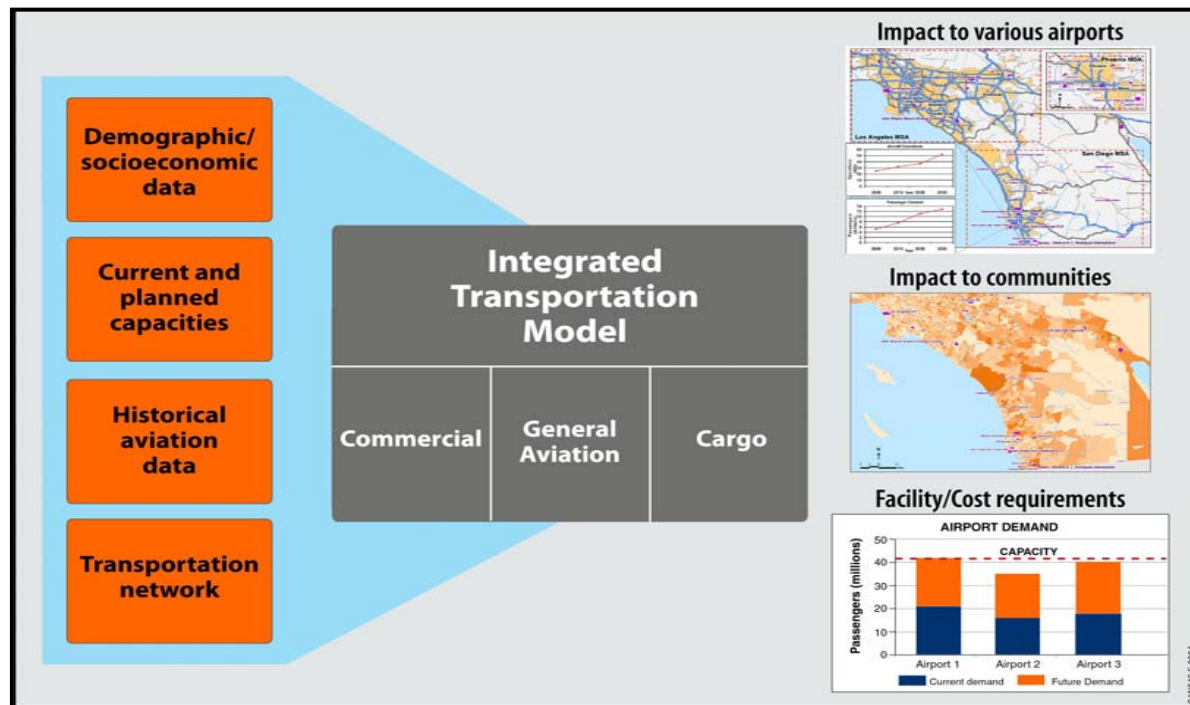


1. **Inventory** – Gather and prepare data for subsequent tasks/phases
2. **Forecasts** – Confirm aviation demand forecasts prepared for *Destination Lindbergh*
3. **Demand/Capacity** – Document the existing and planned capacity of airports and key transportation facilities
4. **Facility Requirements**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

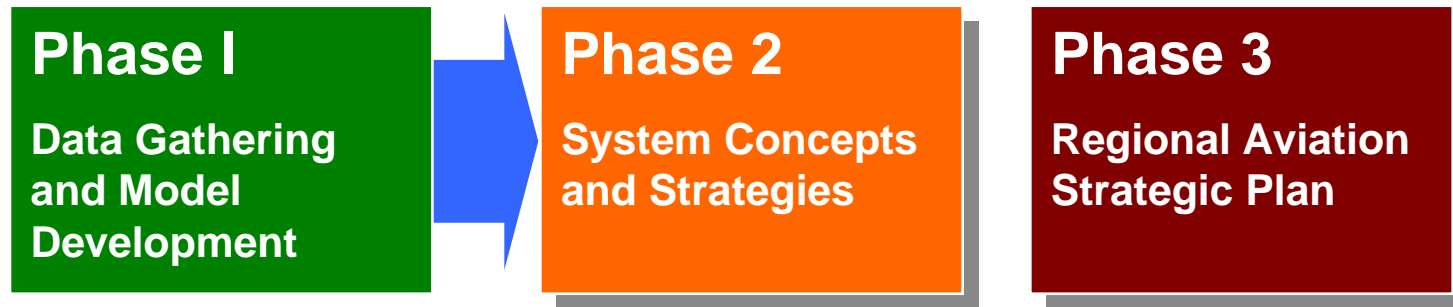


# Importance of Aviation Demand Forecast

- **Facilitates identification of**
  - Improvements and appropriately sized facilities
  - Plans and probable timing of improvements
- **Establishes baseline for financial analyses**



