JACOBS CONSULTANCY

Final Results

Regional Aviation Strategic Plan

San Diego County Regional Airport Authority

RASP Subcommittee

February 15, 2011

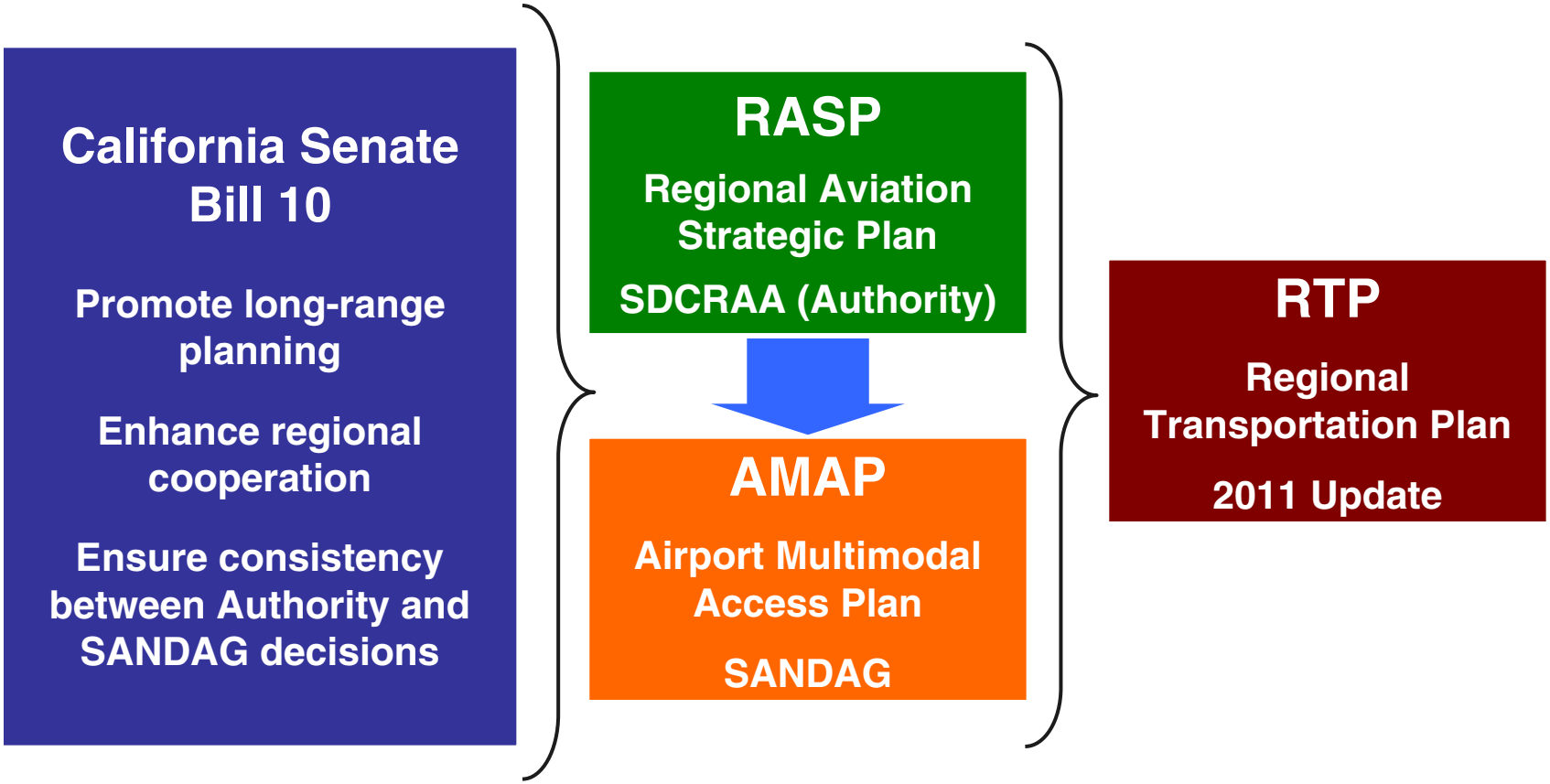
Meeting Agenda

1. Project recap and review
2. Summary of findings
3. Stakeholder Coordination and Public Outreach / Open House
4. SANDAG AMAP integration and next steps

Project Recap

Regional Aviation Strategic Plan (RASP)

