

SAN JOAQUIN COUNTY'S AVIATION SYSTEM

Airport Land Use Compatibility Plan



NEW JERUSALEM AIRPORT



LODI AIRPORT



LODI PRECISSI AIRPARK



KINGDON AIRPARK



TRACY MUNICIPAL AIRPORT



FINAL

Approved June 25, 2009
Amended January 2018

**AIRPORT LAND USE
COMPATIBILITY PLAN UPDATE**

**San Joaquin County
Aviation System
San Joaquin County, California**

Final

**Prepared By
COFFMAN ASSOCIATES, INC.**

July 2009

Amended January 2018



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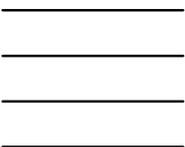
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Chapter One

Introduction

Chapter One INTRODUCTION

Airport Land Use Compatibility Plan San Joaquin County

The amended Airport Land Use Compatibility Plan (ALUCP) for San Joaquin County is intended to protect and promote the safety and welfare of residents and airport users near the public use airports in the County, while promoting the continued operation of those airports. Specifically, the plan seeks to protect the public from the adverse effects of airport noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace.

Implementation of this plan will promote compatible urban development and restrict new incompatible development in the vicinity of the public use airports in San Joaquin County, thus allowing for the continued operation of those airports.

In accordance with the California state laws, this ALUCP has been prepared for the following public use airports within and near San Joaquin County, as identified on **Exhibit 1A**:

- Byron Airport
- Kingdon Airpark
- Lodi Airpark
- Lodi Airport
- New Jerusalem Airport
- Tracy Municipal Airport

This document will review each airport's facilities, inventory of each airport's surrounding environs, an evaluation of the airport land use compatibility issues that face each of these unique airports, alternatives analysis, and an updated set of compatibility review guidelines for the areas surrounding these airports.

BACKGROUND

Airports play a vital role in the transportation system and economy of cities and counties throughout the nation. The public use airports in San Joaquin County provide services such as business travel, tourism, emergency response, fire suppression, law enforcement, and agriculture support. In recognition of the importance of the role airports play and proper land use compatibility planning within the State of California, the California State Legislature enacted laws that mandate the creation of Airport Land Use Commissions (ALUCs). Adopted in 1967 to assist local agency land use compatibility efforts, the laws are intended to protect

“public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.”

To achieve this goal, the ALUC has two primary functions:

- To prepare and adopt an airport land use compatibility plan with a 20-year planning horizon for each airport within its jurisdiction.
- Review local agency land use actions and airport plans.

California law states that an existing agency may be designated to perform the duties of the ALUC. In San Joaquin County, the San Joaquin Council of Governments (SJCOG) was named the ALUC in May 1973.

This plan represents the updated Airport Land Use Compatibility Plan (ALUCP) for San Joaquin County. The original version of this document was adopted by SJCOG in 1983. The 1983 plan was subsequently revised and updated in 1993. This version of the plan is based on guidance found in the *California Airport Land Use Planning Handbook (Handbook) 2011* released by the State of California Department of Transportation Division of Aeronautics pursuant to California Public Utility Code (PUC) Sections 21674.5 and 21674.7.

ALUCP ADOPTION, IMPLEMENTATION, AND AMENDMENTS

The adoption of this plan is coordinated through the SJCOG, which serves as the ALUC for San Joaquin County. SJCOG is obligated to involve the affected local agencies in the adoption process by holding a public hearing on the document prior to formal adoption. As discussed in the Handbook, adoption of the ALUCP begins a statutory 180-day period within which the county and affected cities must either modify its general plan and applicable specific plans or to take the steps necessary to overrule the ALUC (Government Code, Section 65302.3).

The overruling process involves four mandatory steps:

1. the local agency must provide the local Airport Land Use Commission and the California Department of Transportation, Division of Aeronautics, with a copy of the proposed decision and findings within 45 days prior to any decision to overrule the commission;

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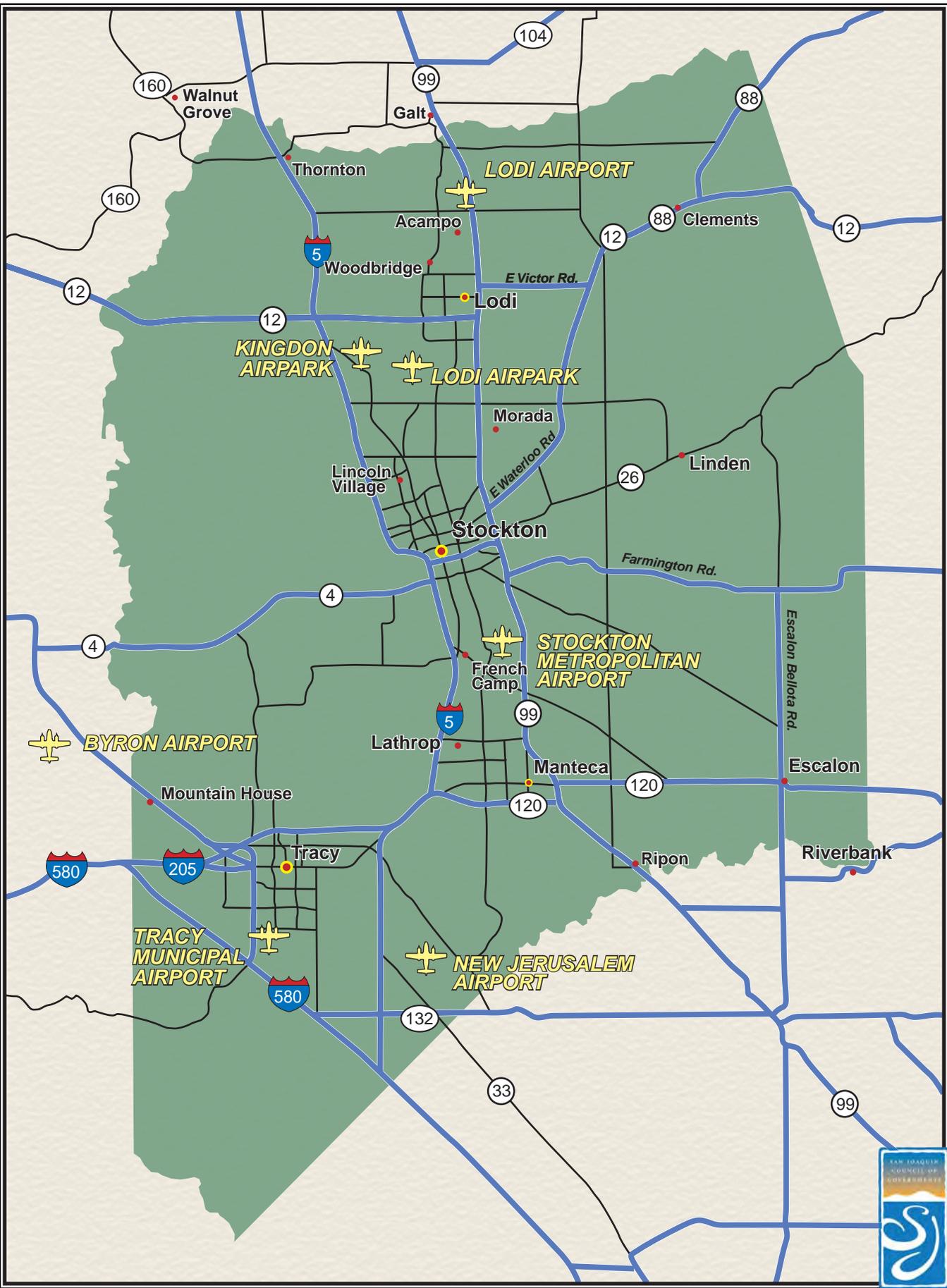


Exhibit 1A
SAN JOAQUIN COUNTY
LOCATION MAP

2. the holding of a public hearing;
3. the adoption of specific findings that the local government's plans are consistent with the purposes of the State airport compatibility statute and that they provide for the orderly development of the airport; and
4. approval of the overrule action by a two-thirds majority of the governing body of the local government.

Upon approval of the ALUCP and where local agencies have amended their general and specific plans to be consistent with the ALUCP, the following types of actions proposed within the airport referral areas will be submitted to the ALUC for determination of consistency prior to approval by the local jurisdiction:

- Adoption of a general plan, specific plan, or any amendments.
- Airport and heliport plans, including master plans, expansion plans, and plans for the construction of a new facility.

The effectiveness of this document can be limited by its currency. As such, the ALUC should review the document as often as necessary to ensure that the information and assumptions used are still appropriate for all of the public use airports in San Joaquin County. It is especially important to review the plan whenever an airport master plan or airport layout plan is amended. Changes in runway lengths in particular could require an amendment to the ALUCP.

The ALUC should also review the ALUCP when new guidance documents are prepared by the California Department of Transportation. It is important for the

ALUCP to reflect the latest information and research on aircraft noise and safety compatibility issues. It should be noted that California State law limits major amendments (revising the policies in a manner that would change their applicability to a public agency, adding new policies, or revising maps) of the ALUCP to no more than once per calendar year (Pub. Util. Code, Section 21675 [a]). Minor amendments (addressing grammatical, typographical, or minor technical errors that do not affect policies or the manner in which those policies are applied) may be adopted as needed.

ROLE OF THE RESPONSIBLE AGENCIES

Airport land use compatibility involves two overarching concepts: a community's need for safe and efficient air transportation and orderly land use development. These two concepts need to be balanced to achieve a favorable result for both the airport and the residents in the airport's vicinity.

Airport land use compatibility planning can be a complicated matter when considering the various levels of government and documentation involved. Prior to addressing the local issues within San Joaquin County, a brief discussion of the specific role of each governmental entity with respect to aviation and land use is necessary. It is important to note that some levels of government are limited in the actions they may take with respect to airport land use compatibility, and care is taken to describe these limitations where appropriate.

FEDERAL

Aviation

The Federal Government, primarily through the Federal Aviation Administration (FAA), has the authority and responsibility to control aircraft noise sources through the following methods:

- **Implement and Enforce Aircraft Operational Procedures.** These include pilot responsibilities, compliance with Air Traffic Control instructions, flight restrictions, and monitoring careless and reckless operation of aircraft. Where and how aircraft are operated is under the complete jurisdiction of the FAA.
- **Manage the Air Traffic Control System.** The FAA is responsible for the control of navigable airspace and reviews any proposed alterations in flight procedures for noise abatement on the basis of safety of flight operations, safe and efficient use of navigable airspace, management and control of the national airspace and air traffic control systems, effects on security and national defense, and compliance with applicable laws and regulations.
- **Certification of Aircraft.** The FAA has required the reduction of aircraft noise through certification, modification of engines, or aircraft replacement as defined in Code of Federal Regulations Title 14, Part 36.
- **Pilot Licensing.** Individuals licensed as pilots are trained under strict guidelines concentrating on safe and courteous aircraft operating procedures, many of which are designed to lessen the effects of aircraft noise.

- **FAA Airport Compliance and Grant Assurances:** FAA Order 5190.6B, FAA Airport Compliance Manual, defines the airport sponsor's role with regard to land use planning and implementation actions "to reduce the effect of noise on residents of the surrounding area. Such actions include optimal site location, improvements in airport design, noise abatement ground procedures, land acquisition, and restrictions on airport use that do not unjustly discriminate against any user, impede the federal interest in safety and management of the air navigation system, or unreasonably interfere with interstate or foreign commerce." Additionally, upon receipt of FAA grant funding, the airport sponsor agrees to take appropriate action, including the adoption of zoning laws, to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations in accordance with FAA Grant Assurance 21, Compatible Land Use.

Land Use

- **Noise Compatibility Studies:** 14 CFR Part 150 establishes procedures and criteria for the evaluation of airport noise-related impacts. Although the FAA may provide guidance for airport land use compatibility, it has no jurisdiction over local planning decisions.

STATE OF CALIFORNIA

Aviation

With respect to aviation, the California Department of Transportation, Division of Aeronautics is responsible for funding, and permitting programs for airports and heliports. Assistance for the development and maintenance of aviation facilities through engineering and aviation experience is provided, as well as systems planning and environmental and community service programs.

Land Use

The State of California grants the authority of land use regulation to local governments. This regulation is accomplished through the use of general plans and zoning ordinances. The state has also established airport noise standards, noise insulation standards, and requirements for the establishment of an ALUC. State staff may also coordinate with local agencies to encourage environmental mitigation measures intended to discourage the encroachment of in-compatible land uses near airport facilities. As with the federal government, local planning decisions are at the discretion of the local jurisdiction and the state may not interfere with these decisions. The state does not participate in the overrule process when local government findings are determined by an ALUC to be inconsistent with an ALUCP.

California State law also requires sellers of real property to disclose any fact materially affecting the value and desirability of the property. Such disclosure is required when the property is either within two miles of an airport or if it is within an Airport Influence Area (AIA). The law defines the AIA as the area where airport-

related factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission. According to the State Division of Aeronautics, the AIA is usually the planning area designated by an airport land use commission for each airport.

Noise Insulation Standards

Title 24, Part 2, Section 1207.4 of the California Code of Regulations, establishes standards for interior room noise attributable to outside noise sources for multi-family residential buildings. Once these buildings are sound-insulated to the proper performance standards, they are not considered "noise impacted." These minimum noise insulation performance standards require that the CNEL shall not exceed 45 dB in any habitable room, with all doors and windows closed.

LOCAL GOVERNMENTS (CITIES AND COUNTIES)

Aviation

Cities and counties may be engaged in an aviation system by owning and operating an airport as its sponsor. As airport proprietors, cities and counties have limited power to control what types of civil aircraft use its airport or to impose curfews or other use restrictions. This power is limited by the rules of 14 CFR Part 161, which states that airport proprietors may not take actions that (1) impose an undue burden on interstate or foreign commerce, (2) unjustly discriminate between different categories of airport users, or (3) involve unilateral action in matters pre-empted by the federal government.

Within the limits of the law and financial feasibility, airport proprietors may mitigate noise or acquire land or partial interests in land, such as air rights, easements, and development rights, to assure the use of property for purposes which are compatible with airport operations.

Land Use

Cities and counties bear responsibility for the orderly development of areas surrounding the airports within their respective jurisdiction. To achieve this goal, each jurisdiction is charged with making sure all applicable planning documents and building codes are consistent with the ALUCP or go through the over-ruling process as outlined in Government Code, Section 65302.3. Local jurisdictions are also obligated to bring local plans into consistency with the Airport Land Use Compatibility Plan (ALUCP) and submit land use actions, such as general plan or specific plan amendments, revisions to ordinances or regulations, airport plans and individual development projects to the ALUC for a determination of consistency under Public Utility Code (PUC) Section 21676.

Airport Land Use Commission

At the county level of government exists a unique intersection of airport and land use compatibility planning with the administration of the Airport Land Use Commission. As previously discussed, the establishment of an ALUC is required for any county with an airport that is operated for the benefit of the public. The role of the ALUC is to *“formulate a comprehensive plan that will provide for the orderly growth at each public use airport and the area surrounding the airport within the*

jurisdiction of the commission” (State of California Public Utilities Code Section 21675).

The SJCOG Board of Directors serves as the airport land use commission for San Joaquin County. The SJCOG was designated as the ALUC in May 1973. The SJCOG is a joint-powers authority comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon, and Lathrop. SJCOG serves as the regional transportation planning agency, which provides a forum for regional decision-making on issues such as growth, transportation, environmental management, housing, open space, air quality, fiscal management, and economic development. SJCOG also considers population statistics, airport land use, habitat and open space planning, and other regional issues. The membership of SJCOG and geographic location of SJCOG member jurisdictions is depicted on **Exhibit 1B**.

While the ALUC does not have the authority to govern operations at any given airport, it is responsible for the preparation of the ALUCP. Once adopted, the ALUCP is to be linked to the general plans, zoning ordinances, and other land use regulations established by local governments to ensure consistency among all documents.

Section 21676 requires that local general plans conform with the ALUC’s comprehensive land use plan. It grants the ALUC the authority to review amendments to general plans, specific plans, zoning amendments, and building regulations that apply within the airport planning boundary.

The primary statutory limitation on ALUCs, stated in PUC Sections 21670(a)(2) and 21674(a), is the lack of authority over existing land uses. An

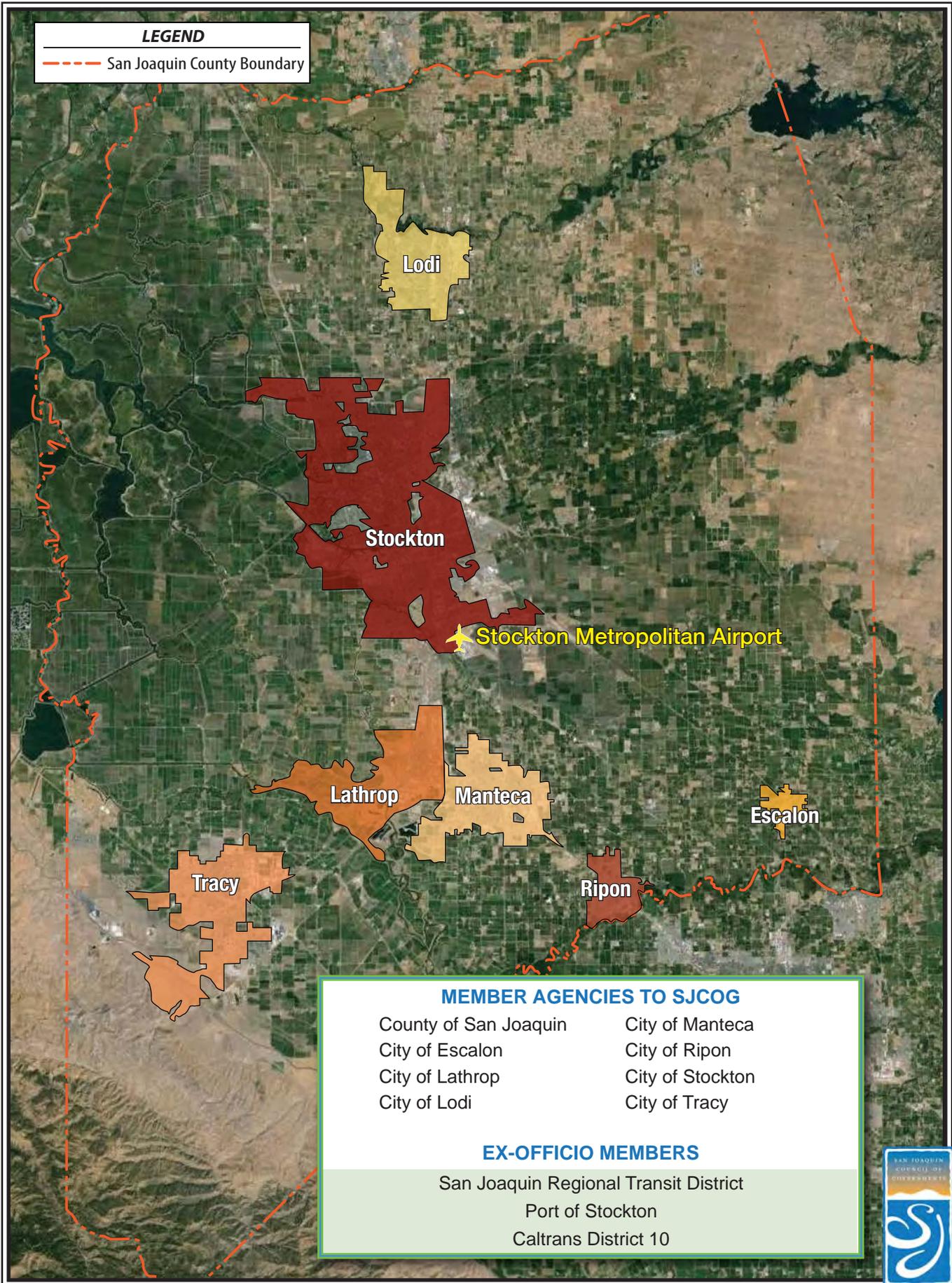


Exhibit 1B
 SJCOC MEMBER AGENCIES

ALUC has no authority to command changes to land uses that are existing or vested, regardless of whether they are incompatible with airport activities.

ESSENTIAL AIRPORT AND LAND USE PLANNING DOCUMENTS

Several documents are involved when considering airport land use compatibility issues. Airport sponsors and local jurisdictions each prepare separate planning documents for their airports and the surrounding development. An overview of each of these documents is included as follows to aid in understanding each component in this process.

Master Plan

An airport master plan provides strategic guidance for airport facilities and infrastructure development to support current and future aviation demands. A master plan reviews and updates the long range forecasts for airport development over the next 20 years. The forecasts are based on the airport's operational characteristics and are used to determine the airport's facility needs.

The objectives of a master plan are to:

- Examine the number and type of existing and potential aircraft users and operations;
- Assess the facilities needed to accommodate this activity;
- Evaluate alternatives to meet these needs;

- Provide a detailed development concept which balances airport needs with financial resources.

The detail of an airport master plan is directly related to the size, function and role of the airport. The airport master plan is prepared and adopted by the airport's sponsor/owner and is to be submitted to the ALUC for review.

Airport Layout Plan

Related to the Airport Master Plan is the Airport Layout Plan or Drawing (ALP). An ALP is a graphic representation of the current and long term facilities for an airport. These are generally required for airports seeking federal assistance for the implementation of airport improvements. The airport master plan or other narrative report typically accompanies the drawing or plans to provide justification for the proposed developments. An ALP generally is used as the basis for developing airport land use compatibility zones within ALUCPs as they reflect the 20-year development horizon for an airport. Upon completion, the ALP is sent to the FAA for review and approval.

General Plan

In addition to the previously discussed functions of the state government, the State of California performs other functions that affect local governments. Most important to the airport land use compatibility planning process is the requirement for each local jurisdiction to develop a *"long range General Plan for the development of the city or county"* which *"shall consist of a statement of development policies and shall include diagrams and text setting forth objectives, principles, stand-*

ards, and plan proposals.” Of the seven mandatory elements in the General Plan, two are especially relevant to the development of an ALUCP – land use and noise.

The land use element of a general plan designates the proposed general distribution and intensity of uses of the land. This element serves as a framework for the plan and is intended to correlate all land use issues into a set of development policies. The land use element must include standards of population density and building intensity.

The noise element identifies and evaluates the noise situation in the community. The projected noise levels are calculated and mapped for airports and other major noise sources such as highways. Projected noise levels are used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of residents to excessive noise.

Airport Land Use Compatibility Plan

An Airport Land Use Compatibility Plan provides for the orderly growth of an airport including the area surrounding the airport referred to as the respective airport’s “Area of Influence”. Its primary function is to safeguard the general welfare of people residing within the vicinity of the air-port and the public in general. To assist in the development of an ALUCP, the Division of Aeronautics publishes the Handbook which establishes statewide guidelines for airport land use compatible planning based on the *State Aeronautics Act*.

The Handbook broadly identifies two compatibility areas to be addressed within an ALUCP: safety and noise. Each of

these compatibility areas have associated characteristics that should be considered when developing ALUCP policies.

Safety Issues

- Minimizing the severity of an aircraft accident by evaluating the land uses near an airport. Certain land uses involve the concentration of large groups of people.
- Land uses can create hazards to aviation. Airspace protection generally involves limitations on the height of manmade structures near an airport.
- Minimizing activities which cause electronic or visual impairments to aviation or attract large numbers of birds.

Noise Issues:

- In areas adjacent to an airport, cumulative noise impacts, measured in terms of Community Noise Equivalent Level (CNEL) contours, may be the most disruptive.
- In areas beyond the outermost contours, noise generated from aircraft overflights can also be considered annoying to residents.

ENVIRONMENTAL REVIEW

The preparation of *California Environmental Quality Act* (CEQA) documentation when adopting or amending an ALUCP is required based upon legal precedent. A decision reached by the California Supreme Court in 2007 clarified the application of CEQA to airport land use compatibility plans (*Muzzy Ranch Co. v. Solano*

County Airport Land Use Commission, 41 Cal. 4th 372, June 21, 2007, modified September 12, 2007). The court ruled that an ALUCP is a “project” subject to environmental review under CEQA. The court explained that even if subsequent action by a local land use regulatory agency is required before development projects can be authorized, an ALUCP “carries significant, binding regulatory consequences for local government...” The court noted that even if an ALUCP would not cause a direct physical change in the environment, it still might affect the environment indirectly. The court specifically discussed the possibility that adoption of land use restrictions in the vicinity of an airport could cause development that would have occurred in the airport area to shift elsewhere, potentially giving rise to an adverse effect on the environment.

According to the court, a “common sense” exemption from CEQA may be invoked by an airport land use commission “[w]here it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment” The CEQA exemption may be used, however, only when the specific facts in question reveal that use of the exemption is justified.

In accordance with Public Resources Code, Section 21096, the ALUCP and Handbook shall be utilized as technical resources to assist in the preparation of environmental documentation as the report relates to airport-related safety hazards and noise problems. Additionally, a lead agency shall not adopt a negative declaration for a development action unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the

airport or for persons residing or working in the project area.

ABOUT THIS DOCUMENT

This document includes all components of the Updated Comprehensive Land Use Plan for five of the six public-use airports within San Joaquin County. Stockton Metropolitan Airport is in the process of an Airport Master Plan Update. The San Joaquin ALUCP will be amended to include the Stockton Metropolitan Airport after the Master Plan has been through the approval process. Additionally, policies are provided for the portion of the County affected by the operations at Byron Airport located in neighboring Contra Costa County.

Chapter Two includes baseline information for each of the airports, including an overview of each airport and its operations, applicable land use policies and plans, and noise exposure contours.

Chapter Three includes the safety, noise, and height restriction guidelines to be for used when considering land use developments within the vicinity of the six public-use airports.

Additionally, appendices are included to supplement the analysis presented in the documents. These include Airport Noise Analysis, Safety Issues and Alternatives, and Height Restriction Issues and Alternatives

Appendices are also provided that include implementation materials for use by SJCOG staff and local planning agencies to achieve the land use compatibility goals of this plan.



Chapter Two

Airport Facilities, Operations, & Environs

Chapter Two

AIRPORT FACILITIES, OPERATIONS, AND ENVIRONS

*Airport Land Use Compatibility Plan
San Joaquin County*

INTRODUCTION

Each of the public use airports, depicted on **Exhibit 2A**, within and bordering San Joaquin County, has unique facilities, operating characteristics and surrounding land use development patterns. This chapter provides an overview of the existing and future airport facilities, aircraft operations, and surrounding land use for each airport. Prior to presenting this information, it is important to understand the framework within which each airport will be discussed. A discussion of the time horizon and geographic extent of the plan is included to further define the scope of the plan. Additionally, an explanation of airport noise exposure contours is provided. Further information regarding the development of noise exposure contours is provided in **Appendix A**.

AIRPORT FACILITIES

Airport facility information is based upon several sources including the most recent Airport Master Plan, Airport Layout drawings, and the Federal Aviation Administration's (FAA) Facility Directory. Airport facilities essential for the ALUCP update include runway orientation, runway length, runway strength, runway lighting, approach and departure procedures, and traffic pattern.

Future facilities are also an important component for developing an airport compatibility plan. California State law (Section 21675[a]) declares that the ALUCP "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 accordance with this provision, the plans for each airport will be discussed and incorporated into the safety and noise analyses prepared for each airport based on the most recent information available. Because each airport plan is developed independently, they may have differing time horizons. The time horizon will be noted in the Airport Operations section for each airport.

AIRPORT OPERATIONS

An airport operation is defined as either an aircraft arrival to or a departure from an airport. Airport operations can be further categorized as either local operations or itinerant operations. Local operations include those operations that: (a) Operate in the local traffic pattern or within sight of the airport; (b) Are known to be departing for, or arriving from, flight in local practice areas within a 20-mile radius of the airport; and (c) Execute simulated instrument approaches or low passes at the airport. Itinerant operations are operations that originate at a different airport or operations that occur outside the local traffic pattern of the airport. Operations by visiting aircraft, some flight training operations, and recreational flights to other airports are counted as itinerant operations.

Each section of this chapter will have a table listing the respective operations by aircraft type and category. The table will also include a 20-year airport operations forecast consistent with California State law (Section 21675[a]) as described above.

AIRPORT ENVIRONS

There are three important components necessary to understand when preparing an assessment of an airport’s land use environs. These include an airport’s influence area, the sphere of influence of nearby jurisdictions, and aircraft noise exposure contours. Pursuant to California Public Utilities Code Section 21675, each airport has an area of influence (AIA). The AIA indicates those areas in which current or future airport-related overflights, noise, safety, or airspace protection conditions may significantly affect land uses and may require land use restrictions to address those conditions. The airport influence area indicates the area within which ALUC review of certain land use actions is required. The airport influence area is indicated on the exhibits prepared for each airport in this chapter and will serve as the study area for each airport. As discussed in Chapter One, the AIA is also the area within which the state’s fair disclosure regulations apply.

Another important consideration for evaluating planning activities within the vicinity of an airport is the sphere of influence (SOI) of the incorporated cities of the county. A sphere of influence defines the area within which urban development is to be encouraged.

Established by the county’s Local Area Formation Commission, the sphere of influence establishes the probable physical boundary and service area of the local government. The lands lying within the sphere are those that the city may someday propose to incorporate through annexation and these areas are typically included within the scope of a city’s general plan.

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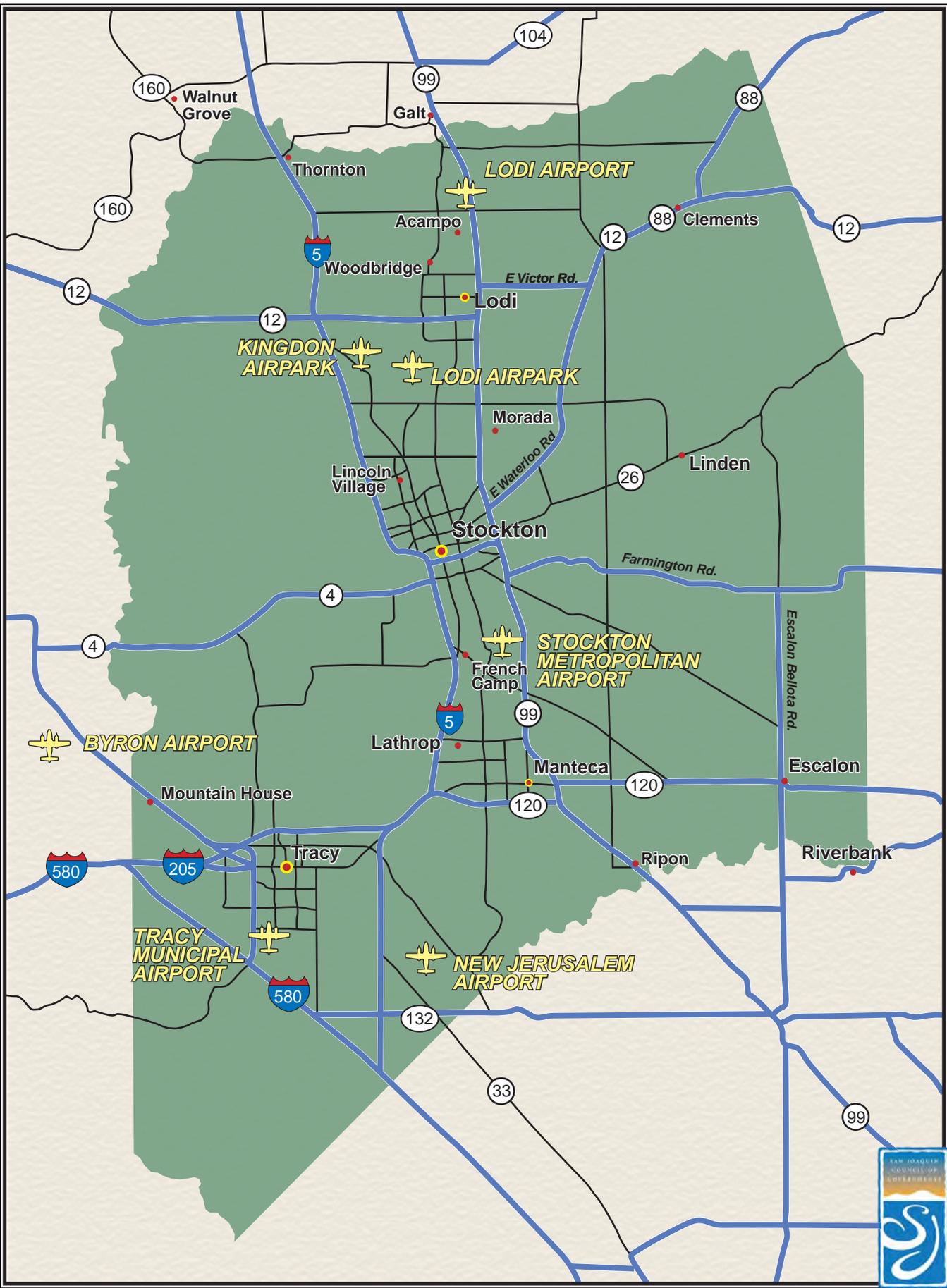


Exhibit 2A
SAN JOAQUIN COUNTY
LOCATION MAP

Finally, noise exposure contours have been prepared for each airport within this study. The purpose of the contours is to depict average annual and single event noise exposure conditions at each airport. The FAA and State of California have approved the use of the Integrated Noise Model (INM) for developing noise exposure contours. The most recent version of the INM is quite sophisticated in predicting noise conditions at a given geographic location and accounts for variables such as airfield elevation, temperature, headwinds, and local topography. Version 7.0 of the INM was used to prepare noise exposure contours for each airport. A detailed discussion of the assumptions used to prepare the contours for each airport can be found in **Appendix A**.

In the following sections, the existing and long-range noise exposure contours are depicted for each airport. Noise contours are displayed in 5 CNEL increments from 55 to 75 CNEL.

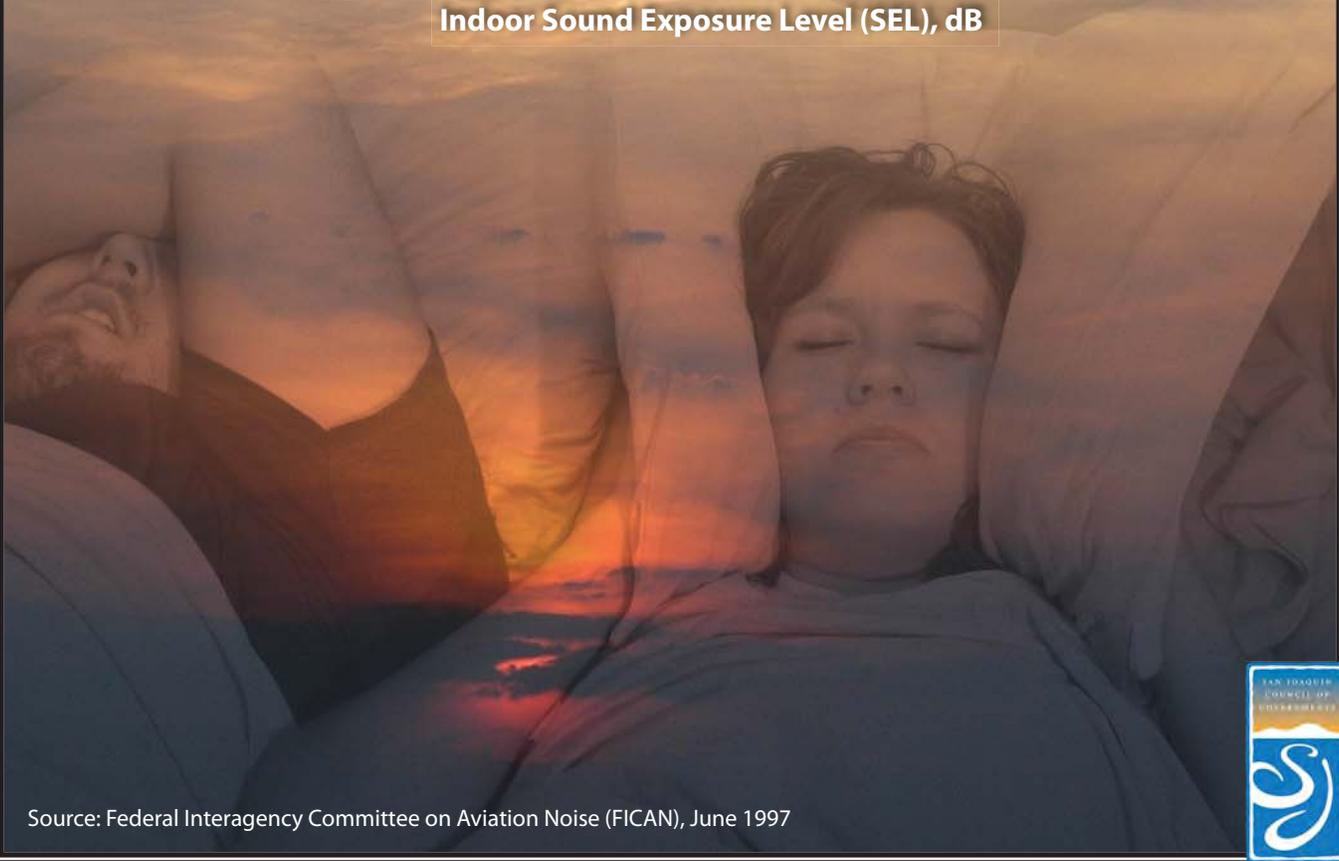
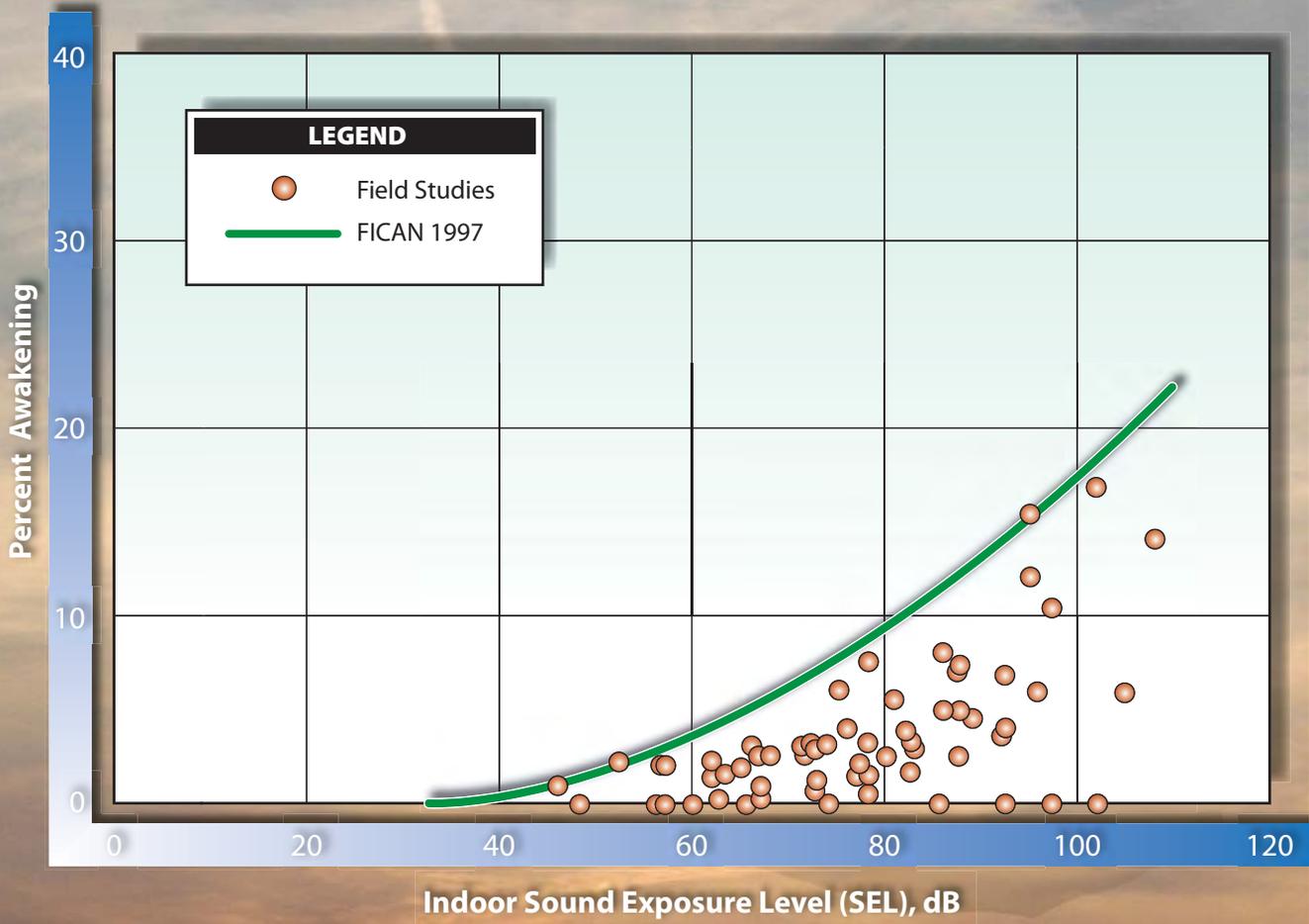
The locations of CNEL contours are among the factors used to determine land use compatibility. The depicted noise contour boundaries, however, are not absolute determinants of the compatibility. The inherent variability of aircraft flight paths and pilot training that occur at the airport all influence noise emissions in the vicinity of airports. This variability in aircraft flight paths and training activity

can create significant single event noise levels that can be disruptive to noise-sensitive land uses.

A commonly used method for determining the potential impact of single events on residential areas is to use sleep disturbance. The Federal Interagency Committee on Aviation Noise (FICAN) recommends using a 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB). **Exhibit 2B** illustrates the FICAN data collected regarding sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore, the 95 dB SEL will be used as a gauge for sleep disturbance. This methodology will be used to develop single-event contours for Byron, Kingdon, Lodi (Lind's), Lodi (Precissi), New Jerusalem, and Tracy Airports. Stockton Metropolitan Airport's single-event analysis includes more detailed information given the range of aircraft types that frequent the airport.

AIRPORT INFORMATION

The following sections provide an overview of each airport affected by this plan including existing and planned land uses and existing and future airport facilities, operations, and noise exposure contours.



Source: Federal Interagency Committee on Aviation Noise (FICAN), June 1997





Byron Airport

BYRON AIRPORT

Airport Setting

Byron Airport was constructed in 1994 to replace a privately owned airport located on the northwest portion of the current airport property. Byron Airport, located in Contra Costa County, has established land use compatibility criteria based on the Contra Costa County Comprehensive Land Use Plan. The land use compatibility zone included in the Contra Costa County Comprehensive Land Use Plan extends into San Joaquin County; therefore, it is necessary to consider the impact of Byron Airport's operations on the land uses within San Joaquin County.

Airport Facilities

Byron Airport is served by two runways. Runway 5-23 is 3,000 feet long and 75 feet wide, and is oriented to the northeast and southwest. Runway 12-30 is 4,500 feet long and 100 feet wide, and aligned to the northwest and southeast. Both runways are constructed of asphalt and have a single-wheel load (SWL) bearing capacity of 29,500 pounds. Runways 23 and 30 are equipped with Precision Approach Path Indicator (PAPI) lighting to aid pilots in their approach to the airport and Runway 30 has a published RNAV (GPS) approach. Additional details regarding the facilities at Byron Airport can be found on **Exhibit 2BA-1** and in **Table 2BA-1**.

TABLE 2BA 1 Airside Facility Data Byron Airport				
	Runway 05-23		Runway 12-30	
Length (ft.)	3,000		4,500	
Width (ft.)	75		100	
Surface Material	Asphalt		Asphalt	
Load Bearing Strength Single Wheel Loading	29,500 lbs.		29,500 lbs.	
Instrument Approach Procedures	Rwy 05 None	Rwy 23 None	Rwy 12 None	Rwy 30 RNAV(GPS)
Approach Aids	Rwy 05 None	Rwy 23 PAPI	Rwy 12 None	Rwy 30 PAPI
Pavement Edge Lighting	MIRL		MIRL	
Displaced Threshold (ft.)	Rwy 05 None	Rwy 23 None	Rwy 12 None	Rwy 30 None
Fixed Wing Aircraft Traffic Pattern	Right	Left	Left	Left
Weather Reporting	AWOS			
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008				
MIRL – Medium Intensity Runway Lights				
RNAV – Area Navigation				
GPS – Global Positioning System				
PAPI – Precision Approach Path Indicator				
AWOS – Automated Weather Observing System				

Future Airport Plans

The airport master plan, adopted in 1986, and the airport layout plan, updated in 1999, has the following improvements identified: extend Runway 12-30 1,500 feet southeast; extend Runway 5-23 900 feet northeast; and build hangars and FBO facilities as needed.

Airport Activity Data

Byron Airport operations data is presented in **Table 2BA-2**. This information is from the Contra Costa County Airport Land Use Compatibility Plan, December 2000. As indicated in the table, the 1999 baseline operations for the airport are 60,500 and the future forecast is 190,200.

	1999	Future
LOCAL		
Single-engine Piston, Variable	3,500	67,340
Single-engine Piston, Fixed	21,385	11,100
Helicopter	4,550	12,500
Local Subtotal	29,435	90,940
ITINERANT		
Single-engine piston, variable	11,515	36,260
Single-engine piston, fixed	10,500	33,300
Multi-engine piston	3,600	12,000
Turboprop	200	3,000
Turbojet, Small	500	2,000
Historic Military Jet	200	200
Helicopter	4,550	12,500
Itinerant Subtotal	31,065	99,260
Total	60,500	190,200

Source: *Contra Costa County Airport Land Use Compatibility Plan (December 2000)*

Airport Noise Exposure and Noise Abatement/Mitigation Programs

The airport's existing and future CNEL noise exposure contours prepared for the Contra Costa County do not extend into San Joaquin County. A SEL noise contour was prepared for the critical aircraft at Byron Airport. The footprint of the Aero-Vodochody L-39 aircraft reaches the San Joaquin County line but does not affect any parcel within the county.

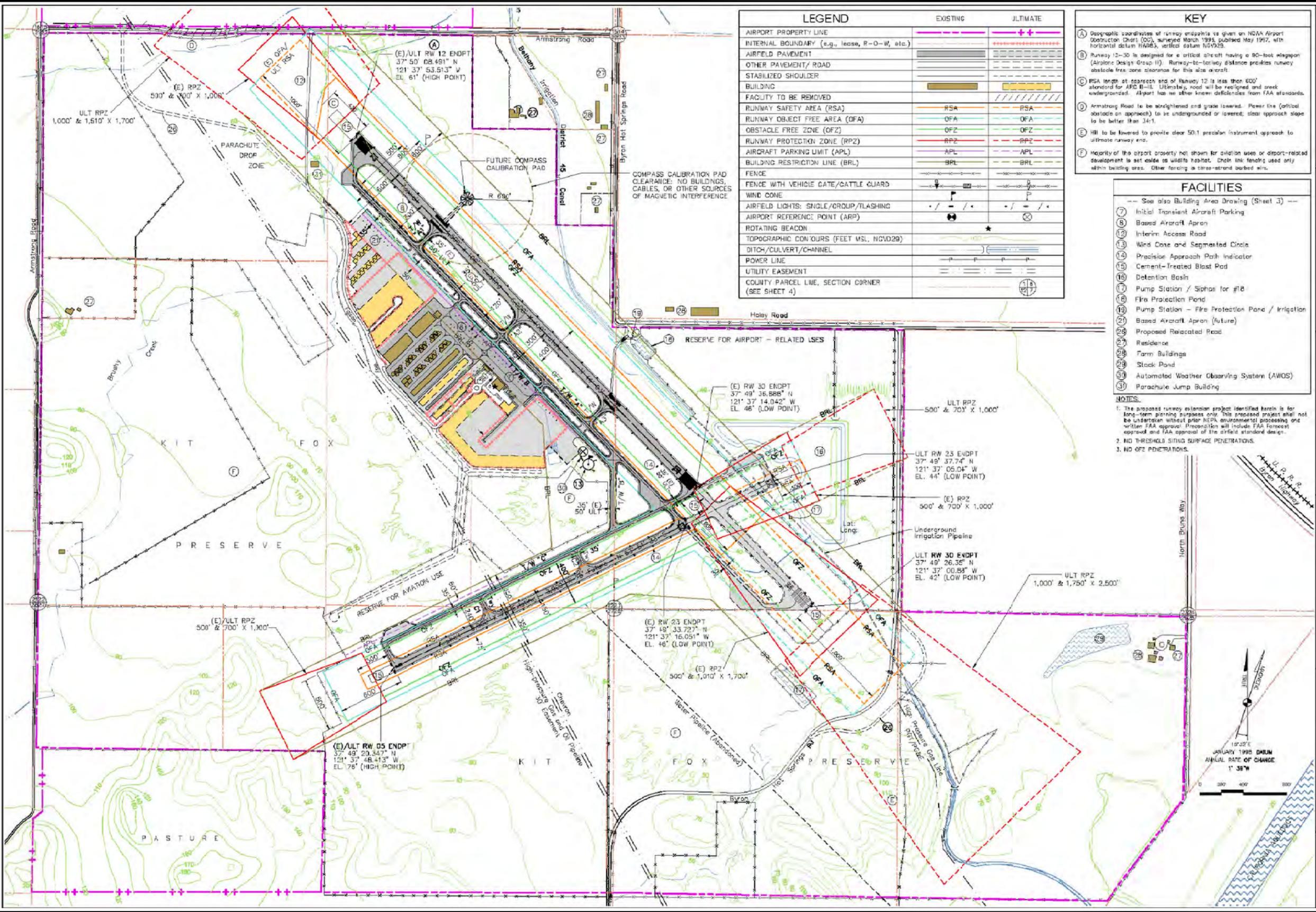
Contra Costa County provides a noise complaint process brochure on their website to help the public understand the complaint submittal process. The county website also allows concerned residents

to submit complaints through an online form.

Existing Land Use

The existing land uses for the area within the Byron Airport land use compatibility zones prepared for the Contra Costa County Airport Land Use Compatibility Plan are depicted on **Exhibit 2BA-2**. As shown on the exhibit, portions of the area within the compatibility zone are developed with residential land uses as part of the first phases of the Mountain House community. The remaining areas within San Joaquin County have been graded in

07SP13-2KA1-05/1508



LEGEND	EXISTING	ULTIMATE
AIRPORT PROPERTY LINE	---	---
INTERNAL BOUNDARY (e.g., lease, R-O-W, etc.)	---	---
AIRFIELD PAVEMENT	▨	▨
OTHER PAVEMENT/ROAD	▨	▨
STABILIZED SHOULDER	▨	▨
BUILDING	▨	▨
FACILITY TO BE REMOVED	▨	▨
RUNWAY SAFETY AREA (RSA)	--- RSA ---	--- RSA ---
RUNWAY OBJECT FREE AREA (OFA)	--- OFA ---	--- OFA ---
OBSTACLE FREE ZONE (OFZ)	--- OFZ ---	--- OFZ ---
RUNWAY PROTECTION ZONE (RPZ)	--- RPZ ---	--- RPZ ---
AIRCRAFT PARKING LIMIT (APL)	--- APL ---	--- APL ---
BUILDING RESTRICTION LINE (BRL)	--- BRL ---	--- BRL ---
FENCE	---	---
FENCE WITH VEHICLE GATE/CATTLE GUARD	---	---
WIND CONE	---	---
AIRFIELD LIGHTS: SINGLE/GROUP/FLASHING	---	---
AIRPORT REFERENCE POINT (ARP)	---	---
ROTATING BEACON	---	---
TOPOGRAPHIC CONTOURS (FEET MSL, NVD29)	---	---
DITCH/CULVERT/CHANNEL	---	---
POWER LINE	---	---
UTILITY EASEMENT	---	---
COUNTY PARCEL LINE, SECTION CORNER (SEE SHEET 4)	---	---

- ### KEY
- (A) Geographic coordinates of runway endpoints as given on NOAA Airport Obstruction Chart (OC), surveyed March 1995, published May 1997, with horizontal datum NAD83, vertical datum NAVD83.
 - (B) Runway 12-30 is designed for a critical aircraft having a 90-foot wingspan (Airplane Design Group II). Runway-to-taxiway distance provides runway obstacle free zone clearance for this size aircraft.
 - (C) RSA length at approach end of Runway 12 is less than 600' standard for AFD B-1. Ultimately, road will be realigned and area undergrounded. Airport has no other known obstructions from FAA standards.
 - (D) Armstrong Road to be realigned and grade lowered. Power line (critical obstacle on approach) to be undergrounded or lowered; clear approach slope to be better than 34:1.
 - (E) Hill to be lowered to provide clear 50:1 precision instrument approach to ultimate runway end.
 - (F) Majority of the airport property not shown for aviation uses or airport-related development is set aside as wildlife habitat. Check link fencing used only within building area. Other fencing is three-strand barbed wire.

- ### FACILITIES
- See also Building Area Drawing (Sheet 3) ---
- (7) Initial Transient Aircraft Parking
 - (8) Based Aircraft Apron
 - (9) Interim Access Road
 - (10) Wind Cone and Segmented Circle
 - (11) Precision Approach Path Indicator
 - (12) Cement-Treated Blast Pad
 - (13) Detention Basin
 - (14) Pump Station / Siphon for #18
 - (15) Fire Protection Pond
 - (16) Pump Station - Fire Protection Pond / Irrigation
 - (17) Based Aircraft Apron (future)
 - (18) Proposed Relocated Road
 - (19) Residence
 - (20) Farm Buildings
 - (21) Stock Pond
 - (22) Automated Weather Observing System (AWOS)
 - (23) Parachute Jump Building

- ### NOTES
1. The proposed runway extension project identified herein is for long-term planning purposes only. This proposed project shall not be undertaken without prior NEPA environmental processing and written FAA approval. Preparation will include FAA forecast approach and FAA approval of the official standard design.
 2. NO THRESHOLD SITING SURFACE PENETRATIONS.
 3. NO OFZ PENETRATIONS.

Prepared By
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Scottsdale, AZ 85260
602.975.7722

Project For
CONTRA COSTA COUNTY AIRPORTS
CONTRA COSTA COUNTY

Project Name
**BYRON AIRPORT
500 EAGLE COURT
BYRON, CALIFORNIA**

Issue Log

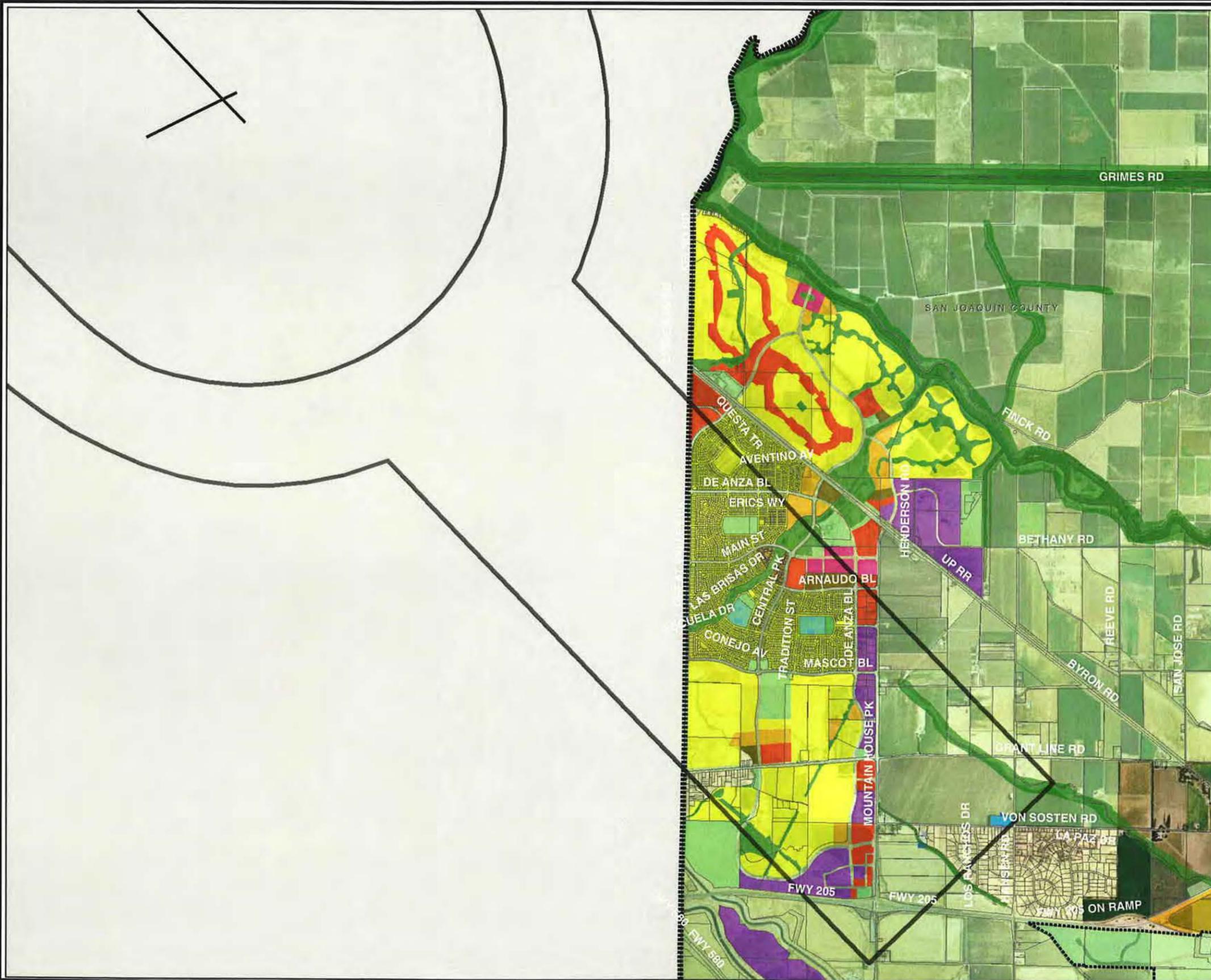
DATE	REVISION/DESCRIPTION	CONTRIBUTOR	CONTRACT NUMBER

Drawing Title
AIRPORT LAYOUT DRAWING

SHEET
2 OF 2

DATE: JANUARY 1995
ANNUAL RATE OF CHANGE: 1" = 38' W

Exhibit 2BA-1
BYRON AIRPORT (C83)
AIRPORT FACILITIES



LEGEND

- Airport Property
- Municipal Boundary
- San Joaquin County Boundary
- Part 77 Horizontal Surface
- Agriculture
- Rural Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Mixed Use
- Park & Open Space
- Public Facility
- Noise Sensitive
- Schools

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.



preparation for development consistent with the existing community.

Land Use Planning Policies and Regulations

The airport is located northwest of the Mountain House development in western San Joaquin County. The existing compatibility zones for Byron Airport adopted by Contra Costa County extend into San Joaquin County. Within the vicinity of the airport, two general plans have been adopted to guide land use decisions. **Exhibit 2BA-3** shows the land uses depicted

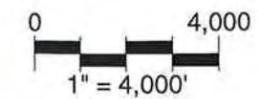
on the City of Tracy General Plan map. As shown on the exhibit, much of the land within the Byron Airport compatibility zones is planned for agricultural uses with scattered residential uses representing existing development. The San Joaquin County General Plan also provides land use guidance for this area. As shown on **Exhibit 2BA-4**, the *San Joaquin County General Plan* has been amended with the Specific Plan for the Mountain House development. The Mountain House Community includes low and medium density residential development, commercial centers, and associated public facilities.

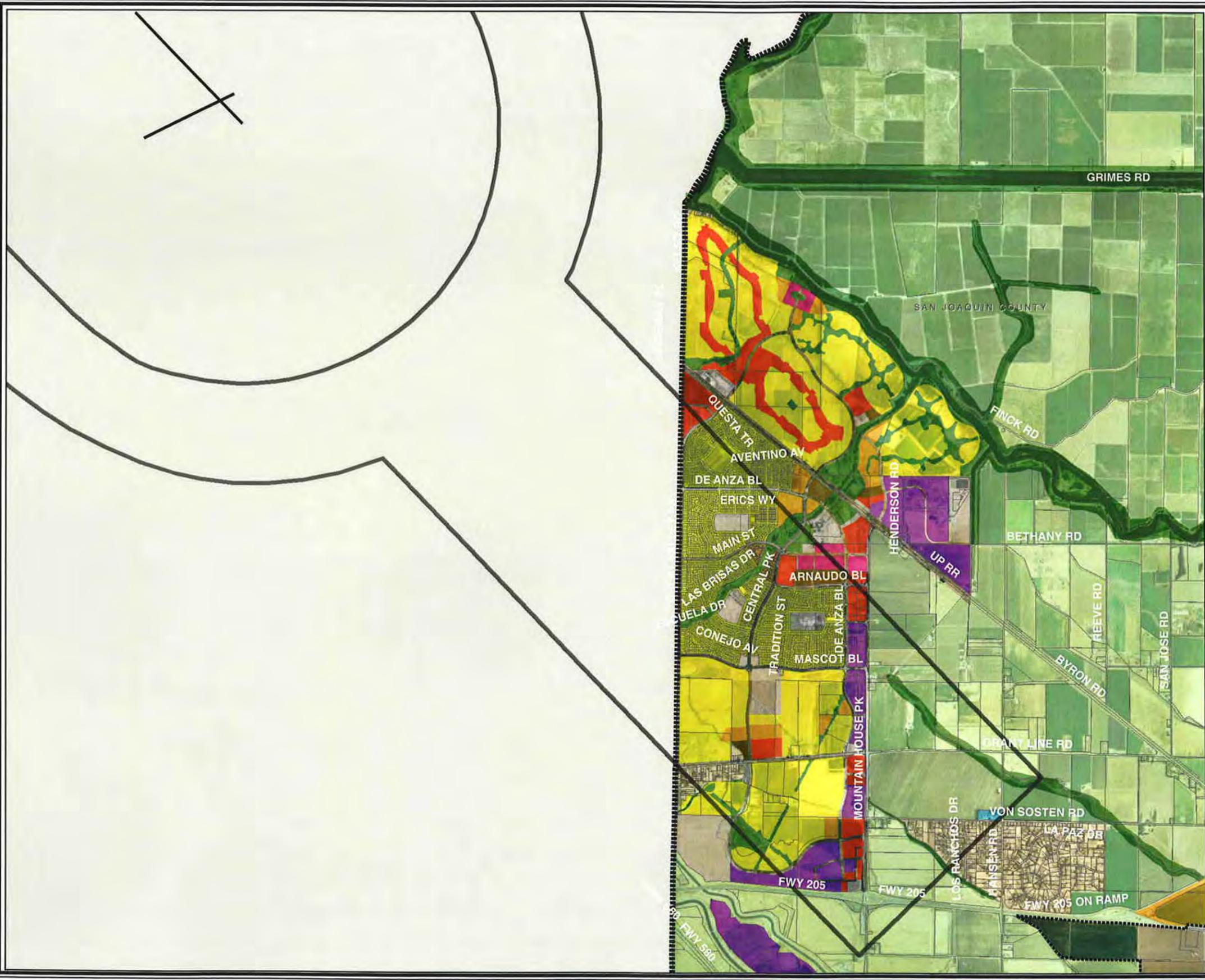


LEGEND

-  Airport Property
-  Municipal Boundary
-  San Joaquin County Boundary
-  Part 77 Horizontal Surface
-  Commercial
-  Industrial
-  Park & Open Space
-  Urban Reserve

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information
 System, February 2008.

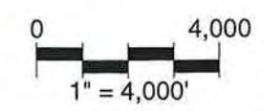




LEGEND

- Airport Property
- Municipal Boundary
- San Joaquin County Boundary
- Part 77 Horizontal Surface
- Light Green Agriculture
- Yellow Rural Density Residential
- Light Yellow Low Density Residential
- Orange Medium Density Residential
- Brown High Density Residential
- Red Commercial
- Purple Industrial
- Pink Mixed Use
- Dark Green Park & Open Space
- Light Green Public Facility
- Blue Noise Sensitive

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.





Kingdon Airpark

KINGDON AIRPARK

Airport Setting

Kingdon Airpark is located approximately four miles southwest of the City of Lodi in an unincorporated portion of San Joaquin County. The airport is privately owned and was originally constructed in the 1940s to support military training activity during World War II. Located east of Interstate Highway 5 between the cities of Lodi and Stockton, the airport presently hosts a variety of aviation activities including pilot training and aerial application of agricultural chemicals. The airport has several types of hangars for lease and also provides aviation fuel services. The airport is also home to the Delta Flying

Club, which owns six single-engine piston aircraft for use by its members.

Airport Facilities

Kingdon Airpark currently has one runway that measures 3,705 feet in length and 60 feet in width. It is oriented to the northwest/southeast and is overlaid with asphalt. Additional details regarding the facilities at Kingdon Airpark can be found on **Exhibit 2KA-1** and **Table 2KA-1**. Kingdon Airpark has a tri-color visual approach slope indicator (TRCV) approach guidance system located on the left hand side of Runway 30. Low intensity runway lights are also present along Runway 12-30.

TABLE 2KA-1 Airside Facility Data Kingdon Airpark		
	Runway 12-30	
Length (ft.)	3,705	
Width (ft.)	60	
Surface Material	Asphalt	
Load Bearing Strength		
Single Wheel Loading (SWL)	N/A	
Double Wheel Loading (DWL)	N/A	
Dual Tandem Wheel Loading (DTWL)	N/A	
Instrument Approach Procedures	None	
Approach Aids	Rwy 12 None	Rwy 30 TRCV
Pavement Edge Lighting	Low-intensity	Low-intensity
Displaced Threshold (ft.)	Rwy 12 295	Rwy 30 490
Fixed Wing Aircraft Traffic Pattern	Left	Left
Weather Reporting	None	
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008		
LIRL – Low Intensity Runway Lights		
TRCV (TRIL) – Tri color visual approach slope indicator, TRCV on left side of runway		

Future Airport Plans

Based on discussions with the airport owners, future airport facility plans include a 1,000-foot extension of the run-

way to the northwest. The runway extension is planned to accommodate additional aircraft that cannot presently operate at the airport.

Airport Activity Data

Aircraft operations information is included in **Table 2KA-2**. According to airport records, the current annual operations for the airport totals 24,472. This includes 20,460 local operations and 3,812 itinerant operations.

The table indicates all local operations at Kingdon Airpark are performed by single-engine aircraft while the itinerant mix of aircraft includes single-engine, multi-engine, and turboprop aircraft.

Airport management anticipates increased operations due to additional services and improved facilities at the airport. The 20-year forecast, based on an interview with airport management, for the airport is 84,500 annual operations. The aircraft fleet mix for the long range scenario is expected to have an increase in the number of business jets and turboprop aircraft for itinerant operations. Local operations will remain as single-engine aircraft.

	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	860	3,990
Single Engine Piston Fixed Pitch	GASEPF	980	3,990
Multi-Engine Piston	BEC58P	440	2,660
Turboprop	DHC6	1,460	1,995
Business Jet	CNA55B	<u>72</u>	<u>665</u>
Subtotal		3,812	13,300
Local			
Single Engine Piston Variable Pitch	GASEPV	18,620	35,600
Single Engine Piston Fixed Pitch	GASEPF	<u>1,840</u>	<u>35,600</u>
Subtotal		20,460	71,200
TOTAL ANNUAL OPERATIONS		24,272	84,500

Source: Interview with Kingdon Airpark management and Coffman Associates analysis.

Airport Noise Exposure and Noise Abatement/Mitigation Programs

The existing and future CNEL noise exposure contours and SEL contours for Kingdon Airpark are shown on **Exhibit 2KA-2**. Additional information regarding the assumptions and methodology used in developing the noise exposure contours can be found in **Appendix A**.

Kingdon Airpark does not have any formal noise abatement procedures, but has taken steps to encourage pilots to avoid noise-sensitive land uses by using the following procedure: climb runway heading

to 800 feet above ground level (AGL), then left turn to 270 degrees before normal departure procedures. This noise abatement procedure is posted on a sign at the end of the runway as shown on **Exhibit 2C**. Additionally, the airport has specified run-up areas, located at the southern end of the airport, in an effort to minimize their impact on nearby land uses.

Existing Land Use

Kingdon Airpark is located in a rural setting. As indicated in **Exhibit 2KA-3**,

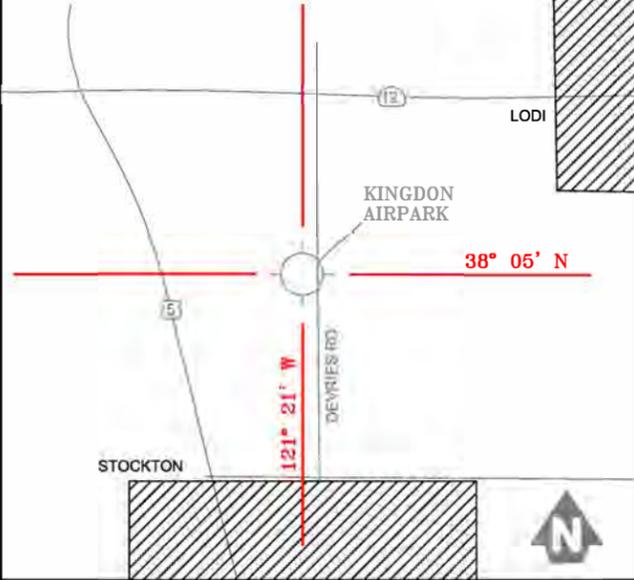
07SP13-2KA1-05/15/08

LODI, CA.

KINGDON AIRPARK (020)

SITE NO. 01783.A

AIRPORT LOCATION

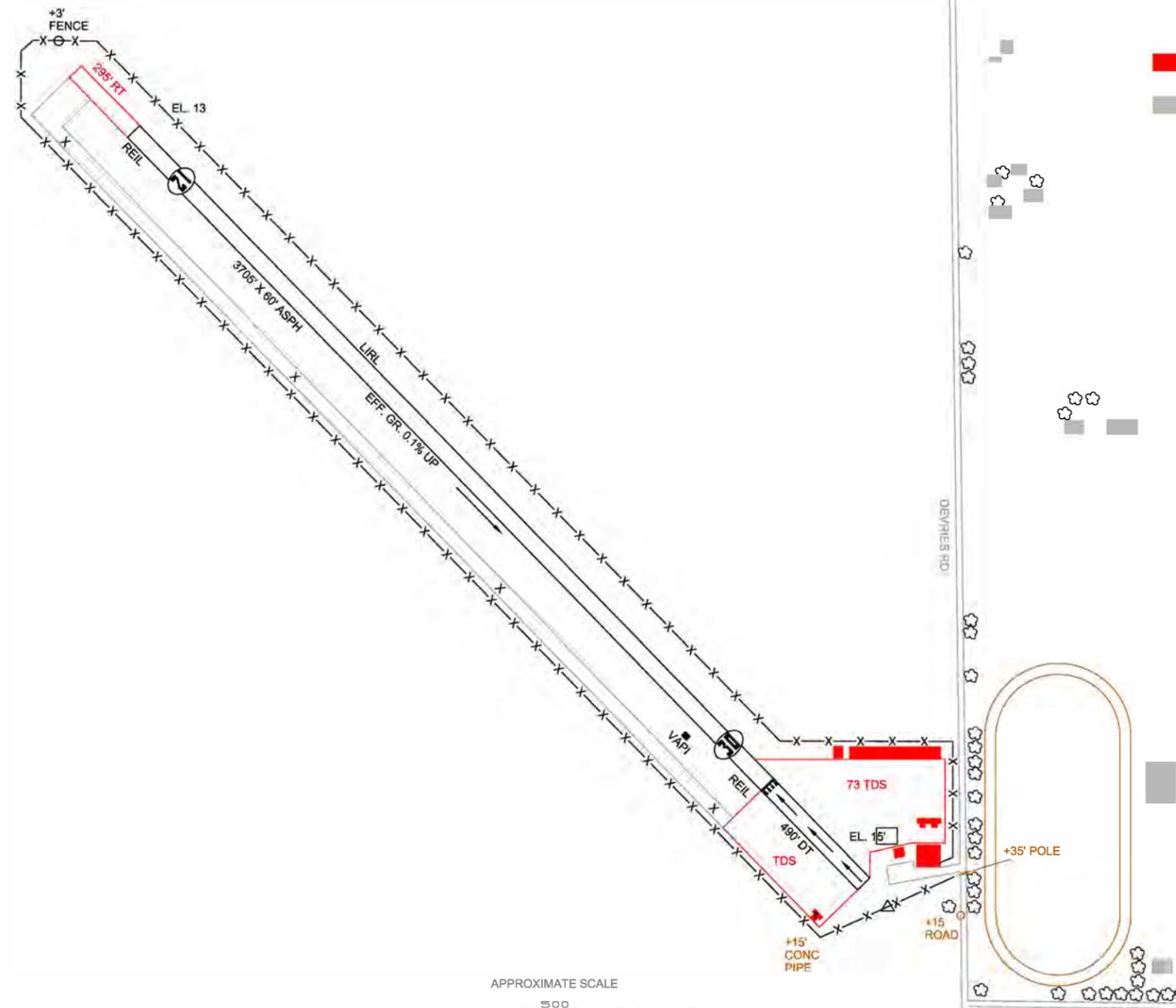


ACRES-41
ELEV. 15'

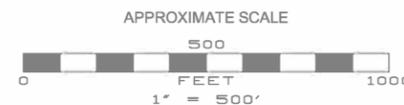
LEGEND

- x—x— Fence
- ⊗ Trees
- On Airport Buildings
- Off Airport Buildings

REMARKS:



Source: State of California Department of Transportation Division of Aeronautics, March, 2005.

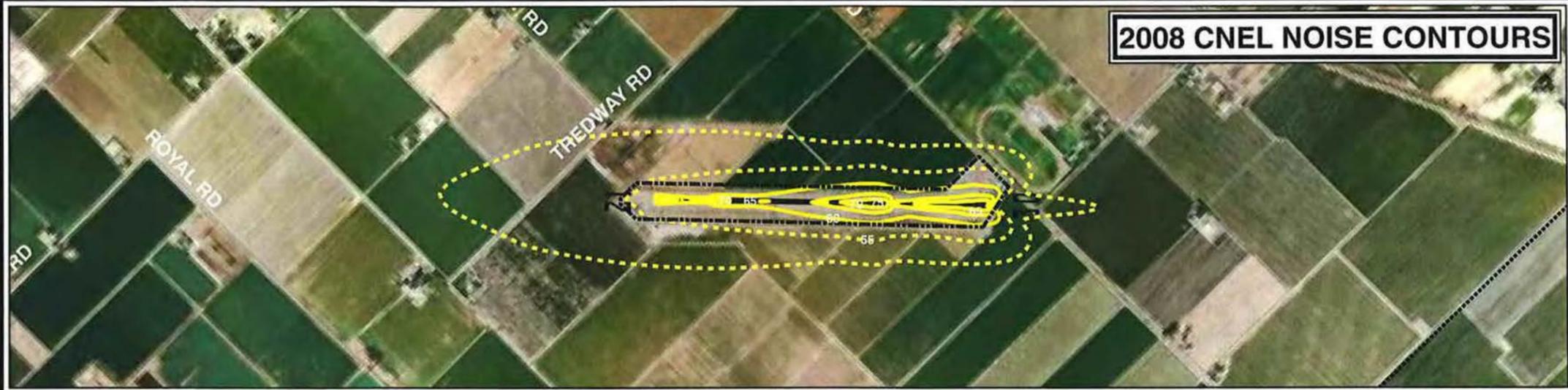


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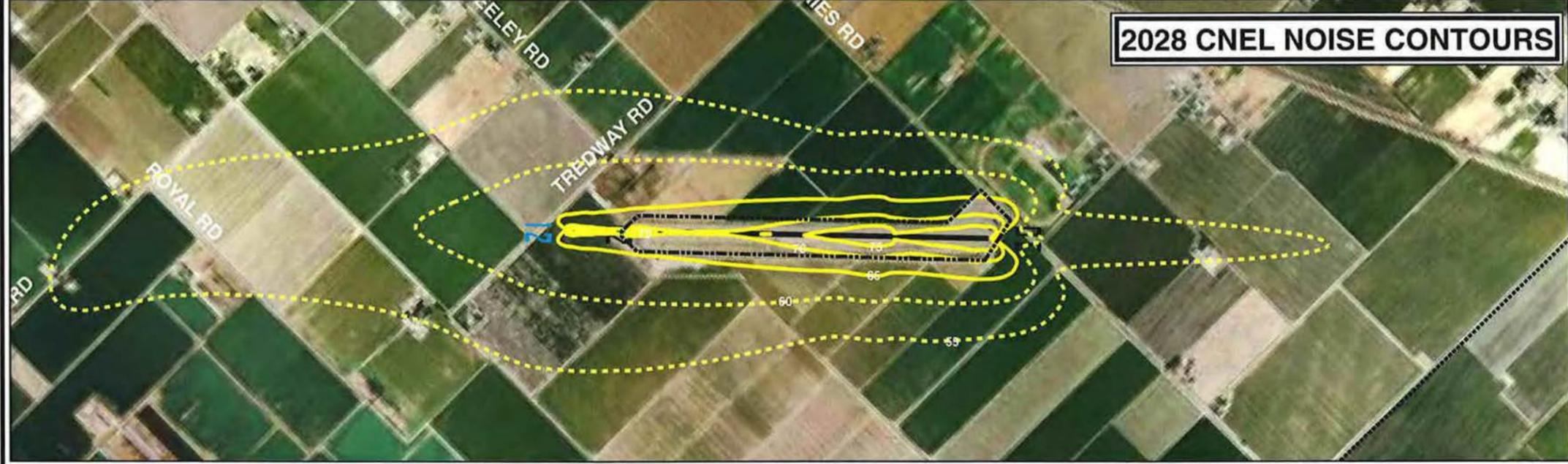


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2008 CNEL NOISE CONTOURS



2028 CNEL NOISE CONTOURS



SINGLE EVENT CONTOUR



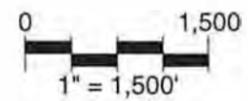
LEGEND

- Airport Property
- CNEL Noise Exposure Contour- Marginal Effect
- CNEL Noise Exposure Contour- Significant Effect
- 95 dB Single Event Contour
- Ultimate Runway Extension

Note: A 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB) was used to determine sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore the 95 dB SEL will be used as a gauge for sleep disturbance.

SEL Contour based on one (1) Cessna 550 Citation Bravo aircraft Departure operation per runway.

Source: Aerial Photography dated 2006. Coffman Associates Analysis.



Kingdon Airpark



New Jerusalem Airport



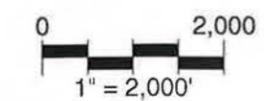
07SP13-2KA3-05/15/08



LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Single-Family Residential
- Commercial
- Industrial
- Public Facility
- Noise Sensitive

Source: Aerial Photography dated 2006.
Windshield Survey, Feb. 3-7, 2008.



much of the land surrounding Kingdon Airpark is developed with agricultural lands used for growing a variety of crops. There are also several residences constructed on multi-acre parcels resulting in low-density residential development throughout the area. Directly to the east of the airport is a race horse training complex with stables and a race horse training track. Northwest of the airport is a freeway commercial development which serves the adjacent Interstate 5 corridor. These land uses were determined by a review of aerial photography and a field survey conducted by the consultant.

Land Use Planning Policies and Regulations

The Kingdon Airpark AIA is contiguous with the Lodi Airport AIA due to their proximity. Portions of the AIA are located within the SOI for both the City of Stockton and the City of Lodi. Therefore, the lands within the AIA are subject to the planning guidance set forth in the respective general plans for these areas. The general plan designations from the *City of Stockton General Plan* for the areas south of Kingdon Airpark are depicted on **Exhibit 2KA-4**. As shown on the exhibit, the areas south of the airport are planned as agriculture and open space. Farther to the south, parcels have the plan's village designation. Under this category, the land

uses will be determined by a specific plan or master development plan with guidance from the *City of Stockton General Plan*. The *San Joaquin County General Plan*, shown on **Exhibit 2KA-5**, designation for the area immediately surrounding Kingdon Airpark is "Public," which includes all major institutional facilities. The areas surrounding Kingdon Airpark that fall under the San Joaquin County jurisdiction are planned as General Agriculture, as stated in the General Plan, is reserved for those areas "generally committed to agriculture with viable commercial agriculture enterprises that require large land areas to efficiently produce their crops." Directly west of Kingdon Airpark are two parcels that have been acquired by the City of Lodi to meet future infrastructure needs; these parcels are designated as Public/Quasi-Public. The area south of the airport is within the City of Stockton SOI. The majority of this area is designated as village in the 2007 Stockton General Plan. The village concept is used as the primary basis for planning new development areas within Stockton. Key features of a village include a mix of single family and multi-family development and a village center. The *San Joaquin County General Plan* designation for this area is General Agriculture. The areas northwest of the airport, as previously discussed, are developed with highway oriented commercial development. The General Plan designation reflects a similar type of development for this area.

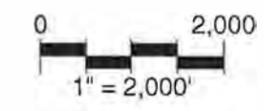
07SP13-2KA4-11/06/08



LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture & Open Space
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Park & Recreation
- Village - Land uses determined by Specific Plan or Master Development Plan.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.

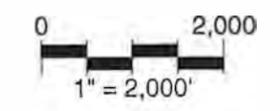




LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Commercial
- Industrial
- Park & Open Space
- Public Facility

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.





Lodi Airport

LODI AIRPORT

Airport Setting

Lodi Airport, originally built in 1929, is located north of Lodi, California, immediately west of Highway 99. This privately owned airport, the second largest in the state, has one of the most active skydiving operations in the State of California. The airport is the base for emergency response helicopters for the region and hosts a designated airworthiness representative to evaluate light-sport aircraft. The airport also offers fuel and other general aviation services including a flight school, maintenance facilities, and a glider center. The airport is also home to the Lodi Airport Café.

Airport Facilities

Lodi Airport is served by two runways: the primary Runway 8-26 is 3,735 feet long, 42 feet wide, and is oriented east and west. The crosswind runway, 12-30, is 2,070 feet long and 26 feet wide, and is oriented northwest and southeast. Both runways have asphalt surfaces. Runway 8-26 is equipped with Low-Intensity Runway Lights (LIRL) to indicate the pavement edge. The airport also has a published VOR/GPS-A approach procedure. Additional information regarding the runways at Lodi Airport can be found on **Exhibit 2LA-1** and **Table 2LA-1**.

TABLE 2LA-1 Airside Facility Data Lodi Airport				
	Runway 08-26		Runway 12-30	
Length (ft.)	3,735		2,070	
Width (ft.)	42		26	
Surface Material	Asphalt		Asphalt	
Load Bearing Strength	30,000 lbs		30,000 lbs	
Single Wheel Loading	N/A		N/A	
Double Wheel Loading	N/A		N/A	
Dual Tandem Wheel Loading	N/A		N/A	
Instrument Approach Procedures	VOR/GPS-A		VOR/GPS-A	
Approach Aids	Rwy 08	Rwy 26	Rwy 12	Rwy 30
	None	None	None	None
	VOR or GPS-A			
Pavement Edge Lighting	LIRL		None	
Displaced Threshold (ft.)	Rwy 08	Rwy 26	Rwy 12	Rwy 30
	None	860	None	100
Fixed Wing Aircraft Traffic Pattern	Left	Right	Left	Left
Weather Reporting	None			
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008				
LIRL – Low-Intensity Runway Lights				
VOR – Very High Frequency Omni-Directional Range				
GPS – Global Positioning System				

Future Airport Plans

Based on discussions with the airport owner, there are plans to extend Runway 12 1,000 feet to the southeast. Additional plans for improvements at the airport include constructing several condo-hangars southwest of the existing airport facilities to serve general aviation tenants. Two corporate hangars totaling 24,000 square feet are under construction at the airport.

Airport Activity Data

The 2008 operations at the airport are estimated to be 54,000, as indicated in **Table 2LA-2**, which includes 28,080 local operations and 25,920 itinerant operations. As previously discussed, Lodi Air-

port has active skydiving operations. The skydiving operators primarily use DC-3 and Twin Otter aircraft for their services. Additionally, local training operations are performed with small, single-engine aircraft. A majority of the itinerant operations are performed by single and multi-engine piston aircraft. There are also periodic turboprop and jet operations at the airport.

Based on an interview with the airport owner, and a review of historic growth trends and airport development plans at the airport, the long range operations forecast for the airport is 150,000 operations in 2028. The growth is anticipated to occur in the local and itinerant piston aircraft with moderate growth in larger turboprop and jet operations.

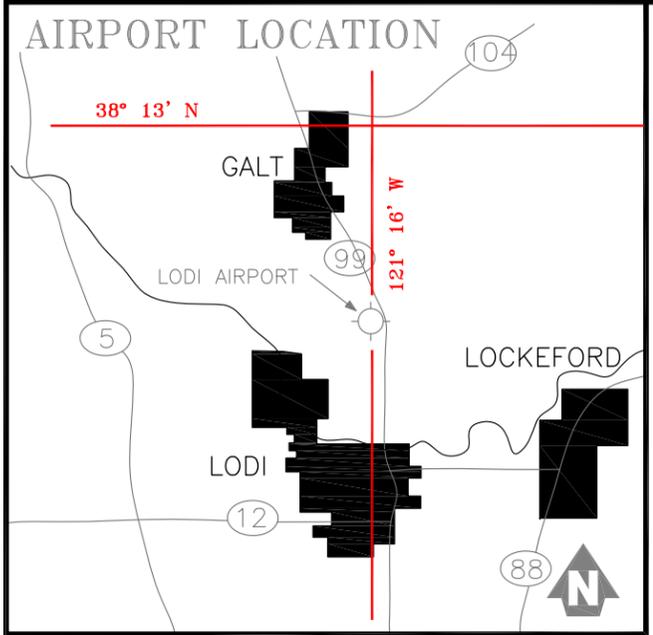
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	11,290	31,650
Single Engine Piston Fixed Pitch	GASEPF	11,290	31,560
Multi-Engine Piston	BEC58P	2,510	7,040
Turboprop	DHC6	500	1,000
Business Jet	CNA55B	30	60
Helicopter	B206L	<u>300</u>	<u>600</u>
Subtotal		25,920	72,000
Local			
Single Engine Piston Variable Pitch	GASEPV	11,000	34,240
Single Engine Piston Fixed Pitch	GASEPF	11,000	34,240
Multi-Engine Piston	BEC58P	1,160	3,600
Turboprop	DC3	720	720
Helicopter	B206L	<u>4,200</u>	<u>5,200</u>
Subtotal		28,080	78,000
TOTAL ANNUAL OPERATIONS		54,000	150,000
Source: Lodi Airport owner estimate and Coffman Associates analysis.			

07SP13-2LA1-05/1508

LODI, CA.

LODI AIRPORT (103)

SITE NO. 01782.A

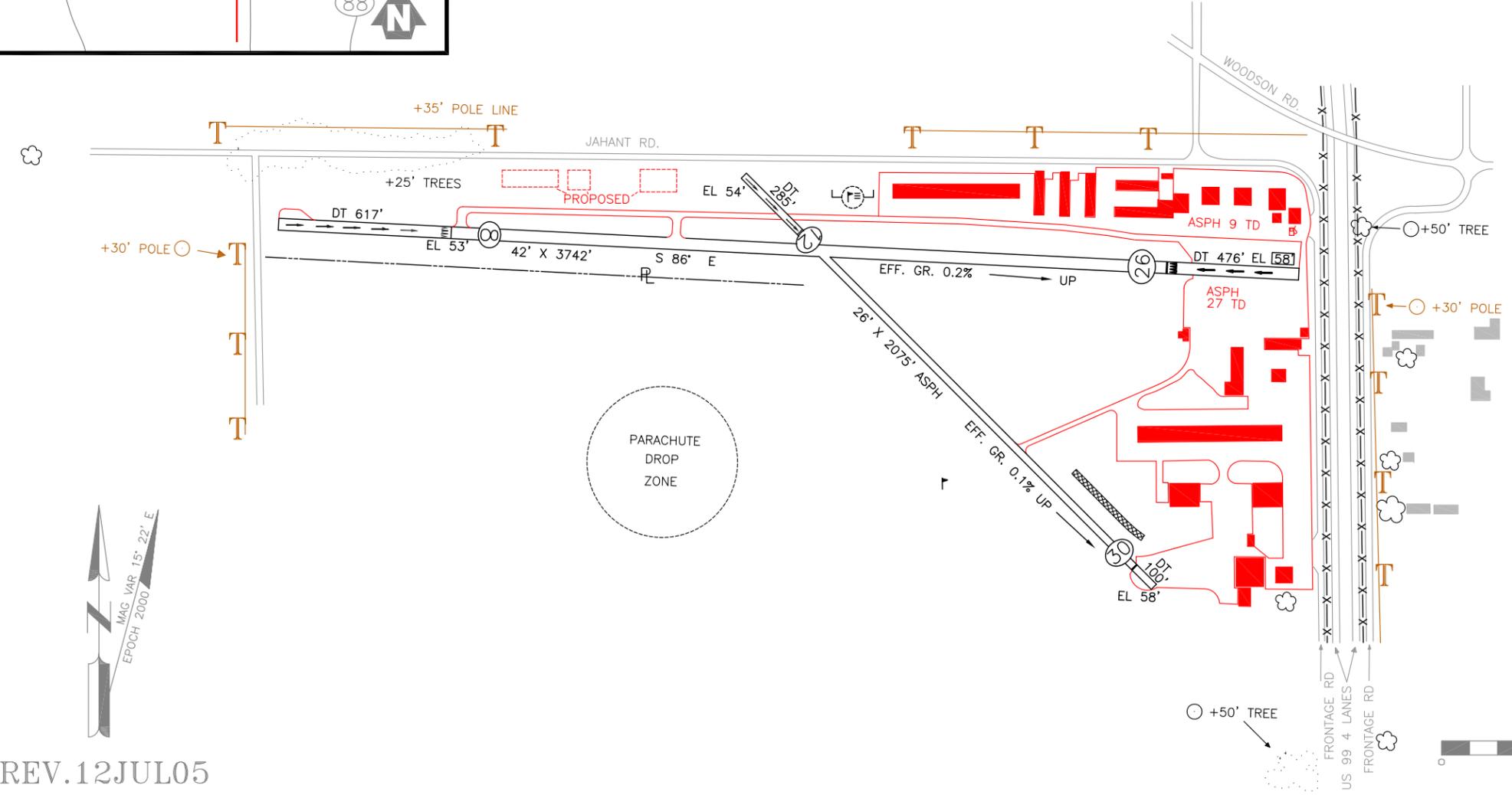


REMARKS:

ACRES- 163
ELEV. 58'

LEGEND

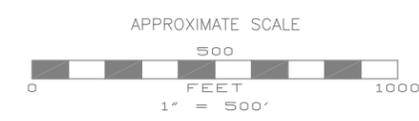
- Airport Property Line
- Fence
- Trees
- On Airport Buildings
- Off Airport Buildings



Source: State of California Department of Transportation Division of Aeronautics, July, 2005.



REV.12JUL05



Airport Noise Exposure and Noise Abatement/Mitigation Programs

The existing and future airport CNEL noise exposure contours for Lodi Airport are shown on **Exhibits 2LA-2** and **2LA-3**. The airport's SEL noise contour is shown on **Exhibit 2LA-4**. Additional information regarding the assumptions and methodology used in developing the noise exposure contours can be found in **Appendix A**.

Lodi Airport does not have any existing noise abatement programs.

Existing Land Use

The existing land development, depicted on **Exhibit 2LA-5**, surrounding Lodi Airport consists of a mix of low-density residential, agricultural, and industrial uses. The lands in the immediate vicinity of the airport are used for raising a variety of crops. There are several residences within the vicinity of the airport, with the greatest concentration located north of Woodson Road. There are also several residences located along Jahant Road, east of the airport. Residences are also located near the approach end of Runway 8 and near the approach end of Runway 26. There are several holding lots for agricultural-related transport trailers near the intersection of Highway 99 and Jahant Road and a natural gas storage facility located southwest of the airport.

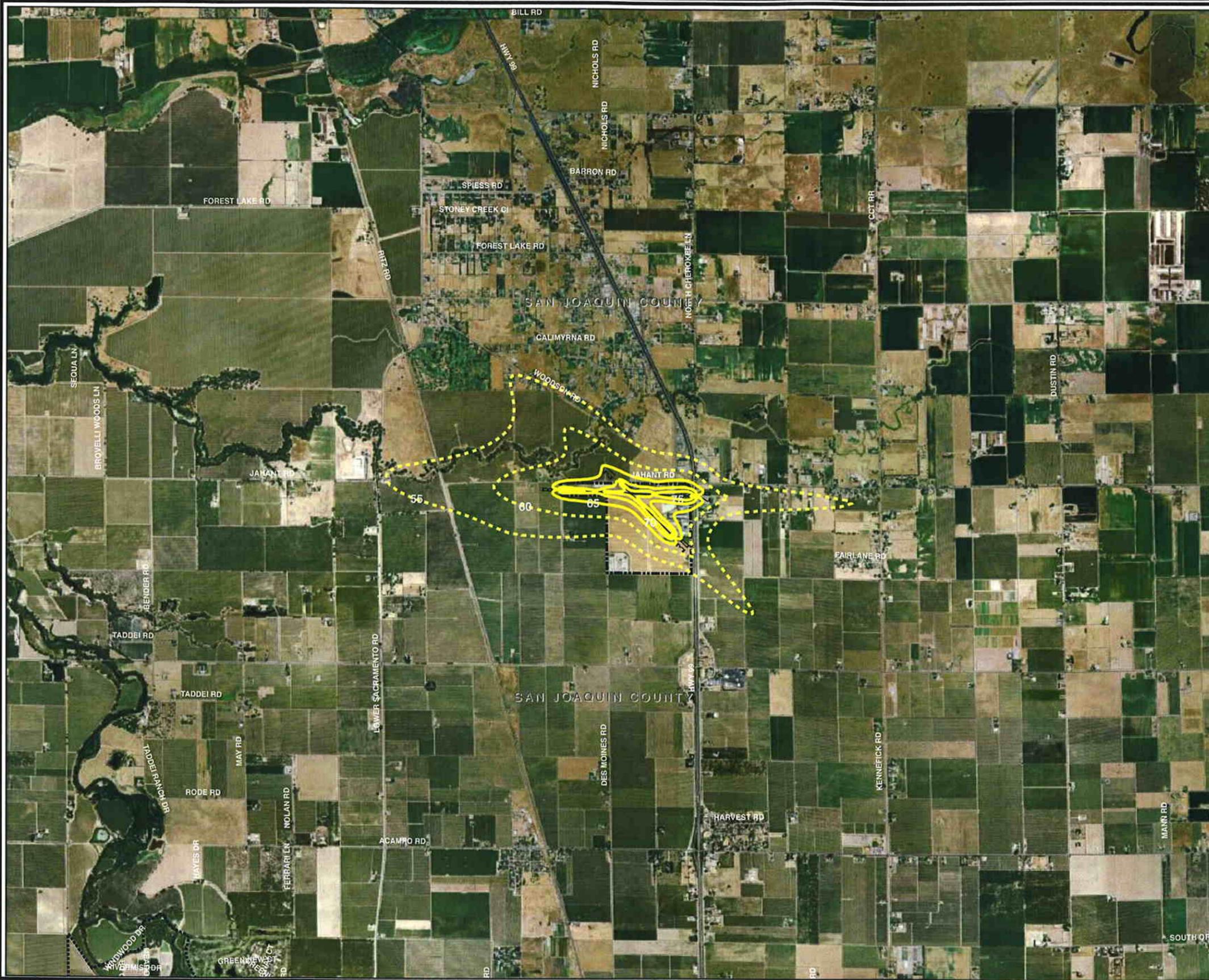
Land Use Planning Policies and Regulations

Lodi Airport is located within an unincorporated portion of San Joaquin County

and is outside the City of Lodi's established spheres of influence and is, therefore, subject to the planning and development regulations adopted for San Joaquin County. **Exhibit 2LA-6** depicts the *San Joaquin County General Plan* designations for the areas within the Lodi Airport vicinity. As shown on the exhibit, much of the AIA is planned for General Agriculture. There are also areas within the AIA designated as Resource Conservation, which the plan states are for lands "with significant resources that generally are to remain in open space." The area directly north of the airport has multiple designations including Limited Industrial, Rural Service Commercial, Rural Residential, and Golf Course. As stated in the general plan, the Limited Industrial designation is for areas "encompassing a wide range of industrial activities whose impacts are typically limited." The Rural Service Commercial area is intended for "retail and service uses which are frequently required by rural residents and the surrounding agricultural community." The Rural Residential area is planned for large lot residential development where full urban services are not available or expected to be available. The lot sizes in these areas are between one and five acres.

As shown on the exhibit, in the outlying areas of the airport vicinity there are also smaller parcels planned for industrial, Rural Service Commercial, and Rural Residential development. Additionally, an elementary school site is identified on the general plan map, where an existing elementary school is located.

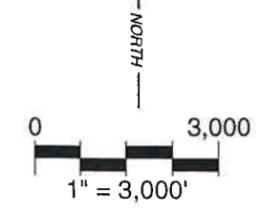
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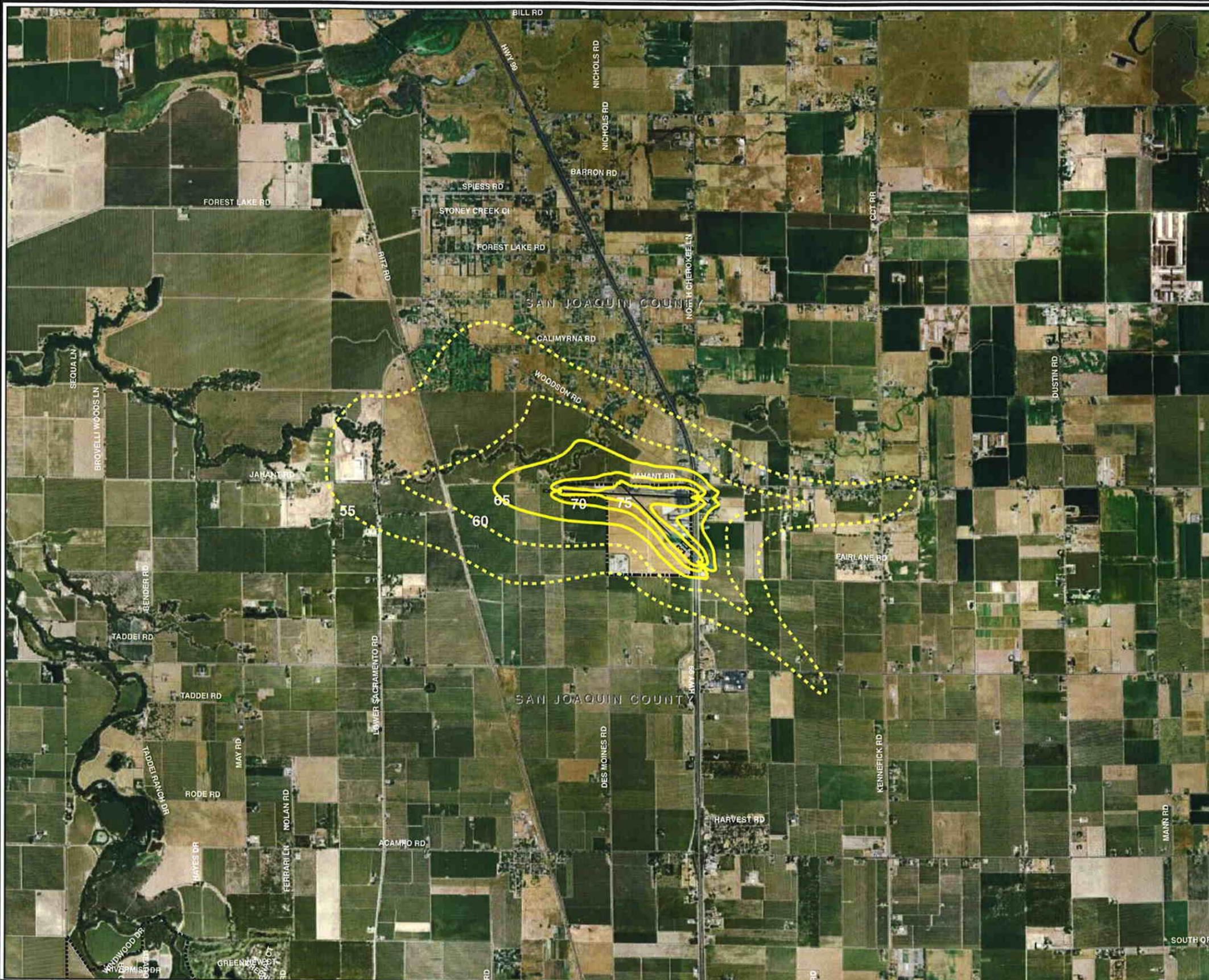


LEGEND

-  Airport Property
-  2008 Noise Exposure Contour-Marginal Effect
-  2008 Noise Exposure Contour-Significant Effect

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.

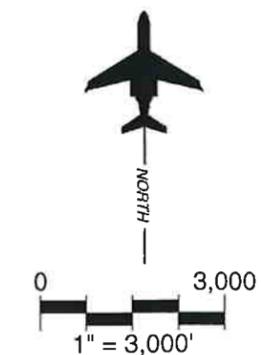




LEGEND

-  Airport Property
-  2028 Noise Exposure Contour-Marginal Effect
-  2028 Noise Exposure Contour-Significant Effect
-  Ultimate Runway Extension

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





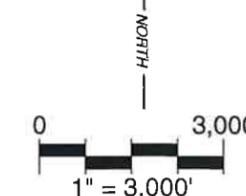
LEGEND

- Airport Property
- Municipal Boundary
- 95 dB Single Event Contour
- - - - Ultimate Runway Extension

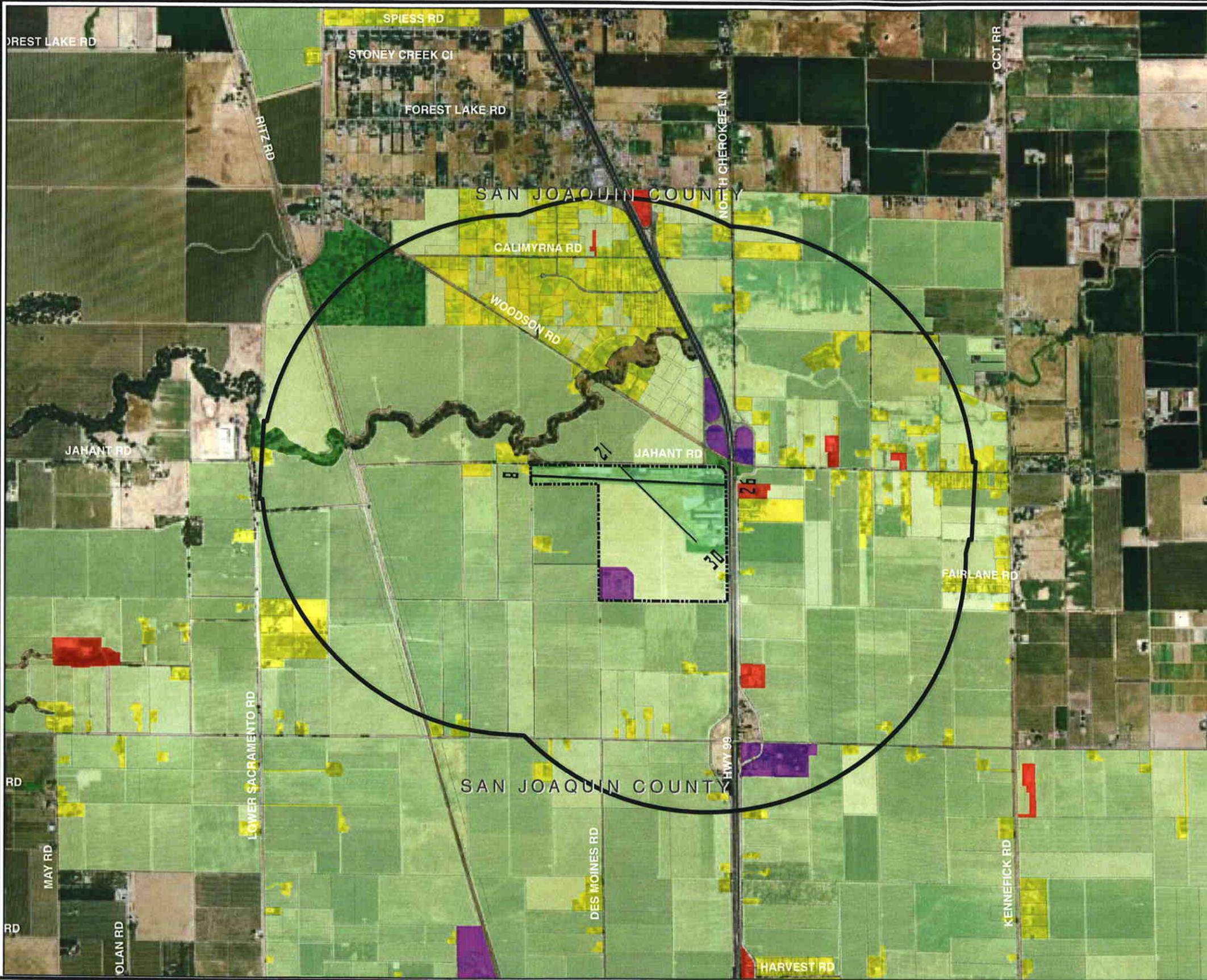
Note: A 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB) was used to determine sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore the 95 dB SEL will be used as a gauge for sleep disturbance.

