



The San Diego Region's Air Transportation *Future*

AIRPORT SITE
SELECTION PROGRAM

June 22, 2006

Ryan N. Hall, Airport System Planner II
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

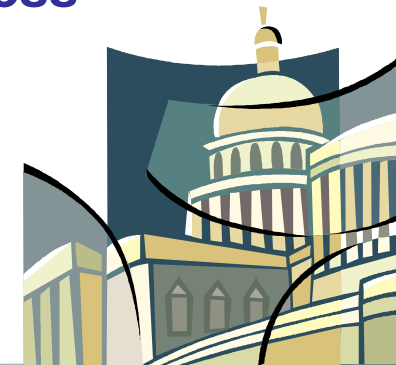
The Law

“

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?

”



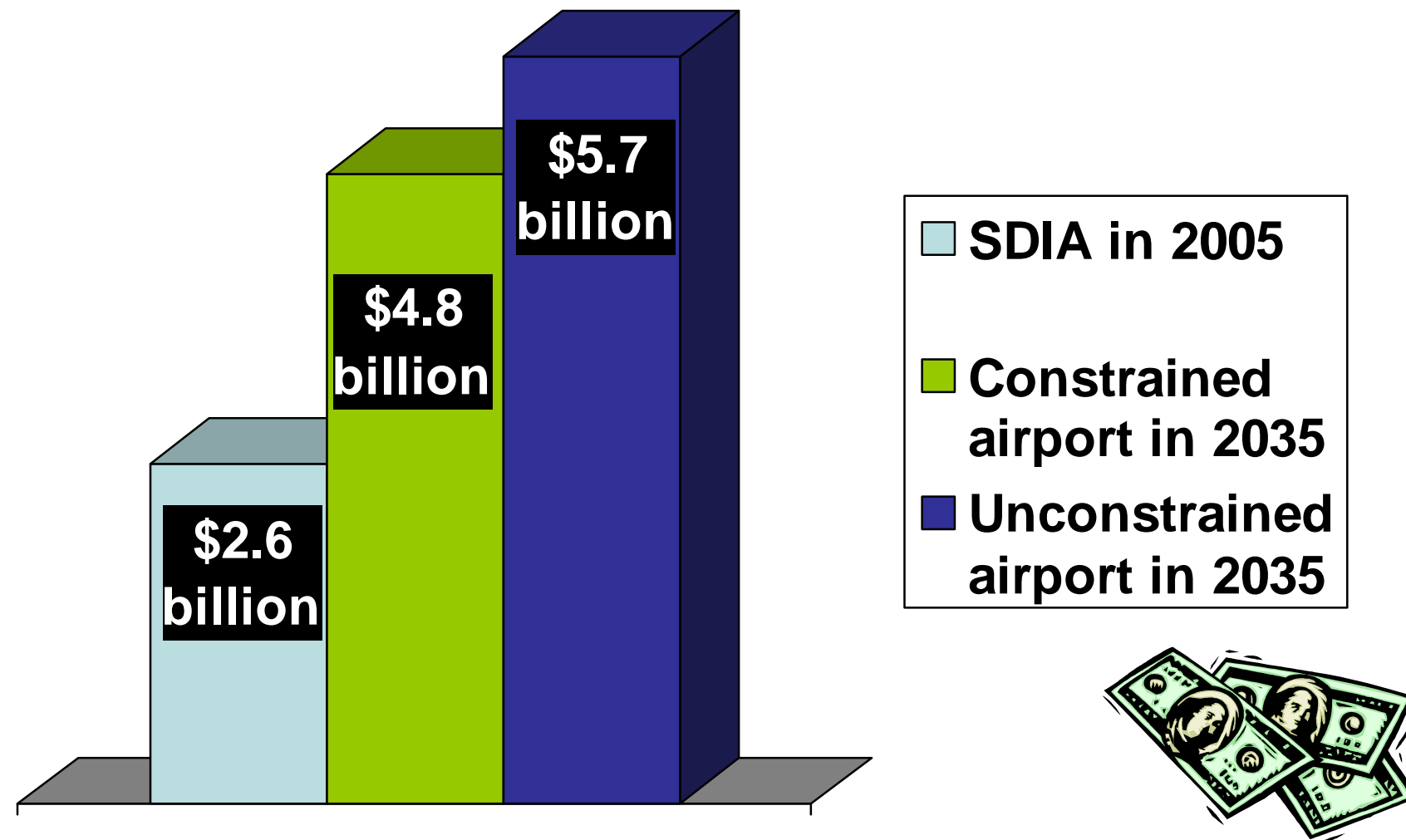
The Regional Asset

- **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



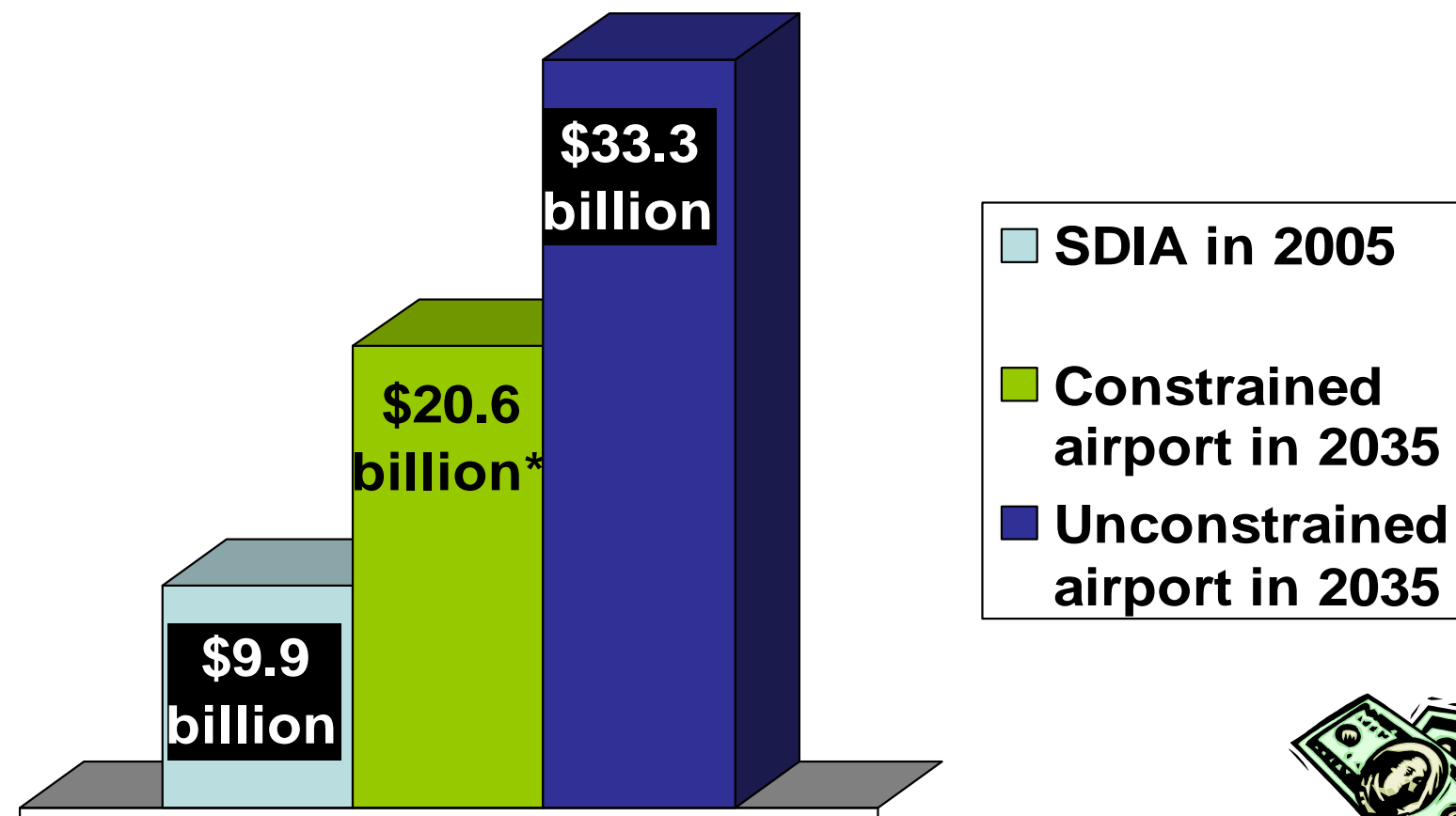
The Regional Asset

Visitor spending by air travelers



The Regional Asset

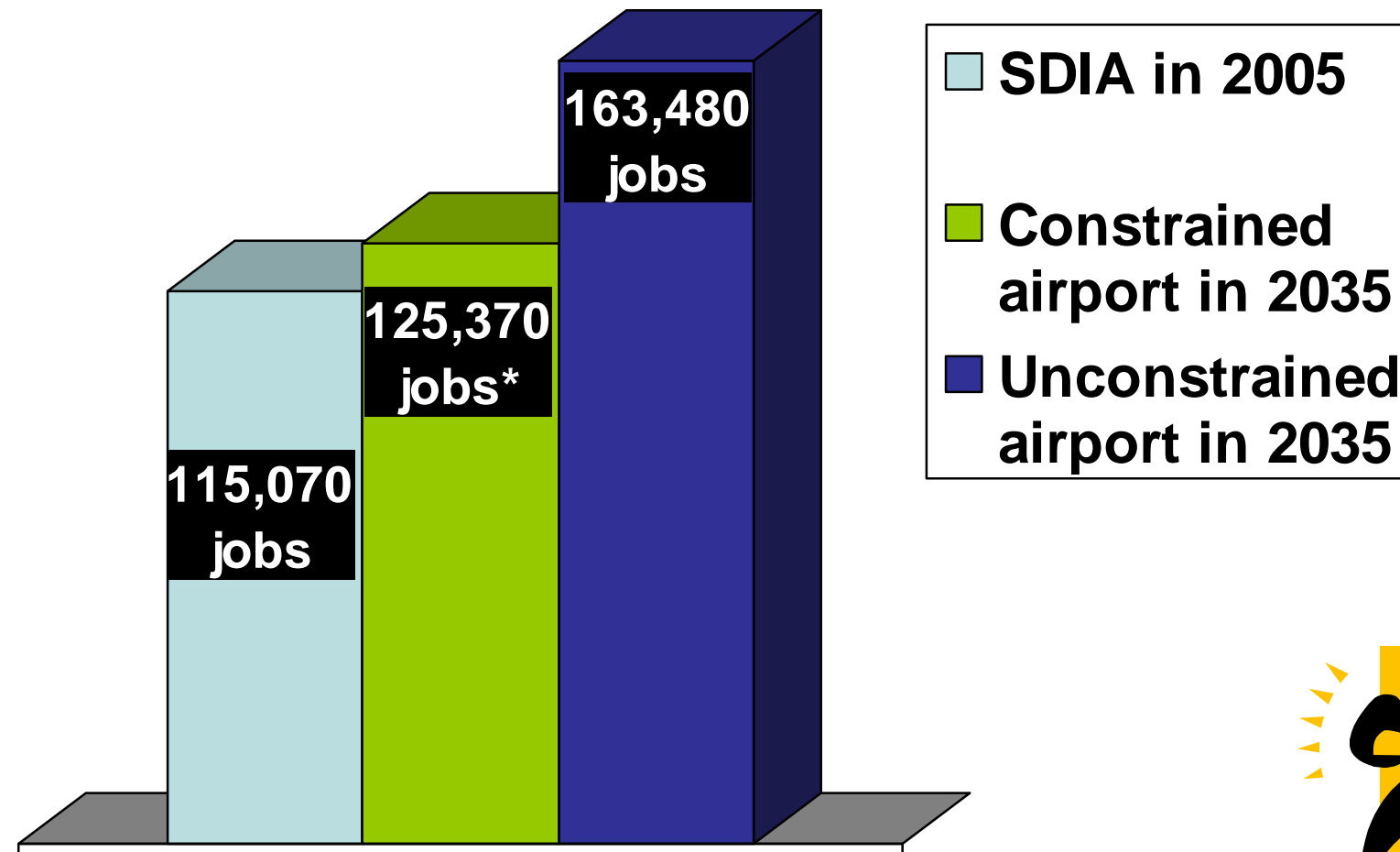
