Background Data: Palm Springs International Airport and Environs

INTRODUCTION

Palm Springs International Airport, the sole air carrier airport in Riverside County, provides both scheduled airline and general aviation access to the Coachella Valley and surrounding desert region. Airlines serving the airport provide nonstop service all along the west coast, including Canada, and as far east as Chicago. In 2002, almost 1.3 million enplaning and deplaning passengers passed through the airport. Together with general aviation activity, total aircraft operations reached nearly 110,000. Some 127 general aviation aircraft are based at the airport.

A new Master Plan, adopted by the Palm Springs City Council in May 2003, envisions continued growth of the airport. Total airline passengers are projected to reach 2.7 million in 2020, over double the present passenger volume. Aircraft operations and based aircraft are both expected nearly double, reaching 170,000 and 220, respectively. To accommodate this growth, major improvements to the airline terminal and construction of new general aviation aircraft hangars are planned. Establishment of a precision instrument approach procedure from the south is proposed, but no physical changes to the runway system are included in the plan.

From a land use compatibility perspective, the projected increases in airport activity might be expected to result in greater impacts. However, airline and corporate jets are the major source of current noise impacts and these aircraft will get quieter as newer models are added to the airline and general aviation fleets. The effect on Palm Springs International Airport noise impacts is that the long-range (2022) noise contours are expected to be slightly smaller than the present contours despite the projected activity growth. The larger, current contours are therefore used for compatibility planning purposes.

Lands in the immediate vicinity of the airport are heavily urbanized. Residential uses predominate to the north and industrial uses to the south. Except for additional industrial development planned along the airport's northeast side and as infill to the south, most opportunities for new land use development are two miles or more distant.

Information about the airport and its surroundings is summarized on the following pages. Exhibits PS-1 through PS-7 focus on the airport's features, activity, and noise impacts. Current and planned land uses are described in the tables and maps presented in Exhibits PS-8 through PS-10.

GENERAL INFORMATION

- ➤ Airport Ownership: City of Palm Springs
- ➤ Year Opened: 1939
 ➤ Property Size
 - Fee title: 932 acres
 - > Avigation easements: 16 acres
- ➤ Airport Classification: Primary Commercial Service
- ➤ Airport Elevation: 474 feet MSL

TRAFFIC PATTERNS AND APPROACH PROCEDURES

► FAR Part 150 Airport Noise Compatibility Program

- ➤ Airplane Traffic Patterns
 - > Runways 13L, 13R: Left traffic

AIRPORT PLANNING DOCUMENTS

➤ Airport Layout Plan Drawing
→ Last updated, May 2003

> Adopted by City Council, May 2003

➤ Airport Master Plan

> Runways 31L, 31R: Right traffic

> Approved by FAA, June 1994

- Pattern Altitude: 1,000 ft. AGL small aircraft, 1,500 ft. AGL others
- ➤ Instrument Approach Procedures (lowest minimums)
 - > Runway 31L VOR or GPS-B
 - · Circling (11/4 mile visibility, 1,900 ft. descent height)
- ➤ Standard Inst. Departure Procedures (initial direction)
 - > Runways 13L/R: Climbing left turn to 040°
 - > Runways 31L/R: Climbing right turn
- ➤ Visual Approach Aids
 - > Runway 13R: VASI (3.0°); REIL
 - > Runway 31L: PAPI (3.0°); REIL
 - > Runway 13L: PAPI (3.5°); REIL
 - > Runway 31R: PAPI (3.5°); REIL
- ➤ Operational Restrictions / Noise Abatement Procedures
 - > Calm winds: Use Runway 13
 - Noise-sensitive area all quadrants; use quiet flight procedures
 - Runways 13R, 31L thresholds displaced for noise abatement

RUNWAY/TAXIWAY DESIGN

Runway 13R-31L

- ➤ Critical Aircraft: DC-10, B-747
- ➤ Airport Reference Code: D-IV
- ➤ Dimensions: 10,000 ft. long, 150 ft. wide
 - > Runway 13R end displaced 3,000 ft.
 - > Runway 31L end displaced 1,500 ft.
- ➤ Pavement Strength: (main landing gear configuration)
 - > 105,000 lbs (single wheel)
 - > 200,000 lbs (dual wheel)
 - > 330,000 lbs (dual-tandem wheel)
 - > 800,000 lbs (double-dual-tandem-wheel)
- ➤ Average Gradient: 0.8% (rising to north)
- ➤ Runway Lighting: High-intensity edge lights (HIRL)
- ► Primary Taxiways: Full-length parallel on both sides

