

# **Gillespie Field Airport Layout Plan Update & Narrative Report**



**GILLESPIE FIELD DEVELOPMENT COUNCIL**

Prepared by



**P&D Aviation**

April 15, 2004



# Agenda

- **Introduction**
- **Purpose of ALP Update**
- **Project Approach**
- **Aviation Forecasts**
- **Runway 27R Threshold**
- **Concept Recommended at Last Meeting**
- **Recommended Concept**
- **CLUP Information**
- **Economic Impact**
- **Next Steps**
- **Questions/Answers**





# Airport Layout Plan

**“An Airport Layout Plan (ALP) is a scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport.”**

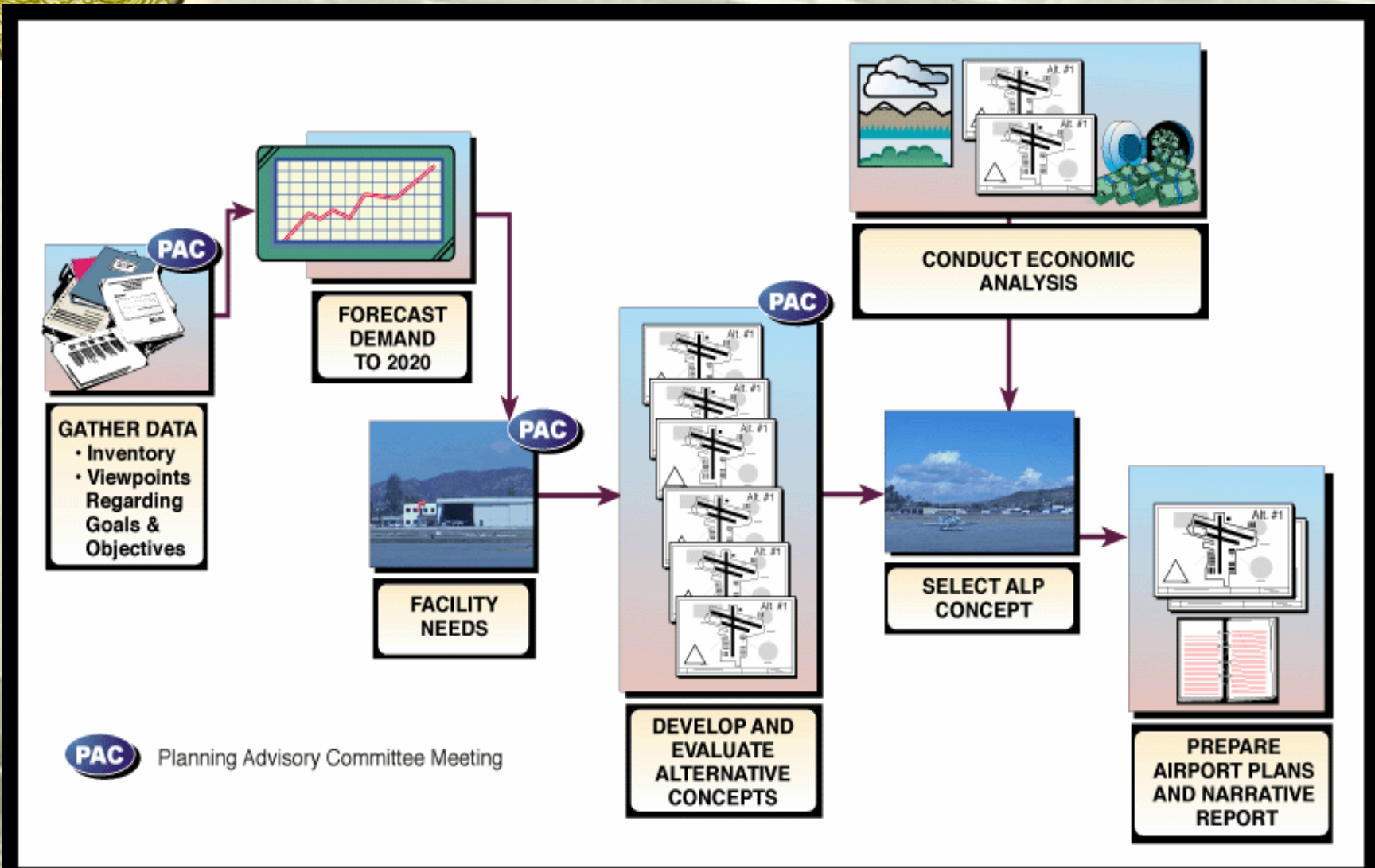
**FAA AC 150/5300-13, Airport Design**

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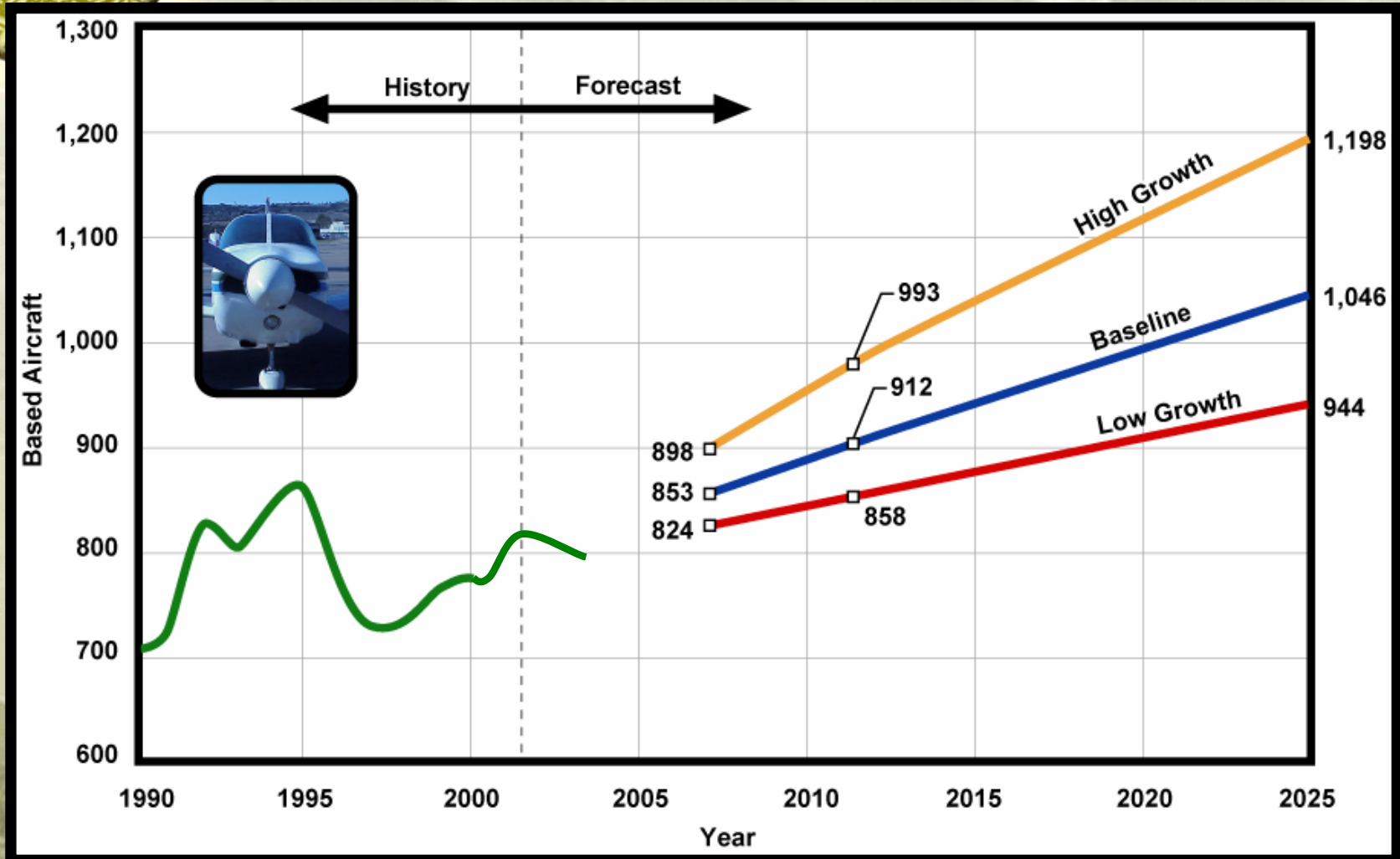