Airport's contribution to the Gross Regional Product



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

The Regional Asset

Airport-related jobs in San Diego County



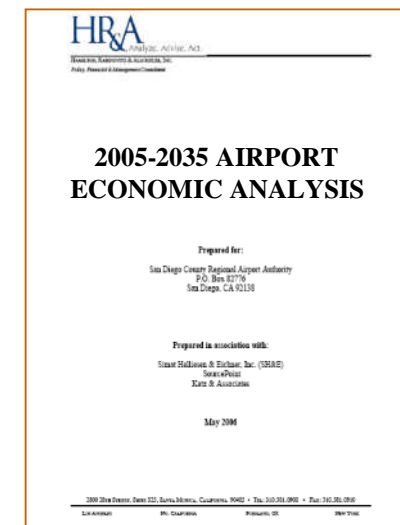
* Assuming lost air cargo capacity is not replaced by other means



At Risk: The Regional Economy

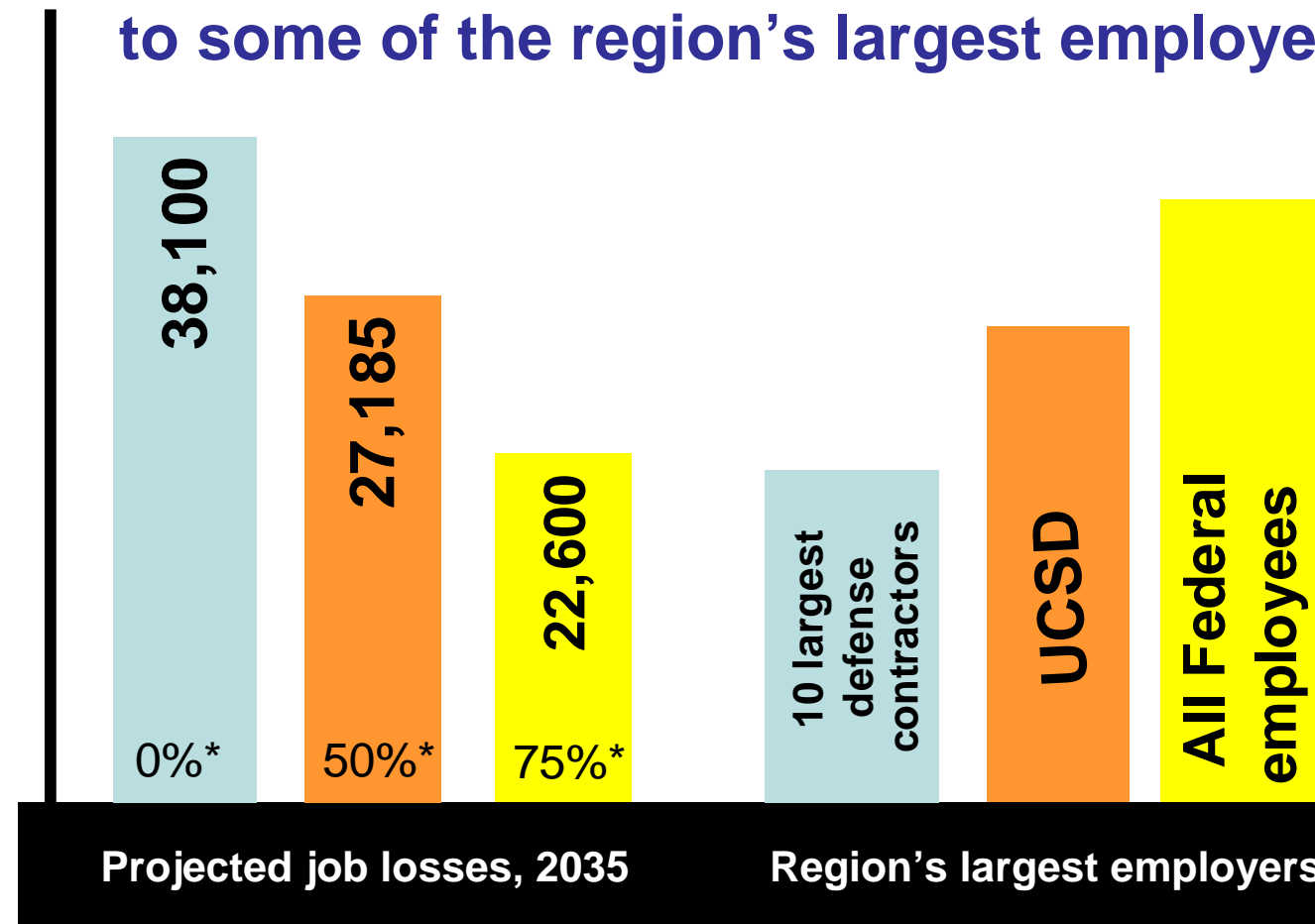
- **What damage will be done to the San Diego region's economy and residents if future air transportation needs are not fully met?**
- **A 2005-2035 Airport Economic Analysis projects the following losses if nothing is done:**

