COMPREHENSIVE LAND USE PLAN
SANTA CLARA COUNTY

NORMAN Y. MINETA
SAN JOSE INTERNATIONAL AIRPORT

Adopted by
SANTA CLARA COUNTY
AIRPORT LAND USE COMMISSION
San Jose, California
May 25, 2011

Amended
11/16/2016

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1 INTRODUCTION AND BACKGROUND

1.1 PURPOSE AND SCOPE

This Comprehensive Land Use Plan (CLUP) is intended to safeguard the general welfare of the inhabitants within the vicinity of Norman Y. Mineta San Jose International Airport (also referred to as San Jose International Airport or the "Airport" throughout this report) and the aircraft occupants. This CLUP is also intended to ensure that surrounding new land uses do not affect the Airport's continued operation.

Specifically, the CLUP seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace. The implementation of this CLUP is intended to prevent future incompatible development from encroaching on the Airport and allow for its development in accordance with the current airport master plan.

The aviation activity forecast for the Airport was updated to reflect the existing aviation activity and provide at least a 20-year forecast of activity. The updated aviation activity forecast formed the basis for preparation of 2027 aircraft noise contours. The Airport Master Plan (AMP) and updated aviation activity forecast and available aircraft noise contours formed the basis for preparation of this CLUP.

1.2 LEGAL AUTHORITY

The Public Utilities Code of the State of California, Sections 21670 et seq. authorizes each county to establish an Airport Land Use Commission (ALUC) and defines its range of responsibilities, duties and powers. The Santa Clara County Airport Land Use Commission is composed of 7 members, two appointed by the Santa Clara County Board of Supervisors, two appointed by the Santa Clara County City Selection Committee, two appointed by a committee composed of the Aviation Director of San Jose International Airport and the Director of the County Roads and Airports Department and one appointed at large by the ALUC.

Section 21675 requires the ALUC to formulate and maintain a comprehensive land use plan (CLUP) for the area surrounding each public-use airport within Santa Clara County. A CLUP may also be developed for a military airport at the discretion of the ALUC. The County has four public-use airports, San Jose International, Palo Alto Airport, Reid-Hillview Airport and South County Airport, and one federally owned airport used by the military, NASA and others, Moffett Federal Airfield. San Jose International Airport is defined as an Air Carrier Airport (as opposed to a General Aviation Airport) due to the type of aircraft that use this airport. Section 21675 also specifies that comprehensive land use plans will:

> *(a) provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, may specify use of land, and may determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.*

1.3 BACKGROUND AND HISTORY

Legislation passed by the State of California in 1967 mandated the creation of an Airport Land Use Commission in each county that had an airport served by a scheduled airline or operated for use by the general public. In conformance with this legislation the Planning Policy Committee, an existing decision-making body with representation from the 15 cities and the County, was designated to be the Airport Land Use Commission (ALUC) for Santa Clara County by the Board of Supervisors and the Select Committee of Mayors. After certification by the California Secretary of State, the Airport Land Use Commission officially came into existence in Santa Clara County in January of 1971. Their first land use policy plan was adopted on June 28, 1973. The 1973 policy plan (the land use plan preceding this Comprehensive Land Use Plan) was amended in 1974 and 1991, and last adopted by the ALUC in September 1992.

1.4 CONTENTS OF THE COMPREHENSIVE LAND USE PLAN

The Comprehensive Land Use Plan contains several major elements:

- The existing and planned-for facilities at the Airport that are relevant to preparing the CLUP;
- Appropriate noise, height, and safety restriction policies and land use compatibility standards;
- Specific findings of compatibility or incompatibility with respect to existing land uses, proposed General Plan land uses, or existing zoning controls; and
- Specific actions that need to be taken to make the County of Santa Clara and the cities' General Plans, Specific Plans, Master Plans and/or Zoning Ordinances consistent with the Comprehensive Land Use Plan.

The CLUP establishes an airport land use planning area, referred to as the Airport Influence Area (AIA), which sets the boundaries for application of ALUC Policy. The CLUP contains the relevant policies for land use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA. Of particular interest to the ALUC are areas "not already devoted to incompatible uses" and, more specifically, undeveloped lands within the AIA. The planning effort is focused on identifying these lands because the policies and standards of the plan are intended to address the compatibility of future development in these areas.

The CLUP is not intended to define allowable land use for a specific parcel of land, although the plan establishes development standards or restrictions that may limit or prohibit certain types of uses and structures on a parcel. The CLUP is not retroactive with respect to existing incompatible land uses, but discusses actions to be taken when expansion, replacement or other significant changes are made to incompatible land uses.

1.5 TECHNICAL REFERENCE DOCUMENT

A separate Technical Reference Library is being maintained by the County of Santa Clara. The Technical Reference Library will contain the major reference documents associated with the land use compatibility planning criteria in this CLUP. The documents will be available for review at Santa Clara County Planning Office.

Section 2

2 SAN JOSE INTERNATIONAL AIRPORT AND ENVIRONS

2.1 AIRPORT ROLE

Norman Y. Mineta San Jose International Airport is geographically located in northern Santa Clara County, at the northwestern boundary of the City of San Jose. The Airport is located on 1050 acres of land, at an elevation of 62 feet above mean sea level (at the FAA Airport Reference Point). The Airport is owned by the City of San Jose and surrounded by the cities of San Jose and Santa Clara. The location of the Airport with respect to nearby communities and other airports is illustrated on Figure 1.

San Jose International Airport (the Airport) is the only Air Carrier airport in Santa Clara County. Air Carrier aviation is defined as scheduled commercial passenger flights and includes scheduled airfreight flights. San Jose International Airport has a full range of aircraft parking/storage facilities, aircraft fueling facilities and aircraft support operations, commonly known as Fixed Base Operators (FBOs). FBO activities include flight training, aircraft maintenance and repair, and aircraft engine overhaul facilities. The airfield has undergone a significant expansion in recent years, both in the runways and in the west side facilities, where there has been significant FBO facility expansion to accommodate corporate aircraft. The Airport passenger terminal area is now undergoing a significant expansion to accommodate the anticipated increase in passenger traffic. This has made this airport very attractive as a destination for passengers and corporate aircraft visiting northern Santa Clara Valley.

San Jose International Airport is classified as a Medium Hub Airport based on the number of annual passenger enplanements. Medium Hub airports are those that account for between 0.25 and 1 percent of total U.S. enplanements. The Role of the Airport as listed in the latest publication of the Federal Aviation Administration's (FAA*) National Plan of Integrated Airport Systems* (NPIAS) (2007-2011), is described as a Primary Commercial Service airport. This describes the level of service that the airport currently provides to the community and is anticipated to provide to the community at the end of the five-year FAA planning period. This designation also represents funding categories for the distribution of Federal aid.

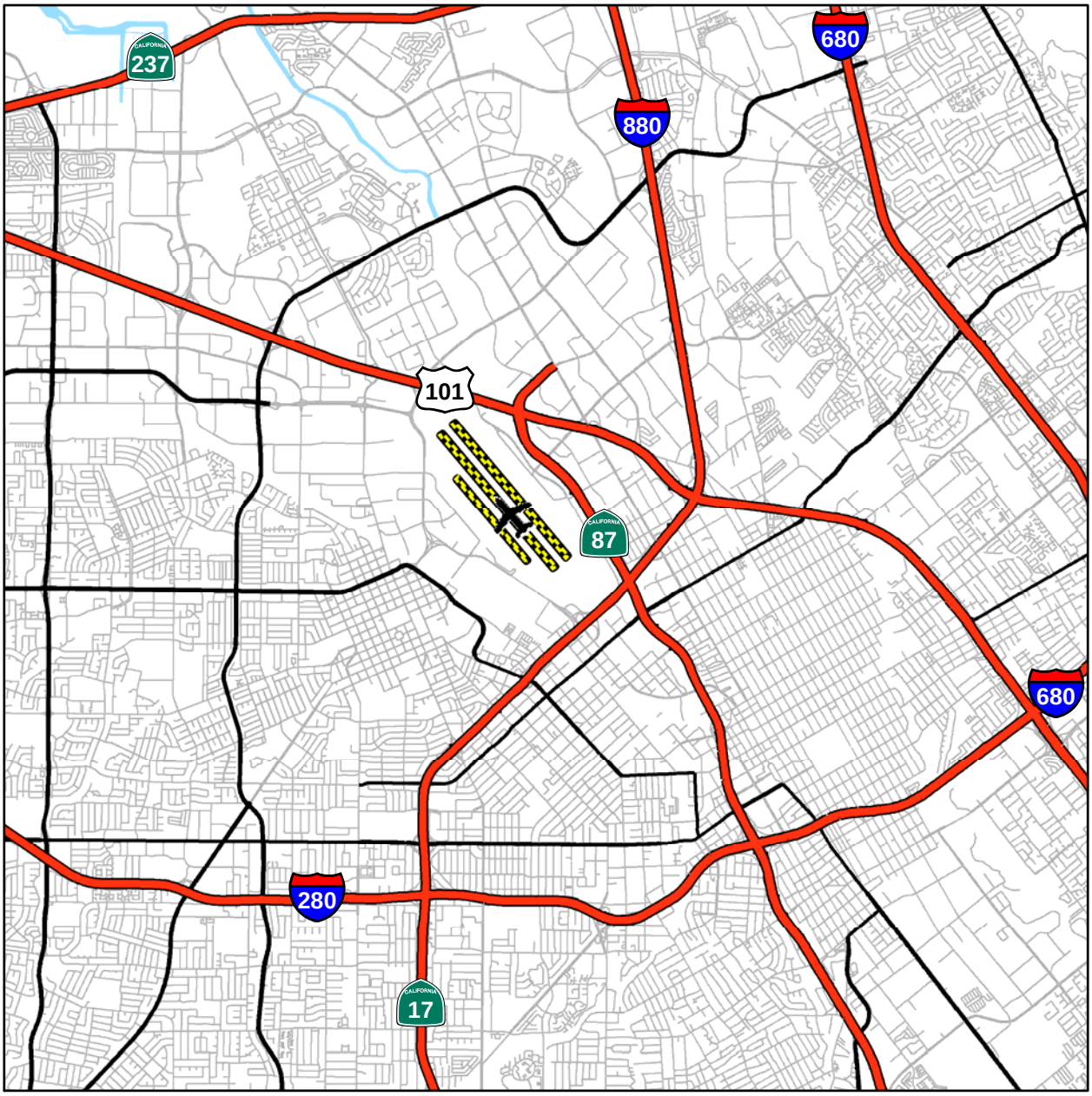
In 2008, passenger volume at the airport was the 6th busiest in CA and 38th busiest in U.S., cargo volume was the 6th busiest in CA and 53rd busiest in U.S., and total aircraft operations volume (including General Aviation) was the 8th busiest in CA and 56th busiest in U.S.

Reid-Hillview Airport is the nearest airport to San Jose International Airport, located 6 miles east. Reid-Hillview Airport is a general aviation airport owned and operated by the County of Santa Clara. Other airports in the vicinity are Moffett Federal Airfield located 7 miles to the northwest, Palo Alto Airport located 12 miles northwest; San Carlos airport located 20 miles northwest and South County Airport located 26 miles southeast. San Francisco International Airport and Metropolitan Oakland International Airport, 30 miles northwest, are the closest Air Carrier airports to San Jose International Airport.

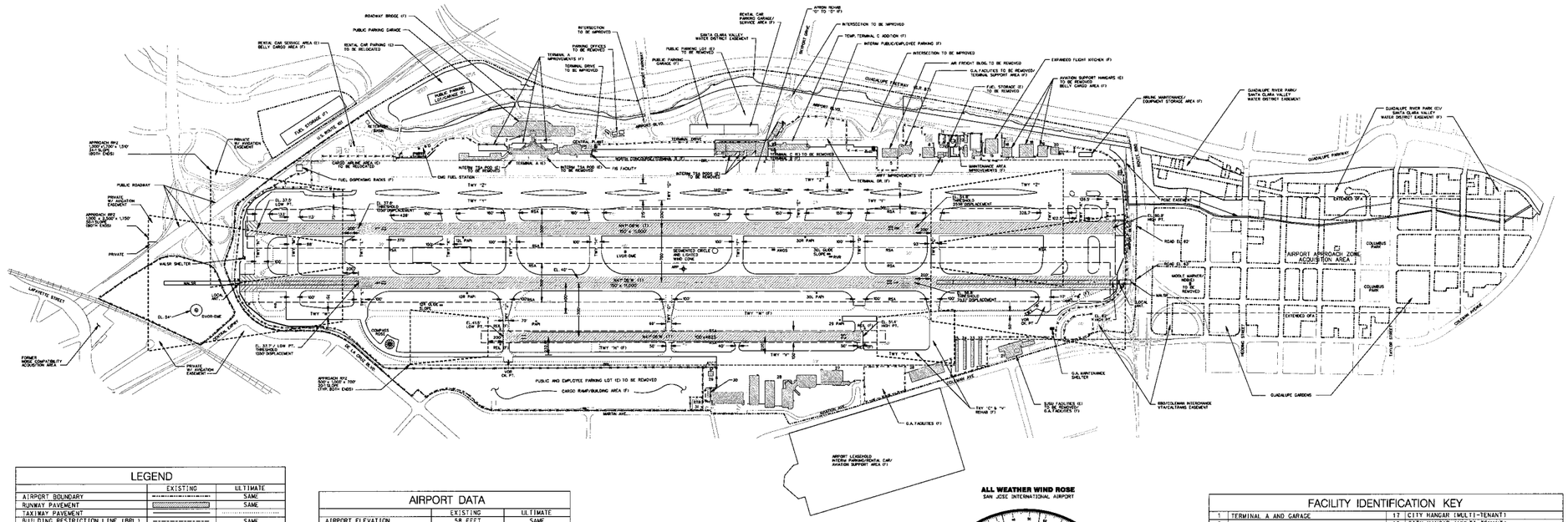
2.2 AIRPORT LAYOUT PLAN

The most recent San Jose International Airport, Airport Layout Plan (ALP) approved by the Federal Aviation Administration (FAA), illustrated on Figure 2, delineates the layout of existing Airport facilities as of February 2007. The ALP is updated as needed to reflect changes in the airport's physical and operational environment. The FAA-approved ALP is used by the FAA for Airport Improvement Program (AIP) grant funds for eligible construction and development projects. AIP grant funds are dispersed on the basis of a priority based on activity levels.

Selected data about the existing Airport facilities and information about its planned development are presented in the following paragraphs.



San Jose International Airport
Location Map
Figure 1



LEGEND

	EXISTING	ULTIMATE
AIRPORT BOUNDARY		SAME
RUNWAY PAVEMENT		SAME
TAXIWAY PAVEMENT		
BUILDING RESTRICTION LINE (BRL)		SAME
RUNWAY SAFETY AREA (RSA)		SAME
FENCING		SAME
BUILDING		
AIRPORT REFERENCE POINT (ARP)		SAME
BLAST FENCE		SAME
RUNWAY PROTECTION ZONE		SAME
GROUND CONTOUR		SAME

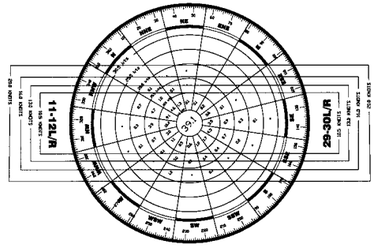
AIRPORT DATA

	EXISTING	ULTIMATE
AIRPORT ELEVATION	58 FEET	SAME
MEAN MAX. TEMP.	81°	SAME
AIRPORT REFERENCE POINT	LAT. 37° 21' 46.6"N LONG. 121° 55' 43.5"W	SAME
TERMINAL NAVAIDS	VOR/DME, ATCT, ASR	SAME
NPIAS ROLE	TRANSPORT	SAME
TAXIWAY LIGHTING	YES	SAME
TAXIWAY MARKING	YES	SAME
RUNWAY/TAXIWAY SURFACE	PAVED	SAME

Scale: 1" = 500'

0 500 1000 1500 2000 FT.

ALL WEATHER WIND ROSE
SAN JOSE INTERNATIONAL AIRPORT



CROSSWIND COVERAGE
RUNWAYS 12R-30L, 12L-30R AND 11-29

10.5 knots	95.74%
13 knots	97.83%
16 knots	99.69%
20 knots	100%

SOURCE: National Oceanic and Atmospheric Administration (NOAA) Observations for 1996 - 2005.

