Draft

WESTOVER FIELD AIRPORT

Land Use Compatibility Plan

Prepared for
County of Amador

June 2017

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CHAPTER 1
Introduction

1.1 Plan Overview

The *Westover Field Airport Land Use Compatibility Plan* (hereafter referred to as the ALUCP or the Plan) is intended to promote compatibility between the functions and operations of Amador County Airport (hereafter referred to as Westover Field or the Airport) and the land uses surrounding the Airport. In order to achieve this goal, the ALUCP establishes a set of compatibility criteria that are applicable to new development, along with policies that are designed to limit the range of future land uses in the vicinity of the Airport. This ALUCP has no authority over airport operations. It must also be noted that while this ALUCP may influence future development in the vicinity of Westover Field, this Plan does not have any authority over existing land uses, even those found to be incompatible with the requirements set forth in this ALUCP. The types of approvals that could constitute an existing land use are defined in Section 3.2, Definitions. ~~Similarly, this ALUCP has no authority over airport operations.~~

The policies set forth in this ALUCP pertain to the County of Amador, as well as the Cities of Jackson and Sutter Creek. Accordingly, the compatibility criteria defined within the policies of this ALUCP are also meant to be reflected in the general plans and other policy instruments adopted by these same neighboring affected jurisdictions. Special districts, school districts, and community college districts within these jurisdictions are also defined as involved agencies and shall also be subject to the policies of this ALUCP. Federal and State agencies and tribal lands are not subject to the provisions of this ALUCP.

1.2 How to Use the Westover Field ALUCP

In this update to the Westover Field ALUCP, there are three chapters that inform the reader of the requirements for Westover Field, along with review procedures and implementation strategies. Chapter 2, Westover Field and Surrounding Environs, provides an overview of Amador County and the affected jurisdictions, as well as the existing and proposed operations and facilities at the Airport. Chapter 3, Policies, provides the policies used to direct land use actions in and around the Airport.

1.3 Airport Land Use Compatibility Planning Framework

The California State Aeronautics Act (Public Utilities Code §21670 et seq.) establishes the regulatory framework for the creation of airport land use commissions (ALUCs) and the drafting of airport land use compatibility plans, and allows for the Amador County ALUC to assert its role in land use development review. The following discussion provides a general synopsis of airport land use compatibility planning, indicating the following facets of airport land use compatibility review: who prepares ALUCPs, how they are established, the implications ALUCPs have on local and regional planning, and the specific enabling legislation for this process.

1.3.1 Airport Land Use Commissions

The role of an airport land use commission (ALUC) is to conduct airport land use compatibility planning for the purpose of protecting the public's health, safety, and welfare. To accomplish this goal, an ALUC ensures 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 land uses.

Pursuant to California Public Utilities Code (PUC) §21674, an ALUC has the following powers and duties:

- To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.
- 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.
- To prepare and adopt an airport land use compatibility plan pursuant to §21675.
- To review the plans, regulations, and other actions of local agencies and airport operators pursuant to §21676.
- The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

Lastly, pursuant to §21674(f), in order to carry out its responsibilities, the Commission may adopt rules and regulations consistent with this article.

Amador County ALUC

Pursuant to PUC §21670(b), the Amador County ALUC consists of two members representing the Amador County Board of Supervisors; two members representing the Cities in the County, appointed by a selection committee comprised of the mayors of all the Cities within the County;

two members representing the airports within the County appointed by the Airport Manager; and one member representing the general public, appointed by the other six members of the ALUC.

1.3.2 Airport Land Use Compatibility Plans

One of the primary responsibilities of an ALUC is the preparation and adoption of an airport land use compatibility plan (PUC §21674(c) and 21675). The ALUCP provides the basis for compatible planning within the vicinity of a public airport. These plans may include land use measures specifying land use, height restrictions, and building standards, which could include but are not limited to soundproofing (PUC §21675(a)). The planning boundary of the airport land use compatibility plan is the "airport influence area" or AIA, and is established by the ALUC after a hearing and consultation with the involved agencies (PUC §21675 (c)). Involved agencies are primarily the affected cities and the County, but may also include special districts, school districts, and community college districts (PUC §21670(f)).

Update of the Westover Field Airport Land Use Plan

This ALUCP serves as an update to the previous plan that was first adopted in 1987, and subsequently amended in 1990. Since the 1990 amendment, numerous factors and conditions have changed related to Westover Field and airport land use compatibility planning, thus, warranting this update. ALUCPs are required to reflect the anticipated growth of an airport during at least the next 20 years.

First, the airport master plan and airport layout plan (ALP) for Westover Field were updated in 2005,[1] pursuant to PUC §21675(a). ALUCs must base their airport land use compatibility plans on a long-range airport master plan adopted by the airport owner (or if no such plan exists, an ALP may be used upon the approval of Caltrans' Division of Aeronautics). Westover Field's ALP was subsequently updated in 2013.

The 2005 Master Plan is the primary source of information used for this ALUCP update regarding long-range development plans for Westover Field. Development proposals in the Master Plan include the future 600-foot length extension and 75-foot width extension of Runway 1-19. Aircraft activity projections set forth in the Master Plan have been updated for the purposes of this ALUCP in order to meet the 20-year planning requirement set forth by the State Aeronautics Act (see Appendix ~~X~~ C for the Aircraft Noise Exposure Analysis). As further described in Chapter 2 of this ALUCP, this forecast anticipates aircraft operations increasing from approximately 25,000 operations (landings and takeoffs) in 2016 to 60,300 operations by 2032.

[1] Master plans are planning tools that provide a 20-year forecast of activity at an airport, and propose a variety of improvements necessary for accommodating the forecasted growth. An ALP graphically depicts the layout of an airport, in both its current and ultimate (20-year build-out) state, and is a component of the airport master plan.

Secondly, the *California Airport Land Use Planning Handbook* (hereafter referred to as the Handbook), the guidance document set forth by Caltrans' Division of Aeronautics that informs the development of airport land use compatibility plans, was updated in 2011. In addition to providing guidance for meeting baseline safety and compatibility goals, the Handbook also provides new information on the role of the California Environmental Quality Act (CEQA) in airport land use compatibility planning, re-examines aircraft accident statistics, explains exemptions and unique circumstances, and clarifies earlier concepts and processes described in the 2002 Handbook.

Pursuant to State law, the Handbook has provided guidance for the compatibility policies set forth in this ALUCP. The Handbook was used in this update to structure the compatibility policies set forth in this ALUCP and to establish the procedures to be followed by the ALUC and local agencies in implementation of the policies. Furthermore, guidance provided in the Handbook was used to prepare Westover Field's safety zones, as shown in Chapter 3.

1.3.3 Relationship with Local Government and the Airport

The State Aeronautics Act sets the foundation for the relationship between ALUCs and ALUCPs with local government and airport plans. The following sections below describe these relationships.

Relationship between ALUCs and Local Government

ALUCs are independent entities that operate separately from local agencies. They have the authority to adopt compatibility plans, and, under certain circumstances, review projects within the boundary of the AIA. ALUCs must engage involved agencies regarding the establishment of an AIA boundary (PUC §21675(c)). Engagement with these outside agencies is critical to effecting land use changes, as existing incompatible uses are the concern of the airport and of the city or county having jurisdiction over the affected area, and policies should be developed with the intention of addressing existing non-conforming land uses. ALUCs do not have land use authority to implement the policies adopted by other jurisdictions set forth in the compatibility plan.

The responsibility for implementing an adopted airport land use compatibility plan ultimately depends on the affected local agencies that are located within the AIA. Per Government Code §65302.3, every county and city affected by an airport land use compatibility plan must make its general plan (and specific plans) consistent with the compatibility plan. Local agencies also have the option to overrule ALUC policies, as described later in this chapter.

As the ALUCP states, local agencies are also required to submit their plans and certain proposed land use actions to the ALUC for review. Per PUC §21676(b), local agencies are required to submit general plans, specific plans, zoning ordinances, and building regulations to the ALUC for consistency review prior to their adoption or amendment. Individual development projects are not typically subject to ALUC review unless an agency's general or specific plan has not been made

consistent with the adopted airport land use compatibility plan (and the local agency has not adopted an override of the compatibility plan).

1.3.4 Relationship between Compatibility Plans and Airport Plans

As described earlier in this Chapter, ALUCPs must be based on either a long-range airport master plan or an ALP (PUC §21675(a)). Conversely, PUC §21676(c) requires that any proposed modification to an airport master plan be submitted to the ALUC for review to determine if the updated master plan is consistent with the airport land use compatibility plan. In situations such as these, ALUCs generally review master plans to ensure that proposed master plan projects remain compliant with established compatibility criteria, and that any potential off-airport impacts are adequately addressed. In the event that a master plan proposes alterations to an airport's runway(s) (i.e., lengthening or widening a runway), the associated ALUCP should be updated to reflect these changes.

1.4 General Plan Consistency

State law requires that, once an ALUC has adopted or amended an ALUCP, general plans and any applicable specific plans be amended, as necessary, in order to be consistent with the compatibility plan (Government Code §65302.3(a)-(b)). This action must be taken within 180 days of when the ALUC adopts or amends its plan.

Alternatively, local agencies have the option of taking the steps necessary to overrule all or part of the compatibility plan. Should a local agency choose to overrule an ALUC, four mandatory steps must be taken:

- At least 45 days prior to any decision to overrule the commission, the local agency must provide the local ALUC and Caltrans' Division of Aeronautics a copy of the proposed decision and findings;
- The holding of a public hearing;
- The making of specific findings that the action proposed is consistent with the State Aeronautics Act; and
- Approval of the proposed action by a two-thirds vote of the agency's governing body.

For more information on the overrule process, please refer to PUC §21676.5(a) or the Caltrans Handbook (http://dot.ca.gov/hq/planning/aeronaut/documents/alucp/lu_p03_protecting_our_airports_and_communities.htm).

Jurisdictions affected by this ALUCP, which include the County of Amador and the Cities of Jackson and Sutter Creek, may need to modify their general plans, specific plans, and other policy documents for consistency with this ALUCP. Jurisdictions can ensure consistency with this ALUCP through one of these strategies:

- **Incorporate Policies into One or More Existing General Plan Element(s)**—One method of achieving the necessary planning consistency is to modify existing general plan elements. For example, jurisdictions could insert airport land use compatibility policies into the land use element, and relevant policies into the noise and safety elements. The primary compatibility criteria and associated maps, along with the procedural policies, could be incorporated into the land use element. By using this approach, direct conflicts would be eliminated and a local agency could fully incorporate a majority of mechanisms and procedures into its general plan to ensure compliance with compatibility criteria.

- **Adopt a General Plan Airport Element**—Another approach is to prepare a separate airport element of the general plan. Such a format may be advantageous when a local agency's general plan also needs to address on-airport development and operational issues. The jurisdiction would still need to address the issue of modification of other plan elements in order to provide cross-referencing and eliminate conflicts.

- **Adopt the ALUCP as Stand-Alone Document**—Local agencies selecting this option could simply adopt the relevant portions of the ALUCP as a local policy document. Changes to the community's existing plan(s) would be minimal. The local agency would need to add policy reference(s) to the separate ALUCP document and remove any direct land use or other conflicts with compatibility planning criteria from local plan(s). Local plan(s) could include a limited discussion of compatibility planning issues, but the substance of most compatibility policies would appear only in the stand-alone ALUCP. The key to this method lies in ensuring that the provisions of the stand-alone document carry over to discretionary and ministerial development project approvals.

- **Adopt Airport Combining District or Overlay Zoning Ordinance**—Local agency adoption of an airport combining district or overlay zoning ordinance allows for jurisdictions to codify airport compatibility criteria identified only in concept in the local plan(s). Other than where direct conflicts need to be eliminated from the local plans, implementation of the compatibility policies would essentially be accomplished solely through the zoning ordinance. The general plan and applicable specific plans would require some (usually minimal) changes to refer to the ALUCP and the overlay zone.

Any of the above identified methods, or a combination of methods, are acceptable approaches for ensuring consistency between local planning documents and this ALUCP. Overall, when updating their planning documents, local agencies need to focus on 1) addressing compatibility issues either directly in a general plan, or indirectly through reference to a zoning ordinance or other policy document, and 2) avoiding direct conflicts with the compatibility criteria set forth in this ALUCP.

CHAPTER 2
Westover Field and Surrounding Environs

2.1 Introduction

The physical and operational characteristics of Westover Field, as well as the land uses (both existing and planned) that surround the Airport, provide the vital information and setting upon which this ALUCP is formed. Understanding the operations of an airport, and how it may affect the community around it, plays a vital role in formulating an airport land use compatibility plan. This information is also utilized for determining potential impacts to the environment that may result from implementation of this ALUCP, as a part of the California Environmental Quality Act (CEQA) process.

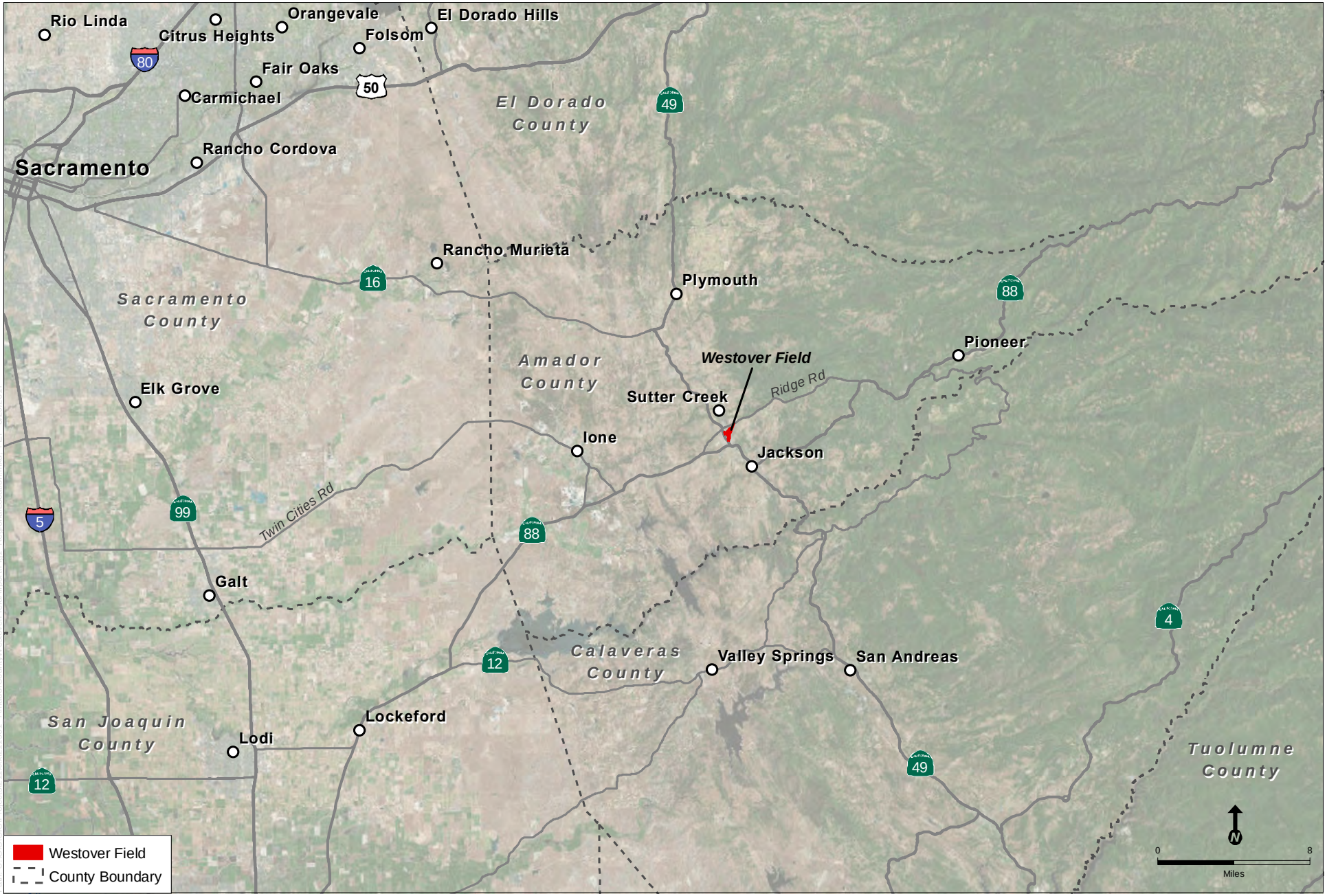
2.2 Westover Field

2.2.1 Location and History

Westover Field is a general aviation facility owned and operated by Amador County, under the General Services Administration. It is located approximately 2.2 miles north of Jackson, less than two miles south of Sutter Creek, 40 miles southeast of Sacramento, and approximately 96 miles northeast of San Francisco (see **Figure 2-1**). Amador County Airport was officially opened on April 5th, 1931. The Airport originally operated as a private field, but was transferred to public use in 1936. Major development of the Airport did not occur until after World War II. In the late 1940s, aviation officials at the federal, state, and county levels administered a $50,000 development project to create a Class 1 airport for the County. The funds were used to improve the runway and construct a new hangar and office, a new apron, a parking area, and a road leading from State Route (SR) 49 to the airport. Another major expansion was undertaken in the late 1970s which resulted in the addition of more property and the construction of the present 3,400-foot runway.[1]

Bill Westover acted as assistant airport manager in 1946 and was promoted to airport manager in 1955. He served in this position until 1967. In honor of his twenty years of service, Amador County Airport was renamed Westover Field. Although Westover Field appears to be the more common name, this airport does utilize both names.

[1] Larry Cenotto. 2006. Logan's Alley, Amador County Yesterdays in Picture and Prose, Volume V. Cenotto Publications. Jackson: California.



SOURCE: ESA, 2017; ESRI Mapping Services

Amador County Westover Field ALUCP . 211961

Figure 2-1

Regional Location

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2.2.2 Facilities and Operations

Westover Field is an Airport Reference Code (ARC) B-1 category facility, which caters to most GA aircraft (12,500 pound gross weight maximum). This corresponds to aircraft approach speed Category B (91 – 121 knots) and Airplane Design Group 1 (ADG 1), which allow up to a 49-foot wingspan. The most current airport layout plan (ALP) for the Airport is depicted in **Figure 2-2**.

Current Airport Facilities

Westover Field's single runway (1-19) is oriented north-to-south, and is 3,401 feet long and 60 feet wide. A 30-foot wide parallel taxiway is located on the west side of Runway 1-19, which provides a total of four connecting taxi lanes. A helicopter landing pad is located to the west of the parallel taxiway.

Landside facilities at the Airport include 96 aircraft tie-down positions, which are available for both based and transient aircraft, 4~~7~~8 portable hangars, ~~24~~ 18 T-hangars, and ~~17~~ 36 box hangars for a total aircraft parking capacity of ~~185~~197. Ten of the box hangars are large enough to store two or more aircraft. In addition to these facilities, the Airport also accommodates six large, fixed-based operation (FBO) hangars, which are used for aircraft maintenance. Based or transient aircraft can refuel at one of two fuel tanks located west of Runway 1-19; one 12,000-gallon tank is available for 100 LL (low lead) avgas (aviation gasoline), and another 12,000-gallon tank provides Jet-A fuel. All of Westover Field's landside facilities are located to the west of Runway 1-19.

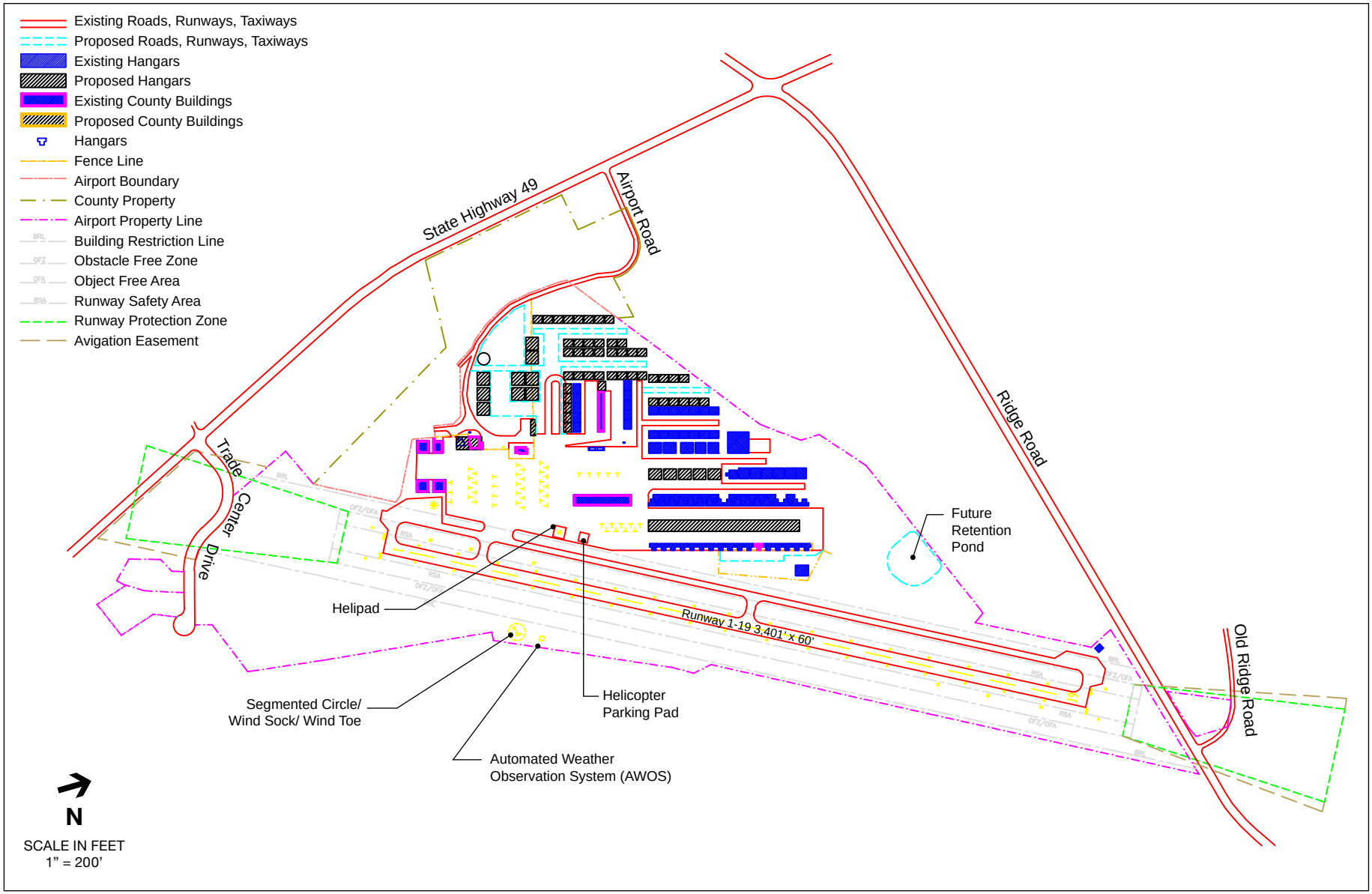
Other facilities at Westover Field include the administration building, which is located in the southwest portion of the Airport, approximately 50 vehicle parking spots, as well as a large gravel area between the main apron and access road, which can accommodate an additional 50-100 vehicles.[2]

Future Airport Facilities

In order to ensure that the Airport continues to function adequately, meets FAA standards, and serves the needs of the aviation community, as well as accommodates the forecasted growth in the number of based aircraft and operations at the Airport, the 2005 *Westover Field Master Plan* (Master Plan) identified several projects intended to improve the functionality of the Airport, as well as to expand its capacity. Projects proposed in the Master Plan include runway safety area (RSA) and stopway[3] improvements; airfield drainage improvements; taxiway improvements; lighting improvements; pavement maintenance; runway widening; and remodeling of the existing terminal/administration building.

2 Amador County. 2005. Westover Field Airport Master Plan. Pages 2.5 to 2.6.

3 Runway "stopways," or "overruns," are located on either end of a runway, and are intended to provide additional length to a runway in the event that an aircraft must abort a takeoff, or requires longer roll-out distance on landing.



SOURCES: Cortright & Seibold, 2013; ESA 2016

Amador County Westover Field ALUCP. 211961

Figure 2-2

Airport Layout Plan

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In addition to these improvements, the Master Plan proposes the development of a variety of aircraft parking, so as to accommodate the forecasted growth of general aviation operations. The selected alternative in the Master Plan identified the removal of some existing tie downs and T-hangars, while adding new portable hangars, box hangars, and large (corporate-style) hangars. In total, the Master Plan's preferred alternative for aircraft parking would result in 253 aircraft parking spaces (a net gain of 68 parking spaces above current conditions).

The projects identified in the 2005 Master Plan were forecasted to occur in three stages over a 20-year planning cycle, and would be developed on an as-needed basis.

Airport Operations

Current Based Fleet Mix and Operations

Westover Field currently has ~~132~~ 127 aircraft based at the Airport. Of these ~~132~~ 127 based aircraft, 122 are single-engine piston airplanes~~,~~ and five are multi-engine airplanes~~, four are helicopters, and one is a glider~~.[4] This number is an increase of approximately 4.7 percent from the number of aircraft that were based at the Airport at the time the *Westover Field Airport Master Plan* (Master Plan) was prepared in 2005, which was 126.