# Planning Approach



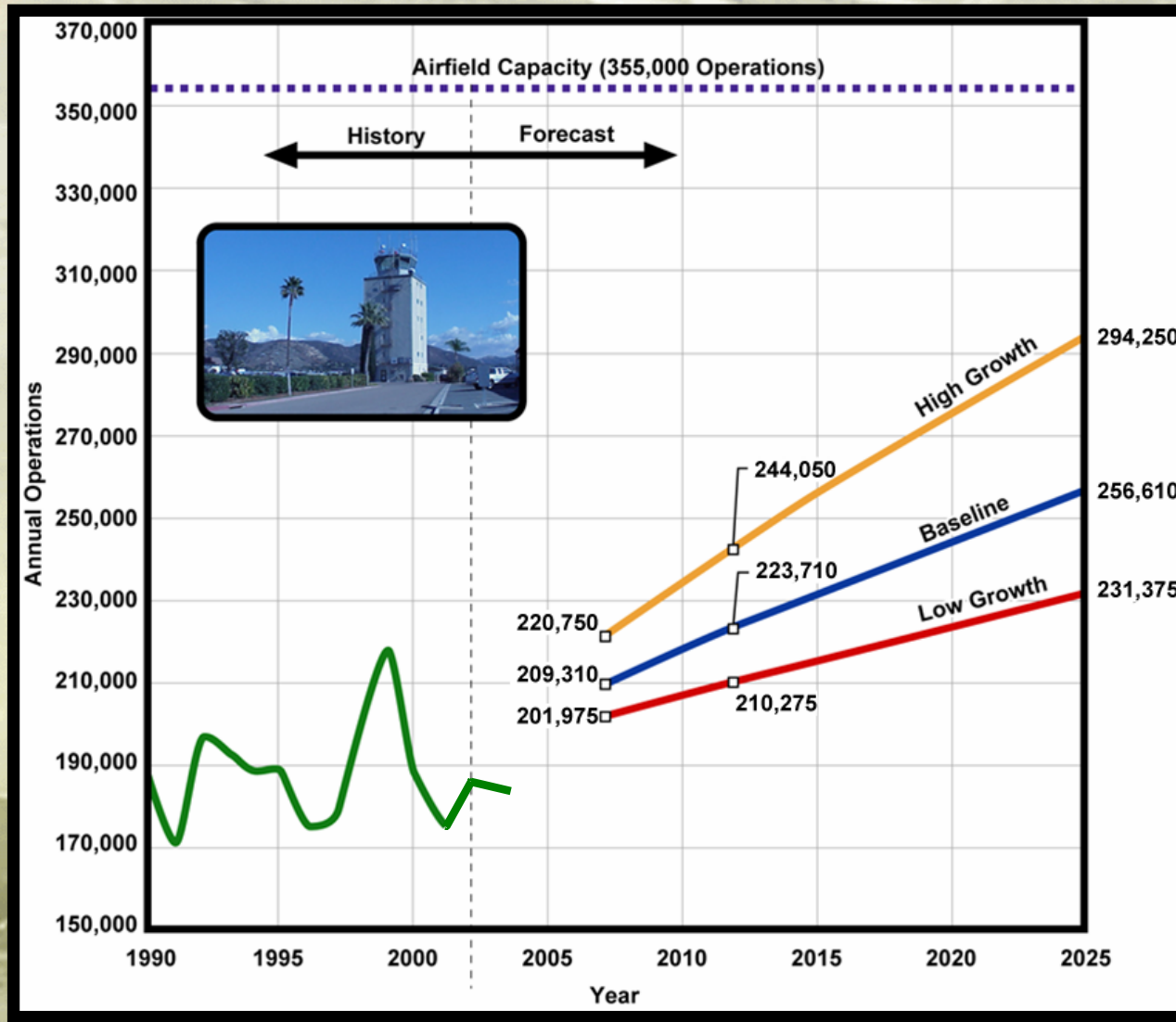


# Forecast Based Aircraft





# Forecast Aircraft Operations





# Runway 27R Threshold



- LOCATION OF DISPLACED THRESHOLD**
- APPLIED FAA THRESHOLD SITING CRITERIA
  - OBTAINED OBSTRUCTION SURVEY
  - 440-FOOT DISPLACED THRESHOLD IS POSSIBLE
  - WILL REQUIRE OBSTRUCTION REMOVAL





# Concept Recommended at November 2002 Meeting

- Meets aeronautical demand
- Provides a helicopter area
- Accommodates non-aviation uses
- Utilizes open areas on the airport not restricted by utility easements

