SAN DIEGO COUNTY
REGIONAL AIRPORT AUTHORITY
Airport Land Use Commission

STAFF REPORT

Item No. 3

Meeting Date: **March 1, 2012**

Subject:

Presentation and Request for Policy Direction on Safety Compatibility Factor – San Diego International Airport - Airport Land Use Compatibility Plan

Recommendation:

Receive the report and provide policy direction on the safety compatibility factor.

Background/Justification:

SDIA ALUCP Steering Committee meetings were held on September 29 and November 17, 2011 to focus on the safety compatibility factor. Discussions on the configuration of the proposed safety zones also occurred at the January 19, 2012 meeting. Safety is one of four compatibility factors (along with noise contours, airspace protection, and overflight notification) that comprise the Airport Influence Area (AIA) set forth in the Airport Land Use Compatibility Plan (ALUCP) for San Diego International Airport (SDIA or the Airport).

Safety Definition and Purpose

Safety compatibility refers to limitations and restrictions on future land uses within areas where the potential risk of aircraft accidents is a concern.

The safety compatibility factor defines safety compatibility zone boundaries and policies for the SDIA ALUCP and the impact of such policies on future land uses in the surrounding environs. The ultimate goal is to protect the lives of people on the ground and ensure that vulnerable populations are not located within proximity to the Airport.

Safety Guidance

Federal Aviation Administration (FAA) Guidance

The Federal government does not have jurisdiction over land use planning, and specifically over safety compatibility planning around airports. There are, however, federal regulations that provide some level of land use restriction related to safety in the immediate runway environment, mainly within airport property boundaries.

State of California Education Code

The California State Education Code Section 17215 places conditions on the acquisition of sites for school development or expansion. The conditions apply to school districts and charter schools seeking to use state or local funds to acquire sites within two nautical miles of any existing or planned runway documented in an airport master plan. Boards proposing to buy or lease such a site must submit a notice of acquisition to the State Department of Education who then notifies the California Department of Transportation (Caltrans) Division of Aeronautics. Within 30 days of receiving the notice, Caltrans will investigate the site, and release a written report detailing its findings including a recommendation regarding whether or not to acquire the site. If the Caltrans findings do not support the site acquisition, then the school board or charter school may not acquire or lease the site for development. If the Caltrans report favors the acquisition, then the school board or charter school may purchase or lease the site after holding a public hearing.

Caltrans Handbook Guidance

The Caltrans Airport Land Use Planning Handbook (the Handbook) provides guidance on establishing airport safety compatibility policies and the recommended geometry of safety compatibility zones. The geometric configuration of the Caltrans safety compatibility zones is based on aeronautical data including aircraft flight patterns, runway length and near-airport aircraft accident location patterns. The safety compatibility zones for large air carrier airports, such as SDIA, assume use of the runway by high performance commercial aircraft and minimal use by light general aviation aircraft activity. Caltrans defines five basic compatibility zones and the nature of aircraft activity within those zones as applicable to large air carrier airports, including SDIA. Table 1 provides details on both.

Table 1

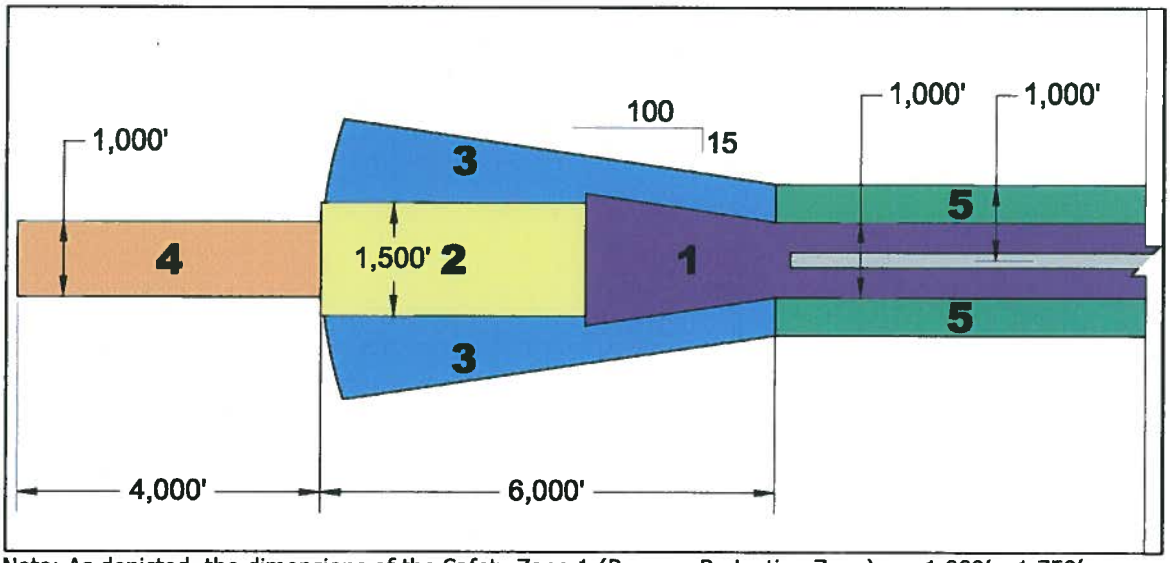
Nature of Aircraft Activity Within Each Safety Zone

Safety Zones	Aircraft Activity
Safety Zone 1: Runway Protection Zone (RPZ)	Aircraft on final approach or departure
Safety Zone 2: Inner Approach/Departure Zone	Aircraft at low altitudes on final approach and straight-out departures
Safety Zone 3: Inner Turning Zone	Aircraft initiating turn to en-route direction on departure
Safety Zone 4: Outer Approach/Departure Zone	Aircraft on instrument approaches and straight-out departures
Safety Zone 5: Sideline Zone	Not normally overflown; primary risk is with aircraft losing directional control on takeoff due to excessive crosswind gusts or loss of one engine

Exhibit 1 depicts the basic configuration of the safety zones as provided in the Handbook.[1]

Exhibit 1

Standard Caltrans Safety Zones



Note: As depicted, the dimensions of the Safety Zone 1 (Runway Protection Zone) are 1,000' x 1,750' x 2,500'; these dimensions may be adjusted based on each airport's approach types and approved RPZ dimensions.

Caltrans published an updated Airport Land Use Planning Handbook in November 2011. Guidance related to the configuration of safety zones in the 2011 Handbook remains identical to that provided in the 2002 Handbook.

The 2011 Handbook provides a four-way classification of the compatibility of land uses within each safety zone, as follows:

- Normally Allow: use is acceptable within the safety zone;
- Limit: use is acceptable within the safety zone only if density/intensity restrictions are met;
- Avoid: use generally should not be permitted within the safety zone unless no feasible alternative is available; or
- Prohibit: use should not be permitted within the safety zone under any circumstances. [2]

Consistent with the 2002 edition, the 2011 Handbook provides the following list of risk-sensitive uses (referred to as uses with vulnerable occupants): schools, hospitals, nursing homes and assisted living facilities.[3] In addition, the 2011 Handbook discusses

[1] State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, Chapter 3 "Building an Airport Land Use Compatibility Plan", p. 3-19, October 2011.
[2] State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, Chapter 4 "Developing Airport Land Use Compatibility Policies", p. 4-18, October 2011.
[3] State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning*

high-risk uses such as hazardous materials manufacturing or storage, and public infrastructure (power plants, fire or police stations, and emergency communications facilities). The Handbook advises that these especially high-risk or sensitive land uses should be given special attention in establishing safety compatibility criteria for any given airport.

Consistent with the 2002 edition, the 2011 Handbook advises maximum limits on the number of people occupying land uses that should be "limited" within a safety zone:

- For residential uses, these limits are expressed in terms of dwelling unit density – the number of dwellings per gross acre.
- For non-residential uses, the limits are expressed in terms of "intensity" – the average number of people occupying the land use per gross acre.

As in the 2002 Handbook, the 2011 Handbook suggests that the density and intensity limits should be varied depending on the character of the airport environs. Density and intensity limits are suggested for four types of airport environs, as follows:

- Rural: areas where the predominant land uses are natural or agricultural; buildings are widely scattered.
- Suburban: areas characterized by low-rise (1-2 story) development and surface parking lots.
- Urban: areas characterized by mid-rise (up to 5 stories) development; generally surface vehicle parking, but potentially some parking structures.
- Dense Urban: city core areas characterized by extensive mid- and high-rise buildings, often with 100 percent lot coverage and limited surface parking.[4] This fourth category was not included in the 2002 Handbook.

Current SDIA ALUCP Safety Policy

RPZs Subject to FAA Safety Criteria

The current SDIA ALUCP, last amended in 2004, addresses safety compatibility concerns by seeking to prevent incompatible development within the RPZs. Uses specified by the ALUCP as compatible within the RPZs include undeveloped areas, airport storage facilities, parking areas and road and utility right-of-ways. The current SDIA ALUCP relies mainly on land use regulations adopted and implemented by the City of San Diego – the Airport Approach Overlay Zone (AAOZ) – to prevent the development of incompatible land uses within portions of the RPZs off airport property. The AAOZ boundary was established to limit the heights of structures to avoid obstacles within the approaches to each runway end.

Hazardous Uses Prohibited within RPZ

The Airport Environs Overlay Zone (AEOZ) was adopted by the City of San Diego to provide noise and safety compatibility development regulations for lands in the

Handbook, Chapter 4 "Developing Airport Land Use Compatibility Policies", p. 4-30, October 2011.
[4] State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, Chapter 4 "Developing Airport Land Use Compatibility Policies", p. 4-17, October 2011.

immediate vicinity of SDIA.[5] The AEOZ requires that new development adhere to the current ALUCP compatibility criteria for the RPZs. This effectively prevents the development of new hazardous uses within the RPZs.

Previous ATAG/SDIA Subcommittee Work

The SDIA Subcommittee of the ALUCP Technical Advisory Group (ATAG) met from 2006-2007 to consider potential policies for the updated SDIA ALUCP. At the end of 2007, work on the SDIA ALUCP was suspended so that the ATAG could focus on completion of the five urban airport ALUCPs.

The SDIA Subcommittee had very few discussions related to safety compatibility policies for the SDIA ALUCP, so no final recommendations were made to the ALUC.

Current Technical Analysis – Safety Zones

Exhibit 2 depicts the example safety zones from the Handbook applied to SDIA. The Handbook suggests that these safety zones may be adjusted to "reflect characteristics of a specific airport runway."[6] Accordingly, adjustments have been made to the Safety Zone 1 to correspond to the actual RPZ on each end of Runway 9-27. The RPZs at SDIA are keyed to the ends of the displaced runway thresholds rather than to the ends of the runway available for takeoff. Note, however, that the outer boundary of Safety Zone 1 off the east end of the runway is adjusted to reflect the portion of the Object Free Zone (OFZ) that extends beyond the RPZ. Safety Zones 2, 3, 4, and 5 are all tied to the actual runway ends, consistent with Handbook guidance.

Exhibits 3 and 4 depict the Caltrans safety zones applied to SDIA superimposed on maps of radar flight tracks. Each flight track depicts the path of a single aircraft operation – either an approach or a departure. The data represent all operations recorded by the Airport's Aircraft Noise and Operations Monitoring System (ANOMS) during a 12-month period ending May 31, 2011. During that period, 185,090 operations were recorded by the system. Exhibit 3 features arrival and departure tracks for jets and multi-engine propeller aircraft in a west flow operating configuration. This configuration is used approximately 97 percent of the time. Exhibit 4 shows flight tracks for an east flow configuration. This configuration is used approximately 3 percent of the time.

These exhibits also show the generalized instrument arrival and departure courses with green and red arrows. The green arrows represent generalized instrument approach courses aligned with Runway 9-27. Note how, within two to three miles from both runway ends, the great majority of arrival flight tracks are clustered along a pathway aligned with the runway centerline, forming a distinct arrival corridor. Red arrows represent standard instrument departure courses and represent the generalized pathways that aircraft follow when climbing toward the published Standard Instrument

[5] San Diego Municipal Code, Chapter 13, Article 2, Division 3, §132.0301, et seq.
[6] State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, Figure 9L *Safety Compatibility Zone Examples*, January 2002. pp. 9-40.