According to the most current operations data available, over a one-year period, Westover Field averaged 68 operations (takeoff and landing) a day, for a total of approximately 25,000 annual operations.[5]

Forecasted Based Fleet Mix and Operations

The 2005 Master Plan provides forecasts of the based fleet mix and operations at Westover Field through 2020. However, pursuant to Public Utilities Code (PUC) §21675(a), an ALUCP shall be based on either a master plan or ALP that "reflects the anticipated growth of the airport during at least the next 20 years." Pursuant to these guidelines, the 2020 forecasts set forth in the Master Plan would be inadequate for the purposes of this ALUCP. In order to ensure that the 20-year forecasting standard set forth by State guidelines is met for this ALUCP, the based fleet mix and operations were updated using current data and methodologies set forth in the Master Plan.

In determining the number of based aircraft at Westover Field over a 20-year forecast period, the Master Plan utilized a high/low forecast range (rather than a single value) for each future year in order to account for uncertainty in federal and State economic trends. As such, the annual growth rates used in the Master Plan ranged from 1.3 – 1.9% (for low and high forecast values, respectively). The Master Plan developed a forecast of general aviation aircraft operations by using the "high-range" of based aircraft forecasted for Westover Field, with an estimate of

4 Dave Sheppard, Amador County Airport Manager, electronic communication to ~~Brian Grattidge, April 26, 2012~~Matt Pruter, April 27, 2017.

5 Dave Sheppard, Amador County Airport Manager, electronic communication, March 8, 2011. For a 12-month period ending February 28, 2010.

approximately 300 operations per based aircraft. For itinerant operations, the Master Plan assumes a distribution of 45% itinerant operations to 55% local operations.

Given that the current number of based aircraft and annual operations at Westover Field (as described above) are below the Master Plan forecast level for this timeframe, the ALUCP forecast operations have been adjusted accordingly. The 1.9% growth rate has been retained for projections over the next 20 years. Economic trends at both the national and state levels, as well as the local population growth rate (up 0.8% from 2001), suggest relatively slow to modest growth in regional general aviation operations; though this does not preclude the possibility that future economic improvements would result in the growth of the general aviation market. **Table 2-1** provides the based aircraft and operations developed for the ALUCP forecast.

TABLE 2-1
WESTOVER FIELD FORECASTED OPERATIONS 2012 – 2032

Year	Based Aircraft*	Annual Operations per Based Aircraft	Annual Operations	Operations Distribution	
				Itinerant (45%)	Local (55%)
~~2012~~	~~132~~	~~300~~	~~39,600~~	~~17,820~~	~~21,780~~
2015	127~~141~~	300~~300~~	37,967 ~~42,300~~	17,085 ~~19,035~~	20,882 ~~23,265~~
2020	~~156~~150	300	~~46,800~~44,870	~~21,060~~20,191	~~25,740~~24,679
2025	~~171~~164	300	~~51,300~~49,185	~~23,085~~22,133	~~28,215~~27,052
2030	~~186~~179	300	~~55,800~~53,499	~~25,110~~24,075	~~30,690~~29,424
2032	192~~201~~	300	~~60,300~~57,526	~~27,135~~25,887	~~33,165~~31,639

NOTE:
* ~~The based fleet in each forecast year includes one (1) glider aircraft. This aircraft was not included in any of the~~ Calculations for noise modeling prepared in support of this ALUCP are based on forecasted operations from the 2005 Airport Master Plan.

Source: Amador County, 2012; ESA Airports, 2012.

The revised forecast of based aircraft is within the theoretic maximum capacity of Westover Field, as identified in the Master Plan's preferred alternative; which envisioned a maximum of 253 aircraft parking spaces. Therefore, full build-out of Westover Field, as described in the Master Plan, would more than adequately accommodate the updated forecast of based aircraft and operations over the next 20 years. Furthermore, while FAA's terminal area forecast (TAF) indicates no future growth of operations at Westover Field over the 20-year planning horizon, it is prudent to predict a reasonable level of growth for the purposes of airport land use compatibility planning. While the number of based aircraft has declined since the 2005 Master Plan was adopted, four based aircraft have been added over the last two years, which is consistent with a 1.3 – 1.9% growth range assumed in the Master Plan. Additionally, helicopter activity was projected at the Airport but no longer occurs on site. The modeling and ~~tables~~information used for this ALUCP reflect this change.

Using the above growth rates, **Table 2-2** provides a breakdown of the forecasted based fleet mix by aircraft type that was developed for this ALUCP. Forecasted operations used for the purpose of preparing the noise contours depicted in Chapter 3 of this ALUCP, broken down by aircraft type, are provided in **Table 2-3**.

TABLE 2-2
PERCENTAGE OF BASED FLEET BY AIRCRAFT TYPE (2032)

Aircraft Type	Percentage (%) of Based Fleet
Single-engine Piston	9~~73~~
Multi-engine Piston	3
~~Helicopter~~	~~4~~
Total	100

Source: Amador County, 2012; ESA Airports, 2012.

TABLE 2-3
FORECASTED OPERATIONS BY AIRCRAFT TYPE (2032)

Aircraft Type	Operations	
	Itinerant	Local
Single-engine Piston	~~25,145~~24,867	~~30,690~~30,973
Multi-engine Piston	~~1,031~~1,020	~~330~~333
Multi-turbo	N/A	~~330~~333
~~Helicopter~~	~~824~~	~~1,650~~
Total	~~27,000~~25,887	~~33,000~~31,639

Source: Amador County, 2012; ESA Airports, 2012.

The time-of-day distribution for forecasted operations were determined to break down to 95 percent occurring during daytime hours (7:00:00 am – 6:59:59 pm), three percent occurring during the evening hours (7:00:00 pm – 9:59:59 pm), and two percent occurring during the nighttime hours (10:00:00 pm – 6:59:59 am).

Runway Utilization and Air Traffic Procedures

The runway use percentages for departures and arrivals for daytime, evening, and nighttime activity for 2032 are included in **Table~~s~~ 2-4** ~~and 2-5~~ for fixed wing operations~~ and helicopters, respectively~~. The majority of the aircraft operations~~, both fixed wing and helicopter,~~ will be made to the south using Runway 19.~~ All helicopter departures are expected to utilize the Airport's helipad for departure.~~

TABLE 2-4
2032 PROJECTED FIXED WING RUNWAY USE PERCENTAGES

Runway	Day	Evening	Night
01	25%	15%	5%
19	75%	85%	95%
Total	**100%**	**100%**	**100%**

SOURCE: Amador County, 2012

~~**TABLE 2-5**~~
~~**2032 PROJECTED HELICOPTER RUNWAY AND HELIPAD USE PERCENTAGES**~~

~~Runway/ Helipad~~	~~Day~~		~~Evening~~		~~Night~~	
	~~Departure~~	~~Arrival~~	~~Departure~~	~~Arrival~~	~~Departure~~	~~Arrival~~
~~01~~		~~25%~~		~~15%~~		~~5%~~
~~19~~		~~75%~~		~~85%~~		~~95%~~
~~HELO~~	~~100%~~		~~100%~~		~~100%~~	

~~SOURCE: Amador County, 2012.~~

The Airport traffic pattern is a standard left-turn on the east and west sides of the runway. A close-in traffic pattern has been established for Runway 19 (east side) in order to minimize aircraft noise exposure on nearby residents. The traffic pattern altitude is 2,690 feet above Mean Sea Level (MSL) (1,000 feet above ground level [AGL]). During calm weather conditions, the preferred runway is Runway 19. Pilots are requested to maintain runway heading until reaching 2,200 feet MSL for noise abatement purposes.

According to the Master Plan, FAA-approved instrument flight rule (IFR) approach procedures exist based upon the Linden VORTAC (VOR/DME Runway 1) and a global positioning satellite (GPS) approach (GPS Runway 1). The lowest straight-in minimums are 400-foot ceiling and one-mile visibility with the local altimeter setting.[6]

2.3 Existing and Planned Land Uses in the Vicinity of Amador County Airport

2.3.1 Amador County

Westover Field is located within the unincorporated community of Martell in western Amador County, between the cities of Sutter Creek and Jackson, which are located north and south of the Airport, respectively.

6 Amador County. 2005. Westover Field Airport Master Plan. Page 2.6.

Existing County land uses in the vicinity of Westover Field include commercial and industrial uses to the south and west of the Airport, agricultural uses to the east of Runway 1-19; and a mix of residential, commercial, and agricultural uses to the north of the Airport (see **Figure 2-3**).

The Land Use Element of the *Amador County General Plan* (County General Plan) designates the Airport as Public Services. County General Plan land use designations north of the Airport include residential (suburban) uses, commercial uses, public services, industrial uses, and agriculture. Land to the east of the Airport is designated as agriculture (estate), residential (suburban) uses, and public services. County land use designations south of Westover Field are predominately industrial and regional service center (see **Figure 2-4**).

2.3.2 City of Jackson

Existing land uses within the vicinity of Westover Field associated with the City of Jackson include residential and agricultural uses to the southeast of Runway 1-19 and residential uses and Argonaut High School to the south of Runway 1-19.

The Land Use Element of the *City of Jackson General Plan* identifies the City's Sphere of Influence (SOI) as extending north and abutting the eastern portion of Airport property. The City of Jackson identifies this area within its SOI as Urban Reserve. According to the General Plan Land Use Element, "the Urban Reserve Designation is intended to preserve undeveloped lands surrounding the City until such time that conversion to urban/suburban uses are determined appropriate and feasible." The Land Use Element goes on to state that future development within the Urban Reserve designation would be intensified in the areas closest to the City center, with increasingly reduced densities as the development moves away from the City towards adjacent agricultural uses.[7]

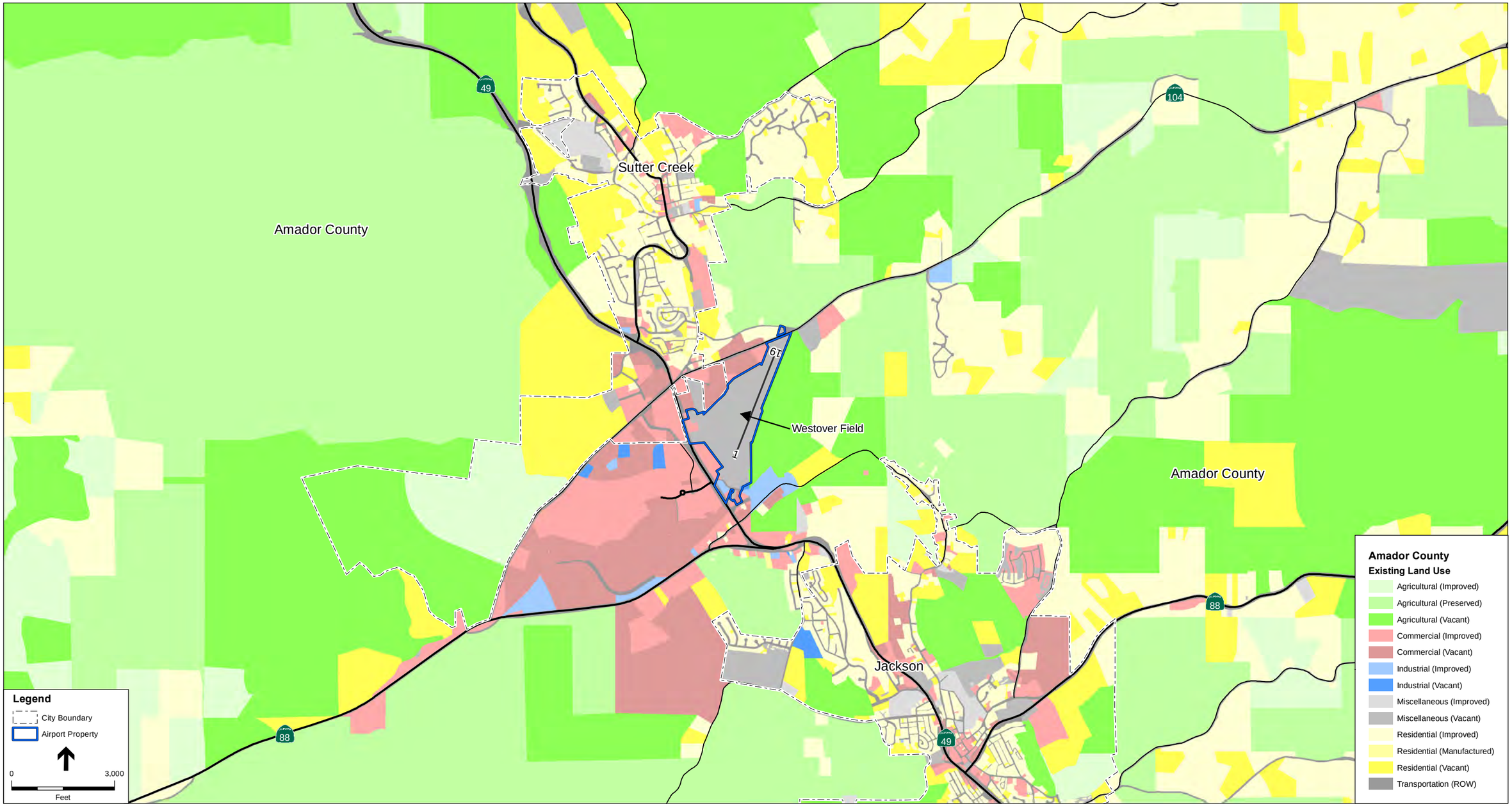
Planned land uses on the northwest end of the City of Jackson, closest to the Airport, include a mix of General Plan designations such as low- to medium-density residential, public, and commercial uses south of SR 49, and low- to medium-density residential, commercial, open space and recreation, and public uses north of State Route 49 (see **Figure 2-4**).

2.3.3 City of Sutter Creek

Existing land uses associated with the City of Sutter Creek that are in the vicinity of the Airport include commercial uses east of State Route 49, a recreation area (Italian Society Park) west of SR 49, and industrial uses to the west of SR 49 (south of Ridge Road). These areas, as shown in **Figure 2-3**, are designated for commercial and industrial uses. Existing land uses to the north of Ridge Road include a mix of commercial and residential uses north of Ridge Road and east of SR 49, and commercial, residential, and industrial uses to the west of SR 49.

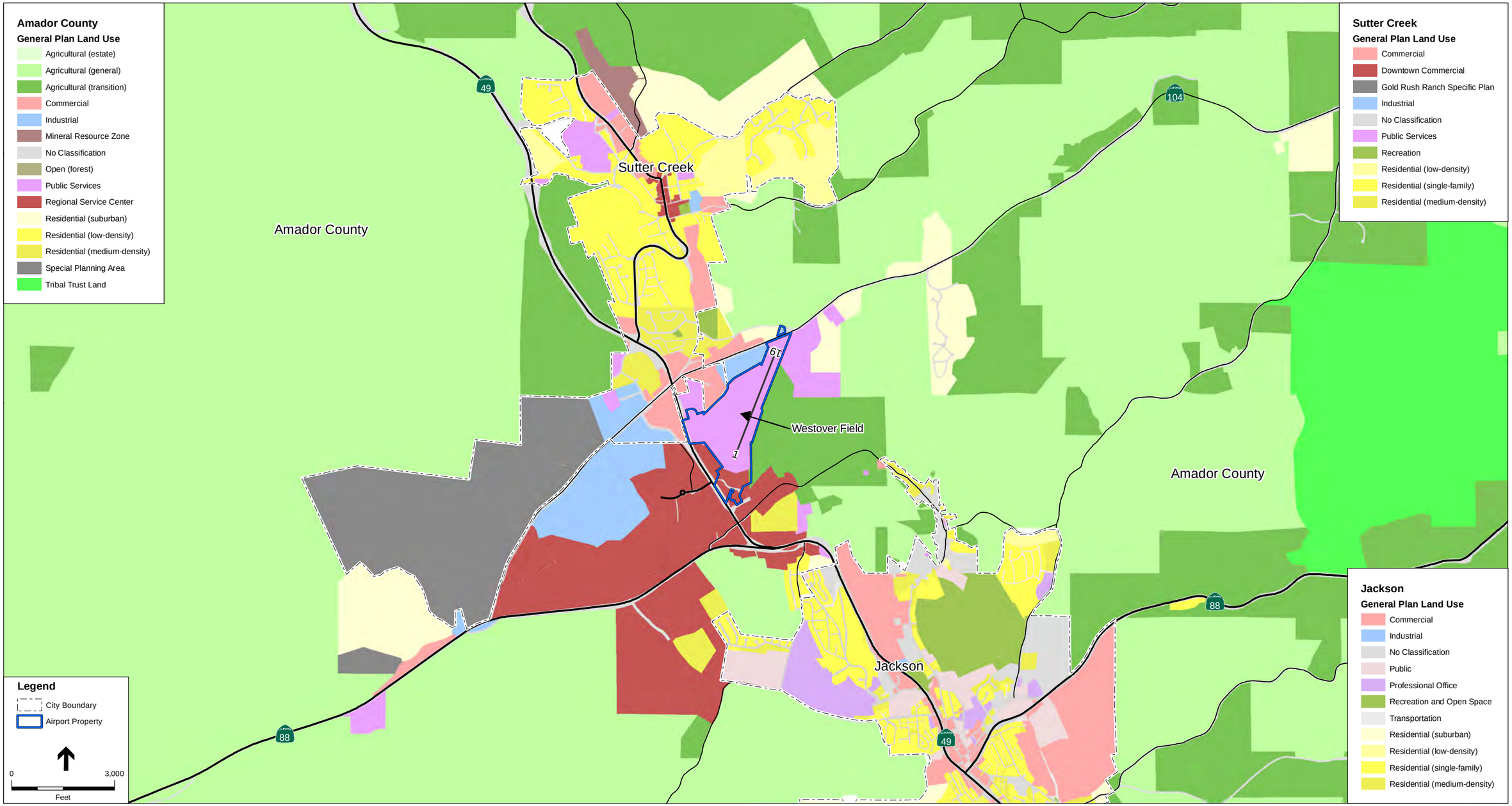
[7] City of Jackson. 2008. City of Jackson Land Use Element. Adopted November 10, 2008 (City Council Resolution 2008-44). Page 14.

The Land Use Element of the *City of Sutter Creek General Plan* identifies its SOI extending south past Ridge Road, and encompassing Westover Field and portions of unincorporated Amador County. In addition to a variety of other land use overlays, the City of Sutter Creek General Plan recognizes Westover Field's Airport Safety Area (ASA), within which proposed City of Sutter Creek land uses must be compatible with the policies set forth in the 1988 *Airport Land Use Plan for Westover Field*.



SOURCE: Amador County Transportation Commission, 2017; and ESA, 2017

Figure 2-3
Generalized Existing Land Uses



SOURCE: Amador County Transportation Commission, 2016; City of Jackson, 2016; City of Sutter Creek, 2016; and ESA, 2017

Amador County Westover Field ALUCP . 211961

Figure 2-4

Generalized Planned Land Uses

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CHAPTER 3
Policies

3.1 Introduction

3.1.1 Purpose of the Compatibility Policies

The policies set forth in this Chapter serve two functions:

(a) To articulate the procedures to be used by the Amador County ALUC and affected local agencies for the purpose of performing airport land use compatibility review as required in the California State Aeronautics Act (PUC §21670 et seq.), while also encouraging the development of land uses that are both appropriate and beneficial to the Amador County and the neighboring affected jurisdictions; and

(b) To identify the compatibility criteria that the ALUC shall use in the review of projects involving land use development within the Westover Field airport influence area (AIA); including the Airport Master Plan and other development plans for Westover Field. Similarly, local agencies such as Amador County, the cities of Jackson and Sutter Creek, and any special districts that may be affected by this document shall use this ALUCP to modify their respective general or specific plans and zoning ordinances for consistency with this ALUCP.

3.1.2 Effective Date

The policies presented in this ALUCP shall become effective on the date that the Amador County ALUC adopts the plan.

(a) The previous plan for Westover Field was adopted in 1987 and amended in 1990. The earlier plan shall remain valid until the ALUC adopts this ALUCP, or shall become effective if a court action invalidates the entirety of this ALUCP.

(b) Any project or phase of a project that qualifies as an existing land use (see definition in Policy 3.2), for which an application has been completed, prior to the date of adoption of this ALUCP shall not be required to comply with the policies set forth in this Plan. For projects that qualify as an existing land use prior to the adoption of this ALUCP, the policies of the 1990 compatibility plan shall apply.

3.2 Definitions

Definitions of terms for the purposes of the policies set forth in this document are as follows. Additional definitions are found in the Glossary.

- 14 CFR Part 77: The part of the Federal Aviation Regulations that addresses objects affecting navigable airspace, per the Title 14 Code of Federal Regulations.

- 14 CFR Part 77 Surfaces: Imaginary airspace surfaces established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

- Above Field Elevation (AFE): Height that is expressed, in feet, of an object measured from the elevation of Westover Field.

- Above Ground Level (AGL): Height that is expressed, in feet, of an object measured from the ground.

- Aeronautics Act: Except as indicated otherwise, the article of the California Public Utilities of the California Public Utilities Code (Section 21670 et seq.).

- Aircraft Accident: An occurrence incident to flight in which, as a result of the operation of an aircraft, a person (occupant or non-occupant) receives fatal or serious injury or an aircraft receives substantial damage.

  Except as provided below, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

  Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered substantial damage.

- Aircraft Incident: A mishap associated with the operation of an aircraft in which neither fatal nor serious injuries nor substantial damage to the aircraft occurs.

- Aircraft Mishap: The collective term for an aircraft accident or an incident.

- Aircraft Operation: The airborne movement of aircraft at an airport or about an en-route fix or at other point where counts can be made. There are two types of operations: local and itinerant. An operation is counted for each landing and each departure, such that a touch-and-go flight is counted as two operations.

- Airport: Westover Field, or an area of land or water that is used or intended to be used for the landing and taking off of aircraft, including its buildings and facilities.

- Airport Elevation: The highest point of an airport's usable runways, measured in feet above mean sea level.

- Airport Influence Area (AIA): The area in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. In most circumstances, the airport influence area is designated by the ALUC as its planning area boundary for the airport and the two terms can be considered synonymous. The term airport influence area is synonymous with the term planning area referred to in State Aeronautics Act, PUC Section 21675.

- Airport Land Use Commission (ALUC): The Amador County Airport Land Use Commission. A commission authorized under the provisions of the California Public Utilities Code, Sections 21670 et seq. and established (in any county within which a public-use airport is located) for the purpose of promoting compatibility between airports and the land uses surrounding them.

- Airport Land Use Compatibility Plan (ALUCP): As used herein, a plan, usually adopted by an ALUC, which sets forth policies for promoting compatibility between airports and the land uses which surround them.

- Airport Layout Plan (ALP): A scale drawing of existing and proposed airport facilities, their location on an airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

- Airport Master Plan (AMP): A long-range plan for development of an airport, including descriptions of the data and analyses on which the plan is based.

- Ambient Noise Level: The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.

- Approach Protection Easement: A form of easement which both conveys all of the rights of an avigation easement and sets specified limitations on the type of land uses allowed to be developed on the property.

- Approach Speed: The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration.

- Aviation-Related Use: Any facility or activity directly associated with the air transportation of persons or cargo or the operation, storage, or maintenance of aircraft at an airport or heliport. Such uses specifically include runways, taxiways, and their associated protected areas defined by the Federal Aviation Administration (FAA), together with aircraft aprons, hangars, terminal buildings, etc.

- Avigation Easement: A type of easement that typically conveys the following rights:

  – A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (usually set in accordance with the 14 CFR Part 77 criteria).

  – A right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal airport activity.

  – A right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace.

  – 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.

  - A right to prohibit electrical interference, glare, misleading lights, visual impairments, wildlife hazards, or other hazards to aircraft flight from being created on the property.

- Based Aircraft: Aircraft stationed at an airport on a long-term basis.

- California Environmental Quality Act (CEQA): Statutes adopted by the state legislature for the purpose of maintaining a quality environment for the people of the state now and in the future. The Act establishes a process for state and local agency review of projects, as defined in the implementing guidelines, which may adversely affect the environment.

- Community Noise Equivalent Level (CNEL): The noise metric adopted by the State of California for evaluating airport noise. It represents the average noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and nighttime periods relative to the daytime period.

- Compatibility Plan: As used herein, a plan, usually adopted by an Airport Land Use Commission, which sets forth policies for promoting compatibility between airports and the land uses which surround them. Often referred to as a Comprehensive Land Use Plan (CLUP).

- Controlled Airspace: Any of several types of airspace within which some or all aircraft may be subject to air traffic control.

- Day-Night Average Sound Level (DNL): The noise metric adopted by the U.S. Environmental Protection Agency for measurement of environmental noise. It represents the average daytime noise level during a 24-hour day, measured in decibels and adjusted to account for the lower tolerance of people to noise during nighttime periods. The mathematical symbol is L_{dn}.