FACILITY IDENTIFICATION KEY

1	TERMINAL A AND GARAGE	17	CITY HANGAR (MULTI-TENANT)
2	BEACON	18	CITY HANGAR (MULTI-TENANT)
3	CENTRAL PLANT	19	CITY HANGAR (MULTI-TENANT)
4	TERMINAL C	20	CITY HANGAR (WAREHOUSE)
5	AIR FREIGHT	21	SAN JOSE STATE UNIVERSITY AERONAUTICS
6	FBO HANGAR (ACM)	22	CITY T-HANGAR BUILDING 8
7	CITY HANGAR (ACM)	23	CITY T-HANGAR BUILDING 9
8	CITY HANGAR (ACM)	24	CITY T-HANGAR BUILDING 10
9	ARFF STATION	25	CITY T-HANGAR BUILDING 11
10	WASTE DISPOSAL	26	FBO HANGAR (AVBASE)
11	FUEL FARM	27	FBO HANGAR (HEWLETT-PACKARD)
12	CITY MAINTENANCE	28	FBO HANGARS (SAN JOSE JET CENTER)
13	CITY MAINTENANCE	29	FAA CONTROL TOWER
14	CITY OFFICE	30	REGULATOR VAULT
15	FLIGHT KITCHEN (LSG SKYCHEFS)	31	FAA REMOTE TRANSMITTER / RECEIVER
16	CITY OFFICE		

RUNWAY DATA

	RUNWAY 12R		RUNWAY 30L		RUNWAY 12L		RUNWAY 30R		RUNWAY 11		RUNWAY 29	
	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE
PAVEMENT LENGTH	11,000'	SAME	11,000'	SAME	11,000'	SAME	11,000'	SAME	4,600'	SAME	4,600'	SAME
TAKE OFF RUN AVAILABLE	9,883'	SAME	10,150'	SAME	10,139'	SAME	10,134'	SAME	4,600'	SAME	4,600'	SAME
TAKE OFF DISTANCE AVAILABLE	11,000'	SAME	11,000'	SAME	11,000'	SAME	11,000'	SAME	4,600'	SAME	4,600'	SAME
ACCELERATE-STOP DISTANCE	9,883'	SAME	10,150'	SAME	10,139'	SAME	10,134'	SAME	4,600'	SAME	4,600'	SAME
DISPLACED THRESHOLD	1,296'	SAME	2,537'	SAME	1,306'	SAME	2,536'	SAME	NONE	SAME	NONE	SAME
LANDING DISTANCE AVAILABLE	8,585'	SAME	7,612'	SAME	8,883'	SAME	7,587'	SAME	4,600'	SAME	4,600'	SAME
EFFECTIVE GRADIENT (%)	0.257%	SAME	0.257%	SAME	0.213%	SAME	0.213%	SAME	0.214%	SAME	0.214%	SAME
RUNWAY WIDTH	150'	SAME	150'	SAME	150'	SAME	150'	SAME	100'	SAME	100'	SAME
PAVEMENT SURFACE	PCC	SAME	PCC	SAME	PCC	SAME	PCC	SAME	ASPHALT	SAME	ASPHALT	SAME
PAVEMENT STRENGTH-SINGLE	220,000 lbs	SAME	220,000 lbs	SAME	220,000 lbs	SAME	220,000 lbs	SAME	60,000 lbs	SAME	60,000 lbs	SAME
-DUAL	250,000 lbs	SAME	250,000 lbs	SAME	250,000 lbs	SAME	250,000 lbs	SAME	60,000 lbs	SAME	60,000 lbs	SAME
-DUAL TANDEM	605,000 lbs	SAME	605,000 lbs	SAME	605,000 lbs	SAME	605,000 lbs	SAME	60,000 lbs	SAME	60,000 lbs	SAME
-TRIPLE TANDEM	777,000 lbs	SAME	777,000 lbs	SAME	777,000 lbs	SAME	777,000 lbs	SAME	N/A	SAME	N/A	SAME
DESIGN CRITICAL AIRCRAFT	GROUP 4	SAME	GROUP 4	SAME	GROUP 4	SAME	GROUP 4	SAME	GROUP 2	SAME	GROUP 2	SAME
RUNWAY LIGHTING	HIRL	SAME	HIRL	SAME	HIRL	SAME	HIRL	SAME	MIRL	SAME	MIRL	SAME
RUNWAY MARKING	PRECISION	SAME	PRECISION	SAME	NPI	SAME	NPI	SAME	BASIC	SAME	BASIC	SAME
FAR PART 77 RUNWAY CATEGORY	PRECISION	SAME	PRECISION	SAME	NPI	SAME	NPI	SAME	VISUAL	SAME	VISUAL	SAME
FAR PART 77 APPROACH SLOPE	50:1	SAME	50:1	SAME	34:1	SAME	34:1	SAME	20:1	SAME	20:1	SAME
ELECTRONIC NAVIGATIONAL AIDS	ILS	SAME	ILS-VOR	SAME	NONE	SAME	GS	SAME	NONE	SAME	NONE	SAME
VISUAL NAVIGATIONAL AIDS	MALSR,PAPI	SAME	MALSR,PAPI	SAME	REIL, PAPI	SAME	PAPI	SAME	PAPI	PAPI,REIL	PAPI	PAPI,REIL
AIRPORT REFERENCE CODE (SEE NOTE 1)	D-IV	SAME	D-IV	SAME	D-IV	SAME	D-IV	SAME	B-II	SAME	B-II	SAME
RUNWAY SAFETY AREA - WIDTH/LENGTH	500'/11,034'	SAME	500'/11,034'	SAME	500'/11,273'	SAME	500'/11,273'	SAME	150'/5200'	SAME	150'/5200'	SAME
RSA DISTANCE BEYOND STOP END	1000'	SAME	1000'	SAME	1000'	SAME	1000'	SAME	300'	SAME	300'	SAME
OBSTACLE FREE ZONE WIDTH	400'	SAME	400'	SAME	400'	SAME	400'	SAME	250'	SAME	250'	SAME
OFZ DISTANCE BEYOND STOP END	200'	SAME	200'	SAME	200'	SAME	200'	SAME	200'	SAME	200'	SAME
OBJECT FREE AREA - WIDTH/LENGTH	500'/11,034'	SAME	500'/11,034'	SAME	800'/11,140'	SAME	800'/11,140'	SAME	500'/5200'	SAME	500'/5200'	SAME
OFA DISTANCE BEYOND STOP END	1000'	SAME	1000'	SAME	1000'	SAME	1000'	SAME	300'	SAME	300'	SAME
RUNWAY BEGINING ELEVATION (NADV 88)	38.0'	SAME	62.0'	SAME	37.5'	SAME	60.9'	SAME	41.5'	SAME	51.4'	SAME
RUNWAY THRESHOLD ELEVATION (NADV 88)	37.7'	SAME	56.8'	SAME	37.6'	SAME	54.8'	SAME	41.5'	SAME	51.4'	SAME
RUNWAY TDZ ELEVATION (NADV 88)	38.7'	SAME	55.5'	SAME	37.8'	SAME	53.8'	SAME	N/A	SAME	N/A	SAME
RUNWAY END ELEVATION (NADV 88)	57.2'	SAME	37.7'	SAME	56.8'	SAME	37.4'	SAME	51.4'	SAME	41.5'	SAME
PAVEMENT END ELEVATION (NADV 88)	62.0'	SAME	38.0'	SAME	60.9'	SAME	37.5'	SAME	51.4'	SAME	41.5'	SAME
APPROACH WEATHER MINIMUMS	1/2 MILE	SAME	1/2 MILE	SAME	1¼ MILE	SAME	1¼ MILE	SAME	1¼ MILE	SAME	1¼ MILE	SAME
DEPARTURE WEATHER MINIMUMS	1/4 MILE	SAME	1/4 MILE	SAME	1/4 MILE	SAME	1/4 MILE	SAME	1/4 MILE	SAME	1/4 MILE	SAME
PERCENTAGE WIND COVERAGE	SEE WIND ROSE	SAME	SEE WIND ROSE	SAME	SEE WIND ROSE	SAME	SEE WIND ROSE	SAME	SEE WIND ROSE	SAME	SEE WIND ROSE	SAME

RUNWAY THRESHOLD COORDINATES

RUNWAY	EXISTING	ULTIMATE
12R	LAT. N37° 22' 15.771" LONG. W121° 56' 20.583"	SAME
30L	LAT. N37° 21' 22.451" LONG. W121° 55' 22.127"	SAME
12L	LAT. N37° 22' 20.253" LONG. W121° 56' 13.975"	SAME
30R	LAT. N37° 21' 27.001" LONG. W121° 55' 15.594"	SAME
11	LAT. N37° 21' 57.209" LONG. W121° 56' 11.750"	SAME
29	LAT. N37° 21' 22.994" LONG. W121° 55' 34.240"	SAME

RUNWAY END COORDINATES

RUNWAY	EXISTING	ULTIMATE
12R	LAT. N37° 22' 25.416" LONG. W121° 56' 31.160"	SAME
30L	LAT. N37° 21' 03.570" LONG. W121° 55' 01.435"	SAME
12L	LAT. N37° 22' 29.972" LONG. W121° 56' 24.633"	SAME
30R	LAT. N37° 21' 08.128" LONG. W121° 54' 54.911"	SAME
11	LAT. N37° 21' 57.209" LONG. W121° 56' 11.750"	SAME
29	LAT. N37° 21' 22.994" LONG. W121° 55' 34.240"	SAME

NOTE: Horizontal datum for coordinates - North American Datum of 1983, Zone 3, EPOCH 2002.00
Vertical Datum - North American Vertical Datum of 1988, GEOID03 Model

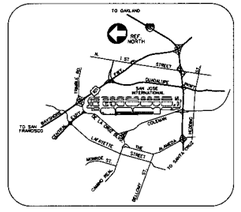
MODIFICATIONS TO STANDARDS

ITEM	STANDARD	COMMENTS
1) RUNWAY CENTERLINE TO TAXIWAY CENTERLINE	GROUP IV=400' SEPARATION (FAA AC 150/5300-13)	APPROVED 350' SEPARATION BETWEEN RUNWAY 12L-30R AND TAXIWAY Y1 LETTER DATED AUG. 7, 1989
2) RUNWAY OBJECT FREE AREA (OFA)	GROUP IV=800' WIDE AND 1000' BEYOND RUNWAY END (FAA AC 150/5300-13)	APPROVED 500' WIDTH FOR RUNWAY 12R-30L; LETTER DATED MARCH 9, 1992
3) RUNWAY CENTERLINE TO TAXIWAY CENTERLINE	GROUP III & IV -300' TO 400' (FAA AC 150/5300-13) HOLDLINE=250' FOR APPROACH CATEGORY C	APPROVED 285' RUNWAY 11-29 TO TAXIWAY V CENTERLINE SEPARATION. D-IV AIRCRAFT OPERATIONAL RESTRICTIONS TO BE APPLIED WHEN APPROACH CATEGORY C IS ON RUNWAY 11-29. LETTER DATED FEB. 12, 1998

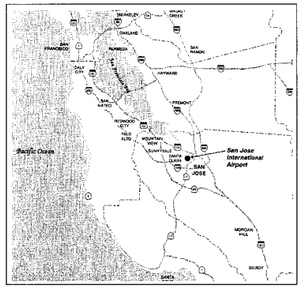
NOTES:

1) Aircraft design Group V can be accommodated on existing Runway 12R-30L and Runway 12L-30R with operational restrictions applied during taxiing to maintain separation requirements.
2) Taxiway V object free area (OFA) is 131 feet wide south of Taxiway G and 259 feet wide at Taxiway G and to the north. Taxilane OFA is 115 feet on the south end and 225 feet on the north end.
3) The Building Restriction Line (BRL) on the east side is for a maximum structure height of 50 feet; the west side BRL is for a maximum structure height of 25 feet.
4) Runway End Coordinates, Airport Reference Point Coordinates, True Bearings and Elevations were taken from SJC data base, March, 2006.
5) Not all RPZ/Road intersection and extended centerline elevations are available.
6) Runway Object Free Area (OFA) must extend 1000' past thresholds of 12R, 30L, 12L and 30R, but should extend as far as feasible.
7) There are objects located in the extended OFA, between the Airport Boulevard and Coleman Avenue, which currently do not meet FAA OFA clearance requirements.
8) No threshold siting surface object penetrations.
9) Stop ends of Runway 12R-30L and Runway 12L-30R are short of end of pavement due to controlling obstructions.
10) No OFZ Object Penetrations.
11) Line of Sight Requirements Met.

VICINITY MAP



LOCATION MAP



APPROVED CONDITIONALLY
FEDERAL AVIATION ADMINISTRATION
AIRPORTS DISTRICT OFFICE
SAN FRANCISCO, CALIFORNIA

By _____ Date 2/9/2007
Manager

Subject to Letter dated 2/9/2007

APPROVAL BLOCK

San Jose International Airport
City of San Jose, California

_____ 2/9/07
APPROVED BY DATE

The contents of these documents do not necessarily reflect the official views or policy of the FAA. Acceptance of these documents by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

NORMAN Y. MINETA SAN JOSE INTERNATIONAL AIRPORT

SAN JOSE INTERNATIONAL AIRPORT

MAGNETIC
TRUE
SOURCE: FAA, 9/20 ANNUAL RATE OF CHANGE IS .648°
NORTH

NO.	BY	APP	DATE	REVISIONS

AIRPORT LAYOUT DRAWING

SHEET 1

2.2.1 Existing Airport Facilities

The existing airfield consists of a three parallel runways, Runway 30R-12L, Runway 30L-12R and Runway 29-11. Runways 30R-12L and 30L-12R have grooved concrete surfaces 11,000 feet long by 150 feet wide and high intensity runway lights, and Precision Approach Path Indicators at both ends of the runways. There are displaced thresholds at both ends of both runways; 2537 feet for Runway 30R, 1307 feet for Runway 12L, 2542 feet for Runway 30L and 1302 feet for Runway 12R. Runway 29-11 has a paved asphalt surface 4,599 feet long by 100 feet wide and has medium intensity runway lights, and Precision Approach Path Indicators at both ends of the runway. The existing maximum gross weight for aircraft using the runways is as follows:

Aircraft Maximum Gross Weight

Runway	Single-wheel	Dual-wheel	Dual-Tandem-wheel	Double-Dual-Tandem-Wheel
30R-12L	220,000 lbs.	250,000 lbs.	605,000 lbs.	
30L-12R	220,000 lbs.	250,000 lbs.	605,000 lbs.	875,000 lbs.
29-11	60,000 lbs.	60,000 lbs.	60,000 lbs.	

Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, defines imaginary surfaces that are used to identify obstructions to air navigation. The following tabular data shows the FAR Part 77 approach slopes, compared with existing obstacle/obstruction controlled approach slopes and other information relative to the controlling obstacle/obstructions based on the latest FAA Form 5010-1, Airport Master Record, for San Jose International Airport.

			Controlling Obstacle/Obstruction: Location from Runway Threshold Related to Extended Runway Centerline			
Runway No.	Runway End Elevation	FAR Part 77 Slope	Actual Slope at Runway End*	Type of Obstruction	Height Above Runway End (feet)	Location
30R	61	34:1	23:1	Tree	54	1435 ft along and 550 ft right of the extended runway centerline
12L	38	34:1	38:1	Pole	32	1441 ft along and 580 ft right of the extended runway centerline
30L	62	50:1	2:1	Fence	14	230 ft along and 170 ft right of the extended runway centerline
12R	38	50:1	13:1	Pole	29	580 ft along and 480 ft right of the extended runway centerline
29	52	20:1	23:1	Tree	79	2060 ft along and 100 ft left of the extended runway centerline
11	42	20:1	50:1			

Source: FAA Form 5010, 7/31/2008

* NOTE: All runways meet their FAR Part 77 slope requirements to the runway thresholds.

The FAA establishes Runway Protection Zones off each runway end to enhance the safety of aircraft operations and the protection of people and property on the ground. The following defines the size of the Runway Protection Zones for each runway.

Runway No.	Runway Approach Type	Length (feet)	Inner Width (feet)	Outer Width (feet)
30R-12L	Nonprecision	1,700	1,000	1,510
30L-12R	Precision	2,500	1,000	1,750
29-11	Visual	1,000	500	700

Caltrans requires that the airport sponsor have adequate property interest in the Runway Protection Zones (RPZs) as a condition of receiving certain grants. Portions of the Runway Protection Zone for Runway 12L and Runway 12R are outside the Airport boundary but are on state owned property and/or have avigation easements.

Access to the passenger terminal area on the east side of the Airport is from Coleman Avenue off Interstate 880 on the south, Airport Boulevard from the east or Highway 87 on the northwest. Access to the General Aviation facilities is on the west side of the airport from Coleman Avenue. All General Aviation aircraft basing areas are located on the west side of the Airport. There are 134 aircraft tiedown spaces, 46 hangars and approximately 90 unmarked FBO tiedown spaces at the Airport. Airport facilities include a FAA control tower, an ARFF fire station, a fuel farm, a rotating beacon, a lighted windsock and a segmented circle.

2.2.2 Future Airport Facilities

Most of the airfield improvement projects identified in the June 1997 Airport Master Plan (AMP) have been completed. The June 2007 AMP Update identifies several taxiway improvement projects remaining to be started. The new passenger terminal is currently under construction. Future projects include Terminal Area Roadway Improvements, Rental Car Parking Garage, new Public Short Term and Long Term Parking Garages, and additional Passenger Terminal expansion. Cargo Airline and belly-freight facilities also have been approved for future construction. Additional General Aviation development is planned for the west side of the airport with obsolete buildings being removed and replaced by new FBO facilities. A number of Aviation Support Projects have been identified for future construction, such as new fuel storage facilities, relocated airline maintenance/storage facilities and relocated airport maintenance facilities.

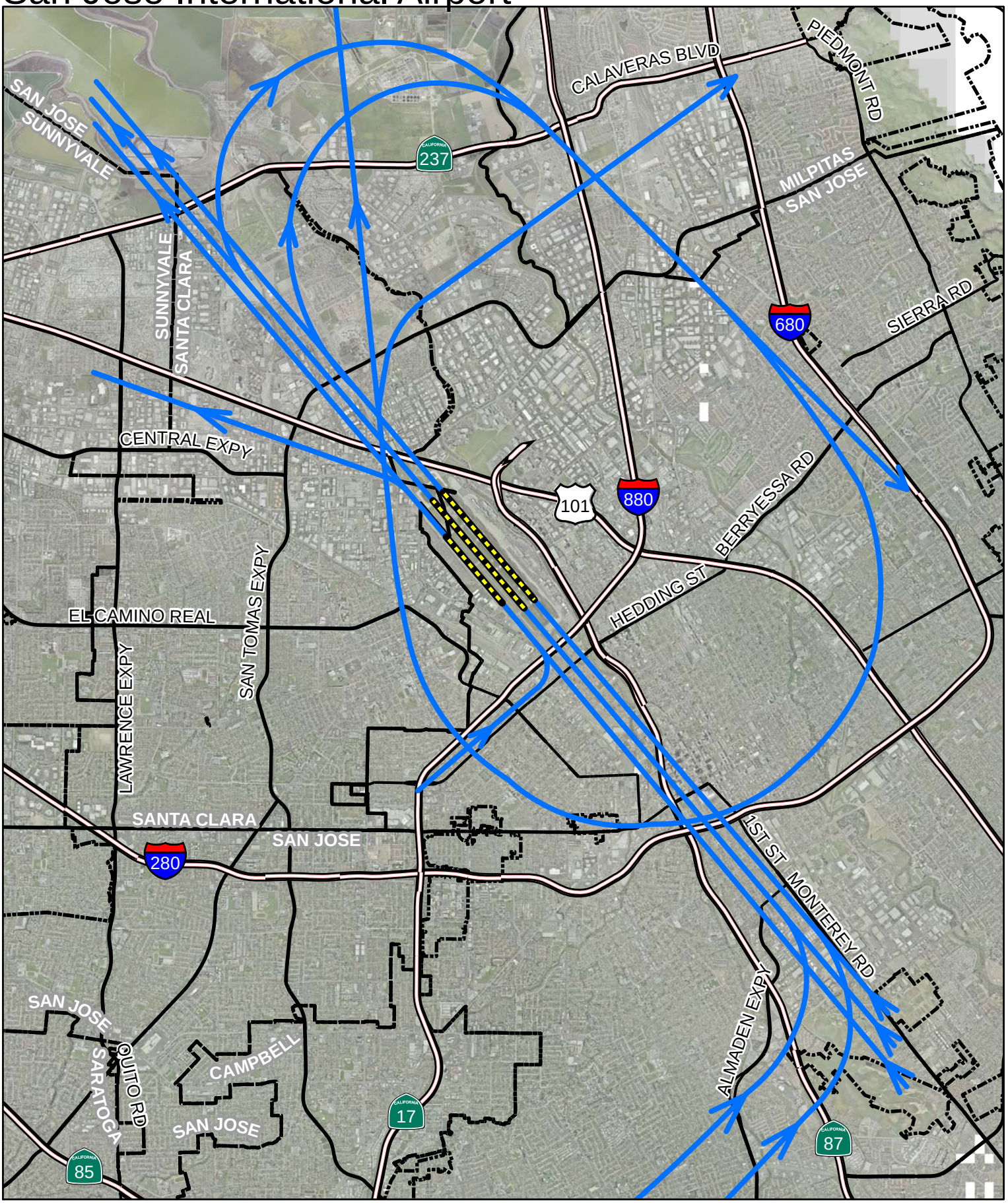
2.3 AVIATION ACTIVITY

The noise impact of an airport is a direct result of the number of aircraft operations at that airport and the types of those aircraft. Given this information, and some other factors such as flight tracks and the distribution of flight operations throughout the day and night, computer models can generate a representation of the noise contours around an airport. The generalized flight tracks for the airport are shown in Figure 3. The noise contours created by the computer model reflect the data provided to the program. Thus the activity data, both current and forecasted, needs to be as accurate as possible.