# Phases 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**

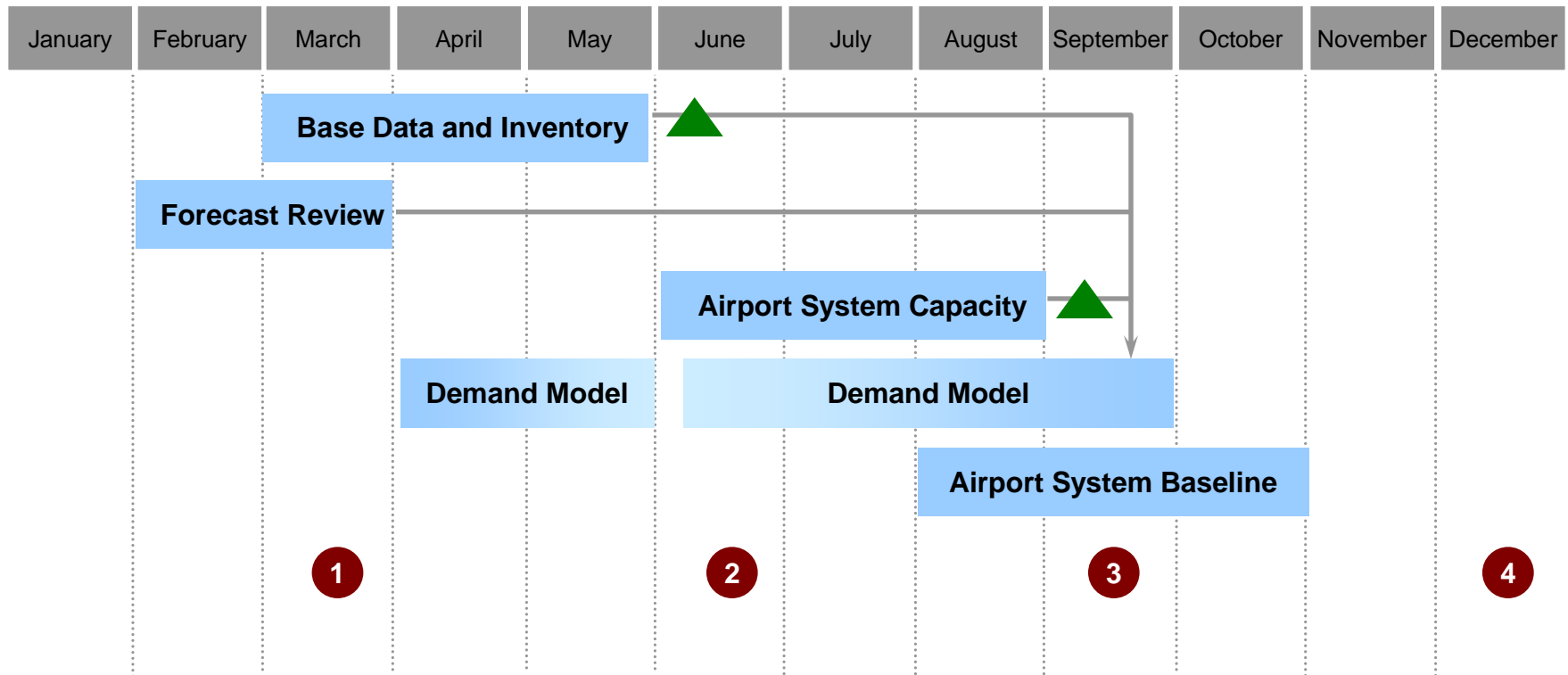
# Key Stakeholders

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

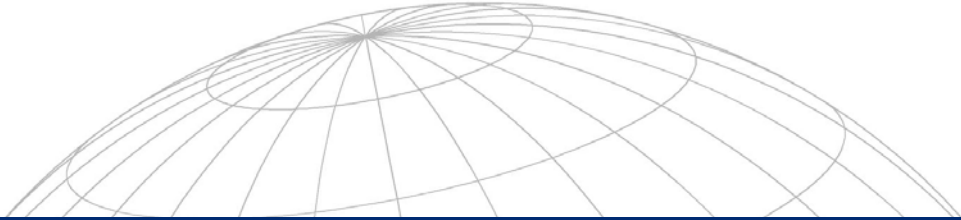
-  RASP Subcommittee Meeting
-  Task Deliverable / Working Paper