SEL Contour based on one (1) DC3 aircraft Departure operation per runway.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



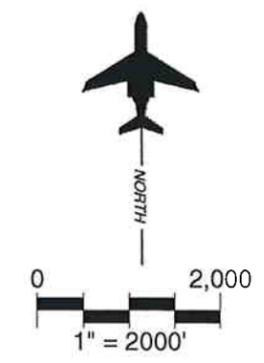
07SP13-2LA5-05/15/08

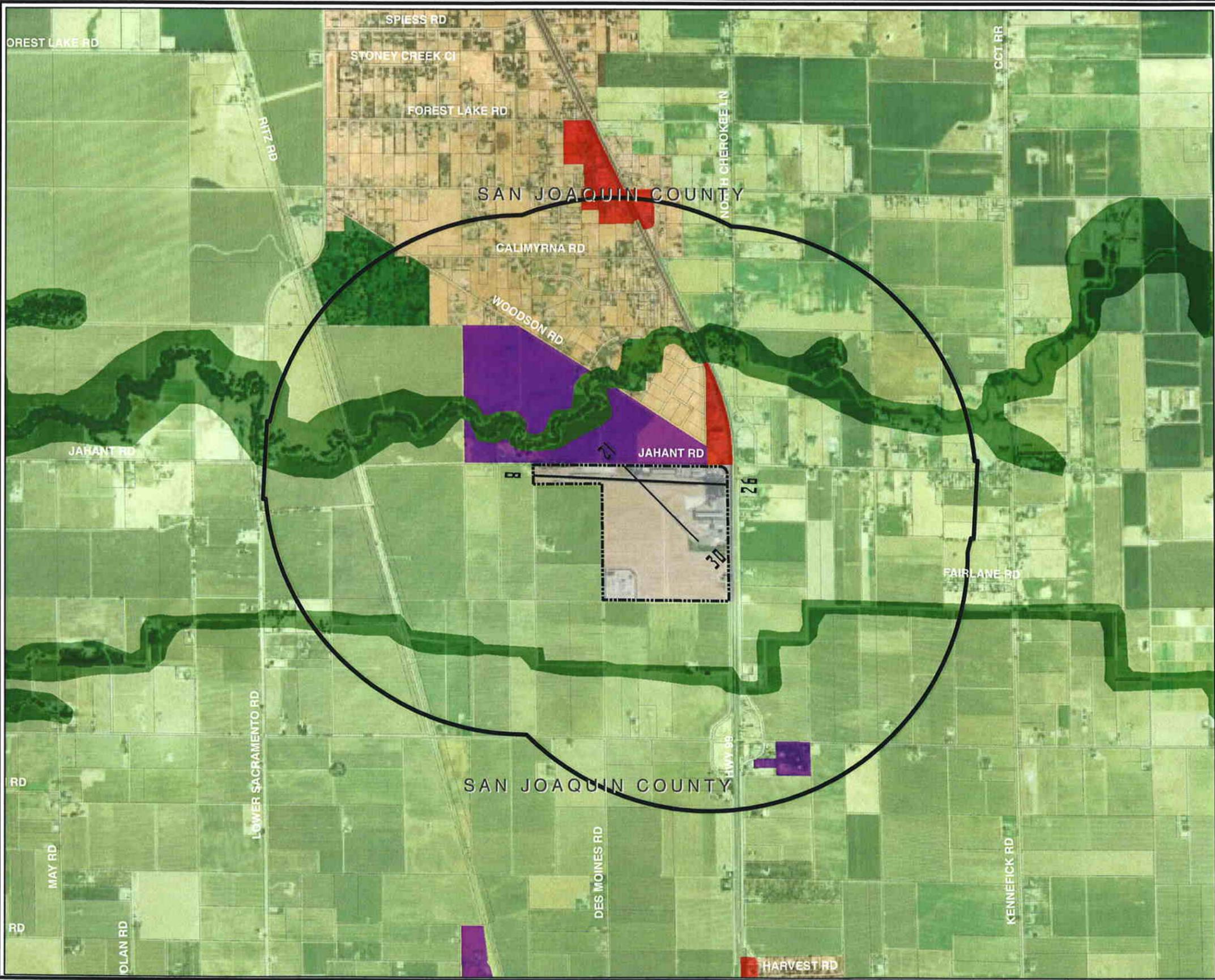


LEGEND

- Airport Property
- Part 77 Horizontal Surface
- Agriculture
- Single-Family Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility
- Noise Sensitive
- Schools

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.

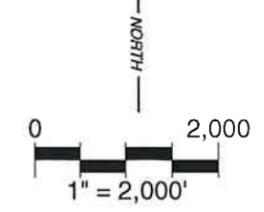




LEGEND

- Airport Property
- Part 77 Horizontal Surface
- Agriculture
- Rural Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Lodi (Precissi) Airpark

LODI (Precissi) AIRPARK

Airport Setting

Lodi Airpark, located directly south of the City of Lodi, was constructed in 1945 as a public use airport. Its primary function is a base for a commercial aerial chemical application service for both agriculture and insect abatement purposes. Lodi Airpark is also used for pilot training activity.

Airport Facilities

Lodi Airpark is served by one runway, which is oriented to the east and west.

Runway 7-25 is 1,875 feet long and 22 feet wide, and is constructed of asphalt. The airport does not have any approach aids or runway edge lighting. A summary of the airport's facilities is provided on **Exhibit 2LP-1** and **Table 2LP-1**.

Future Airport Plans

There are no additional airport facilities planned for Lodi (Precissi) Airport at this time.

TABLE 2LP-1 Airsides Facility Data Lodi (Precissi) Airpark		
	Runway 07-25	
Length (ft.)	1,875	
Width (ft.)	22	
Surface Material	Asphalt	
Load Bearing Strength		
Single Wheel Loading	N/A	
Double Wheel Loading	N/A	
Dual Tandem Wheel Loading	N/A	
Instrument Approach Procedures	None	
Approach Aids	Rwy 07 None	Rwy 25 None
Pavement Edge Lighting	None	None
Displaced Threshold (ft.)	Rwy 07 None	Rwy 25 None
Fixed Wing Aircraft Traffic Pattern	Left	Left
Weather Reporting	None	
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008		

Airport Activity Data

As previously discussed, Lodi Airpark primarily serves as a base for aerial chemical application services; as a result, a majority of the operations at the airport

are performed by aerial application aircraft or "cropdusters." Periodically, pilots fly to Lodi Airpark to perform training operations. As indicated in **Table 2LP-2**, the current operations total for the airport is 6,000.

TABLE 2LP-2 Lodi Airpark Operations			
	INM Designator	2008	Long Range
LOCAL			
Single-engine Piston, Variable	GASEPV	450	900
Single-engine Piston, Fixed	GASEPF	450	900
Multi-engine Piston	BEC58P	100	200
Local Subtotal		1,000	2,000
ITINERANT			
Single-engine piston, variable	GASEPV	180	360
Single-engine piston, fixed	GASEPF	180	360
Multi-engine piston	BEC58P	40	80
Air Tractor 501	SD330 -3 dB	1820	3640
Air Tractor 502	SD330 -3 dB	1820	3640
Eagle	CNA206	960	1920
Itinerant Subtotal		5,000	10,000
Total		6,000	12,000
Source: Interview with Airport Operator			

Based on an interview with the airport operator, operations are anticipated to double during the planning horizon. The resulting total is expected to be 12,000 operations in the year 2028.

Airport Noise Exposure and Noise Abatement/Mitigation Programs

The existing and future airport CNEL noise exposure contours for Lodi Airpark are shown on **Exhibit 2LP-2** based on the operations information presented in **Table 2LP-2**. The SEL noise contour for Lodi Airport is also depicted on **Exhibit 2LP-2**. Additional information regarding the assumptions and methodology used in developing the noise exposure contours can be found in **Appendix A**.

The aerial application pilots based at Lodi Airpark maintain a list of areas that are considered noise-sensitive due to the nature of the development in the area or complaints received from these areas. Flight plans made for aerial application are designed, whenever possible, to avoid

these noise-sensitive areas. The airport does not have any formal noise abatement procedures posted for pilots.

Existing Land Use

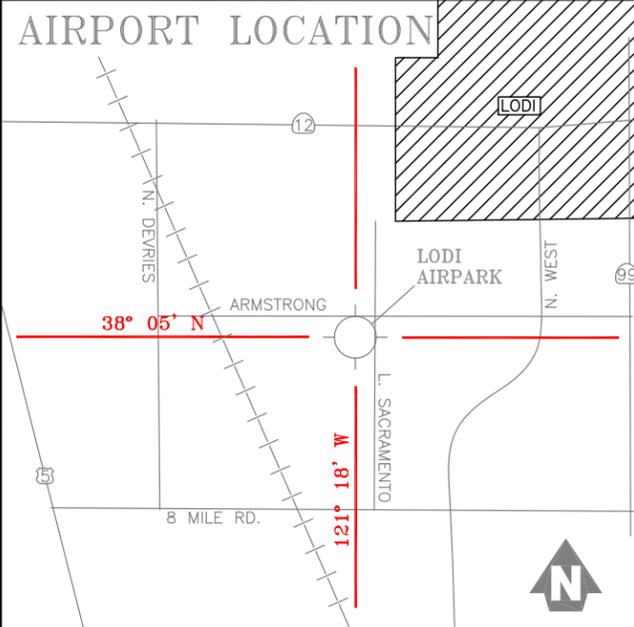
Existing land uses for the area surrounding Lodi Airpark are depicted on **Exhibit 2LP-3**. The existing land uses surrounding Lodi Airpark consist primarily of agricultural operations and their supporting facilities. The parcels immediately surrounding the airport are used for growing a variety of crops. Northwest and northeast of the airport, on the north side of Armstrong Road, there are also two farms used for raising livestock. A storage lot for a landscaping company is north of the airport at the intersection of Armstrong Road and Lower Sacramento Road. In addition to these land uses, there are also several residences scattered throughout the airport vicinity. Many of these residences are located close to the major roads, Lower Sacramento Road and Armstrong Road.

07SP13-2LP1-05/15/08

LODI, CA.

LODI AIRPARK (L53)

SITE NO. 01784.A



REMARKS:

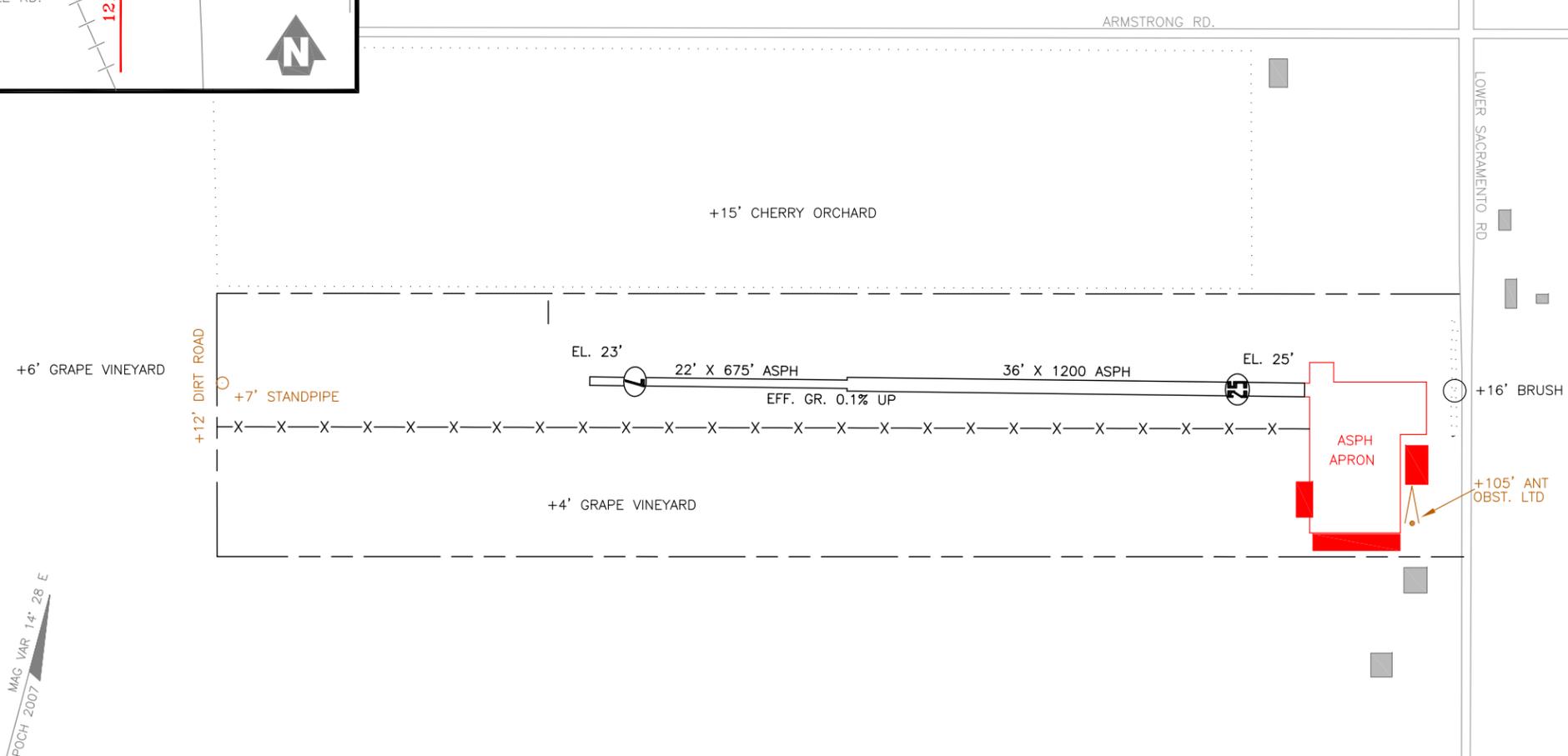
RWY 7L-25R CLOSED TO GEN. PUBLIC
OPEN TO CROP DUSTERS ONLY

ACRES-51

ELEV. 25'

LEGEND

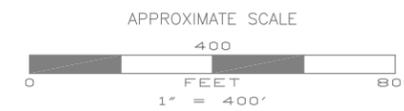
- Airport Property Line
- x-x- Fence
- On Airport Buildings
- Off Airport Buildings



Source: State of California Department of Transportation Division of Aeronautics, October, 2007.



REV. 04OCT07





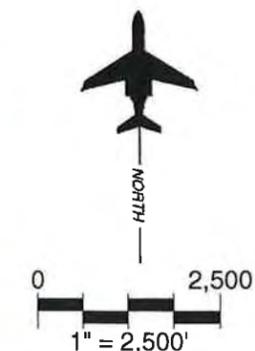
LEGEND

- Airport Property
- CNEL Noise Exposure Contour- Marginal Effect
- CNEL Noise Exposure Contour- Significant Effect
- 95 dB Single Event Contour

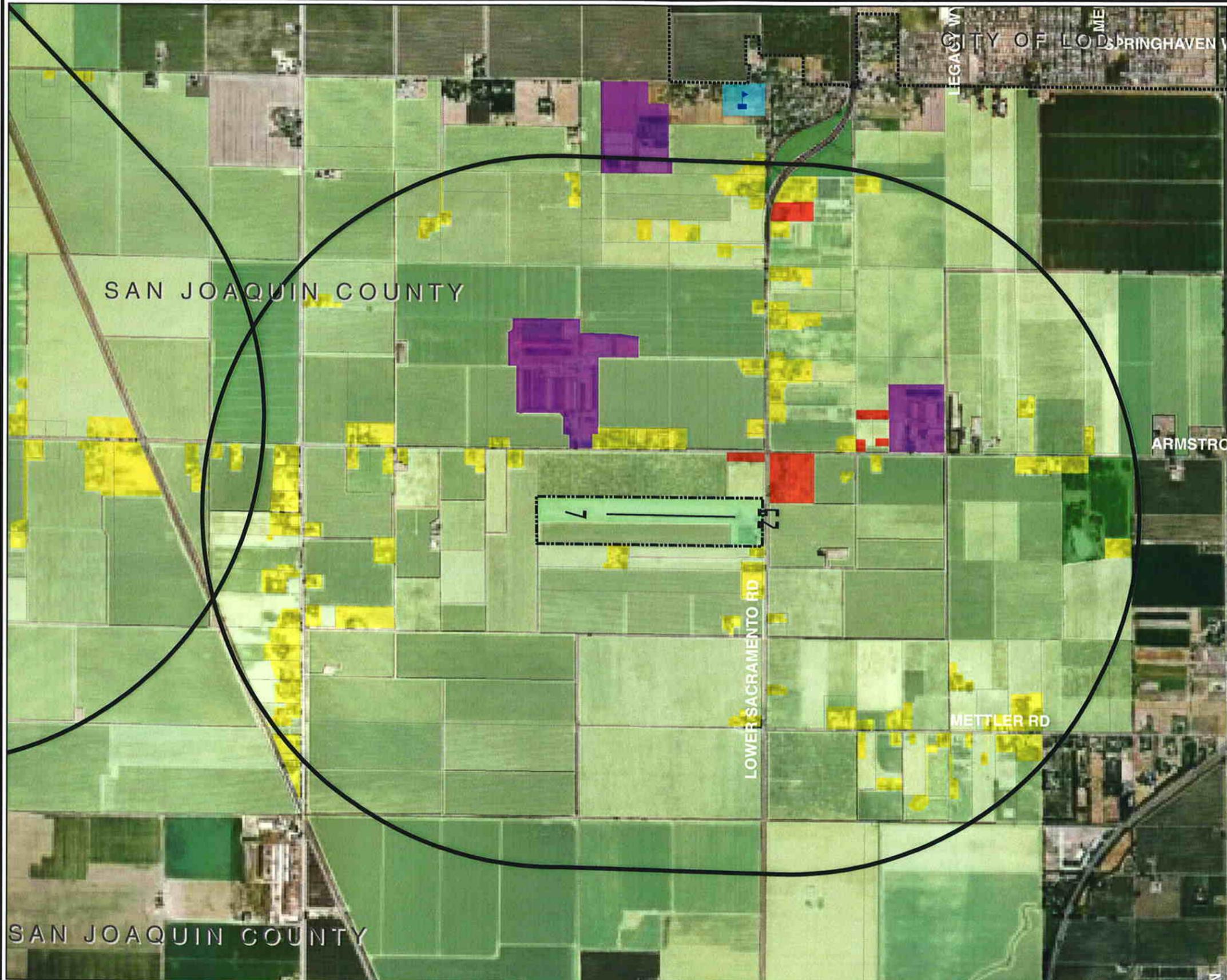
Note: A 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB) was used to determine sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore the 95 dB SEL will be used as a gauge for sleep disturbance.

SEL Contour based on one (1) Baron 58P aircraft Departure operation per runway.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.



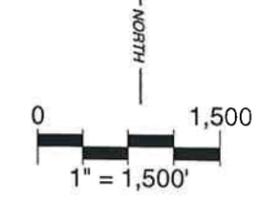
07SP13-2LP3-05/15/08



LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Single-Family Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility
- Noise Sensitive
- Schools

Source: Aerial Photography dated 2006.
 Windsheild Survey, Feb. 3-7, 2008.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.

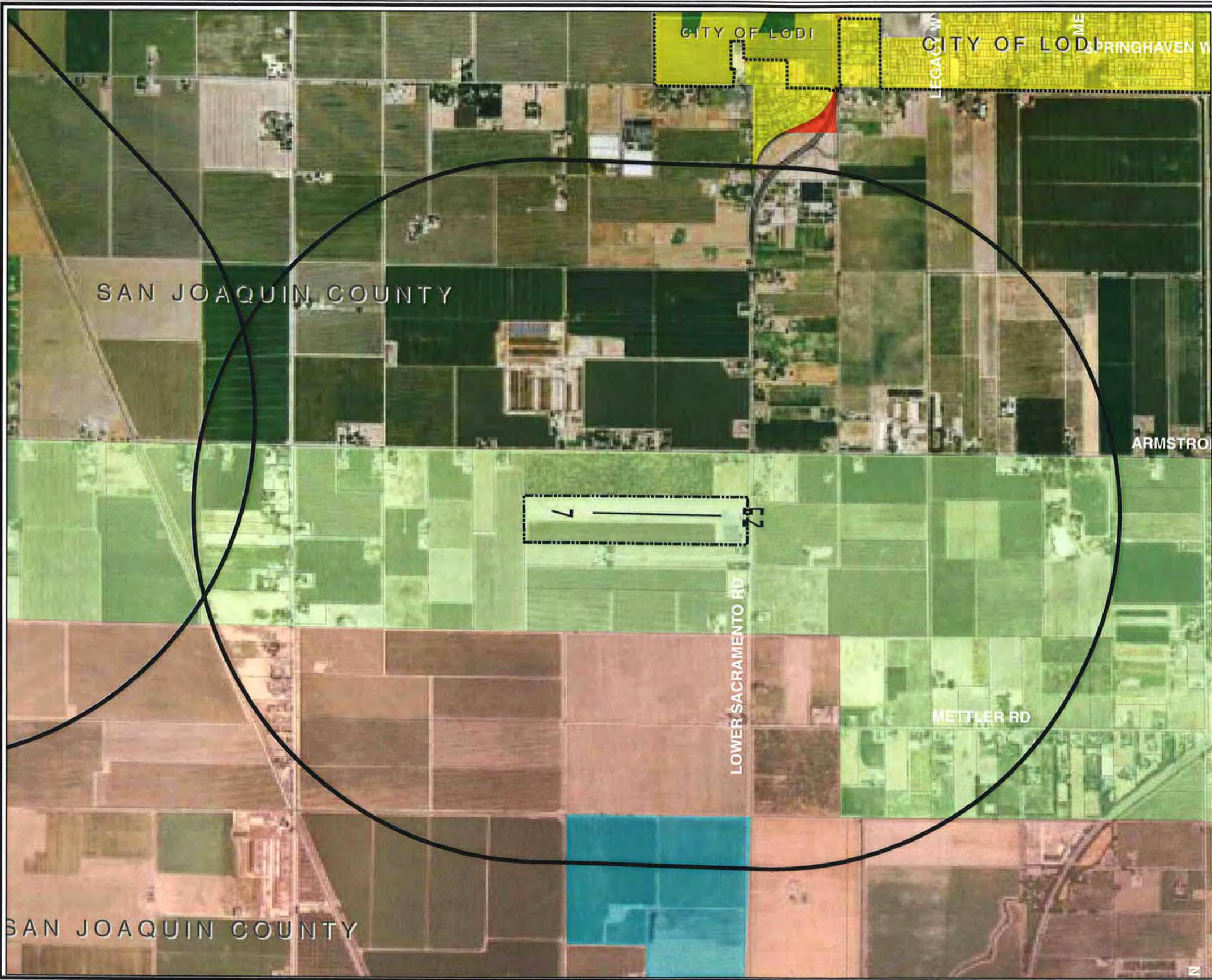


Land Use Planning Policies and Regulations

As previously discussed, the Lodi Airpark AIA is contiguous with the Kingdon Airpark AIA due to their proximity. The areas south of the airport are shown on the *City of Stockton General Plan*. As shown on **Exhibit 2LP-4**, the areas south of the airport are planned as agriculture and open space. Farther to the south, parcels have the plan's village designation. Under this category, the land uses will be determined by a specific plan or master development plan with guidance from the *City of Stockton General Plan*. Additionally, there is a school site located directly south of the airport along Lower Sacramento Road.

The *San Joaquin County General Plan* also provides land use guidance for the areas near Lodi Airpark. A majority of this area is planned for General Agriculture, as shown on **Exhibit 2LP-5**, with a smaller portion dedicated to Resource Conservation. North of the airport, within the City of Lodi SOI, and a portion south of the SOI, is designated as Planned Residential Preserve (PRR) under the *City of Lodi General Plan*. The PRR designation is used for areas well suited for residential development within the timeframe of the general plan; however, until these parcels are redesignated with a non-reserve designation, they will have the same development standards as the Agricultural designation.

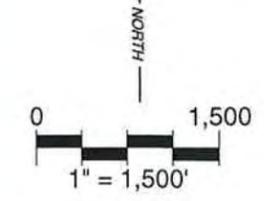
07SP13-2LP4-11/06/08



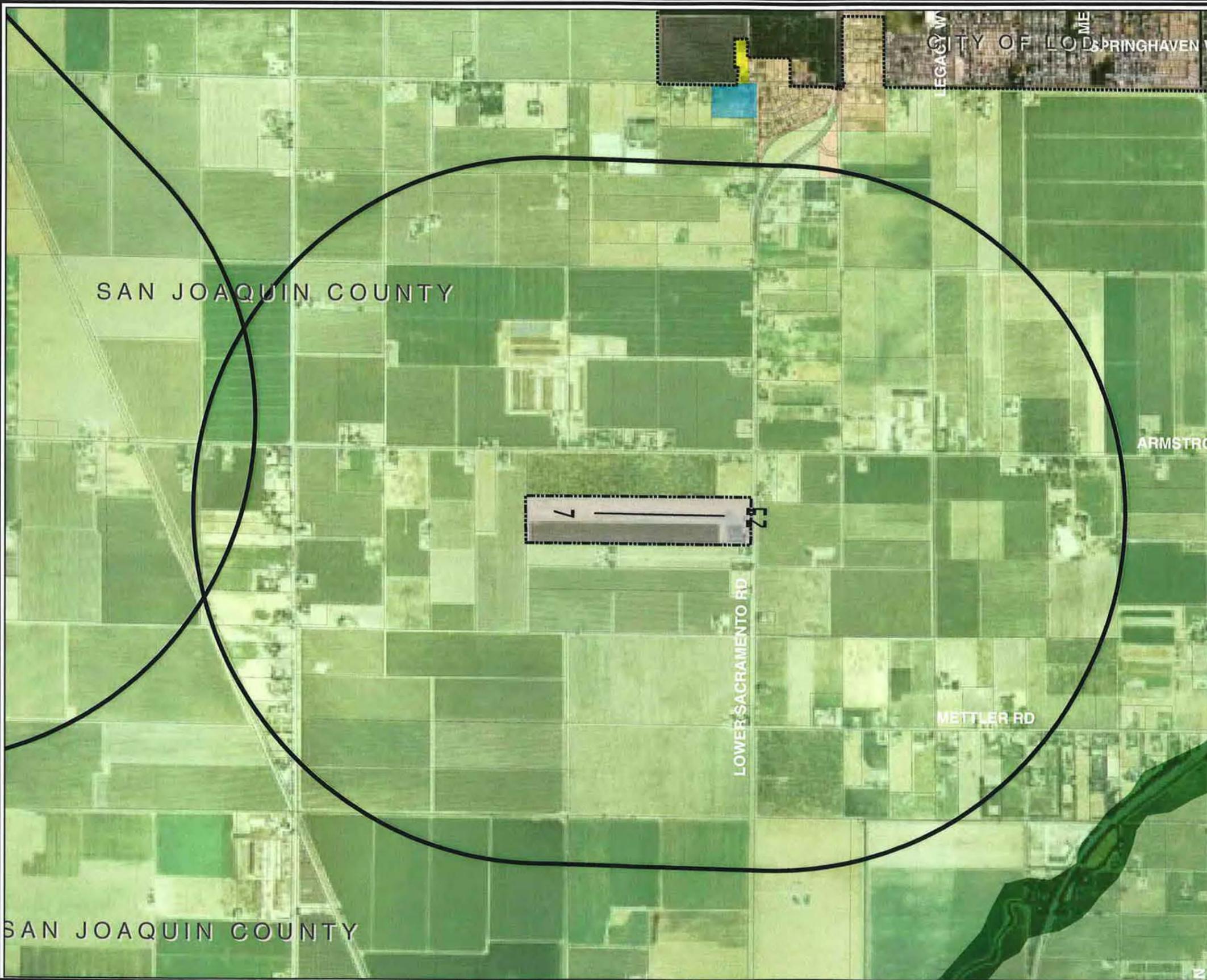
LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture & Open Space
- Single-Family Residential
- Multi-Family Residential
- Commercial
- Planned Residential
- Park & Open Space
- Institutional
- Public Facility
- Village - Land uses determined by Specific Plan or Master Development Plan.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



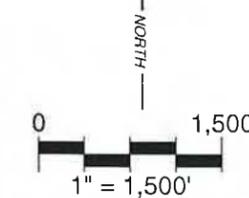
07SP13-2LP5-11/06/08



LEGEND

-  Airport Property
-  Municipal Boundary
-  Part 77 Horizontal Surface
-  Agriculture
-  Rural Residential
-  Single-Family Residential
-  Park & Open Space
-  Public Facility
-  Noise Sensitive

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information
 System, February 2008.
 Coffman Associates Analysis.





New Jerusalem Airport

NEW JERUSALEM AIRPORT

Airport Setting

New Jerusalem Airport, owned and operated by the City of Tracy, is located approximately seven miles southeast of Tracy.

The airport is unattended and serves as a staging area for aerial chemical application, pilot training activities, as well as powered parachute and ultralight activities. A designated Aerobatics Box sponsored by International Aerobatics Club

Chapter 38 is located directly southeast of Runway 12-30.

Airport Facilities

New Jerusalem Airport is served by one runway, Runway 12-30, which is 3,530 feet long and 60 feet wide, constructed of asphalt. The runway has a full-length parallel taxiway. There are no airfield support facilities located at the airport. Details about the airport facilities can be found in **Table 2NJ-1** and shown on **Exhibit 2NJ-1**.

TABLE 2NJ-1 Airside Facility Data New Jerusalem Airport		
	Runway 12-30	
Length (ft.)	3,530	
Width (ft.)	60	
Surface Material	Asphalt	
Load Bearing Strength	12,500 lbs.	
Single Wheel Loading	N/A	
Double Wheel Loading	N/A	
Dual Tandem Wheel Loading	N/A	
Instrument Approach Procedures	None	
Approach Aids	Rwy 12 None	Rwy 30 None
Pavement Edge Lighting	None	None
Displaced Threshold (ft.)	Rwy 12 None	Rwy 30 None
Fixed Wing Aircraft Traffic Pattern	Left	Left
Weather Reporting	None	
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008		

Future Airport Plans

There are no additional airport facilities planned for New Jerusalem Airport at this time.

Airport Activity Data

New Jerusalem Airport is unattended and, therefore, no records are kept regarding its operations. The number of operations

at the airport is estimated to be 4,000 annually. Additional improvements are not anticipated within the planning horizon and the long range forecast of operations for the airport is anticipated to remain at 4,000. Operations for New Jerusalem Airport are presented in **Table 2NJ-2**.

TABLE 2KNJ-2 New Jerusalem Airport Operations			
	INM Designator	2008	Long Range
LOCAL			
N/A	N/A	0	0
Local Subtotal		0	0
ITINERANT			
Single-engine piston, variable	GASEPV	2000	2000
Single-engine piston, fixed	GASEPF	2000	2000
Itinerant Subtotal		4000	4000
Total		4000	4000
Source: 5010 Form			

Airport Noise Exposure and Noise Abatement/Mitigation Programs

The existing and future airport CNEL noise exposure contours for New Jerusalem Airport are shown on **Exhibit 2NJ-2**. Due to the lack of growth anticipated at the airport, the existing and long range CNEL noise contours are the same size. The SEL noise contour for the airport is also depicted on **Exhibit 2NJ-2**. Additional information regarding the assumptions and methodology used in developing the noise exposure contours can be found in **Appendix A**.

New Jerusalem Airport does not have any formal noise abatement procedures. A sign has been posted at the southern end of the runway encouraging pilots to be considerate of nearby noise-sensitive uses. The sign states “Pilots – Fly Polite. Please make your crosswind turn well before homes.” An image of the sign can be found on **Exhibit 2C**.

Existing Land Use

New Jerusalem Airport is located in a rural setting in an area surrounded by lands devoted to agricultural uses. Within the immediate vicinity of the airport, the

lands are used for raising various crops as indicated on **Exhibit 2NJ-3**. Directly to the south of the airport is Durham Ferry Road, which has several residences lining the north and south sides of the roadway. To the east of the airport, there is one residence. To the west of the airport, at the intersection of Durham Ferry Road and Koster Road, there is a development of several residences and the New Jerusalem School and Fire Station 93 for the Tracy Fire Department.

Land Use Planning Policies and Regulations

New Jerusalem Airport is located outside the City of Tracy SOI and all the land within its AIA is under the planning jurisdiction of San Joaquin County. As shown on **Exhibit 2NJ-4**, the area surrounding New Jerusalem Air-port is primarily planned for General Agricultural land uses as stated in the *San Joaquin County General Plan*. The areas east of the airport along the San Joaquin River have been designated as Resource Conservation areas. The remaining designations are consistent with the existing development described in the previous section.

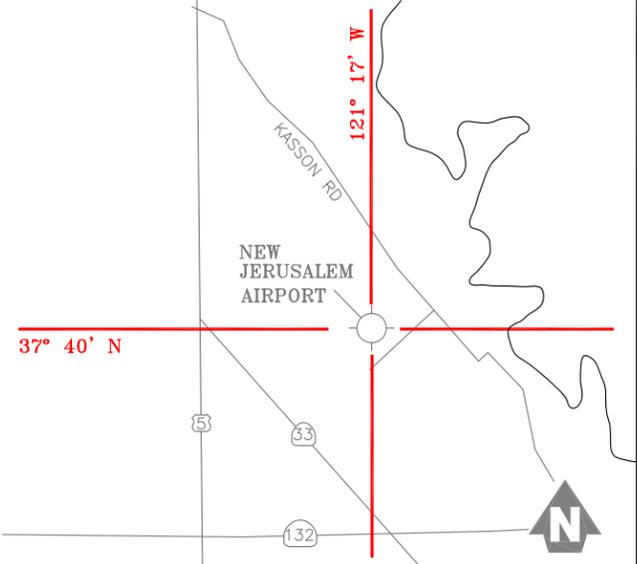
07SP13-2NJ1-05/15/08

TRACY, CA.

NEW JERUSALEM AIRPORT (1Q4)

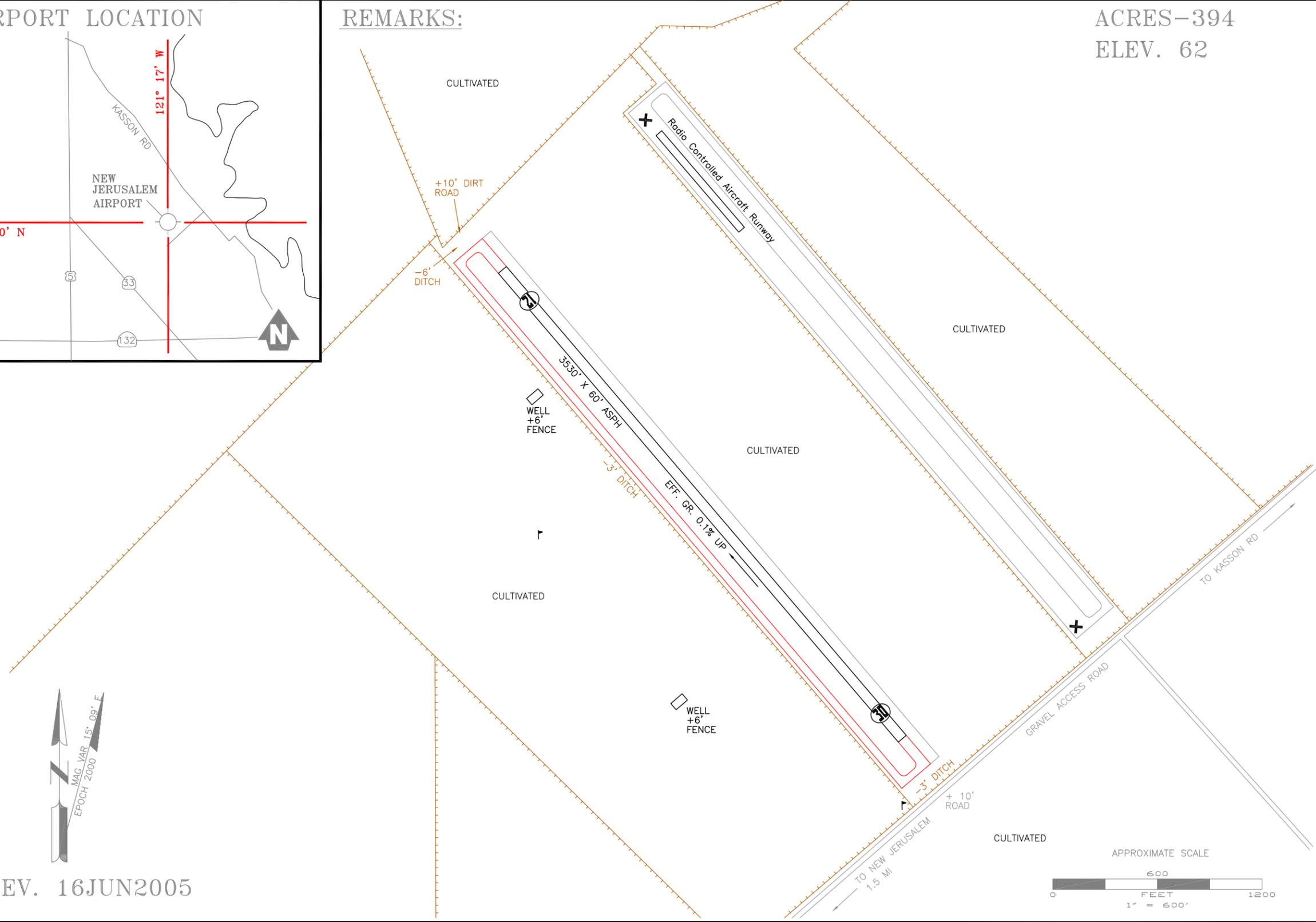
SITE NO. 02358.A

AIRPORT LOCATION



REMARKS:

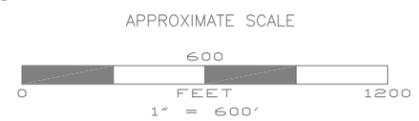
ACRES-394
ELEV. 62



Source: State of California Department of Transportation Division of Aeronautics, June, 2005.



REV. 16JUN2005



07SP13-2NJ12-0515/08

2008/2028 CNEL NOISE CONTOURS



SINGLE EVENT CONTOUR



LEGEND

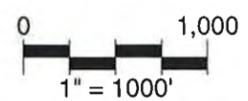
- Airport Property
- CNEL Noise Exposure Contour- Marginal Effect
- CNEL Noise Exposure Contour- Significant Effect
- 95 dB Single Event Contour

Note: A 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB) was used to determine sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore the 95 dB SEL will be used as a gauge for sleep disturbance.

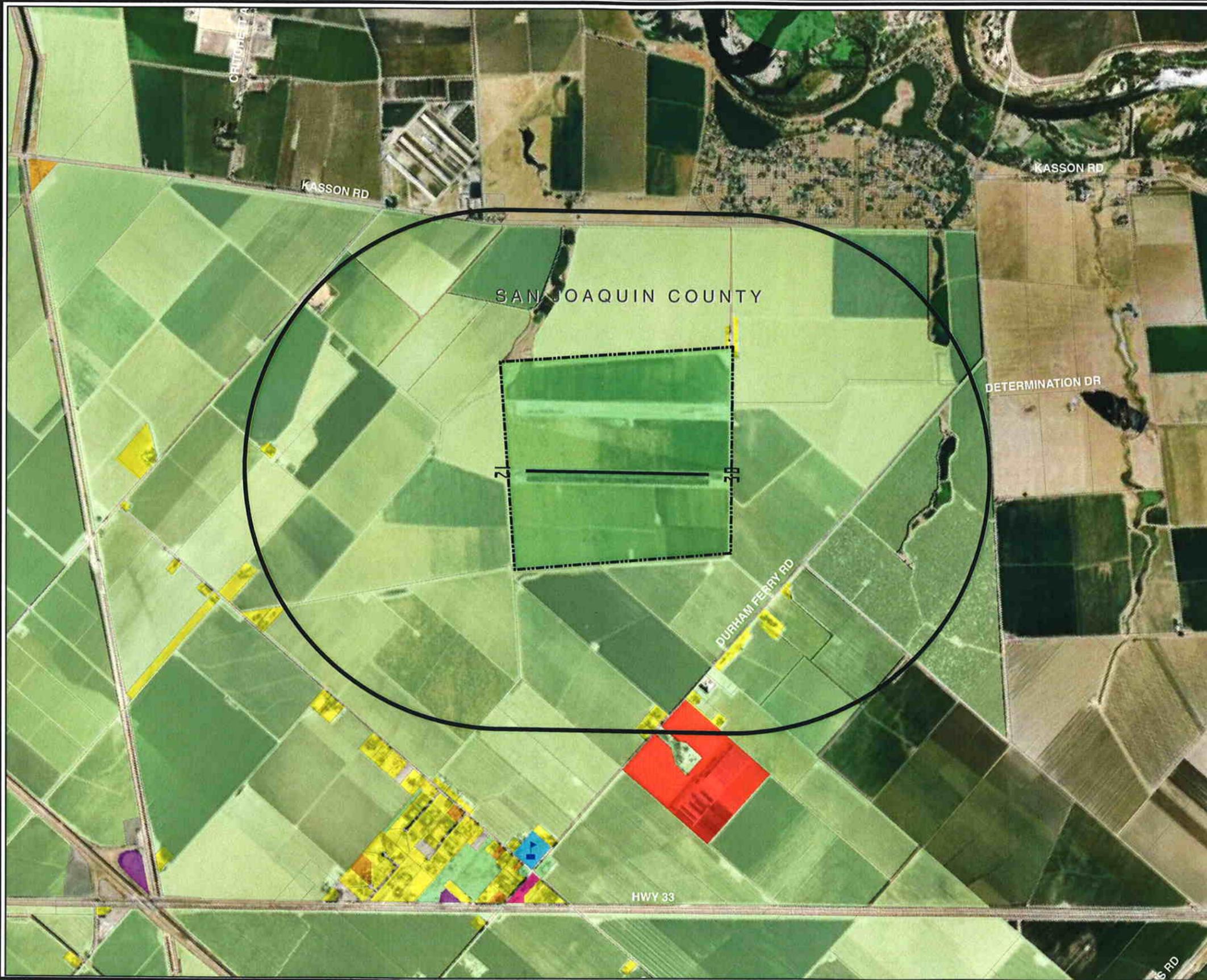
SEL Contour based on one (1) General Aviation Single Engine Variable Pitch aircraft Departure operation per runway.

The airport assumed no growth within the next twenty year. Therefore the 2008 and the 2028 Noise Exposure Contours and on and the same.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.



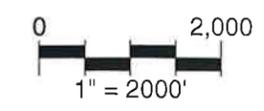
07SP13-2NJ13-05/15/08



LEGEND

- Airport Property
- PArt 77 Horizontal Surface
- Agriculture
- Single-Family Residential
- Multi-Family Residential
- Commercial
- Industrial
- Mixed Use
- Park & Open Space
- Public Facility
- Noise Sensitive
- Schools

Source: Aerial Photography dated 2006.
 Windsheild Survey Feb. 3-7, 2008.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



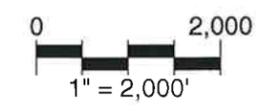
07SP13-2NJ-14-11/06/08



LEGEND

-  Airport Property
-  Part 77 Horizontal Surface
-  Agriculture
-  Rural Residential
-  Commercial
-  Park & Open Space
-  Public Facility

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Tracy Municipal Airport

TRACY MUNICIPAL AIRPORT

Airport Setting

Tracy Municipal Airport is owned and operated by the City of Tracy, California. Located within the city limits, this general aviation airport provides a range of aviation services including general aviation and jet fuel sales, and hangar and tie down rentals. The fixed base operator (FBO) at the airport provides aircraft maintenance services, flight training, and aircraft rental services for both standard aircraft and Light Sport Aircraft. Directly southeast of the airport, International Aerobatic Club Chapter 38 sponsors a designated aerobatic box in which aerobatic maneuvers are performed.

Airport Facilities

Tracy Municipal Airport is served by two runways: 8-26 and 12-30. Runway 8-26 is 3,438 feet long and 100 feet wide, and oriented east-west. Runway 12-30 is 4,002 feet long and 100 feet wide, and aligned to the northwest-southeast. Both runways are constructed of asphalt. The airport has several published instrument approach procedures, as shown in **Table 2TM-1**, to aid pilots in navigation. Both runways are equipped with medium-intensity runway lights to indicate the pavement edge. The following table summarizes the airport facilities. Airport facilities are shown on **Exhibit 2TM-1**.

TABLE 2TM-1 Airside Facility Data Tracy Municipal Airport				
	Runway 08-26		Runway 12-30	
Length (ft.)	3,438		4,002	
Width (ft.)	100		100	
Surface Material	Asphalt		Asphalt	
Load Bearing Strength				
Single Wheel Loading	50,000 lbs.		50,000 lbs.	
Double Wheel Loading	70,000 lbs.		70,000 lbs.	
Dual Tandem Wheel Loading	120,000 lbs.		120,000 lbs.	
Instrument Approach Procedures	Rwy 08	Rwy 26 GPS	Rwy 12 NDB, RNAV (GPS),	Rwy 30 RNAV (GPS),
	VOR or GPS A			
Approach Aids	Rwy 08 VASI	Rwy 26 VASI	Rwy 12 None	Rwy 30 VASI
Pavement Edge Lighting	MIRL		MIRL	
Displaced Threshold (ft.)	Rwy 08 None	Rwy 26 860	Rwy 12 None	Rwy 30 100
Fixed Wing Aircraft Traffic Pattern	Left	Left	Left	Left
Weather Reporting	AWOS - III			
Source: Airport/Facility Directory Southwest U.S. Edition; February 14, 2008				
VOR - VHF Omnidirectional Range				
GPS - Global Positioning System				
NDB - Non-directional Beacon				
RNAV (GPS) - Area Navigation GPS				
VASI - Visual Approach Slope Indicator				
MIRL - Medium Intensity Runway Lights				
AWOS - Automated Weather Observing System				

Future Airport Plans

There are no runway alterations planned for Tracy Municipal Airport according to the Airport Master Plan. Plans are underway to construct 40 – 50 additional hangars on the east side of the airport. Construction is anticipated to be completed in 2009.

Airport Activity Data

The existing and forecast operations for Tracy Municipal Airport are presented in **Table 2TM-2**. As shown in the table, the existing operations for the airport total 59,701, including 20,475 local operations and 39,226 itinerant operations. A majority of the local operations are performed by single engine piston aircraft involved

in flight training at the airport. In addition, aerobatic activities occur frequently within the confines of the designated aerobatic box located directly east of the airport. Itinerant operations are also dominated by single engine piston aircraft, with a small percentage of operations performed by turboprop and business jet aircraft, aerial applicators, powered parachutes, ultralight aircraft, and helicopters.

The long range forecast for Tracy Municipal Airport indicates a total of 107,200 annual operations. The Master Plan (1998) also indicated the fleet mix distribution for operations at the airport would be 66 percent single engine piston, 29.4 percent multi-engine piston, 3 percent turboprop, and 1.4 percent business jet. These percentages were applied to the itinerant operations.

TABLE 2TM-2 Tracy Municipal Airport Operations			
	INM Designator	2008	Long Range
LOCAL			
Single-engine Piston, Variable	GASEPV	9,930	20,355
Single-engine Piston, Fixed	GASEPF	9,930	20,355
Multi-engine Piston	BEC58P	615	18,290
Local Subtotal		20,475	59,000
ITINERANT			
Single-engine piston, variable	GASEPV	18,606	15,900
Single-engine piston, fixed	GASEPF	18,606	15,900
Multi-engine piston	BEC58P	1,958	14,275
Turboprop	DHC6	36	1,450
Business Jet	CNA55B	20	675
Itinerant Subtotal		39,226	48,200
Total		59,701	107,200
Source: Interview with Airport Operator, Airport Master Plan (1998), 5010 Form, FAA Terminal Area Forecast, AirportIQ			

Airport Noise Exposure and Noise Abatement/Mitigation Programs

The existing and future airport noise exposure contours for Tracy Municipal Airport are shown on **Exhibits 2TM-2** and **2TM-3**. The airport's SEL noise contour is shown on **Exhibit 2TM-4**. Additional

information regarding the assumptions and methodology used in developing the noise exposure contours can be found in **Appendix A**.

Tracy Municipal Airport does not have any formal noise abatement programs.

07SP13-2TM1-05/15/08

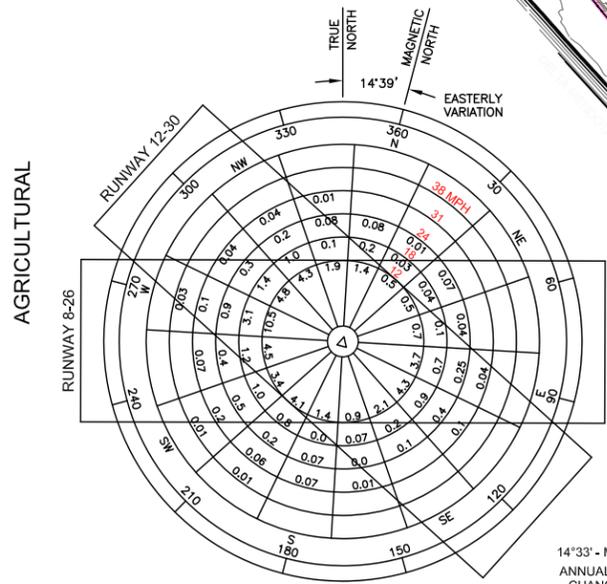
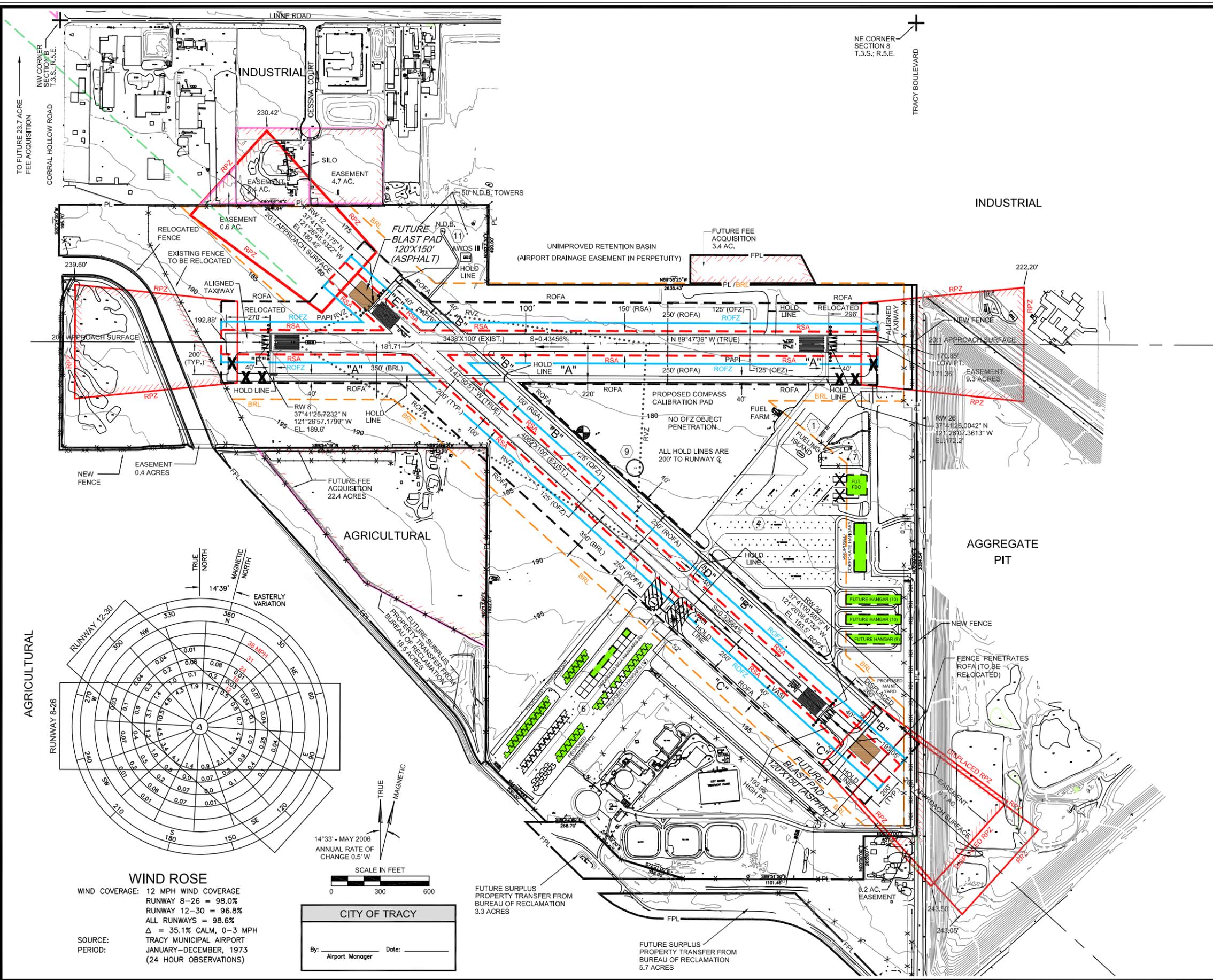
LEGEND		
	EXISTING	FUTURE
AIRPORT REFERENCE POINT	⊙	⊙
AIRPORT PROPERTY LINE	— PL —	— FPL —
AVIGATION EASEMENT	— AE —	— FAE —
BUILDING RESTRICTION LINE	— BRL —	— FBRL —
OBSTACLE FREE ZONE	— OFZ —	— FOFZ —
RUNWAY SAFETY AREA	— RSA —	— FRSA —
RUNWAY PROTECTION ZONES	— RPZ —	— FRPZ —
RUNWAY OBJECT FREE AREA	— ROFA —	— FROFA —
RUNWAY VISIBILITY ZONE	— RVZ —	— FRVZ —
BUILDINGS	— B —	— FB —
FACILITIES	— F —	— FF —
FACILITY TO BE REMOVED	N/A	X
FENCE	— F —	— FF —
LIGHTING	••••	••••
WIND CONE	— WC —	— FWC —

BUILDINGS/FACILITIES DATA	
1	FBO/TERMINAL BUILDING
2	AUTO PARKING
3	FUEL PIT
4	APRON
5	FBO
6	HANGARS
7	VAULT
8	HELIPAD
9	SEGMENTED CIRCLE/CONE
10	AVIATION COMMERCIAL
11	AWOS/NDB
12	

- NOTES**
- (A) TOPOGRAPHY AND PHOTOMAPPING SOURCE IS JULY 2, 2004.
 - (B) NVAID SITING IS SUBJECT TO FAA REVIEW AND DESIGN.
 - (C) FLOODING ON SITE IS NOT EXPECTED BASED ON PAST PERFORMANCE.
 - (D) PAVEMENTS ARE ASPHALTIC CONCRETE. ALL STRENGTHS ARE ESTIMATED.
 - (E) SEE WIND ROSE.
 - (F) COORDINATES ARE NAD 1983 HORIZONTAL, NVD 1988 VERTICAL.
 - (G) CLEAR SLOPES ARE BASED ON FAA FORM 5010 DATA.
 - (H) BUILDING SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO DESIGN.
 - (I) NO KNOWN THRESHOLD SITING SURFACE OBJECT PENETRATIONS.

THE PREPARATION OF THIS DOCUMENT WAS FINANCED IN PART THROUGH A GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

ANY PROPOSED RUNWAY PROJECT IDENTIFIED HEREIN IS FOR PLANNING PURPOSES ONLY. THE PROPOSED PROJECT SHALL NOT BE UNDERTAKEN WITHOUT PRIOR NEPA ENVIRONMENTAL PROCESSING AND WRITTEN FAA APPROVAL. PRECONDITION WILL INCLUDE FAA FORECAST APPROVAL AND FAA APPROVAL OF THE AIRFIELD STANDARD DESIGN.



WIND ROSE

WIND COVERAGE: 12 MPH WIND COVERAGE
 RUNWAY 8-26 = 98.0%
 RUNWAY 12-30 = 96.8%
 ALL RUNWAYS = 98.6%
 Δ = 35.1% CALM, 0-3 MPH

SOURCE: TRACY MUNICIPAL AIRPORT
 PERIOD: JANUARY-DECEMBER, 1973
 (24 HOUR OBSERVATIONS)

CITY OF TRACY

By: _____ Date: _____
 Airport Manager

FUTURE SURPLUS PROPERTY TRANSFER FROM BUREAU OF RECLAMATION 3.3 ACRES

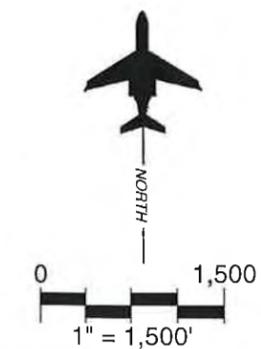
FUTURE SURPLUS PROPERTY TRANSFER FROM BUREAU OF RECLAMATION 5.7 ACRES



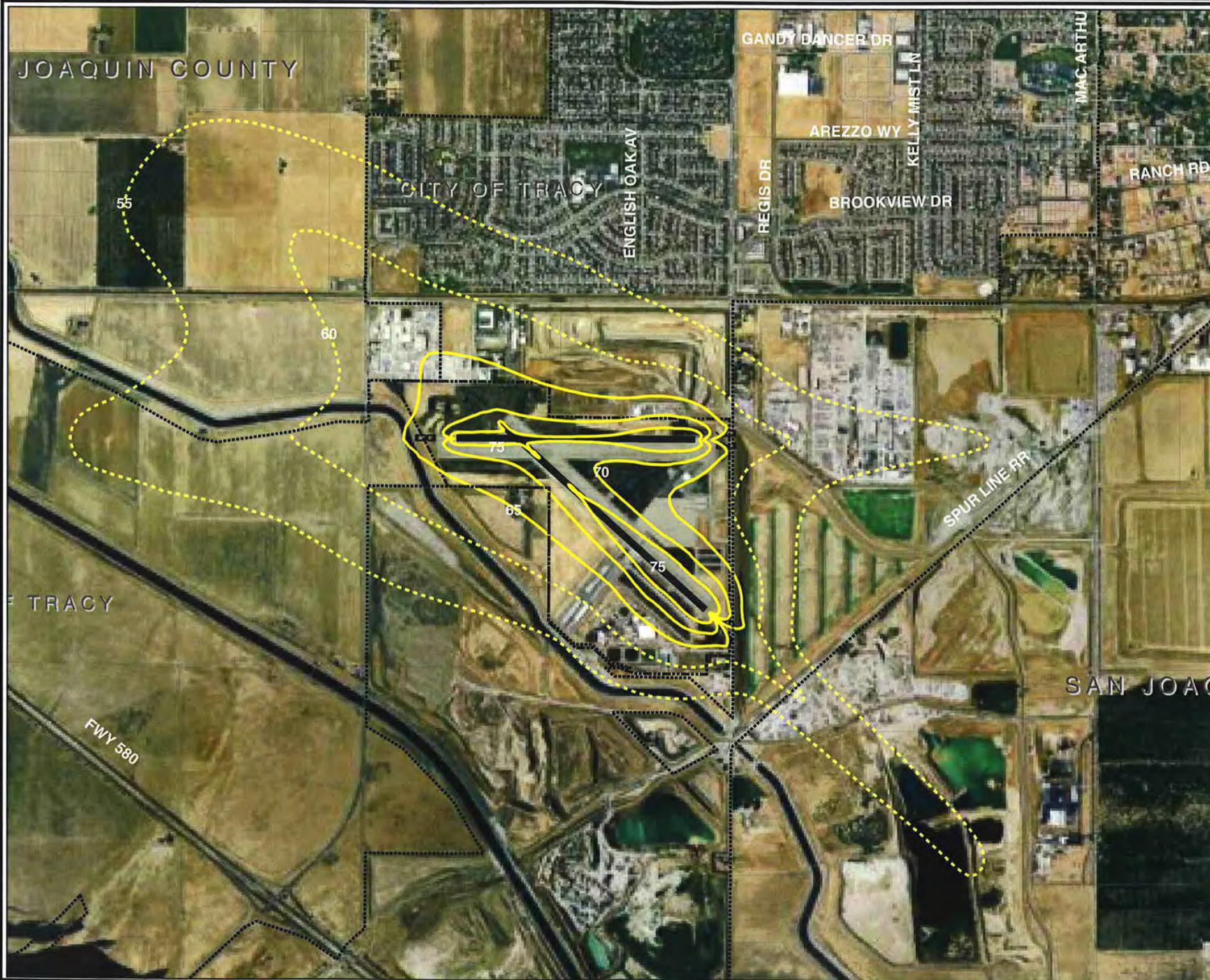
LEGEND

-  Airport Property
-  Municipal Boundary
-  2008 Noise Exposure Contour-Marginal Effect
-  2008 Noise Exposure Contour-Significant Effect

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates analysis.



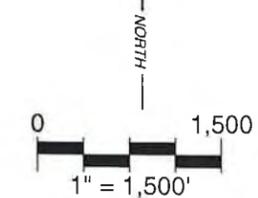
07SP13-2TM3-05/15/08



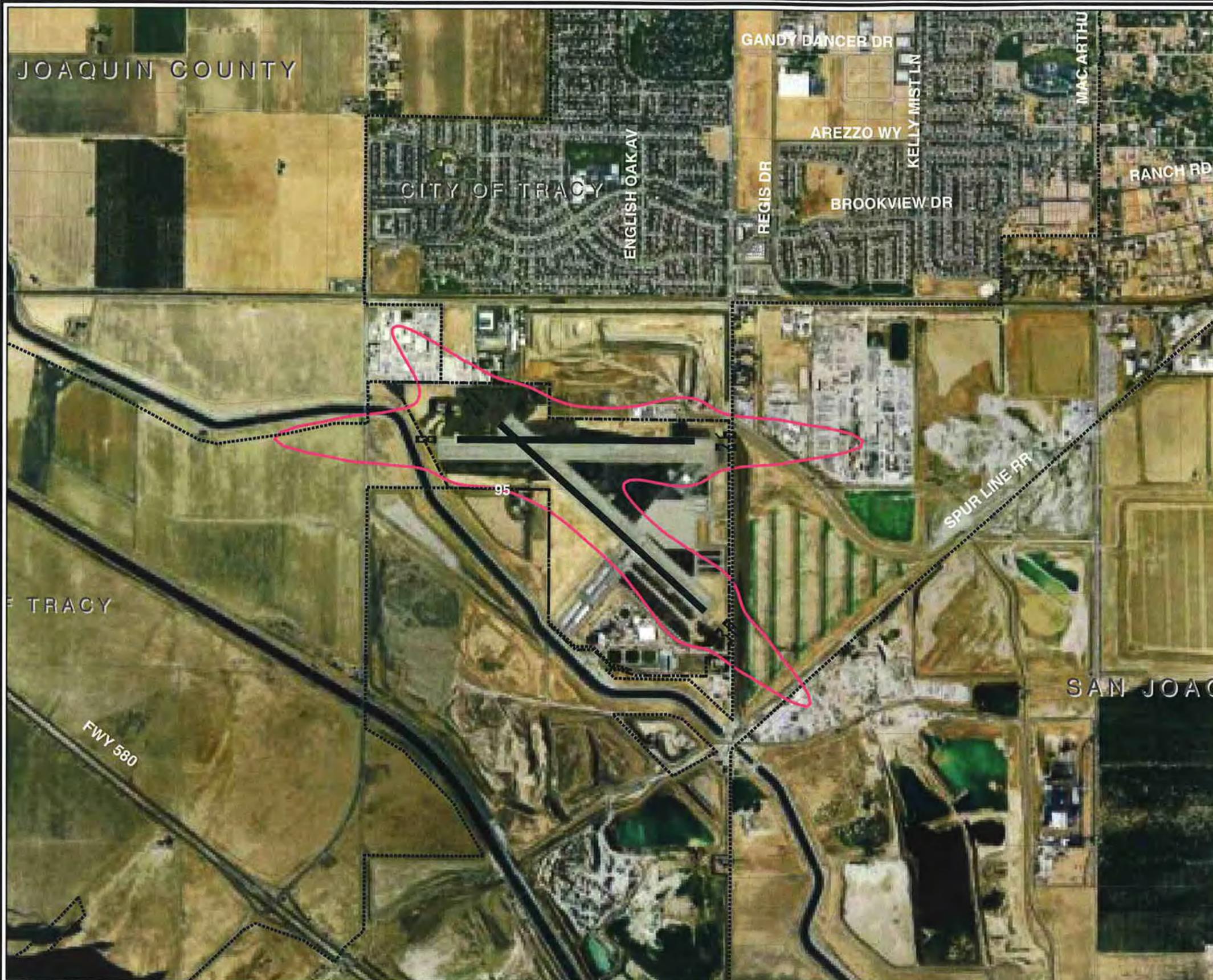
LEGEND

- Airport Property
- Municipal Boundary
- 2028 Noise Exposure Contour- Marginal Effect
- 2028 Noise Exposure Contour- Significant Effect

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates analysis.



07SP13-2TM4-05/15/08



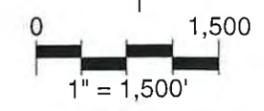
LEGEND

- Airport Property
- Municipal Boundary
- 95 dB Single Event Contour

Note: A 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB) was used to determine sleep disturbance. The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore the 95 dB SEL will be used as a gauge for sleep disturbance.

SEL Contour based on one (1) Baron 58P aircraft Departure operation per runway.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates analysis.



Existing Land Use

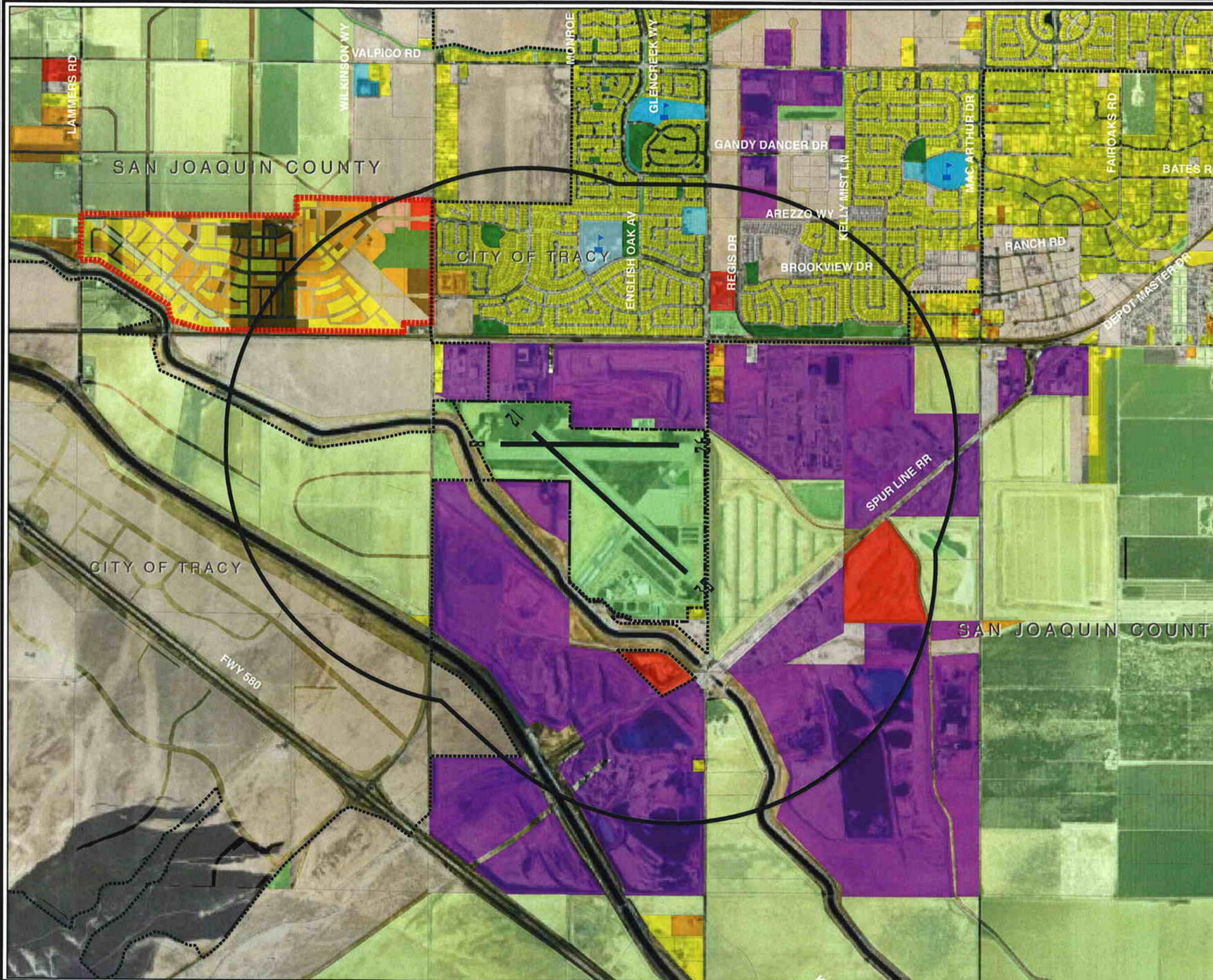
The existing land uses for the area surrounding Tracy Municipal Airport are depicted on **Exhibit 2TM-5**. As shown in the exhibit, much of the airport is surrounded by industrial development, including a quarry operation to the south and south-east, and industrial material storage lots north and northeast of the airport. To the northwest of the airport, existing land use includes multi-family along Corral Hollow Road (at Middlefield Road). The City of Tracy approved a development agreement for the Ellis Specific Plan West of Corral Hollow Road. A development agreement meets the definition of an existing land use. Therefore, the Ellis Specific Plan is also depicted on the existing land use map. Along the southern boundary of the airport is the Delta Mendota Canal. North of Linne Road, there are several housing developments which include detached single-family dwellings. Additionally, there are scattered residences located along Tracy Boulevard and Corral Hollow Road near the airport.

Land Use Planning Policies and Regulations

The areas north and west of the airport are located within the City of Tracy and are subject to the planning documents adopted by the city. The *City of Tracy General Plan* reflects the land uses that currently exist on the parcels immediately adjacent to the/ airport as discussed in the previous section. *The City of Tracy General Plan* designations are shown on **Exhibit 2TM-6**.

Northwest of the airport is an area identified as Urban Reserve. As stated in the *City of Tracy General Plan*, Urban Reserve areas will require comprehensive planning and the preparation of a Specific Plan or Planned Unit Development. A general plan amendment will also be prepared prior to development on these parcels.

The areas southeast of the airport fall outside the SOI for the City of Tracy and are under the planning jurisdiction of San Joaquin County. These areas, as indicated on **Exhibit 2TM-7**, are planned for General Agriculture, comparable to the existing use.

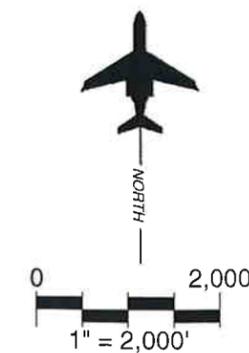


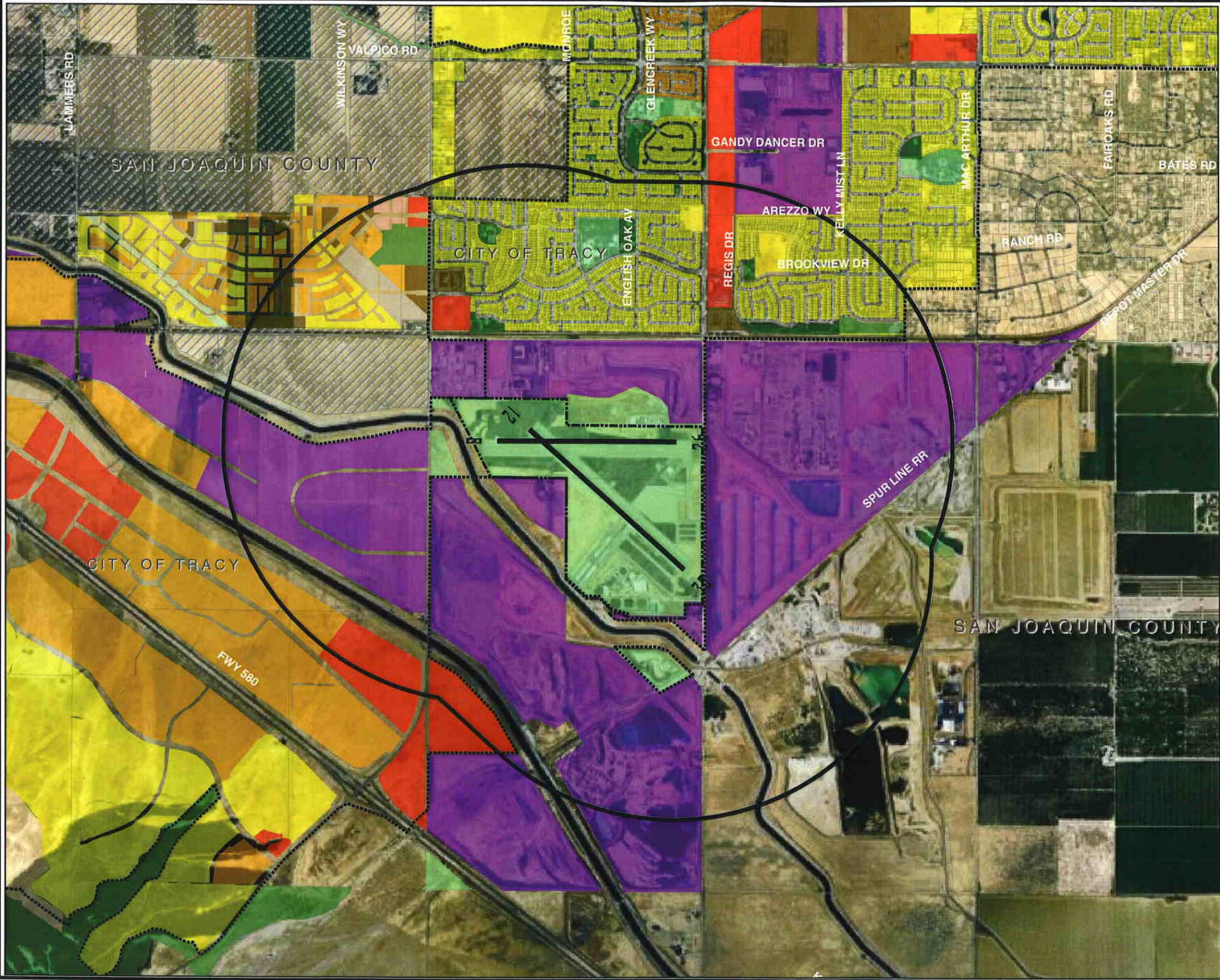
LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Single-Family Residential
- Multi-Family Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility
- Noise Sensitive
- Schools
- Limited Use/Vacant Land
- Ellis Development Agreement ¹

1: A Development Agreement is considered and existing land use.

Source: Aerial Photography dated 2006.
Wind Sheild Survey Feb. 3-7, 2008.
San Joaquin Geographic Information System, February 2008.
Coffman Associates analysis.

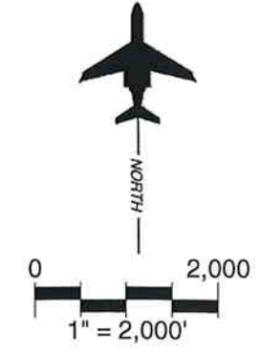




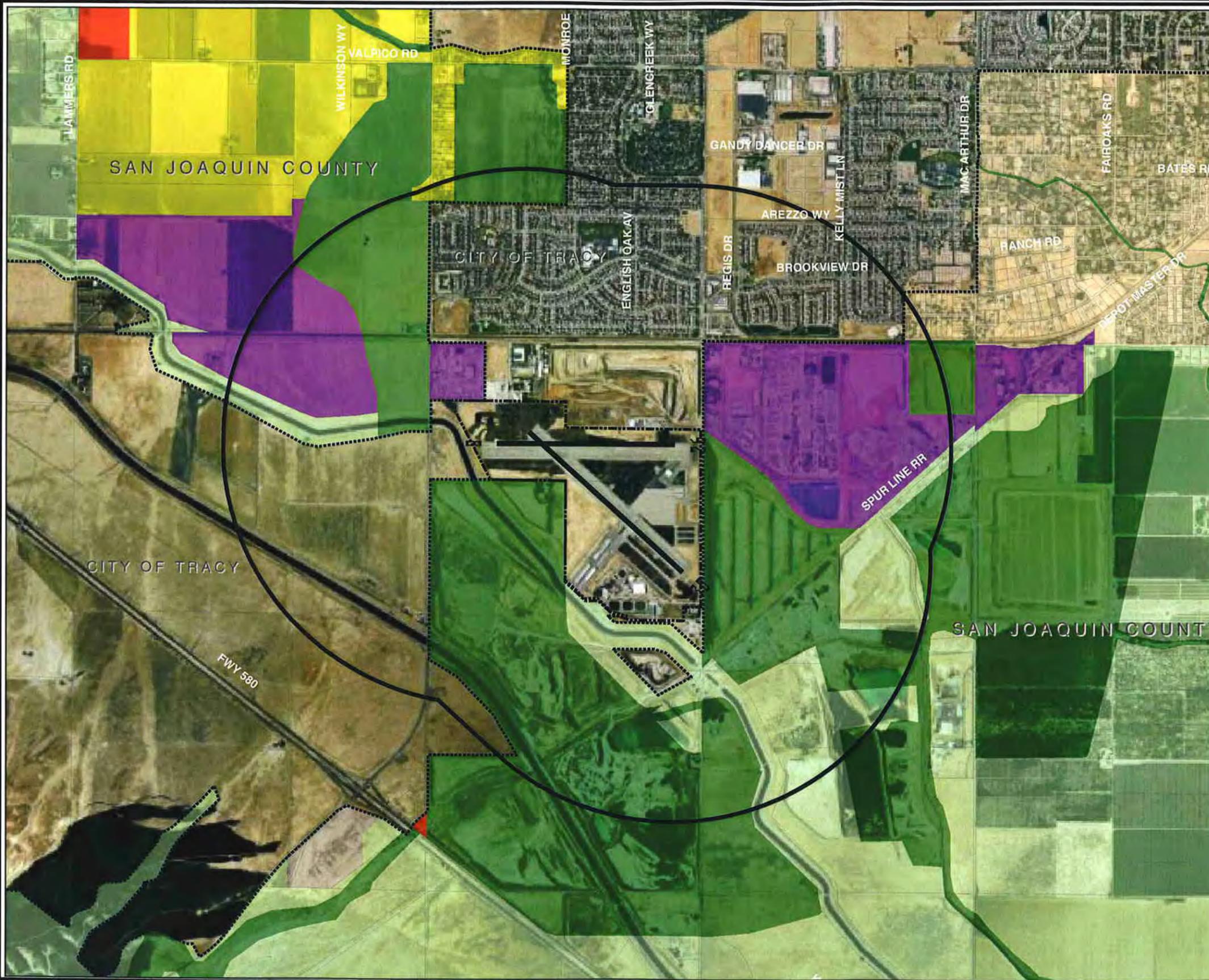
LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Rural Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility
- Noise Sensitive
- Limited Use
- Urban Reserve

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.



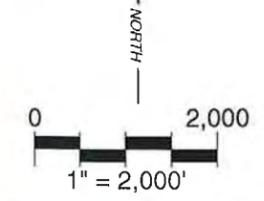
07SP13-2TM7-11/06/08



LEGEND

- Airport Property
- Municipal Boundary
- Part 77 Horizontal Surface
- Agriculture
- Rural Density Residential
- Low Density Residential
- Commercial
- Industrial
- Park & Open Space
- Public Facility

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.





Chapter Three

Comprehensive Land Use Plan Policies

Chapter Three

COMPREHENSIVE LAND USE PLAN POLICIES

Airport Land Use Compatibility Plan San Joaquin County

The following policies are intended to ensure compatible development in the area surrounding the public use airports within San Joaquin County. It has been developed in accordance with *the California Airport Land Use Planning Handbook* published in January 2002.

1.0 GENERAL COUNTY POLICIES

1.1 Geographic Scope: The geographic scope of the San Joaquin Airport Land Use Compatibility Plan encompasses:

1.1.1. Airport Influence Area

(a) All lands on which the uses could be negatively affected by present or future aircraft operations at any of the public use airports for which the ALUC has specifically adopted these procedures; also those

lands on which the uses could negatively affect any of the same airports.

(b) The specific limits of the influence area for each of the airports are depicted on the respective *Compatibility Map* for that airport as presented in Section 5 of this Chapter.

(c) All lands within San Joaquin County that could be negatively affected by present or future aircraft operations at Byron Airport situated in Contra Costa County as well as lands in San Joaquin County on which the uses could negatively affect usage of that airport.

1.1.2. Compliance with State Law: The Airport Land Use Commission for San Joaquin County shall comply with the provisions in the Public Utilities Code, Chapter 4, Article 3.5, Section 21670 et. seq. (airport land use commission statutes), when

administering these compatibility policies and the airport land use compatibility planning process in San Joaquin County.

The ALUC shall also implement Business and Professions Code, Section 11010 (b)(13), by establishing an AIA in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by the ALUC. Any property located in the vicinity of the Airport within the AIA must be provided with a real estate disclosure notice.

1.1.3. Effective Date: This compatibility plan analysis shall become effective immediately upon a formal adoption action by the Airport Land Use Commission for San Joaquin County. Land use policy actions and development actions are subject to this compatibility plan analysis unless the circumstances defined below apply.

1.1.4. Applicability of Policies to Existing Land Uses: Existing land uses shall be exempt from the policies and criteria of this compatibility plan analysis, except as specifically provided in this Section.

1.1.5. Countywide Impacts on Flight Safety: Other lands, regardless of their location in the county, on which certain land use characteristics could adversely affect the safety of aircraft flight in San Joaquin County. The specific uses of concern are identified in Policy 1.3.2.

1.1.6. New Airports: The site and environs of any new public use airport that may be proposed anywhere in the county, including within incorporated cities, and that requires an Airport Permit from the California Department of Transportation.

1.1.7. Heliports: The site and environs of any public-use or special-use heliport (as defined by the California Department of Transportation) that may exist or be proposed anywhere within San Joaquin County, including within incorporated cities.

1.1.8. Limitations: The Airport Land Use Commission (the SJCOG Board) has no authority over Airport operations (Pub. Util. Code, Section 21674[e]). Therefore, nothing in this ALUCP shall be interpreted as regulating or conveying any recommendations concerning aircraft operations to/from/at the Airport.

This ALUCP is not a specific development plan and does not designate specific land uses for any particular parcel or parcels of land. In addition, the land use compatibility policies and criteria contained within this document are intended to promote compatible land development in the vicinity of the public use airport in San Joaquin County. They are not intended to remove existing incompatible uses. **None of the compatibility criteria contained herein are retroactive to existing land uses.**

Incompatible development that currently exists is recognized as existing nonconforming land use by the SJCOG ALUC. Although this nonconforming land use is recognized, neither this ALUCP nor the SJCOG ALUC finds these uses to be consistent with this ALUCP.

In addition to land uses that are currently developed and in use, "existing land uses" shall also include vested development projects that have not yet been built (See Section 1.2.13, Existing Land Use).

1.2 Definitions

The following definitions apply for the purposes of the policies set forth in this document:

1.2.1. Aeronautics Act: Except as indicated otherwise, the article of the California Public Utilities Code (Sections 21670 et seq.) pertaining to airport land use commissions.

1.2.2. Airport: Each of the public-use airports, as listed in Chapter One, situated within or affecting lands within San Joaquin County, or any other new public-use airport which might be created within the boundaries of San Joaquin County.

1.2.3. Airport Influence Area (AIA): An area, as delineated in this Chapter herein, in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. The *airport influence area* constitutes the area within which certain land use actions are subject to ALUC review.

1.2.4. Airport Land Use Commission (ALUC): The San Joaquin County Airport Land Use Commission.

1.2.5. Airport Land Use Compatibility Plan (ALUCP): The San Joaquin County Airport Land Use Compatibility Plan.

1.2.6. Avigation Easement: An easement that conveys rights associated with aircraft overflight of a property, including creation of noise, limits on the height of structures and trees, etc.

1.2.7. Code of Federal Aviation Regulations (CFR) Part 77: The part of Federal Aviation Regulations which deals with objects affecting navigable airspace in the

vicinity of airports. Objects which exceed the Part 77 height limits constitute airspace obstructions.

1.2.8. Community Noise Equivalent Level (CNEL): The noise metric adopted by the state of California for describing airport noise impacts. The noise impacts are typically depicted by a set of contours, each of which represents points having the same CNEL value.

1.2.9. Compatibility Zone: Any of the zones set forth herein for the purposes of assessing land use compatibility within the airport influence area.

1.2.10. Development Actions: See the definition of Local agency actions, regulations, permits, and/or project.

1.2.11. Division of Aeronautics: California Department of Transportation, Division of Aeronautics, or any successor agency that may assume the responsibilities of the Division of Aeronautics.

1.2.12. Dwelling: A building or a portion thereof used or designed and intended to be used for human habitation.

1.2.13. Existing Land Use: The actual use of land or the proposed use of the land evidenced by a vested right to proceed with development or occupancy (provided the new occupancy remains within the same or reduced level of occupancy as the most recent one) as of the effective date of this compatibility plan analysis. Vested means the irrevocable right to complete construction notwithstanding an intervening change in the law that would otherwise preclude it.

1.2.14. General Plan: For this compatibility plan analysis, this term means any general plan, community plan, or specific plan,

zoning ordinance, building regulation, land use policy document, or implementing ordinance or any change thereto, and any amendment thereto (see Pub. Util. Code §21676).

1.2.15. Gross Acreage: Gross acreage includes the property at issue, plus up to the centerline of adjacent roads and any adjacent, permanently dedicated, open lands.

1.2.16. Handbook: The most recent version of the California Airport Land Use Planning Handbook published by the California Department of Transportation, Division of Aeronautics.

1.2.17. Heliport: A helicopter landing facility for which a Heliport Permit is required from the California Department of Transportation. Public-use and special-use heliports (including those at hospitals) are included within this definition, but helipads located on an airport are excluded. Personal-use heliports may or may not require a state permit depending upon their location and other factors.

1.2.18. Infill: Development of vacant or underutilized land within areas that are already largely developed or used more intensively. See Policy 3.2.1 for criteria used to identify infill areas for compatibility planning purposes.

1.2.19. Local Jurisdiction: The County of San Joaquin or any city or other government agency (except state or federal government agencies having jurisdiction over land uses within their boundaries).

1.2.20. Local Agency: A land use jurisdiction, school district, community college district, or other special district subject to the provisions of this ALUCP. The ALUC does not have authority over land use

actions of federal agencies or Native American tribes.

1.2.21. Local agency actions, regulations, and permits: Any human-caused change to improved or unimproved real property that requires a discretionary permit or approval from any local agency or that is sponsored and proposed to be built by a local agency, developer, or the real property owner. Actions include, but are not limited to, buildings or other structures, mining, dredging, filling, grading, paving, an excavation or drilling operation, and/or storage of materials.

1.2.22. Lot of Record: A parcel of land platted and recorded as of the effective date of this compatibility plan analysis.

1.2.23. Lot Coverage: The ratio between the ground floor area of a building (or buildings) and the area of the lot or parcel on which the building (or buildings) are placed.

1.2.24. Major Land Use Action: Actions related to proposed land uses for which compatibility with airport activity is a particular concern, but for which ALUC review is not always mandatory under state law. These types of actions are listed in Policy 1.3.3.

1.2.25. Nonconforming Use: In general, a land use, parcel, or building which does not comply with a current ALUCP or zoning ordinance, but which was legally permitted at the time the plan or ordinance was adopted. For the purposes of this Plan, a nonconforming land use is one which exists (see definition of “existing land use” in Policy 1.2.13) as of the plan’s adoption date, but which does not conform with the compatibility criteria set forth herein.

1.2.26. Project: Any land use matter, either publicly or privately sponsored, that is subject to the provisions of this compatibility plan analysis. For this compatibility plan analysis, this term means any action, regulation, or permit (see Pub. Util. Code §21676.5).

1.2.27. Real Estate Disclosure: A written statement that notifies the prospective purchaser of real estate, prior to completion of the purchase, of the potential annoyances or inconveniences associated with airport operations. Typically, a real estate disclosure is provided at the real estate sales or leasing offices. A real estate disclosure is required by state law as a condition of the sale of most residential property if the property is located in the vicinity of an airport and is within its AIA (See Bus. & Prof. Code, §11010; Civ. Code, §§1102.6, 1103.4, 1353). State law does not require the real estate disclosure to be recorded in the chain of title for the affected property.

1.2.28. Residential Density: For airport compatibility purposes, the chief distinguishing feature among residential land uses is the number of dwelling units per acre. To be compatible with airport activities, the number of dwelling units per acre should not exceed the criterion specified for the compatibility zone where the use would occur.

1.2.29. PUC: Public Utilities Code.

1.2.30. Vested Right: A right to the proposed use of land as demonstrated by any of the following:

(a) A vesting tentative map that has been approved pursuant to California Government Code, Section 66498.1, and has not expired; or

(b) A development agreement that has been executed pursuant to California Government Code, Section 65866, and remains in effect; or

(c) A valid building permit that has been issued, substantial work that has been performed, and substantial liabilities that have been incurred in good faith reliance on the permit, pursuant to the California Supreme Court decision in *Avco Community Developers, Inc. v. South Coast Regional Com* (1976) 17 Cal.3d 785,791, and its progeny.

1.3 Types of Actions Reviewed

1.3.1 Actions Which Require ALUC Review: As required by state law, the following types of actions shall be referred to the ALUC prior to their approval by the local jurisdiction:

(a) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (PUC Section 21676(b))

(b) The adoption or approval of a zoning ordinance or building regulation which (1) affects property within an airport influence area, and (2) involves the types of airport impact concerns listed in Section 1.4 (PUC Section 21676(b)).

(c) Adoption or modification of the master plan for an existing public-use airport (PUC Section 21676(c)).

(d) Any proposal for expansion of an existing airport or heliport if such expansion will require an amended airport permit from the state of California (PUC Section 21664.5).

(e) Any proposal for a new airport or heliport whether for public use or private use (PUC Section 21661.5) if the facility requires a state Airport Permit.

1.3.2. Other Land Use Actions Subject to ALUC Review: In addition to the above types of land use actions for which ALUC review is mandatory, other types of land use actions are subject to review under the following circumstances:

(a) Until such time as (1) the ALUC finds that a local agency's general plan or specific plan is consistent with the ALUCP, or (2) the local agency has overruled the ALUC's determination of inconsistency, state law provides that the ALUC may require the local agency to refer all actions, regulations, and permits involving land within an airport influence area to the ALUC for review (PUC Section 21676.5(a)). Only those actions that the ALUC elects not to review are exempt from this requirement. ALUC policy is that only major land use actions listed in Policy 1.3.3 shall be submitted for review.

(b) Proposed redevelopment of a property for which the existing use is consistent with the general plan and/or specific plan, but nonconforming with the compatibility criteria set forth in this plan, shall be subject to ALUC review. This policy is intended to address circumstances that arise when a general or specific plan land use designation does not conform to ALUC compatibility criteria, but is deemed consistent with the compatibility plan because the designation reflects an existing land use. Proposed redevelopment of such lands voids the consistency status and is to be treated as new development subject to ALUC review even if the proposed use is consistent with the local general plan or specific plan. (Also see Policies 3.2.2 and 3.2.3.)

1.3.3. Major Land Use Actions: The scope or character of certain major land use actions, as listed below, is such that their compatibility with airport activity is a potential concern. Even though these actions may be basically consistent with the local general plan or specific plan, sufficient detail may not be known to enable a full airport compatibility evaluation at the time that the general plan or specific plan is reviewed. To enable better assessment of compliance with the compatibility criteria set forth herein, ALUC review of these actions may be warranted. The circumstances under which ALUC review of these actions is to be conducted are indicated in Policy 1.3.2 above.

(a) Actions affecting land uses within any compatibility zone.

(1) Proposed residential development, including land divisions, consisting of five or more dwelling units or lots.

(2) Proposed development agreements or amendments to such agreements.

(3) Any proposed expansion of the sphere of influence of a city or special district.

(4) Proposed pre-zoning associated with future annexation of land to a city.

(5) Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required.

(6) Major capital improvements (e.g., water, sewer, or roads) which

would promote urban uses in undeveloped or agricultural areas to the extent that such uses are not reflected in a previously reviewed general plan or specific plan.

(7) Proposed land acquisition by a government entity for any facility accommodating a congregation of people (for example, a school or hospital).

(8) Any off-airport, non-aviation use of land within *the* runway protection zone (RPZ) of any airport.

(9) Proposals for new development (including buildings, antennas, and other structures) having a height of more than:

- No development is allowed within the RPZ;
- 35 feet above ground level (AGL) within the Inner Approach/Departure Zone;
- 70 feet AGL within Extended Approach/Departure Zone; or
- 150 feet AGL within Sideline Safety or Traffic Pattern Zone.

(10) Any obstruction reviewed by the Federal Aviation Administration (FAA) in accordance with Part 77 of the CFR that receives a finding of anything other than “not a hazard to air navigation.”

(11) Any project having the potential to create electrical or visual hazards to aircraft in flight, including:

- Electrical interference with radio communications or navigational signals;

- Lighting which could be mistaken for airport lighting;
- Glare in the eyes of pilots of aircraft using the airport; and
- Impaired visibility near the airport.

(12) Projects having the potential to cause attraction of birds or other wildlife that can be hazardous to aircraft operations to be increased within the vicinity of an airport accordance with accordance with Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*.

(13) Proposed non-aviation development of airport property (hotels, motels, restaurants and non-aviation related commercial/office buildings) if such development has not previously been included in an airport master plan or community general plan. (See Policy 3.1.1(f)).

(b) Regardless of location within San Joaquin County, any proposal for construction or alteration of a structure (including antennas) taller than 200 feet above the ground level at the site. (Such structures also require notification to the Federal Aviation Administration in accordance with Code of Federal Regulations, Part 77, Paragraph 77.13(a)(1).)

(c) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

1.3.4. Airport Land Use Commission Review after Local Agency Makes Local Plans Consistent with Compatibility Plan Analysis or Overrides Compatibility Plan Analysis: After local agencies have either made their local plans and zoning ordinances or facilities' master plans consistent with the compatibility plan analysis or overridden the compatibility plan analysis as provided by law, Public Utilities Code, Section 21676 (b) requires local agencies to submit only proposed land use policy actions to the airport land use commission for a determination of the consistency of the proposed action with the compatibility plan analysis prior to local agency approval of such action. In addition to this statutory requirement, the ALUC will request review of the development proposal, if any, which triggered the proposed land use action. This requirement shall apply to any proposed land use policy action that affects property within the AIA.

1.3.5. Inter-County Coordination: Where an airport influence area crosses the San Joaquin County line, affected jurisdictions outside San Joaquin County are asked to maintain coordination with the ALUC on airport land use compatibility issues. In particular:

(a) Costa Contra County should inform the ALUC regarding proposed plans for development of Byron Airport that may change the character or magnitude of impacts within the San Joaquin County portion of the airport influence area. (See Byron Airport map in Chapter 2).

(b) Any other county adjacent to San Joaquin County or any city or other agency within such counties that may be considering proposed establishment or expansion of an airport within three miles (or heliport within one mile) of the San Joaquin

County boundary should inform the ALUC of such proposal. ALUC review of such actions is advisory only. The ALUC has no jurisdiction over development outside San Joaquin County boundaries.

1.4. Types of Airport Impacts

1.4.1. Compatibility Concerns: The ALUC is concerned with the potential impacts related to:

(a) Land use safety with respect both to people on the ground and the occupants of aircraft;

(b) Exposure to aircraft noise;

(c) Protection of airport airspace; and

(d) General concerns related to aircraft overflights.

1.4.2. Airport Impacts Not Considered: Other impacts sometimes created by airports (e.g., air pollution, automobile traffic, etc.) are not addressed by these compatibility policies and are not subject to review by the ALUC. In accordance with state law (PUC Section 21674(e)), this Plan and the ALUC do not have authority over the operation of any airport (including where and when aircraft fly, and airport security).

1.4.3. Advisory Review of Development Proposals: Under state law, local governments may submit development proposals within the AIA to the Airport Land Use Commission for voluntary, non-binding advisory review. ALUC reviews are voluntary only if the jurisdiction's general plan and/or specific plan is fully consistent with the compatibility plan analysis (if these plans are not consistent, then ALUC review is mandatory). The Airport Land Use Commission shall encourage local

governments to submit the following types of development proposals within the AIA for advisory review:

- Commercial or mixed-use development of more than 100,000 square feet of gross building area;
- Residential or mixed-use development that includes more than 50 dwelling units;
- Public or private schools;
- Hospitals or other inpatient medical care facilities;
- Libraries;
- Places of public assembly; and/or
- Towers.

When an ALUC review is advisory, the local jurisdiction does not need to take the special steps necessary to overrule the ALUC if it disagrees with the outcome of a review.

1.5 ALUC Overrule Policies

1.5.1. Overruling Process: Various sections of the ALUC statutes provide for local agencies to overrule ALUC decisions on land use matters and airport master plans. The overruling process involves four mandatory steps:

1. the local agency must provide the local Airport Land Use Commission and the California Department of Transportation, Division of Aeronautics, with a copy of the proposed decision and findings within 45 days prior to any decision to overrule the commission;
2. the holding of a public hearing;
3. the adoption of specific findings that the local government's plans are consistent with the purposes of the State airport compatibility statute and that they provide for the orderly development of the airport; and

4. approval of the overrule action by a two-thirds majority of the governing body of the local government.

1.5.2. Substance of the Finding: The essential substance of the findings which accompany a local agency overruling of an ALUC decision is indicated in ALUC Section 21670. Section 21670(a) indicates that five separate purposes for the legislation are stated:

- "...to provide for the orderly development of each public use airport in this state..."
- "...to provide for the orderly development of...the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards..."
- "...to provide for the orderly development of...the area surrounding these airports so as...to prevent the creation of new noise and safety problems."
- "...to protect the public health, safety, and welfare by ensuring the orderly expansion of airports..."
- "...to protect the public health, safety, and welfare by...the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses."

Although findings do not need to address each of these purposes point by point, it is essential that, collectively, all of the purposes be addressed. The following sections outline possible approaches to demonstrating a proposed action would indeed be consistent with these purposes.

(a) Providing for Orderly Development of the Airport. The findings should document:

(1) How the local agency has considered any adopted long-range development plans that may exist for the airport;

(2) How the local agency plans support for development of the airport over at least the next 20 years; and

(3) How local land use planning and zoning actions would serve to protect the approaches to the airport runways.

(b) Relationship to California Airport Noise Standards. The findings should:

(1) Document any inconsistencies between noise element policies and noise compatibility criteria in the ALUC compatibility plan and attempt to resolve why the differences exist;

(2) Show how noise element policies will assure conformance with the state noise airport standards; and

(3) Identify any measures to be incorporated into local development to mitigate existing and foreseeable airport noise problems.

(c) Preventing Creation of New Noise and Safety Problems. The findings should:

(1) Document any inconsistencies between the proposed land use action and safety compatibility criteria in the ALUC compatibility plan;

(2) Describe the measures taken to assure that risks – both to people and property on the ground and to the occupants of aircraft –

associated with the land use proposal are held to a minimum; and
(3) Indicate that the proposed land use action falls within a level of acceptable risk considered to be a community norm.

(d) Protecting Public Health, Safety, and Welfare by Ensuring Orderly Expansion of the Airport. The findings should:

(1) Document any inconsistencies between the proposed land use action and safety compatibility criteria in the ALUC compatibility plan;

(2) Describe the measures taken to assure that risks – both to people and property on the ground and to the occupants of aircraft – associated with the land use proposal are held to a minimum; and

(3) Indicate that the proposed land use action falls within a level of acceptable risk considered to be a community norm.

(e) Minimizing the Public's Exposure to Excessive Noise and Safety Hazards. The statute implies a quantitative assessment of noise exposure and safety hazards. The purpose of the statute is not merely to reduce the public's exposure to noise and safety hazards, but to minimize exposure in areas with excessive noise or safety concerns. To adopt a finding demonstrating consistency with this purpose, the local agency first must determine whether the existing noise exposure or safety hazards are excessive.

(1) If existing noise and safety hazards are not excessive, then the actions taken by the local agency must "prevent the creation of new

noise and safety problems” (see the third bullet above).

(2) If the existing exposure is excessive, the local agency would have to show how its action in overruling an ALUC determination of inconsistency nonetheless minimizes additional exposure to those noise and safety concerns that have been identified.

(3) Finally, the local agency needs to show the extent to which land uses in the area in question are already incompatible with airport operations and how an action to overrule would not create a new incompatible use or would not expose additional persons or property to noise and safety hazards associated with existing compatible uses.

1.6 Review Fees

A 1989 amendment to the State Aeronautics Act granted ALUCs the authority to charge fees for review of land use proposals and airport plans (Section 21671.5(f)). The ALUC fees are based upon the typical number of staff hours involved in a project review and attempt to cover the full cost of the staff time. Fees for ALUC should be reviewed annually and adjusted to cover staff review costs. A current fee schedule is to be made available on the ALUC website and at the ALUC offices.

1.7 ALUCP Update

ALUC should review and, when appropriate, update their compatibility plans at least every five years. More frequent reviews may be appropriate for airports or

communities where conditions are changing rapidly. California State law limits major amendments (revising the policies in a manner that would change their applicability to a public agency, adding new policies, or revising maps) of the ALUCP to no more than once per calendar year (Pub. Util. Code, Section 21675 [a]). Minor amendments (addressing grammatical, typographical, or minor technical errors that do not affect policies or the manner in which those policies are applied) may be adopted as needed.

2.0 REVIEW PROCESS

2.1. Timing and Public Input

2.1.1. Timing of Project Submittal: Proposed actions listed in Policy 1.3 should be submitted to the ALUC early enough in the review process for the ALUC’s evaluation to be duly considered by the local jurisdiction prior to formalizing its actions. The timing may vary depending upon the nature of the specific project. However, all projects must be submitted to the ALUC for review prior to final approval by the local government entity.

2.1.2. Public Input: Where applicable, the ALUC shall provide public notice and obtain public input in accordance with PUC Section 21675.2(d) before acting on any plan, regulation, or other land use proposal under consideration.