- Decibel (dB): A unit measuring the magnitude of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound, specifically a sound just barely audible to an unimpaired human ear. For environmental noise from aircraft and other transportation sources, an A-weighted sound level (abbreviated dBA) is normally used. The A-weighting scale adjusts the values of different sound frequencies to approximate the auditory sensitivity of the human ear.

- Deed Notice: A formal statement added to the legal description of a deed to a property and on any subdivision map. As used in airport land use planning, a deed notice would state that the property is subject to aircraft overflights. Deed notices are used as a form of buyer notification as a means of ensuring that those who are particularly sensitive to aircraft overflights can avoid moving to the affected areas.

- Designated Body: A local government entity, such as a regional planning agency or a county planning commission, chosen by the county board of supervisors and the selection committee of city mayors to act in the capacity of an airport land use commission.

- Displaced Threshold: A landing threshold that is located at a point on the runway other than the designated beginning of the runway (see *Threshold*).

- Easement: A less-than-fee-title transfer of real property rights from the property owner to the holder of the easement.

- Equivalent Sound Level (Leq): The level of constant sound which, in the given situation and time period, has the same average sound energy as does a time-varying sound.

- Existing Land Use: A land use that either physically exists or else for which government approvals have been obtained through one or more of the following:

  – A valid building permit has been issued;

  – A legally valid development agreement has been approved and remains in effect, pursuant to Government Code Section 65866 which provides that *"A development agreement shall not prevent a city, county, or city and county, in subsequent actions applicable to the property, from applying new rules, regulations, and policies which do not conflict with those rules, regulations, and policies applicable to the property as set forth herein, nor shall a development agreement prevent a city, county, or city and county from denying or conditionally approving any subsequent development project application on the basis of such existing or new rules, regulations, and policies~~specify duration of the agreement, the permitted uses of the property, the density or intensity of use, the maximum height and size of proposed buildings, and provisions for reservation or dedication of land for public purposes~~;"*

  – A vesting tentative parcel or subdivision map has been approved, pursuant to Government Code, Section 66498.1(b), which "*confer a vested right to proceed with development in substantial compliance with the ordinances, policies, and standards in effect at the time the vesting tentative map is approved or conditionally approved;*"

  – A final subdivision map has been recorded;

  – A use permit or other discretionary entitlement has been approved and not yet expired; or

  – A use permit, PUD, or PD indicating the permitted uses of the property, the density or intensity of use, the maximum height and size of proposed buildings, and provisions for reservation or dedication of land for public purposes that has been approved and not yet expired.

- Federal Aviation Administration (FAA): The U.S. government agency which is responsible for ensuring the safe and efficient use of the nation's airports and airspace.

- Federal Aviation Regulations (FAR): Regulations formally issued by the FAA to regulate air commerce.

- Findings: Legally relevant subconclusions which expose a government agency's mode of analysis of facts, regulations, and policies, and which bridge the analytical gap between raw data and ultimate decision.

- General Aviation: That portion of civil aviation which encompasses all facets of aviation except air carriers.

- Glide Slope: An electronic signal radiated by a component of an ILS to provide vertical guidance for aircraft during approach and landing.

- Global Positioning System (GPS): A navigational system which utilizes a network of satellites to determine a positional fix almost anywhere on or above the earth. Developed and operated by the U.S. Department of Defense, GPS has been made available to the civilian sector for surface, marine, and aerial navigational use. For aviation purposes, the current form of GPS guidance provides en route aerial navigation and selected types of nonprecision instrument approaches. Eventual application of GPS as the principal system of navigational guidance throughout the world is anticipated.

- Height Review Overlay Zone: The area around an airport where the ground lies above a 14 CFR Part 77 surface or less than 35 feet beneath a 14 CFR Part 77 surface.

- Helipad: A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters.

- Heliport: A facility used for operating, basing, housing, and maintaining helicopters.

- Infill: Development that takes place on vacant property largely surrounded by existing development, especially development that is similar in character.

- Land Use Density: A measure of the concentration of land use development in an area. Mostly the term is used with respect to residential development and refers to the number of dwelling units per acre. Unless otherwise noted, policies in this compatibility plan refer to gross rather than net acreage.

- Land Use Intensity: A measure of the concentration of nonresidential land use development in an area. For the purposes of airport land use planning, the term indicates the number of people per acre attracted by the land use. Unless otherwise noted, policies in this compatibility plan refer to gross rather than net acreage.

- Local Agency: Amador County or any city or other government agency (excluding federal agencies and tribes) having jurisdiction over land uses within its boundaries.

- 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.

- Mean Sea Level: Height that is expressed, in feet, of an object measured using mean sea level as its reference elevation.

- Meteorological Tower: A structure used for the measurement, collection, or monitoring of air quality, barometric pressure, temperature, wind speed, and wind energy resource data, and includes the tower, base plate, anchors, guy cables and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment anemometers and vanes, data logger, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location.

- National Transportation Safety Board (NTSB): The U.S. government agency responsible for investigating transportation accidents and incidents.

- Noise Contours: Continuous lines of equal noise level usually drawn around a noise source, such as an airport or highway. The lines are generally drawn in 5-decibel increments.

- Noise Level Reduction (NLR): A measure used to describe the reduction in sound level from environmental noise sources occurring between the outside and the inside of a structure.

- Nonconforming Use: In general, a land use, parcel, or building that does not comply with a current land use plan or zoning ordinance, but which was legally permitted at the time the plan or ordinance was adopted. For the purposes of the airport land use compatibility plan for Westover Field in Amador County, a nonconforming use is one that exists (see definition of "existing land use" in Policy XX) as of the plan's adoption date, but which does not conform to the compatibility criteria set forth herein.

- Obstruction: Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceeds the standards established in Subpart C of 14 CFR Part 77, Objects Affecting Navigable Airspace.

- Overflight: Any distinctly visible and audible passage of an aircraft in flight, not necessarily directly overhead.

- Overflight Easement: An easement which describes the right to overfly the property above a specified surface and includes the right to subject the property to noise, vibrations, fumes, and emissions. An overflight easement is used primarily as a form of buyer notification.

- Overflight Zone: The area(s) where aircraft maneuver to enter or leave the traffic pattern, defined by flight tracks modeled at Westover Field.

- Overrule: An action taken by a local agency, in accordance with state law, in which an agency adopts or approves a general or specific plan, zoning ordinance, building regulation, or an airport master plan, when an ALUC has found the action to be inconsistent with this ALUCP.

- Planning Area Boundary: An area surrounding an airport designated by an ALUC for the purpose of airport land use compatibility planning conducted in accordance with provisions of the State Aeronautics Act.

- Project; Land Use Action; Development Proposal: Terms similar in meaning and all referring to the types of land use matters, either publicly or privately sponsored, which are subject to the provisions of this ALUCP.

- Redevelopment: Construction of a new use (though this does not have to be a new land use type) to replace an existing land use at a density or intensity that may differ from the existing use.

- Renewable Energy Generation: Methods of generating electrical power which do not require the combustion of fossil fuels such as oil and natural gas. Renewable energy generation might include (but is not limited to) solar, wind, and geothermal power, or the generation of energy from biomass or other sources.

- Riparian Habitat: Areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands.

- Safety Zone: For the purpose of airport land use planning, an area near an airport in which land use restrictions are established to protect the safety of the public from potential aircraft accidents. These zones are also used in this ALUCP for the purpose of determining land use compatibility.

- Single-Event Noise: As used in herein, the noise from an individual aircraft operation or overflight.

- Single Event Noise Exposure Level (SENEL): A measure, in decibels, of the noise exposure level of a single event, such as an aircraft flyby, measured over the time interval between the initial and final times for which the noise level of the event exceeds a threshold noise level and normalized to a reference duration of one second. SENEL is a noise metric established for use in California by the state Airport Noise Standards and is essentially identical to Sound Exposure Level (SEL).

- Solar Facility, Commercial-scale: A solar energy conversion system consisting of solar arrays, and associated control or conversion electronics that convert solar energy to utility power for the primary purpose of resale or off-site use.

- Solar Facility, Non-commercial: A facility that converts sunlight into electricity either through photovoltaic, concentrated solar thermal, or solar hot water devices that are accessory to, and incorporated into, the development of an authorized use of the property, and which are designed for the purpose of reducing or meeting on-site energy needs.

- Sound Exposure Level (SEL): A time-integrated metric (i.e., continuously summed over a time period) which quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.

- Touch-and-Go: An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway.

- Traffic Pattern: The traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from an airport. The components of a typical traffic pattern are upwind leg, crosswind leg, downwind leg, base leg, and final approach.

- Visual Approach: An approach where the pilot must use visual reference to the runway for landing under VFR conditions.

- Visual Flight Rules (VFR): Rules that govern the procedures for conducting flight under visual conditions. VFR applies when meteorological conditions are equal to or greater than the specified minimum-generally, a 1,000-foot ceiling and three-mile visibility.

- Wind Turbine Generator, Commercial: A wind-driven machine, generating a total of 1.5 kilowatts (KW) or greater on-site, that converts wind energy into production of electrical power, either for the primary purpose of on-site use or resale or off-site use.

- Wind Turbine Generator, Non-commercial: A wind-driven machine, generating a total of less than 1.5 kilowatts (KW) on-site that converts wind energy into production of electrical power for the primary purpose of on-site use and not for resale.

- Zoning: The division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general plan.

3.3 Airport Influence Area

The AIA is the area in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. The AIA is determined by the ALUC, based on the location and configuration of the airport, the extent of the noise and safety impacts associated with the airport(s), and other compatibility factors as appropriate (such as airspace protection). Where an ALUC has not formally adopted an AIA, the default distance is two miles from the runway (per PUC Section 21675.1[b]). The AIA is important, as it defines the jurisdiction of the ALUCP. The AIA is established by the ALUCP after consulting with the involved agencies and the holding of a public hearing.

The AIA for the 1987 Airport Land Use Plan was based on the inner horizontal airspace surface (14 CFR Part 77 surface), which corresponds with the Plan's Safety Zone 3 ("Overflight Zone"). This AIA was subsequently shown in the general plans, and or zoning maps, of the County, and the cities of Jackson and Sutter Creek.

For this 2017 update of the ALUCP, the AIA incorporates the entirety of the six safety zones and all of the CNEL contours, which range from 55 to 70 dB. Due to FAA-approved changes in the Airport Layout Plan (ALP), the inner horizontal surface is now larger than the 1990 Plan. The decision to include all safety zones in the AIA has occurred for the following reasons:

- It provides relative continuity with the 1987 Airport Land Use Plan (as revised in 1990);
- It is a distinct area recognized by the FAA (although it does not represent the full area of the FAA's regulatory concern);
- It identifies the area within which height restrictions may be of most concern to local agencies with jurisdiction over development projects (while recognizing that the 14 Part 77 surfaces, and corresponding restrictions and procedures, extend farther);
- It is very similar (though not identical) to the Safety Zone (Zone 6) as calculated per the 2011Handbook.

With these factors in mind, the Safety Zones are shown in **Figure 3-1**.

3.4 Actions Subject to ALUC Review

3.4.1 Actions Requiring ALUC Review

3.4.1.1 General and Specific Plans, Zoning Ordinances, and Building Regulations

Pursuant to state law, prior to the approval of the following types of actions, the local agency must refer the action to the ALUC for review of consistency with this ALUCP:

(a) The adoption or amendment of any new or existing general or specific plan that affects the property located within the AIA (PUC §21676(b)).

(b) The adoption or amendment of any new or existing zoning ordinance or building regulation that affects land within the AIA (PUC §21676(b)).

(c) Any proposal for expansion of an existing airport or heliport, if such expansion will require an amended airport permit from the state of California (State Aeronautics Act Section 21664.5).

(d) Any proposal for a new airport, heliport, or military airfield, whether for public use or private use (State Aeronautics Act Section 21661.5), if the facility requires an Airport Permit or Heliport Permit issued by the California Department of Transportation.

3.4.1.2 Airport Actions

Pursuant to state law, the following airport actions are subject to ALUC review for consistency with this ALUCP, prior to approval by Westover Field:

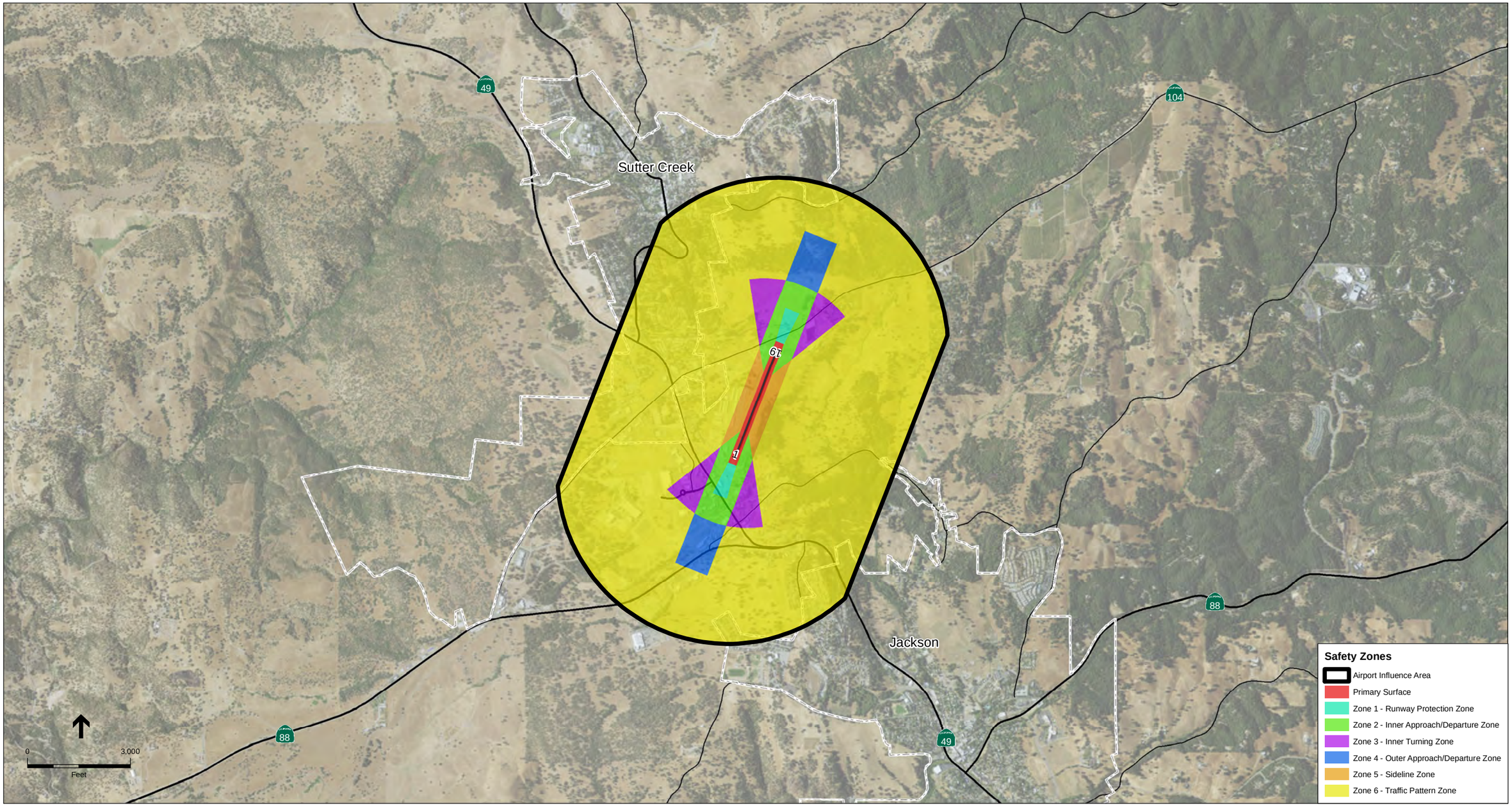
(a) Adoption or amendment of a master plan for Westover Field (PUC §21676(c)).

(b) Any proposal to expand Westover Field, provided that such expansion will require an amended airport permit from the state (PUC §21664.5). An "expansion" may include the construction of a new runway; the extension or realignment of an existing runway; and/or the acquisition of runway protection zones or any interest in land for the purpose of the previous previously mentioned actions.

3.4.2 Other Actions Potentially Subject to ALUC Review

Other types of land use actions (including regulations and permits) within the established AIA are potentially subject to ALUC review under the following circumstances:

(a) Until such time that either (1) the ALUC finds that a local agency's general or specific plan is consistent with this ALUCP as currently adopted or as amended in the future or (2) the local agency has overruled the ALUC's determination of inconsistency, state law requires the local agency to refer all actions, regulations, and permits involving land within an AIA to the ALUC for a formal review and consistency determination (PUC §21676.5(a)).



SOURCE: ESRI; and ESA, 2016

Amador County Westover Field ALUCP . 211961

Figure 3-1

Airport Influence Area and Safety Zones

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~~For the purposes of this ALUCP, only *major land use actions*, as defined in Policy 3.4.2.1, shall be submitted for review.~~

(b) After a local agency has revised its general plan or specific plan to be consistent with this ALUCP, or has overruled the ALUC, the ALUC no longer has the authority under state law to require that all actions, regulations, and permits be referred for further review. However, the ALUC and local agency can agree that the ALUC should continue to receive, review, and comment upon individual projects (PUC §21676.5(b)).

1. ALUC review of actions under these circumstances is "advisory" only, and would not represent a formal determination. Therefore, the local agency would not be required to implement any of the design changes or conditions recommended by the ALUC.

For the purposes of this ALUCP, only *major land use actions*, as defined in Policy 3.4.2.1, ~~shall~~ should be submitted for review.

(c) Proposed redevelopment of property for which the existing use is consistent with the applicable general and/or specific plan, but is inconsistent with the policies set forth in this ALUCP, shall be subject to ALUC review.

1. In circumstances where a general or specific plan land use designation does not conform with this ALUCP, but had been deemed an "existing land use" at the time the plan was reviewed, and therefore was considered compatible, proposed redevelopment of such lands voids the consistency status. Proposed redevelopment of such land uses is to be treated as new development, and is subject to ALUC review even if the proposed use is consistent with the local general or specific plan.

3.4.2.1 Major Land Use Actions

"Major land use actions," for the purposes of this ALUCP, are actions that, due to their size, nature, detail, or a combination of these or other factors, present a potential compatibility concern. The circumstances under which ALUC review of these actions is required are indicated in Policy 3.4.2(a) and (b). The following are considered, for the purposes of this ALUCP, major land use actions:

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

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

(c) Any off-airport, nonaviation use of land within a clear zone at Westover Field.

(d) New development agreements or amendments to such agreements.

(e) Major capital improvements (i.e., sewer, water, and roads) which would promote urbanization in undeveloped areas where such land uses were not previously reviewed in a general or specific plan.

(f) Proposed land acquisition by a government entity for the development of any facility that may accommodate the congregation of people (i.e., a school or hospital).

(g) The proposed construction of any object that may be of a height requiring review by the FAA, pursuant to 14 CFR Part 77.

(h) Non-aviation development of airport property not previously shown on an approved ALP.

(i) Any project having the potential to attract hazardous wildlife within the vicinity of Westover Field.

(j) Any proposed commercial and non-commercial wind turbine projects greater than 100 feet in height Above Field Elevation (AFE).

(k) Any proposed new commercial-scale solar facilities.

3.5 Review Process

3.5.1 General

(a) Timing of Project Submittal. Proposed actions listed in Policy 3.4 should be referred to the ALUC at the earliest feasible point in time in order to ensure that local jurisdictions are given the appropriate amount of time to consider ALUC review. The timing of an ALUC's review of a proposed land use action may vary depending on the type of project submitted for review.

1. Depending upon the type of plan or project and the normal scheduling of meetings, ALUC review can occur before, after, or concurrently with review by the local planning commission and other advisory bodies, but must be accomplished before final action by the local agency.

(b) Fees. Any applicable review fees as established by the ALUC shall accompany the submittal of actions for ALUC or ALUC Administrative Officer review.

(c) Public Noticing. Where applicable, the ALUC shall provide public notice and obtain public input in accordance with the California Public Utilities Code (PUC Section 21675.2(d)) and general plan law (Government Code, Section 65090) before action on any plan, regulation, or other land use proposal under consideration.

3.5.2 General Plans, Specific Plans, Zoning Ordinance, and Building Regulations

3.5.2.1 Initial Review of Consistency

In conjunction with adoption of this ALUCP, the ALUC shall review the general plans, specific plans, and zoning ordinances of affected local agencies to determine their consistency with the ALUCP.

(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 ALUCP or, alternatively, adopt findings and override the ALUC in accordance with PUC §21676(b) (Government Code §65302.3).

(b) Prior to taking action on a proposed amendment to a general plan or specific plan, the local agency must submit a draft of the proposal to the ALUC for review and approval, in accordance with PUC §21676(b).

(c) In conjunction with its submittal of a general plan or specific plan amendment to the ALUC, a local agency may request that the ALUC modify the areas defined as "infill" in accordance with Policy 3.2. The ALUC will include a determination on the infill as part of its action on the consistency of the general plan and specific plans.

(d) After a local agency has revised its general plan or specific plan for consistency with the ALUCP, subsequent land use proposals within the AIA (which are consistent with the applicable general plan, specific plans, and zoning ordinances) are subject to ALUC review only under the conditions indicated in Policy 3.4.2.

3.5.2.2 Subsequent Reviews of Land Use Development Proposals

As indicated in Policies 6.1.4 (a)(1) and 6.1.4 (a)(2), prior to taking action to adopt a new or amended (or amendment to) a general plan or specific plan or the addition or approval of a zoning ordinance or building regulation affecting an AIA as defined herein, local agencies must submit the proposed plan, ordinance, or regulation to the ALUC for review. Subsequent land use development that is consistent with applicable, previously reviewed, local plans, ordinances, and regulations is subject to ALUC review only under the conditions indicated in Policies 6.1.4 (b) and 6.2.3 (d).

3.5.2.3 Required Project Submittal Information

Copies of the complete text and maps of the plan, ordinance, or regulation proposed for adoption or amendment must be submitted to the ALUC for review. Any applicable supporting material documenting that the proposed action is consistent with this ALUCP should be included.

3.5.2.4 ALUC Action Choices

When reviewing a general plan, specific plan, zoning ordinance, or building regulation for consistency with the ALUCP, the ALUC has three choices of action:

(a) Find the plan, ordinance, or regulation consistent with the ALUCP. If a local agency wishes to proceed with adoption or amendment of a general or specific plan, zoning ordinance, or building regulation that has been determined to be inconsistent with this ALUCP, the agency must follow the overrule provisions of PUC §21676(a).

(b) Find the plan, ordinance, or regulation consistent with the ALUCP, subject to conditions and/or modifications that the ALUC may require. Any such conditions should be limited in scope and described in a manner that allows compliance to be clearly assessed.

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

3.5.2.5 ALUC Voting

For voting purposes, 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. (PUC Section 21671.5(e)).

3.5.2.~~5~~ 6 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 §21676(d)).

(a) The date of submittal shall be the date on which all applicable project information, as specific in Policy 3.5.2.3, is received by the ALUC Administrative Officer.

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

(c) The 60-day review period may be extended if the submitting agency or project applicant agrees to the request in writing or so acknowledges at the ALUC hearing on the action.

(d) Regardless of ALUC 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.

3.5.3 Airport Plans

3.5.3.1 Required Submittal Information

Any proposal for a new airport or heliport, or an airport or heliport master or development plan, submitted to the ALUC for review shall contain sufficient information to enable the ALUC to adequately assess the noise, overflight, safety, and airspace protection impacts of airport activity upon surrounding land uses.

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

1. A layout plan drawing of the facility showing the location of:
   i. Property boundaries;
   ii. Runways or helicopter takeoff and landing areas;
   iii. Runway or helipad protection zones; and
   iv. Aircraft or helicopter approach/departure flight routes.
2. Airspace surfaces in accordance with FAR, Part 77.

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

4. Proposed flight track locations and projected noise contours or other relevant noise impact data.

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 has been prepared for the project.

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

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

3.5.3.2 ALUC Action Choices for Plans of an Existing Airport

When reviewing airport master plans or expansion plans for existing airports, the ALUC has three action choices:

(a) Find the airport or heliport plan consistent with the ALUCP.

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

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

3.5.3.3 Response Time

The ALUC must respond to the submittal of an airport master plan or development plan within 60 days from the date of submittal (PUC §21676(d)).

(a) If the ALUC fails to make a consistency determination within the specified time period, the proposed action is deemed consistent with this ALUCP.

(b) Amador County, as the airport operator, shall be notified of the ALUC's action in writing.

3.5.4 Major Land Use Actions

3.5.4.1 Required Submittal Information

A proposed major land use action submitted for ALUC (or ALUC Administrative Officer) review should include the following information (additional information may be requested as needed during ALUC evaluation of the proposed project):

(a) Indication, in writing, that the proposed local action is referred to the ALUC for mandatory review and comment.

(b) Site maps to indicate the location of the proposed local action.

(c) Any development or development application has been proposed to the referring jurisdiction or is known by the referring jurisdiction to be in preparation in conjunction with the local action, and the identities of the applicant or applicants.