# 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



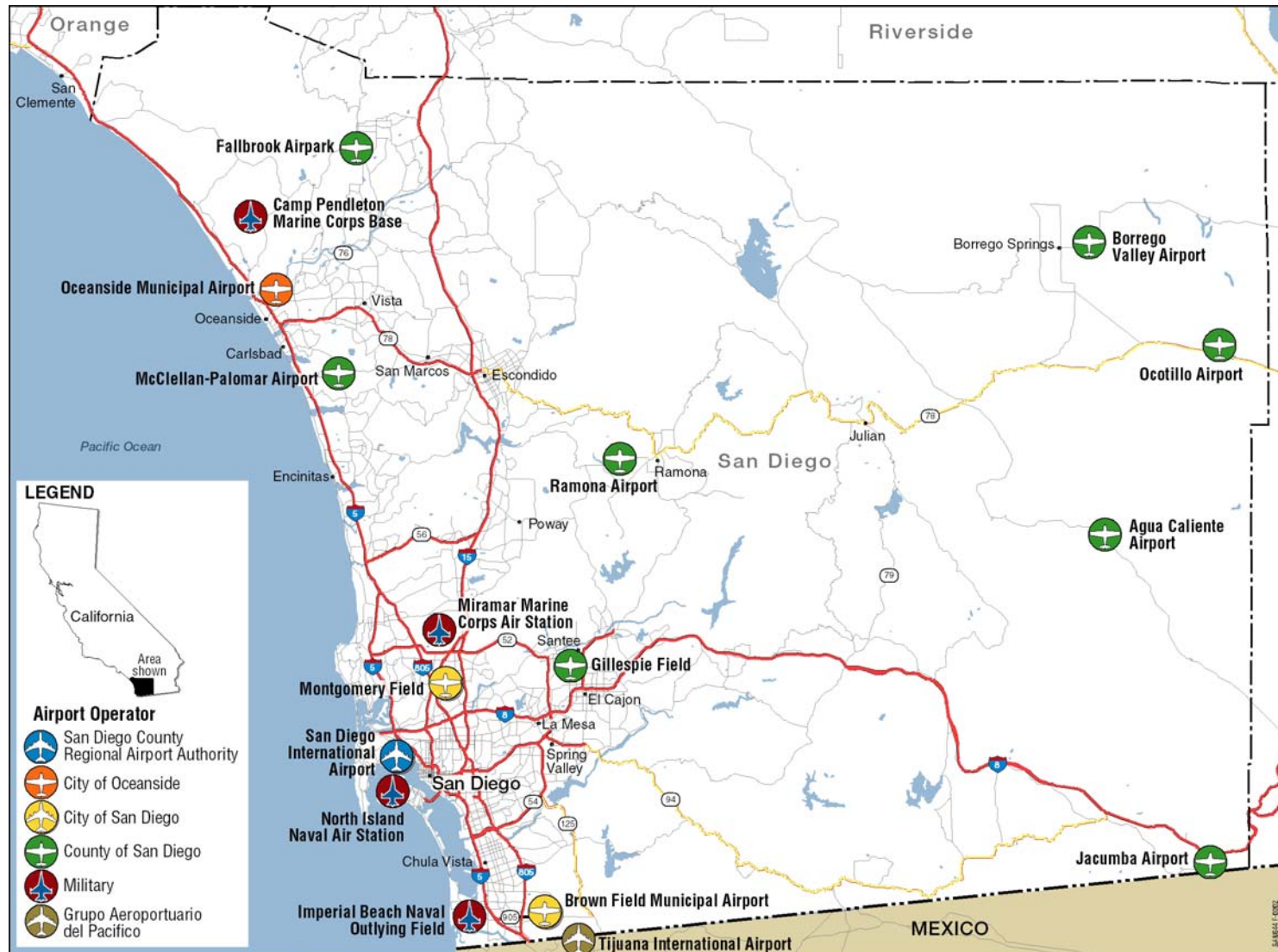


# FORECAST SUMMARY

## 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