Senate Bill 10 – Multimodal Planning to be Coordinated by SDCRAA and SANDAG

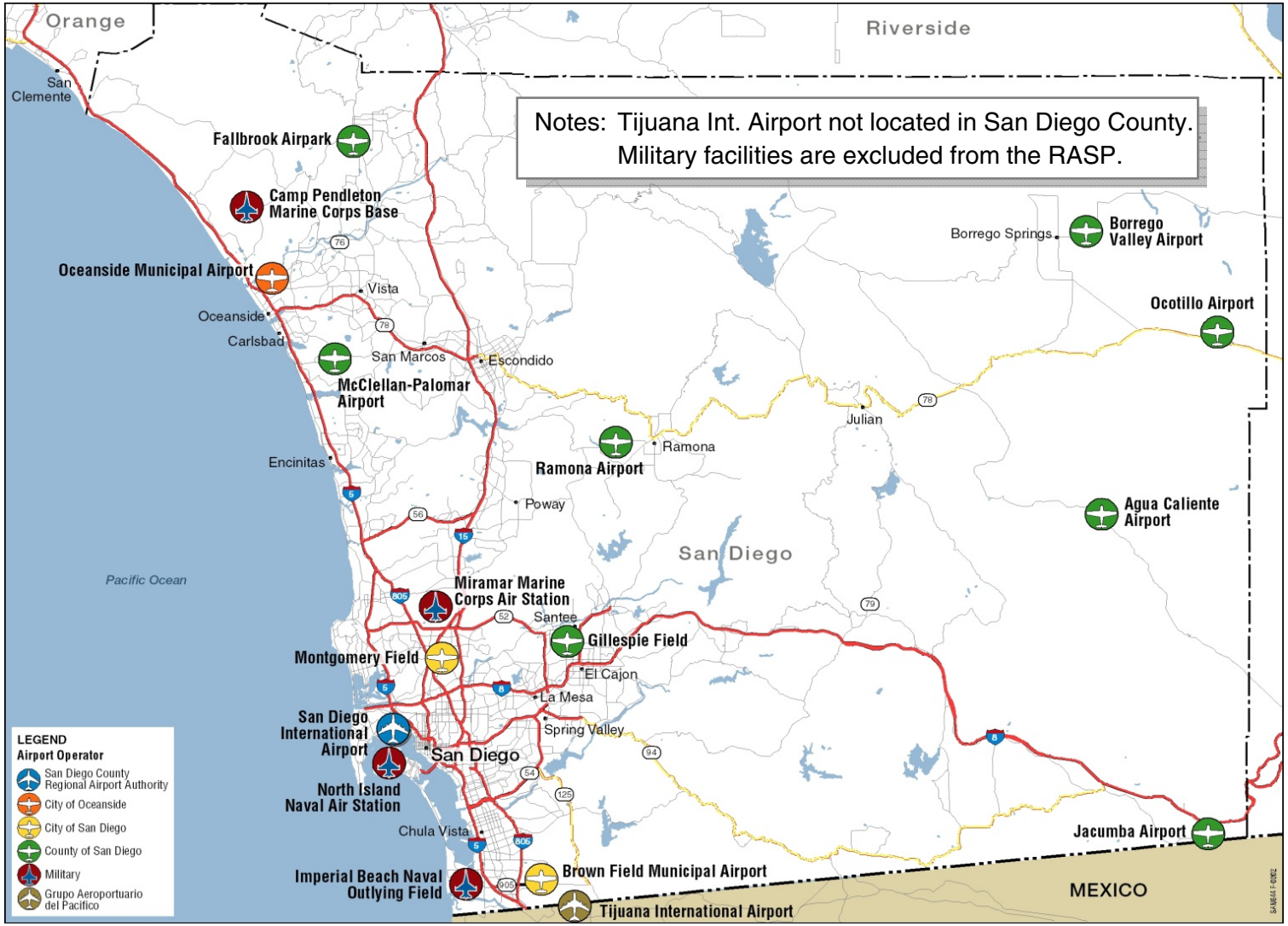


Project Overview

3-Phase Work Plan

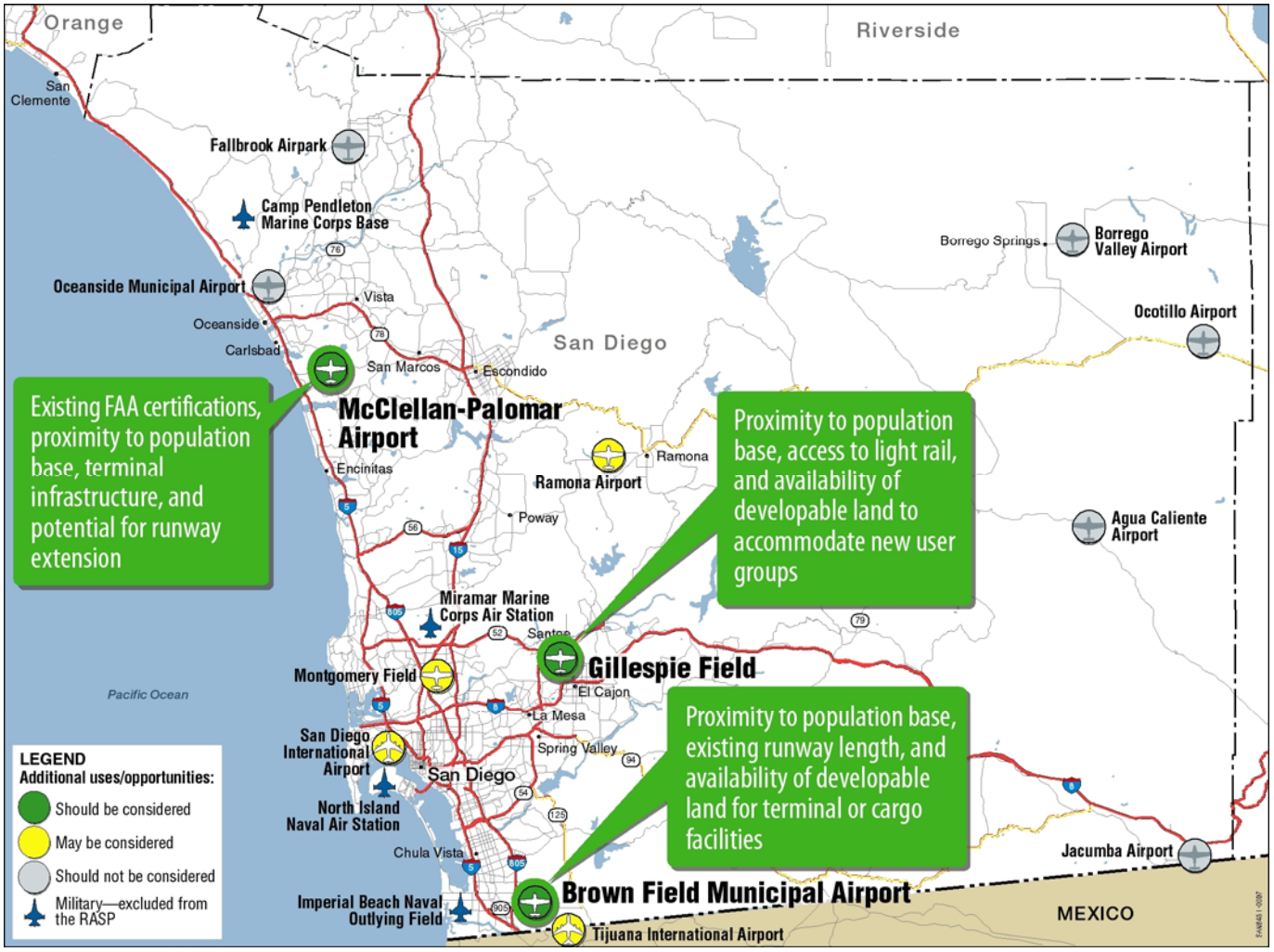
RASP Study Area

12 Public Use Airports Located in a Densely Populated and Developed Region



Strategic Assessment Findings

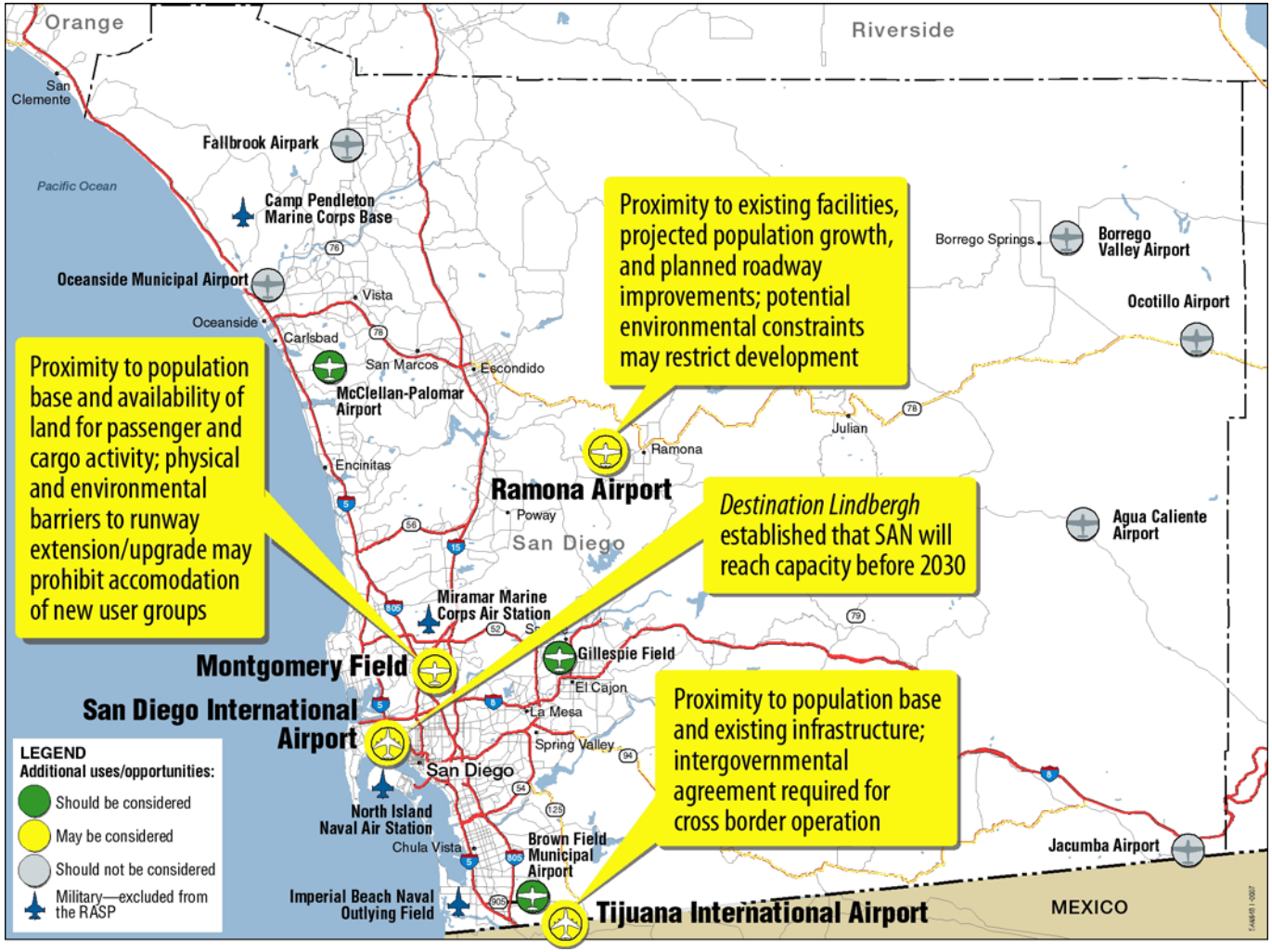