The aviation activity data is taken from the FAA Form 5010 reports for 2006, and 2007, and from the *San Jose International Airport Master Plan Update* dated June 2007. The June 2007 AMP Update provides forecasts of aircraft operations at the Airport for the year 2017, which for purposes of this CLUP, was extended through 2027.

As the CLUP is a 20-year planning document, the existing base year (2006) aviation activity was reviewed and updated aviation activity forecasts were prepared through the year 2027. A summary of the existing and forecast aviation activity is presented in Table 2-1 and discussed in the following paragraphs.

San Jose International Airport



Flightpaths

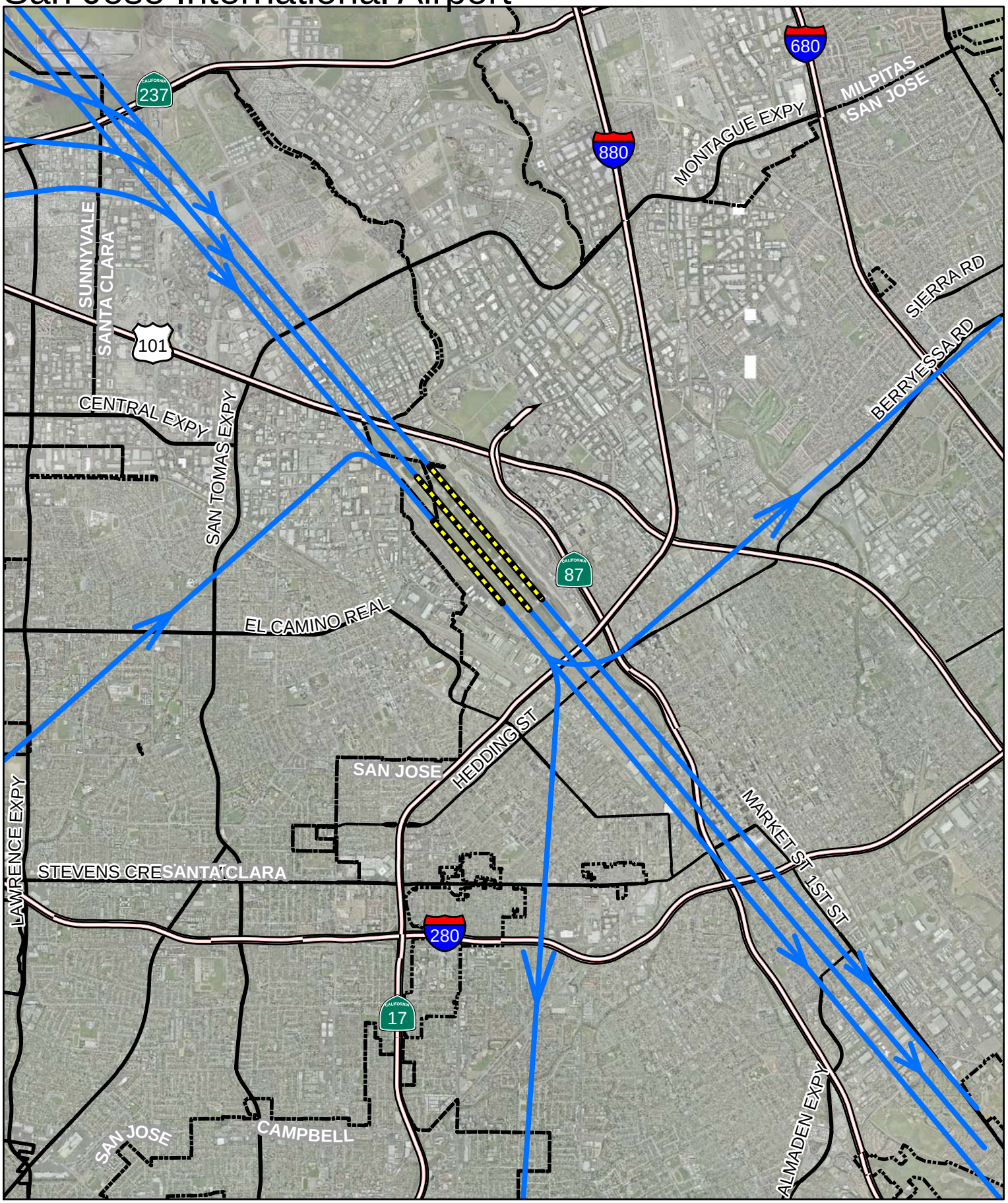
- Flightpath
- Runway

Aircraft Flight Tracks
Figure 3a

Feet
0 2,500 5,000 10,000

N

San Jose International Airport



Flightpaths

Flightpath

Runway

Aircraft Flight Tracks
Figure 3b

0 2,500 5,000 10,000 Feet

N

Table 2 - 1

UPDATED AVIATION ACTIVITY FORECASTS

San Jose International Airport

2006 – 2027

	Base Year	Forecast				
	2006	**2007**	**2012**	**2017**	**2022**	**2027**
BASED AIRCRAFT						
Single-engine – piston	86	79	117	154	154	154
Multi-engine – piston	10	10	20	30	30	30
Turboprop	13	16	25	35	35	35
Jet	62	60	96	132	132	132
Helicopter	1	1	5	9	9	9
Other	0	0	0	0	0	0
Total based aircraft	172	166	263	360	360	360
AIRCRAFT OPERATIONS						
Air Carrier	100,650	100,944	142,051	186,400	186,400	186,400
General Aviation						
-Itinerant	40,921	40,127	66,705	93,282	93,282	93,282
-Local	16,962	15,666	26,042	36,418	36,418	36,418
Subtotal – General Aviation operations	57,883	55,793	92,747	129,700	129,700	129,700
Air Taxi & Commuter	29,832	30,452	21,815	13,100	13,100	13,100
Military	97	78	400	800	800	800
Total operations	188,462	187,267	257,013	330,000	330,000	330,000
OPERATIONS PER BASED AIRCRAFT	1096	1128	977	917	917	917

Source: *San Jose International Airport Master Plan Update, December 1999 & June 2007 and Airport Management for 2006, 2007 & 2017 data*

2.3.1 Based Aircraft

The AMP forecasts that the number of based aircraft at San Jose International will increase from 172 in 2006 to 360 by 2017 and for purposes of this CLUP, was extended through 2027 as shown in Table 2-1. The increase in forecast based aircraft at the Airport assumes maximum occupancy of the land designated for general aviation facilities on the southwest side of the airport.

2.3.2 Aircraft Operations

The number of annual aircraft operations at San Jose International Airport, as presented in Table 2-1, is forecast to increase from a recorded 188,462 operations in the year 2006 to 330,000 operations by the year 2017, which has been extended to 2027. The 330,000 number was taken from the June 2007 San Jose International Airport Master Plan Update. The AMP indicates that the mix of operations will change over time with a greater percentage of operations being conducted by twin-engine, turboprop aircraft and business jets through 2027.

2.3.2.1 Air Carrier

The number of Air Carrier aircraft operations at the Airport, as presented in Table 2-1, is forecast to increase from 100,650 operations in the year 2006 to 186,400 by the year 2017, which for purposes of this CLUP, has been extended to 2027.

2.3.2.2 General Aviation

The number of annual General Aviation aircraft operations at San Jose International Airport, as presented in Table 2-1, is forecast to increase from a recorded 57,883 operations in the year 2006 to 129,700 operations by the year 2017, which for purposes of this CLUP, has been extended to 2027.

Itinerant Operations. Itinerant operations are conducted by aircraft that takeoff from one airport and land at another airport, or the reverse. They include the operations of aircraft based at the Airport and flights of other aircraft to and from the Airport. The itinerant operations at the Airport include aircraft based on the airport used for personal business and recreational activities traveling to other airports.

Itinerant operations are forecast to increase from 70.7 percent of total General Aviation aircraft operations to 89.0 percent of total General Aviation aircraft operations at the Airport over the forecast period and will continue to account for the larger number of General Aviation aircraft operations at the Airport.

Local Operations. Local operations are performed by aircraft operating in the local traffic pattern and aircraft departing for, or arriving from, local practice areas. These are primarily General Aviation operations with a few Military operations, and include training operations by both aircraft based at the Airport and aircraft from other airports in nearby communities. These local operations include flight training, the activities of based aircraft pilots maintaining their landing skills and activities of itinerant aircraft pilots who come to practice landing at an Air Carrier airport.

Local operations are forecast to decrease as a percent of total General Aviation operations from 29.3 percent of total operations to 11.0 percent of total General Aviation operations at the airport.

2.3.2.3 Air Taxi-Commuter

Air taxi operations include the unscheduled "for hire" operations carrying passengers and cargo to and from the area including any operations by bank couriers or other small package carriers. Commuter Airlines operate scheduled passenger flights using aircraft with fewer than 60 seats. Air taxi operations are considered to be general aviation activity and commuter airline operations are considered to be air carrier activity.

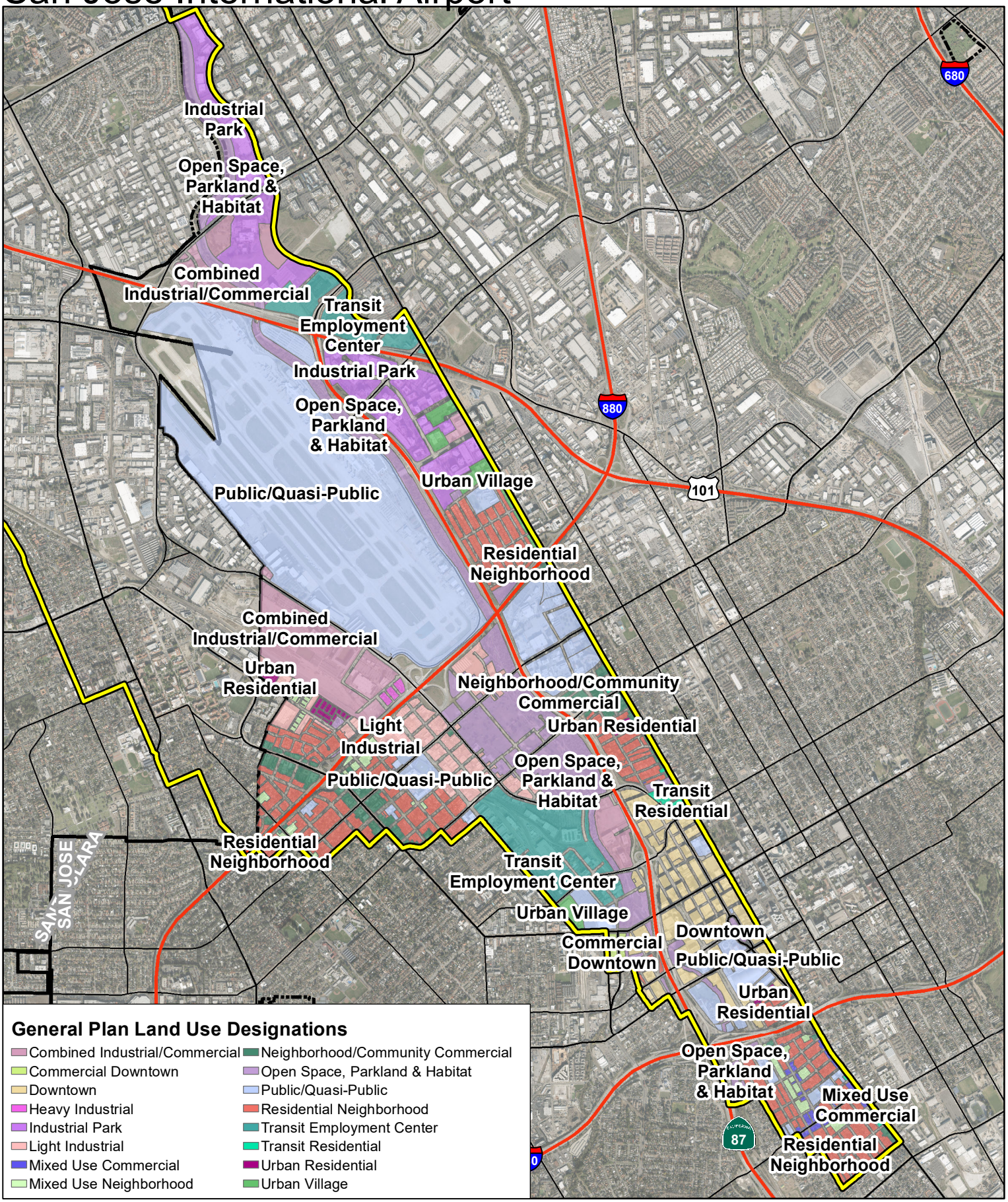
2.3.2.4 Military

Military operations are forecast to increase from 97 in 2006 to 800 in 2017 In the June 2007 AMP Update. The 2017 number is carried forward to 2027. A review of the FAA 5010 information from 2000 to 2007 shows an average of 252 military operations per year. Military operations consist of both fixed-wing and helicopter operations.

2.4 AIRPORT ENVIRONS

Figures 4a and 4b present the land use designations within the Airport environs based on the current City of San Jose and the City of Santa Clara General Plans. The predominant land uses in the Airport environs are residential and commercial.

San Jose International Airport



General Plan Land Use Designations

- Combined Industrial/Commercial
- Commercial Downtown
- Downtown
- Heavy Industrial
- Industrial Park
- Light Industrial
- Mixed Use Commercial
- Mixed Use Neighborhood
- Neighborhood/Community Commercial
- Open Space, Parkland & Habitat
- Public/Quasi-Public
- Residential Neighborhood
- Transit Employment Center
- Transit Residential
- Urban Residential
- Urban Village

General Plan Land Use

City of San Jose

Feet

0 2,000 4,000 8,000

N

This map created by the Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
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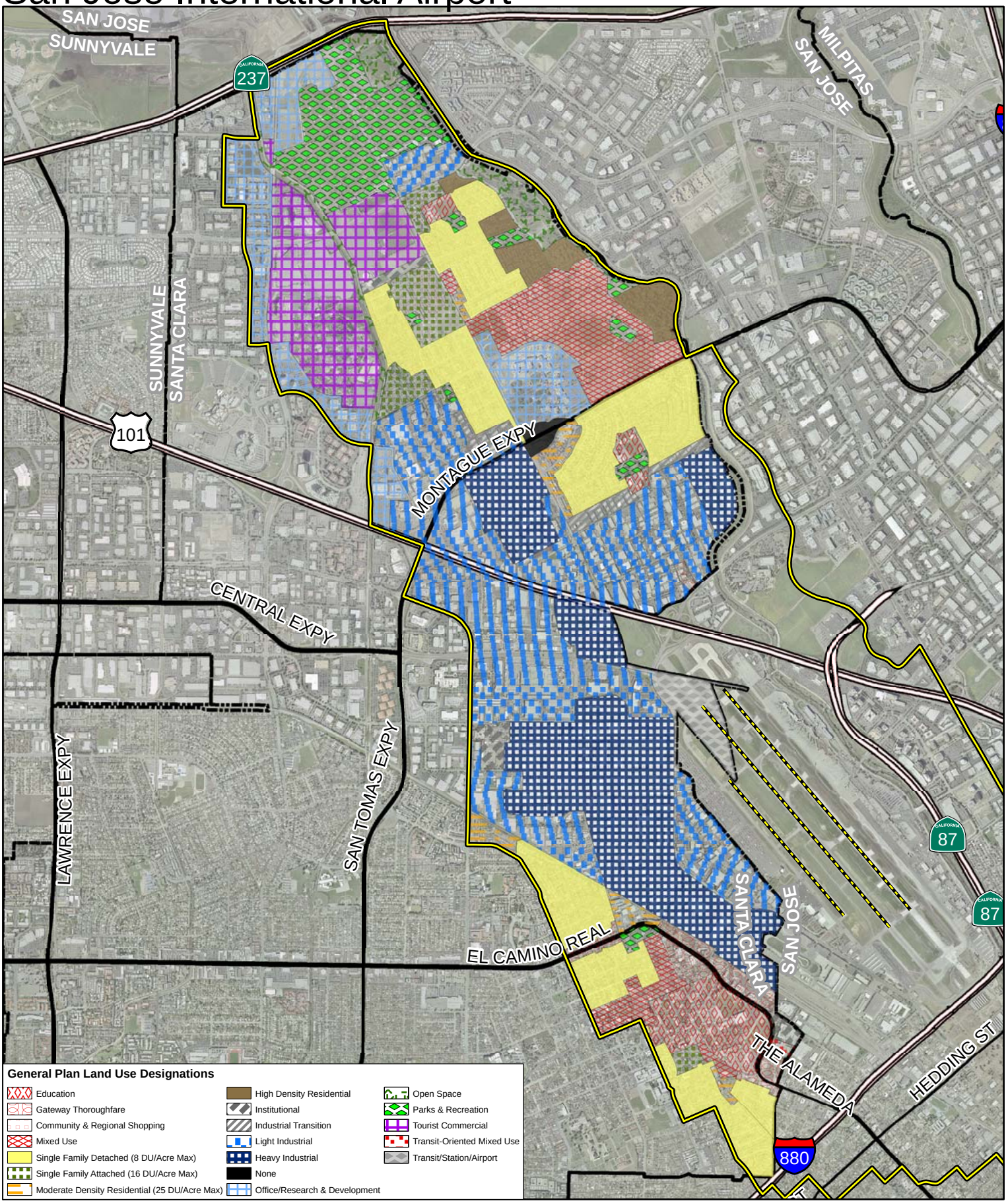
Figure 4a

San Jose International Airport



General Plan Land Use

City of Santa Clara

0 2,000 4,000 8,000 Feet

N

This map created by Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
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Figure 4b

Section 3

3 LAND USE COMPATIBILITY GUIDELINES

3.1 OVERVIEW

Land use compatibility policies and standards are based on community values, sound technical knowledge, and acceptable analytical methods. These policies and compatibility criteria form the basis for evaluating existing land use compatibility and provide the foundation for the Santa Clara County Airport Land Use Commission (ALUC) policies. These standards focus on the three areas of ALUC responsibility including aircraft noise, the control of objects in navigable airspace, and the safety of persons on the ground and in aircraft. These compatibility criteria are contained in relevant State and Federal statutes and regulations and are discussed in this section.

Federal, State and other local agencies have developed and published guidelines for airport land use compatibility planning. Unfortunately, no civilian or military authority has established regulations or statutes that specify a single methodology for mitigating the incompatibilities between an airport and its environs, nor have such incompatibilities been adequately defined. The enabling legislation for the Santa Clara County Airport Land Use Commission offers some guidance while directing the Commission to provide for the orderly growth of the airports and the areas surrounding the airports, and to safeguard the general welfare of the inhabitants within the vicinity of the airports and the public in general. The legislation further enables the Commission to develop height restrictions on structures, to specify the use of land, to determine building standards, including noise insulation, and to assist local agencies in ensuring compatible land uses in the vicinity of the airports to the extent that the land in the vicinity of the airports is not already devoted to incompatible uses. The Commission is also empowered to coordinate planning at the State, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

3.2 LAND USE COMPATIBILITY CRITERIA

The principal source for airport land use compatibility planning is the January 2002 *California Airport Land Use Planning Handbook* (2002 Handbook) published by the California Department of Transportation, Division of Aeronautics (Caltrans). The 2002 Handbook provides guidelines for formulating compatibility criteria and policies for preparing Comprehensive Land Use Plans (CLUPs). Noise and safety compatibility concepts and issues are presented, and copies of relevant legislation and examples of mitigation measures, such as model noise and avigation easements are included. The 2002 Handbook is available for review at http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.html and at the Santa Clara County Planning Department office. Note that a local agency is not precluded from establishing land use policies and guidelines that are more restrictive than those described in this CLUP.