Exhibit 2
Standard Caltrans Safety Zones

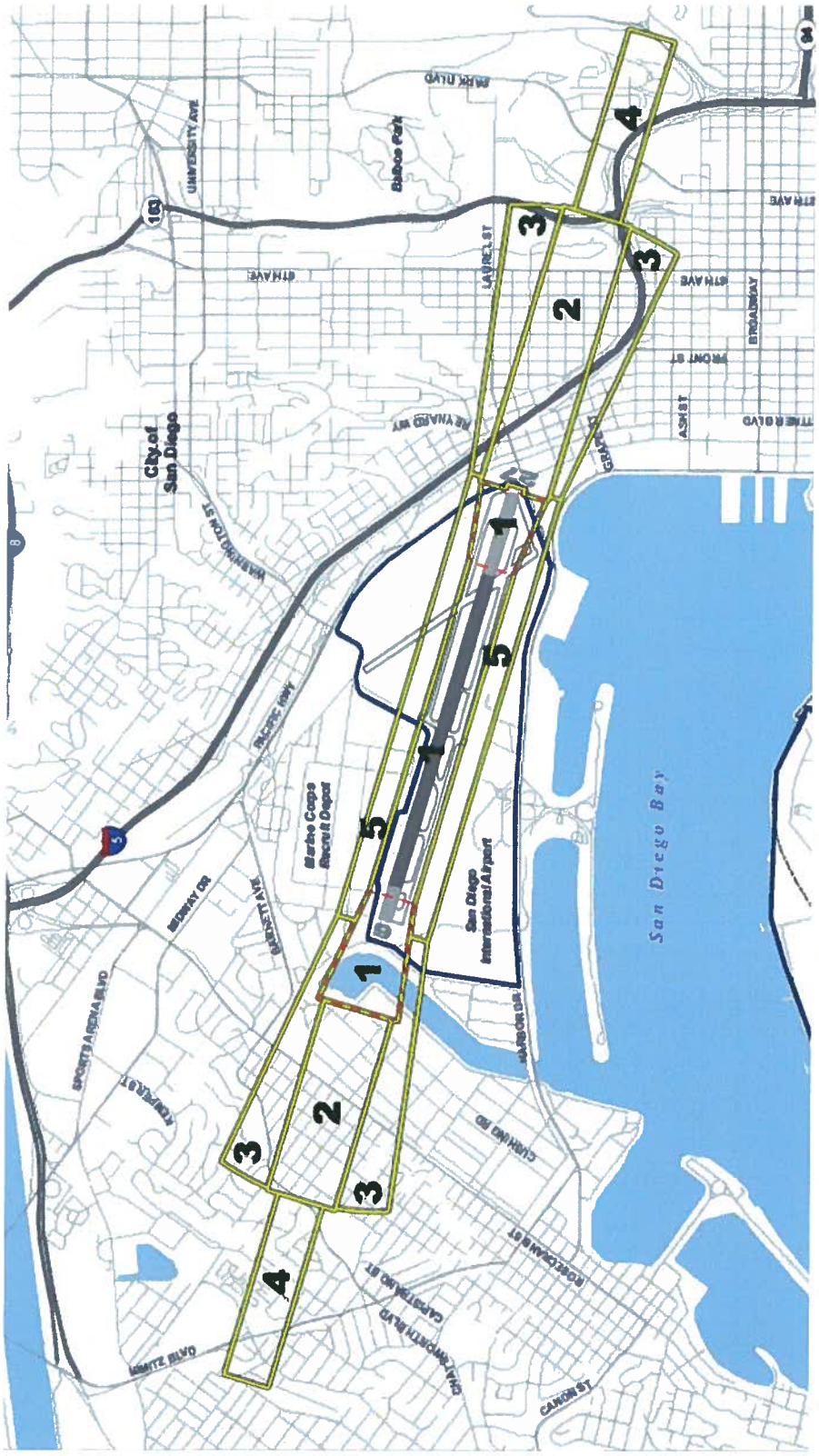


Exhibit 3

Standard Caltrans Safety Zones

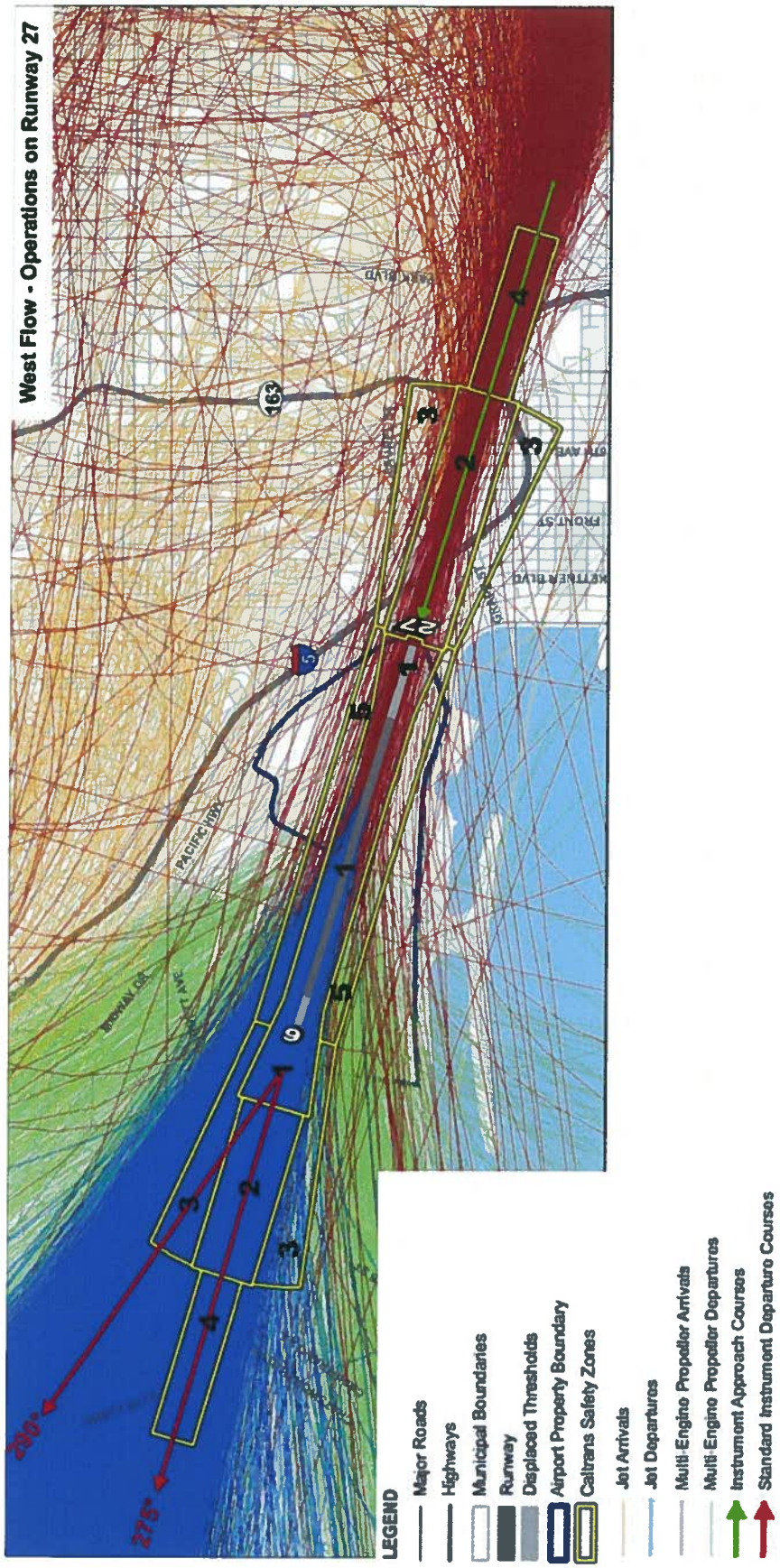
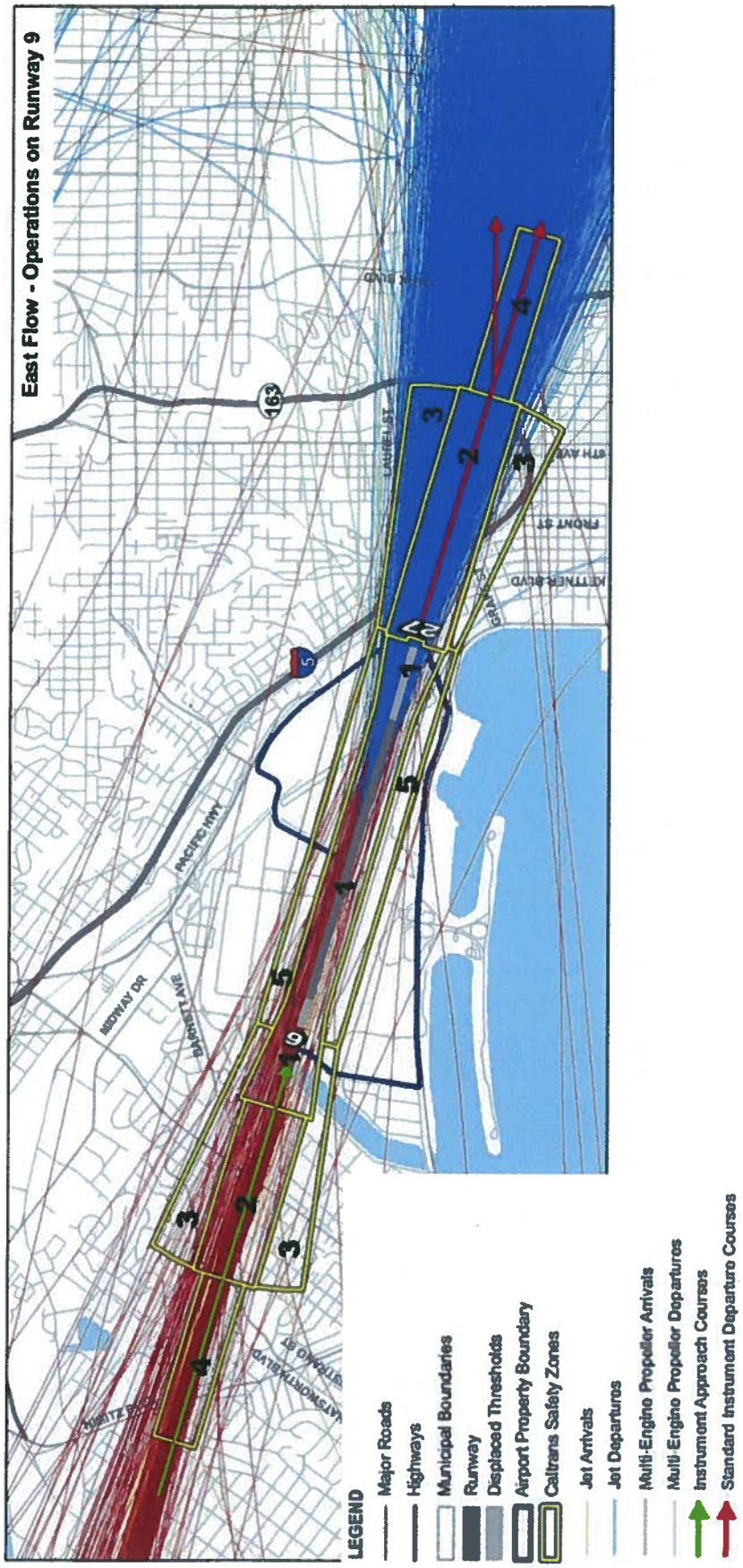


Exhibit 4

Standard Caltrans Safety Zones



Departure (SID) checkpoints, following the 275° and 290° headings. As depicted, the vast majority of jet departure flight tracks are heavily concentrated in limited areas on each side of the Airport. On the west side, jet departures are concentrated between the 275° and 290° headings. The slower propeller aircraft departures, as depicted in green, are often assigned other routes and headings by air traffic control to safely separate them from the faster jets. Departures toward the 250° (toward the southwest) and 310° (toward the northwest) headings often assigned by air traffic control are clearly depicted by the green multi-engine propeller departure flight tracks.[7]

An abbreviated terminology is used to refer to each safety zone. For instance, the Safety Zone 2 on the east side of the runway (Runway 27 end) is referred to as SZ 2E. Similarly, the Safety Zone 4 on the west side of the runway (Runway 9 end) is referred to as SZ 4W.

Based on guidance contained in Table 9A of the Handbook "Safety Zone Adjustment Factors - Airport Operational Variables", safety zone boundaries may be adjusted to "take into account various operational characteristics of a particular airport runway." Accordingly, adjustments were considered based on instrument procedures and associated flight tracks.

Except for a few areas discussed in the next paragraph, the Caltrans safety zones provide adequate coverage for the areas subject to frequent close-in arrival and departure activity, as follows:

Safety Zone 1 "Runway Protection Zone": On both sides of the Airport, SZ 1 provides adequate coverage of flight tracks under both east and west flows. On the west end it extends 2,500 feet (0.47 miles) from its base and 2,700 feet (0.51 miles) from the displaced Runway 9 threshold. On the east side it extends 1,810 feet (0.34 miles) from its base and 2,010 feet (0.38 miles) from the displaced Runway 27 threshold.

Safety Zone 2 "Inner Approach/Departure Zone": On both sides of the Airport, SZ 2 provides adequate coverage of the dense clusters of flight tracks under both east and west flows. On the west end, it extends 4,200 feet (0.80 miles) from the western edge Safety Zone 1 and 6,900 feet (1.31 miles) from the displaced Runway 9 threshold. On the east end, it extends 6,000 feet (1.14 miles) from the eastern edge of Safety Zone 1 and 8,010 feet (1.52 miles) from the displaced Runway 27 threshold.

Safety Zone 3 "Inner Turning Zone": On the east side of the Airport, both SZ 3s (referred to as SZ 3E South and SZ 3E North) provide adequate coverage, under both east and west flows, although fewer flight tracks appear under the SZ 3E South than under SZ 3E North. On the west end, it extends 6,000 feet (1.14 miles) from the western edge of the OFZ and 6,900 feet (1.31 miles) from the displaced Runway 9

[7] Currently, propeller aircraft account for approximately 12% of all operations. That share is forecasted to decline to 4% by 2030.

threshold. On the east end, it extends 6,000 feet (1.14 miles) from the end of the OFZ and 8,010 feet (1.52 miles) from the displaced Runway 27 threshold.

On the west side of the Airport, SZ 3W South provides adequate coverage, under both east and west flows. However, as depicted on Exhibit 5, for west-flow departures on Runway 27, the Caltrans safety zone layout of the SZ 3W North does not cover the dense departure flight track patterns following the 290° heading.