Airports That <u>Should be</u> Considered For Additional Uses/Opportunities



Note: Tijuana International Airport not located in San Diego County.

Strategic Assessment Findings

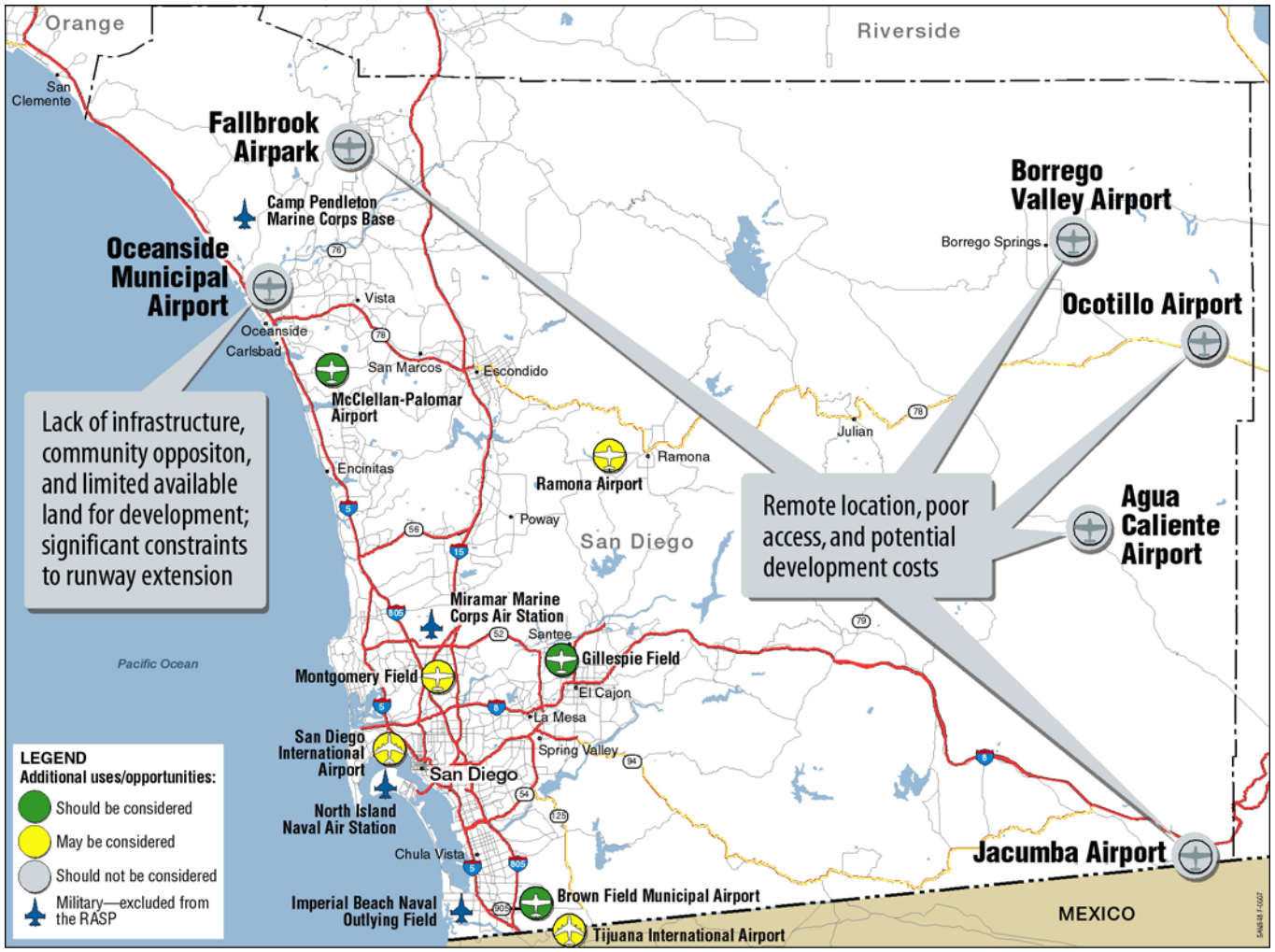
Airports That <u>May Be</u> Considered For Additional Uses/Opportunities



Note: Tijuana International Airport not located in San Diego County.