3.3 NOISE RESTRICTION AREA

Airport noise affects many communities. At certain levels, airport noise can interfere with sleep, conversation, or relaxation. It also may disrupt school and work activities. At even higher levels, airport noise may make outdoor activities impossible and may begin to raise health concerns with respect to hearing loss and stress-related problems. However, hearing damage from airport noise may not be a problem for nearby neighbors because noise levels are simply not of sufficient intensity to cause such damage. An exception to this is the exposure a ground crew member receives during the handling of a jet aircraft. Similarly, medical studies are inconclusive on a cause-and-effect relationship for non-auditory health concerns near airport. A more general conclusion is that noise may have an additive effect for some people with anxieties, ulcers, and tension illness.

The amount of annoyance that aircraft noise creates among people living and working in the vicinity of an airport varies on an individual basis. Studies show that a certain percentage of people will continue to be annoyed by aircraft noise at any given noise level, regardless of how low that aircraft noise level may be.

All levels of government share responsibility for addressing the airport noise issue. The Federal government establishes noise standards for aircraft as published in Federal Aviation Regulations (FAR) Part 36, *Noise Standards: Aircraft Type and Airworthiness Certification*, and conducts research on noise

abatement techniques and noise compatibility. The preparation of a special airport noise study under the provisions of FAR Part 150, *Airport Noise Compatibility Planning*, provides technical assistance to the airport operator in planning and implementing a noise compatibility program. The State of California also prescribes noise standards for all airports as defined in Title 21, *Airport Noise Standards*, of the California Code of Regulations, and sets noise insulation standards for residential structures as defined in Title 24, *California Building Standards Code*, of the California Building Standards Commission. The airport operator may develop airport noise control programs and enact operational restrictions to control and reduce noise levels in the community. Finally, local governments have the responsibility to limit the exposure of the population to excessive airport noise levels through the land use planning and zoning process.

The City of San Jose has recognized that a higher noise level exists around the Airport and in their Downtown Core Area, defined as the area south of Julian St, west of Fourth St, north of Highway 280 and east of Highway 87, due to aircraft overflights, the level of commercial activities and vehicular traffic in that area. Therefore the City tolerates a higher level of aircraft noise in that area.

3.3.1 Airport Noise Descriptors

To adequately address the airport noise issue, local governments need a standard way to measure and describe airport noise and establish land use compatibility guidelines. The City of San Jose uses DNL as the measure of noise. The County of Santa Clara has identified DNL and CNEL as being equivalent measures of noise. Relative to aviation, it is common to use the Community Noise Equivalent Level (CNEL) for determining land use compatibility in the community environment.

The Community Noise Equivalent Level (CNEL) descriptor is a method of averaging single-event noise levels over a typical 24-hour day and applying penalties to noise events occurring during the evening (7 p.m. to 10 p.m.) and night (10 p.m. to 7 a.m.) hours. CNEL is usually defined in terms of average annual conditions, so that the CNEL measured on a given day may be either less than or greater than the annual average.

The State of California uses the CNEL descriptor to describe land use compatibility with respect to aircraft noise exposures. CNEL is the noise descriptor standard defined in Title 21 of the California Code of Regulations, *Airport Noise Standards*, and the standard specified for evaluation of exterior and interior noise impacts in Title 24 of the California Building Standards Commission, *California Building Standards Code*. The CNEL is identified as one of two noise descriptors used in the preparation of a noise element of a general plan according to guidelines established by the Office of Noise Control, California Department of Health Services (now documented as *General Plan Guidelines, Appendix A*).

The Federal Aviation Administration (FAA) recognizes the CNEL as essentially equivalent to the Yearly Day-Night Average Sound Level (DNL), which is the basis for FAA recommendations for land use compatibility with respect to aircraft noise described in FAR Part 150, *Airport Noise Compatibility Planning*.

The decibel (dB) is the unit of measurement for the magnitude of a sound. A decibel is equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound, specifically a sound just barely audible to an unimpaired human ear (e.g., 55, 60, 65, 70 and 75 dB).

3.3.2 Land Use Compatibility Standards – California

Land use compatibility guidelines for airport noise are included in the 2002 Handbook. Amendments to the law enacted in October 1994 mandate the use of these guidelines in the preparation of airport land use plans. These guidelines were originally developed in 1983 after considering State Office of Noise Control (ONC), FAA, and U.S. Department of Housing and Urban Development (HUD) guidelines together with a review of available airport land use plans. Existing Federal and State laws were reviewed as part of the updated 2002 Handbook. The State ONC criteria established the 55 dB CNEL as a residential threshold value to distinguish normally acceptable from conditionally acceptable situations.

The Caltrans guidelines for land use compatibility standards extend below the Federal 65 dB CNEL, as the Federal threshold does not sufficiently explain the annoyance area surrounding general aviation airports.

The frequency of operations from some airports, visibility of aircraft at low altitudes and typically lower background noise levels around many general aviation airports are all believed to create a heightened awareness of general aviation activity and potential for annoyance outside of the 65 dB CNEL contour.

At and above the 60 dB CNEL level, the California Building Code, Section 1208A.8.3 requires an acoustical analysis of proposed residential structures, other than detached single-family dwellings, to achieve an indoor noise level of 45 dB CNEL.

The noise attenuating properties of existing types of construction were considered in setting state standards. Typical wood frame construction with drywall interiors provides noise reduction of between 15 and 20 dB. Thus, residential units exposed to outdoors noise in the range between 60 and 65 dB CNEL can be attenuated to achieve the 45 dB CNEL level indoors when built using normal standards of construction.

The 2002 Handbook (see Appendix B herein) urges ALUCs to be conservative when establishing noise contours.

3.3.3 Land Use Compatibility Standards - Santa Clara County

In the *Noise Element* of the 1994 Santa Clara County General Plan, the County identified 55 dB DNL as the normally acceptable standard for residential uses. Above 55 dB DNL, residential uses are cautionary, however the noise exposure is great enough to be of some concern.

3.3.4 Land Use Compatibility Standards – City of San Jose

The Land Use Compatibility Guidelines for Community Noise in the *Goals and Policies Chapter* of the San Jose 2020 General Plan, Figure 16, specifies a maximum interior noise quality level limit of 45 DNL and a long-range maximum exterior noise quality level of 55 DNL (equilivent to CNEL) for schools, hospitals, libraries and auditoriums, and a maximum exterior noise level limit of 60 DNL for residences, hotels, motels, retail and business areas, parks and playgrounds. Specified land uses in areas above these exterior noise levels are permitted after an acoustical analysis of the amount of attenuation necessary to maintain an indoor level of DNL <=45. A Leq value of Leq(30) is used for the evaluation of school impact by the airport. Above 70 DNL, new development is permitted only if uses are entirely indoors and building design limits interior levels to <= 45 DNL. Outdoor activity areas are permitted if they are designed and constructed to limit the noise levels to 60 DNL or less. Noise Policy 1 identifies 60 DNL as the short term exterior noise quality level.

The San Jose 2020 General Plan recommends a maximum exterior noise level of 55 DNL for residential and Public/Quasi-Public uses, which include schools, hospitals, libraries and auditoriums. Additionally, the San Jose 2020 General Plan noise policies acknowledge the pre-existing noise context of the Airport.

Specifically, noise policies numbers 1, 4, 5, and 6 in the General Plan state:

San Jose 2020 General Plan Noise Policy No. 1 : "The City's acceptable noise level objectives are 55 DNL as the long-range exterior noise quality level, 60 DNL as the short-range exterior noise quality level, 45 DNL as the interior noise quality level, and 76 DNL as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City recognizing that the attainment of exterior noise quality levels in the environs of the San Jose international and Reid–Hillview airports, the Downtown Core Area and along major roadways may not be achieved in the time frame of this Plan. To achieve the noise objectives, the City should require appropriate site and building design, building construction and noise attenuation techniques in new residential development."

San Jose 2020 General Plan Noise Policy No. 4: "The City should monitor Federal legislative and administrative activity pertaining to aircraft noise for new possibilities for noise reducing modifications to aircraft engines beyond existing Stage 3 requirements. In addition, the City should monitor the ongoing FAA study group discussions pertaining to land use around airports and oppose Federal policies preempting local land use authority. The City should monitor any efforts at the Federal level to revise or modify the Federal schedule for phase-out of Stage 2 aircraft. The City should continue to encourage the use of quieter aircraft at the San Jose International Airport."

San Jose 2020 General Plan Noise Policy No. 5: "The City should continue to require safe and compatible land uses within the Airport noise zones (identified by the 65 CNEL contour as set forth in State law) and should also encourage operating procedures which minimize noise."

San Jose 2020 General Plan Noise Policy No. 6: "The City should continue to encourage the Federal Aviation Administration to enforce current cruise altitudes which minimize the impact of aircraft noise on land use."

3.3.5 Land Use Compatibility Standards – City of Santa Clara

The Noise Element in the *Environmental Element* of the City of Santa Clara 2000 – 2010 General Plan, Figure 5-G, indicates that for Residential and Public Educational facilities, an exterior noise level between 55 and 70 CNEL "requires design & insulation to reduce noise levels." Above 70 CNEL, "Avoid land use except when entirely indoors and an interior noise level of 45 Ldn can be maintained." (CNEL and Ldn are considered equivalent.) Noise Policy 23 says: "Within the San Jose Airport noise impact area, maintain residential neighborhoods as designated in the Land Use Element. Permit appropriate residential development in these neighborhoods subject to noise insulation." Noise Policy 25 says: "Prohibit any significant new residential development in the adverse noise environment created by the San Jose International Airport (65 CNEL and over)."

3.3.6 San Jose International Airport Noise Contours

An analysis of annual aircraft operations and related noise levels for San Jose International Airport was made to prepare CNEL noise exposure maps for this CLUP using current and forecast aircraft operations based on the existing runway configuration. These noise studies are presented in the *San Jose International Airport Master Plan Update, Final Supplemental Environmental Impact Report, Aircraft Noise Analysis and San Jose International Airport Master Plan Update Project, Second Addendum to the Environmental Impact Report, Appendix A.* The ALUC has elected to adopt the most conservative (largest) contours from these studies for the purposes of this CLUP.

The Federal Aviation Administration's (FAA) Integrated Noise Model (INM) Version 6.0c was used to prepare CNEL noise exposure maps based on the FAA aircraft noise level database and airport operational factors described below. The INM software was developed by the FAA and represents the Federally sanctioned and preferred method for analyzing aircraft noise exposure.

3.3.7 Aircraft Operations

Aircraft operational factors that can significantly affect overall noise levels as described by CNEL include the aircraft fleet mix, the number of daily operations and the time of day when aircraft operations occur. Runway use factors also significantly influence CNEL values. Trip length can affect aircraft single-event noise levels. An aircraft that is making a local flight may carry less fuel and fewer passengers than that for a long flight and therefore make less noise on departure. The INM software applies corrections to air carrier aircraft takeoff profiles to account for these differences, but makes no corrections to general aviation aircraft takeoff profiles.

Aircraft operational assumptions for the Airport were based upon analyses of airport activity provided by Airport Management. These assumptions are summarized in Tables 3-1 and 3-2. Single-engine piston aircraft were assumed for 100 percent of the local operations.

Descriptions of aircraft flight tracks were developed for use in the INM through discussions with Airport Management and review of the assumptions used for previous descriptions of aircraft operations at the Airport. Based on these data, generalized flight tracks were prepared for use in the noise modeling process to describe areas with a concentration of aircraft overflights. It is recognized that variations in flight paths occur at the Airport and that the tracks used for this analysis are a general representation of those flight tracks.

Table 3 - 1

AIRPORT CONFIGURATION AND RUNWAY USE

San Jose International Airport

2027

Airport Configuration			
Runway Configuration:	30R-12L 30L-12R 29-11		
Field Elevation: (Runway High Point)	62 feet MSL		
Runway Use:	Runway 30L/30R/29 – 85% Runway 12R/12L/11 – 15%		
Temporal Distribution of Runway Operations Percentage of Use			
Aircraft Class	Day 7 a.m. to 7 p.m.	Evening 7 p.m. To 10 p.m.	Night 10 p.m. to 7 a.m.
Takeoffs:			
Heavy Air Carrier Jets	100%	0%	0%
Air Carrier Jets	66%	19%	15%
Cargo Jets	69%	0%	31%
Corporate Jets	80%	10%	10%
Commuter Turboprops	80%	20%	0%
GA, Propellor, All	87%	8%	5%
Helicopter	88%	8%	4%
Landings:			
Heavy Air Carrier Jets	77%	23%	0%
Air Carrier Jets	70%	14%	16%
Cargo Jets	68%	0%	32%
Corporate Jets	80%	10%	10%
Commuter Turboprops	70%	20%	10%
GA, Propellor, All	87%	8%	5%
Helicopter	88%	8%	4%

Source: *San Jose International Airport Master Plan Update, Supplemental EIR, August 2002*

Table 3 - 2

ANNUAL AIRCRAFT OPERATIONS

San Jose International Airport

2027

Generalized Aircraft Type (INM Designation)		Year 2027
Airbus 318/319/320	(A320)	14,600
Airbus 300/310	(A300)	1,080
Boeing 727-100/200	(727EM2)	1,606
Boeing 737-100/200	(737N17)	1,825
Boeing 737-300/400/500/700/800	(737700)	94,024
Boeing 757	(757PW/757RR)	18,615
Boeing 767	(767300)	4,380
Boeing 777	(777300)	5,110
DC-8/9	(DC93LW)	219
DC-10	(DC1030)	730
MD-80/81/82/83/87/88	(MD83)	29,565
Regional Jets	(CL601)	20,440
Regional Turboprops	(EMB120)	2,190
Large State 2 Business Jets	(GIIB)	2,117
Large Stage 3 Business Jets	(GIV)	8,514
Medium/Small Stage 2 Business Jets	(COMJET)	34,347
Medium/Small Stage 3 Business Jets	(LEAR35)	4,562
Twin Engine Turboprop	(CNA441)	13,505
Twin Engine Propellor	(BEC58P)	11,060
Single Engine Propellor	(COMSEP)	57,861
Helicopter	(B206L)	3,650
Total		330,000

Source: *San Jose International Airport Master Plan Update, 2nd Addendum to the EIR, Appendix A, Table I, April 2003*

3.3.7.1 CNEL Noise Exposure Contours

The Integrated Noise Model (INM) Version 6.0c was used to prepare CNEL noise exposure contours for the Airport based on the aircraft noise level and operational factors described in the previous sections.

User inputs to the INM include the following:

- Airport altitude and mean temperature
- Runway configuration
- Aircraft flight track definition
- Aircraft stage length (not applicable to South County Airport)
- Aircraft departure and approach profiles
- Aircraft traffic volume and fleet mix
- Flight track utilization by aircraft types

The INM database includes aircraft performance parameters and noise level data for numerous commercial, military and general aviation aircraft classes. When the user specifies a particular aircraft class from the INM database, the model automatically provides the necessary inputs concerning aircraft power settings, speed, departure profile, and noise levels. INM default values were used for all fixed-wing aircraft types.

After the model had been prepared for the various aircraft classes, INM input files were created containing the number of operations by aircraft class, time of day and flight track for annual average day aircraft operations and future operations.

From these data, the INM produces lines of equal noise levels, i.e. noise contours. The location of these noise contours become less precise with distance from the runway since aircraft do not follow each flight track exactly as defined in the model. However, they are accurate enough to indicate general areas of likely community response to noise generated by aircraft activity and serve as the basis for land use compatibility determinations.

3.3.8 Impacts on Land Use

The 75, 70 and 65 dB CNEL noise contours based on the forecast aircraft operations are illustrated on Figure 5 and discussed below.

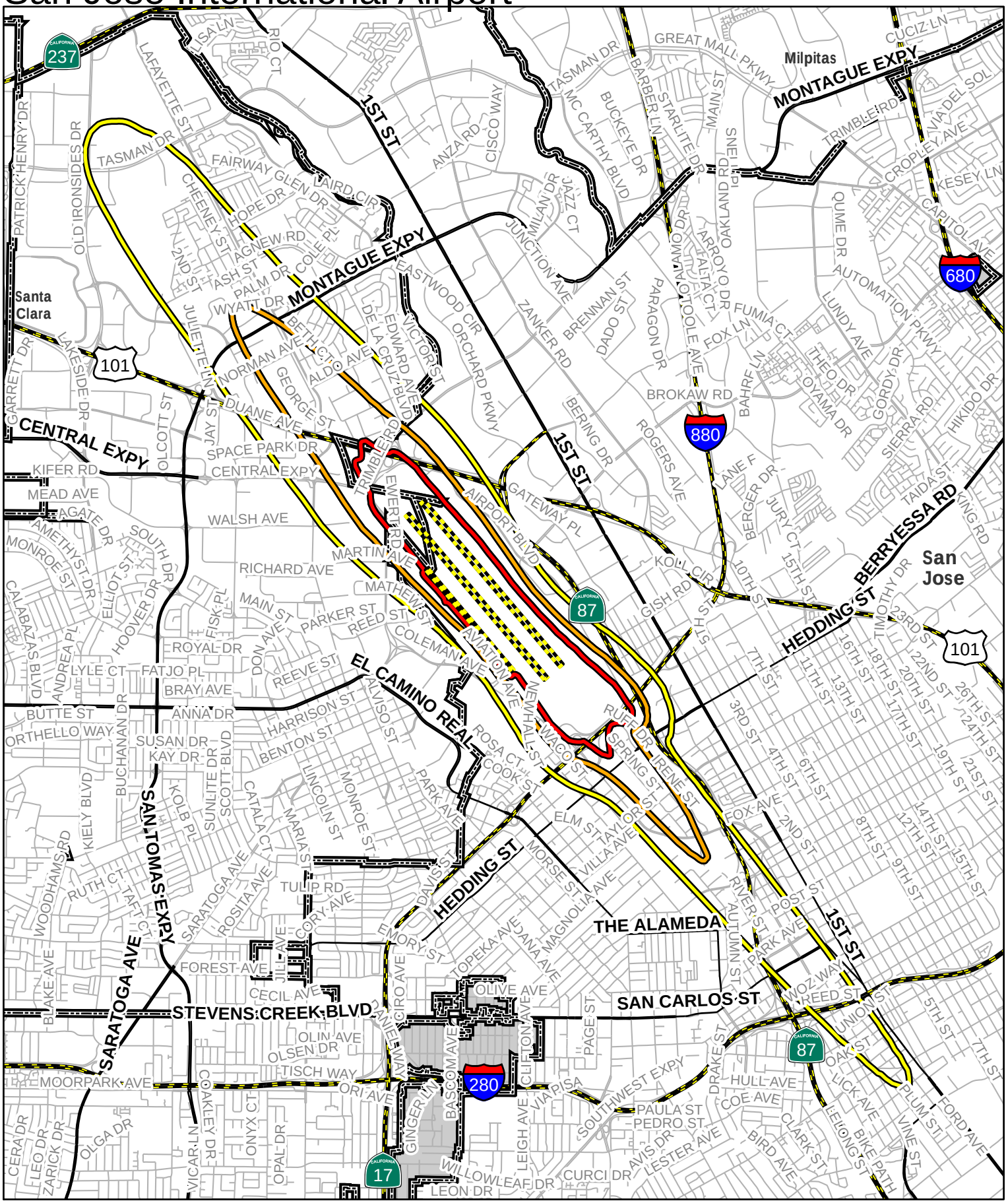
3.3.8.1 75 dB CNEL Noise Level

The 75 dB CNEL aircraft noise contour is completely contained within the Airport boundaries or over city or state owned property with one exception on the northwest end. This property is zoned Commercial.