## AIRFIELD IMPROVEMENTS

- REMOVE OBSTRUCTIONS
- R/W 27R THRESHOLD
- EXTEND T/W C
- EXTEND R/W 9R-27L

## HELICOPTER AREA

NON-AVIATION, BUT NO HELOS WEST OF MARSHALL

## REMODEL TERMINAL

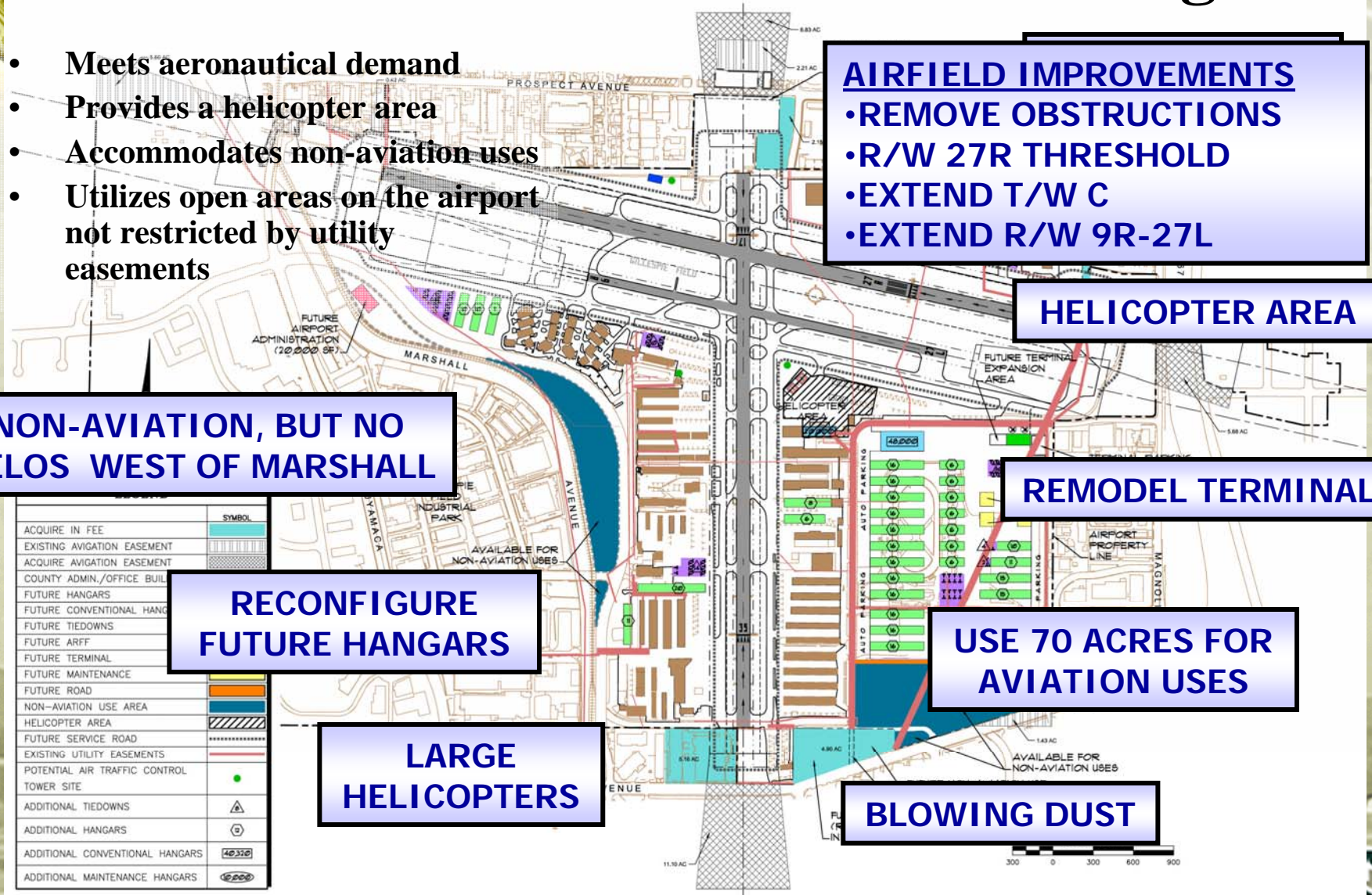
## RECONFIGURE FUTURE HANGARS

USE 70 ACRES FOR AVIATION USES

## LARGE HELICOPTERS

## BLOWING DUST

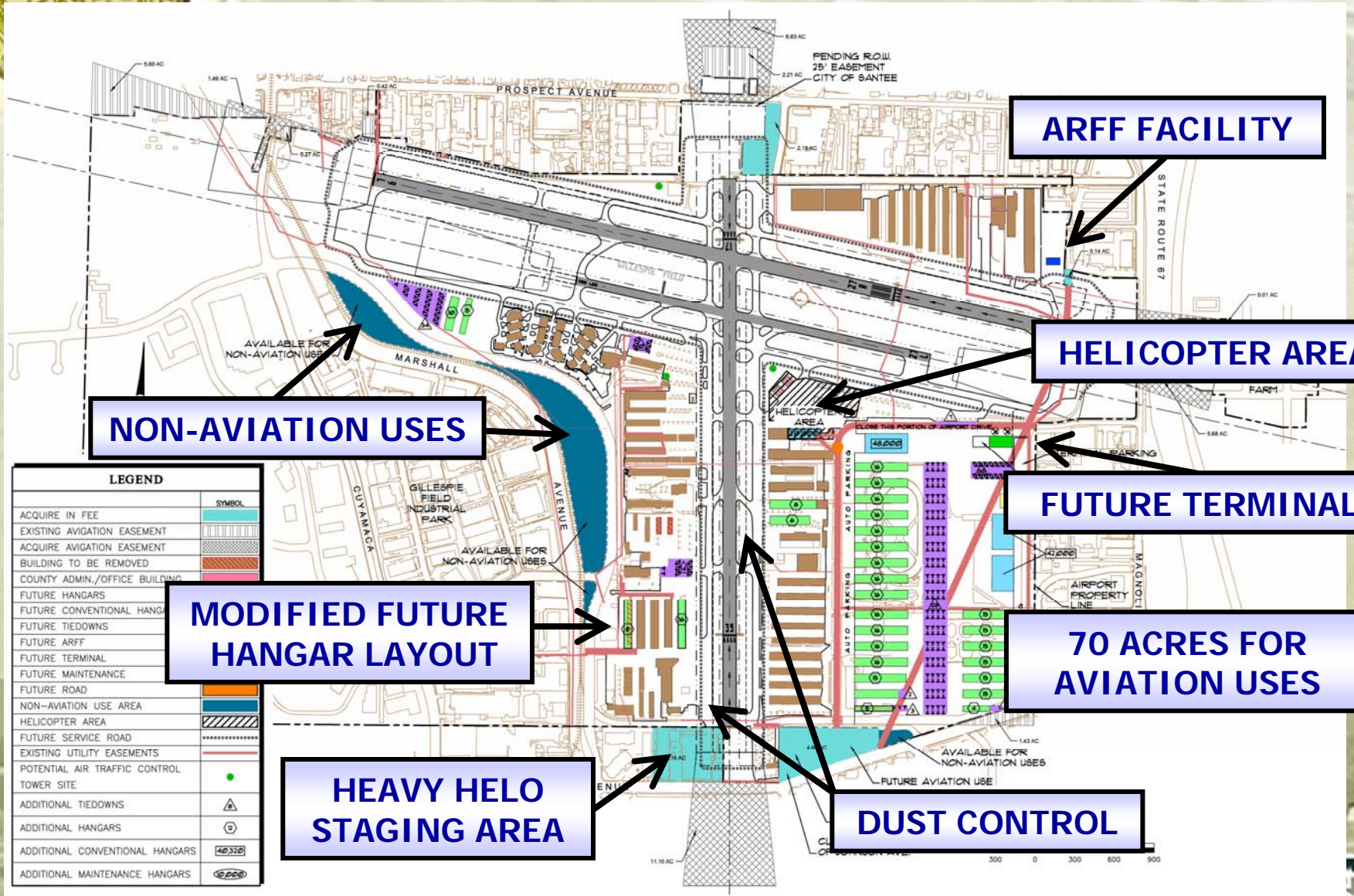
	SYMBOL
ACQUIRE IN FEE	[Pattern]
EXISTING AVIGATION EASEMENT	[Pattern]
ACQUIRE AVIGATION EASEMENT	[Pattern]
COUNTY ADMIN./OFFICE BUIL.	[Pattern]
FUTURE HANGARS	[Pattern]
FUTURE CONVENTIONAL HANG.	[Pattern]
FUTURE TIEDOWNS	[Pattern]
FUTURE ARFF	[Pattern]
FUTURE TERMINAL	[Pattern]
FUTURE MAINTENANCE	[Pattern]
FUTURE ROAD	[Pattern]
NON-AVIATION USE AREA	[Pattern]
HELICOPTER AREA	[Pattern]
FUTURE SERVICE ROAD	[Pattern]
EXISTING UTILITY EASEMENTS	[Pattern]
POTENTIAL AIR TRAFFIC CONTROL TOWER SITE	[Symbol]
ADDITIONAL TIEDOWNS	[Symbol]
ADDITIONAL HANGARS	[Symbol]
ADDITIONAL CONVENTIONAL HANGARS	[Symbol]
ADDITIONAL MAINTENANCE HANGARS	[Symbol]