Runway 13L-31R

- ➤ Critical Aircraft: Medium twin
- ➤ Airport Reference Code: B-II
- ➤ Dimensions: 4,952 ft. long, 75 ft. wide
- ➤ Pavement Strength: (main landing gear configuration)
 - > 12,500 lbs (single wheel)
 - > 60,000 lbs (dual wheel)
- ➤ Average Gradient: 0.9% (rising to north)
- ► Runway Lighting: Medium-intensity edge lights (MIRL)
- ➤ Primary Taxiways: Full-length parallel on east side

APPROACH PROTECTION

- ➤ Runway Protection Zones (RPZ)
 - > Rwys 13L, 31R: 1,000 ft. long; all on airport property
 - > Runway 13R: 1,700 ft.; most on airport
 - > Runway 31L: 1,700 ft.; 1/2 on airport
- ➤ Approach Obstacles
 - > Runway 13R: None close in; distant rising terrain
 - > Runway 31L: None close in; distant rising terrain

BUILDING AREA

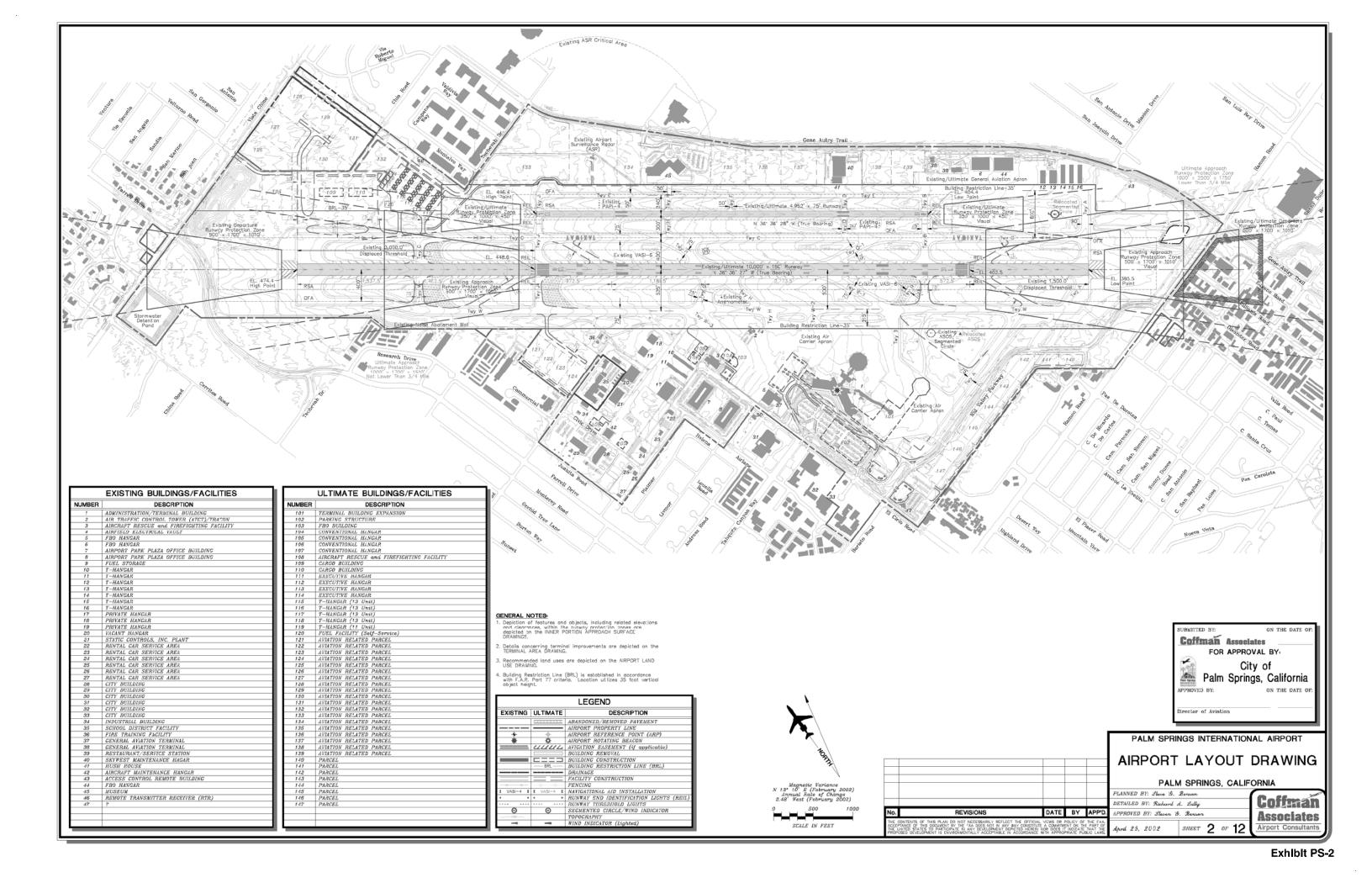
- ► Location: South side and northwest along property line
- ➤ Aircraft Parking Capacity
 - > Hangar spaces: 75 (includes FBO, Skywest hangars)
 - Tiedowns: 90
- ➤ Other Major Facilities
 - > Air traffic control tower
 - > Pilots lounge
- ➤ Services
 - > Fuel: 100LL, Jet A (via truck, 6:00 a.m. to 10:00 p.m.)
 - > Commercial airline service
 - Other: Aircraft rental & instruction; aircraft maintenance & modification; sightseeing tours