2.2. Review Process for Community Land Use Plans and Ordinances

2.2.1. Initial ALUC Review of General Plan Consistency: In conjunction with adoption or amendment of this ALUCP, the Commission shall review the general plans and specific plans of affected local

jurisdictions to determine their consistency with the ALUC's policies.

(a) Within 180 days of the ALUC's adoption or amendment of the ALUCP, each local agency must amend its general plan and any applicable specific plan to be consistent with the ALUC's plan or, alternatively, adopt findings and overrule the ALUC in accordance with PUC Section 21676(b) (Government Code Section 65302.3) and outlined in Policy 1.5.

(b) Prior to taking action on a proposed amendment, the local agency must submit a draft of the proposal to the ALUC for review and approval.

2.2.2. Subsequent Reviews of Related Land Use Development Proposals: As indicated in Policies 1.3.1(a) and 1.3.1(b), prior to taking action on an amendment of a general plan or specific plan or the addition or approval of a zoning ordinance or building regulation affecting an airport influence area as defined in Policy 1.2.3, local agencies must submit a complete copy of the proposed plan, ordinance, or regulation to the ALUC for review. In addition, supporting documentation, associated mapping exhibits depicting the boundaries of the plan, and any environmental documentation prepared for the plan/ordinance should be submitted.

Subsequent land use development actions that are consistent with applicable, previously reviewed, local plans, ordinances, and regulations are subject to ALUC review only under the conditions indicated in Policies 1.3.2 and 2.3.5.

2.2.3. ALUC Action Choices: When reviewing a general plan, specific plan, zoning ordinance, or building regulation for consistency with the Compatibility Plan, the ALUC has three choices of action:

(a) Find the plan, ordinance, or regulation consistent with the ALUCP.

(b) Find the plan, ordinance, or regulation consistent with ALUCP, subject to conditions and/or modifications that the ALUC may require

(c) Find the plan, ordinance, or regulation inconsistent with the ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts or shortcomings upon which its determination is based.

2.2.4. Response Time: The ALUC must respond to a local agency's request for a consistency determination on a general plan, specific plan, zoning ordinance, or building regulation within 60 days from the date of referral (PUC Section 21676(d)).

(a) The 60-day review period may be extended if agreed upon in writing by the submitting agency or project applicant.

(b) The date of referral is deemed to be the date on which all applicable project submittal information is received by the ALUC staff.

(c) If the ALUC fails to make a determination within that period, the proposed action shall be deemed consistent with the ALUCP.

(d) Regardless of ALUC's action or failure to act, the proposed action must comply with other applicable local, state, and federal regulations and laws.

(e) The referring agency shall be notified of the ALUC's action in writing.

2.2.5. ALUC Response to Notification of Proposed Overruling: If a local agency proposes to overrule an ALUC action regarding a community land use plan or

ordinance, it must provide 45 days' notice to both the ALUC and the California Division of Aeronautics and these agencies then have 30 days in which to respond (PUC Sections 21676(a) and (b)).

2.3. Review Process for Airport Master Plans and Development Plans

2.3.1. Project Submittal Information: An airport master plan or development plan submitted to the ALUC for review shall contain sufficient information to enable the ALUC to adequately assess the noise, safety, airspace protection, and overflight impacts of airport activity upon surrounding land uses. A master plan report should be submitted, if available.

(a) At a minimum, information to be submitted shall include:

(1) A layout plan drawing of the proposed facility showing the location of:

- Property boundaries;
- Runways or helicopter takeoff and landing areas;
- Runway or helipad protection zones;
- Aircraft or helicopter approach/departure flight routes.

(2) Code of Federal Regulation Part 77 airspace drawing.

(3) Activity forecasts, including the number of operations by each type of aircraft proposed to use the facility, the percentage of day, evening, and night operations, and the distribution of takeoffs and landings for each runway direction.

(4) Existing and proposed flight track locations, current and projected noise contours, and other supplementary noise impact data that may be relevant.

(5) A map showing existing and planned land uses in the areas affected by aircraft activity associated with implementation of the proposed master plan or development plan.

(6) Any environmental document (initial study, draft environmental impact report, etc.) that may have been prepared for the project.

(7) Identification and proposed mitigation of impacts on surrounding land uses.

(b) Any applicable review fees per Policy 1.6 as established by the ALUC shall accompany the application.

2.3.2. Commission Action Choices for Plans of Existing Airports: When reviewing airport master plans or expansion plans for existing public-use airports, the Commission has three action choices:
(a) Find the airport plan consistent with the ALUCP.

(b) Find the airport plan inconsistent with the ALUCP.

(c) Modify the ALUCP (after duly noticed public hearing) to reflect the assumptions and proposals in the airport plan.

2.3.3. Commission Action Choices for Reviews of New Airports or Heliports: When reviewing proposals for new airports or heliports, the ALUC's choices of action are:

(a) Approve the proposal as being consistent with the specific review policies listed in Section 4.2.

(b) Approve the proposal and adopt an ALUCP for that facility. State law requires adoption of such a plan if the airport or heliport will be a public-use facility (PUC Section 21675(a)).

(c) Disapprove the proposal on the basis that the noise, safety, airspace protection, and overflight impacts it would have on surrounding land uses are not adequately mitigated.

2.3.4. Response Time: The ALUC must respond to a local agency's submittal of an airport master plan or development plan within 60 days from the date of referral (PUC Section 21676(d)).

(a) If the ALUC fails to make a determination within that period, the proposed action shall be deemed consistent with the ALUCP.

(b) Regardless of ALUC action or failure to act, the proposed action must comply with other applicable local, state, and federal regulations and laws.

(c) The referring agency shall be notified of the ALUC's action in writing.

2.3.5. ALUC Response to Notification of Proposed Overruling: If a local agency proposes to overrule an ALUC action regarding an airport master plan or development plan, it must provide 45 days' notice to both the ALUC and the California Division of Aeronautics and these agencies then have 30 days in which to respond (PUC Section 21676(c)).

2.4. Review Process for Major Land Use Actions

2.4.1. Project Submittal Information: A proposed major land use action submitted to the ALUC for review shall include:

(a) The following information:

(1) Property location data (assessor's parcel number, street address, subdivision lot number).

(2) An accurately scaled map showing the relationship of the project site to the airport boundary and runways.

(3) A description of the existing and proposed uses of the land in question.

(4) The type of land use action being sought from the local jurisdiction (e.g., zoning change, building permit, etc.).

(5) For residential uses, an indication of the potential or proposed number of dwelling units per acre (including any secondary units on a parcel); or, for nonresidential uses, the number of people potentially occupying the total site or portions thereof at any one time.

(6) If applicable, a detailed site plan showing ground elevations, the location of structures, open spaces, and water bodies, and the heights of structures and trees.

(7) Identification of any characteristics which could create electrical interference, confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight.

(8) Any environmental document (initial study, draft environmental impact report, etc.) that may have been prepared for the project.

(9) Any staff reports regarding the project that may have been presented to local agency decision makers.

(10) Other relevant information which the Commission or its staff determine to be necessary to enable a comprehensive review of the proposal.

(b) Any applicable review fees as established by the ALUC per Policy 1.6.

2.4.2. ALUC Action Choices: When reviewing a major land use project proposal, the ALUC has three choices of action:

(a) Find the project consistent with the ALUCP.

(b) Find the project consistent with the ALUCP, subject to compliance with such conditions as the ALUC may specify. Any such conditions should be limited in scope and described in a manner that allows compliance to be clearly assessed (e.g., the height of a structure).

(c) Find the project inconsistent with the ALUCP. In making a finding of inconsistency, the ALUC shall note the specific conflicts upon which the determination is based.

2.4.3. Response Time: In responding to major land use actions submitted for review, the policy of the ALUC is that:

(a) When a major land use action is submitted for review on a mandatory basis as required by Policy 1.3.3:

(1) Reviews by the ALUC shall be completed within 30 days of when a complete application is submitted.

(2) The date of referral is deemed to be the date on which all applicable project submittal information as listed in Policy 2.4.1 is received by the ALUC.

(3) If the ALUC fails to make a determination within the above time periods, the proposed action shall be deemed consistent with the compatibility plan.

(4) Regardless of action or failure to act on the part of the ALUC, the proposed action still must comply with other applicable local, state, and federal laws and regulations.

(5) The referring agency shall be notified of the ALUC's action in writing.

2.4.4. ALUC Response to Notification of Proposed Overruling: If a local agency proposes to overrule an ALUC action regarding a major land use action for which ALUC review is mandatory, it must provide 45 days' notice to both the ALUC and the California Division of Aeronautics and these agencies then have 30 days in which to respond (PUC Section 21676.5(a)).

2.5. Ruling Conformation

2.5.1. Subsequent Review: The ALUC often reviews airport master plans, development plans, general plans, specific plans, ordinances, and land use action documents when they are in draft form.

(a) The ALUC reserves the right to reconfirm determinations made on a draft documents if material changes and/or

modifications have been made before the document is finalized.

(b) If the ALUC or local agency deems material changes and/or modifications have been made between the draft and final versions of a plan/ordinance/land use action that may affect the ALUC determination, the document must be submitted to the ALUC for reconfirmation.

(c) ALUC reconfirmation should be completed by staff within 30 days of when a final document is submitted for reconfirmation.

(d) If the ALUC fails to reconfirm or make a new determination within the 30-day period, the ALUC determination on the draft document will remain valid.

(e) Regardless of ALUC action or failure to act, the plan/ordinance/land use action must comply with other applicable local, state, and federal regulations and laws.

3.0 LAND USE ACTION COMPATIBILITY CRITERIA

3.1. Safety and Compatibility Criteria

The criteria for assessing whether a land use plan, ordinance, or development proposal is to be judged compatible, with respect to safety, with a nearby airport are set forth in the Safety Criteria matrix, **Table 3A**. These criteria are to be used in conjunction with the compatibility map and policies for each airport as presented in Section 5. The Safety Criteria matrix represents a compilation of compatibility criteria associated with each of the four types of airport impacts listed in Policy 1.4.1. For the purposes of reviewing

proposed amendments to community land use plans and zoning ordinances, as well as in the review of individual development proposals, the safety criteria in the matrix are anticipated to suffice. ALUC may refer to the supporting criteria, as listed in Sections 3.3 and 3.4, to clarify or supplement its review of such actions.

3.1.1. Safety and Compatibility Zones: There are six safety zones defined for each airport which include:

(a) Zone 1, Runway Protection Zone. Runway protection zones are trapezoidal-shaped areas located at ground level beyond each end of a runway. Ideally, each runway protection zone should be entirely clear of all objects. Places of worship, schools, hospitals, office buildings, shopping centers, and other places of public assembly, as well as fuel storage facilities and gas stations should be prohibited. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 1.

(b) Zone 2, Inner Approach/Departure Zone. This zone encompasses areas overflown at low altitudes, typically only 200 to 400 feet above runway elevation. Residential uses except on large, agricultural parcels should be prohibited. Nonresidential uses to activities which attract people (uses such as shopping centers, most eating establishments, theaters, meeting halls, multi-story office buildings, and labor-intensive manufacturing plants) should be prohibited. In addition, children's schools, day care centers, hospitals, nursing homes, and hazardous uses (e.g., aboveground bulk fuel storage and gas stations) should be prohibited. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 2.

**TABLE 3A
Safety Criteria Matrix**

Zone	Maximum Densities/Intensities/Required Open Land			Additional Criteria	
	Dwelling Units per Acre ¹	Maximum Non-residential Intensity ²	Req'd Open Land ³	Prohibited Uses ⁴	Other Development Conditions ⁵
Zone 1 (RPZ)	None	None	All unused	<ul style="list-style-type: none"> All structures except ones with location set by aeronautical function Assemblages of people Public & quasi-public services Objects exceeding 14 CFR Part 77 height limits Storage of hazardous materials Chemicals and allied products & storage Petroleum refining & storage Electrical & natural gas generation & switching Oil & gas extraction Natural gas & petroleum pipelines¹² Gas stations and fueling stations Waterways that create a bird hazard⁶ Hazards to flight⁶ New dumps and landfills or the expansion of existing dumps or landfills subject to applicable law and implementing advisories⁷ 	<ul style="list-style-type: none"> Avigation easement dedication
Zone 2 (IADZ)	1 d.u. per 10 acres	50 persons per acre	30%	<ul style="list-style-type: none"> Residential, except for very low residential Chemicals and allied products & storage Petroleum refining & storage Rubber & plastics Passenger terminals & stations Radio, TV & Telephone centers Electrical & natural gas generation & switching Oil & gas extraction Natural gas & petroleum pipelines¹² Gas stations and fueling stations Petroleum truck terminals Businesses & personal services: <ul style="list-style-type: none"> Hotels, motels, restaurants Public & quasi-public services: <ul style="list-style-type: none"> Children's schools, day care centers, libraries Hospitals, nursing homes Places of worship Schools Recreational uses: <ul style="list-style-type: none"> Athletic fields, playgrounds, & riding stables Theaters, auditoriums, & stadiums Waterways that create a bird hazard⁶ Hazards to flight⁶ New dumps and landfills or the expansion of existing dumps or landfills subject to applicable law and implementing advisories⁷ 	<ul style="list-style-type: none"> Avigation easement dedication Locate structures maximum distance from extended runway centerline Minimum NLR of 45 dB residences (including mobile homes) and office buildings⁹ Airspace review required for objects > 35 feet tall¹⁰
Zone 3 (ITZ)	1 d.u. per 5 acres	120 persons per acre	20%	Same as Zone 2	<ul style="list-style-type: none"> Same as zone 2
Zone 4 (OADZ)	1 d.u. per 5 acres	180 persons per acre	20%	<ul style="list-style-type: none"> Children's schools, day care centers, libraries Hospitals, nursing homes Bldgs. with >3 aboveground habitable floors Highly noise-sensitive outdoor nonresidential uses⁸ Waterways that create a bird hazard⁶ Hazards to flight⁶ New dumps and landfills or the expansion of existing dumps or landfills subject to applicable law and implementing advisories⁷ 	<ul style="list-style-type: none"> Minimum NLR of 25 dB in residences (including mobile homes) and office buildings⁹ Airspace review required for objects >70 feet tall¹¹

TABLE 3A (Continued)
Safety Criteria Matrix

Zone	Maximum Densities/Intensities/Required Open Land			Additional Criteria	
	Dwelling Units per Acre ¹	Maximum Non-residential Intensity ²	Req'd Open Land ³	Prohibited Uses ⁴	Other Development Conditions ⁵
Zone 5 (SSZ)	1 d.u. per 2 acres	160 persons per acre	25%	Same as Zone 2	Same as Zone 2
Zone 6 (AP)	None	No Limit	No Requirement	<ul style="list-style-type: none"> • Hazards to flight⁶ 	<ul style="list-style-type: none"> • Airspace review required for objects >70 feet tall¹¹
Zone 7 (TPZ)	No Limit	450 persons per acre	10%	<ul style="list-style-type: none"> • Waterways that create a bird hazard⁶ • Hazards to flight⁶ • New dumps and landfills or the expansion of existing dumps or landfills subject to applicable law and implementing advisories⁷ • Outdoor stadiums 	<ul style="list-style-type: none"> • Airspace review required for objects >100 feet tall¹¹
Zone 8 (AIA)	No Limit	No Limit	No Requirement	<ul style="list-style-type: none"> • Hazards to flight⁶ • New dumps and landfills or the expansion of existing dumps or landfills subject to applicable law and implementing advisories⁷ 	<ul style="list-style-type: none"> • Airspace review required for objects >100 feet tall¹¹

Notes:

- Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre (d.u./ac). Clustering of units is encouraged. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.
- Usage intensity calculations shall include the peak number of people per gross acre (e.g., employees, customers/visitors, etc.) who may be on the property at a single point in time, whether indoors or outside. Gross acreage includes the property at issue, plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.
- Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects.
- The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.
- As part of certain real estate transactions involving residential property within any compatibility zone (that is, anywhere within an airport influence area), information regarding airport proximity and the existence of aircraft overflights must be disclosed. This requirement is set by state law. Easement dedication and deed notice requirements indicated for specific compatibility zones apply only to new development and to reuse if discretionary approval is required.
- Hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds or other wildlife hazards to increase is also prohibited. Such uses (e.g., stormwater management facilities, other waterways, golf courses) are further detailed in FAA Advisory Circular 150/5200-33B or subsequent advisory (Hazardous Wildlife Attractants On or Near Airports).
- New dumps or landfills and the expansion of existing dumps or landfills are subject to FAA notification and review and are further subject to restrictions and conditions outlined in U.S. Code Title 49, Subtitle VII, Part A, Subpart iii, Chapter 447, Section 44718; 40 CFR Section 258.10; FAA Advisory Circular 150/5200-34A or subsequent advisory (Construction or Establishment of Landfills Near Public Airports); FAA Advisory Circular 150/5200-33B or subsequent advisory, (Hazardous Wildlife Attractants On or Near Airports).
- Examples of highly noise-sensitive outdoor nonresidential uses that should be prohibited include amphitheaters and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
- NLR = Noise Level Reduction, the outside-to-inside sound level attenuation that the structure provides.
- Objects up to 35 feet in height are permitted. However, the Federal Aviation Administration may require marking and lighting of certain objects.
- This height criterion is for general guidance. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not be obstructions.
- Natural gas & petroleum pipelines less than 36 inches below the surface.

RPZ	Runway Protection Zone	SSZ	Sideline Safety Zone
IADZ	Inner Approach/Departure Zone	AP	Airport Property
ITZ	Inner Turning Zone	TPZ	Traffic Pattern Zone
OADZ	Outer Approach/Departure Zone	AIA	Airport Influence Area

(c) Zone 3, Inner Turning Zone. Encompasses locations where aircraft are typically turning from the base to final approach legs of the standard traffic pattern and are descending from traffic pattern altitude. Zone 3 also includes the area where departing aircraft normally complete the transition from takeoff power and flap settings to a climb mode and have begun to turn to their en route heading. Residential uses should be limited to one dwelling unit per five acres in Zone 3. Nonresidential uses having moderate or higher usage intensities (e.g., major shopping centers, fast food restaurants, theaters, and meeting halls) are unacceptable. Children's schools, large day care centers, hospitals, nursing homes, and hazardous uses (e.g., aboveground bulk fuel storage and gas stations) should also be avoided in Zone 3. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 3.

(d) Zone 4, Outer Approach/Departure Zone. Zone 4 is situated along extended runway centerline beyond Zone 3. Approaching aircraft are usually at less than traffic pattern altitude in Zone 4. Residential uses should be limited to one dwelling unit per five acres in Zone 4. Children's schools, large day care centers, hospitals, nursing homes, and highly noise-sensitive nonresidential uses (amphitheaters, drive-in theaters, and nature preserves) should also be avoided in Zone 4. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 4.

(e) Zone 5, Sideline Safety Zone. Zone 5 encompasses close-in area lateral to runways, but not on airport property. The primary risk in Zone 5 is with aircraft losing directional control on takeoff. Prohibited land uses are similar to Zone 2. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 5.

(f) Zone 6, Airport Property Zone. This zone is further divided into Airport Building Areas and Aircraft Activity Areas. Airport Building Areas include terminal areas, fixed based operator buildings, hangars, tie-down areas, automobile parking areas, and areas planned for aviation uses. Airport buildings, aviation support facilities, hotels and motels, airport related commercial uses, offices, light industrial uses, and sewage facilities if they are constructed so as not to constitute a hazard are permitted in the Airport Building Area. Aircraft Activity Areas include runways, taxiways, and associated safety areas and setbacks per FAA regulations. All uses within the Aircraft Activity Areas must meet FAA regulations or be approved by the FAA. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 6.

(g) Zone 7, Traffic Pattern Zone. Zone 7 includes all other portions of regular aircraft traffic patterns and pattern entry routes. Outdoor stadiums and similar uses with very high intensities should be prohibited. In addition, hazards to flight (physical [e.g., tall objects], visual, and electronic forms of interference with the safety of aircraft operations) are also prohibited. **Table 3A** provides a complete list of prohibited uses and conditions for Zone 6.

(h) Zone 8, Airport Influence Area (AIA). Properties within the AIA are routinely subject to overflights by aircraft using public-use airports. Hazards to flight (physical [e.g., tall objects], visual, and electronic forms of interference with the safety of aircraft operations) are prohibited within the AIA. **Table 3A** provides a list of prohibited uses and conditions for the AIA.

3.2. Special Conditions

3.2.1. Infill: Where development not in conformance with the criteria set forth in this ALUCP already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the zone.

This exception does not apply within Zone 1.

(a) A parcel can be considered for infill development if it meets all of the following criteria plus the applicable provisions of either Sub-policy (b) or (c) below:

(1) The parcel size is no larger than 20.0 acres.

(2) At least 65% of the site's perimeter is bounded (disregarding roads) by existing uses similar to, or more intensive than, those proposed.

(3) The proposed project would not extend the perimeter of the area defined by the surrounding, already developed, incompatible uses.

(4) Further increases in the residential density, nonresidential usage intensity, and/or other incompatible design or usage characteristics (e.g., through use permits, density transfers, addition of second units on the same parcel, height variances, or other strategy) are prohibited.

(5) The area to be developed cannot previously have been set aside as open land in accordance with policies contained in this ALUCP unless replacement open land is

provided within the same compatibility zone.

(b) For residential development, the average development density (dwelling units per gross acre) of the site shall not exceed the lesser of:

(1) The average density represented by all existing lots that lie fully or partially within a distance of 300 feet from the boundary of the parcel to be divided; or

(2) Double the density permitted in accordance with the criteria for that location as indicated in the Compatibility Criteria matrix, **Table 3A**.

(c) For nonresidential development, the average usage intensity (the number of people per gross acre) of the site's proposed use shall not exceed the lesser of:

(1) The average intensity of all existing uses that lie fully or partially within a distance of 300 feet from the boundary of the proposed development; or

(2) Double the intensity permitted in accordance with the criteria for that location as indicated in the Compatibility Criteria matrix, **Table 3A**.

(d) Infill development on some parcels should not enable additional parcels to then meet the qualifications for infill. The ALUC's intent is that parcels eligible for infill be determined just once. Thus, in order for the ALUC to consider proposed development under these infill criteria, the entity having land use authority (San Joaquin County or affected cities) must first identify the qualifying locations in its general

plan or other adopted planning document approved by the ALUC. This action may take place in conjunction with the process of amending a general plan for consistency with the ALUC plan or may be submitted by the local agency for consideration by the ALUC at the time of initial adoption of this ALUCP. In either case, the burden for demonstrating that a proposed development qualifies as infill rests with the affected land use jurisdiction and/or project proponent.

3.2.2. Modifications to Nonconforming Uses: Existing uses (including a parcel or building), as defined in Section 1.2.13, not in conformance with this ALUCP may only be expanded as follows:

(a) Nonconforming residential uses may be expanded in building size provided that the more than 10 percent beyond the permitted project size and does not result in more dwelling units than currently exist on the parcel at the time of the adoption of this ALUCP (a bedroom could be added, for example, but a separate dwelling unit could not be built unless the property owner is entitled development by right [See Policy 3.2.4]).

(b) A nonconforming nonresidential development may be continued, leased, or sold and the facilities may be maintained or altered (including potentially enlarged), provided that the portion of the site devoted to the nonconforming use is not expanded and the usage intensity (the number of people per acre) is not increased above the levels existing at the time of adoption of this ALUCP. For further guidance on the expansion of uses that may represent potential flight hazards, please see Sections 3.4.6 (Other Flight Hazards) and 3.4.5 (FAA Notification).

(c) Factors to be considered for any proposed expansion of a nonconforming use

(in terms of the site size or the number of dwelling units or people on the site) include whether the development qualifies as infill (Policy 3.2.1) or warrants approval because of other special conditions (Policy 3.2.6).

(d) If a non-conforming use is abandoned or altered beyond what is specified in sections (a) and (b) above, all non-conforming restored land uses must conform to ALUCP policies.

3.2.3. Reconstruction of Nonconforming Use: An existing nonconforming development that has been fully or partially destroyed as the result of a calamity may be rebuilt only under the following conditions:

(a) Nonconforming residential uses may be rebuilt provided that the expansion does not result in more dwelling units than existed on the parcel at the time of the damage.

(b) A nonconforming nonresidential development may be rebuilt provided that it has been only partially destroyed and that the reconstruction does not increase the floor area of the previous structure or result in an increased intensity of use (i.e., more people per acre). Partial destruction shall be considered to mean damage that can be repaired at a cost of no more than 75% of the assessor's full cash value of the structure at the time of the damage.

(c) Any nonresidential use that has been more than 75% destroyed must comply with all applicable standards herein when reconstructed.

(d) Reconstruction under paragraphs (a) or (b) above must begin within 24 months of the date the damage occurred.

(e) The above exceptions do not apply within Zone 1 or where such reconstruction would be in conflict with a county or city general plan or zoning ordinance.

(f) Nothing in the above policies is intended to preclude work required for normal maintenance and repair.

3.2.4. Development by Right: Nothing in these policies prohibits:

(a) Construction of a single-family home, including a second unit as defined by state law, on a legal lot of record if such use is permitted by local land use regulations.

(b) Construction of other types of uses if local government approvals qualify the development as effectively existing (see Policy 1.2.13 for definition).

(c) Lot line adjustments provided that new developable parcels would not be created and the resulting gross density or intensity of the affected property would not exceed the applicable criteria indicated in the Compatibility Criteria matrix, **Table 3A**.

3.2.5. Parcels Lying within Two or More Compatibility Zones: For the purposes of evaluating consistency with the compatibility criteria set forth herein, any parcel that is split by compatibility zone boundaries shall be considered as if it were multiple parcels divided at the compatibility zone boundary line. However, the density or intensity of development allowed within the more restricted portion of the parcel can (and is encouraged to) be transferred to the less restricted portion.

3.2.6. Other Special Conditions: The compatibility criteria set forth in this ALUCP are intended to be applicable to all locations within each airport's influence area. However, it is recognized that there may

be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site.

(a) After due consideration of all the factors involved in such situations, the ALUC may find a normally incompatible use to be acceptable.

(b) In reaching such a decision, the ALUC shall make specific findings as to why the exception is being made and that the land use will not create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed use. Findings also shall be made as to the nature of the extraordinary circumstances that warrant the policy exception.

(c) The burden for demonstrating that special conditions apply to a particular development proposal rests with the project proponent and/or the referring agency, not with the ALUC.

(d) The granting of a special conditions exception shall be considered site specific and shall not be generalized to include other sites.

(e) Special conditions that warrant general application in all or part of the influence area of one airport, but not at other airports, are set forth in following sections of this ALUCP.

3.3. Noise

The purpose of noise compatibility policies is to avoid establishment of noise-sensitive land uses in the portions of airport environs that are exposed to significant levels of aircraft noise. The evaluation of

airport/land use noise compatibility shall consider both the current and future CNEL contours of each airport as depicted in Chapter Two of this ALUCP. At most airports in the county, anticipated growth in aircraft operations results in projected future noise contours being larger than current ones. However, in some instances, factors such as introduction of a quieter aircraft fleet mix, planned changes to the configuration of airport runways, or expected modifications to flight procedures can result in current contours being larger than the future contours in some or all of the airport environs. In these cases, a composite of the contours for the two time frames shall be considered in compatibility analyses.

Projected noise contours included in Chapter Two are calculated based upon forecasted aircraft activity as indicated in an airport master plan or that is considered by the ALUC to be plausible (refer to activity data in Appendix A). The ALUC or the entities that operate airports in San Joaquin County should periodically review these projected noise level contours and update them if appropriate.

The locations of CNEL contours are among the factors used to determine land use compatibility. The depicted noise contour boundaries, however, are not absolute determinants of the compatibility. The inherent variability of aircraft flight paths and pilot training that occur at the airport all influence noise emissions in the vicinity of airports. This variability in aircraft flight paths and training activity can create significant single event noise levels that can be disruptive to noise-sensitive land uses.

A commonly used method for determining the potential impact of single events on residential areas is to use sleep disturbance. The Federal Interagency Committee

on Aviation Noise (FICAN) recommends using a 10 percent awakening value associated with indoor sound exposure levels (SEL) of 80 decibels (dB). The typical home with the windows closed attenuates exterior noise approximately 15 dB. Therefore, the 95 dB SEL will be used to identify noise-sensitive areas (residential, hospitals, hotels, and motels) that require disclosure for potential of sleep disruption from aircraft overflights.

3.3.1. Application of Noise Contours: The locations of CNEL contours are among the factors used to define compatibility zone boundaries and criteria. Because of the inherent variability of flight paths and other factors that influence noise emissions, the depicted contour boundaries are not absolute determinants of the compatibility or incompatibility of a given land use on a specific site or a portion thereof. Noise contours can only quantify noise impacts in a general manner.

3.3.2. Noise Exposure in Residential Areas: Unless otherwise indicated in the airport-specific policies listed in the next section, the maximum CNEL considered normally acceptable for new residential land uses in the vicinity of the airports covered by this ALUCP is 60 CNEL. These standards shall be based upon noise contours calculated as described above.

3.3.3. Noise Exposure for Other Land Uses: Noise level compatibility standards for other types of land uses shall be applied in the same manner as the above residential noise level criteria. The extent of outdoor activity associated with a particular land use is an important factor to be considered in evaluating its compatibility with airport noise. Examples of acceptable noise levels for other land uses in an airport's vicinity are presented in **Table 3B**.

TABLE 3B Noise Compatibility Criteria					
	SEL	CNEL			
	95	55-60	60-65	65-70	70-75
RESIDENTIAL					
Single-family, duplex, multi-family, manufactured housing	Y[1]	Y[1,2,3]	Y[1,2,4]	N	N
Manufactured housing	Y[1]	Y[1,2]	N	N	N
PUBLIC FACILITIES					
Education facilities	Y	Y[1,2,3]	Y[1,2,4]	N	N
Religious facilities, libraries, museums, galleries, clubs and lodges	Y	Y[1,2,3]	Y[1,2,4]	N	N
Outdoor sport events, entertainment and public assembly except amphitheaters	Y	Y	Y	N	N
Indoor recreation, amusements, athletic clubs, gyms and spectator events, parks, outdoor recreation: tennis, golf courses, riding trails, etc	Y	Y	Y	Y	Y
COMMERCIAL					
Hotels/motels	Y[1]	Y[1,2,3]	Y[1,2,4]	N	N
Hospitals and other health care Services	Y[1]	Y[1,2,3]	Y[1,2,4]	N	N
Services: finance, real estate, insurance, professional and government offices	Y	Y	Y	Y[1]	Y[1]
Retail sales: building materials, farm equipment, automotive, marine, mobile homes, recreational vehicles and accessories	Y	Y	Y	Y[1]	Y[1]
Restaurants, eating and drinking Establishments	Y	Y	Y	Y[1]	Y[1]
Retail sales: general merchandise, food, drugs, apparel, etc.	Y	Y	Y	Y[1]	Y[1]
Personal services: barber and beauty shops, laundry and dry cleaning, etc.	Y	Y	Y	Y[1]	Y[1]
Automobile service stations/gas stations	Y	Y	Y	Y	Y
Repair services	Y	Y	Y	Y	Y[1]
INDUSTRIAL					
Processing of food, wood and paper products; printing and publishing; warehouses, wholesale and storage activities	Y	Y	Y	Y	Y

TABLE 3B (Continued) Noise Compatibility Criteria					
	SEL	CNEL			
	95	55-60	60-65	65-70	70-75
Refining, manufacturing and storage of chemicals, petroleum and related products, manufacturing and assembly of electronic components, etc.	Y	Y	Y	Y	Y
Manufacturing of stone, clay, glass, leather, gravel and metal products; construction and salvage yards; natural resource extraction and processing, agricultural, mills and gins	Y	Y	Y	Y	Y
AGRICULTURE					
Animal husbandry, livestock farming, breeding and feeding; plant nurseries (excluding retail sales)	Y	Y	Y	Y	Y[1]
Farming (except livestock)	Y	Y	Y	Y	Y
<p>1 The following fair disclosure statement is required as a condition of development approval or building permit issuance. NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.</p> <p>2 Avigation easement required as a condition of development approval or building permit issuance.</p> <p>3 Sound insulation required to reduce interior to exterior noise levels by at least 20dB.</p> <p>4 Sound insulation required to reduce interior to exterior noise levels by at least 25dB.</p>					

3.3.4. Interior Noise Levels: Land uses for which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria.

(a) The maximum, aircraft-related, interior noise level that shall be considered acceptable for land uses near airports is 45 dB CNEL in:

- Any habitable room of single- or multi-family residences;
- Hotels and motels;
- Hospitals and nursing homes;
- Religious, meeting halls, theaters, and mortuaries;
- Office buildings; and
- Schools, libraries, and museums.

(b) The noise contours depicted in Chapter Two of this ALUCP shall be used in calculating compliance with these criteria. The calculations should assume that windows are closed.

(c) When reviewed as part of a general plan or zoning ordinance amendment or as a major land use action, evidence that proposed structures will be designed to comply with the above criteria shall be submitted to the ALUC under the following circumstances:

- (1) Any mobile home situated within an airport's 55-dB CNEL contour. [A typical manufactured home has an average exterior-to-interior noise level reduction

(NLR) of approximately 15 dB with windows closed.]

(2) Any single- or multi-family residence situated within an airport's 60 CNEL contour. [Wood frame buildings constructed to meet current standards for energy efficiency typically have an average NLR of approximately 20 dB with windows closed.]

(3) Any hotel or motel, hospital or nursing home, church, meeting hall, office building, religious facility, school, library, or museum situated with an airport's 65-dB CNEL contour.

3.3.5. Construction of New or Expanded Airports or Heliports:

Any proposed construction of a new airport or heliport or expansion of facilities at an existing airport or heliport which would result in a significant increase in cumulative noise exposure (measured in terms of CNEL) shall include measures to reduce the exposure to a less-than-significant level. For the purposes of this plan, a noise increase shall be considered significant if:

(a) In locations having an existing ambient noise level of less than 60 CNEL, the project would increase the noise level by 5.0 CNEL or more.

(b) In locations having an existing ambient noise level of between 60 and 65 CNEL, the project would increase the noise level by 3.0 CNEL or more.

(c) In locations having an existing ambient noise level of more than 65 CNEL, the project would increase the noise level by 1.5 CNEL or more.

3.4. Airspace Protection

Tall structures, trees, and other objects, particularly when located near airports or on high terrain, may constitute hazards to aircraft in flight. Federal regulations establish the criteria for evaluating potential obstructions. These regulations also require that the Federal Aviation Administration be notified of proposals for creation of certain such objects. The FAA conducts aeronautical studies of these objects and determines whether they would be hazards, but it does not have the authority to prevent their creation. The purpose of ALUC airspace protection policies, together with regulations established by local land use jurisdictions and the state government, is to ensure that hazardous obstructions to the navigable airspace do not occur.

3.4.1. Basis for Height Limits: The criteria for limiting the height of structures, trees, and other objects in the vicinity of an airport shall be based upon: Part 77, Subpart C, of the CFR; the United States Standard for Terminal Instrument Procedures (TERPS); and applicable airport design standards published by the Federal Aviation Administration. Airspace plans depicting the critical areas for airspace protection around each of the airports covered by this ALUCP are depicted in the next section.

3.4.2. ALUC Review of Height of Proposed Objects: Based upon FAA criteria, proposed objects that would exceed the heights indicated below for the respective compatibility zones potentially represent airspace obstructions issues. Development proposals that include any such objects shall be reviewed by the ALUC. Objects of lesser height normally would not have a potential for being airspace obstructions and therefore do not require ALUC review

with respect to airspace protection criteria (noise, safety, and overflight concerns may still be present). Caution should be exercised, however, with regard to any object more than 50 feet high proposed to be located on a site that is substantially higher than surrounding terrain.

(a) Within Zone 1, the height of any proposed development, including vegetation, requires review.

(b) Within Zones 2, 3, 5, and 6, ALUC review is required for any proposed object taller than 35 feet AGL unless the airport controls an easement on the land on which the object is to be located and grants a waiver to height restrictions.

(c) Within Zone 4, ALUC review is required for any proposed object taller than 70 feet AGL.

(d) Within Zone 7 and AIA, ALUC review is required for any proposed object taller than 100 feet AGL.

3.4.3. Height Restriction Criteria: The height of objects within the influence area of each airport shall be reviewed, and restricted if necessary, according to the following criteria. The locations of these zones are depicted on the respective Compatibility Map for each airport.

(a) Within Zone 1, the height of all objects shall be limited in accordance with applicable Federal Aviation Administration criteria including CFR Part 77, TERPS, and/or airport design standards.

(b) Within Zones 2, 3, 5, and 6:

(1) Objects up to 35 feet AGL tall are acceptable and do not require ALUC review for the purposes of height factors.

(2) ALUC review is required for any proposed object taller than 35 feet AGL.

(3) Federal Aviation Administration review may be necessary for proposed objects adjacent to the runway edges and the FAA may require marking and lighting of certain objects (the affected areas are generally on airport property).

(c) Within Zone 4, generally, there is no concern with regard to any object up to 70 feet AGL tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet AGL taller than other nearby objects.

(d) Within Zone 7 and AIA, generally, there is no concern with regard to any object up to 100 feet AGL tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet AGL above the ground.

3.4.4. Avigation Easement Dedication: As a condition for development approval, the owner of any property proposed for development within Zones 1, 2, 3, 4, and 5 shall be required to dedicate an avigation easement to the entity owning the affected airport. The avigation easement shall:

(a) Provide the right of flight in the airspace above the property;

(b) Allow the generation of noise and other impacts associated with aircraft overflight;

(c) Restrict the height of structures, trees and other objects;

(d) Permit access to the property for the removal or aeronautical marking of

objects exceeding the established height limit; and

(e) Prohibit electrical interference, glare, and other potential hazards to flight from being created on the property. An example of an aviation easement is provided in Appendix D.

3.4.5. FAA Notification: Proponents of a project involving objects that may exceed a CFR Part 77 surface must notify the Federal Aviation Administration as required by CFR Part 77, Subpart B, and by the PUC, Sections 21658 and 21659. (Notification to the Federal Aviation Administration under CFR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations. Refer to Appendix D for the specific FAA notification requirements.)

(a) Local jurisdictions shall inform project proponents of the requirements for notification to the FAA.

(b) The requirement for notification to the FAA shall not necessarily trigger an airport compatibility review of an individual project by the ALUC if the project is otherwise in conformance with the compatibility criteria established herein.

(c) FAA review is required for any proposed structure more than 200 feet above the surface level of its site. All such proposals also shall be submitted to the ALUC for review regardless of where in the county they would be located.

(d) Any project submitted to the ALUC for airport land use compatibility review for reason of height-limit issues shall include a copy of the CFR Part 77 notification to the Federal Aviation Administration and the FAA findings if available.

In addition, FAA notification is required for owners or operators proposing to site new, or expand existing, Municipal Solid Waste Landfills (MSWLFs) within a five-mile radius of any airport runway (CFR 40, Subchapter 1, Part 258, Subpart B, Section 258.10). FAA Form 7460-1, Notice of Proposed Construction or Alteration, or other suitable document similar to FAA Form 7460-1, may be used to notify the appropriate FAA Regional Airports Division Office of a planned siting or expansion of a MSWLF, as well as other potential wildlife attractants.

3.4.6. Other Flight Hazards: New land uses that may cause visual, electronic, or increased bird strike hazards to aircraft in flight shall not be permitted within any airport's influence area. Specific characteristics to be avoided include:

(a) Glare or distracting lights which could be mistaken for airport lights;

(b) Sources of dust, steam, or smoke which may impair pilot visibility;

(c) Sources of electrical interference with aircraft communications or navigation; and

(d) Any proposed use, especially landfills and certain agricultural uses, that creates an increased attraction for large flocks of birds. (Refer to FAA Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports* and Advisory Circular 150/5200-34A, *Construction or Establishment of Landfills Near Public Airports* or the latest version of these advisory circulars.)

3.5. Overflight

Noise from individual operations, especially by comparatively loud aircraft, can be intrusive and annoying in locations beyond the limits of the mapped noise contours. Sensitivity to aircraft overflights varies from one person to another. The purpose of overflight compatibility policies is to help notify people about the presence of overflights near airports so that they can make more informed decisions regarding acquisition or lease of property in the affected areas. Overflight compatibility is particularly important with regard to residential land uses.

3.5.1. State Law Requirements Regarding Real Estate Transfer Disclosure: Effective January 1, 2004, California State statutes (Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353) require as part of residential real estate transactions that information be disclosed regarding whether the property is situated within an airport influence area.

(a) With certain exceptions, these state requirements apply both to the sale or lease of newly subdivided lands and to the sale of existing residential property.

(b) The statutes define an *airport influence area* as “the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission.” The airport influence area for each of the airports in San Joaquin County subject to this ALUCP is indicated on that airport’s compatibility map contained in Section 5.

(c) Where disclosure is required, the following statement shall be provided:

NOTICE OF AIRPORT IN VICINITY:
This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

(d) For the purposes of this ALUCP, the above real estate disclosure provisions of state law shall continue in effect as ALUC policy with respect to new development even if the law is rescinded. Furthermore, each land use jurisdiction affected by this ALUCP should adopt a policy designating the airport influence area as the area wherein disclosure of airport influences is required in conjunction with the transfer of residential real estate. Such local jurisdiction policies also should be applied to lease or rental agreements for existing residential property.

4.0 AIRPORT DEVELOPMENT ACTION COMPATIBILITY CRITERIA

4.1. Criteria for Master or Development Plans of Existing Airports

4.1.1. What is Reviewed: When reviewing airport master plans or development plans for existing airports, the ALUC shall determine whether activity forecasts or proposed facility development identified in

the plan differ from the forecasts and development assumed for that airport in this ALUCP. Attention should specifically focus on:

(a) Activity forecasts that are:

(1) significantly higher than those in the ALUCP; or that

(2) include a higher proportion of larger or noisier aircraft.

(b) Proposals to:

(1) construct a new runway or helicopter takeoff and landing area;

(2) change the length, width, or landing threshold location of an existing runway; or (3) establish an instrument approach procedure.

4.1.2. Noise Impacts of Expanded Existing Airports or Heliports: Any proposed expansion of facilities at an existing airport or heliport that would result in a significant increase in cumulative noise exposure (measured in terms of CNEL) shall include measures to reduce the exposure to a less-than-significant level. For the purposes of this plan, a noise increase shall be considered significant if:

(a) In locations having an existing ambient noise level of less than 55 CNEL, the project would increase the noise level by 5.0 CNEL or more.

(b) In locations having an existing ambient noise level of between 55 and 60 CNEL, the project would increase the noise level by 3.0 CNEL or more.

(c) In locations having an existing ambient noise level of more than 60 CNEL, the

project would increase the noise level by 1.5 CNEL or more.

4.1.3. Consistency Determination: The ALUC shall determine whether the proposed airport plan or development plan is consistent with the ALUCP. The ALUC shall base its determination of consistency on;

(a) Findings that the forecasts and development identified in the airport plan would not result in greater noise, overflight, and safety impacts or height restrictions on surrounding land uses than are assumed in the ALUCP.

(b) A determination that any non-aviation development proposed for locations within the airport boundary (excluding federal- or state-owned property) will be consistent with the compatibility criteria and policies indicated in this ALUCP with respect to that airport (see Policy 3.1.1(f) and **Table 3A**).

4.2. Criteria for Proposed New Airports or Heliports

4.2.1. What is Reviewed: In reviewing proposals for new airports and heliports, the ALUC shall focus on the noise, safety, airspace protection, and overflight impacts upon surrounding land uses.

(a) Other types of environmental impacts (e.g., air quality, water quality, natural habitats, vehicle traffic, etc.) are not within the scope of Commission review.

(b) The Commission shall evaluate the adequacy of the proposed facility design (in terms of federal and state standards) only to the extent that the design affects surrounding land use.

(c) The Commission must base its review on the proposed airfield design. The Commission does not have the authority to require alterations to the airfield design.

4.2.2. Airport/Land Use Relationships:

The review shall examine the relationships between existing and planned land uses in the vicinity of the proposed airport or heliport and the impacts that the proposed facility would have upon these land uses.

(a) Questions to be considered should include:

(1) Would the existing or planned land uses be considered incompatible with the airport or heliport if the latter were already in existence?

(2) What measures are included in the airport or heliport proposal to mitigate the noise, safety, airspace protection, and overflight impacts on surrounding land uses? Such measures might include:

- Location of flight tracks so as to minimize the impacts;
- Other operational procedures to minimize impacts;
- Installation of noise barriers or structural noise insulation;
- Acquisition of property interests (fee title or easements) on the impacted land.

13(b) The noise impact assessment criteria listed in Policy 4.1.2 with respect to airport expansion projects shall also be considered with regard to the review of new airport development.

5.0 AIRPORT COMPATIBILITY MAPS

The compatibility maps in this section provide a connection between the San Joaquin County compatibility criteria outlined in previous sections and features of each individual airport. The information used to develop the compatibility zones boundaries are can be found in Chapter Two, Appendix A, and Appendix C.



Byron Airport

5.1 Byron Airport

5.1.1. Airport Management: Byron Airport is owned and operated by Contra Costa County, California.

5.1.2. Airport Configuration: Byron Airport is served by two runways. Runway 5-23 is 3,000 feet long and 75 feet wide, and is oriented to the northeast and southwest. Runway 12-30 is 4,500 feet long and 100 feet wide, and aligned to the northwest and southeast. The 1986 Airport Master Plan for Byron Airport includes a 1,500-foot extension to Runway 12-30 and a 900-foot extension to Runway 5-23.

5.1.3 Airport Activity: The 20-year aircraft operations forecast for Byron Airport is anticipated to grow from 60,500 to 190,200.

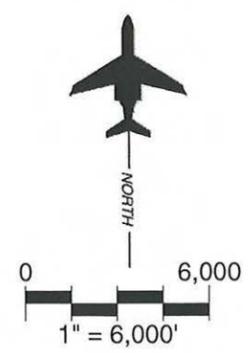
5.1.4. Additional Compatibility Policies: Byron Airport is located in Contra Costa County. The San Joaquin County ALUC forwards all San Joaquin County-based projects that lie within any of Bryon Airport's safety zones to the Contra Costa County ALUC. Project applicant must coordinate with Contra Costa County ALUC to ensure their project aligns with the safety measures set by Bryon's Airport Land Use Compatibility Plan.



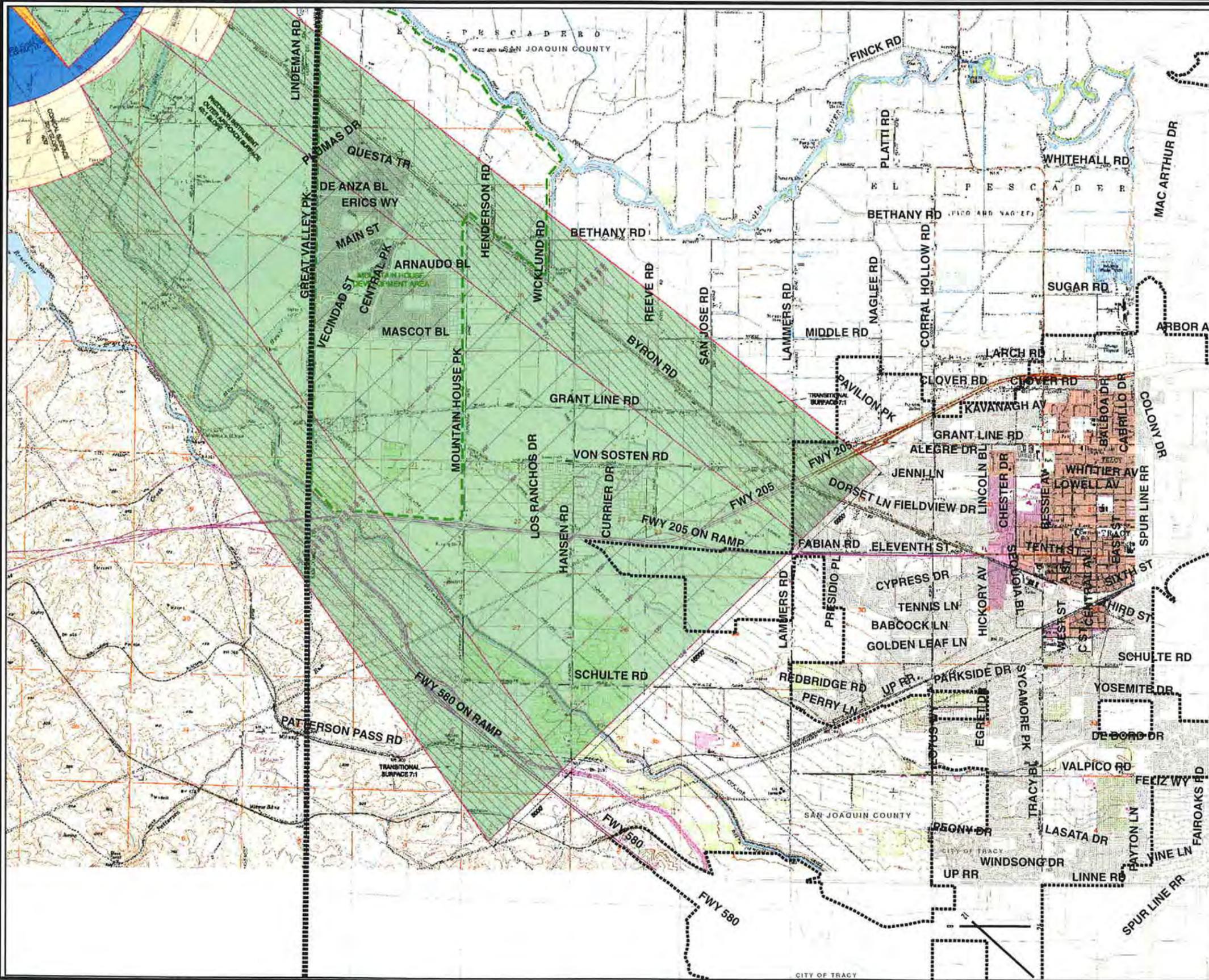
LEGEND

- Airport Property
- Municipal Boundary
- County Boundary
- Airport Influence Area

Source: Contra Costa County Airport Land Use
 Compatibility Plan, December 2000.
 Byron Airport Master Plan, June 2005.



07SP13-3BA3-03/16/09



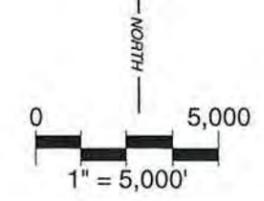
LEGEND

- Airport Property
- Municipal Boundary
- County Boundary

14 CFR PART 77 SURFACES

- Conical Surface
- Horizontal Surface
- Approach Surface
- Transitional Surface

Source: Byron Airport Master Plan, Prepared by Leigh Fisher Associates in association with The Hoyt Company and T.Y. Lin International/CCS, June 2005.





Kingdon Airpark

5.2 Kingdon Airpark

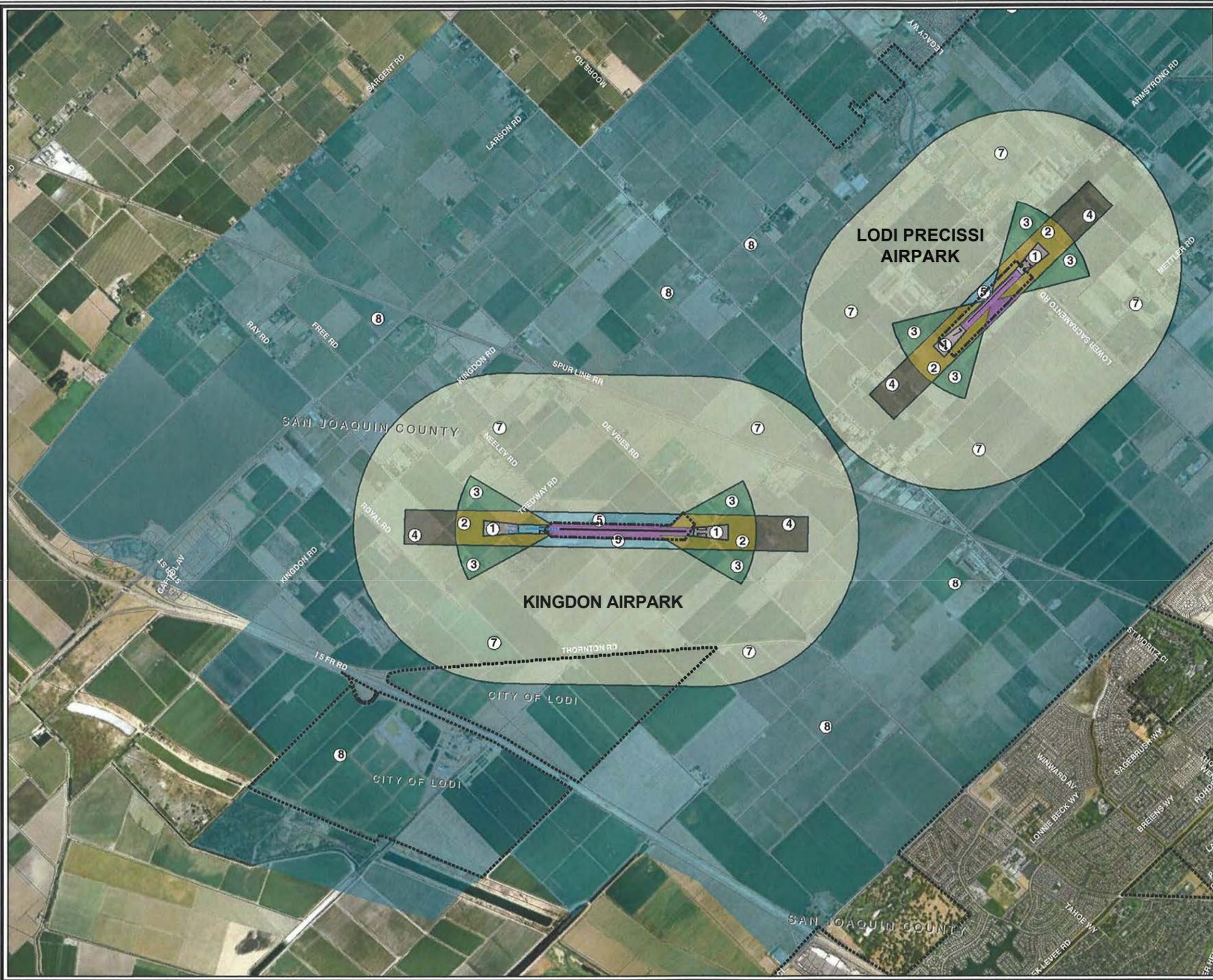
5.2.1. Airport Management: Kingdon Airpark is privately owned and open to the public.

5.2.2. Airport Configuration: Kingdon Airpark currently has one runway that measures 3,705 feet in length oriented to the northwest/southeast. Based on discussions with the airport owners, future airport facility plans include a 1,000-foot extension of the runway to the northwest.

5.2.3. Airport Activity: The 20-year forecast, based on an interview with airport management, is anticipated to increase from 24,272 to 84,500 annual operations.

5.2.4. Additional Compatibility Policies: This section is reserved.

07SP13-3KA1-10/30/08



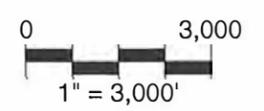
LEGEND

- Airport Property
- Municipal Boundary

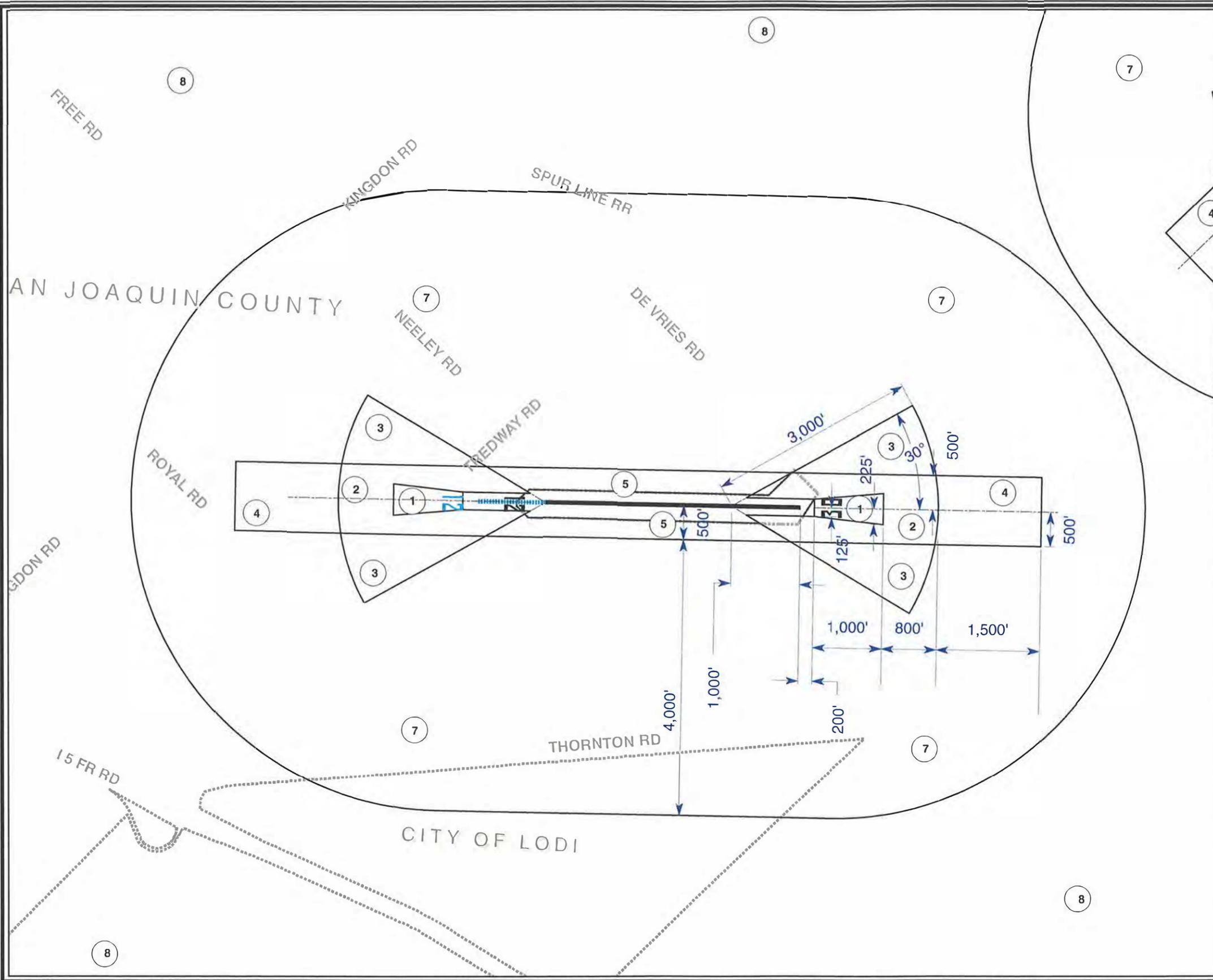
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3KA2-03/06/09



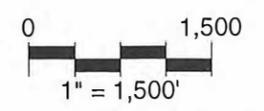
LEGEND

- Airport Property
- Municipal Boundary

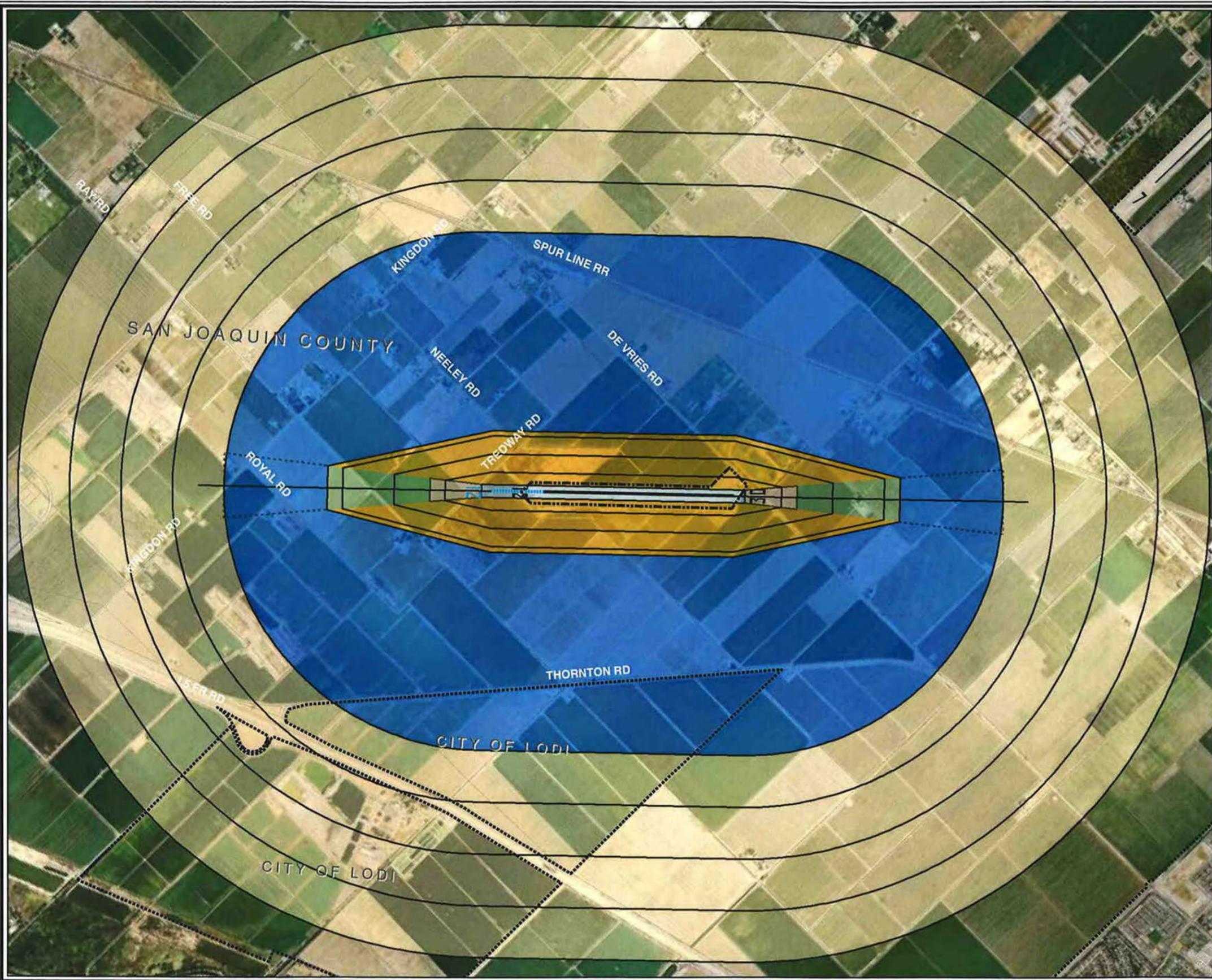
COMPATIBILITY ZONES

- (1) Runway Protection Zone
- (2) Inner Approach/Departure Zone
- (3) Inner Turning Zone
- (4) Outer Approach/Departure Zone
- (5) Sideline Safety Zone
- (6) Airport Property
- (7) Traffic Pattern Zone
- (8) Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3KA3-10/30/08



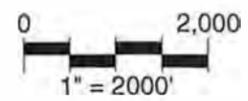
LEGEND

- Airport Property
- Municipal Boundary

14 CFR PART 77 SURFACES

- Conical Surface
- Horizontal Surface
- Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Lodi Airport

5.3 Lodi Airport

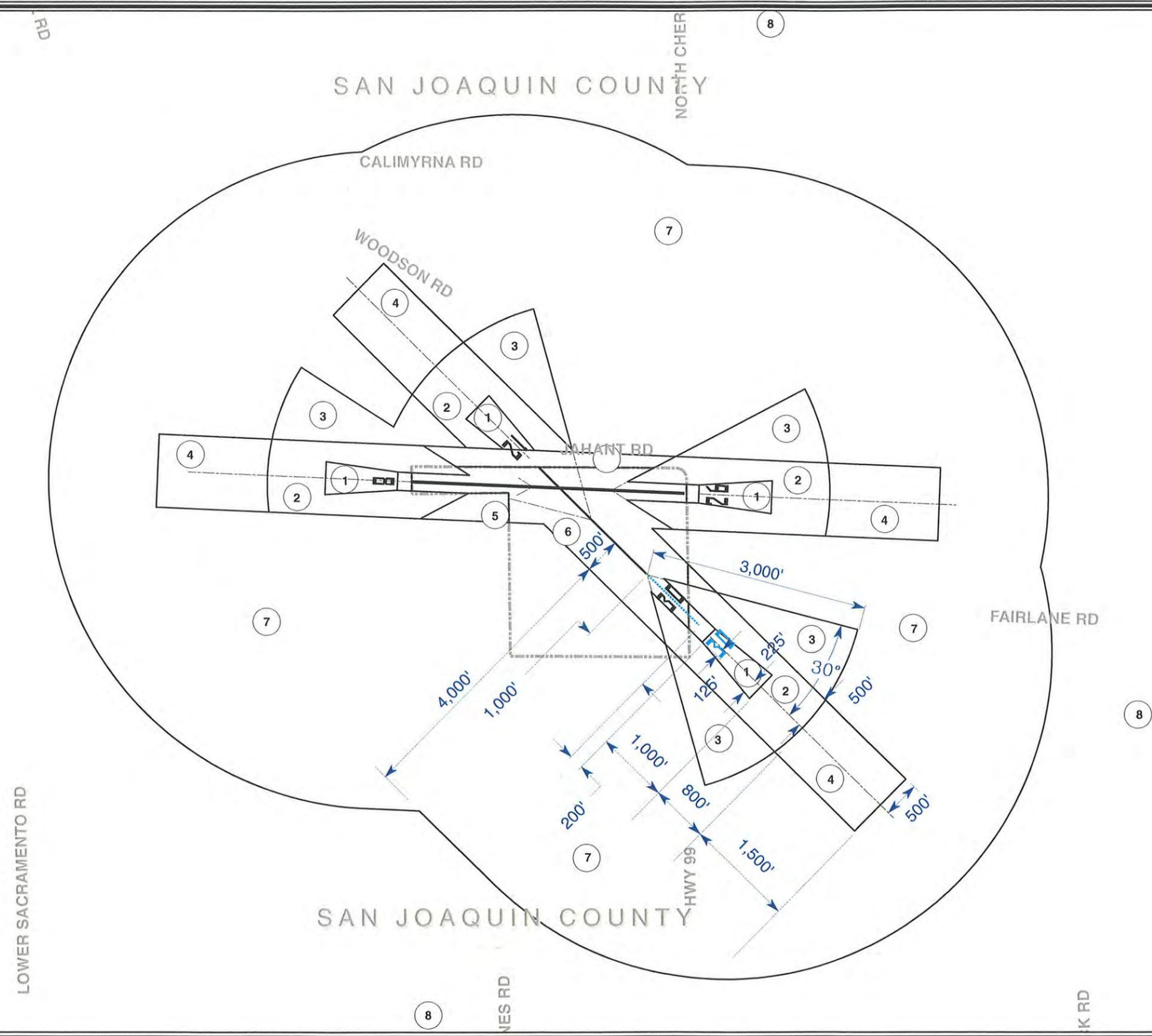
5.3.1. Airport Management: Lodi Airport is privately owned and open to the public.

5.3.2. Airport Configuration: Lodi Airport is served by Runway 8-26 (3,085 feet long) and Runway 12-30 2,070 feet long). Based on discussions with the airport owner, future airport facility plans include a 1,000-foot extension of Runway 12 to the southeast.

5.3.3. Airport Activity: The 20-year forecast, based on an interview with airport owner, is anticipated to increase from 36,000 to 78,800 annual operations.

5.3.4. Additional Compatibility Policies: This section is reserved.

07SP13-31_A2-03/06/09



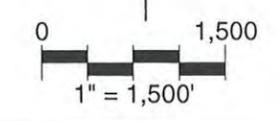
LEGEND

- Airport Property
- Municipal Boundary

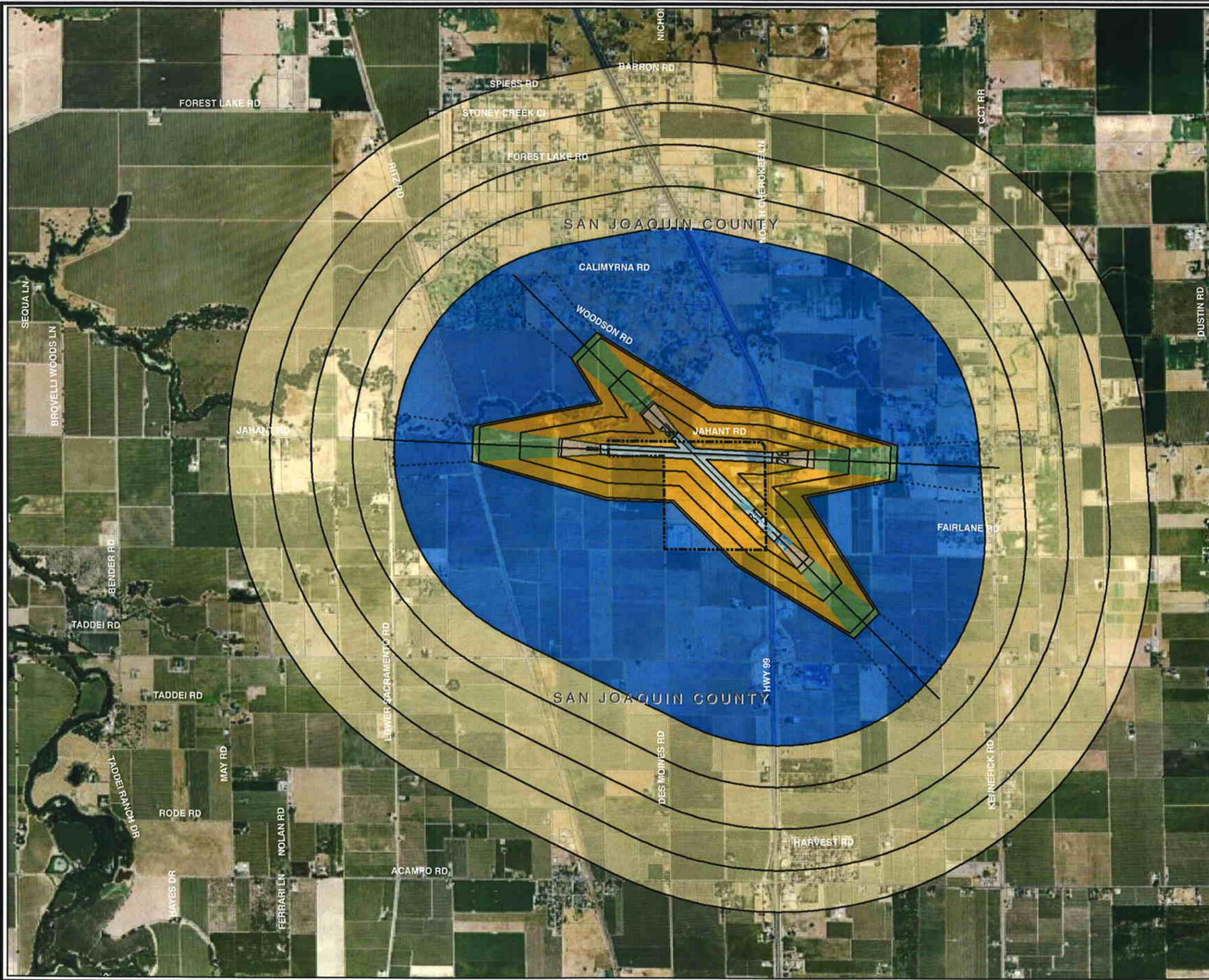
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-31.A3-10/30/08



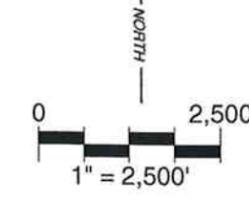
LEGEND

- Airport Property
- Municipal Boundary

14 CFR PART 77 SURFACES

- Conical Surface
- Horizontal Surface
- Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Lodi (Precissi) Airpark

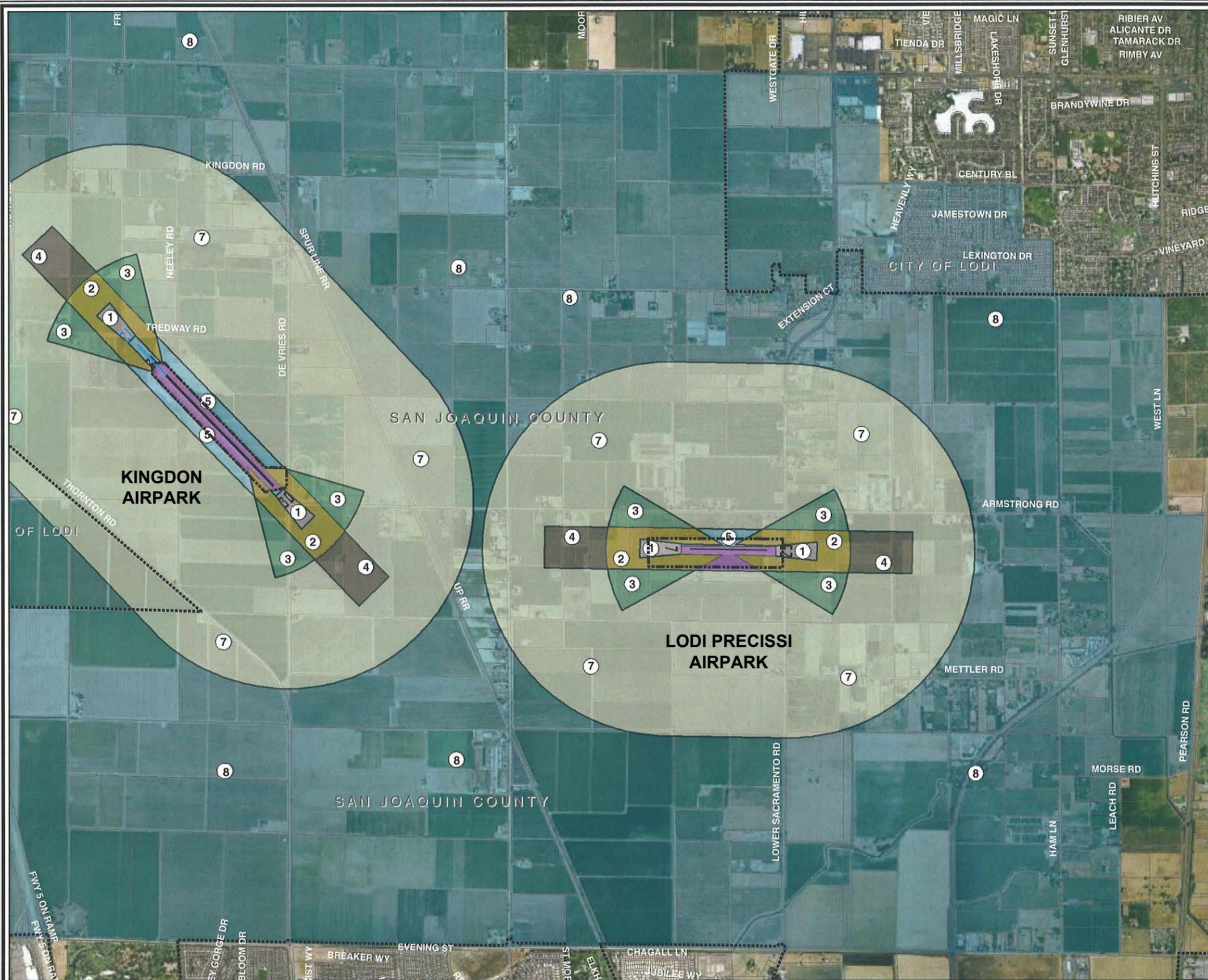
5.4 Lodi (Precissi) Airpark

5.4.1. Airport Management: Lodi (Precissi) Airpark is privately owned and open to the public.

5.4.2. Airport Configuration: Lodi Airpark is served by Runway 7-25, which is 1,875 feet long and oriented to the east and west. There are no plans for a runway extension or additional runways.

5.4.3. Airport Activity: The 20-year forecast, based on an interview with airport owner, is anticipated to increase from 6,000 to 12,000 annual operations.

5.4.4. Additional Compatibility Policies: This section is reserved.



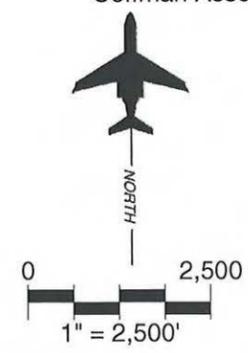
LEGEND

- Airport Property
- Municipal Boundary

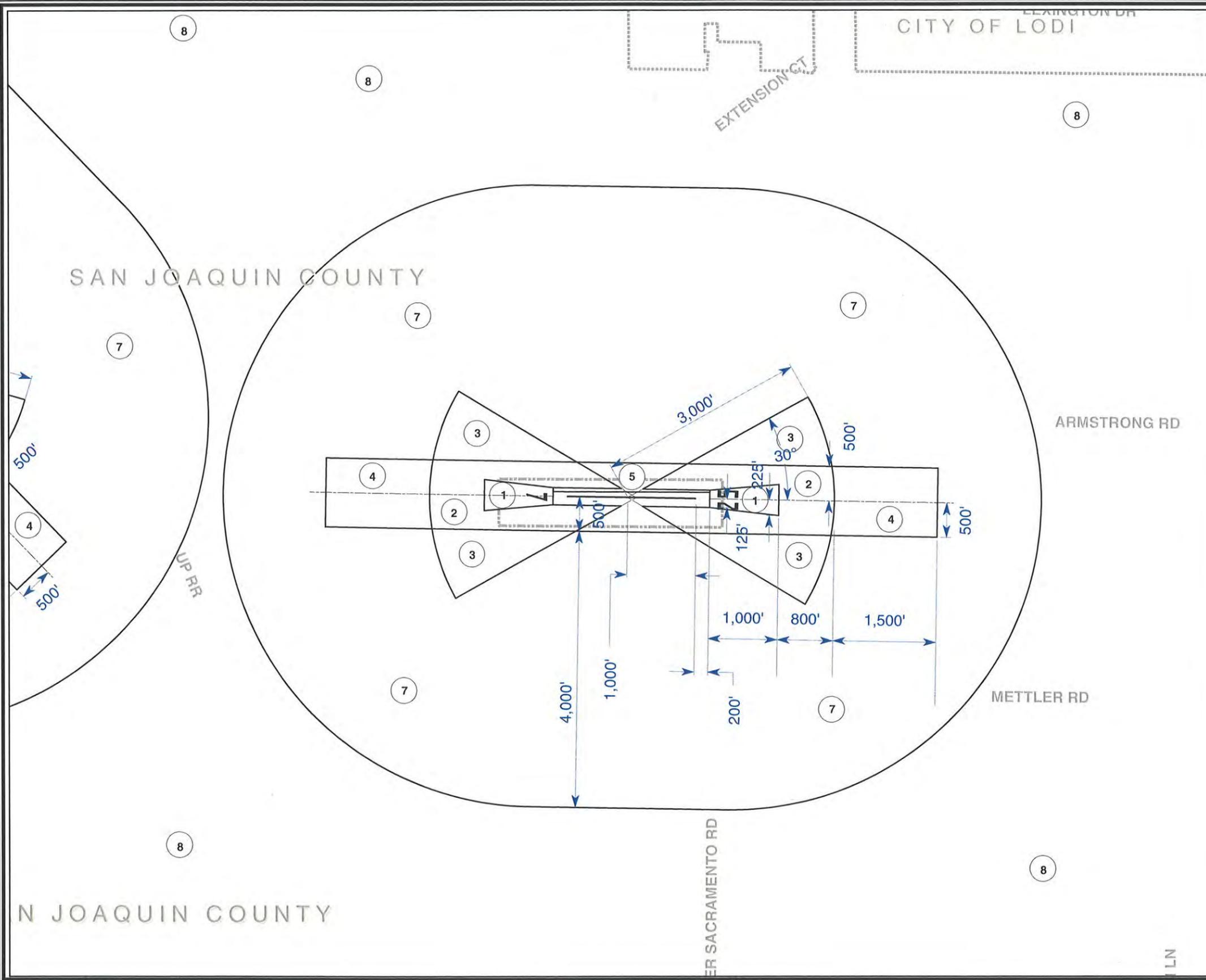
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-31.P2-03/06/09



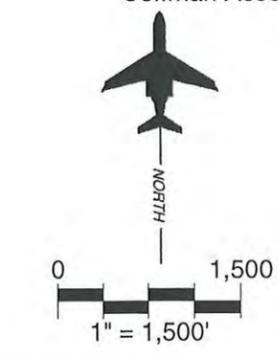
LEGEND

- Airport Property
- Municipal Boundary

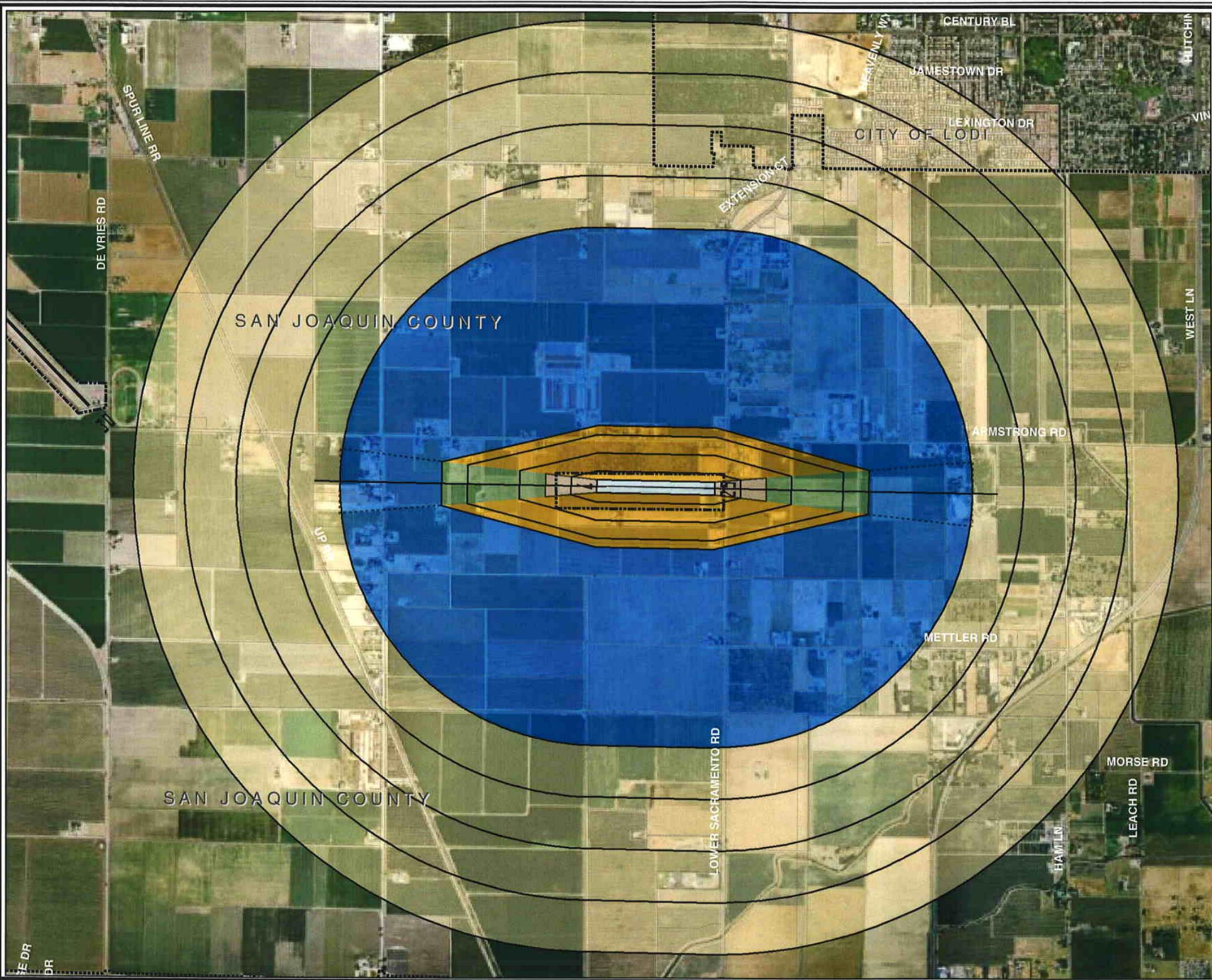
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3L P3-10/30/08



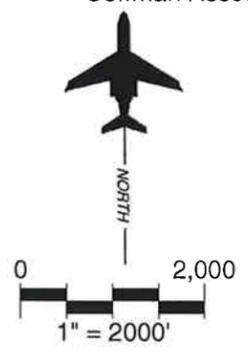
LEGEND

-  Airport Property
-  Municipal Boundary

14 CFR PART 77 SURFACES

-  Conical Surface
-  Horizontal Surface
-  Approach Surface
-  Primary Surface
-  Runway Protection Zone
-  Transitional Surface

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





New Jerusalem Airport

5.5 New Jerusalem Airport

5.5.1. Airport Management: New Jerusalem Airport is owned and operated by the City of Tracy, California.

5.5.2. Airport Configuration: New Jerusalem Airport is served by one runway, Runway 12-30, which is 3,530 feet long. There are no plans for a runway extension or additional runways.

5.5.3. Airport Activity: The 20-year forecast, based on an interview with airport management, is anticipated to remain stable at 4,000 annual operations.

5.5.4. Additional Compatibility Policies: This section is reserved.



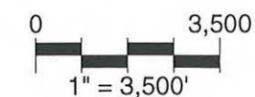
LEGEND

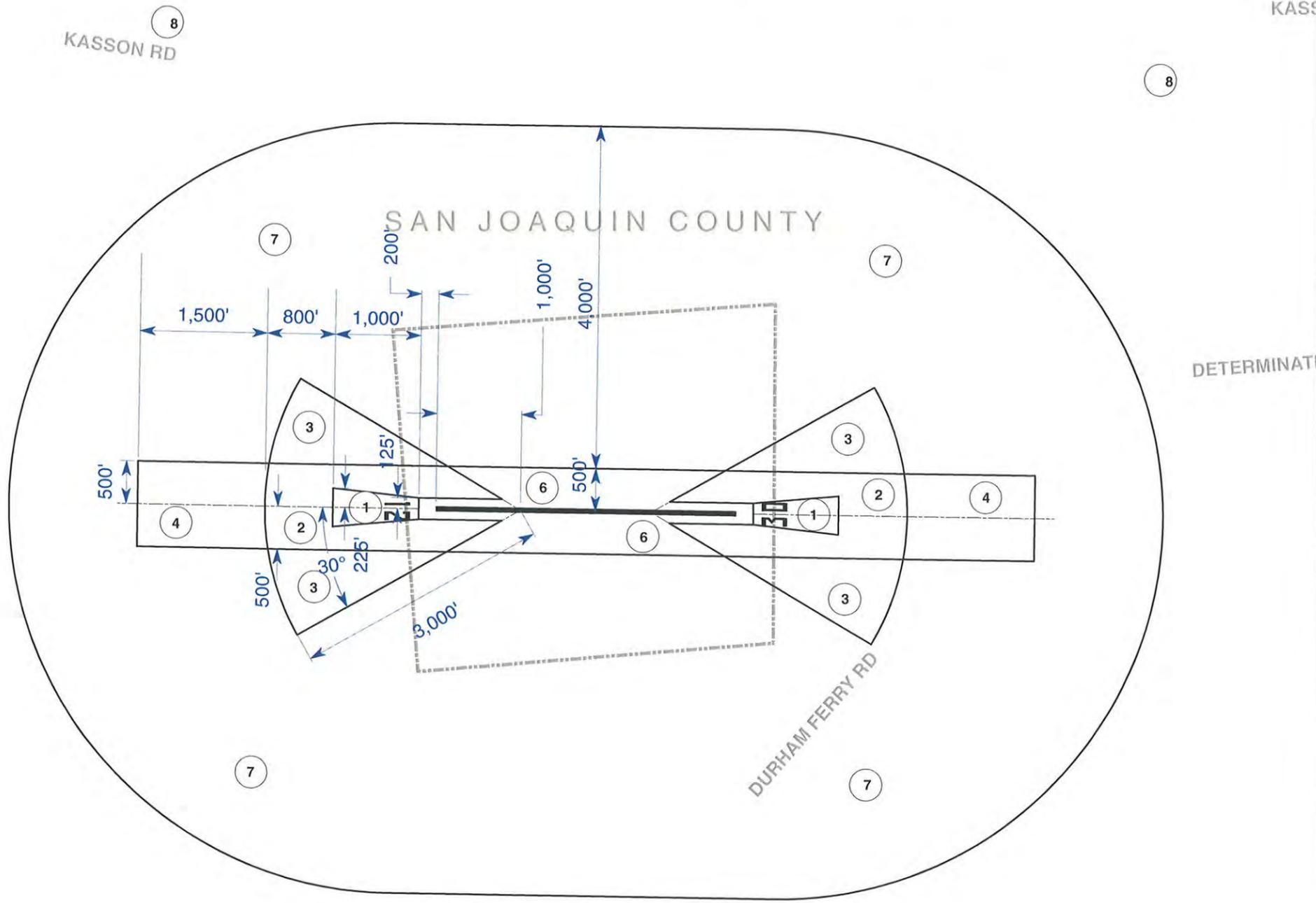
- Airport Property
- Municipal Boundary

COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





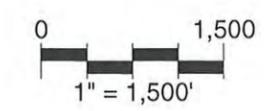
LEGEND

- Airport Property
- Municipal Boundary

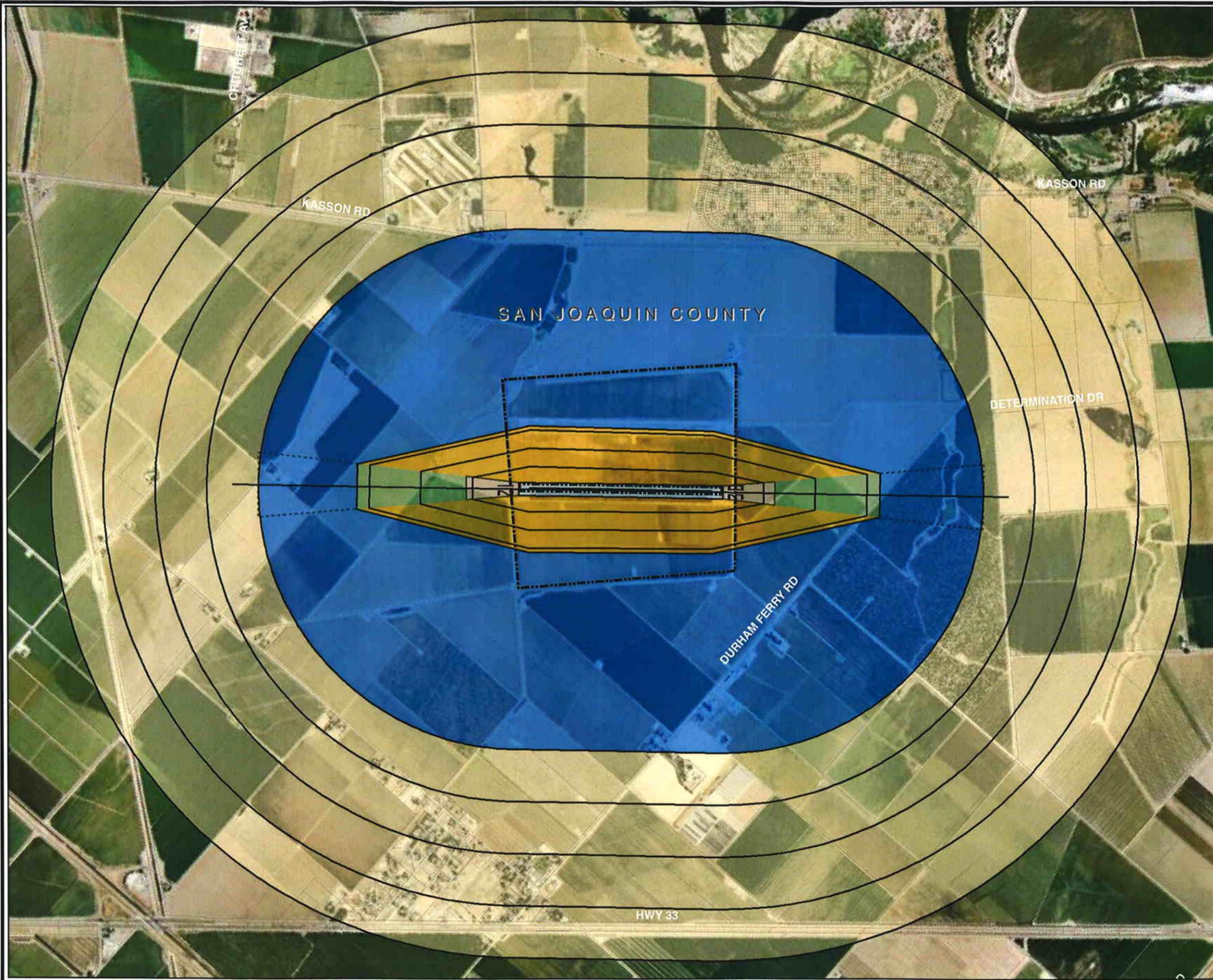
COMPATIBILITY ZONES

- (1) Runway Protection Zone
- (2) Inner Approach/Departure Zone
- (3) Inner Turning Zone
- (4) Outer Approach/Departure Zone
- (5) Sideline Safety Zone
- (6) Airport Property
- (7) Traffic Pattern Zone
- (8) Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3NJ13-10/30/08



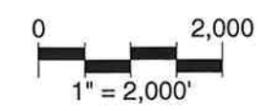
LEGEND

- Airport Property
- Municipal Boundary

14 CFR PART 77 SURFACES

- Conical Surface
- Horizontal Surface
- Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Tracy Municipal Airport

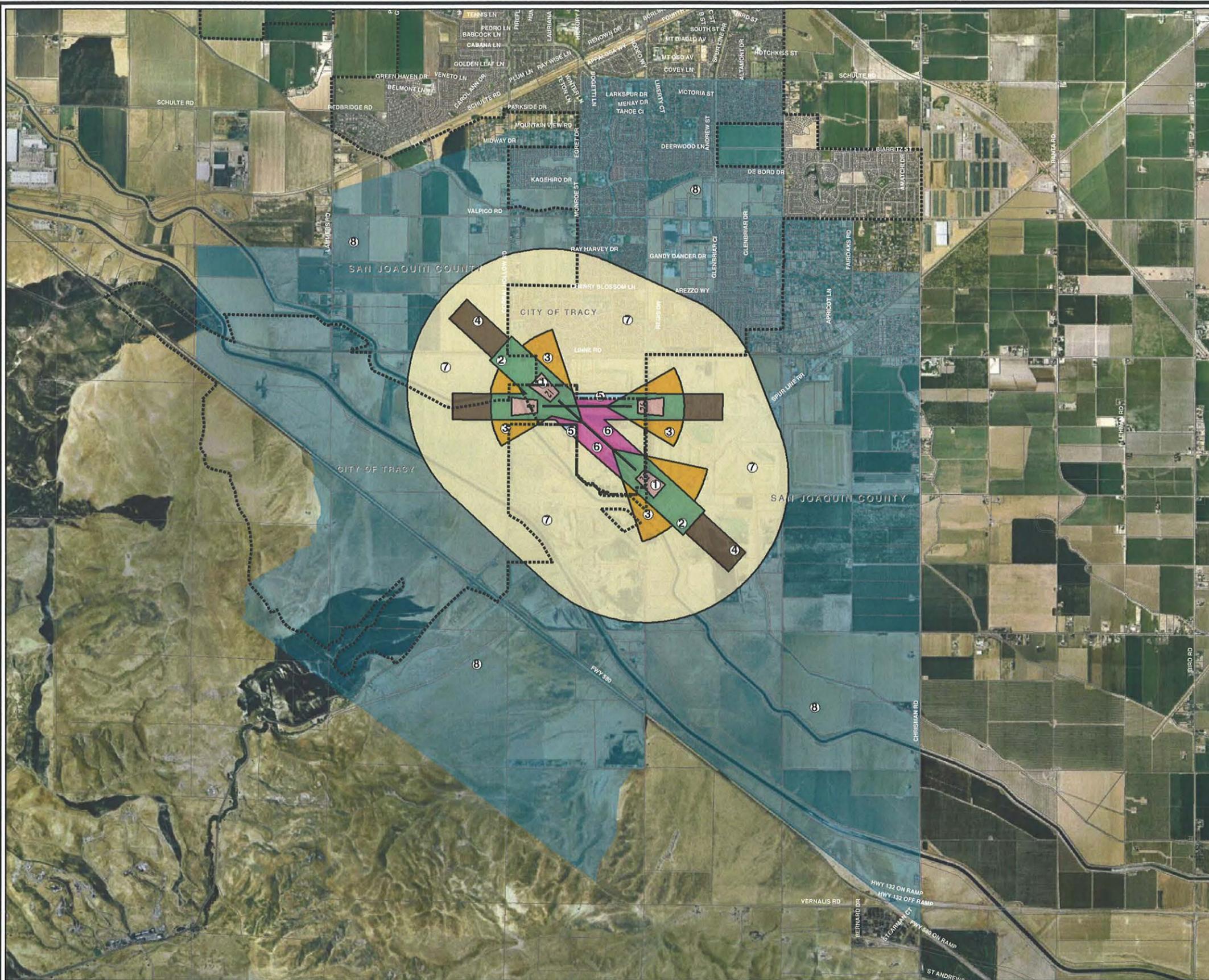
5.6 Tracy Municipal Airport

5.6.1. Airport Management: Tracy Municipal Airport is owned and operated by the City of Tracy, California.

5.6.2. Airport Configuration: Tracy Municipal Airport is served by two runways: 8-26 and 12-30. Runway 8-26 is 3,438 feet long and oriented east-west. Runway 12-30 is 4,002 feet long and aligned to the northwest-southeast. The 1998 Airport Master Plan for Tracy Municipal Airport has no plans for extending either runway.

5.6.3. Airport Activity: The 20-year forecast is based upon the 1998 Airport Master Plan for Tracy Municipal Airport. The long range operations are forecast to reach 107,200 at Tracy Municipal Airport.

5.6.4. Additional Compatibility Policies: This section is reserved.



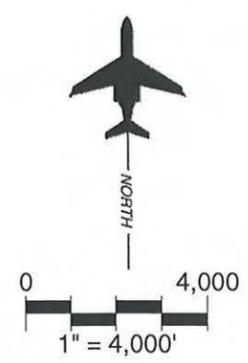
LEGEND

- Airport Property
- Municipal Boundary

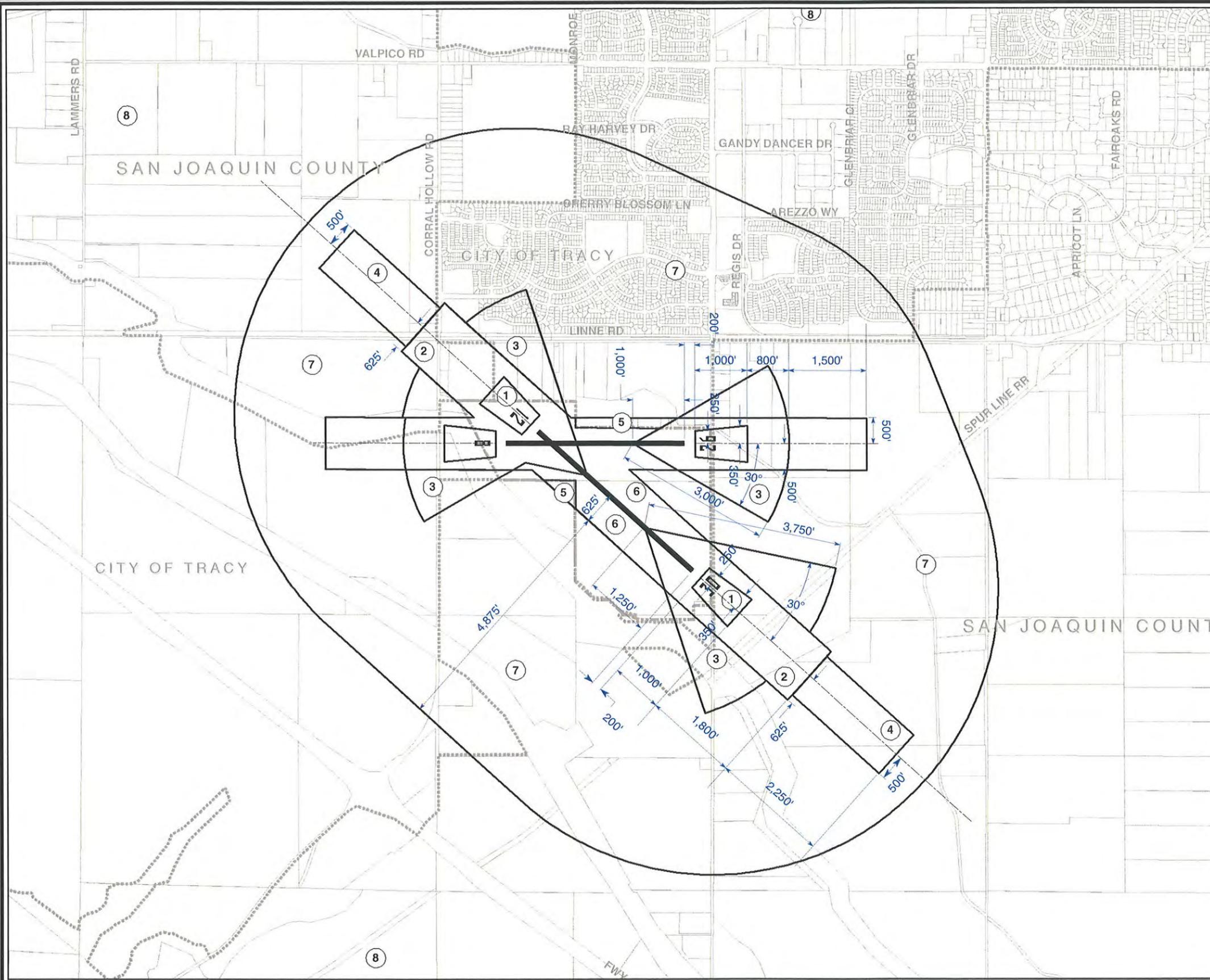
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3TMP-03/06/09



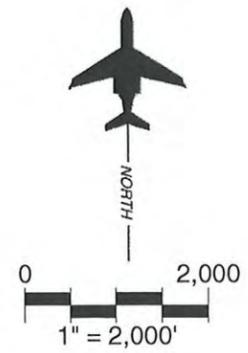
LEGEND

- Airport Property
- Municipal Boundary

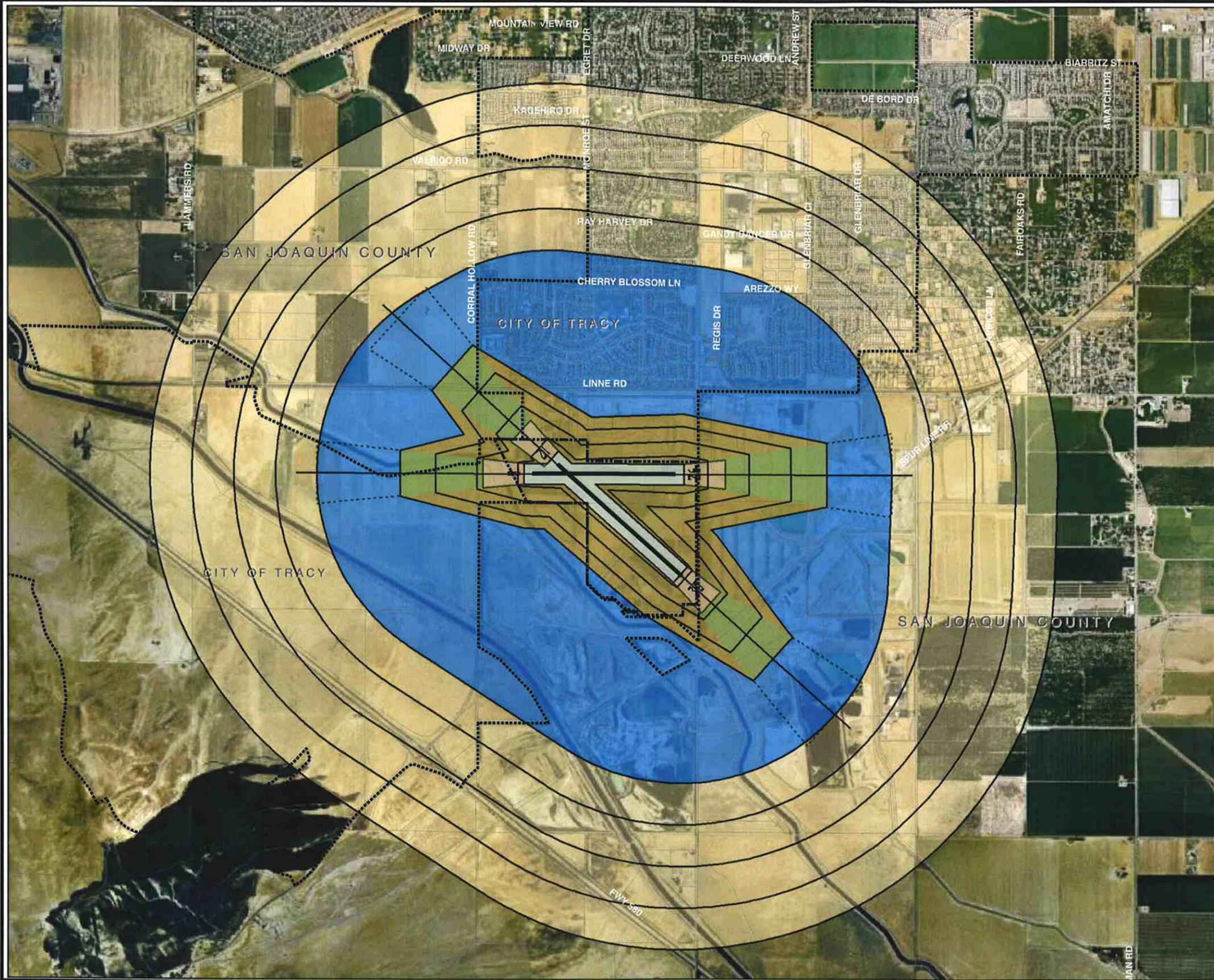
COMPATIBILITY ZONES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Airport Property
- ⑦ Traffic Pattern Zone
- ⑧ Airport Influence Area

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-3TM3-10/30/08



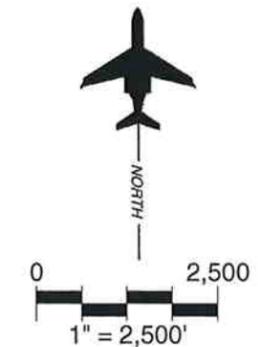
LEGEND

- Airport Property
- Municipal Boundary

14 CFR PART 77 SURFACES

- Conical Surface
- Horizontal Surface
- Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Tracy Municipal Airport Master Plan, July 8, 1998.