(d) A full project description and map of the geographic area. The map and description must indicate:

1. The geographic area encompassed by the proposed local action;

2. The relationship of the proposed local action to the Airport;

3. The relationship of the proposed local action to the safety zones as defined by the ALUCP in force; and

4. The relationship of the proposed local action to airport noise contours, as defined by the ALUCP.

(e) A description of uses, land use densities, residential land use densities, and open space conservation proposed for the local action.

(f) An analysis of the maximum elevation of improvements (i.e., site elevation plus height of improvements) that would be permissible under the terms and conditions of the proposed local action, and of the relationship of the maximum allowable elevation of improvements to the applicable imaginary airport surfaces as defined in 14 CFR Part 77.

(g) A copy of any Initial Study, Environmental Impact Report, Environmental Assessment, Environmental Impact Statement, noise study, or other environmental evaluation prepared or required in conjunction with the proposed local action.

(h) A written assurance that for residential property within the AIA offered for sale or lease the notice of intention filed with the Department of Real Estate shall include the following (as per the provisions of Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353):

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: overflights, 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.

3.5.4.2 ALUC Administrative Officer's Choices

The ALUC Administrative Officer is authorized to assist the ALUC with the review of major land use actions, in accordance with Policy ~~3.4.2(a)~~3.5.4. Determinations shall be made in writing

and describe, in detail, the basis for the decision. When reviewing major land use actions, the ALUC Administrative Officer ~~has~~ chooses three ~~choices~~ courses of action:

(a) Find the project consistent with this ALUCP.

(b) Find the project consistent with this ALUCP, subject to conditions specified by the ALUC and ALUC Administrative Officer.

(c) Find the project inconsistent with this ALUCP. In making this finding, the ALUC Administrative Officer shall note the specific conflicts leading to this determination.

The ALUC has ultimate authority over the determination of all major land use actions.

~~3.5.4.3 Appeal of the ALUC Administrative Officer's Determination~~

~~Consistency determinations made by the ALUC Administrative Office in accordance with Policy 3.4.2(a) may be appealed by an affected agency or project applicant. In such circumstances, the ALUC shall review the proposed action, the Administrative Officer's determination, and information supporting the appeal. The ALUC will then make a final determination regarding the proposed action's consistency with this ALUCP. Appeals must be submitted within 30 days of Administrative Officer's date of determination.~~

3.5.4.~~4~~ 3 Response Time

When reviewing major land use actions submitted by local agencies or project proponents, the following policies apply:

(a) When conducting a mandatory review of a major land use action submitted in accordance with Policy 3.4.2(a):

1. Reviews by the ALUC Administrative Officer must be completed within 30 days of submittal.

The start of the review period shall commence once all applicable project information, as specified in Policy 3.5.4.1, has been received by the ALUC Administrative Officer.

Reviews of projects appealed to the ALUC shall be completed within 60 days of the date of appeal.

If a consistency determination is not reached within the timeframes specified above, the project shall be deemed consistent with this ALUCP.

(b) When a major land use action is submitted for review in accordance with Policy 3.4.2(b), the ALUC Administrative Officer shall complete this review within 30 days of receipt of all necessary information, as specified in Policy 3.5.4.1. In doing so, decision-making-bodies will be given ample opportunity to consider the comments of the ALUC.

(c) The referring agency or project proponent shall be notified of the ALUC's findings in writing.

3.6 Compatibility Criteria

3.6.1 Noise

The noise contours established for the purpose of evaluating the noise compatibility of land use development in the vicinity of Westover Field are depicted on **Figure 3-2**. As shown, the 55, 60, 65, and 70 decibel (dB) Community Noise Equivalent Level (CNEL) contours associated with the forecasted (2032) Westover Field operations remain within the AIA. **Table 3-1** identifies land uses that are compatible within the 55, 60, 65, and 70 dB CNEL contours.

(a) This assessment of potential noise impacts shall be made with respect to potential future noise levels. These noise levels are described in Appendix ~~A~~C.

(b) The ALUC should periodically review the projected noise level contours and update them as the ALUC finds appropriate. Reviews should be done at least every five years and should be done sooner if the mission of the Airport or the characteristics of aircraft operations change in a manner not reflected in this ALUCP.

3.6.1.1 Objective

Noise compatibility policies are established in order to prevent the development of noise-sensitive land uses in portions of the airport environ that are exposed to significant levels of aircraft noise.

3.6.1.2 Evaluation

The noise compatibility policies set forth in this section shall be used in conjunction with **Figure 3-2** and **Table 3-1** during the evaluation of proposed land uses within the AIA for Westover Field.

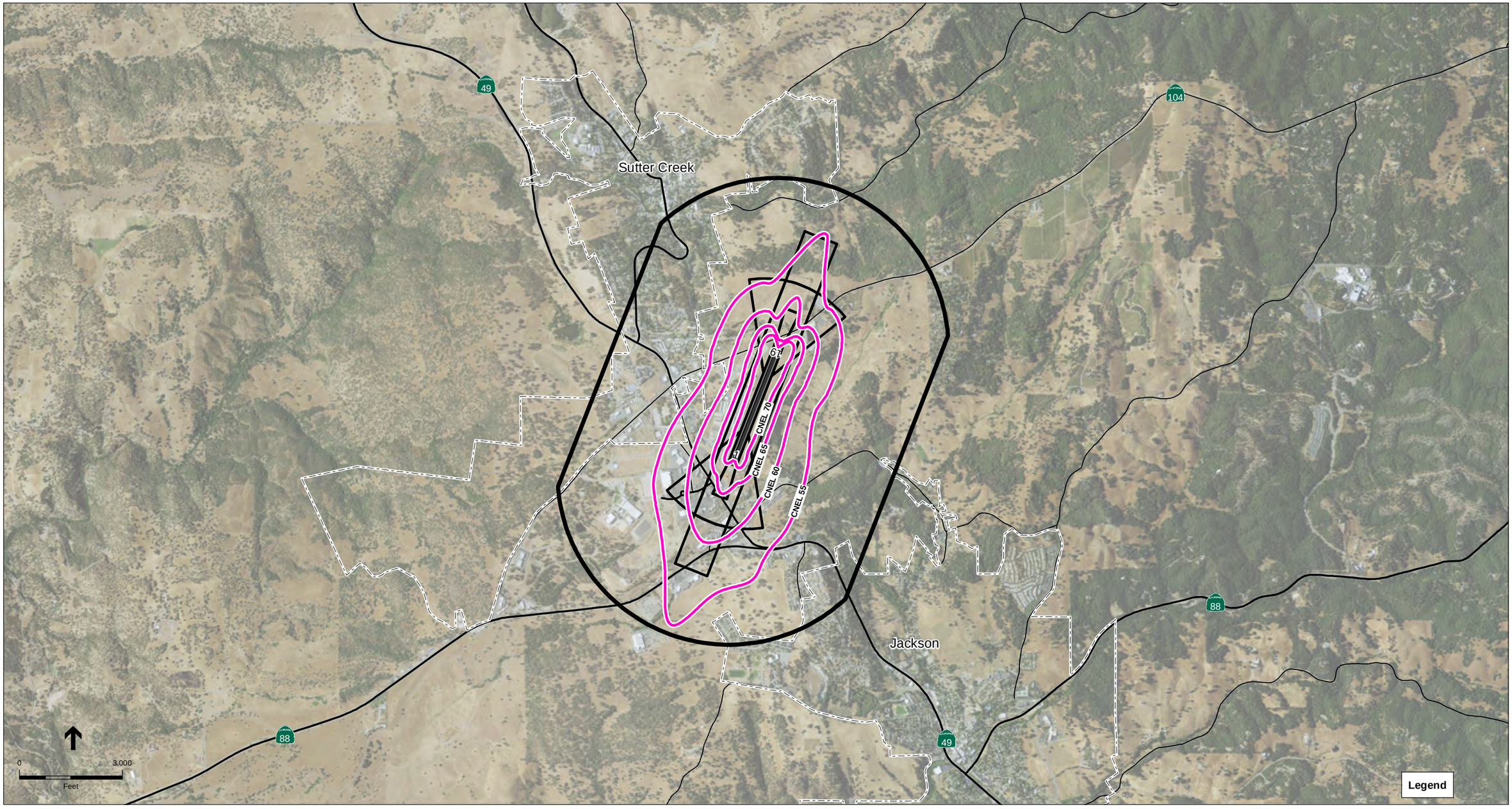
(a) The criteria in this section indicate the maximum acceptable airport-related noise levels, which are measured in terms of CNEL, for a range of land uses.

(b) Noise compatibility policies only apply to the identified noise contours. Within the identified noise exposure ranges, each land use type is shown as “clearly compatible,” normally compatible,” “marginally compatible,” “normally unacceptable,” or “clearly unacceptable.” The meaning of these terms is provided in **Table 3-1** and differ for indoor versus outdoor uses.

(c) Land uses not specifically listed in **Table 3-1** shall be evaluated using the criteria for similar listed uses.

3.6.1.3 Measurement

The magnitude of exposure experienced by land around Westover Field to airport-related noise shall be described in terms of CNEL.



SOURCE: ESRI; INM 7.0c; and ESA, 2017

Amador County Westover Field ALUCP . 211961

Figure 3-2

2032 Noise Contours

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TABLE 3-1
NOISE COMPATIBILITY CRITERIA

Land Use Category	Location[1] CNEL (dB) 55-65[2]	65-70	>70
Residential			
Single-family Residential	-	--	--
Multi-family Residential	-	--	--
Public			
Schools,[3] Libraries, Day Care Centers, Nursing Homes, Hospitals, and Other Sensitive Uses	o	-	--
Churches	o	-	--
Cultural Centers	o	-	--
Commercial and Industrial			
Commercial Uses	+	o	-
Industrial	+	o	o
Agricultural and Recreational			
Cropland	++	++	+
Livestock Breeding	o	o	-
Parks, Playgrounds, Zoos	+	o	-
Golf Courses, Riding Stables, Water Recreation	+	o	o
Outdoor Spectator Sports	+	o	-
Amphitheaters	-	--	--

	Land Use Acceptability	Interpretation/Comments
++	Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+	Normally Acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.
o	Marginally Acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the condition that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.
-	Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses that have conventionally constructed structures and/or involve outdoor activities that would be disrupted by noise should generally be avoided.
--	Clearly Unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

NOTES:

1 See Figure 3-2 for locations of the CNEL contours.

2 Due to the relatively rural nature of this airport and its environs, 55 CNEL has been included in the noise compatibility analysis. Per page 4-6 of the 2011 Handbook:

Under these assumptions (for a small airport in a quiet location), a total correction of minus 10 dB would be applied to the basic criterion of CNEL 65 dB. A community fitting these conditions therefore may find that a criterion of CNEL 55 dB should be set as the maximum acceptable noise exposure for new residential and other noise-sensitive land use development.

3 For schools, the interior noise standard is usually assumed to be an hourly L_{eq} of 45 dB during the peak period of aircraft operations during school hours. Schools should meet the American National Standard Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools (ANSI/ASA S12.60-2010), published by the American National Standard Institute and Acoustical Society of America.

The noise contours depict the greatest annualized noise impact, measured in terms of CNEL, anticipated to be generated by the airport over the planning timeframe, which in accordance with state law, extends at least 20 years into the future.

The noise contours depicted in **Figure 3-2** were created for this ALUCP for the purpose of establishing the noise compatibility criteria herein. The ALUC should periodically review the projected CNEL contours and update them if and when appropriate. (Please see Appendix ~~A~~ C for further information on the development of these noise contours.)

The threshold for evaluation is the projected 55 dB CNEL contour. All proposed land use changes that would sustain noise exposure at a level that is less than 55 CNEL are considered consistent with the noise compatibility policies. As the 2011 Handbook states:

> Under these assumptions (for a small airport in a quiet location), a total correction of minus 10 dB would be applied to the basic criterion of CNEL 65 dB. A community fitting these conditions therefore may find that a criterion of CNEL 55 dB should be set as the maximum acceptable noise exposure for new residential and other noise-sensitive land use development.[1]

3.6.1.4 Factors Determining Noise Criteria

The factors considered during the development of noise criteria include the following:

(a) Established federal and state regulations and guidelines;

(b) Established local noise-abatement policies, general and specific plan policies;

(c) The degree to which noise would affect the activity associated with a particular land use, and ordinances; and

(d) The extent of outdoor activity associated with a particular land use.

3.6.2 Safety

To depict the relative risks of aircraft accidents near airport environs, Caltrans' 2011 *California Airport Land Use Planning Handbook* (Handbook) identifies a set of safety zones and the risk contours upon which they are based. These zones are designed to minimize the risks to people and property on the ground in the event of an off-airport aircraft accident or emergency landing. The most stringent land use controls shall be applied to the areas with greatest potential risk. The risk contours are derived from the accident location database described in the Handbook and show the relative concentrations of accidents near the ends of runways of different lengths. The safety zones are developed using this data and are created for varying runway lengths and operational characteristics, while at the same time taking into account aeronautical factors that affect where aircraft accidents are most likely to occur. Although the accident database is national

[1] California Department of Transportation (Caltrans), Division of Aeronautics. 2011. California Airport Land Use Planning Handbook. October. Page 4-6.

in scope, the safety zones established for Westover Field are based on accident data from general aviation airports with similar operational characteristics (e.g., runway lengths, classes of aircraft flow, traffic patterns, etc.) as those found at the Westover Field.

Figure 3-1 presents a total of six different safety zones. The choice of safety zone criteria appropriate for a particular zone is largely a function of risk acceptability. For example, some land uses (e.g., schools and hospitals) represent intolerable risks when located near aircraft operation areas and are prohibited. Where the risks associated with a particular land use are considered significant but tolerable, restrictions may be established to reduce the risk to an acceptable level. Acceptable land uses generally require no limitations. (**Table 3-2** presents a list of compatible land uses within each safety zone and **Table 3-3** presents standards for residential densities and nonresidential intensities within each safety zone.)

3.6.2.1 Objective

Land use safety compatibility criteria are intended to minimize the risks to people and property on the ground as well as those people in an aircraft in the event of an accident or emergency landing occurring outside the airport boundary. Policies set forth in this section focus on reducing the potential consequences of such events when they occur. The most stringent land use controls will be applied to the areas with greatest risk potential. **Table 3-3** provides the density and intensity limitations for the various safety zones.

3.6.2.2 Evaluation

The safety compatibility of proposed uses within Westover Field's AIA should be evaluated in accordance with the policies set forth in this section, including the safety zones presented on **Figure 3-1** and the criteria listed in **Table 3-2**.

(a) The criteria provided in **Tables 3-2** and **3-3**, along with the discussions provided in Policies 3.6.2.6 through 3.6.2.11 indicate whether a particular type of land use is "compatible", "conditional", or "incompatible" with the exposure to aircraft accident risks.[2]

(b) Land uses not specifically listed should be evaluated using the criteria for similar listed uses.

[2] The following definitions apply for "compatible," "conditional," and "incompatible."
Compatible is defined as satisfying requirements for noise, safety, and airspace protection criteria.
Conditional is defined as compatible if indicated usage intensity, lot coverage, and other listed conditions are met.
Incompatible is defined as not permitted under any circumstances.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Residential Uses							
Single-family	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible	In Safety Zone 2, housing density standards may be maintained if less than 1 dwelling unit per 10 acres. Compatible in Safety Zones 3 and 4 for very low densities.
Two-family (duplexes)	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-1 are met.
Multi-family Dwelling	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-1 are met.
Group Quarters	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-1 are met.
Mobile Home Parks or Courts	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-1 are met.
Custodial Care Facilities (e.g., retirement homes, assisted living facilities, and other care facilities)	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-1 are met.
Public and Quasi-Public Uses							
Hospitals	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Preschool	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Government Services	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Schools	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Schools and Preschools Associated with Churches and Religious Institutions	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Cultural Activities; e.g., Churches, Religious Institutions, Libraries	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Indoor Recreation (e.g., gymnasiums, athletic and wellness centers, fitness clubs)	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible	Compatible in Safety Zones 2, 3, and 4 if nonresidential intensity criteria in Table 3-3 are met.
Medical and Other Health Clinics	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Outpatient Medical, Dental, and Health Care Offices	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible	Offices less than three stories in height are compatible in Safety Zone 2. Compatible in Safety Zones 3 and 4 if nonresidential intensity criteria in Table 3-3 are met.
Veterinary Services	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible	Offices less than three stories in height are compatible in Safety Zone 2. Compatible in Safety Zones 3 and 4 if nonresidential intensity criteria in Table 3-3 are met.
Cemeteries	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	
Other Public and Quasi-public Services	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Commercial Uses							
Day Care Facilities	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Compatible	
Wholesale Warehousing and Sales	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Building Materials – Retail	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
General Merchandise – Retail	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Food – Retail	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Automotive Service, Sales, or Repair	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Apparel and Accessories – Retail	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Eating and Drinking Places	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Furniture, Home Furnishing – Retail	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Other Retail Trade	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Offices – Professional Services, Finance, Civic, Real Estate	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible	Offices less than three stories in height are compatible in Safety Zone 2. Compatible in Safety Zones 3 and 4 if nonresidential intensity criteria in Table 3-3 are met.
Residential Hotels	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-3 are met.
Transient Lodging – Hotels, Motels	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if noise criteria in Table 3-3 are met.
Animal Boarding Kennels	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Finance, Insurance and Real Estate	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Personal Services (e.g., salons, beauty shops, print shops, gyms, car washes)	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Animal Grooming and Care	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Repair Services – Automobile	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Contract Construction Services, Yard	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Indoor Recreation Services (e.g., fitness centers)	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible in Safety Zone 3 if nonresidential intensity criteria in Table 3-3 are met.
Vehicle Fueling (e.g., gas stations with above-ground tanks)	Incompatible	Incompatible	Conditional	Compatible	Compatible	Compatible	Above-ground tanks are defined as being greater than 6,000 gallons, per the Uniform Fire Code.
Vehicle Fueling (e.g., gas stations with underground tanks)	Incompatible	Incompatible	Compatible	Compatible	Compatible	Compatible	
Other Services	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Industrial Uses							
Food Production and Processing	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Textile Mill Products	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Apparel	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Lumber and Wood Products Storage	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Furniture and Fixtures	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Paper and Allied Products	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Printing, Publishing	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Chemicals and Allied Products	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	In Safety Zone 6, additional evaluation required from permitting agencies to evaluate whether additional special measures are required to minimize hazards if struck by aircraft.
Petroleum Refining and Related Industries	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	In Safety Zone 6, additional evaluation required from permitting agencies to evaluate whether additional special measures are required to minimize hazards if struck by aircraft.
Rubber and Miscellaneous Plastic	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Stone, Clay, and Glass Products	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Primary Metal Industries	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Fabricated Metal Products	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Miscellaneous Manufacturing	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Warehousing/Storage	Incompatible	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 2 if nonresidential intensity criteria in Table 3-3 are met.
Agricultural and Recreational							
Agricultural Production	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria. Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Permanent Open Space	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria. Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Water Areas	Incompatible	Incompatible	Compatible	Compatible	Compatible	Compatible	Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Wholesale Horticultural Production	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.
Livestock Farming, Animal Breeding	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	
Neighborhood Parks	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	
Community and Regional Uses	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Nature Exhibits	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Spectator Sports, Stadiums, Arenas	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Golf Course, Riding Stables	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Water Based Recreational Areas	Incompatible	Compatible	Compatible	Compatible	Compatible	Compatible	Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Resort and Group Camps	Incompatible	Incompatible	Conditional	Conditional	Conditional	Compatible	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Auditoriums, Concert Halls	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Outdoor Amphitheaters, Music Shells	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible	Conditional	Compatible in Safety Zone 6 if nonresidential intensity criteria in Table 3-3 are met.
Transportation, Communication, and Utilities							
Railroad	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.
Highway and Street Rights-of-way	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.
Auto Parking Lots/Airplane Parking Areas	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.
Communications	Incompatible	Conditional	Conditional	Conditional	Conditional	Conditional	Requires ALUC review in Safety Zones 2-6 if greater than 200 feet AFE.

TABLE 3-2
LAND USE COMPATIBILITY BY SAFETY ZONE

Land Use Category	Compatibility with Safety Zone (Compatible, Conditional, Incompatible)						
	Safety Zone 1	Safety Zone 2	Safety Zone 3	Safety Zone 4	Safety Zone 5	Safety Zone 6	Notes
Utilities	Incompatible	Conditional	Conditional	Conditional	Conditional	Conditional	Requires ALUC review in Safety Zones 2-6 if greater than 200 feet AFE. Refer to Section 3.6.5 for additional policies for Wildlife Hazards.
Energy Generating Facilities	Incompatible	Conditional	Conditional	Compatible	Compatible	Compatible	Refer to Policy 3.6.3.7 for additional regulations pertaining to power plants as potential flight hazards.
Other Transportation, Communication, and Utilities	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.
Inflatable objects and signage (e.g., balloons)	Conditional	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible in Safety Zone 1 pending the proposed uses meet FAA criteria.

SOURCE: California Department of Transportation (Caltrans), 2011; Amador County, 2017; ESA Airports, 2017.

TABLE 3-3
LAND USE COMPATIBILITY CRITERIA

Safety Zone	Maximum Residential Density (du)	Maximum Nonresidential Intensity (people per acre)	Maximum Single Acre (people per acre)
1	0	0*	0
2	1 per 10 ac	40	80
3	1 per 2 ac	70	210
4	1 per 2 ac	100	300
5	1 per 1 ac	70	210
6	No limit – consider noise and overflight standards	200	800

NOTE:
* Exceptions can be made agricultural activities, roads, and automobile parking, provided that FAA criteria are established.

Source: California Department of Transportation (Caltrans). 2011. California Airport Land Use Planning Handbook. October

3.6.2.3 Measurement

The concept of risk is essential to maintaining a high degree of safety in an airport environment. For the purposes of this ALUCP, the risk that potential aircraft accidents pose to land around Westover Field shall be defined in terms of the geographic distribution of where accidents are most likely to occur. Due to the infrequency of aircraft accidents, the pattern of accidents at any one airport cannot be used to predict where future accidents are most likely to occur around a particular airport. The safety zones depicted in the Handbook, and upon which the safety zones in the ALUCP are based, were formulated using the accident distribution patterns presented in the Handbook for similar general aviation airports nationwide.

However, state law provides that ALUCs, while required to be guided by the Handbook, may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports within the AIA (per PUC §21675(a)). The ALUC will also take into consideration the type of and location of proposed land uses apart from aircraft accident distribution patterns within the AIA, in order to minimize exposure to excessive noise and safety hazards within areas around Westover Field to the extent that the areas are not already devoted to incompatible uses, and to safeguard against safety problems related to airport use.

3.6.2.4 Factors Determining Safety Criteria

In determining criteria for each safety zone and the overall approach to this compatibility factor, the following issues were considered:

(a) Locations, delineated in respect to the runway, where aircraft accidents near general aviation airports typically occur. The most stringent land use controls will be applied to the areas where the greatest risk of aircraft accidents is likely to occur (as delineated by the Caltrans Handbook), or where land uses put vulnerable populations at an intolerable risk from potential aircraft accidents.

(b) Runway length and approach categories for each runway at Westover Field. These factors are reflected in the safety zone shapes and sizes, and are based upon zones suggested in the Caltrans Handbook.

(c) Encroachment of incompatible land uses is one of the primary concerns when preparing an airport land use compatibility plan. The Handbook suggests that, "because many general aviation airports are located on the fringes of urban areas, both the threat of new incompatible development and the opportunity for ALUCs to help preserve a compatible airport land use relationship are great." Westover Field is located in a rural setting between the Cities of Jackson and Sutter Creek. While Westover Field does not currently face the encroachment of incompatible uses experience at other general aviation airports in California, the goal of this ALUCP is to preserve the open space around the Airport, in order to reduce the risk of aircraft accident for those living and working in the vicinity of Westover Field.

(d) The ALUC recognizes buildings with higher and/or vulnerable populations present an added risk and are therefore, restricted within some safety zones. Where not restricted, the California Building Code (CBC) requires additional safety measures for these types of buildings.

3.6.2.5 Westover Field Safety Zones

A total of six different safety zones were identified based on runway length and flight patterns (see **Figure 3-1**). As described above, the choice of safety zone criteria appropriate for a particular zone is largely a function of risk acceptability. Land uses (e.g., schools and hospitals) which, for a given proximity to the airport, are judged to represent intolerable risks must be prohibited. Where the risks of a particular land use are considered significant but tolerable, establishment of restrictions may reduce the risk to an acceptable level. Uses which are basically acceptable generally require no limitations.

In certain situations, the potential risk of an aircraft accident occurring in a location where large numbers of people assemble or have restricted mobility, such as sports stadiums, amphitheaters, etc., may be perceived as an intolerable risk no matter where it may be located within an AIA.