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



# 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



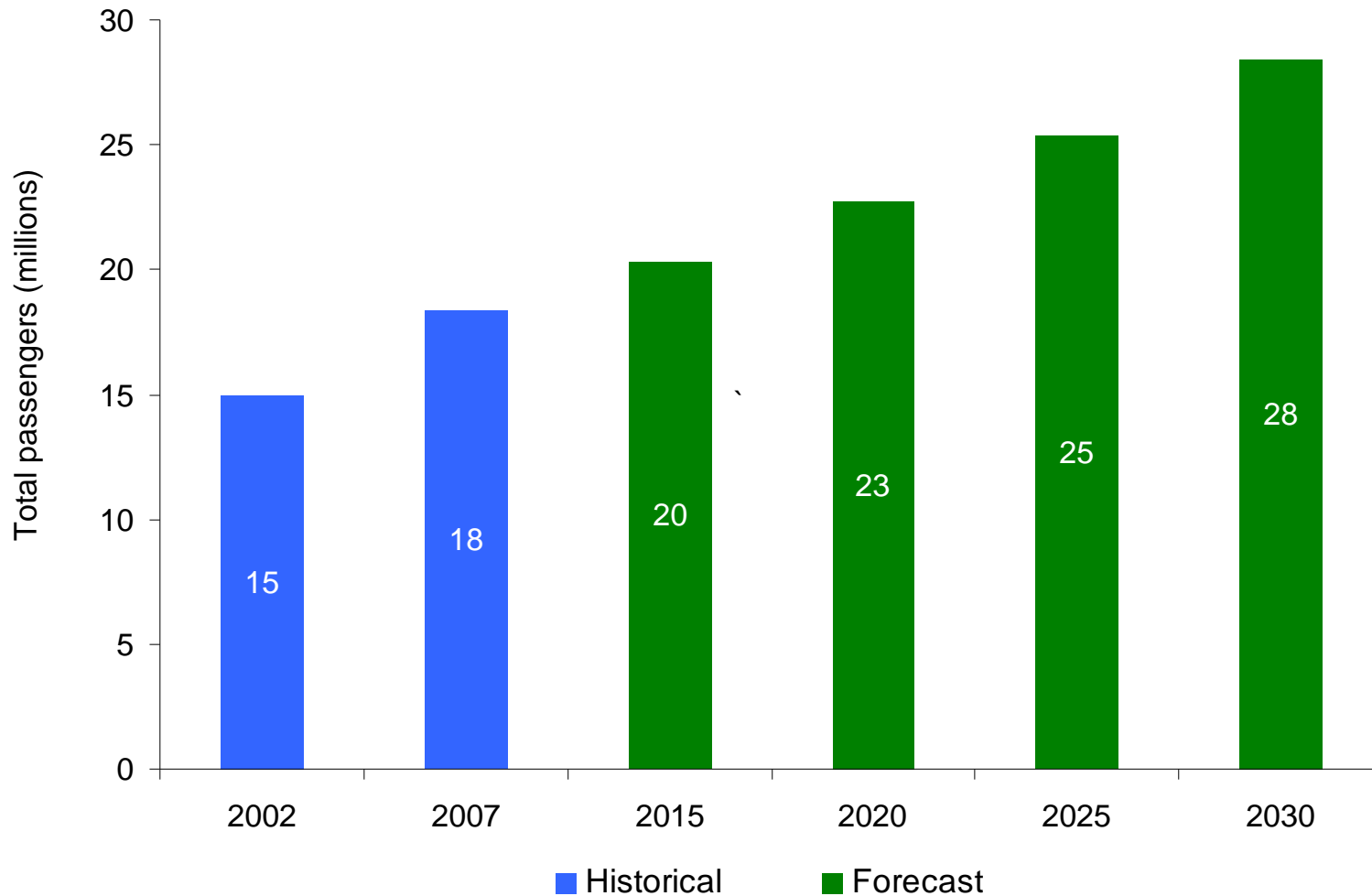
# Commercial Passenger Forecast Assumptions