PLANNED FACILITY IMPROVEMENTS

- ➤ Airfield
 - > Add approach light system to Runway 31L
 - > Establish Rwy 31L Cat. I precision inst. approach
- ▶ Building Area
 - > Replace air traffic control tower
 - > Expand terminal apron
- ➤ Property
 - > No planned acquisition

Exhibit PS-1

Airport Features Summary



	BACKGROUNI	D DATA: PALM S	PRINGS INTERNATIONAL AIRPORT	AND ENVIRONS	CHAPTE
BASED AIRCRAFT			TIME OF DAY DISTRIBUTION		
	Current ^a	Future ^b		Current ^c	Future b
	2002 data	2025	Airline		
Aircraft Type			Day	77%	76%
Single-Engine	99	152	Evening	14%	19%
Twin-Engine Piston	20	35	Night	9%	5%
Turboprop	4	18	Other Airplanes	0,0	0,0
Turbojet	2	11	Day	78%	no
Helicopters	2	1	Evening	15%	change
Total	127	220	Night	7%	onungo
7 Otai	121	220	Helicopters	1 /0	
ALDU INIE ACTIVITY			Day	81%	no
AIRLINE ACTIVITY	•	h	Evening	15%	change
	Current ^a	Future ^b	Night	4%	change
	2002 data	2025	Nigrit	4%	
Enplaned Passengers	642,458	1,350,000	D		
Air Carrier Operations	35,786	56,460	RUNWAY USE DISTRIBUTION		
				Current ^c	Future ^b
AIRCRAFT OPERATIONS			General Aviation, Local		
	Current ^a	Future ^b	Takeoffs & Landings		
	2002 data	2025	Runway 13L	35%	no
Total	2002 data	2020	Runway 31R	65%	change
Annual	109,544	170,260	Runway 13R	0%	_
	304	473	Runway 31L	0%	
Average Day	304	4/3	General Aviation, Itinerant		
Distribution by Aircraft Tune			Takeoffs & Landings		
Distribution by Aircraft Type	51%	400/	Runway 13L	17%	no
Single-Engine	51%	49%	Runway 31R	32%	change
Twin-Engine	40/	50 /	Runway 13R	18%	
Piston & Turboprop	4%	5%	Runway 31L	33%	
Business Jet	8%	11%	Business Jet & Commuter A		
Helicopter	2%	3%	Takeoffs & Landings		
Airline, Jet & Turboprop	35%	32%	Runway 13L	4%	no
51.11.11.11.7.10.11			Runway 31R	5%	change
Distribution by Type of Opera			Runway 13R	32%	change
Local	14%	14%	Runway 31L	60%	
(incl. touch-and-goes			Air Carrier	0070	
Itinerant	86%	86%	Takeoffs & Landings		
				0%	no
			Runway 13L	0%	no
			Runway 31R		change
			Runway 13R	35%	
			Runway 31L	65%	

FLIGHT TRACK USAGE C **Current and Future**

- ➤ Approaches generally straight-in except for tough-and-go
- ▶ Departures turn eastward to avoid residential areas and San Jacinto Mountains

Notes

^a Source: Airport management records

^b Source: 2003 Airport Master Plan forecast for 2020 assumed as 2025 for compatibility planning purposes