(a) The following six safety zones are identified for the purpose of presenting safety policies:

1. Zone 1: Runway Protection Zone
2. Zone 2: Inner Approach / Departure Zone
3. Zone 3: Inner Turning Zone
4. Zone 4: Outer Approach / Departure Zone
5. Zone 5: Sideline Zone
6. Zone 6: Traffic Pattern Zone

3.6.2.6 Safety Zone 1

Safety Zone 1 consists of Runway 1-19, along with the immediately adjoining areas that are located within the runway primary surface and clear zones. Within this zone, all new structures

and residential land uses are prohibited. Nonresidential land uses are to be avoided, but some exceptions could be made for certain agricultural activities, roads, and automobile parking, provided that FAA criteria are satisfied.

3.6.2.7 Safety Zone 2

Safety Zone 2 comprises the areas immediately adjacent to each end of Runway 1-19, surrounding Safety Zone 1, involving the inner approach and departure areas near the airport. Typically, residential uses are generally restricted, apart from infill within developed areas. Non-residential uses that include agriculture, non-group recreational uses (that result in minimal concentrations of people), storage of low-hazard materials, low-intensity light industrial land uses, and auto, aircraft, and marine repair services are all normally allowed within this zone.

3.6.2.8 Safety Zone 3

Safety Zone 3 contains the areas where pilots turn to their final descent. In this safety zone, in addition to uses allowed in Safety Zone 2, greenhouses, low-hazard materials storage, mini-storage, warehouses, light industrial uses, and vehicle repair services are normally allowed. Very low residential densities and low-intensity offices and commercial uses are limited within this zone, while uses with higher concentrations of people and children are prohibited.

3.6.2.9 Safety Zone 4

Safety Zone 4 is provided for the long final approach for approaching aircraft, and is located behind Safety Zone 2. Normally, uses that are allowed in Zone 3, restaurants, and retail and industrial uses are allowed in this zone. Higher intensity retail uses and offices are to be avoided in this zone, while buildings and uses that result in larger assemblages of people and children are prohibited.

3.6.2.10 Safety Zone 5

Safety Zone 5 is the sideline zone and is designed as an area not typically overflown and runs outside and parallel to Runway 1-19. Normally, all uses in Zone 4 and common aviation-related activities are allowed, provided they meet FAA height criteria and airspace protection, and uses limited in Safety Zone 3 are also limited in this zone. All residential uses are meant to be avoided unless they are related to the airport, and higher-intensity non-residential uses and other uses that result in higher assemblages of people and children are prohibited.

3.6.2.11 Safety Zone 6

Safety Zone 6 comprises the traffic pattern zone, and this larger zone covers regular traffic patterns and pattern entry routes both into and out of the Airport. This zone also contains the 55 dB CNEL contour. While residential uses in this zone are only restricted in relation to noise and overflight impacts, no other prohibitions exist within this zone. However, outdoor stadiums and similar uses that would result in very high intensities should be avoided.

3.6.2.12 Parcels Bisected by Safety Zones

In cases of consistency with Tables 3-2 and 3-3, parcels that are split by safety zone boundaries shall be considered as if it were separate areas based on the safety zone boundary lines. The applicant shall bring forward a plan that complies with the requirements found in ~~both~~each of the separate safety zones.

3.6.3 Airspace Protection

The airspace protection zones established for the purpose of evaluating the airspace compatibility of land use development are depicted on **Figure 3-3**. The zones represent the imaginary surfaces defined for Westover Field in accordance with Title 14 Code of Federal Regulation Part 77, *Safe, Efficient Use and Preservation of Navigable Airspace* (14 CFR Part 77). For more information about the 14 CFR Part 77 and airspace protection, refer to Appendix ~~X~~F.

3.6.3.1 Objective

Similar to safety policies, airspace protection criteria are intended to reduce the risk of harm to people and property resulting from an aircraft accident. This is accomplished by the establishment of compatibility policies that seek to prevent the creation of land use features that can be hazards to the airspace used by aircraft in flight and have the potential to cause an aircraft accident to occur. Such hazards may be physical, visual, or electronic.

3.6.3.2 Evaluation

Tall structures, trees, and other objects (such as floating balloons or signs), or high terrain on or near airports, may constitute hazards to aircraft. Federal regulations establish the criteria for evaluating potential obstructions. These regulations require that the FAA be notified of proposals related to the construction of potentially hazardous structures. The FAA conducts “aeronautical studies” of proposed projects to determine whether they would pose risks to aircraft, but it does not have the authority to prevent their construction. The purpose of ALUC airspace protection policies, together with regulations established by local land use jurisdictions and the state government, is to ensure that hazards to the navigable airspace are avoided. The policies set forth in this section apply to the entire AIA.

3.6.3.3 Measurement

14 CFR Part 77 provides guidance for the height of objects that may affect normal aviation operations (see Appendix ~~X~~F). The guidance provided by 14 CFR Part 77 is not absolute, however. Deviation from the 14 CFR Part 77 standards does not necessarily mean that a safety hazard exists, only that offending objects must be evaluated by the FAA and that mitigation, such as marking or lighting may be required if appropriate. **Figure 3-3** depicts the 14 CFR Part 77 surfaces associated with Westover Field.

3.6.3.4 Factors Determining Airspace Protection Criteria

As described above, airspace protection policies rely upon regulation enacted by FAA and the state of California; ALUC policies are intended to help implement the federal and state regulations.

(a) FAA has well-defined standards by which potential hazards to flight, especially airspace obstructions, can be assessed. However, FAA has no authority to prevent the creation of such hazards; that authority rests with state and local officials.

(b) California airspace protection standards mostly mirror those of the FAA; the primary difference being that state law gives the California Department of Transportation, Division of Aeronautics and local agencies the authority to enforce the standards.

3.6.3.5 FAA Notification

Proponents of a project that may exceed the elevation of a 14 CFR Part 77 surface must notify the FAA as required by 14 CFR Part 77, Subpart B, by the State Aeronautics Act, and by Public Utilities Code Sections 21658 and 21659 (Notification to the FAA under 14 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 ~~X~~ E of this document for a copy of these sections of the state codes and to Appendix ~~X~~ F for the specific FAA notification requirements. A copy of the form to be submitted to the FAA — FAA Form 7460, Notice of Proposed Construction or Alteration — is included in Appendix ~~X~~ F as well.).

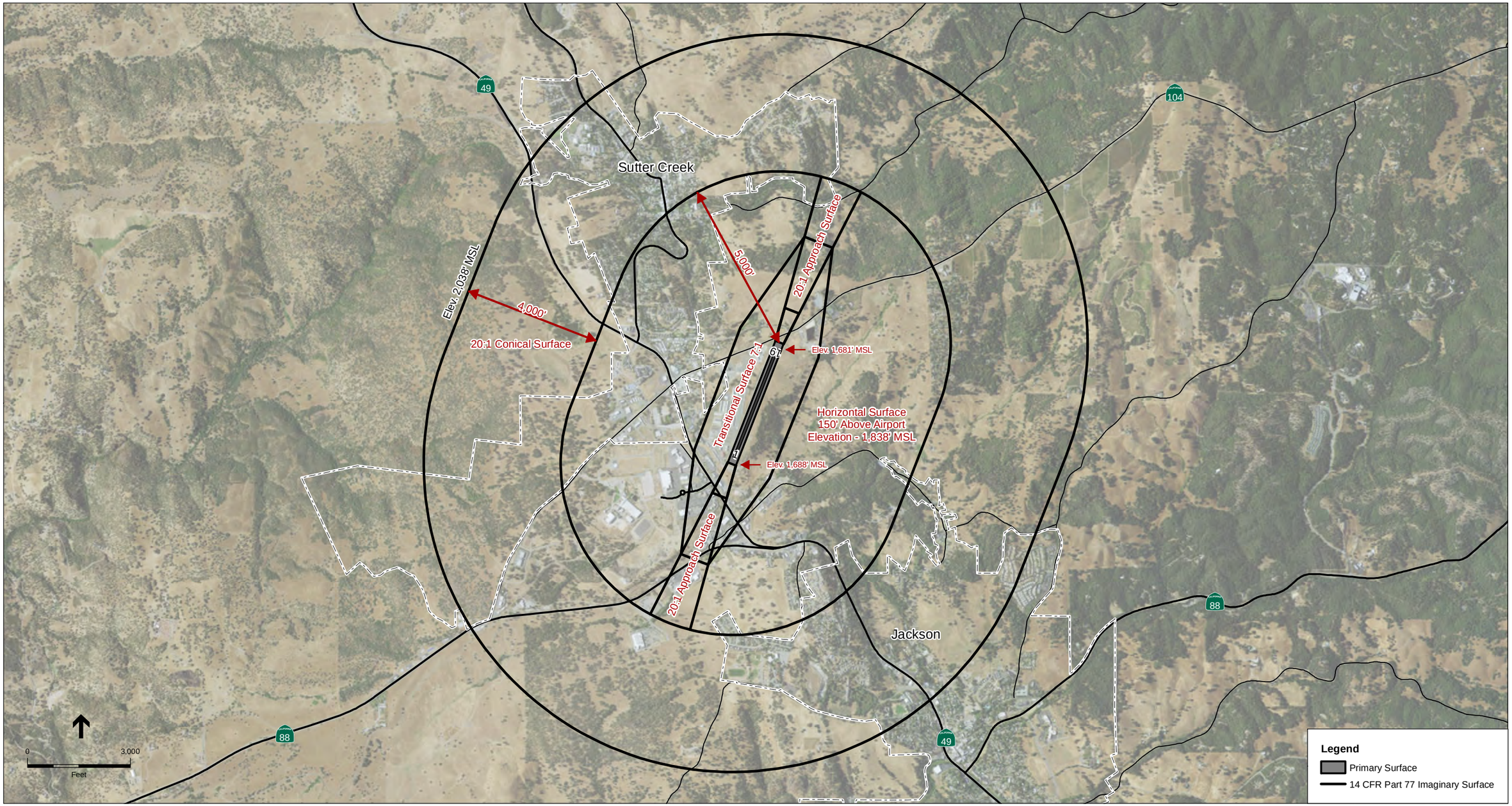
(a) Local jurisdictions shall inform project proponents of the requirements for notifying the FAA.

(b) FAA notification shall not automatically trigger an airport compatibility review of a project by the ALUC, unless the general plan of the jurisdiction in which the project is located has not been deemed compatible with this ALUCP.

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

(d) Any project submitted to the ALUC for airport land use compatibility review for reasons of height issues shall include a copy of the 14 CFR Part 77 notification to the FAA and the results of the FAA's analysis. Determination from the FAA may represent only one aspect of a project's many compatibility factors. Thus, a no-hazard determination from the FAA does not ensure ALUCP compatibility and ALUC approval.

(e) Jurisdictions or project proponents are encouraged to utilize guidance for the evaluation of projects within a civil airport's imaginary surfaces contained in Appendix ~~X~~ F (see Section 77.19). Should further assistance be required in determining the potential for a proposed structure to penetrate Westover Field's imaginary surfaces, please contact the ALUC staff person, or airport manager.



SOURCE: USDOT. FAA. 14 CFR Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace, July 21, 2010; ESA, 2016, ESRI

Amador County Westover Field ALUCP . 211961

Figure 3-3

14 CFR Part 77 Imaginary Surfaces

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3.6.3.6 Obstruction Marking and Lighting

In general, the FAA or the California Division of Aeronautics will determine the need for marking and lighting of an obstruction as part of aeronautical studies conducted in accordance with 14 CFR Part 77. Under most circumstances, when reviewing proposed structures that exceed the height criteria, the ALUC is expected to abide by the FAA's conclusions regarding marking and lighting requirements. However, situations may arise in which the ALUC, because of its particular knowledge of local airports and airspace, may reach a different conclusion than that of the FAA. In such instances, the ALUC may determine either that a proposed structure is unacceptable or that it is acceptable only if marked and lighted. Any marking and lighting that the ALUC may require shall be consistent with FAA standards as to color and other features.

3.6.3.7 Other Flight Hazards

Land uses that may cause visual, electronic, navigational, or bird strike hazards to aircraft in flight shall be allowed within the airport influence area only if the uses are consistent with FAA rules and regulations, and/or have demonstrated consideration/application of appropriate FAA guidelines.

(a) Specific characteristics to be avoided include:

1. Glare or distracting lights that could be mistaken for airport lights;

2. Sources of dust, heat, steam, smoke that may impair pilot vision;

3. Sources of steam or other emissions that may cause thermal plumes or other forms of unstable air that generate turbulence within the flight path;

4. Sources of electrical interference with aircraft communications or navigation; and

5. Features that create an increased attraction for wildlife as identified in FAA rules, regulations, and guidelines including, but not limited to, FAA Order 5200.5A, *Waste Disposal Sites On or Near Airports*, and Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*. Land uses with the possibility of attracting hazardous wildlife include landfills and certain recreational or agricultural uses that attract large flocks of birds. Section 3.6.5 provides policies that regulate land uses that could potentially attract wildlife hazards.

(b) Due to their propensity to generate smoke, steam, and other visual and physical hazards to aircraft in flight, power plants should be avoided in the AIA. However, given the varying types of power plants (i.e., thermal, solar farms, wind farms, etc.), proposed land uses of this type should be evaluated on a case-by-case basis, and in accordance with FAA criteria and the policies set forth in this Plan.

(c) In order to resolve any uncertainties or differences with regard to the significance of the above types of flight hazards, local agencies should consult with FAA officials and Westover Field management.

3.6.3.8 Height Restriction Criteria

The general criteria to be used in assessing whether objects may represent airspace obstructions are established by 14 CFR Part 77. In general, the height of objects in the vicinity of Westover Field shall be limited so as not to exceed the imaginary airspace surfaces defined for the airport, in accordance with 14 CFR Part 77 criteria.

(a) A simplified diagram of the 14 CFR Part 77 Subpart C surfaces for Westover Field is depicted in **Figure 3-3**.

(b) In certain circumstances, objects may need to be restricted to heights less than the limits indicated by **Figure 3-3**.

(c) All height requirements shall be measured AFE in all other locations.

3.6.4 Overflight

The overflight zones established for the purpose of providing overflight notification for land uses near Westover Field are depicted in **Figure 3-4**, along with touch and go and fixed-wing flight tracks. These zones are established to reflect standard traffic patterns and suggested approach and departure paths in the vicinity of Westover Field, and are based on aircraft noise exposure occurring in the vicinity of the Airport.

3.6.4.1 Objective

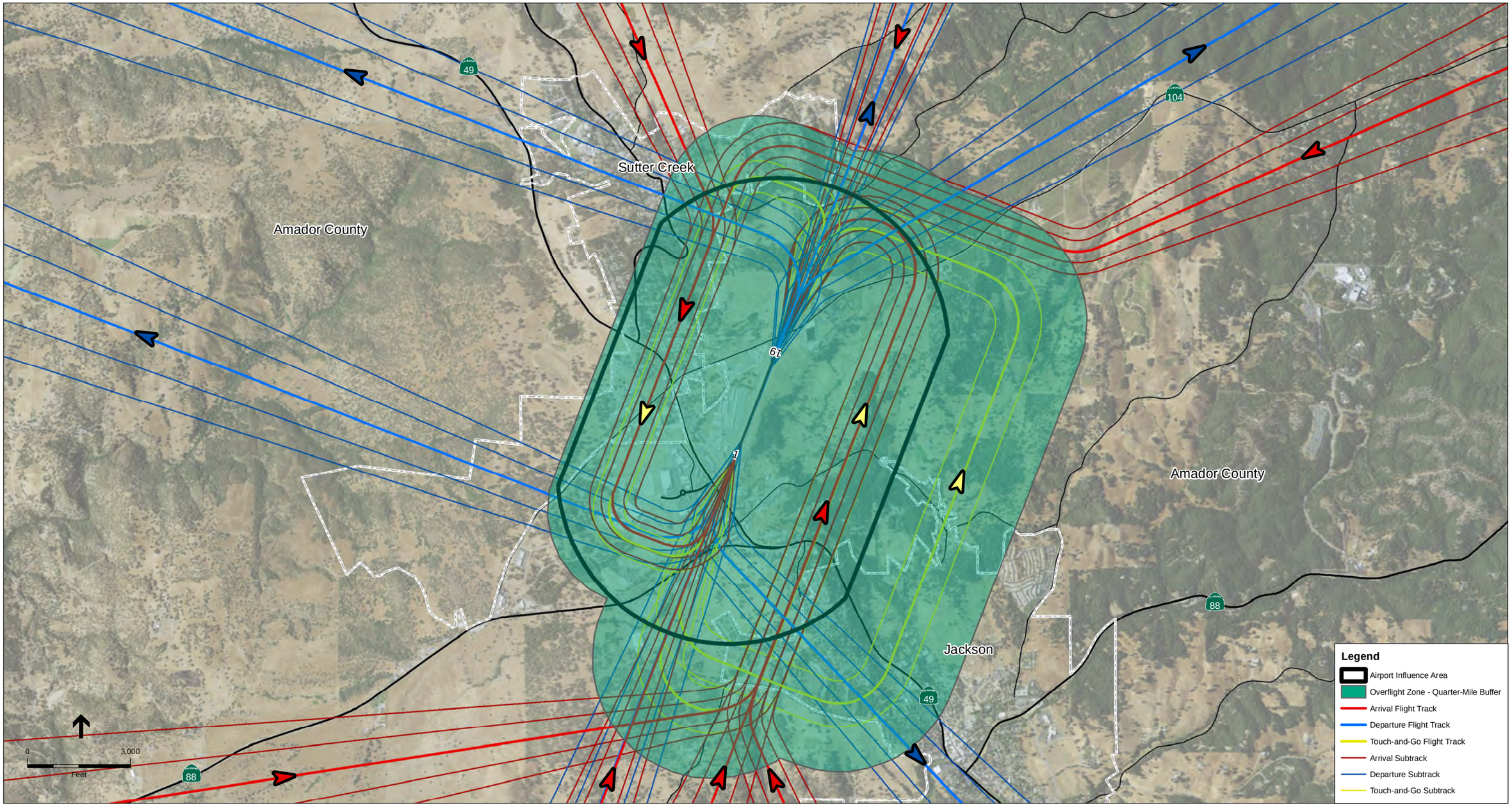
Noise from the overhead flight of aircraft can be annoying and intrusive in locations beyond the limits of the noise contours identified in **Figure 3-2**. While sensitivity to aircraft overflights will vary from person to person, the basic intent of overflight policies is to warn people near an airport of the presence of aircraft so that they have the ability to make informed decisions regarding the acquisition or lease of property within the influence area of an airport.

3.6.4.2 Evaluation

Unlike other compatibility factors such as noise, safety, or airspace protection, overflight compatibility policies do not restrict how land can be developed or used; rather, the policies in this section form the requirements for notification about airport proximity and aircraft overflights. These policies are to be applied by the ALUC when evaluating new development. The boundaries of the overflight zone around Westover Field are identified in **Figure 3-4**.

3.6.4.3 Measurement

Determining the boundaries of overflight noise exposure is difficult to determine as these locations extend well beyond the defined CNEL contours normally associated with areas of high noise exposure. The general locations over which aircraft routinely fly, including when they approach and depart an airport is generally used as an indicator of overflight annoyance concern. Furthermore, the FAA has determined that for the purposes of NEPA, changes in Aircraft Flight



SOURCE: ESRI; INM 7.0c; ESA, 2017

Amador County Westover Field ALUCP . 211961

Figure 3-4

Overflight Zone

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tracks below 3,000 feet above ground level (AGL) require more rigorous environmental review than those changes occurring above 3,000 feet AGL.

3.6.4.4 Factors Determining Overflight Criteria

In determining the overflight criteria for Westover Field, the following factors were considered:

(a) Limitations of ALUC authority of existing land uses. In order to be most effective, overflight policies would ideally apply to all real estate transactions; existing and new. However, the ALUC only has authority to set requirements for new development and to define the boundaries within which real estate transfer disclosure under state law is appropriate.

(b) Need for continuity of real estate disclosure to future property owners and tenants. It is recommended that real estate notifications run with the land and is provided to prospective future owners and tenants.

3.6.4.5 Overflight Policies

Based upon the requirements of the 2032 forecast contours reflected in Appendix ~~A~~C, the ALUC shall enforce the following policies:

(a) Concurrent with the noise standards, the ALUC should periodically review the maximum mission noise exposure level contours and update them if appropriate. Reviews should occur at least every five years and should take place sooner if the forecast number of the aircraft operations, or the aircraft fleet mix change in a manner not reflected in this ALUCP.

(b) Disclosure Requirements: Realtors shall provide disclosure notices to all new home buyers for any properties located within the AIA, indicating the overflight impacts for the said property. Please see Appendix B for sample disclosure documents.

3.6.5 Wildlife Hazards

Figure 3-5 depicts two wildlife hazard zones, the 5,000-foot Perimeter A and the 5-mile Perimeter B, which contain specific development requirements. Perimeter A is delineated by a radius 5,000 feet from the runway centerlines. The Perimeter B is located five miles from the farthest edge of the Airport's air operations area (AOA), which the FAA recommends for any hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace. FAA Advisory Circular 150/5200-33B provides guidance for minimizing the risks that certain wildlife species pose to aircraft. Perimeter A is based on the fact that Westover Field serves piston-powered aircraft, while Perimeter B is required for all airports. Together, these perimeters encompass portions of all safety zones and present additional conditions on certain types of land uses that are known to attract wildlife that are hazardous to aircraft operations. See FAA Circular 150/5200-33B in Appendix ~~X~~ G for

specific land use details and restrictions, including a description of conflicting land uses. The following regulations do not apply to existing land uses.[3]

(a) Perimeter A: Within Perimeter A as shown on **Figure 3-5**, new or expanded land uses involving discretionary review that has the potential to attract wildlife and cause bird strikes are required to prepare a wildlife hazard analysis (WHA). Reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Expansion of existing wildlife attractants includes newly created areas and increases in enhanced or restored areas. The WHA must demonstrate wildlife attractants that may pose hazards to aircraft in flight will be minimized.

(b) Perimeter B: Outside the Perimeter A but within the Perimeter B, as shown on **Figure 3-5**, any new or expanded land use involving discretionary review that has the potential to attract the movement of wildlife and cause bird strikes is required to prepare a WHA. Expansion of existing wildlife attractants includes newly created areas and increases in enhanced or restored areas. The WHA must demonstrate wildlife movement that may pose hazards to aircraft in flight will be minimized.

(c) All discretionary projects located within the Perimeter A and Perimeter B are required to consider the potential for the project to attract hazardous wildlife, wildlife movement, or bird strike hazards as part of environmental review process required by the California Environmental Quality Act (CEQA).

(d) Because biological and hazard impacts are required to be examined in the context of CEQA compliance, it is anticipated that most projects will develop the information necessary to prepare a WHA and demonstrate compliance with this Policy 5.8.2 as part of the CEQA process, and that separate documentation will not be needed. Proposed projects within the Perimeter A that have the potential to cause a significant adverse impact under Policy 3.6.5(c), with or without mitigation, shall be reviewed by the ALUC (including but not limited to projects requiring an environmental impact report, mitigated negative declaration, or equivalent document).