Appendix A

Noise Modeling Assumptions

Appendix A

NOISE MODELING ASSUMPTIONS

Airport Land Use Compatibility Plan

San Joaquin County

This aircraft noise analysis was prepared to assess aircraft noise at the public use airports within the San Joaquin County Airport Land Use Compatibility Plan based on current and future operations. The following discussion describes the methodology, input assumptions, and results of aircraft noise analysis.

AIRCRAFT NOISE ANALYSIS METHODOLOGY

The standard methodology for analyzing the prevailing noise conditions at airports involves the use of a computer simulation model. The Federal Aviation Administration (FAA) developed the Integrated Noise Model (INM) for developing noise exposure contours at civilian airports.

The INM is designed as a conservative planning tool, tending to slightly overstate noise conditions. The model and its related databases are periodically updated based on the philosophy that each version should err on the side of over-prediction while each subsequent update moves closer to reality. Version 7.0 is the most current version of the INM at this time. It is the version used for the noise analysis described in this analysis.

INM describes aircraft noise in terms of Community Noise Equivalent Level (CNEL). The CNEL noise metric accounts for the increased sensitivity to noise in the evening (7:00 p.m. to 10:00 p.m.) and at night (10:00 p.m. to 7:00 a.m.). CNEL is defined as the 24-hour average sound level, in A-weighted decibels, obtained after the addition of

4.77 decibels to sound levels between 7:00 p.m. and 10:00 p.m. and 10 decibels to sound levels between 10:00 p.m. and 7:00 a.m., as averaged over a span of one year. In California, it is the required metric for determining the cumulative exposure of individuals to aircraft.

The INM works by defining a network of grid points at ground level around the airport. It then selects the shortest distance from each grid point to each flight track and computes the noise exposure for each aircraft operation, by aircraft type and engine thrust level, along each flight track. Corrections are applied for air-to-ground acoustical attenuation, acoustical shielding of the aircraft engines by the aircraft itself, and aircraft speed variations. The noise exposure levels for each aircraft are then summed at each grid point location. The cumulative noise exposure levels at all grid points are then used to develop noise exposure contours for selected values (the 55, 60, 65, 70, and 75 CNEL are shown). Noise contours are then plotted on a base map of the airport environs.

In addition to the mathematical procedures defined in the model, the INM has another very important element. This is a database containing tables correlating noise, thrust settings, and flight profiles for most of the civilian aircraft and many common military aircraft operating in the United States. This database, often referred to as the noise curve data, has been developed under FAA guidance based on rigorous noise monitoring in controlled settings. In fact, the INM database was devel-

oped through more than a decade of research, including extensive field measurements of more than 10,000 aircraft operations. The database also includes performance data for each aircraft to allow for the computation of airport-specific flight profiles (rates of climb and descent).

The INM allows for a variety of user inputs to represent the airport and its environs. The following inputs were used to develop airport noise exposure contours:

- Geographic location of runway ends
- Elevation
- Air field temperature
- Daily operations and fleet mix
- Database selection
- Operations time-of-day
- Runway use
- Flight tracks

GEOGRAPHIC LOCATION OF RUNWAY ENDS AND AIRPORT ELEVATION

The location of the runway ends and airport elevation provides a spatial reference for the model when calculating noise exposure. For each airport considered, data was collected from the airport's Layout Plan, the FAA Airport/Facilities Directory, published runway end coordinate database and the FAA's 5010 Airport Master Records. Future runway lengths were calculated based on the published runway end coordinates. **Table A1** presents the airfield elevations used when developing the noise exposure contours.

TABLE A1 Airport Elevations	
Airport	Elevation (MSL)
Byron Airport	78.5
Kingdon Executive Airport	15.0
Lodi Airport	58.0
Lodi Airpark	25.0
New Jerusalem Airport	62.0
Tracy Municipal	193.0
Source: FAA Airport/Facilities Directory	

AIRFIELD TEMPERATURE

Atmospheric conditions affect the performance characteristics of an aircraft. To simulate conditions at an airport, the model allows for the input of the normal daily mean temperature as published by the National Oceanic and Atmospheric Administration’s (NOAA) National Climatic Data Center (NCDC). A normal daily mean temperature of 61.8 degrees Fahrenheit was used for all airports within the study based on NOAA’s Stockton, California monitoring station.

DAILY OPERATIONS AND FLEET MIX

The number and type of aircraft operating at an airport strongly influence the shape of the noise exposure contours. The operations are divided into two categories (local and itinerant). Local operations are typically defined as take-offs and landings by an aircraft that has remained in the general vicinity of the airport without an intermediate stop at another airport. Many training and recreational flights are counted as local

operations. Itinerant operations are operations that originate at a different airport or operations that occur outside the local traffic pattern of the airport. Operations by visiting aircraft, some flight training operations, and recreational flights to other airports are counted as itinerant operations.

The selection of individual aircraft types is important to the modeling process because different aircraft types generate different noise levels. The noise footprints presented on **Exhibit A1** illustrate this concept graphically. The footprints represent the noise pattern generated by one departure and one arrival of the given aircraft type. The aircraft illustrated are commonly operated at the airports within San Joaquin County.

The distribution of these operations among various categories, users, and types of aircraft is critical to the development of the input model data. Existing and forecast operations were used to prepare the noise exposure contours for each airport. A table showing the operations assumptions is presented in the following section for each airport.

DATABASE SELECTION

The INM allows the user to select representative aircraft to be modeled for each airport to provide a realistic representation of airport operations. Flight plans, airline flight schedules, airfield observations, and based aircraft lists were used to determine the types of aircraft which frequently use the San Joaquin County airports. To accurately represent the noise conditions at the airport, the INM provides aircraft noise data for many of the aircraft operating in the national fleet. The operations tables included in the following sections identify the INM noise profile selected for each airport.

TIME-OF-DAY

The time-of-day at which operations occur is important as input to the INM due to the 4.77 decibel weight added to evening operations (7:00 p.m. to 10:00 p.m.) and the 10 decibel weight added to nighttime (10:00 p.m. to 7:00 a.m.) flights. In calculating aircraft noise exposure, one evening operation is the equivalent of three daytime operations by the same aircraft because of the added numerical weight. A nighttime operation is equal to ten daytime operations resulting from the added penalty. Estimates for the time of day for operations were determined through interviews with airport owners and managers. These percentages of operations were applied to both future forecast scenarios.

RUNWAY USE

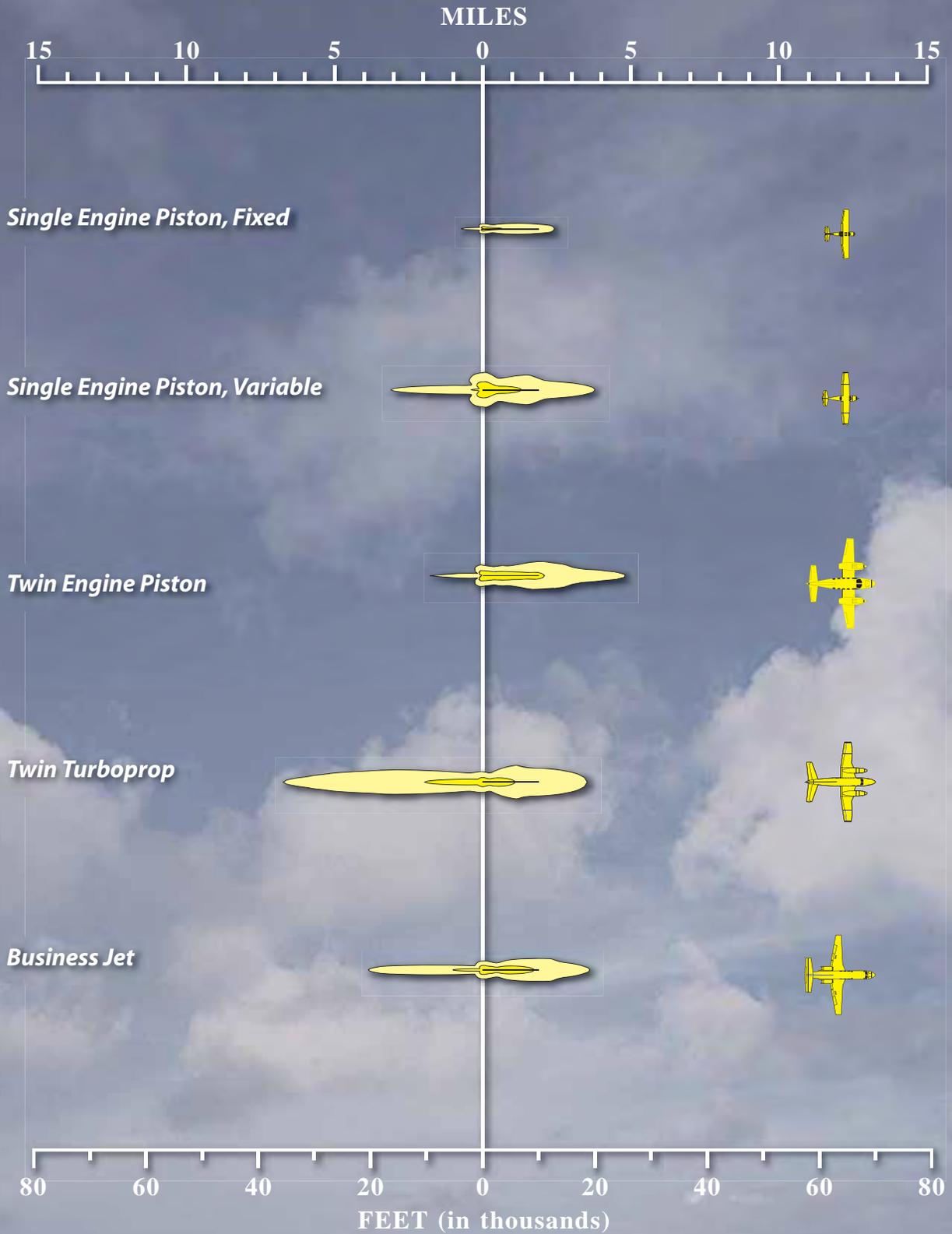
Runway usage data is another essential input to the INM. These numbers indicate the percent usage for each runway end. Factors such as the location of airfield facilities, runway length, prevailing wind conditions, and flight origin or destination can influence runway use. Runway use assumptions are presented in the following sections and are based on interviews with airport owners and managers.

FLIGHT TRACKS

Local and standard air traffic procedures and input from the airport owners and managers were used to develop consolidated flight tracks for use in the INM. The result is consolidated flight tracks describing the average corridors that lead to and from the airports within San Joaquin County. The flight tracks were developed to reflect common patterns and to account for the dispersion of flight paths near the airports.

The final step in developing input assumptions for the INM is the assignment of aircraft to specific flight tracks. Prior to this step, specific flight tracks, runway utilization, and operations statistics for the various aircraft models using San Joaquin County Airports were evaluated.

The flight tracks were developed with the help of the airport staff and local



The contours represent sound exposure levels (SEL) of 80 and 90 dB for one arrival and one departure of each aircraft type. The outer contour represents 80 dB SEL. The inner contour represents 90 dB SEL.

Source: Coffman Associates 2007



operators to identify the proportion of traffic using each consolidated flight track. This analysis resulted in a percentage of use for each flight track. These percentages were then used to assign the single-engine propeller aircraft and light twin engine aircraft activity to the flight tracks. To determine the specific number of aircraft assigned to any one flight track, a long series of

calculations was performed. The number of specific aircraft of one group is factored by runway utilization and flight track percentage.

The following sections present the noise modeling assumptions used for this study. Exhibits showing the noise exposure contours can be found in Chapter Two of this document.

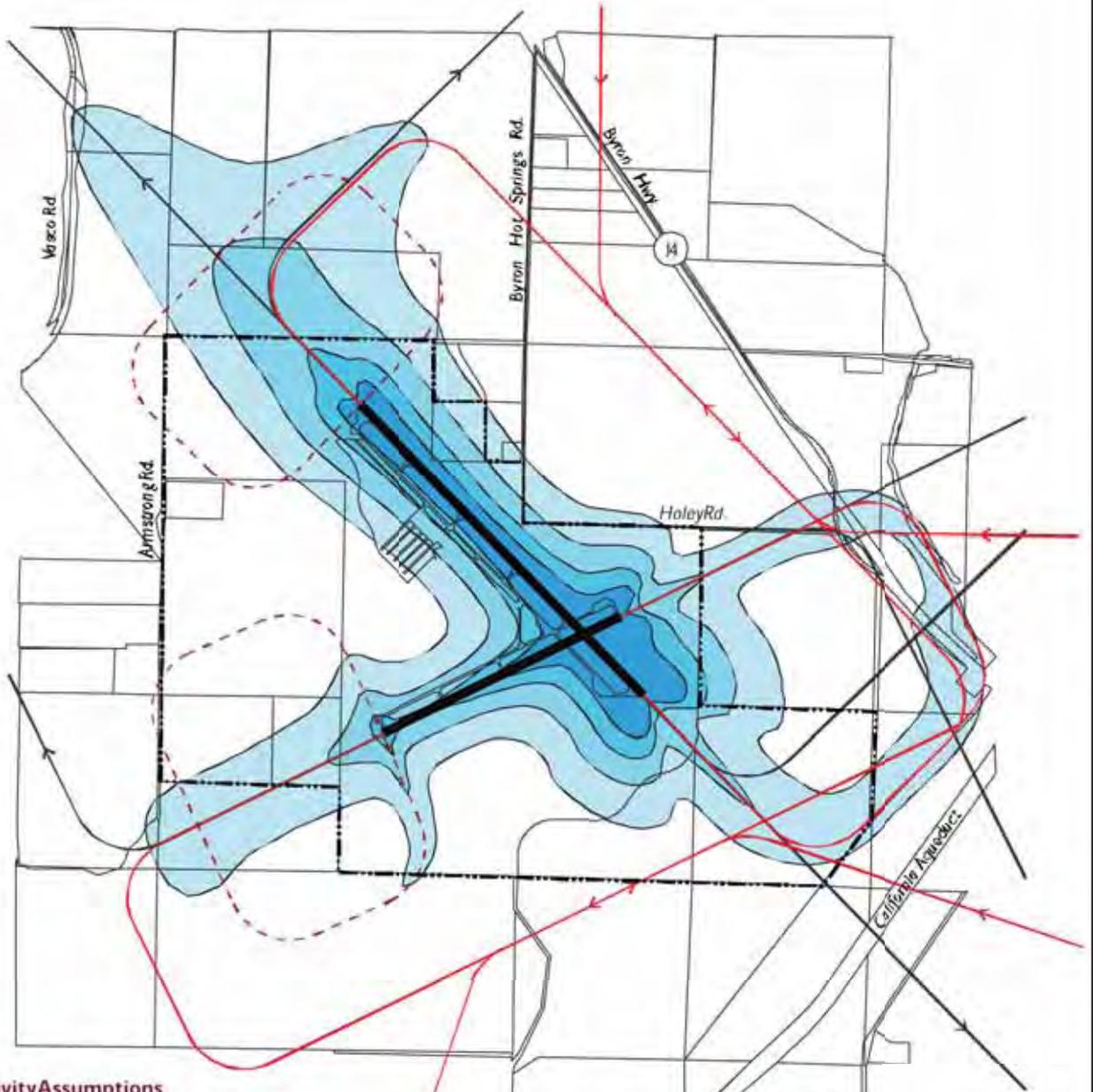
BYRON AIRPORT

OPERATIONS AND NOISE CONTOURS

Byron Airport operations data is presented in **Table ABA-1**. This information is from the Contra Costa County

Airport Land Use Compatibility Plan, December 2000. Further information regarding the noise modeling assumptions was not included within the Contra Costa County Airport Land Use Compatibility Plan. The resulting noise exposure contours, as presented in the plan, are shown on **Exhibit ABA-1**.

TABLE ABA-1 Byron Airport Operations		
	1999	Future
LOCAL		
Single-engine Piston, Variable	3,500	67,340
Single-engine Piston, Fixed	21,385	11,100
Helicopter	4,550	12,500
Local Subtotal	29,435	90,940
ITINERANT		
Single-engine piston, variable	11,515	36,260
Single-engine piston, fixed	10,500	33,300
Multi-engine piston	3,600	12,000
Turboprop	200	3,000
Turbojet, Small	500	2,000
Historic Military Jet	200	200
Helicopter	4,550	12,500
Itinerant Subtotal	31,065	99,260
Total	60,500	190,200
Source: <i>Contra Costa County Airport Land Use Compatibility Plan (December 2000)</i>		



Activity Assumptions

- 160,200 Total Annual Aircraft Operations
- 20,000 Helicopter Operations Included
- 200 Historic Military Jet Operations Included
- See Exhibit 6C for Details

Notes:

- Future operations projection represents the activity level associated with planned capacity of 400 based aircraft.
- Runway lengths include planned extensions.

55-60 dBCNEL
 60-65 dBCNEL
 65-70 dBCNEL
 70+ dBCNEL

Airport Property Boundary
 Primary Airplane Flight Tracks
 Primary Helicopter Flight Training Tracks

0' 2,500' 5,000'
 FEET
 1" = 2500'

Contra Costa County Airport Land Use Compatibility Plan (December 2000)



KINGDON EXECUTIVE AIRPORT

DAILY OPERATIONS AND FLEET MIX

The number of aircraft operating at the airport on an average day is based upon discussions with Kingdon Executive Airport management. The operations and fleet mix shown in **Table AKA-1** are based on forecast information from airport management.

As shown in the table, general aviation single engine fixed pitch propeller and variable pitched models were modeled with the GASEPF and GASEPV identifiers. These represent a broad range of single engine piston general aviation aircraft. The BEC58P was used to represent the multi-engine piston aircraft; the DHC6 was used to represent the turboprop aircraft; and the CNA55B was used to represent the business jet aircraft. Additional information regarding the use of INM aircraft identifiers can be found in **Appendix A**.

TABLE AKA-1 Existing and Forecast Annual Operations Kingdon Executive Airport			
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	860	3,990
Single Engine Piston Fixed Pitch	GASEPF	980	3,990
Multi-Engine Piston	BEC58P	440	2,660
Turboprop	DHC6	1,460	1,995
Business Jet	CNA55B	<u>72</u>	<u>665</u>
Subtotal		3,812	13,300
Local			
Single Engine Piston Variable Pitch	GASEPV	18,620	35,600
Single Engine Piston Fixed Pitch	GASEPF	<u>1,840</u>	<u>35,600</u>
Subtotal		20,460	71,200
TOTAL ANNUAL OPERATIONS		24,272	84,500
Source: Interview with Kingdon Executive Airport management and Coffman Associates analysis.			

TIME-OF-DAY

Based on an interview with airport management, seven percent of operations occur during the evening hours (7:00 p.m. to 10:00 p.m.), and three percent of operations occur during the nighttime hours (10:00 p.m. to 7:00

a.m.). The remaining 90 percent occur during daytime hours.

RUNWAY USE

Runway use percentages, based on an interview with airport management, are

presented in **Table AKA-2**. As indicated in the table, a majority of arrival

and departure operations occur on Runway 30.

TABLE AKA-2	
Runway Use	
Kingdon Airport	
Runway	Runway Use Percentage
ARRIVALS	
12	5.0%
30	95.0%
DEPARTURES	
12	5.0%
30	95.0%
Source: Kingdon Executive Airport management estimate and Coffman Associates analysis.	

FLIGHT TRACKS

Existing and future arrival, departure, and touch-and-go flight tracks for Kingdon Executive Airport are shown on **Exhibit AKA-1**. Both runways have a standard left hand traffic pattern.

RESULTS OF NOISE ANALYSIS

Output data selected for calculation by the INM were annual average noise contours in CNEL. The noise exposure contours are depicted on Exhibit 2KA-2 in Chapter Two. **Table AKA-3** summarizes the area within each set of contours.

TABLE AKA-3		
Comparative Areas of Noise Exposure (Square Miles)		
Kingdon Executive Airport		
CNEL Contour	2008	Long Range
55	0.306	0.935
60	0.104	0.336
65	0.037	0.129
70	0.011	0.044
75	0.003	0.014

LODI AIRPORT

DAILY OPERATIONS AND FLEET MIX

The number of aircraft operating at the airport on an average day is based upon discussion with the Lodi Airport owner.

The operational and fleet mix shown in **Table ALA-1** is based on a discussion from the airport management. As shown in the table, general aviation single engine fixed pitch propeller and variable pitched models were modeled

with the GASEPF and GASEPV identifiers. These represent a broad range of single engine piston general aviation aircraft. The BEC58P was used to represent the multi-engine piston aircraft; the DC3 was used to represent the primary skydiving aircraft; the DHC6 was used to represent the turboprop aircraft; the CNA55B was used to represent the small business jet aircraft; and the B206L was used to represent helicopters. Additional information regarding the use of INM aircraft identifiers can be found in **Appendix A**.

TABLE ALA-1 Existing and Forecast Annual Operations Lodi Airport			
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	11,290	31,650
Single Engine Piston Fixed Pitch	GASEPF	11,290	31,560
Multi-Engine Piston	BEC58P	2,510	7,040
Turboprop	DHC6	500	1,000
Business Jet	CNA55B	30	60
Helicopter	B206L	<u>300</u>	<u>600</u>
Subtotal		25,920	72,000
Local			
Single Engine Piston Variable Pitch	GASEPV	11,000	34,240
Single Engine Piston Fixed Pitch	GASEPF	11,000	34,240
Multi-Engine Piston	BEC58P	1,160	3,600
Turboprop	DC3	720	720
Helicopter	B206L	<u>4,200</u>	<u>5,200</u>
Subtotal		28,080	78,000
TOTAL ANNUAL OPERATIONS		54,000	150,000
Source: Lodi Airport owner estimate and Coffman Associates analysis.			

TIME-OF-DAY

Based on an interview with airport management, eight percent of opera-

tions occur during the evening hours (7:00 p.m. to 10:00 p.m.), and two percent of operations occur during the nighttime hours (10:00 p.m. to 7:00

a.m.). The remaining 90 percent occur during daytime hours.

presented in **Table ALA-2**. As indicated in the table, a majority of arrival and departure operations occur on Runway 26 and Runway 30.

RUNWAY USE

Runway use percentages, based on an interview with airport management, are

TABLE ALA-2	
Runway Use	
Lodi Airport	
Runway	Runway Use Percentage
ARRIVALS	
08	7.0%
26	59.0%
12	6.0%
30	28.0%
DEPARTURES	
08	7.0%
26	59.0%
12	6.0%
30	28.0%

Source: Lodi Airport manager estimate and Coffman Associates analysis.

FLIGHT TRACKS

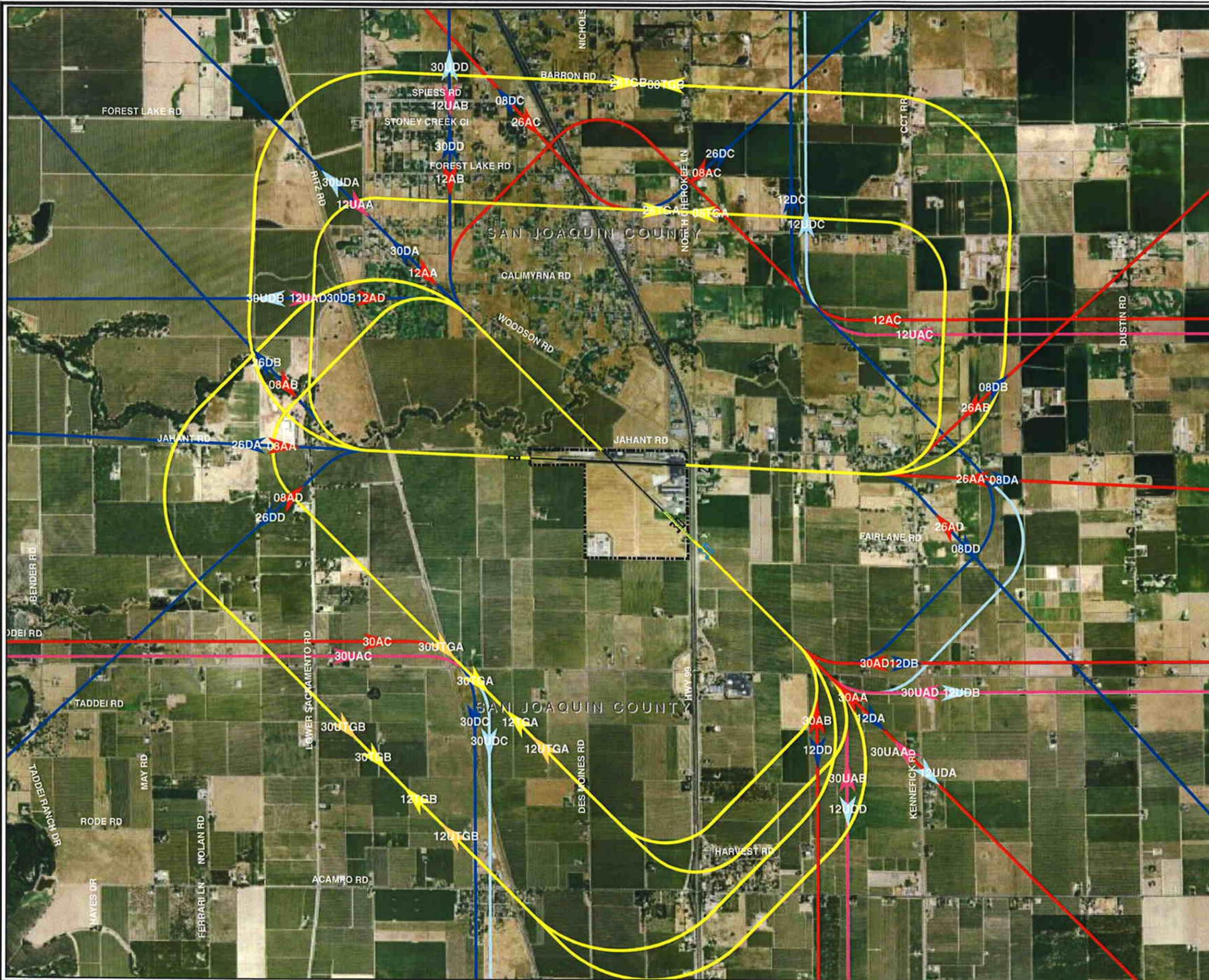
Existing and future arrival, departure, and touch-and-go flight tracks for Lodi Airport are shown on **Exhibit ALA-1**. Runways 8, 12, and 30 all have a standard left hand traffic pattern. Runway 26 has a right hand traffic pattern.

RESULTS OF NOISE ANALYSIS

Output data selected for calculation by the INM were annual average noise contours in CNEL. The noise exposure contours can be found on Exhibits 2LA-2 and 2LA-3 in Chapter Two. **Table ALA-3** summarizes the area within each set of contours.

TABLE ALA-3		
Comparative Areas of Noise Exposure (Square Miles)		
Lodi Airport		
CNEL Contour	2008	Long Range
55	1.072	2.711
60	0.390	1.067
65	0.153	0.459
70	0.062	0.194
75	0.021	0.079

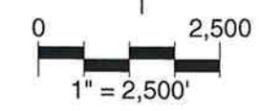
07SP13-ALA1-05/22/08



LEGEND

- Airport Property
- Municipal Boundary
- Arrival Tracks
- Ultimate Runway Extension
- Departure Tracks
- Touch-and-Go Tracks
- Ultimate Arrival Tracks
- Ultimate Departure Tracks
- Ultimate Touch-and-Go Tracks

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information
 System, February 2008.
 Coffman Associates Analysis.



LODI (PRECISSI) AIRPARK

DAILY OPERATIONS AND FLEET MIX

The number of aircraft operating at the airport on an average day is based upon discussion with the Lodi Airpark airport manager.

The operational and fleet mix shown in **Table ALP-1** is based on a discussion from the airport management.

As shown in the table, general aviation single engine fixed pitch propeller and variable pitched models were modeled with the GASEPF and GASEPV identifiers. These represent a broad range of single engine piston general aviation aircraft. The BEC58P was used to represent the multi-engine piston aircraft, and the SD330 and CNA206 identifiers were used to represent aerial application aircraft. Additional information regarding the use of INM aircraft identifiers can be found in **Appendix A**.

TABLE ALP-1 Existing and Forecast Annual Operations Lodi Airpark			
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	180	600
Single Engine Piston Fixed Pitch	GASEPF	180	600
Multi-Engine Piston	BEC58P	40	150
Turboprop	SD330 -3dB	3,640	12,100
Single Engine Piston	CNA206	<u>960</u>	<u>3,200</u>
Subtotal		5,000	16,650
Local			
Single Engine Piston Variable Pitch	GASEPV	450	1,500
Single Engine Piston Fixed Pitch	GASEPF	450	1,500
Multi-Engine Piston	BEC58P	<u>100</u>	<u>350</u>
Subtotal		1,000	3,350
TOTAL ANNUAL OPERATIONS		6,000	20,000
Source: Lodi Airpark manager estimate and Coffman Associates analysis.			

TIME-OF-DAY

Based on an interview with airport management, five percent of operations occur during the evening hours (7:00

p.m. to 10:00 p.m.), and five percent of operations occur during the nighttime hours (10:00 p.m. to 7:00 a.m.). The remaining 90 percent occur during daytime hours.

RUNWAY USE

Runway use percentages, based on an interview with airport management, are presented in **Table ALP-2**. As indicated in the table, a majority of arrival

and departure operations are split equally between the two runway ends. The runway use distribution at Lodi Airpark was established through discussions with the Lodi Airpark manager.

TABLE ALP-2	
Runway Use	
Lodi Airpark	
Runway	Runway Use Percentage
ARRIVALS	
07	50.0%
25	50.0%
DEPARTURES	
07	50.0%
25	50.0%
Source: Lodi Airpark manager estimate and Coffman Associates analysis.	

FLIGHT TRACKS

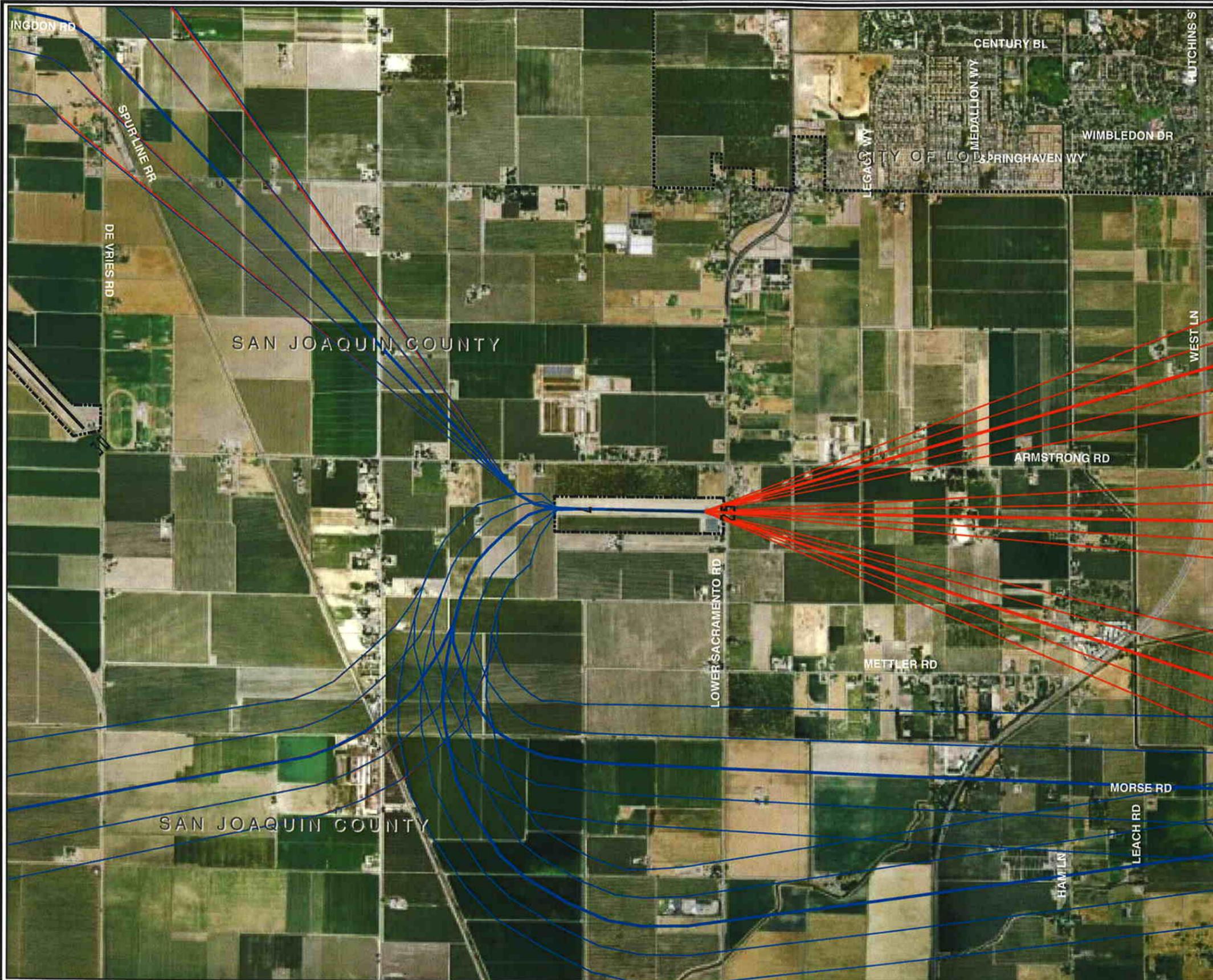
Existing and future arrival, departure, and touch-and-go flight tracks for Lodi Airpark are shown on **Exhibit ALP-1**. Both runways have a standard left hand traffic pattern.

RESULTS OF NOISE ANALYSIS

Output data selected for calculation by the INM were annual average noise contours in CNEL. The noise exposure contours can be found on Exhibit 2LP-2 In Chapter Two. **Table ALP-3** summarizes the area within each set of contours.

TABLE ALP-3		
Comparative Areas of Noise Exposure (Square Miles)		
Lodi Airpark		
CNEL Contour	2008	Long Range
55	0.217	0.750
60	0.070	0.226
65	0.026	0.072
70	0.009	0.027
75	0.003	0.009

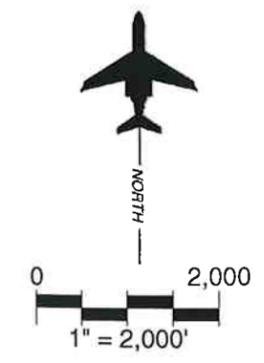
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LEGEND

-  Airport Property
-  Municipal Boundary
-  Arrival Tracks
-  Departure Tracks

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



NEW JERUSALEM AIRPORT

The number of aircraft operating at the airport on an average day is an estimate based upon discussion with the New Jerusalem airport manager.

The operational and fleet mix shown in **Table ANJ-1** is an estimate based on a

discussion from the airport management. As shown in the table, general aviation single engine fixed pitch propeller and variable pitched models were modeled with the GASEPF and GASEPV identifiers. These represent a broad range of single engine piston general aviation aircraft.

TABLE A12			
Existing and Forecast Annual Operations			
New Jerusalem Airport			
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	2,000	2,000
Single Engine Piston Fixed Pitch	GASEPF	<u>2,000</u>	<u>2,000</u>
Subtotal		4,000	4,000
Local			
Single Engine Piston Variable Pitch	GASEPV	0	0
Single Engine Piston Fixed Pitch	GASEPF	<u>0</u>	<u>0</u>
Subtotal		0	0
TOTAL ANNUAL OPERATIONS		4,000	4,000
Source: New Jerusalem airport manager estimates and Coffman Associates analysis.			

TIME-OF-DAY

According to the New Jerusalem airport manager, the airport does not operate during the evening or nighttime. All operations occur during the daytime hours.

RUNWAY USE

Runway use percentages, based on *estimates obtained during* an interview with airport management, are presented in Table ANJ-2. As indicated in the table, *seventy percent of arrivals occur on runway 30 and thirty percent on Runway 12.*

TABLE ANJ-2	
Runway Use	
New Jerusalem Airport	
Runway	Runway Use Percentage
ARRIVALS	
12	30.0%
30	70.0%
DEPARTURES	
12	30.0%
30	70.0%
Source: New Jerusalem airport manager estimate and Coffman Associates analysis.	

FLIGHT TRACKS

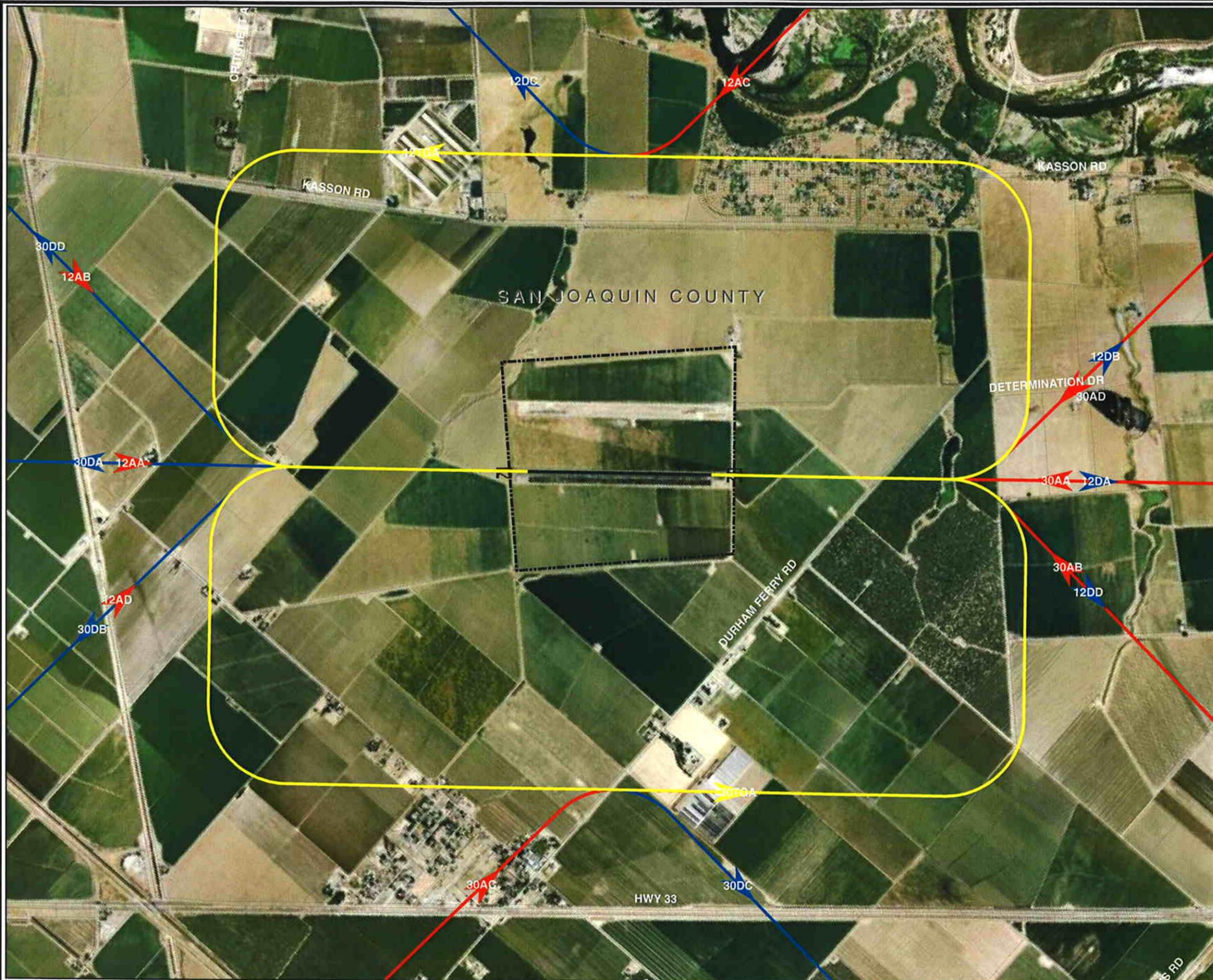
Existing and future arrival and departure flight tracks for New Jerusalem Airport are shown on **Exhibit ANJ-1**. Both runways have a standard left hand traffic pattern.

RESULTS OF NOISE ANALYSIS

Output data selected for calculation by the INM were annual average noise contours in CNEL. The noise exposure contours can be found on Exhibit 2NJ-2 in Chapter Two. **Table ANJ-3** summarizes the area within each set of contours.

TABLE ANJ-3		
Comparative Areas of Noise Exposure (Square Miles)		
New Jerusalem Airport		
CNEL Contour	2008	Long Range
55	0.123	0.123
60	0.054	0.054
65	0.019	0.019
70	0.007	0.007
75	0.003	0.003

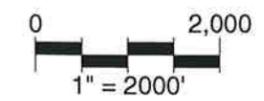
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LEGEND

-  Airport Property
-  Arrival Tracks
-  Departure Tracks
-  Touch-and-Go Tracks

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information
 System, February 2008.
 Coffman Associates Analysis.



TRACY MUNICIPAL AIRPORT

DAILY OPERATIONS AND FLEET MIX

The number of aircraft operating at the airport on an average day is based upon *FAA ATADS, the Tracy Municipal Airport Master Plan (1998), Coffman Associates analysis, Caltrans estimates, and* discussion with the Tracy Municipal Airport manager.

The operational and fleet mix shown in Table ATM-1 is based on **the Tracy Municipal Airport based aircraft fleet mix and** discussion with the airport management.

As shown in the table, general aviation single engine fixed pitch propeller and variable pitched models were modeled with the GASEPF and GASEPV identifiers. These represent a broad range of single engine piston general aviation aircraft. The BEC58P was used to represent the multi-engine piston aircraft; the DHC6 was used to represent the turboprop aircraft; and the CNA55B was used to represent the business jet aircraft. All substitutions are in accordance with the Pre-Approved Substitution List and are commensurate with published FAA guidelines. Additional information regarding the use of INM aircraft identifiers can be found in **Appendix A**.

TABLE ATM-1 Existing and Forecast Annual Operations Tracy Municipal Airport			
	INM Designator	2008	Long Range
Itinerant			
Single Engine Piston Variable Pitch	GASEPV	18,606	15,906
Single Engine Piston Fixed Pitch	GASEPF	18,606	15,906
Multi-Engine Piston	BEC58P	1,959	14,267
Turboprop	DHC6	36	1,446
Business	CNA55B	<u>20</u>	<u>675</u>
		39,227	48,200
Subtotal			
Local			
Single Engine Piston Variable Pitch	GASEPV	9,930	20,355
Single Engine Piston Fixed Pitch	GASEPF	9,930	20,355
Multi-Engine Piston	BEC58P	<u>614</u>	<u>18,290</u>
		20,474	59,000
TOTAL ANNUAL OPERATIONS		59,701	107,200
Source: Tracy Municipal airport manager estimate and Coffman Associates analysis. FAA ATADS. Tracy Municipal Airport Master Plan, 1998.			

TIME-OF-DAY

Based on an interview with airport management, seven percent of operations occur during the evening hours (7:00 p.m. to 10:00 p.m.), and three percent of operations occur during the nighttime hours (10:00 p.m. to 7:00 a.m.). The remaining 90 percent occur during daytime hours.

RUNWAY USE

Runway use percentages, based on an interview with airport management, are presented in Table ATM-2. As indicated in the table, a majority of arrivals and departures occur on **Runway 30 and Runway 26**.

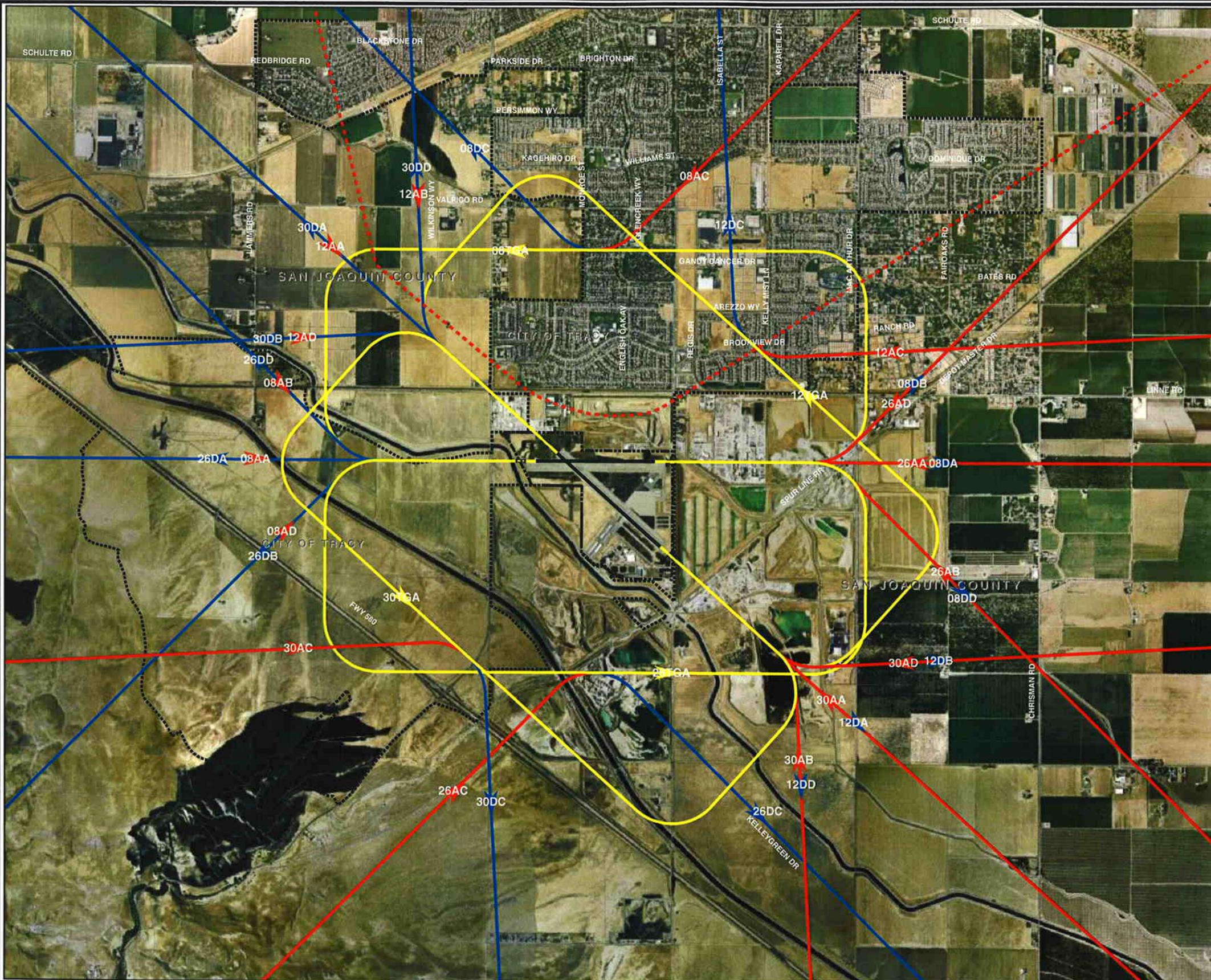
TABLE ATM-2	
Runway Use	
Tracy Municipal Airport	
Runway	Runway Use Percentage
ARRIVALS	
08	10.0%
26	23.0%
12	1.0%
30	66.0%
DEPARTURES	
08	10.0%
26	23.0%
12	1.0%
30	66.0%
Source: Tracy Municipal airport manager estimate and Coffman Associates analysis.	

FLIGHT TRACKS

Existing and future arrival, departure, and touch-and-go flight tracks for Tracy Municipal Airport are shown on **Exhibit ATM-1**. All four runways have a standard left hand traffic pattern.

RESULTS OF NOISE ANALYSIS

Output data selected for calculation by the INM were annual average noise contours in CNEL. The noise exposure contours can be found on Exhibits 2TM-2 and 2TM-3 in Chapter Two. **Table ATM-3** summarizes the area within each set of contours.



LEGEND

-  Airport Property
-  Arrival Tracks
-  Departure Tracks
-  Touch-and-Go Tracks
-  Missed Approach

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates analysis.

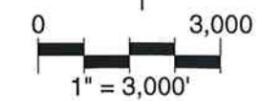


TABLE ATM-3		
Comparative Areas of Noise Exposure (Square Miles)		
Tracy Municipal airport		
CNEL Contour	2008	Long Range
55	1.146	2.161
60	0.493	0.851
65	0.227	0.349
70	0.094	0.153
75	0.035	0.057



Appendix B

Existing Airport Compatibility Guidelines

Appendix B

EXISTING AIRPORT COMPATIBILITY GUIDELINES

Airport Land Use Compatibility Plan San Joaquin County

This appendix includes a review of noise, safety, and airspace compatibility guidelines published by the Federal Aviation Administration, California Department of Transportation – Division of Aeronautics, and San Joaquin Council of Governments.

NOISE GUIDELINES

FEDERAL

In the early 1980s, the FAA promulgated Code of Federal Regulations (CFR) Title 14, Part 150 to guide airport land use compatibility studies. These guidelines were based on earlier studies and guidelines by federal agencies (Federal Interagency Committee on Urban Noise, 1980). These land use compatibility guidelines are

advisory in nature, rather than regulatory. Part 150 explicitly states that determinations of land use compatibility are purely local responsibilities. (See Section A150.101(a) and (d) and explanatory note in Table 1 of 14 CFR Part 150.) **Exhibit B1** summarizes the FAA airport noise land use compatibility guidelines.

The FAA uses Part 150 guidelines as the basis for defining areas within which noise compatibility projects, such as sound insulation or property acquisition, may be eligible for federal funding. Federal grants may be available through the noise set-aside funds from the Airport Improvement Program (AIP) for airports that have conducted a Part 150 Noise Compatibility Study. In general, noise compatibility projects must be within the 65 DNL

(65 CNEL in California) noise contour to be eligible for federal funding. According to the AIP handbook, “Noise compatibility projects usually are located in areas where aircraft noise is significant, as measured in day-night average sound level (DNL) or 65 decibels (dB) or greater.” (See FAA Order 5100.38Bm, Chapter 8, paragraph 810.b.) However, projects may also be approved and made eligible in areas of less noise exposure. In these cases, the following criterion apply: The airport operator must adopt a designation of non-compatibility different from federal guidelines, the NEM and NCP must identify areas as non-compatible, and measures proposed for mitigation within the area must meet Part 150 criteria.

The FAA guidelines outlined in **Exhibit B1** state that residential development, including standard construction (residential construction without acoustic treatment), mobile homes, and transient lodging are all incompatible with noise above 65 DNL or CNEL. Homes of standard construction and transient lodging may be considered compatible where local communities have determined these uses are permissible; however, sound insulation methods are recommended. Schools and other public use facilities are also generally considered to be incompatible with noise exposure above 65 DNL or CNEL. As with residential development, communities can permit these uses to be acceptable with appropriate sound insulation measures.

Examples of incompatible land uses at various noise levels include outdoor music venues and amphitheatres at

levels exceeding 65 DNL or CNEL; zoos and nature exhibits above 70 DNL or CNEL; and hospitals, nursing homes, places of worship, auditoriums, concert halls, livestock breeding, amusement parks, resorts, and camps above 75 DNL or CNEL.

STATE OF CALIFORNIA

California law sets the standard for the acceptable level of aircraft noise for persons residing near airports at 65 CNEL (California Code of Regulations, Title 21, Division 2.5, Chapter 6). The 65 CNEL criterion was selected for urban residential areas where houses are of typical construction with windows partially open. Four types of land uses are defined as incompatible with noise above 65 CNEL: residences, schools, hospitals and convalescent homes, and places of worship. These land uses are regarded as compatible if they have been insulated to assure an interior sound level, from aircraft noise, of 45 CNEL. They are also to be considered compatible if an aviation easement over the property has been obtained by the airport operator.

California noise insulation standards apply to new hotels, motels, apartment buildings, and other dwellings, not including detached single-family homes. They require that interior noise levels attributable to outdoor sources shall not exceed 45 decibels (based on the DNL or CNEL metric) in any habitable room. In addition, any of these residential structures proposed within a 60 CNEL noise contour requires an acoustical analysis to

LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N ¹	N ¹	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N ¹	N ¹	N ¹	N	N
PUBLIC USE						
Schools	Y	N ¹	N ¹	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y ²	Y ³	Y ⁴	Y ⁴
Parking	Y	Y	Y ²	Y ³	Y ⁴	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y ²	Y ³	Y ⁴	N
Retail trade-general	Y	Y	25	30	N	N
Utilities	Y	Y	Y ²	Y ³	Y ⁴	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y ²	Y ³	Y ⁴	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y ⁶	Y ⁷	Y ⁸	Y ⁸	Y ⁸
Livestock farming and breeding	Y	Y ⁶	Y ⁷	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y ⁵	Y ⁵	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally-determined land uses for those determined to be appropriate by local authorities in response to locally-determined needs and values in achieving noise compatible land uses.

See other side for notes and key to table.



KEY

Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor-to-indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

- 1 Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB, respectively, should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- 2 Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 3 Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 4 Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- 5 Land use compatible provided special sound reinforcement systems are installed.
- 6 Residential buildings require a NLR of 25.
- 7 Residential buildings require a NLR of 30.
- 8 Residential buildings not permitted.

Source: *14 CFR Part 150*, Appendix A, Table 1.



show that the proposed design will meet the allowable interior noise level standard. (California Code of Regulations, Title 24, Part 2, Appendix Chapter 35.)

The *California Airport Land Use Planning Handbook* (Caltrans 2002), land use compatibility guidelines are suggested for use in the preparation of comprehensive airport land use plans. The guidelines suggest that no new residential uses should be permitted within the 65 CNEL noise contour. In quiet communities, it is recommended that the 60 CNEL noise contour be used as the maximum permissible noise level for residential uses. At rural airports, it is noted that 55 CNEL may be suitable for use as a maximum permissible noise level for residential uses.

SAN JOAQUIN COUNCIL OF GOVERNMENTS

The 1993 San Joaquin Council of Government's Airport Land Use Plan outlines land use compatibility criteria for land uses within an airport's 65 CNEL noise exposure contour. The plan states that for areas within the 65 CNEL noise contour, the following uses are permitted with conditions:

- Dumps, landfills, and waterways are permitted only if thorough evaluation indicates that they will not present a bird hazard to aircraft.
- Playgrounds and athletic fields are permitted only if they are not to be used for noise-sensitive activities.

The plan states that the following land uses are prohibited within the 65 CNEL noise contour:

- All residential uses
- Schools (other than flying schools)
- Churches
- Theatres
- Auditoriums

The plan additionally states, "Most other land uses are permitted, if soundproofing is used where needed to reduce interior levels of exterior noise to no more than 45 dB."

The 1993 Airport Land Use Plan also includes compatibility criteria for land uses between the 60 and 65 CNEL noise exposure contours. The plan permits the following land uses with conditions.

- Residential uses are permitted if insulated to reduce interior noise to a level no higher than 45 dB and if an aviation easement is recorded in favor of the Airport Operator.
- Dumps, landfills, and waterways are permitted only if thorough evaluation indicates that they will not present a bird hazard to aircraft.
- Playgrounds and athletic fields are permitted only if they are not to be used for noise-sensitive activities.

The plan states that the following land uses are prohibited within the 60 CNEL noise contour:

- Schools (other than flying schools)
- Churches

- Theatres
- Auditoriums

The plan additionally states, “Most other land uses are permitted, if soundproofing is used where needed to reduce interior levels to exterior noise to no more than 45 dB.”

SAFETY AND AIRSPACE GUIDELINES

The following sections address the federal, state, and local guidelines regarding airport safety applicable within San Joaquin County.

FEDERAL

As previously stated, the FAA does not have the authority to control land use compatibility within the vicinity of an airport. The FAA provides compatibility guidance for the areas within the immediate vicinity of the runway and runway protection zones. The FAA’s criteria may only apply to land that is controlled by an airport proprietor. The FAA does have leverage with airport proprietors that accept grants for airport improvement projects. By accepting grant money, the airport proprietor must accept the grant’s assurances which state that they will make every effort to limit non-compatible land uses near the airport. State and local agencies are free to set more stringent land use compatibility policies as they see fit.

Runway Protection Zones

Runway protection zones (RPZs) are trapezoidal-shaped areas located at ground level beyond each end of a runway. The dimensions of RPZs vary depending upon:

- The type of landing approach available at the airport (visual, nonprecision, or precision); and
- Characteristics of the critical aircraft operating at the airport (weight and approach speed).

Per FAA guidance, each runway protection zone should be entirely clear of all objects. The FAA’s Advisory Circular 150/5300-13, *Airport Design*, strongly recommends that the property within the RPZ be owned entirely by the airport proprietor. When this is not possible, the airport proprietor should obtain easements sufficient to control the land use. For portions of the RPZ that are not under airport control, the FAA recommends that the following land uses be prohibited: churches, hospitals, fuel storage facilities, office buildings, schools, shopping centers, and other places of public assembly. Beyond the runway protection zones, the FAA has no specific safety-related land use guidance other than airspace protection.

Airspace Protection

The FAA has published guidance regarding the protection of navigable airspace in 14 CFR Part 77. Part 77

establishes standards for determining obstructions to navigable airspace and the effects of obstructions on the safe and efficient use of airspace.

Through Part 77, the FAA conducts aeronautical studies on the height of structures which examine their effect on such factors as: aircraft operational capabilities; electronic and procedural requirements; and, airport hazard standards. As discussed in the *California Airport Land Use Planning Handbook* (2002), federal action in response to new airspace obstructions is primarily limited to three possibilities:

- For airports with instrument approaches, an obstruction could necessitate modification to one or more of the approach procedures (particularly greater visibility and/or cloud ceiling minimums) or even require elimination of an approach procedure.
- Airfield changes such as displacement of a landing threshold could be required (especially at airports certificated for commercial air carrier service).
- The owner of an airport could be found in noncompliance with the conditions agreed to upon receipt of airport development or property acquisition grant funds and could become ineligible for future grants (or, in extreme cases, be required to repay part of a previous grant).

Part 77 height limits are defined in terms of five imaginary surfaces in the airspace extending about two to three miles around airport runways and ap-

proximately 9.5 miles from the ends of runways having a precision instrument approach. The surfaces include:

- Primary Surface
- Horizontal Surface
- Conical Surface
- Approach Surface
- Transitional Surface

The surfaces are defined based on physical characteristics as determined under Part 77. An example of the surfaces is shown on **Exhibit B2**. Each of these surfaces has an established maximum height stated in the guidelines. A building is not automatically considered an obstruction due to its height. Various factors, including the extent to which an object is shielded by nearby taller objects, are taken into account. The FAA may recommend marking and lighting of obstructions. The FAA has no authority to remove or to prevent construction or growth of objects deemed to be obstructions. Local governments having jurisdiction over land uses are typically responsible for establishing height limitation ordinances which prevent new, and enable removal of existing, obstructions to the Part 77 surfaces.

The FAA has additional guidelines to protect the airspace within the vicinity of the airport, identified as the area encompassed by the airport's Part 77 imaginary surfaces. FAA guidance states that no land use should be allowed if it could endanger or interfere with the landing, take off, or maneuvering of an aircraft at an airport. Specific land use characteristics to be avoided include:

- Creation of electrical interference with navigational signals or radio communication between the airport and aircraft;
- Lighting which is difficult to distinguish from airport lighting;
- Glare in the eyes of pilots using the airport;
- Smoke or other impairments to visibility in the airport vicinity; and
- Uses which attract birds and create bird strike hazards.

STATE OF CALIFORNIA

State Aeronautics Act –

As discussed in the *California Airport Land Use Planning Handbook* (2002), the *California State Aeronautics Act* (Public Utilities Code, Section 21001 et seq.) provides for the following conditions related to aviation:

- The right of flight over private property, unless conducted in a dangerous manner or at altitudes below those prescribed by federal authority (Section 21403(a)).
- No use shall be made of the airspace above a property which would interfere with the right of flight, including established approaches to a runway (Section 21402).

Additionally, under the Aeronautics Act, no person may erect any structure or allow any natural growth to a

height that would constitute a hazard to air navigation under Part 77 by the FAA unless the State Department of Transportation issues a permit.

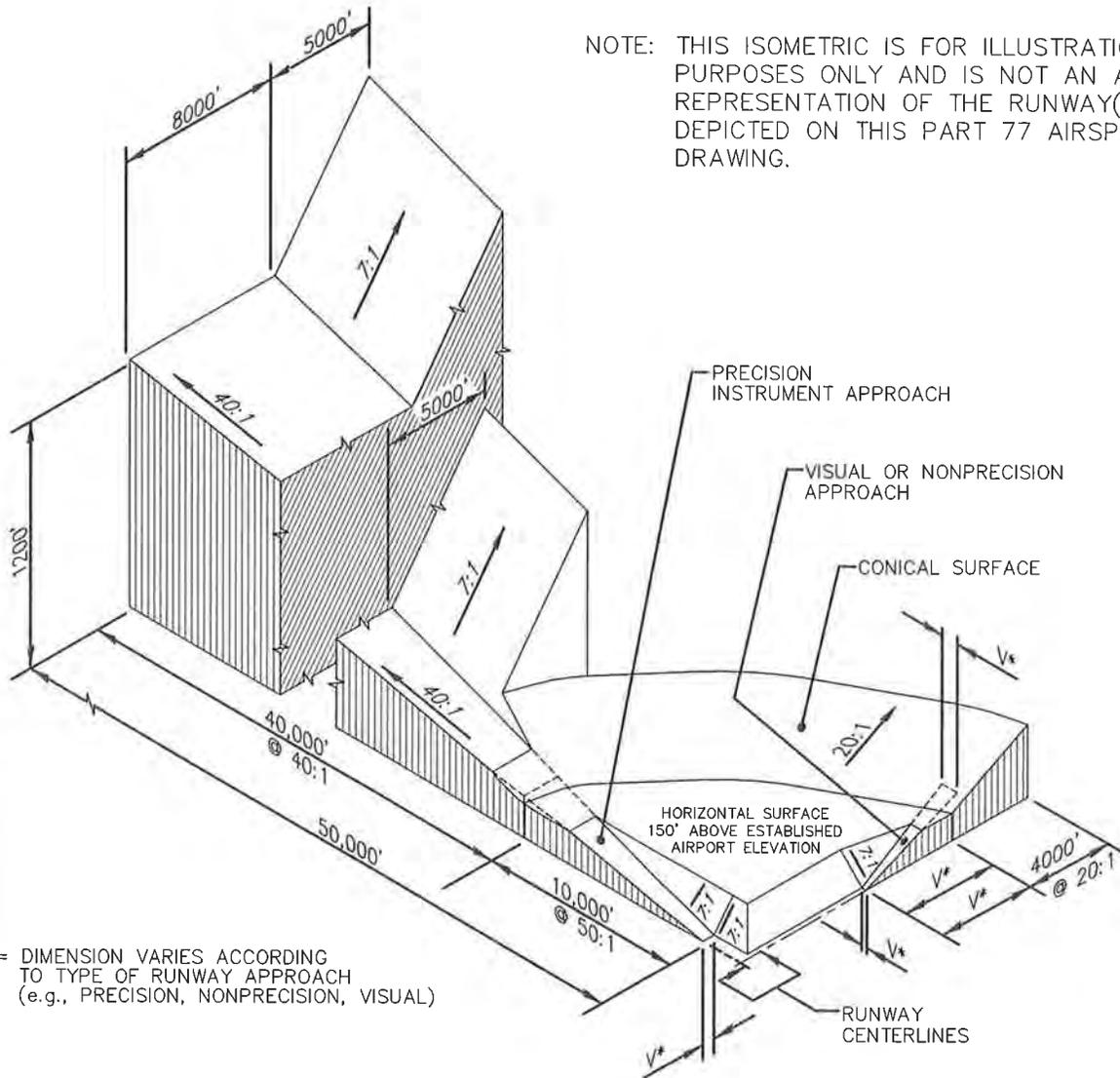
State Education Code –

The California Education Code (Section 17215) requires the California Department of Transportation, Division of Aeronautics, to conduct a site investigation for the acquisition of every proposed public and charter school site within two nautical miles of an existing or planned runway. The Division evaluates the compatibility of the site with the *California Airport Land Use Planning Handbook*, the local airport land use compatibility plan, and other factors prior to making its recommendations to the State Department of Education for use in determining whether state funds can be expended on the school.

California Land Use Planning Handbook

The *California Airport Land Use Planning Handbook (Handbook)* provides guidance for developing compatibility zones to protect the areas surrounding airports. Similar to Part 77 surfaces, these zones are drawn with specific dimensions from the airport's runways. **Exhibit B3** illustrates the compatibility zone concepts outlined in the Handbook.

In conjunction with the compatibility zones, the Handbook provides density and intensity guidance for land uses within each of the zones. Density and intensity limitations establish the



NOTE: THIS ISOMETRIC IS FOR ILLUSTRATION PURPOSES ONLY AND IS NOT AN ACTUAL REPRESENTATION OF THE RUNWAY(S) DEPICTED ON THIS PART 77 AIRSPACE DRAWING.

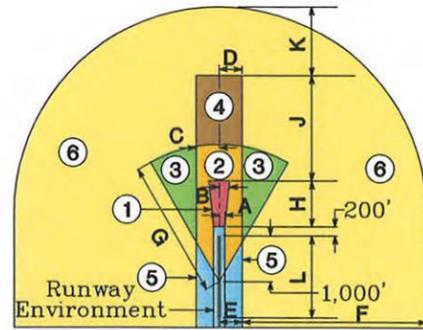
V* = DIMENSION VARIES ACCORDING TO TYPE OF RUNWAY APPROACH (e.g., PRECISION, NONPRECISION, VISUAL)

ISOMETRIC VIEW OF SECTION THRU CENTERLINE OF RUNWAYS

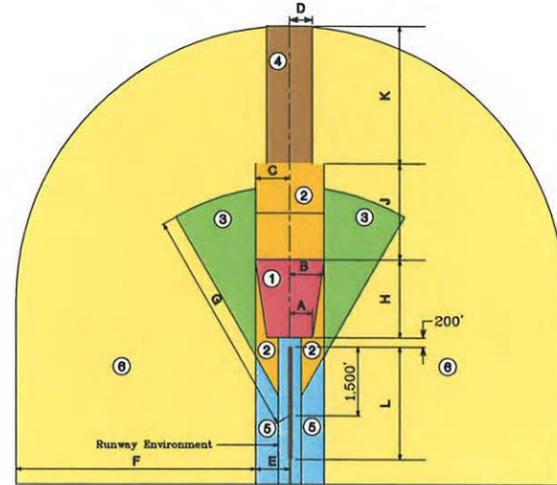
N.T.S.



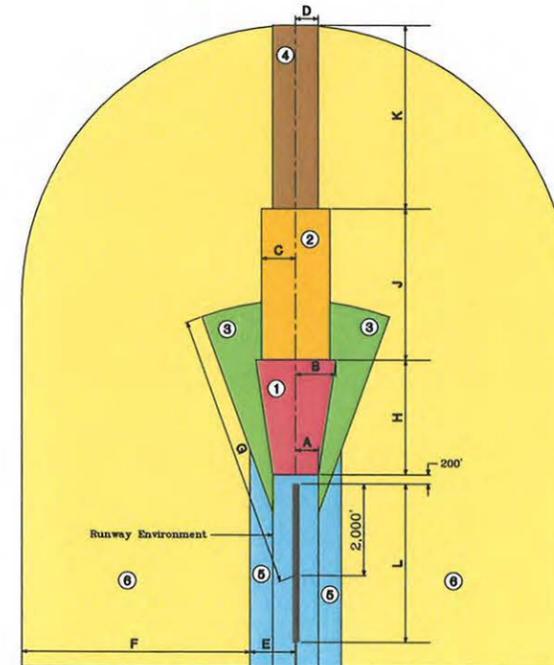
SAFETY ZONE NAMES	
1	Runway Protection Zone
2	Inner Approach/Departure Zone
3	Inner Turning Zone
4	Outer Approach/Departure Zone
5	Sideline Safety Zone
6	Traffic Pattern Zone



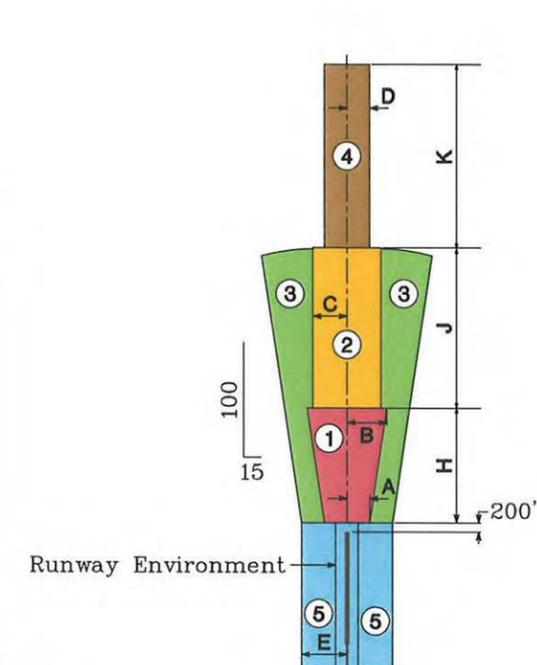
SHORT GENERAL AVIATION RUNWAY



MEDIUM GENERAL AVIATION RUNWAY



LONG GENERAL AVIATION RUNWAY



LARGE AIR CARRIER RUNWAY

SAFETY ZONE DIMENSIONS (Feet)	
- Runway Less than 4,000' (L)	
- Approach Visibility Minimums ≥ 1 Mile or Visual Approach Only	
A	125
B	225
C	500
D	500
E	500
F	4,000
G	3,000 @ 30°
H	1,000
J	2,300
K	1,500

SAFETY ZONE DIMENSIONS (Feet)	
- Runway 4,000' to 5,999' (L)	
- Approach Visibility Minimums ≥ 3/4 Mile or < 1 Mile	
A	500
B	755
C	750
D	500
E	750
F	5,250
G	5,000 @ 30°
H	1,700
J	2,100
K	3,000

SAFETY ZONE DIMENSIONS (Feet)	
- Runway 6,000' or More (L)	
- Approach Visibility Minimums < 3/4 Mile	
A	500
B	875
C	750
D	500
E	1,000
F	5,000
G	6,000 @ 20°
H	2,500
J	3,300
K	4,000

SAFETY ZONE DIMENSIONS (Feet)	
- Minimal Light-Aircraft General Aviation Activity	
- Predominately Straight-in and Straight-out Flight Routes	
- Approach Visibility Minimums ≥ 3/4 Mile	
A	500
B	875
C	750
D	500
E	1,000
H	2,500
J	3,500
K	4,000

Note: These safety zone shapes and sizes are intended only to illustrate the concepts discussed in the text. They do not represent standards or recommendations.

Source: California Airport Land Use Planning handbook, Prepared by Shutt Moen Associates, in association with Brown-Buntin Associates and Gatzke, Dillon & Ballance, (January 2002)

DRAFT



maximum number of dwellings that can be built on land near an airport, thereby reducing the number of people living in areas of greater accident risk, and thereby decreasing the potential severity of an accident. Density refers to the number of structures allowed per unit of land, while intensity refers

to the amount of people using the land at any given time. Density limitations are typically used for residential land uses and intensity limitations are used for non-residential uses. **Table B1** summarizes the density and intensity guidelines provided in the Handbook.

TABLE B1 Land Use Compatibility Guidance						
MAXIMUM RESIDENTIAL DENSITY						
Safety Compatibility Zones^a						
Current Setting	Runway Protection Zone	Inner Approach/Departure Zone	Inner Turning Zone	Outer Approach/Departure Zone	Sideline Zone	Traffic Pattern Zone
<i>Average Number of Dwelling Units Per Gross Acre</i>						
Rural Farm-land/Open Space	0	Maintain current zoning if less than density criteria for rural / suburban setting				No limit
Rural/Suburban	0	1 d.u. per 10-20 ac	1 d.u. per 2-5 ac	1 d.u. per 2-5 ac	1 d.u. per 1-2 ac	No limit
Urban	0	0	Allow infill at up to average of surrounding residential area			No limit
MAXIMUM NONRESIDENTIAL INTENSITY						
Safety Compatibility Zones						
Current Setting	Runway Protection Zone	Inner Approach/Departure Zone	Inner Turning Zone	Outer Approach/Departure Zone	Sideline Zone	Traffic Pattern Zone
<i>Average Number of People Per Gross Acre^b</i>						
Rural Farm-land/Open Space	0 ^c	10-25	60-80	60-80	80-100	150
Rural/Suburban	0 ^c	25-40	60-80	60-80	80-100	150
Urban	0 ^c	40-60	80-100	80-100	100-150	No limit ^d
<i>Multipliers for Above Numbers^e</i>						
Maximum Number of People per Single Acre	X 1.0	X 2.0	X 2.0	X 3.0	X 2.0	X 3.0
Bonus for Special Risk Reduction Building Design	X 1.0	X 1.5	X 2.0	X 2.0	X 2.0	X 2.0
^a Clustering to preserve open land encouraged in all zones. ^b Some land uses prohibited regardless of usage intensity ^c Exceptions can be permitted for agricultural activities, roads, and automobile parking provided that FAA criteria are satisfied. ^d Large stadiums and similar uses should be prohibited. ^e Multipliers are cumulative (e.g., maximum intensity per single acre in inner safety zone is 2.0 times the average intensity for the site, but with risk-reduction building design is 2.0 x 1.5 = 3.0 times the average intensity).						

**SAN JOAQUIN COUNCIL
OF GOVERNMENTS**

The 1993 San Joaquin County Airport Land Use Plan includes land use compatibility criteria to address obstructions to navigable airspace. **Table B2** summarizes the land use compatibility criteria set forth in the plan. The criteria are based on the Part 77 surfaces

and associated subareas. Additionally, the San Joaquin County Airport Land Use Plan includes intensity restrictions which limit the number of people that may congregate within a specific area. These restrictions are meant to reduce risk to people on the ground in the event of an aircraft accident.

TABLE B2 San Joaquin County Airport Land Use Plan Airspace Restrictions		
Surface	Prohibited Uses	Intensity Restriction
Airport Building Areas	Residential Dumps or landfills, other than those consisting entirely of earth and rock, waterways that create a bird hazard	None
Other Airport Property	Residential Dumps or landfills, other than those consisting entirely of earth and rock, waterways that create a bird hazard	None
Runway Protection Zone	Residential, Industrial/manufacturing, Transportation, communication and utilities Agriculture and mining Commercial Business and personal service Restaurants Hotels and motels Public and quasi-public services Hospitals Churches Schools Recreational Uses Theaters Auditoriums Stadiums Athletic fields Playgrounds Dumps or landfills, other than those consisting entirely of earth and rock, waterways that create a bird hazard Warehouses, storage yards, and all petroleum and chemical storage facilities	None

TABLE B2 (Continued)
San Joaquin County Airport Land Use Plan
Airspace Restrictions

Surface	Prohibited Uses	Intensity Restriction
Inner Approach and Climb-out Areas	Residential Manufacturing and industrial uses Chemicals and allied products Asphalt paving and misc. petroleum Petroleum refining Rubber & plastics Passenger terminals & stations Radio, TV & telephone centers Electrical & natural gas generation and switching Oil & gas extraction Natural gas & petroleum pipelines Commercial uses except those listed as permitted Businesses & personal services except those listed as permitted Hotels and motels Restaurants Public and quasi-public services Hospitals Churches Schools Recreational Uses Theaters Auditoriums Stadiums Athletic fields Playgrounds Riding stables Dumps or landfills, other than those consisting entirely of earth and rock, waterways that create a bird hazard Petroleum and chemical storage	No land use which would result in a density of greater than 10 persons in any one acre at any one time is permitted.

TABLE B2 (Continued)
San Joaquin County Airport Land Use Plan
Airspace Restrictions

Surface	Prohibited Uses	Intensity Restriction
Outer Approach and Climb-out Areas	Residential, except for very low density Manufacturing and industrial uses Chemicals and allied products Asphalt paving and misc. petroleum Petroleum refining Rubber & plastics Passenger terminals & stations Radio, TV & telephone centers Electrical & natural gas generation and switching Oil & gas extraction Hotels and motels Restaurants Public and quasi-public services Hospitals Churches Schools Recreational Uses Theaters Auditoriums Stadiums Athletic fields Playgrounds Riding stables Dumps or landfills, other than those consisting entirely of earth and rock, Natural gas & petroleum pipelines Commercial uses Chemical & allied products Petroleum truck terminals Businesses & personal services except those listed as permitted waterways that create a bird hazard Petroleum and chemical storage	No land use which would result in a density of greater than 50 persons in any one acre at any one time is permitted.

TABLE B2 (Continued)
San Joaquin County Airport Land Use Plan
Airspace Restrictions

Surface	Prohibited Uses	Intensity Restriction
Transitional Zone	Residential, except for very low density Manufacturing and industrial uses Chemicals and allied products Asphalt paving and misc. petroleum Petroleum refining Rubber & plastics Passenger terminals & stations Radio, TV & telephone centers Electrical & natural gas generation and switching Oil & gas extraction Natural gas & petroleum pipelines Commercial uses Chemical & allied products Petroleum truck terminals Businesses & personal services except those listed as permitted Hotels and motels Restaurants Public and quasi-public services Hospitals Churches Schools Recreational Uses Theaters Auditoriums Stadiums Athletic fields Playgrounds Riding stables Dumps or landfills, other than those consisting entirely of earth and rock, waterways that create a bird hazard Petroleum and chemical storage	No land use which would result in a density of greater than 25 persons in any one acre at any one time, except for permitted residential uses.
Horizontal and Conical Surfaces	None	None

Each of the compatibility zones also has standards regarding soundproofing, non-reflective materials, transmissions, and power line undergrounding that applies to proposed development. These are stated in the plan as follows:

- New residential land uses (developments with no less than five units) within each airport's area of influence must have an aviation easement recorded in favor of the

airport. The Deed of Avigation and Hazard Easement must be filed with the local governing body's recording agency prior to the beginning of development construction. These easements should not be construed as permission slips for airports to expand their facilities. Airport expansions are governed by the FAA.

- Occupied structures must be soundproofed to reduce interior

noise to 45 dB according to state guidelines. Reflective materials are not permitted to be used in structures or signs (excluding traffic directing signs) to avoid distracting pilots.

- All proposed acquisitions of property within a two-mile radius of an airport runway for the purpose of constructing a school requires a re-

view and approval of the proposal by the State Department of Transportation, Division of Aeronautics.

- No transmissions which would interfere with aircraft communications or navigation are permitted. Power lines must be undergrounded, if necessary, to prevent hazard to aircraft.



Appendix C

Policy and Compatibility Alternatives

Appendix C

POLICY AND

Airport Land Use Compatibility Plan

COMPATIBILITY ALTERNATIVES

San Joaquin County

The purpose of this appendix is to review alternatives to the *1993 San Joaquin County Airport Land Use Compatibility Plan* (ALUCP) policies and compatibility guidelines. Material contained in this appendix was developed for discussion purposes during the development of the ALUCP update and in some cases does not reflect the final plan and policies contained in Chapter Three of this document.

This appendix will start by discussing the current Airport Land Use Commission (ALUC) policies and review procedures. Options to improve the readability and clarify the policies and review procedures based upon the *2002 California Airport Land Use Planning Handbook* will be reviewed. Alternatives to the current compatibility guidelines will then be discussed.

A review of the federal, State of California, and current 1993 ALUCP land use guidelines can be found in Appendix B. A compatibility factor exhibit for each airport has been developed using this information and a comparison of the current 1993 ALUCP and *2002 California Airport Land Use Planning Handbook* compatibility zones for each airport has also been provided.

ALUCP POLICY ALTERNATIVES

This section will be broken down into two areas: general policies of the ALUCP and the review process. General policies include the geographical extent of the ALUC

review, type of airport impacts, and the type of land use actions that should be reviewed. The review process discussion will include timing of project submittal and review, project submittal information, ALUC actions, and how the ALUC handles a proposed overruling.

Geographical Extent of ALUC Review

The 1993 document clearly states that the guidelines are to ensure that no new land uses that result in a hazard to aircraft or to the health or safety of persons on the ground are permitted within an airport's area of influence (AIA) (on page 9 of the 1993 ALUCP). The area of influence is depicted on individual Airport Land Use Zone maps for each airport. There is no provision for ALUC review of land use actions outside the six designated airport influence areas.

Focusing on land use actions in the airport influence area is a generally accepted method for identifying potential development that may be incompatible with airports. However, language could be added that gives the ALUC the flexibility to review land use actions regardless of location in San Joaquin County that could adversely affect the safety of aircraft in flight. An example of where this policy might be applied is if a new public use airport or helipad is proposed in the county.

Type of Airport Impacts

The types of airport impacts are not specifically discussed in the 1993 ALUCP. Consideration should be given to providing policy guidance on the primary compatibility concerns. These compatibility concerns include exposure to aircraft noise, safety of the people in the aircraft and on the ground, airport airspace protection, and aircraft overflights. Policy guidance on airport impacts not considered by the ALUC or the ALUCP should also be considered. Air pollution, automobile traffic, when and where aircraft fly, and airport security are not subject to ALUC review.

Type of Land Use Actions Reviewed

There is very little policy guidance on what type of land use actions should be reviewed in the 1993 ALUCP. The 1993 document states, "The ALUC staff will review development referrals and report their findings to the local jurisdictions." Consideration should be given to providing more detailed policy guidance on the type of land use actions that should be reviewed by the ALUC. These land use actions can be broken down into two categories: 1) land use actions which require ALUC review by state law; and 2) land use actions that are potentially subject to ALUC review.

Mandatory land use actions include:

- The adoption or approval of any amendment to a general plan or specific plan affecting the property within an airport influence area.
- The adoption or approval of a zoning ordinance or building regulation which affects property within an airport influence area.
- Adoption or modification of a master plan for an existing public-use airport.
- Any proposal for expansion of an existing airport or heliport expansion requires an amended airport permit from the state.
- Any proposal for a new airport or heliport whether for public use or private use.

Non-mandatory land use actions potentially subject to ALUC review include:

- Proposed residential development, including land divisions, consisting of five or more dwelling units or lots.
- Proposed development agreements or amendments to such agreements.
- Any proposed expansion of the sphere of influence of a city or special district.
- Proposed pre-zoning associated with future annexation of land to a city.
- Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required.
- Major capital improvements (e.g., water, sewer, or roads) which would promote urban uses in undeveloped or agricultural areas to the extent that such uses are not reflected in a previously reviewed general plan or specific plan.
- Proposed land acquisition by a government entity for any facilities accommodating a congregation of people (for example, a school or hospital).
- Any off-airport, non-aviation use of land within the Runway Protection Zone (RPZ) of any airport.
- Proposals for new development (including buildings, antennas, and other structures) having a height of more than:
 - 35 feet within the Runway Protection Zone or Inner Approach/Departure Zone;
 - 70 feet within Extended Approach/Departure Zone; or
 - 150 feet within Sideline Safety or Traffic Pattern Zone.
- Any obstruction reviewed by the Federal Aviation Administration (FAA) in accordance with Part 77 of the Federal Aviation Regulations (FAR) that receives a finding of anything other than “not a hazard to air navigation.”
- Any project having the potential to create electrical or visual hazards to aircraft in flight, including:
 - Electrical interference with radio communications or navigational signals;
 - Lighting which could be mistaken for airport lighting;
 - Glare in the eyes of pilots of aircraft using the airport; and
 - Impaired visibility near the airport.

- Projects having the potential to cause attraction of birds or other wildlife that can be hazardous to aircraft operations to be increased within the vicinity of an airport.
- Proposed non-aviation development of airport property if such development has not previously been included in an airport master plan or community general plan.
- Regardless of location within the County, any proposal for construction or alteration of a structure (including antennas) taller than 200 feet above the ground level at the site.
- Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

In addition to the above types of land use actions potentially subject to ALUC reviews, consideration should also be given to the following circumstances:

- Until the ALUC finds that a local agency's general plan and specific plans are consistent with the ALUCP, the ALUC may require the local agency to refer all land use actions, regulations, and permits involving land within an airport influence area to the Commission for review (state law provides for this contingency in Public Utilities Code Section 21676.5[a]). Several different strategies for achieving full general plan/specific plan consistency are available to local agencies. These include:
 - Incorporating policies into existing general plan elements;
 - Adopting a general plan airport element;
 - Adopting the compatibility plan as a specific plan;
 - Adopting the compatibility plan as a stand-alone document; or
 - Adopting an airport combining district or overlay zoning ordinance.
- After a local agency has revised its land use designations to show consistency with the ALUCP, the ALUC no longer has authority under state law to require that all actions, regulations, and permits be referred for review. However, the ALUC and the local agency can agree that the ALUC should continue to review individual projects.
- Proposed redevelopment of a property for which the existing use is consistent with the general plan and/or specific plan, but nonconforming with the compatibility criteria set forth in this plan, shall be subject to ALUC review. This policy is intended to address circumstances that arise when a general or specific plan land use designation does not conform to ALUC compatibility criteria, but is deemed consistent with the compatibility plan because the designation reflects an existing land use. Proposed redevelopment of such lands voids the consistency status and is to be treated as new development subject to ALUC review even if the proposed use is consistent with the local general plan or specific plan.

ALUC REVIEW PROCESS

Specific information on the ALUC review process is not included in the 1993 ALUCP document. Consideration should be given to outlining project submittal information needed for a thorough review, the type of actions the ALUC can take, the amount of review time ALUC requires, and the overruling process. Below is a basic description of the information needed for review. The possible actions the ALUC can take after completing their review and the time frame in which the ALUC review must be completed is then discussed, followed by a description of the overruling process.

Information Required for ALUC Review

An airport master plan or development plan submitted to the ALUC for review should contain sufficient information to enable the ALUC to adequately assess the noise, safety, airspace protection, and overflight impacts of aircraft activity upon surrounding land uses. A master plan report should be submitted, if available.

Community Land Use Plan and Ordinance Reviews

- Complete copy of land use plan/ordinance.
- Mapping and associated exhibits clearly depicting the boundaries of the plan.
- Supporting documentation and appendices.
- Any environmental documentation prepared for the plan/ordinance.

Airport Master Plans and Development Plans

- A layout plan drawing of the proposed facility showing the location of:
 - Property boundaries;
 - Runways or helicopter takeoff and landing areas;
 - Runway or helipad protection zones;
 - Aircraft or helicopter approach/departure flight routes.
- Part 77 airspace surfaces.
- Activity forecasts, including the number of operations by each type of aircraft proposed to use the facility; the percentage of day, evening, and night operations; and the distribution of takeoffs and landings for each runway direction.
- Current and projected noise contours and other supplementary noise impact data that may be relevant.
- Any environmental documentation that may have been prepared for the project.

Land Use Actions

- Property location data:
 - Assessor's parcel number
 - Street address
 - Subdivision lot number
- A scaled map showing the relationship of the land use action project site to the airport.
- A description of the existing land uses on the property.
- A description of proposed land use on the property:
 - A detailed site plan showing ground elevations, location of structures, height of structures, open spaces, and bodies of water
 - If residential, the number of dwelling units per acre
 - If non-residential, the number of people potentially occupying the property or portion of property
- Type of land use action being sought from the local jurisdiction:
 - Zoning change
 - Building permit
- List any characteristics that create:
 - Electrical interference
 - Glaring lights or visual hazards
 - Smoke
 - Hazards to aircraft in flight
- Any environmental documentation on the land use action
- Local jurisdictional staff reports on the proposed land use action
- Any other relevant information that the ALUC deems necessary to complete the review of the land use action

ALUC Ruling Options

ALUC ruling options can be broken down into three basic categories after the review is complete. These categories include: 1) ruling options for community land use plan and ordinance reviews; 2) airport master plans and development plans; and 3) land use actions. The following sections provide suggested approval/disapproval ruling options guidance on each of these three categories.

ALUC Ruling Options for Community Land Use Plan and Ordinance Reviews

- Find the plan, ordinance, or regulation consistent with the ALUCP.
- Find the plan, ordinance, or regulation consistent with the ALUCP subject to conditions and/or modifications that the ALUC may require.
- Find the plan, ordinance, or regulation inconsistent with the ALUCP (ALUC should note the specific conflicts or shortcoming of the plan, ordinance, or regulation).

ALUC Ruling Options for Airport Master Plans and Development Plans

- Find the airport master plan/development plan consistent with the ALUCP.
- Modify the ALUCP (after duly noticed public hearing) to reflect the assumptions and proposals in the airport master plan/development plan.
- Find the airport master plan/development plan inconsistent with the ALUCP (ALUC should note the specific conflicts or shortcoming of the airport master plan/development plan).

ALUC Ruling Options for Land Use Actions

- Find the land use action consistent with the ALUCP.
- Find the land use action consistent with the ALUCP subject to conditions and/or modifications that the ALUC may require.
- Find the land use action inconsistent with the ALUCP (ALUC should note the specific conflicts or shortcoming of the land use action).

ALUC Response Time

The ALUC must respond to a local agency's request for consistency determination on a general plan, specific plan, zoning ordinance, building regulation, or airport master plan within 60 days from the date of referral (Public Utilities Code Section 21676[d]). If the ALUC fails to make a determination within the 60-day period, the proposal is deemed consistent with the ALUCP. However, regardless of ALUC action or failure to act, the proposal must comply with other applicable local, state, and federal regulations and laws.

The ALUC has more flexibility in responding to land use actions. In general, land use actions submitted for ALUC review should be completed by staff within 30 days of when a complete application is submitted. If the ALUC fails to make a determination within the 30-day period, the land use action is deemed consistent with the ALUCP. As stated previously, regardless of ALUC action or failure to act, the land use action must comply with other applicable local, state, and federal regulations and laws.

ALUC Ruling Conformation

The ALUC often reviews airport master plans, development plans, general plans, specific plans, ordinances, and land use action documents when they are in draft form. The ALUC reserves the right to reconfirm determinations made on a draft document if material changes and/or modifications have been made before the document is finalized. If the ALUC or local agency deems material changes and/or modifications have been made between the draft and final versions of a

plan/ordinance/land use action that may affect the ALUC determination, the document must be submitted to the ALUC for reconfirmation. ALUC reconfirmation should be completed by staff within 30 days of when a final document is submitted for reconfirmation. If the ALUC fails to reconfirm or make a new determination within the 30-day period, the ALUC determination on the draft document will remain valid. Regardless of ALUC action or failure to act, the plan/ordinance/land use action must comply with other applicable local, state, and federal regulations and laws.

Local Agency Overrule Notification

If a local agency starts the overrule process of an ALUC determination, it must provide 45 days notice to both the ALUC and the California Division of Aeronautics. The ALUC and California Division of Aeronautics then have 30 days from the date of notice in which to respond (Public Utilities Code Section 21676(c)).

SPECIAL POLICY ALTERNATIVES

Additional land use guidance may be necessary in cases where infill development, existing nonconforming uses, parcels within more than one compatibility zone, and development by existing rights issues must be reviewed by the ALUC. The 1993 ALUCP currently does not address these issues. The following sections describe policy alternatives for these situations.

Infill Policy

Where development not in conformance with the ALUCP criteria already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the zone. This exception does not apply within the Runway Protection Zone or Inner Approach/Departure Zone.

A parcel can be considered for infill development if it meets the following criteria:

- The parcel size is no larger than 20.0 acres.
- At least 65 percent of the site's perimeter is bounded (disregarding roads) by existing uses similar to, or more intensive than, those proposed.
- The area to be developed cannot previously have been set aside as open land in accordance with policies contained in this *Plan* unless replacement open land is provided within the same compatibility zone.
- For proposed residential uses, the average density must not exceed existing lots that lie fully or partially within a distance of 300 feet from the boundary of the parcel to be divided.

- For proposed nonresidential uses, the average intensity must not exceed any existing uses that lie fully or partially within a distance of 300 feet from the boundary of the proposed development.

Nonconforming Uses

Existing uses not in conformance with this ALUCP may only be expanded as follows:

- Nonconforming residential uses may be expanded in building size provided the expansion does not result in more dwelling units than currently exist on the parcel (a bedroom could be added, for example, but a separate dwelling unit could not be built).
- A nonconforming nonresidential development may be continued, leased, or sold, and the facilities may be maintained or altered (including potentially enlarged), provided that the portion of the site devoted to the nonconforming use is not expanded and the usage intensity (the number of people per acre) is not increased above the levels existing at the time of adoption of this ALUCP.
- ALUC review is required for any proposed expansion of a nonconforming use (in terms of the site size or the number of dwelling units or people on the site). Factors to be considered in such reviews include whether the development qualifies as infill or warrants approval because of other special conditions.
- An existing nonconforming development that has been fully or partially destroyed as the result of a calamity may be rebuilt provided that the expansion does not result in more dwelling units, floor area, or result in increased intensity of use than existed on the parcel at the time of the damage.
- The exceptions to rebuilding nonconforming uses do not apply within the Runway Protection Zone or where such reconstruction would be in conflict with a county or city general plan or zoning ordinance.
- Nothing in the above policies is intended to preclude work required for normal maintenance and repair.

Parcels Lying within Two or More Compatibility Zones

For the purposes of evaluating consistency with the compatibility criteria set forth in the ALUCP, any parcel that is split by compatibility zone boundaries shall be considered as if it were multiple parcels divided at the compatibility zone boundary

line. However, the density or intensity of development allowed within the more restricted portion of the parcel should be transferred to the less restricted portion.

Development by Right

Nothing in these policies prohibits construction of a single-family home, including a second unit as defined by state law, on a legal lot of record if such use is permitted by local land use regulations. The construction of other types of land uses are also not prohibited if local government approvals qualify the development as effectively existing.

COMPATIBILITY GUIDELINE ALTERNATIVES

Compatibility policies and maps are the central component of any ALUCP. The purpose of this section is to discuss potential compatibility policy alternatives to the *1993 San Joaquin County Airport Land Use Compatibility Plan*. A complete breakdown of the current guidelines can be found in Appendix B. An alternative compatibility matrix can be found in **Table C1**. Generalized compatibility zone areas and names can be found on **Exhibit C1**.

**TABLE C1
Alternative Compatibility Matrix**

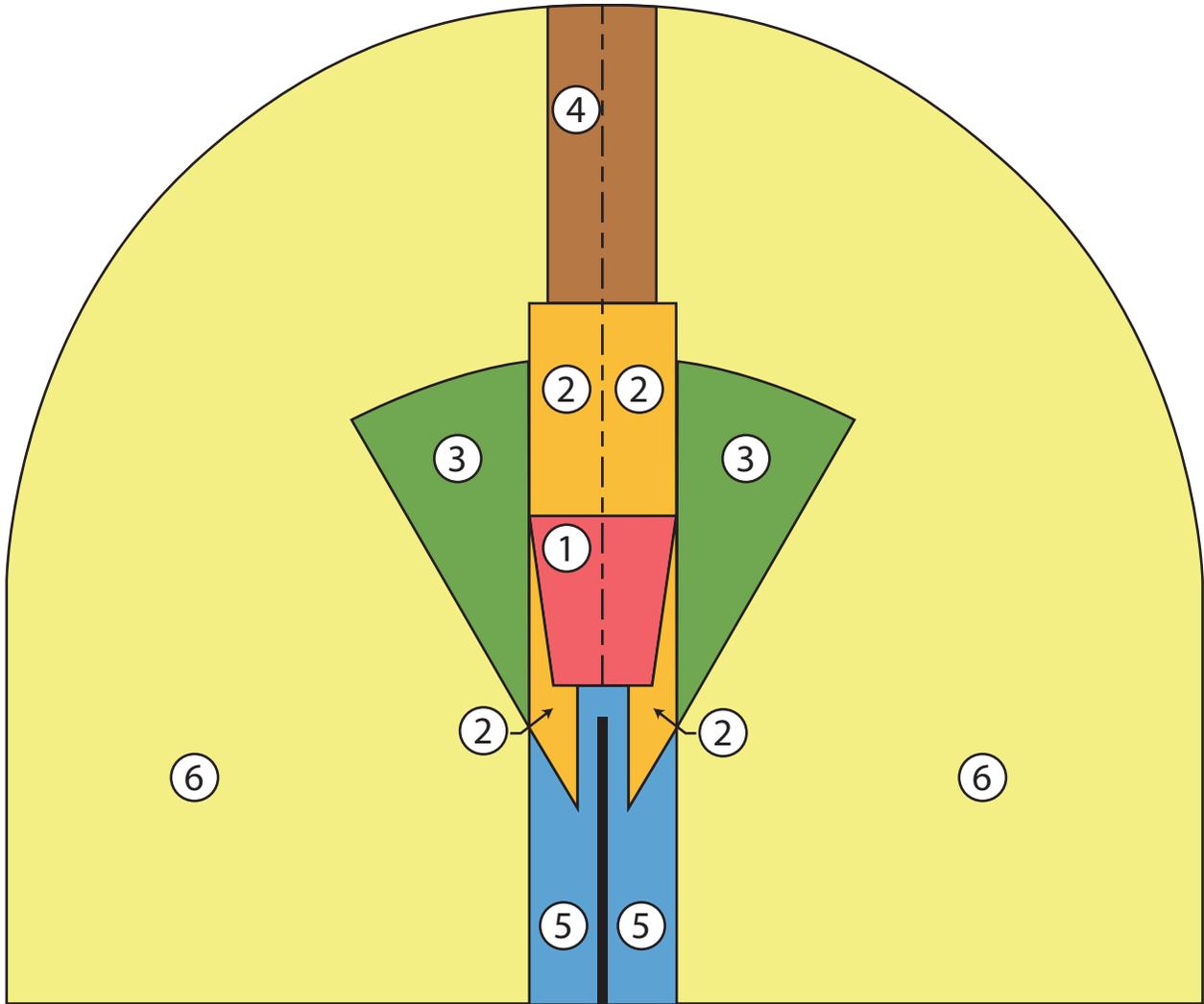
Zone	Maximum Densities/Intensities/Required Open Land			Additional Criteria	
	Dwelling Units per Acre ¹	Maximum Non-residential Intensity ²	Req'd Open Land ³	Prohibited Uses ⁴	Other Development Conditions ⁵
Zone 1	None	None	All unused	<ul style="list-style-type: none"> • All structures except ones with location set by aeronautical function • Assemblages of people • Public & quasi-public services • Objects exceeding FAR Part 77 height limits • Storage of hazardous materials • Chemicals and allied products & storage • Petroleum refining & storage • Electrical & natural gas generation & switching • Oil & gas extraction • Natural gas & petroleum pipelines • Dumps or landfills, other than those consisting entirely of earth & rock. • Hazards to flight⁶ 	<ul style="list-style-type: none"> • Avigation easement dedication
Zone 2	1 d.u. per 10 acres	10 persons per acre	30%	<ul style="list-style-type: none"> • Residential, except for very low residential • Manufacturing and industrial uses • Chemicals and allied products & storage • Petroleum refining & storage • Rubber & plastics • Passenger terminals & stations • Radio, TV & Telephone centers • Electrical & natural gas generation & switching • Oil & gas extraction • Natural gas & petroleum pipelines • Petroleum truck terminals • Businesses & personal services • Hotels, motels, restaurants • Public & quasi-public services • Children's schools, day care centers, libraries • Hospitals, nursing homes • Places of worship • Schools • Recreational uses, athletic fields, playgrounds, & riding stables • Theaters, auditoriums, & stadiums • Dumps or landfills, other than those consisting entirely of earth & rock. • Waterways that create a bird hazard • Hazards to flight⁶ 	<ul style="list-style-type: none"> • Avigation easement dedication • Locate structures maximum distance from extended runway centerline • Minimum NLR of 45 dB residences (including mobile homes) and office buildings⁸ • Airspace review required for objects > 35 feet tall⁹
Zone 3	1 d.u. per 5 acres	50 persons per acre	20%	Same as Zone 2	<ul style="list-style-type: none"> • Same as zone 2
Zone 4	1 d.u. per 5 acres	80 persons per acre	20%	<ul style="list-style-type: none"> • Children's schools, day care centers, libraries • Hospitals, nursing homes • Bldgs. with >3 aboveground habitable floors • Highly noise-sensitive outdoor nonresidential uses⁷ • Hazards to flight⁶ 	<ul style="list-style-type: none"> • Minimum NLR of 25 dB in residences (including mobile homes) and office buildings⁸ • Airspace review required for objects >70 feet tall¹⁰

TABLE C1 (Continued)
Alternative Compatibility Matrix

Zone	Maximum Densities/Intensities/Required Open Land			Additional Criteria	
	Dwelling Units per Acre ¹	Maximum Non-residential Intensity ²	Req'd Open Land ³	Prohibited Uses ⁴	Other Development Conditions ⁵
Zone 5	1 d.u. per 2 acres	100 persons per acre	25%	Same as Zone 2	Same as Zone 2
Zone 6	No Limit	150 persons per acre	10%	<ul style="list-style-type: none"> Hazards to flight⁶ 	<ul style="list-style-type: none"> Airspace review required for objects >100 feet tall¹⁰
AIA	No Limit	No Limit ¹⁸	No Req't	<ul style="list-style-type: none"> Hazards to flight⁶ 	<ul style="list-style-type: none"> Airspace review required for objects >100 feet tall¹⁰

Notes:

- Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre (d.u./ac). Clustering of units is encouraged. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.
- Usage intensity calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at a single point in time, whether indoors or outside.
- Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects.
- The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.
- As part of certain real estate transactions involving residential property within any compatibility zone (that is, anywhere within an airport influence area), information regarding airport proximity and the existence of aircraft overflights must be disclosed. This requirement is set by state law. Easement dedication and deed notice requirements indicated for specific compatibility zones apply only to new development and to reuse if discretionary approval is required.
- Hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited.
- Examples of highly noise-sensitive outdoor nonresidential uses that should be prohibited include amphitheatres and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
- NLR = Noise Level Reduction, the outside-to-inside sound level attenuation that the structure provides.
- Objects up to 35 feet in height are permitted. However, the Federal Aviation Administration may require marking and lighting of certain objects.
- This height criterion is for general guidance. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not be obstructions.