# Recommended Concept



**ARFF FACILITY**

**HELICOPTER AREA**

**FUTURE TERMINAL**

**70 ACRES FOR AVIATION USES**

**DUST CONTROL**

**HEAVY HELO STAGING AREA**

**MODIFIED FUTURE HANGAR LAYOUT**

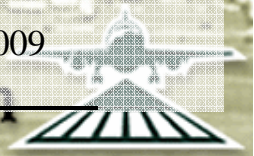
**NON-AVIATION USES**



# Phase 1 Improvements

Project	Timing
<b>Phase 1 (2005 – 2009)</b>	
Runway 9R-27L Rehabilitation	Underway
Runway 9L-27R Rehabilitation	Underway
Construct Transient Aircraft Ramp south of T/W D at west end of R/W 9L-27R	2004
Relocate R/W 27R Displaced Threshold and Remove and/or Light Obstructions	2004
Improve Runway Safety Areas to Meet FAA Standards	2004/2006
Prepare Cost Estimate and Financial Plan	2005
Provide SDCRAA Information for CLUP Update	2005
Acquire Property (fee simple)	2005
Acquire Avigation Easements	2005
Release Property from Aeronautical Use (west of Marshall Avenue)	2005
Extend Taxiway C to the West	2005
Reconstruct Existing Transient Ramp	2005
Construct Based Aircraft Storage on Existing Leaseholds	2005 - 2006
Slurry Seal Runway 17-35 and Associated Taxiways	2006
Close Airport Drive between Joe Crosson and Wing Avenue	2006
Site Preparation of 70-acre Parcel	2006
Construct New Emergency Generator Building	2006
Airfield Lighting Improvements – PAPI R/W 27L	2007
Upgrade Existing Electrical Vault	2007
Construct 48,000 SF Hangar	2007
Construct Based Aircraft Storage Facilities on 70-acre Parcel	2007 – 2009
Construct Airfield Dust Control Improvements (infield areas along R/W 17-35)	2008