Strategic Assessment Findings

Airports That <u>Should Not be</u> Considered For Additional Uses/Opportunities



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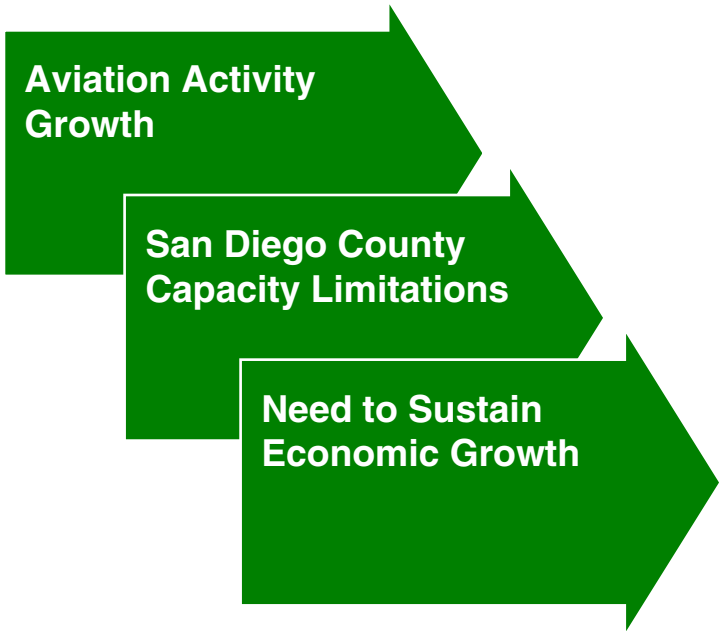
Complicated Factors Constrain Implementation of Alternatives

Forces Requiring Preparation of the RASP



RASP Alternative Scenarios

Factors Working Against Regional Airport System Solutions

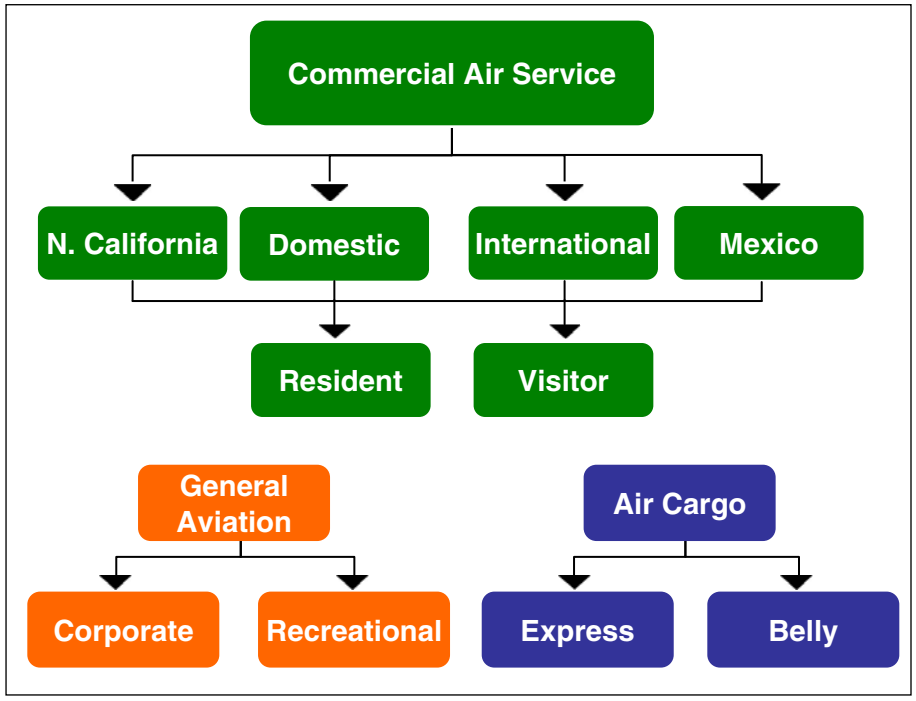
Regulatory Factors
- No single controlling entity to implement solutions
- No regulatory mechanisms to relocate activity segments

Political Factors
- Public perceptions
- Pre-conceived notions regarding effectiveness (or lack) of solutions
- Consensus among stakeholders is difficult

Technical Factors
- Lack of appropriate existing facilities
- Regional demand characteristics
- Benefit-cost considerations of major capital improvements

Regional Aviation Travel Demand Model

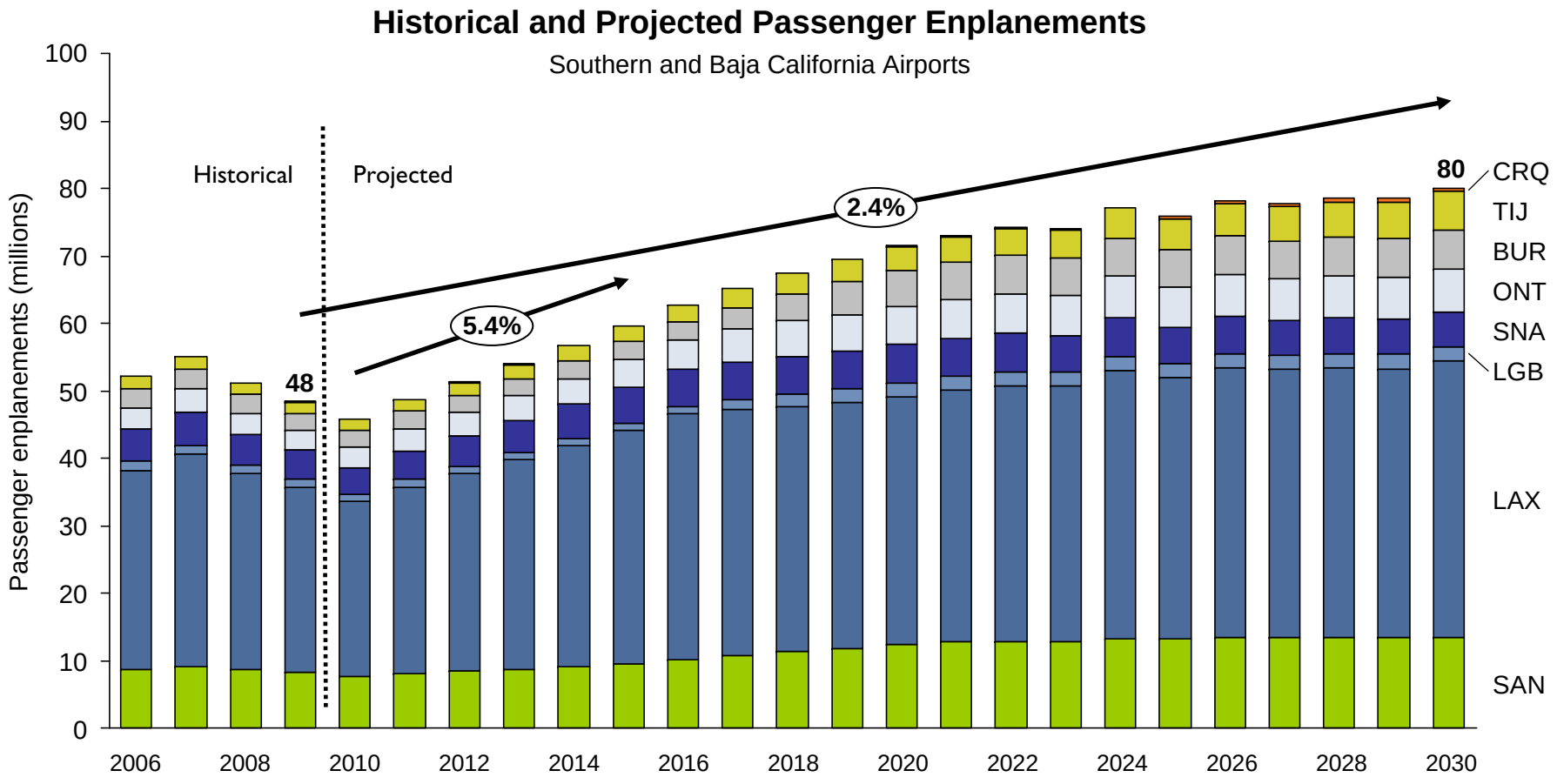
Decision Support Tool to Assess "What If" Scenarios