- ✓ *Lost personal income*
- ✓ *Lost Gross Regional Product*
- ✓ *Lost jobs*



At Risk: The Regional Economy

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

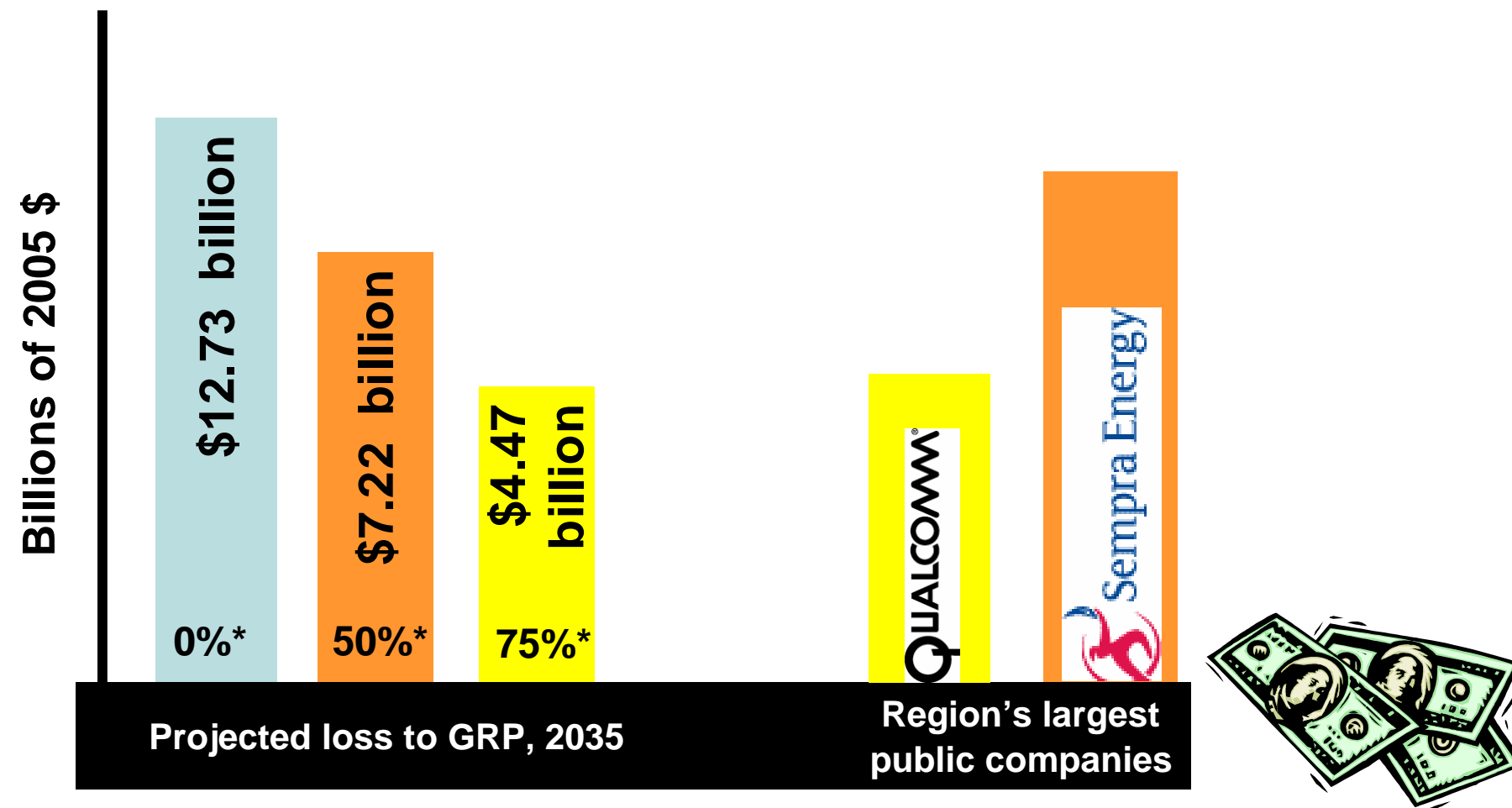


* Percentage of foregone cargo exports using other modes



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



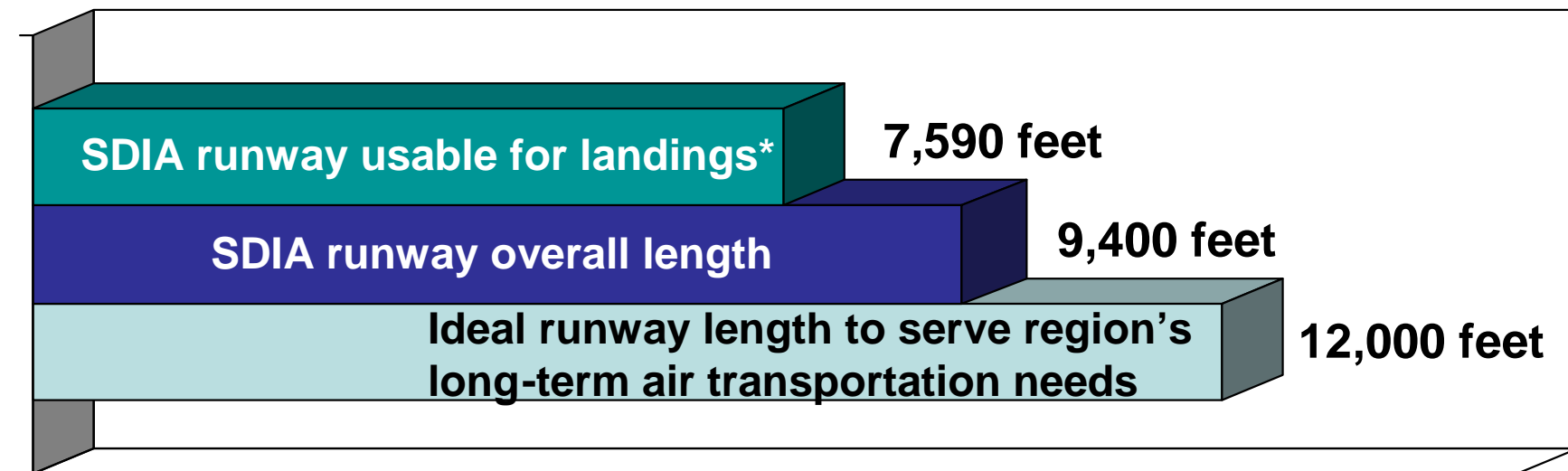
Lindbergh's Limitations

- **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*

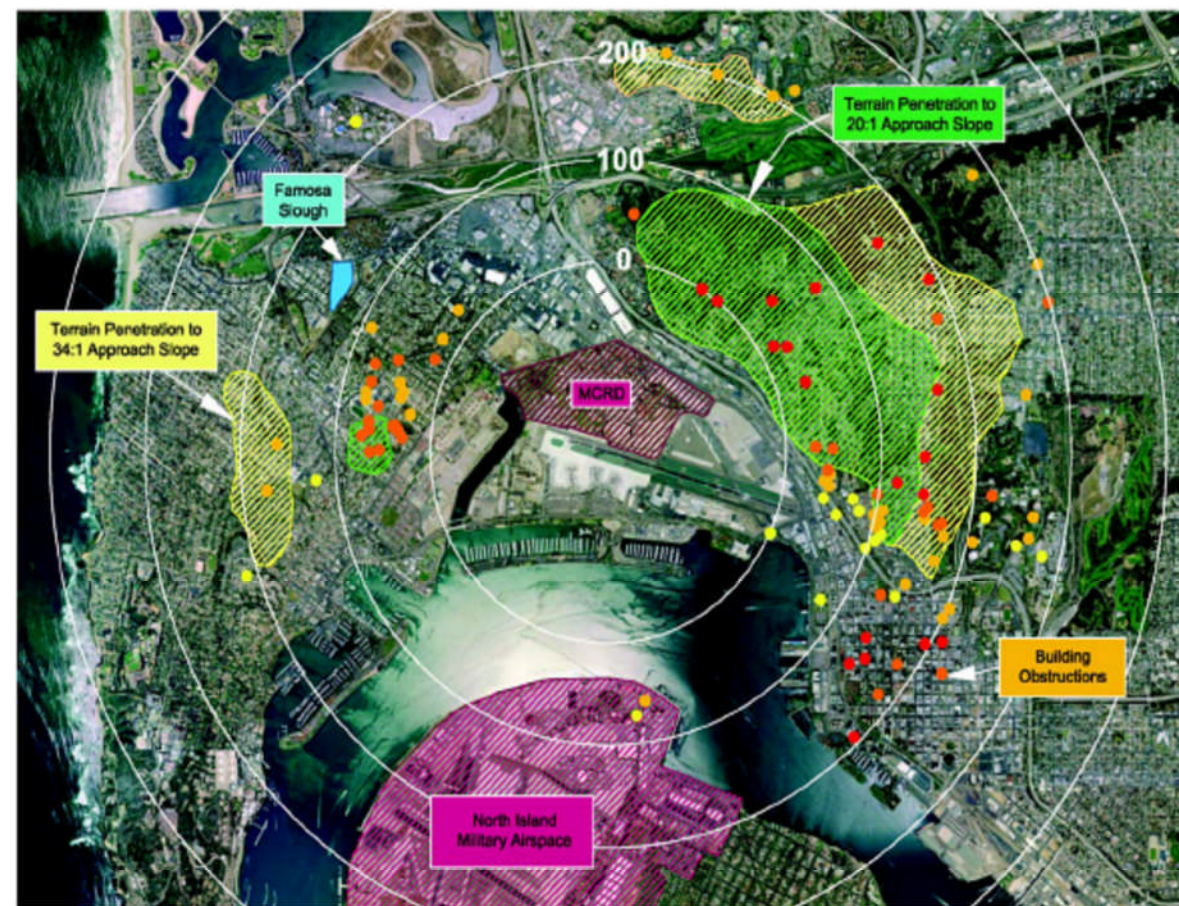


* Due to terrain and other obstructions, only 7,590 feet of SDIA's runway is usable for landings