Safety Zone 4 "Outer Approach/Departure Zone": SZ 4E provides adequate coverage as flight tracks are densely clustered underneath this safety zone in both east and west flows. SZ 4W provides adequate coverage of the departure flight tracks located along the 275° heading corridor. On the west end, it extends west 4,000 feet (0.76 miles) from the western edge of Safety Zone 2 and 10,900 feet (2.07 miles) from the displaced Runway 9 threshold; extends northwest 4,000 feet (0.76 miles) along the center line of the 290° heading from end of western edge of Safety Zone 3. On the east end, it Zone 4 extends west 4,000 feet (0.76 miles) from the eastern edge of Safety Zone 2 and 12,010 feet (2.27 miles) from the displaced Runway 27 threshold.

However, as depicted on Exhibit 5, SZ 4W does not cover the dense cluster of jet departures along the 290° heading.

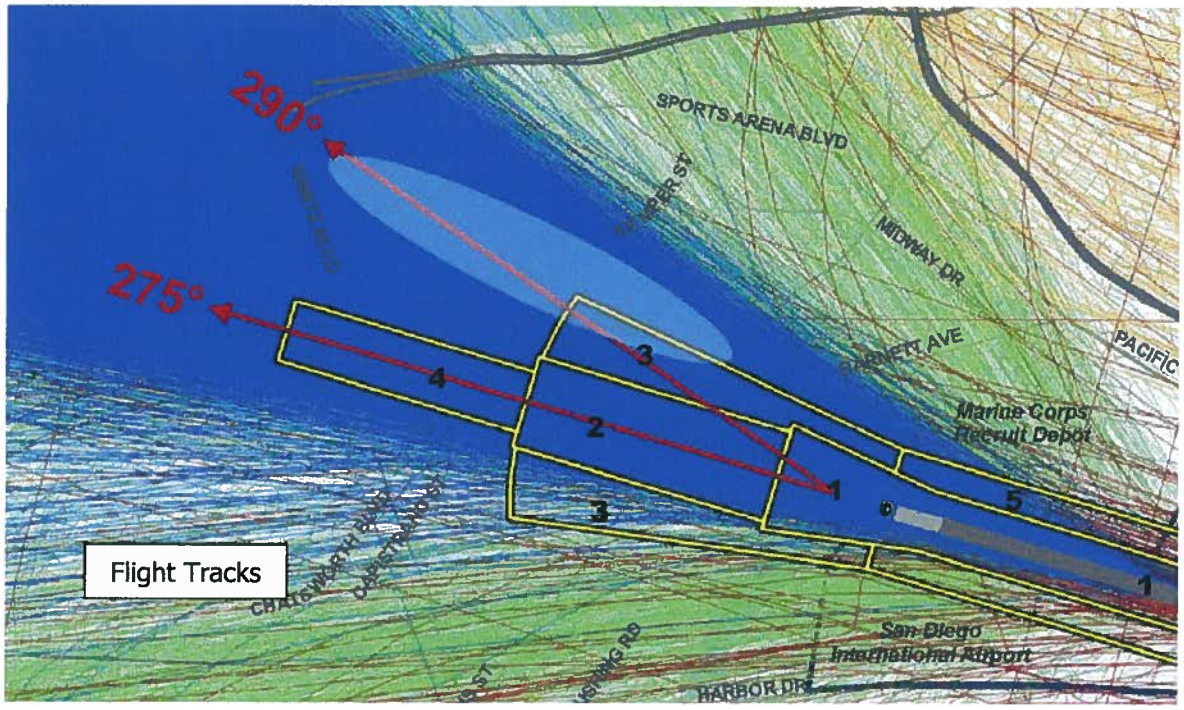
Safety Zone 5 "Sideline Zone": Both SZ 5s provide adequate coverage, as applied to SDIA, acknowledging the infrequent aircraft activity over these zones. The two SZ 5s are 500 feet wide (as measured from SZ 1) and 9,800 feet (1.86 miles) long.

As depicted on Exhibit 6, the following adjustments are recommended to provide adequate coverage for the 290° heading corridor as well as the 275° corridor:

> SZ 3W North: to provide adequate coverage along the 290° heading corridor, SZ 3W North is extended or "fanned" further to the north. Its northern corner is set at the same distance from the nominal centerline of the 290° corridor as it would be from the extended runway centerline using the standard Caltrans configuration for SZ3 (1,879 feet).
>
> SZ 4W North: to provide adequate coverage, SZ 4 West is also "fanned" along the nominal centerline of the 290° corridor and is based on the same dimensions as the standard Caltrans SZ 4 but is filled in the middle to cover the flight tracks/density in that area.

Exhibit 5

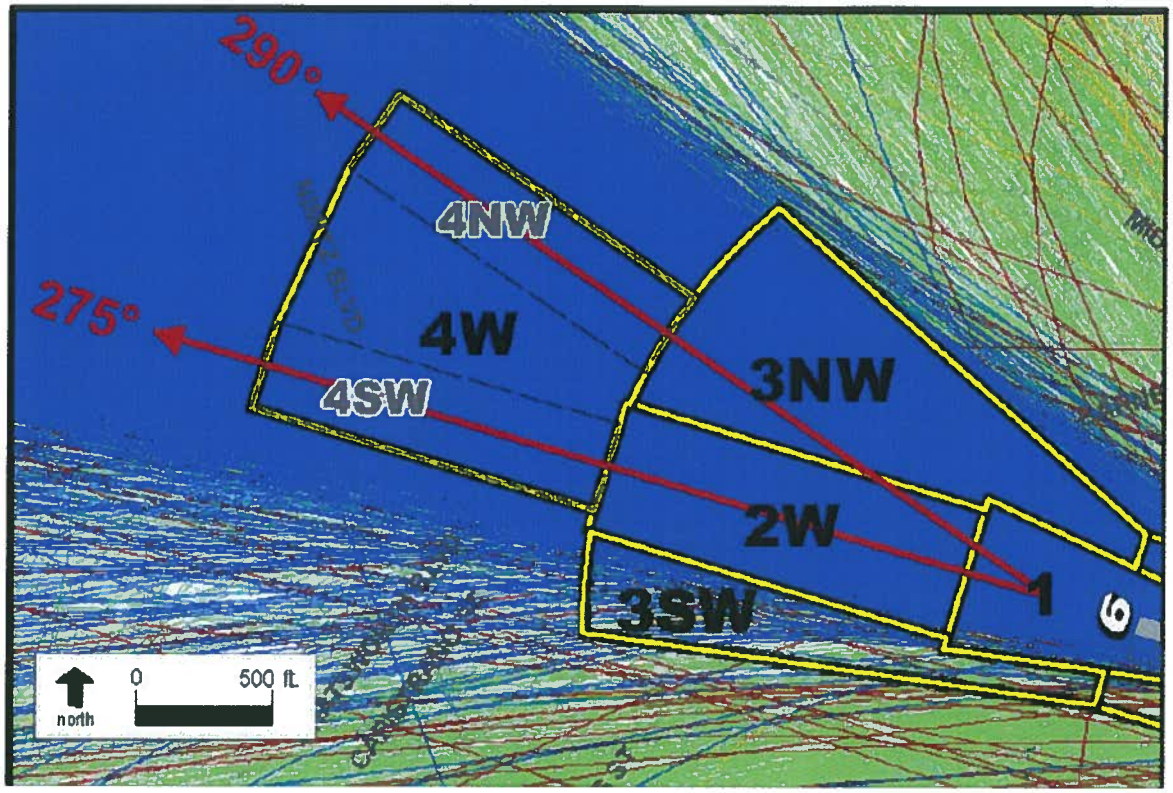
Area Along 290° Heading Corridor Not Covered by Standard Safety Zones 3 and 4



Proposed Safety Zones
Former Proposed Safety Zone Boundaries
Jet Arrivals
Jet Departures
Multi-Engine Propeller Arrivals
Multi-Engine Propeller Departures
Instrument Approach Courses
Standard Instrument Departure Courses

Exhibit 6

Proposed Adjusted SZ 3W North and SZ 4W North



Proposed Safety Zones
Former Proposed Safety Zone Boundaries
Jet Arrivals
Jet Departures
Multi-Engine Propeller Arrivals
Multi-Engine Propeller Departures
Instrument Approach Courses
Standard Instrument Departure Courses

Proposed Safety Compatibility Matrix

This section provides the proposed safety compatibility matrix/policies (Table 2) to be incorporated in the draft ALUCP.

Table 2

Safety Compatibility Criteria

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses																			
	Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	‡	96											‡	240						
Centre City - Cortez	‡	96					99	461						240						
Centre City - East Village													‡	240						
Centre City - Little Italy	40	266					123	213											‡	180
Midway - Pacific Highway	46	162			‡	180			45	180							‡	180		
Ocean Beach															31	240				
Peninsula - NTC			‡	116					‡	180	‡	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

Land Use Category [6]	Safety Zones					Conditions	Occupancy Factor [1]
	1	2	3	4	5		
RESIDENTIAL							
Single-Family, Multi-family						Zones 2, 3, 4: Allow in areas designated for residential use in the applicable Community Plan, subject to the dwelling unit density limits shown above.	N/A
Single Room Occupancy (SRO) Facility [2]						Zones 2, 3, 4: Allow if development intensity does not exceed the NR limits shown above.	200
Group Quarters [2]						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	100
COMMERCIAL, OFFICE, SERVICE, TRANSIENT LODGING							
Hotel, Motel, Resort						Zone 2: Allow if no more than 56 rooms per acre and no conference facilities. Zones 3, 4: Allow if development intensity does not exceed the NR limits.	200
Office - Medical, Financial, Professional Services, Civic						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	215
Retail/Wholesale - Low-Intensity (e.g., Furniture, Lumber and Home Improvement, Nursery)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	250
Retail - Medium Intensity (e.g., Convenience Market, Drug Store, Pet Store)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	170
Retail - High Intensity (e.g., Clothing, Discount Store, General Merchandise, Supermarket, Toys)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	120
Service - Low-Intensity (e.g., Auto Service Station, Car Wash, Check-cashing, Veterinary Clinics)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	200
Service - High Intensity (e.g., Eating, Drinking Establishment, Funeral Chapel, Mortuary)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	60
Sport/Fitness Facility						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	60
Theater - Movie and Live Performance						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	60

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses (Safety Zones)																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	*	96											*	240						
Centre City - Cortez	*	96					99	461						240						
Centre City - East Village													*	240						
Centre City - Little Italy	40	266					123	213											*	180
Midway - Pacific Highway	46	162			*	180			45	180							*	180		
Ocean Beach															31	240				
Peninsula - NTC			*	116					*	180	*	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

Land Use Category*	Safety Zones 1	2	3	4	5	Conditions	Occupancy Factor[3]
INDUSTRIAL							
Junkyard, Dump, Recycling Center							N/A
Manufacturing/Processing - General						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	300
Manufacturing/Processing of Biomedical Agents, Biosafety Levels 3 and 4 Only[4]							N/A
Manufacturing/Processing of Hazardous Materials[5]						Zone 4: Allow if development intensity does not exceed the NR limits shown above. Zone 5: Allow only if needed for airport/aviation-related purpose, provided that development intensity does not exceed the NR limits shown above.	300
Mining, Extractive Industry						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	1000
Research and Development - Scientific, Technical						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	300
Sanitary Landfill							N/A
Self-storage Facility							N/A
Warehousing/Storage - General							1000
Warehousing/Storage of Biomedical Agents, Biosafety Levels 3 and 4 Only[4]							N/A
Warehousing/Storage of Hazardous Materials[5]						Zone 4: Allow if development intensity does not exceed the NR limits shown above. Zone 5: Allow only if needed for airport/aviation-related purpose, provided that development intensity does not exceed the NR limits shown above.	1000
TRANSPORTATION, COMMUNICATION, UTILITIES							
Auto Parking						Zone 1: Structures not permitted. Allow surface lots only in "controlled activity area" outside the "central portion" of RPZ, per FAA AC 150/5300-13, Section 212.a.(2)(a) and Figure 2-3. Dedication of avigation easement to Airport operator is required for portion of use in Zone 1.	N/A
Electrical Power Generation Plant							N/A
Electrical Substation							N/A
Emergency Communications Facilities							N/A
Marine Cargo Terminal							N/A
Marine Passenger Terminal						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	200

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses — Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	‡	96											‡	240						
Centre City - Core	‡	96					99	461						240						
Centre City - East Village													‡	240						
Centre City - Little Italy	40	266					123	213											‡	180
Midway - Pacific Highway	46	162			‡	180			45	180							‡	180		
Ocean Beach															31	240				
Peninsula - NTC			‡	116					‡	180	‡	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

Land Use Category*	Safety Zones 1	2	3	4	5	Conditions	Occupancy Factor[1]
Transit Center, Bus/Rail Station						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	200
Transportation, Communication, Utilities - General						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	1000
Truck Terminal							N/A
Water, Wastewater Treatment Plant						Zones 3, 4: Allow only if no alternative sites outside the zones are available and feasible for development.	1000
EDUCATIONAL, INSTITUTIONAL, AND PUBLIC SERVICES							
Cemetery							N/A
Child Day Care Center (greater than 14 children)							N/A
Convention Center						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	110
Fire and Police Stations						Zone 5: Allow only if needed to provide emergency services at Airport.	215
Jail, Prison							N/A
Library, Museum, Gallery						Zone 2: Allow if capacity is less than 50 people and intensity does not exceed the NR limits shown above. Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	170
Medical Care - Congregate Care Facility, Nursing and Convalescent Home							N/A
Medical Care - Hospital							N/A
Medical Care - Out-Patient Clinics						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	215
Medical Care - Out-Patient Surgery Centers							N/A
Public Assembly (religious, fraternal)						Zone 2: Allow if capacity is less than 50 people and intensity does not exceed the NR limits shown above. Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	60
School for Adults – College, University, Vocational/Trade School						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	60
School for Children – Pre-K through Grade 12							N/A
RECREATION, PARK AND OPEN SPACE							
Arena, Stadium							N/A

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses — Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	#	96											#	240						
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Midway - Pacific Highway	46	162			#	180			45	180							#	180		
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Peninsula - NTC			#	116					#	180	#	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

Land Use Category [4]	Safety Zones 1	2	3	4	5	Conditions	Occupancy Factor[1]
Golf Course						Zone 1: Allow only in "controlled activity area" outside the "central portion" of RPZ, per FAA AC 150/5300-13, Section 212.a.(2)(a) and Figure 2-3. Dedication of avigation easement to Airport operator is required for portion of use in Zone 1.	N/A
Golf Course Clubhouse						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	170
Marina						Zones 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	170
Park, Open Space, Outdoor Recreation						Zone 1: Structures not allowed. Allow nonstructural uses only in "controlled activity area" outside the "central portion" of RPZ, per FAA AC 150/5300-13, Section 212.a.(2)(a) and Figure 2-3. Dedication of avigation easement to Airport operator is required for portion of use in Zone 1.	N/A
AGRICULTURE							
Aquaculture							N/A
Crops						Zone 1: Allow only if it does not attract wildlife, including flocking birds, per FAA AC 150/5300-12, Sections 202.g. and 212.a.(2)(a). Dedication of avigation easement to Airport operator is required for portion of use in Zone 1.	N/A

LEGEND

	Compatible Use: Use is permitted.
	Conditional Use: Use is permitted subject to stated conditions.
	Incompatible Use: Use is not permitted under any circumstances.
	No part of the Community Planning Area or neighborhood is in the Safety Zone
R	NR permitted residential density, in dwelling units per acre
NR	NR permitted nonresidential intensity, in persons per acre
#	No dwellings are in the portion of the CPA or neighborhood within the indicated Safety Zone. No new dwellings are permitted in the portion of the CPA or neighborhood within the indicated Safety Zone unless the parcel was designated for residential use in the community plan as of the effective date of the ALUCP.