^c Source: 2003 Airport Master Plan estimates

Exhibit PS-3

Airport Activity Data Summary

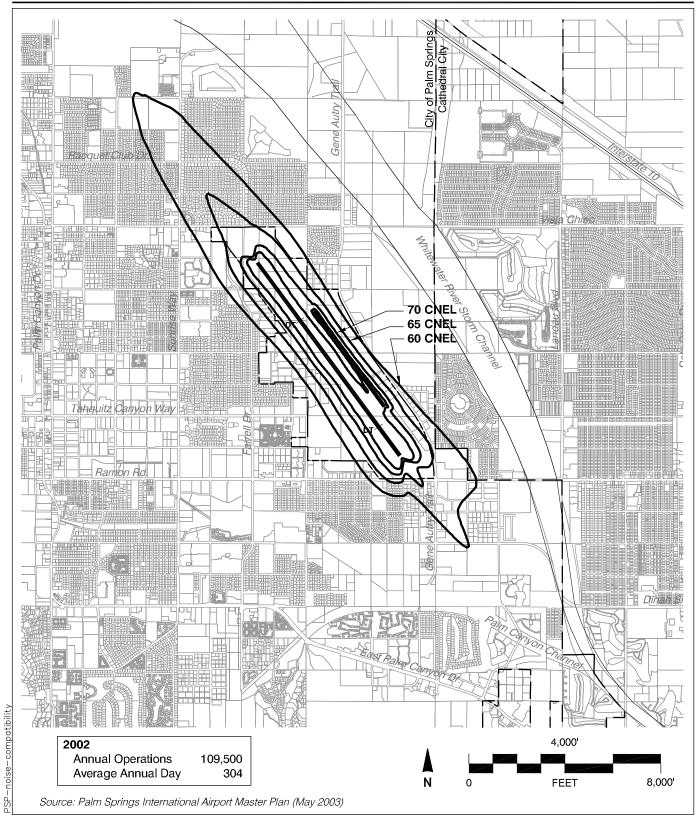


Exhibit PS-4

Existing Noise Impacts

Palm Springs International