GENERALIZED ZONES

COMPATABILITY ZONES	
①	Runway Protection Zone
②	Inner Approach / Departure Zone
③	Inner Turning Zone
④	Outer Approach / Departure Zone
⑤	Sideline Safety Zone
⑥	Traffic Pattern Zone

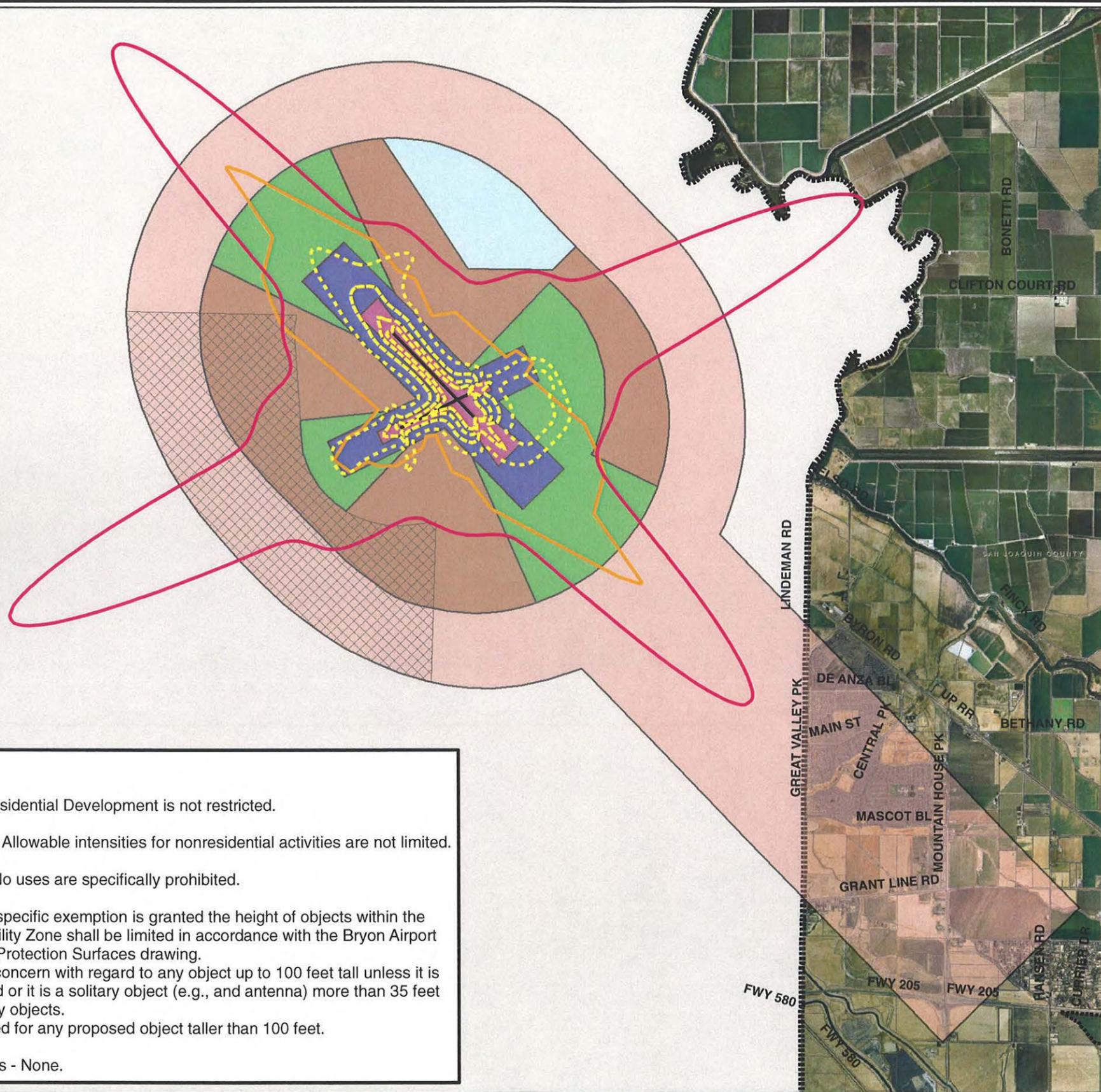


COMPATIBILITY FACTORS AND ZONE COMPARISON

A compatibility factors map has been prepared for each airport. This map depicts the airport's flight tracks, CNEL noise exposure contours, SEL noise exposure contour, accident distribution contour, and 1993 ALUCP zones. The flight tracks, CNEL noise exposure contours, and SEL noise exposure contour information is taken from Chapter Two and Appendix A. The accident distribution contour is derived from the *2002 California Airport Land Use Planning Handbook* which is broken down by runway length. The contours encompassing 80 percent of accidents on arrivals and departure locations have been depicted. The purpose of this series of exhibits is to spur discussion on the adequacy of the zone coverage for each airport.



Byron Airport



LEGEND

- Airport Property
- Municipal Boundary
- County Boundary

- Noise & Overflight Compatibility Factors
- CNEL Noise Exposure Contour
- 95 dB Single Event Contour

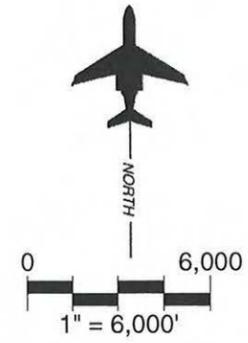
- Existing Compatibility Zones
- Accident Distribution Contour¹
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Height Exception Overlay Zone

Current Compatibility Zone Guidelines

* There are no Compatibility Zones based upon current guidelines that reach San Joaquin County.

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway 05-23 Less than 4,000 feet and Runway 12-30 6,000 feet or more.

Source: Contra Costa County Airport Land Use Compatibility Plan, December 2000.
Byron Airport Master Plan, June 2005.



Compatibility Zone 'D' Criteria

Residential Development - Residential Development is not restricted.

Nonresidential Development - Allowable intensities for nonresidential activities are not limited.

Uses Specificall Prohibited - No uses are specifically prohibited.

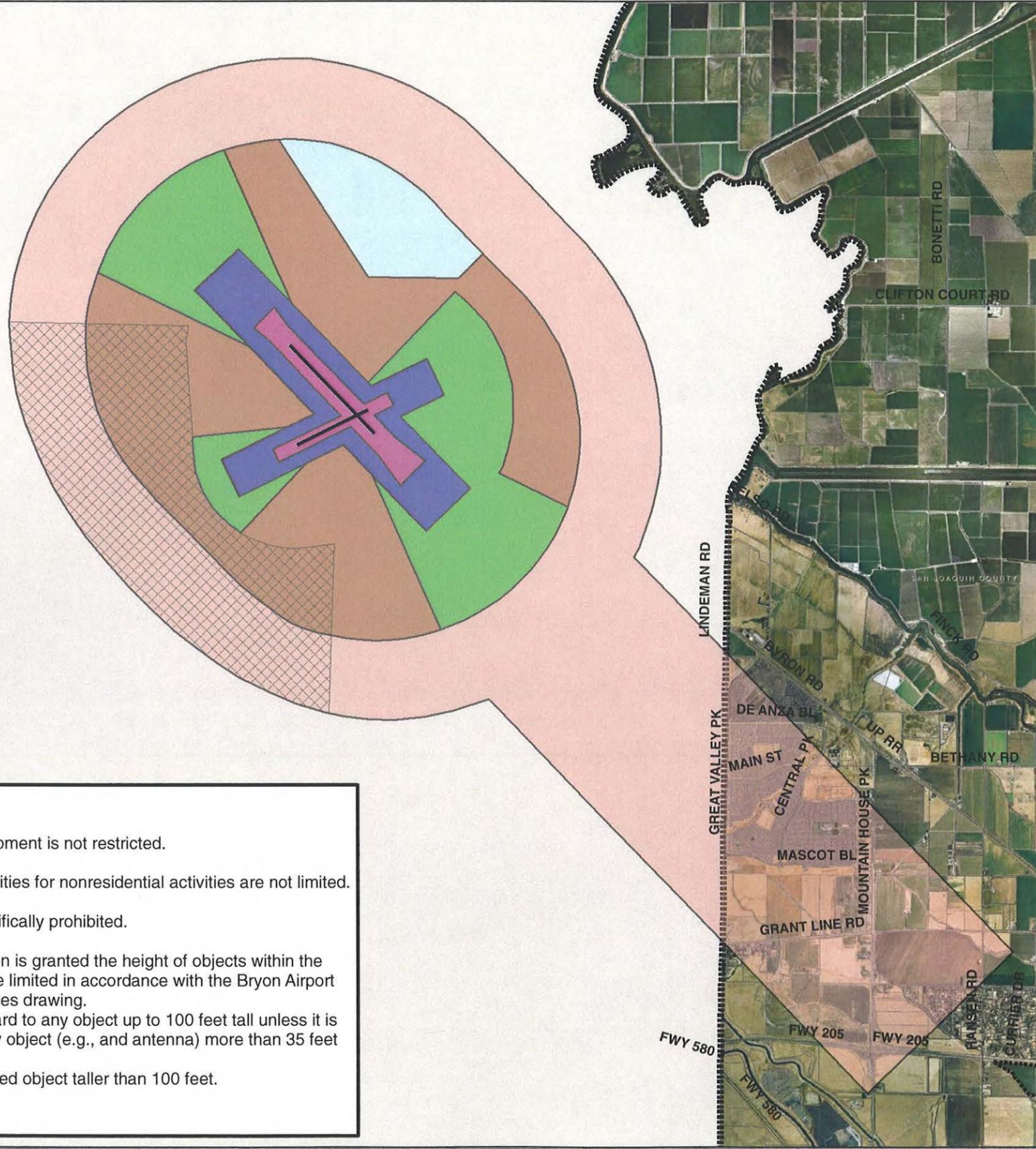
Height Limitations - Unless a specific exemption is granted the height of objects within the Compatibility Zone shall be limited in accordance with the Bryon Airport Airspace Protection Surfaces drawing.

(a) Generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., and antenna) more than 35 feet taller than other nearby objects.

(b) ALUC review is required for any proposed object taller than 100 feet.

Other Development Conditions - None.





LEGEND

- Airport Property
- Municipal Boundary
- County Boundary

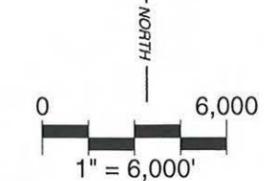
EXISTING COMPATIBILITY ZONES

- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Height Exception Overlay Zone

**2002 HANDBOOK
COMPATIBILITY ZONE GUIDELINES**

* There are no Compatibility Zones based upon current guidelines that reach San Joaquin County.

Source: Contra Costa County Airport Land Use Compatibility Plan, December 2000.
Byron Airport Master Plan, June 2005.



Compatibility Zone 'D' Criteria

Residential Development - Residential Development is not restricted.

Nonresidential Development - Allowable intensities for nonresidential activities are not limited.

Uses Specificall Prohibited - No uses are specifically prohibited.

Height Limitations - Unless a specific exemption is granted the height of objects within the Compatibility Zone shall be limited in accordance with the Bryon Airport Airspace Protection Surfaces drawing.

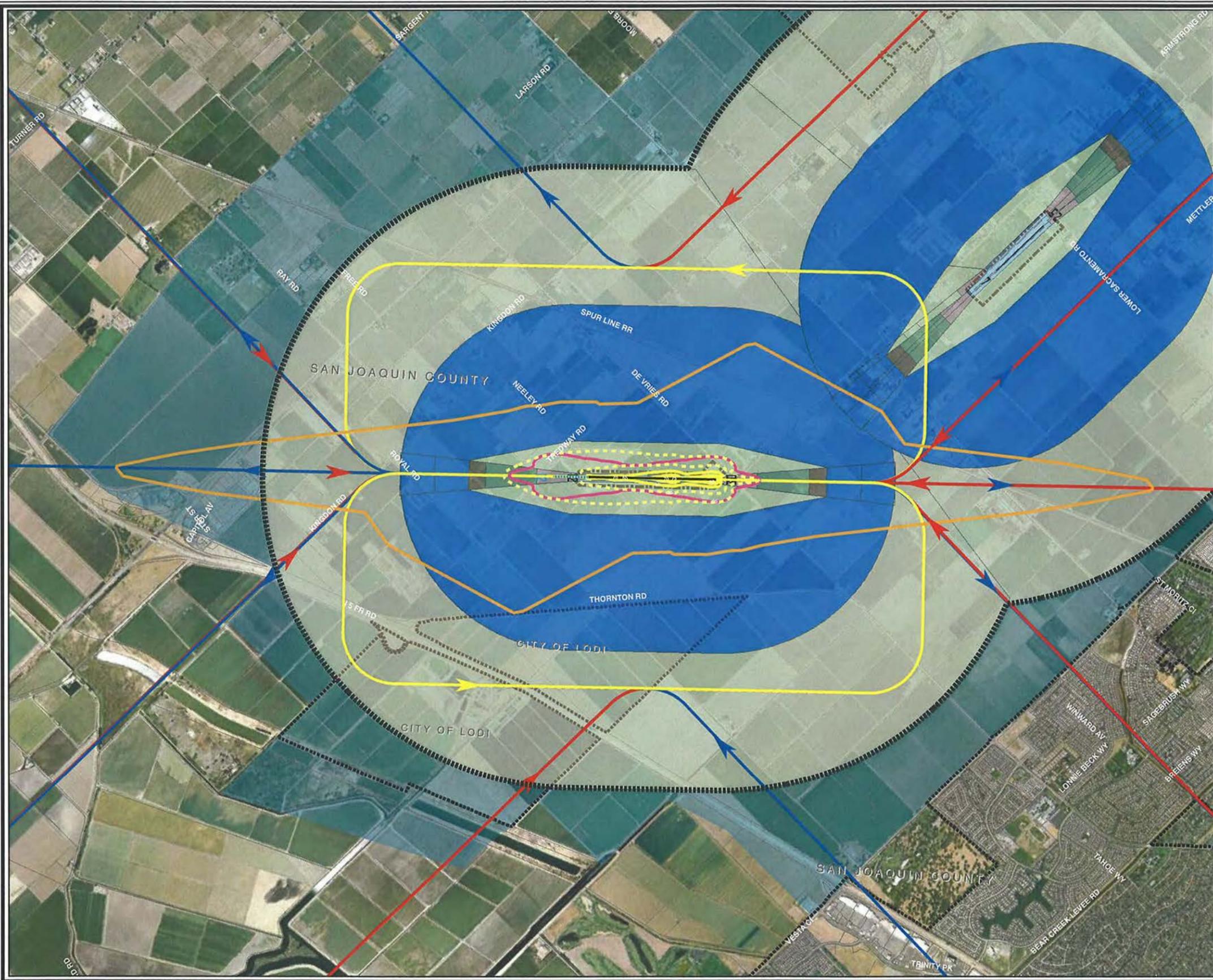
- (a) Generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., and antenna) more than 35 feet taller than other nearby objects.
- (b) ALUC review is required for any proposed object taller than 100 feet.

Other Development Conditions - None.



Kingdon Executive Airport

07SP13-CKA1-0710/08

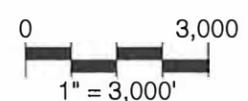


LEGEND

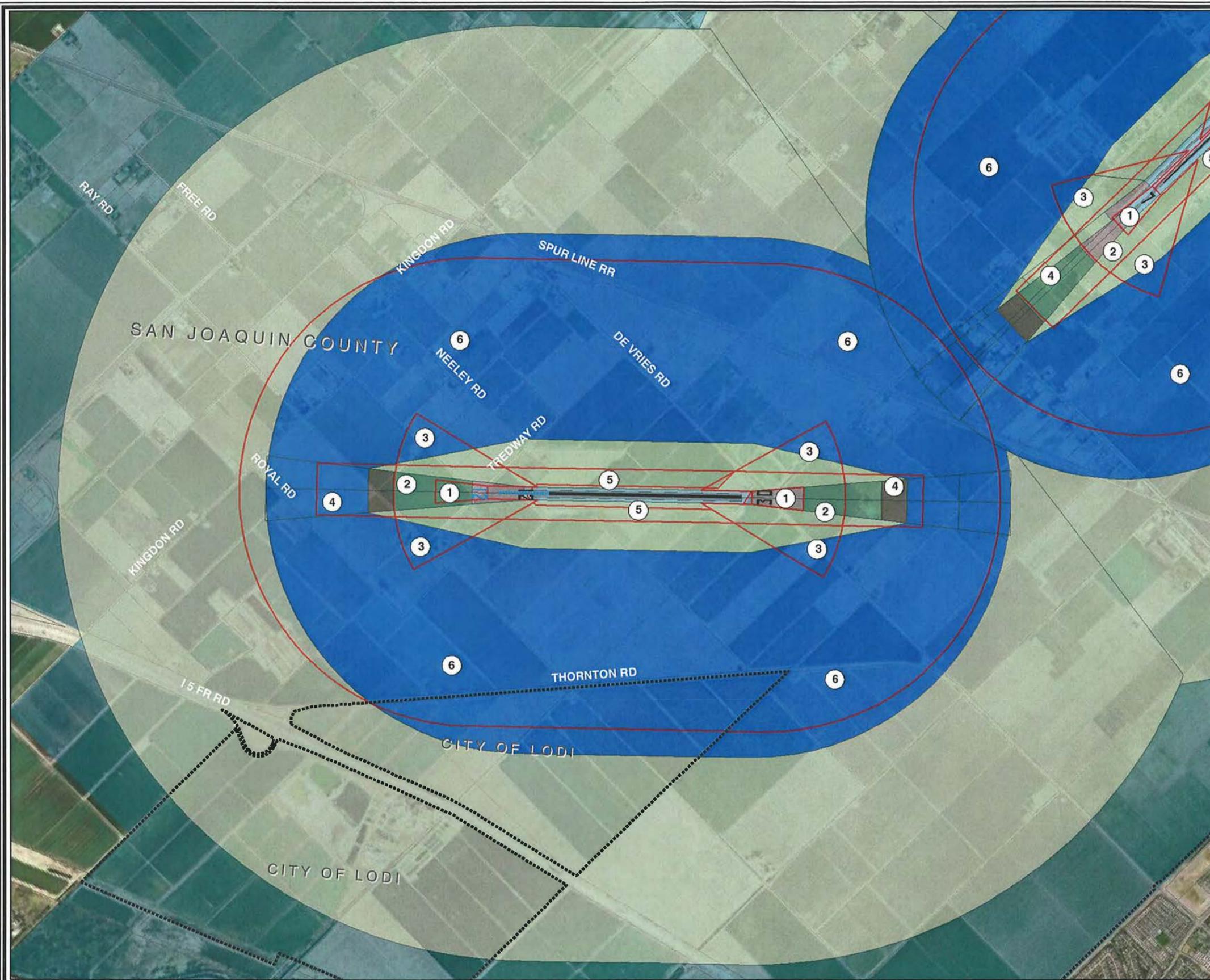
- Airport Property
- Municipal Boundary
- Airport Influence Area
- Noise & Overflight Compatibility Factors**
- Arrival Tracks
- Departure Tracks
- Touch-and-Go Tracks
- - - - - CNEL Noise Exposure Contour
- 95 dB Single Event Contour
- Safety & Airspace Compatibility Factors**
- Accident Distribution Contour¹
- Conical Surface
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway 4,000 to 5,999 feet.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.



07SP13-CKA2-0710/08



LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

EXISTING COMPATIBILITY ZONES

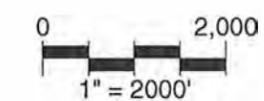
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

2002 HANDBOOK COMPATIBILITY ZONE GUIDELINES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Traffic Pattern Zone

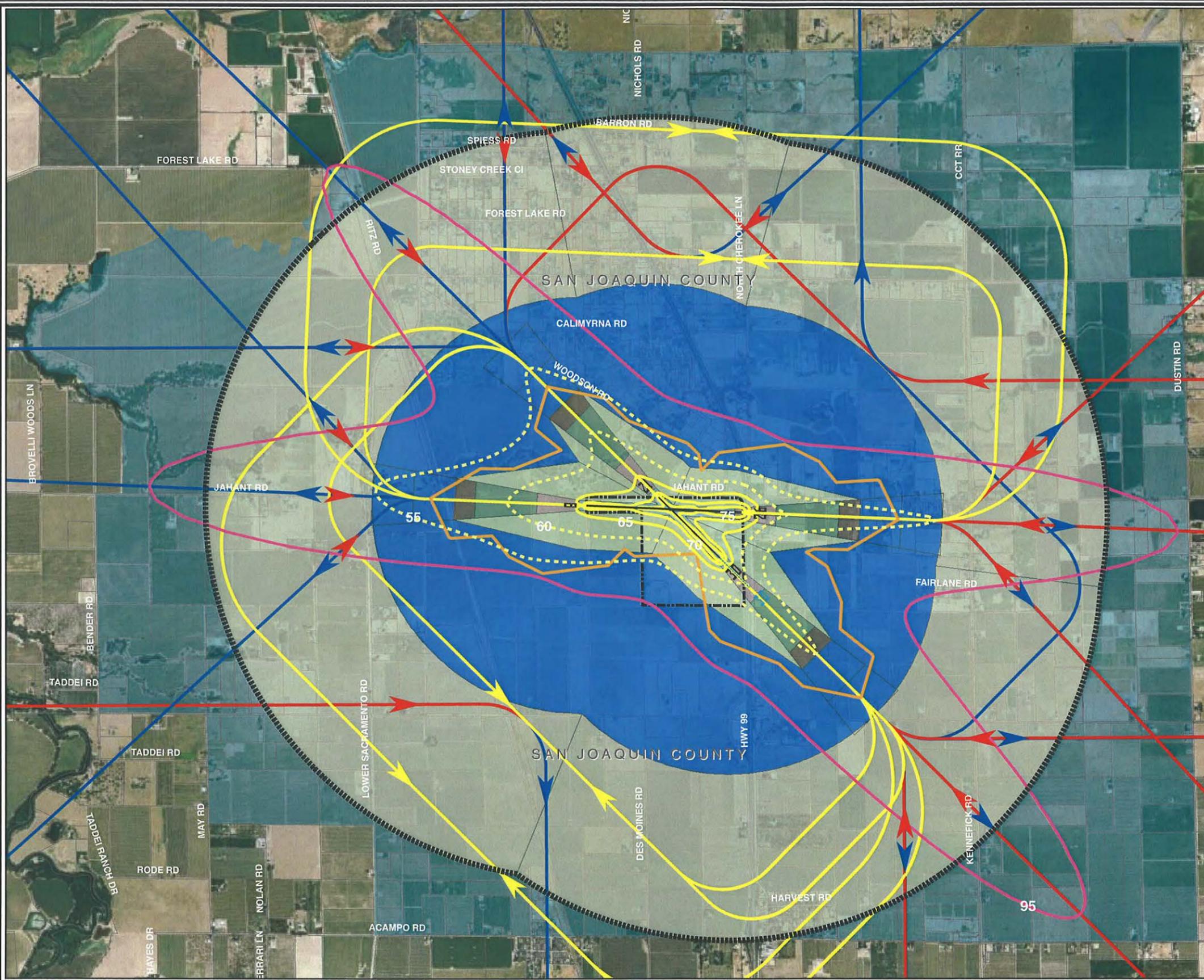
Note: Current compatibility zone guidelines based upon 2002 California Airport Land Use Planning Handbook. Based on Short General Aviation Runway airport safety zone configuration

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.





Lodi Airport

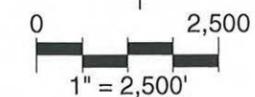


LEGEND

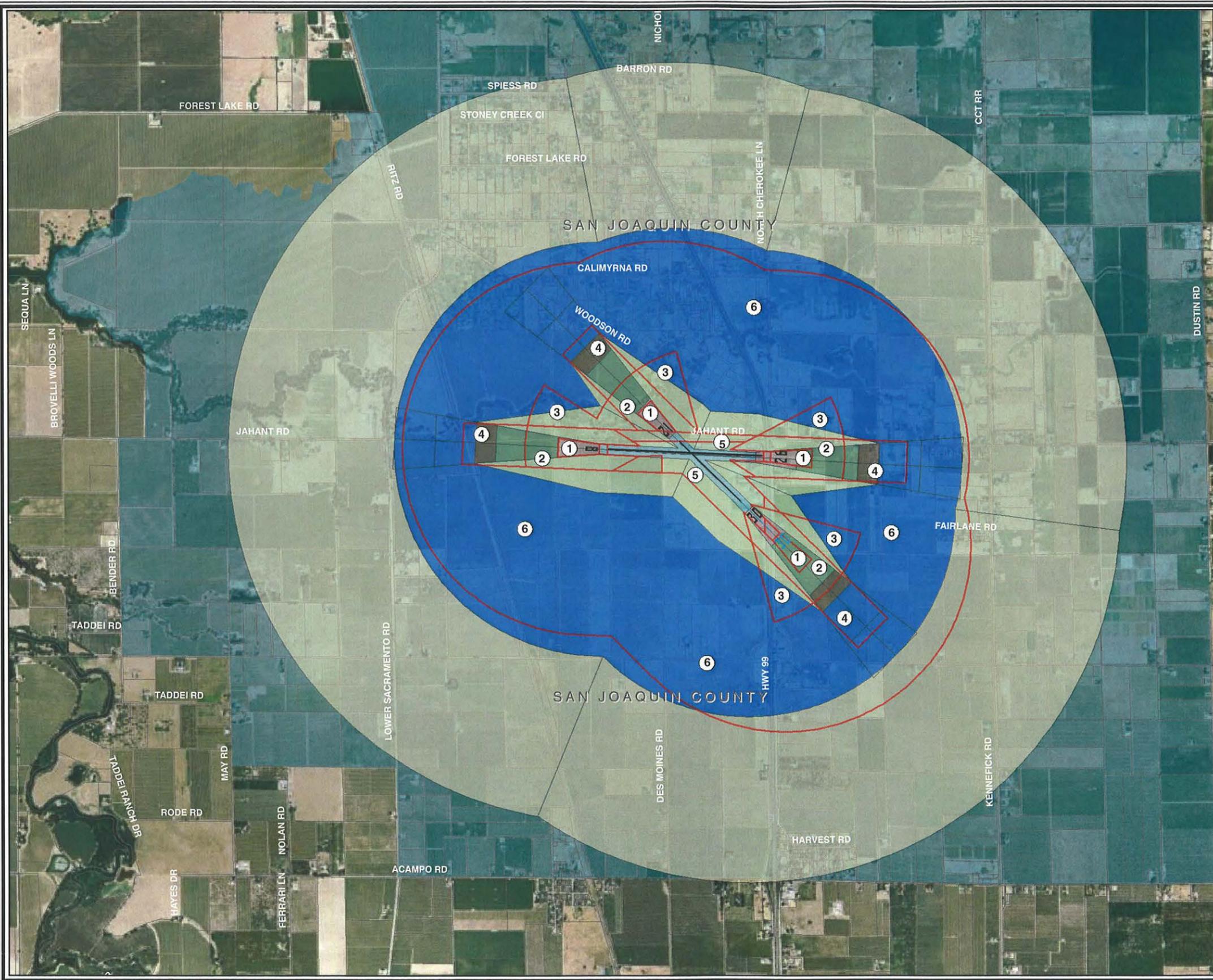
- Airport Property
- Airport Influence Area
- Noise & Overflight Compatibility Factors**
- Arrival Tracks
- Departure Tracks
- Touch-and-Go Tracks
- CNEL Noise Exposure Contour
- 95 dB Single Event Contour
- Safety & Airspace Compatibility Factors**
- Accident Distribution Contour¹
- Conical Surface
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway Less than 4,000 feet.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.



07SP13-CL A2-07/10/08



LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

EXISTING COMPATIBILITY ZONES

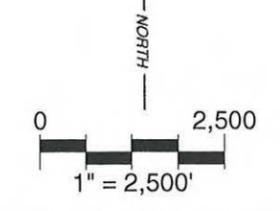
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

2002 HANDBOOK COMPATIBILITY ZONE GUIDELINES

- Runway Protection Zone
- Inner Approach/Departure Zone
- Inner Turning Zone
- Outer Approach/Departure Zone
- Sideline Safety Zone
- Traffic Pattern Zone

Note: Current compatibility zone guidelines based upon 2002 California Airport Land Use Planning Handbook. Based on Short General Aviation Runway airport safety zone configuration

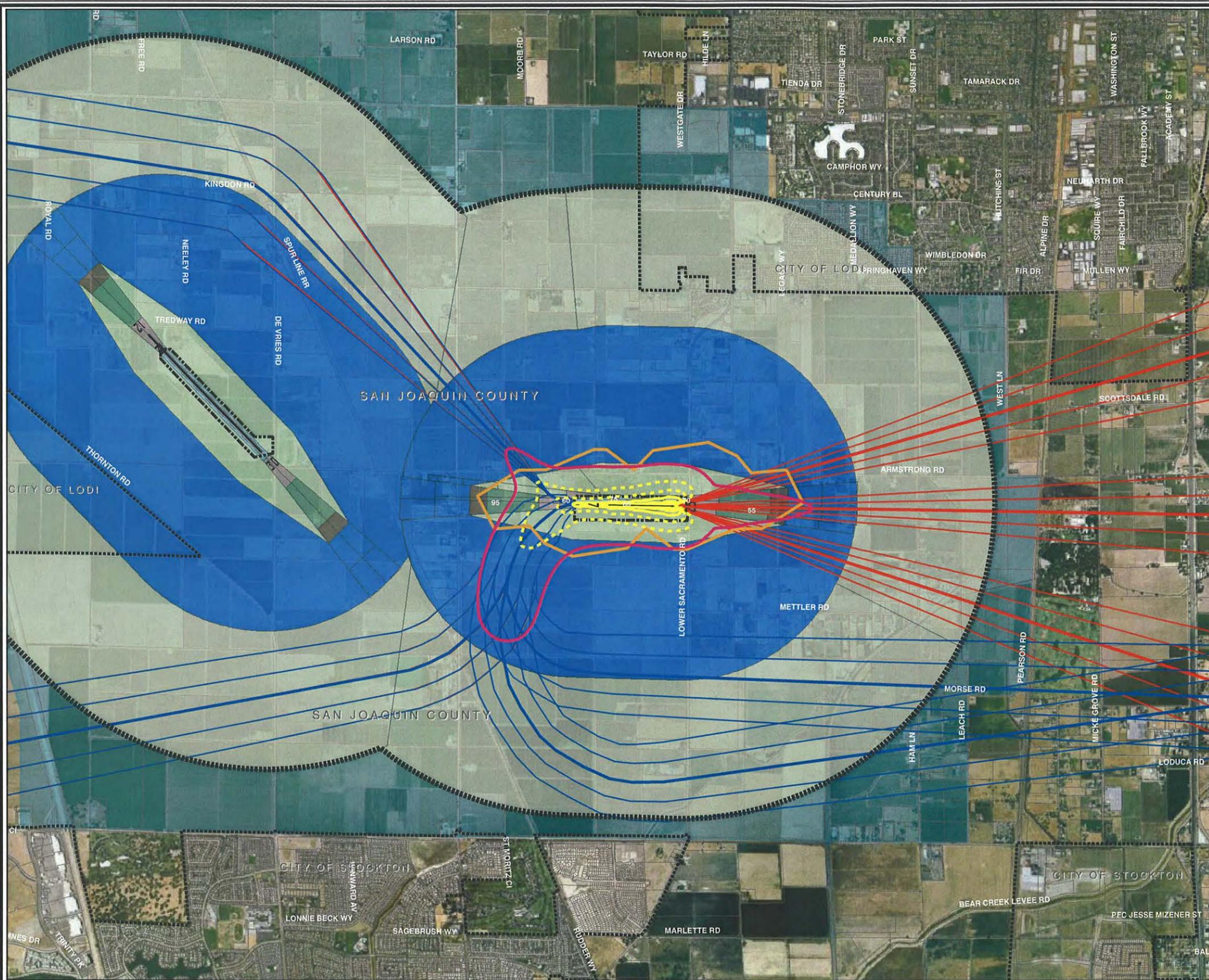
Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.





Lodi (Precissi) Airpark

07SP13-CLP1-0710/08



LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

Noise & Overflight Compatibility Factors

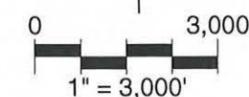
- Arrival Tracks
- Departure Tracks
- CNEL Noise Exposure Contour
- 95 dB Single Event Contour

Safety & Airspace Compatibility Factors

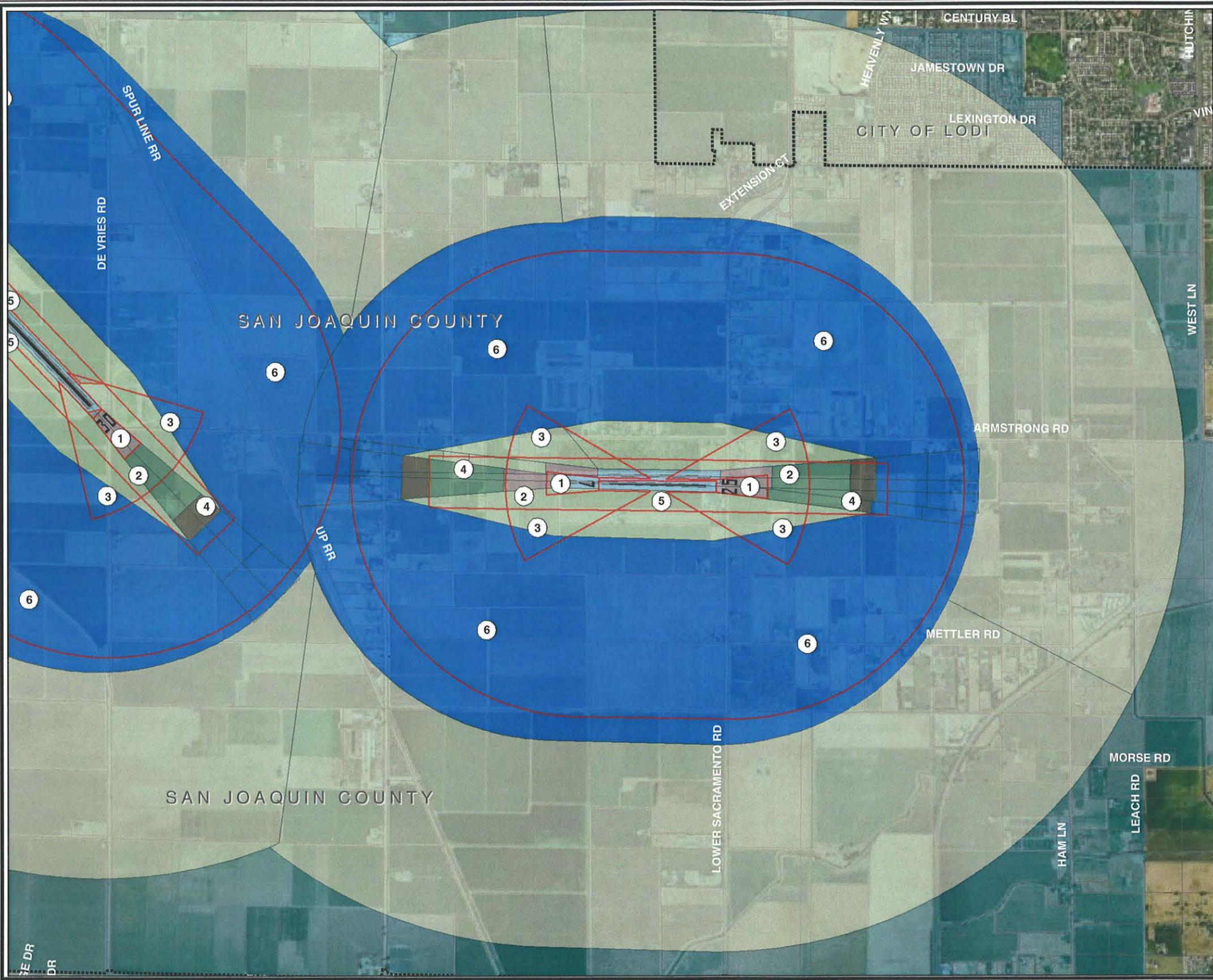
- Accident Distribution Contour¹
- Conical Surface
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway Less than 4,000 feet.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.



07SP13-CLP2-0710/08



LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

EXISTING COMPATIBILITY ZONES

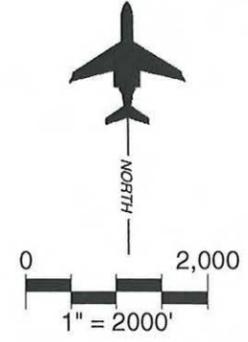
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

2002 HANDBOOK COMPATIBILITY ZONE GUIDELINES

- Runway Protection Zone
- Inner Approach/Departure Zone
- Inner Turning Zone
- Outer Approach/Departure Zone
- Sideline Safety Zone
- Traffic Pattern Zone

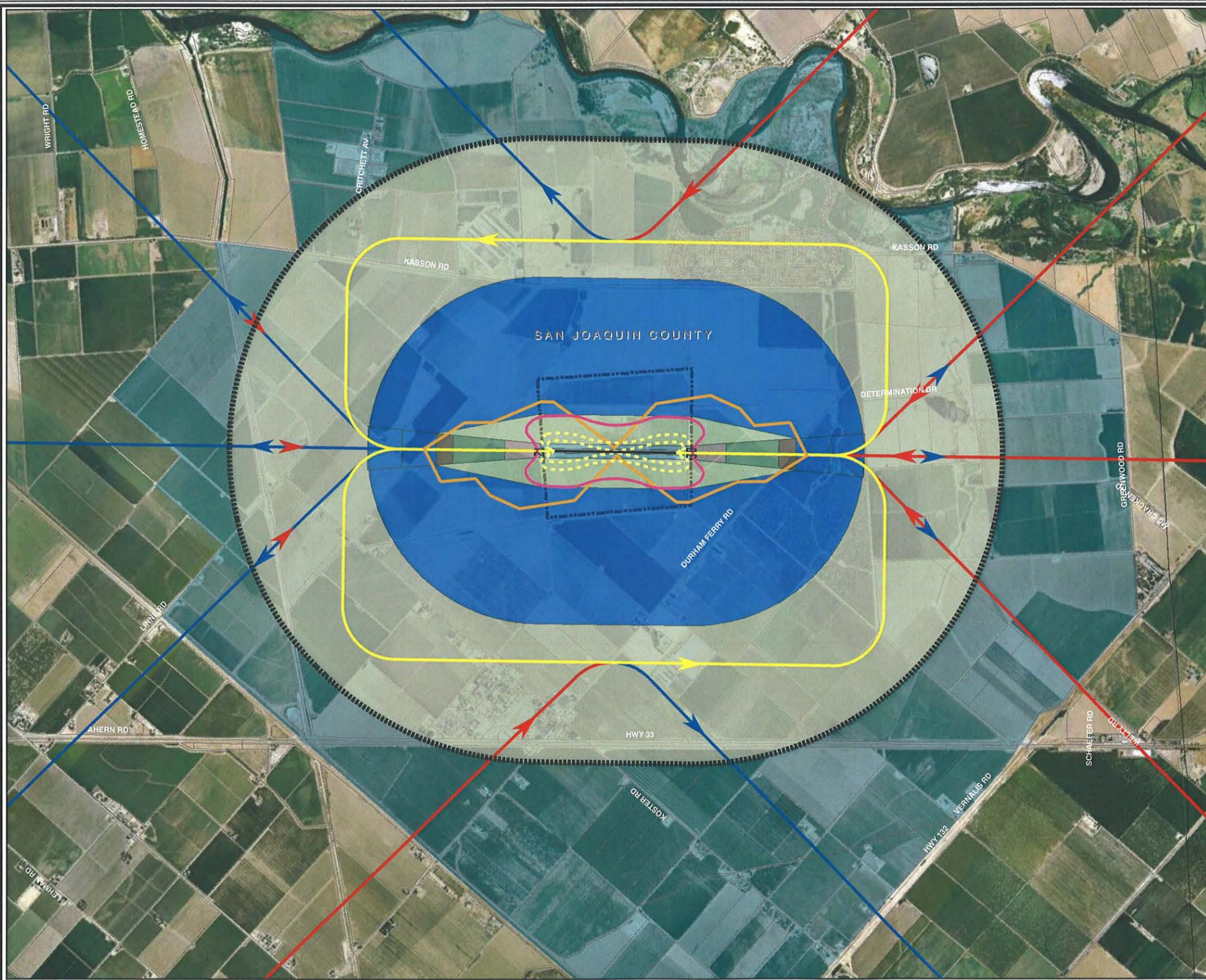
Note: Current compatibility zone guidelines based upon 2002 California Airport Land Use Planning Handbook. Based on Short General Aviation Runway airport safety zone configuration

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.





New Jerusalem Airport

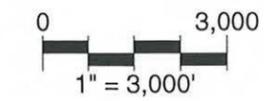


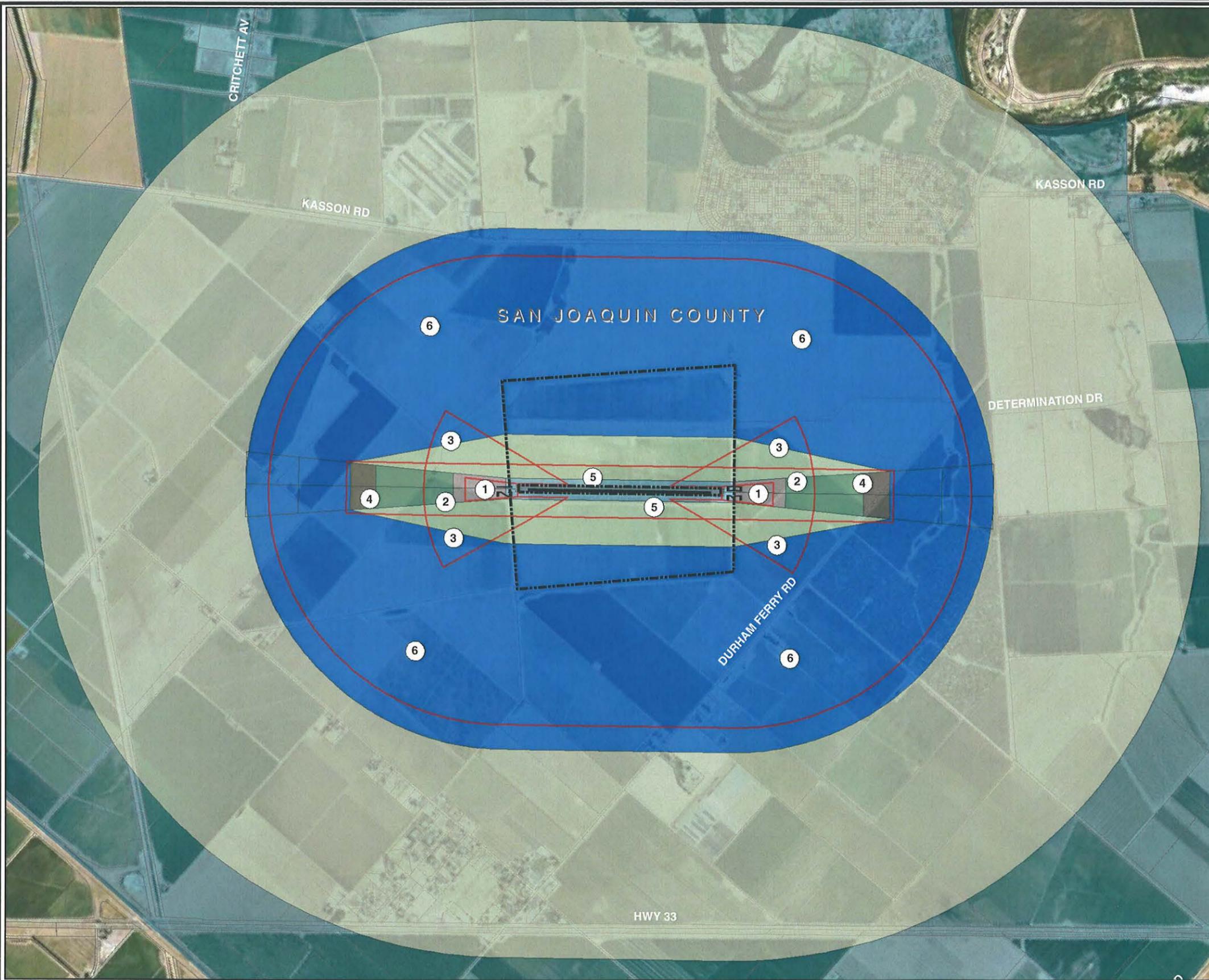
LEGEND

- Airport Property
 - Municipal Boundary
 - Airport Influence Area
- Noise & Overflight Compatibility Factors
- Arrival Tracks
 - Departure Tracks
 - Touch-and-Go Tracks
 - CNEL Noise Exposure Contour
 - 95 dB Single Event Contour
- Safety & Airspace Compatibility Factors
- Accident Distribution Contour¹
 - Conical Surface
 - Conical Surface
 - Horizontal Surface
 - Inner Approach Surface
 - Outer Approach Surface
 - Primary Surface
 - Runway Protection Zone
 - Transitional Surface

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway Less than 4,000 feet.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.





LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

EXISTING COMPATIBILITY ZONES

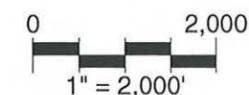
- Conical Surface
- Horizontal Surface
- Inner Approach Surface
- Outer Approach Surface
- Primary Surface
- Runway Protection Zone
- Transitional Surface

**2002 HANDBOOK
COMPATIBILITY ZONE GUIDELINES**

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Traffic Pattern Zone

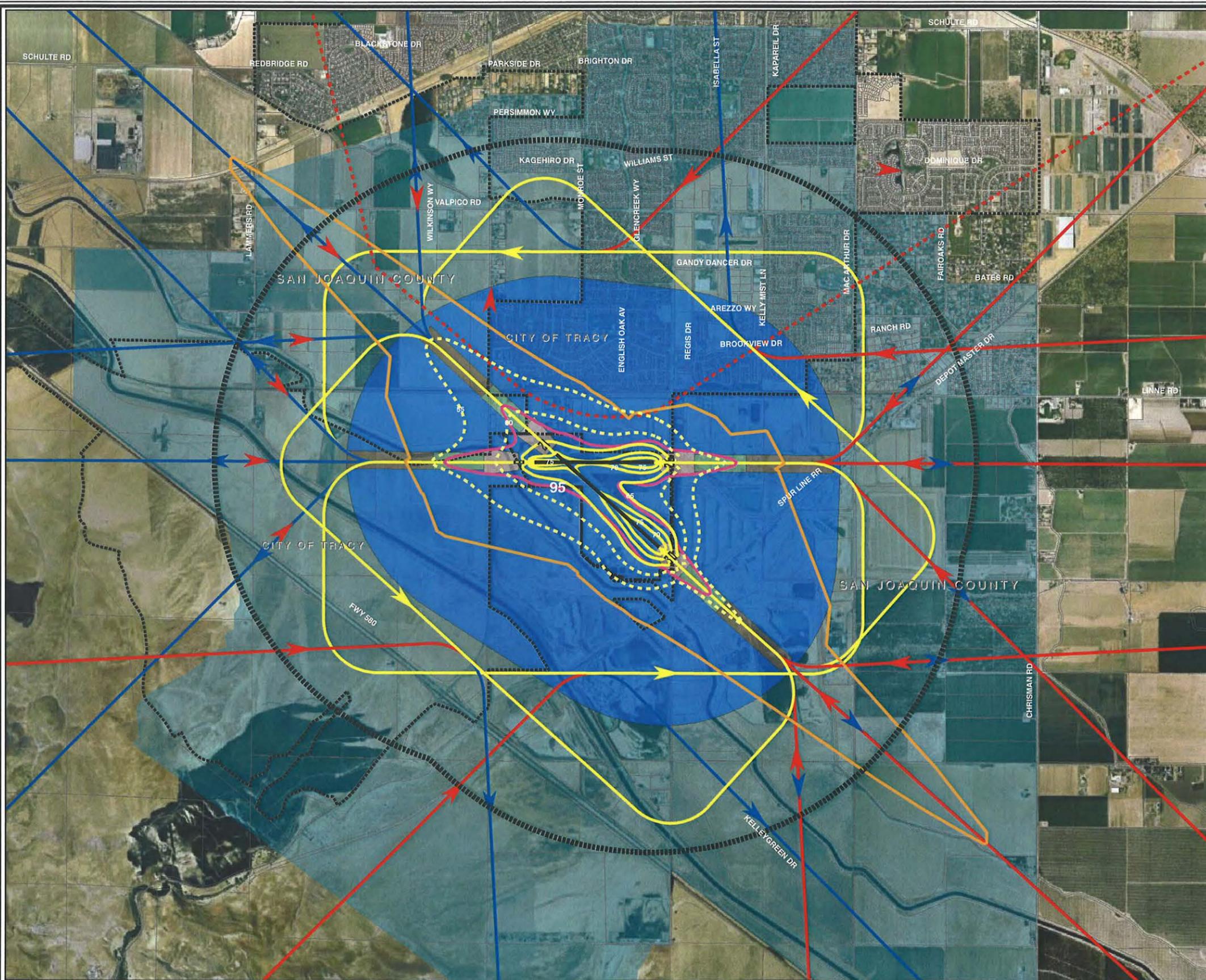
Note: Current compatibility zone guidelines based upon 2002 California Airport Land Use Planning Handbook. Based on Short General Aviation Runway airport safety zone configuration

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates Analysis.





Tracy Municipal Airport

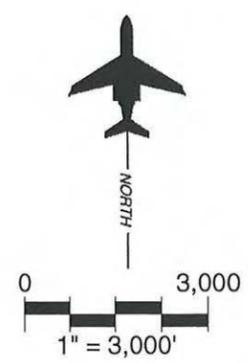


LEGEND

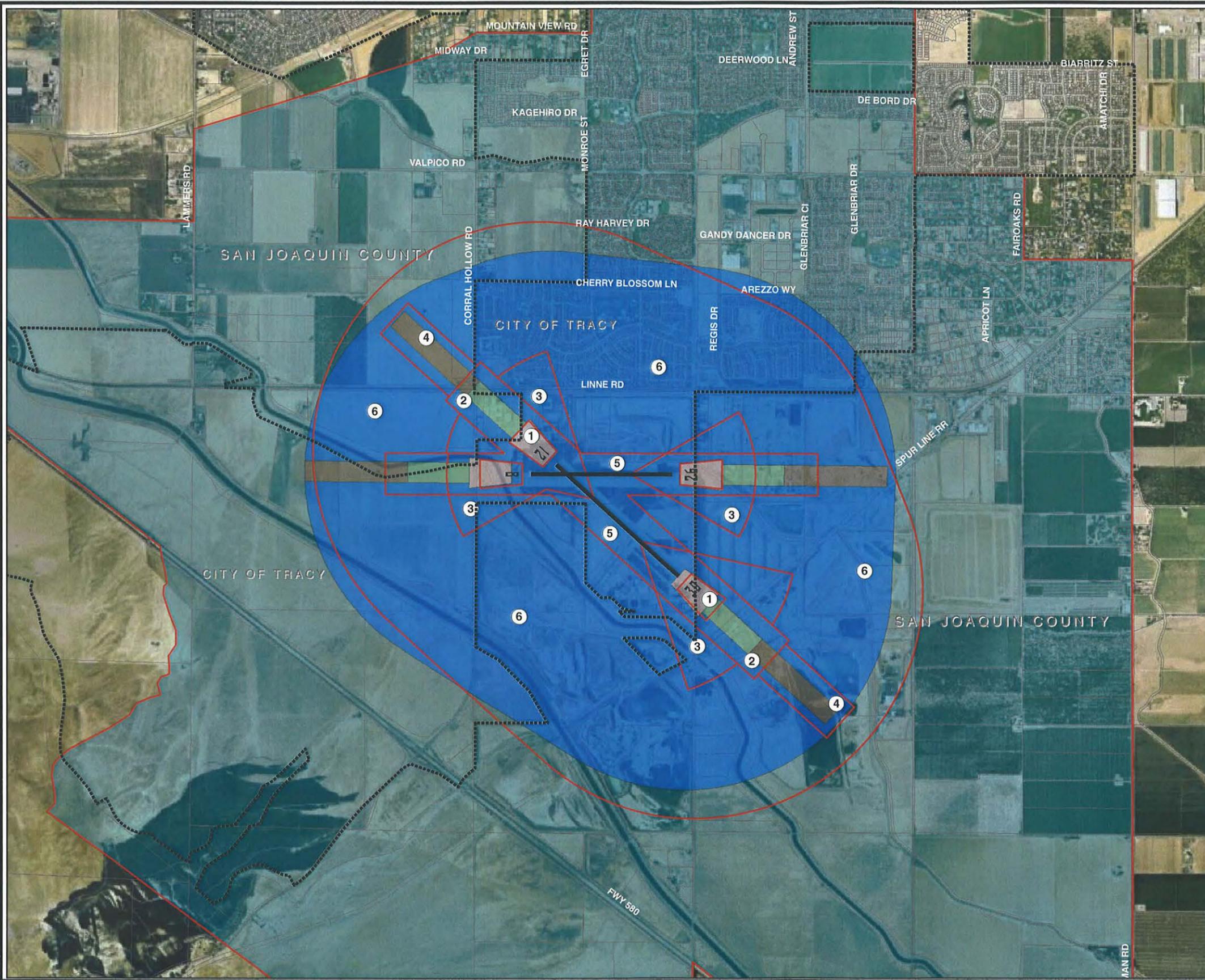
- Airport Property
 - Municipal Boundary
 - Airport Influence Area
- Noise & Overflight Compatibility Factors**
- Arrival Tracks
 - - - Missed Approach Track
 - Departure Tracks
 - Touch-and-Go Tracks
 - - - CNEL Noise Exposure Contour
 - 95 dB Single Event Contour
- Safety & Airspace Compatibility Factors**
- Accident Distribution Contour¹
 - Conical Surface
 - Runway Protection Zone
 - Inner Approach Surface
 - Outer Approach Surface
 - Horizontal Surface

Note: 1 Accident Distribution Contour for 80% of all arrivals and departures on Runway 12-30 for 4,000 to 5,999 feet and Runway 08-26 Less than 4,000 feet.

Source: Aerial Photography dated 2006. San Joaquin Geographic Information System, February 2008. Coffman Associates analysis.



Tracy Municipal Airport's Runway 12-30 currently meets the length (4,002') criterion outlined in the *Airport Land Use Compatibility Planning Handbook* for medium general aviation safety zones and approach visibility criterion (≥ 1 mile) for small general aviation safety zones. Runway 12-30 does not meet the complete criteria for small or medium general aviation safety zones. Therefore, zones for Runway 12-30 are halfway between the medium and small general aviation zones. The zones for Runway 12-30 are a fair compromise between capturing a significant amount of accident data and potential urban development sought along the primary departure corridor from Tracy Municipal Airport (see **Exhibit CTM-2**). A similar methodology was also used during the development of the current safety zones for Tracy Municipal Airport.



LEGEND

- Airport Property
- Municipal Boundary
- Airport Influence Area

EXISTING COMPATIBILITY ZONES

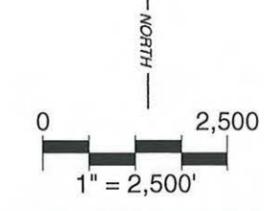
- Runway Protection Zone
- Inner Approach Surface
- Outer Approach Surface
- Horizontal Surface

2002 HANDBOOK COMPATIBILITY ZONE GUIDELINES

- ① Runway Protection Zone
- ② Inner Approach/Departure Zone
- ③ Inner Turning Zone
- ④ Outer Approach/Departure Zone
- ⑤ Sideline Safety Zone
- ⑥ Traffic Pattern Zone

Note: Current compatibility zone guidelines based upon 2002 California Airport Land Use Planning Handbook. Runway 12-30 does not meet the complete criteria for small or medium general aviation safety zones. Therefore, zones for Runway 12-30 are halfway between the medium and small general aviation zones. The short general aviation runway safety zone configuration is used for Runway 08-26.

Source: Aerial Photography dated 2006.
 San Joaquin Geographic Information System, February 2008.
 Coffman Associates Analysis.





Appendix D

Implementation and Supporting Materials

Appendix D

IMPLEMENTATION AND SUPPORTING MATERIALS

Airport Land Use Compatibility Plan
San Joaquin County

The responsibility for implementation of the policies set forth in the compatibility plans adopted by the airport land use commission rests largely with the affected local jurisdictions. This appendix contains a consistency checklist and samples of two types of implementation documents.

- **General Plan/Ordinance Consistency Checklist**—This checklist is intended to assist the county and cities with modifications necessary to make their general plans and other local policies consistent with the ALUC’s compatibility plan. It is also designed to facilitate ALUC reviews of these local plans and policies. The consistency checklist can be found on page D-2.
- **Land Use Review Application**- This form is intended to assist the county and cities with land use action reviews.
- **Avigation Easement**—Avigation easements transfer certain property rights from the owner of the underlying property to the owner of an airport. The ALUC may require an avigation easement dedication as a condition for approval of development on property subject to high noise levels or a need to restrict heights of structures and trees to less than might ordinarily occur on the property. A sample of a standard avigation easement is included on page D-4.
- **Recorded Deed Notice**—Deed notices are a form of buyer awareness measures whose objective is to ensure that prospective buyers of airport area property, particularly residential property, are informed about the airport’s impact on the

property. Unlike easements, deed notices do not convey property rights from the property owner to the airport and do not restrict the height of objects. They only document the existence of certain conditions which affect the property—such as the proximity of the airport and common occurrence of aircraft overflights at or below the airport traffic pattern altitude. ALUCs may make recording of deed notices a requirement for project approval within portions of the airport influence area where aviation easements are not essential. Page D-7 contains a sample of a deed notice.

This appendix also includes the following supporting information related to airport land use compatibility planning:

- California State Aeronautics Act (PUC Sections 21670-21679.5) – which was most recently amended in August 2012.
- Code of Federal Regulations Title 14, Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace
- San Joaquin County Airport Land Use Commission Formation Document
- FAA Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports
- FAA Advisory Circular 150/5200-34A, Construction or Establishment of Landfills Near Public Airports

Additional information regarding this topic can be found on the Caltrans Division of Aeronautics website: <http://www.dot.ca.gov/hq/planning/aeronaut/index.html>

General Plan Consistency Checklist

COMPATIBILITY CRITERIA

General Plan Document

The following items typically appear directly in a general plan document. Amendment of the general plan will be required if there are any conflicts with the compatibility plan.

- ◇ **Land Use Map**—No direct conflicts should exist between proposed new land uses indicated on a general plan land use map and the ALUC land use compatibility criteria.
 - Residential densities (dwelling units per acre) should not exceed the set limits. Differences between gross and net densities and the potential for secondary dwellings on single parcels (see below) may need to be taken into account.
 - Proposed nonresidential development needs to be assessed with respect to applicable intensity limits (see below).
 - No new land uses of a type listed as specifically prohibited should be shown within affected areas.
- ◇ **Noise Element**—General plan noise elements typically include criteria indicating the maximum noise exposure for which residential development is normally acceptable. This limit must be made consistent with the equivalent compatibility plan criteria. Note, however, that a general plan may establish a different limit with respect to aviation-related noise than for noise from other sources (this may be appropriate in that aviation-related noise is often judged to be more objectionable than other types of equally loud noises).

Zoning or Other Policy Documents

The following items need to be reflected either in the general plan or in a separate policy document such as a combining zone ordinance. If a separate policy document is adopted, modification of the general plan to achieve consistency with the compatibility plan may not be required. Modifications would normally be needed only to eliminate any conflicting language which may be present and to make reference to the separate policy document.

- ◇ **Secondary Dwellings**—Detached secondary dwellings on the same parcel should be counted as additional dwellings for the purposes of density calculations. This factor needs to be reflected in local policies either by adjusting the maximum allowable densities or by prohibiting secondary dwellings where their presence would conflict with the compatibility criteria.
- ◇ **Intensity Limitations on Nonresidential Uses**—Local policies must be established to limit the usage intensities of commercial, industrial, and other nonresidential land uses. This can be done by duplication of the performance-oriented criteria—specifically, the number of people per acre-indicated in the compatibility plan. Alternatively, local jurisdictions may create a detailed list of land uses which are allowable and/or not allowable within each compatibility zone. For certain land uses, such a list may need to include limits on building sizes, floor area ratios, habitable floors, and/or other design parameters which are equivalent to the usage intensity criteria.
- ◇ **Identification of Prohibited Uses**—Compatibility plans may prohibit daycare centers, hospitals, and certain other uses within much of each airport's influence area. The facilities often are permitted or conditionally permitted uses within many commercial or industrial land use designations. Policies need to be established which preclude these uses in accordance with the compatibility criteria.

**Zoning or Other Policy Documents,
Continued**

- ◇ **Open Land Requirements**—Compatibility plan requirements, if any, for assuring that a minimum amount of open land is preserved for the airport vicinity must be reflected in local policies. Normally, the locations which are intended to be maintained as open land would be identified on a map with the total acreage within each compatibility zone indicated. If some of the area included as open land is private property, then policies must be established which assure that the open land will continue to exist as the property develops. Policies specifying the required characteristics of eligible open land also must be established.
- ◇ **Infill Development**—If a compatibility plan contains infill policies and a jurisdiction wishes to take advantage of them, the lands which meet the qualifications must be shown on a map.
- ◇ **Height Limitations and Other Hazards to Flight**—To protect the airport airspace, limitations must be set on the height of structures and other objects near airports. These limitations are to be based upon Part 77 of the Federal Aviation Regulations, but may include exceptions for objects on high terrain if provided for in the compatibility plan. Restrictions also must be established on other land use characteristics which can cause hazards to flight (specifically, visual or electronic interference with navigation and uses which attract birds). Note that many jurisdictions have already adopted an airport-related hazard and height limit zoning ordinance which, if up to date, will satisfy this consistency requirement.
- ◇ **Noise Insulation Requirements**—Some compatibility plans call for certain buildings proposed for construction within high noise-impact areas to demonstrate that they will contain sufficient sound insulation to reduce aircraft-related noise to an acceptable level. These criteria apply to new residences, schools, and certain other buildings containing noise-sensitive uses. Local policies must include parallel criteria.
- ◇ **Buyer Awareness Measures**—As a condition for approval of development within certain compatibility zones, some compatibility plans require either dedication of an aviation easement to the airport proprietor or placement on deeds of a notice regarding airport impacts. If so, local jurisdiction policies must contain similar requirements. Compatibility plans also may encourage, but should not require, local jurisdictions to adopt a policy stating that airport

proximity and the potential for aircraft overflights be disclosed as part of real estate transactions regarding property in the airport influence area.

- ◇ **Nonconforming Uses and Reconstruction**—Local jurisdiction policies regarding nonconforming uses and reconstruction must be equivalent to or more restrictive than those in the compatibility plan, if any.

REVIEW PROCEDURES

In addition to incorporation of ALUC compatibility criteria, local jurisdiction implementing documents must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria.

- ◇ **Actions Always Required to be Submitted for ALUC Review**—State law specifies which types of development actions must be submitted for airport land use commission review. Local policies should either list these actions or, at a minimum, note the jurisdiction's intent to comply with the state statute.
- ◇ **Other Land Use Actions Potentially Subject to ALUC Review**—In addition to the above actions, the compatibility plan may identify certain major land use actions for which referral to the ALUC is dependent upon agreement between the jurisdiction and the ALUC. If the jurisdiction fully complies with all of the items in this general plan consistency check list or has taken the necessary steps to overrule the ALUC, then referral of the additional actions is voluntary. On the other hand, a jurisdiction may elect not to incorporate all of the necessary compatibility criteria and review procedures into its own policies. In this case, referral of major land use actions to the ALUC is mandatory. Local policies should indicate the jurisdiction's intentions in this regard.
- ◇ **Process for Compatibility Reviews by Local Jurisdictions**—If a jurisdiction chooses to submit only the mandatory actions for ALUC review, then it must establish a policy indicating the procedures which will be used to assure that airport compatibility criteria are addressed during review of other projects. Possibilities include: a standard review procedure checklist which includes reference to compatibility criteria; use of a geographic information system to identify all parcels within the airport influence area; etc.
- ◇ **Variance Procedures**—Local procedures for granting of variances to the zoning ordinance must make certain that any such variances do not result in a conflict with the compatibility criteria. Any variance which involves issues of

noise, safety, airspace protection, or overflight compatibility as addressed in the compatibility plan must be referred to the ALUC for review.

- ◇ **Enforcement**—Policies must be established to assure compliance with compatibility criteria during the lifetime of the development.

Enforcement procedures are especially necessary with regard to limitations on usage intensities and the heights of trees. An airport combining district zoning ordinance is one means of implementing enforcement requirements.

Source: *California Airport Land Use Planning Handbook* (January 2002)

APPLICATION FOR MAJOR LAND USE ACTION REVIEW		ALUC Identification No. _____
SAN JOAQUIN LAND USE COMMISSION		
PROJECT PROPONENT (To be completed by applicant)		
Date of Application _____	_____	Phone Number _____
Property Owner _____	_____	_____
Mailing Address _____	_____	_____
_____	_____	_____
Agent (if any) _____	_____	_____
Mailing Address _____	_____	_____
_____	_____	_____
PROJECT LOCATION (To be completed by applicant)		
<i>Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways.</i>		
Street Address _____	_____	_____
Assessor's Parcel No. _____	Parcel Size _____	_____
Subdivision Name _____	_____	_____
Lot Number _____	Zoning Classification _____	_____
PROJECT DESCRIPTION (To be completed by applicant)		
<i>If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees: include additional project description data as needed.</i>		
Existing Land Use _____	_____	_____
(describe) _____	_____	_____
_____	_____	_____
Proposed Land Use _____	_____	_____
(described) _____	_____	_____
_____	_____	_____
For Residential Uses _____	Number of Parcels or Units on Site (exclude secondary units) _____	_____
For Other Land Uses _____	Hours of Use _____	_____
(See Appendix E _____	Number of People on Site __ Maximum Number _____	_____
of ALUCP) _____	Method of Calculation _____	_____
_____	_____	_____
Height Data _____	Height above Ground or Tallest Object (including antennas and trees) _____	ft.
_____	Highest Elevation (above sea level) of Any Object or Terrain on Site _____	ft.
_____	_____	_____
Flight Hazards _____	Does the project involve any characteristics which could create electrical interference, confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight? ____ Yes ____ No	
_____	If yes, describe _____	
_____	_____	
_____	_____	

REFERRING AGENCY (To be completed by Agency Staff)	
Date Received _____	Agency Name _____
Staff Contact _____	Phone Number _____
Agency's Project No. _____	Type of Project _____
ALUC REVIEW (To be completed by ALUC Staff)	
Application Date Received _____	By _____
Receipt Is Application Complete? _____ Yes _____ No	If No, cite reasons _____
Airport(s) Nearby _____ Primary Criteria Review Compatibility Zone(s) ___ 1 ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ AIA Allowable (not prohibited) Use? ___ Yes ___ No _____ Density/Intensity Acceptable? ___ Yes ___ No _____ Height Acceptable? ___ Yes ___ No _____ Easement/Deed Notice Provided? ___ Yes ___ No _____	
Special Conditions	Describe: _____ _____
Supplemental Review Criteria Noise _____ Safety _____ Airspace Protection _____ Overflight _____	
ACTIONS TAKEN (To be completed by ALUC Staff)	
ALUC Staff Recommendation ___ Approve	Date _____
___ Disapprove	
ALUC Action ___ Consistent	Date _____
___ Consistent with Conditions (list conditions/attach additional pages if needed)	_____
___ Inconsistent (list reasons/attach additional pages if needed)	_____

Sample Avigation Easement

This indenture made this ____ day of _____, 20__, between _____ hereinafter referred to as Grantor, and the [Insert County or City name], a political subdivision in the State of California, hereinafter referred to as 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 a fee simple estate. The property which is subject to this easement is depicted as _____ on "Exhibit A" attached and is more particularly described as follows:

[Insert legal description of real property]

The easement applies to the Airspace above an imaginary plane over the real property. The plane 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 _____ Airport official runway end elevation of _____ feet Above Mean Sea Level (AMSL), as determined by [Insert name and Date of Survey or Airport Layout Plan that determines the elevation] the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

(1) For the use and benefit of the public, the easement and 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 hereinafter known, in, through, across, or about any portion of the Airspace hereinabove described; and

(2) The easement and right to cause or create, or permit or allow to be caused or created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real 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 hereinafter known or used, for navigation of or flight in air; and

(3) A continuing right to clear and keep clear from the 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 said 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 hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and on behalf of itself, its successors and assigns, the Grantor hereby covenants with the [Insert County or City name], for the direct benefit of the real property constituting the _____ Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the hereinabove described real property, nor will they permit to allow, any building structure, improvement, tree or other object which extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the _____ Airport, in the [Insert County or City name], State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from or operating such aircraft in or about the _____ Airport, or in otherwise flying through said Airspace.

Grantor, together with its successors in interest and assigns, hereby waives its right to legal action against Grantee, its successors, or assigns for monetary damages or other redress due to impacts, as described in Paragraph (2) of the granted rights of easement, 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, Grantor, its successors, and assigns shall have no duty to avoid or mitigate such damages through physical modification of airport facilities or establishment or modification of aircraft operational procedures or restrictions. However, this waiver shall not apply if the airport role or character of its usage (as identified in an adopted airport master plan, for example) changes in a fundamental manner which could not reasonably have been anticipated at the time of the granting of this easement and which results in a substantial increase in the impacts associated with aircraft operations. Also, this grant of easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which may from time to time 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 instrument, the real property firstly hereinabove described is the servient tenement and said _____ Airport is the dominant tenement.

DATED: _____

STATE OF }
 ss
COUNTY OF }

On _____, before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Notary Public

Source: *California Airport Land Use Planning Handbook* (January 2002)

Sample Deed Notice

A statement similar to the following should be included on the deed for any real property subject to the deed notice requirements set forth in the **[San Joaquin County Airport Land Use Commission]** *Airport Land Use Compatibility Plan*. Such notice should be recorded by the county of **[Insert County name]**. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.

The **[San Joaquin County Airport Land Use Commission]** *Airport Land Use Compatibility Plan* and **[Insert County/City name]** Ordinance (Ordinance No. _____) identify a **[Insert Airport name]** Airport Influence Area. Properties within this area are routinely subject to overflights by aircraft using this public-use airport and, as a result, residents may experience inconvenience, annoyance, or discomfort arising from the noise of such operations. State law (Public Utilities Code Section 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 **[Insert County name]** County population and economic growth. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.

Source: *California Airport Land Use Planning Handbook* (January 2002)



California Public Utilities Code
Section 21001 et seq.
relating to the
State Aeronautics Act

Prepared by
California Department of Transportation
Division of Aeronautics
Sacramento, CA

February 2013



Gary Cathey
Division Chief

About this booklet

The law contained herein was copied from www.leginfo.ca.gov, a website maintained by the Legislative Counsel of California. We periodically update this booklet as changes are made to the State Aeronautics Act and at the Counsel's website. You can view the text of the State Aeronautics Act online by opening the www.leginfo.ca.gov homepage, selecting "California Law" and searching within the Public Utilities Code.

This booklet contains one new section since its last update in February 2011:

- Section 21417 added by Stats.2012, c. 182 (A.B.511), § 1.

California Department of Transportation
Division of Aeronautics
1120 N Street, MS 40
Sacramento, CA 95814
<http://www.dot.ca.gov/hq/planning/aeronaut/index.html>

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CALIFORNIA PUBLIC UTILITIES CODE

Section 21001 et seq. relating to the State Aeronautics Act

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Article 1. Department of Transportation

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**AERONAUTICS LAW
STATE AERONAUTICS ACT
PUBLIC UTILITIES CODE**

Chapter 1. General Provisions and Definitions

Title of Part

21001. This part may be cited as the "State Aeronautics Act."

Purpose

21002. The purpose of this part is to further and protect the public interest in aeronautics and aeronautical progress by the following means:

- (a) Encouraging the development of private flying and the general use of air transportation.
- (b) Fostering and promoting safety in aeronautics.
- (c) Effecting uniformity of the laws and regulations relating to aeronautics consistent with federal aeronautics laws and regulations.
- (d) Granting to a state agency powers, and imposing upon it duties, so that the state may properly perform its functions relative to aeronautics and effectively exercise its jurisdiction over persons and property, assist in the development of a statewide system of airports, encourage the flow of private capital into aviation facilities, and cooperate with and assist political subdivisions and others engaged in aeronautics in the development and encouragement of aeronautics.
- (e) Establishing only those regulations which are essential and clearly within the scope of the authority granted by the Legislature, in order that persons may engage in every phase of aeronautics with the least possible restriction consistent with the safety and the rights of others.
- (f) Providing for cooperation with the federal authorities in the development of a national system of civil aviation and for coordination of the aeronautical activities of those authorities and the authorities of this state.
- (g) Assuring that persons residing in the vicinity of airports are protected to the greatest possible extent against intrusions by unreasonable levels of aircraft noise.
- (h) Fostering and promoting the development of a stable and efficient regional air carrier system to provide access for small and rural communities to the national air transportation system consistent with federal policies favoring deregulation.
- (i) Developing, in cooperation with the private sector, airport management, local jurisdictions, federal authorities, and the general public, informational programs to increase the understanding of current air transportation issues including, but not limited to, aviation safety, planning, airport noise, airport development and management, and the role of aviation in the economic development of the state, as an integral part of the state's transportation system.
- (j) Sponsoring or cosponsoring, with representatives of the aerospace and aviation industry, aviation educational and informational seminars which meet the needs of pilots and other members of the industry for current information on aviation safety, planning, and airport development and management.

Definitions; Effect

21003. Unless the context otherwise requires, the definitions and general provisions set forth in this chapter govern the construction of this part.

Public and Government Functions; Public Necessity

21004. The acquisition of any land or interest therein pursuant to this part, the planning, acquisition, establishment, construction, improvement, maintenance, equipment, and operation of airports and air navigation facilities, whether by the state separately or jointly with any political subdivision, and the exercise of any other powers granted to the department by this part are public and governmental functions, exercised for a public purpose, and are matters of public necessity. All land and other property and privileges acquired and used by or on behalf of the state pursuant to this part are acquired and used for public and governmental purposes as a matter of public necessity.

Effect of Part on Zoning Regulations

21005. This part shall not be construed as limiting any power of the state or a political subdivision to regulate airport hazards by zoning.

Effect of Chapter on Use of Helicopters

21006. This chapter or any other law shall not be construed as prohibiting, restricting, or permitting the prohibition of the operation or landing in populated areas of helicopters and similar aircraft capable of approximately vertical ascent and descent, subject to such reasonable rules affecting the public safety as the department may promulgate. The department shall adopt rules and regulations, effective January 1, 1989, for the conditions under which helicopters may make temporary use of a landing site.

Department

21006.5. "Department" means the Department of Transportation.

Aeronautics Commission; Division; Department

21007. Whenever the term "California Aeronautics Commission," "Division of Aeronautics," or "Department of Aeronautics" is used in any other law, it means the Department of Transportation.

Director

21008. "Director" means the Director of Transportation. Any reference in any law or regulation to the Director of Aeronautics shall be deemed to refer to the Director of Transportation.

Division

21008.3. "Division" means the Division of Aeronautics in the department.

Commission

21008.5. "Commission" means the California Transportation Commission.

Person

21009. "Person" means any individual, firm, partnership, corporation, limited liability company, company, association, joint stock association, or body politic; and includes any trustee, receiver, assignee, or other similar representative.

Political Subdivision

21010. "Political subdivision" means any county, city, city and county, public corporation, district or other political entity or public corporation of this State.

Aeronautics

21011. "Aeronautics" means:

- (a) The science and art of flight, including transportation by aircraft.
- (b) The operation, construction, repair, or maintenance of aircraft and aircraft power plants and accessories, including the repair, packing, and maintenance of parachutes.
- (c) The design, establishment, construction, extension, operation, improvement, repair, or maintenance of airports or other air navigation facilities.

Aircraft

21012. "Aircraft" means any manned contrivance used or designed for navigation of, or flight in, the air requiring certification and registration as prescribed by federal statute or regulation. Notwithstanding the foregoing provisions of this section, manned lighter-than-air balloons and ultralight vehicles as defined in the regulations of the Federal Aviation Administration (14 C.F.R. Part 103), whether or not certificated by the Federal Aviation Administration, shall not be considered to be aircraft for purposes of this part.

Airport

21013. "Airport" means any area of land or water which is used, or intended for use, for the landing and take-off of aircraft, and any appurtenant areas which are used, or intended for use, for airport buildings or other airport facilities or rights of way, and all airport buildings and facilities located thereon.

Air Navigation Facility

21014. "Air navigation facility" means any facility, other than facilities owned or operated by the United States, used, or available or designed for use, in aid of air navigation, including any structures, mechanisms, lights, beacons, markers, communicating systems, or other facilities used or useful as an aid, or constituting an advantage or convenience, to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport.

Operation of Aircraft; Operate Aircraft

21015. "Operation of aircraft" or "operate aircraft" means the use, navigation, or piloting of aircraft in the air space over this State or upon any airport within this State.

Airman

21016. "Airman" means any individual who engages, as the person in command, or as pilot, mechanic, or member of the crew, in the navigation of aircraft while under way, and any individual who is directly in charge of the inspection, maintenance, overhauling, or repair of aircraft engines, propellers, or appliances, and any individual who serves in the capacity of aircraft dispatcher, or air traffic control-tower operator. "Airman" does not include any individual employed outside the United States, or any individual employed by a manufacturer of aircraft, aircraft engines, propellers, or appliances to perform duties as inspector or mechanic in connection therewith, or any individual performing inspection or mechanical duties in connection with aircraft owned or operated by him.

Airport Hazard

21017. "Airport hazard" means any structure, object of natural growth, or use of land, which obstructs the air space required for flight of aircraft in landing or taking off at an airport or which is otherwise hazardous to the landing or taking off.

Airway

21018. "Airway" means a route in the navigable air space over the land or waters of this State, designated by proper authority as a route suitable for air navigation.

Violations; Punishment

21019. Any person violating any of the provisions of this part, other than Section 21407.1, or any of the rules or orders issued under this part, is punishable by a fine of not more than one thousand dollars (\$1,000) or by imprisonment of not more than six months, or both.

Land

21020. "Land" includes tide and submerged lands or other lands subject to the public trust for commerce, navigation, or fisheries.

Chapter 2. Department of Transportation and State Aeronautics Board

Article 1. Department of Transportation

Rules and Regulations

21204. The department may adopt, administer, and enforce rules and regulations for the administration of this part.

Statement of Estimated Revenues; Budget

21206. The department shall prepare a statement of all estimated revenues of the Aeronautics Account in the State Transportation Fund and revenues available for local subventions from any other sources for the next succeeding fiscal year, together with a statement of proposed expenditures to be made to local agencies and the University of California during the next succeeding fiscal year, or obligations to be incurred in connection therewith.

The statement shall be included in the printed fiscal year budget submitted to the Legislature. Insofar as the matters to which it pertains, it shall constitute as submitted the budget submitted to the Department of Finance pursuant to Section 13320 of the Government Code, and, as to such matters, shall be administered by the Department of Finance as the fiscal year budget of the Department of Transportation under the provisions of this

section and of Article 2 (commencing with Section 13320) of Chapter 3 of Part 3 of Division 3 of Title 2 of the Government Code.

Any changes or modifications in the budget described in this section shall be approved by the Director of Finance.

In the event, during an annual period, the budgetary amount approved and allocated for any purpose exceeds the amount actually necessary therefor, with a resultant available surplus, such surplus may be allocated to any other purpose or supplemental project upon the written approval of the Director of Finance.

In administering the budget, the Director of Finance shall not limit expenditures or incurrence of obligations thereunder to quarterly, semiannual, or other periods of the fiscal year.

Noise Mitigation Projects

21207. Whenever a political subdivision owning and operating an airport constructs or implements a noise mitigation project at the airport, including, but not limited to, the installation of noise monitoring equipment at any time after the project has been included within the aeronautics program in the state transportation improvement program and prior to funding of the project, the department shall, when funding for the project becomes available, reimburse the political subdivision for the eligible costs of the project, without interest, not to exceed the amount of the funds made available to the department or the political subdivision's actual eligible costs, whichever is lower. Reimbursement under this section shall be made only if the political subdivision completes the project to the standards approved by the department including, but not limited to, bidding and contracting procedures and the project is approved by the commission. This section does not apply to any project for which state funding is not specifically made available.

Article 1.5. State Aeronautics Board

State Aeronautics Board Abolished

21215. (a) The State Aeronautics Board is hereby abolished, and the California Transportation Commission succeeds to, and is vested with, all the duties, powers, purposes, responsibilities, and jurisdiction vested in the State Aeronautics Board.

(b) Any reference in any law or regulation to the State Aeronautics Board shall be deemed to refer to the California Transportation Commission.

(c) The California Transportation Commission shall have the possession and control of all licenses, permits, leases, agreements, contracts, orders, claims, judgments, records, papers, equipment, supplies, bonds, moneys, funds, appropriations, buildings, land and other property, real or personal, held for the benefit, use, or obligation of the State Aeronautics Board.

Appeals

21216. Any person or entity injured or aggrieved by any procedure or action of the department with respect to aeronautics may appeal to the California Transportation Commission for relief, and the decision of the commission as to such matter shall, after hearing thereon, be conclusive, subject to such review as may be otherwise provided by law. This section shall not apply to any procedure or action for which a hearing pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code is specified in this part as the means for reviewing or finalizing the procedure or action.

Article 2: Powers and Duties

Recognition of Federal Authority; Intrastate Rates

21240. This state recognizes the authority of the federal government to regulate the operation of aircraft and to control the use of the airways, and nothing in this act shall be construed to give the department the power to so regulate and control safety factors in the operation of aircraft or to control use of the airways. This section does not affect the state's power to regulate the intrastate rates of common carriers by air, and such power is hereby reserved to the state.

Encouragement of Aeronautics, Airports, and Air Navigation Facilities

21241. The department shall encourage, foster, and assist in the development of aeronautics in this state and encourage the establishment of airports and air navigation facilities. It shall cooperate with and assist the federal government, political subdivisions of this state, and others in the development of aeronautics, and shall seek to coordinate their aeronautical activities.

Political subdivisions may cooperate with the department in the development of aeronautics and aeronautics facilities in this state.

Legislation; Representation of State

21242. The department may:

- (a) Draft and recommend necessary legislation to advance the interest of the state in aeronautics.
- (b) Represent the state in aeronautical matters before federal and other agencies.
- (c) Participate as plaintiff or defendant or as intervenor on behalf of the state or any political subdivision or citizen in any controversy which involves the interest of the state in aeronautics.
- (d) Assist political subdivisions and their law enforcement agencies in becoming acquainted with and enforcing the civil air regulations.

Rules, Regulations, Procedures, and Standards; Classification of Airports

21243. The department may make and amend general or special rules, regulations, and procedures and establish minimum standards, consistent with and clearly within the scope of federal legislation governing aeronautics and the rules, regulations, and standards issued thereunder. The department may, by regulation, classify airports into several reasonable classes or groups according to their facilities and the types and number of aircraft which they are capable of handling and may make and amend rules, regulations, and procedures and establish minimum standards for each separate class or group.

Temporary Rules, Regulations, Procedures, and Standards

21244. For the purpose of protecting and insuring the general public interest and safety and the safety of persons operating, using, or traveling in aircraft and developing aeronautics in this state, and after appropriate public hearings, the department may make and amend temporary general or special rules and procedures and establish temporary minimum standards consistent with this part as it deems necessary to administer this part. The department shall draft these temporary rules, procedures, and standards in the form of proposed aviation law and shall submit them to the next general session of the Legislature. These temporary rules, procedures, and standards shall not remain in effect beyond 90 days after the final adjournment of that session of the Legislature.

Rules; Copies for Public Inspection

21245. The department shall keep on file with the Secretary of State, and at its principal office, a copy of all its rules for public inspection.

Publication and Distribution of Orders, Rules, and Procedures

21246. The department shall provide for the publication and general distribution of all its orders, rules, and procedures having general effect.

Contracts

21247. The department may enter into any contracts necessary to the execution of its powers under this part. All contracts made by the department, either as the agent of the state or as the agent of any political subdivision, shall be made pursuant to the laws of the state governing the making of like contracts. Where the planning, acquisition, construction, improvement, maintenance, or operation of any airport or air navigation facility is financed wholly or partially with federal money the department, as agent of the state or of any political subdivision, may let contracts in the manner prescribed by the federal authorities acting under the laws of the United States and any rules made thereunder.

Joint Exercise of Powers

21248. The department may exercise any of its powers under this part jointly with any political subdivision, state agency, other states or their political subdivisions, or the United States.

Conferences and Joint Hearings with Federal Agencies

21249. The department may confer or hold joint hearings with any federal agency in connection with any matter arising under this part or relating to the sound development of aeronautics.

Cooperation with Federal Agencies

21250. The department may avail itself of the cooperation, services, records, and facilities of the federal agencies in the administration and enforcement of this part. It shall cooperate with and make available to the federal agencies, its services, records, and facilities, insofar as practicable.

Administration

21251. In administering this part the department may use the facilities and services of other state agencies and political subdivisions to the utmost extent possible. These agencies and political subdivisions shall make available to the department their facilities and services.

Enforcement

21252. (a) The department, its members, the director, officers and employees of the department, and every state and peace officer charged with the enforcement of state and subordinate laws or ordinances, may enforce and assist in the enforcement of this part, the rules and orders issued under this part, and all other laws of this state relating to aeronautics. In the enforcement of such rules, orders, and laws, the director, and such officers and employees as the director may designate, shall have the authority, as public officers, to arrest without a warrant, any person who, in his presence, has violated or as to whom there is probable cause to believe has violated any of such rules, orders, or laws.

In any case in which an arrest authorized by this subdivision is made for an offense declared to be a misdemeanor, and the person arrested does not demand to be taken before a magistrate, the arresting officer may, instead of taking such person before a magistrate, follow the procedure prescribed by Chapter 5C (commencing with Section 853.6) of Title 3 of Part 2 of the Penal Code. The provisions of such chapter shall thereafter apply with reference to any proceeding based upon the issuance of a citation pursuant to this authority.

(b) There shall be no civil liability on the part of and no cause of action shall arise against any person, acting pursuant to subdivision (a) and within the scope of his authority, for false arrest or false imprisonment arising out of any arrest which is lawful or which the arresting officer, at the time of such arrest, had reasonable cause to believe was lawful. No such officer shall be deemed an aggressor or lose his right to self-defense by the use of reasonable force to effect the arrest or to prevent escape or to overcome resistance.

(c) The director, and such officers and employees as the director may designate, may serve all processes and notices throughout the state.

Enforcement of Part; Injunction and Other Legal Process

21253. In the name of the state, the department may enforce this part and rules and orders issued under this part by injunction or other legal process in the courts of this state.

Reports of Violations to Federal and Other State Agencies

21254. The department may report to the appropriate federal agencies and agencies of other states all proceedings instituted charging violations of Section 21407, and Sections 21409 to 21412, inclusive, and all penalties of which it has knowledge imposed upon airmen or the owners or operators of aircraft for violations of the law of this state relating to aeronautics or for violations of the rules or orders of the department.

Reports from Federal and Other State Agencies

21255. The department may receive reports of penalties and other data from agencies of the federal government and other states, and may enter into agreements with these agencies governing the delivery, receipt, exchange, and use of reports and data. The department may make the reports and data of these agencies and of the courts of this state available to any court of this state and to any officer of the state or of any political subdivision authorized to enforce the aeronautics laws by Section 21252.

Receipt and Disbursement of Funds

21256. The department may accept, receive, receipt for, disburse, and expend federal and other money, public or private, made available to accomplish in whole or in part any of the purposes of this part. All federal money accepted under this part shall be accepted and expended by the department upon the terms and conditions prescribed by the United States. In accepting federal money under this part, the department shall have the same authority to enter into contracts on behalf of the state as is granted to the department under Section 21603. The department shall deposit all money received under this section in the Special Deposit Fund in the State Treasury, to be disbursed or expended in accordance with the terms and conditions upon which it was made available.

Ownership and Operation of Aircraft

21257. The department may own and operate aircraft for use in the furtherance of its duties, employ airmen and mechanics for proper operation and maintenance of the aircraft, and insure its employees against injury or death arising from aircraft accidents incurred in the performance of their assigned duties, within the limits of appropriations for these purposes.

Department Responsibility

21258. The department shall represent the state and local agencies before the Civil Aeronautics Board and other federal agencies in all matters related to the Airline Deregulation Act of 1978 (P.L. 95-504, as amended) and the essential air service program created by that act. The department shall assist and cooperate with federal, state, and local agencies and private entities in the development of a stable and efficient regional air carrier system.

Chapter 3. Regulation of Aeronautics

Sovereignty

21401. Sovereignty in the space above the land and waters of this state rests in the state, except where granted to and assumed by the United States pursuant to a constitutional grant from the people of the state.

The operation of aircraft in such space is a privilege subject to the laws of this state.

Ownership; Prohibited Use of Airspace

21402. The ownership of the space above the land and waters of this State is vested in the several owners of the surface beneath, subject to the right of flight described in Section 21403. No use shall be made of such airspace which would interfere with such right of flight; provided, that any use of property in conformity with an original zone of approach of an airport shall not be rendered unlawful by reason of a change in such zone of approach.

Lawful Flight; Flight Within Airport Approach Zone

21403. (a) Flight in aircraft over the land and waters of this state is lawful, unless at altitudes below those prescribed by federal authority, or unless conducted so as to be imminently dangerous to persons or property lawfully on the land or water beneath. The landing of an aircraft on the land or waters of another, without his or her consent, is unlawful except in the case of a forced landing or pursuant to Section 21662.1. The owner, lessee, or operator of the aircraft is liable, as provided by law, for damages caused by a forced landing.

(b) The landing, takeoff, or taxiing of an aircraft on a public freeway, highway, road, or street is unlawful except in the following cases:

(1) A forced landing.

(2) A landing during a natural disaster or other public emergency if the landing has received prior approval from the public agency having primary jurisdiction over traffic upon the freeway, highway, road, or street.

(3) When the landing, takeoff, or taxiing has received prior approval from the public agency having primary jurisdiction over traffic upon the freeway, highway, road or street.

The prosecution bears the burden of proving that none of the exceptions apply to the act which is alleged to be unlawful.

(c) The right of flight in aircraft includes the right of safe access to public airports, which includes the right of flight within the zone of approach of any public airport without restriction or hazard. The zone of approach of an airport shall conform to the specifications of Part 77 of the Federal Aviation Regulations of the Federal Aviation Administration, Department of Transportation.

Tort Liability; Injury or Death of Passengers

21404. Liability of the owner or pilot of an aircraft carrying passengers for injury or death to the passengers is determined by the rules of law applicable to torts on the land or waters of this state, arising out of similar relationships. Every owner of an aircraft is liable and responsible for death or injury to person or property resulting from a negligent or wrongful act or omission in the operation of the aircraft, in the business of the owner or otherwise, by any person using or operating the same with the permission, express or implied, of the owner.

Limitation on Liability

21404.1. (a) The liability of an owner, bailee of an owner, or personal representative of a decedent imposed by Section 21404 and not arising through the relationship of principal and agent or master and servant is limited to the

amount of fifteen thousand dollars (\$15,000) for the death of or injury to one person in any one accident and, subject to the limit as to one person, is limited to the amount of thirty thousand dollars (\$30,000) for the death of or injury to more than one person in any one accident and is limited to the amount of five thousand dollars (\$5,000) for damage to property of others in any one accident.

(b) An owner, bailee of an owner, or personal representative of a decedent is not liable under this section for damages imposed for the sake of example and by way of punishing the operator of the aircraft. Nothing in this subdivision makes an owner, bailee of an owner, or personal representative immune from liability for damages imposed for the sake of example and by way of punishing him for his own wrongful conduct.

Tort Liability; Collision Damage

21405. The liability of the owner of one aircraft to the owner of another aircraft, or to operators or passengers on either aircraft, for damage caused by collision on land or in the air, is determined by the rules of law applicable to torts on land.

Careless or Reckless Operation

21407. It is unlawful for any person to operate an aircraft in the air, or on the ground or water in a careless or reckless manner so as to endanger the life or property of another. In any proceeding charging operation of aircraft in violation of this section, the court in determining whether the operation was careless or reckless shall consider the standards for safe operation of aircraft prescribed by federal statutes or regulations governing aeronautics.

Operation While Under the Influence

21407.1. (a) It is unlawful for any person, who is under the influence of an alcoholic beverage or any drug, or the combined influence of an alcoholic beverage and any drug, to operate an aircraft in the air, or on the ground or water, or to engage in parachuting for sport.

(b) No person shall operate an aircraft in the air or on the ground or water who has 0.04 percent or more, by weight, of alcohol in his or her blood.

Consent to Chemical Testing

21407.2. (a) (1) (A) Any person who operates an aircraft in the air or on the ground or water is deemed to have given his or her consent to chemical testing of his or her blood or breath for the purpose of determining the alcoholic content of his or her blood, if lawfully arrested for any offense allegedly committed in violation of Section 21407.1 or if the officer requests chemical testing as part of any investigation of a suspected violation of state or local law. If a blood or breath test, or both, are unavailable, then paragraph (2) of subdivision (d) applies.

(B) Any person who operates an aircraft in the air or on the ground or water is deemed to have given his or her consent to chemical testing of his or her blood or urine for the purpose of determining the drug content of his or her blood, if lawfully arrested for any offense allegedly committed in violation of Section 21407.1 or if the officer requests chemical testing as part of an investigation of a suspected violation of state or local law.

(C) The testing shall be administered at the direction of a peace officer having reasonable cause to believe the person was operating an aircraft in violation of Section 21407.1 under either of the following conditions:

(i) The person is lawfully arrested.

(ii) The officer requests the person to submit to chemical testing as part of an investigation of a suspected violation of state or local law.

(D) The person shall be told that his or her failure to submit to, or the failure to complete, the required chemical testing may result in prohibition from operating an aircraft for not more than one year and, if the person is convicted of a violation of Section 21407.1, a fine, imprisonment, prohibition from operating an aircraft for not more than one year, or any combination thereof.

(2) (A) If the person is lawfully arrested for operating an aircraft under the influence of an alcoholic beverage, the person has the choice of whether the test shall be of his or her blood or breath, and the officer shall advise the person that he or she has that choice. If the person arrested either is incapable, or states that he or she is incapable, of completing the chosen test, the person shall submit to the remaining test. If a blood or breath test, or both, are unavailable, then paragraph (2) of subdivision (d) applies.

(B) If the person is lawfully arrested for operating an aircraft under the influence of any drug or the combined influence of an alcoholic beverage and any drug, the person has the choice of whether the test shall be of his or her blood, breath, or urine, and the officer shall advise the person that he or she has that choice.

(C) A person who chooses to submit to a breath test may also be requested to submit to a blood or urine test if the officer has reasonable cause to believe that the person was operating an aircraft under the influence of any drug or the combined influence of an alcoholic beverage and any drug and if the officer has a clear indication that a blood or

urine test will reveal evidence of the person being under the influence. The officer shall state in his or her report the facts upon which that belief and that clear indication are based. If the person who is arrested is either incapable or states that he or she is incapable of completing a blood test, that person shall submit to and complete a urine test. If the person arrested either is incapable, or states that he or she is incapable, of completing either chosen test, the person shall submit to and complete the other remaining test.

(3) If the person is lawfully arrested for an offense allegedly committed in violation of Section 21407.1 and, because of the need for medical treatment, the person is first transported to a medical facility where it is not feasible to administer a particular test of, or to obtain a particular sample of, the person's blood, breath, or urine, the person has the choice of those tests which are available at the facility to which that person has been transported. In that event, the officer shall advise the person of those tests which are available at the medical facility and that the person's choice is limited to those tests which are available.

(4) The officer shall also advise the person that he or she does not have the right to have an attorney present before stating whether he or she will submit to a test or tests, before deciding which test or tests to take, or during administration of the test or tests chosen, and that, in the event of refusal to submit to a test or tests, the refusal may be used against him or her in a court of law.

(5) Any person who is unconscious or otherwise in a condition rendering him or her incapable of refusal is deemed not to have withdrawn his or her consent and a test or tests may be administered whether or not the person is told that his or her failure to submit to, or the noncompletion of, the test or tests may result in a fine, imprisonment, and prohibition from operating an aircraft for not more than one year. Any person who is dead is deemed not to have withdrawn his or her consent and a test or tests may be administered at the direction of a peace officer.

(b) Any person who is afflicted with hemophilia is exempt from the blood test required by this section.

(c) Any person who is afflicted with a heart condition and is using an anticoagulant under the direction of a licensed physician and surgeon is exempt from the blood test required by this section.

(d) (1) A person lawfully arrested for any offense allegedly committed while the person was operating an aircraft in violation of Section 21407.1 may request the arresting officer to have a chemical test made of the arrested person's blood or breath for the purpose of determining the alcoholic content of that person's blood, and, if so requested, the arresting officer shall have the test performed.

(2) If a blood or breath test is not available under subparagraph (A) of paragraph (1) of subdivision (a), or under subparagraph (A) of paragraph (2) of subdivision (a), or under paragraph (1) of this subdivision, the person shall submit to the remaining test in order to determine the percent, by weight, of alcohol in the person's blood. If both the blood and breath tests are unavailable, the person shall be deemed to have given his or her consent to chemical testing of his or her urine and shall submit to a urine test.

Punishment

21407.6. (a) Any person convicted under Section 21407.1 shall be punished upon a first conviction by imprisonment in the county jail for not less than 30 days nor more than six months or by a fine of not less than two hundred fifty dollars (\$250) nor more than one thousand dollars (\$1,000) or by both such fine and imprisonment.

Any person convicted under Section 21407.1 shall be punished upon a second or any subsequent conviction by imprisonment in the county jail for not less than five days nor more than one year and by a fine of not less than two hundred fifty dollars (\$250) nor more than one thousand dollars (\$1,000), without being granted probation by the court and without having the court suspend the execution of the sentence.

(b) Any person convicted under Section 21407.1 and who, when so operating an aircraft, has done any act forbidden by law or neglects any duty imposed by law in the operation of the aircraft, which act or neglect proximately causes bodily injury to any person other than the operator shall be punished by imprisonment in the state prison, or in the county jail for not less than 90 days nor more than one year and by fine of not less than two hundred fifty dollars (\$250) nor more than ten thousand dollars (\$10,000).

Authority to Prohibit Violator from Operation Aircraft

21408. For any violation of Section 21407 or 21407.1, in addition to the penalties provided by Section 21019 or 21407.6, the court may prohibit the violator from operating an aircraft within the state for a period not exceeding one year. Violation of the prohibition of the court may be treated as a separate offense under this section or as a contempt of court. Upon a plea of guilty or conviction under Section 21407 or 21407.1, the department shall cause a record of the plea or conviction and of the sentence imposed to be maintained. This section does not authorize the court or any other agency or person to take away, impound, hold, or mark any federal certificate, permit, rating, or license. The peace officer requesting that a person submit to a chemical test of the blood, breath, or urine pursuant to Section 21407.2 shall report anyone refusing to submit to the chemical test to the Federal Aviation Administration for appropriate administrative action.

Unlicensed Operation

21409. It is unlawful for any person to engage in aeronautics as an airman in the State unless he has an appropriate effective airman certificate, permit, rating, or license issued by the United States authorizing him to engage in the particular class of aeronautics in which he is engaged, if the certificate, permit, rating, or license is required by the United States.

Possession and Inspection of Certificate, License, Etc.

21410. Every airman shall keep any certificate, permit, rating, or license required for him by the United States in his personal possession when he is operating within the state. He shall present it for inspection upon the demand of any peace officer, any other officer of the state or of a political subdivision, or member, official, or employee of the department, authorized by Section 21252 to enforce the aeronautics laws, or any official, manager, or person in charge of any airport upon which the airman lands, or upon the reasonable request of any other person.

Unlicensed Aircraft

21411. It is unlawful for any person to operate, or cause or authorize to be operated, any civil aircraft within this State unless the aircraft has an appropriate effective certificate, permit, or license issued by the United States if required by the United States.

Posting Aircraft License; Inspection

21412. Any certificate, permit, or license required by the United States for an aircraft shall be carried in the aircraft at all times while the aircraft is operating in the state, shall be conspicuously posted in the aircraft where it may be readily seen by passengers or inspectors, and shall be presented for inspection upon the demand of any peace officer, any other officer of the state or of a political subdivision, or member, official, or employee of the department, authorized by Section 21252 to enforce the aeronautics laws, or any official, manager, or person in charge of any airport upon which the aircraft lands, or upon the reasonable request of any person.

Accidents; Reports; Preservation of Parts Pending Investigation

21413. The department shall report to the appropriate federal agency all accidents in aeronautics in this state of which it is informed, and shall, insofar as is practicable, preserve, protect, and prevent the removal of the component parts of any aircraft involved in an accident being investigated by it until the federal agency institutes an investigation.

Intoxicated Persons In or About Aircraft

21415. No person shall be in, or perform any act in connection with the maintenance or operation of, any aircraft when under the influence of intoxicating liquor.

This section does not apply to a person who is in an aircraft merely as a passenger, but this section shall not be construed to relieve any such person of criminal liability imposed by any other law for being intoxicated while in an aircraft.

Locking Door Separating Pilot Compartment from Passenger Compartment

21416. On all commercial aircraft which transport passengers for compensation or hire the door which separates the pilot compartment from the passenger compartment shall be kept locked at all times the aircraft is in a flight over this state during which passengers are being transported except:

(a) During takeoff and landing of the airplane when such door is the means of access to a required passenger emergency exit.

(b) At such times as it may be necessary to provide access to the flight crew or passenger compartments for the crew members in the performance of their duties, or to provide access for other persons authorized admission to the flight crew compartment.

The pilot of the aircraft shall be guilty of a misdemeanor if the door is not so locked.

It shall be unlawful for any person, except a member of the crew, to have in his possession in the passenger compartment at any time the aircraft is in a flight over this state during which passengers are being transported a key or other device for opening such door from the passenger side of the door.