NOTES

1	Occupancy factor expressed as square feet per person for nonresidential uses in structures. The occupancy factor is used to estimate the average intensity of proposed nonresidential uses. N/A means "not applicable," since the land use does not involve the construction of habitable, nonresidential buildings.
2	While this is classified as a residential use, it does not include conventional dwelling units. Thus, only the NR intensity limits apply.
3	Hazardous materials include: (1) aboveground fuel storage with tank capacities above 10,000 gallons; (2) toxic materials in quantities exceeding the threshold planning quantities established by the U.S. Environmental Protection Agency; (3) more than 50 pounds of explosives; (4) medical and biological facilities qualifying as Biosafety Level 2 facilities.
4	Biosafety Level 3 facilities handle agents that cause serious or potentially lethal disease through inhalation. Biosafety Level 4 facilities handle agents that cause life-threatening disease and for which there are no vaccines or treatments.

Coordination Efforts/Range of Thinking

ALUC staff met with the potentially affected local agencies (CCDC, City of San Diego, and the Unified Port of San Diego) on August 3, October 26, and November 8, 2011 to discuss the approach to developing safety zones for SDIA as well as the draft matrices and policies in preparation for the September 29 and November 17, 2011 Steering Committee meetings.

The September 29, 2011 meeting focused on how Caltrans developed their recommended safety zones and how they would be applied to SDIA. Comments and suggestions were made by attendees related to the potential fanning of the zones on the west end of the runway as well as the need for SZ 3SE (discussed further below).

A second safety Steering Committee meeting was held November 17, 2011. Staff discussed the October 2011 release of the Caltrans Handbook Update and the fact that the standard safety zone configurations did not change. However, how to limit uses within those zones did change. Draft safety matrices that took these changes into account were presented to the Steering Committee and comments and suggestions were made. The matrices presented in this staff report address those comments/suggestions.

Safety Zone Input

The Steering Committee supports adjusting SZ 3NW and SZ 4NW as depicted in Exhibit 6. The Steering Committee questioned the need for SZ 3SE, given the lack of aircraft activity and published flight procedures do not direct aircraft to fly over this area.

General Counsel and ALUC staff met with Caltrans staff and Counsel on January 18, 2012 to discuss the possibility of eliminating SZ 3SE due to the following findings:

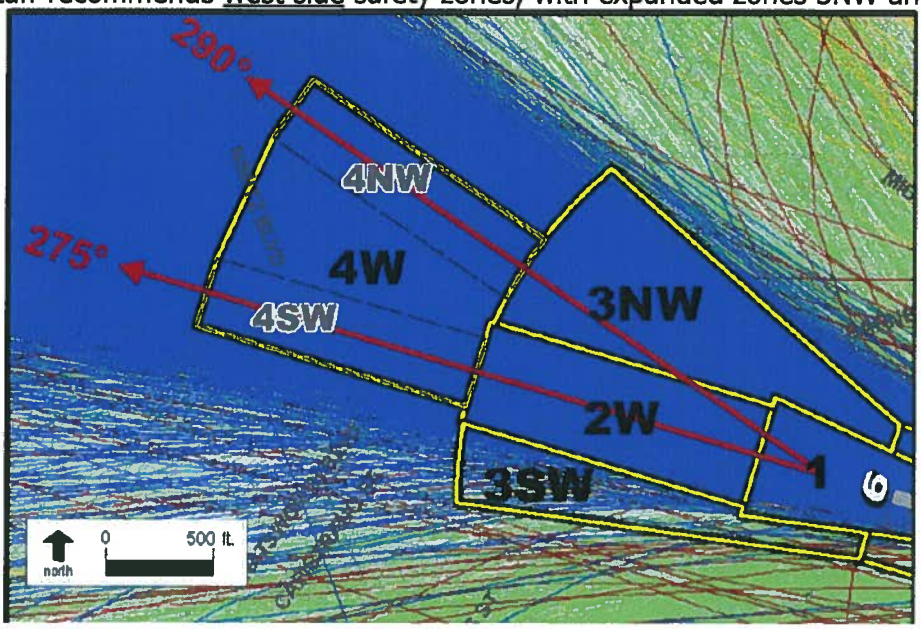
- Zone 3 is an Inner Turning Zone designed to protect for Aircraft initiating turns to en-route directions on departure. SDIA operates under east flow procedures (departures and arrivals on Runway 9) approximately 3.5 percent of the time annually. Therefore, only a fraction of this percentage accounts for departures on Runway 9 heading east.
- Published VFR procedures direct pilots to avoid approaches over downtown and to avoid close-in right turns on departure.
- Instrument procedures direct aircraft to fly on runway centerline for extended distances or turn left on departure.
- In 2011 SDIA had less than 30 total operations in the area defined as SZ 3SE.

Caltrans responded that safety zones as depicted in the Handbook are a minimum and cannot be eliminated. They did say that it may be possible for SDIA to adjust policies within the zone if findings are made to support the proposed policies.

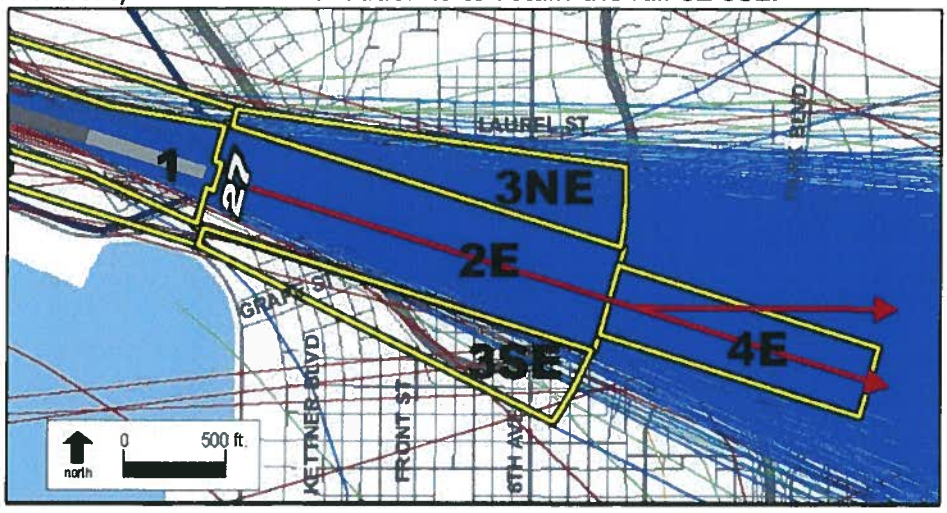
At that time, it was the opinion of two members of the Committee that SZ 3SE should be eliminated regardless of Caltrans input.

Staff Recommendation

- Staff recommends west side safety zones, with expanded zones 3NW and 4W.



- Although staff agrees with the Steering Committee that there is limited basis for keeping SZ 3SE on the east side, Caltrans will not support the elimination of this zone. Consequently, General Counsel has advised staff that significant legal risk would occur if the zone was eliminated contrary to Caltrans' guidance. Therefore, staff recommendation is to retain the full SZ 3SE.



- Staff also recommends approval of safety policies as shown in Table 2.

List of Attendees Who Signed In for the September 29, 2011 Meeting

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
September 29, 2011

Name	Affiliation	Email Address (If you want to be placed on distribution list)
John G Wotzka	Self-Public	johnwotzka@gmail.com
George Condon	staff	
Leo Wilson	Coleman Planes	leo.wilsonsr@sbcglobal.net
M. Seidel	Uptown Planners	seidel2@cox.net
Paul Webb	Peninsula Planning Board	pbwebb3@cox.net
John Ziebarth	AIA	john@ziebarth.com
Amy Gonzalez	SDCRAA	agonzale@san.org
Michael Patton	SD City Council D2	MPatton@sandiego.gov
Candice D. Magnus	Port of SD	cmagnus@portofsandiego.org

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
September 29, 2011

Name	Affiliation	Email Address (If you want to be placed on distribution list)
JOSHUA L. CLEAVER	STUDENT AT THOMAS JEFFERSON SCHOOL OF LAW	
DAVID HULSE	NAVFAC	
HUGO CARVER	UNDATED CONCERNED CITIZEN	MARTIECARVER@YAHOO.COM
Garret Hollarn	SDCRAA	
Jim McCollum	SOLAR TURBINES	ON FILE
Ann McCaull	Coronado	
Louis Misko	MiskoConsulting	Louis@MiskoConsulting.com

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
September 29, 2011

Name	Affiliation	Email Address (If you want to be placed on distribution list)
Neil Hyytinen	Chamber of Commerce	same as before
Amanda Lee	City of San Diego	ajohnsonlee@sandiego.gov
Tait Galloway	City of San Diego	tgalloway@sandiego.gov
Cynthia Conger	Peninsula	Seaportcynthia@aol.com

List of Attendees Who Signed In for the November 17, 2011 Meeting

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
November 17, 2011

Name	Affiliation	Email Address (If you want to be placed on distribution list)
Nan Valerio	League of Women Voters	navalerio@aol.com
John Wotzka	Self-Public	John.wotzka@gmail.com
Ann McCaull	Coronado	
JOHN ZIEBARTH	AIA	

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
November 17, 2011

Name	Affiliation	Email Address (If you want to be placed on distribution list)
Amanda Lee	City of San Diego	ajohnsonlee@sandiego.gov
Jim McCollum	Solar Turbines	on file
Candice D Magnus	Port of San Diego	cmagnus@portofsandiego.org
BRANDON NICHOLS	CCDC	BNICHOLS74@AOL.COM
Tait Galloway	City of S.D.	" on file
RICK BEACH	CAASD	"
Cynthia Conger	Peninsula	Seaportcynthia@aol.com

List of Attendees Who Signed In for the January 19, 2012 Meeting

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
January 19, 2012

Name	Affiliation	Email Address (if you want to be placed on distribution list)
John G Wotzka	Self - Public	johnwotzka@gmail.com
Paul B Webb	Peninsula Planning	
David Hunlee	NAVFAC	
George Condon	SDCRAA Staff	gcondon@san.org
John Zierarth	AIA	
Neil Haytmen	Chamber	
Tait Galloway	City of S.D.	
Brandon Nichols	CCDC	
J. M. McCollum	Solar Turbines	on file

SDIA ALUCP Steering Committee

PLEASE WRITE LEGIBLY
January 19, 2012

Name	Affiliation	Email Address (if you want to be placed on distribution list)
Ann McCauley	Coronado	same
Amanda Lee	San Diego	
Rick Beach	CAASD	on file
Mike Patton	CD2	MPatton@sandiego.gov

Fiscal Impact:

The SDIA ALUCP update program is funded through the Airport Planning FY12 operating budget. Adequate funds for the subject of this staff report are budgeted in the Airport Planning Department's FY12 operating budget, within personnel costs and professional (i.e. consultant) services.

Authority Strategies:

This item supports one or more of the Authority Strategies, as follows:

☒ Community Strategy ☒ Customer Strategy ☐ Employee Strategy ☐ Financial Strategy ☐ Operations Strategy

Environmental Review:

A. This ALUC presentation is not a project that would have a significant effect on the environment as defined by the California Environmental Quality Act (CEQA), as amended. 14 Cal. Code Regs. §15378. This ALUC presentation is not a "project" subject to CEQA, Cal. Pub. Res. Code §21065.

B. This ALUC presentation is not a "development" as defined by the California Coastal Act. Cal. Pub. Res. Code §30106.

Equal Opportunity Program:

Not applicable.