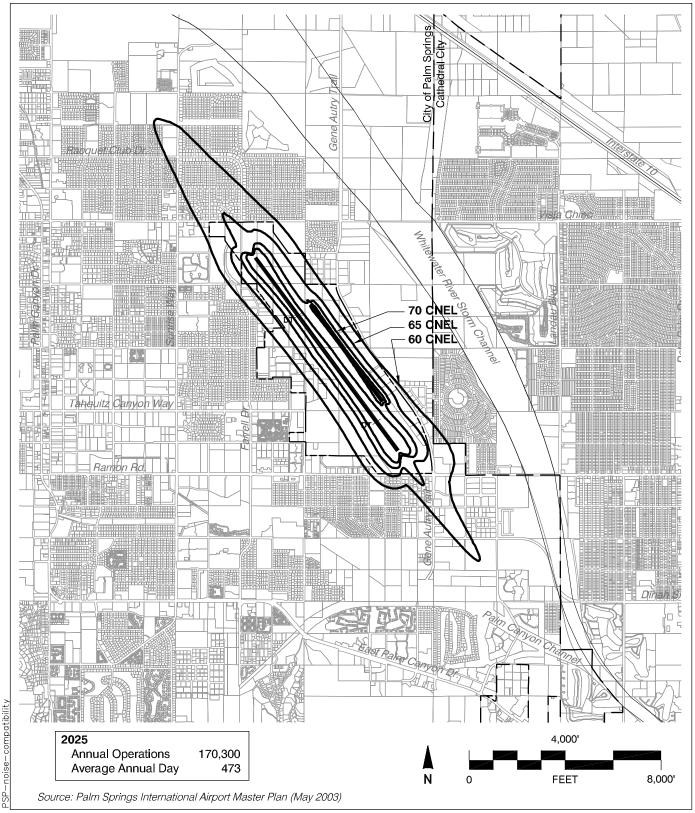


Exhibit PS-5

Future Noise Impacts

Palm Springs International

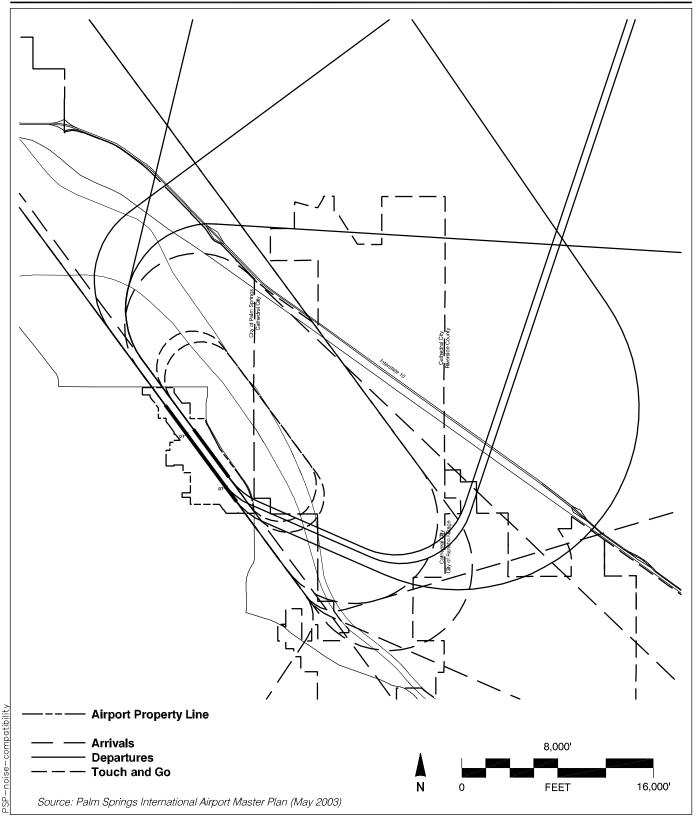
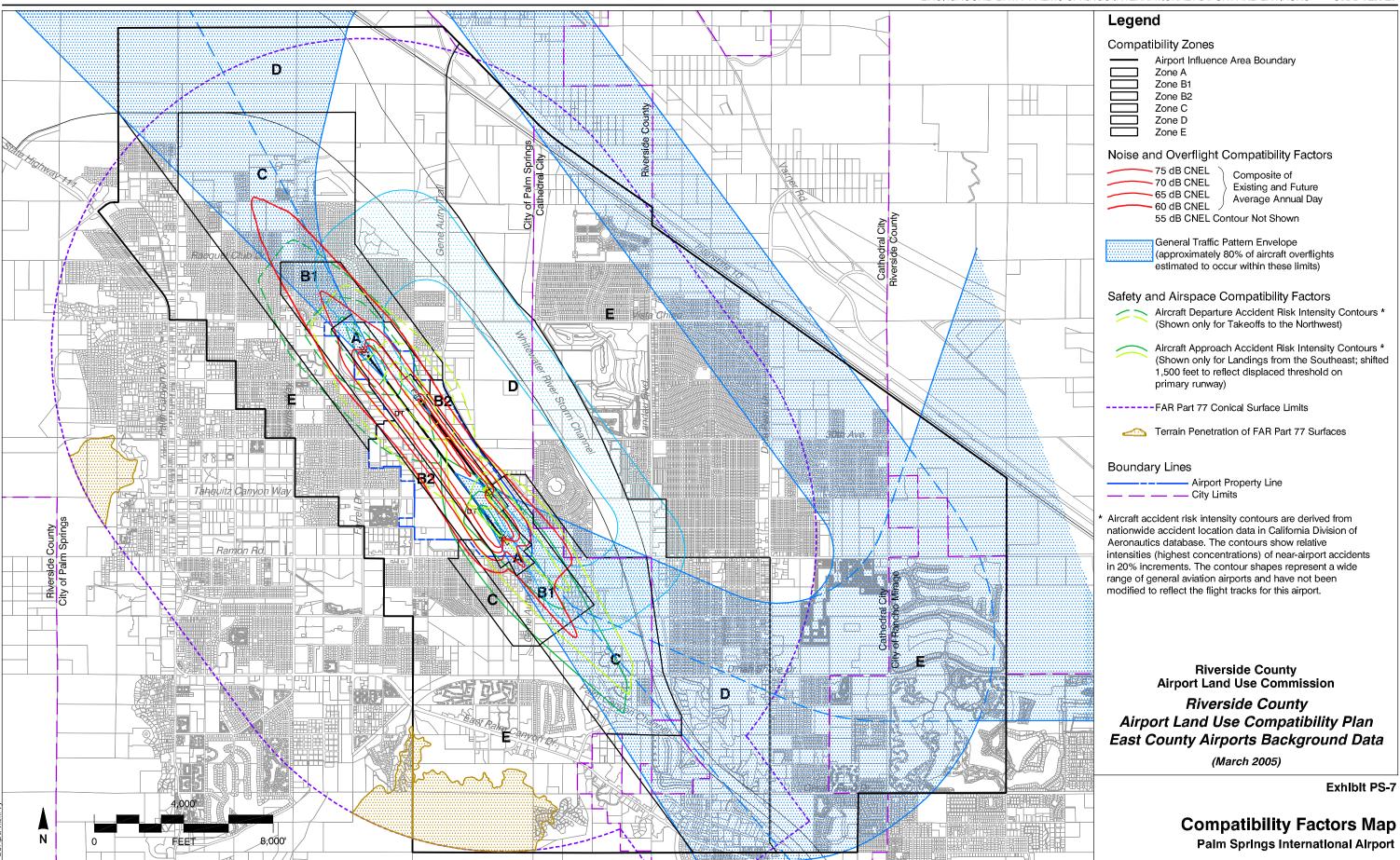