3.3.8.2 70 dB CNEL Noise Level

The 70 dB CNEL aircraft noise contour extends from Beech Street on the northwest to the intersection of Trimble Road and De La Cruz Blvd through the airport passenger terminal area to Highway 87 to Hedding Street into the Coleman Loop area to the railroad tracks south of Coleman Avenue then northwest to the intersection of Coleman Avenue and McKendrie Street. to the intersection of Waco Street. and Hamline Street. then along the west side of the airport to the intersection of Lafayette Street and Comstock Street then northwest to Beech Street. The Northwest portion of this contour is in the City of Santa Clara and overlays residential properties at Beech Street and at the intersection of Lafayette Street and Aldo Avenue. The southeast area of this contour is in the City of San Jose and overlays open areas and industrial properties in the southeast Coleman Loop area.

San Jose International Airport



2022 Aircraft Noise Contours

Figure 5

CNEL (dB)

Runway
65
70
75
City Limits
Unincorporated_Areas

0 2,000 4,000 8,000 Feet

N

3.3.8.3 65 dB CNEL Noise Level

The approximate boundary of the 65 dB CNEL aircraft noise contour extends from the intersection of Great America Parkway and Guadalupe Slough to the intersection of Agnews Road and Grarrity Way then to the intersection of Laurelwood Road and Belick Street then to the intersection of US Highway 101 and Highway 87, along Highway 87 to the intersection of Senora Avenue and San Juan Avenue, then to the intersection of Ferrari Avenue and North San Pedro Street, then to the intersection of Younger Avenue and North San Pedro Street then to the intersection of Highway 87 and West Mission Street then along Highway 87 to Coleman Avenue then to the intersection of Basset Street and Terraine Street, then to the intersection of San Pedro Street and San Fernando Street, to the intersection of Park Avenue and Market Street, direct to the intersection of Goodyear Street and Sherman Street, then direct to the intersection of West Humboldt Street and Mastic Street, then to the intersection of Almaden Avenue and Willow Street then to the intersection of West Julian Street and North Montgomery Street, then to the intersection of University Avenue and Chestnut Street, then to the intersection of Stockton Avenue and Emory Street, then to the intersection of Newhall street and Newhall Drive, then to the intersection of Coleman Avenue and Aviation Avenue, then along the western airport boundary to the intersection of Brokaw Road and Martin Avenue, then to the intersection of Robert Avenue and De La Cruz Boulevard, then to the intersection of Lafayette Street and Walsh Avenue, then direct to the intersection of Juliette Lane and Mission College Boulevard, then to Tasman Drive and Great America Parkway, then along Great America Parkway to the intersection with Guadalupe Slough.

3.4 HEIGHT RESTRICTION AREA

Airport vicinity height limitations are required to protect the public safety, health, and welfare by ensuring that aircraft can safely fly in the airspace around an airport. This protects both those in the aircraft and those on the ground who could be injured in the event of an accident. In addition, height limitations are required to protect the operational capability of airports, thus preserving an important part of National and State aviation transportation systems.

Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, establishes imaginary surfaces for airports and runways as a means to identify objects that are obstructions to air navigation. Each surface is defined as a slope ratio or at a certain altitude above the airport elevation.

FAA uses FAR Part 77 obstructions standards as elevations above which structures may constitute a safety hazard. Any penetrations of the FAR Part 77 surface are subject to review on a case-by-case basis by the FAA. The FAA evaluates the penetration based on the published flight patterns for the airport, as they exist at that time. If a safety problem is found to exist, FAA may issue a determination of a hazard to air navigation. FAA does not have the authority to prevent the encroachment, however California law can prevent the encroachment if the FAA has made a determination of a hazard to air navigation. The local jurisdiction can establish and enforce height restrictions.

Another height restriction consideration for air carrier airports is defined in FAR Part 25.121, *Climb: One-engine-inoperative* (OEI). This regulation defines minimum clearance heights extending from the runway liftoff point for an air carrier aircraft having an engine failure as it departs the runway. These aircraft are designed to fly safely with one engine inoperative, but their rate of climb is substantially reduced and obstacles need to be lower than for a normal departure. Different aircraft designs (at their maximum gross weight) and different Air Carriers have different OEI surface requirements. These height limitations may or may not be lower than the FAR Part 77 surfaces, and are generally NOT considered by the FAA in its review of obstructions to air navigation.

The ALUC statutes (PUC 21670) mandate that the airspace above the airport be protected for at least the next 20 years. Thus while higher FAR Part 77 surface penetrations are not found to be a hazard at the time they are evaluated by the FAA, these penetrations may become a hazard in the future due to changes in instrument approach procedures or lower OEI surfaces or lengthened runways. FAA approved penetrations would prevent these new procedures from being put into place for the benefit of airport operations, thus reducing the future utility of the airport.

The dimensions of the imaginary surfaces vary depending on the type of approach to or the OEI departure from a particular runway as illustrated on Figure 6 for the Airport based on the ultimate dimensions shown on the Airport Layout Plan. Precision Instrument-Approach runways generally have larger surfaces and flatter approach slopes than non-precision approach and visual approach runways. Table 3-3 tabulates the imaginary surfaces described below.

3.4.1 Primary Surface

The Primary Surface is a surface longitudinally centered along a runway, and extending 200 feet beyond the end of each runway. For Runways 30L-12R and 30R-12L the width of the Primary Surface is 1,000 feet and for Runway 29-11, the Primary Surface width is 500 feet.

3.4.2 Approach Surface

A surface longitudinally centered on the extended runway centerline, extending outward and upward from each end of the primary surface. An Approach Surface is applied to each end of each runway based upon the type of approach available or planned for that runway end. The inner edge of the Approach Surface is the same width as the Primary Surface for that runway. The Approach Surface dimensions are described in Table 3-3.

3.4.3 Transitional Surface

A surface extending outward and upward from the sides of the Primary Surface and from the sides of the Approach Surfaces at a slope of 7 to 1.

3.4.4 Horizontal Surface

A horizontal plane 150 feet above the established airport elevation (the highest point of an airport's usable landing area measured in feet above mean sea level), the perimeter of which is constructed by swinging arcs 10,000 feet out for Runways 30R-12L and 30L-12R and 5000 feet for Runway 29-11, from the center of each end of the Primary Surface of each runway and connecting the arcs with tangent lines.

3.4.5 Conical Surface

A surface extending outward and upward from the periphery of the Horizontal Surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

3.4.6 One Engine Inoperative (OEI) Surfaces

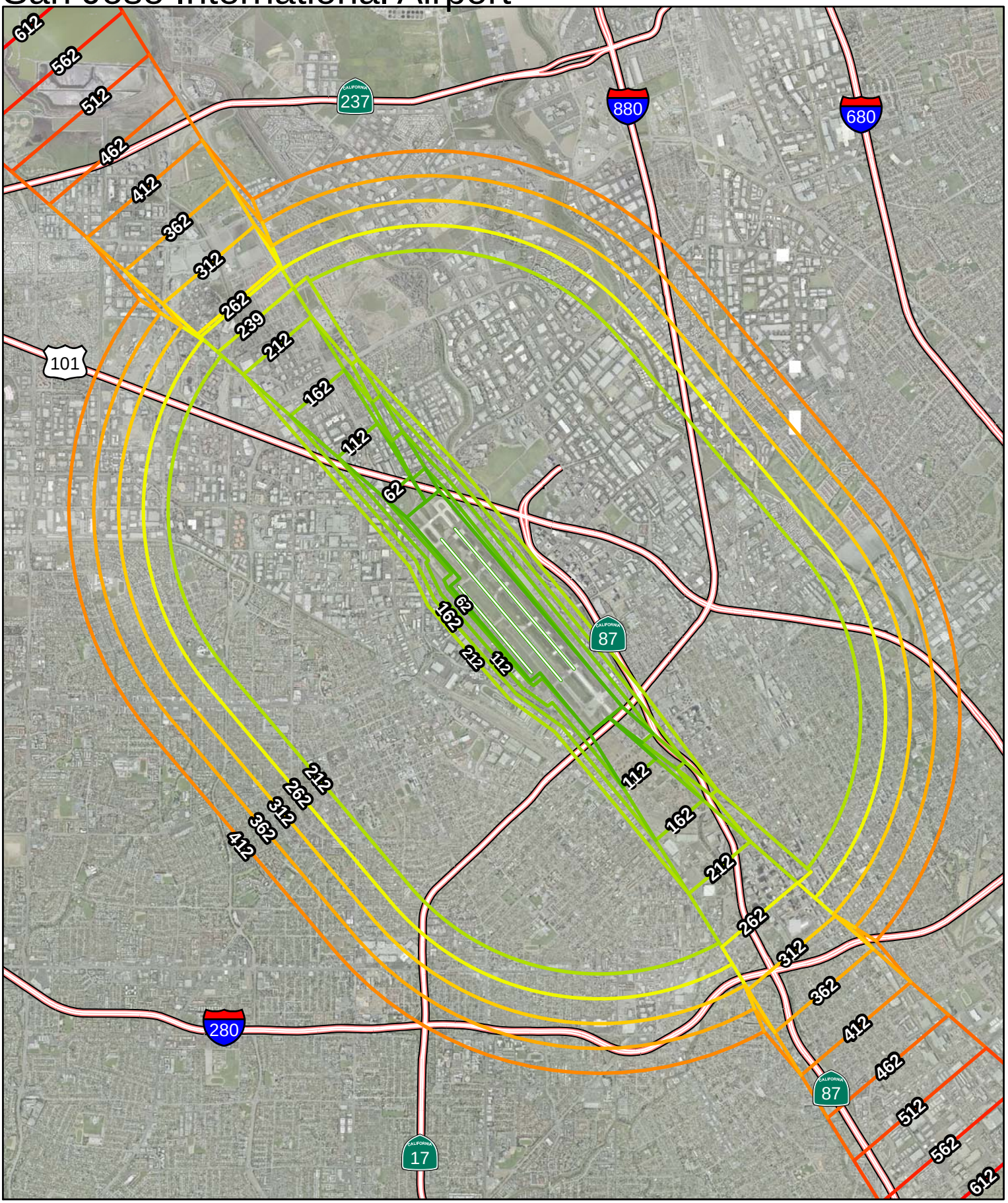
A surface extending outward and upward from a runway used for departures by Air Carrier aircraft. This surface provides obstruction clearance for a multi-engine aircraft having an engine failure on takeoff. The parameters for this surface are defined in Federal Aviation Regulations (FAR) Part 25.121.

3.4.7 Summary

Where imaginary surfaces overlap, such as in the case where the Approach Surface penetrates and continues upward and outward from the Horizontal Surface, the lowest surface is used to determine whether or not an object would be an obstruction to air navigation.

Any proposed new construction or expansion of existing structures that would penetrate any of the FAR Part 77 imaginary surfaces of the Airport is considered an incompatible land use, unless either the FAA has determined that the proposed structure does not constitute a hazard to air navigation or the Caltrans Aeronautics Program has issued a permit allowing construction of the proposed structure. The FAA has established minimum standards for the determination of hazards or obstructions to aviation. The FAA permits local agencies such as the ALUC to establish more restrictive criteria for determining if the height of a structure creates a safety hazard to aircraft operations. A determination by the FAA or Caltrans that a project does not constitute a hazard to air navigation does not limit the ALUC from determining that a project may be inconsistent under the policies of this CLUP.

San Jose International Airport



Maximum Structure Height (feet above MSL)

Runway	162	266	462
Ground Level	212	312	512
62	239	362	562
112	262	412	612

FAR Part 77 Surfaces
Figure 6

0 2,000 4,000 8,000 Feet

N

Table 3 - 3

FAR PART 77 DIMENSIONS

San Jose International Airport

	Runway					
	30L	12R	30R	12L	29	11
Runway Type	Precision	Precision	Nonprecision	Nonprecision	Visual	Visual
Primary Surface						
Length (feet)	11,400	11,400	11,400	11,400	4,999	4,999
Width (feet)	1000	1000	1000	1000	500	500
Approach Surface						
Slope	50:1*	50:1*	34:1	34:1	20:1	20:1
Length (feet)	10,000*	10,000*	10,000	10,000	10,000	10,000
Inner Width	1000	1000	1000	1000	500	500
Outer Width	16,000	16,000	4,000	4,000	3,500	3,500
Transitional Surfaces						
Slope	7:1	7:1	7:1	7:1	7:1	7:1
Horizontal Surface						
End Radius (feet)	10,000	10,000	10,000	10,000	5,000	5,000
Elevation (feet MSL)	212	212	212	212	212	212
Conical Surface						
Slope	20:1	20:1	20:1	20:1	20:1	20:1
Width (feet)	4,000	4,000	4,000	4,000	4,000	4,000

* Slope is 50:1 for 10,000 feet then 40:1 for an additional 40,000 feet

Source: Federal Aviation Regulations, Part 77

3.5 SAFETY RESTRICTION AREA

Safety of people on the ground and in the air and the protection of property from airport-related hazards are among the responsibilities of the Airport Land Use Commission. The 2002 Handbook presents guidelines for the establishment of airport safety areas in addition to those established by the FAA.

Airport safety zones are established to minimize the number of people exposed to potential aircraft accidents in the vicinity of the Airport by imposing density and use limitations within these zones. Figure 7 illustrates the airport safety zones for Runways 30R-12L, 30L-12R and 29-11 at the Airport. The safety zones are related to runway length and expected use. The safety zones shown in Figure 7 are based on a runway length of 11,000 feet for Runways 30R-12L and 30L-12R, and 4,599 for Runways 29-11. Aircraft flight tracks are shown on Figure 3.

In addition, the survivability of aircraft occupants in the event of an emergency landing has been shown to increase significantly if the aircraft is able to reach the ground under control of the pilot. As a result, open area requirements are established for the safety zones in addition to density and use requirements.

Exposure to potential aircraft accidents diminishes with distance from the airport runways. The safety zones shown below are in descending order of exposure to potential aircraft accidents, with the Runway Protection Zone (RPZ) having the highest exposure followed by the Inner Safety Zone (ISZ), Turning Safety Zone (TSZ), Outer Safety Zone (OSZ) and Sideline Safety Zone (SSZ), with the Traffic Pattern Zone (TPZ) having the lowest level of exposure.

At airports with displaced runway thresholds, a choice exists to use either the runway threshold (end of pavement) or the displaced threshold to determine the location of the safety zones. This CLUP uses the threshold adopted by the Airport and the FAA for positioning the FAA RPZs, as depicted on the FAA approved Airport Layout Plan, as the basis for positioning the ALUC safety zones. At this airport both RPZs are based on the displaced thresholds and thus the ALUC safety zones are positioned accordingly.

The safety zones defined for the Airport are a composite based on the 2002 Handbook guidelines. The safety zones for the two longer runways are based on the diagram for a Large Air Carrier Airport while the safety zones for the shorter runway are based on the diagram for an airport having a general aviation runway between 4,000 and 5,999 feet in length. Some deviations from the guidelines have been made to account for a single traffic pattern on the northwest side of the airport. Safety zones are exclusive in their coverage, and do not overlay each other. Thus land in the RPZ is only in the RPZ, and is not also in the ISZ or TSZ. The order of precedence is, from highest to lowest: RPZ, ISZ, TSZ, OSZ, SSZ and TPZ. If a development project spans more than one safety zone, each part of the project must meet the requirements for the safety zone in which the land for that portion of the project is located. Thus a single building that extends over two safety zones may have differing height and density-of-use requirements for the two parts of the same physical structure. The following safety zones apply to San Jose International Airport based on guidelines provided in the 2002 Handbook:

3.5.1 Runway Protection Zones

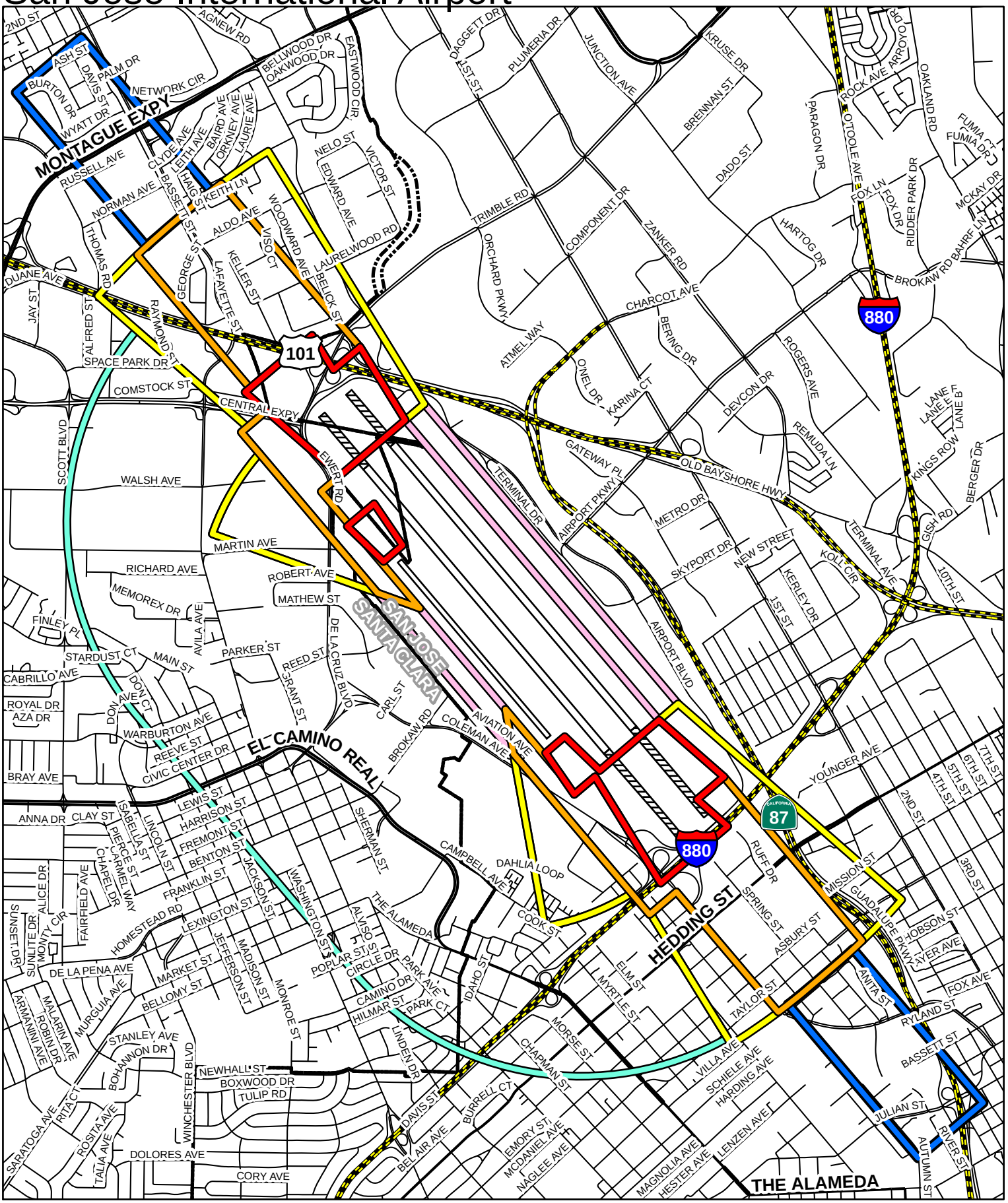
The function of the Runway Protection Zone (RPZ) is to enhance the protection of people and property on the ground and aircraft occupants. RPZs should be clear of all objects, structures and activities. At this airport the RPZ as adopted by the airport and the FAA, begins 200 feet out from the runway's displaced landing thresholds (not the pavement ends). It is a trapezoidal area centered on the extended runway centerline. The size is related to the expected aircraft use and the visibility minimums for that particular runway.