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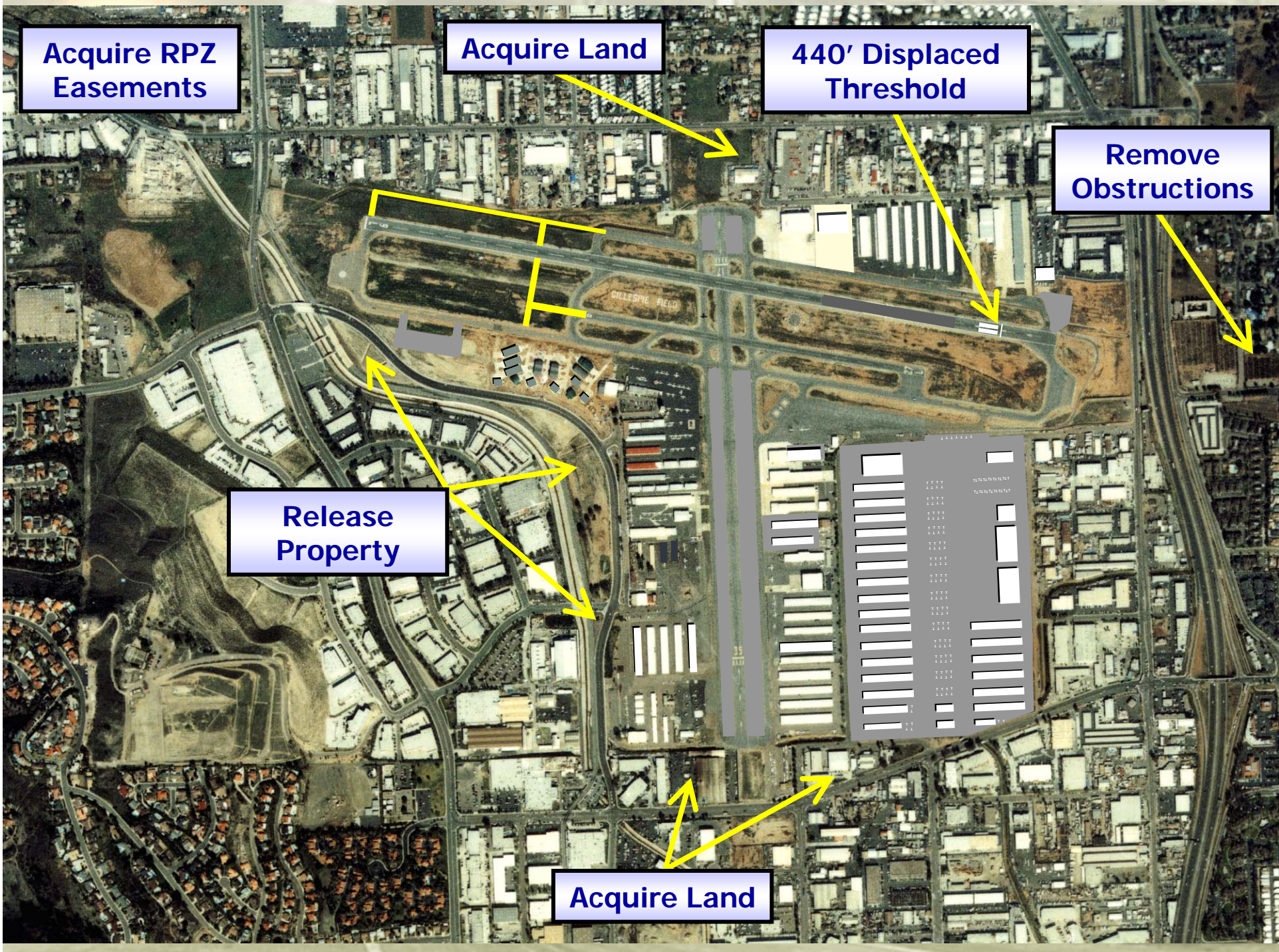




# Phase 2 & 3 Improvements

Project	Timing
<b>Phase 2 (2010 – 2014)</b>	
Runway 17-35 Rehabilitation	Phase 2
Construct Run-up Pad R/W 27R	Phase 2
Enhance Runway/Taxiway Intersections (fillets)	Phase 2
Construct General Aviation Terminal/Airport Administration Building	Phase 2
Construct Helicopter Area	Phase 2
Construct Additional Based Aircraft Storage Facilities	Phase 2
Construct Conventional Hangars (42,000 SF and 10,000 SF)	Phase 2
<b>Phase 3 (2015 – 2025)</b>	
Construct 423-foot Extension on West End of R/W 9R-27L	Phase 3
Slurry Seal Runways and Associated Taxiways & Prepare Pavement Management Plan	Phase 3
Construct Additional Based Aircraft Storage Facilities	Phase 3
Construct Conventional Hangar (42,000 SF)	Phase 3
Construct Aircraft Rescue and Fire Fighting (ARFF) Building	Phase 3
Acquire ARFF Vehicle	Phase 3
Relocate/Upgrade Airport Traffic Control Tower (ATCT) Building	Phase 3
Replace Existing VASI with PAPI	Phase 3
Develop Enhanced Instrument Approach Procedure Based on Available Technologies	Phase 3