Exhibit PS-6

Modeled Flight Tracks



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AIRPORT SITE

- ➤ Location
 - Central Riverside County
 - Eastern edge of city; 2 miles from Palm Springs central business district
- ➤ Nearby Terrain
 - Flat floor of Coachella Valley in immediate vicinity; airport elevation 474 ft. MSL
 - Murray Hill (elevation 2,210 ft.) 4± miles south
 - Base of San Jacinto Mountains 3 miles west; Mt. San Jacinto peak (elevation 10,804 ft.) 10± miles west

AIRPORT ENVIRONS LAND USE JURISDICTIONS

- ➤ County of Riverside
 - > Nearest unincorporated area 21/2 miles north
- ➤ City of Cathedral City
 - City limits within ¼ mile east of airport and 2 miles southeast (along runway approach)
- ➤ City of Palm Springs
 - > Airport entirely within the city limits
- ➤ City of Rancho Mirage
 - > City limits $3\pm$ miles southeast along future precision instrument approach route

STATUS OF COMMUNITY PLANS

- ➤ City of Cathedral City
 - > General plan adopted July 2002
- ➤ City of Palm Springs
 - > General Plan adopted March 1993
- ➤ City of Rancho Mirage
 - > General Plan adopted 1996

EXISTING AIRPORT AREA LAND USES

- ➤ General Character
 - Mostly urban uses, particularly residential, except undeveloped desert land to northeast and southeast
- ➤ Runway Approaches
 - > Northwest (Runways 13R/L): Residential within $\frac{1}{2}$ mile of Rwy 13R end (landing threshold displaced 3,000 ft.); religious facility 4,000 \pm ft. from runway end; desert beyond $\frac{1}{2}$ mile
 - Southeast (Runways 31R/L): Generally undeveloped desert within 1½ miles, except some commercial/industrial uses within ¼ mile of Rwy 31L end (landing threshold displaced 1,500 ft.); urban residential and golf courses beyond 1½ mile
- ➤ Traffic Patterns
 - Northeast: Whitewater River Storm Channel (1 mile distant); residential and golf course beyond
 - > No pattern on southwest

PLANNED AIRPORT AREA LAND USES

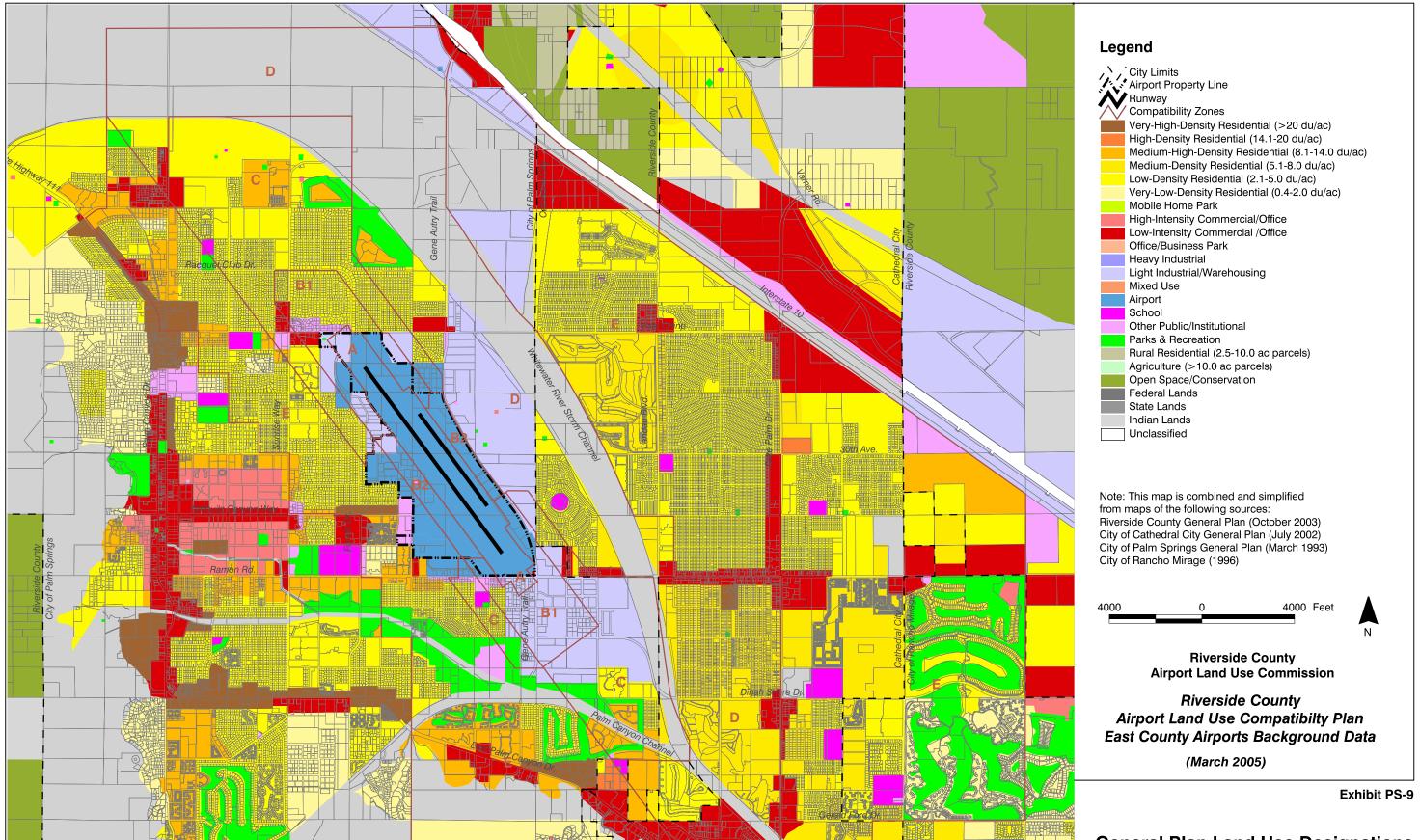
- ➤ City of Cathedral City
 - Southeast: Mostly existing resort/low-density residential and open space; scattered commercial uses
- ➤ City of Palm Springs
 - North: Industrial uses bordering airport property; existing low-density residential beyond
 - > East: Industrial uses adjacent to airport
 - > Southeast: Large industrial area off runway ends
 - > South and West: Infill of existing urban uses
- ➤ City of Rancho Mirage
 - West of Hwy 111 beneath future ILS approach corridor: Infill commercial and industrial uses