Prepared by:

KEITH WILSCHETZ
DIRECTOR, AIRPORT PLANNING

COMMUNICATION RECEIVED FROM THE PUBLIC

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

ALUC Communication

Date: February 29, 2012

To: Airport Land Use Commissioners

From: Angela Shafer-Payne, Vice President, Planning and Operations Division

Subject: Caltrans' Participation at March 1, 2012 ALUC Meeting

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At the February 9, 2012, meeting of the Airport Land Use Commission (ALUC), the ALUC requested that a member of Caltrans staff appear at the next meeting to answer questions regarding Caltrans' 2011 Airport Land Use Planning Handbook. Since that meeting, Authority staff has been working with Caltrans personnel to arrange for a knowledgeable Caltrans expert to attend the March 1 meeting. A conference call was held on Friday, February 24 to finalize their attendance. The conference call included Angie Jamison from the ALUC staff and several Caltrans staff, including Bill Figge, Chris Schmidt, Ron Bolyard and Raiyn Bain, Caltrans' general counsel in Sacramento.

Despite staff's efforts, Caltrans will not be sending a representative to speak to the ALUC. Instead, they prepared a letter that was forwarded to Authority staff today (attached). The letter attempts to address the various clarifying questions raised about the 2011 Handbook's conclusions by the ALUC and ALUC staff.

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS – M.S.#40
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY 711

Flex your power!
Be energy efficient!

February 29, 2012

Ms. Angela Jamison
Manager, Airport Planning
San Diego County Regional Airport Authority
P.O. Box 82776
San Diego, CA 92138-2776

Dear Ms. Jamison:

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), hereby provides comments regarding the proposal to eliminate or reduce Safety Zone 3SE at the San Diego International Airport (SDIA). On January 18, 2012 at Caltrans Headquarters, the Department met with San Diego County Airport Land Use Commission (ALUC) staff, Ms. Angela Jamison and Ms. Amy Gonzalez, and voiced its concerns regarding the elimination of safety zone 3SE based on potential safety issues. The Department also questioned the ALUC's analysis to eliminate or reduce safety zone 3SE based on its consultants recommendation that infrequent flight tracks and low accident occurrences sufficiently justify the removal of safety zone 3SE.

The Department also asked if an adequate inventory of vested and long-range land use proposals in zone 3SE, and the associated land use safety controls for these proposals, were provided to the ALUC. The Department's position is more detailed in the ALUC Staff Report dated February 9, 2012. This letter supports the ALUC staff recommendation against the elimination or reduction of safety zone 3SE and supports the ALUC staff recommendation not to eliminate safety zone 3SE. The Division's recommendation is consistent with established criteria and guidelines contained in the California Airport Land Use Planning Handbook (Handbook). This letter will also address a number of issues brought up at the February 9, 2012 ALUC meeting regarding the use of the Handbook and the creation of the safety zones contained in the Handbook.

The Division strongly supports public safety as the State has the duty to protect the public's interest in aeronautics and aeronautical progress by fostering and promoting safety at airports and the property within its vicinity. Protecting people and property on the ground from the potential consequences of near-airport aircraft accidents is a fundamental land use compatibility-planning objective. While the chance of an aircraft injuring someone on the ground is historically quite low, an aircraft accident is a high consequence event. To protect people and property on the ground from the risks of near-airport aircraft accidents, restrictions on land use are essential. Two prominent methods for reducing the risk of injury and property damage on the ground are to limit the number of persons in an area and to limit the area covered by occupied structures. The potential severity of an off-airport aircraft accident is highly dependent upon the nature of the land use at the accident site.

The Division maintains its public safety position and disagrees with SDIA's representations that the likelihood an aircraft accident is so minimal in the south east of the runway based on the localized low historic accident data or flight tracks that removal of this safety zone is warranted. The Division is unwilling to expose the public to the potential risk of an aircraft accident in such a dense and populated area by the elimination of zone 3SE. The State Aeronautics Act, codified in PUC § 21001 et seq., states that: "The San Diego County Regional Airport Authority shall engage in a public collaborative planning process when preparing and updating an airport land use compatibility plan." (Section 21670.3). The Department commends the open dialogue between ALUC and Division staff. However, the Division, at this time, maintains its position that despite historically low accident data and flight tracks in zone 3SE, there is still an inherent risk for a serious aviation accident so close to a runway in such a dense and populated area. The Division is mindful of numerous aircraft accidents, an example being the Southwest Airlines Flight 1455 aircraft accident at the Bob Hope Airport in Burbank, California, on March 5, 2000. The aircraft came to rest on a city street adjacent to a gas station. The NTS Board found that the incident was due to pilot error and the air traffic controller. Thus, even though there were no fatalities several passengers were seriously injured; the subject accident could have had catastrophic consequences. Thus, infrequent flight tracks do not guarantee that an aircraft accident will not occur.

Moreover, it is the responsibility of an ALUC to protect persons in the Airport Influence Area (AIA) and may use land use controls as one of its safety mitigation tools. Specifically, evidence to date is based on historical data and does not adequately include future land use planning objectives or land use controls. The Division continues to be concerned that the ALUC may not have been presented with a comprehensive understanding of future land use scenarios within zone 3SE and prescribed aviation safety measures.

At the February 9, 2012 ALUC meeting, questions were raised regarding the use of the Handbook and development of the safety zones described therein. The following is offered to help explain both.

Use of the Handbook
In 1994, a section was added to the State Aeronautics Act to require that: "An airport land use commission that formulates, adopts or amends a comprehensive airport land use plan shall be guided by...the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation" (PUC Section 21674.7). The addition of this statute changed the role of the Handbook from a useful reference document to one that must be used as guidance in the development of ALUC policies. This is particularly important in the development of safety compatibility policies because very little guidance is otherwise available for civilian airports.

To support the broad type of airports around the State, the Division assembled, and continues to update, the Handbook in a manner supportive of all public use airports regardless of commercial certification or general aviation designation from the Federal Aviation Administration (FAA). To this end,

> PUC § 21674.7 mandates that the Division update and publish the Handbook and the ALUC "*shall*" be guided by information prepared and updated contained in the Airport Land Use Planning Handbook to discourage incompatible land uses near existing airports. PUC §21674.7 (b) mandates local agencies *shall* be guided by the "height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division..." and

> "any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations..."

Thus, based on the above, if the criteria and guidelines in the Handbook are not utilized or incorporated, the ALUC and/or the local agencies require specific supporting evidence to authorize such a deviation. Moreover,

> "The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of an airport land use commissions...(2) The development of criteria for determining the airport influence area, and (3) The identification of essential elements that should be included in an airport land use compatibility plan..." (PUC § 21674.5)

The Handbook was intended to be applied to the broad range of public use airports around the State with each ALUC given the responsibility of applying the Handbook to its unique situation. The Division's role is to help ALUCs understand the contents and processes within the Handbook but not render local land use planning decisions. It is in this regard that we ask the ALUC if they are confident that they have received sufficient information regarding future land use scenarios to recommend the removal or reduction of a safety zone 3SE, regardless of the Department's opinion? To help guide this assessment, PUC Section 21675(d) and (e) state that the ALUC is required to submit one copy of the airport land use compatibility plan (ALUCP) and each amendment of the ALUCP to the Division. If an ALUCP does not include the matters required to be included pursuant to this article, the Division shall notify the ALUC responsible for the plan.

Updates to the Handbook
It is the Division's understanding that the Handbook and its data has been called into question because the Division does not support the removal or reduction of safety zone 3SE. Such a contention lacks merit and should be considered suspect. The Handbook was recently updated by the Division and published in October 2011. The Handbook update included input from a Technical Advisory Committee (TAC). The TAC representatives included Division of Aeronautics staff, consultants, 7 ALUC Staff members from throughout the state, 7 Airport Managers, and aviation experts from the FAA. The TAC met and reviewed the draft Handbooks and their comments were received and incorporated into what became the final Handbook. The Division also sent notice of the draft Handbook to every ALUC in the State, every City and County Planning Department and every Airport Manager. The Division also reached out to the public and had 3 public meetings where we presented the Handbook update process and received comments, answered questions and let the public know how they could further comment and be a part of the update. We received numerous comments and incorporated the comments as appropriate. While the Handbook update process does not require a response to comments report similar to that prepared for an Environmental Impact Report, all comments were considered by the TAC and the Handbook update preparation team.

Establishment of Safety Zones
The 2011 edition of the Handbook does not change the safety zones provided in the 2002 edition. Evidence from analysis of the limited new data gathered for the 2011 edition was insufficient to conclude that the geographic distribution of accidents has significantly changed during the past decade compared to the pattern from the 1983-1992 period that served as the basis for the safety zones in the 2002 Handbook.

Safety zones were first established after a 1952 Report of the President's Airport Commission first used accident location data to define the size and shape of clear zones. The Handbook safety zones are based on historical accident data recorded by the National Transportation Safety Board. The size and shape of the safety zones are based on this data, airport approach and departure characteristics, and runway length. There is a set of safety zones in the Handbook for large air carrier runways as well as smaller general aviation airports. The set of safety zones for large air carrier airports includes only 5 safety zones. The safety zones for a large air carrier airport have been modified from the general aviation safety zones, which normally include 6 safety zones, in consideration of the accident data and the type of operations that occur at one of these runways. For large commercial airports, there is not a safety zone 6 and safety zone 3 has been narrowed to account for the operational characteristics at this type of airport. Further reduction of any of these safety zones would not be appropriate as it is already represents the minimum set of zones proven necessary by national historic accident trends. It is essential to recognize that the route followed by an aircraft when in distress may not be a normal route following prescribed flight tracks. Aircraft accidents can occur in places seldom overflown by aircraft. For more information on the establishment of safety zones please reference Appendix E in the Handbook.

Summary
One of the main purposes of an ALUC is to advise the local decision makers on how best to safely accommodate land uses around an airport. One of the ways they do this is by the preparation of an ALUCP that considers current and future land uses around an airport. It is required by State law that the local governments make their General Plans consistent with the ALUCP. Should a local entity choose to adopt an ALUCP contrary to the guidance expressed in the Handbook, they may do so following PUC Sections 21675.1(d), 21676, and 21676.5, the overrule process. The overrule process preserves local agency's constitutional land use authority and local agency's ability to implement its plans and projects.

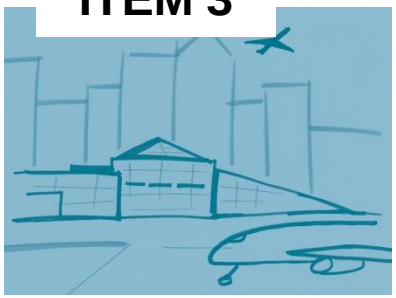
The Division continues to remain available to support the ALUC staff in their efforts to update SDIA's ALUCP. If you have further questions, please don't hesitate to contact me or my staff. I can be reached at (916) 654-4151.