- **Estimates demand at each airport from each population / commercial area in the region**
- **Demand divided among commercial air service, GA activity, and air cargo operations to account for different "demand drivers"**
- **Categories further differentiated to capture market nuances**
- **Demand model benefits**
  - Leverages SANDAG Regional Travel Demand Model
  - Synchronize RASP results with SANDAG's regional planning in RTP

Projected Passenger Enplanements

Enplaned Passengers in the Region are Projected to Increase 50% Between 2009 and 2030



Notes: Passenger enplanements based on forecast demographic data from International Monetary Fund (IMF), LA Economic Development Corporation (LAEDC), and SANDAG
Model calibrated to actual enplanements from 2006 to 2009; projections may be different from actual.
Results generally correspond to FAA TAF data for 2025.
SAN CAGR = 4.7% in the "recovery"; 2.5% for the forecast period.

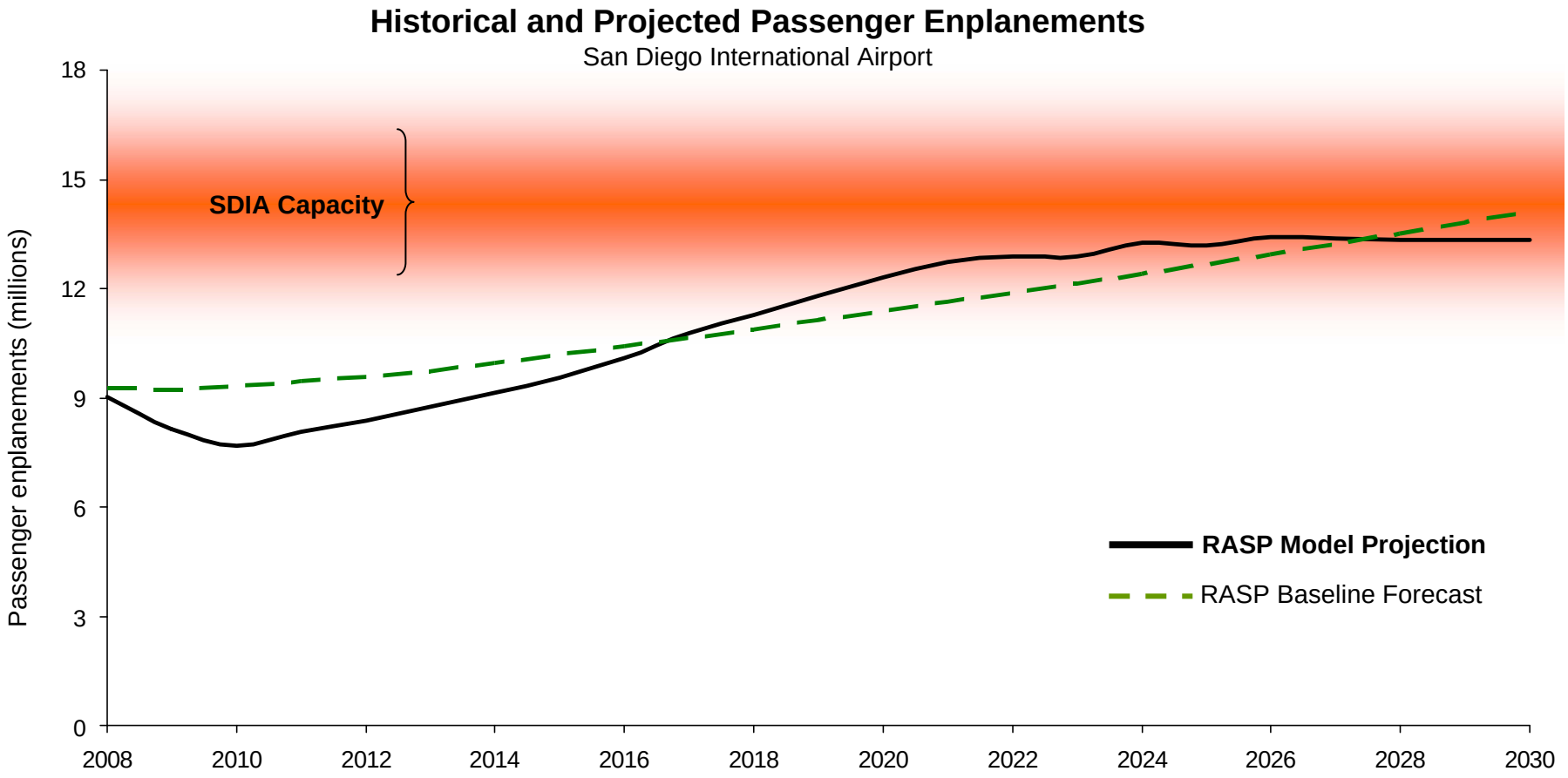
Baseline Scenario Overview

The "Do–Nothing" Scenario Against Which Other Scenarios Will Be Evaluated

- **A** **Airfield facility constraints "cap" activity at SDIA at around 28M annual passengers (14M enplanements)**
- **B** **Airfield capacity constraint results in higher fares and lower levels of service**
- **C** **Accommodation of some San Diego demand at LA region airports**
- **D** **Accommodation of some regional demand at Tijuana International Airport**
- **E** **Increased commercial service at McClellan-Palomar**