(e) The following land uses have the potential to attract wildlife activity and movement and, in accordance with parts (a) and (b), require WHA preparation:

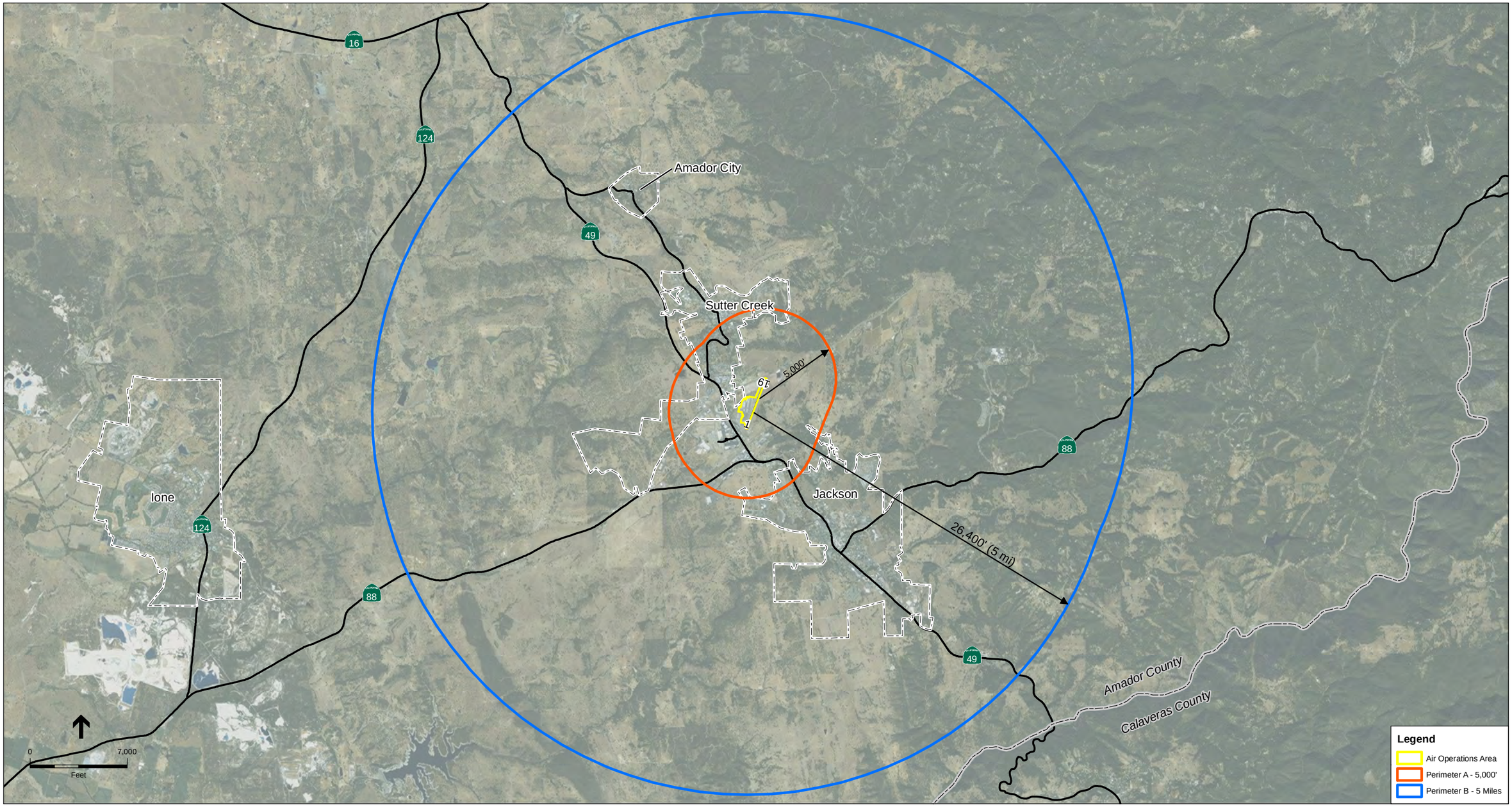
1. Waste disposal operations, which include municipal solid waste landfills;

2. Water management facilities, which include drinking water intake and treatment facilities, stormwater and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, and ponds that result from mining activities;

3. Wetlands (natural or artificial);

4. Open water areas;

[3] Land uses in existence that do not meet the wildlife hazard policies of this ALUCP, upon adoption, are not required to eliminate existing wildlife hazards. Thus, existing activities and uses would be allowed to remain, and only new or expanded land uses are required to meet the aforementioned standards. It should be noted that these regulations are not intended to prohibit existing agricultural activities.



SOURCE: ESRI; and ESA, 2016

Figure 3-5

Wildlife Hazard Analysis Boundaries

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Sediment ponds, retention basins, and other stagnant water bodies;

Detention basins holding water more than 48 hours;

Dredge spoil containment areas (also known as confined disposal facilities);

Agricultural activities (such as irrigation and crop production); and

Golf courses, landscaping, and other land uses that could attract wildlife activity and/or movement.

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APPENDIX A

Amador County ALUC Formation Minutes

PAULE SHAW LEASE: (0776/1)

MOTION: It was moved by Supervisor Martin, seconded by Supervisor Begovich, and unanimously carried to authorize the Chairman to sign the Surrender of Premises and to direct the Deputy Clerk of the Board to record said document.

EMERGENCY SERVICES: (0820/1)

MOTION: It was moved by Supervisor Martin, seconded by Supervisor Begovich, and unanimously carried to issue a press release announcing the availability of Farmers Home Administration Emergency Loans to eligible farmers and ranchers in Amador County.

PROBATION/APPOINTMENT: (0844/1) Mr. Mike Prizmich, Personnel Director, gave background on the request by the Probation Office for the appointment of an on-call transport officer.

MOTION: It was moved by Supervisor Begovich, seconded by Supervisor Davenport, and unanimously carried to approve the request of the Probation Department to hire Teri Aston as an on-call transport officer subject to the receipt by the Personnel Department of verification of peace officer training.

EMERGENCY SERVICES/RANCHO SECO: (0875/1) In response to a request to encumber FY 1985/1986 funds, the following action was taken:

MOTION: It was moved by Supervisor Davenport, seconded by Supervisor Begovich, and unanimously carried to approve the encumberance of FY 85/86 funds in the amount of $400 for budget line item 32866-0275.

ALPINE COUNTY: (0895/1) The Board acknowledged receipt of a memorandum from John Otto, Building Official, concerning the request by Alpine County to provide inspection services in Kirkwood. This item was placed on the agenda of August 12, 1986 after further investigation is conducted.

SB 1735: (0948/1)

MOTION: It was moved by Supervisor Davenport, seconded by Supervisor Martin, and unanimously carried to authorize the Chairman to send a letter in support of SB 1735 which will raise the ceiling on the present telephone surcharge to pay for the line and equipment costs of the state-wide 9-1-1 system from the present 3/4% to 1%.

PERSONNEL MATTERS (M. Prizmich, Personnel Director)

ROAD SUPERINTENDENT: (0985/1) After a short dicussion regarding the subject position, the following action was taken:

MOTION: It was moved by Supervisor Davenport, seconded by Supervisor Begovich, and carried to approve advertising and hiring to fill the position of Road Superintendent with emphasis to be placed on hiring from within the present County employees.
NOES: Supervisor Bamert

PLANNING (G. Clark, Director)

AIRPORT LAND USE COMMISSION: (1170/1) Mr. Gary Clark gave a short presentation on the actions which the Board must take relative to the formation of an Airport Land Use Commission.

MOTION: It was moved by Supervisor Deaver, seconded by Supervisor Begovich, and unanimously carried to designate a five-person commission as appropriate in accordance with Section 21670.1 of the State Aeronautics Act instead of the seven-person commission described in Section 21670.

MOTION: It was moved by Supervisor Deaver, seconded by Supervisor Begovich, and carried to appoint the Planning Committee (Supervisors Deaver and Bamert) as the Board's designees to sit on the Airport Land Use Commission, and to authorize the Chairman to appoint the alternate member to the Commission.
NOES: Supervisor Davenport - because the Chairman should appoint all members.

Discussion ensued as to meeting dates, and it was the opinion of the Board that a meeting date be set as soon as confirmation is received from the City Councils of Sutter Creek and Jackson as to their representatives on the Airport Land Use Commission.

SMUD INTERTIE: (1481/1) Chairman Bamert reported that he had contacted Supervisor Flynn of El Dorado County concerning the request for financial participation in future tasks that might be performed by Envirosphere Company relative to the Trans-Sierra transmission line project. No action need be taken at this time.

4-H YOUTH PROGRAM: (1565/1) In response to a request to Supervisor Begovich by the 4-H Program Coordinator for support of the Hunter Safety Course, the following action was taken:

MOTION: It was moved by Supervisor Deaver, seconded by Supervisor Martin, and unanimously carried to authorize the expenditure of $40 from the Fish & Game budget to the 4-H Youth Program, Safety/Outdoor Sports Project, for the purpose of covering the cost of ammunition and targets for class members.

NOVEMBER BALLOT: (1601/1) In response to a letter received from the Counties of Butte, Tehama, Trinity and Glenn concerning a proposed ballot measure on State funding of mandated welfare, health and court and jail systems, the Board took the following action:

MOTION: It was moved by Supervisor Davenport, seconded by Supervisor Martin, and unanimously carried to adopt a resolution placing the following financing advisory measure for adoption on the November ballot: "We the people of the County of Amador in order to more fully fund high priority local services such as police, fire and libraries, hereby petition the State of California to assume the total financial responsibility for state mandated welfare, health, and court and jail systems."

RESOLUTION NO. 86-237A

Resolution directing the County Clerk to place County financing advisory measure on ballot in General Election

The Board indicated its willingness to attend a joint Board of Supervisors meeting in Red Bluff on Thursday, August 7, 1986.

SAN DIEGO COUNTY: (1731/1) A letter from San Diego County relative to the County of San Diego versus Unruh, et al, was referred to the Auditor for recommendation and a report back to the Board on August 5, 1986.

APPENDIX B

Sample Implementation Documents

APPENDIX B
Sample Implementation Documents

The responsibility for implementation of the compatibility criteria set forth in the compatibility plan for Westover Field rests largely with the affected local jurisdictions. Modification of general plans and applicable specific plans for consistency with applicable compatibility plans is the major step in this process. However, not all of the detailed policies necessary for achieving full general plan consistency are necessarily included in general plans and specific plans — many can be established through other documents. This appendix contains examples of three types of implementation documents.

- Airport Combining Zone Ordinance — One local option for compatibility criteria implementation is adoption of an airport combining zone ordinance. An airport combining zone ordinance is a way of collecting various airport-related development conditions into one local policy document. Adoption of a combining zone is not required, but is suggested as an option. Appendix D1 describes some of the potential components of an airport combining zone ordinance.
- Avigation Easement — Avigation easements transfer certain property rights from the owner of the underlying property to the owner of an airport or, in the case of military airports, to a local government agency on behalf of the federal government. ALUCs may require 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. Also, airports may require avigation easements in conjunction with programs for noise insulation of existing structures in the airport vicinity. A sample of a standard avigation easement is included in Appendix D2.
- Recorded Deed Notice — Deed notices are a form of buyer awareness measure 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. Recording of deed notices is a requirement for project approval within portions of the areas of influence of the airports in Amador County where avigation easements are not essential. Appendix D3 contains a sample of a deed notice.
- Real Estate Disclosure – Real estate disclosure statements are an additional buyer awareness measure wherein ALUCs and local jurisdictions disseminate information regarding potential overflight issues and matters of significance, and this language is to be included on any parcel map, tentative map, or final map for subdivision approval. Having received this information, the brokers would be obligated to tell sellers that the facts should be disclosed to prospective buyers.

Appendix B1
Possible Airport Combining Zone Components

An airport compatibility combining zoning ordinance might include some or all of the following components:

- Airspace Protection — A combining district can establish restrictions on the height of buildings, antennas, trees, and other objects as necessary to protect the airspace needed for operation of the airport. These restrictions should be based upon the current version of Title 14 Code of Federal Regulations, Objects Affecting Navigable Airspace, Subpart C. Additions or adjustment to take into account instrument approach (TERPS) surfaces should be made as necessary. Provisions prohibiting smoke, glare, hazardous wildlife attractions, and other hazards to flight should also be included.

- FAA Notification Requirements — Combining districts also can be used to ensure that project developers are informed about the need for compliance with the notification requirements of Title 14 Code of Federal Regulations. Subpart B of the regulations requires that the proponent of any project which exceeds a specified set of height criteria submit a Notice of Proposed Construction or Alteration (Form 7460-1) to the Federal Aviation Administration prior to commencement of construction. The height criteria associated with this notification requirement are lower than those spelled out in Title 14 Code of Federal Regulations, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.

- State Regulation of Obstructions — State law prohibits anyone from constructing or altering a structure or permitting an object of natural growth to exceed the heights established by FAR Title 14 Code of Federal Regulations, Subpart C, unless the FAA has determined the object would or does not constitute a hazard to air navigation (Public Utilities Code, Section 21659). Additionally, a permit from the Department of Transportation is required for any structure taller than 500 feet above the ground unless the height is reviewed and approved by the Federal Communications Commission or the FAA (Section 21656).

- Designation of High Noise-Impact Areas — California state statutes require that multi-family residential structures in high-noise exposure areas be constructed so as to limit the interior noise to a Community Noise Equivalent Level of no more than 45 dB. A combining district could be used to indicate the locations where special construction techniques may be necessary in order to ensure compliance with this requirement. The combining district also could extend this criterion to single-family dwellings.

- Maximum Densities/Intensities — Airport noise and safety compatibility criteria are frequently expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. These standards can either be directly included in a combining zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the method of calculating the intensity limitations needs to be defined. Alternatively, a matrix can be established indicating whether each specific type of land use is compatible with each compatibility zone. To be useful, the land use categories need to be

more detailed than typically provided by general plan or zoning ordinance land use designations.

- Open Areas for Emergency Landing of Aircraft — In most circumstances in which an accident involving a small aircraft occurs near an airport, the aircraft is under control as it descends. When forced to make an off-airport emergency landing, pilots will usually attempt to do so in the most open area readily available. To enhance safety both for people on the ground and the occupants of aircraft, airport compatibility plans often contain criteria requiring a certain amount of open land near airports. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be included in a combining district so that they will be applied to development of large parcels. Adequate open areas can often be provided by clustering of development on adjacent land.

- Areas of Special Compatibility Concern — A significant drawback of standard general plan and zoning ordinance land use designations is that they can be changed. Uses that are currently compatible are not assured of staying that way in the future. Designation of areas of special compatibility concern would serve as a reminder that airport impacts should be carefully considered in any decision to change the existing land use designation.

- Real Estate Disclosure Policies — The geographic extent and specific language of recommended real estate disclosure statements can be described in an airport combining zone ordinance.

Appendix B2
Typical 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. [For military airports: Grantee shall hold said easement on behalf of the United States Government.] 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 Title 14 Code of Federal 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 hereafter 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, turbulence, currents, odors, vapors, fumes, fuel particle emissions, exhaust, smoke, dust, and other effects of air, illumination, and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and

(3) A continuing right to clear and keep clear from the 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.

(6) The prohibition against creating on the real property electrical and electronic interference, glint, glare, and other conditions that would impair the vision of pilots, high-velocity exhaust plumes, and other interference with radio, radar, microwave, or means of aircraft communication, and uses or features that make it difficult for pilots to distinguish between airfield navigation lights and visual aids and other lights, and other potential hazards to flight.

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 [for public-use airports: Grantee and any and all members of the general public] [for military airports: United States Government] 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, Grantee, 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}
_____
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

Appendix B3
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 [Insert ALUC name] 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.

For civil airports:
The Westover Field Airport Land Use Compatibility Plan and [Insert County / City Name] Ordinance (Ordinance No. _____) identify a Westover Field Airport Influence Area. Properties within this area are routinely subject to overflights by aircraft using this civil 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.) supports the importance of civil airports in protection of the public interest of the people of the United States and 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. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.

Appendix B4
Sample Real Estate Disclosure

A statement similar to the following should be included on the deed for any real property subject to the real estate disclosure requirements set forth in the Westover Field Airport Land Use Compatibility Plan. Such notice should be recorded by the county of Amador. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.

NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an overflight zone. 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.

APPENDIX C
Noise Modeling Assumptions

1.0 Overview

The methodology for calculating the noise exposure surrounding Westover Field/Amador County Airport (JAQ) includes the use of a Federal Aviation Administration (FAA)-approved computer simulation model and airport specific data including the types of aircraft operating at the airport, runway use, flight track utilization, aircraft stage lengths, and the time of day for aircraft operations. The Integrated Noise Model (INM) version 7.0c was used to generate a Community Noise Equivalent Level (CNEL) contour. The following text identifies the INM input data used in preparing the CNEL contours at JAQ.

2.0 The CNEL Noise Metric

2.1 CNEL Noise Metric Overview

Cumulative noise metrics have been developed to assess community response to noise. They are useful because these scales attempt to include the loudness of the noise, the duration of the noise, the total number of noise events, and the time of day these events occur into one single number rating scale.

Equivalent Noise Level (Leq) – Leq is the sound level corresponding to a steady-state, A-weighted sound level containing the same total energy as a time-varying signal over a given sample period. Leq is the "energy" average noise level during the time period of the sample. It is based on the observation that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. It is the energy sum of all the sound that occurs during that time period. Leq is used in the calculation of CNEL.

Community Equivalent Noise Level (CNEL) – The CNEL metric is a 24-hour, time-weighted energy average noise level based on the A-weighted decibel. It is a measure of the overall sound energy or noise experienced during the entire day. The time-weighting refers to the fact that noise events occurring during certain sensitive time periods are penalized to reflect the increased potential for annoyance. In the CNEL scale, additional weighting is placed on evening (7:00:00 pm to 9:59:59 pm) and nighttime (10:00:00 pm to 6:59:59 am) operations. This penalty was selected to attempt to account for the higher sensitivity to noise in the evening and nighttime and the expected further decrease in background noise levels that typically occur during these hours.

For assessing long term noise exposure, the CNEL is the metric specified in Title 21 of the California State Aeronautics Regulations to be used in their environmental assessments and FAR Part 150 noise compatibility planning process. The CNEL noise metric has emerged as a highly workable tool for use in land use planning and in relating noise, particularly aircraft noise, to community reaction. CNEL has also been employed to establish specific criteria relative to the compatibility between various forms of land use and levels of CNEL noise.

Computation of CNEL – In calculating CNEL, the Leq level is used as the hourly equivalent sound level. The hourly noise figures are summed for the 12 hours of daytime (7:00 a.m. to 9:59:59 p.m.) and added to the sum of Leq hourly figures for the remaining 3 hours of evening with 6 dB penalty, and 9 hours of nighttime with a 10 dB penalty (to reflect added human sensitivity to nighttime noise). The result is the CNEL noise level or a 24-hour summary of noise levels for a given location. When aircraft noise contours are calculated, however, the noise levels are solely due to the aircraft and do not include background or ambient noise.

3.0 Integrated Noise Levels

The standard methodology for analyzing the noise conditions at airports involves the use of an aircraft noise model. The FAA has approved the Integrated Noise Model (INM) for use in environmental assessments. The INM was developed by the Transportation Systems Center of the United States Department of Transportation (USDOT) and is undergoing continuous refinement. Version 7.0c of the INM, the most current version of the model at the time of this project was initiated, was used for the noise analysis described in this report.

3.1 Methodology

The INM works by defining a network of grid points at ground level around an airport. It then selects the shortest distance from each grid point to each flight track and computes the noise exposure generated by each aircraft operation, along each flight track. Corrections are applied for atmospheric 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 location. The cumulative noise exposure levels at all grid points are then used to develop noise exposure contours for selected values (e.g. 65, 70, and 75 CNEL). Using the results of the grid point analysis, noise contours of equal noise exposure can then be plotted.

3.2 Noise Power Distance Curves

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 level, thrust settings, and distance for most of the civilian aircraft, and many common military aircraft, operating in the United States. This database, often referred to as the noise power distance curve data, has been developed under FAA guidance based on thousands of actual noise measurements in controlled settings for each aircraft type.

The database also includes performance data for each aircraft type. This data allows the model to compute airport-specific flight profiles (rates of climb and descent) for each aircraft type, providing an accurate representation of actual procedures.

3.3 Noise Contour Mapping

CNEL levels are indicated by a series of contour lines superimposed on a map of the airport and off-airport environs. These levels are calculated for designated grid points on the ground from the weighted summation of the effects of all aircraft operations occurring on the average 24-hour day. Some operations are far enough away from a grid point location that their effect is minimal, while other operations may dominate noise exposure at that location.

One can think of the accumulation of noise energy throughout a 24-hour day from passing aircraft in the CNEL computation like a series of passing rain squall lines. At the end of the 24-hour period, a rain gauge would indicate the total rainfall received during that day even though the rain only fell during the brief periods. Similarly, CNEL indicates the total noise accumulated during the day although the noise is not constant and only occurs when aircraft pass by.

3.4 INM Input Data

In order to develop CNEL noise contours, the INM uses a series of input factors. Some of these factors are included in the database for the model (such as engine noise levels, thrust settings, aircraft profiles and aircraft speeds) and others are airport-specific and need to be determined for each condition analyzed. These airport-specific data include the airport elevation, average annual temperature, runway layout, the mathematical description of ground tracks above which aircraft fly, and the assignment of specific aircraft with specific engine types at specific takeoff weights to individual flight tracks. Other INM input factors specific to JAQ for calculating the projected CNEL contours for this ALUCP for 2032 include:

- Future Year 2032 runway orientation and use
- Future Year 2032 aircraft operations, and fleet mix
- Time of day/night operations
- Flight Tracks

3.5 Runway Utilization

Runway utilization at JAQ depends primarily on wind conditions and length of runway. Based on discussions with the JAQ airport manager, runway use percentages were established for the Future Year 2032 Airport scenario. The runway use is an important element affecting the size and shape of noise contours. The runway use percentages for departures and arrivals for daytime, evening, and nighttime activity for the Future Year 2032 are included in **Tables 1** for fixed wing. The majority of the fixed wing aircraft operations will be made to the south, using Runway 19.

TABLE 1

FY 2032 PROJECTED FIXED WING RUNWAY USE PERCENTAGES

Runway	Day	Evening	Night
01	25%	15%	5%
19	75%	85%	95%
Total	**100%**	**100%**	**100%**

SOURCE: JAQ Airport Manager, 2017.

3.6 Aircraft Operations

The projected 2032 operations levels were determined by the 2012 Airport fleet mix provided by the Airport. From this fleet mix, a compound growth rate was applied through discussions with the JAQ Airport Manager and operations calculations provide in the 2005 JAQ Airport Master Plan Update. It is projected that JAQ will have 60,000 operations in 2032 as shown in **Table 2**. Through continued discussion with the Airport, itinerant verses local operation splits, as well as the time-of-day operations were determined. It was determined that itinerant traffic makes up 45% of the operations at JAQ, while local traffic is the more predominant at 55%. When discussing the time-of-day the operations occur, it was determined that 95% occur during daytime hours (7:00:00 am – 6:59:59 pm), 3% occur during the evening hours (7:00:00 pm – 9:59:59 pm), and 2% occur during the nighttime hours (10:00:00 pm – 6:59:59 am).

All the operation at JAQ, for the purposes of modeling, can be classified under general aviation (GA) aircraft. The general aviation fleet mix for fixed wing was determined through discussions with the Airport Manager.

TABLE 2
FUTURE YEAR 2032 PROJECTED AIRCRAFT OPERATIONS

Aircraft Category	INM Aircraft Type	Stage Length	Operations			Total Annual Operations
			Departures	Arrivals	Local	
General Aviation						
	CNA172	1	2,576.34	3,576.34	7,829.08	12,981.76
	CNA182	1	1,236.64	1,236.64	-	2,473.28
	CNA206	1	309.16	309.16	-	618.32
	GASEPF	1	3,194.66	3,194.66	9,708.06	16,097.38
	GASEPV	1	4,328.24	4,328.24	13,152.86	21,809.34
	PA28	1	927.48	927.48	-	1,854.96
	BEC58P	1	309.16	309.16	660.00	1,278.32
	DC3	1	206.11	206.11	-	412.22
Totals			**13,088**	**14,088**	**27,176**	**57,526**

SOURCE: JAQ 2005 Updated Airport Master Plan; JAQ Airport Manager, 2017; ESA Airports, 2017.

4.0 Flight Tracks

4.1 Aircraft Flight Tracks

The location of flight tracks (flight corridors) is an important factor in determining the geographic distribution of noise contours on the ground. The locations of the current arrival and departure tracks into and out of JAQ were developed based on discussions with the Airport Manager. Flight tracks utilized by arriving and departing aircraft in all flow conditions were reviewed and a series of centerlines of flight corridors were established for each condition. Since aircraft do not follow a single track in the sky, the INM includes a system of spreading the flight operations into corridors to closely replicate the actual splay of aircraft.

The itinerant aircraft arrival and departure flight tracks for north-flow fixed-wing and south-flow fixed-wing are shown on **Figures 1** and **2**, respectively.

GA flight tracks were spread out in all directions from JAQ, however, it was noted by the JAQ Airport Manager, that GA aircraft predominantly fly north and southwest headings when departing. Arriving aircraft were determined to mostly follow the standard traffic pattern at JAQ. The flight tracks use percentages by aircraft category are presented in **Tables 3**, **4**, and **5**.

TABLE 3
FY 2032 ARRIVAL FLIGHT TRACK USE PERCENTAGES

Aircraft Type	Direction	Runway	Track ID	Percent
Fixed Wing	**North**	01	01AP1	60%
			01AP2	35%
			01AP3	5%
	South	19	19AP1	3%
			19AP2	60%
			19AP3	2%
			19AP4	35%

SOURCE: JAQ Airport Manager, 2017.

TABLE 4
FY 2032 DEPARTURE FLIGHT TRACK USE PERCENTAGES

Aircraft Type	Direction	Runway	Track ID	Percent
Fixed Wing	**North**	01	01DP1	45%
			01DP2	45%
			01DP3	10%
	South	19	19DP1	45%
			19DP2	45%
			19DP3	10%

SOURCE: JAQ Airport Manager, 2017.

TABLE 5
FY 2032 LOCAL FLIGHT TRACK USE PERCENTAGES

Aircraft Type	Direction	Runway	Track ID	Percent
Fixed Wing	**North**	01	01TGP	100%
	South	19	19TGP	5%
			19TGCP	95%

SOURCE: JAQ Airport Manager, 2017.

5.0 Conclusion

The forecasted 2032 noise contours for JAQ are shown in **Figure 4**. This is a combination of all of the input data discussed above including: the runway use percentages, flight tracks and flight track percentages, fleet mix, total operations including itinerant versus local, and the time-of-day those operations take place. Total acreages the contours cover can be found in **Table 6**.

TABLE 6

FUTURE YEAR 2032 NOISE CONTOUR ACREAGES

Noise Contour	Acreage
60	348.1
65	143.8
70	64.3

SOURCE: INM 7.0c, ESA Airports, 2017.

APPENDIX D

Methods for Determining Concentrations of People

APPENDIX D

Methods for Determining Concentrations of People

One criterion used in many compatibility plans is the maximum number of people per acre that can be present in a given area at any one time. If a proposed use exceeds the maximum density, it is considered inconsistent with compatibility planning policies. This appendix provides some guidance on how the people-per-acre determination can be made.