Sincerely,

TERRY L. BARRIE, Chief
Office of Aviation Planning

c: Bill Figge, Caltrans District 11, Chris Schmidt, Caltrans District 11

ITEM 3



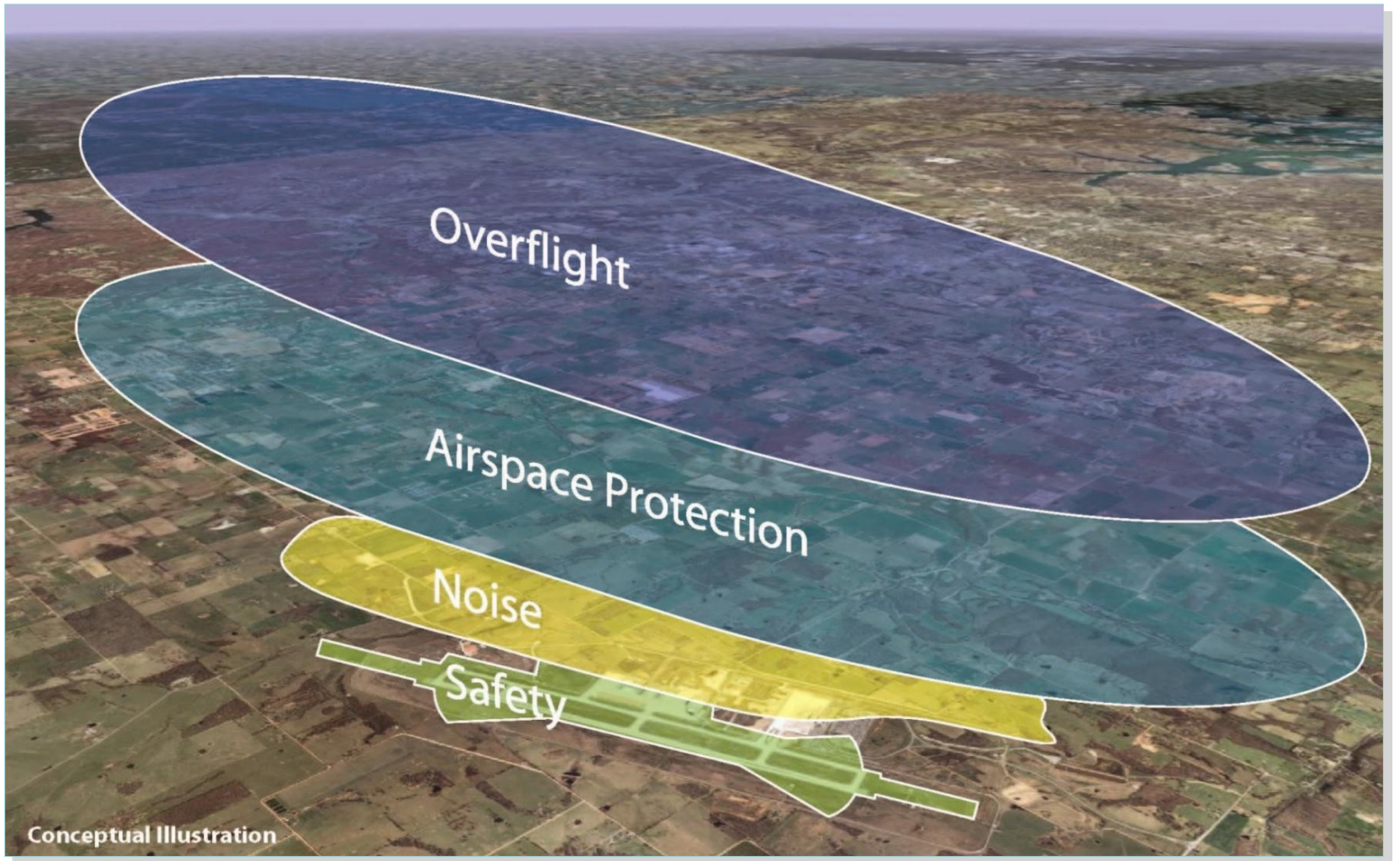
Safety Compatibility Factor

SAN DIEGO COUNTY
REGIONAL AIRPORT AUTHORITY

AIRPORT LAND USE COMMISSION
SAN DIEGO COUNTY

SAN.ORG

Compatibility Factors



Safety Compatibility Factor

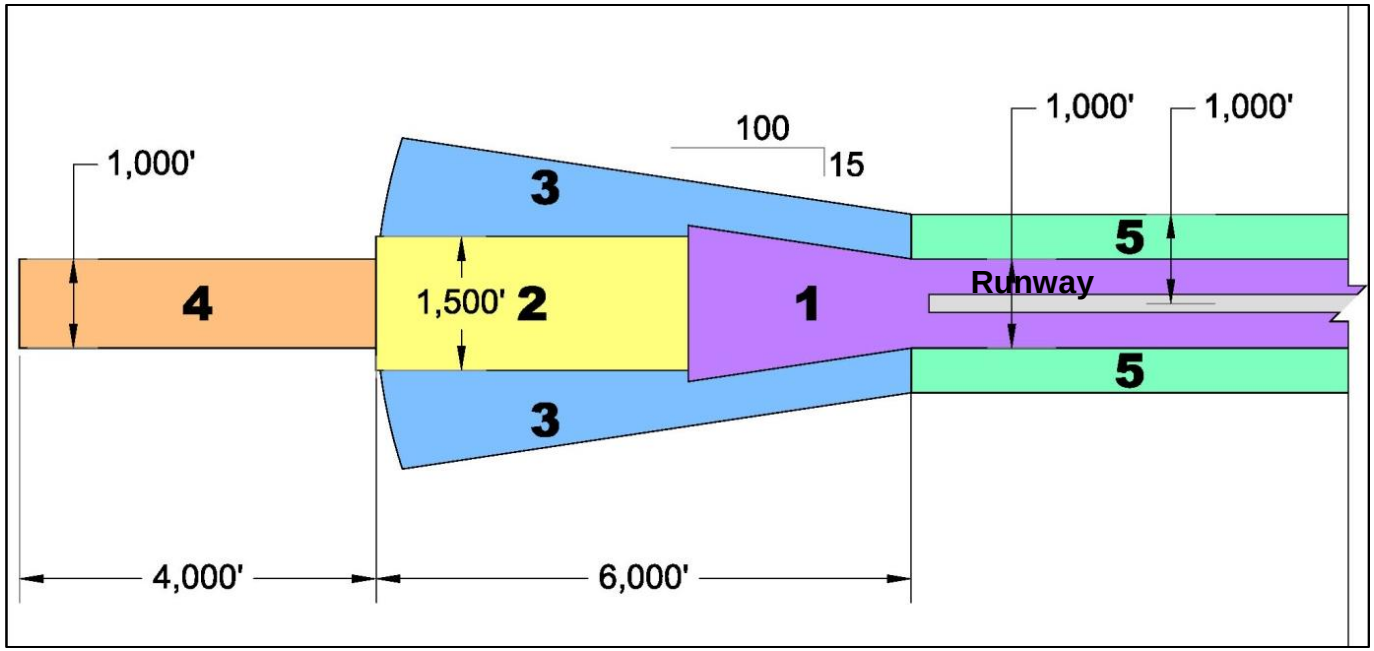
- Define geometry of zones
- Implement policies
  - Prohibit specific land uses
  - Limit density/intensity of uses
  - Rebuilding of existing use is allowed

Safety Compatibility Boundary Approach

- Follow the Caltrans' *Handbook* guidance on safety zone boundaries
- Adjust as warranted based on aeronautical considerations (physical and operational characteristics):
  - runway configuration
  - approach and departure procedures
  - other factors that determine where aircraft fly

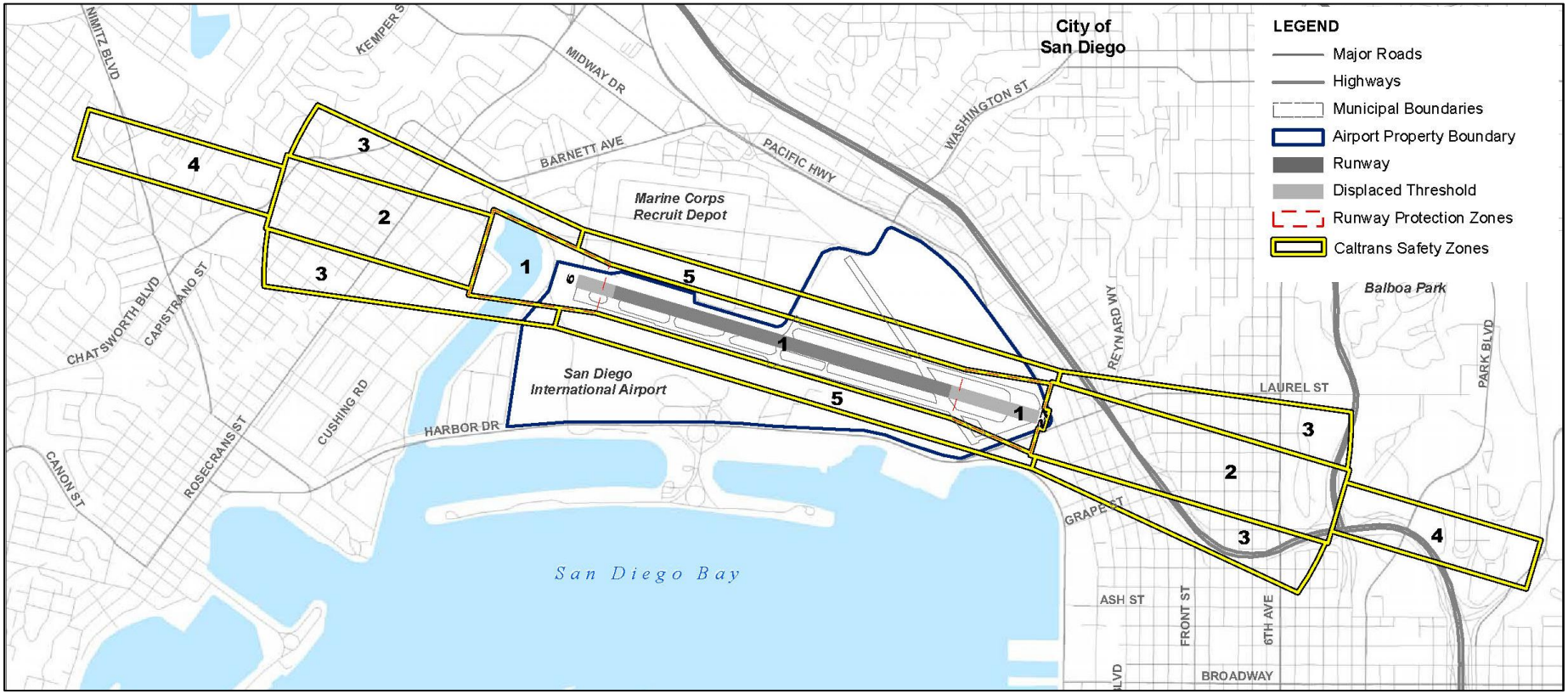
Source: State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, p. 3-14, October 2011.

Caltrans Safety Zones



Caltrans recommends a standard safety zone configuration for large air carrier runways which may be adjusted to account for individual airport approach types and RPZ dimensions

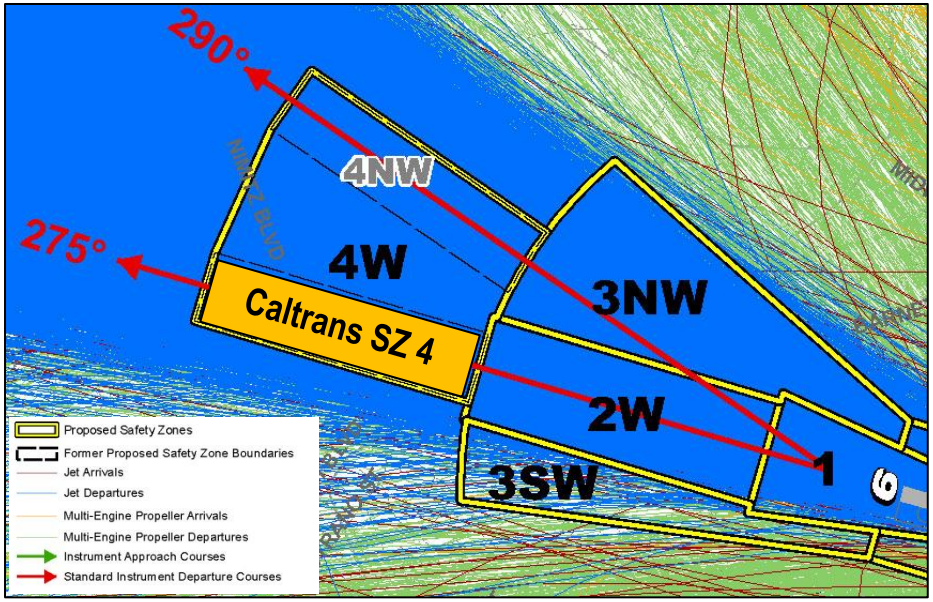
Caltrans Safety Zones Applied to SDIA



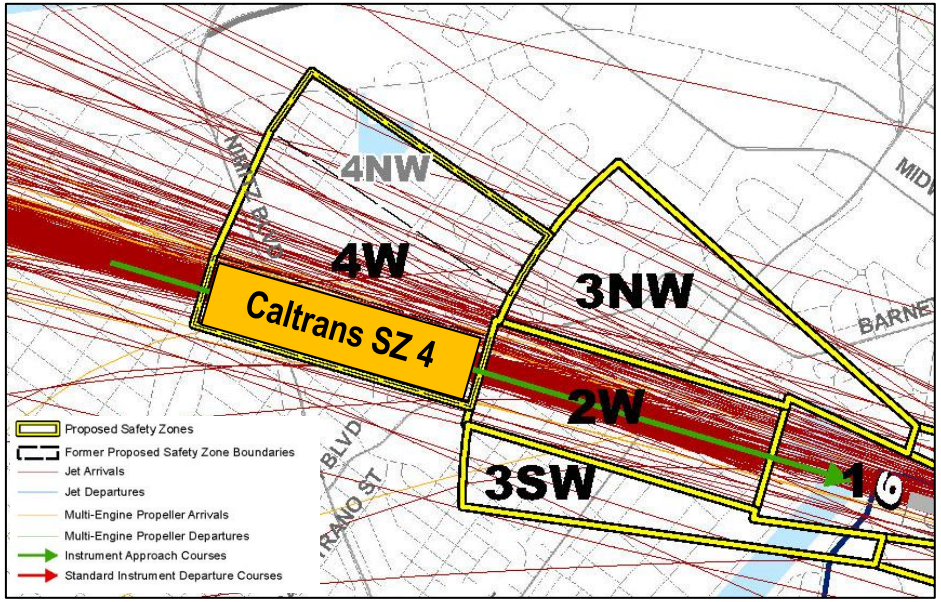
Note: Safety Zone 1 has been adjusted to correspond to the actual Runway Protection Zone (RPZ) boundaries at SDIA.