- The RPZs for Runway 30L and Runway 12R are 2,500 feet long with an inner width of 1,000 feet and an outer width of 1,750 feet.

- The RPZs for Runway 30R and Runway 12L are 1,700 feet long with an inner width of 1,000 feet and an outer width of 1,510 feet.

- The RPZs for Runway 29 and Runway 11 are 1,000 feet long, with an inner width of 500 feet and an outer width of 700 feet.

San Jose International Airport



Safety Zones

- Runway
- Runway Protection Zone
- Inner Safety Zone
- Turning Safety Zone
- Outer Safety Zone
- Sideline Safety Zone
- Proposed Runway
- Traffic Pattern Zone

Airport Safety Zones
Figure 7

0 1,000 2,000 4,000 Feet

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3.5.2 Turning Sector Defined

Some of the safety zones are bounded by a geometric feature defined as a "Turning Sector". There are two Turning Sectors for this airport, one for the shorter runway and another for the longer runways. These features are constructed as follows:

3.5.2.1 Runways 30L-12R and 30R-12L Turning Sectors

Each runway end has a sector, which is bounded on the inside by the extended runway centerline. The radius of these sectors is 12667 ft, with the center point located 6667 ft along the runway centerline from the outer end of the primary surface, towards the opposite end of the runway. The arc for the sector is swung to the side opposite from the other runway. The interior angle of the sector is 8.53 degrees from the extended runway centerline.

The Turning Sector is defined as the outside bounds of the feature constructed above. There is one Turning Sector for each end of each of the longer runways.

3.5.2.2 Runways 29-11 Turning Sectors

Each runway end has a sector, which is bounded on the inside by the extended runway centerline. The radius of these sectors is 5000 ft with the center point located 1500 ft along the runway centerline from the runway threshold towards the opposite end of the runway. The arc for the sector is swung towards the traffic pattern side for the associated runway. The interior angle of the sector is 30 degrees from the extended runway centerline.

The Turning Sector is defined as the outside bounds of the feature constructed above. There is one Turning Sector for each end of this runway.

3.5.3 Inner Safety Zone

The Inner Safety Zone (ISZ) is located within the Turning Sector boundary described above. The ISZ represents the approach and departure corridors that have the second highest level of exposure to potential aircraft accidents. The ISZ is centered on the runway centerline and extends from the outer edge of the Runway Protection Zone to the outer edge of the Turning Sector boundary. The length of the runway determines the dimensions.

- The ISZ for Runway 30L, 30R, 12L and 12R is an area 1,500 feet wide, centered on the runway centerline, contained within the Turning Sector. The total length of the RPZ and the ISZ is 6,000 feet.

- The ISZ for Runway 29 and 11 is an area 1500 feet wide, centered on the runway centerline. The total length of the RPZ and the ISZ is 3,800 feet.

- The Inner Safety Zone excludes the RPZ, the Turning Safety Zone and the Primary Surface.

3.5.4 Turning Safety Zone

The Turning Safety Zone (TSZ) represents the approach and departure areas that have the third highest level of exposure to potential aircraft accidents. The Turning Safety Zones are defined below.

- The TSZs for Runways 30R, 30L, 12R, 12L, 29 and 11 are the areas inside the Turning Sector that do not include the RPZ or the ISZ.

- The Turning Safety Zone areas do not include the RPZ or the ISZ.

3.5.5 Outer Safety Zone

The Outer Safety Zone (OSZ) is a rectangular area centered on the extended runway centerline starting at the outer end of the ISZ and extending away from the runway end. The length of the runway determines the dimensions.

- The OSZ for each end of Runways 30L, 30R, 12L and 12R is a rectangular area 1,000 feet wide and 4,000 feet long centered on the extended runway centerline, starting at the outer edge of the ISZ and extending away from the runway threshold.

- The OSZ for each end of Runways 29 and 11 is a rectangular area 1,000 feet wide and 3,000 feet long centered on the extended runway centerline, starting at the outer edge of the ISZ and extending away from the runway threshold. (Not shown on Figure 7 due to higher exposure zones overlaying this zone.)

3.5.6 Sideline Safety Zone

The Sideline Safety Zone (SSZ) is an area along the length of the outside the Primary Surface intersecting the Turning Safety Zone. Aircraft do not normally over fly this area, except aircraft losing directional control on takeoff (especially twin-engine aircraft).

- The SSZ for runways 30L, 30R, 12L, 12R, 29 and 11 are 500 feet wide and extend along the runway Primary Surface to intercept the Turning Sector boundaries.

- The SSZ excludes the area of the primary surface.

3.5.7 Traffic Pattern Zone

The Traffic Pattern Zone (TPZ) is that portion of the airport area routinely overflown by aircraft operating in the airport traffic pattern. The potential for aircraft accidents is relatively low and the need for land use restrictions is minimal. The TPZ excludes all other zones described above.

- The Traffic Pattern Zone (TPZ) for runway 29-11 is the area bounded by a line constructed starting at a point 1000 feet from each end of the runway. With these points as the center, construct a quarter circle arc of 6000 feet radius to the southwest side of the runway and connect these two quarter-circles with a line tangent to both. The area outside any of the Runway Protection Zones, Inner Safety Zones, Sideline Safety Zones and Outer Safety Zones and inside this boundary and inside the Airport Influence Area is defined as the Traffic Pattern Zone for this runway.

- The Traffic Pattern Zone for this airport is defined as that portion of the Airport Influence Area outside the Runway Protection Zones, Inner Safety Zones, Traffic Pattern Zones, Sideline Safety Zones and Outer Safety Zones.

3.6 OVERFLIGHT RESTRICTION AREA

All areas within the Airport Influence Area (AIA) should be regarded as potentially subject to aircraft overflights. Although sensitivity to aircraft overflights will vary from one person to another, overflight sensitivity is particularly important within residential land uses and certain agricultural uses (open-air turkey farming, etc.).

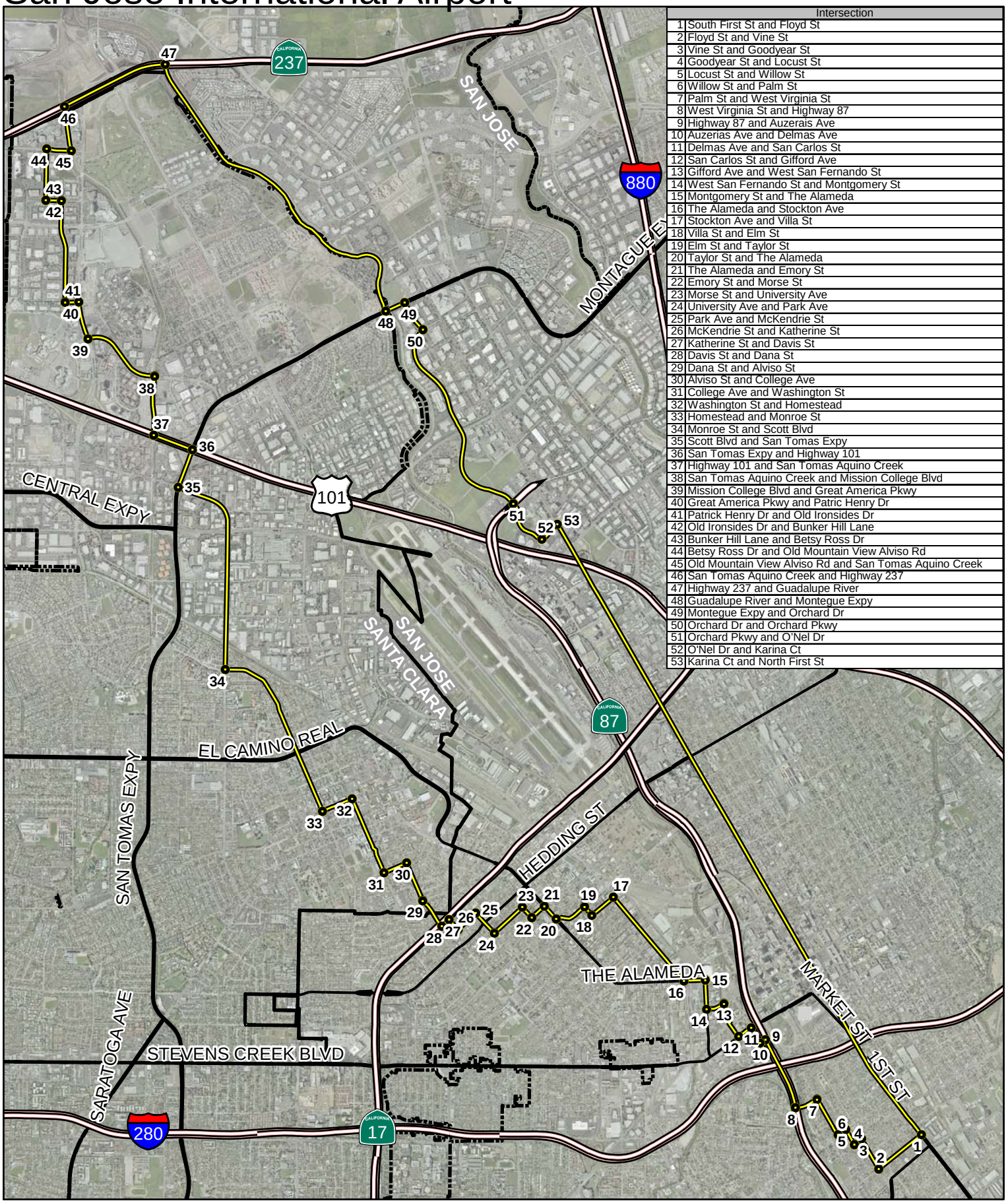
3.7 AIRPORT INFLUENCE AREA

The Airport Influence Area (AIA) is a composite of the areas surrounding the Airport that are affected by noise, height, and safety considerations. The AIA is defined as a feature-based boundary around the Airport within which all actions, regulations and permits must be evaluated by local agencies to determine how the Airport Comprehensive Land Use Plan policies may impact the proposed development. This evaluation is to determine that the development meets the conditions specified for height restrictions, and noise and safety protection to the public. [A.B. 332 (Stats. 2003) to be codified in Public Utilities Code 21674.7 (b)].

The Airport Influence Area for San Jose International Airport (Figure 8) is defined as the area bounded by South First St at Floyd St southwest on Floyd to Vine St to Goodyear St to Locust St to Willow St to Palm St to West Virginia St to to Highway 87 to Auzerais Ave to Delmas Ave to San Carlos St to Gifford Ave to to West San Fernando St to Montgomery St to the Alameda to Stockton Ave to Villa St to Elm St to Taylor St to The Alameda to Emory St to Morse St to University Ave to Park Ave to McKendrie St to Katherine St to Davis St to Dana St to Alviso St to College Ave to Washington St to Homestead to Monroe St to Scott Blvd to San Tomas Expressway to Highway 101 to San Tomas Aquino Creek to Mission College Blvd to Great America Parkway to Patric Henry Dr to Old Ironsides Dr to Bunker Hill Lane to Betsy Ross Dr to Old Mountain View Alviso Rd to San Tomas Aquino Creek to Highway 237 to Guadalupe River to Montegue Expressway to Orchard Dr to Orchard Parkway to O'Nel Dr to Karina Ct to North First St southeast to Floyd St. In addition, for structures (including antennae) with a height of 500 feet or greater above ground level, the AIA is defined as the entire county, but only policies T-1 and T-2 shall apply.

The compatibility of land uses within the AIA should be preserved to the maximum extent feasible with particular emphasis on the preservation of existing agricultural and open space uses. The conversion of land from existing or planned agricultural, industrial, or commercial use to residential uses should be the subject of careful consideration of the potential impacts of aircraft overflights.

San Jose International Airport



	Intersection
1	South First St and Floyd St
2	Floyd St and Vine St
3	Vine St and Goodyear St
4	Goodyear St and Locust St
5	Locust St and Willow St
6	Willow St and Palm St
7	Palm St and West Virginia St
8	West Virginia St and Highway 87
9	Highway 87 and Auzerais Ave
10	Auzerias Ave and Delmas Ave
11	Delmas Ave and San Carlos St
12	San Carlos St and Gifford Ave
13	Gifford Ave and West San Fernando St
14	West San Fernando St and Montgomery St
15	Montgomery St and The Alameda
16	The Alameda and Stockton Ave
17	Stockton Ave and Villa St
18	Villa St and Elm St
19	Elm St and Taylor St
20	Taylor St and The Alameda
21	The Alameda and Emory St
22	Emory St and Morse St
23	Morse St and University Ave
24	University Ave and Park Ave
25	Park Ave and McKendrie St
26	McKendrie St and Katherine St
27	Katherine St and Davis St
28	Davis St and Dana St
29	Dana St and Alviso St
30	Alviso St and College Ave
31	College Ave and Washington St
32	Washington St and Homestead
33	Homestead and Monroe St
34	Monroe St and Scott Blvd
35	Scott Blvd and San Tomas Expy
36	San Tomas Expy and Highway 101
37	Highway 101 and San Tomas Aquino Creek
38	San Tomas Aquino Creek and Mission College Blvd
39	Mission College Blvd and Great America Pkwy
40	Great America Pkwy and Patric Henry Dr
41	Patrick Henry Dr and Old Ironsides Dr
42	Old Ironsides Dr and Bunker Hill Lane
43	Bunker Hill Lane and Betsy Ross Dr
44	Betsy Ross Dr and Old Mountain View Alviso Rd
45	Old Mountain View Alviso Rd and San Tomas Aquino Creek
46	San Tomas Aquino Creek and Highway 237
47	Highway 237 and Guadalupe River
48	Guadalupe River and Montegue Expy
49	Montegue Expy and Orchard Dr
50	Orchard Dr and Orchard Pkwy
51	Orchard Pkwy and O'Nel Dr
52	O'Nel Dr and Karina Ct
53	Karina Ct and North First St

Airport Influence Area

- SJ_AIA_intersections
- AIA

Airport Influence Area
Figure 8

0 2,000 4,000 8,000 Feet

Section 4

4 LAND USE COMPATIBILITY POLICIES

4.1 LAND USE PLANNING ISSUES

The land use planning criteria for the individual land use planning issues applicable to the Airport are discussed in Section 3.0. Figure 8 shows the Airport Influence Area (AIA), which encompasses the land use planning categories for noise and safety. The Santa Clara County Airport Land Use Commission (ALUC) and the Comprehensive Land Use Plan (CLUP) for the Airport address policies based on the following criteria:

- **Noise Restriction Area.** The Noise Restriction Area is defined as the 65 dB CNEL contour (see Figure 5), inside which an acoustical analysis is required by the local agency with land use jurisdiction demonstrating how low-density, single-family, multi-family and mobile home dwelling units and schools have been designed to meet an interior noise level of 45 dB CNEL.

- **Height Restriction Area.** The Height Restriction Area is to protect the airspace around the Airport. The Horizontal Surface is 150 feet above the Airport elevations, the perimeter of which is constructed by swinging arcs out from the ends of the Primary Surface. The radius of the arc is 10,000 feet for this airport. The Conical Surface extends outward and upward from the periphery of the Horizontal Surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet. The Height Restriction Area is defined as the lowest of the Approach Surfaces plus the Transitional Surfaces plus the Horizontal Surface plus the Conical Surface plus the One Engine Inoperative surfaces and is defined in section 3.4 and presented on Figure 6.

- **Safety Restriction Area.** The Safety Restriction Area is to provide land use safety with respect to people and property on the ground and the occupants of aircraft. The safety zones applicable to the Airport are defined in Section 3.5 and presented on Figure 7.

- **Overflight Restriction Area.** The Overflight Restriction Area is a composite of the areas surrounding the Airport that are areas affected by noise, height, and safety considerations. All areas within the AIA (Figure 8) should be regarded as potentially subject to aircraft overflights as discussed in Section 3.6.

4.2 JURISDICTIONAL RESPONSIBILITIES

The policies set forth in this section contain criteria intended to prevent future conflicts between airport operations and surrounding land uses. Implementation of these criteria requires action by the local jurisdictions that have control over the land uses in the Airport Influence Area (AIA) presented on Figure 8.

The jurisdictional responsibilities for implementation of the CLUP are described below. In addition, actions that are available to the local jurisdictions are also presented.

Implementation of the CLUP will be the responsibility of the County of Santa Clara and the City of San Jose and the City of Santa Clara for those areas within the AIA under their jurisdiction. Note that Policies T-1 and T-2 extend countywide. The Santa Clara County Airport Land Use Commission (ALUC) will provide policy direction, advice, and technical assistance to the County and the Cities of San Jose and Santa Clara as needed to facilitate implementation of the CLUP.

4.2.1 Santa Clara County Airport Land Use Commission

The Santa Clara County Airport Land Use Commission shall:

- Adopt the airport land use policies and the AIA boundary maps. The CLUP and its planning boundary maps shall, upon adoption, be subject to annual review by the ALUC and be updated as required.

  Amendments to the CLUP document are limited to no more than once per calendar year.

- Review the General Plan and applicable Specific Plans for the County of Santa Clara and the Cities of San Jose and Santa Clara to determine if such plans and regulations are consistent with the policies of this CLUP.

  Until the ALUC has determined that the General Plans and Specific Plans of the County and cities are consistent, or until the County or associated city has overridden the ALUC's determination, all actions, regulations and permits within the AIA shall be referred to the ALUC for a consistency determination.

- Review all proposed amendments to the General Plans, Specific Plans, and zoning and building regulations that may affect land use in the AIA.

  The ALUC shall determine if the proposed amendments are consistent or inconsistent with this CLUP.

- Review proposed changes to the Airport Master Plan or Airport Layout Plan or modifications to the aircraft flight tracks, new aircraft noise contours, or any other development that would alter the land use compatibility issues addressed in Section 3.0.