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

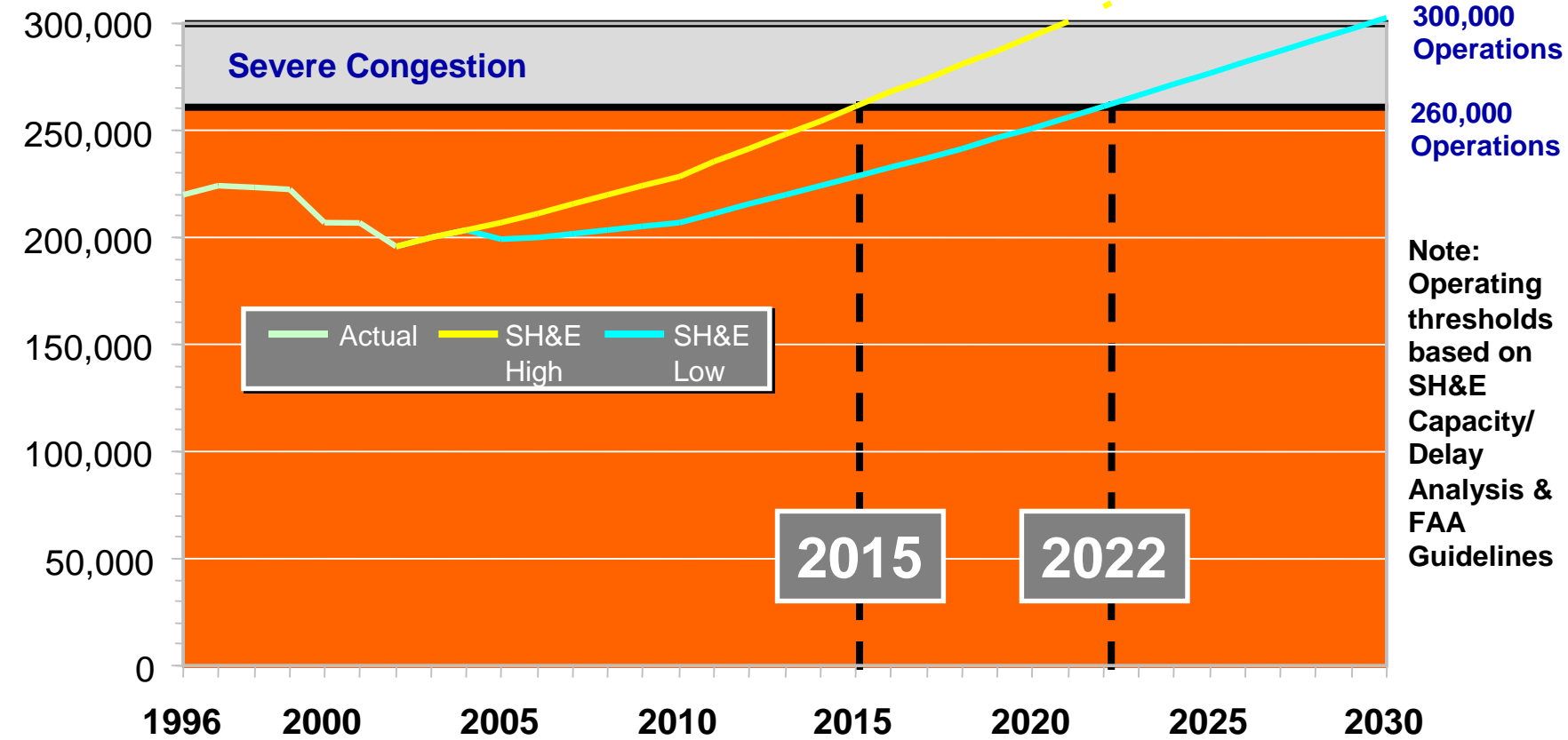


Lindbergh's Limitations

More operations are projected than Lindbergh Field can handle



Aircraft Operations



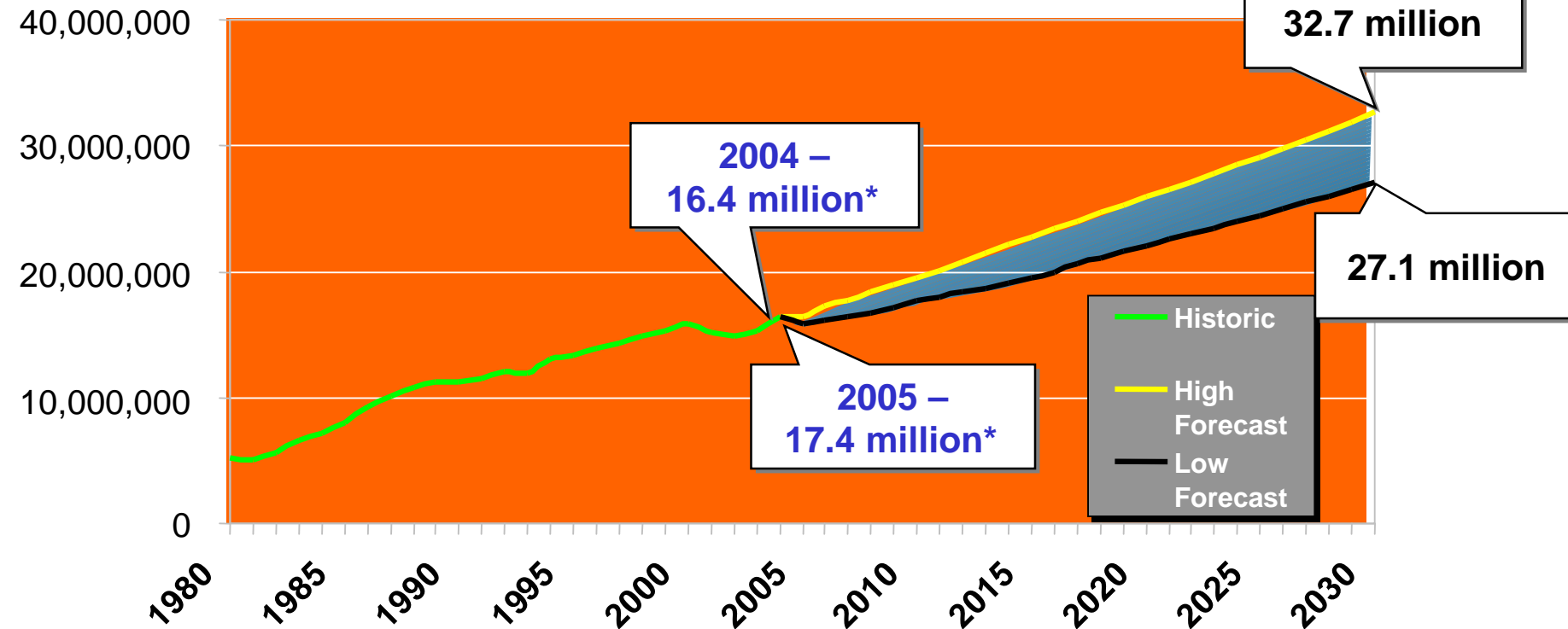
Note:
Operating thresholds based on SH&E Capacity/Delay Analysis & FAA Guidelines