Meteorological Towers

21417. (a) As used in this section, the following terms have the following meanings:

- (1) "Meteorological instrument" means an instrument for measuring and recording the speed of the wind.
- (2) "Meteorological tower" means a structure, including all guy wires and accessory facilities, on which a meteorological instrument is mounted for the purposes of documenting whether a site has wind resources sufficient for the operation of a wind turbine generator.
- (3) "Prime agricultural land" means land that satisfies the requirements of paragraph (1), (2), or (4) of subdivision (c) of Section 51201 of the Government Code.
- (b) A meteorological tower below 200 feet in height and above 50 feet in height that is located on prime agricultural land, or within one mile of prime agricultural land, and erected after January 1, 2013, shall be marked as follows:
- (1) The full length of the meteorological tower shall be painted in equal, alternating bands of aviation orange and white, beginning with orange at the top of the tower and ending with orange at the bottom of the marked portion of the tower. The bands shall be between 20 and 30 feet in width.
- (2) Two or more high visibility spherical marker balls, also called cable balls, that are aviation orange shall be attached to each outside guy wire that is connected to a meteorological tower.
- (3) One or more seven-foot high visibility safety sleeves shall be placed at each anchor point and shall extend from the anchor point along each guy wire attached to the anchor point.
- (c) A light may be affixed to the highest point on a meteorological tower as an additional option for the marking of the meteorological tower.
- (d) (1) A local agency may incorporate any requirements of this section into any applicable land use permit that the agency administers.
- (2) This section shall not be construed to authorize a local agency to require a new permit that applies to a meteorological tower.
- (3) To the extent that the requirements of this section conflict with local permitting requirements, the requirements of this section shall supersede those permitting requirements.
- (e) This section shall remain in effect only until January 1, 2018, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2018, deletes or extends that date.

Chapter 3.7 Wire Strike Education and Prevention

Legislative Intent

21504. The Legislature finds and declares as follows:

- (a) Representatives from the aviation community, electric utility industry, and government agencies voluntarily convened a working group in July 1992 to develop a comprehensive program to improve low-level flight safety throughout California.
- (b) The working group found that the prevention of aircraft wire strikes and losses through (1) pilot education and awareness and (2) selective marking of those wires and supporting structures that present a hazard to low-level flight safety are equally important to improving low-level flight safety throughout the state.
- (c) The working group developed criteria for marking selected wires and supporting structures based upon visibility and likelihood of aircraft activity, which now must be evaluated in the field.
- (d) It is, therefore, the intent of the Legislature in enacting this chapter to implement recommendations of the working group to undertake a pilot education and awareness program and to evaluate the criteria for marking selected wires and supporting structures in the field.

Pilot Awareness Program

21505. (a) The Division of Aeronautics, in cooperation with the aviation industry and the electric utility industry and in consultation with the Federal Aviation Administration, shall coordinate and disseminate information provided by the working group to pilots to increase awareness of wire hazards and to communicate techniques for identifying and avoiding wires.

(b) For purposes of coordinating and disseminating the information provided to the division by the working group pursuant to subdivision (a), every electrical corporation and publicly owned electrical utility in this state which serves 250,000 or more customers shall pay a one-time fee in a sufficient amount so that the total of all fees collected does not exceed one hundred thousand dollars (\$100,000). The fee shall be in the proportion that each utility's total miles of transmission line greater than 110 kilovolts bears to the total miles of transmission line greater than 110 kilovolts statewide.

(c) All fees collected pursuant to subdivision (b) shall be deposited in the Aeronautics Account in the State Transportation Fund to be continuously appropriated to the Department of Transportation for the purposes set forth in subdivision (a).

Cost Recovery

21507. All costs incurred by an electrical corporation pursuant to this chapter shall be deemed reasonable by the commission and shall be fully recoverable through rates.

Chapter 4. Airports and Air Navigation Facilities

Article 1. Assistance to Political Subdivisions

Engineering and Technical Services

21601. The department may make available its engineering and other technical services, with or without charge, to any political subdivision or person desiring them in connection with the planning, acquisition, construction, improvement, maintenance, or operation of airports or air navigation facilities, subject to rules promulgated by the department.

Financing

21602. (a) Subject to the terms and within the limits of special appropriations made by the Legislature, the department may render financial assistance by grant or loan, or both, to political subdivisions jointly, in the planning, acquisition, construction, improvement, maintenance, or operation of an airport owned or controlled, or to be owned or controlled, by a political subdivision or subdivisions, if the financial assistance has been shown by public hearing to be appropriate to the proper development or maintenance of a statewide system of airports. Financial assistance may be furnished in connection with federal or other financial aid for the same purpose.

(b) Notwithstanding subdivision (a) of Section 21681, a city or county designated by the Airport Land Use Commission is eligible to compete for funds held in the Aeronautics Account in the State Transportation Fund on behalf of any privately owned, public use airport that is included in an airport land use compatibility plan. However, the city or county shall be eligible to compete for the funds only when zoning on the parcel is tantamount to a taking of all reasonable uses that might otherwise be permitted on the parcel. The eligible airport and aviation purposes are limited to those specified in paragraphs (4), (5), (6), (9), and (14) of subdivision (f) of Section 21681, and, further, any capital improvements or acquisitions shall become the property of the designated city or county. Matching funds pursuant to subdivision (a) of Section 21684 may include the in-kind contribution of real property, with the approval of the department.

(c) Any grant of funds held in the Aeronautics Account in the State Transportation Fund on behalf of any privately owned airports shall contain a covenant that the airport remain open for public use for 20 years. Any grant made to a city or county on behalf of a privately owned airport shall contain a payback provision based upon existing market value at the time the private airport ceases to be open for public use.

(d) Upon request, California Aid to Airports Program (CAAP) projects included within the adopted Aeronautics Program, may be funded in advance of the year programmed, with the concurrence of the department, in order to better utilize funds in the account.

(e) There is, in the Aeronautics Account in the State Transportation Fund, a subaccount for the management of funds for loans to local entities pursuant to this chapter. All funds for airport loans in the Special Deposit Fund are hereby transferred to the subaccount. With the approval of the Department of Finance, the department shall deposit in the subaccount all money received by the department from repayments of and interest on existing and future airport loans, including, but not limited to, the sums of five hundred forty thousand dollars (\$540,000) in repayments from the General Fund due in July 1987, and July 1988, and may, upon appropriation, transfer additional funds from the Aeronautics Account in the State Transportation Fund to the subaccount as the department deems appropriate. Interest on money in the subaccount shall be credited to the subaccount as it accrues.

(f) Notwithstanding Section 13340 of the Government Code, the money in the subaccount created by subdivision (e) is hereby continuously appropriated to the department without regard to fiscal years for purposes of loans to political subdivisions for airport purposes.

Agent for Political Subdivisions; Contracts; Handling of Funds

21603. Upon the request of any political subdivision or political subdivisions acting jointly, the department may act as agent in accepting, receiving, receipting for, and disbursing federal money, and other money public or private, made available to finance, in whole or in part, the planning, acquisition, construction, improvement, maintenance, or operation of a public airport or air navigation facility. The department may act as agent in contracting for and

supervising the planning, acquisition, construction, improvement, maintenance, or operation. Any political subdivision may designate the department as its agent for these purposes.

The department as principal on behalf of the state, and any political subdivision on its own behalf, may enter into any contracts with each other, the United States, or any person, which may be required in connection with a grant or loan of federal money for public airport or air navigation facility purposes.

All federal money accepted under this section shall be accepted and transferred or expended by the department upon such terms and conditions as are prescribed by the United States. All money received by the department pursuant to this section shall be deposited in the Special Deposit Fund in the State Treasury, to be disbursed or expended in accordance with the terms and conditions upon which it was made available.

Airport Closing Procedures

21605. No proprietor of any permitted airport which is open to the public and has received public funds shall close or suspend operation of the airport, or close an existing runway or taxiway except on a temporary basis for inspection, maintenance, construction, or emergency purposes, without notifying the department in writing 60 days prior to the intended closure or suspension of operations. On its own motion or upon the request of an affected or interested person, the department may conduct a public hearing to determine the impact of the intended closure or suspension of operations, both economically and on the entire state air transportation system. The department may take appropriate action to assist the proprietor in keeping the airport operational and open for public use.

Article 2. State Airports and Air Navigation Facilities

Establishment; Planning; Construction

21631. From appropriations or other money made available for the purpose, the department, on behalf of and in the name of the state, may plan, establish, construct, enlarge, improve, maintain, equip, operate, regulate, and protect airports and air navigation facilities, either within or without the state, including the construction, installation, equipment, maintenance, and operation at the airports of buildings and other facilities for the servicing of aircraft or for the comfort and accommodation of air travelers.

Acquisition of Existing Facilities

21632. (a) The department may also acquire existing airports and air navigation facilities, but it shall not acquire any airport or air navigation facility owned or controlled by a political subdivision of this or any other state without the consent of the political subdivision.

(b) Whenever an airport owned or operated by the United States in this state ceases to be so owned or operated, the department, in consultation with local and regional transportation planning agencies, may evaluate the present and future need for the airport in the state's public-use airport system, including the need for both the transportation of people and goods. The purpose of the evaluation is to determine aviation needs and does not eliminate any requirement of the California Environmental Quality Act, Division 13 (commencing with Section 21000) of the Public Resources Code.

(c) Prior to finalizing the evaluation, the department shall submit a copy of its report to the commission for review and comment.

The commission shall complete its review and forward any comments to the department not later than 45 days after receiving the evaluation.

(d) Upon completion of its evaluation, the department may make a recommendation to the Legislature, the commission, the affected local agencies, and the appropriate federal agency for the airport's ownership and type of operation as a public-use airport, if the department determines that the airport would be of significant benefit to the state's airport system. It is the intent of the Legislature that the department, in making its recommendation, give priority for ownership and operation of these public-use airports to a local political subdivision or subdivisions acting jointly.

(e) Notwithstanding Section 21606, if a political subdivision or subdivisions acting jointly notify the department of their intentions to prepare a reuse plan for the airport, and simultaneously apply to the Federal Aviation Administration for a federal grant to develop an airport master plan for the airport, the department shall not make its recommendation pursuant to subdivision (d). If the department's evaluation determines that the airport would be of significant benefit to the state's airport system, and the political subdivision or subdivisions acting jointly fail to convert the federal airport to a civil public-use airport in accordance with the department's evaluation within five years of notification to the department, or fail to evidence substantial progress toward that purpose as determined by the department, then the department may take action in accordance with subdivision (f).

(f) If the department determines the airport is of present or future benefit to the state's public-use airport system, and no political subdivision applies to the appropriate federal agency to acquire or operate the airport, or has notified the department of its intention to prepare a reuse plan for the airport and thereafter fails to act upon its application pursuant to subdivision (e), the department may, subject to subdivision (g), assist in the formation of a public entity to own and operate the airport which shall be representative of political subdivisions in the area which surrounds and is served by the airport, as determined by the department. If established, the owning and operating entity may, subject to subdivision (g), prepare and submit an application to the appropriate federal agency to acquire or operate, or acquire and operate, the airport as a public airport.

(g) Notwithstanding subdivision (f), if any political subdivision has previously applied to the appropriate federal agency to acquire and operate the airport as a public airport, has completed all required environmental and fiscal evaluations, and subsequently withdrew its application prior to December 31, 1988, the department shall not file any application to acquire or operate the airport or assist in the formation of a public entity to own and operate the airport.

Acquisition of Real or Personal Property

21633. For the purposes of this article, the department, by purchase, gift, devise, lease, condemnation, or otherwise, may acquire real or personal property, or any interest therein, including any property described in Section 21652.

Disposal of Property

21636. The department may dispose of any property, airport, air navigation facility, or portion or interest, acquired pursuant to this article, by sale, lease, or otherwise. The disposal shall be in accordance with the laws of this state governing the disposition of other state property, except that in the case of disposals to any political subdivision or government or the United States for aeronautical purposes, the disposal may be effected in the manner and upon the terms the department deems in the best interests of the state.

Contracts and Leases for Operation

21637. In operating an airport or air navigation facility owned or controlled by the state, the department may enter into contracts, leases, and other arrangements for a term not exceeding 20 years with any person, granting the privilege of using or improving the airport or air navigation facility or space therein for commercial purposes, conferring the privilege of supplying goods, commodities, things, services, or facilities at the airport or air navigation facility, or making available services to be furnished by the department or its agents at the airport or air navigation facility. In each case the department may establish the terms and conditions and fix the charges, rentals, or fees for the privileges or services, which shall be reasonable and uniform for the same class of privilege or service and shall be established with regard to the property and improvement used and the expenses of operation to the state. In no case shall the public be deprived of its rightful, equal, and uniform use of the airport, air navigation facility, or portion of either. The department shall grant no exclusive privilege for the sale or delivery of gasoline or other petroleum products.

Lease of Airports

21638. The department shall call for bids for the operation of any state-owned airport and shall lease the airport for a term not to exceed five years to the highest qualified bidder or bidders. No person shall be granted any authority to operate the airport other than as a public airport or to enter into any contracts, leases, or other arrangements in connection with the operation of the airport which the department might not have undertaken under Section 21637. The state may operate an airport only if no acceptable bid is received.

Exclusive Right for Use Prohibited

21639. The department shall grant no exclusive right for the use of any airport or air navigation facility under its jurisdiction. This section shall not be construed to prevent the making of contracts, leases, and other arrangements pursuant to this article.

Lien for Charges; Enforcement

21640. To enforce the payment of any charges for repairs, improvements, storage, or care of any personal property by the department or its agents in connection with the operation of an airport or air navigation facility owned or operated by the state, the state has a lien on the property, which is enforceable by the department as provided by law.

Flying or Releasing Balloon, Kite or Rocket Near Airport as Misdemeanor

21646. It shall be a misdemeanor for any person to release or fly or cause to be released or flown, within five miles of any airport, any moored balloon, kite, unmanned rocket, or unmanned free balloon which might be ingested by an aircraft engine or might cause a pilot's view of the airport and zone approach to be obstructed, or which could be used to suspend an object capable of endangering airborne aircraft or impairing a pilot's vision.

Article 2.5. Non-Public Use Airports

Airport Defined

21650. "Airport" for the purposes of this article means an airport not open to the general public.

Airport Marks; Federal Aviation Administration Standards

21650.1. An airport shall be marked as required by rule of the department with letters or symbol selected by the department to designate that the airport is not open to the general public. In selecting the letters or symbol, the department shall be guided by letters or symbols currently in use by the Federal Aviation Administration for similar or comparable purposes.

Permit; Application and Receipt Under Article 3

21650.2. Nothing shall prevent an airport from applying for and receiving a permit pursuant to Article 3 (commencing with Section 21661) of this chapter.

Article 2.6 Hazard Elimination; Flight Disturbance

Eminent Domain

21652. (a) Any person authorized to exercise the power of eminent domain for airport purposes may acquire by purchase, gift, devise, lease, condemnation, or otherwise:

(1) Any property necessary to permit the safe and efficient operation of the airport, or to permit the removal, elimination, obstruction-marking, or obstruction-lighting of airport hazards, or to prevent the establishment of airport hazards.

(2) Airspace or an easement in such airspace above the surface of property where necessary to permit imposition upon such property of excessive noise, vibration, discomfort, inconvenience, interference with use and enjoyment, and any consequent reduction in market value, due to the operation of aircraft to and from the airport.

(3) Remainder property underlying property taken pursuant to paragraph (2), where permitted by Section 1240.410 of the Code of Civil Procedure.

(b) As used in this section, "property" includes real and personal property and any right or interest therein, whether within, beyond, adjacent to, or in the vicinity of, the boundaries of an airport or airport site, and, by way of illustration and not by way of limitation, includes air rights, airspace, air easements, and easements in airport hazards.

Removal of Hazards

21653. Any person authorized to exercise the power of eminent domain for airport purposes may provide, by purchase, gift, devise, lease, condemnation, or otherwise, for the removal or relocation of any airport hazard or the removal or relocation of all facilities, structures, and equipment that may interfere with the location, expansion, development, or improvement of the airport and other air navigation facilities or with the safe approach thereto and takeoff therefrom by aircraft. Any person acting under authority of this section shall pay the cost of such removal or relocation.

Article 2.7 Regulation of Obstructions

Proposed Site for Construction of State Building Within Two Miles of Airport Boundary

21655. Notwithstanding any other provision of law, if the proposed site of any state building or other enclosure is within two miles, measured by air line, of that point on an airport runway, or runway proposed by an airport master plan, which is nearest the site, the state agency or office which proposes to construct the building or other enclosure shall, before acquiring title to property for the new state building or other enclosure site or for an addition to a present site, notify the Department of Transportation, in writing, of the proposed acquisition. The department shall investigate the proposed site and, within 30 working days after receipt of the notice, shall submit to the state agency

or office which proposes to construct the building or other enclosure a written report of the investigation and its recommendations concerning acquisition of the site.

If the report of the department does not favor acquisition of the site, no state funds shall be expended for the acquisition of the new state building or other enclosure site, or the expansion of the present site, or for the construction of the state building or other enclosure, provided that the provisions of this section shall not affect title to real property once it is acquired.

Permit for Extension of Structure More Than 500 Feet Above Ground

21656. No person shall erect or add to the height of any structure within the boundaries of this state which will result in a structure that extends more than 500 feet above the ground on which such structure rests until a permit therefor has been issued for such purpose by the department. This section is not applicable to the construction of any structure if the Federal Communications Commission is required to approve the height of the structure or if the height of the structure is required to be approved under the Federal Aviation Act of 1958 (Public Law 85-726; 72 Stat. 731).

Refusal to Issue Permit; Request for Hearing

21657. The department may refuse issuance of a permit under Section 21656 if it determines that the erection of or addition to a structure would obstruct the airspace overlying the state so as to create an unsafe condition for the flight of aircraft.

Any person denied a permit shall, upon request, be granted a hearing by the department to determine whether a permit shall be issued. The hearing shall be held pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

Construction of Utility Pole or Line in Vicinity of Aircraft Landing Area

21658. No public utility shall construct any pole, pole line, distribution or transmission tower, or tower line, or substation structure in the vicinity of the exterior boundary of an aircraft landing area of any airport open to public use, in a location with respect to the airport and at a height so as to constitute an obstruction to air navigation, as an obstruction is defined in accordance with Part 77 of the Federal Aviation Regulations, Federal Aviation Administration, or any corresponding rules or regulations of the Federal Aviation Administration, unless the Federal Aviation Administration has determined that the pole, line, tower, or structure does not constitute a hazard to air navigation. This section shall not apply to existing poles, lines, towers, or structures or to the repair, replacement, or reconstruction thereof if the original height is not materially exceeded and this section shall not apply unless just compensation shall have first been paid to the public utility by the owner of any airport for any property or property rights which would be taken or damaged hereby.

Hazards Near Airports Prohibited

21659. (a) No person shall construct or alter any structure or permit any natural growth to grow at a height which exceeds the obstruction standards set forth in the regulations of the Federal Aviation Administration relating to objects affecting navigable airspace contained in Title 14 of the Code of Federal Regulations, Part 77, Subpart C, unless a permit allowing the construction, alteration, or growth is issued by the department.

(b) The permit is not required if the Federal Aviation Administration has determined that the construction, alteration, or growth does not constitute a hazard to air navigation or would not create an unsafe condition for air navigation. Subdivision (a) does not apply to a pole, pole line, distribution or transmission tower, or tower line or substation of a public utility.

(c) Section 21658 is applicable to subdivision (b).

Refusal to Issue Permit; Request for Hearing

21660. The department may refuse issuance of a permit under Section 21659 if it determines that the construction or alteration of the structure or growth of the natural growth would constitute a hazard to air navigation or create an unsafe condition for air navigation.

Any person denied a permit shall, upon request, be granted a hearing by the department to determine whether a permit shall be issued. The hearing shall be held pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

Article 3. Regulation of Airports

Exemptions

21661. This article does not apply to any temporary seaplane landing site, ultralight vehicle flightpark, or to airports owned or operated by the United States. To the extent necessary, the department may exempt any other class of airports, pursuant to a reasonable classification or grouping, from any rule or requirement thereof, adopted pursuant to this article, if it finds that its application would be an undue burden on the class and is not required in the interest of public safety.

This section shall become operative on January 1, 1989.

City Council or Board of Supervisors and ALUC Approvals

21661.5. (a) No political subdivision, any of its officers or employees, or any person may submit any application for the construction of a new airport to any local, regional, state, or federal agency unless the plan for construction is first approved by the board of supervisors of the county, or the city council of the city, in which the airport is to be located and unless the plan is submitted to the appropriate commission exercising powers pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Part 1 of Division 9, and acted upon by that commission in accordance with the provisions of that article.

(b) A county board of supervisors or a city council may, pursuant to Section 65100 of the Government Code, delegate its responsibility under this section for the approval of a plan for construction of new helicopter landing and takeoff areas, to the county or city planning agency.

Submission of Plan for Expansion or Enlargement of Airport

21661.6. (a) Prior to the acquisition of land or any interest therein, including tide and submerged lands or other lands subject to the public trust for commerce, navigation, or fisheries, by any political subdivision for the purpose of expanding or enlarging any existing publicly owned airport, the acquiring entity shall submit a plan of that expansion or enlargement to the board of supervisors of the county, or the city council of the city, in which the property proposed to be acquired is located.

(b) The plan shall show in detail the airport-related uses and other uses proposed for the property to be acquired.

(c) The board of supervisors or the city council, as the case may be, shall, upon notice, conduct a public hearing on the plan, and shall thereafter approve or disapprove the plan.

(d) Upon approval of the plan, the proposed acquisition of property may begin.

(e) The use of property so acquired shall thereafter conform to the approved plan, and any variance from that plan, or changes proposed therein, shall first be approved by the appropriate board of supervisors or city council after a public hearing on the subject of the variance or plan change.

(f) The requirements of this section are in addition to any other requirements of law relating to construction or expansion of airports.

Approval of Sites; Issuance of Permits; Charges

21662. The department shall have the authority to issue airport site approval permits, amended airport site approval permits, airport permits, and amended airport permits. No charge shall be made for the issuance of any permit.

Emergency Service Helicopters

21662.1. (a) At or as near as practical to the site of a medical emergency and at a medical facility, an officer authorized by a public safety agency may designate an area for the landing and taking off of an emergency service helicopter, in accordance with regulations established not later than January 1, 1989, pursuant to Section 21243.

(b) "Public safety agency" means any city, county, state agency, or special purpose district authorized to arrange for emergency medical services.

Emergency Flights for Medical Purposes

21662.4. (a) Emergency aircraft flights for medical purposes by law enforcement, firefighting, military, or other persons who provide emergency flights for medical purposes are exempt from local ordinances adopted by a city, county, or city and county, whether general law or chartered, that restrict flight departures and arrivals to particular hours of the day or night, that restrict the departure or arrival of aircraft based upon the aircraft's noise level, or that restrict the operation of certain types of aircraft.

(b) As used in this section, "emergency aircraft flights for medical purposes" are those flights in which undue delay would threaten a patient's life. "Emergency aircraft flights for medical purposes" include, but are not limited to, flights for the transportation of any of the following:

- (1) Patients accompanied by licensed or certificated medical attendants such as paramedics, nurses, physicians, and respiratory therapists.
- (2) Surgical transplant teams for the purpose of procuring human organs for reimplantation in recipients.
- (3) Organ procurement agency coordinators responding to a potential donor.
- (4) Temporarily viable human organs such as a heart, liver, lungs, kidneys, and pancreas, and human tissue, blood, or blood components.
- (5) Human tissue and blood samples for clinical testing to determine compatibility between a donor and a recipient.
- (6) Mechanical adjuncts or biological replacements for human organs.
- (7) Medical equipment and supplies.
- (8) Aircraft or equipment used during a medical emergency, or emergency personnel and first responders involved in treating the medical emergency, for the purpose of returning to its base of operation.

"Emergency aircraft flights for medical purposes" do not include the transportation of medical personnel to attend seminars, conferences, or speaking appearances in which undue delay would not jeopardize any patient's medical condition.

(c) (1) Written information concerning the emergency shall be submitted to the airport proprietor for all emergency aircraft flights within 72 hours prior or subsequent to the departure or arrival of the aircraft. For all emergency aircraft flights for medical purposes, the information shall include the patient's name and address, the names of medical attendants or personnel and the discipline in which they are licensed or hold a certificate to practice, a signed statement by the attending physician specifying that a medical emergency was involved, the requesting medical facility or agency, the intended destination, the type and registration number of the aircraft, and the names of all flight crew members, provided that the disclosure is authorized by and made in a manner consistent with the standards with respect to the privacy of individually identifiable health information of Title II (commencing with Section 200) of the federal Health Insurance Portability and Accountability Act of 1996 (Public Law 104-191), the regulations issued by the United States Department of Health and Human Services pursuant to that act (45 C.F.R. Pts. 160 and 164), and the Confidentiality of Medical Information Act (Part 2.6 (commencing with Section 56) of Division 1 of the Civil Code).

(2) This subdivision does not apply to emergency aircraft flights for medical purposes by law enforcement, firefighting, or military personnel.

(d) Any airport that incurs additional expenses in order to accommodate the arrival or departure of emergency aircraft flights for medical purposes may charge the patient on whose behalf the flight is made, or any organization or entity which has volunteered to reimburse the airport, for those expenses.

(e) For emergency aircraft flights for medical purposes, when two airports are located in the same geographical area, and one of the airports is a "closed" or restricted airport, the Legislature encourages the use of the "open" or unrestricted airport when feasible, rather than using the "closed" or restricted airport.

(f) When leasing aircraft for flights for emergency medical purposes, the Legislature encourages the use, when feasible, of aircraft which comply with local noise ordinances.

Helicopters in Proximity to Certain Schools Prohibited

21662.5. Notwithstanding Section 21006 or Section 21661 or any other provision of law to the contrary, no helicopter may land or depart in any area within 1,000 feet, measured by air line, of the boundary of any public or private school maintaining kindergarten classes or any classes in grades 1 through 12, without approval of the department or by a public safety agency designated by the department, unless the landing or departure takes place at a permitted permanent heliport, or is a designated emergency medical service landing site.

Before approval of the landing or departure of a helicopter pursuant to this section, all schools within the specified area shall be notified by the department or public safety agency of the application and shall have 15 days after the notice in which to demand a public hearing. The public hearing shall be held at a location in the immediate vicinity of the landing or departure site. The department or public safety agency shall not grant approval pursuant to this section unless it has first found that helicopter operations at the proposed site can be conducted in a safe manner, and in accordance with criteria established by the department.

This section shall not prevent the governing body of any city or county from enacting ordinances or regulations imposing restrictions equal to or greater than those imposed by this section.

Operation Without Permit

21663. It is unlawful for any political subdivision, any of its officers or employees, or any person to operate an airport unless an appropriate airport permit required by rule of the department has been issued by the department and has not subsequently been revoked.

Approval of Sites; Application

21664. Any political subdivision or person planning to construct, establish, or expand an airport shall apply for the appropriate permit from the department prior to the construction, establishment or expansion. The application shall set forth the location of all highways, railways, wires, cables, poles, fences, schools, residential areas and places of public gathering, and any other information as may be required by the rules and regulations of the department. Whenever an airport owned or operated by the United States ceases to be so owned or operated, any political subdivision or person desiring or planning to own or operate the airport shall apply to the department in compliance with the provisions of this article. If the airport holds a permit issued by the department, the application shall be confined to consideration of the matters enumerated in subdivision (e) of Section 21666.

Amended Airport Permits; Airport Expansion Defined

21664.5. (a) An amended airport permit shall be required for every expansion of an existing airport. An applicant for an amended airport permit shall comply with each requirement of this article pertaining to permits for new airports. The department may by regulation provide for exemptions from the operation of this section pursuant to Section 21661, except that no exemption shall be made limiting the applicability of subdivision (e) of Section 21666, pertaining to environmental considerations, including the requirement for public hearings in connection therewith.

(b) As used in this section, "airport expansion" includes any of the following:

(1) The acquisition of runway protection zones, as defined in Federal Aviation Administration Advisory Circular 150/1500-13, or of any interest in land for the purpose of any other expansion as set forth in this section.

(2) The construction of a new runway.

(3) The extension or realignment of an existing runway.

(4) Any other expansion of the airport's physical facilities for the purpose of accomplishing or which are related to the purpose of paragraph (1), (2), or (3).

(c) This section does not apply to any expansion of an existing airport if the expansion commenced on or prior to the effective date of this section and the expansion met the approval, on or prior to that effective date, of each governmental agency that required the approval by law.

Issuance of Permits; Requirements; Conditions

21666. The department shall issue a permit if it is satisfied that all of the following requirements have been met:

(a) The site meets or exceeds the minimum airport standards specified by the department in its rules and regulations, provided, however, that the department may modify its minimum airport standards when issuing a permit if it is satisfied that the airport will conform to minimum standards of safety.

(b) Safe air traffic patterns have been established for the proposed airport and for all existing airports and approved airport sites in its vicinity.

(c) The zone of approach of the airport has been engineered in conformity with the provisions of Section 21403, the documents relating thereto are available for public inspection.

(d) The department when issuing a permit may impose reasonable conditions which it deems necessary to effectuate the purposes of this article.

(e) The advantages to the public in selection of the site of a proposed new airport outweigh the disadvantages to the environment or, in the case of an amended permit, the advantages to the public of the proposed airport expansion outweigh the disadvantages to the environment. Environmental considerations include but are not limited to noise, air pollution, and the burden upon the surrounding area caused by the airport or airport expansion, including but not limited to, surface traffic and expense. The standards by which noise considerations are weighed shall be the level of noise acceptable to a reasonable person residing in the vicinity of the airport. The regulations adopted by the department pursuant to Section 21669 may be considered in determining such level of noise.

Each permit issued by the department shall set forth any conditions imposed thereon, and any modification of the general minimum airport standards prescribed by the department relative to such airport or airport site.

The department may refuse to issue a permit under this article if it determines that the requirements of this section have not been met. Any person denied a permit shall, upon request, be granted a hearing by the department to determine whether the permit should be issued.

Revocation of Permit; Grounds

21668. The department may revoke any airport permit if it determines that any of the following conditions are present:

- (a) There has been an abandonment of a site or an airport.
- (b) There has been a failure within the time prescribed to develop the site as an airport or to comply with the conditions of the approval as set forth in the permit.
- (c) The airport or site no longer conforms to the minimum airport standards prescribed by the department, or no longer complies with the conditions imposed in the airport permit or site approval.
- (d) The owner or operator of a permitted airport has failed to comply with any rule or regulation of the department.
- (e) The site may no longer be safely used by the general public because of a change in physical or legal conditions either on or off the airport site.

The department shall not revoke a permit under this section without prior notice or opportunity for hearing, unless the department determines in writing that public safety considerations require a summary revocation. In this event, any person aggrieved by the action of the department shall, upon request, be granted a hearing by the department to determine whether the revocation shall remain in effect.

Suspension of Operation

21668.2. In lieu of revoking an airport permit pursuant to Section 21668, the department may suspend any airport permit, or may require suspension of operations of a portion of an airport, and such suspension shall remain in effect until the department determines that the conditions requiring the suspension no longer exist.

The department shall not order a suspension under this section without prior notice or opportunity for hearing, unless the department determines in writing that public safety considerations require a summary suspension. In this event, any person aggrieved by the action of the department shall, upon request, be granted a hearing by the department to determine whether the suspension shall remain in effect.

Adoption of Noise Standards

21669. The department shall adopt noise standards governing the operation of aircraft and aircraft engines for airports operating under a valid permit issued by the department to an extent not prohibited by federal law. The standards shall be based upon the level of noise acceptable to a reasonable person residing in the vicinity of the airport.

Existing Residential Conversion

21669.1. (a) Land use conversion involving existing residential communities shall generally be considered the least desirable action for achieving compliance with noise standards regulations adopted by the Department of Transportation pursuant to Section 21669.

- (b) Nothing in this section creates a private right of action in any civil litigation.
- (c) This section is declaratory of existing regulations of the department.

Guidelines

21669.2. In its deliberations, the department shall be governed by the following guidelines:

- (a) Statewide uniformity in standards of acceptable airport noise need not be required, and the maximum amount of local control and enforcement shall be permitted.
- (b) Due consideration shall be given to the economic and technological feasibility of complying with the standards promulgated by the department.

Effective Date of Regulations

21669.3. Any regulations designed to establish a noise monitoring program at an airport entering service after November 30, 1971, shall go into effect on the date the airport enters service.

Violation of Standards; Enforcement; Penalties

21669.4. (a) The violation of the noise standards by any aircraft shall be deemed a misdemeanor and the operator thereof shall be punished by a fine of one thousand dollars (\$1,000) for each infraction.

(b) It shall be the function of the county wherein an airport is situated to enforce the noise regulations established by the department. To this end, the operator of an airport shall furnish to the enforcement authority designated by the county the information required by the department's regulations to permit the efficient enforcement thereof. The operator of each airport shall reimburse the county for its costs of implementing the airport noise regulations

contained in Article 8 (commencing with Section 5050) of subchapter 6 of Title 4 of the California Administrative Code, which shall, for purposes of subdivision (c), credit the operator for any amounts received from penalties assessed for violations at such airport. Upon request of the operator, the department shall review and shall determine the reasonableness of such costs, and such costs may be considered in fixing any airport user fees.

(c) Penalties assessed for the violation of the noise regulations shall be used first to reimburse the General Fund for the amount of any money appropriated to carry out the purposes for which the noise regulations are established, and second be used in the enforcement of the noise regulations at participating airports.

Noise-sensitive projects; approval conditioned upon grant of avigation easement

21669.5. (a) For purposes of this section, the following terms have the following meanings:

(1) (A) "Avigation easement" means a less-than-fee-title transfer of real property rights from the property owner that may convey to an owner or operator of an airport any or all of the following rights:

(i) A right-of-way for the free and unobstructed passage of aircraft through the airspace over the property at any altitude above a specified surface.

(ii) A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.

(iii) A right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace.

(iv) A right-of-entry onto the property, with proper advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.

(v) A right to prohibit electrical interference, glare, misleading lights, visual impairments, and other hazards to aircraft flight from being created on the property.

(B) "Avigation easement" includes an easement obtained pursuant to paragraph (2) of subdivision (a) of Section 21652.

(2) "CNEL" means community noise equivalent level established pursuant to Chapter 6 (commencing with Section 5000) of Division 2.5 of Title 21 of the California Code of Regulations.

(3) "Noise-sensitive land use" means residential uses, including detached single-family dwellings, multifamily dwellings, highrise apartments or condominiums, mobilehomes, public and private educational facilities, hospitals, convalescent homes, churches, synagogues, temples, and other places of worship.

(4) "Noise-sensitive project" means a project involving new construction or reconstruction for a planned noise-sensitive land use within an airport's 65 decibels CNEL or higher noise contour.

(b) If a political subdivision conditions approval of a noise-sensitive project upon the grant of an avigation easement to the owner or operator of an airport, the avigation easement shall be required to be granted to the owner or operator of the airport prior to the issuance of the building permit that allows construction or reconstruction of the noise-sensitive project. The owner or operator of an airport that is granted an avigation easement as a condition for approval of a noise-sensitive project pursuant to this subdivision shall be entitled to immediately record it upon receipt.

(c) An avigation easement granted to the owner or operator of an airport as a condition for approval of a noise-sensitive project shall include a termination clause that operates to terminate the avigation easement if the noise-sensitive project is not built and the permit or any permit extension authorizing construction or reconstruction of the noise-sensitive project has expired or has been revoked.

(d) Within 30 days after expiration or revocation of a permit or permit extension that authorized construction or reconstruction of a noise-sensitive project and was conditioned upon the property owner granting an avigation easement to the owner or operator of an airport, the political subdivision that had issued the permit shall notify the owner or operator of the airport of the expiration or revocation of the permit. Within 90 days after receipt of the notice from the political subdivision, the owner or operator of the airport shall record a notice of termination with the county recorder in which the property is located. Proof of filing of the notice of termination shall be provided to the political subdivision by the owner or operator of the airport within 30 days of recordation.

(e) Notwithstanding Sections 6103 and 27383 of the Government Code, in filing any instrument, paper, or notice pursuant to this section, the owner or operator of an airport shall pay all applicable recording fees prescribed by law.

Hearing Procedures

21669.6. Hearings under this article required by the provisions of Sections 21666, 21668, 21668.2, and 21669, or regulations adopted pursuant to those provisions, shall be conducted pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

Article 3.5. Airport Land Use Commission

Creation; Membership; Selection

21670. (a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation.

For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport.

(f) It is the intent of the Legislature to clarify that, for the purposes of this article, that special districts, school districts, and community college districts are included among the local agencies that are subject to airport land use laws and other requirements of this article.

Action by Designated Body Instead of Commission

21670.1. (a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) that does not include among its membership at least two members having expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

(c) (1) Notwithstanding subdivisions (a) and (b), and subdivision (b) of Section 21670, if the board of supervisors of a county and each affected city in that county each makes a determination that proper land use planning pursuant

to this article can be accomplished pursuant to this subdivision, then a commission need not be formed in that county.

(2) If the board of supervisors of a county and each affected city makes a determination that proper land use planning may be accomplished and a commission is not formed pursuant to paragraph (1), that county and the appropriate affected cities having jurisdiction over an airport, subject to the review and approval by the Division of Aeronautics of the department, shall do all of the following:

(A) Adopt processes for the preparation, adoption, and amendment of the airport land use compatibility plan for each airport that is served by a scheduled airline or operated for the benefit of the general public.

(B) Adopt processes for the notification of the general public, landowners, interested groups, and other public agencies regarding the preparation, adoption, and amendment of the airport land use compatibility plans.

(C) Adopt processes for the mediation of disputes arising from the preparation, adoption, and amendment of the airport land use compatibility plans.

(D) Adopt processes for the amendment of general and specific plans to be consistent with the airport land use compatibility plans.

(E) Designate the agency that shall be responsible for the preparation, adoption, and amendment of each airport land use compatibility plan.

(3) The Division of Aeronautics of the department shall review the processes adopted pursuant to paragraph (2), and shall approve the processes if the division determines that the processes are consistent with the procedure required by this article and will do all of the following:

(A) Result in the preparation, adoption, and implementation of plans within a reasonable amount of time.

(B) Rely on the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.

(C) Provide adequate opportunities for notice to, review of, and comment by the general public, landowners, interested groups, and other public agencies.

(4) If the county does not comply with the requirements of paragraph (2) within 120 days, then the airport land use compatibility plan and amendments shall not be considered adopted pursuant to this article and a commission shall be established within 90 days of the determination of noncompliance by the division and an airport land use compatibility plan shall be adopted pursuant to this article within 90 days of the establishment of the commission.

(d) A commission need not be formed in a county that has contracted for the preparation of airport land use compatibility plans with the Division of Aeronautics under the California Aid to Airports Program (Chapter 4 (commencing with Section 4050) of Title 21 of the California Code of Regulations), Project Ker-VAR 90-1, and that submits all of the following information to the Division of Aeronautics for review and comment that the county and the cities affected by the airports within the county, as defined by the airport land use compatibility plans:

(1) Agree to adopt and implement the airport land use compatibility plans that have been developed under contract.

(2) Incorporated the height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, as part of the general and specific plans for the county and for each affected city.

(3) If the county does not comply with this subdivision on or before May 1, 1995, then a commission shall be established in accordance with this article.

(e) (1) A commission need not be formed in a county if all of the following conditions are met:

(A) The county has only one public use airport that is owned by a city.

(B) (i) The county and the affected city adopt the elements in paragraph (2) of subdivision (d), as part of their general and specific plans for the county and the affected city.

(ii) The general and specific plans shall be submitted, upon adoption, to the Division of Aeronautics. If the county and the affected city do not submit the elements specified in paragraph (2) of subdivision (d), on or before May 1, 1996, then a commission shall be established in accordance with this article.

Los Angeles County

21670.2. (a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning

commission on an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

(b) By January 1, 1992, the county regional planning commission shall adopt the airport land use compatibility plans required pursuant to Section 21675.

(c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the airport land use compatibility plans required pursuant to Section 21675 are not adopted by the county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the airport land use compatibility plans are adopted.

San Diego County

21670.3. (a) Sections 21670 and 21670.1 do not apply to the County of San Diego. In that county, the San Diego County Regional Airport Authority, as established pursuant to Section 170002, shall be responsible for the preparation, adoption, and amendment of an airport land use compatibility plan for each airport in San Diego County.

(b) The San Diego County Regional Airport Authority shall engage in a public collaborative planning process when preparing and updating an airport land use compatibility plan.

Intercounty Airports

21670.4. (a) As used in this section, "intercounty airport" means any airport bisected by a county line through its runways, runway protection zones, inner safety zones, inner turning zones, outer safety zones, or sideline safety zones, as defined by the department's Airport Land Use Planning Handbook and referenced in the airport land use compatibility plan formulated under Section 21675.

(b) It is the purpose of this section to provide the opportunity to establish a separate airport land use commission so that an intercounty airport may be served by a single airport land use planning agency, rather than having to look separately to the airport land use commissions of the affected counties.

(c) In addition to the airport land use commissions created under Section 21670 or the alternatives established under Section 21670.1, for their respective counties, the boards of supervisors and city selection committees for the affected counties, by independent majority vote of each county's two delegations, for any intercounty airport, may do either of the following:

(1) Establish a single separate airport land use commission for that airport. That commission shall consist of seven members to be selected as follows:

(A) One representing the cities in each of the counties, appointed by that county's city selection committee.

(B) One representing each of the counties, appointed by the board of supervisors of each county.

(C) One from each county having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.

(D) One representing the general public, appointed by the other six members of the commission.

(2) In accordance with subdivision (a) or (b) of Section 21670.1, designate an existing appropriate entity as that airport's land use commission.

Actions subject to mediation

21670.6. Any action brought in the superior court relating to this article may be subject to a mediation proceeding conducted pursuant to Chapter 9.3 (commencing with Section 66030) of Division 1 of Title 7 of the Government Code.

Airport Owned by a City, District, or County

21671. In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) of subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

Term of Office

21671.5. (a) Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body that originally

appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing that member. The expiration date of the term of office of each member shall be the first Monday in May in the year in which that member's term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.

(b) Compensation, if any, shall be determined by the board of supervisors.

(c) Staff assistance, including the mailing of notices and the keeping of minutes and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.

(d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

(e) The commission shall meet at the call of the commission chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

(f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission that has not adopted the airport land use compatibility plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.

(g) In any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the airport land use compatibility plans are complete by that date, may continue charging fees after June 30, 1992. If the airport land use compatibility plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

Rules and Regulations

21672. Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

Initiation of Proceedings for Creation by Owner of Airport

21673. In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

Powers and Duties

21674. The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) 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.

(c) To prepare and adopt an airport land use compatibility plan pursuant to Section 21675.

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

Training of Airport Land Use Commission's Staff

21674.5. (a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.

(b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:

- (1) The establishment of a process for the development and adoption of airport land use compatibility plans.
- (2) The development of criteria for determining the airport influence area.
- (3) The identification of essential elements that should be included in the airport land use compatibility plans.
- (4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.
- (5) Any other organizational, operational, procedural, or technical responsibilities and functions that the department determines to be appropriate to provide to commission staff and for which it determines there is a need for staff training or development.

(c) The department may provide training and development programs for airport land use commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:

- (1) By offering formal courses or training programs.
- (2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.
- (3) By producing and making available written information.
- (4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

Airport Land Use Planning Handbook

21674.7. (a) An airport land use commission that formulates, adopts, or amends an airport land use compatibility plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation.

(b) It is the intent of the Legislature to discourage incompatible land uses near existing airports. Therefore, prior to granting permits for the renovation or remodeling of an existing building, structure, or facility, and before the construction of a new building, it is the intent of the Legislature that local agencies shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, to the extent that the criteria has been incorporated into the plan prepared by a commission pursuant to Section 21675. This subdivision does not limit the jurisdiction of a commission as established by this article. This subdivision does not limit the authority of local agencies to overrule commission actions or recommendations pursuant to Sections 21676, 21676.5, or 21677.

Land Use Plan

21675. (a) Each commission shall formulate an airport land use compatibility plan that will 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's airport land use compatibility 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 an airport land use compatibility plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the airport influence area. The airport land use compatibility 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.

(b) The commission shall include, within its airport land use compatibility plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any military airport for all of the purposes specified in subdivision (a). The airport land use compatibility plan shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport. This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The airport influence area shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the airport land use compatibility plan and each amendment to the plan.

(e) If an airport land use compatibility plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

Adoption of Land Use Plan

21675.1. (a) By June 30, 1991, each commission shall adopt the airport land use compatibility plan required pursuant to Section 21675, except that any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, shall adopt that airport land use compatibility plan on or before June 30, 1992.

(b) Until a commission adopts an airport land use compatibility plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, "vicinity" means land that will be included or reasonably could be included within the airport land use compatibility plan. If the commission has not designated an airport influence area for the airport land use compatibility plan, then "vicinity" means land within two miles of the boundary of a public airport.

(c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

(1) The commission is making substantial progress toward the completion of the airport land use compatibility plan.

(2) There is a reasonable probability that the action, regulation, or permit will be consistent with the airport land use compatibility plan being prepared by the commission.

(3) There is little or no probability of substantial detriment to or interference with the future adopted airport land use compatibility plan if the action, regulation, or permit is ultimately inconsistent with the airport land use compatibility plan.

(d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.

(e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the airport land use compatibility plan.

(f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport is not liable for damages to property or personal injury resulting from the city's or county's decision to proceed with the action, regulation, or permit.

(g) A commission may adopt rules and regulations that exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:

(1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.

(2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

Approval or Disapproval of Actions, Regulations, or Permits

21675.2. (a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or proceedings, except previously filed pending matters of the same character.

(b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration of the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the location of any proposed development, the application number, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the public notice is provided. If the applicant provides notice pursuant to this

section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

(c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.

(d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

Review of Local General Plans

21676. (a) Each local agency whose general plan includes areas covered by an airport land use compatibility plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the airport land use compatibility plan. If the plan or plans are inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its airport land use compatibility plans. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the public record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(c) Each public agency owning any airport within the boundaries of an airport land use compatibility plan shall, prior to modification of its airport master plan, refer any proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the airport land use compatibility plan.

Review of Local Plans

21676.5. (a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is

consistent with the purposes of this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

Marin County Override Provisions

21677. Notwithstanding the two-thirds vote required by Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the public record of the final decision to overrule the commission, which may be adopted by a majority vote of the governing body.

Airport Owner's Immunity

21678. With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676, 21676.5, or 21677 overrules a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to overrule the commission's action or recommendation.

Court Review

21679. (a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use compatibility plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, that directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction that postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency that took the action does one of the following:

- (1) In the case of an action that is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.
- (2) In the case of an action that is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.
- (3) Rescinds the action.
- (4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2), whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency that took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use compatibility plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

Deferral of Court Review

21679.5. (a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport, shall be commenced in any county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan.

(b) If a commission has been prevented from adopting the airport land use compatibility plan by June 30, 1991, or if the adopted airport land use compatibility plan could not become effective, because of a lawsuit involving the adoption of the airport land use compatibility plan, the June 30, 1991, date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.

(c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission or other designated body adopts an airport land use compatibility plan on or before June 30, 1991, the action shall be dismissed. If the commission or other designated body does not adopt an airport land use compatibility plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.

(d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use compatibility plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

Article 4. Aeronautics Fund

Continuation; Continuous Appropriation

21680. (a) The Aeronautics Fund is hereby continued in existence as the Aeronautics Account in the State Transportation Fund. The moneys deposited to the credit of the account are continuously appropriated for expenditure by the board and the department as provided in this article.

(b) Any reference in any law or regulation to the Airport Assistance Revolving Fund, the Airport Assistance Fund, or the Aeronautics Fund shall be deemed to refer to the Aeronautics Account in the State Transportation Fund. As used in this article, "fund" shall be deemed to refer to the Aeronautics Account in the State Transportation Fund.

Definitions

21681. As used in this article, the following terms have the following meanings:

(a) "Own and operate" means that the public entity shall own the property in fee simple or by a long-term lease of a minimum of 20 years, unless otherwise approved by the department, and shall maintain dominion and control of the property, except that the public entity may provide by contract with a person for the operation and management of an airport otherwise meeting the requirements of this article. Operations of the airport shall be for, and on behalf of, the public entity. All leases to the public entity of property are required to be approved by the department. A lease of the property by the public entity to an agent or agency other than to a public entity does not meet the criteria for participation in airport assistance funds.

(b) "Matching funds" means money that is provided by the public entity and does not consist of funds previously received from state or federal agencies or public entity funds previously used to match federal or state funds. This definition shall be retroactive to July 1, 1967.

(c) "General aviation" means all aviation except air carrier and military aviation.

(d) "Public entity" means any city, county, airport district, airport authority, port district, port authority, public district, public authority, political subdivision, airport land use commission, community services district, or public corporation and the University of California.

(e) "Public agency" means the various agencies of the State of California and the federal government.

(f) "Airport and aviation purposes" means expenditures of a capital improvement nature, including the repair or replacement of a capital improvement, and expenditures for compatible land use planning in the area surrounding an airport, for any of the following purposes:

(1) Land acquisition for development and improvement of general aviation aircraft landing facilities.

(2) Grading and drainage necessary for the construction or reconstruction of runways or taxiways.

(3) Construction or reconstruction of runways or taxiways.

(4) Acquisition of "runway protection zones" as defined in Federal Aviation Administration Advisory Circular 150/1500-13.

(5) Acquisition of easements through, or other interests in, airspace as may be reasonably required for safeguarding aircraft operations in the vicinity of an aircraft landing facility.

(6) Removal of natural obstructions from runway protection zones.

(7) Installation of "segmented circle airport marker systems" as defined in current regulations of the Federal Aviation Administration.

(8) Installation of runway, taxiway, boundary, or obstruction lights, together with directly related electrical equipment.

(9) Installation of minimum security fencing around the perimeter of an aircraft landing facility.

(10) Grading and drainage necessary to provide for parking of transient general aviation aircraft.

(11) Construction or reconstruction of transient general aviation aircraft parking areas.

(12) Servicing of revenue or general obligation bonds issued to finance capital improvements for airport and aviation purposes.

(13) Air navigational facilities.

(14) Engineering and preliminary engineering related directly to a project funded under this article.

(15) Other capital improvements as may be designated in rules and regulations adopted by the department.

(16) Activities of an airport land use commission in connection with the preparation of a new or updated airport land use compatibility plan pursuant to Section 21675. Expenditures that cannot be clearly identified as capital improvements shall be submitted to the department for consideration and approval.

(17) Airport master plans and airport layout plans.

(g) "Operation and maintenance" means expenditures for wages or salaries, utilities, service vehicles, and all other noncapital expenditures that are included in insurance, professional services, supplies, construction equipment, upkeep and landscaping, and other items of expenditure designated as "operation and maintenance" in rules and regulations adopted by the department.

(h) "Enplanement" means the boarding of an aircraft by a revenue passenger, including an original, stopover, or transfer boarding of the aircraft. For purposes of this subdivision, a stopover is a deliberate and intentional interruption of a journey by a passenger scheduled to exceed four hours in the case of an intrastate or interstate passenger or not to exceed 24 hours in the case of an international passenger at a point between the point of departure and the point of destination, and a transfer is an occurrence at an intermediate point in an itinerary whereby a passenger or shipment changes from a flight of one carrier to another flight either of the same or a different carrier with or without a stopover.

Payments from Fund

21682. (a) The department shall establish individual revolving fund subaccounts for eligible airports in the Aeronautics Account in the State Transportation Fund. Money payable under this section shall be credited to individual airport subaccounts annually, and may be accumulated for a maximum period of five years.

(b) The department shall, subject to Section 21684, credit from the Aeronautics Account to each public entity owning and operating an airport or airports under a valid permit issued by the department for every airport which has not been designated by the Federal Aviation Administration as (1) a reliever airport, as defined in Section 503 (a) (19) of the federal Airport and Airway Improvement Act of 1982, as amended, or (2) a commercial service airport, as defined in Section 503 (a) (5) of the federal Airport and Airway Improvement Act of 1982, as amended, the sum of ten thousand dollars (\$10,000) annually for each qualifying airport. These funds shall be paid to public entities upon request for expenditure on preapproved eligible projects. Eligible public entities may submit applications for the withdrawal of credited funds for expenditure on proposed projects in letter form to the department for review and approval. Projects identified shall be for airport and aviation purposes and operation and maintenance purposes. No payment made under this section is transferable, but shall be expended only upon the airport for which the payment is made, unless the department authorizes a payment to be transferred for expenditure

on another airport owned or operated by the public entity. The department may establish any accounting systems it deems necessary to provide for the cumulation and expenditure of funds under this subdivision.

(c) If, in any year, there is insufficient money in the Aeronautics Account to make the credits specified in subdivision (b), the department shall, subject to Section 21684, credit to each public entity subaccount an amount which is equal to the total amount of money in the Aeronautics Account multiplied by a percentage equivalent to the proportion which the airport or airports of the public entity for which credit is required to be made pursuant to subdivision (b) bear to the total number of airports for which credit is required to be made pursuant to subdivision (b).

(d) No payment shall be made under this section to any public entity for any airport on which general or commercial aviation activities are substantially restricted if the airport is licensed to conduct these activities by the department. The department shall determine whether or not general or commercial aviation activities are restricted.

(e) The department shall adopt rules and regulations and establish procedures to effect prompt payment to public entities for eligible airport projects from money credited pursuant to this section.

Payment of Aviation Share of Comprehensive Transportation Planning Costs

21682.5. The department shall pay, from the Aeronautics Account to the Transportation Planning and Development Account in the State Transportation Fund, a sum equal to the pro rata share of the comprehensive transportation duties attributable to aviation planning and research, as determined by the Director of Transportation.

Use of Balance

21683. Any public entity may apply to the department each year for the allocation of funds for the acquisition or development of airports. The commission may, pursuant to rules and regulations promulgated by the department, make an allocation to the public entity if it determines that the proposed acquisition or development is feasible and in accordance with the policies and standards established by the department. The department shall make recommendations to the commission on all applications. Such allocations shall be represented as subventions in the department budget in accordance with Section 21206.

No moneys paid under this section shall be expended for operation and maintenance. No payment shall be made under this section to any public entity for any airport on which general or commercial aviation activities are substantially restricted if the airport is licensed to conduct such activities by the department. The department shall determine whether or not general or commercial aviation activities are restricted.

Use of Funds for Local Match for Federal Airport Improvement Program Grants

21683.1. (a) At the discretion of the commission, any balance remaining in the Aeronautics Account, after the payments made under Section 21682, may be used to provide a portion of the local match for federal Airport Improvement Program grants. Matching shall be provided only for grants at general aviation airports, or at airports that have been designated by the Federal Aviation Administration as reliever airports, as defined in Section 503(a)(19) of the federal Airport and Airway Improvement Act of 1982, as amended.

(b) Funds shall not be allocated by the commission until the federal grant offer is accepted by the public entity. Upon allocation by the commission, the department may pay a public entity an amount equal to 5 percent of the amount of a federal Airport Improvement Program grant. These funds are excluded from the requirements of Section 21684.

(c) Funds shall not be allocated by the commission until the federal grant offer is accepted by the public entity. Upon allocation by the commission, the department may, until December 31, 2006, pay a public entity an amount equal to the 10 percent local match required for a federal Airport Improvement Program grant for security projects at small general aviation airports. For purposes of this section, a "security project" means a project to install or maintain fencing, gates, security lighting, access controls systems, and surveillance systems. For purposes of this section a "small general aviation airport" means an airport with fewer than 80,000 annual landings and take-offs of aircraft.

Use of Balance in Aeronautics Account

21683.2. Any balance remaining in the Aeronautics Account, after the payments made under Section 21682 and Section 21683.1, shall be used at the discretion of the commission for airport and aviation purposes subject to the provisions of Section 21684.

Special Aviation Fund

21684. (a) No payment shall be made to a public entity pursuant to this article unless the public entity has established a special aviation fund in which all payments received by a public entity under this article shall be

deposited for expenditure solely for airport and aviation purposes. No payment shall be made to a public entity for a project pursuant to Section 21683.2 unless the public entity deposits in its special aviation fund a sum from other than state or federal sources, established annually by the commission at not less than 10 percent nor more than 50 percent of the nonfederal portion of the project.

Notwithstanding the provisions of this subdivision requiring matching funds, the department shall pay to each public entity owning and operating an airport or airports the annual amount that is in accordance with Section 21682.

(b) No payment shall be made for any airport to the University of California pursuant to this article unless the university has established a special aviation fund in which all payments received by the university under this article shall be deposited for expenditure solely for airport and aviation purposes. No payment shall be made for any airport to the University of California pursuant to Section 21683.2 unless the university deposits in its special aviation fund each year, for expenditure solely for airport and aviation purposes, a sum from nonstate or nonfederal funds based on the rate established annually by the commission pursuant to subdivision (a), or unless a city located within 10 miles of the airport or the county within which the airport is located pays to the university a sum based on the rate established annually by the commission pursuant to subdivision (a). However, any sums so deposited by the university or paid by the city or county may be considered jointly as meeting the requirements of this section. The payments received from a city or county pursuant to these sections are to be expended solely for the airport and for aviation purposes related to such airport. All payments received by the university shall be deposited in its special aviation fund.

Use of Balance of Fund to Purchase Emergency Search and Rescue Equipment

21684.1. Notwithstanding the provisions of Section 21683, any balance remaining in the fund after the payments made under Section 21682 may be used by the department to purchase emergency search and rescue equipment and to make such equipment available for use by recognized search and rescue groups. The equipment shall remain the property of the department. No more than eight thousand dollars (\$8,000) shall be expended pursuant to this section for the purchase of emergency search and rescue equipment.

Allocation of Funds for Construction of Airports

21684.5. Notwithstanding the provisions of this article inasmuch as they require matching funds the department may allocate funds to public agencies for the construction of airports.

Allocation of Funds to Counties

21684.6. Notwithstanding the provisions of this article, inasmuch as they require matching funds, the department may allocate funds to a county or a city for the construction of recreational airports or reliever training airstrips in accordance with regulations of the department if the county or city supplies the land and maintains and operates all facilities of such airport or airstrip.

Special Aviation Fund; Payments to State College or University Branch

21685. Any public entity may pay any part of the money in its special aviation fund to a state college or branch of the University of California located within its boundaries to be expended for the same purposes as the public entity may expend such money. Any money paid to a state college or branch of the University of California shall be expended within the public entity paying the money.

Audit of Books and Records of Public Agencies

21686. It shall be the duty of any public entity receiving payments or allocations under this article to periodically audit its books and records as deemed necessary by the department for the purpose of determining that the money received has been expended for the purposes and under the conditions authorized by this article.

Airports No Longer Open to the General Public; Payments to State

21687. (a) (1) If an airport, for which payments have been made from the Aeronautics Account, ceases to be open to the general public for more than one year, the public entity to which those payments were made shall pay to the state funds equal to the amount computed by the department pursuant to paragraph (2), and those funds shall be deposited in the Aeronautics Account.

(2) (A) The department shall compute an amount equal to the total of all payments made for the airport from the Aeronautics Account during the preceding 20 years, less 5 percent of the amount of a particular payment multiplied by the number of years since the payment was made, or the unused balance, whichever is greater.

(B) The computation described in subparagraph (A) shall not include any payment the department made pursuant to Section 21682, if, upon the request of the public entity that owns and operates the airport, the department determines that the airport is not necessary to the system of public airports in this state. When making this determination, the department shall consider all of the following factors:

- (i) Whether the airport is approved for night operations.
 - (ii) Whether the airport has an approved instrument approach procedure.
 - (iii) How many aircraft are based at the airport.
 - (iv) Whether the airport is used for airborne fire attacks.
 - (v) Whether the airport is used for emergency medical transportation.
 - (vi) What services the airport provides for the community.
 - (vii) The size of the community that is served by the airport.
 - (viii) Whether any aviation or transportation planning agency has designated the airport as having a significant role.
 - (ix) Whether a suitable, public-use airport is situated within a reasonable distance.
 - (x) Whether closure of the airport will have a negative effect on other airports.
 - (xi) Whether the airport is used for law enforcement purposes.
- (b) This section does not apply to either of the following:
- (1) An airport that is replaced by a comparable facility, as determined by the department, within a period of one year.
 - (2) An airport for which the department, on or after January 1, 1981, has suspended the airport permit and for which payments made pursuant to this article are being expended to correct the deficiency or condition that resulted in the suspension of the airport's permit.

Limitation on Expenditure of Funds

21688. (a) No payments shall be made from the Aeronautics Account for expenditure on any airport or for the acquisition or development of any airport, if the department determines that the height restrictions around the airport are inadequate to provide reasonable assurance that the landing and taking off of aircraft at the airport will be conducted without obstruction or will be otherwise free from hazards.

Height restrictions shall be considered adequate if as a minimum they meet the obstruction standards of subchapter C of Part 77 of the Federal Aviation Regulations of the Federal Aviation Administration, as these standards apply to civil airport imaginary surfaces related to runways.

The airport-owning entity shall have sufficient control over obstructions in the airspace in the vicinity of the airport to assure that height restrictions can be maintained. This control may be in the form of ownership of any land from which obstructions may rise, air navigation easements to guarantee maintenance of restrictions, or height limitation or land use zoning which will prohibit obstructions which would violate the obstruction standards.

(b) This section shall not prevent or prohibit the department from assisting any public agency or public entity in planning airport development or in planning the zoning needs around an airport.

Article 4.5. Airport Facilities and Concessions

Legislative Findings

21690.5. The Legislature finds and declares as follows:

(a) The proper operation of California's publicly owned or operated airports is essential to the welfare of the state and its people.

(b) California's publicly owned or operated airports establish a vital transportation link between the state and the economic systems of the nation and the world, and enable the state to enjoy and provide the benefits of an international tourist and commercial center.

(c) The economic validity and stability of California's publicly owned or operated airports is, consequently, a matter of statewide importance.

(d) The policy of this state is to promote the development of commerce and tourism to the end of securing to the people of this state the benefits of these activities conducted in the state.

(e) Therefore, since the proper operation of the state's publicly owned or operated airports is essential to the welfare of the state and its people, the Legislature recognizes and affirms such operation as a governmental function to be discharged in furtherance of the policy of securing the benefits of commerce and tourism for the state and its people.

Scope of Law

21690.6. The provisions of this article shall apply to any airport owned or operated by a political subdivision, including a charter city.

Promotion of Commerce and Tourism

21690.7. The governing bodies of publicly owned or operated airports shall manage airport facilities and grant airport concessions in furtherance of the development of commerce and tourism in or affecting the state. In managing facilities and granting concessions for services to the public, such airport governing bodies shall promote the development of commerce and tourism by (a) securing a diversity of airport services; (b) avoiding wasteful duplication of such services; (c) securing to the users of airports safe, courteous, and quality service; (d) limiting or prohibiting business competition which is destructive of the ends of promoting commerce and tourism in the state; (e) allocating limited airport resources to promote such ends; and (f) fostering California's image as a commercial and tourist center.

Exclusive Agreements

21690.8. The Legislature recognizes that to further the policies and fulfill the objectives stated in this article, it is often necessary that publicly owned or operated airports enter into exclusive or limited agreements with a single operator or a limited number of operators. The governing bodies of publicly owned or operated airports shall grant exclusive or limited agreements to displace business competition with regulation or monopoly service whenever the governing body determines, in consideration of the factors set forth in Section 21690.9, that such agreements are necessary to further the policies and to fulfill the objectives stated in this article. The Legislature contemplates that publicly owned or operated airports will grant exclusive or limited agreements in furtherance of the policy of this state to displace business competition by exclusive or limited agreements to fulfill these policies and objectives.

Determination of Necessity

21690.9. Before entering any exclusive or limited agreement in connection with the management of any airport facility or the operation of any airport concession, the governing body of a publicly owned or operated airport shall, under authority hereby expressly delegated by the state, determine the necessity for an exclusive or limited agreement. The governing body shall consider the following factors to determine the necessity for an exclusive or limited agreement to further the policies and objectives stated in this article:

- (a) Public safety.
- (b) Public convenience.
- (c) Quality of service.
- (d) The need to conserve airport space.
- (e) The need to avoid duplication of services.
- (f) The impact on the environment or facilities of the airport as an essential commercial and tourist service center.
- (g) The need to avoid destructive competition which may impair the quality of airport services to the public, lead to uncertainty, disruption, or instability in the rendering of such services, or detract from the state's attractiveness as a center of tourism and commerce.

In making its determination, the airport operator shall not be required to take evidence or to make findings of fact.

Compliance with Other States

21690.10. Nothing in this article shall excuse any local agency from complying with applicable state or local requirements for competitive bidding or public hearings which may be required prior to the awarding or entering into of any bid, agreement or lease.

Article 5. Los Angeles International Airport Relocation and Development

Legislative Findings

21690.20. The Legislature hereby finds that Los Angeles International Airport is one of the important air terminals of the world, making a significant contribution daily to the economy of California.

Since 1959, jet air traffic at the airport has increased from 80 flights daily to nearly 1,000 daily. This increasing air traffic and necessary expansion of airport facilities has had an adverse affect on the residents of the surrounding areas. Expansion and development has and is expected to require the acquisition of many homes in the vicinity of the airport and has rendered other homes in areas subjected to aircraft noise nearly uninhabitable. Property owners in the vicinity of the airport are either unable to sell their homes or able to sell only at depressed market prices.

Under present laws, the Department of Airports of the City of Los Angeles is required only to pay homeowners "fair market value" for their property. With increasing property costs and current high interest rates, it is impossible for a homeowner to purchase a comparable dwelling in a comparable residential area for amounts now being paid as "fair market value."

The City Council of the City of Los Angeles has initiated this legislation to enable the city to (1) assist displaced homeowners to relocate in comparable residential areas and housing, (2) provide, where available, replacement housing acceptable to affected homeowners, and (3) purchase affected homes to compensate homeowners for the depressed values of their property.

There is precedent for the provision of replacement housing, where available, in Chapter 953 of the Statutes of 1968, by which the Department of Public Works is authorized to provide relocation assistance and replacement housing to certain individuals and families displaced because of construction of certain state highway projects. Further, there is precedent for relocation payments to compensate certain homeowners in Public Law 90-495 and in Chapter 3 of the Statutes of 1968, First Extraordinary Session.

Definitions

21690.21. Unless the context otherwise requires, the following definitions shall govern the construction of this article:

- (a) "Airport" means Los Angeles International Airport.
- (b) "Department" means the Department of Airports, City of Los Angeles.
- (c) "Mayor" means the Mayor of the City of Los Angeles.
- (d) "Board" means the Los Angeles International Airport Property Acquisition Board.

Authority of Department

21690.22. Notwithstanding any other provision of law, the department is authorized to:

- (a) Assist homeowners displaced by the expansion of the airport to relocate in comparable residential areas and housing.
- (b) Provide, where available, replacement housing acceptable to affected homeowners.
- (c) Purchase affected property to compensate homeowners for the depressed values of their property as a result of the proximity of the airport to enable such homeowners to purchase comparable housing under more normal market conditions.

Expenditure of Available Funds

21690.23. The department is authorized to expend any available funds, including state and federal funds, for the purpose of purchasing homes from homeowners displaced by the expansion of the airport and relocating or providing suitable replacement housing for such persons, notwithstanding any other provision of law.

Petition for Payment of Additional Compensation

21690.24. Upon establishment of a program for additional payments to homeowners by the department pursuant to this article, the affected property owners may petition as provided in Section 21690.26 for the payment of additional compensation for the depressed value of the affected property resulting from the presence and operation of the airport, provided that such owner has not previously recovered any sums in the nature of an inverse condemnation award by reason of the presence and operation of the airport.

Appointment of Board

21690.25. Upon establishment by the department of a program for such additional compensation, the mayor shall appoint, subject to the approval of the city council, five persons who shall constitute the board.

Tenure of Board; Quorum; Duties

21690.26. The members of the board shall serve at the pleasure of the mayor, and any action taken by a majority thereof shall constitute the action of the board. The board shall hear petitions from homeowners dislocated by reason of airport expansion and operations for amounts to be paid in excess of market value of affected property. The board shall establish procedures for the conduct of its business.

Payment of Awards

21690.27. The Board of Airport Commissioners of the City of Los Angeles is directed to pay any sum awarded by the board pursuant to Section 21690.26.

Persons Eligible; Time for Filing Petition; Time for Payment

21690.28. The provisions of this article are available only to persons who own residential property which has been or is being condemned or sold for airport purposes. Petitions for additional compensation may be filed with the board at the same time that condemnation proceedings or acquisition negotiations are initiated; and the board shall pay any sum awarded pursuant to Section 21690.26 within 60 days after condemnation or other acquisition proceedings are completed.

Partial Invalidity

21690.29. If any provision of this article or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the article which can be given effect without the invalid provision or application, and to this end the provisions of this act are severable.

Chapter 5. Proceedings

Investigation, Inquiries, and Hearings

21692. The department, any member, the director, or any officer or employee of the department designated by it may hold investigations, inquiries, and hearings concerning matters covered by this part and the rules and orders of the department, and concerning accidents in aeronautics within this state. Hearings shall be open to the public and, except as provided in Section 21691, shall be held upon such call or notice as the department deems advisable. Each member of the department, the director, and every officer or employee of the department designated by it to hold any inquiry, investigation, or hearing may administer oaths and affirmations, certify to all official acts, issue subpoenas, and order the attendance and testimony of witnesses and the production of papers, books, and documents. If any person fails to comply with any subpoenas or order issued under the authority of this section, the department or its authorized representative may invoke the aid of any court of general jurisdiction. The court may order such person to comply with the requirements of the subpoena or order to give evidence touching the matter in question. Failure to obey the order of the court may be punished by the court as contempt.

Reports of Investigations and Hearings

21693. In order to facilitate the making of investigations by the department in the interest of public safety and promotion of aeronautics, the reports of investigations or hearings or any part of the reports, shall not be admitted in evidence or used for any purpose in any suit, action, or proceeding growing out of any matter referred to in the investigation, hearing, or report, except in case of any suit, action, or proceeding, civil or criminal, instituted by or in behalf of the department or in the name of the state under the provisions of this part or other laws of the state relating to aeronautics. Any member of the department, the director, or any officer or employee of the department shall not be required to testify to any facts ascertained in, or information gained by reason of, his official capacity, nor be required to testify as an expert witness in any suit, action, or proceeding involving any aircraft. Subject to these limitations, the department may make available to appropriate federal, state, and political subdivision agencies information and material developed in the course of its investigations and hearings.

Orders of Department; Contents; Service; Review

21694. Every order of the department requiring performance of certain acts or compliance with certain requirements shall set forth the reasons, state the acts to be done or requirements to be met, and be served upon the person affected either by registered mail or in person. Any person aggrieved by an order of the department may have the action of the department reviewed by the courts in the manner provided by law.

Chapter 6. Airport Planning

California Aviation System Plan

21701. The division, in consultation with transportation planning agencies as designated by the director pursuant to Section 29532 of the Government Code, shall prepare a California Aviation System Plan, which shall include, but not be limited to, every California airport designated in the federal National Plan of Integrated Airport Systems and any other existing or proposed public use airports, as designated by the division.

Elements in Plan

21702. The California Aviation System Plan shall include, but not be limited to, all of the following elements:

(a) A background and introduction element, which summarizes aviation activity in California and establishes goals and objectives for aviation improvement.

(b) An air transportation issues element, which addresses issues such as aviation safety, airport noise, airport ground access, transportation systems management, airport financing, airport land use compatibility planning, and institutional relationships.

(c) A regional plan alternative element, which consists of the aviation elements of the regional transportation plans prepared by each transportation planning agency. This element shall include consideration of regional air transportation matters relating to growth, capacity needs, county activity, airport activity, and systemwide activity in order to evaluate adequately the overall impacts of regional activity in relation to the statewide air transportation system. This element shall propose general aviation and air carrier public use airports for consideration by the commission for funding eligibility under this chapter.

(d) A state plan alternative element, which includes consideration of statewide air transportation matters relating to growth, including, but not limited to, county activity, airport activity, and systemwide activity in order to evaluate adequately the state aviation system and to designate an adequate number of general aviation and air carrier public use airports for state funding in order to provide a level of air service and safety acceptable to the public.

(e) A comparative element, which compares and contrasts the regional plan alternative with the state plan alternative, including, but not limited to, airport noise, air quality, toxic waste cleanup, energy, economics, and passengers served.

(f) A 10-year capital improvement plan for each airport, based on each airport's adopted master plan if the airport has a master plan, approved by the applicable transportation planning agency, and submitted to the division for inclusion in the California Aviation System Plan.

(g) Any other element deemed appropriate by the division and the transportation planning agencies.

(h) A summary and conclusion element, which presents the findings and recommended course of action.

Submittal to Commission

21703. The division shall submit the California Aviation System Plan to the commission.

Periodic Revision of Plan

21704. The division, in consultation with the transportation planning agencies, shall biennially revise the capital improvement plan developed pursuant to subdivision (f) of Section 21702, and the division shall submit the revised capital improvement plan to the commission. The division, in consultation with the transportation planning agencies, shall revise all other elements of the California Aviation System Plan every five years, and shall submit the revised system plan to the commission.

Adoption of Revisions by Commission

21705. The commission shall review, hold public hearings on, and, based on these hearings, adopt or revise and adopt as revised, the California Aviation System Plan and its subsequent revisions.

Project Funding Applications

21706. The division shall require that every project submitted for funding from the Aeronautics Account in the State Transportation Fund shall be consistent with the California Aviation System Plan. Applications for funding shall be processed in accordance with the procedures adopted by the commission. In determining the priorities of projects, the division shall, and the transportation planning agencies may, utilize the methodology adopted by the commission for determining the priorities of projects that the commission selects for allocation pursuant to Sections 21683 and 21683.2 and the procedures adopted by the commission.

Federal Grant Funds

21707. Any funds necessary to carry out Sections 21701, 21702, and 21704 shall be obtained from federal grants, except for updates of the capital improvement plan and policy elements of the California Aviation System Plan, which may be funded from nonfederal sources.

Federal Aviation Administration, DOT

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areas, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

Subpart C—Prohibited Areas

§ 73.81 Applicability.

This subpart designates prohibited areas and prescribes limitations on the operation of aircraft therein.

§ 73.83 Restrictions.

No person may operate an aircraft within a prohibited area unless authorization has been granted by the using agency.

§ 73.85 Using agency.

For the purpose of this subpart, the using agency is the agency, organization or military command that established the requirements for the prohibited area.

EDITORIAL NOTE: Sections 73.87 through 73.99 are reserved for descriptions of designated prohibited areas. For FEDERAL REGISTER citations affecting these prohibited areas, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

PART 75 [RESERVED]

PART 77—SAFE, EFFICIENT USE, AND PRESERVATION OF THE NAVIGABLE AIRSPACE

Subpart A—General

Sec.

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AUTHORITY: 49 U.S.C. 106 (g), 40103, 40113–40114, 44502, 44701, 44718, 46101–46102, 46104.

SOURCE: Doc. No. FAA–2006–25002, 75 FR 42303, July 21, 2010, unless otherwise noted.

Subpart A—General

§ 77.1 Purpose.

This part establishes:

(a) The requirements to provide notice to the FAA of certain proposed construction, or the alteration of existing structures;

(b) The standards used to determine obstructions to air navigation, and navigational and communication facilities;

(c) The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities or equipment; and

(d) The process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

§ 77.3 Definitions.

For the purpose of this part:

Non-precision instrument runway means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

Planned or proposed airport is an airport that is the subject of at least one of the following documents received by the FAA:

- (1) Airport proposals submitted under 14 CFR part 157.
- (2) Airport Improvement Program requests for aid.
- (3) Notices of existing airports where prior notice of the airport construction or alteration was not provided as required by 14 CFR part 157.
- (4) Airport layout plans.
- (5) DOD proposals for airports used only by the U.S. Armed Forces.
- (6) DOD proposals on joint-use (civil-military) airports.
- (7) Completed airport site selection feasibility study.

Precision instrument runway means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

Public use airport is an airport available for use by the general public without a requirement for prior approval of the airport owner or operator.

Seaplane base is considered to be an airport only if its sea lanes are outlined by visual markers.

Utility runway means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

Visual runway means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

Subpart B—Notice Requirements

§ 77.5 Applicability.

(a) If you propose any construction or alteration described in § 77.9, you must provide adequate notice to the FAA of that construction or alteration.

(b) If requested by the FAA, you must also file supplemental notice before the start date and upon completion of certain construction or alterations that are described in § 77.9.

(c) Notice received by the FAA under this subpart is used to:

(1) Evaluate the effect of the proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace and of airport traffic capacity at public use airports;

(2) Determine whether the effect of proposed construction or alteration is a hazard to air navigation;

(3) Determine appropriate marking and lighting recommendations, using FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting;

(4) Determine other appropriate measures to be applied for continued safety of air navigation; and

(5) Notify the aviation community of the construction or alteration of objects that affect the navigable airspace, including the revision of charts, when necessary.

§ 77.7 Form and time of notice.

(a) If you are required to file notice under § 77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

(b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.

(c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.

(d) If you propose construction or alteration to an existing structure that

exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

(e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

§ 77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

(a) Any construction or alteration that is more than 200 ft. AGL at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part

of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

§ 77.11 Supplemental notice requirements.

(a) You must file supplemental notice with the FAA when:

(1) The construction or alteration is more than 200 feet in height AGL at its site; or

(2) Requested by the FAA.

(b) You must file supplemental notice on a prescribed FAA form to be received within the time limits specified in the FAA determination. If no time limit has been specified, you must submit supplemental notice of construction to the FAA within 5 days after the structure reaches its greatest height.

(c) If you abandon a construction or alteration proposal that requires supplemental notice, you must submit notice to the FAA within 5 days after the project is abandoned.

(d) If the construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Subpart C—Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities**§ 77.13 Applicability.**

This subpart describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. These standards apply to the following:

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus.

(b) The alteration of any permanent or temporary existing structure by a change in its height, including appurtenances, or lateral dimensions, including equipment or material used therein.

§ 77.15 Scope.

(a) This subpart describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Such facilities include air naviga-

tion aids, communication equipment, airports, Federal airways, instrument approach or departure procedures, and approved off-airway routes.

(b) Objects that are considered obstructions under the standards described in this subpart are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard. Once further aeronautical study has been initiated, the FAA will use the standards in this subpart, along with FAA policy and guidance material, to determine if the object is a hazard to air navigation.

(c) The FAA will apply these standards with reference to an existing airport facility, and airport proposals received by the FAA, or the appropriate military service, before it issues a final determination.

(d) For airports having defined runways with specially prepared hard surfaces, the primary surface for each runway extends 200 feet beyond each end of the runway. For airports having defined strips or pathways used regularly for aircraft takeoffs and landings, and designated runways, without specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for aircraft takeoffs and landings, a determination must be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those determined pathways must be considered runways, and an appropriate primary surface as defined in § 77.19 will be considered as longitudinally centered on each such runway. Each end of that primary surface must coincide with the corresponding end of that runway.

(e) The standards in this subpart apply to construction or alteration proposals on an airport (including heliports and seaplane bases with marked lanes) if that airport is one of the following before the issuance of the final determination:

(1) Available for public use and is listed in the Airport/Facility Directory, Supplement Alaska, or Supplement Pacific of the U.S. Government Flight Information Publications; or

(2) A planned or proposed airport or an airport under construction of which the FAA has received actual notice, except DOD airports, where there is a clear indication the airport will be available for public use; or,

(3) An airport operated by a Federal agency or the DOD; or,

(4) An airport that has at least one FAA-approved instrument approach.

§ 77.17 Obstruction standards.

(a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 499 feet AGL at the site of the object.

(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under § 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative

ground traffic control service furnished by an airport traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) 15 feet for any other public roadway.

(3) 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) 23 feet for a railroad.

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

§ 77.19 Civil airport imaginary surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach procedure existing or planned for that runway end.

(a) *Horizontal surface.* A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by sweeping arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting

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two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) *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.

(c) *Primary surface.* A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having non-precision instrument approaches.

(3) For other than utility runways, the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

(iv) The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) *Approach surface.* A surface longitudinally centered on the extended runway centerline and 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.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a non-precision instrument approach;

(iv) 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;

(v) 4,000 feet for that end of a non-precision instrument runway, other than utility, having a non-precision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) *Transitional surface.* These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

§77.21 Department of Defense (DOD) airport imaginary surfaces.

(a) *Related to airport reference points.* These surfaces apply to all military airports. For the purposes of this section, a military airport is any airport operated by the DOD.

(1) *Inner horizontal surface.* A plane that is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) *Conical surface.* A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) *Outer horizontal surface.* A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) *Related to runways.* These surfaces apply to all military airports.

(1) *Primary surface.* A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) *Clear zone surface.* A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) *Approach clearance surface.* An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) *Transitional surfaces.* These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces,

and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

§ 77.23 Heliport imaginary surfaces.

(a) *Primary surface.* The area of the primary surface coincides in size and shape with the designated take-off and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.

(b) *Approach surface.* The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

(c) *Transitional surfaces.* These surfaces extend outward and upward from the lateral boundaries of the primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

Subpart D—Aeronautical Studies and Determinations

§ 77.25 Applicability.

(a) This subpart applies to any aeronautical study of a proposed construction or alteration for which notice to the FAA is required under § 77.9.

(b) The purpose of an aeronautical study is to determine whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of other existing or proposed structures, would constitute a hazard to air navigation.

(c) The obstruction standards in subpart C of this part are supplemented by other manuals and directives used in determining the effect on the navigable airspace of a proposed construction or alteration. When the FAA needs additional information, it may circulate a

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study to interested parties for comment.

§ 77.27 Initiation of studies.

The FAA will conduct an aeronautical study when:

(a) Requested by the sponsor of any proposed construction or alteration for which a notice is submitted; or

(b) The FAA determines a study is necessary.

§ 77.29 Evaluating aeronautical effect.

(a) The FAA conducts an aeronautical study to determine the impact of a proposed structure, an existing structure that has not yet been studied by the FAA, or an alteration of an existing structure on aeronautical operations, procedures, and the safety of flight. These studies include evaluating:

(1) The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;

(2) The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;

(3) The impact on existing and planned public use airports;

(4) Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final determination;

(5) Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;

(6) The potential effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;

(7) The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.

(b) If you withdraw the proposed construction or alteration or revise it so that it is no longer identified as an obstruction, or if no further aeronautical study is necessary, the FAA may terminate the study.

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§ 77.31 Determinations.

(a) The FAA will issue a determination stating whether the proposed construction or alteration would be a hazard to air navigation, and will advise all known interested persons.

(b) The FAA will make determinations based on the aeronautical study findings and will identify the following:

(1) The effects on VFR/IFR aeronautical departure/arrival operations, air traffic procedures, minimum flight altitudes, and existing, planned, or proposed airports listed in § 77.15(e) of which the FAA has received actual notice prior to issuance of a final determination.

(2) The extent of the physical and/or electromagnetic effect on the operation of existing or proposed air navigation facilities, communication aids, or surveillance systems.

(c) The FAA will issue a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.

(d) A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation. A Determination of No Hazard to Air Navigation may include the following:

(1) Conditional provisions of a determination.

(2) Limitations necessary to minimize potential problems, such as the use of temporary construction equipment.

(3) Supplemental notice requirements, when required.

(4) Marking and lighting recommendations, as appropriate.

(e) The FAA will issue a Determination of No Hazard to Air Navigation when a proposed structure does not exceed any of the obstruction standards and would not be a hazard to air navigation.

§ 77.33 Effective period of determinations.

(a) The effective date of a determination not subject to discretionary review under 77.37(b) is the date of issuance. The effective date of all other determinations for a proposed or existing structure is 40 days from the date of issuance, provided a valid petition for review has not been received by the FAA. If a valid petition for review is filed, the determination will not become final, pending disposition of the petition.

(b) Unless extended, revised, or terminated, each Determination of No Hazard to Air Navigation issued under this subpart expires 18 months after the effective date of the determination, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

(c) A Determination of Hazard to Air Navigation has no expiration date.

[Doc. No. FAA-2006-25002, 75 FR 42303, July 21, 2010, as amended by Amdt. 77-13-A, 76 FR 2802, Jan. 18, 2011]

§ 77.35 Extensions, terminations, revisions and corrections.

(a) You may petition the FAA official that issued the Determination of No Hazard to Air Navigation to revise or reconsider the determination based on new facts or to extend the effective period of the determination, provided that:

(1) Actual structural work of the proposed construction or alteration, such as the laying of a foundation, but not including excavation, has not been started; and

(2) The petition is submitted at least 15 days before the expiration date of the Determination of No Hazard to Air Navigation.

(b) A Determination of No Hazard to Air Navigation issued for those construction or alteration proposals not requiring an FCC construction permit may be extended by the FAA one time for a period not to exceed 18 months.

(c) A Determination of No Hazard to Air Navigation issued for a proposal requiring an FCC construction permit may be granted extensions for up to 18 months, provided that:

(1) You submit evidence that an application for a construction permit/li-

cense was filed with the FCC for the associated site within 6 months of issuance of the determination; and

(2) You submit evidence that additional time is warranted because of FCC requirements; and

(3) Where the FCC issues a construction permit, a final Determination of No Hazard to Air Navigation is effective until the date prescribed by the FCC for completion of the construction. If an extension of the original FCC completion date is needed, an extension of the FAA determination must be requested from the Obstruction Evaluation Service (OES).

(4) If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

Subpart E—Petitions for Discretionary Review**§ 77.37 General.**

(a) If you are the sponsor, provided a substantive aeronautical comment on a proposal in an aeronautical study, or have a substantive aeronautical comment on the proposal but were not given an opportunity to state it, you may petition the FAA for a discretionary review of a determination, revision, or extension of a determination issued by the FAA.

(b) You may not file a petition for discretionary review for a Determination of No Hazard that is issued for a temporary structure, marking and lighting recommendation, or when a proposed structure or alteration does not exceed obstruction standards contained in subpart C of this part.

§ 77.39 Contents of a petition.

(a) You must file a petition for discretionary review in writing and it must be received by the FAA within 30 days after the issuance of a determination under § 77.31, or a revision or extension of the determination under § 77.35.

(b) The petition must contain a full statement of the aeronautical basis on which the petition is made, and must include new information or facts not previously considered or presented during the aeronautical study, including

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valid aeronautical reasons why the determination, revisions, or extension made by the FAA should be reviewed.

(c) In the event that the last day of the 30-day filing period falls on a weekend or a day the Federal government is closed, the last day of the filing period is the next day that the government is open.

(d) The FAA will inform the petitioner or sponsor (if other than the petitioner) and the FCC (whenever an FCC-related proposal is involved) of the filing of the petition and that the determination is not final pending disposition of the petition.

§ 77.41 Discretionary review results.

(a) If discretionary review is granted, the FAA will inform the petitioner and

the sponsor (if other than the petitioner) of the issues to be studied and reviewed. The review may include a request for comments and a review of all records from the initial aeronautical study.

(b) If discretionary review is denied, the FAA will notify the petitioner and the sponsor (if other than the petitioner), and the FCC, whenever a FCC-related proposal is involved, of the basis for the denial along with a statement that the determination is final.

(c) After concluding the discretionary review process, the FAA will revise, affirm, or reverse the determination.



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FILED

In the office of the Secretary of State
of the State of California

AUG 10 1973

EDMUND G. BROWN Jr., Secretary of State

[Signature]
Deputy Secretary of State

Mr. Edmund G. Brown, Jr.
Secretary of State
119 State Capitol
Sacramento, California 95814

RE: Designation of Airport Land Use Commission

Dear Sir:

Pursuant to the provisions of Section 21670.1 of the Public Utilities Code of the State of California, the Board of Supervisors and the mayor of each city of the County of San Joaquin have designated the San Joaquin County Council of Governments the appropriate body to assume the planning responsibilities of the Airport Land Use Commission for the County of San Joaquin. This notification is forwarded to you pursuant to the requirements of the aforementioned section.

Very truly yours,

GERALD A. SHERWIN
County Counsel

By *[Signature]*
PATRICK H. CURRAN
Deputy County Counsel

PHC:jms

cc: San Joaquin County
Council of Governments
County Administrator



U.S. Department
of Transportation

**Federal Aviation
Administration**

Advisory Circular

**Subject: HAZARDOUS WILDLIFE
ATTRACTANTS ON OR NEAR
AIRPORTS**

Date: 8/28/2007

AC No: 150/5200-33B

Initiated by: AAS-300 **Change:**

1. PURPOSE. This Advisory Circular (AC) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. It also discusses airport development projects (including airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants. Appendix 1 provides definitions of terms used in this AC.

2. APPLICABILITY. The Federal Aviation Administration (FAA) recommends that public-use airport operators implement the standards and practices contained in this AC. The holders of Airport Operating Certificates issued under Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports, Subpart D (Part 139), may use the standards, practices, and recommendations contained in this AC to comply with the wildlife hazard management requirements of Part 139. Airports that have received Federal grant-in-aid assistance must use these standards. The FAA also recommends the guidance in this AC for land-use planners, operators of non-certificated airports, and developers of projects, facilities, and activities on or near airports.

3. CANCELLATION. This AC cancels AC 150/5200-33A, *Hazardous Wildlife Attractants on or near Airports*, dated July 27, 2004.

4. PRINCIPAL CHANGES. This AC contains the following major changes, which are marked with vertical bars in the margin:

- a. Technical changes to paragraph references.
- b. Wording on storm water detention ponds.
- c. Deleted paragraph 4-3.b, *Additional Coordination*.

5. BACKGROUND. Information about the risks posed to aircraft by certain wildlife species has increased a great deal in recent years. Improved reporting, studies, documentation, and statistics clearly show that aircraft collisions with birds and other wildlife are a serious economic and public safety problem. While many species of wildlife can pose a threat to aircraft safety, they are not equally hazardous. Table 1

ranks the wildlife groups commonly involved in damaging strikes in the United States according to their relative hazard to aircraft. The ranking is based on the 47,212 records in the FAA National Wildlife Strike Database for the years 1990 through 2003. These hazard rankings, in conjunction with site-specific Wildlife Hazards Assessments (WHA), will help airport operators determine the relative abundance and use patterns of wildlife species and help focus hazardous wildlife management efforts on those species most likely to cause problems at an airport.

Most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. These areas can also present potential hazards to aviation if they encourage wildlife to enter an airport's approach or departure airspace or air operations area (AOA). Constructed or natural areas—such as poorly drained locations, detention/retention ponds, roosting habitats on buildings, landscaping, odor-causing rotting organic matter (putrescible waste) disposal operations, wastewater treatment plants, agricultural or aquaculture activities, surface mining, or wetlands—can provide wildlife with ideal locations for feeding, loafing, reproduction, and escape. Even small facilities, such as fast food restaurants, taxicab staging areas, rental car facilities, aircraft viewing areas, and public parks, can produce substantial attractions for hazardous wildlife.

During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Hazardous wildlife attractants on and near airports can jeopardize future airport expansion, making proper community land-use planning essential. This AC provides airport operators and those parties with whom they cooperate with the guidance they need to assess and address potentially hazardous wildlife attractants when locating new facilities and implementing certain land-use practices on or near public-use airports.

6. MEMORANDUM OF AGREEMENT BETWEEN FEDERAL RESOURCE AGENCIES. The FAA, the U.S. Air Force, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture - Wildlife Services signed a Memorandum of Agreement (MOA) in July 2003 to acknowledge their respective missions in protecting aviation from wildlife hazards. Through the MOA, the agencies established procedures necessary to coordinate their missions to address more effectively existing and future environmental conditions contributing to collisions between wildlife and aircraft (wildlife strikes) throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety while protecting the Nation's valuable environmental resources.



DAVID L. BENNETT
Director, Office of Airport Safety
and Standards

Table 1. Ranking of 25 species groups as to relative hazard to aircraft (1=most hazardous) based on three criteria (damage, major damage, and effect-on-flight), a composite ranking based on all three rankings, and a relative hazard score. Data were derived from the FAA National Wildlife Strike Database, January 1990–April 2003.¹

Species group	Ranking by criteria			Composite ranking ²	Relative hazard score ³
	Damage ⁴	Major damage ⁵	Effect on flight ⁶		
Deer	1	1	1	1	100
Vultures	2	2	2	2	64
Geese	3	3	6	3	55
Cormorants/pelicans	4	5	3	4	54
Cranes	7	6	4	5	47
Eagles	6	9	7	6	41
Ducks	5	8	10	7	39
Osprey	8	4	8	8	39
Turkey/pheasants	9	7	11	9	33
Hérons	11	14	9	10	27
Hawks (buteos)	10	12	12	11	25
Gulls	12	11	13	12	24
Rock pigeon	13	10	14	13	23
Owls	14	13	20	14	23
H. lark/s. bunting	18	15	15	15	17
Crows/ravens	15	16	16	16	16
Coyote	16	19	5	17	14
Mourning dove	17	17	17	18	14
Shorebirds	19	21	18	19	10
Blackbirds/starling	20	22	19	20	10
American kestrel	21	18	21	21	9
Meadowlarks	22	20	22	22	7
Swallows	24	23	24	23	4
Sparrows	25	24	23	24	4
Nighthawks	23	25	25	25	1

¹ Excerpted from the *Special Report for the FAA, "Ranking the Hazard Level of Wildlife Species to Civil Aviation in the USA: Update #1, July 2, 2003"*. Refer to this report for additional explanations of criteria and method of ranking.

² Relative rank of each species group was compared with every other group for the three variables, placing the species group with the greatest hazard rank for ≥ 2 of the 3 variables above the next highest ranked group, then proceeding down the list.

³ Percentage values, from Tables 3 and 4 in Footnote 1 of the *Special Report*, for the three criteria were summed and scaled down from 100, with 100 as the score for the species group with the maximum summed values and the greatest potential hazard to aircraft.

⁴ Aircraft incurred at least some damage (destroyed, substantial, minor, or unknown) from strike.

⁵ Aircraft incurred damage or structural failure, which adversely affected the structure strength, performance, or flight characteristics, and which would normally require major repair or replacement of the affected component, or the damage sustained makes it inadvisable to restore aircraft to airworthy condition.

⁶ Aborted takeoff, engine shutdown, precautionary landing, or other.

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SECTION 1.

GENERAL SEPARATION CRITERIA FOR HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS.

1-1. INTRODUCTION. When considering proposed land uses, airport operators, local planners, and developers must take into account whether the proposed land uses, including new development projects, will increase wildlife hazards. Land-use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes.

The FAA recommends the minimum separation criteria outlined below for land-use practices that attract hazardous wildlife to the vicinity of airports. Please note that FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across the airport's approach or departure airspace or air operations area (AOA). (See the discussion of the synergistic effects of surrounding land uses in Section 2-8 of this AC.)

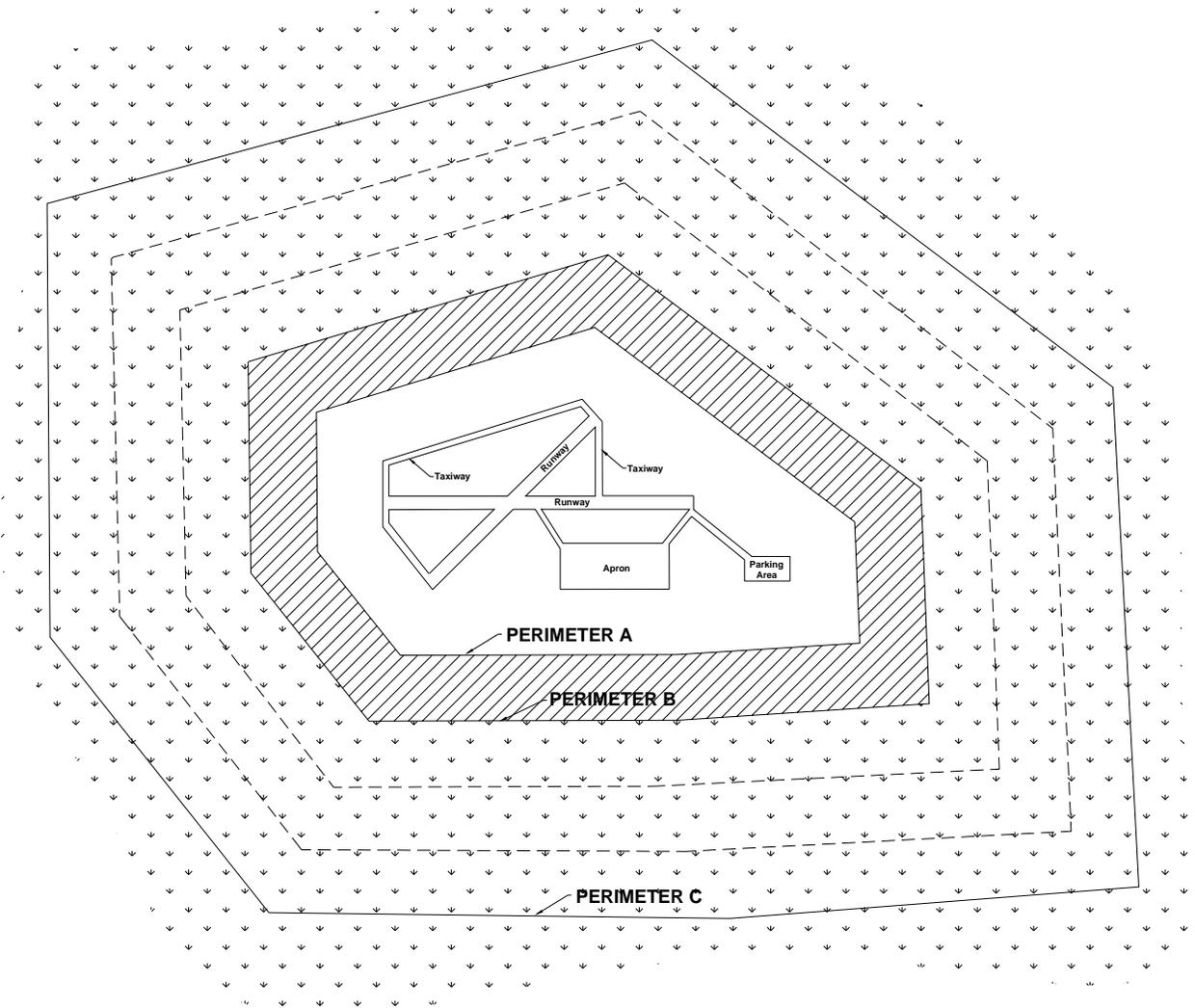
The basis for the separation criteria contained in this section can be found in existing FAA regulations. The separation distances are based on (1) flight patterns of piston-powered aircraft and turbine-powered aircraft, (2) the altitude at which most strikes happen (78 percent occur under 1,000 feet and 90 percent occur under 3,000 feet above ground level), and (3) National Transportation Safety Board (NTSB) recommendations.

1-2. AIRPORTS SERVING PISTON-POWERED AIRCRAFT. Airports that do not sell Jet-A fuel normally serve piston-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 5,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance measured from the nearest aircraft operations areas.

1-3. AIRPORTS SERVING TURBINE-POWERED AIRCRAFT. Airports selling Jet-A fuel normally serve turbine-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 10,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance from the nearest aircraft movement areas.

1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING AIRSPACE. For all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.

Figure 1. Separation distances within which hazardous wildlife attractants should be avoided, eliminated, or mitigated.



PERIMETER A: For airports serving piston-powered aircraft, hazardous wildlife attractants must be 5,000 feet from the nearest air operations area.

PERIMETER B: For airports serving turbine-powered aircraft, hazardous wildlife attractants must be 10,000 feet from the nearest air operations area.

PERIMETER C: 5-mile range to protect approach, departure and circling airspace.

SECTION 2.

LAND-USE PRACTICES ON OR NEAR AIRPORTS THAT POTENTIALLY ATTRACT HAZARDOUS WILDLIFE.

2-1. GENERAL. The wildlife species and the size of the populations attracted to the airport environment vary considerably, depending on several factors, including land-use practices on or near the airport. This section discusses land-use practices having the potential to attract hazardous wildlife and threaten aviation safety. In addition to the specific considerations outlined below, airport operators should refer to *Wildlife Hazard Management at Airports*, prepared by FAA and U.S. Department of Agriculture (USDA) staff. (This manual is available in English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: <http://wildlife-mitigation.tc.FAA.gov>.) And, *Prevention and Control of Wildlife Damage*, compiled by the University of Nebraska Cooperative Extension Division. (This manual is available online in a periodically updated version at: ianrwww.unl.edu/wildlife/solutions/handbook/.)

2-2. WASTE DISPOSAL OPERATIONS. Municipal solid waste landfills (MSWLF) are known to attract large numbers of hazardous wildlife, particularly birds. Because of this, these operations, when located within the separations identified in the siting criteria in Sections 1-2 through 1-4, are considered incompatible with safe airport operations.

a. Siting for new municipal solid waste landfills subject to AIR 21. Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) (AIR 21) prohibits the construction or establishment of a new MSWLF within 6 statute miles of certain public-use airports. Before these prohibitions apply, both the airport and the landfill must meet the very specific conditions described below. These restrictions do not apply to airports or landfills located within the state of Alaska.

The airport must (1) have received a Federal grant(s) under 49 U.S.C. § 47101, et. seq.; (2) be under control of a public agency; (3) serve some scheduled air carrier operations conducted in aircraft with less than 60 seats; and (4) have total annual enplanements consisting of at least 51 percent of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

The proposed MSWLF must (1) be within 6 miles of the airport, as measured from airport property line to MSWLF property line, and (2) have started construction or establishment on or after April 5, 2001. Public Law 106-181 only limits the construction or establishment of some new MSWLF. It does not limit the expansion, either vertical or horizontal, of existing landfills.

NOTE: Consult the most recent version of AC 150/5200-34, *Construction or Establishment of Landfills Near Public Airports*, for a more detailed discussion of these restrictions.

- b. Siting for new MSWLF not subject to AIR 21.** If an airport and MSWLF do not meet the restrictions of Public Law 106-181, the FAA recommends against locating MSWLF within the separation distances identified in Sections 1-2 through 1-4. The separation distances should be measured from the closest point of the airport's AOA to the closest planned MSWLF cell.
- c. Considerations for existing waste disposal facilities within the limits of separation criteria.** The FAA recommends against airport development projects that would increase the number of aircraft operations or accommodate larger or faster aircraft near MSWLF operations located within the separations identified in Sections 1-2 through 1-4. In addition, in accordance with 40 CFR 258.10, owners or operators of existing MSWLF units that are located within the separations listed in Sections 1-2 through 1-4 must demonstrate that the unit is designed and operated so it does not pose a bird hazard to aircraft. (See Section 4-2(b) of this AC for a discussion of this demonstration requirement.)
- d. Enclosed trash transfer stations.** Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ). These facilities should not handle or store putrescible waste outside or in a partially enclosed structure accessible to hazardous wildlife. Trash transfer facilities that are open on one or more sides; that store uncovered quantities of municipal solid waste outside, even if only for a short time; that use semi-trailers that leak or have trash clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations. The FAA considers these facilities incompatible with safe airport operations if they are located closer than the separation distances specified in Sections 1-2 through 1-4.
- e. Composting operations on or near airport property.** Composting operations that accept only yard waste (e.g., leaves, lawn clippings, or branches) generally do not attract hazardous wildlife. Sewage sludge, woodchips, and similar material are not municipal solid wastes and may be used as compost bulking agents. The compost, however, must never include food or other municipal solid waste. Composting operations should not be located on airport property. Off-airport property composting operations should be located no closer than the greater of the following distances: 1,200 feet from any AOA or the distance called for by airport design requirements (see AC 150/5300-13, *Airport Design*). This spacing should prevent material, personnel, or equipment from penetrating any Object Free Area (OFA), Obstacle Free Zone (OFZ), Threshold Siting Surface (TSS), or Clearway. Airport operators should monitor composting operations located in proximity to the airport to ensure that steam or thermal rise does not adversely affect air traffic. On-airport disposal of compost by-products should not be conducted for the reasons stated in 2-3f.