Safety Zones Adjustment – West Side

West Flow – Departures on Runway 27

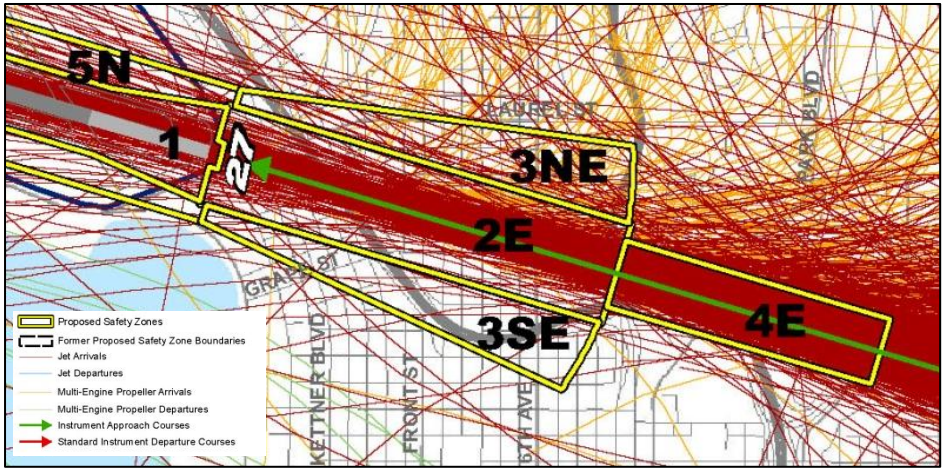


East Flow – Arrivals on Runway 9

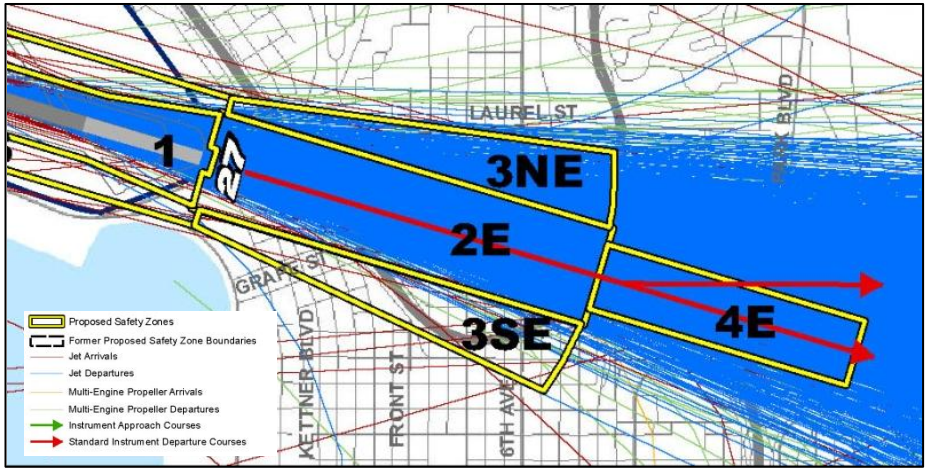


Safety Zone Options
East Side

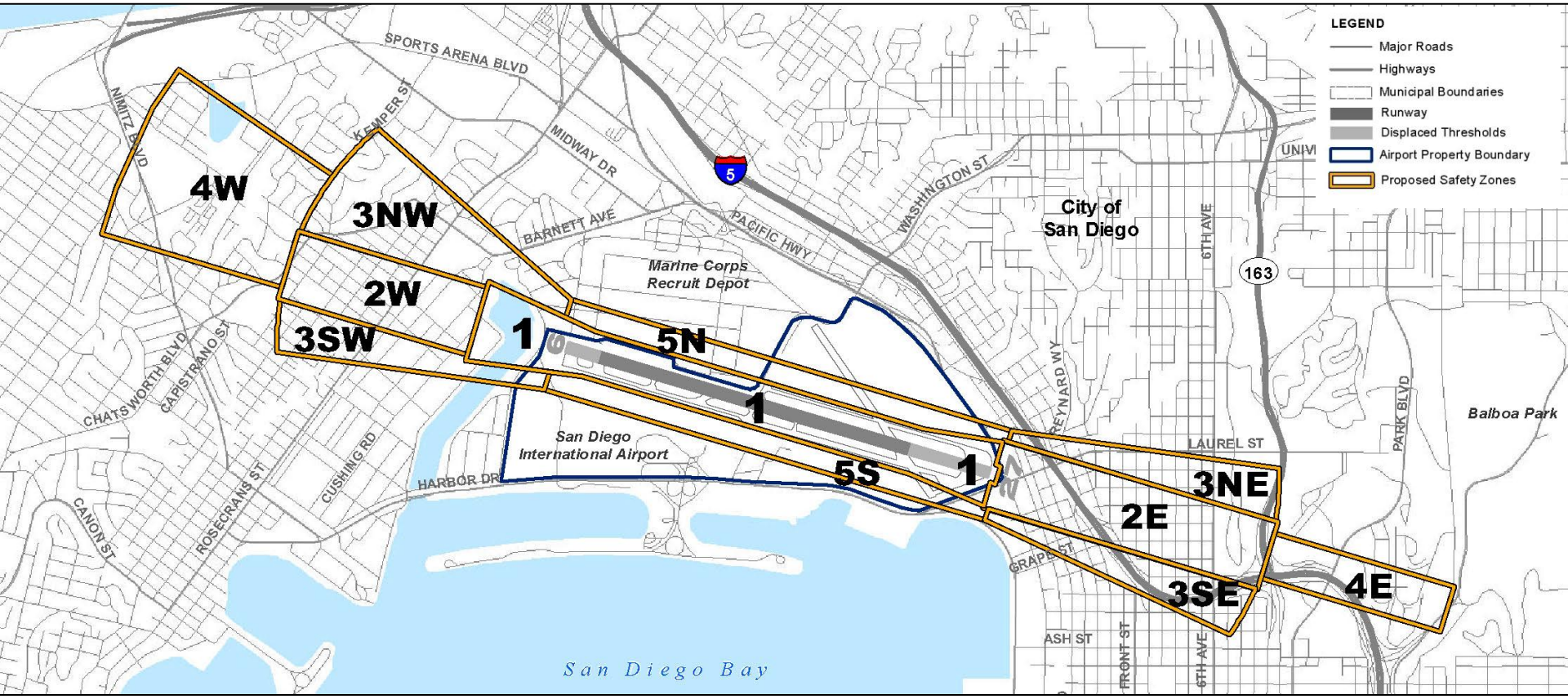
West Flow – Arrivals on Runway 27



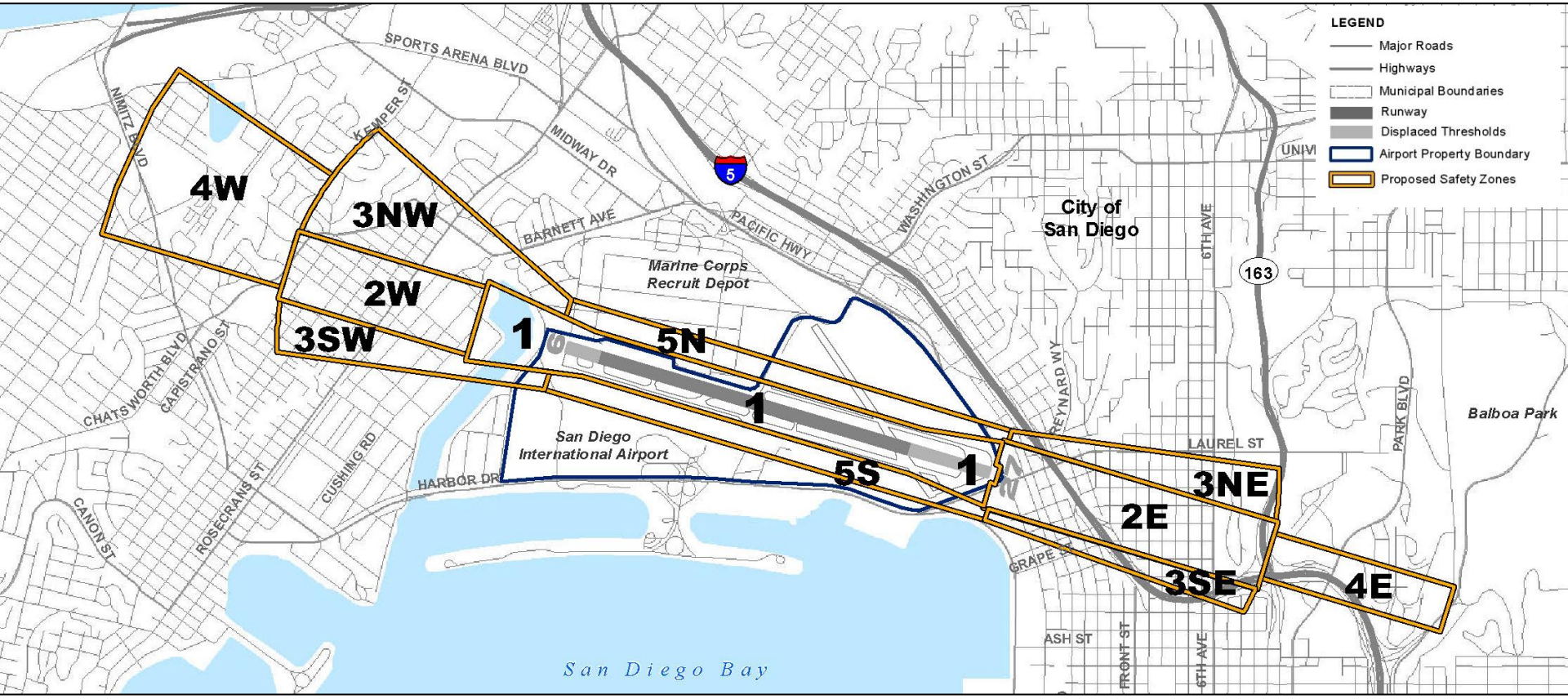
East Flow – Departures on Runway 9



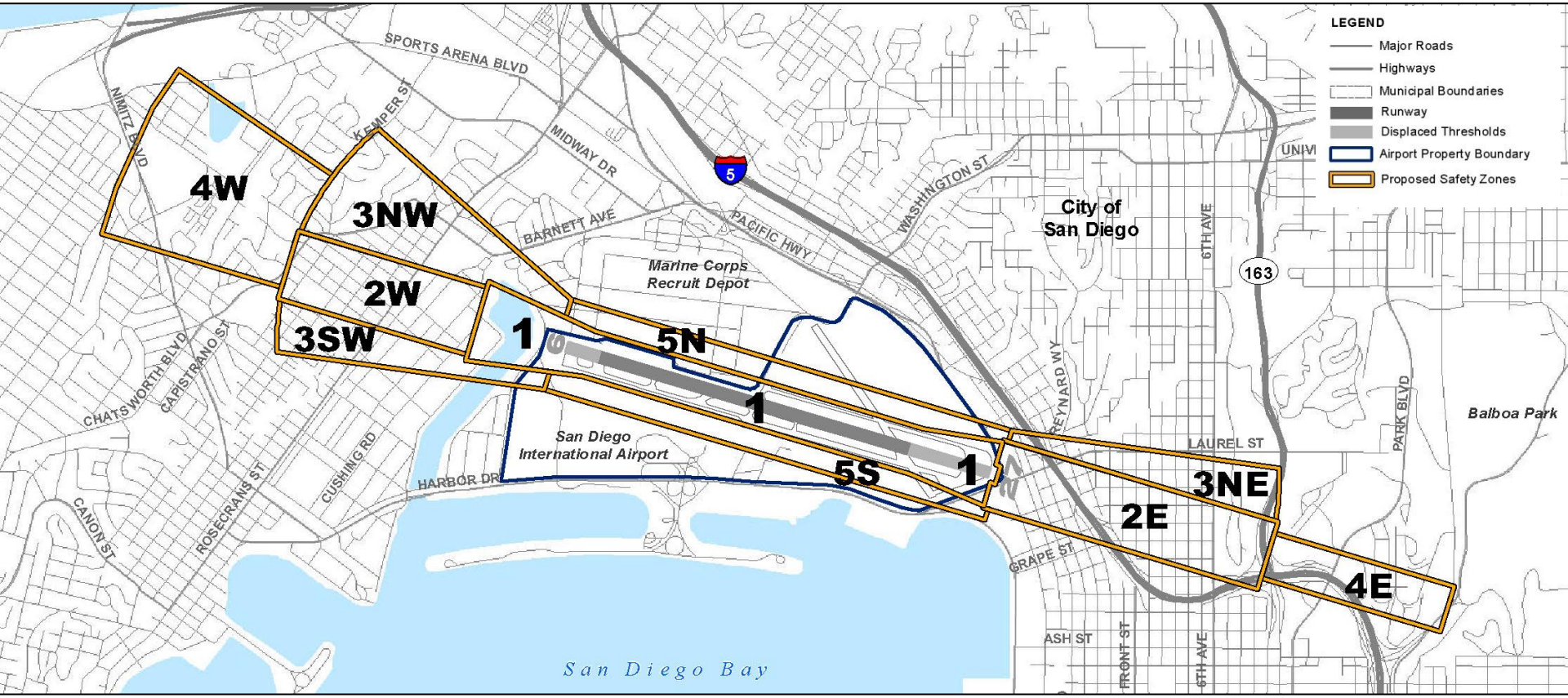
Safety Zone Boundaries – Option A



Safety Zone Boundaries – Option B



Safety Zone Boundaries – Option C



Meeting with Caltrans Aeronautics Division

- January 18, 2012 -- Staff met with Caltrans representatives to discuss options for Safety Zone 3SE
  - Caltrans maintains the standard safety zone configuration is a minimum
  - Caltrans will not endorse any safety zone configuration in which any zones are eliminated or reduced in size

Safety Zone 3SE Staff Recommendation

- Define Geometry - Option A is preferred
  - Consistent with Caltrans guidance as explained in 1/18/2012 meeting
  - SDCRAA legal counsel recommends adherence to Caltrans guidance

Proposed Safety Policies and Standards

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

AIRPORT LAND USE COMMISSION SAN DIEGO COUNTY

SAN.ORG

Proposed Safety Compatibility Goal

Minimize risks to people and property on the ground and in aircraft

- Prohibit specific new land uses
- Limit density/intensity of new uses
- Ensure that safety policies are sensitive to long-term sustainability of neighborhoods and business districts in proposed safety zones

Safety Policies – Prohibited Uses

Safety Zone	Land Use
1	All structures
2	Group quarters, Fitness facilities, Theaters, Hazardous uses, Critical public utilities, Hospitals, Nursing homes, Child day care centers, Schools, Arenas and stadiums
3	Hazardous uses, Critical public utilities, Hospitals, Nursing homes, Child day care centers, Children's schools, Arenas and stadiums
4	Critical public utilities, Hospitals, Nursing homes, Child day care centers, Children's schools, Arenas and stadiums
5	Child day care centers, Residential, Group quarters, Hotels, Fitness facilities, Theaters, Hazardous uses, Critical public utilities, Public assembly facilities, Aquaculture