  The ALUC shall determine if the proposed changes are consistent with this CLUP or if the CLUP requires an amendment.

- Review the plans, regulations and other actions where there is a conflict with ALUC plans and policies. A review of land use issues within the AIA relating to ALUC policies may be requested by any member of the ALUC, or by the owner/operator of the Airport.

- Coordinate off-airport land use planning efforts of the cities within the county, the County of Santa Clara and Federal and State agencies concerned with airport land use.

- Gather and disseminate information relating to airport land use and aircraft noise, height and safety factors that may affect land use.

4.2.1.1 Review of Development Projects

Once the ALUC has determined that a local jurisdiction's General Plan and applicable Specific Plans are consistent with the CLUP (or the local jurisdiction has overruled the ALUC and made the required findings of consistency with the purposes stated in Public Utilities Code section 21670, et al), to the extent that these are not mandated referrals, the ALUC encourages the local jurisdictions to submit referrals to the ALUC for the following proposed developments:

- Any project that requires use of the Infill policies or Reconstruction policy R-3 in order to be deemed consistent or inconsistent with this CLUP.

- Proposed residential development, including land divisions, consisting of five or more dwelling units or parcels within the AIA.

- Major infrastructure development or improvements (e.g., water, sewer, roads) that would promote urban development within the AIA.

- Proposed land acquisition by any entity for the purpose of developing a school, hospital, nursing home, library, outdoor theater, or other high-density or low-mobility uses within the AIA.

- Any proposal anywhere in the County for construction or alteration of a structure (including antennas) higher than 200 feet above ground level, to verify compliance with FAR 77.13 and ALUC policies.

- Any proposed land use action by city or County planning agencies involving a question of compatibility with the Airport’s activities. For example, creation of a landfill within the AIA would generally meet all height and density requirements, however the tendency of landfills to attract bird activity may create a safety hazard for airport operations.

- Any project within the AIA that is voluntarily referred to the ALUC for review by the local agency.

4.2.1.2 Project Submittals

When review of a land use development proposal is required under this CLUP, the referring agency shall provide the following information to the ALUC in addition to the information required by the city or County:

- A map, drawn to an appropriate scale, showing the relationship of the project to the Airport's boundaries and runways, airport safety zones, airport noise contours and the FAA Part 77 Surfaces for the airport.

- A detailed site plan showing ground elevations, location of structures, open spaces and the heights of structures and landscaping.

- A description of permitted or proposed land uses and restrictions on the uses.

- An indication of the potential or proposed number of dwelling units per acre for residential uses.

- The maximum number of people potentially occupying the total site or portions of the site at any one time.

- Any project submitted for airport land use compatibility review for reasons of height-limit issues shall include a copy of the Federal Aviation Administration's evaluation and reply to proponent's notification to the FAA using FAA Form 7460-1, *Notice of Proposed Construction or Alteration*.

4.2.1.3 Review Process

The proposed actions referred to in Section 4.2.1.1 shall be referred to the ALUC at the earliest possible time but no later than the time allowed in the applicable statutes and regulations, in order that the ALUC's findings may be considered by the local agency prior to finalizing the proposed action.

The ALUC must find a proposal either 1) consistent with the CLUP or 2) inconsistent with the CLUP. Additionally, the ALUC can provide recommendations for changes that would enhance the project's compatibility with the CLUP or the ALUC can state under which conditions the proposal would be consistent.

The ALUC must take action on a request for a consistency determination within 60 days of the referral. If the proponent desires to request a delay in determination, the proponent must withdraw the project from consideration and reapply at a later date. If the determination is not made within 60 days (or as extended by proponent's request), the proposal shall be considered consistent with the CLUP.

The ALUC may, at the request of the local jurisdiction or interested party, provide an interpretation of any of the policies found in this CLUP.

4.2.2 Affected Local Agencies

To bring their General Plan and Specific Plans into conformity with this CLUP, the ALUC recommends that the affected agencies consider the following:

- Adopt the ALUC policies and the AIA boundary maps.

- Incorporate the adopted ALUC policies, boundary maps, and land use recommendations into the local agency's General and/or Specific Plan and Zoning Ordinances.

- Provide ongoing review of land uses within the AIA to ensure that land use changes are compatible with ALUC policies and plans. The affected local agency shall work closely with ALUC staff to establish and carry out review coordination with the ALUC.

- Incorporate the AIA boundary maps into the local agency's geographic information system (GIS).

4.2.2.1 Overrule Notification Process

The affected local agencies shall:

- Notify the ALUC at least 45 days in advance, of their intent to overrule any ALUC non-consistency determination including a copy of their proposed decision and specific findings.

- Notify the ALUC if and when the local agency overrules any ALUC non-consistency determinations.

4.2.3 Airport Owner/Operator Responsibilities

To ensure that the ALUC is able to fulfill its statutory responsibilities, San Jose International Airport management should:

- Notify the ALUC of operational or physical changes at any of the airports they manage, such as aircraft flight tracks, airfield configuration, structural development, relocation of facilities, and proposed new and/or updates to planning documents.

- Notify the ALUC of any changes that may affect Federal Aviation Regulations (FAR) Part 77 height restriction surfaces or CNEL aircraft noise contours.

- Provide CNEL noise contour data including the most recent actual data as well as forecasts covering at least twenty years into the future.

4.3 COMPATIBILITY POLICIES

The compatibility of land uses in the vicinity of the Airport will be evaluated for each of the potential land use impact categories in terms of the compatibility policies established for each category of concern. The graphic illustrations of each area of concern presented in this CLUP are to be included in the evaluation. The following compatibility policies will be used for ALUC consistency review.

4.3.1 General Compatibility

4.3.1.1 Policies

G-1 In the case of conflicting policies, the most restrictive policy shall be applied.

G-2 If a project falls into an area within two or more Airport Influence Areas (AIA), the most restrictive conditions from each separate airport CLUP shall apply to the project.

G-3 The Airport is exempt from the policies of this CLUP for the development of projects on airport property that are directly related to airport operations (examples: terminals, FBOs, fuel storage, passenger and employee parking). This policy does not relieve the Airport of its other obligations to the ALUC, such as providing Airport Master Plan Updates for ALUC review.

G-4 Local jurisdictions should encourage the conversion of land uses that are currently incompatible with this CLUP to uses that are compatible, where feasible.

G-5 Where legally allowed, dedication of an avigation easement to the City of San Jose shall be required to be offered as a condition of approval on all projects located within an Airport Influence Area, other than reconstruction projects as defined in paragraph 4.3.7. All such easements shall be similar to that shown as Exhibit 1 in Appendix A.

G-6 Any proposed uses that may cause a hazard to aircraft in flight are not permitted within the AIA. Such uses include electrical interference, high intensity lighting, attraction of birds (certain agricultural uses, sanitary landfills), and activities that may produce smoke, dust, or glare. This policy requires the

height at maturity of newly planted trees to be considered to avoid future penetration of the FAA FAR Part 77 Surfaces.

G-7 All new exterior lighting or large video displays within the AIA shall be designed so as to create no interference with aircraft operations. Such lighting shall be constructed and located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting shall be arrayed in such a manner that it cannot be mistaken for airport approach or runway lights by pilots.

4.3.2 Noise Compatibility

The objective of noise compatibility criteria is to minimize the number of people exposed to frequent and/or high levels of aircraft noise.

4.3.2.1 Policies

N-1 The Community Noise Equivalent Level (CNEL) method of representing noise levels shall be used to determine if a specific land use is consistent with the CLUP.

N-2 In addition to the other policies herein, the Noise Compatibility Policies presented in Table 4-1 shall be used to determine if a specific land use is consistent with this CLUP.

N-3 Noise impacts shall be evaluated according to the Aircraft Noise Contours presented on Figure 5.

N-4 No residential or transient lodging construction shall be permitted within the 65 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound levels will be less than 45 dB CNEL and there are no outdoor patios or outdoor activity areas associated with the residential portion of a mixed use residential project or a multi unit residential project. (Sound wall noise mitigation measures are not effective in reducing noise generated by aircraft flying overhead.)

N-5 All property owners within the Airport Influence Area who rent or lease their property for residential use shall include in their rental/lease agreement with the tenant, a statement advising that they (the tenants) are living within a high noise area and the exterior noise level is predicted to be greater than 65 dB CNEL in a manner that is consistent with current state law including AB2776 (2002).

N-6 Noise level compatibility standards for other types of land uses shall be applied in the same manner as the above residential noise level criteria. Table 4-1 presents acceptable noise levels for other land uses in the vicinity of the Airport.

N-7 Single-event noise levels (SENL) from single aircraft overflights are also to be considered when evaluating the compatibility of highly noise-sensitive land uses such as schools, libraries, outdoor theaters, and mobile homes. Single-event noise levels are especially important in the areas regularly overflown by aircraft, but which may not produce significant CNEL contours, such as the down-wind segment of the traffic pattern, and airport entry and departure flight corridors.

4.3.3 Height Compatibility

The objective of height compatibility criteria is to avoid development of land uses, which, by posing hazards to flight, can increase the risk of an accident occurring.

4.3.3.1 Policies

H-1 Any structure or object that penetrates the Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace*, (FAR Part 77) surfaces as illustrated in Figure 6, is presumed to be a hazard to air navigation and will be considered an incompatible land use, except in the following circumstance. If the structure or object is above the FAR Part 77 surface, the proponent may submit the project data to the FAA for evaluation and air navigation hazard determination, in which case the FAA's determination shall prevail.

Table 4 - 1

NOISE COMPATIBILITY POLICIES

LAND USE CATEGORY	CNEL					
	55-60	60-65	65-70	70-75	75-80	80-85
Residential – low density Single-family, duplex, mobile homes	*	**	***	****	****	****
Residential – multi-family, condominiums, townhouses	*	**	***	****	****	****
Transient lodging - motels, hotels	*	*	**	****	****	****
Schools, libraries, indoor religious assemblies, hospitals, nursing homes	*	***	****	****	****	****
Auditoriums, concert halls, amphitheaters	*	***	***	****	****	****
Sports arena, outdoor spectator sports, parking	*	*	*	**	***	****
Playgrounds, neighborhood parks	*	*	***	****	****	****
Golf courses, riding stables, water recreation, cemeteries	*	*	*	**	***	****
Office buildings, business commercial and professional, retail	*	*	**	***	****	****
Industrial, manufacturing, utilities, agriculture	*	*	*	***	***	****
* Generally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. Mobile homes may not be acceptable in these areas. Some outdoor activities might be adversely affected.					
** Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Outdoor activities may be adversely affected. <u>Residential:</u> Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.					
*** Generally Unacceptable	New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor activities are likely to be adversely affected.					
**** Unacceptable	New construction or development shall not be undertaken.					

Source: Based on General Plan Guidelines, Appendix C (2003), Figure 2 and Santa Clara County ALUC 1992 Land Use Plan, Table 1

H-2 Any project that may exceed a FAR Part 77 surface must notify the Federal Aviation Administration (FAA) as required by FAR Part 77, Subpart B on FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. (Notification to the FAA under FAR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the FARs).

4.3.4 Tall Structure Compatibility

Structures of a height greater than 200 feet above ground level can be a special hazard to aircraft in flight.

4.3.4.1 Policies

T-1 The applicant for any proposed project anywhere in the County for construction or alteration of a structure (including antennas) higher than 200 feet above ground level shall submit to the FAA a completed copy of FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. A copy of the submitted form shall be submitted to the Santa Clara County ALUC as well as a copy of the FAA's response to this form.

T-2 Any proposed project anywhere in the County for construction or alteration of a structure (including antennas) higher than 200 feet above ground level shall comply with FAR 77.13(a)(1) and shall be determined inconsistent if deemed to be a hazard by the FAA or if the ALUC determines that the project has any impact on normal aircraft operations or would increase the risk to aircraft operations.

4.3.5 Safety Compatibility

The objective of safety compatibility criteria is to minimize the risks associated with potential aircraft accidents. These include the safety of people on the ground and the safety of aircraft occupants. Land uses of particular concern are those in which the occupants have reduced effective mobility or are unable to respond to emergency situations.

4.3.5.1 Policies

S-1 These policies and the Safety Zone Compatibility Policies presented in Table 4-2 shall be used to determine if a specific land use is consistent with the CLUP. Safety impacts shall be evaluated according to the Airport Safety Zones presented on Figure 7.

S-2 Schools, hospitals, nursing homes, and other uses in which the majority of occupants are children, elderly, and/or disabled shall be prohibited within the Runway Protection Zones (RPZs), Inner Safety Zones (ISZs), Turning Safety Zones (TSZs), Sideline Safety Zones (SSZs), and Outer Safety Zones (OSZs) presented in Table 3-2.

S-3 Amphitheaters, sports stadiums and other very high concentrations of people shall be prohibited within the Runway Protection Zones (RPZs), Inner Safety Zones (ISZs), Turning Safety Zones (TSZs), Sideline Safety Zones (SSZs) and Outer Safety Zones (OSZs) presented in Figure 7.

S-4 Storage of fuel or other hazardous materials shall be prohibited in the Runway Protection Zone. Above ground storage of fuel or other hazardous materials shall be prohibited in the Inner Safety Zone and Turning Safety Zone. In the Sideline Safety Zones and Outer Safety Zones, storage of fuel or other hazardous materials not associated with aircraft use should be discouraged.

S-5 In addition to the requirements of Table 4-2, open space requirements, for sites which can accommodate an open space component, shall be established at the general plan level for each safety zone where feasible as determined by the local jurisdiction, as individual parcels may be too small to accommodate the minimum-size open space requirement. To qualify as open space, an area must be free of buildings and have minimum dimensions of at least 75 feet wide by 300 feet long along the normal direction of flight. Streets and parks may function as such open spaces without limitations on vegetation or right of way improvements. The alignment of streets to runways, clustering of development and provision of contiguous landscaping and parking areas will be encouraged to increase the size of open space areas.

Table 4 - 2

SAFETY ZONE COMPATIBILITY POLICIES

Safety Zone	Maximum Population Density	Open Space Requirements	Land Use
Runway Protection Zone – RPZ	-0- (No people allowed)	100 percent (No structures allowed)	Agricultural activities, roads, open low-landscaped areas. No trees, telephone poles or similar obstacles. Occasional short-term transient vehicle parking is permitted.
Inner Safety Zone – ISZ	Nonresidential, maximum 120 people per acre (includes open area and parking area required for the building's occupants and one-half of the adjacent street area)	30 percent of gross area open. No structures or concentrations of people between or within 100 feet of the extended runway centerlines.	No residential. Nonresidential uses should be activities that attract relatively few people. No shopping centers, restaurants, theaters, meeting halls, stadiums, multi-story office buildings, labor-intensive manufacturing plants, educational facilities, day care facilities, hospitals, nursing homes or similar activities. No hazardous material facilities (gasoline stations, etc.).
Turning Safety Zone – TSZ	Nonresidential, maximum 200 people per acre (includes open area and parking area required for the building's occupants and one-half of the adjacent street area)	20 percent of gross area Minimum dimensions: 300 ft by 75 ft parallel to the runway(s).	Residential - if non-residential uses are not feasible, allow residential infill to existing density. No regional shopping centers, theaters, meeting halls, stadiums, schools, day care centers, hospitals, nursing homes or similar activities. No hazardous material facilities (gasoline stations, etc.).
Outer Safety Zone – OSZ	Nonresidential, maximum 300 people per acre (includes open area and parking area required for the building's occupants and one-half of the adjacent street area)	20 percent of gross area	Residential - if non-residential uses are not feasible, allow residential infill to existing density. No regional shopping centers, theaters, meeting halls, stadiums, schools, large day care centers, hospitals, nursing homes or similar activities. No above ground bulk fuel storage.
Sideline Safety Zone – SSZ	Nonresidential, maximum 300 people per acre (includes open area and parking area required for the building's occupants and one-half of the adjacent street area)	30 percent of gross area	Residential - if non-residential uses are not feasible, allow residential infill to existing density. No regional shopping centers, theaters, meeting halls, stadiums, schools, large day care centers, hospitals, nursing homes or similar activities. No above ground bulk fuel storage.
Traffic Pattern Zone – TPZ	No Limit	10 percent of gross area located within one-half mile of the project	Residential – No Limit. No sports stadiums (greater than 20,000 person capacity) or similar uses with very high concentration of people. Note that this applies only to those areas inside the Airport Influence Area. (See Paragraph 3.5.7, Pg 3-16)

Source: Based on 2002 *Airport Land Use Planning Handbook* prepared by the California Department of Transportation, Division of Aeronautics

S-6 The principal means of reducing risks to people on the ground is to restrict land uses so as to limit the number of people who might gather in areas most susceptible to aircraft accidents. A method for determining the concentration of people for various land uses is presented in Section 5.0, Implementation.

S-7 The following uses shall be prohibited in all Airport Safety Zones:

- Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

- Any use that would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

- Any use which would generate smoke or water vapor, or which would attract large concentrations of birds, or which may otherwise negatively affect safe air navigation within the area.

- Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation, communication or navigation equipment.

S-8 In unique cases an exception can be granted, at the discretion of the ALUC, on the basis of mitigation measures proposed by the applicant which would result in the final project improving the overall safety in the safety zones in comparison to the situation existing prior to the project. An example of such a possible mitigation is the removal of existing incompatible structures in exchange for constructing less incompatible structures. The following conditions must be met for this variance to be granted:

a. There must be a clear, demonstrable net improvement in safety.

b. The mitigation must provide a permanent improvement in safety. For instance, in the example above, the removed structures could not be replaced by other structures at a later date.

4.3.6 Overflight

The objective of the overflight compatibility criteria is to assist those persons who are highly annoyed by overflights or have an above-average sensitivity to aircraft overflights to avoid living in locations where these impacts may occur.

4.3.6.1 Policies

O-1 All new projects within the AIA that are subject to discretionary review and approval shall be required to dedicate in compliance with state law, an avigation easement to the City of San Jose. The avigation easement shall be similar to that shown as Exhibit 1 in Appendix A.

(In September of 2002 Assembly Bill AB2776 was signed into law and became effective on January 1, 2004. This statute requires that as part of the real estate transfer process, the residential property purchaser be informed if the property is in an Airport Influence Area and be informed of the potential impacts resulting from the associated airport.)

4.3.7 Reconstruction

Reconstruction as used in this CLUP is the rebuilding of a legally established structure located in any of the safety zones, to its original conditions (typically due to a fire, or earthquake damage or destruction). “Original conditions” means the same or lesser footprint, height and intensity of use. Reconstruction projects may be approved under the following policies:

4.3.7.1 Policies

R-1 Reconstruction projects that are not subject to a previous avigation easement shall not be required to provide an avigation easement as a condition for approval.

R-2 Residential reconstruction projects must include noise insulation to assure interior noise levels of less than 45 dB CNEL.

R-3 An application for reconstruction increasing the structure's internal square footage, footprint square footage, height, and/or intensity of use may be approved if the local agency determines that such increase will have no adverse impact beyond that which existed with the original structure. However, a project approved under this policy shall require the property owner to offer and the local agency shall accept an avigation easement to the jurisdiction operating the airport, similar to Exhibit 1 in the Appendix.

4.3.8 Modification

Modification as used in this CLUP is defined as the modification of approvals and unbuilt development that does not change the intensity of development. Examples are rezoning to change the setbacks, permit amendments or revised architecture, etc.