- f. **Underwater waste discharges.** The FAA recommends against the underwater discharge of any food waste (e.g., fish processing offal) within the separations identified in Sections 1-2 through 1-4 because it could attract scavenging hazardous wildlife.
- g. **Recycling centers.** Recycling centers that accept previously sorted non-food items, such as glass, newspaper, cardboard, or aluminum, are, in most cases, not attractive to hazardous wildlife and are acceptable.
- h. **Construction and demolition (C&D) debris facilities.** C&D landfills do not generally attract hazardous wildlife and are acceptable if maintained in an orderly manner, admit no putrescible waste, and are not co-located with other waste disposal operations. However, C&D landfills have similar visual and operational characteristics to putrescible waste disposal sites. When co-located with putrescible waste disposal operations, C&D landfills are more likely to attract hazardous wildlife because of the similarities between these disposal facilities. Therefore, a C&D landfill co-located with another waste disposal operation should be located outside of the separations identified in Sections 1-2 through 1-4.
- i. **Fly ash disposal.** The incinerated residue from resource recovery power/heat-generating facilities that are fired by municipal solid waste, coal, or wood is generally not a wildlife attractant because it no longer contains putrescible matter. Landfills accepting only fly ash are generally not considered to be wildlife attractants and are acceptable as long as they are maintained in an orderly manner, admit no putrescible waste of any kind, and are not co-located with other disposal operations that attract hazardous wildlife.

Since varying degrees of waste consumption are associated with general incineration (not resource recovery power/heat-generating facilities), the FAA considers the ash from general incinerators a regular waste disposal by-product and, therefore, a hazardous wildlife attractant if disposed of within the separation criteria outlined in Sections 1-2 through 1-4.

2-3. WATER MANAGEMENT FACILITIES. Drinking water intake and treatment facilities, storm water and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, and ponds that result from mining activities often attract large numbers of potentially hazardous wildlife. To prevent wildlife hazards, land-use developers and airport operators may need to develop management plans, in compliance with local and state regulations, to support the operation of storm water management facilities on or near all public-use airports to ensure a safe airport environment.

- a. **Existing storm water management facilities.** On-airport storm water management facilities allow the quick removal of surface water, including discharges related to aircraft deicing, from impervious surfaces, such as pavement and terminal/hangar building roofs. Existing on-airport detention ponds collect storm water, protect water quality, and control runoff. Because they slowly release water

after storms, they create standing bodies of water that can attract hazardous wildlife. Where the airport has developed a Wildlife Hazard Management Plan (WHMP) in accordance with Part 139, the FAA requires immediate correction of any wildlife hazards arising from existing storm water facilities located on or near airports, using appropriate wildlife hazard mitigation techniques. Airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.

Where possible, airport operators should modify storm water detention ponds to allow a maximum 48-hour detention period for the design storm. The FAA recommends that airport operators avoid or remove retention ponds and detention ponds featuring dead storage to eliminate standing water. Detention basins should remain totally dry between rainfalls. Where constant flow of water is anticipated through the basin, or where any portion of the basin bottom may remain wet, the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat.

When it is not possible to drain a large detention pond completely, airport operators may use physical barriers, such as bird balls, wires grids, pillows, or netting, to deter birds and other hazardous wildlife. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office.

The FAA recommends that airport operators encourage off-airport storm water treatment facility operators to incorporate appropriate wildlife hazard mitigation techniques into storm water treatment facility operating practices when their facility is located within the separation criteria specified in Sections 1-2 through 1-4.

- b. New storm water management facilities.** The FAA strongly recommends that off-airport storm water management systems located within the separations identified in Sections 1-2 through 1-4 be designed and operated so as not to create above-ground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. When it is not possible to place these ponds away from an airport's AOA, airport operators should use physical barriers, such as bird balls, wires grids, pillows, or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages

the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

- c. Existing wastewater treatment facilities.** The FAA strongly recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport. Where required, a WHMP developed in accordance with Part 139 will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should encourage wastewater treatment facility operators to incorporate measures, developed in consultation with a wildlife damage management biologist, to minimize hazardous wildlife attractants. Airport operators should also encourage those wastewater treatment facility operators to incorporate these mitigation techniques into their standard operating practices. In addition, airport operators should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.
- d. New wastewater treatment facilities.** The FAA strongly recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in Sections 1-2 through 1-4. Appendix 1 defines wastewater treatment facility as “any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes.” The definition includes any pretreatment involving the reduction of the amount of pollutants or the elimination of pollutants prior to introducing such pollutants into a publicly owned treatment works (wastewater treatment facility). During the site-location analysis for wastewater treatment facilities, developers should consider the potential to attract hazardous wildlife if an airport is in the vicinity of the proposed site, and airport operators should voice their opposition to such facilities if they are in proximity to the airport.
- e. Artificial marshes.** In warmer climates, wastewater treatment facilities sometimes employ artificial marshes and use submergent and emergent aquatic vegetation as natural filters. These artificial marshes may be used by some species of flocking birds, such as blackbirds and waterfowl, for breeding or roosting activities. The FAA strongly recommends against establishing artificial marshes within the separations identified in Sections 1-2 through 1-4.
- f. Wastewater discharge and sludge disposal.** The FAA recommends against the discharge of wastewater or sludge on airport property because it may improve soil moisture and quality on unpaved areas and lead to improved turf growth that can be an attractive food source for many species of animals. Also, the turf requires more frequent mowing, which in turn may mutilate or flush insects or small animals and produce straw, both of which can attract hazardous wildlife. In addition, the improved turf may attract grazing wildlife, such as deer and geese. Problems may also occur when discharges saturate unpaved airport areas. The resultant soft, muddy conditions can severely restrict or prevent emergency vehicles from reaching accident sites in a timely manner.

2-4. WETLANDS. Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species (Table 1).

NOTE: If questions exist as to whether an area qualifies as a wetland, contact the local division of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, or a wetland consultant qualified to delineate wetlands.

- a. Existing wetlands on or near airport property.** If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports. Where required, a WHMP will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.
- b. New airport development.** Whenever possible, the FAA recommends locating new airports using the separations from wetlands identified in Sections 1-2 through 1-4. Where alternative sites are not practicable, or when airport operators are expanding an existing airport into or near wetlands, a wildlife damage management biologist, in consultation with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the state wildlife management agency should evaluate the wildlife hazards and prepare a WHMP that indicates methods of minimizing the hazards.
- c. Mitigation for wetland impacts from airport projects.** Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4.

(1) Onsite mitigation of wetland functions. The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge, which cannot be replicated when moved to a different location. Using existing airport property is sometimes the only feasible way to achieve the mitigation ratios mandated in regulatory orders and/or settlement agreements with the resource agencies. Conservation easements are an additional means of providing mitigation for project impacts. Typically the airport operator continues to own the property, and an easement is created stipulating that the property will be maintained as habitat for state or Federally listed species.

Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations. A wildlife damage management biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Sections 1-2 through 1-4 before the mitigation is implemented. A WHMP should be developed to reduce the wildlife hazards.

(2) Offsite mitigation of wetland functions. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4 unless they provide unique functions that must remain onsite (see 2-4c(1)). Agencies that regulate impacts to or around wetlands recognize that it may be necessary to split wetland functions in mitigation schemes. Therefore, regulatory agencies may, under certain circumstances, allow portions of mitigation to take place in different locations.

(3) Mitigation banking. Wetland mitigation banking is the creation or restoration of wetlands in order to provide mitigation credits that can be used to offset permitted wetland losses. Mitigation banking benefits wetland resources by providing advance replacement for permitted wetland losses; consolidating small projects into larger, better-designed and managed units; and encouraging integration of wetland mitigation projects with watershed planning. This last benefit is most helpful for airport projects, as wetland impacts mitigated outside of the separations identified in Sections 1-2 through 1-4 can still be located within the same watershed. Wetland mitigation banks meeting the separation criteria offer an ecologically sound approach to mitigation in these situations. Airport operators should work with local watershed management agencies or organizations to develop mitigation banking for wetland impacts on airport property.

2-5. DREDGE SPOIL CONTAINMENT AREAS. The FAA recommends against locating dredge spoil containment areas (also known as Confined Disposal Facilities) within the separations identified in Sections 1-2 through 1-4 if the containment area or the spoils contain material that would attract hazardous wildlife.

2-6. AGRICULTURAL ACTIVITIES. Because most, if not all, agricultural crops can attract hazardous wildlife during some phase of production, the FAA recommends against the used of airport property for agricultural production, including hay crops, within the separations identified in Sections 1-2 through 1-4. . If the airport has no financial alternative to agricultural crops to produce income necessary to maintain the viability of the airport, then the airport shall follow the crop distance guidelines listed in the table titled "Minimum Distances between Certain Airport Features and Any On-Airport Agricultural Crops" found in AC 150/5300-13, *Airport Design*, Appendix 17. The cost of wildlife control and potential accidents should be weighed against the income produced by the on-airport crops when deciding whether to allow crops on the airport.

- a. Livestock production.** Confined livestock operations (i.e., feedlots, dairy operations, hog or chicken production facilities, or egg laying operations) often attract flocking birds, such as starlings, that pose a hazard to aviation. Therefore, The FAA recommends against such facilities within the separations identified in Sections 1-2 through 1-4. Any livestock operation within these separations should have a program developed to reduce the attractiveness of the site to species that are hazardous to aviation safety. Free-ranging livestock must not be grazed on airport property because the animals may wander onto the AOA. Furthermore, livestock feed, water, and manure may attract birds.
- b. Aquaculture.** Aquaculture activities (i.e. catfish or trout production) conducted outside of fully enclosed buildings are inherently attractive to a wide variety of birds. Existing aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4 must have a program developed to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should also oppose the establishment of new aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4.
- c. Alternative uses of agricultural land.** Some airports are surrounded by vast areas of farmed land within the distances specified in Sections 1-2 through 1-4. Seasonal uses of agricultural land for activities such as hunting can create a hazardous wildlife situation. In some areas, farmers will rent their land for hunting purposes. Rice farmers, for example, flood their land during waterfowl hunting season and obtain additional revenue by renting out duck blinds. The duck hunters then use decoys and call in hundreds, if not thousands, of birds, creating a tremendous threat to aircraft safety. A wildlife damage management biologist should review, in coordination with local farmers and producers, these types of seasonal land uses and incorporate them into the WHMP.

2-7. GOLF COURSES, LANDSCAPING AND OTHER LAND-USE CONSIDERATIONS.

- a. Golf courses.** The large grassy areas and open water found on most golf courses are attractive to hazardous wildlife, particularly Canada geese and some species of gulls. These species can pose a threat to aviation safety. The FAA recommends against construction of new golf courses within the separations identified in Sections 1-2 through 1-4. Existing golf courses located within these separations must develop a program to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should ensure these golf courses are monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be immediately implemented.
- b. Landscaping and landscape maintenance.** Depending on its geographic location, landscaping can attract hazardous wildlife. The FAA recommends that airport operators approach landscaping with caution and confine it to airport areas not associated with aircraft movements. A wildlife damage management biologist should review all landscaping plans. Airport operators should also monitor all landscaped areas on a continuing basis for the presence of hazardous wildlife. If

hazardous wildlife is detected, corrective actions should be immediately implemented.

Turf grass areas can be highly attractive to a variety of hazardous wildlife species. Research conducted by the USDA Wildlife Services' National Wildlife Research Center has shown that no one grass management regime will deter all species of hazardous wildlife in all situations. In cooperation with wildlife damage management biologist, airport operators should develop airport turf grass management plans on a prescription basis, depending on the airport's geographic locations and the type of hazardous wildlife likely to frequent the airport

Airport operators should ensure that plant varieties attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grass. For airport property already planted with seed mixtures containing millet, rye grass, or other large-seed producing grasses, the FAA recommends disking, plowing, or another suitable agricultural practice to prevent plant maturation and seed head production. Plantings should follow the specific recommendations for grass management and seed and plant selection made by the State University Cooperative Extension Service, the local office of Wildlife Services, or a qualified wildlife damage management biologist. Airport operators should also consider developing and implementing a preferred/prohibited plant species list, reviewed by a wildlife damage management biologist, which has been designed for the geographic location to reduce the attractiveness to hazardous wildlife for landscaping airport property.

- c. **Airports surrounded by wildlife habitat.** The FAA recommends that operators of airports surrounded by woodlands, water, or wetlands refer to Section 2.4 of this AC. Operators of such airports should provide for a Wildlife Hazard Assessment (WHA) conducted by a wildlife damage management biologist. This WHA is the first step in preparing a WHMP, where required.
- d. **Other hazardous wildlife attractants.** Other specific land uses or activities (e.g., sport or commercial fishing, shellfish harvesting, etc.), perhaps unique to certain regions of the country, have the potential to attract hazardous wildlife. Regardless of the source of the attraction, when hazardous wildlife is noted on a public-use airport, airport operators must take prompt remedial action(s) to protect aviation safety.

2-8. SYNERGISTIC EFFECTS OF SURROUNDING LAND USES. There may be circumstances where two (or more) different land uses that would not, by themselves, be considered hazardous wildlife attractants or that are located outside of the separations identified in Sections 1-2 through 1-4 that are in such an alignment with the airport as to create a wildlife corridor directly through the airport and/or surrounding airspace. An example of this situation may involve a lake located outside of the separation criteria on the east side of an airport and a large hayfield on the west side of an airport, land uses that together could create a flyway for Canada geese directly across the airspace of the airport. There are numerous examples of such situations;

therefore, airport operators and the wildlife damage management biologist must consider the entire surrounding landscape and community when developing the WHMP.

SECTION 3.

PROCEDURES FOR WILDLIFE HAZARD MANAGEMENT BY OPERATORS OF PUBLIC-USE AIRPORTS.

3.1. INTRODUCTION. In recognition of the increased risk of serious aircraft damage or the loss of human life that can result from a wildlife strike, the FAA may require the development of a Wildlife Hazard Management Plan (WHMP) when specific triggering events occur on or near the airport. Part 139.337 discusses the specific events that trigger a Wildlife Hazard Assessment (WHA) and the specific issues that a WHMP must address for FAA approval and inclusion in an Airport Certification Manual.

3.2. COORDINATION WITH USDA WILDLIFE SERVICES OR OTHER QUALIFIED WILDLIFE DAMAGE MANAGEMENT BIOLOGISTS. The FAA will use the Wildlife Hazard Assessment (WHA) conducted in accordance with Part 139 to determine if the airport needs a WHMP. Therefore, persons having the education, training, and expertise necessary to assess wildlife hazards must conduct the WHA. The airport operator may look to Wildlife Services or to qualified private consultants to conduct the WHA. When the services of a wildlife damage management biologist are required, the FAA recommends that land-use developers or airport operators contact a consultant specializing in wildlife damage management or the appropriate state director of Wildlife Services.

NOTE: Telephone numbers for the respective USDA Wildlife Services state offices can be obtained by contacting USDA Wildlife Services Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD, 20737-1234, Telephone (301) 734-7921, Fax (301) 734-5157 (<http://www.aphis.usda.gov/ws/>).

3-3. WILDLIFE HAZARD MANAGEMENT AT AIRPORTS: A MANUAL FOR AIRPORT PERSONNEL. This manual, prepared by FAA and USDA Wildlife Services staff, contains a compilation of information to assist airport personnel in the development, implementation, and evaluation of WHMPs at airports. The manual includes specific information on the nature of wildlife strikes, legal authority, regulations, wildlife management techniques, WHAs, WHMPs, and sources of help and information. The manual is available in three languages: English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: <http://wildlife-mitigation.tc.FAA.gov/>. This manual only provides a starting point for addressing wildlife hazard issues at airports. Hazardous wildlife management is a complex discipline and conditions vary widely across the United States. Therefore, qualified wildlife damage management biologists must direct the development of a WHMP and the implementation of management actions by airport personnel.

There are many other resources complementary to this manual for use in developing and implementing WHMPs. Several are listed in the manual's bibliography.

3-4. WILDLIFE HAZARD ASSESSMENTS, TITLE 14, CODE OF FEDERAL REGULATIONS, PART 139. Part 139.337(b) requires airport operators to conduct a Wildlife Hazard Assessment (WHA) when certain events occur on or near the airport.

Part 139.337 (c) provides specific guidance as to what facts must be addressed in a WHA.

3-5. WILDLIFE HAZARD MANAGEMENT PLAN (WHMP). The FAA will consider the results of the WHA, along with the aeronautical activity at the airport and the views of the airport operator and airport users, in determining whether a formal WHMP is needed, in accordance with Part 139.337. If the FAA determines that a WHMP is needed, the airport operator must formulate and implement a WHMP, using the WHA as the basis for the plan.

The goal of an airport's Wildlife Hazard Management Plan is to minimize the risk to aviation safety, airport structures or equipment, or human health posed by populations of hazardous wildlife on and around the airport.

The WHMP must identify hazardous wildlife attractants on or near the airport and the appropriate wildlife damage management techniques to minimize the wildlife hazard. It must also prioritize the management measures.

3-6. LOCAL COORDINATION. The establishment of a Wildlife Hazards Working Group (WHWG) will facilitate the communication, cooperation, and coordination of the airport and its surrounding community necessary to ensure the effectiveness of the WHMP. The cooperation of the airport community is also necessary when new projects are considered. Whether on or off the airport, the input from all involved parties must be considered when a potentially hazardous wildlife attractant is being proposed. Airport operators should also incorporate public education activities with the local coordination efforts because some activities in the vicinity of your airport, while harmless under normal leisure conditions, can attract wildlife and present a danger to aircraft. For example, if public trails are planned near wetlands or in parks adjoining airport property, the public should know that feeding birds and other wildlife in the area may pose a risk to aircraft.

Airport operators should work with local and regional planning and zoning boards so as to be aware of proposed land-use changes, or modification of existing land uses, that could create hazardous wildlife attractants within the separations identified in Sections 1-2 through 1-4. Pay particular attention to proposed land uses involving creation or expansion of waste water treatment facilities, development of wetland mitigation sites, or development or expansion of dredge spoil containment areas. At the very least, airport operators must ensure they are on the notification list of the local planning board or equivalent review entity for all communities located within 5 miles of the airport, so they will receive notification of any proposed project and have the opportunity to review it for attractiveness to hazardous wildlife.

3-7 COORDINATION/NOTIFICATION OF AIRMEN OF WILDLIFE HAZARDS. If an existing land-use practice creates a wildlife hazard and the land-use practice or wildlife hazard cannot be immediately eliminated, airport operators must issue a Notice to Airmen (NOTAM) and encourage the land-owner or manager to take steps to control the wildlife hazard and minimize further attraction.

SECTION 4.

FAA NOTIFICATION AND REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS

4-1. FAA REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS.

- a. The FAA discourages the development of waste disposal and other facilities, discussed in Section 2, located within the 5,000/10,000-foot criteria specified in Sections 1-2 through 1-4.
- b. For projects that are located outside the 5,000/10,000-foot criteria but within 5 statute miles of the airport's AOA, the FAA may review development plans, proposed land-use changes, operational changes, or wetland mitigation plans to determine if such changes present potential wildlife hazards to aircraft operations. The FAA considers sensitive airport areas as those that lie under or next to approach or departure airspace. This brief examination should indicate if further investigation is warranted.
- c. Where a wildlife damage management biologist has conducted a further study to evaluate a site's compatibility with airport operations, the FAA may use the study results to make a determination.

4-2. WASTE MANAGEMENT FACILITIES.

- a. **Notification of new/expanded project proposal.** Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) limits the construction or establishment of new MSWLF within 6 statute miles of certain public-use airports, when both the airport and the landfill meet very specific conditions. See Section 2-2 of this AC and AC 150/5200-34 for a more detailed discussion of these restrictions.

The Environmental Protection Agency (EPA) requires any MSWLF operator proposing a new or expanded waste disposal operation within 5 statute miles of a runway end to notify the appropriate FAA Regional Airports Division Office and the airport operator of the proposal (40 CFR 258, *Criteria for Municipal Solid Waste Landfills*, Section 258.10, *Airport Safety*). The EPA also requires owners or operators of new MSWLF units, or lateral expansions of existing MSWLF units, that are located within 10,000 feet of any airport runway end used by turbojet aircraft, or within 5,000 feet of any airport runway end used only by piston-type aircraft, to demonstrate successfully that such units are not hazards to aircraft. (See 4-2.b below.)

When new or expanded MSWLF are being proposed near airports, MSWLF operators must notify the airport operator and the FAA of the proposal as early as possible pursuant to 40 CFR 258.

- b. Waste handling facilities within separations identified in Sections 1-2 through 1-4.** To claim successfully that a waste-handling facility sited within the separations identified in Sections 1-2 through 1-4 does not attract hazardous wildlife and does not threaten aviation, the developer must establish convincingly that the facility will not handle putrescible material other than that as outlined in 2-2.d. The FAA strongly recommends against any facility other than that as outlined in 2-2.d (enclosed transfer stations). The FAA will use this information to determine if the facility will be a hazard to aviation.
- c. Putrescible-Waste Facilities.** In their effort to satisfy the EPA requirement, some putrescible-waste facility proponents may offer to undertake experimental measures to demonstrate that their proposed facility will not be a hazard to aircraft. To date, no such facility has been able to demonstrate an ability to reduce and sustain hazardous wildlife to levels that existed before the putrescible-waste landfill began operating. For this reason, demonstrations of experimental wildlife control measures may not be conducted within the separation identified in Sections 1-2 through 1-4.

4-3. OTHER LAND-USE PRACTICE CHANGES. As a matter of policy, the FAA encourages operators of public-use airports who become aware of proposed land use practice changes that may attract hazardous wildlife within 5 statute miles of their airports to promptly notify the FAA. The FAA also encourages proponents of such land use changes to notify the FAA as early in the planning process as possible. Advanced notice affords the FAA an opportunity (1) to evaluate the effect of a particular land-use change on aviation safety and (2) to support efforts by the airport sponsor to restrict the use of land next to or near the airport to uses that are compatible with the airport.

The airport operator, project proponent, or land-use operator may use FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, or other suitable documents similar to FAA Form 7460-1 to notify the appropriate FAA Regional Airports Division Office. Project proponents can contact the appropriate FAA Regional Airports Division Office for assistance with the notification process.

It is helpful if the notification includes a 15-minute quadrangle map of the area identifying the location of the proposed activity. The land-use operator or project proponent should also forward specific details of the proposed land-use change or operational change or expansion. In the case of solid waste landfills, the information should include the type of waste to be handled, how the waste will be processed, and final disposal methods.

- a. Airports that have received Federal grant-in-aid assistance.** Airports that have received Federal grant-in-aid assistance are required by their grant assurances to take appropriate actions to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. The FAA recommends that airport operators to the extent practicable oppose off-airport land-use changes or practices within the separations identified in Sections 1-2 through 1-4 that may attract hazardous wildlife. Failure to do so may lead to noncompliance with applicable grant assurances. The FAA will not approve the placement of airport

development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants without appropriate mitigating measures. Increasing the intensity of wildlife control efforts is not a substitute for eliminating or reducing a proposed wildlife hazard. Airport operators should identify hazardous wildlife attractants and any associated wildlife hazards during any planning process for new airport development projects.

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APPENDIX 1. DEFINITIONS OF TERMS USED IN THIS ADVISORY CIRCULAR.

1. **GENERAL.** This appendix provides definitions of terms used throughout this AC.

1. **Air operations area.** Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron.
2. **Airport operator.** The operator (private or public) or sponsor of a public-use airport.
3. **Approach or departure airspace.** The airspace, within 5 statute miles of an airport, through which aircraft move during landing or takeoff.
4. **Bird balls.** High-density plastic floating balls that can be used to cover ponds and prevent birds from using the sites.
5. **Certificate holder.** The holder of an Airport Operating Certificate issued under Title 14, Code of Federal Regulations, Part 139.
6. **Construct a new MSWLF.** To begin to excavate, grade land, or raise structures to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting agency.
7. **Detention ponds.** Storm water management ponds that hold storm water for short periods of time, a few hours to a few days.
8. **Establish a new MSWLF.** When the first load of putrescible waste is received on-site for placement in a prepared municipal solid waste landfill.
9. **Fly ash.** The fine, sand-like residue resulting from the complete incineration of an organic fuel source. Fly ash typically results from the combustion of coal or waste used to operate a power generating plant.
10. **General aviation aircraft.** Any civil aviation aircraft not operating under 14 CFR Part 119, Certification: Air Carriers and Commercial Operators.
11. **Hazardous wildlife.** Species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard
12. **Municipal Solid Waste Landfill (MSWLF).** A publicly or privately owned discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR § 257.2. An MSWLF may receive

other types wastes, such as commercial solid waste, non-hazardous sludge, small-quantity generator waste, and industrial solid waste, as defined under 40 CFR § 258.2. An MSWLF can consist of either a stand alone unit or several cells that receive household waste.

13. **New MSWLF.** A municipal solid waste landfill that was established or constructed after April 5, 2001.
14. **Piston-powered aircraft.** Fixed-wing aircraft powered by piston engines.
15. **Piston-use airport.** Any airport that does not sell Jet-A fuel for fixed-wing turbine-powered aircraft, and primarily serves fixed-wing, piston-powered aircraft. Incidental use of the airport by turbine-powered, fixed-wing aircraft would not affect this designation. However, such aircraft should not be based at the airport.
16. **Public agency.** A State or political subdivision of a State, a tax-supported organization, or an Indian tribe or pueblo (49 U.S.C. § 47102(19)).
17. **Public airport.** An airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(20)).
18. **Public-use airport.** An airport used or intended to be used for public purposes, and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft may be under the control of a public agency or privately owned and used for public purposes (49 U.S.C. § 47102(21)).
19. **Putrescible waste.** Solid waste that contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 CFR §257.3-8).
20. **Putrescible-waste disposal operation.** Landfills, garbage dumps, underwater waste discharges, or similar facilities where activities include processing, burying, storing, or otherwise disposing of putrescible material, trash, and refuse.
21. **Retention ponds.** Storm water management ponds that hold water for several months.
22. **Runway protection zone (RPZ).** An area off the runway end to enhance the protection of people and property on the ground (see AC 150/5300-13). The dimensions of this zone vary with the airport design, aircraft, type of operation, and visibility minimum.
23. **Scheduled air carrier operation.** Any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial

operator for which the air carrier, commercial operator, or their representative offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR Part 119 or as a public charter operation under 14 CFR Part 380 (14 CFR § 119.3).

- 24. Sewage sludge.** Any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. (40 CFR 257.2)
- 25. Sludge.** Any solid, semi-solid, or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. (40 CFR 257.2)
- 26. Solid waste.** Any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including, solid liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended, (68 Stat. 923). (40 CFR 257.2)
- 27. Turbine-powered aircraft.** Aircraft powered by turbine engines including turbojets and turboprops but excluding turbo-shaft rotary-wing aircraft.
- 28. Turbine-use airport.** Any airport that sells Jet-A fuel for fixed-wing turbine-powered aircraft.
- 29. Wastewater treatment facility.** Any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes, including Publicly Owned Treatment Works (POTW), as defined by Section 212 of the Federal Water Pollution Control Act (P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-576) and the Water Quality Act of 1987 (P.L. 100-4). This definition includes any pretreatment involving the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. (See 40 CFR Section 403.3 (q), (r), & (s)).

- 30. Wildlife.** Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring thereof (50 CFR 10.12, *Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants*). As used in this AC, wildlife includes feral animals and domestic animals out of the control of their owners (14 CFR Part 139, Certification of Airports).
- 31. Wildlife attractants.** Any human-made structure, land-use practice, or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the airport's AOA. These attractants can include architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquaculture activities, surface mining, or wetlands.
- 32. Wildlife hazard.** A potential for a damaging aircraft collision with wildlife on or near an airport.
- 33. Wildlife strike.** A wildlife strike is deemed to have occurred when:
- a. A pilot reports striking 1 or more birds or other wildlife;
 - b. Aircraft maintenance personnel identify aircraft damage as having been caused by a wildlife strike;
 - c. Personnel on the ground report seeing an aircraft strike 1 or more birds or other wildlife;
 - d. Bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal's death is identified;
 - e. The animal's presence on the airport had a significant negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal) (Transport Canada, Airports Group, *Wildlife Control Procedures Manual*, Technical Publication 11500E, 1994).

2. RESERVED.



U.S. Department
of Transportation

**Federal Aviation
Administration**

Advisory Circular

Subject: CONSTRUCTION OR
ESTABLISHMENT OF LANDFILLS NEAR
PUBLIC AIRPORTS

Date: January 26, 2006
Initiated by: AAS-300

AC No: 150/5200-34A
Change:

1. Purpose.

This advisory circular (AC) contains guidance on complying with Federal statutory requirements regarding the construction or establishment of landfills near public airports.

2. Application.

The guidance contained in the AC is provided by the Federal Aviation Administration (FAA) for use by persons considering the construction or establishment of a new municipal solid waste landfill (MSWLF) near a public airport. Guidance contained herein should be used to comply with MSWLF site limitations contained in 49 U.S.C. § 44718(d), as amended by section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, Pub. L. No. 106-181 (April 5, 2000), "Structures interfering with air commerce." In accordance with § 44718(d), as amended, these site limitations are not applicable in the State of Alaska.

In addition, this AC provides guidance for a state aviation agency desiring to petition the FAA for an exemption from the requirements of § 44718(d), as amended.

3. Cancellation

This AC cancels AC 150/52300-34, *Construction or Establishment of Landfills Near Public Airports*, dated August 8, 2000.

This revision contains no substantive changes to the original. Changes include revised and new website addresses, revised strike statistics, and regulation titles.

4. Related Reading Materials.

AC - 150/5200-33, *Hazardous Wildlife Attractions On or Near Airports*.

Wildlife Strikes to Civil Aircraft in the United States. FAA Wildlife Aircraft Strike Database Serial Reports.

Report to Congress: *Potential Hazards to Aircraft by Locating Waste Disposal Sites in the Vicinity of Airports*, April 1996, DOT/FAA/AS/96-1.

Title 14, Code of Federal Regulation, Part 139, Certification of Airports.

Title 40, Code of Federal Regulation, Part 258, Municipal Solid Waste Landfill Criteria.

Some of these documents and additional information on wildlife management, including guidance on landfills, are available on the FAA's Airports web site at http://www.faa.gov/airports_airtraffic/airports/ or <http://wildlife-mitigation.tc.faa.gov>

5. Definitions.

Definitions for the specific purpose of this AC are found in Appendix 1.

6. Background.

The FAA has the broad authority to regulate and develop civil aviation under the Federal Aviation Act of 1958, 49 U.S.C. § 40101, et. seq., and other Federal law. In section 1220 of the Federal Aviation Reauthorization Act of 1996, Pub. L. No. 104-264 (October 9, 1996), the Congress added a new provision, section (d), to 49 U.S.C. § 44718 to be enforced by the FAA and placing limitations on the construction or establishment of landfills near public airports for the purposes of enhancing aviation safety. Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), Pub. L. No. 106-181 (April 5, 2000) replaced section 1220 of the 1996 Reauthorization Act, 49 U.S.C. § 44718 (d), with new language. Specifically, the new provision, § 44718(d), as amended, was enacted to further limit the construction or establishment of a municipal solid waste landfill (MSWLF) near certain smaller public airports.

In enacting this legislation, Congress expressed concern that a MSWLF sited near an airport poses a potential hazard to aircraft operations because such a waste facility attracts birds. Statistics support the fact that bird strikes pose a real danger to aircraft. An estimated 87 percent of the collisions between wildlife and civil aircraft occurred on or near airports when aircraft are below 2,000 feet above ground level (AGL). Collisions with wildlife at these altitudes are especially dangerous as aircraft pilots have minimal time to recover from such emergencies.

The FAA National Wildlife Aircraft Strike Database shows that more than 59,000 civil aircraft sustained reported strikes with wildlife from 1990 to 2004. Between 1990-2004, aircraft-wildlife strikes involving U. S. civil aircraft resulted in over \$495 million/year worth of aircraft damage and associated losses and over 631,000 hours/year of aircraft down time.

From 1990 to 2004, waterfowl, gulls and raptors were involved in 77% of the 3,493 reported damaging aircraft-wildlife strikes where the bird was identified. Populations of Canada geese and many species of gulls and raptors have increased markedly over the last several years. Further, gulls and Canada geese have adapted to urban and suburban environments and, along with raptors and turkey vultures, are commonly found feeding or loafing on or near landfills.

In light of increasing bird populations and aircraft operations, the FAA believes locating landfills in proximity to airports increases the risk of collisions between birds and aircraft. To address this concern, the FAA issued AC 150/5200-33, *Hazardous Wildlife Attractions On or Near Airports*, to provide airport operators and aviation planners with guidance on minimizing wildlife attractants. AC 150/5200-33 recommends against locating municipal solid waste landfills within five statute miles of an airport if the landfill may cause hazardous wildlife to move into or through the airport's approach or departure airspace.

7. General.

Using guidance provided in the following sections, persons considering construction or establishment of a landfill should first determine if the proposed facility meets the definition of a new MSWLF (see Appendix 1). Section 44718(d), as amended, applies only to a new MSWLF. It does not apply to the expansion or modification of an existing MSWLF, and does not apply in the State of Alaska. If the proposed landfill meets the definition of a new MSWLF, its proximity to certain public airports (meeting the criteria specified in Paragraph 8 below) should be determined. If it is determined that a new MSWLF would be located within six miles of such a public airport, then either the MSWLF should be planned for an alternate location more than 6 miles from the airport, or the MSWLF proponent should request the appropriate State aviation agency to file a petition for an exemption from the statutory restriction.

In addition to the requirements of § 44718(d), existing landfill restrictions contained in AC 150/5200-33, *Hazardous Wildlife Attractions On or Near Airports* (see Paragraph 5, Background) also may be applicable. Airport operators that have accepted Federal funds have obligations under Federal grant assurances to operate their facilities in safe manner and must comply with standards prescribed in advisory circulars, including landfill site limitations contained in AC 150/5200-33.

8. Landfills Covered by the Statute.

The limitations of § 44718(d), as amended, only apply to a new MSWLF (constructed or established after April 5, 2000). The statutory limitations are not applicable where construction or establishment of a MSWLF began on or before April 5, 2000, or to an existing MSWLF (received putrescible waste on or before April 5, 2000). Further, an existing MSWLF that is expanded or modified after April 5, 2000, would not be held to the limitations of § 44718(d), as amended.

9. Airports Covered by the Statute.

The statutory limitations restricting the location of a new MSWLF near an airport apply to only those airports that are recipients of Federal grants (under the Airport and Airway Improvement Act of 1982, as amended, 49 U.S.C. § 47101, *et seq.*) and primarily serve general aviation aircraft and scheduled air carrier operations using aircraft with less than 60 passenger seats.

While the FAA does not classify airports precisely in this manner, the FAA does categorize airports by the type of aircraft operations served and number of annual passenger enplanements. In particular, the FAA categorizes public airports that serve air carrier operations. These airports are known as commercial service airports, and receive scheduled passenger service and have 2,500 or more enplaned passengers per year.

One sub-category of commercial service airports, nonhub primary airports, closely matches the statute requirement. Nonhub primary airports are defined as commercial service airports that enplane less than 0.05 percent of all commercial passenger enplanements (0.05 percent equated to 352,748 enplanements in 2004) but more than 10,000 annual enplanements. While these enplanements consist of both large and small air carrier operations, most are conducted in aircraft with less than 60 seats. These airports also are heavily used by general aviation aircraft, with an average of 81 based aircraft per nonhub primary airport.

In addition, the FAA categorizes airports that enplane 2,500 to 10,000 passengers annually as non-primary commercial service airports, and those airports that enplane 2,500 or less passengers annually as general aviation airports. Both types of airports are mainly used by general aviation but in some instances, they have annual enplanements that consist of scheduled air carrier operations conducted in aircraft with less than 60 seats. Of the non-primary commercial service airports and general aviation airports, only those that have scheduled air carrier operations conducted in aircraft with less than 60 seats would be covered by the statute. The statute does not apply to those airports that serve only general aviation aircraft operations.

To comply with the intent of the statute, the FAA has identified those airports classified as nonhub primary, non-primary commercial service and general aviation airports that:

1. Are recipients of Federal grant under 49 U.S.C. § 47101, et. seq.;
2. Are under control of a public agency;
3. Serve scheduled air carrier operations conducted in aircraft with less than 60 seats; and
4. Have total annual enplanements consisting of at least 51% of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

Persons considering construction or establishment of a new MSWLF should contact the FAA to determine if an airport within six statute miles of the new MSWLF meets these criteria (see paragraph 11 below for information on contacting the FAA). If the FAA determines the airport does meet these criteria, then § 44718(d), as amended, is applicable.

An in-depth explanation of how the FAA collects and categorizes airport data is available in the FAA's National Plan of Integrated Airport Systems (NPIAS). This report and a list of airports classified as nonhub primary, non-primary commercial service and general aviation airports (and associated enplanement data) are available on the FAA's Airports web site at http://www.faa.gov/airports_airtraffic/airports/planning_capacity/.

10. Separation distance measurements.

Section 44718(d), as amended, requires a minimum separation distance of six statute miles between a new MSWLF and a public airport. In determining this distance separation, measurements should be made from the closest point of the airport property boundary to the closest point of the MSWLF property boundary. Measurements can be made from a perimeter fence if the fence is co-located, or within close proximity to, property boundaries. It is the responsibility of the new MSWLF proponent to determine the separation distance.

11. Exemption Process.

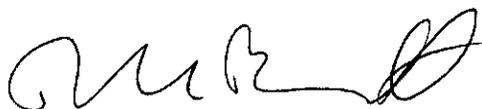
Under § 44718(d), as amended, the FAA Administrator may approve an exemption from the statute's landfill location limitations. Section 44718(d), as amended, permits the aviation agency of the state in which the airport is located to request such an exemption from the FAA Administrator. Any person desiring such an exemption should contact the aviation agency in the state in which the affected airport is located. A list of state aviation agencies and contact information is available at the National Association of State Aviation Officials (NASAO) web site at www.nasao.org or by calling NASAO at (301) 588-1286.

A state aviation agency that desires to petition the FAA for an exemption should notify the Regional Airports Division Manager, in writing, at least 60 days prior to the construction of a MSWLF. The petition should explain the nature and extent of relief sought, and contain information, documentation, views, or arguments that demonstrate that an exemption from the statute would not have an adverse impact on aviation safety. Information on contacting FAA Regional Airports Division Managers can be found on the FAA's web site at www.faa.gov.

After considering all relevant material presented, the Regional Airports Division Manager will notify the state agency within 30 days whether the request for exemption has been approved or denied. The FAA may approve a request for an exemption if it is determined that such an exemption would have no adverse impact on aviation safety.

12. Information.

For further information, please contact the FAA's Office of Airport Safety and Standards, Airport Safety and Operations Division, at (800) 842-8736, Ext. 7-3085 or via email at WebmasterARP@faa.gov. Any information, documents and reports that are available on the FAA web site also can be obtained by calling the toll-free telephone number listed above.

A handwritten signature in black ink, appearing to read 'DLB', with a stylized flourish at the end.

DAVID L. BENNETT
Director, Office of Airport Safety and Standards

APPENDIX 1. DEFINITIONS.

The following are definitions for the specific purpose of this advisory circular.

Construct a municipal solid waste landfill (MSWLF) means excavate or grade land, or raise structures, to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting authority.

Establish a municipal solid waste landfill (MSWLF) means receive the first load of putrescible waste on site for placement in a prepared municipal solid waste landfill.

Existing municipal solid waste landfill (MSWLF) means a municipal solid waste landfill that received putrescible waste on or before April 5, 2000.

General aviation aircraft means any civil aviation aircraft not operating under 14 CFR Part 119, Certification: Air carriers and commercial operators.

Municipal solid waste landfill (MSWLF) means publicly or privately owned discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR § 257.2. A MSWLF may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste, as defined under 40 CFR § 258.2. A MSWLF may consist of either a standalone unit or several cells that receive household waste.

New municipal solid waste landfill (MSWLF) means a municipal solid waste landfill that was established or constructed after April 5, 2000.

Person(s) means an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them (14 CFR Part 1).

Public agency means a State or political subdivision of a State; a tax-supported organization; or an Indian tribe or pueblo (49 U.S.C. § 47102(15)).

Public airport means an airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(16)).

Putrescible waste means solid waste which contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 CFR § 257.3-8).

Scheduled air carrier operation means any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial operator for which the air carrier, commercial operator, or their representatives offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR Part 119, or is conducted as a public charter operation under 14 CFR Part 380 (14 CFR § 119.3).

Solid waste means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. § 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) (40 CFR § 258.2).



Appendix E

Calculating Intensity of Land Uses

Appendix E

CALCULATING INTENSITY OF LAND USES

*Airport Land Use
Compatibility Plan
San Joaquin County*

This appendix provides some guidance on how to calculate the intensity of land uses (the number of people-per-acre). The most difficult part about determining the intensity of a land use is estimating the number of people likely to use a particular facility. There are several methods which can be utilized, depending upon the nature of the proposed use:

- **Maximum Occupancy-** The California Building Code (CBC) can be used as a standard for determining the maximum occupancy of certain uses. The chart provided as **Table E1** indicates the required number of square feet per occupant. The number of people on the site can be calculated by dividing the total floor area of a proposed use by the minimum square feet per occupant requirement listed in the table. The maximum occupancy can then be divided by the size of the parcel in acres to determine the number of people-per-acre. Surveys of actual occupancy levels conducted by various agencies have indicated that many retail and office uses are generally occupied at no more than 50 percent of their maximum occupancy levels, even at the busiest times of day. Therefore, the number of people calculated for office and retail uses should usually be adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination. Even with this adjustment,

the CBC-based methodology typically produces intensities at the high end of the likely range.

- **Parking Ordinance-** The number of people present in a given area can be calculated based upon the number of parking spaces provided. Traffic studies can be used to develop an assumption regarding the number of people per vehicle. The number of people-per-acre can then be calculated by dividing the number of people on-site by the size of the parcel in acres. This approach is appropriate where the use is expected to be dependent upon access by vehicles. Depending upon the specific assumptions utilized, this methodology typically results in a number in the low end of the likely intensity for a given land use.
- **Survey of Similar Uses-** Certain uses may require an estimate based upon a survey of similar uses. This approach is more difficult, but is appropriate for uses which, because of the nature of the use, cannot be reasonably estimated based upon parking or square footage.

TABLE E1 Maximum Floor Area Allowances Per Occupant	
Function of Space	Floor Area In Sq. Ft. Per Occupant
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Assembly with fixed seats	See Section 1004.7
Assembly without fixed seats	
Concentrated (chairs only – not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms – other than fixed seating areas	40 net
Daycare	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mercantile	
Areas on other floors	60 gross
Basement and grade floor areas	30 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross
For SI: 1 square foot = 0.0929 m ² .	

Example:

Proposed Development: Single-floor furniture store containing 20,000 sq. ft.

A. Calculation Based on Parking Space Requirements

Assume that local codes require 1 parking space per 1,500 square feet of use area for a furniture store. Next, assume 1.5 people per automobile for this type of use.

The usage intensity would be:

- 1) 20,000 sq. ft. bldg. / 1,500 sq. ft. (1.0 parking space per 1,500 sq. ft.) = 13 required parking spaces.
- 2) 13 parking spaces x 1.5 people per space = 20 people maximum on-site.
- 3) 20,000 sq. ft. bldg. footprint / 43,560 sq. ft. per acre = 0.46 acre bldg. footprint.
- 4) Assuming a relatively balanced occupancy throughout the building and that outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:
Building footprint < 1.0 acre; therefore, maximum people in 1 acre = bldg. occupancy = 20 people per single acre.

B. Calculation Based on California Building Code

For the purposes of the CBC-based methodology, the furniture store is assumed to consist of 50 percent retail sales floor (at 30 square feet per occupant) and 50 percent warehouse (at 500 square feet per occupant). Usage intensities would, therefore, be estimated as follows:

- 1) 10,000 sq. ft. retail floor area / 30 sq. ft. per occupant = 333 people maximum occupancy in retail area
- 2) 10,000 sq. ft. warehouse floor area / 500 sq. ft. per occupant = 20 people maximum occupancy in warehouse area
- 3) Maximum occupancy under CBC assumptions = 333 + 20 = 353 people
- 4) Assuming typical peak occupancy is 50 percent of CBC numbers = 177 people maximum expected at any one time

The two methods produce very different results. The occupancy area estimate of 30 square feet per person is undoubtedly high for a furniture store even after the 50 percent adjustment. On the other hand, the 20 people-per-acre estimate using the parking requirement methodology appears low, but it is probably closer to being realistic.



Appendix F

Initial Study

FINAL INITIAL STUDY

For the

**SAN JOAQUIN COUNTY AIRPORT LAND USE
COMPATIBILITY PLAN UPDATE**

~~March 13, 2009~~

Revised: June 25, 2009

Prepared for:

San Joaquin County Council of Governments



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Project Title:

San Joaquin County Airport Land Use Compatibility Plan Update

Lead Agency Name and Address:

San Joaquin County Airport Land Use Commission
555 E. Weber Avenue
Stockton, CA 95202

Contact Person and Phone Number:

Laura Brunn, Associate Regional Planner
(209) 468-3913

Project Description:

The San Joaquin Airport Land Use Compatibility Plan Update (ALUCP) provides policies for use by the San Joaquin County Airport Land Use Commission when evaluating the compatibility between proposals for land use development in the vicinity of all public-use airports in or adjacent to San Joaquin County and the operations of these airports. The local agencies that have jurisdiction over land uses within the areas covered by this plan include San Joaquin County, Cities of Lodi, Stockton, and Tracy. The plan is prepared in accordance with the requirements of the California State Aeronautics Act.

Although Stockton Metropolitan Airport (SMA) is a public use airport and is therefore subject to ALUC policies, this ALUCP Update does not include SMA. San Joaquin County is currently processing an update to SMA’s Master Plan and due to the airport being a regionally significant asset to San Joaquin County, having an updated Master Airport Plan in place for the ALUCP update is essential. ALUCPs are required by statute to use the subject airport’s approved Master Plan (if available) as its guiding document as it relates to the layout, operations, and forecasts. After the Master Plan is adopted SJCOG will prepare an amendment to the ALUCP and environmental documentation to incorporate new elements of the Master Plan and develop current safety and compatibility zones specific to SMA. Until then, the compatibility zones and criteria contained in the 1993 ALUCP will remain in effect for Stockton Metropolitan Airport.

Project Location:

The environs of five public-use airports in San Joaquin County and one public use airport in nearby Contra Costa County: Kingdon Executive Airport, Lodi Airport, Lodi Precissi Airpark, New Jerusalem Airport, Tracy Municipal Airport, and Byron Airport. The areas included within the planning area for each airport’s environs vary with the size of the airport runways and approach procedures. The planning areas for each airport include:

Lodi Airport	18.46 square miles
Kingdon Exec/Lodi Precissi Airpark	27.45 square miles
New Jerusalem Airport	20.79 square miles
Tracy Municipal Airport	22.11 square miles

Byron Airport

5.45 square miles (within San Joaquin County)

Project Sponsor's Name and Address:

San Joaquin County Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

General Plan Designation:

According to City and County adopted plans.

Zoning:

According to City and County adopted ordinances.

Surrounding Land Uses and Setting:

Kingdon Executive Airport: Surrounded by agricultural lands with scattered residential dwellings. The nearest concentration of residential development is located south of the airport approximately two miles.

Lodi Airport: Low-density residential dwellings are located north and east of the airport. Small clusters of commercial/industrial are located northeast and south of the airport. Agricultural lands and scattered residential dwellings can be found south and west of the airport.

Lodi Precissi Airpark: This airport is surrounded by agricultural lands with clusters of residential dwellings in all quadrants. Small clusters of commercial/industrial uses can be found north and east of the airport.

New Jerusalem Airport: Agricultural land completely surrounds this airport. There is a small concentration of residential dwellings located approximately one mile southwest of the airport.

Tracy Municipal Airport: This airport is located on the southwestern edge of the City of Tracy. Industrial uses are located immediately adjacent to the airport in all quadrants. A dense concentration of residential dwellings is located approximately ½ mile to the north.

Byron Airport: The portion of the airport influence area within San Joaquin County is a mix of agricultural and low density residential associated with the Mountain House development.

Other agencies whose approval is required:

The San Joaquin Airport Land Use Commission (ALUC) can adopt the plan without approval from any other agency. However, implementation of the ALUCP Update's policies can only be accomplished by the local governments that have authority over land uses within the influence areas of each public use airport. State statutes require these agencies to make their general plans consistent with the Airport Land Use Compatibility Plan within 180 days of approval/adoption of the ALUCP by the ALUC, unless they go through an overrule procedure. By state law, the over-

rule procedure requires two-thirds majority vote by the governing body of the jurisdiction and specific findings that the action proposed is consistent with the purposes of the State of California airport land use compatibility statute.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

I. Aesthetics	II. Agriculture Resources	III. Air Quality
IV. Biological Resources	V. Cultural Resources	VI. Geology/Soils
VII. Hazards & Hazardous Materials	VIII. Hydrology/Water Quality	IX. Land Use/Planning
X. Mineral Resources	XI. Noise	XII. Population/Housing
XIII. Public Services	XIV. Recreation	XV. Transportation/Traffic
XVI. Utilities/Service Systems		XVII. Mandatory Findings of Significance

EVALUATION OF ENVIRONMENTAL IMPACTS

Explanations of all “Potentially Significant,” “Less Than Significant with Mitigation Incorporated,” “Less than Significant Impact,” and “No Impact” answers are provided on the attached sheets.

General Comment

No physical construction projects would result from the adoption of the San Joaquin County Airport Land Use Plan Update or from subsequent implementation of the land use restrictions and policies. Therefore, the “No Impact” column has been checked with respect to the following environmental impact categories:

- I. Aesthetics
- II. Agriculture Resources
- III. Air Quality
- IV. Biological Resources
- V. Cultural Resources
- VI. Geology/Soils
- VII. Hazards & Hazardous Materials
- VIII. Hydrology/Water Quality
- X. Mineral Resources
- XIII. Public Services
- XIV. Recreation
- XV. Transportation/Traffic
- XVI. Utilities/Service Systems

XVII Mandatory Findings of Significance

I. AESTHETICS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				<input checked="" type="checkbox"/>

I.a though **I.d**: See general comment on Page 3.

II. AGRICULTURE RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				<input checked="" type="checkbox"/>
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				

II.a and II.b: See general comment on Page 3.

II.b. The cumulative effect of the proposed ALUCP on the San Joaquin County General Plan is a reduction of a total of six potential homes within the AIAs of Byron, Kingdon Executive, Lodi Airport, Lodi (Precissi) Airpark, New Jerusalem, and Tracy Municipal Airports. A review of the San Joaquin County General Plan Agricultural Land element indicates that a majority of the unincorporated county falls under an agricultural reserve designation. In addition, approximately 540,000 acres of the land used for agriculture is held under Williamson Act contracts. The Williamson Act is a voluntary tax incentive program for preserving agricultural and open space lands. In order to be eligible for tax benefits under the Williamson Act, the land must be located within an agricultural reserve designated by the County. A ten-year contract is entered into by the County and the property owner. Under this contract, the County places restrictions on the land guaranteeing that the property will remain an agricultural or open space use. A Williamson Act contract can be canceled by providing notice of cancellation and waiting ten years for the contract to expire for County Board of Supervisors approval.

The San Joaquin Countys geographical information system (GIS) was used to determine the number of acres not designated as agricultural reserve in unincorporated portion of the County and outside of the AIAs. In addition, natural resource conservation and the Delta (a unique habitat at the confluence of the Sacramento and San Joaquin Rivers) were removed from the acreage calculation. There are approximately 21,600 acres of non-agricultural preservation that is also not categorized as natural resource conservation land within unincorporated San Joaquin County outside of the AIAs that can be developed. This area should be sufficient to accommodate the potential six dwellings reduction from the proposed AIA.

III. AIR QUALITY				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?				<input checked="" type="checkbox"/>

e) Create objectionable odors affecting a substantial number of people?				<input checked="" type="checkbox"/>
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				

III.a through III.e: See general comment on Page 3.

IV. BIOLOGICAL RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				<input checked="" type="checkbox"/>

IV.a through IV.e: See general comment on Page 3.

IV.f. The cumulative effect of the proposed ALUCP on the San Joaquin County General Plan is a reduction of a total of six potential homes within the AIAs of Byron, Kingdon Executive, Lodi Airport, Lodi (Precissi) Airpark, New Jerusalem, and Tracy Municipal Airports. A review of the San Joaquin County General Plan Vegetation, Fish, and Wildlife Habitat Element provides a map of the County’s vegetation and wildlife resources.

The San Joaquin Counties geographical information system (GIS) was used to determine the number of acres not designated as natural resource conservation or Delta (a unique habitat at the confluence of the Sacramento and San Joaquin Rivers). In addition, areas designated as agricultural reserve in the in the unincorporated portion of the County were removed. There are approximately 21,600 acres not designated as natural resource conservation/Delta or agricultural within unincorporated San Joaquin County outside of the AIAs that can be developed. This area should be sufficient to accommodate the potential six dwellings reduction from the proposed AIA.

V. CULTURAL RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?				<input checked="" type="checkbox"/>

V.a through V.d: See general comment on Page 3.

VI. GEOLOGY AND SOILS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?				<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?				<input checked="" type="checkbox"/>
iv) Landslides?				<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?				<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				<input checked="" type="checkbox"/>

VI.a through **VI.e**: See general comment on Page 3.

VII. HAZARDS AND HAZARDOUS MATERIALS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				<input checked="" type="checkbox"/>

VII.a, VII.b, VII.c, VII.d, VII.f, VII.g, VII.h. See General Comment on Page 3.

VII.e The San Joaquin County ALUCP is intended to reduce the risk of exposure to the hazards of an off-airport aircraft accident, by limiting residential densities and concentrations of people in locations near the public-use airports within and adjacent to the county. The risks of aircraft accident occurrences are further reduced by limitations on the height of structures, trees, and other objects which might penetrate airport airspace as defined by Title 14 of the Code of Federal Regulations, Part 77. The plan seeks to minimize the consequences of an off-airport aircraft accident by requiring a percentage of the land in critical areas near the airports to remain open for emergency aircraft landings. This percentage varies based on the zone (See Table 3A on page 3-14 in Chapter 3, Comprehensive Land Use Plan Policies).

VIII. HYDROLOGY/WATER QUALITY				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?				<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?				<input checked="" type="checkbox"/>

VIII.a through **VIII.f**: See general comment on Page 3.

VIII. HYDROLOGY/WATER QUALITY (Continued)				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</i>				<input checked="" type="checkbox"/>
<i>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</i>				<input checked="" type="checkbox"/>
<i>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</i>				<input checked="" type="checkbox"/>
<i>j) Inundation by seiche, tsunami, or mudflow?</i>				<input checked="" type="checkbox"/>

VIII.a through **VIII.j**: See general comment on Page 3.

IX. LAND USE/PLANNING				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			<input checked="" type="checkbox"/>	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				<input checked="" type="checkbox"/>

IX.a: The focus of the ALUCP Update is airport-related compatibility of future land use development in the airport vicinity. The ALUCP Update is explicitly not applicable to existing land

uses per state aeronautics statutes. Although existing land uses in some locations might not have been allowed had the ALUCP Update been in effect, no changes to those existing uses are proposed. In addition, the ALUCP Update allows continued development of a similar nature in these areas in accordance with the policies on infill as contained in the ALUCP Update.

IX.b: The impact of the proposed ALUCP Update compatibility zones and policies on general plan policies and zoning is assessed in this section. The impact assessment starts by calculating the total acreage within each airport influence area (AIA) (See **Table IX.b 1**). As seen on **Table IX.b 1**, the total acreage within the AIA for each airport remains unchanged between the 1993 ALUCP (1998 for Tracy Municipal Airport) and the ALUCP Update. However, due to a change in CalTrans guidance regarding the development of ALUCPs, the acreage of the various safety zones within the airports AIAs changed in accordance with 2002 California Airport Land Use Planning Handbook.

For all airports the acreage contained within the traffic pattern zone (TPZ) in the proposed ALUCP is smaller than that what was allowed within the Conical Surface from the 1993 ALUCP (1998 for Tracy Municipal Airport). Additionally, the proposed ALUCP zones along approach/departure path and turning areas are slightly larger than the previous plan and an inner turning zone has been introduced. Overall, these changes result in fewer dwellings/intensity allowed within close proximity to the airport and more dwellings/intensity allowed in the outlying areas within the AIA.

To assess potential impacts, utilizing available acreage for development, the number of dwelling units allowed through the ALUCP is compared to the dwelling units or density allowed within the applicable General Plan or zoning ordinance. For the purposes of calculating the number of potential future dwellings and commercial/industrial uses within each ALUCP zone, acreage of developed areas was subtracted from the total acreage within each AIA. The proposed ALUCP policies are defined in terms of gross acres and general plan policies are expressed in terms of net acres; therefore, in order to calculate the effect of the proposed ALUCP on housing, the number of units per gross acre was estimated subtracting 15 percent of each gross acre would be developed to allow for roads, utilities, and other public spaces. A similar approach has been taken to calculate the intensity of commercial and industrial uses.

Table IX.b 1 Safety Zone Acreage		
Zone	1993 ALUCP (acres)³	Proposed ALUCP (acres)
Byron Airport¹		
Airport Influence Area (AIA)	N/A	3,490.5
Kingdon Executive Airport²		
Airport Influence Area (AIA)	3,491.7	7,481.4
Traffic Pattern/Conical Zone (TPZ)	6,226.8	2,271.8
Outer Safety Zone (OSZ)	18.4	69.5
Inner Turning Zone (ITZ)	0.0	99.1
Inner Safety Zone (ISZ)	41.3	88.6
Runway Protection Zone (RPZ)	16.1	16.1
Sideline/Transitional Safety Zone (SSZ)	314.3	58.7
Airport Property/Primary Surface	<u>12.4</u>	<u>35.8</u>
Total Area	10,121.0	10,121.0
Lodi Airport		
Airport Influence Area (AIA)	4,046.7	9,281.4
Traffic Pattern/Conical Zone (TPZ)	7,182.4	2,004.3
Outer Safety Zone (OSZ)	43.0	139.0
Inner Turning Zone (ITZ)	0.0	125.8
Inner Safety Zone (ISZ)	94.7	163.1
Runway Protection Zone (RPZ)	34.4	31.1
Sideline/Transitional Safety Zone (SSZ)	384.8	14.9
Airport Property/Primary Surface	<u>31.0</u>	<u>57.4</u>
Total Area	11,817.1	11,817.1
Lodi (Precissi) Airpark²		
Airport Influence Area (AIA)	1,515.5	5,376.3
Traffic Pattern/Conical Zone (TPZ)	5,541.0	1,751.4
Outer Safety Zone (OSZ)	23.2	69.5
Inner Turning Zone (ITZ)	0.0	99.1
Inner Safety Zone (ISZ)	55.7	88.6
Runway Protection Zone (RPZ)	24.5	16.1
Sideline/Transitional Safety Zone (SSZ)	248.4	10.6
Airport Property/Primary Surface	<u>22.3</u>	<u>19.0</u>
Total Area	7,430.6	7,430.6
New Jerusalem Airport		
Airport Influence Area (AIA)	5,661.3	10,912.4
Traffic Pattern/Conical Zone (TPZ)	7,240.3	2,055.4
Outer Safety Zone (OSZ)	19.9	69.5
Inner Turning Zone (ITZ)	0.0	99.1
Inner Safety Zone (ISZ)	48.0	88.6
Runway Protection Zone (RPZ)	22.3	16.1
Sideline/Transitional Safety Zone (SSZ)	288.8	0.0
Airport Property/Primary Surface	<u>28.0</u>	<u>67.5</u>
Total Area	13,308.6	13,308.6
Tracy Municipal Airport³		
Airport Influence Area (AIA)	10,854.7	10,598.4
Traffic Pattern/Overflight Zone (TPZ)	3,056.0	2,759.8
Outer Safety Zone (OSZ)	114.8	172.8
Inner Turning Zone (ITZ)	0.0	206.6
Inner Safety Zone (ISZ)	68.9	260.0
Runway Protection Zone (RPZ)	57.4	55.1
Sideline Safety Zone (SSZ)	0.0	11.9
Airport Property	<u>0.0</u>	<u>87.2</u>
Total Area	14,151.8	14,151.8
¹ There are no current safety zones for Byron Airport within San Joaquin County. An area is proposed for the airport influence area designation along the instrument approach path to Byron Airport within San Joaquin County. ² The Kingdon Executive Airport and Lodi (Precissi) Airpark have overlapping airport influence area and conical surface boundaries. ³ 1998 ALUCP for Tracy Municipal Airport.		

General plan and zoning policies for each jurisdiction were used to calculate land use densities (dwelling units per acre) and intensities (persons per acre) allowed on the undeveloped areas within the AIA. Policies from the current 1993 ALUCP (as amended) were then applied to the areas within each AIA and the difference between the jurisdiction's development policies and ALUCP policies were calculated. Finally, the proposed ALUCP policies are were applied within each AIA and the difference between the jurisdiction's development policies and proposed ALUCP policies are calculated. The comparison between these two differences (the application of 1993 ALUCP policies and the proposed ALUCP policies to each jurisdiction within each AIA) provides the net impact to each jurisdiction. The following text and information contained within **Tables IX.b 2** through **IX.b 6** below summarize the impact of the proposed ALUCP Update policies for each airport.

Byron Airport

The Byron Airport, located in nearby Contra Costa County, was not included in the previous San Joaquin County ALUCP. Byron Airport's primary approach into the airport is from the south-east and over San Joaquin County. Therefore, it is prudent to include Byron Airport in the San Joaquin County ALUCP update.

A portion of Byron Airport's AIA, along the primary approach path to the airport, extends into San Joaquin County. As stated in Chapter Three of this document, properties within the Byron Airport AIA are routinely subject to overflights by aircraft using the airport. Only hazards to flight (physical [e.g., tall objects], visual, and electronic forms of interference with the safety of aircraft operations) are prohibited within the AIA. There are no other restrictions to land use development within the AIA zone; therefore, there is no impact to the San Joaquin County and City of Tracy General Plans or zoning for the Byron Airport Proposed ALUCP zone. Additional impact assessment on the General Plan and zoning are not necessary for Byron Airport.

Kingdon Executive Airport

The results of the Kingdon Executive Airport impact assessment can be found in **Table IX.b 2**. Kingdon Executive Airport falls within the sphere of influence for the City of Stockton and unincorporated San Joaquin County.

The impact on Stockton General Plan with proposed ALUCP indicates that throughout the AIA, approximately 0.5 more dwellings could be built under the proposed ALUCP with 1.1 fewer dwellings allowed within the areas near the airport and more allowed outside the traffic pattern zone. There is no impact on the Stockton General Plan intensity within the AIA with the proposed ALUCP. Therefore, the Proposed ALUCP for Kingdon Airport has no impact on the Stockton General Plan.

Table IX.b 2 Kingdon Executive Airport						
Zone	Dwelling Units			People		
	1993 ALUCP¹	Proposed ALUCP¹	Difference	1993 ALUCP²	Proposed ALUCP²	Difference
<i>Stockton General Plan³</i>						
AIA	4,073.9	10,836.5	6,762.7	3277.9	8,719.1	5,441.2
TPZ	7,851.1	1,088.3	-6,762.8	6310.6	869.4	-5,441.2
OSZ	0.2	0.7	0.5	0.0	0.0	0.0
ITZ	0.0	0.7	0.7	0.0	0.0	0.0
ISZ	0.0	0.6	0.6	0.0	0.0	0.0
SSZ	1.1	0.0	-1.1	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	11,926.2	11,926.7	0.5	9,588.5	9,588.5	0.0
<i>San Joaquin County General Plan⁴</i>						
AIA	64.4	132.8	68.4	82,377.0	92,964.3	10,587.3
TPZ	112.5	43.6	-68.8	10,587.3	0.0	-10,587.3
OSZ	0.4	1.5	1.1	0.0	0.0	0.0
ITZ	0.0	2.1	2.1	0.0	0.0	0.0
ISZ	0.0	1.6	1.6	0.0	0.0	0.0
SSZ	3.8	0.2	-3.5	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	181.0	181.9	0.9	92,964.3	92,964.3	0.0
<i>San Joaquin County Zoning⁵</i>						
AIA	332.3	674.5	342.2	27,568.3	46,270.2	18,701.9
TPZ	565.4	228.2	-337.2	18,701.9	0.0	-18,701.9
OSZ	2.0	7.4	5.4	0.0	0.0	0.0
ITZ	0.0	10.5	10.5	0.0	0.0	0.0
ISZ	0.0	5.3	5.3	0.0	0.0	0.0
SSZ	33.4	6.2	-27.2	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	933.1	932.1	-1.0	46,270.2	46,270.2	0.0
¹ Total dwelling Units allowed in undeveloped areas within the Kingdon Executive Airport 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ² Total number of people (intensity) allowed in undeveloped areas within the Kingdon Executive Airport 1993 and proposed Airport Land Use Compatibility Plan safety zones. ³ Stockton General Plan, 2007. General Plan assumptions for Stockton can be found on Table F3 at the end of this appendix. ⁴ San Joaquin County General Plan 2010, 1994. General Plan assumptions for San Joaquin County can be found on Table F1 at the end of this appendix. ⁵ Title 9, Development Title of San Joaquin County, 1995. Zoning assumptions for San Joaquin County can be found on Table F5 at the end of this appendix.						

The impact on the San Joaquin County General Plan with the proposed ALUCP indicates that throughout the AIA, approximately 0.9 more dwellings could be built. There is no impact on the San Joaquin County General Plan intensity within the AIA with the proposed ALUCP. Therefore, the proposed ALUCP for Kingdon Airport has no impact on the San Joaquin County General Plan.

The proposed ALUCP has very little effect on the current San Joaquin County zoning. With respect to density, 1.0 fewer potential homes can be built within the AIA when compared to the 1993 ALUCP. The concentration of people allowed is the same when the proposed and 1993 ALUCP are compared.

The San Joaquin County Regional Housing Needs Allocation (RHNA) (August 2008) projected a need for 6,075 new dwelling units throughout the unincorporated portions of the county. The

reduction of 1.0 potential dwellings from the Kingdon Airport AIA is only 0.01 percent of the total projected housing for San Joaquin County's unincorporated areas. Given the large amount of developable property outside the Kingdon Airport AIA within the unincorporated San Joaquin County, the impact of reducing 0.9 potential dwellings is not anticipated to be significant. Therefore, the effect on the San Joaquin County zoning density for Kingdon Airport is less than significant.

Lodi Airport

The Lodi Airport impact assessment results can be found on **Table IX.b 3**. Lodi Airport also falls solely within the unincorporated San Joaquin County. The impact on the San Joaquin County General Plan with proposed ALUCP indicates that throughout the AIA, approximately 1.5 fewer potential dwellings could be built under the proposed ALUCP. The San Joaquin County General Plan intensity (people allowed per acre) is increased slightly (48 people) in the AIA with the proposed ALUCP.

As previously mentioned, the San Joaquin County RHNA study projected 6,075 new dwelling units throughout the unincorporated portions of the county. The reduction of 1.5 potential dwellings from the Lodi Airport AIA is only 0.03 percent of the total projected housing for San Joaquin County's unincorporated areas. Given the large amount of developable property outside the Lodi Airport AIA within the unincorporated San Joaquin County, the impact of reducing 1.5 potential dwellings is not anticipated to be significant. Therefore, the effect on the San Joaquin County General Plan density for Lodi Airport is less than significant.

The proposed ALUCP has no effect on the current San Joaquin County zoning. With respect to dwelling density, 0.1 more potential dwellings can be built within the AIA when compared to the 1993 ALUCP. The concentration of people allowed is also higher when the proposed and 1993 ALUCP are compared. Therefore, the proposed ALUCP for Lodi Airport has no impact on the San Joaquin County zoning.

Table IX.b 3						
Lodi Airport						
Zone	Dwelling Units			People		
	1993 ALUCP¹	Proposed ALUCP¹	Difference	1993 ALUCP²	Proposed ALUCP²	Difference
<i>San Joaquin County General Plan³</i>						
AIA	306.7	904.6	597.9	758.8	20,966.6	20,207.7
TPZ	847.6	248.5	-599.1	28,363.2	10,850.3	-17,512.9
OSZ	0.0	0.0	0.0	228.7	735.7	507.0
ITZ	0.0	0.4	0.4	0.0	564.4	564.4
ISZ	0.0	0.0	0.0	403.2	1,093.4	690.2
SSZ	0.7	0.0	-0.7	4,802.3	394.4	-4,407.9
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	1,155.0	1,153.5	-1.5	34,556.2	34,604.7	48.5
<i>San Joaquin County Zoning⁴</i>						
AIA	649.6	1,639.0	989.4	1,956.9	13,124.6	11,167.6
TPZ	1,399.4	406.8	-992.6	22,399.1	13,692.8	-8,706.3
OSZ	3.4	11.3	7.9	457.4	4,238.1	3,780.8
ITZ	0.0	10.1	10.1	0.0	4,230.8	4,230.8
ISZ	0.0	4.9	4.9	203.4	2,400.9	2,197.5
SSZ	19.8	0.3	-19.5	4,483.8	1,261.1	-3,222.7
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	2,072.2	2,072.3	0.1	29,500.6	38,948.3	9,447.7
¹ Total dwelling Units allowed in undeveloped areas within the Lodi Airport 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ² Total number of people (intensity) allowed in undeveloped areas within the Lodi Airport 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ³ San Joaquin County General Plan 2010, 1994. General Plan assumptions for San Joaquin County can be found on Table F1 at the end of this appendix. ⁴ Title 9, Development Title of San Joaquin County, 1995. Zoning assumptions for San Joaquin County can be found on Table F5 at the end of this appendix.						

Lodi (Precissi) Airpark

The results of the Lodi (Precissi) Airpark impact assessment can be found on **Table IX.b 4**. Lodi (Precissi) Airpark falls within the sphere of influence for the Cities of Lodi and Stockton as well as unincorporated San Joaquin County. The impact on the Lodi General Plan with proposed ALUCP indicates that there will be no impact to dwelling density or intensity within the AIA under the proposed ALUCP. Therefore, the proposed ALUCP for Lodi (Precissi) Airpark has no impact on the Lodi General Plan.

The impact on Stockton General Plan with proposed ALUCP indicates that there could be 1.5 more potential dwellings built within the AIA under the proposed ALUCP. Therefore, the proposed ALUCP for Lodi Airport has no impact on the Lodi General Plan. The concentration of people allowed is the same when the proposed and 1993 ALUCP are compared. Therefore, the proposed ALUCP for Lodi (Precissi) Airpark has no impact on the Stockton General Plan.

The impact on San Joaquin County General Plan with proposed ALUCP indicates that throughout the AIA, approximately 1.4 more potential dwellings could be built under the proposed ALUCP. The San Joaquin County General Plan intensity is unchanged within the AIA with the proposed ALUCP.

Table IX.b 4						
Lodi (Precissi) Airpark						
Zone	Dwelling Units			People		
	1993 ALUCP¹	Proposed ALUCP¹	Difference	1993 ALUCP²	Proposed ALUCP²	Difference
City of Lodi General Plan³						
AIA	1,264.7	2,833.6	1,568.9	7,188.5	7,647.8	459.3
TPZ	1,568.9	0	-1,568.9	459.3	0.0	-459.3
OSZ	0	0	0.0	0.0	0.0	0.0
ITZ	0	0	0.0	0.0	0.0	0.0
ISZ	0	0	0.0	0.0	0.0	0.0
SSZ	0	0	0.0	0.0	0.0	0.0
RPZ	0	0	0.0	0.0	0.0	0.0
Total	2833.6	2,833.6	0.0	7,647.8	7,647.8	0.0
Stockton General Plan⁴						
AIA	3,141.3	10,042.9	6,901.6	2,722.7	30,646.5	27,923.8
TPZ	9,221.4	2,321.1	-6,900.3	31,485.1	3,561.3	27,923.8
OSZ	0.5	1.5	1.0	0.0	0.0	0.0
ITZ	0.0	1.7	1.7	0.0	0.0	0.0
ISZ	0.0	1.9	1.9	0.0	0.0	0.0
SSZ	4.7	0.2	-4.5	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	12,367.9	12,369.3	1.4	34,207.8	34,207.8	0.0
San Joaquin County General Plan⁵						
AIA	25.4	219.6	194.2	0.0	0.0	0.0
TPZ	229.7	37.2	-192.5	0.0	0.0	0.0
OSZ	0.5	1.5	1.0	0.0	0.0	0.0
ITZ	0.0	2.1	2.1	0.0	0.0	0.0
ISZ	1.2	1.4	0.2	0.0	0.0	0.0
SSZ	4.8	0.1	-4.6	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	261.8	261.9	0.3	0.0	0.0	0.0
San Joaquin County Zoning⁶						
AIA	129.9	570.1	440.2	0.0	431.2	431.2
TPZ	618.2	186.1	-432.1	431.2	0.0	-431.2
OSZ	2.5	7.4	4.9	0.0	0.0	0.0
ITZ	0.0	10.5	10.5	0.0	0.0	0.0
ISZ	0.0	5.3	5.3	0.0	0.0	0.0
SSZ	26.4	1.1	-25.3	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	777.0	780.5	3.5	431.2	431.2	0.0
¹ Total dwelling Units allowed in undeveloped areas within the Lodi (Precissi) Airpark 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ² Total number of people (intensity) allowed in undeveloped areas within the Lodi (Precissi) Airpark 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ³ Lodi General Plan, 1991. General Plan assumptions for Lodi can be found on Table F4 at the end of this appendix. ⁴ Stockton General Plan, 2007. General Plan assumptions for Stockton can be found on Table F3 at the end of this appendix. ⁵ San Joaquin County General Plan 2010, 1994. General Plan assumptions for San Joaquin County can be found on Table F1 at the end of this appendix. ⁶ Title 9, Development Title of San Joaquin County, 1995. Zoning assumptions for San Joaquin County can be found on Table F5 at the end of this appendix.						

The proposed ALUCP has no effect on the current San Joaquin County zoning. With respect to dwelling density, 3.5 more potential dwellings can be built within the AIA when compared to the 1993 ALUCP. The concentration of people allowed is unchanged when the proposed and 1993 ALUCP are compared. Therefore, the proposed ALUCP for Lodi (Precissi) Airpark has no impact on the San Joaquin County Zoning.

New Jerusalem Airport

The results of the New Jerusalem Airport impact assessment can be found on **Table IX.b 5**. New Jerusalem Airport falls solely within the jurisdiction of San Joaquin County. The impact on the San Joaquin County General Plan with the proposed ALUCP indicates that throughout the AIA, approximately 1.5 more potential dwellings could be built under the proposed ALUCP. The San Joaquin County General Plan intensity remains unchanged within the AIA with the proposed ALUCP.

The proposed ALUCP has very little effect on the current San Joaquin County zoning. With respect to dwelling density, 1.5 fewer potential dwellings can be built within the AIA when compared to the 1993 ALUCP. The concentration of people allowed within the AIA is the same when the proposed and 1993 ALUCP are compared.

As previously discussed, the San Joaquin County RHNA projected 6,075 new dwelling units throughout the unincorporated portions of the county. The reduction of 1.5 potential dwellings from the New Jerusalem Airport AIA is only 0.02 percent of the total projected housing for San Joaquin County's unincorporated areas. Given the large amount of developable property outside the New Jerusalem Airport AIA within the unincorporated San Joaquin County, the impact of reduction 1.5 potential dwellings is not anticipated to be significant. Therefore, the effect on the San Joaquin County zoning dwelling density for New Jerusalem Airport is less than significant.

Table IX.b 5						
New Jerusalem Municipal Airport						
Zone	Dwelling Units			People		
	1993 ALUCP¹	Proposed ALUCP¹	Difference	1993 ALUCP²	Proposed ALUCP²	Difference
San Joaquin County General Plan⁶						
AIA	108.4	327.1	218.7	19,994.1	20,883.9	889.8
TPZ	255.8	36.6	-219.2	889.8	0.0	-889.8
OSZ	0.4	1.5	1.1	0.0	0.0	0.0
ITZ	0.0	2.0	2.0	0.0	0.0	0.0
ISZ	0.0	1.3	1.3	0.0	0.0	0.0
SSZ	2.6	0.3	-2.3	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	367.2	368.7	1.5	20,883.9	20,883.9	0.0
San Joaquin County Zoning⁷						
AIA	591.7	1,233.8	642.1	7,773.6	8169.9	396.3
TPZ	852.5	218.4	-634.1	396.3	0.0	-396.3
OSZ	2.1	7.4	5.3	0.0	0.0	0.0
ITZ	0.0	10.5	10.5	0.0	0.0	0.0
ISZ	0.0	5.3	5.3	0.0	0.0	0.0
SSZ	30.7	0.0	-30.7	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	1,476.9	1,475.4	-1.5	8,169.9	8,169.9	0.0
¹ Total dwelling Units allowed in undeveloped areas within the New Jerusalem Airport 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ² Total number of people (intensity) allowed in undeveloped areas within the New Jerusalem Airport 1993 and Proposed Airport Land Use Compatibility Plan safety zones. ³ San Joaquin County General Plan 2010, 1994. General Plan assumptions for San Joaquin County can be found on Table F1 at the end of this appendix. ⁴ Title 9, Development Title of San Joaquin County, 1995. Zoning assumptions for San Joaquin County can be found on Table F5 at the end of this appendix.						

Tracy Municipal Airport

The results of the Tracy Municipal Airport impact assessment can be found on **Table IX.b 6**. Tracy Municipal Airport falls within both the City of Tracy and unincorporated San Joaquin County. The impact on both Tracy General Plan with proposed ALUCP indicates that throughout the AIA, more potential dwellings and a higher intensity of people could be built under the proposed ALUCP. There is no difference between the dwelling density allowed within the AIA under the 1998 ALUCP and proposed ALUCP under the City of Tracy's current zoning. Therefore, the proposed ALUCP for Tracy Municipal Airport has no impact on the current Tracy General Plan or zoning.

The impact on San Joaquin County General Plan with proposed ALUCP indicates that throughout the AIA, approximately 8.4 more potential dwellings could be built under the proposed ALUCP. There is no impact on San Joaquin County General Plan intensity within the AIA with the proposed ALUCP. Therefore, the proposed ALUCP for Tracy Municipal Airport has no impact on the San Joaquin County General Plan.

The proposed ALUCP has very little effect on the current San Joaquin County zoning. With respect to dwelling density, 6.7 fewer potential dwellings can be built within the AIA when compared to the 1998 ALUCP. The concentration of people allowed is also slightly less (5.2) when the proposed and 1998 ALUCP are compared.

The reduction of 6.7 dwellings from the Tracy Municipal Airport AIA is only 0.1 percent of the total projected housing (6,075 from the 2008 RHNA) for San Joaquin County's zoned unincorporated areas. Given the large amount of developable property outside the Tracy Municipal Airport AIA within the unincorporated San Joaquin County, the impact of reducing 6.7 potential dwellings is not anticipated to be significant. The concentration of people allowed within the AIA is also slightly less when the proposed and 1998 ALUCP are compared. Therefore, the effect on the San Joaquin County zoning density and intensity for Tracy Municipal Airport is less than significant.

Table IX.b 6 Tracy Municipal Airport						
Zone	Dwelling Units			People		
	1998 ALUCP¹	Proposed ALUCP¹	Difference	1998 ALUCP²	Proposed ALUCP²	Difference
City of Tracy General Plan³						
AIA	17,233.2	16,989.8	-243.4	160,419.1	163,782.5	3,336.4
TPZ	623.8	995.4	371.6	62,905.5	68,256.0	5,350.5
OSZ	0.0	0.0	0.0	1,725.6	2,806.0	1,080.4
ITZ	0.0	0.0	0.0	0.0	6,425.2	6,425.2
ISZ	0.0	0.0	0.0	969.1	744.6	-224.5
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	17,857.0	17,985.2	128.2	226,019.3	242,014.3	15,995.0
City of Tracy Zoning^{4,5}						
AIA	657.2	657.2	0.0	NA	NA	NA
TPZ	1.3	1.3	0.0	NA	NA	NA
OSZ	0.0	0.0	0.0	NA	NA	NA
ITZ	NA	0.0	0.0	NA	NA	NA
ISZ	0.0	0.0	0.0	NA	NA	NA
RPZ	0.0	0.0	0.0	NA	NA	NA
Total	658.5	658.5	0.0	0.0	0.0	0.0
San Joaquin Count General Plan⁶						
AIA	3,512.5	3,511.0	-1.5	11,423.1	11,268.4	-154.7
TPZ	1.7	11.6	9.9	2,679.2	2,830.7	151.5
OSZ	0.0	0.0	0.0	0.1	2.9	2.8
ITZ	NA	0.0	0.0	0.0	0.2	0.2
ISZ	0.0	0.0	0.0	0.0	0.2	0.2
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	3,514.2	3,522.6	8.4	14,102.4	14,102.4	0.0
San Joaquin County Zoning⁷						
AIA	954.6	933.4	-21.2	3,003.2	3,003.2	0.0
TPZ	98.7	102.0	3.3	4,657.9	4,651.9	-6.0
OSZ	5.3	9.2	3.9	0.0	0.0	0.0
ITZ	NA	5.0	5.0	0.0	0.8	0.8
ISZ	1.3	3.6	2.3	0.0	0.0	0.0
RPZ	0.0	0.0	0.0	0.0	0.0	0.0
Total	1,059.2	1,053.2	-6.7	7,661.1	7,655.9	-5.2
¹ Total dwelling Units allowed in undeveloped areas within the Tracy Municipal Airport 1998 and Proposed Airport Land Use Compatibility Plan safety zones. ² Total number of people (intensity) allowed in undeveloped areas within the Tracy Municipal Airport 1998 and Proposed Airport Land Use Compatibility Plan safety zones. ³ City of Tracy General Plan, 2006. General Plan assumptions for Tracy can be found on Table F4 at the end of this appendix. ⁴ Tracy Municipal Code, Title 10, Planning and Zoning, Chapter 10.08, Zoning Regulations. Zoning assumptions used for Tracy are found on Table F6 at the end of this appendix. ⁵ Sufficient information within the commercial and industrial categories of the Tracy Zoning Ordinance is not available to calculate intensity of use (the number of people per acre). See Table F6. ⁶ San Joaquin County General Plan 2010, 1994. General Plan assumptions for San Joaquin County can be found on Table F1 at the end of this appendix. ⁷ Title 9, Development Title of San Joaquin County, 1995. Zoning assumptions for San Joaquin County can be found on Table F5 at the end of this appendix.						

Summary of Impacts to General Plans and Zoning

The proposed ALUCP does not reduce or inhibit the development beyond what is allowed in the 1993 ALUCP (1998 ALUCP for Tracy Municipal Airport) or proposed in the current general plans for the Cities of Lodi, Stockton, and Tracy. Current zoning within the City of Tracy is also unaffected by the proposed ALUCP. **Table IX.b 7** below summarizes the impacts on general plans for the Cities of Lodi, Stockton, and Tracy.

Table IX.b 7 Impact Summary						
Zone	Dwelling Units			People		
	1993 ALUCP¹	Proposed ALUCP	Difference	1993 ALUCP¹	Proposed ALUCP	Difference
Lodi General Plan						
Total	2,833.6	2,833.6	0.0	7,647.8	7,647.8	0.0
Stockton General Plan						
Total	24,294.1	24,296.0	1.9	43,796.3	43,796.3	0.0
Tracy General Plan						
Total	17,857.0	17,985.2	128.2	226,019.3	242,014.3	15,995.0
Tracy Zoning⁷						
Total	658.5	658.5	0.0	NA	NA	NA
San Joaquin County General Plan						
Total	5,479.2	5,488.6	9.4	162,506.8	162,555.3	48.5
San Joaquin County Zoning⁷						
Total	4,841.5	4838.1	-3.4	83,863.1	93,305.1	9,443.0
¹ 1998 ALUCP for Tracy Municipal Airport						
Source: Coffman Associates analysis						

The net impact on the San Joaquin County General Plan is that the proposed ALUCP allows nine more dwellings and no reduction in intensity within all six AIAs when compared to the 1993 ALUCP (1998 ALUCP for Tracy Municipal Airport). The net impact on the San Joaquin County zoning is four fewer potential dwellings would be allowed and no reduction in intensity within all six AIAs when compared to the 1993 ALUCP (1998 ALUCP for Tracy Municipal Airport).

As discussed previously, the total reduction of four potential dwellings from the AIA is only 0.06 percent of the total projected housing for San Joaquin County’s unincorporated areas. Given the large amount of developable property outside the AIAs within the unincorporated San Joaquin County, the impact of reducing the number of potential dwellings by five is not significant. Therefore, the net impact on the San Joaquin County zone density for proposed ALUCP is less than significant.

IX.c: Tthe ALUCP Update has no known conflicts with applicable habitat conservation or natural community conservation plans or policies adopted by San Joaquin County or the incorporated cities.

X. MINERAL RESOURCES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				<input checked="" type="checkbox"/>

X.a and **X.b:** See general comment on Page 3.

XI. NOISE				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				<input checked="" type="checkbox"/>

XI.a, XI.b, XI.c, and XI.d: The San Joaquin County Airport Land Use Compatibility Plan is intended to reduce the risk of exposure to aircraft noise by limiting residential densities and concentrations of people within the current and future 55 CNEL noise exposure contours at each airport. The plan does not directly affect the operation of the airports or the aircraft using the airports.

XI.e and XI.f: See General Comment on Page 3.

XII. POPULATION AND HOUSING				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>

See general comment on Page 3.

XIII. PUBLIC SERVICES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				<input checked="" type="checkbox"/>
b) Police protection?				<input checked="" type="checkbox"/>
c) Schools?				<input checked="" type="checkbox"/>
d) Parks?				<input checked="" type="checkbox"/>
e) Other public facilities?				<input checked="" type="checkbox"/>

XIII.a through **XIII.e**: See general comment on Page 3.

XIV. RECREATION				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				<input checked="" type="checkbox"/>

XIV.a and **XIV.b:** See general comment on Page 3.

XV. TRANSPORTATION/TRAFFIC				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?				<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?				<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				<input checked="" type="checkbox"/>

XV.a through **XV.g**: See general comment on Page 3.

XVI. UTILITIES AND SERVICE SYSTEMS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?				<input checked="" type="checkbox"/>

XVI.a through **XVI.g**: See general comment on Page 3.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				<input checked="" type="checkbox"/>

XVII.a and **XVII.c**: See general comment on Page 3.

XVII.b: The ALUCP Update will not have any significant cumulative impacts. The ALUCP Update necessitates only minor changes to the adopted general plan and zoning of San Joaquin County. In addition, the ALUCP Update will not directly or indirectly result in any cumulative restrictions on airport use. If anything, the effect of the plan will be to avoid the types of restriction to airport operations which often occur as a cumulative result of incompatible land use development in the airport vicinity.

DETERMINATION:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____	_____
Signature	Date
_____	_____
Printed Name	For

Supporting Documentation

The following tables provide the assumptions for calculating density and intensity impacts within each jurisdiction located within the proposed Airport Land Use Compatibility Plan Update safety zones. General plan assumption breakdowns are presented for San Joaquin County and the Cities of Lodi, Stockton, and Tracy (**Tables F1 to F4**). Zoning assumption breakdowns are presented for San Joaquin County and the City of Tracy (**Tables F5 and F6**). The municipal boundaries of the Cities of Lodi and Stockton currently do not fall within the proposed ALUCP safety zones. Therefore, zoning breakdowns are not provided for Lodi and Stockton.

TABLE F1						
San Joaquin County General Plan						
	Min. Building Lot	Building Coverage	# of Floors	Floor Area	People Per Sq. Ft.	People Per Acre
San Joaquin County General Plan (Intensity Calculation)						
COMMERCIAL						
Commercial Neighborhood	217,800	NA	2	50,000	100	500
Community Commercial	435,600	NA	3	100,000	100	100
Office Commercial	NA	60%	3	78,408	100	784
Commercial General	NA	60%	3	78,408	100	784
Commercial Freeway	NA	60%	3	78,408	100	784
Commercial Rural Ser	NA	60%	2	52,272	100	523
Commercial Recreation	NA	NA	NA	NA	NA	500
INDUSTRIAL						
Industrial Limited	NA	NA	NA	NA	NA	25
Industrial General	NA	NA	NA	NA	NA	20
Industrial Truck	NA	NA	NA	NA	NA	NA
San Joaquin County General Plan (Density Calculation)						
RESIDENTIAL						
	Dwellings Per Acre					
Rural Residential	1					
Very Low Density Residential	2.5					
Low Density Residential	7.5					
Medium Density Residential	12.5					
Medium-High Residential	18.8					
High Density	50					
General Agriculture	.05					
Limited Agriculture	.02					
Ag-Urban Reserve	.05					
Mixed Use	12.5					
Source: San Joaquin County General Plan 2010, 1994						

TABLE F2				
Lodi General Plan				
	Floor Area Ration (%)	Floor Area	People Per Sq. Ft.	People Per Acre
Lodi General Plan (Intensity Calculation)				
COMMERCIAL				
Neighborhood Community	30%	13,068	100	130.7
General	30%	13,068	100	130.7
Downtown	150%	65,340	100	653.4
INDUSTRIAL				
Light	40%	17,424	100	174.2
Heavy	40%	17,424	100	174.2
Industrial Reserve	40%	17,424	100	174.2
Lodi General Plan (Density Calculation)				
RESIDENTIAL				
	Dwelling Units Per Acre			
Low Density	5			
Medium Density	12			
High Density	24			
Eastside	5			
Planned	7			
Planned Residential Reserve	7			
Source: Lodi General Plan, 1991				

TABLE F3				
Stockton General Plan				
	Floor Area Ration (%)	Floor Area	People Per Sq. Ft.	People Per Acre
Stockton General Plan (Intensity Calculation)				
VILLAGE OFFICE/COMMERCIAL				
Administrative Professional	60%	26,136	100	261.4
Commercial	40%	17,424	100	174.2
COMMERCIAL/INDUSTRIAL/MIXED USE				
Commercial	30%	13,068	100	130.7
Industrial	60%	26,136	100	261.4
Institutional	50%	21,780	100	217.8
Mixed Use	50%	21,780	100	217.8
Open Space Agriculture	10%	4,356	100	43.6
Parks and Recreation	20%	8,712	100	87.1
Stockton General Plan (Density Calculation)				
RESIDENTIAL			Dwelling Units Per Acre	
Low Density Residential			8.7	
Commercial			29	
Institutional			1	
Mixed use			2.9 (per 100 acres)	
Open Space			1 (per 40 acres)	
Parks and Recreation			1	
VILLAGE RESIDENTIAL			Dwelling Units Per Acre	
Residential Estate			1	
Low Density Residential			5.7	
Medium Density Residential			10.6	
High Density Residential			25	
Administrative Professional			25	
Commercial			25	
Mixed Use			29	
VILLAGE RESIDENTIAL MIX			Percentage	
Residential Estate			5%	
Low Density Residential			75%	
Medium Density Residential			15%	
High Density Residential			5%	
			100%	
Source: Stockton General Plan, 2007				

TABLE F4					
City of Tracy General Plan					
	Floor Area Ratio	Lot Size	People Per Sq. Ft.	People Per Acre	Dwelling Units
Tracy General Plan (Intensity Calculation)					
Commercial	1	43,560	100	436	25
Office	1	43,560	100	436	NA
Downtown	1	43,560	100	436	50
Village Center	1	871,200	100	436	25
Industrial	0.5	43,560	100	218	
Urban Reserve		% of Total Land	D/U per acre/FAR	People Per Sq. Ft.	People Per Acre
Urban Reserve 8					
Residential Very Low		43%	1.50	100	NA
Residential Low		27%	4.35	100	NA
Commercial		2%	0.30	100	131
Industrial		25%	0.40	100	174
Park		2%			
Urban Reserve 9					
Residential Low		35%	4.35	100	NA
Residential Medium		50%	9.00	100	NA
Commercial		4%	0.30	100	131
Village Center		4%	0.30	100	131
Park		7%	NA	NA	NA
Urban Reserve 11					
Industrial		100%	0.40	100	174
Urban Reserve 16					
Residential Low		12%	4.35	100	NA
Residential Medium		39%	9.00	100	NA
Residential High		37%	18.75	100	NA
Park		11%	NA	NA	NA
Urban Reserve 17					
Residential Low		15%	4.35	100	NA
Residential Medium		50%	9.00	100	NA
Residential High		25%	18.75	100	NA
Park		10%	NA	NA	NA
Tracy General Plan (Density Calculation)					
RESIDENTIAL					
				Dwellings Per Gross Acre	
Residential Very Low				2	
Residential Low				5.8	
Residential Medium				12	
Residential High				25	
Source: City of Tracy General Plan, 2006					

TABLE F5 San Joaquin County Zoning					
	Min. Building Lot	Building Coverage	Floor Area	People Per Sq. Ft.	People Per Acre
San Joaquin County Zoning (Intensity Calculation)					
COMMERCIAL					
Commercial Limited	43,560	25%	10,890	100	108.9
Commercial Neighborhood	43,560	60%	26,136	100	261.4
Community Commercial	43,560	60%	26,136	100	261.4
Office Commercial	5,000	60%	3,000	100	261.4
Commercial General	43,560	60%	26,136	100	261.4
Commercial Freeway	43,560	60%	26,136	100	261.4
Commercial Rural Ser	5,000	60%	3,000	100	261.4
Commercial Recreation	43,560	50%	21,780	100	217.4
Crossroads Commercial	5,000	60%	3,000	100	261.4
INDUSTRIAL					
Industrial Warehouse	87,120	40%	34,848	100	174.2
Industrial Park	10,000	60%	6,000	100	261.4
Industrial Limited	10,000	60%	6,000	100	261.4
Industrial General	10,000	60%	6,000	100	261.4
Industrial Truck	43,560	50%	21,780	100	217.8
	Building Lot	# of Dwellings Includes Employee Housing		Dwelling Per Sq. Ft.	
San Joaquin County Zoning (Density Calculation)					
AGRICULTURE					
Ag General					
AG-20	871,200		5		174,240
AG-40	1,742,400		5		348,480
AG-80	3,484,800		5		696,960
AG-160	6,969,600		5		1,393,920
Ag Limited					
AG-5	217,800		5		43,560
AG-10	435,600		5		87,120
Ag Urban Reserve					
AG-20	871,200		5		174,240
AG-40	1,742,400		5		348,480
AG-80	3,484,800		5		696,960
AG-160	6,969,600		5		1,393,920
Ag Resource Management					
AG-20	871,200		5		174,240
AG-40	1,742,400		5		348,480
AG-80	3,484,800		5		696,960
AG-160	6,969,600		5		1,393,920
RESIDENTIAL					
			Dwellings Per Gross Acre		
Rural Residential			1		
Very Low Density Residential			2		
Low Density Residential			6		
Medium Density Residential			10		
Medium-High Residential			15		
High Density			50		
Mixed Use			50		
Source: Title 9, Development Title of San Joaquin County, 1995					

TABLE F6				
City of Tracy Zoning				
	Min. Building Lot	Building Coverage	Floor Area	People Per Acre
Tracy Zoning (Intensity Calculation)				
COMMERCIAL				
Commercial Shopping	261,360	NA	NA	NA
Neighborhood Shopping	87,120	NA	NA	NA
Central Business District	NA	NA	NA	NA
Gen. Highway Commercial	NA	NA	NA	NA
INDUSTRIAL				
Light Industrial	NA	NA	NA	NA
Heavy Industrial	NA	NA	NA	NA
Highway Service	NA	NA	NA	NA
		Building Lot	# of Dwellings	Dwelling Per Acre
Tracy Zoning (Density Calculation)				
AGRICULTURE				
Agriculture		435,600	1	0.1
RESIDENTIAL				
		Dwellings Per Gross Acre		
Residential Estate			2.9	
Low Density Residential			7.8	
Medium Density Cluster			12.4	
Medium Density Residential			7.3	
High Density Residential			7.3	
Residential Mobile Home			18.2	
Source: Tracy Municipal Code, Title 10, Planning and Zoning, Chapter 10.08, Zoning Regulations				



Appendix G

Negative Declaration



SAN JOAQUIN COUNCIL OF GOVERNMENTS

555 E. Weber Avenue • Stockton, California 95202

209.468.3913 • 209.468.1084 (fax)

www.sjcog.org

June 25, 2009

NEGATIVE DECLARATION

FINAL

The San Joaquin Council of Governments has reviewed the proposed project described below to determine whether it could have a significant effect on the environment. "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

NAME OF PROJECT: Update to the San Joaquin Airport Land Use Compatibility Plan (ALUCP)

PROJECT DESCRIPTION: The San Joaquin ALUCP provides policies for use by the San Joaquin County Airport Land Use Commission when evaluating the compatibility between proposals for land use development in the vicinity of all public-use airports in or adjacent to San Joaquin County and the operations of these airports. The local agencies that have jurisdiction over land uses within the areas covered by this plan include San Joaquin County, and the cities of Lodi, Stockton, and Tracy. The plan is prepared in accordance with the requirements of the *California State Aeronautics Act*.

PROJECT LOCATION & ENVIRONMENTAL SETTING: In accordance with the California state laws, the ALUCP update has been prepared for the following public use airports within and near San Joaquin County (See Attached Map):

- *Kingdon Executive Airport:* Surrounded by agricultural lands with scattered residential dwellings. The nearest concentration of residential development is located south of the airport approximately two miles.
- *Lodi Airport:* Low-density residential dwellings are located north and east of the airport. Small clusters of commercial/industrial uses are located northeast and south of the

airport. Agricultural lands and scattered residential dwellings can be found south and west of the airport.

- *Lodi Precissi Airpark*: This airport is surrounded by agricultural lands with clusters of residential dwellings in all quadrants. Small clusters of commercial/industrial uses can be found north and east of the airport.
- *New Jerusalem Airport*: Agricultural land completely surrounds this airport. There is a small concentration of residential dwellings located approximately one mile southwest of the airport.
- *Tracy Municipal Airport*: This airport is located on the southwestern edge of the City of Tracy. Industrial uses are located immediately adjacent to the airport in all quadrants. A dense concentration of residential dwellings is located approximately one-half mile to the north.
- *Byron Airport*: The portion of the airport influence area within San Joaquin County is a mix of agricultural and low density residential uses associated with the Mountain House development.

APPLICANT CONTACT INFORMATION: Copies of the Negative Declaration, the Initial Study, and the Draft ALUCP may be obtained from the San Joaquin Council of Governments, 555 E. Weber Avenue, Stockton, CA 95202, (209) 468-3913.

FINDINGS AND DETERMINATION

The San Joaquin Council of Governments finds that, based on the completed Initial Study (attached), there is no substantial evidence the project described above will have a significant impact on the environment. Therefore, the following environmental determinations have been made:

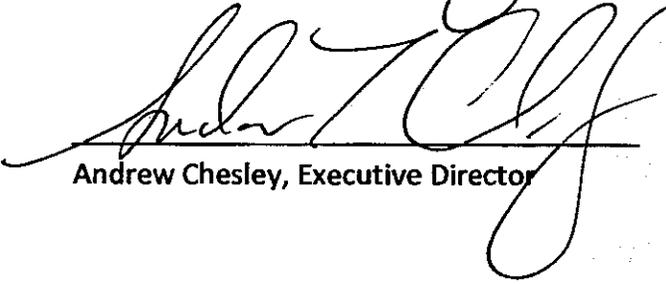
- 1. Based on the whole record (including the Initial Study and any supporting documentation), the San Joaquin Council of Governments has determined that there is no substantial evidence that the project will have a significant effect on the environment.**
- 2. The Negative Declaration, with its supporting documentation, reflects the independent judgment and analysis of the lead agency, which is the San Joaquin Council of Governments.**

The basis for this determination is that there are no physical construction projects that would result from the adoption of the San Joaquin County ALUCP update or from subsequent implementation of the land use restrictions and policies. In addition, the proposed ALUCP does not reduce or inhibit the development beyond what is allowed in the 1993 ALUCP (1998 ALUCP for Tracy Municipal Airport) or proposed in the current general plans for the Cities of Lodi, Stockton, and Tracy. Current zoning within the Cities of Lodi, Stockton, and Tracy are also unaffected by the proposed ALUCP. If there are substantial changes that alter the character or impacts of the proposed project, another environmental impact determination will be necessary.

Circulated on: March 27, 2009


Andrew Chesley, Executive Director

Adopted on: June 25, 2009


Andrew Chesley, Executive Director

Attachments:

- A. Public Notice
- B. Regional Location Map
- C. Public Review Distribution; Comments Received and Response

PUBLIC REVIEW

- (x) Draft document referred for comments on March 27, 2009.
- () No comments were received during the public review period.
- () Comments were received but did not address the draft Negative Declaration findings or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.
- (x) Comments addressing the findings of the draft Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public review period. The letters and responses follow (see Response to Comments, attached).



SAN JOAQUIN COUNCIL OF GOVERNMENTS

555 E. Weber Avenue • Stockton, California 95202

209.468.3913 • 209.468.1084 (fax)

www.sjcog.org

March 27, 2009

PUBLIC NOTICE

INTENT TO ADOPT A NEGATIVE DECLARATION

The San Joaquin Council of Governments has completed and independently reviewed an Initial Study and has prepared a draft Negative Declaration for the update to the county's Airport Land Use Compatibility Plan (ALUCP).

Project Title: ALUCP Update

Project Sponsor: San Joaquin Council of Governments (SJCOCG)

Project Description: The San Joaquin ALUCP provides policies for use by the San Joaquin County Airport Land Use Commission when evaluating the compatibility between proposals for land use development in the vicinity of all public-use airports in or adjacent to San Joaquin County and the operations of these airports. The local agencies that have jurisdiction over land uses within the areas covered by this plan include San Joaquin County, and the cities of Lodi, Stockton, and Tracy. The plan is prepared in accordance with the requirements of the *California State Aeronautics Act*.

Project Location: The environs of five public-use airports in San Joaquin County and one public use airport in nearby Contra Costa County: Kingdon Executive Airport, Lodi Airport, Lodi Precissi Airpark, New Jerusalem Airport, Tracy Municipal Airport, and Byron Airport. The regions included within the planning area for each airport's environs vary with the size of the airport runways and approach procedures. Although Stockton Metropolitan Airport (SMA) is a public use airport and is therefore subject to ALUC policies, San Joaquin County is currently processing an update to SMA's Master Plan. After the Master Plan is adopted, SJCOCG will amend the ALUCP to incorporate elements of the new Master Plan and develop the new safety and compatibility zones specific to SMA.

Significant Environmental Impacts: There is no substantial evidence that the project will have a significant effect on the environment.

Public Comment Period: All interested persons are invited to comment on the Negative Declaration pursuant to the provisions of CEQA. The comment period is 30 days starting on March 27, 2009, and ending on April 27, 2009. Comments must be received by **noon on April 27th** and must be submitted to SJCOG at the address noted below.