- **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%

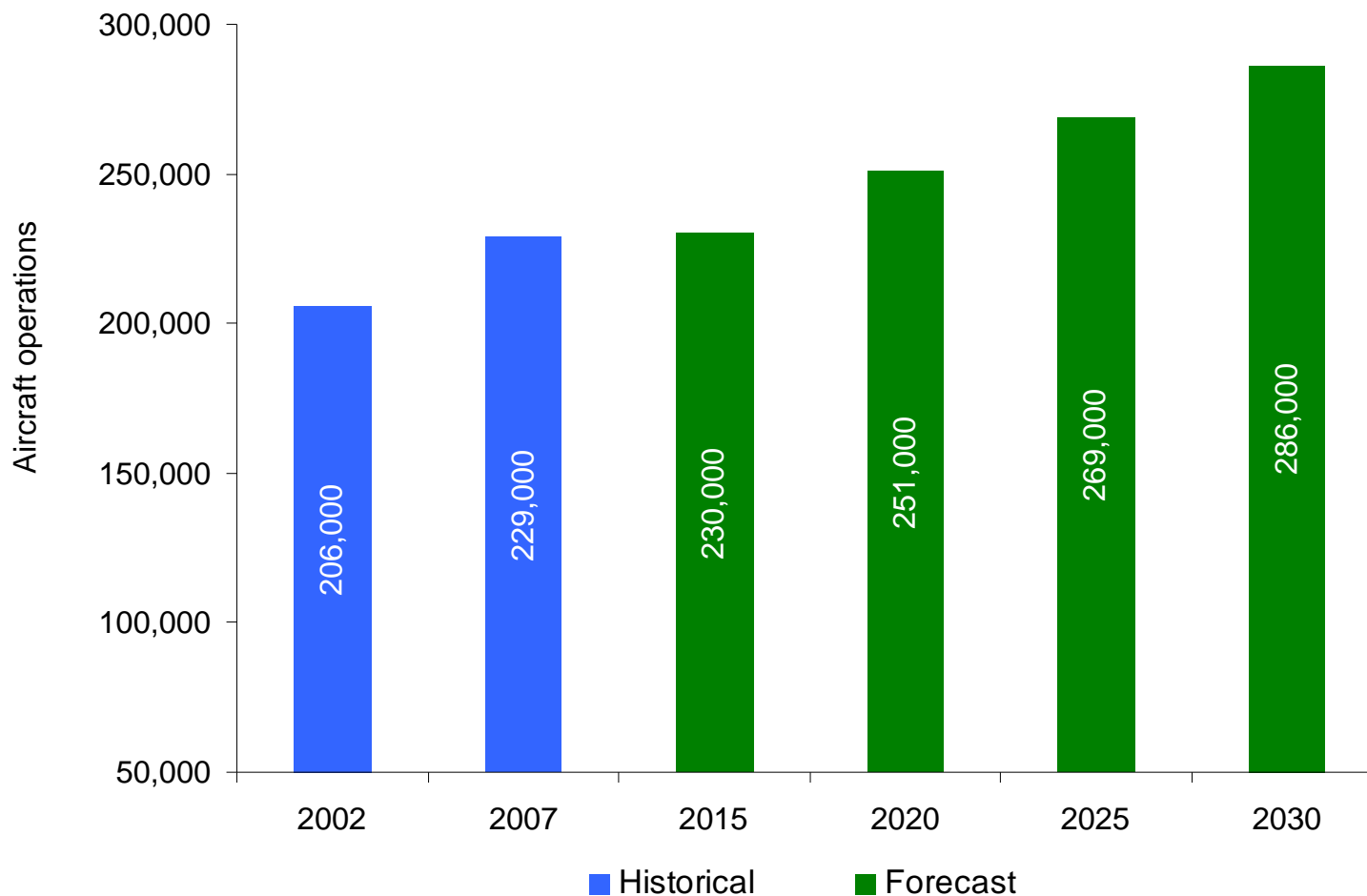


Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# County-Wide Passenger Aircraft Operations Forecast