Baseline Scenario – SDIA Enplanement Projections

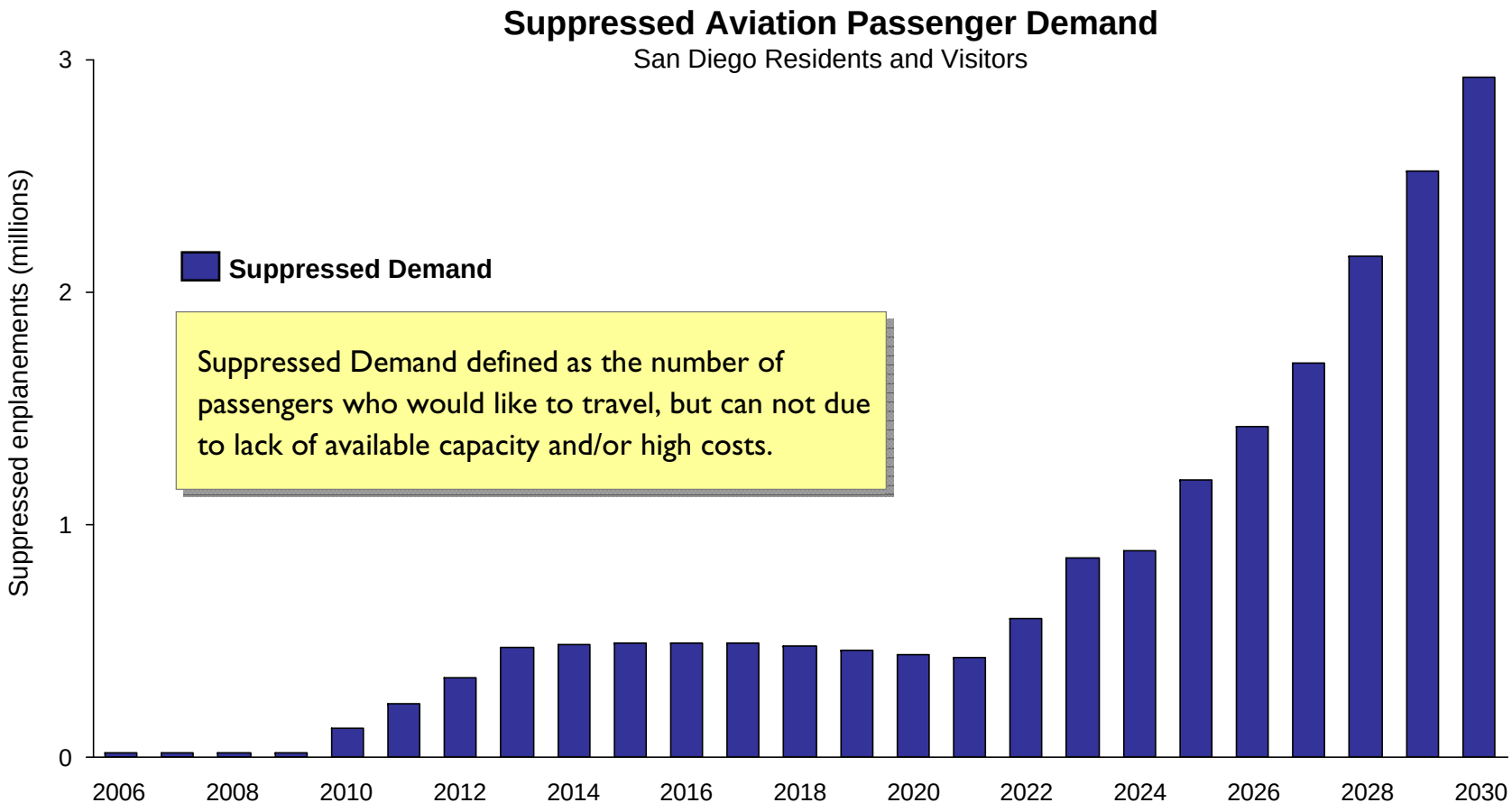
Demand Model Indicates Capacity Constraint at SDIA Begins in Early 2020s



Sources: RASP Forecasts and Financial Forecast Update, Landrum & Brown, Inc. December 2008 and June 2009, respectively.
Note: Model calibrated to actual enplanements from 2006 to 2009; projections may be different from actual.

Baseline Scenario – Suppressed Passenger Demand

As Capacity is Reached, the Number of Suppressed Passengers in the County Increases



Note: Suppressed demand presented above relative to 2006; some suppressed demand already exists.

Alternative Scenarios

15 Scenarios Considered; 13 Subject to Technical Evaluation

1. Commercial Passenger Optimization

A. Full build-out of the ITC and north side terminal at San Diego International

B. Preserve SDIA airfield capacity for commercial service

C. Enhance commercial passenger service at McClellan-Palomar Airport

~~D. Introduce commercial passenger service at Brown Field~~

E. Up-gauge SDIA's Fleet Mix –Narrow-body Fleet

F. Up-gauge SDIA's Fleet Mix – Increased Wide-body Fleet

2. Enhanced Utilization of Tijuana

A. Tijuana Rodriguez International Airport focus on commercial service

B. Aviation passenger cross border facility (currently proposed)

C. Cross border airport terminal

3. California High Speed Rail

Stations at downtown LA, ONT Airport and:

A. Station at downtown San Diego

B. Station at SDIA

4. General Aviation Optimization

A. Enhance McClellan-Palomar Airport for high-end / corporate general aviation

B. Enhance Brown Field for high-end / corporate general aviation

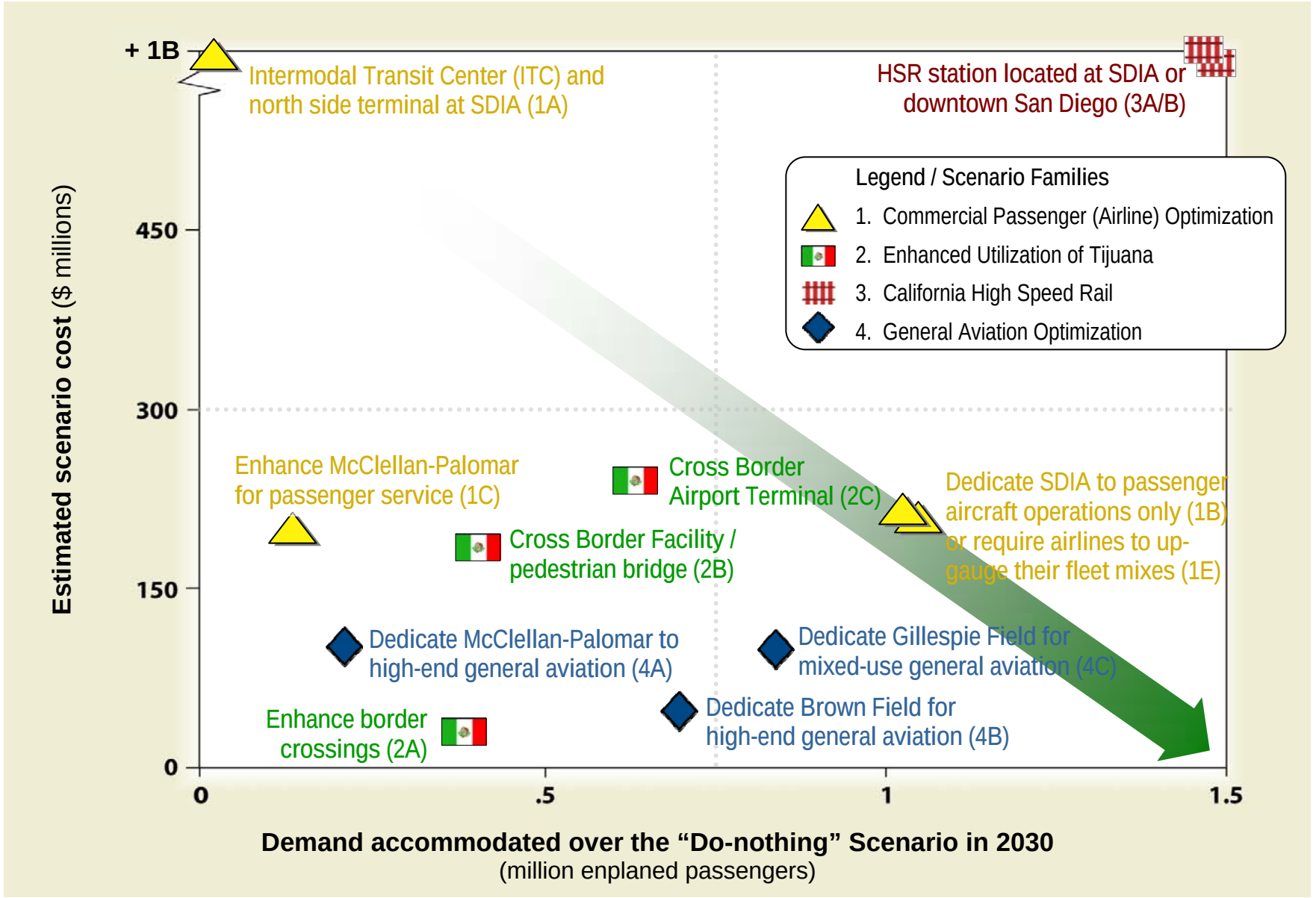
C. Enhance Gillespie Field for mix-use general aviation

5. Air Cargo Optimization

~~A. Introduce cargo service at Brown Field~~

Summary of Findings

Evaluation Matrix Compares Scenario Costs and Benefits



Summary of Findings

The RASP Alternative Scenarios Yield Mixed Results

1. **Full Build-out of the Intermodal Transit Center (ITC)** – has little effect on suppressed demand; however, the scenario yields regional access and other benefits not captured by RASP analyses.
2. **Enhancing McClellan-Palomar** – has little effect on suppressed demand because even at maximum capacity, the Airport can only accommodate a very small portion of projected regional demand.
3. **Up-gauging SDIA's Fleet Mix** – provides the same relative benefits as reserving SDIA capacity for passenger service; however, the fleet mix is already favorable with relatively few small aircraft.
4. **General Aviation Optimization** – have relatively similar costs and provide nearly the same, but nominal, impact on demand relative to the Do-nothing Scenario.
5. **Brown Field Scenarios** – were eliminated from consideration based on (a) FAA determined that precision instrument approaches are not feasible; (b) passenger and cargo airlines are unwilling to relocate based on location and lack of precision approaches; and (c) potential public and political opposition.
6. **Tijuana Enhancements** – have less than expected effect on demand because San Diego residents and visitors are projected to increase their use of the Tijuana airport with or without improvements.
7. **California High Speed Rail** – both scenarios perform similarly and could play a role to alleviate future capacity problems; benefits may increase beyond the 2030 RASP planning horizon.

Summary Considerations

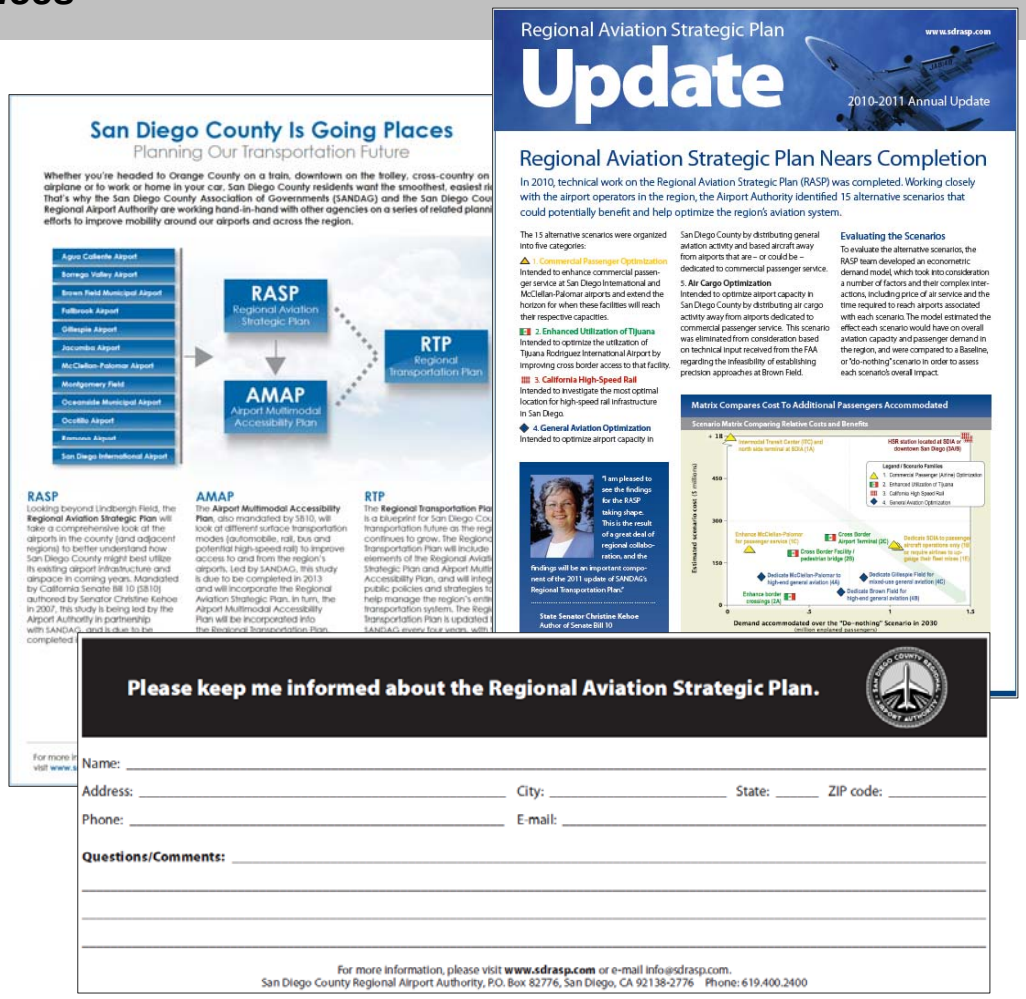
1. **All reasonable ideas and concepts were evaluated**
   - Changes in airport capability / market
   - Changes to an airport's fleet mix
   - Surface, rail, and cross border initiatives
   - Federal, state and local aviation initiatives
   - Changes to surface transportation infrastructure
2. **The passenger capacity of San Diego International can only marginally be improved**
   - Even the most beneficial actions have a nominal effect on improving overall commercial service (passenger airline) capacity in the region
   - Options with the most benefit would only provide at most an additional 5 years of activity growth at SDIA
3. **Regional airport improvements are possible**
   - Some improvements are positive to individual airports; others benefit the system
   - Some actions are legally challenging and therefore not likely to be implemented
4. **No single entity in the region can unilaterally implement RASP findings**
5. **RASP included significant stakeholder / technical contributions**
   - RASP Subcommittee (subset of Airport Advisory Committee)
   - Assisted in identifying full-range of reasonable and feasible options
   - Provided constant feedback to other stakeholders