4.3.8.1 Policies

M-1 Modifications shall be transmitted to the ALUC staff for review and comment.

4.3.9 Infill

The term "infill" as used in this CLUP is defined as the development of vacant or underutilized residential properties located in a safety zone, of less than 0.25 acres in size, in areas that are already substantially developed with uses not ordinarily permitted by the CLUP compatibility criteria. In some circumstances, infill projects may be acceptable if the following criteria are met.

Redevelopment is not considered infill. The term "redevelopment" as used in this CLUP is defined as land that previously contained a building that was removed or demolished with the intent of replacing the building with a new building.

4.3.9.1 Policies

I-1 Infill projects must comply with paragraph 4.3.5 and table 4-2 of this CLUP with the exception of the land use density requirements.

I-2 Infill projects may be approved if all of the following conditions are met:

a) The total contiguous undeveloped land area at this location is less than 0.25 acres in size. Note that this means the total contiguous undeveloped land area, not just the land area being proposed for development. Lots larger than 0.25 acres shall not be considered for infill.

b) The site is already surrounded on three sides and a street, or two sides and two streets, by the same land use as that being proposed.

c) The local agency determines that the project will create no adverse safety impacts beyond those that already exist due to the existing incompatible land uses.

d) Where legally feasible the property owner shall offer and the local agency shall accept an avigation easement to the jurisdiction operating the airport, similar to Exhibit 1 in the Appendix.

Section 5

5 IMPLEMENTATION

5.1 CONSISTENCY WITH LOCAL PLANS AND ZONING

The California State Aeronautics Act {Public Utilities Code: Division 9, Part 1, Chapter 4, Article 3.5, Section 21670 et seq} places the responsibility for implementing and enforcing this Comprehensive Land Use Plan (CLUP) on the local governmental agencies responsible for land use planning within each airport's Airport Influence Area (AIA).

Once the ALUC has adopted a revised (or new) CLUP, and transmitted that CLUP to an affected local agency that local agency is mandated to incorporate the CLUP's provisions into its General and/or Specific Plan(s) within 180 days {Government Code 65302.3(b)}, unless all or portions of the CLUP are overruled, in which case the 180 day requirement is reset to the overrule date. The local agency is encouraged to adopt zoning ordinance(s) that implement the policies of their General/Specific Plan(s).

If a local agency decides not to incorporate the CLUP policies verbatim in its General and/or Specific plans, it may overrule portions (or all of) the CLUP if it finds that its General and/or Specific Plans are consistent with the State Aeronautics Act, PUC 21670 et seq. The overrule process requires a two-thirds vote of the local agency's governing body, supported by specific findings which demonstrate that the plan(s) satisfy the purposes of the State Aeronautics Act {PUC 21670 et seq} and guidance of the state's Airport Land Use Planning Handbook.

During the amendment process and subsequent to adoption of revised General and/or Specific Plan(s) by a local agency, the ALUC is required to promptly review both the draft and final Plan(s) for a CLUP consistency determination {PUC 21676}.

5.2 LAND USE DESIGNATIONS

The most fundamental means of assuring compatibility between an airport and surrounding land uses is by the designation of appropriate land uses in local general plans, specific plans, and zoning ordinances. Even with the designation of appropriate land uses, the long-term maintenance of airports and land use compatibility is often difficult to achieve.

Land use designations can be limited in the degree of restrictiveness that can be applied. Overly restrictive land use regulations may raise constitutional questions to the taking of private property without just compensation. This is particularly applicable in areas near the ends of the runways where such extreme restrictions may be appropriate. For this reason airport owners/operators are encouraged to purchase an interest in the land containing the Runway Protection Zones in order to effect the purposes of this Plan.

Land use designations for an area for different uses than already exist may encourage change in the long term, but it may not eliminate existing incompatible uses. Other actions such as fee simple acquisition may be necessary to bring about the changes.

5.2.1 Airport Overlay Zones

One way of achieving aviation-oriented land use designations is adoption of an overlay or combining zone. An overlay zone supplements local land use designations by adding specific noise and, often more importantly, safety criteria (e.g., maximum number of people on the site, site design, and open space criteria, height restrictions, etc.) applicable to future development in the AIA.

An airport overlay zone has several important benefits. Most importantly, it permits the continued utilization of the majority of the design and use policies contained in the existing zones. At the same time, it provides a mechanism for implementation of restrictions and conditions that may apply to only a few types of land uses within a given land use category or zoning district. This avoids the need for a large number of discrete zoning districts. It also enables local jurisdictions to use the policies provided in the CLUP, rather than through redefinition of existing zoning district descriptions.

The County and cities should consider adopting in their zoning codes an Airport Overlay District Zone (Airport Safety Overlay Zone), which should include the following:

- **Noise Insulation Standards** - In areas that will potentially be impacted by noise, the Airport Overlay District Zone could be used to assure compliance with the State statutes regarding interior noise levels. The Overlay District Zone could specify the construction techniques necessary to meet the requirements.

- **Height Limitations** - Restrictions on the height of buildings, antennas, trees, and other objects near the Airport, as defined by Federal Aviation Regulations (FAR) Part 77, Subpart C, and regulated by the California Aeronautics Law, can be implemented as part of the Airport Overlay District Zone.

- **FAA Notification Requirements** - The Airport Overlay District Zone also can be used to assure that project developers are informed about the need for compliance with the notification requirements of FAR Part 77. Subpart B of the regulations requires that the proponent of any project that exceeds a specified set of height criteria submit a FAA Form 7460-1 *Notice of Proposed Construction or Alteration* to the FAA prior to commencement of construction. The height criteria associated with this notification requirement are lower than those in FAR Part 77, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.

- **Maximum Densities** - The principal noise and safety compatibility standards in the CLUP are expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. These standards can either be included as is in the Airport Overlay District Zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the implications of the density limitations are not as clear. One step that can be taken by local governments is to establish a matrix indicating whether specific types of land uses are or are not compatible with each of the four compatibility zones. To be useful, the land use categories will need to be more detailed than typically provided by general plan or zoning ordinance land use designations.

- **Open Space Requirements** - CLUP criteria regarding AIA open space suitable for emergency aircraft landings can be implemented by the Airport Overlay District Zone. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be addressed in terms of development restrictions on large parcels.

5.2.2 Avigation Easements

Avigation easements are another type of land use control measure available to local jurisdictions. Historically, avigation easements have been used to establish height limitations, prevent other flight hazards, and prevent noise impacts. More recently, they have been used as a form of buyer awareness - the recording of an easement against a property ensures that prospective buyers of the property are informed about the Airport impacts. (See the Appendix for a typical Avigation Easement).

An avigation easement applies only to the specific property to which it is attached and it is binding on all subsequent owners of the property. Avigation easements can be obtained either by purchase or by required dedication.

- **Purchase** - Acquisition of avigation easements for a monetary amount is usually done by the Airport owner, which may or may not be the same as the local land use jurisdiction. In most instances, the purchase of avigation easements is limited to property within Runway Protection Zones or elsewhere very close to the Airport's boundaries where some significant degree of restriction or impact is involved.

- **Dedication** - Required dedication of avigation easements is sometimes set as a condition for local jurisdiction approval of a proposed land use development, especially a residential development, in the vicinity of an Airport. Generally, when avigation easements are obtained in this manner, they are primarily intended to serve as a comprehensive and stringent form of a buyer awareness measure.

A standard avigation easement conveys the following property rights from the owner of the property to the holder of the easement:

- **Overflight** - A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (in accordance with Federal Aviation Regulations Part 77 and/or criteria for terminal instrument procedures).

- **Impacts** - A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with airport and aircraft activity.

- **Height Limits** - A right to prohibit the construction or growth of any structure, tree, or other object that would penetrate the acquired airspace.

- **Access and Abatement** - A right-of-entry onto the property, with appropriate advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.

- **Other Restrictions** - A right to prohibit electrical interference, glare, misleading light sources, visual impairments, and other hazards to aircraft from being created on the property.

Easements that convey only one or more of these rights are common. An easement containing only the first two rights is usually referred to as an overflight or noise easement. The latter three rights are often collectively called a height-limit or airspace easement. Overflight easements are useful in locations sufficiently distant from an airport where height limits and other restrictions are not a concern. Height-limit easements have most frequently been obtained by purchase of properties close to an airport where restrictions on the height of objects are necessary. Because height-limit easements do not include the overflight easement rights, there is little apparent advantage to obtaining them rather than a complete avigation easement.

5.2.3 Buyer Awareness Measures

Buyer awareness is an umbrella category for types of airport/land use compatibility measures whose objective is to ensure that prospective buyers of property in the vicinity of an airport are made aware of the airport's existence and the impacts that the airport activity has on surrounding land uses. Avigation easements are the most definitive form of a buyer awareness measure. Buyer awareness can also be successfully implemented through other types of programs. Two primary methods are deed notices and real-estate disclosure statements.

- **Deed Notices.** Deed notices are statements recorded with the County Clerk-Recorder disclosing that the property is subject to routine overflights and associated noise and other impacts by aircraft operating at a nearby airport. An ideal application of deed notices is as a condition of approval for development of residential land use in airport-vicinity locations where neither noise nor safety are significant factors, but frequent aircraft overflights may be annoying to some people. In addition to being recorded with the deed to a property, the notices should be recorded with parcel maps and any tentative or final subdivision maps. (See the Appendix for a typical Deed Notice).

  Deed notices are similar to avigation or other aviation-related easements in that they become part of the title to a property and thus are a permanent form of buyer awareness. The distinguishing difference between deed notices and avigation easements is that deed notices only serve as a disclosure of potential overflights, whereas avigation easements convey an identified set of property rights. In locations where height limitations or other land use restrictions are unnecessary, deed notices have the advantage of being less cumbersome to define. Also, they have less appearance of having a negative effect on the value of the property.

- **Real Estate Disclosure Statements.** A more comprehensive form of buyer awareness program is to require that information about an Airport Influence Area be disclosed to prospective buyers of all airport-vicinity properties prior to the transfer of title. The advantage of this type of program is that it applies to previously existing land uses as well as to new development.

  This type of program can be implemented through adoption of a local ordinance requiring real estate disclosure upon the transfer of title or it can be established in conjunction with the adoption of an airport overlay zone. Notification describing the zone and discussing its significance could be formally sent to all local real-estate brokers and title companies. The brokers would be obligated by State law to pass it along to prospective buyers after receiving this information.

  At a minimum, the area covered by a real estate disclosure program should include the Airport Influence Area as established in the CLUP. The boundary also could be defined to coincide with the boundaries of an airport overlay zone.

5.2.4 Methods of Calculating Density and Building Occupancy

The Safety Compatibility Policies for non-residential uses limit the persons per acre in certain safety zones. Determining the maximum number of persons likely to occupy a structure is not an exact science, however, the following methods are available to provide a reasonable estimate of how many persons will use a proposed facility.

- **Parking Ordinance.** Most jurisdictions have parking regulations, which specify how many parking spaces are required for particular types of uses. Once an assumption is made regarding the number of persons per vehicle, an estimate can be made of the maximum number of persons that could occupy the structure. The assumption of persons per vehicle must be based on the type of use.

- **Number of Seats.** If the proposed use provides seating for its patrons, such as a restaurant, it is relatively easy to determine the maximum number of people that could occupy the structure.

- **Uniform Building Code.** The Uniform Building Code (UBC) specifies a certain number of square feet per occupant that are required for certain uses. This number can be determined through contact with the city or County Building Department.

- **Similar Uses.** Certain uses may require an estimate based on a survey of similar uses. This method is more difficult but is appropriate for uses, which because of the nature of the use, cannot be reasonably estimated based on parking or square footage.

Section 6

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7 APPENDIX A

Sample Implementation Documents

Some ALUC approvals may require the dedication of Avigation Easements or use of Deed Notices in selected areas around the Airport. Examples might be the dedication of Avigation Easements for any development within the Traffic Pattern Zone, especially within the Safety Zones and Runway Protection Zones. Deed Notices might be more appropriate for development outside the Traffic Pattern Zone but within the Airport Influence Area.

Examples of these documents are presented on the following pages.

Exhibit 1 – Avigation Easement

Exhibit 2 – Deed Notice

Exhibit 1
Sample Avigation Easement

AVIGATION EASEMENT DEED

_____ [list owners of property in exact form as on deed for property] (hereinafter "Grantor") hereby grant an avigation easement to the City of San Jose, a political subdivision in the State of California (hereinafter "Grantee").

The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds fee title. The property which is subject to this Avigation Easement is located at [insert address and assessor's parcel number] and is more particularly described on Exhibit A attached hereto and incorporated herein (hereinafter "Property").

The easement conveyed herein ("Avigation Easement") applies to both the Property and the airspace above an imaginary plane over the Property (hereinafter "Airspace"), which is described as follows:

> The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations and consists of a plane [describe approach, transition, or horizontal surface]: the elevation of said plane being based upon the official FAA San Jose International Airport elevation of _____ feet Above Mean Sea Level (AMSL), the approximate dimensions of which said plane are described and shown on Exhibit B attached hereto and incorporated herein by reference.

The purposes of this Avigation Easement include, but are not limited to, the following:

(1) The use and benefit of the public for the continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Property and Airspace; and

(2) The right to cause or create, or permit or allow to be caused or created within all space above the existing surface of the Property and any and all Airspace above the Property, such noise, vibration, currents and other effects of air, illumination and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and

(3) A continuing right to clear and keep clear from the Property and Airspace any portions of buildings, structures, or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above the Airspace, and the right to cut to the ground level and remove any trees which extend into or above the Airspace; and

(4) The right to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures, or other improvements, and trees or other objects which extend into or above the Airspace; and

(5) The right of ingress to, passage within, and egress from the Property for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and behalf of itself, its successors and assigns, the Grantor hereby covenants with the Grantee, for the direct benefit of the real property constituting the San Jose International Airport (hereinafter

"Airport"), that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the Property, nor will they allow, any building structure, improvement, tree or other object to extend into or above the Airspace or constitute an obstruction to air navigation, or to obstruct or interfere with the use of this Avigation Easement.

This Avigation Easement shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the Airport in the County of Santa Clara, State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and to any and all members of the general public who may use Airspace for landing at, taking off from or operating such aircraft in or about the Airport, or in otherwise flying above the Property or through said Airspace.

Grantor, together with its successors in interest and assigns, hereby waives its right to legal action against Grantee, its officers, employees, successors, and assigns for monetary damages or other redress due to impacts associated with aircraft operations in the air or on the ground at the Airport, including future increases in the volume or changes in location of said operations. Furthermore, Grantee, its officers, employees, successors, and assigns shall have no duty to avoid or mitigate such damages through physical modifications of airport facilities or establishment or modification of aircraft operational procedures or restrictions. This grant of Avigation Easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which it may have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this Avigation Easement, the Property and Airspace hereinabove described constitute the servient tenement and property comprising the Airport is the dominant tenement.

DATED: _____ _____

Name: _____

_____

Name: _____

[Note: Signatures of grantors must be notarized.]

Exhibit 2

Sample Deed Notice

The following statement should be included on the deed and recorded by the transferor with the County Clerk-Recorder for any property located within the Airport Influence Area. This statement should also be included on any parcel map, tentative map or final map for subdivision approval for any property within the Airport Influence Area.

The *Santa Clara County Airport Comprehensive Land Use Plan* identifies Airport Influence Areas. Properties within these areas are routinely subject to overflights by aircraft using the associated airport and, as a result residents may experience inconvenience, annoyance or discomfort arising from the noise or sight of such operations. State law (Public Utilities code sections 21670 et. Seq.) establishes the importance of public use airports to protection of the public interest of the people of the State of California. Residents of property near such airports should therefore be prepared to accept the inconvenience, annoyance or discomfort from normal aircraft operations. Residents also should be aware that the current volume of aircraft activity may increase in the future in response to government needs, Santa Clara County population and/or economic growth. Any subsequent deed conveying this parcel or subdivisions there of shall contain a statement in substantially this form.

8 APPENDIX B

Selected Excerpts
California Airport Land Use Planning Handbook (January 2002)

Establishing Noise Compatibility Policies

[Page Summary-8]
"Compatibility plans should be based upon the noise contours for the time frame that results in the greatest noise impacts. Usually, this time frame is the long-range future (at least 20 years), but sometimes can be the present or a combination of the two. Also, for busy airports, the capacity of the runway system may be the best representation of potential long-range future activity levels."

[Pages 7-18,19]
"State statutes specify that airport land use compatibility plans must be based upon an airport development plan "that reflects the anticipated growth of the airport during at least the next 20 years." Forecasts having the required 20-year time horizon are normally included in airport master plans. The FAA, the Division of Aeronautics, and some regional planning agencies also prepare individual airport forecasts, some extending to 20 years.

For the purposes of compatibility planning, however, 20 years may be shortsighted. For most airports, a lifespan of more than 20 years can reasonably be presumed. Moreover, the need to avoid incompatible land use development will exist for as long as an airport exists. Once development occurs near an airport, it is virtually impossible or at least very costly and time consuming to change the land uses to ones which would be more compatible with airport activities

In conducting noise analyses for compatibility plans, the long-range time frame is almost always of greatest significance. Barring vast improvements in aircraft noise reduction technology, the growth in aircraft operations expected at most airports will result in larger noise contours. A possible exception to this trend is that, at some airports, planned changes in runway configuration or approach procedures could result in reduction of noise impacts in some portions of the airport environs. In these instances, a combination of current and future noise contours may be the appropriate basis for compatibility planning.

Past improvements in aircraft noise reduction technology or, more to the point, the elimination of older, noisier aircraft from the fleet have caused noise contours at some airports to shrink. One result of shrinking contour sizes during the late 1990s was pressure to allow residential and other noise-sensitive development closer to airports. Allowing such development might be reasonable in situations where no potential exists for the contours to expand back to their former size (for example, where policies to limit contour sizes have been adopted). However, whether future technology will again enable significant reduction in noise impacts is uncertain. Thus, looking to the long-range future, the scenario which has the greatest land use planning implications for most airports is that anticipated future growth in airport activity will result in expansion of noise contours.

G U I D A N C E
The "at least" phrase in the statutory guidelines deserves emphasis. The 20-year time frame should be considered a minimum for compatibility plans. Noise impacts (as well as other compatibility concerns) should be viewed from the longest practical time perspective."

SJC CLUP
CHANGE DOCUMENT
5/25/11 to 11/16/16
WBW

Cover page: Added "Amended 11/16/16",

Page 3-10, Section 3.4.1 The last sentence is changed to read " For Runways 30L-12R and 30R-12L the width of the Primary Surface is 1,000 feet and for Runway 29-11, the Primary Surface width is 500 feet."

Page 3-11, Figure 6 Changed the width drawn for the Primary Surface for runway 30R-12L from 500 feet to 1000 feet.

Page 4-4, Section 4.3.1.1, Policy G-6 Added the following sentence to the end of this paragraph: "This policy requires the height at maturity of newly planted trees to be considered to avoid future penetration of the FAA FAR Part 77 Surfaces."

Page 4-5, Section 4.3.1.1, Policy G-7 Added the phrase "or large video displays" in the first sentence.