Lindbergh's Limitations

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

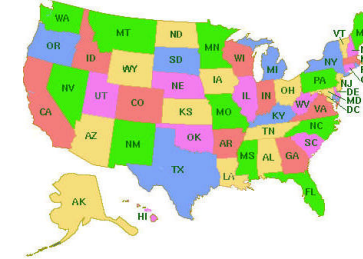


Annual Passengers

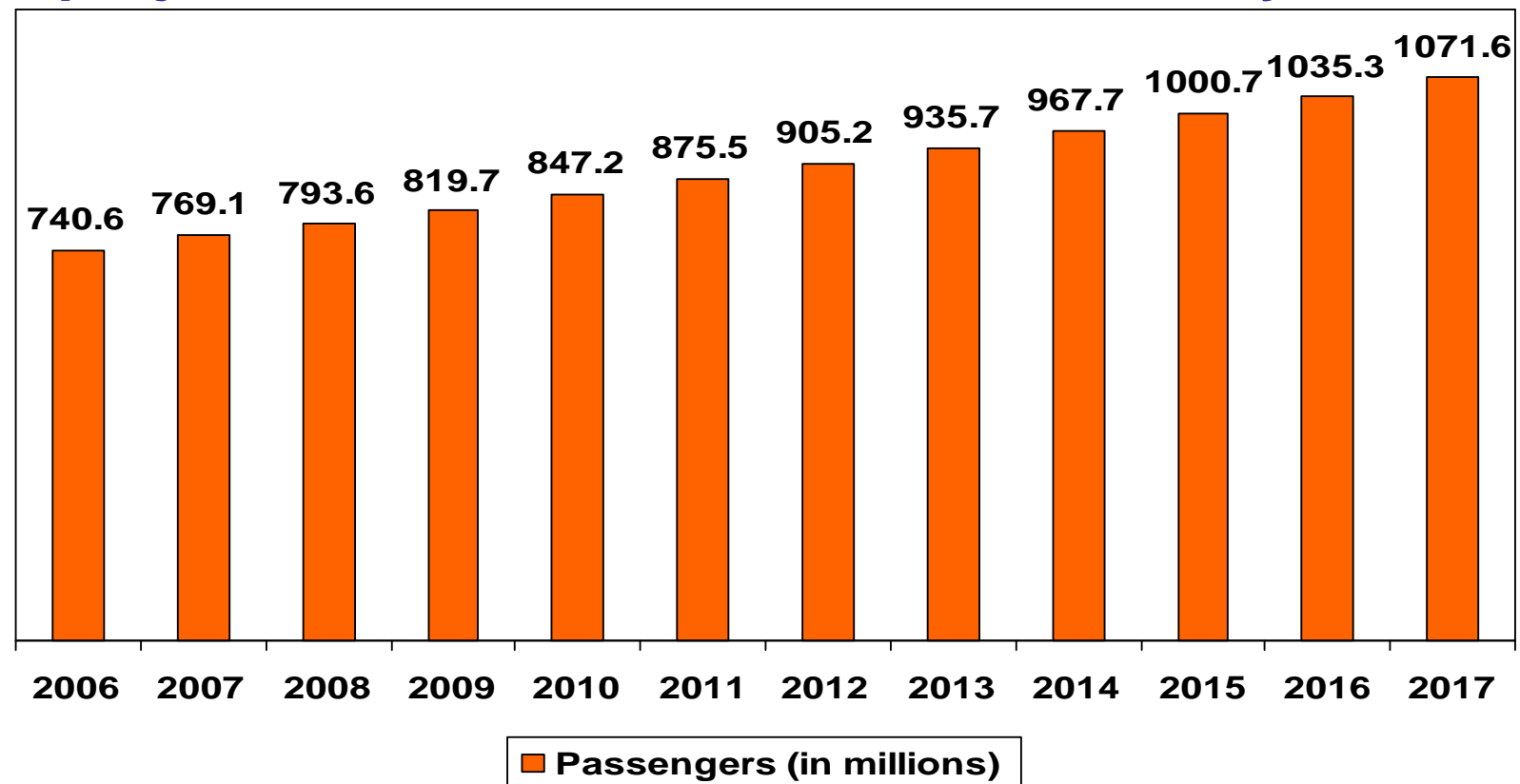


* All-time record highs

Lindbergh's Limitations

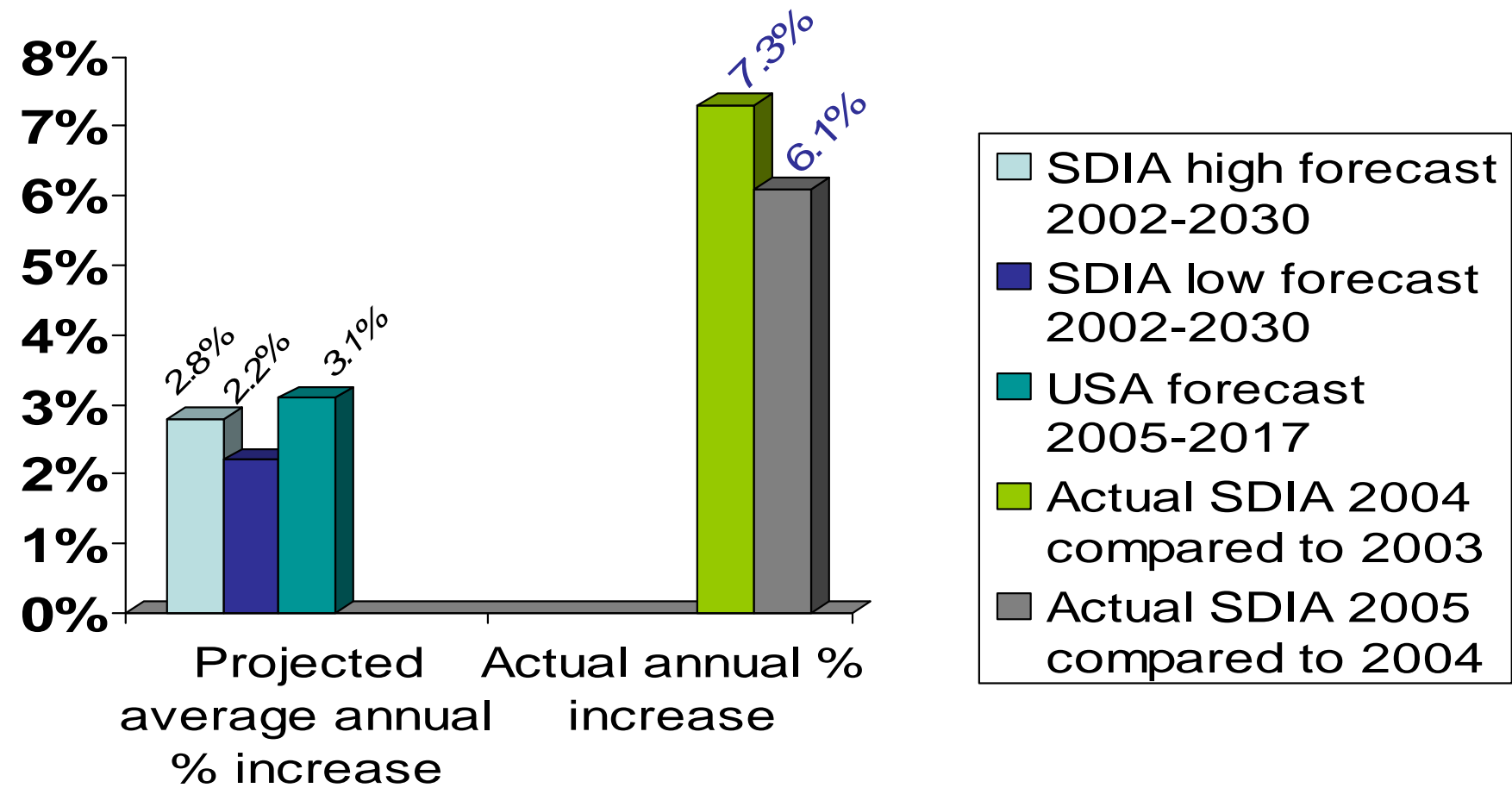


Nationwide, passenger demand is projected to increase more than 3% each year



Lindbergh's Limitations

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



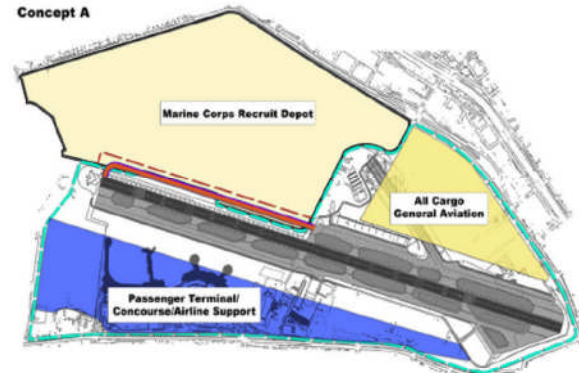
SDIA Concepts

Numerous concepts examining how Lindbergh Field could be expanded to serve the region's long-term air transportation needs have been thoroughly analyzed.

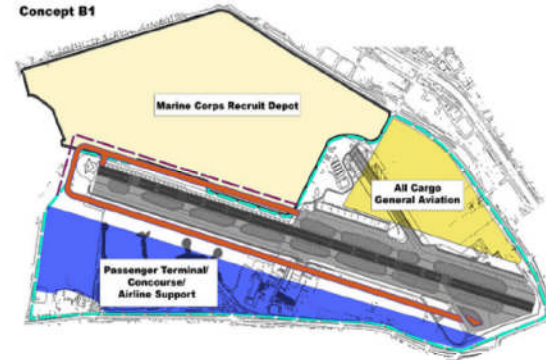
None have proven feasible without extraordinary community impacts.