The most difficult part about making a people-per-acre determination 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:

- Parking Ordinance - The number of people present in a given area can be calculated based upon the number of parking spaces provided. Some assumption regarding the number of people per vehicle needs to be developed to calculate the number of people on-site. 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.
- Maximum Occupancy- The Uniform or California Building Code (CBC) can be used as a standard for determining the maximum occupancy of certain uses. Table D-1 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 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 percent) 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.
- 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.

Appendix D1 shows sample calculations.

TABLE D-1
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT[1]

Function of Space	Occupant Load Factor[2]
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
Exhibit Gallery and Museum	30 net
Assembly with fixed seats	See Section 1004.4[3]
Assembly without fixed seats	
Concentrated (chairs only—not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Business areas	100 gross
Courtrooms	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
Group 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	100 gross
Kitchens, commercial	200 gross
Laboratory	
Educational	50 net
Laboratories, non-educational	100 net
Laboratory suite[4]	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Mall buildings – covered and open	See Section 402.8.2[5]
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

NOTES:

1. For SI: 1 square foot = 0.929 m^2

2. Floor area in square feet per occupant.

3. **Section 1004.4 Fixed seating.**

For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein. The occupant load for areas in which fixed seating is not installed, such as waiting spaces, shall be determined in accordance with Section 1004.1.2 and added to the number of fixed seats.

The occupant load of wheelchair spaces and the associated companion seat shall be based on one occupant for each wheelchair space and one occupant for the associated companion seat provided in accordance with Section 1108.2.3.

For areas having fixed seating without dividing arms, the occupant load shall not be less than the number of seats based on the number of seats based on one person for each 18 inches (457 mm) of seating length.

The occupant load of seating booths shall be based on one person for each 24 inches (610 mm) of booth seat length measured at the backrest of the seating booth.

4. **Section 443.2 Definitions.** The following terms are defined in Chapter 2 [of the CBC]:

Laboratory suite.

[F] Liquid tight floor.

5. **Section 402.8.2 Determination of occupant load.**

The occupant load permitted in any individual tenant space in a covered or open mall building shall be determined by this code. Means of egress requirements for individual tenant spaces shall be based on the occupant load thus determined.

402.8.2.1 Occupant formula

In determining required means of egress of the mall, the number of occupants for whom means of egress are to be provided shall be based on gross leasable area of the covered or open mall building (excluding anchor buildings) and the occupant load factor as determined by Equation 4-1.

OLF = (0.00007) (GLA) + 25

Equation 4-1

where:

OLF = The occupant load factor (square feet per person)

GLA = The gross leasable area (square feet).

Exception: Tenant spaces attached to a covered or open mall building but with a means of egress system that is totally independent of the open mall of an open mall building or of a covered mall building shall not be considered as gross leasable area for determining the required means of egress for the mall building.

402.8.2.2 OLF range. The occupant load factor (OLF) is not required to be less than 30 and shall not exceed 50.

402.8.2.3 Anchor buildings. The occupant load of anchor buildings opening into the mall shall not be included in computing the total number of occupants for the mall.

402.8.2.4 Food courts. The occupant load of a food court shall be determined in accordance with Section 1004. For the purposes of determining the means of egress requirements for the mall, the food court occupant load shall be added to the occupant load of the covered or open mall building as calculated above.

SOURCE: California Building Code (2013), Table 1004.1.2 (p. 372)

Appendix D1
Sample People-Per-Acre Calculations

Example 1

Proposed Development: Two office buildings, each two stories and containing 20,000 square feet of floor area per building. Site size is 3.0 net acres. Counting a portion of the adjacent road, the gross area of the site is 3.5± acres.

A. Calculation Based on Parking Space Requirements

For office uses, assume that a county or city parking ordinance requires 1 parking space for every 300 square feet of floor area. Data from traffic studies or other sources can be used to estimate the average vehicle occupancy. For the purposes of this example, the number of people on the property is assumed to equal 1.5 times the number of parking spaces.

The average usage intensity would therefore be calculated as follows:

1) 40,000 sq. ft. floor area x 1.0 parking space per 300 sq. ft. = 134 required parking spaces
2) 134 parking spaces x 1.5 people per space = 201 people maximum on site
3) 200 people / 3.5 acres gross site size = 57 people per acre average for the site

Assuming that occupancy of each building is relatively equal throughout, but that there is some separation between the buildings and outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:

1) 20,000 sq. ft. bldg. / 2 stories = 10,000 sq. ft. bldg. footprint
2) 10,000 sq. ft. bldg. footprint / 43,560 sq. ft. per acre= 0.23 acre bldg. footprint
3) Building footprint <1.0 acre; therefore maximum people in 1 acre = bldg. occupancy = 100 people per single acre

B. Calculation Based on California Building Code

Using the CBC (Appendix D1) as the basis for estimating building occupancy yields the following results for the above example:

1) 40,000 sq. ft. bldg. / 100 sq. ft./occupant = 400 people max. bldg. occupancy (under UBC)
2) 400 max. bldg. occupancy x 50% adjustment = 200 people maximum on site
3) 200 people / 3.5 acres gross site size = 57 people per acre average tor the site

Conclusions: In this instance, both methodologies give the same results. For different uses and/or different assumptions, the two methodologies are likely to produce different numbers. In most such cases, the CBC methodology will indicate a higher intensity.

APPENDIX E

State Laws Related to Airport Land Use Planning

APPENDIX E: STATE LAWS RELATED TO AIRPORT LAND USE PLANNING

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Article 3.5
AIRPORT LAND USE COMMISSION

(As of April 2015)

21670. Creation; Membership; Selection

(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.

21670.1. Action by Designated Body Instead of Commission

(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.

21670.2. Applicability to Counties Having over 4 Million in Population

(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 such 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.

21670.3. San Diego County

(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.

21670.4. Intercounty Airports

(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.

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.

21671. Airports Owned by a City, District, or County; Appointment of Certain Members by Cities and Counties

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.

21671.5. Term of Office

(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.

21672. Rules and Regulations

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.

21673. Initiation of Proceedings for Creation by Owner of Airportz

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.

21674. Powers and Duties

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.

21674.5. Training of Airport Land Use Commission's Staff

(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.

21674.7. Airport Land Use Planning Handbook

(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.

21675. Land Use Plan

(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.

21675.1. Adoption of Land Use Plan

(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.

21675.2. Approval or Disapproval of Actions, Regulations, or Permits

(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.

21676. Review of Local General Plans

(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.

21676.5. Review of Local Plans

(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.

21677. Marin County Override Provisions

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.

21678. Airport Owner's Immunity

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.

21679. Court Review

(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.

21679.5. Deferral of Court Review

(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.

AERONAUTICS LAW

PUBLIC UTILITIES CODE
Division 9, Part 1
Chapter 3 — Regulation of Aeronautics
(excerpts)

21402. Ownership; Prohibited Use of Airspace

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.

21403. Lawful Flight; Unauthorized and Forced Landings; Damages; Use of Highways; Burden of Proof; Within Airport Approach Zone

(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.

AERONAUTICS LAW

PUBLIC UTILITIES CODE
Division 9, Part 1
Chapter 3 — Regulation of Aeronautics
(excerpts)

21417. Definitions for Meteorological Towers

(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.

AERONAUTICS LAW

PUBLIC UTILITIES CODE
Division 9, Part 1
Chapter 4 — Airports and Air Navigation Facilities

Article 2.7
REGULATION OF OBSTRUCTIONS
(excerpts)

21655. Proposed Site for Construction of State Building Within Two Miles of Airport; Investigation and Report; Expenditure of State Funds

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.

21658. Construction of Utility Pole or Line in Vicinity of Aircraft Landing Area

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.

21659. Hazards near Airports Prohibited

(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).

AERONAUTICS LAW

PUBLIC UTILITIES CODE
Division 9, Part 1, Chapter 4

Article 3
REGULATION OF AIRPORTS
(excerpts)

21661.5. City Council or County Board of Supervisors and ALUC Approvals

(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.

21664.5. Amended Airport Permits; Airport Expansion Defined

(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.

PLANNING AND ZONING LAW

GOVERNMENT CODE
Title 7 — Planning and Land Use
Division 1 — Planning and Zoning
Chapter 3 — Local Planning

Article 5
AUTHORITY FOR AND SCOPE OF GENERAL PLANS
(excerpts)

65302.3. General and Applicable Specific Plans; Consistency with Airport Land Use Plans; Amendment; Nonconcurrence Findings

(a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

(b) The general plan, and any applicable specific plan, shall be amended, as necessary, within 180 days of any amendment to the plan required under Section 21675 of the Public Utilities Code.

(c) If the legislative body does not concur with any provision of the plan required under Section 21675 of the Public Utilities Code, it may satisfy the provisions of this section by adopting findings pursuant to Section 21676 of the Public Utilities Code.

(d) In each county where an airport land use commission does not exist, but where there is a military airport, the general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport.

PLANNING AND ZONING LAW

GOVERNMENT CODE
Title 7, Division 1
Chapter 4.5 — Review and Approval of Development Projects

Article 3
APPLICATION FOR DEVELOPMENT PROJECTS
(excerpts)

Note: The following government code sections are referenced in Section 21675.2(c) of the ALUC statutes.

65943. Completeness of Application; Determination; Time; Specification of Parts not Complete and Manner of Completion

(a) Not later than 30 calendar days after any public agency has received an application for a development project, the agency shall determine in writing whether the application is complete and shall immediately transmit the determination to the applicant for the development project. If the written determination is not made within 30 days after receipt of the application, and the application includes a statement that it is an application for a development permit, the application shall be deemed complete for purposes of this chapter. Upon receipt of any resubmittal of the application, a new 30-day period shall begin, during which the public agency shall determine the completeness of the application. If the application is determined not to be complete, the agency's determination shall specify those parts of the application which are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the public agency in response to the list and description.

(b) Not later than 30 calendar days after receipt of the submitted materials, the public agency shall determine in writing whether they are complete and shall immediately transmit that determination to the applicant. If the written determination is not made within that 30-day period, the application together with the submitted materials shall be deemed complete for purposes of this chapter.

(c) If the application together with the submitted materials are determined not to be complete pursuant to subdivision (b), the public agency shall provide a process for the applicant to appeal that decision in writing to the governing body of the agency or, if there is no governing body, to the director of the agency, as provided by that agency. A city or county shall provide that the right of appeal is to the governing body or, at their option, the planning commission, or both.

There shall be a final written determination by the agency on the appeal not later than 60 calendar days after receipt of the applicant's written appeal. The fact that an appeal is permitted to both the planning commission and to the governing body does not extend the 60-day period. Notwithstanding a decision pursuant to subdivision (b) that the application and submitted materials are not complete, if the final written determination on the appeal is not

made within that 60-day period, the application with the submitted materials shall be deemed complete for the purposes of this chapter.

(d) Nothing in this section precludes an applicant and a public agency from mutually agreeing to an extension of any time limit provided by this section.

(e) A public agency may charge applicants a fee not to exceed the amount reasonably necessary to provide the service required by this section. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

65943.5.

(a) Notwithstanding any other provision of this chapter, any appeal pursuant to subdivision (c) of Section 65943 involving a permit application to a board, office, or department within the California Environmental Protection Agency shall be made to the Secretary for Environmental Protection.

(b) Notwithstanding any other provision of this chapter, any appeal pursuant to subdivision (c) of Section 65943 involving an application for the issuance of an environmental permit from an environmental agency shall be made to the Secretary for Environmental Protection under either of the following circumstances:

(1) The environmental agency has not adopted an appeals process pursuant to subdivision (c) of Section 65943.

(2) The environmental agency declines to accept an appeal for a decision pursuant to subdivision (c) of Section 65943.

(c) For purposes of subdivision (b), "environmental permit" has the same meaning as defined in Section 71012 of the Public Resources Code, and "environmental agency" has the same meaning as defined in Section 71011 of the Public Resources Code, except that "environmental agency" does not include the agencies described in subdivisions (c) and (h) of Section 71011 of the Public Resources Code.

65944. Acceptance of Application as Complete; Requests for Additional Information; Restrictions; Clarification, Amplification, Correction, etc.; Prior to Notice of Necessary Information

(a) After a public agency accepts an application as complete, the agency shall not subsequently request of an applicant any new or additional information which was not specified in the list prepared pursuant to Section 65940. The agency may, in the course of processing the application, request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application.

(b) The provisions of subdivision (a) shall not be construed as requiring an applicant to submit with his or her initial application the entirety of the information which a public agency may require in order to take final action on the application. Prior to accepting an application, each public agency shall inform the applicant of any information included in the list prepared

pursuant to Section 65940 which will subsequently be required from the applicant in order to complete final action on the application.

(c) This section shall not be construed as limiting the ability of a public agency to request and obtain information which may be needed in order to comply with the provisions of Division 13 (commencing with Section 21000) of the Public Resources Code.

(d)

(1) After a public agency accepts an application as complete, and if the project applicant has identified that the proposed project is located within 1,000 feet of a military installation or within special use airspace or beneath a low-level flight path in accordance with Section 65940, the public agency shall provide a copy of the complete application to any branch of the United States Armed Forces that has provided the Office of Planning and Research with a single California mailing address within the state for the delivery of a copy of these applications. This subdivision shall apply only to development applications submitted to a public agency 30 days after the Office of Planning and Research has notified cities, counties, and cities and counties of the availability of Department of Defense information on the Internet pursuant to subdivision (d) of Section 65940.

(2) Except for a project within 1,000 feet of a military installation, the public agency is not required to provide a copy of the application if the project is located entirely in an "urbanized area." An urbanized area is any urban location that meets the definition used by the United State Department of Commerce's Bureau of Census for "urban" and includes locations with core census block groups containing at least 1,000 people per square mile and surrounding census block groups containing at least 500 people per square mile.

(e) Upon receipt of a copy of the application as required in subdivision (d), any branch of the United States Armed Forces may request consultation with the public agency and the project applicant to discuss the effects of the proposed project on military installations, low-level flight paths, or special use airspace, and potential alternatives and mitigation measures.

(f)

(1) Subdivisions (d), (e), and (f) as these relate to low-level flight paths, special use airspace, and urbanized areas shall not be operative until the United States Department of Defense provides electronic maps of low-level flight paths, special use airspace, and military installations, at a scale and in an electronic format that is acceptable to the Office of Planning and Research.

(2) Within 30 days of a determination by the Office of Planning and Research that the information provided by the Department of Defense is sufficient and in an acceptable scale and format, the office shall notify cities, counties, and cities and counties of the availability of the information on the Internet. Cities, counties, and cities and counties shall comply with subdivision (d) within 30 days of receiving this notice from the office.

65945. Notice of Proposal to Adopt or Amend Certain Plans or Ordinances by City or County, Fee; Subscription to Periodically Updated Notice as Alternative, Fee

(a) At the time of filing an application for a development permit with a city or county, the city or county shall inform the applicant that he or she may make a written request to receive notice

from the city or county of a proposal to adopt or amend any of the following plans or ordinances:

(1) A general plan.

(2) A specific plan.

(3) A zoning ordinance.

(4) An ordinance affecting building permits or grading permits.

The applicant shall specify, in the written request, the types of proposed action for which notice is requested. Prior to taking any of those actions, the city or county shall give notice to any applicant who has requested notice of the type of action proposed and whose development project is pending before the city or county if the city or county determines that the proposal is reasonably related to the applicant's request for the development permit. Notice shall be given only for those types of actions which the applicant specifies in the request for notification.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of providing that notice. If a fee is charged pursuant to this subdivision, the fee shall be collected as part of the application fee charged for the development permit.

(b) As an alternative to the notification procedure prescribed by subdivision (a), a city or county may inform the applicant at the time of filing an application for a development permit that he or she may subscribe to a periodically updated notice or set of notices from the city or county which lists pending proposals to adopt or amend any of the plans or ordinances specified in subdivision (a), together with the status of the proposal and the date of any hearings thereon which have been set.

Only those proposals which are general, as opposed to parcel-specific in nature, and which the city or county determines are reasonably related to requests for development permits, need be listed in the notice. No proposal shall be required to be listed until such time as the first public hearing thereon has been set. The notice shall be updated and mailed at least once every six weeks; except that a notice need not be updated and mailed until a change in its contents is required.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of providing that notice, including the costs of updating the notice, for the length of time the applicant requests to be sent the notice or notices.

65945.3. Notice of Proposal to Adopt or Amend Rules or Regulations Affecting Issuance of Permits by Local Agency other than City or County; Fee

At the time of filing an application for a development permit with a local agency, other than a city or county, the local agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a rule or regulation affecting the issuance of development permits.

Prior to adopting or amending any such rule or regulation, the local agency shall give notice to any applicant who has requested such notice and whose development project is pending before the agency if the local agency determines that the proposal is reasonably related to the applicant's request for the development permit.

The local agency may charge the applicant for a development permit, to whom notice is provided pursuant to this section, a reasonable fee not to exceed the actual cost of providing that notice. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

65945.5. Notice of Proposal to Adopt or Amend Regulation Affecting Issuance of Permits and Which Implements Statutory Provision by State Agency

At the time of filing an application for a development permit with a state agency, the state agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a regulation affecting the issuance of development permits and which implements a statutory provision.

Prior to adopting or amending any such regulation, the state agency shall give notice to any applicant who has requested such notice and whose development project is pending before the state agency if the state agency determines that the proposal is reasonably related to the applicant's request for the development permit.

65945.7. Actions, Inactions, or Recommendations Regarding Ordinances, Rules or Regulations; Invalidity or Setting Aside Ground of Error Only if Prejudicial

No action, inaction, or recommendation regarding any ordinance, rule, or regulation subject to this Section 65945, 65945.3, or 65945.5 by any legislative body, administrative body, or the officials of any state or local agency shall be held void or invalid or be set aside by any court on the ground of any error, irregularity, informality, neglect or omission (hereinafter called "error") as to any matter pertaining to notices, records, determinations, publications or any matters of procedure whatever, unless after an examination of the entire case, including evidence, the court shall be of the opinion that the error complained of was prejudicial, and that by reason of such error the party complaining or appealing sustained and suffered substantial injury, and that a different result would have been probable if such error had not occurred or existed. There shall be no presumption that error is prejudicial or that injury was done if error is shown.

65946. [Replaced by AB2351 Statutes of 1993]

PLANNING AND ZONING LAW

GOVERNMENT CODE
Title 7, Division 1
Chapter 9.3 — Mediation and Resolution of Land Use Disputes
(excerpts)

66030.

(a) The Legislature finds and declares all of the following:

(1) Current law provides that aggrieved agencies, project proponents, and affected residents may bring suit against the land use decisions of state and local governmental agencies. In practical terms, nearly anyone can sue once a project has been approved.

(2) Contention often arises over projects involving local general plans and zoning, redevelopment plans, the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), development impact fees, annexations and incorporations, and the Permit Streamlining Act (Chapter 4.5 (commencing with Section 65920)).

(3) When a public agency approves a development project that is not in accordance with the law, or when the prerogative to bring suit is abused, lawsuits can delay development, add uncertainty and cost to the development process, make housing more expensive, and damage California's competitiveness. This litigation begins in the superior court, and often progresses on appeal to the Court of Appeal and the Supreme Court, adding to the workload of the state's already overburdened judicial system.

(b) It is, therefore, the intent of the Legislature to help litigants resolve their differences by establishing formal mediation processes for land use disputes. In establishing these mediation processes, it is not the intent of the Legislature to interfere with the ability of litigants to pursue remedies through the courts.

66031.

(a) Notwithstanding any other provision of law, any action brought in the superior court relating to any of the following subjects may be subject to a mediation proceeding conducted pursuant to this chapter:

(1) The approval or denial by a public agency of any development project.

(2) Any act or decision of a public agency made pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(3) The failure of a public agency to meet the time limits specified in Chapter 4.5 (commencing with Section 65920), commonly known as the Permit Streamlining Act, or in the Subdivision Map Act (Division 2 (commencing with Section 66410)).

(4) Fees determined pursuant to Chapter 6 (commencing with Section 17620) of Division 1 of Part 10.5 of the Education Code or Chapter 4.9 (commencing with Section 65995).

(5) Fees determined pursuant to the Mitigation Fee Act (Chapter 5 (commencing with Section 66000), Chapter 6 (commencing with Section 66010), Chapter 7 (commencing with Section 66012), Chapter 8 (commencing with Section 66016), and Chapter 9 (commencing with Section 66020)).

(6) The adequacy of a general plan or specific plan adopted pursuant to Chapter 3 (commencing with Section 65100).

(7) The validity of any sphere of influence, urban service area, change of organization or reorganization, or any other decision made pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Division 3 (commencing with Section 56000) of Title 5).

(8) The adoption or amendment of a redevelopment plan pursuant to the Community Redevelopment Law (Part 1 (commencing with Section 33000) of Division 24 of the Health and Safety Code).

(9) The validity of any zoning decision made pursuant to Chapter 4 (commencing with Section 65800).

(10) The validity of any decision made pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Part 1 of Division 9 of the Public Utilities Code.

(b) Within five days after the deadline for the respondent or defendant to file its reply to an action, the court may invite the parties to consider resolving their dispute by selecting a mutually acceptable person to serve as a mediator, or an organization or agency to provide a mediator.

(c) In selecting a person to serve as a mediator, or an organization or agency to provide a mediator, the parties shall consider the following:

(1) The council of governments having jurisdiction in the county where the dispute arose.

(2) Any subregional or countywide council of governments in the county where the dispute arose.

(3) Any other person with experience or training in mediation including those with experience in land use issues, or any other organization or agency that can provide a person with experience or training in mediation, including those with experience in land use issues.

(d) If the court invites the parties to consider mediation, the parties shall notify the court within 30 days if they have selected a mutually acceptable person to serve as a mediator. If the parties have not selected a mediator within 30 days, the action shall proceed. The court shall not draw any implication, favorable or otherwise, from the refusal by a party to accept the invitation by the court to consider mediation. Nothing in this section shall preclude the parties from using mediation at any other time while the action is pending.

PLANNING AND ZONING LAW

GOVERNMENT CODE
Title 7 — Planning and Land Use
Division 2 — Subdivisions
Chapter 3 — Procedure

Article 3
REVIEW OF TENTATIVE MAP BY OTHER AGENCIES
(excerpts)

66455.9. Potential School Sites; Notice; Investigation

Whenever there is consideration of an area within a development for a public schoolsite, the advisory agency shall give the affected districts and the State Department of Education written notice of the proposed site. The written notice shall include the identification of any existing or proposed runways within the distance specified in Section 17215 of the Education Code. If the site is within the distance of an existing or proposed airport runway as described in Section 17215 of the Education Code, the department shall notify the State Department of Transportation as required by the section and the site shall be investigated by the State Department of Transportation required by Section 17215.

EDUCATION CODE
Title 1 — General Education Code Provisions
Division 1 — General Education Code Provisions
Part 10.5 — School Facilities
Chapter 1 — School Sites

Article 1
GENERAL PROVISIONS
(excerpts)

Note: SB 161, Statutes of 1997, replaced Education Code Section 39005 with Section 17215; SB 967, Statutes of 1995, deleted Sections 39006 and 39007.

17215.

(a) In order to promote the safety of pupils, comprehensive community planning, and greater educational usefulness of schoolsites, before acquiring title to or leasing property for a new schoolsite, the governing board of each school district, including any district governed by a city board of education, or a charter school, shall give the State Department of Education written notice of the proposed acquisition or lease and shall submit any information required by the State Department of Education if the site is within two miles, measured by air line, of that point on an airport runway or a potential runway included in an airport master plan that is nearest to the site.

(b) Upon receipt of the notice required pursuant to subdivision (a), the State Department of Education shall notify the Department of Transportation in writing of the proposed acquisition or lease. If the Department of Transportation is no longer in operation, the State Department of Education shall, in lieu of notifying the Department of Transportation, notify the United States Department of Transportation or any other appropriate agency, in writing, of the proposed acquisition or lease for the purpose of obtaining from the department or other agency any information or assistance that it may desire to give.

(c) The Department of Transportation shall investigate the site and, within 30 working days after receipt of the notice, shall submit to the State Department of Education a written report of its findings including recommendations concerning acquisition or lease of the site. As part of the investigation, the Department of Transportation shall give notice thereof to the owner and operator of the airport who shall be granted the opportunity to comment upon the site. The Department of Transportation shall adopt regulations setting forth the criteria by which a site will be evaluated pursuant to this section.

(d) The State Department of Education shall, within 10 days of receiving the Department of Transportation's report, forward the report to the governing board of the school district or charter school. The governing board or charter school may not acquire title to or lease the property until the report of the Department of Transportation has been received. If the report does not favor the acquisition or lease of the property for a schoolsite or an addition to a present schoolsite, the governing board or charter school may not acquire title to or lease the property. If the report does favor the acquisition or lease of the property for a schoolsite or an addition to a present schoolsite, the governing board or charter school shall hold a public hearing on the matter prior to acquiring or leasing the site.