Stakeholder Coordination and Public Outreach / Open House

Public Open House – January 26, 2011

Held January 26, 2011, at Authority offices

- **Presentations**
  - Introduction (SDCRAA Board)
  - RASP technical findings
  - AMAP integration (SANDAG)
- **Handout / technical materials**
  - RASP Annual Update (2011)
  - RASP Fact Sheet
  - RASP Frequently Asked Questions
  - Planning Processes Visual
  - Presentation
  - Comment Card
  - AMAP Fact Sheet
  - 2050 RTP Fact Sheet
- **Approximately 50 public/interested parties attended**



Summary of Open House Questions/Comments

RASP-related Questions

Comment	Response
Is there a possibility of the various airport operators collaborating to implement these scenarios?	Yes, but such an approach would require regional coordination among the various airport sponsors.
Studies on potential impacts to surrounding communities should be included; will there be an environmental analysis to quantifying the carbon footprint of each scenario?	It would be up to each airport operators to analyze potential effects if they choose to implement a specific scenario. SANDAG's RTP will include environmental analyses.
Why is a new airport not part of these scenarios?	The RASP mandate was to evaluate only existing airport facilities; new airports were not considered in the RASP.
Was consideration given to expanding McClellan-Palomar Airport to accommodate more passenger service?	Scenario 1C includes passenger service at McClellan-Palomar and assumes terminal capacity is increased to 750,000 annual passengers; even at max capacity, this scenario has limited impact on regional demand.
What are the constraints at Montgomery Field?	Montgomery Field is constrained by existing development and population.

Summary of Open House Questions/Comments

RASP-related Questions

Comment	Response
Assuming San Diego International Airport is reaching capacity, what are the benefits of high-speed rail?	A high percentage of San Diego International traffic is inter-California; regional benefits could be provided if these passengers transferred from air to rail.
Are the airlines on board with the scenario related to increasing wide body aircraft operations?	Unlikely; airlines deploy aircraft sizes according to market demand, and no airport sponsor can require a carrier to utilize specific aircraft types.
Given that Gillespie and Brown Field have problems with fog, terrain and population, why are you considering Gillespie as a better candidate for larger enhancements?	Scenarios were identified to answer "what if" questions; as well as were developed in coordination with a committee comprised of users and operators.
Have you been approached by the developers of the Tijuana Airport to provide financial support for the cross border terminal?	No, but the RASP Team has coordinated with the consortium of property owners developing the cross border facility.
Was there any talk about combining several of the scenarios?	The scenarios were developed and tested independently in order to identify the impact/benefits of each scenario.

Summary of Open House Questions/Comments

RASP-related Questions

Comment	Response
Brown and McClellan have a large number of high-end general aviation aircraft; Gillespie is more mixed-use, which includes high-end. Does the RASP anticipate this much high-end general aviation demand?	The intent of the General Aviation scenarios is to enhance outlying airports to accommodate corporate users currently operating from San Diego International Airport.
Why did FAA rejected the Brown Field scenarios?	Commercial operators require a precision instrument approach to ensure all weather access; FAA determined that such an approach is not viable at Brown because of terrain, Mexican border, and nearby military airports.
What about using Miramar for an airport? Is there any possibility this would happen?	Military airports were not evaluated in the RASP. The Airport Authority Board includes a standing "Military Liaison Committee" to discuss such issues, and there is ongoing dialogue.

Summary of Open House Questions/Comments

Questions for SANDAG

Comment	Response
Why hasn't SANDAG evaluated Santa Fe Station to Lindbergh Field on the existing rail right-of-way?	SANDAG is looking at the current alignment of the trolley along the north side of the airport property and locating an Intermodal Transit Center there.
Why haven't you evaluated a bus system to Palomar?	Bus routes are proposed and depicted graphically.
Who will make the final high speed rail destination decision?	The state and federal railroad administration will make that determination; SANDAG supports the Airport location.

SANDAG AMAP integration and Next Steps

SANDAG / AMAP Integration

Coordination between RASP Team and SANDAG AMAP/RTP Team

- **Progress report to SANDAG Transportation Committee on January 21, 2011**
- **RASP / AMAP monthly coordination meetings**
- **RASP findings / output provided to SANDAG AMAP/RTP staff regularly**
- **RASP Team drafted sections of RTP Chapter 6 – *Aviation***

Next Steps for RASP Subcommittee

- **Report to full Airport Advisory Committee at February 23, 2011 meeting**
- **Consider input to RASP to the Airport Authority Board**
- **Airport Authority Board to adopt RASP findings at March 3, 2011 meeting**

Additional Information

- **For more information:** **www.sdrasp.com**
- **Draft RASP Technical Report:** **www.sdrasp.com**
- **Input can be e-mailed to:** **info@sdrasp.com**