SDIA Concepts, 2001 Master Plan

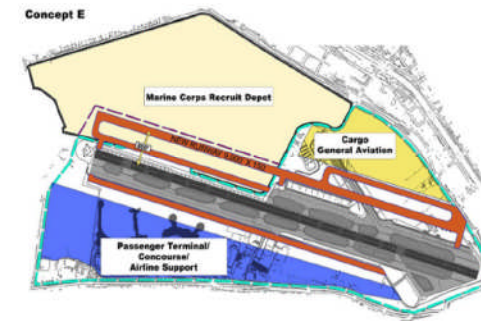
Concept A



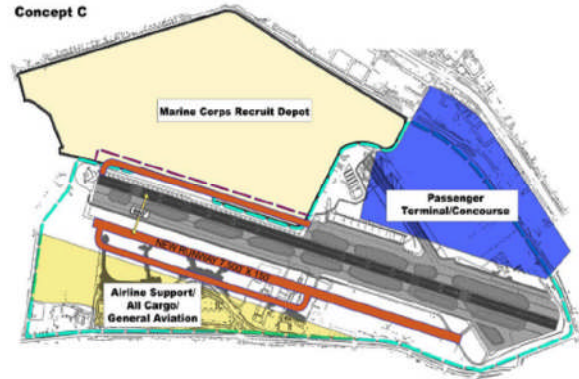
Concept B1



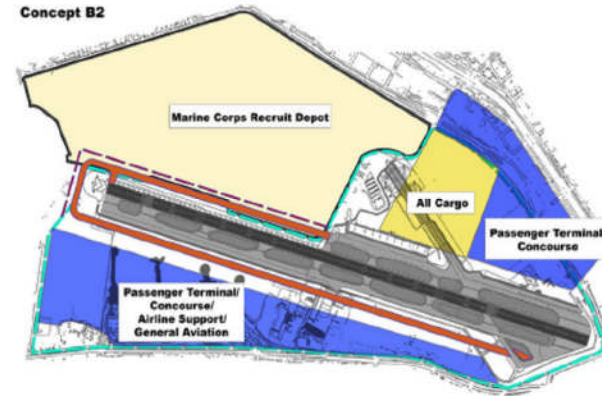
Concept E



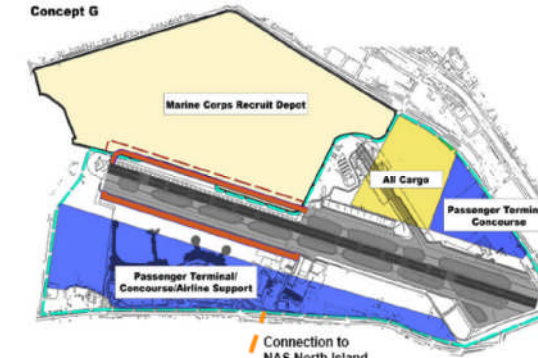
Concept C



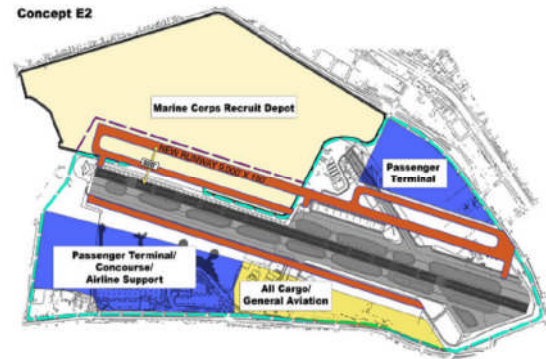
Concept B2



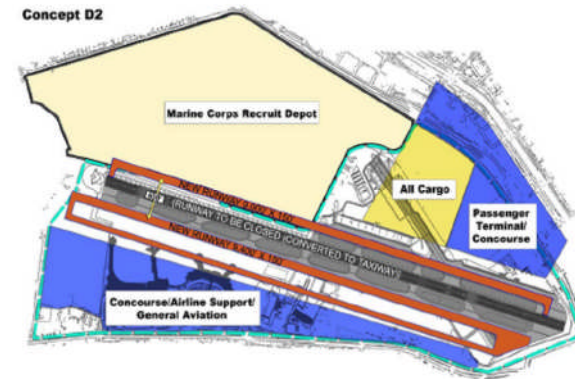
Concept G



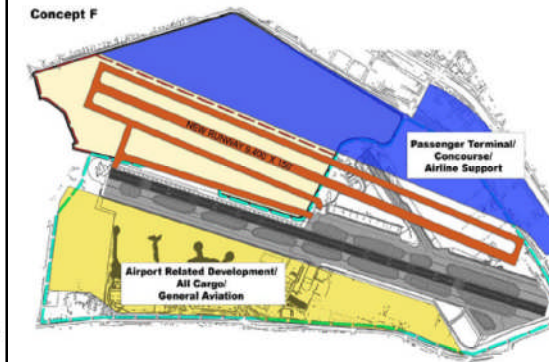
Concept E2



Concept D2



Concept F



Source: HNTB, June 2001.

Connection to NAS North Island

SDIA Concepts, ASSP

Concept 1



Concept 2



Concept 3



Concept 5



Concept 4



Concept 6



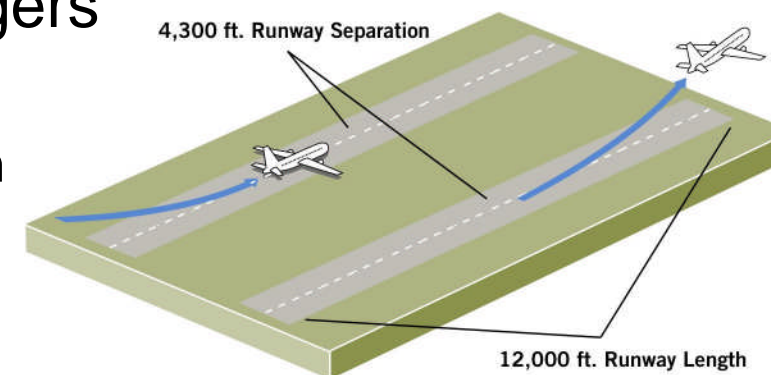
Airport Site Selection Process

- **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



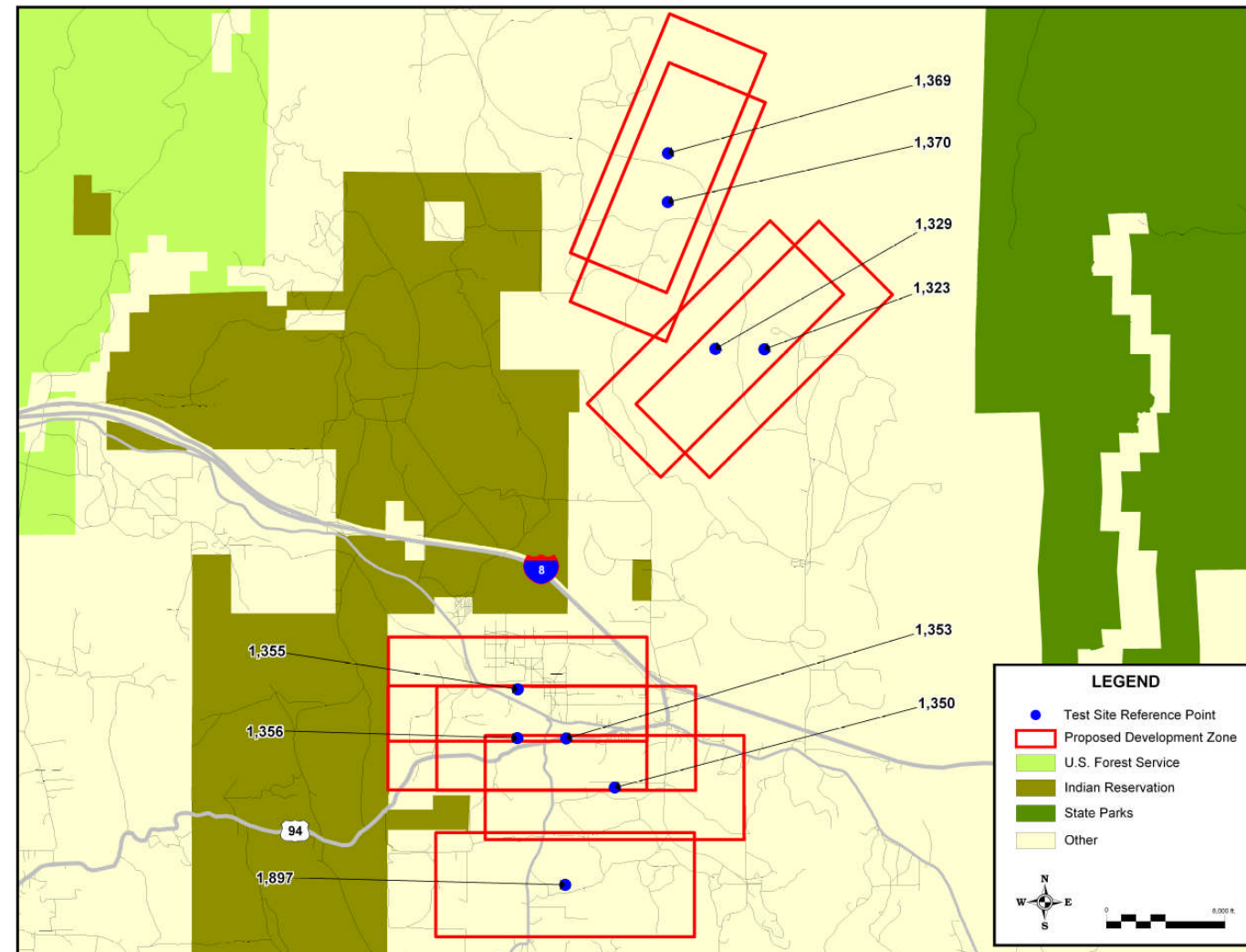
The Long-Term Solution ***Airport Site Selection Program***