Average annual growth approximately 1.0%

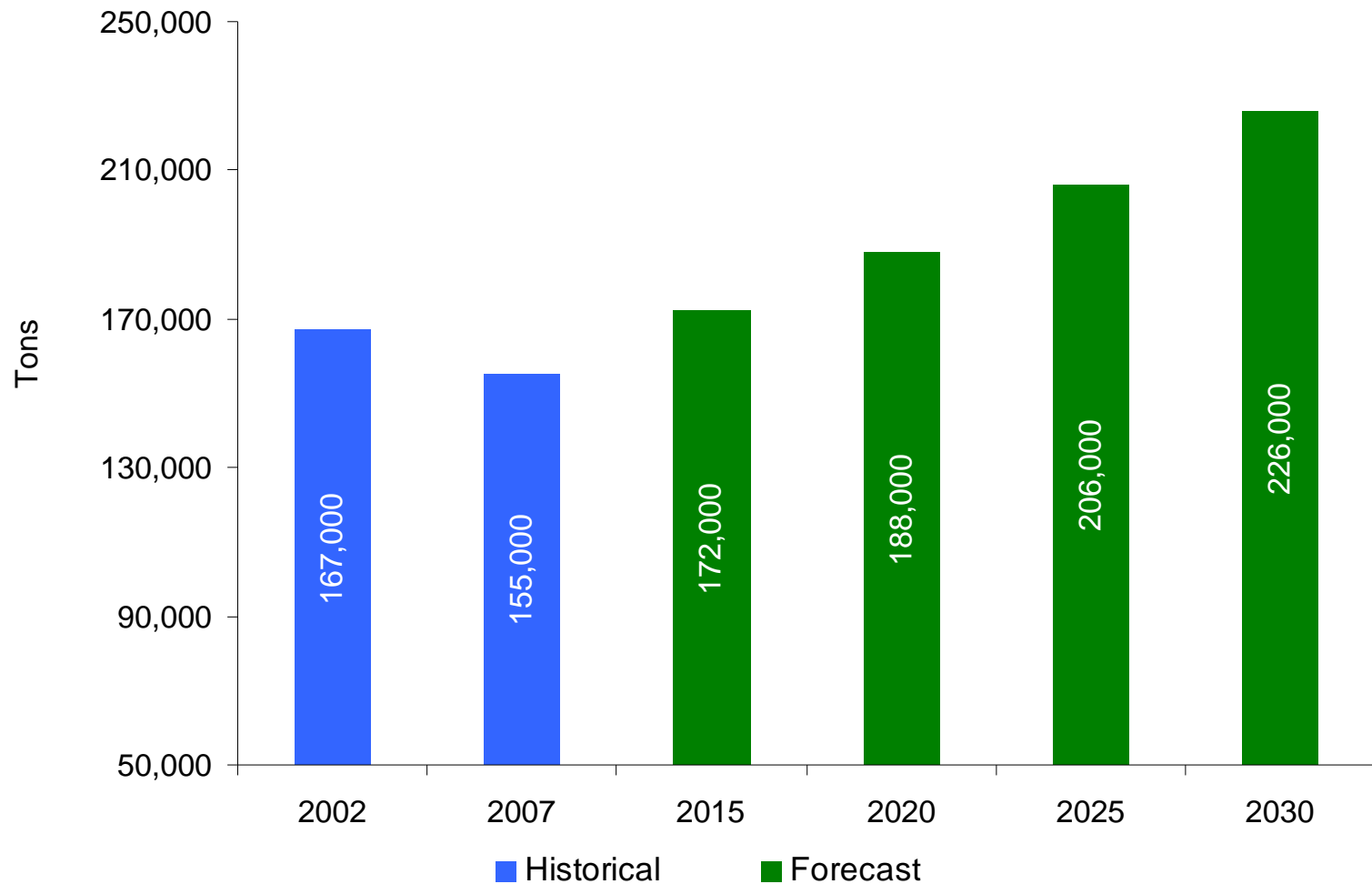


Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# County-Wide Air Cargo Tonnage Forecast

Average annual growth approximately 1.2%



Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# General Aviation Forecast Assumptions

## Planned improvements and foreseeable changes

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

Table includes only airports with documented improvements

Source: Landrum & Brown Inc., RASP Forecast, December 2008.

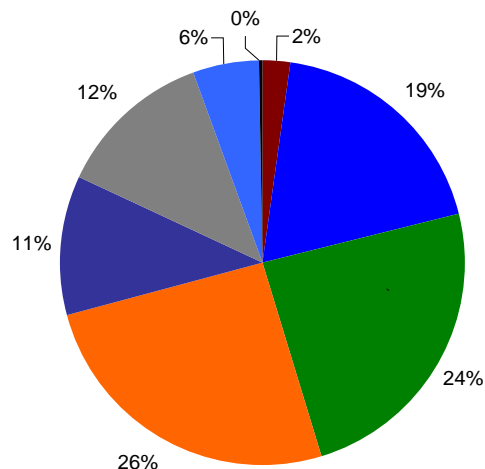




# General Aviation / Air Taxi Forecast Operations

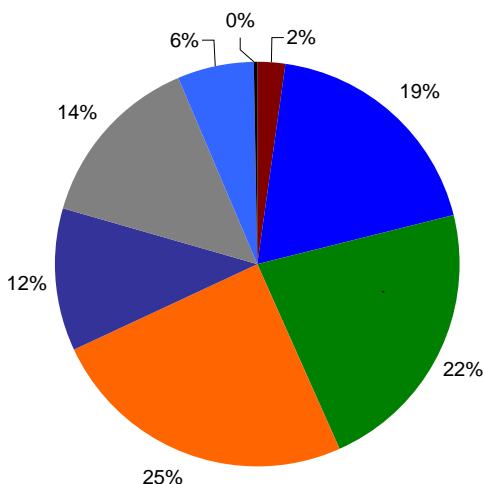
Forecast growth from 1.0 million to about 1.5 million by 2030