Safety Policies – Conditional Uses

- Allow subject to density and intensity limitations
- Limits based on existing densities and intensities for each Safety Zone, by CPA/Neighborhood
  - Maximum Limits = the greater of:
    - Dense Urban - Average of existing density/intensity in the surrounding area
    - Urban - Caltrans suggested density/intensity

Matrix

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses — Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	‡	96											‡	240						
Centre City - Cortez	‡	96					99	461						240						
Centre City - East Village													‡	240						
Centre City - Little Italy	40	266					123	213											‡	180
Midway - Pacific Highway	46	162			‡	180			45	180							‡	180		
Ocean Beach															31	240				
Peninsula - NTC			‡	116					‡	180	‡	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

Land Use Category [a]	Safety Zones 1	2	3	4	5	Conditions	Occupancy Factor [1]
RESIDENTIAL							
Single-Family, Multi-family						Zones 2, 3, 4: Allow in areas designated for residential use in the applicable Community Plan, subject to the dwelling unit density limits shown above.	N/A
Single Room Occupancy (SRO) Facility [2]						Zones 2, 3, 4: Allow if development intensity does not exceed the NR limits shown above.	200
Group Quarters [2]						Zones 3, 4: Allow if development intensity does not exceed the NR limits shown above.	100
COMMERCIAL, OFFICE, SERVICE, TRANSIENT LODGING							
Hotel, Motel, Resort						Zone 2: Allow if no more than 56 rooms per acre and no conference facilities. Zones 3, 4: Allow if development intensity does not exceed the NR limits.	200
Office - Medical, Financial, Professional Services, Civic						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	215
Retail/Wholesale - Low-Intensity (e.g., Furniture, Lumber and Home Improvement, Nursery)						Zones 2, 3, 4, 5: Allow if development intensity does not exceed the NR limits shown above.	250

Safety Compatibility Standards - Excerpt

Land Use Category [a]	Safety Zones				
	1	2	3	4	5
RESIDENTIAL					
Single-Family, Multi-family					
Single Room Occupancy (SRO) Facility[2]					
Group Quarters [2]					
COMMERCIAL, OFFICE, SERVICE, TRANSIENT LODGING					
Hotel, Motel, Resort					
Office - Medical, Financial, Professional Services, Civic					
Retail/Wholesale - Low-Intensity (e.g., Furniture, Lumber and Home Improvement, Nursery)					
Retail - Medium Intensity (e.g., Convenience Market, Drug Store, Pet Store)					
Retail - High Intensity (e.g., Clothing, Discount Store, General Merchandise, Supermarket, Toys)					
Service - Low-Intensity (e.g., Auto Service Station, Car Wash, Check-cashing, Veterinary Clinics)					
Service - High Intensity (e.g., Eating, Drinking Establishment, Funeral Chapel, Mortuary)					
Sport/Fitness Facility					
Theater - Movie and Live Performance					

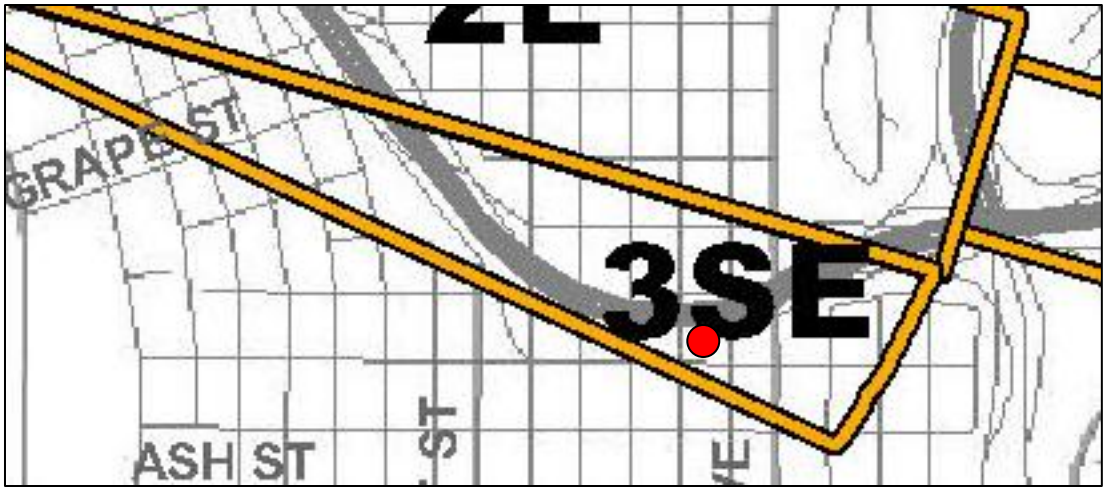
Maximum Allowable Densities and Intensities

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses																			
	Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Centre City - Cortez	‡	96					99	461						240						
Centre City - East Village													‡	240						
Centre City - Little Italy	40	266					123	213											‡	180
Midway - Pacific Highway	46	162			‡	180			45	180							‡	180		
Ocean Beach															31	240				
Peninsula - NTC			‡	116					‡	180	‡	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

R	Allowable residential density, in dwelling units per acre
NR	Allowable nonresidential intensity, in persons per acre
‡	No dwellings are in the portion of the CPA or neighborhood within the indicated Safety Zone. No new dwellings are allowed unless the area was designated for residential use in the community plan as of the effective date of the ALUCP.

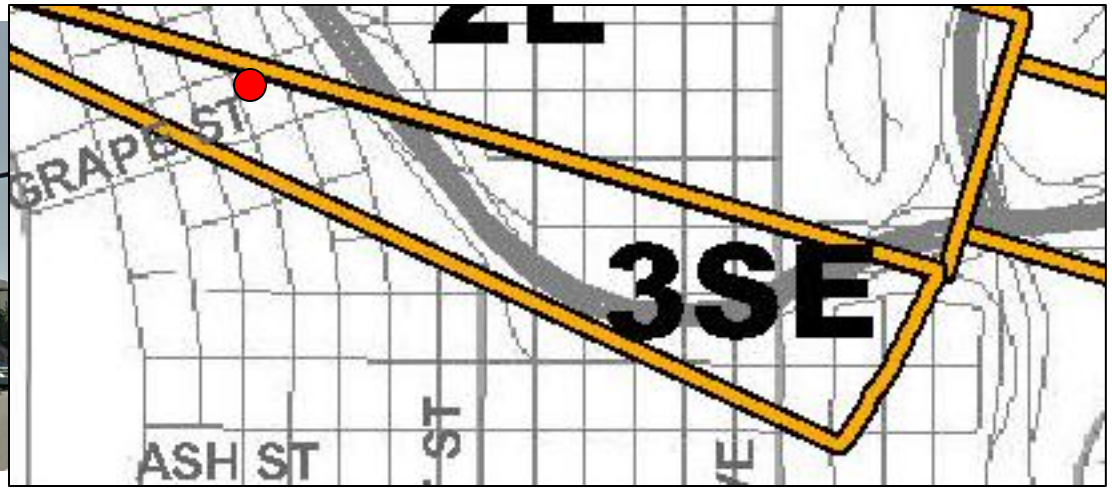
Example 1

- Cedar Gateway (6th Ave & Cedar Street)
  - 65 dwelling units
  - 4,362 sf retail
  - ~0.44 ac lot
  - ALUCP would limit site to a max of 43 dwelling units



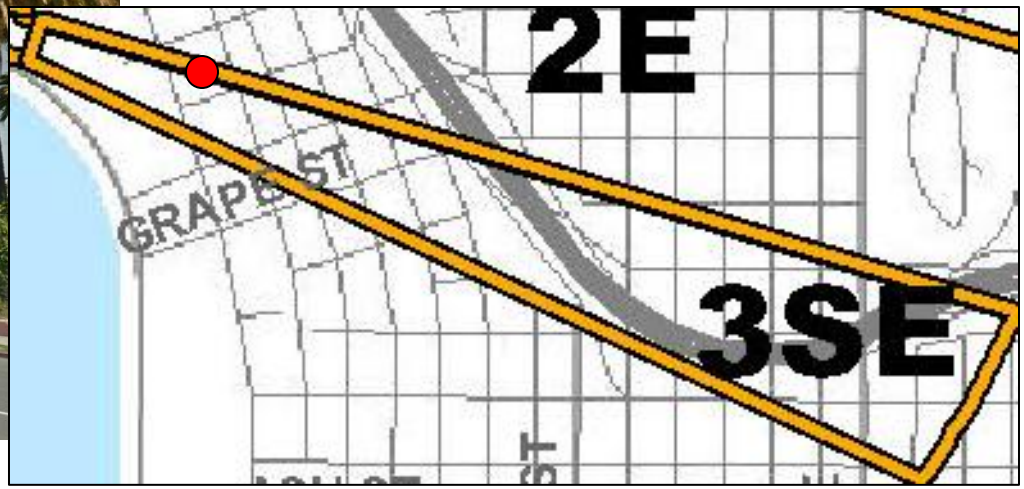
Example 2

- Hawthorn Place (Hawthorn & India Street)
  - 35 dwelling units
  - 4,000 sf retail
  - ~0.30 acre lot
  - ALUCP would limit site to a max of 37 dwelling units



Example 3

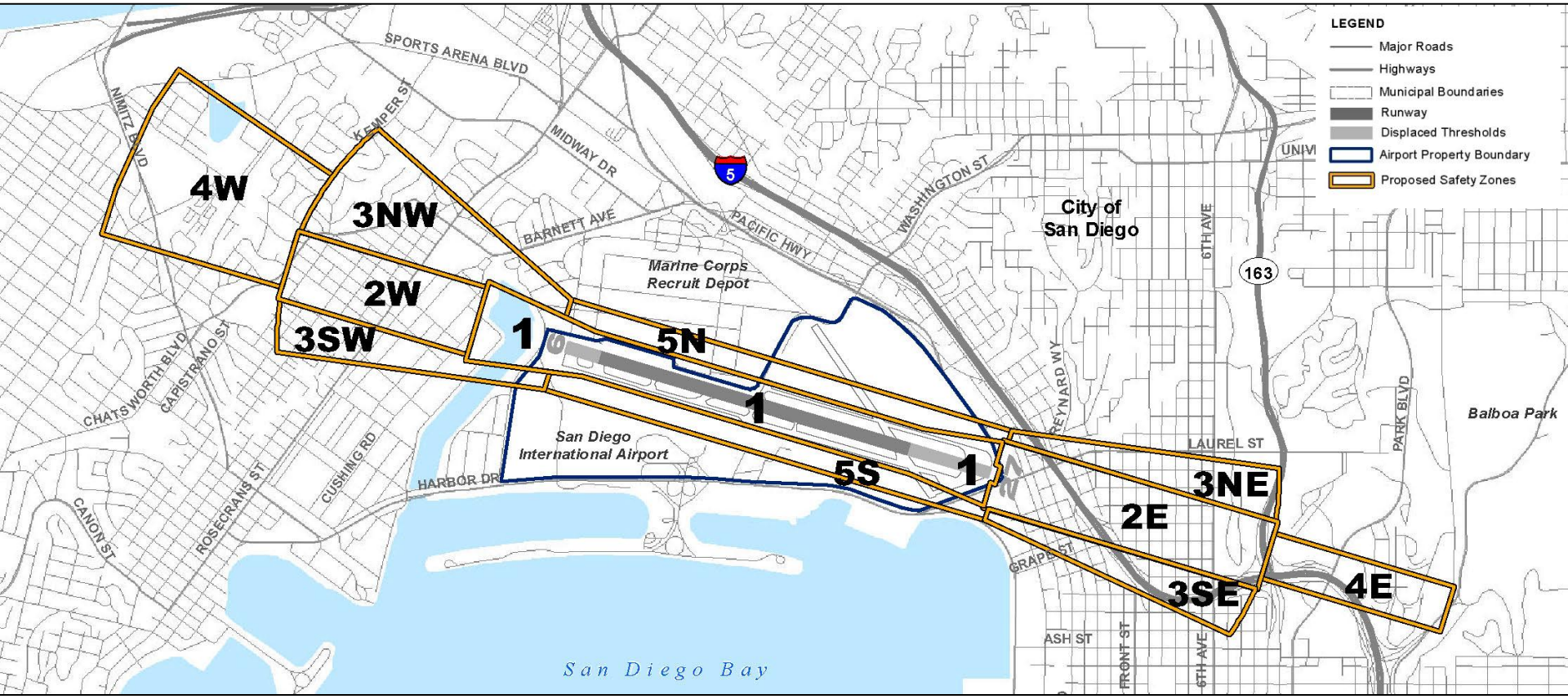
- A-1 Self Storage (Pac Hwy & Juniper)
  - 18,000 sf building
  - ~1.0 acre lot
  - ALUCP would not limit the intensity of this use category (self-storage facility)



Staff Recommendation

- That the ALUC recommend moving forward with the proposed safety zones and policies, as presented.

Recommended Safety Zones



Recommended Policies

Community Planning Area - Neighborhood	Density/Intensity for Conditional Uses — Safety Zones																			
	2E		2W		3NE		3SE		3NW		3SW		4E		4W		5N		5S	
	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR	R	NR
Balboa Park	‡	96											‡	240						
Centre City - Cortez	‡	96					99	461						240						
Centre City - East Village													‡	240						
Centre City - Little Italy	40	266					123	213											‡	180
Midway - Pacific Highway	46	162			‡	180			45	180							‡	180		
Ocean Beach															31	240				
Peninsula - NTC			‡	116					‡	180	‡	245								
Peninsula - Other Neighborhoods			20	96					10	180	8	180			37	240				
Uptown	61	267			60	220	147	326												

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