Acquire RPZ Easements

Acquire Land

440' Displaced Threshold

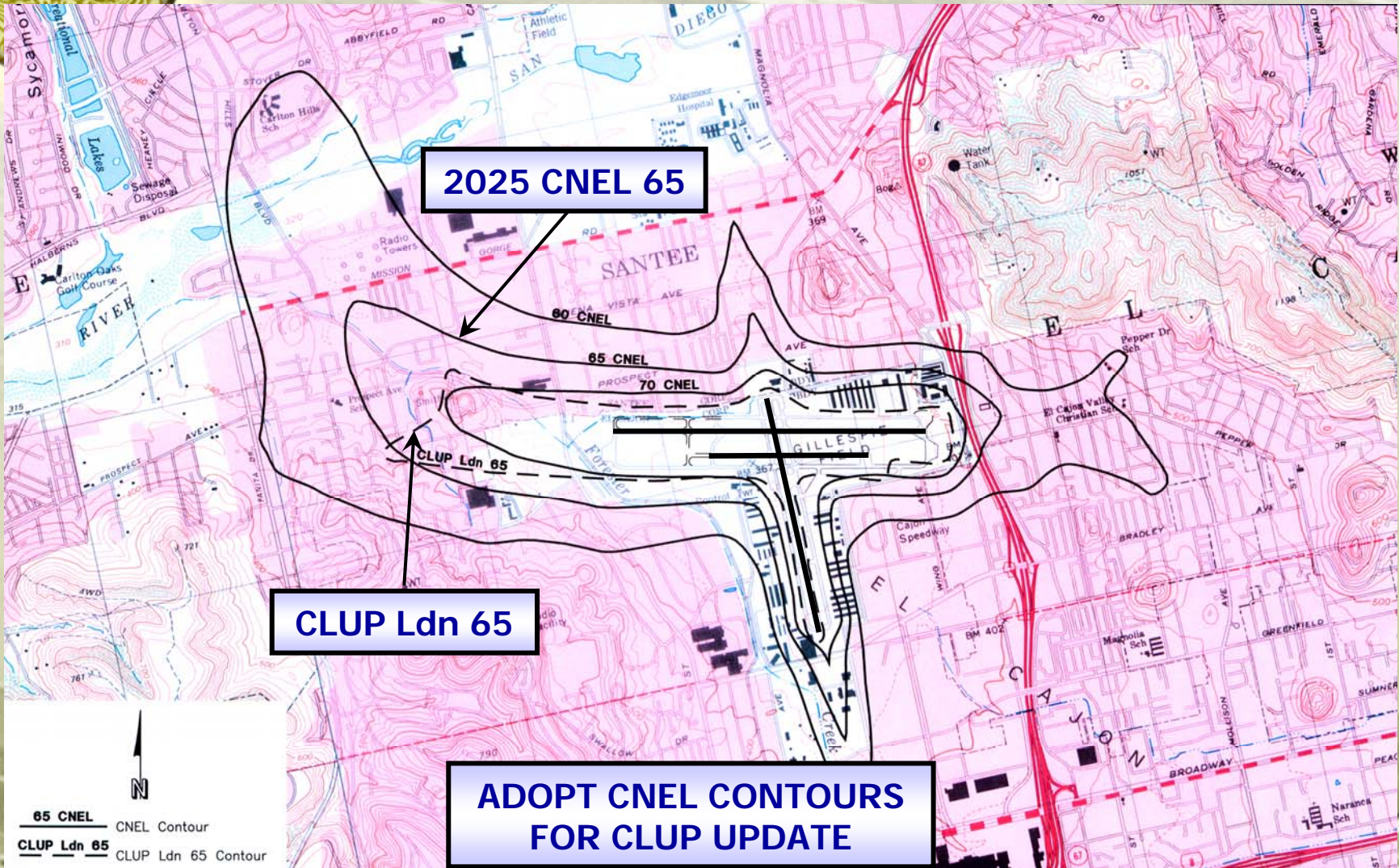
Remove Obstructions

Release Property

Acquire Land

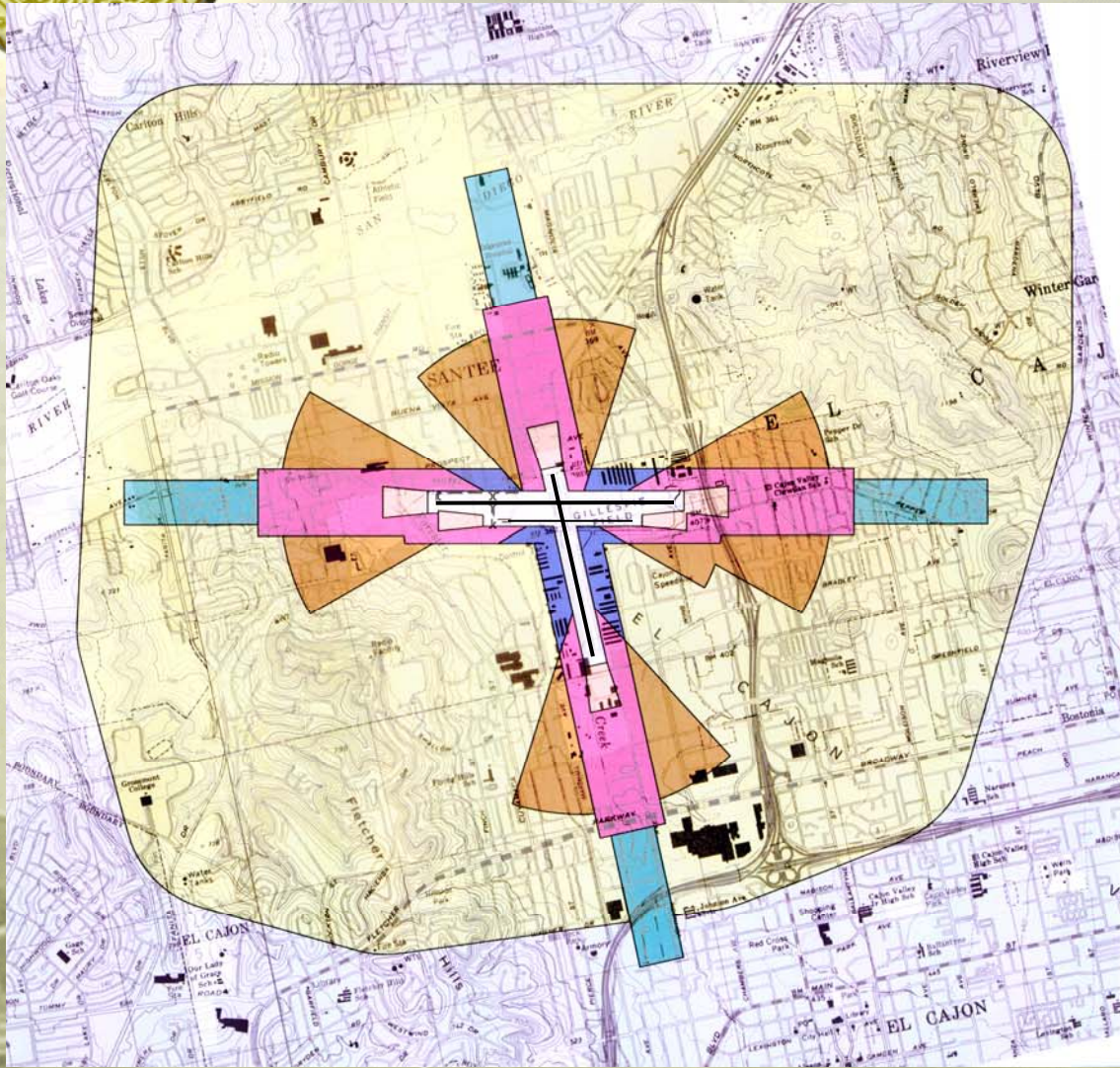


# Future Noise Contours





# Caltrans Airport Safety Zones



LEGEND					
Symbol	Zone	Maximum Residential Density <sup>1</sup> (Dwelling Units per Gross Acre)		Maximum Non-Residential Density (Average Number of people per Gross Acre)	
		Rural/Suburban	Urban	Rural/Suburban	Urban
[Pink Box]	1. Runway Protection Zone	0	0	0 <sup>3</sup>	0 <sup>3</sup>
[Orange Box]	2. Inner Approach/Departure Zone	1 d.u. per 10-20 ac.	0	25-40	40-60
[Yellow Box]	3. Inner Turning Zone	1 d.u. per 2-5 ac.	Infill <sup>2</sup>	60-80	80-100
[Light Blue Box]	4. Outer Approach/Departure Zone	1 d.u. per 2-5 ac.	Infill <sup>2</sup>	60-80	80-100
[Dark Blue Box]	5. Sideline Zone	1 d.u. per 1-2 ac.	Infill <sup>2</sup>	80-100	100-150
[Light Yellow Box]	6. Traffic Pattern Zone	No Limit	No Limit	150	No Limit <sup>4</sup>

<sup>1</sup> Clustering to preserve open land encouraged in all zones.  
<sup>2</sup> Allow infill at up to average of surrounding residential area only if non-residential uses are not feasible.  
<sup>3</sup> Exceptions can be permitted for agricultural activities, roads, and automobile parking provided that FAA criteria are satisfied.  
<sup>4</sup> Large stadiums and similar uses should be prohibited.

Source: California Airport Land Use Planning Handbook, State of California Department of Transportation Division of Aeronautics, January 2002.



**ADOPT CALTRANS  
GUIDELINES FOR  
CLUP UPDATE**





# Economic Impact

- **Marshall Avenue site is suitable for multi-tenant industrial space.**
- **267 businesses/organizations on County-owned land generate \$403 million in direct sales and 3,164 jobs. Regional output (direct, indirect and induced) is \$919 million and 6,250 jobs.**
- **\$919 million represents approximately 0.4% of the regional economy.**
- **Proposed (2025) development will generate \$530 million in direct sales. Regional output would be about \$1.2 billion and support 8,250 jobs county-wide.**
- **\$919 million in county-wide output generates \$9.9 million in local government revenues and \$51.2 million in federal/state government revenues. This increases to \$13.0 million and \$67.2 million, respectively, for proposed (2025) development.**





# Next Steps

- **FAA review of Draft ALP.**
- **Revise ALP and Narrative Report per FAA and other comments.**
- **Submit Final ALP and Narrative Report.**

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