Lead Agency/Contact Person:

San Joaquin Council of Governments
Laura Brunn, Associate Regional Planner
555 E. Weber St.
Stockton, CA 95202

Phone: (209) 468-3913

Fax: (209) 468-1084

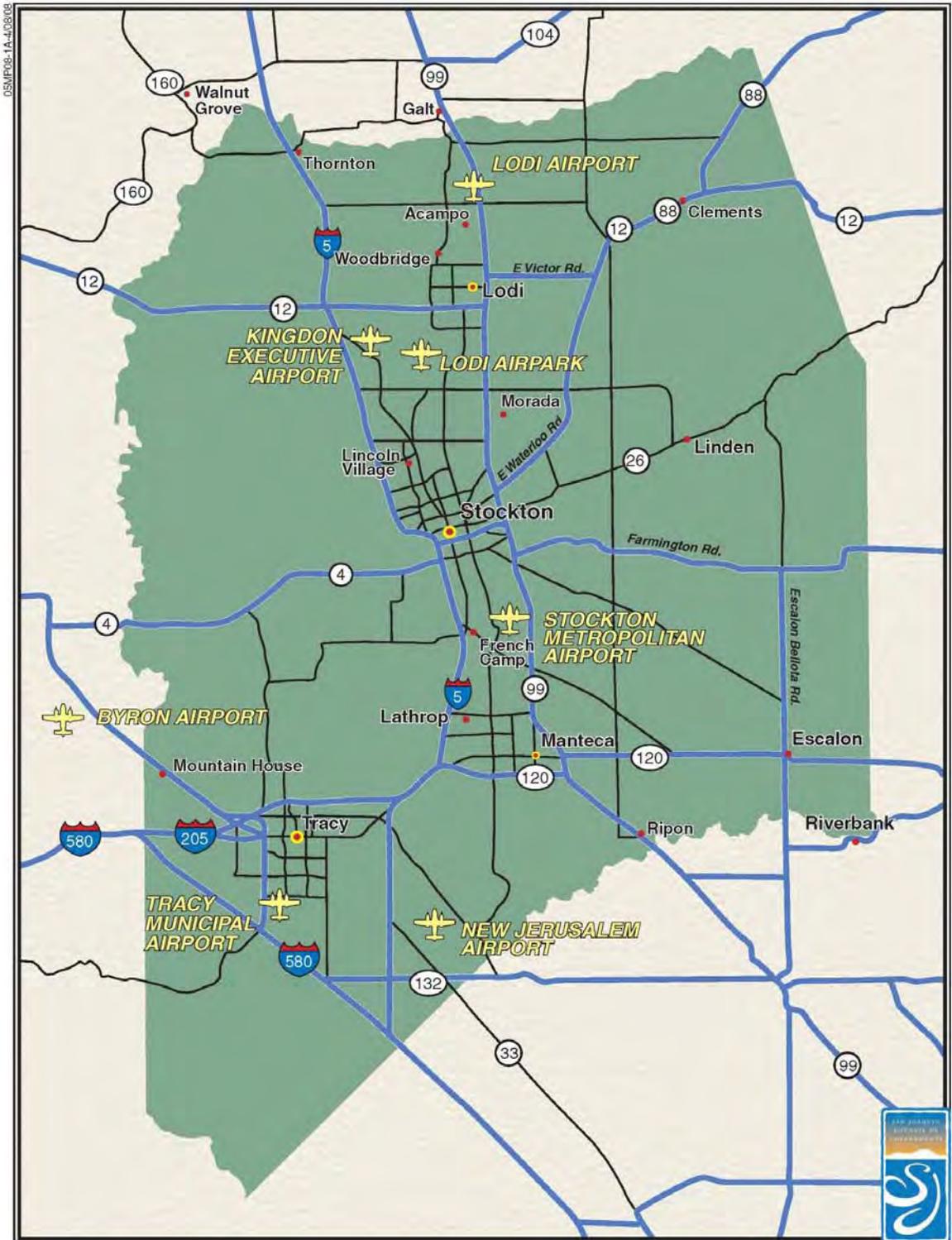
E-mail: brunn@sjcog.org

Comments may be delivered to SJCOG in person, faxed, mail, or through email.

The project file is available for review during regular office hours at the SJCOG Regional Office located at 555 E. Weber in downtown Stockton. The document may also be viewed and downloaded directly at <http://www.coffmanassociates.com/public/SanJoaquin/>. A CD containing the draft documents (ND/IS and ALUCP) may be requested from Laura Brunn at the above contact.

Public Hearings: This is not a notice of public hearing. Future public hearings regarding this project will be duly noticed as required by law.

ATTACHMENT B
REGIONAL LOCATION MAP



ATTACHMENT C

PUBLIC REVIEW DISTRIBUTION: COMMENTS RECEIVED and RESPONSES

PUBLIC REVIEW DISTRIBUTION

Draft copies or notice of this Negative Declaration were distributed to:

- California State Clearinghouse
- San Joaquin County
- City of Lodi
- City of Stockton
- City of Tracy
- City of Manteca
- City of Lathrop
- City of Escalon
- City of Ripon
- Byron Airport
- Kingdon Executive Airport
- Lodi Airport
- Lodi (Precissi) Airpark
- New Jerusalem Airport
- Tracy Municipal Airport
- Airport Land Use Compatibility Plan Update Planning Advisory Committee
- Ms. Mamie Starr
- Ms. Celeste Garamendi
- Mr. Denny Presley
- Mr. Chris Long
- Mr. Tom Truszkowski
- Mr. Derek van Hoften
- Stockton Record
- Lodi Sentinel
- Tracy Press
- Latino Times

RESPONSE TO COMMENTS

City of Tracy Daniel G. Sodergren (April 23, 2009)

City Comment 1: The City of Tracy has submitted prior comments on the Draft ALUCP dated August 14, 2008, November 5, 2008 and February 26, 2009, and will be sending additional comments on the proposed ALUCP in a separate letter. In addition, the City provided information to you regarding the December, 2008 City Council approval of an EIR, General Plan Amendment, Specific Plan and Development Agreement regarding the Ellis property as part of the environmental review process for the project. The Ellis project could be affected by the proposed ALUCP.

Response to City Comment 1: August 14, 2008, November 5, 2008, and February 26, 2009 correspondence has been received. Additional correspondence from Mr. Rod Buchanan was received on April 27, 2009. Information on the City Council approval of an EIR, General Plan Amendment, Specific Plan, and Development Agreement regarding the Ellis property has also been received.

Consistent with the Draft Airport Land Use Compatibility Plan (ALUCP) and at the request of the City of Tracy the Ellis Specific Plan is recognized by the ALUCP Update and Initial Study as an

existing land use because it has a development agreement in place (see page 2-23 in Chapter Two of the ALUCP Update). Therefore, the updated ALUCP zones will have no impact on the Ellis Specific Plan. The prior correspondence received was discussed at the Airport Land Use Plan Advisory Group meetings and in meetings with the City of Tracy staff as noted in this Staff Report.

City Comment 2: As you know, an agency may not adopt a negative declaration, and must instead prepare an Environmental Impact Report ("EIR"), if it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact. (See *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68; Cal. Code Regs" tit. 14, § 15064(f)(1),) When engaging in this analysis, the agency must consider the environmental impacts of the project as a whole.

Response to City Comment 2: Airport Land Use Commissions (ALUC) are encouraged to review and, when appropriate, to update their compatibility plans at least every five years. With the exception of Tracy Municipal Airport (amended as part of their 1998 Airport Master Plan), the compatibility plans for the public use airports have not been updated since 1993. The ALUC timed the start of the compatibility plan update to coincide with Stockton Metropolitan Airport's Master Plan Update. Delays (believed to be 18 to 24 months) beyond the ALUC's control resulted in dropping the Stockton Metropolitan Airport from the current compatibility plan update. As described in the ALUCP the ALUC has elected to proceed with the update of Lodi Airport, Lodi Precissi Airpark, New Jerusalem, Kingdon Executive, Tracy Municipal Airport, and the portion of Byron Airport's compatibility zones that extend into San Joaquin County because information is available to complete and update their respective ALUCPs. When Stockton Metropolitan Airport has completed the update to their airport master plan, The ALUCP will be amended and updated to include the Stockton Metropolitan Airport and a separate initial study with the appropriate CEQA document will be prepared. Until an updated ALUCP is completed for Stockton Metropolitan Airport, development proposals in the Stockton Metropolitan Airport Influence Area will continue to be reviewed under the current 1993 ALUCP. This is similar to the approach the City of Tracy took when updating the Master Plan and ALUCP zones for Tracy Municipal Airport in 1998.

The ALUCP update for Stockton Metropolitan Airport is considered a separate project. There is a lack of meaningful information which the ALUC could rely on to form a project description as development plans for the Stockton Metropolitan Airport are speculative at this time. In addition, the development is not a "crucial element" for updating and implementing the ALUCP for the other public use airports. Separate evaluation of each airport is permitted by the Handbook and, under CEQA, as the Stockton Metropolitan Airport development is unknown at this time and not the Project being evaluated, it is not considered project segmentation.

City Comment 3: In this case, by excluding consideration of the Stockton Metropolitan Airport ("SMA") in its analysis, the DND fails to consider the effects of the impact of the project as a whole. Additionally, the ALUCP may result in significant environmental effects that have not been adequately addressed in the DND

Response to City Comment 3: See response to Comment 2. Stockton Metropolitan Airport is not a crucial element, will not result in impacts to the ALUCP update for the other public use airports, and will have no bearing on the analysis for the update on the other public use airports. The City of Tracy's comments are noted and shall be considered when and if it prepares an update for the Stockton Metropolitan Airport. As Tracy is a responsible jurisdiction with respect to its boundaries, its comments are noted. In addition, the commenter provided no significant environmental information or analysis which the ALUC could rely on to respond or consider. The ALUC will continue to work with the City of Stockton to address its update of the Stockton Metropolitan Airport.

City Comment 4: The DND finds, in part, that the ALUCP will not have a significant effect on the environment because "there are no physical construction projects that would result from the adoption of the San Joaquin County ALUCP update or from subsequent implementation of the land use restrictions and policies." (DND, p. 2.) Lack of physical construction alone is not a basis for concluding that there are no significant impacts of the project. (Cal. Code Regs., tit. 14, § 15064.)

Response to City Comment 4: Please see the Initial Study for the analysis of potential dwelling unit and nonresidential intensity impacts for the Tracy Municipal Airport environs (pages F-21 to F-23). The Initial Study and the Negative Declaration provides detailed analysis with respect to the Project and after consideration of the Project as a whole concludes that there is not a significant effect on the environment.

City Comment 5: Under CEQA, a public agency may not divide a single project into smaller individual subcomponents in order to avoid responsibility for considering the environmental impacts of the project as a whole. (See *Orinda Association v. Board of Supenisors* (1986) 182 Cal.App.3d 1145.) By severing off the SMA, and dividing the project into two, the DND fails to analyze the project as a whole as required under CEQA. While clearly it is more administratively convenient to wait until the update to the SMA Master Plan is complete, administrative convenience does not excuse compliance with CEQA.

Response to City Comment 5: See response to Comments 2 and 3.

City Comment 6: In section IX.b of the DND, there is a discussion of the impacts that the ALUCP will have on the number of potential dwelling units that may be built within a particular jurisdiction. Without explanation or analysis, the DND simply concludes that in each jurisdiction the changes are "...not anticipated to be significant." This is insufficient for two reasons. First, mere conclusions as to the absence of the possibility of a significant effect are inadequate to support a negative declaration. (See *Citizens Association for Sensible Development of Bishop Area v County of Inyo* (1985) 172 Cal.App.3d 151, 171.) Second, there is no discussion or analysis of the cumulative effects the ALUCP may have on the environment by allowing more dwelling units to be built and/or by displacing dwelling units.

Response to City Comment 6: The role of the ALUCP seeks to protect the public from the adverse effects of airport noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. The ALUCP does not propose or encourage development. Therefore, the ALUCP does not allow more dwelling units than what is provided for in each jurisdiction's general plan and zoning ordinance.

The Initial Study provides a breakdown of the potential impacts to dwelling units when the current and proposed safety zone restrictions are applied to each jurisdiction's general plan and zoning. For the City of Tracy, the dwelling unit impact can be found on Table IX.b6 on page F22 of the Initial Study. A summary of all the impacts to potential dwellings and nonresidential intensity can be found on Table IX.b7 on page F-23.

City Comment 7: It is acknowledged that, under CEQA, a public agency is not always "required to make a *detailed* analysis of the impacts of a project on [future] housing and growth." (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.AppA1h 342,369.) However, some analysis is required. Especially in this case, where the cumulative effects of the ALUCP on housing displacement and/or growth may be significant.

Response to City Comment 7: The Initial Study provides a breakdown of the potential impacts to dwelling units when the current and proposed safety zone restrictions are applied to each jurisdiction's general plan and zoning. For the City of Tracy, the dwelling unit impact can be found on Table IX.b6 on page F22 of the Initial Study. A summary of all the impacts to potential dwellings and nonresidential intensity can be found on Table IX.b7 on page F-23.

City Comment 8: The DND includes several inaccuracies relating to potential conflicts between the ALUCP and the City of Tracy General Plan and Zoning.

Response to City Comment 8: See responses to Comments 9, 10, 13, and 14.

City Comment 9: The 1993 ALUCP is not the standard by which restrictions on development should be measured. Since 1993, the Commission has adopted a 1998 amendment to the 1993 Plan, based on the City of Tracy Airport Master Plan.

Response to City Comment 9: The data and analysis for the 1998 ALUCP for the Tracy Municipal Airport was relied on in the Initial Study. Table IX.b6 on page F-22 and the corresponding text on pages F-21 and F-23 incorrectly cite the 1993 ALUCP. Please see attached errata sheet.

City Comment 10: Also, in December, 2008, the City of Tracy amended its General Plan and adopted a Specific Plan (effectively imposing zoning requirements) on the Ellis property. These actions were based on the 1998 amendment to the ALUCP then in effect. Neither the 1998 amendment nor the Tracy General Plan, Specific Plan or Development Agreement are acknowledged or reflected in the proposed ALUCP.

Response to City Comment 10: The Ellis Specific Plan is recognized by the Draft ALUCP Update and Initial Study as an existing land use because it has a development agreement in place (see page 2-23 in Chapter Two of the ALUCP Update).

The 1998 ALUCP for Tracy Municipal Airport was used in the Initial Study. Table IX.b6 on page F22 and the corresponding text on pages F-21 and F-23 incorrectly cite the 1993 ALUCP. Please see attached errata sheet.

City Comment 11: The proposed ALUCP does, in fact, inhibit development beyond what is allowed in the 1993 ALUCP as amended in 1998 and is in conflict with the current General Plan and Specific Plan/zoning for the City of Tracy.

Response to City Comment 11: See responses to Comments 6, 9 and 10.

City Comment 12: Again, the 1993 ALUCP is not the correct standard. It ignores the 1998 amendment to the ALUCP. Also, it is untrue that the proposed ALUCP has no impact on the current Tracy General Plan or zoning. The proposed ALUCP ignores the City's General Plan and zoning (through the Specific Plan) at the Ellis property by (1) its silence regarding these Council actions, and (2) by showing maps with cone areas which conflict with the uses approved under those City Plans.

Response to City Comment 12: See responses to Comments 6, 9 and 10.

City Comment 13: This failure to recognize the 1998 amendment and the City's recent General Plan Amendment and Specific Plan (in the ALUCP text and maps) result in a conflict between the City's Plans and the proposed ALUCP and could have the affect of limiting proposed residential development or limiting development of a planned aquatic center, or both. The proposed ALUCP creates new land use compatibility cones and restrictions that are inconsistent with the approved General Plan, Ellis Specific Plan and Development Agreement. As a result, under Government Code section 65302.3, the City could be required to amend its General Plan and Specific Plan or adopt findings (if even possible) to override the Commission's action. A generic statement that "no changes to existing uses are proposed" (DND, page F-13) is insufficient assurance that the proposed ALUCP will not have significant repercussions in Tracy.

Response to City Comment 13: See responses to Comments 6, 9 and 10. The data and analysis for the 1998 ALUCP for Tracy Municipal Airport was relied on in the Initial Study. Table IX.b6 on page F22 and the corresponding text on pages F-21 and F-23 incorrectly cite the 1993 ALUCP. Please see attached errata sheet.

The Ellis Specific Plan is recognized by the ALUCP Update and Initial Study as an existing land use because it has a development agreement in place (see page 2-23 in Chapter Two the of

ALUCP Update). Therefore, the updated ALUCP zones will have no impact on the Ellis Specific Plan. The remaining portions of the Tracy General Plan will not be impacted by the ALUCP Update (see Table IX.b.6 of the Initial Study).

City Comment 14: There is no such thing as Urban Reserve 10. It has been replaced with "TR-Ellis", "Commercial" and "Village Center" with the adoption of the City's General Plan Amendment and Ellis Specific Plan and Development Agreement.

Response to City Comment 14: The Urban Reserve information will be removed from the table. Please see attached errata sheet.

City Comment 15: Given these concerns, the City requests that an EIR be prepared for the ALUCP in order to accurately and completely analyze its potential effects on the environment. The City also requests that it be notified of the time and place of any public hearings that may be scheduled to consider the ALUCP and/or the DND so that it may participate further.

Response to City Comment 15: See Response to City Comments 2 and 3. Comment noted. The public hearing is anticipated to be held on May 28, 2009 during the Airport Land Use Commission meeting at 5 p.m.

City of Tracy Parks and Community Services Department Rod Buchanan (April 27, 2009)

CSD Comment 1: Previous City Comment #10: It appears that the Hybrid zone length was adjusted to reflect an adjustment of the length to a midpoint between the Small GA runway and Medium GA runway zones. However, there does not appear to be a similar adjustment methodology to the width and we request that this adjustment be made.

In your response you indicate that the width of the outer approach departure zone for the Small General Aviation runway and Medium General Aviation runway safety zones are the same (1,000 feet) and that a reduction in width is not warranted. However, the 1992 Airport Layout Plan and most recent City General Plan are consistent with a hybrid approach relating to the width, as well as the length, of the outer approach departure zone. City staff still requests that a reduction in width is warranted to be compatible with the 1992 Airport Master Plan and the City General Plan.

Response to CSD Comment 1: The current width of the outer approach/departure zone for Tracy Municipal Airport is approximately 500 feet, one half of the distance suggested in medium general aviation runway and small general aviation runway safety standards of 1,000 feet. We believe it is prudent to leave the outer approach/departure zone width at 1,000 feet given the available runway length, number of aircraft operations, lack of guidance from the City of Tracy on how the current zones were determined, and lack of provisions in *California Airport*

Land Use Planning Handbook (January 2002) for reducing the size of the outer approach/departure zone beyond the suggest guidelines.

Surland CHEVALIER, ALLEN & LICHMAN, LLP (May 1, 2009)

Surland Comment 1: As a threshold matter, Surland takes this opportunity to express its gratitude to the San Joaquin County Airport Land Use Commission ("ALUC") for denominating the Ellis Specific Plan an existing use.

Response to Surland Comment 1: Comment noted.

Surland Comment 2: Surland renews its question concerning the basis for Table 3A3 of the Draft ALUCP, which bases non-residential intensity limitations only on a maximum per single acre rather than an average over the entire zone. Surland has previously commented on this issue in a letter to Mr. Dana Cowell on November 13,2008, and in its February 6, 2009, letter to David Fitz, and incorporates those letters by reference. Although the ALUC responded to our most recent letter regarding this issue, the ALUC has failed to explain why Table 3A still departs substantially from its counterpart in the Handbook, Table 9C (Handbook, p. 9-47), on at least five important parameters: (1) it does not define "single acre;" (2) it restricts only a "maximum number" of persons per acre instead of an average; (3) it does not distinguish between urban and non-urban categories of development in establishing non-residential intensities; (4) it fails to follow Handbook guidance on the definition of "stadiums;" and (5) it fails to apply the provision for "special risk reduction building design" features.

Response to Surland Comment 2: The maximum intensity for each zone in Table 3A is based upon Table 9C of the *California Airport Land Use Planning Handbook* (January 2002). The maximum nonresidential intensity is calculated by multiplying the Rural/Suburban setting for each zone by the maximum number of people per single acre multiplier (example: for Zone 4, the Rural/Suburban maximum nonresidential intensity is 60 multiplied by the maximum number of people per single acre multiplier 3. This results in a maximum number of people per single acre of 180). The current ALUCP allows 60 to 100 persons per acre. It should also be noted that the calculation for the maximum number of people per acre is the same methodology adopted by the City of Tracy and the Airport Land Use Commission in 1998 for the Tracy Municipal Airport.

Tracy Municipal Airport Current and Proposed Airport Land Use Compatibility Plan Nonresidential Intensity Comparison		
Zone	Current Intensity Allowed ¹	Proposed Intensity Allowed ¹
Zone 1 (Runway Protection Zone)	10	0
Zone 2 (Inner Approach/Departure Zone) ²	40-60	50
Zone 3 (Inner Turning Zone)	N/A ⁴	120
Zone 4 (Outer Approach/Departure Zone) ³	60-100	180
Zone 5 (Sideline Safety Zone)	N/A ⁴	160

Zone 6 (Airport Property)	N/A ⁴	No Limit
Zone 7 (Traffic Pattern Zone)	150	450
Zone 8 (Airport Influence Area)	No Limit	No Limit
¹ Maximum person per acre allowed ² Current plan zone is called Inner Approach Zone ³ Current plan zone is called Outer Approach Zone ⁴ Inner Turning, Sideline Safety, and Airport Property zones not included in current plan		

The *California Airport Land Use Planning Handbook* (January 2002) provides three general development settings in Table 9C on page 4-47: Rural Farmland/Open Space (Minimal Development), Rural/Suburban (Mostly to Partially Undeveloped), and Urban (Heavily Developed). All of the airports included in the San Joaquin ALUCP have large areas that are undeveloped (this includes both Tracy Municipal and Stockton Metropolitan Airports). Therefore, the Rural/Suburban setting was deemed the most appropriate and selected from Table 9C of the Handbook as a basis for calculating nonresidential densities for this ALUCP Update.

The *California Airport Land Use Planning Handbook* (January 2002) specifically states: "Allow most nonresidential uses; prohibit outdoor stadiums and similar uses with very high intensities." in Table 9B on page 9-45.

Special risk reduction building design features are provided for in Table 3A on page 3-17 (see footnote 2) of the Draft ALUCP Update.

Surland Comment 3: The definition of "existing land use" on p. 3-3 of the Draft ALUCP contains a typo. The citation to the California *Government Code* in § 1.2.1 Oed) should be "California *Government Code*, section 65865, *et seq.*"

Response to Surland Comment 3: Comment noted. Please see attached errata sheet to the Draft Airport Land Use Compatibility Plan Update for San Joaquin County.

Surland Comment 4: Surland reserves its rights to comment on any further publications, amendments or edits to the Draft ALUCP, the proposed Negative Declaration, or the Draft Initial Study

Response to Surland Comment 4: Comment noted.

Surland Comment 5: Surland also points a typographical error on Table 3A. In the cell for Zone 6 Maximum Non-Residential Intensity, it states simply "Limit." According David Fitz at the February 6, 2009, Planning Advisory Committee meeting, this should read "No Limit."

Response to Surland Comment 5: Comment noted. Please see attached errata sheet to the Draft Airport Land Use Compatibility Plan Update for San Joaquin County.

Surland Comment 6: First, the Handbook points out that: "[the guidelines indicated in Table 9C are set on the basis of gross acreage averaged over an entire compatibility zone or development site." Handbook, p. 9-51. The Handbook defines "gross acreage" as the "entire site or zone, regardless of streets or parcel lines." *Jd.* 4 The Draft ALUCP in Table 3A, on the other hand, establishes a maximum number of people that may be present on "one acre of land" at any one time and does not specify the way in which the "one acre of land" will be delineated. That is, within the larger compatibility zones, which encompass several acres, there is no indication where one acre ends and another begins. This poses substantial problems for municipalities, planners and developers when they are trying to assess whether the intensity of a certain acre has been exceeded.

Response to Surland Comment 6: The *California Airport Land Use Planning Handbook* (January 2002) (See Table 9C on page 4-47) also provides per acre criteria. The per acre approach in the Draft ALUCP Update is consistent with the current (1998) ALUCP approach for Tracy Municipal Airport which uses per acre criteria. Also see Response to Surland Comment 2.

Surland Comment 7: Second, setting a maximum intensity per acre without averaging does not take clustering into account in any meaningful way. As the Handbook explains: rarely is the usage intensity of a development spread equally throughout the site. . . most of the buildings and other facilities are sometimes concentrated in one portion of the site, leaving other areas as open space because of terrain, environmental, or other considerations. Handbook, p.9-52. Table 3A maximum per acre still assumes that the development within a Compatibility Zone will be spread equally throughout the zone, even with the addition of multipliers for special risk reduction in buildings. Contrary to the position the ALUC takes in the Draft ALUCP, the Handbook concludes that the best approach is to average the number of people over gross acreage. Handbook, p. 9-52. Moreover, the Handbook suggests that multipliers be used of two or three times the overall criterion to encourage clustering development so as to provide the greatest amount of large open areas. Surland would suggest that in order to reward clustering of development, a single acre grid overlay be established to measure single acre intensity. This would permit clustering, and, at the same time, prohibit excessive concentration of people in a true single acre. It would also benefit municipalities, planners and developers in their efforts to establish the intensity of a certain acre within the compatibility zone.

Response to Surland Comment 7: The maximum per acre criteria listed in Table 3A makes no assumptions on how development is spread throughout a parcel. Development can be clustered within a given parcel and still meet the per acre criteria listed in Table 3A. In addition, clustering is encouraged with the open land requirements in column four in Table 3A on pages 3-16 and 3-17 of the Draft ALUCP Update.

Surland Comment 8: Third, Table 3A fails to take into account differing levels of surrounding development when establishing non-residential intensity guidelines, as Handbook Table 9C does. Table 9C sets different intensities based on whether the setting is "Rural Farmland," "Rural/Suburban," or "Urban." In Zone 6 of Table 9C (which corresponds to Zone 7

of the Draft ALUCP), for example, in an Urban setting, there is no limit for the "Maximum Nonresidential Intensity." This is of particular importance for airports like Tracy Municipal Airport and Stockton Municipal Airport, which are located in urban settings.⁵ The Draft ALUCP's assumption that all San Joaquin County airports are "Rural/Suburban" ignores the reality that some airports in San Joaquin County are well on their way, if not already, in an "Urban" setting.

Response to Surland Comment 8: See Response to Surland Comment 2.

Surland Comment 9: Fourth, Table 3A lists outdoor stadiums as a prohibited use. Table 9C of the Handbook, however, refers to large not outdoor stadiums. Handbook, p. 9-53. Moreover, it lists large stadiums as a prohibited use only in the Urban setting. Handbook, p.9-47. Since the ALUC has taken the position that the Rural/Suburban setting is the only setting that is applicable to airports in San Joaquin County, then it should also eliminate the prohibited use associated with the Urban setting. Conversely, if the Tracy Municipal Airport is, in fact, located in an urban setting, then both residential densities and non-residential intensities should be dramatically increased, and only large stadiums should, pursuant to Handbook guidance, be prohibited.

Response to Surland Comment 9: See Response to Surland Comment 2.

Surland Comment 10: Finally, the term Special Risk-Reduction Building Design remains undefined. It is Surland position that the appropriate risk reduction measures are those specified in the California Building Code (CBC). California Code of Regulations, Title 24, Part 2. Therefore, if construction within Zones 2-7 contain one or more of the risk reduction measures specified in the CBC, the relevant multiplier should apply (Draft ALUCP, Table 3A, Note 2). Correct application of the multiplier for risk reduction would dramatically increase development potential in ALUCP Zones 4 and 7 not reflected in the current version of the Draft ALUCP.

Response to Surland Comment 10: A reference to California Code of Regulations, Title 24, Part 2 to Table 3A, footnote 2 will be added. Please see attached errata sheet to the Draft Airport Land Use Compatibility Plan Update for San Joaquin County.

Surland Comment 11: In summary, Surland asks the ALUC to keep in mind that pursuant to the statutory scheme authorizing it, the [ALUCP] carries significant binding regulatory consequences for local government in Solano County, *Muzzy Ranch Co. v. Solano County Airport Land Use Commission*, 41 Cal.4th 372, 384 (2007). Intensity limits are no longer advisory; and, thus, such limits have the strong potential for depriving property owners, like Surland, which has an approved Development Agreement with the City of Tracy, and, thus, a vested right to develop, of both the economically viable use of their property, and their reasonable investment backed expectations. *Shea Homes v. County of Alameda*, 110 Cal.App.4th 1246, 1268 (2003).

Response to Surland Comment 11: The Initial Study and corresponding Negative Declaration provide detail analysis with respect to potential impacts and considered the consequences for updating the ALUCP. Consistent with the Draft Airport Land Use Compatibility Plan (ALUCP) and at the request of the City of Tracy the Surland development (the Ellis Specific Plan) is recognized by the ALUCP Update as an existing land use as it has development agreement in place (see page 2-23 in Chapter Two the of ALUCP Update). Therefore, the updated ALUCP zones will have no impact on the Ellis Specific Plan.

Surland Comment 12: Although Exhibit 3TM-2 in Chapter 3 is an improvement over the previous draft of the ALUCP, it is still missing critical information. First, the Draft ALUCP does not explain why and how it developed the hybrid for Tracy Municipal Airport. Second, although the Draft ALUCP indicates the length at one end of the runway, it does not indicate whether those lengths are the same for the other end of the runway. This is critical for Tracy Municipal Airport since there is a displaced threshold on Runway 30, and there is no indication whether the zones are calculated from the end of the runway or from the displaced threshold. Before Surland can comment on the hybrid compatibility zones, it must know all of the dimensions for the zones and the ALUC justification for those dimensions.

Response to Surland Comment 12: The dimensions are the same for both Runway 12 and Runway 30. The displaced threshold on Runway 30 does not change the zone dimensions because the portion of the runway that is displaced is used for departures (See Table 9A in the *California Airport Land Use Planning Handbook* [January 2002]).

Surland Comment 13: In *Muzzy, supra*, the Supreme Court also held: Depending on the circumstances, a government agency may reasonably anticipate that its placing a ban on development in one area of a jurisdiction may have the consequence, notwithstanding existing zoning or land use planning, of displacing development to other areas of the jurisdiction.

Id. at 383. *Muzzy Ranch* does not hold that the measure of displaced development is a comparison between the restrictions in a prior ALUCP and a proposed ALUCP, which is the measure relied upon in the Negative Declaration. Rather, *Muzzy Ranch* focuses on the impacts of changes in patterns of development, originally established in a Land Use Jurisdiction General Plan and zoning ordinances, caused by the proposed ALUCP. Id. That required comparison is not reflected in Tables IX.b.1-7. Those Tables, to the extent they take into account the local land use restrictions at all, appear to assume that the densities and intensities in the local General Plans are identical with those in the 1993 ALUCP, and, thus, the relevant comparisons will always be to the 1993 ALUCP.

Response to Surland Comment 13: Comment noted. The analysis provided includes consideration of displacement and determined that no significant impact would occur as a result of the update to the ALUCP. The *Muzzy Ranch* decision referenced by the commenter requires consideration of significant impacts associated with significant changes in development patterns which as analyzed and considered by the Initial Study and Negative Declaration, is not the case for the current Project. In addition, by state law (See Public Utility

Code Section 21676), the local general plans must conform to the current 1993 ALUCP (as amended in 1998 for Tracy Municipal Airport). Therefore, the comparison between the current ALUCP and the Draft ALUCP Update is valid for determining potential impacts.

The Initial Study and corresponding Negative Declaration provide analysis with respect to potential impacts and considers the consequences for updating the ALUCP. Consistent with the ALUCP and at the request of the City of Tracy the Surland development (the Ellis Specific Plan) is recognized by the ALUCP Update as an existing land use as it has development agreement in place (see page 2-23 in Chapter Two the of ALUCP Update). The updated ALUCP zones will have no impact on the Ellis Specific Plan nor does it have a significant impact on the development patters for the Project as a whole. Therefore, considering that the ALUCP update and corresponding CEQA documents has consider the impacts on projected growth to be less than significant and the fact that there is no impact to the existing project (Ellis Specific Plan) a Negative Declaration in this particular case is appropriate.

Surland Comment 14: Such an assumption is, however, belied by the facts. The Public Utilities Code only requires an individual project to come before the ALUC if a local General Plan or other land use restriction is inconsistent with the applicable ALUCP, Public Utilities Code Â§ 21676(b). The Ellis Specific Plan received a Consistency Determination from the ALUC, an event which should have occurred only if the Tracy General Plan were not consistent with the 1993 ALUCP. Thus, there is no factual basis for the apparent assumption made in the Initial Study that the densities and intensities in the local General Plans are identical with those in the 1993 ALUCP. Without evidence of such an identity, a direct comparison of the densities and intensities permitted in the Tracy and County General Plans with those permitted in the proposed ALUCP must be made in order to ascertain the true potential for displacement of development posed by the proposed ALUCP. Since there are significant restrictions on density and intensity of use in the proposed ALUCP various compatibility zones, there is a fair argument (CEQA Guideline Â§ 15384, subd. (a)) that the proposed ALUCP will have a significant effect on the environment. See, *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d 68, 75 (1974); *Friends of Street v. City of Hayward*, 106 Cal.App.3d 988, 1000-1003 (1st Dist. 1980).

Response to Surland Comment 14: The Ellis Specific Plan (known in the Tracy General Plan as Urban Reserve Area 10) was brought before the ALUC for a consistency review because the general plan policy required it. The Tracy General Plan Policy 10d on page 2-72 states, "Site planning and land use decisions in the eastern portion of the Urban Reserve shall conform to safety and development requirements in the San Joaquin County Airport Land use Plan." This is a fairly common practice because general plans do not always provide the detail (streets and parcels) that a specific plan does. Also see Response to Surland Comment 13.

Surland Comment 15: The proposed ALUCP will displace a significant amount of residential density at most San Joaquin County airports. At Kingdon Executive Airport, the Initial Study states there will be 86% decrease in the number of dwelling units allowed in the TPZ. Draft ALUCP, App. F, p. F-16. The same is true at Lodi Airport, where there would be a 70% decrease in the number of dwelling units allowed in the TPZ, Lodi (Precissi) will record a

100% drop and New Jerusalem a 86% decrease. Even at Tracy, the revised Zone 4 will encompass an additional 26.20 acres of residential development within the Ellis Specific Plan, planned for up to 376 additional units. The fact that increases in development in the AIA makes up the difference is not the issue. The issue is not merely that displacement will be accommodated elsewhere, but also the development impact, including traffic and other cumulative impacts, that will result in the areas to which development is displaced. Those impacts have not been addressed in the Negative Declaration.

Response to Surland Comment 15: The reason the Kingdon Executive, Lodi Airport, Lodi (Precissi) Airpark, New Jerusalem Airport, and Tracy Municipal Airport appear to reduce the number of dwellings is that the total acreage for each traffic pattern zone (TPZ) is smaller (See Table IX.b1). For example, the TPZ zone for Kingdon had 6,226.8 acres in the 1993 ALUCP and only 2,271.8 acres in the Draft ALUCP Update. The reason for the decrease in the TPZ acre is that a new zone (inner turning zone) has been added and some zones within the TPZ are larger per the *California Airport Land Use Planning Handbook* (January 2002) guidance. There is no limit to the residential density allowed in the Draft ALUCP Update TPZ zone.

Surland Comment 16: The ALUCP will also have a significant impact on the non-residential intensity in the TPZ at the San Joaquin airports:

Kingdon will decrease 86%
Lodi will decrease 61%
Lodi (Precissi) will decrease 100%
New Jerusalem will decrease 100%

Thus, the proposed ALUCP will severely restrict commercial and industrial development near those airports, pushing commercial and industrial development away from the airport and toward other areas on which the impacts of that shift have not yet been analyzed.

Response to Surland Comment 16: The Draft ALUCP Update nonresidential intensity (the restrictive factor for commercial and industrial uses) is either the same or higher when compared to the current ALUCP (See Table IX.b.7 on page F-23 of the Initial Study). Also see response to Comment 15.

Surland Comment 17: This is under the Stockton General Plan, under the San Joaquin County General Plan there would be a 61% decrease, and under the San Joaquin County Zoning, there would be a 60% decrease.

Response to Surland Comment 17: See response to Comment 15.

Surland Comment 18: Another example of the inadequacy of the Initial Study is the total absence of information concerning the impacts on some airports. The Negative Declaration contains no data or analysis concerning the environmental effect of the ALUCP on the Byron Airport environs. Therefore, the record does not support the Initial Study conclusion that there

is no impact to the San Joaquin County and City of Tracy [sic] General Plans or zoning from the Byron Airport Proposed ALCUP [sic]. Draft ALUCP, App. F., F-15.

Response to Surland Comment 18: Byron Airport only has an airport influence area within San Joaquin County. There are no restrictions on the number of dwellings or intensities of nonresidential uses within the airport influence area. This is discussed on page F-15 of the Initial Study.

Surland Comment 19: Similarly, the Initial Study, Table IX.b.6. contains no information on the differential impacts of the 1993 ALUCP and the proposed ALUCP under the City of Tracy Zoning Assumption. Rather, Table IX.b.6., n. 5, states: Sufficient information within the commercial and industrial categories of the Tracy Zoning Ordinance is not available to calculate intensity of use (the number of people per acre) Even though the comparison between the restrictions of the existing and proposed ALUCPs is a spurious one, the Negative Declaration lacks any information concerning the potential impact of the ALUCP on City of Tracy zoning, and by extension on the projects structured by that zoning. This is especially problematic for the Ellis Specific Plan which is currently undergoing annexation proceedings by the City of Tracy, and, as set forth above, stands to lose a substantial amount of residential acreage.

Response to Surland Comment 19: The commercial and industrial categories in the Tracy Zoning Ordinance do provide minimum building lot size, building lot coverage, or floor area information necessary to calculate intensity of use (the number of people per acre). See Table F6 on page F-37 of the Initial Study.

Surland Comment 20: In summary, the Initial Study and Negative Declaration are not sufficient under the standards set by CEQA and Muzzy Ranch to determine whether the adoption of the ALUCP will cause a significant impact on development plans around the San Joaquin County airports in general, and at Tracy Municipal Airport in particular.

Response to Surland Comment 20: Comment noted see Response to Surland Comments above.

Surland Comment 21: There should be a minus sign in front of the "5,441.2" in Table IX.b.2 in the second line of the last column.

Response to Surland Comment 21: Please see attached errata sheet to the Draft Airport Land Use Compatibility Plan Update Initial Study for San Joaquin County.



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May 1, 2009

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Lee's Summit, Missouri 64063

Re: Comments of The Surland Companies on the March 27, 2009, Draft of the San Joaquin Airport Land Use Compatibility Plan Update and Associated Negative Declaration

Dear Mr. Fitz:

The following constitute the comments of The Surland Companies ("Surland") concerning the Draft San Joaquin Airport Land Use Compatibility Plan Update ("Draft ALUCP") and associated proposed Negative Declaration published on March 27, 2009. As a threshold matter, Surland takes this opportunity to express its gratitude to the San Joaquin County Airport Land Use Commission ("ALUC") for denominating the Ellis Specific Plan an existing use.¹ Nevertheless, Surland retains some general concerns, as detailed below.²

1

I. THE DRAFT ALUCP IS AMBIGUOUS WITH RESPECT TO NON-RESIDENTIAL INTENSITIES LIMITATIONS

Surland renews its question concerning the basis for Table 3A³ of the Draft ALUCP, which bases non-residential intensity limitations only on a maximum per single acre rather than

2

¹ The definition of "existing land use" on p. 3-3 of the Draft ALUCP contains a typo. The citation to the California *Government Code* in § 1.2.10(d) should be "California *Government Code*, section 65865, *et seq.*"

3

² Surland reserves its rights to comment on any further publications, amendments or edits to the Draft ALUCP, the proposed Negative Declaration, or the Draft Initial Study.

4

³ Surland also points a typographical error on Table 3A. In the cell for Zone 6 /Maximum Non-Residential Intensity, it states simply "Limit." According David Fitz at the February 6, 2009, Planning Advisory Committee meeting, this should read "No Limit."

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an average over the entire zone. Surland has previously commented on this issue in a letter to Mr. Dana Cowell on November 13, 2008, and in its February 6, 2009, letter to David Fitz, and incorporates those letters by reference.

Although the ALUC responded to our most recent letter regarding this issue, the ALUC has failed to explain why Table 3A still departs substantially from its counterpart in the Handbook, Table 9C (Handbook, p. 9-47), on at least five important parameters: (1) it does not define “single acre;” (2) it restricts only a “maximum number” of persons per acre instead of an average; (3) it does not distinguish between urban and non-urban categories of development in establishing non-residential intensities; (4) it fails to follow Handbook guidance on the definition of “stadiums;” and (5) it fails to apply the provision for “special risk reduction building design” features.

5 Cont.

First, the Handbook points out that: “[t]he guidelines indicated in Table 9C are set on the basis of gross acreage averaged over an entire compatibility zone or development site.” Handbook, p. 9-51. The Handbook defines “gross acreage” as the “entire site or zone, regardless of streets or parcel lines.” *Id.*⁴ The Draft ALUCP in Table 3A, on the other hand, establishes a maximum number of people that may be present on “one acre of land” at any one time and does not specify the way in which the “one acre of land” will be delineated. That is, within the larger compatibility zones, which encompass several acres, there is no indication where one acre ends and another begins. This poses substantial problems for municipalities, planners and developers when they are trying to assess whether the intensity of a certain acre has been exceeded.

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Second, setting a maximum intensity per acre without averaging does not take “clustering” into account in any meaningful way. As the Handbook explains: “[r]arely is the usage intensity of a development spread equally throughout the site. . . most of the buildings and other facilities are sometimes concentrated in one portion of the site, leaving other areas as open space because of terrain, environmental, or other considerations.” Handbook, p.9-52. Table 3A’s maximum “per acre” still assumes that the development within a Compatibility Zone will be spread equally throughout the zone, even with the addition of multipliers for special risk reduction in buildings. Contrary to the position the ALUC takes in the Draft ALUCP, the Handbook concludes that the best approach is to average the number of people over gross acreage. Handbook, p. 9-52. Moreover, the Handbook suggests that multipliers be used “of two or three times the overall criterion” to encourage “clustering development so as to provide the greatest amount of large open areas.” *Id.* Surland would suggest that in order to reward

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⁴ Compare this with the Draft ALUCP’s definition of gross acreage: “gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.” Draft ALUCP, p.3-3, and p.3-17, note 1.



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clustering of development, a single acre grid overlay be established to measure single acre intensity. This would permit clustering, and, at the same time, prohibit excessive concentration of people in a true single acre. It would also benefit municipalities, planners and developers in their efforts to establish the intensity of a certain acre within the compatibility zone.

7 Cont.

Third, Table 3A fails to take into account differing levels of surrounding development when establishing non-residential intensity guidelines, as Handbook Table 9C does. Table 9C sets different intensities based on whether the setting is “Rural/Farmland,” “Rural/Suburban,” or “Urban.” In Zone 6 of Table 9C (which corresponds to Zone 7 of the Draft ALUCP), for example, in an Urban setting, there is no limit for the “Maximum Nonresidential Intensity.” This is of particular importance for airports like Tracy Municipal Airport and Stockton Municipal Airport, which are located in urban settings.⁵ The Draft ALUCP’s assumption that all San Joaquin County airports are “Rural/Suburban” ignores the reality that some airports in San Joaquin County are well on their way, if not already, in an “Urban” setting.

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Fourth, Table 3A lists “outdoor stadiums” as a prohibited use. Table 9C of the Handbook, however, refers to “large” not “outdoor” stadiums. Handbook, p. 9-53. Moreover, it lists “large stadiums” as a prohibited use *only in the “Urban”* setting. Handbook, p.9-47. Since the ALUC has taken the position that the “Rural/Suburban” setting is the only setting that is applicable to airports in San Joaquin County, then it should also eliminate the prohibited use associated with the “Urban” setting. Conversely, if the Tracy Municipal Airport is, in fact, located in an urban setting, then both residential densities and non-residential intensities should be dramatically increased, and only “large” stadiums should, pursuant to Handbook guidance, be prohibited.

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Finally, the term “Special Risk-Reduction Building Design” remains undefined. It is Surland’s position that the appropriate risk reduction measures are those specified in the California Building Code (“CBC”). California Code of Regulations, Title 24, Part 2. Therefore, if construction within Zones 2-7 contain one or more of the risk reduction measures specified in the CBC, the relevant multiplier should apply (Draft ALUCP, Table 3A, Note 2). Correct application of the multiplier for risk reduction would dramatically increase development potential in ALUCP Zones 4 and 7 not reflected in the current version of the Draft ALUCP.

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In summary, Surland asks the ALUC to keep in mind that “[p]ursuant to the statutory scheme authorizing it, the [ALUCP] carries significant binding regulatory consequences for local

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⁵ Indeed, the Draft ALUCP states that Northwest of Tracy Municipal Airport is an area designated as “Urban reserve.” This is an indication that the City of Tracy considers the land within the Airport Influence Area to be urban, as opposed to rural or suburban.



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government in Solano County,” *Muzzy Ranch Co. v. Solano County Airport Land Use Commission*, 41 Cal.4th 372, 384 (2007). Intensity limits are no longer “advisory;” and, thus, such limits have the strong potential for depriving property owners, like Surland, which has an approved Development Agreement with the City of Tracy, and, thus, a vested right to develop, of both the economically viable use of their property, and their “reasonable investment backed expectations.” *Shea Homes v. County of Alameda*, 110 Cal.App.4th 1246, 1268 (2003).

11 Cont.

II. THE JUSTIFICATION FOR USE OF “HYBRID” COMPATIBILITY ZONES USED FOR TRACY MUNICIPAL IS NOT STATED ANYWHERE IN THE DRAFT ALUCP.

Although Exhibit 3TM-2 in Chapter 3 is an improvement over the previous draft of the ALUCP, it is still missing critical information. First, the Draft ALUCP does not explain why and how it developed the “hybrid” for Tracy Municipal Airport. Second, although the Draft ALUCP indicates the length at one end of the runway, it does not indicate whether those lengths are the same for the other end of the runway. This is critical for Tracy Municipal Airport since there is a displaced threshold on Runway 30, and there is no indication whether the zones are calculated from the end of the runway or from the displaced threshold. Before Surland can comment on the hybrid compatibility zones, it must know all of the dimensions for the zones and the ALUC’s justification for those dimensions.

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III. THE NEGATIVE DECLARATION UNDERESTIMATES THE SIGNIFICANCE OF THE PROJECT’S ENVIRONMENTAL IMPACTS.

In *Muzzy, supra*, the Supreme Court also held:

Depending on the circumstances, a government agency may reasonably anticipate that its placing a ban on development in one area of a jurisdiction may have the consequence, notwithstanding existing zoning or land use planning, of displacing development to other areas of the jurisdiction.

Id. at 383. *Muzzy Ranch* does not hold that the measure of displaced development is a comparison between the restrictions in a prior ALUCP and a proposed ALUCP, which is the measure relied upon in the Negative Declaration. Rather, *Muzzy Ranch* focuses on the impacts of changes in patterns of development, originally established in a Land Use Jurisdiction’s General Plan and zoning ordinances, caused by the proposed ALUCP. *Id.* That required comparison is not reflected in Tables IX.b.1-7. Those Tables, to the extent they take into account the local land use restrictions at all, appear to assume that the densities and intensities in the local General

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Plans are identical with those in the 1993 ALUCP, and, thus, the relevant comparisons will always be to the 1993 ALUCP.

13 Cont.

Such an assumption is, however, belied by the facts. The *Public Utilities Code* only requires an individual project to come before the ALUC if a local General Plan or other land use restriction is inconsistent with the applicable ALUCP, *Public Utilities Code* § 21676(b). The Ellis Specific Plan received a Consistency Determination from the ALUC, an event which should have occurred only if the Tracy General Plan were not consistent with the 1993 ALUCP. Thus, there is no factual basis for the apparent assumption made in the Initial Study that the densities and intensities in the local General Plans are identical with those in the 1993 ALUCP. Without evidence of such an identity, a direct comparison of the densities and intensities permitted in the Tracy and County General Plans with those permitted in the proposed ALUCP must be made in order to ascertain the true potential for displacement of development posed by the proposed ALUCP. Since there are significant restrictions on density and intensity of use in the proposed ALUCP's various compatibility zones, there is a "fair argument" (CEQA Guideline § 15384, subd. (a)) that the proposed ALUCP will have a significant effect on the environment. See, *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d 68, 75 (1974); *Friends of "B" Street v. City of Hayward*, 106 Cal.App.3d 988, 1000-1003 (1st Dist. 1980).

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For example, the proposed ALUCP will displace a significant amount of residential density at most San Joaquin County airports. At Kingdon Executive Airport, the Initial Study states there will be 86% decrease in the number of dwelling units allowed in the TPZ.⁶ Draft ALUCP, App. F, p. F-16. The same is true at Lodi Airport, where there would be a 70% decrease in the number of dwelling units allowed in the TPZ. Lodi (Precissi) will record a 100% drop and New Jerusalem a 86% decrease. Even at Tracy, the revised Zone 4 will encompass an additional 26.20 acres of residential development within the Ellis Specific Plan, planned for up to 376 additional units. The fact that increases in development in the AIA makes up the difference is not the issue. The issue is not merely that displacement will be accommodated elsewhere, but also the development impact, including traffic and other cumulative impacts, that will result in the areas to which development is displaced. Those impacts have not been addressed in the Negative Declaration.

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The ALUCP will also have a significant impact on the non-residential intensity in the TPZ at the San Joaquin airports:

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⁶ This is under the Stockton General Plan, under the San Joaquin County General Plan there would be a 61% decrease, and under the San Joaquin County Zoning, there would be a 60% decrease.

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- Kingdon will decrease 86%⁷
- Lodi will decrease 61%
- Lodi (Precissi) will decrease 100%
- New Jerusalem will decrease 100%

17 Cont.

Thus, the proposed ALUCP will severely restrict commercial and industrial development near those airports, pushing commercial and industrial development away from the airport and toward other areas on which the impacts of that shift have not yet been analyzed.

Another example of the inadequacy of the Initial Study is the total absence of information concerning the impacts on some airports. The Negative Declaration contains no data or analysis concerning the environmental effect of the ALUCP on the Byron Airport environs. Therefore, the record does not support the Initial Study's conclusion that "there is no impact to the San Joaquin County and City of Tracy [*sic*] General Plans or zoning from the Byron Airport Proposed ALUCP [*sic*]." Draft ALUCP, App. F., F-15.

18

Similarly, the Initial Study, Table IX.b.6. contains no information on the differential impacts of the 1993 ALUCP and the proposed ALUCP under the City of Tracy Zoning Assumption. Rather, Table IX.b.6., n. 5, states: "Sufficient information within the commercial and industrial categories of the Tracy Zoning Ordinance is not available to calculate intensity of use (the number of people per acre)." Even though the comparison between the restrictions of the existing and proposed ALUCPs is a spurious one, the Negative Declaration lacks any information concerning the potential impact of the ALUCP on City of Tracy zoning, and by extension on the projects structured by that zoning. This is especially problematic for the Ellis Specific Plan which is currently undergoing annexation proceedings by the City of Tracy, and, as set forth above, stands to lose a substantial amount of residential acreage.

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In summary, the Initial Study and Negative Declaration are not sufficient under the standards set by CEQA and *Muzzy Ranch* to determine whether the adoption of the ALUCP will cause a significant impact on development plans around the San Joaquin County airports in general, and at Tracy Municipal Airport in particular.

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⁷ There should be a minus sign in front of the "5,441.2" in Table IX.b.2 in the second line of the last column.

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Coffman Associates, Inc.
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If you have any questions or desire additional information regarding these comments, please feel free to call at (714)384-6526 or send an e-mail to staber@calairlaw.com. Surland appreciates this opportunity to comment.

Yours very truly,

CHEVALIER, ALLEN & LICHMAN, LLP

A handwritten signature in black ink that reads "Steven M. Taber".

Steven M. Taber

cc: Laura Brunn



CITY OF TRACY

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RECEIVED
APR 24 2009
San Joaquin
County

April 23, 2009

San Joaquin Council of Governments
Laura Brunn, Associate Regional Planner
555 East Weber Street
Stockton, California 95202

Re: ALUCP Update Draft Negative Declaration

Dear Ms. Brunn:

The purpose of this letter is to comment on the Initial Study and Draft Negative Declaration ("DND") issued on March 27, 2009, regarding the San Joaquin Airport Land Use Compatibility Plan ("ALUCP").

The City of Tracy has submitted prior comments on the Draft ALUCP dated August 14, 2008, November 5, 2008 and February 26, 2009, and will be sending additional comments on the proposed ALUCP in a separate letter. In addition, the City provided information to you regarding the December, 2008 City Council approval of an EIR, General Plan Amendment, Specific Plan and Development Agreement regarding the Ellis property as part of the environmental review process for the project. The Ellis project could be affected by the proposed ALUCP. 1

As you know, an agency may not adopt a negative declaration, and must instead prepare an Environmental Impact Report ("EIR"), if it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact. (See *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68; Cal. Code Regs., tit. 14, § 15064(f)(1).) When engaging in this analysis, the agency must consider the environmental impacts of the project as a whole. 2

In this case, by excluding consideration of the Stockton Metropolitan Airport ("SMA") in its analysis, the DND fails to consider the effects of the impact of the project as a whole. Additionally, the ALUCP may result in significant environmental effects that have not been adequately addressed in the DND.¹ Finally, the DND include several inaccurate and other ambiguous or confusing statements. These inaccuracies and ambiguities render the draft inadequate as an informational document, and invite confusion in the implementation of the ALUCP. The following are examples of the City's concerns. 3

¹ The DND finds, in part, that the ALUCP will not have a significant effect on the environment because "there are no physical construction projects that would result from the adoption of the San Joaquin County ALUCP update or from subsequent implementation of the land use restrictions and policies." (DND, p. 2.) Lack of physical construction alone is not a basis for concluding that there are no significant impacts of the project. (Cal. Code Regs., tit. 14, § 15064.) 4

I. Failure to Address the Whole Project

The DND provides as follows:

Although Stockton Metropolitan Airport (SMA) is a public use airport and is therefore subject to ALUC policies, this ALUCP Update does not include SMA. San Joaquin County is currently processing an update to SMA's Master Plan and due to the airport being a regionally significant asset to San Joaquin County, having an updated Master Airport Plan in place for the ALUCP update is essential. ALUCPs are required by statute to use the subject airport's approved Master Plan (if available) as its guiding document as it related to the layout, operations, and forecasts. After the Master Plan is adopted SJCOG will prepare an amendment to the ALUCP and environmental documentation to incorporate new elements of the Master Plan and develop current safety and compatibility zones specific to SMA. Until then, the compatibility zones and criteria contained in the 1993 ALUCP will remain in effect for Stockton Metropolitan Airport.

(DND, page F-1.)

Under CEQA, a public agency may not divide a single project into smaller individual subcomponents in order to avoid responsibility for considering the environmental impacts of the project as a whole. (See *Orinda Association v. Board of Supervisors* (1986) 182 Cal.App.3d 1145.) By severing off the SMA, and dividing the project into two, the DND fails to analyze the project as a whole as required under CEQA. While clearly it is more administratively convenient to wait until the update to the SMA Master Plan is complete, administrative convenience does not excuse compliance with CEQA.

5

II. Failure to Consider the Impacts of Housing Displacement and/or Growth

In section IX.b of the DND, there is a discussion of the impacts that the ALUCP will have on the number of potential dwelling units that may be built within a particular jurisdiction. Without explanation or analysis, the DND simply concludes that in each jurisdiction the changes are "... not anticipated to be significant." This is insufficient for two reasons. First, mere conclusions as to the absence of the possibility of a significant effect are inadequate to support a negative declaration. (See *Citizens Association for Sensible Development of Bishop Area v County of Inyo* (1985) 172 Cal.App.3d 151, 171.) Second, there is no discussion or analysis of the cumulative effects the ALUCP may have on the environment by allowing more dwelling units to be built and/or by displacing dwelling units².

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² As was pointed out in *Muzzy Ranch Co. v. Solano County Airport Land Use Commission* (2007) 41 Cal.4th 372, 383:

Depending on the circumstances, a government agency may reasonably anticipate that its placing a ban on development in one area of a jurisdiction may have the consequence, notwithstanding existing zoning or land use planning, of displacing development to other areas of the jurisdiction.

It is acknowledged that, under CEQA, a public agency is not always "required to make a detailed analysis of the impacts of a project on [future] housing and growth." (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 369.) However, some analysis is required. Especially in this case, where the cumulative effects of the ALUCP on housing displacement and/or growth may be significant.

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III. Conflicts with the City of Tracy General Plan and Zoning

The DND includes several inaccuracies relating to potential conflicts between the ALUCP and the City of Tracy General Plan and Zoning. These include the following:

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- "...the proposed ALUCP does not reduce or inhibit the development beyond what is allowed in the 1993 ALUCP or proposed in the current general plans for the Cities of ... Tracy. Current zoning within the Cities of ... Tracy are also unaffected by the proposed ALUCP." (DND, page 2.)

The 1993 ALUCP is not the standard by which restrictions on development should be measured. Since 1993, the Commission has adopted a 1998 amendment to the 1993 Plan, based on the City of Tracy Airport Master Plan.

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Also, in December, 2008, the City of Tracy amended its General Plan and adopted a Specific Plan (effectively imposing zoning requirements) on the Ellis property. These actions were based on the 1998 amendment to the ALUCP then in effect. Neither the 1998 amendment nor the Tracy General Plan, Specific Plan or Development Agreement are acknowledged or reflected in the proposed ALUCP.

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The proposed ALUCP does, in fact, inhibit development beyond what is allowed in the 1993 ALUCP as amended in 1998 and is in conflict with the current General Plan and Specific Plan/zoning for the City of Tracy.

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- "...There is no difference between the dwelling density allowed within the AIA under the 1993 ALUCP and proposed ALUCP under the City of Tracy's current zoning. Therefore, the proposed ALUCP for Tracy Municipal Airport has no impact on the current Tracy General Plan or zoning." (DND, page F-21.)

Again, the 1993 ALUCP is not the correct standard. It ignores the 1998 amendment to the ALUCP. Also, it is untrue that the proposed ALUCP has no impact on the current Tracy General Plan or zoning. The proposed ALUCP ignores the City's General Plan and zoning (through the Specific Plan) at the Ellis property by (1) its silence regarding these Council actions, and (2) by showing maps with cone areas which conflict with the uses approved under those City Plans.

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This failure to recognize the 1998 amendment and the City's recent General Plan Amendment and Specific Plan (in the ALUCP text and maps) result in a conflict between the City's Plans and the proposed ALUCP and could have the affect of limiting proposed residential development or limiting development of a planned aquatic center, or both. The proposed ALUCP creates new land use compatibility cones and restrictions that are inconsistent with the approved General

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Plan, Ellis Specific Plan and Development Agreement. As a result, under Government Code section 65302.3, the City could be required to amend its General Plan and Specific Plan or adopt findings (if even possible) to override the Commission's action. A generic statement that "no changes to existing uses are proposed" (DND, page F-13) is insufficient assurance that the proposed ALUCP will not have significant repercussions in Tracy.

13 Cont.

- "Urban Reserve 10". (DND, page F-35, Table F4.)

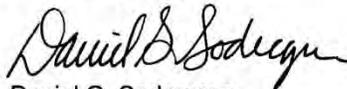
There is no such thing as Urban Reserve 10. It has been replaced with "TR-Ellis", "Commercial" and "Village Center" with the adoption of the City's General Plan Amendment and Ellis Specific Plan and Development Agreement.

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Given these concerns, the City requests that an EIR be prepared for the ALUCP in order to accurately and completely analyze its potential effects on the environment. The City also requests that it be notified of the time and place of any public hearings that may be scheduled to consider the ALUCP and/or the DND so that it may participate further.

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Very truly yours,



Daniel G. Sodergren
Interim City Attorney

cc: City of Tracy Mayor and City Council
Leon Churchill, City Manager
Rod Buchanan, Director of Parks and Community Services
Andrew Malik, Director of Development and Engineering Services
Bill Dean, Assistant Director of Development and Engineering Services
Debra Corbett, Special Counsel



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Think Local the Global

April 27, 2009

Dana Cowell, Deputy Director
San Joaquin Council of Governments
555 E. Weber Avenue
Stockton, CA 95202-2804

Re: San Joaquin County Council of Governments acting as Airport Land Use Commission regarding ALUCP update 2008-2009 completed for draft review; Response to City comments dated March 27, 2009; and Intent to adopt a negative declaration dated March 27, 2009

Dear Mr. Cowell:

Please find the City of Tracy's reply to the recent response from SJCOG to City comments dated March 27, 2009; and Intent to Adopt a Negative Declaration dated March 27, 2009. Additional responses may be submitted from various City Departments.

Previous City Comment #10: It appears that the Hybrid zone length was adjusted to reflect an adjustment of the length to a midpoint between the Small GA runway and Medium GA runway zones. However, there does not appear to be a similar adjustment methodology to the width and we request that this adjustment be made.

In your response you indicate that the width of the outer approach departure zone for the Small General Aviation runway and Medium General Aviation runway safety zones are the same (1,000 feet) and that a reduction in width is not warranted. However, the 1992 Airport Layout Plan and most recent City General Plan are consistent with a hybrid approach relating to the width, as well as the length, of the outer approach departure zone. City staff still requests that a reduction in width is warranted to be compatible with the 1992 Airport Master Plan and the City General Plan.

Respectfully,

Rod Buchanan, Director of Parks and Community Services

cc: City of Tracy Mayor and City Council
Leon Churchill, City Manager
Daniel Sodergren, Interim City Attorney
Andrew Malik, DES Director
William Dean, Assistant DES Director
Andrew T. Chesley, Executive Director, San Joaquin Council of Governments
Laura Brunn, Regional Planner, San Joaquin Council of Governments

"Creating Community In Tracy Through People, Parks and Programs"



Glossary

Glossary of Terms

A

ABOVE GROUND LEVEL: The elevation of a point or surface above the ground.

ACCELERATE-STOP DISTANCE AVAILABLE (ASDA): See declared distances.

ADVISORY CIRCULAR: External publications issued by the FAA consisting of nonregulatory material providing for the recommendations relative to a policy, guidance and information relative to a specific aviation subject.

AIR CARRIER: An operator which: (1) performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week, and places between which such flights are performed; or (2) transports mail by air pursuant to a current contract with the U.S. Postal Service. Certified in accordance with Federal Aviation Regulation (FAR) Parts 121 and 127.

AIRCRAFT: A transportation vehicle that is used or intended for use for flight.

AIRCRAFT APPROACH CATEGORY: A grouping of aircraft based on 1.3 times the stall speed in their landing configuration at their maximum certificated landing weight. The categories are as follows:

- Category A: Speed less than 91 knots.
- Category B: Speed 91 knots or more, but less than 121 knots.
- Category C: Speed 121 knots or more, but less than 141 knots.
- Category D: Speed 141 knots or more, but less than 166 knots.
- Category E: Speed greater than 166 knots.

AIRCRAFT OPERATION: The landing, takeoff, or touch-and-go procedure by an aircraft on a runway at an airport.

AIRCRAFT OPERATIONS AREA (AOA): A restricted and secure area on the airport property designed to protect all aspects related to aircraft operations.

AIRCRAFT OWNERS AND PILOTS ASSOCIATION: A private organization serving the interests and needs of general aviation pilots and aircraft owners.

AIRCRAFT RESCUE AND FIRE FIGHTING: A facility located at an airport that provides emergency vehicles, extinguishing agents, and personnel responsible for minimizing the impacts of an aircraft accident or incident.

AIRFIELD: The portion of an airport which contains the facilities necessary for the operation of aircraft.

AIRLINE HUB: An airport at which an airline concentrates a significant portion of its activity and which often has a significant amount of connecting traffic.

AIRPLANE DESIGN GROUP (ADG): A grouping of aircraft based upon wingspan. The groups are as follows:

- Group I: Up to but not including 49 feet.
- Group II: 49 feet up to but not including 79 feet.
- Group III: 79 feet up to but not including 118 feet.
- Group IV: 118 feet up to but not including 171 feet.
- Group V: 171 feet up to but not including 214 feet.
- Group VI: 214 feet or greater.

AIRPORT AUTHORITY: A quasi-governmental public organization responsible for setting the policies governing the management and operation of an airport or system of airports under its jurisdiction.

AIRPORT BEACON: A navigational aid located at an airport which displays a rotating light beam to identify whether an airport is lighted.

AIRPORT CAPITAL IMPROVEMENT PLAN: The planning program used by the Federal Aviation Administration to identify, prioritize, and distribute funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives.

AIRPORT ELEVATION: The highest point on the runway system at an airport expressed in feet above mean sea level (MSL).

AIRPORT IMPROVEMENT PROGRAM: A program authorized by the Airport and Airway Improvement Act of 1982 that provides funding for airport planning and development.

AIRPORT LAYOUT DRAWING (ALD): The drawing of the airport showing the layout of existing and proposed airport facilities.

AIRPORT LAYOUT PLAN (ALP): A scaled drawing of the existing and planned land and facilities necessary for the operation and development of the airport.

AIRPORT LAYOUT PLAN DRAWING SET: A set of technical drawings depicting the current and future airport conditions. The individual sheets comprising the set can vary with the complexities of the airport, but the FAA-required drawings include the Airport Layout Plan (sometimes referred to as the Airport Layout Drawing (ALD)), the Airport Airspace Drawing, and the Inner Portion of the Approach Surface Drawing, On-Airport Land Use Drawing, and Property Map.

AIRPORT MASTER PLAN: The planner's concept of the long-term development of an airport.

AIRPORT MOVEMENT AREA SAFETY SYSTEM: A system that provides automated alerts and warnings of potential runway incursions or other hazardous aircraft movement events.

AIRPORT OBSTRUCTION CHART: A scaled drawing depicting the Federal Aviation Regulation (FAR) Part 77 surfaces, a representation of objects that penetrate these surfaces, runway, taxiway, and ramp areas, navigational aids, buildings, roads and other detail in the vicinity of an airport.

AIRPORT REFERENCE CODE (ARC): A coding system used to relate airport design criteria to the operational (Aircraft Approach Category) to the physical characteristics (Airplane Design Group) of the airplanes intended to operate at the airport.

AIRPORT REFERENCE POINT (ARP): The latitude and longitude of the approximate center of the airport.

AIRPORT SPONSOR: The entity that is legally responsible for the management and operation of an airport, including the fulfillment of the requirements of laws and regulations related thereto.

AIRPORT SURFACE DETECTION EQUIPMENT: A radar system that provides air traffic controllers with a visual representation of the movement of aircraft and other vehicles on the ground on the airfield at an airport.

AIRPORT SURVEILLANCE RADAR: The primary radar located at an airport or in an air traffic control terminal area that receives a signal at an antenna and transmits the signal to air traffic control display equipment defining the location of aircraft in the air. The signal provides only the azimuth and range of aircraft from the location of the antenna.

AIRPORT TRAFFIC CONTROL TOWER (ATCT): A central operations facility in the terminal air traffic control system, consisting of a tower, including an associated instrument flight rule (IFR) room if radar equipped, using air/ground communications and/or radar, visual signaling and other devices to provide safe and expeditious movement of terminal air traffic.

AIR ROUTE TRAFFIC CONTROL CENTER: A facility which provides en route air traffic control service to aircraft operating on an IFR flight plan within controlled airspace over a large, multi-state region.

AIRSIDE: The portion of an airport that contains the facilities necessary for the operation of aircraft.

AIRSPACE: The volume of space above the surface of the ground that is provided for the operation of aircraft.

AIR TAXI: An air carrier certificated in accordance with FAR Part 121 and FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Generally operates small aircraft "for hire" for specific trips.

AIR TRAFFIC CONTROL: A service operated by an appropriate organization for the purpose of providing for the safe, orderly, and expeditious flow of air traffic.

AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC): A facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the en route phase of flight.

AIR TRAFFIC CONTROL SYSTEM COMMAND CENTER: A facility operated by the FAA which is responsible for the central flow control, the central altitude reservation system, the airport reservation position system, and the air traffic service contingency command for the air traffic control system.

AIR TRAFFIC HUB: A categorization of commercial service airports or group of commercial service airports in a metropolitan or urban area based upon the proportion of annual national enplanements existing at the airport or airports. The categories are large hub, medium hub, small hub, or non-hub. It forms the basis for the apportionment of entitlement funds.

AIR TRANSPORT ASSOCIATION OF AMERICA: An organization consisting of the principal U.S. airlines that represents the interests of the airline industry on major aviation issues before federal, state, and local government bodies. It promotes air transportation safety by coordinating industry and governmental safety programs and it serves as a focal point for industry efforts to standardize practices and enhance the efficiency of the air transportation system.

ALERT AREA: See special-use airspace.

ALTITUDE: The vertical distance measured in feet above mean sea level.

ANNUAL INSTRUMENT APPROACH (AIA): An approach to an airport with the intent to land by an aircraft in accordance with an IFR flight plan when visibility is less than three miles and/or when the ceiling is at or below the minimum initial approach altitude.

APPROACH LIGHTING SYSTEM (ALS): An airport lighting facility which provides visual guidance to landing aircraft by radiating light beams by which the pilot aligns the aircraft with the extended centerline of the runway on his final approach and landing.

APPROACH MINIMUMS: The altitude below which an aircraft may not descend while on an IFR approach unless the pilot has the runway in sight.

APPROACH SURFACE: An imaginary obstruction limiting surface defined in FAR Part 77 which is longitudinally centered on an extended runway centerline and extends outward and upward from the primary surface at each end of a runway at a designated slope and distance based upon the type of available or planned approach by aircraft to a runway.

APRON: A specified portion of the airfield used for passenger, cargo or freight loading and unloading, aircraft parking, and the refueling, maintenance and servicing of aircraft.

AREA NAVIGATION: The air navigation procedure that provides the capability to establish and maintain a flight path on an arbitrary course that remains within the coverage area of navigational sources being used.

AUTOMATED TERMINAL INFORMATION SERVICE (ATIS): The continuous broadcast of recorded non-control information at towered airports. Information typically includes wind speed, direction, and runway in use.

AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS): A reporting system that provides frequent airport ground surface weather observation data through digitized voice broadcasts and printed reports.

AUTOMATED WEATHER OBSERVATION STATION (AWOS): Equipment used to automatically record weather conditions (i.e. cloud height, visibility, wind speed and direction, temperature, dew point, etc.)

AUTOMATIC DIRECTION FINDER (ADF): An aircraft radio navigation system which senses and indicates the direction to a non-directional radio beacon (NDB) ground transmitter.

AVIGATION EASEMENT: A contractual right or a property interest in land over which a right of unobstructed flight in the airspace is established.

AZIMUTH: Horizontal direction expressed as the angular distance between true north and the direction of a fixed point (as the observer's heading).

B

BASE LEG: A flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline. See "traffic pattern."

BASED AIRCRAFT: The general aviation aircraft that use a specific airport as a home base.

BEARING: The horizontal direction to or from any point, usually measured clockwise from true north or magnetic north.

BLAST FENCE: A barrier used to divert or dissipate jet blast or propeller wash.

BLAST PAD: A prepared surface adjacent to the end of a runway for the purpose of eliminating the erosion of the ground surface by the wind forces produced by airplanes at the initiation of takeoff operations.

BUILDING RESTRICTION LINE (BRL): A line which identifies suitable building area locations on the airport.

C

CAPITAL IMPROVEMENT PLAN: The planning program used by the Federal Aviation Administration to identify, prioritize, and distribute Airport Improvement Program funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives.

CARGO SERVICE AIRPORT: An airport served by aircraft providing air transportation of property only, including mail, with an annual aggregate landed weight of at least 100,000,000 pounds.

CATEGORY I: An Instrument Landing System (ILS) that provides acceptable guidance information to an aircraft from the coverage limits of the ILS to the point at which the localizer course line intersects the glide path at a decision height of 100 feet above the horizontal plane containing the runway threshold.

CATEGORY II: An ILS that provides acceptable guidance information to an aircraft from the coverage limits of the ILS to the point at which the localizer course line intersects the glide path at a decision height of 50 feet above the horizontal plane containing the runway threshold.

CATEGORY III: An ILS that provides acceptable guidance information to a pilot from the coverage limits of the ILS with no decision height specified above the horizontal plane containing the runway threshold.

CEILING: The height above the ground surface to the location of the lowest layer of clouds which is reported as either broken or overcast.

CIRCLING APPROACH: A maneuver initiated by the pilot to align the aircraft with the runway for landing when flying a predetermined circling instrument approach under IFR.

CLASS A AIRSPACE: See Controlled Airspace.

CLASS B AIRSPACE: See Controlled Airspace.

CLASS C AIRSPACE: See Controlled Airspace.

CLASS D AIRSPACE: See Controlled Airspace.

CLASS E AIRSPACE: See Controlled Airspace.

CLASS G AIRSPACE: See Controlled Airspace.

CLEAR ZONE: See Runway Protection Zone.

COMMERCIAL SERVICE AIRPORT: A public airport providing scheduled passenger service that enplanes at least 2,500 annual passengers.

COMMON TRAFFIC ADVISORY FREQUENCY: A radio frequency identified in the appropriate aeronautical chart which is designated for the purpose of transmitting airport advisory information and procedures while operating to or from an uncontrolled airport.

COMPASS LOCATOR (LOM): A low power, low/medium frequency radio-beacon installed in conjunction with the instrument landing system at one or two of the marker sites.

CONICAL SURFACE: An imaginary obstruction- limiting surface defined in FAR Part 77 that extends from the edge of the horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

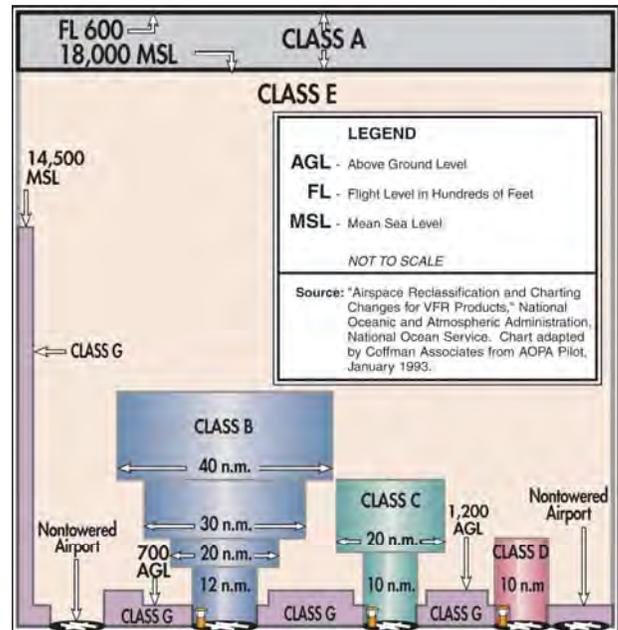
CONTROLLED AIRPORT: An airport that has an operating airport traffic control tower.

CONTROLLED AIRSPACE: Airspace of defined dimensions within which air traffic control services are provided to instrument flight rules (IFR) and visual flight rules (VFR) flights in accordance with the airspace classification. Controlled airspace in the United States is designated as follows:

- **CLASS A:** Generally, the airspace from 18,000 feet mean sea level (MSL) up to but not including flight level FL600. All persons must operate their aircraft under IFR.
- **CLASS B:** Generally, the airspace from the surface to 10,000 feet MSL surrounding the nation's busiest airports. The configuration of Class B airspace is unique to each airport, but typically consists of two or more layers of air space and is designed to contain all published instrument approach procedures to the airport. An air traffic control clearance is required for all aircraft to operate in the area.
- **CLASS C:** Generally, the airspace from the surface to 4,000 feet above the airport elevation (charted as MSL) surrounding those airports that have an operational control tower and radar approach control and are served by a qualifying number of IFR operations or passenger enplanements. Although individually tailored for each airport, Class C airspace typically consists of a surface area with a five nautical mile (nm) radius and an outer area with a 10 nautical mile radius that extends from 1,200 feet to 4,000 feet above the airport elevation. Two-way radio communication is required for all aircraft.
- **CLASS D:** Generally, that airspace from the surface to 2,500 feet above the air port elevation (charted as MSL) surrounding those airports that have an operational control tower. Class D airspace is individually tailored and configured to encompass published instrument approach procedure . Unless otherwise authorized, all persons must establish two-way radio communication.
- **CLASS E:** Generally, controlled airspace that is not classified as Class A, B, C, or D. Class E airspace extends upward from

either the surface or a designated altitude to the overlying or adjacent controlled airspace. When designated as a surface area, the airspace will be configured to contain all instrument procedures. Class E airspace encompasses all Victor Airways. Only aircraft following instrument flight rules are required to establish two-way radio communication with air traffic control.

- **CLASS G:** Generally, that airspace not classified as Class A, B, C, D, or E. Class G airspace is uncontrolled for all aircraft. Class G airspace extends from the surface to the overlying Class E airspace.



CONTROLLED FIRING AREA: See special-use airspace.

CROSSWIND: A wind that is not parallel to a runway centerline or to the intended flight path of an aircraft.

CROSSWIND COMPONENT: The component of wind that is at a right angle to the runway centerline or the intended flight path of an aircraft.

CROSSWIND LEG: A flight path at right angles to the landing runway off its upwind end. See "traffic pattern."

D

DECIBEL: A unit of noise representing a level relative to a reference of a sound pressure 20 micro newtons per square meter.

DECISION HEIGHT: The height above the end of the runway surface at which a decision must be made by a pilot during the ILS or Precision Approach Radar approach to either continue the approach or to execute a missed approach.

DECLARED DISTANCES: The distances declared available for the airplane’s takeoff runway, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are:

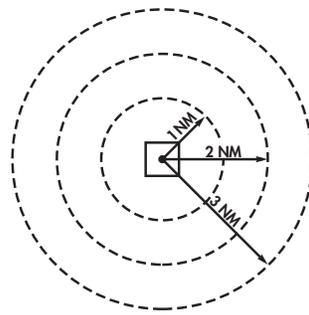
- **TAKEOFF RUNWAY AVAILABLE (TORA):** The runway length declared available and suitable for the ground run of an airplane taking off.
- **TAKEOFF DISTANCE AVAILABLE (TODA):** The TORA plus the length of any remaining runway and/or clear way beyond the far end of the TORA.
- **ACCELERATE-STOP DISTANCE AVAILABLE (ASDA):** The runway plus stopway length declared available for the acceleration and deceleration of an aircraft aborting a takeoff.
- **LANDING DISTANCE AVAILABLE (LDA):** The runway length declared available and suitable for landing.

DEPARTMENT OF TRANSPORTATION: The cabinet level federal government organization consisting of modal operating agencies, such as the Federal Aviation Administration, which was established to promote the coordination of federal transportation programs and to act as a focal point for research and development efforts in transportation.

DISCRETIONARY FUNDS: Federal grant funds that may be appropriated to an airport based upon designation by the Secretary of Transportation or Congress to meet a specified national priority such as enhancing capacity, safety, and security, or mitigating noise.

DISPLACED THRESHOLD: A threshold that is located at a point on the runway other than the designated beginning of the runway.

DISTANCE MEASURING EQUIPMENT (DME): Equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.



DNL: The 24-hour average sound level, in A-weighted decibels, obtained after the addition of ten decibels to sound levels for the periods between 10 p.m. and 7 a.m. as averaged over a span of one year. It is the FAA standard metric for determining the cumulative exposure of individuals to noise.

DOWNWIND LEG: A flight path parallel to the landing runway in the direction opposite to landing. The downwind leg normally extends between the crosswind leg and the base leg. Also see “traffic pattern.”

E

EASEMENT: The legal right of one party to use a portion of the total rights in real estate owned by another party. This may include the right of passage over, on, or below the property; certain air rights above the property, including view rights; and the rights to any specified form of development or activity, as well as any other legal rights in the property that may be specified in the easement document.

ELEVATION: The vertical distance measured in feet above mean sea level.

ENPLANED PASSENGERS: The total number of revenue passengers boarding aircraft, including originating, stop-over, and transfer passengers, in scheduled and nonscheduled services.

ENPLANEMENT: The boarding of a passenger, cargo, freight, or mail on an aircraft at an airport.

ENTITLEMENT: Federal funds for which a commercial service airport may be eligible based upon its annual passenger enplanements.

ENVIRONMENTAL ASSESSMENT (EA): An environmental analysis performed pursuant to the National Environmental Policy Act to determine whether an action would significantly affect the environment and thus require a more detailed environmental impact statement.

ENVIRONMENTAL AUDIT: An assessment of the current status of a party’s compliance with applicable environmental requirements of a party’s environmental compliance policies, practices, and controls.

ENVIRONMENTAL IMPACT STATEMENT (EIS): A document required of federal agencies by the National Environmental Policy Act for major projects are legislative proposals affecting the environment. It is a tool for decision-making describing the positive and negative effects of a proposed action and citing alternative actions.

ESSENTIAL AIR SERVICE: A federal program which guarantees air carrier service to selected small cities by providing subsidies as needed to prevent these cities from such service.

F

FEDERAL AVIATION REGULATIONS: The general and permanent rules established by the executive departments and agencies of the Federal Government for aviation, which are published in the Federal Register. These are the aviation subset of the Code of Federal Regulations.

FEDERAL INSPECTION SERVICES: The provision of customs and immigration services including passport inspection, inspection of baggage, the collection of duties on certain imported items, and the inspections for agricultural products, illegal drugs, or other restricted items.

FINAL APPROACH: A flight path in the direction of landing along the extended runway centerline. The final approach normally extends from the base leg to the runway. See “traffic pattern.”

FINAL APPROACH FIX: The designated point at which the final approach segment for an aircraft landing on a runway begins for a non-precision approach.

FINDING OF NO SIGNIFICANT IMPACT (FONSI): A public document prepared by a Federal agency that presents the rationale why a proposed action will not have a significant effect on the environment and for which an environmental impact statement will not be prepared.

FIXED BASE OPERATOR (FBO): A provider of services to users of an airport. Such services include, but are not limited to, hangaring, fueling, flight training, repair, and maintenance.

FLIGHT LEVEL: A designation for altitude within controlled airspace.

FLIGHT SERVICE STATION: An operations facility in the national flight advisory system which utilizes data interchange facilities for the collection and dissemination of Notices to Airmen, weather, and administrative data and which provides pre-flight and in-flight advisory services to pilots through air and ground based communication facilities.

FRANGIBLE NAVAID: A navigational aid which retains its structural integrity and stiffness up to a designated maximum load, but on impact from a greater load, breaks, distorts, or yields in such a manner as to present the minimum hazard to aircraft.

G

GENERAL AVIATION: That portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity, and large aircraft commercial operators.

GENERAL AVIATION AIRPORT: An airport that provides air service to only general aviation.

GLIDESLOPE (GS): Provides vertical guidance for aircraft during approach and landing. The glideslope consists of the following:

1. Electronic components emitting signals which provide vertical guidance by reference to airborne instruments during instrument approaches such as ILS; or
2. Visual ground aids, such as VASI, which provide vertical guidance for VFR approach or for the visual portion of an instrument approach and landing.

GLOBAL POSITIONING SYSTEM (GPS): A system of 24 satellites used as reference points to enable navigators equipped with GPS receivers to determine their latitude, longitude, and altitude.

GROUND ACCESS: The transportation system on and around the airport that provides access to and from the airport by ground transportation vehicles for passengers, employees, cargo, freight, and airport services.

H

HELIPAD: A designated area for the takeoff, landing, and parking of helicopters.

HIGH INTENSITY RUNWAY LIGHTS: The highest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

HIGH-SPEED EXIT TAXIWAY: A long radius taxiway designed to expedite aircraft turning off the runway after landing (at speeds to 60 knots), thus reducing runway occupancy time.

HORIZONTAL SURFACE: An imaginary obstruction- limiting surface defined in FAR Part 77 that is specified as a portion of a horizontal plane surrounding a runway located 150 feet above the established airport elevation. The specific horizontal dimensions of this surface are a function of the types of approaches existing or planned for the runway.

I

INITIAL APPROACH FIX: The designated point at which the initial approach segment begins for an instrument approach to a runway.

INSTRUMENT APPROACH PROCEDURE: A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.

INSTRUMENT FLIGHT RULES (IFR): Procedures for the conduct of flight in weather conditions below Visual Flight Rules weather minimums. The term IFR is often also used to define weather conditions and the type of flight plan under which an aircraft is operating.

INSTRUMENT LANDING SYSTEM (ILS): A precision instrument approach system which normally consists of the following electronic components and visual aids:

1. Localizer.
2. Glide Slope.
3. Outer Marker.
4. Middle Marker.
5. Approach Lights.

INSTRUMENT METEOROLOGICAL CONDITIONS: Meteorological conditions expressed in terms of specific visibility

and ceiling conditions that are less than the minimums specified for visual meteorological conditions.

ITINERANT OPERATIONS: Operations by aircraft that are not based at a specified airport.

K

KNOTS: A unit of speed length used in navigation that is equivalent to the number of nautical miles traveled in one hour.

L

LANDSIDE: The portion of an airport that provides the facilities necessary for the processing of passengers, cargo, freight, and ground transportation vehicles.

LANDING DISTANCE AVAILABLE (LDA): See declared distances.

LARGE AIRPLANE: An airplane that has a maximum certified takeoff weight in excess of 12,500 pounds.

LOCAL AREA AUGMENTATION SYSTEM: A differential GPS system that provides localized measurement correction signals to the basic GPS signals to improve navigational accuracy integrity, continuity, and availability.

LOCAL OPERATIONS: Aircraft operations performed by aircraft that are based at the airport and that operate in the local traffic pattern or within sight of the airport, that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport.

LOCAL TRAFFIC: Aircraft operating in the traffic pattern or within sight of the tower, or aircraft known to be departing or arriving from the local practice areas, or aircraft executing practice instrument approach procedures. Typically, this includes touch and-go training operations.

LOCALIZER: The component of an ILS which provides course guidance to the runway.

LOCALIZER TYPE DIRECTIONAL AID (LDA): A facility of comparable utility and accuracy to a localizer, but is not part of a complete ILS and is not aligned with the runway.

LONG RANGE NAVIGATION SYSTEM (LORAN): Long range navigation is an electronic navigational aid which determines aircraft position and speed by measuring the difference in the time of reception of synchronized pulse signals from two fixed transmitters. Loran is used for en route navigation.

LOW INTENSITY RUNWAY LIGHTS: The lowest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

M

MEDIUM INTENSITY RUNWAY LIGHTS: The middle classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

MICROWAVE LANDING SYSTEM (MLS): An instrument approach and landing system that provides precision guidance in azimuth, elevation, and distance measurement.

MILITARY OPERATIONS: Aircraft operations that are performed in military aircraft.

MILITARY OPERATIONS AREA (MOA): See special-use airspace

MILITARY TRAINING ROUTE: An air route depicted on aeronautical charts for the conduct of military flight training at speeds above 250 knots.

MISSED APPROACH COURSE (MAC): The flight route to be followed if, after an instrument approach, a landing is not affected, and occurring normally:

1. When the aircraft has descended to the decision height and has not established visual contact; or
2. When directed by air traffic control to pull up or to go around again.

MOVEMENT AREA: The runways, taxiways, and other areas of an airport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports with a tower, air traffic control clearance is required for entry onto the movement area.

N

NATIONAL AIRSPACE SYSTEM: The network of air traffic control facilities, air traffic control areas, and navigational facilities through the U.S.

NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS: The national airport system plan developed by the Secretary of Transportation on a biannual basis for the development of public use airports to meet national air transportation needs.

NATIONAL TRANSPORTATION SAFETY BOARD: A federal government organization established to investigate and determine the probable cause of transportation accidents, to recommend equipment and procedures to enhance transportation safety, and to review on appeal the suspension or revocation of any certificates or licenses issued by the Secretary of Transportation.

NAUTICAL MILE: A unit of length used in navigation which is equivalent to the distance spanned by one minute of arc in latitude, that is, 1,852 meters or 6,076 feet. It is equivalent to approximately 1.15 statute mile.

NAVAID: A term used to describe any electrical or visual air navigational aids, lights, signs, and associated supporting equipment (i.e. PAPI, VASI, ILS, etc.)

NAVIGATIONAL AID: A facility used as, available for use as, or designed for use as an aid to air navigation.

NOISE CONTOUR: A continuous line on a map of the airport vicinity connecting all points of the same noise exposure level.

NON-DIRECTIONAL BEACON (NDB): A beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his or her bearing to and from the radio beacon and home on, or track to, the station. When the radio beacon is installed in conjunction with the Instrument Landing System marker, it is normally called a Compass Locator.

NON-PRECISION APPROACH PROCEDURE: A standard instrument approach procedure in which no electronic glide slope is provided, such as VOR, TACAN, NDB, or LOC.

NOTICE TO AIRMEN: A notice containing information concerning the establishment, condition, or change in any component of or hazard in the National Airspace System, the timely knowledge of which is considered essential to personnel concerned with flight operations.

O

OBJECT FREE AREA (OFA): An area on the ground centered on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

OBSTACLE FREE ZONE (OFZ): The airspace below 150 feet above the established airport elevation and along the runway and extended runway centerline that is required to be kept clear of all objects, except for frangible visual NAVAIDS that need to be located in the OFZ because of their function, in order to provide clearance for aircraft landing or taking off from the runway, and for missed approaches.

ONE-ENGINE INOPERABLE SURFACE: A surface emanating from the runway end at a slope ratio of 62.5:1. Air carrier airports are required to maintain a technical drawing of this surface depicting any object penetrations by January 1, 2010.

OPERATION: The take-off, landing, or touch-and-go procedure by an aircraft on a runway at an airport.

OUTER MARKER (OM): An ILS navigation facility in the terminal area navigation system located four to seven miles from the runway edge on the extended centerline, indicating to the pilot that he/she is passing over the facility and can begin final approach.

P

PILOT CONTROLLED LIGHTING: Runway lighting systems at an airport that are controlled by activating the microphone of a pilot on a specified radio frequency.

PRECISION APPROACH: A standard instrument approach procedure which provides runway alignment and glide slope (descent) information. It is categorized as follows:

- **CATEGORY I (CAT I):** A precision approach which provides for approaches with a decision height of not less than 200 feet and visibility not less than 1/2 mile or Runway Visual Range (RVR) 2400 (RVR 1800) with operative touchdown zone and runway centerline lights.
- **CATEGORY II (CAT II):** A precision approach which provides for approaches with a decision height of not less than 100 feet and visibility not less than 1200 feet RVR.
- **CATEGORY III (CAT III):** A precision approach which provides for approaches with minima less than Category II.

PRECISION APPROACH PATH INDICATOR (PAPI): A lighting system providing visual approach slope guidance to aircraft during a landing approach. It is similar to a VASI but provides a sharper transition between the colored indicator lights.

PRECISION APPROACH RADAR: A radar facility in the terminal air traffic control system used to detect and display with a high degree of accuracy the direction, range, and elevation of an aircraft on the final approach to a runway.

PRECISION OBJECT FREE AREA (POFA): An area centered on the extended runway centerline, beginning at the runway threshold and extending behind the runway threshold that is 200 feet long by 800 feet wide. The POFA is a clearing standard which requires the POFA to be kept clear of above ground objects protruding above the runway safety area edge elevation (except for frangible NAVAIDS). The POFA applies to all new authorized instrument approach procedures with less than 3/4 mile visibility.

PRIMARY AIRPORT: A commercial service airport that enplanes at least 10,000 annual passengers.

PRIMARY SURFACE: An imaginary obstruction limiting surface defined in FAR Part 77 that is specified as a rectangular surface longitudinally centered about a runway. The specific dimensions of this surface are a function of the types of approaches existing or planned for the runway.

PROHIBITED AREA: See special-use airspace.

PVC: Poor visibility and ceiling. Used in determining Annual Service Volume. PVC conditions exist when the cloud ceiling is less than 500 feet and visibility is less than one mile.

R

RADIAL: A navigational signal generated by a Very High Frequency Omni-directional Range or VORTAC station that is measured as an azimuth from the station.

REGRESSION ANALYSIS: A statistical technique that seeks to identify and quantify the relationships between factors associated with a forecast.

REMOTE COMMUNICATIONS OUTLET (RCO): An unstaffed transmitter receiver/facility remotely controlled by air traffic personnel. RCOs serve flight service stations (FSSs). RCOs were established to provide ground-to-ground communications between air traffic control specialists and pilots at satellite airports for delivering en route clearances, issuing departure authorizations, and acknowledging instrument flight rules cancellations or departure/landing times.

REMOTE TRANSMITTER/RECEIVER (RTR): See remote communications outlet. RTRs serve ARTCCs.

RELIEVER AIRPORT: An airport to serve general aviation aircraft which might otherwise use a congested air-carrier served airport.

RESTRICTED AREA: See special-use airspace.

RNAV: Area navigation - airborne equipment which permits flights over determined tracks within prescribed accuracy tolerances without the need to overfly ground-based navigation facilities. Used en route and for approaches to an airport.

RUNWAY: A defined rectangular area on an airport prepared for aircraft landing and takeoff. Runways are normally numbered in relation to their magnetic direction, rounded off to the nearest 10 degrees. For example, a runway with a magnetic heading of 180 would be designated Runway 18. The runway heading on the opposite end of the runway is 180 degrees from that runway end. For example, the opposite runway heading for Runway 18 would be Runway 36 (magnetic heading of 360). Aircraft can takeoff or land from either end of a runway, depending upon wind direction.

RUNWAY ALIGNMENT INDICATOR LIGHT: A series of high intensity sequentially flashing lights installed on the extended centerline of the runway usually in conjunction with an approach lighting system.

RUNWAY END IDENTIFIER LIGHTS (REIL): Two synchronized flashing lights, one on each side of the runway

threshold, which provide rapid and positive identification of the approach end of a particular runway.

RUNWAY GRADIENT: The average slope, measured in percent, between the two ends of a runway.

RUNWAY PROTECTION ZONE (RPZ): An area off the runway end to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape. Its dimensions are determined by the aircraft approach speed and runway approach type and minima.

RUNWAY SAFETY AREA (RSA): A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

RUNWAY VISIBILITY ZONE (RVZ): An area on the airport to be kept clear of permanent objects so that there is an unobstructed line of sight from any point five feet above the runway centerline to any point five feet above an intersecting runway centerline.

RUNWAY VISUAL RANGE (RVR): An instrumentally derived value, in feet, representing the horizontal distance a pilot can see down the runway from the runway end.

S

SCOPE: The document that identifies and defines the tasks, emphasis, and level of effort associated with a project or study.

SEGMENTED CIRCLE: A system of visual indicators designed to provide traffic pattern information at airports without operating control towers.

SHOULDER: An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft running off the pavement; enhanced drainage; and blast protection. The shoulder does not necessarily need to be paved.

SLANT-RANGE DISTANCE: The straight line distance between an aircraft and a point on the ground.

SMALL AIRPLANE: An airplane that has a maximum certified takeoff weight of up to 12,500 pounds.

SPECIAL-USE AIRSPACE: Airspace of defined dimensions identified by a surface area wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Special-use airspace classifications include:

- **ALERT AREA:** Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft.

- **CONTROLLED FIRING AREA:** Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft and to ensure the safety of persons or property on the ground.
- **MILITARY OPERATIONS AREA (MOA):** Designated airspace with defined vertical and lateral dimensions established outside Class A airspace to separate/segregate certain military activities from instrument flight rule (IFR) traffic and to identify for visual flight rule (VFR) traffic where these activities are conducted.
- **PROHIBITED AREA:** Designated airspace within which the flight of aircraft is prohibited.
- **RESTRICTED AREA:** Airspace designated under Federal Aviation Regulation (FAR) 73, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use. When not in use by the using agency, IFR/VFR operations can be authorized by the controlling air traffic control facility.
- **WARNING AREA:** Airspace which may contain hazards to nonparticipating aircraft.

STANDARD INSTRUMENT DEPARTURE (SID): A preplanned coded air traffic control IFR departure routing, preprinted for pilot use in graphic and textual form only.

STANDARD INSTRUMENT DEPARTURE PROCEDURES: A published standard flight procedure to be utilized following takeoff to provide a transition between the airport and the terminal area or en route airspace.

STANDARD TERMINAL ARRIVAL ROUTE (STAR): A preplanned coded air traffic control IFR arrival routing, preprinted for pilot use in graphic and textual or textual form only.

STOP-AND-GO: A procedure wherein an aircraft will land, make a complete stop on the runway, and then commence a takeoff from that point. A stop-and-go is recorded as two operations: one operation for the landing and one operation for the takeoff.

STOPWAY: An area beyond the end of a takeoff runway that is designed to support an aircraft during an aborted takeoff without causing structural damage to the aircraft. It is not to be used for takeoff, landing, or taxiing by aircraft.

STRAIGHT-IN LANDING/APPROACH: A landing made on a runway aligned within 30 degrees of the final approach course following completion of an instrument approach.

T

TACTICAL AIR NAVIGATION (TACAN): An ultrahigh frequency electronic air navigation system which provides

suitably-equipped aircraft a continuous indication of bearing and distance to the TACAN station.

TAKEOFF RUNWAY AVAILABLE (TORA):
See declared distances.

TAKEOFF DISTANCE AVAILABLE (TODA):
See declared distances.

TAXILANE: The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

TAXIWAY: A defined path established for the taxiing of aircraft from one part of an airport to another.

TAXIWAY SAFETY AREA (TSA): A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.

TERMINAL INSTRUMENT PROCEDURES: Published flight procedures for conducting instrument approaches to runways under instrument meteorological conditions.

TERMINAL RADAR APPROACH CONTROL: An element of the air traffic control system responsible for monitoring the en-route and terminal segment of air traffic in the airspace surrounding airports with moderate to high levels of air traffic.

TETRAHEDRON: A device used as a landing direction indicator. The small end of the tetrahedron points in the direction of landing.

THRESHOLD: The beginning of that portion of the runway available for landing. In some instances the landing threshold may be displaced.

TOUCH-AND-GO: An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway. A touch-and go is recorded as two operations: one operation for the landing and one operation for the takeoff.

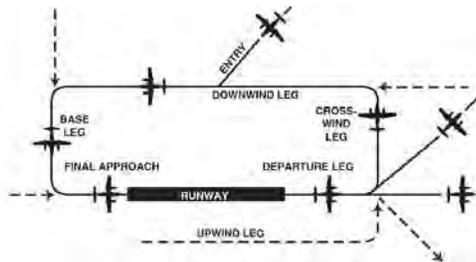
TOUCHDOWN: The point at which a landing aircraft makes contact with the runway surface.

TOUCHDOWN ZONE (TDZ): The first 3,000 feet of the runway beginning at the threshold.

TOUCHDOWN ZONE ELEVATION (TDZE): The highest elevation in the touchdown zone.

TOUCHDOWN ZONE (TDZ) LIGHTING: Two rows of transverse light bars located symmetrically about the runway centerline normally at 100- foot intervals. The basic system extends 3,000 feet along the runway.

TRAFFIC PATTERN: The traffic flow that is prescribed for aircraft landing at or taking off from an airport. The components of a typical traffic pattern are the upwind leg, crosswind leg, downwind leg, base leg, and final approach.



U

UNCONTROLLED AIRPORT: An airport without an air traffic control tower at which the control of Visual Flight Rules traffic is not exercised.

UNCONTROLLED AIRSPACE: Airspace within which aircraft are not subject to air traffic control.

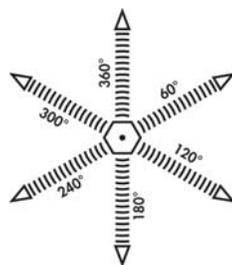
UNIVERSAL COMMUNICATION (UNICOM): A nongovernment communication facility which may provide airport information at certain airports. Locations and frequencies of UNICOM's are shown on aeronautical charts and publications.

UPWIND LEG: A flight path parallel to the landing runway in the direction of landing. See "traffic pattern."

V

VECTOR: A heading issued to an aircraft to provide navigational guidance by radar.

VERY HIGH FREQUENCY/ OMNIDIRECTIONAL RANGE (VOR): A ground-based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. Used as the basis for navigation in the national airspace system. The VOR periodically identifies itself by Morse Code and may have an additional voice identification feature.



VERY HIGH FREQUENCY OMNI-DIRECTIONAL RANGE/ TACTICAL AIR NAVIGATION (VORTAC): A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance-measuring equipment (DME) at one site.

VICTOR AIRWAY: A control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids.

VISUAL APPROACH: An approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic control facility and having an air traffic control authorization, may proceed to the airport of destination in VFR conditions.

VISUAL APPROACH SLOPE INDICATOR (VASI): An airport lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity red and white focused light beams which indicate to the pilot that he is on path if he sees red/white, above path if white/white, and below path if red/red. Some airports serving large aircraft have three-bar VASI's which provide two visual guide paths to the same runway.

VISUAL FLIGHT RULES (VFR): Rules that govern the procedures for conducting flight under visual conditions. The term VFR is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

VISUAL METEOROLOGICAL CONDITIONS: Meteorological conditions expressed in terms of specific visibility and ceiling conditions which are equal to or greater than the threshold values for instrument meteorological conditions.

VOR: See "Very High Frequency Omnidirectional Range Station."

VORTAC: See "Very High Frequency Omnidirectional Range Station/Tactical Air Navigation."

W

WARNING AREA: See special-use airspace.

WIDE AREA AUGMENTATION SYSTEM: An enhancement of the Global Positioning System that includes integrity broadcasts, differential corrections, and additional ranging signals for the purpose of providing the accuracy, integrity, availability, and continuity required to support all phases of flight.

Abbreviations

AC: advisory circular	DME: distance measuring equipment
ADF: automatic direction finder	DNL: day-night noise level
ADG: airplane design group	DWL: runway weight bearing capacity of aircraft with dual-wheel type landing gear
AFSS: automated flight service station	DTWL: runway weight bearing capacity of aircraft with dual-tandem type landing gear
AGL: above ground level	FAA: Federal Aviation Administration
AIA: annual instrument approach	FAR: Federal Aviation Regulation
AIP: Airport Improvement Program	FBO: fixed base operator
AIR-21: Wendell H. Ford Aviation Investment and Reform Act for the 21st Century	FY: fiscal year
ALS: approach lighting system	GPS: global positioning system
ALSF-1: standard 2,400-foot high intensity approach lighting system with sequenced flashers (CAT I configuration)	GS: glide slope
ALSF-2: standard 2,400-foot high intensity approach lighting system with sequenced flashers (CAT II configuration)	HIRL: high intensity runway edge lighting
AOA: Aircraft Operation Area	IFR: instrument flight rules (FAR Part 91)
APV: instrument approach procedure with vertical guidance	ILS: instrument landing system
ARC: airport reference code	IM: inner marker
ARFF: aircraft rescue and fire fighting	LDA: localizer type directional aid
ARP: airport reference point	LDA: landing distance available
ARTCC: air route traffic control center	LIRL: low intensity runway edge lighting
ASDA: accelerate-stop distance available	LMM: compass locator at ILS outer marker
ASR: airport surveillance radar	LORAN: long range navigation
ASOS: automated surface observation station	MALS: medium intensity approach lighting system with indicator lights
ATCT: airport traffic control tower	MIRL: medium intensity runway edge lighting
ATIS: automated terminal information service	MITL: medium intensity taxiway edge lighting
AVGAS: aviation gasoline - typically 100 low lead (100L)	MLS: microwave landing system
AWOS: automated weather observation station	MM: middle marker
BRL: building restriction line	MOA: military operations area
CFR: Code of Federal Regulation	MLS: mean sea level
CIP: capital improvement program	

NAVAID: navigational aid

NDB: nondirectional radio beacon

NM: nautical mile (6,076.1 feet)

NPES: National Pollutant Discharge Elimination System

NPIAS: National Plan of Integrated Airport Systems

NPRM: notice of proposed rule making

ODALS: omnidirectional approach lighting system

OFA: object free area

OFZ: obstacle free zone

OM: outer marker

PAC: planning advisory committee

PAPI: precision approach path indicator

PFC: porous friction course

PFC: passenger facility charge

PCL: pilot-controlled lighting

PIW public information workshop

PLASI: pulsating visual approach slope indicator

POFA: precision object free area

PVASI: pulsating/steady visual approach slope indicator

PVC: poor visibility and ceiling

RCO: remote communications outlet

REIL: runway end identifier lighting

RNAV: area navigation

RPZ: runway protection zone

RSA: runway safety area

RTR: remote transmitter/receiver

RVR: runway visibility range

RVZ: runway visibility zone

SALS: short approach lighting system

SASP: state aviation system plan

SEL: sound exposure level

SID: standard instrument departure

SM: statute mile (5,280 feet)

SRE: snow removal equipment

SSALF: simplified short approach lighting system with
runway alignment indicator lights

STAR: standard terminal arrival route

SWL: runway weight bearing capacity for aircraft with
single-wheel tandem type landing gear

TACAN: tactical air navigational aid

TDZ: touchdown zone

TDZE: touchdown zone elevation

TAF: Federal Aviation Administration (FAA) Terminal
Area Forecast

TODA: takeoff distance available

TORA: takeoff runway available

TRACON: terminal radar approach control

VASI: visual approach slope indicator

VFR: visual flight rules (FAR Part 91)

VHF: very high frequency

VOR: very high frequency omni-directional range

VORTAC: VOR and TACAN collocated



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