ESTABLISHED AIRPORT COMPATIBILITY MEASURES

- ➤ City of Cathedral City General Plan
 - Single-family residential conditionally acceptable within 55-CNEL contour; normally unacceptable within 70-CNEL contour
 - Multi-family residences and other noise-sensitive development conditionally acceptable within 60 CNEL noise contour and normally unacceptable above 70 CNEL
- ► City of Palm Springs General Plan
 - Residential uses normally acceptable between 60 and 70 CNEL; rural/low-density residential clearly unacceptable above 70-CNEL; medium- to high-density residential normally unacceptable between 70 and 75 CNEL and clearly unacceptable above 75 CNEL
- ➤ City of Palm Springs Zoning Codes
 - Within Airport (A) zone, height of structures limited to 30 feet; soundproofing and avigation easement guidelines established
 - > No airport-related height limit zoning
- ➤ City of Rancho Mirage General Plan
 - Residential and other noise-sensitive uses conditionally acceptable below 55 CNEL; generally unacceptable above 65 CNEL

Exhibit PS-8

Airport Environs Information



General Plan Land Use Designations

Palm Springs International Airport Environs

CITY OF CATHEDRAL CITY: GENERAL PLAN (2002)

Residential Land Use

- ➤ Compatibility Zone C
 - Residential designations with densities ranging from 2.1 to 5.0 dwelling units/acre and 5.1 to 8.0 dwelling units/acre conflict with Zone C compatibility criteria south-southeast of airport [C1]
- ➤ Compatibility Zone D
 - Residential designations with densities ranging from 2.1 to 5.0 dwelling units/acre 5.1 to 8.0 dwelling units/acre east and southeast of airport potentially conflict with the high-and-low options of *Zone D* [C2]

Other Policies

- ➤ General Plan
 - > No acknowledgement of ALUC coordination
 - Noise policy allowing up to 70 dB CNEL for residential development conflicts with Compatibility Plan limit of 60 dB CNEL
- ➤ Zoning Codes
 - > No airport-related height limit zoning established

Non-Residential Land Use

- ➤ Compatibility Zone D
 - Zone D intensity limits (100 people/acre) apply to areas designated as Low-Intensity Commercial/Office south-southeast of airport [C3]

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit PS-10

General Plan Consistency Review (Preliminary)

Palm Springs International Airport Environs

CITY OF PALM SPRINGS: GENERAL PLAN (1993), AND ZONING CODES

Residential Land Use

- ➤ Compatibility Zone B1
 - Residential development within this zone is existing and therefore not in conflict with the ALUCP
- ➤ Compatibility Zone C
 - Planned residential development in these areas north of airport are consistent with Policy PS.2.2 which allows residential densities of either less than 0.2 du/ac or between 3.0 and 15.0 du/ac [P1a]
 - Residential designations with densities ranging from 2.1 to 5.0 du/acre southeast of airport are consistent with Policy PS.2.2 [P1b]
- ➤ Compatibility Zone D
 - Planned residential development in these areas are consistent with Policy PS.2.3 which allows residential densities of either less than 0.2 du/ac or at least 3.0 du/ac [P2]
- ➤ Compatibility Zone E
 - > No inconsistencies noted