(e) If the Department of Transportation's recommendation does not favor acquisition or lease of the proposed site, state funds or local funds may not be apportioned or expended for the acquisition or lease of that site, construction of any school building on that site, or for the expansion of any existing site to include that site.

(f) This section does not apply to sites acquired prior to January 1, 1966, nor to any additions or extensions to those sites.

EDUCATION CODE
Title 3 — Postsecondary Education
Division 7 — Community Colleges
Part 49 — Community Colleges, Education Facilities
Chapter 1 — School Sites

Article 2
SCHOOL SITES
(excerpts)

81033. Investigation: Geologic and Soil Engineering Studies; Airport in Proximity

(c) To promote the safety of students, comprehensive community planning, and greater educational usefulness of community college sites, the governing board of each community college district, if the proposed site 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 and excluding them if the property is not so located, before acquiring title to property for a new community college site or for an addition to a present site, shall give the board of governors notice in writing of the proposed acquisition and shall submit any information required by the board of governors.

Immediately after receiving notice of the proposed acquisition of property which 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 board of governors shall notify the Division of Aeronautics of the Department of Transportation, in writing, of the proposed acquisition. The Division of Aeronautics shall make an investigation and report to the board of governors within 30 working days after receipt of the notice. If the Division of Aeronautics is no longer in operation, the board of governors, in lieu of notifying the Division of Aeronautics, shall notify the Federal Aviation Administration or any other appropriate agency, in writing, of the proposed acquisition for the purpose of obtaining from the authority or other agency any information or assistance it may desire to give.

The board of governors shall investigate the proposed site and, within 35 working days after receipt of the notice, shall submit to the governing board a written report and its recommendations concerning acquisition of the site. The governing board shall not acquire title to the property until the report of the board of governors has been received. If the report does not favor the acquisition of the property for a community college site or an addition to a present community college site, the governing board shall not acquire title to the property until 30 days after the department's report is received and until the board of governors' report has been read at a public hearing duly called after 10 days' notice published once in a newspaper of general circulation within the community college district, or if there is no such newspaper, then in a newspaper of general circulation within the county in which the property is located.

(d) If, with respect to a proposed site located within two miles of an operative airport runway, the report of the board of governors submitted to a community college district governing board under subdivision (c) does not favor the acquisition of the site on the sole or partial basis of the unfavorable recommendation of the Division of Aeronautics of the Department of Transportation, no state agency or officer shall grant, apportion, or allow to that community college district for expenditure in connection with that site, any state funds otherwise made

available under any state law whatever for community college site acquisition or college building construction, or for expansion of existing sites and buildings, and no funds of the community college district or of the county in which the district lies shall be expended for those purposes. However, this section shall not be applicable to sites acquired prior to January 1, 1966, or to any additions or extensions to those sites.

If the recommendation of the Division of Aeronautics is unfavorable, the recommendation shall not be overruled without the express approval of the board of governors and the State Allocation Board.

(e) No action undertaken by the board of governors or by any other state agency or by any political subdivision pursuant to this chapter, or in compliance with this chapter, shall be construed to affect any rights arising under Section 19 of Article I of the California Constitution.

PUBLIC RESOURCES CODE
California Environmental Quality Act Statutes
Division 13 — Environmental Quality
Chapter 2.6 — General
(excerpts)

21096. Airport Planning

(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with Section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.

(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) 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.

BUSINESS AND PROFESSIONS CODE
Division 4 — Real Estate
Part 2 — Regulation of Transactions
Chapter 1 — Subdivided Lands
Article 2 — Investigation, Regulation and Report
(excerpts)

11010.

(a) Except as otherwise provided pursuant to subdivision (c) or elsewhere in this chapter, any person who intends to offer subdivided lands within this state for sale or lease shall file with the Bureau of Real Estate an application for a public report consisting of a notice of intention and a completed questionnaire on a form prepared by the bureau.

(b) The notice of intention shall contain the following information about the subdivided lands and the proposed offering.

[Sub-Sections (1) through (12) omitted]

(13)(A) The location of all existing airports, and of all proposed airports shown on the general plan of any city or county, located within two statute miles of the subdivision. If the property is located within an airport influence area, the following statement shall be included in the notice of intention:

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, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

(B) For purposes of this section, an "airport influence area," also known as an "airport referral area," is 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.

CIVIL CODE
Division 2 — Property
Part 4 — Acquisition of Property
Title 4 — Transfer
Chapter 2 — Transfer of Real Property
Article 1.7 — Disclosure of Natural Hazards Upon Transfer of Residential Property
(excerpts)

1103.

(a) Except as provided in Section 1103.1, this article applies to the transfer by sale, exchange, installment land sale contract, as defined in Section 2985, lease with an option to purchase, any other option to purchase, or ground lease coupled with improvements, of any real property described in subdivision (c), or residential stock cooperative, improved with or consisting of not less than one nor more than four dwelling units.

(b) Except as provided in Section 1103.1, this article shall apply to a resale transaction entered into on or after January 1, 2000, for a manufactured home, as defined in Section 18007 of the Health and Safety Code, that is classified as personal property intended for use as a residence, or a mobilehome, as defined in Section 18008 of the Health and Safety Code, that is classified as personal property intended for use as a residence, if the real property on which the manufactured home or mobilehome is located is real property described in subdivision (c).

(c) This article shall apply to the transactions described in subdivisions (a) and (b) only if the transferor or his or her agent is required by one or more of the following to disclose the property's location within a hazard zone:

(1) A person who is acting as an agent for a transferor of real property that is located within a special flood hazard area (any type Zone "A" or "V") designated by the Federal Emergency Management Agency, or the transferor if he or she is acting without an agent, shall disclose to any prospective transferee the fact that the property is located within a special flood hazard area if either:

(A) The transferor, or the transferor's agent, has actual knowledge that the property is within a special flood hazard area.

(B) The local jurisdiction has compiled a list, by parcel, of properties that are within the special flood hazard area and a notice has been posted at the offices of the county recorder, county assessor, and county planning agency that identifies the location of the parcel list.

(2) …is located within an area of potential flooding…shall disclose to any prospective transferee the fact that the property is located within an area of potential flooding…

(3) …is located within a very high fire hazard severity zone, designated pursuant to Section 51178 of the Public Resources Code…shall disclose to any prospective transferee the fact that the property is located within a very high fire hazard severity zone and is subject to the requirements of Section 51182…

(4) …is located within an earthquake fault zone, designated pursuant to Section 2622 of the Public Resources Code…shall disclose to any prospective transferee the fact that the property is located within a delineated earthquake fault zone…
(5) …is located within a seismic hazard zone, designated pursuant to Section 2696 of the Public Resources Code…shall disclose to any prospective transferee the fact that the property is located within a seismic hazard zone…
(6) …is located within a state responsibility area determined by the board, pursuant to Section 4125 of the Public Resources Code, shall disclose to any prospective transferee the fact that the property is located within a wildland area that may contain substantial forest fire risks and hazards and is subject to the requirements of Section 4291…

(d) Any waiver of the requirements of this article is void as against public policy.

1103.1

(a) This article does not apply to the following transfers:

(1) Transfers pursuant to court order, including, but not limited to, transfers ordered by a probate court in administration of an estate, transfers pursuant to a writ of execution, transfers by any foreclosure sale, transfers by a trustee in bankruptcy, transfers by eminent domain, and transfers resulting from a decree for specific performance.

(2) Transfers to a mortgagee by a mortgagor or successor in interest who is in default, transfers to a beneficiary of a deed of trust by a trustor or successor in interest who is in default, transfers by any foreclosure sale after default, transfers by any foreclosure sale after default in an obligation secured by a mortgage, transfers by a sale under a power of sale or any foreclosure sale under a decree of foreclosure after default in an obligation secured by a deed of trust or secured by any other instrument containing a power of sale, or transfers by a mortgagee or a beneficiary under a deed of trust who has acquired the real property at a sale conducted pursuant to a power of sale under a mortgage or deed of trust or a sale pursuant to a decree of foreclosure or has acquired the real property by a deed in lieu of foreclosure.

(3) Transfers by a fiduciary in the course of the administration of a decedent's estate, guardianship, conservatorship, or trust.

(4) Transfers from one coowner to one or more other coowners.

(5) Transfers made to a spouse, or to a person or persons in the lineal line of consanguinity of one or more of the transferors.

(6) Transfers between spouses resulting from a judgment of dissolution of marriage or of legal separation of the parties or from a property settlement agreement incidental to that judgment.

(7) Transfers by the Controller in the course of administering Chapter 7 (commencing with Section 1500) of Title 10 of Part 3 of the Code of Civil Procedure.

(8) Transfers under Chapter 7 (commencing with Section 3691) or Chapter 8 (commencing with Section 3771) of Part 6 of Division 1 of the Revenue and Taxation Code.

(9) Transfers or exchanges to or from any governmental entity.

(b) Transfers not subject to this article may be subject to other disclosure requirements, including those under Sections 8589.3, 8589.4, and 51183.5 of the Government Code and Sections 2621.9, 2694, and 4136 of the Public Resources Code. In transfers not subject to this article, agents may make required disclosures in a separate writing.

1103.2

(a) The disclosures required by this article are set forth in, and shall be made on a copy of, the following Natural Hazard Disclosure Statement: [content omitted].

(b) If an earthquake fault zone, seismic hazard zone, very high fire hazard severity zone, or wildland fire area map or accompanying information is not of sufficient accuracy or scale that a reasonable person can determine if the subject real property is included in a natural hazard area, the transferor or transferor's agent shall mark "Yes" on the Natural Hazard Disclosure Statement. The transferor or transferor's agent may mark "No" on the Natural Hazard Disclosure Statement if he or she attaches a report prepared pursuant to subdivision (c) of Section 1103.4 that verifies the property is not in the hazard zone. Nothing in this subdivision is intended to limit or abridge any existing duty of the transferor or the transferor's agents to exercise reasonable care in making a determination under this subdivision.

[Sub-Sections (c) through (h) omitted]

[Section 1103.3 omitted]

1103.4

(a) Neither the transferor nor any listing or selling agent shall be liable for any error, inaccuracy, or omission of any information delivered pursuant to this article if the error, inaccuracy, or omission was not within the personal knowledge of the transferor or the listing or selling agent, and was based on information timely provided by public agencies or by other persons providing information as specified in subdivision (c) that is required to be disclosed pursuant to this article, and ordinary care was exercised in obtaining and transmitting the information.

(b) The delivery of any information required to be disclosed by this article to a prospective transferee by a public agency or other person providing information required to be disclosed pursuant to this article shall be deemed to comply with the requirements of this article and shall relieve the transferor or any listing or selling agent of any further duty under this article with respect to that item of information.

(c) The delivery of a report or opinion prepared by a licensed engineer, land surveyor, geologist, or expert in natural hazard discovery dealing with matters within the scope of the professional's license or expertise shall be sufficient compliance for application of the exemption provided by subdivision (a) if the information is provided to the prospective transferee pursuant to a request therefor, whether written or oral. In responding to that request, an expert may indicate, in writing, an understanding that the information provided will be used in fulfilling the requirements of Section 1103.2 and, if so, shall indicate the

required disclosures, or parts thereof, to which the information being furnished is applicable. Where that statement is furnished, the expert shall not be responsible for any items of information, or parts thereof, other than those expressly set forth in the statement.

(1) In responding to the request, the expert shall determine whether the property is within an airport influence area as defined in subdivision (b) of Section 11010 of the Business and Professions Code. If the property is within an airport influence area, the report shall contain the following statement:

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.

[Remainder of Article 1.7 omitted]

CIVIL CODE
Division 2, Part 4
Title 6 — Common Interest Developments
Chapter 2 — County Documents
Article 1 — Creation
(excerpts)

1353.

(a)

(1) A declaration, recorded on or after January 1, 1986, shall contain a legal description of the common interest development, and a statement that the common interest development is a community apartment project, condominium project, planned development, stock cooperative, or combination thereof. The declaration shall additionally set forth the name of the association and the restrictions on the use or enjoyment of any portion of the common interest development that are intended to be enforceable equitable servitudes. If the property is located within an airport influence area, a declaration, recorded after January 1, 2004, shall contain the following statement:

> 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.

(2) For purposes of this section, an "airport influence area," also known as an "airport referral area," is 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.

(3) [Omitted]

(4) The statement in a declaration acknowledging that a property is located in an airport influence area or within the jurisdiction of the San Francisco Bay Conservation and Development Commission does not constitute a title defect, lien, or encumbrance.

(b) The declaration may contain any other matters the original signator of the declaration or the owners consider appropriate.

LEGISLATIVE HISTORY SUMMARY

PUBLIC UTILITIES CODE
Section 21670 et seq.
Airport Land Use Commission Statutes

1967 Original ALUC statute enacted.
- Establishment of ALUCs required in each county containing a public airport served by a certificated air carrier.
- The purpose of ALUCs is indicated as being to make recommendations regarding height restrictions on buildings and the use of land surrounding airports.

1970 Assembly Bill 1856 (Badham) Chapter 1182, Statutes of 1970 — Adds provisions which:
- Require ALUCs to prepare comprehensive land use plans.
- Require such plans to include a long-range plan and to reflect the airport's forecast growth during the next 20 years.
- Require ALUC review of airport construction plans (Section 21661.5).
- Exempt Los Angeles County from the requirement of establishing an ALUC.

1971 The function of ALUCs is restated as being to require new construction to conform to Department of Aeronautics standards.

1973 ALUCs are permitted to establish compatibility plans for military airports.

1982 Assembly Bill 2920 (Rogers) Chapter 1041, Statutes of 1982 — Adds major changes which:
- More clearly articulate the purpose of ALUCs.
- Eliminate reference to "achieve by zoning."
- Require consistency between local general and specific plans and airport land use commission plans; the requirements define the process for attaining consistency, they do not establish standards for consistency.
- Eliminate the requirement for proposed individual development projects to be referred to an ALUC for review once local general/specific plans are consistent with the ALUC's plan.
- Require that local agencies make findings of fact before overriding an ALUC decision.
- Change the vote required for an override from 4/5 to 2/3.

1984 Assembly Bill 3551 (Mountjoy) Chapter 1117, Statutes of 1984 — Amends the law to:
- Require ALUCs in all counties having an airport which serves the general public unless a county and its cities determine an ALUC is not needed.
- Limit amendments to compatibility plans to once per year.
- Allow individual projects to continue to be referred to the ALUC by agreement.
- Extend immunity to airports if an ALUC action is overridden by a local agency not owning the airport.
- Provide state funding eligibility for preparation of compatibility plans through the Regional Transportation Improvement Program process.

1987 Senate Bill 633 (Rogers) Chapter 1018, Statutes of 1987 — Makes revisions which:

- Require that a designated body serving as an ALUC include two members having "expertise in aviation."
- Allows an interested party to initiate court proceedings to postpone the effective date of a local land use action if a compatibility plan has not been adopted.
- Delete sunset provisions contained in certain clauses of the law.
- Allows reimbursement for ALUC costs in accordance with the Commission on State Mandates.

1989 Senate Bill 255 (Bergeson) Chapter 54, Statutes of 1989 —

- Sets a requirement that comprehensive land use plans be completed by June 1991.
- Establishes a method for compelling ALUCs to act on matters submitted for review.
- Allows ALUCs to charge fees for review of projects.
- Suspends any lawsuits that would stop development until the ALUC adopts its plan or until June 1, 1991.

1989 Senate Bill 235 (Alquist) Chapter 788, Statutes of 1989 — Appropriates $3,672,000 for the payment of claims to counties seeking reimbursement of costs incurred during fiscal years 1985-86 through 1989-90 pursuant to state-mandated requirement (Chapter 1117, Statutes of 1984) for creation of ALUCs in most counties. This statute was repealed in 1993.

1990 Assembly Bill 4164 (Mountjoy) Chapter 1008, Statutes of 1990 — Adds section 21674.5 requiring the Division of Aeronautics to develop and implement a training program for ALUC staffs.

1990 Assembly Bill 4265 (Clute) Chapter 563, Statutes of 1990 — With the concurrence of the Division of Aeronautics, allows ALUCs to use an airport layout plan, rather than a long-range airport master plan, as the basis for preparation of a compatibility plan.

1990 Senate Bill 1288 (Beverly) Chapter 54, Statutes of 1990 — Amends Section 21670.2 to give Los Angeles County additional time to prepare compatibility plans and meet other provisions of the ALUC statutes.

1991 Senate Bill 532 (Bergeson) Chapter 140, Statutes of 1991 —

- Allows counties having half of their compatibility plans completed or under preparation by June 30, 1991, an additional year to complete the remainder.
- Allows ALUCs to continue to charge fees under these circumstances.
- Fees may be charged only until June 30, 1992, if plans are not completed by then.

1993 Senate Bill 443 (Committee on Budget and Fiscal Review) Chapter 59, Statutes of 1993 — Amends Section 21670(b) to make the formation of ALUCs permissive rather than mandatory as of June 30, 1993. (Note: Section 21670.2 which assigns responsibility for coordinating the airport planning of public agencies in Los Angeles County is not affected by this amendment.)

1994 Assembly Bill 2831 (Mountjoy) Chapter 644, Statutes of 1994 — Reinstates the language in Section 21670(b) mandating establishment of ALUCs, but also provides for an alternative airport land use planning process. Lists specific actions which a county and affected cities must take in order for such alternative process to receive Caltrans'

approval. Requires that ALUCs be guided by information in the Caltrans' Airport Land Use Planning Handbook when formulating airport land use plans.

1994 Senate Bill 1453 (Rogers) Chapter 438, Statutes of 1994 — Amends California Environmental Quality Act (CEQA) statutes as applied to preparation of environmental documents affecting projects in the vicinity of airports. Requires lead agencies to use the Airport Land Use Planning Handbook as a technical resource when assessing the airport-related noise and safety impacts of such projects.

1997 Assembly Bill 1130 (Oller) Chapter 81, Statutes of 1997 — Added Section 21670.4 concerning airports whose planning boundary straddles a county line.

2000 Senate Bill 1350 (Rainey) Chapter 506, Statutes of 2000 — Added Section 21670(f) clarifying that special districts are among the local agencies to which airport land use planning laws are intended to apply.

2001 Assembly Bill 93 (Wayne) Chapter 946, Statutes of 2001—Added Section 21670.3 regarding San Diego County Regional Airport Authority's responsibility for airport planning within San Diego County.

2002 Assembly Bill 3026 (Committee on Transportation) Chapter 438, Statutes of 2002—Changes the term "comprehensive land use plan" to "airport land use compatibility plan."

2002 Assembly Bill 2776 (Simitian) Chapter 496, Statutes of 2002—Requires information regarding the location of a property within an airport influence area be disclosed as part of certain real estate transactions effective January 1, 2004.

2002 Senate Bill 1468 (Knight) Chapter 971, Statutes of 2002—Changes ALUC preparation of airport land use compatibility plans for military airports from optional to required. It requires that the plans be consistent with the safety and noise standards in the Air Installation Compatible Use Zone for that airport. Requires that the general plan and any specific plans be consistent with these standards where there is military airport, but an airport land use commission does not exist.

2003 Assembly Bill 332 (Mullin) Chapter 351, Statutes of 2003—Clarifies that school districts and community college districts are subject to compatibility plans. Requires local public agencies to notify ALUC and Division of Aeronautics at least 45 days prior to deciding to overrule the ALUC.

Adds that prior to granting building construction permits, local agencies shall be guided by the criteria established in the Airport Land Use Planning Handbook and any related federal aviation regulations to the extent that the criteria has been incorporated into their airport land use compatibility plan.

2004 Senate Bill 1223 (Committee on Transportation) Chapter 615, Statutes of 2004—Technical revisions eliminating most remaining references to the term "comprehensive land use plan" and replacing it with "airport land use compatibility plan." Also replaces the terms "planning area" and "study area" with "airport influence area."

2005 Assembly Bill 1358 (Mullin) Chapter 29, Statutes of 2005—Requires a school district to notify the Department of Transportation before leasing property for a new school site. Also makes these provisions applicable to charter schools.

2007 Senate Bill 10 (Kehoe) Chapter 287, Statutes of 2007—The San Diego County Regional Airport Authority Reform Act of 2007. Restructures the airport authority established in 2001 by AB 93 (Wayne), with a set of goals related to governance, accountability, planning and operations at San Diego International Airport.

APPENDIX F

Title 14, Code of Federal Regulations, Part 77

Appendix F

Title 14, Code of Federal Regulations, Part 77

Subpart A
GENERAL

Amdt. 77-13, as of May 24, 2017.

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 navigation 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 swinging 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 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 that 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 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.

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/license 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 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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APPENDIX G

Federal Aviation Administration (FAA) Advisory Circular 150/5200-33B

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.

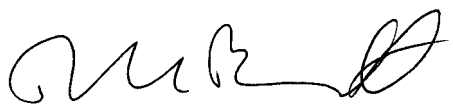

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Table 1. Ranking of 25 species groups as to relative hazard to aircraft (1=most hazardous) based on three criteria (damage, major damage, and effect-on-flight), a composite ranking based on all three rankings, and a relative hazard score. Data were 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
Herons	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 $\geq$ 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.)

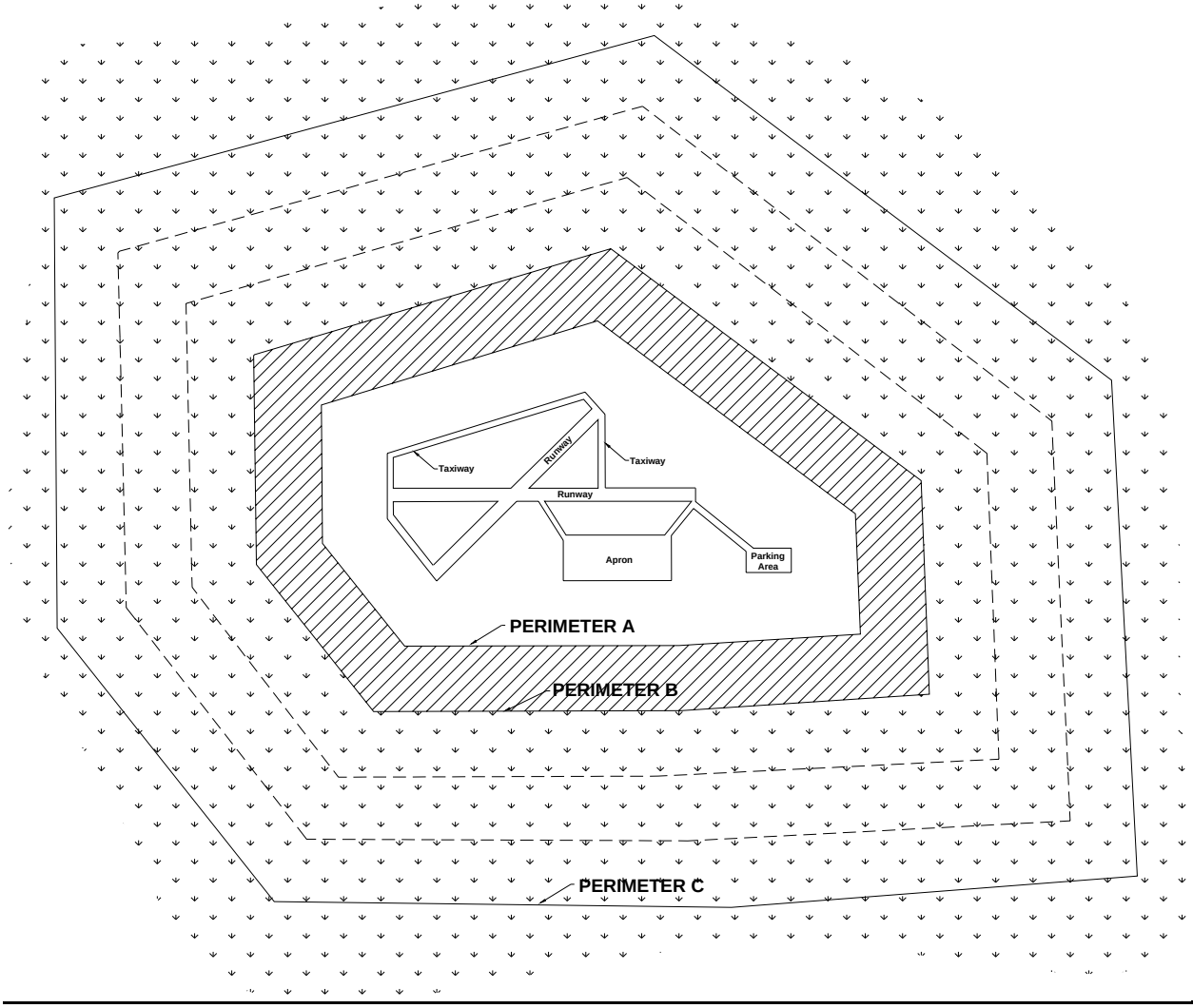
The basis for the separation criteria contained in this section can be found in existing FAA regulations. The separation distances are based on (1) flight patterns of piston-powered aircraft and turbine-powered aircraft, (2) the altitude at which most strikes happen (78 percent occur under 1,000 feet 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 form 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.