**2008 TOTAL: 1.02 MILLION**

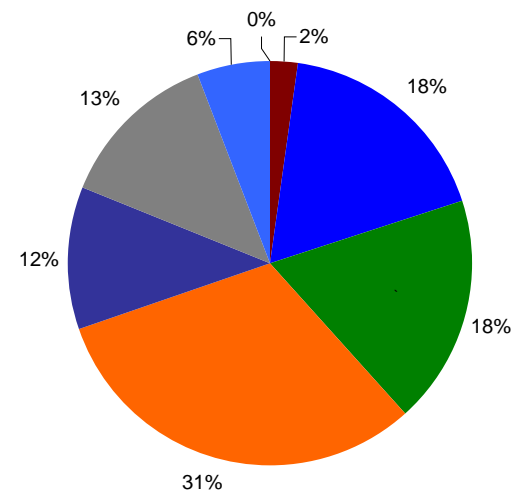


- San Diego International Airport
- Gillespie Field
- General aviation
- McClellan-Palomar Airport
- Brown Field Municipal Airport
- Limited use general aviation
- Montgomery Field
- Ramona Airport

**2015 TOTAL: 1.13 MILLION**



**2030 TOTAL: 1.48 MILLION**



Notes: General aviation airports include Borrego Valley, Fallbrook, and Oceanside.

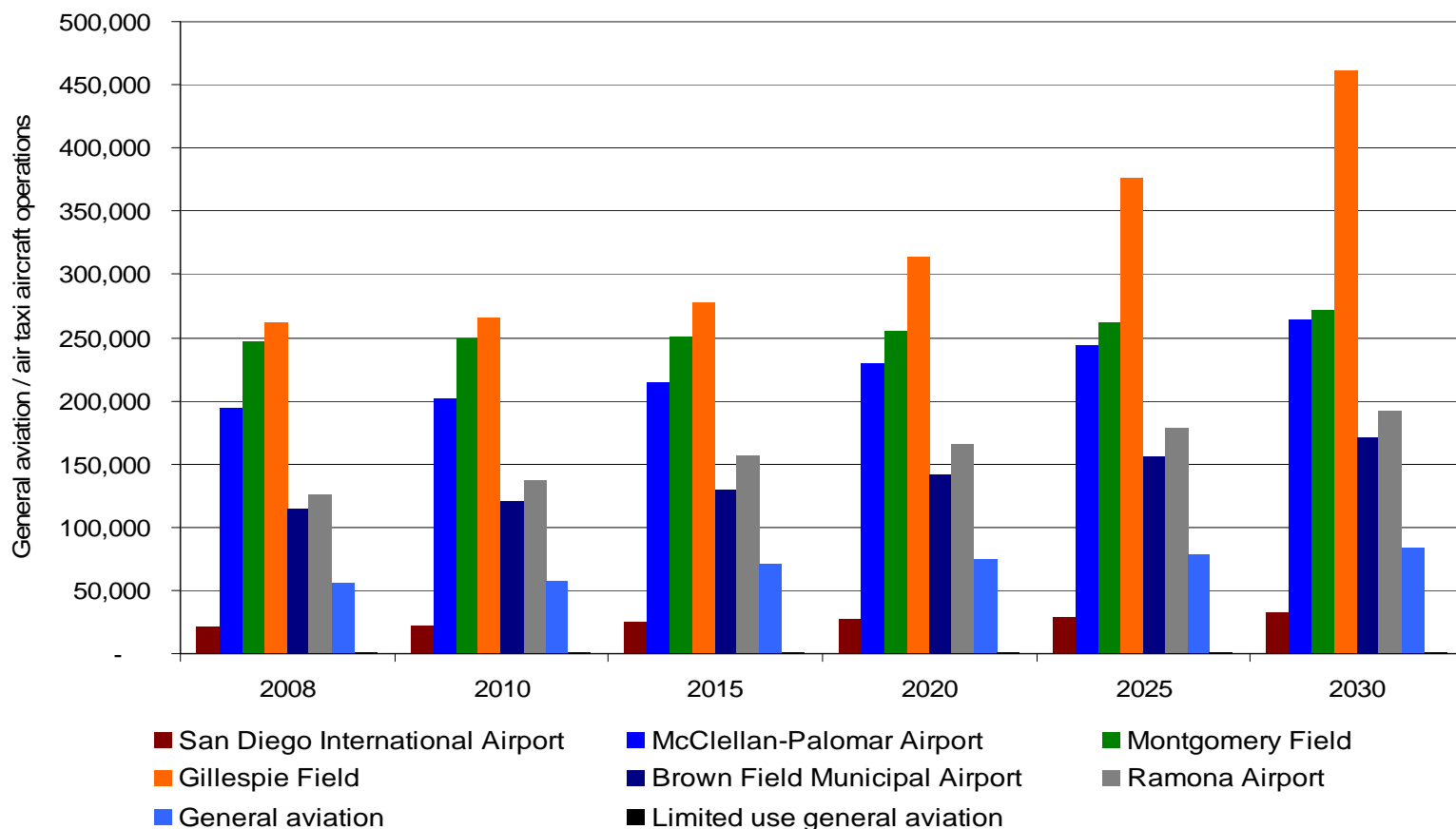
Limited use general aviation airports include Agua Caliente, Ocotillo, and Jacumba airports.