- **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**

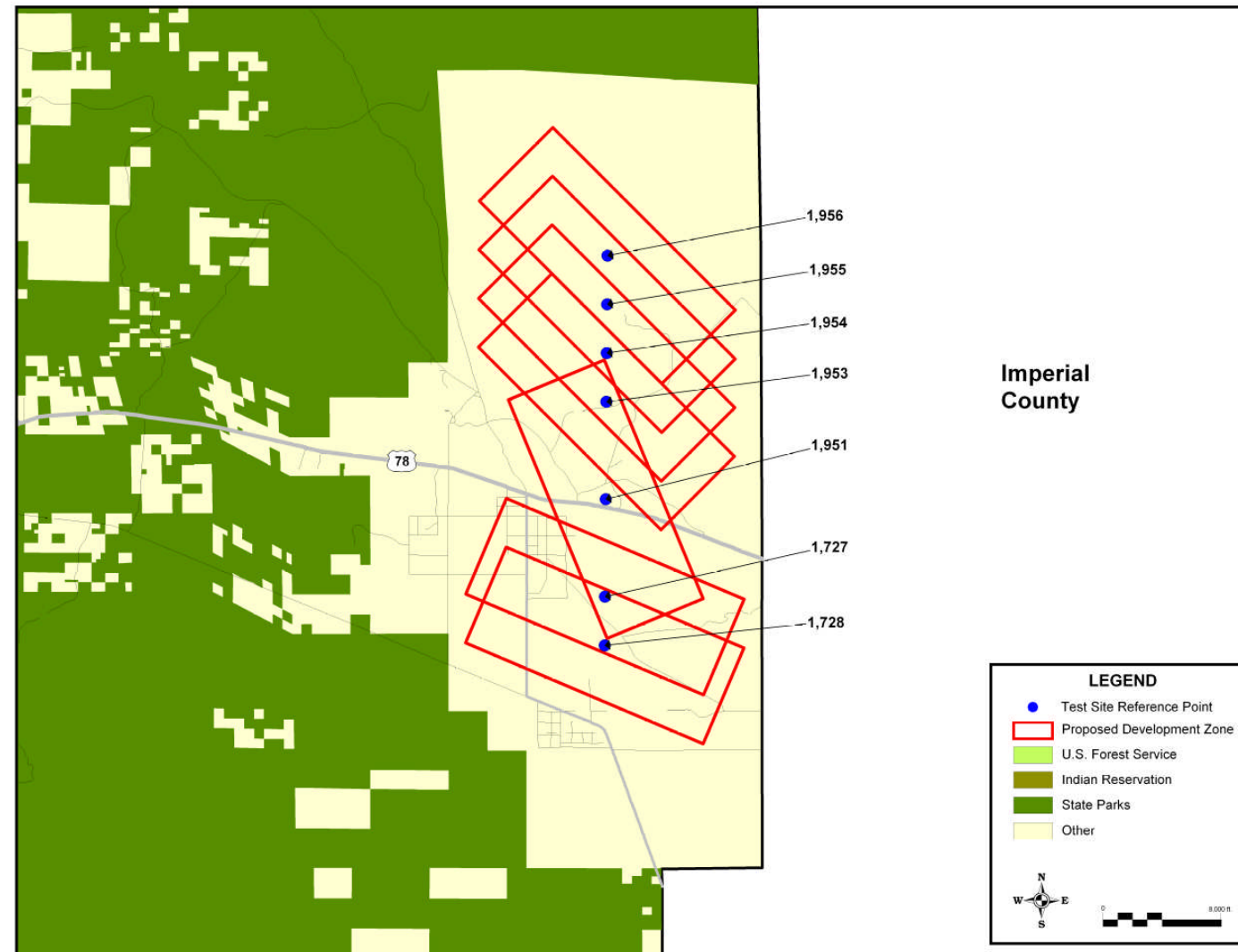
Public Working Group - Criteria and Thresholds

Limiting Criteria	Threshold	Description
Terrain Obstructions – Topography	Significant	Excludes sites that have significant terrain obstructions
Existing Residential Population to be Relocated	No greater than 5,000	Excludes sites causing the relocation of 5,000 or more residents
Existing Noise Impacted Population	No greater than 10,000	Excludes sites resulting in more than 10,000 people being impacted by noise
Mitigation Acreage for Coastal Wetlands/ Vernal Tide Pools	No greater than 1,000 acres	Excludes sites requiring more than 1,000 acres to be mitigated
Mitigation Acreage for Wetlands/Marine areas	No greater than 1,000 acres	Excludes sites requiring more than 1,000 acres to be mitigated
Fill required for developing the site	No greater than 100 million cubic yards (net)	Excludes sites requiring more than 100 million cubic yards of fill (net) to develop the site