Other Policies

- ➤ General Plan
 - > No acknowledgment of ALUC coordination
 - Noise policy allows residential development up to 70 dB CNEL conflicts with Compatibility Plan limit of 60 dB CNEL
- Zoning Codes
 - > No height limit zoning established

Non-Residential Land Use

- ➤ Compatibility Zone A
 - Light Industrial/ Warehousing designation at the northern edge of airport and Other Public/Institutional designation at the southern edge of the airport conflict with Zone A compatibility criteria; no structures are allowed in Zone A [P3]
- ➤ Compatibility Zone B1
 - Basic Zone B1 intensity limits (25 people/acre) apply to areas designated as Light Industrial Warehousing at the north-western edge of the airport [P4]
 - Within the designated portion of Zone B1, Policy PS.2.4(a) permits usage intensities of 40 to 50 people per acre depending upon the amount of open land on the site. Most of the Light Industrial/Warehousing uses planned for this area are expected to be consistent with these criteria, but specific higherintensity uses such as retail stores may not be [P5]
- ➤ Compatibility Zone C
 - Planned Light Industrial Warehousing on the north side of the airport are assumed to be consistent with the basic intensity limit of 75 people/acre; highintensity uses must be prevented, however [P6]
 - Within the designated portion of Zone C, Policy PS.2.4(b) permits usage intensities of 80 to100 people per acre depending upon the amount of open land on the site. Most of the Light Industrial/Warehousing uses planned for this area are expected to be consistent with these criteria, but specific higherintensity uses such as retail stores may not be [P7]
- Compatibility Zone D
 - > Basic intensity limit in Zone D is 100 people/acre. Most of the Light Industrial/Warehousing uses planned for this area are expected to be consistent with these criteria, but specific higher-intensity uses such as retail stores may not be [P8]
- ➤ Compatibility Zone E
 - > No inconsistencies noted

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit PS-10, continued

CITY OF RANCHO MIRAGE: GENERAL PLAN (1998)

Non-Residential Land Use

- ➤ Compatibility Zone E
 - > No inconsistencies noted

Other Policies

- ➤ General Plan
 - > No acknowledgement of ALUC coordination
 - Noise policy conditional acceptance of up to 65 dB CNEL for residential development conflicts with Compatibility Plan limit of 60 dB CNEL
- ➤ Zoning Codes
 - > No airport-related height limit zoning established

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit PS-10, continued

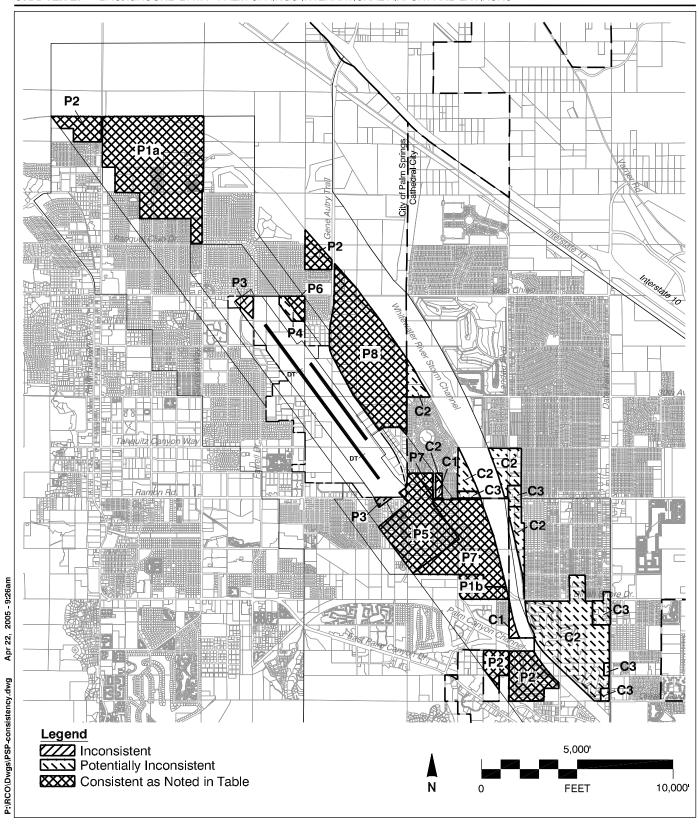


Exhibit PS-10, continued