Source: Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# Unconstrained General Aviation Operations Forecast

Majority of growth accommodated at 3 facilities



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.

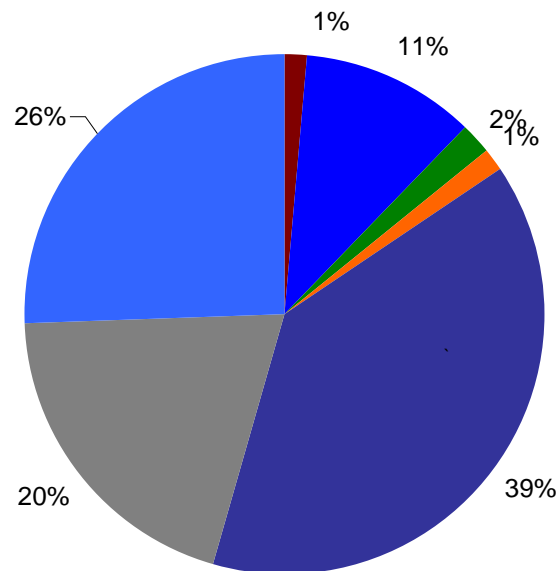
Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# Forecast of Military Operations at Civilian Airports

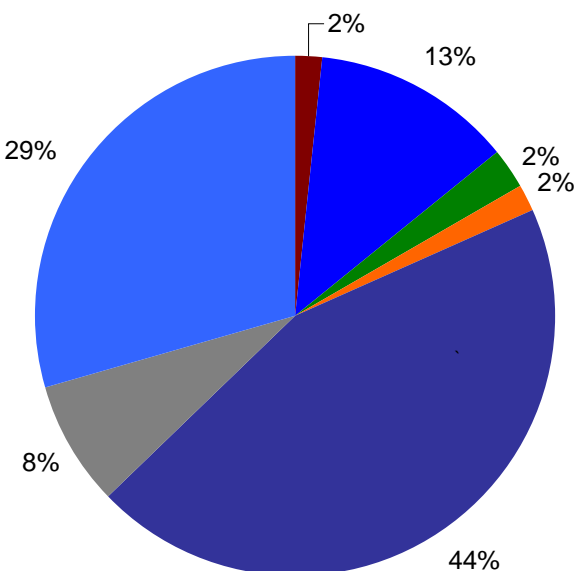
Flat growth and no significant change in share by airport

**2008 TOTAL: 14,400**



■ San Diego International Airport 29%  
■ Gillespie Field  
■ General aviation  
■ McClellan-Palomar Airport  
■ Brown Field Municipal Airport  
■ Limited use general aviation  
■ Montgomery Field  
■ Ramona Airport

**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.

Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# Forecast Summary

Year	Passenger	Air Cargo	Aircraft operations				
	Enplanements (a)	Tonnage (b)	Passenger (a)	Cargo (b)	GA / air taxi	Military (e)	Total
Historical							
2005	8,741,621	187,705	193,144	7,206	1,038,847	10,515	1,249,712
2006	8,809,826	207,992	195,150	6,592	1,075,995	12,335	1,290,072
2007	9,219,875	154,689	204,261	6,682	1,121,013	17,247	1,349,203
2008 (c)	9,300,682	157,200	204,500	6,600	1,023,525	14,478	1,249,103
Forecast							
2010	9,336,400	164,200	196,200	6,500	1,057,425	12,600	1,272,725
2015	10,386,300	172,400	209,400	6,700	1,129,425	12,600	1,358,125
2020	11,751,200	188,200	234,000	7,100	1,211,725	12,600	1,465,425
2025	13,063,300	205,900	257,400	7,700	1,326,625	12,600	1,604,325
2030	14,533,000	225,600	283,500	8,400	1,476,325	12,600	1,780,825
CAGR (d)							
2005 - 2008	2.1%	-5.7%	1.9%	-2.9%	-0.5%	11.2%	0.0%
2008 - 2020	2.0%	1.5%	1.1%	0.6%	1.4%	-1.2%	1.3%
2008 - 2030	2.0%	1.7%	1.5%	1.1%	1.7%	-0.6%	1.6%

(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

Source: Source: Landrum & Brown Inc., RASP Forecast, December 2008.



# Further Information is on the Internet

## ■ Additional forecast documentation

[www.san.org](http://www.san.org)

- *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.sdrasp.com](http://www.sdrasp.com)