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**



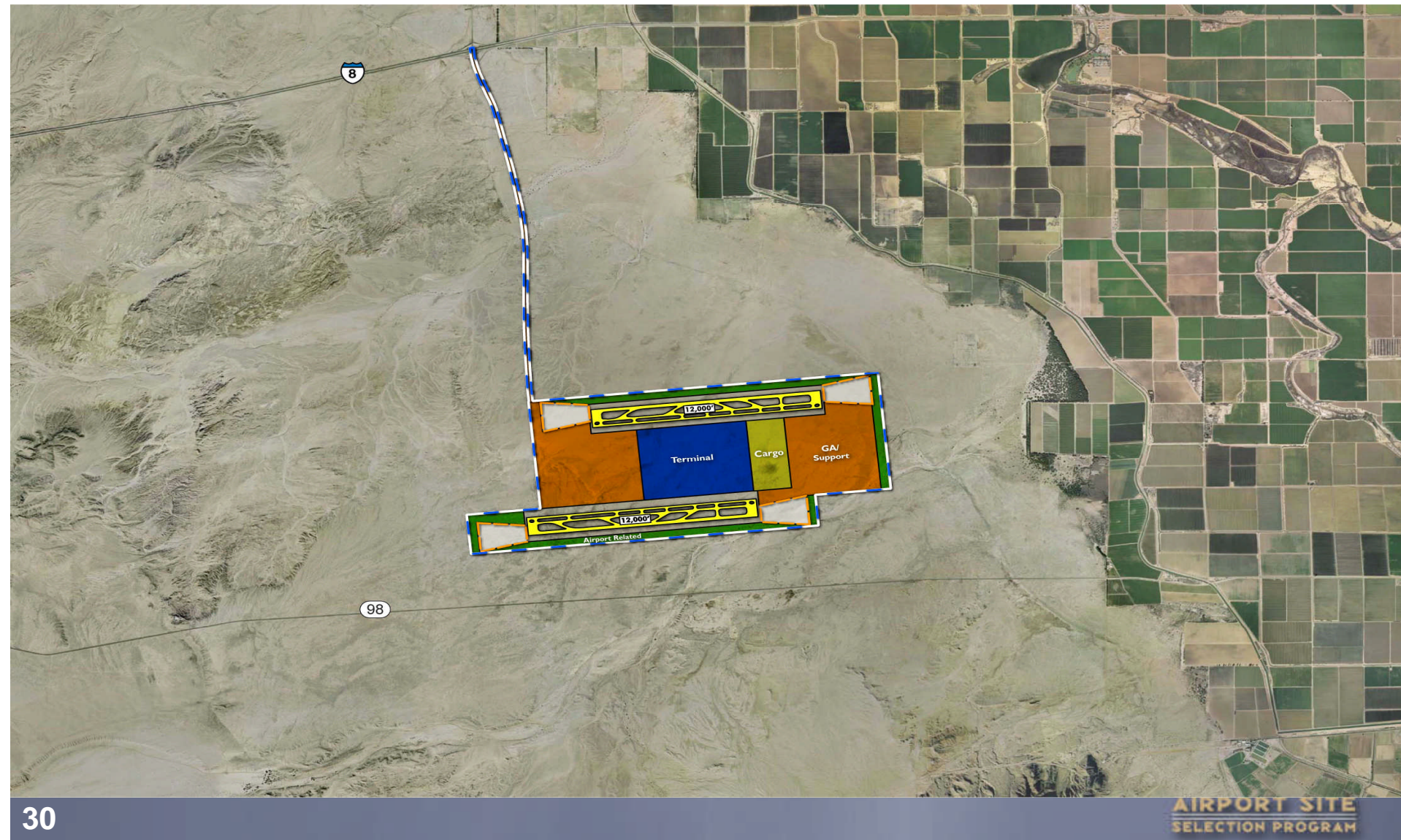
Civilian Site Concepts

Campo/Boulevard



Civilian Site Concepts

Desert Site in Imperial County



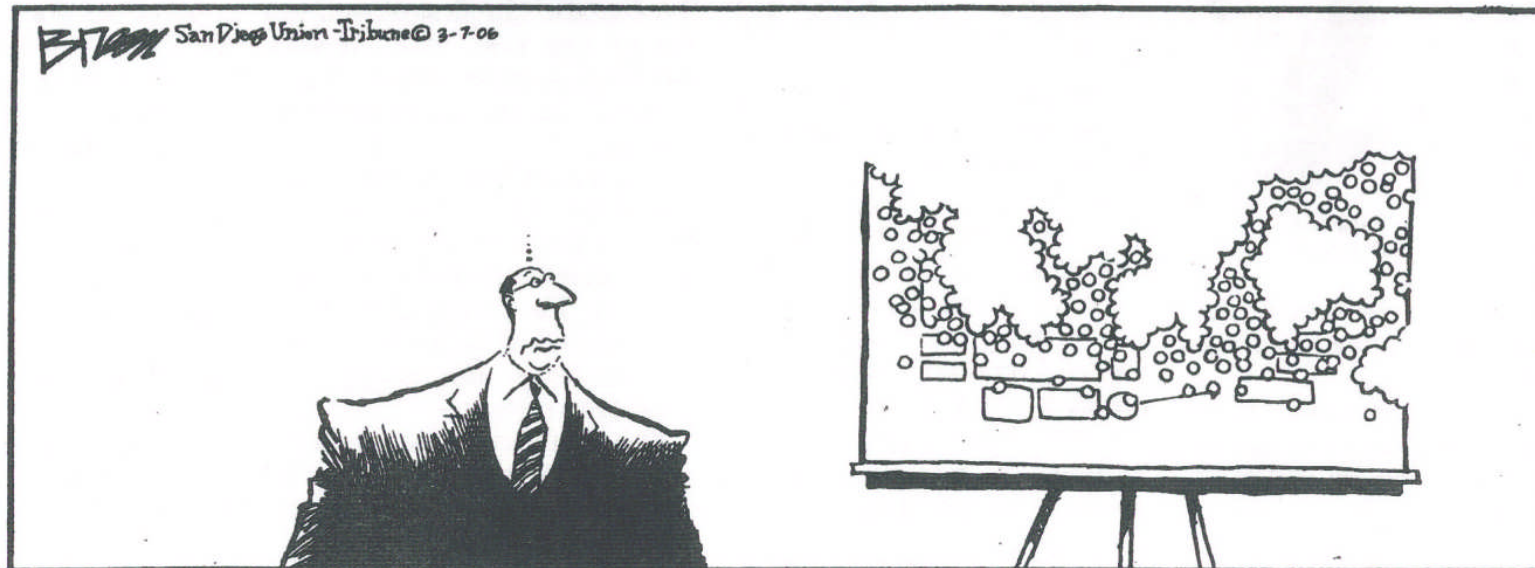
Civilian Site Concepts SDIA Concept 6



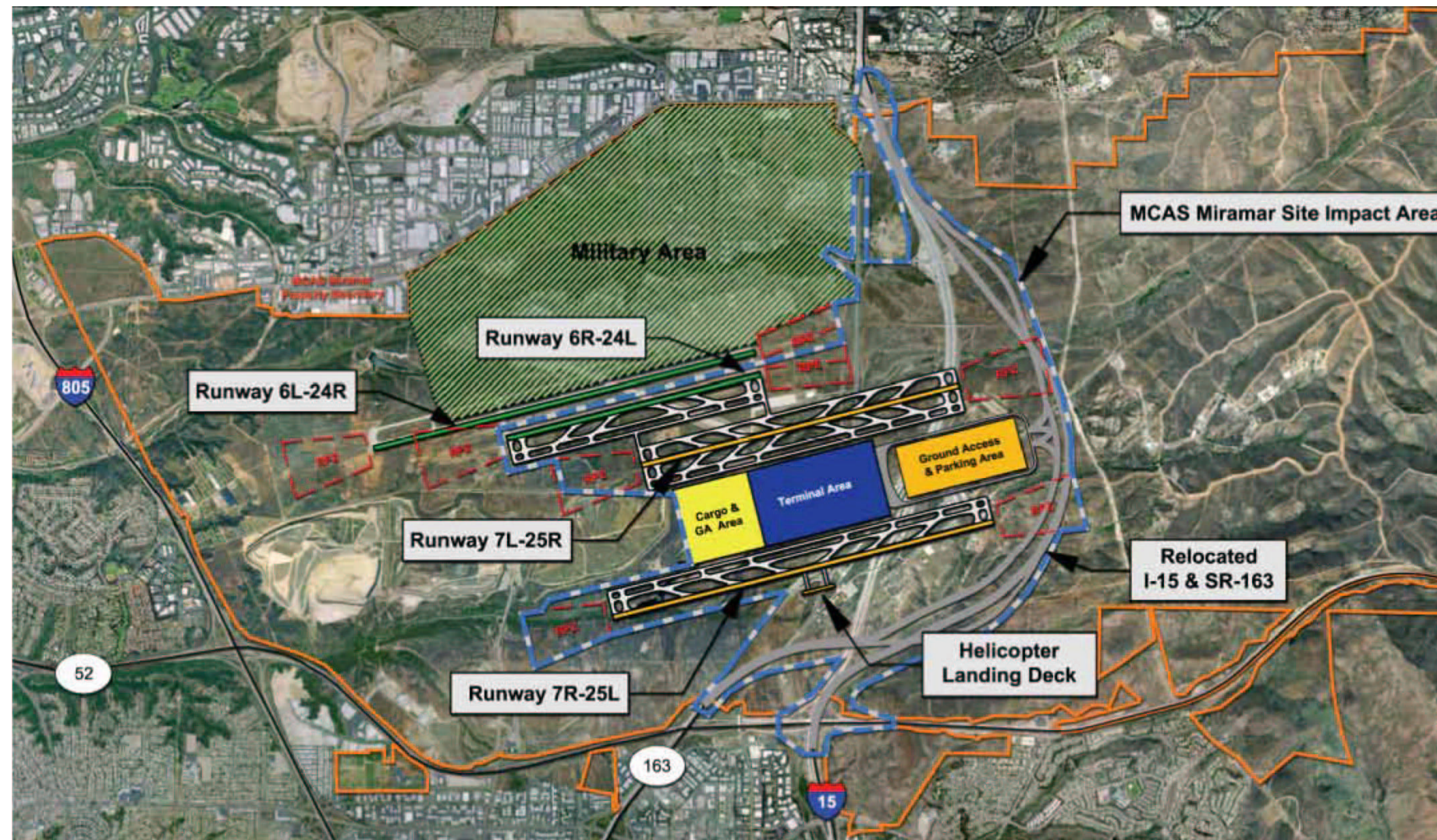
ELIMINATED 10/05

Steve Breen SAN DIEGO UNION-TRIBUNE

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



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

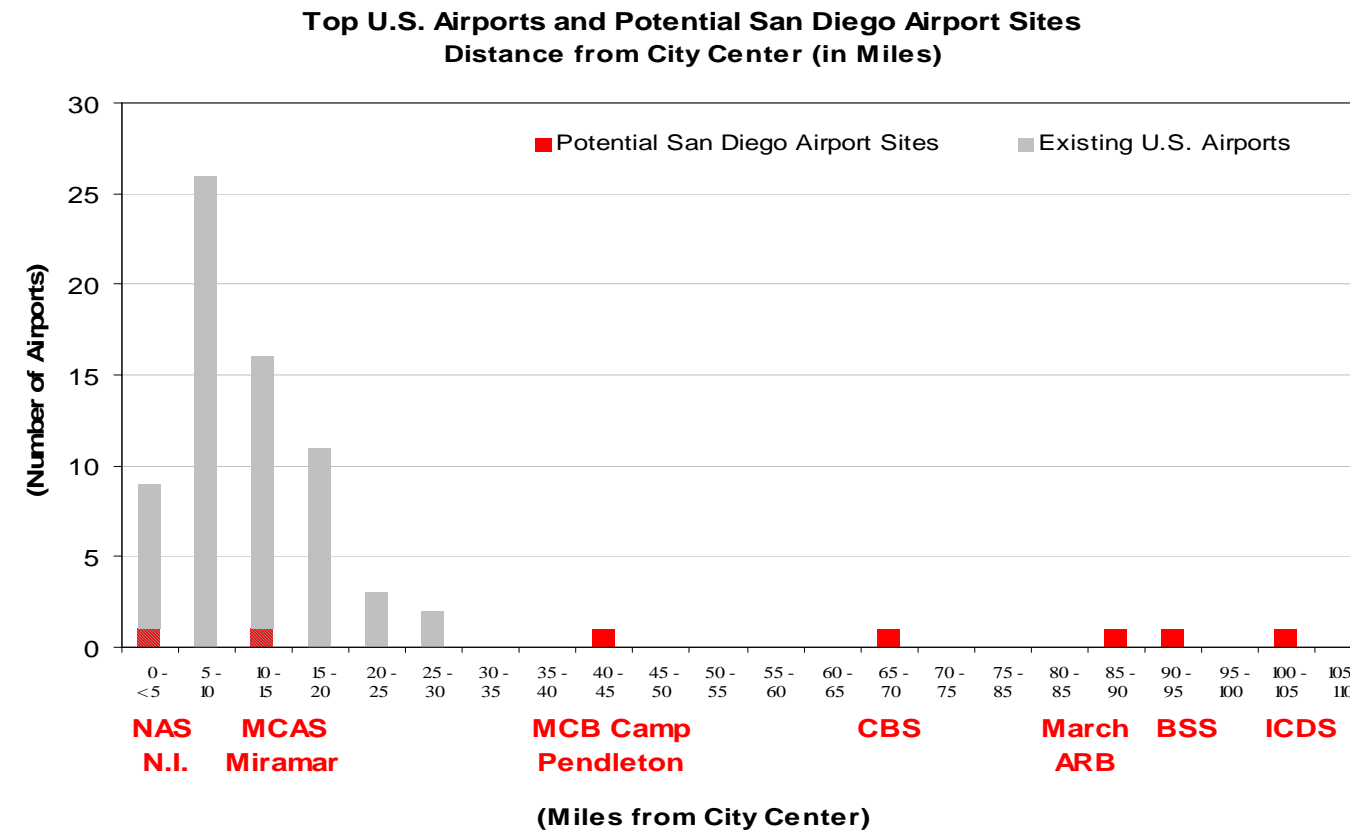
Aeronautical	Environmental	Noise	Market	Military	Financial
--------------	---------------	-------	--------	----------	-----------

- 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

	CBS	ICDS	NAS NI/ SDIA	MCB CP	MCAS Miramar
Aeronautical	Meets need	Meets needs with issues	Major issues	Meets need	Meets need
Environmental	Issues	Issues	Coastal issues	Issues	Issues
Market	Not acceptable	Not acceptable	Strong	Acceptable	Strong
Military	No military issues	Airspace changes required	Unmitigatable impacts	Joint use appears possible	Joint use appears possible
Financial	Somewhat Questionable	Least viable	Somewhat questionable	Potentially viable	Potentially viable

Financial Feasibility

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?

