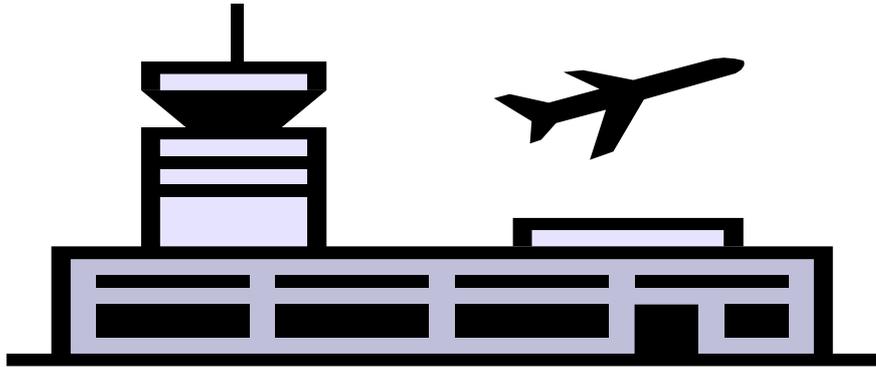


**LAKE TAHOE AIRPORT  
COMPREHENSIVE LAND USE PLAN**



**Prepared for  
City of South Lake Tahoe  
Airport Land Use Commission  
1052 Tata Lane, South Lake Tahoe, California 96150**

**Prepared by  
Janis G. Brand & Richard D. French**

**JULY 1990  
REVISED April 1992  
REVISED August 1995  
REVISED September 2002 : Janis G. Brand  
\*REVISED December 9, 2004 : City Planning  
\*\*REVISED May 10, 2007**

## I. INTRODUCTION

### **A. BACKGROUND**

This Comprehensive Land Use Plan (CLUP) was prepared under the authority of the Airport Land Use Commission Law, Chapter 4, Article 3.5, California Public Utilities Code. The purpose of the Airport Land Use Commission Law is to:

- 1. Protect public health, safety, and welfare through the adoption of land use standards that minimize the public's exposure to safety hazards and excessive levels of noise.**
- 2. Prevent the encroachment of incompatible land uses around public-use airports, thereby preserving the utility of these airports into the future.**

These purposes are implemented through Airport Land Use Commissions. The Sierra Planning Organization/Foothill Airport Land Use Commission (FALUC) has been designated by El Dorado County as the Airport Land Use Commission.

The City of South Lake Tahoe Planning Commission, when augmented with two Airport Commission members, has been designated the Airport Land Use Commission (ALUC) for the City of South Lake Tahoe under provisions of article 3.5 of the California Public Utilities Code (See Appendix A). This Article of the code mandates the establishment of ALUCs and details their various duties. The ALUC is required to establish planning boundaries around each public use airport within its jurisdiction and to formulate a comprehensive land use plan (CLUP) to provide for the sensible growth of the airport and the airport environs.

ALUC law does not give the Airport Land Use Commission jurisdiction over the operation of any airport (Section 21674(e)). The ALUC, therefore, has no power over such things as the number of aircraft which can be based at an airport, the number of operations which can occur, the flight patterns which aircraft use, or the hours during which aircraft can use an airport. The ALUC fulfills its responsibilities in four basic ways:

1. The adoption of a basic Airport Land Use Commission Policy Plan, as adopted by the ALUC.
2. The adoption of land use plans for individual airports called, as adopted by the South Lake Tahoe ALUC for Lake Tahoe Airport.
3. The incorporation of the land use compatibility guidelines contained in the CLUP into the general plan and land use regulations by cities and counties with jurisdiction over any geographic area subject to the CLUP.
4. ALUC review and determination of compatibility of individual development proposals, general plan amendments, and other land use plans and regulations around airports.

This document establishes specific planning boundaries and a comprehensive land use plan that defines compatible types and patterns for any future development that might occur in the area surrounding the Lake Tahoe Airport. The policies and guidelines contained in the plan are

intended to protect the safety and general welfare of the people in the vicinity of the airport and to assure the safety of air navigation. Specifically, the plan seeks to protect the public from any adverse effects of aircraft noise, to stabilize if not reduce the number of people exposed to potential airport-related hazards, and to ensure that no structures affect navigable airspace. It also establishes the planning boundaries around the airport. Planning boundaries are established for height, noise, and safety.

The Lake Tahoe Airport is an extremely noise sensitive airport. Noise restrictions and regulations are covered under the Master Plan Settlement Agreement and Access Plan, adopted in 1992, as recorded and binding by the Federal District Court. Those documents are incorporated herein for guidance on any ALUC recommendations and decisions on land use planning. The ALUC shall make no recommendations for regulations stricter or less restrictive than those in the MPSA. Any amendments to the MPSA shall, likewise, be incorporated herewith.

It should be understood that the purpose of this plan is to provide a basis for determining various land uses which are compatible with ALUC policies and is not necessarily a specific development plan or development goal. This plan does not set forth specific land uses for any particular parcels of land, nor is it retroactive with respect to any existing inconsistent land uses. Per State law (Section 21674(a)), ALUCs have no authority over existing land uses.

The City ALUC's role is to make recommendations to the City Council. Both the City and County ALUCs are concerned with land use planning and do not make zoning decisions. After City and County adoption of this plan, any projects in conflict with the CLUP would be referred to their respective planning departments for recommended zoning changes.

Following adoption by the ALUC, a Comprehensive Land Use Plan and/or any subsequent revisions are transmitted to all affected jurisdictions. State Law (Government Code, Section 65302.3) requires that the local jurisdiction take action within 10 days to assure that its land use regulations are consistent with the provisions of the CLUP. The law provides for two methods by which to achieve this consistency:

1. To amend pertinent portions of general plans, specific plans, zoning ordinances, or other land use regulations as necessary to achieve consistency with the CLUP. Once this is done, the local jurisdiction, through enforcement of its land use controls and regulations, effectively becomes the agency that actually implements the standards contained within a CLUP.
2. In the event a Board of Supervisors or City Council does not agree with specific provisions of a CLUP, it can satisfy the consistency requirement by overruling specific provisions of the ALUC plan by a two-thirds vote. The overruling must, however, be made after a public hearing and must be based on specific findings that the proposed action is consistent with the purposes of the ALUC law.

The Lake Tahoe Airport is owned and operated by the City of South Lake Tahoe. The airport is recognized by the City of South Lake Tahoe and the Tahoe Regional Planning Agency as a primary element in the transportation system and the economy of El Dorado County and the Lake Tahoe Basin. Its regional significance extends to Placer, Amador, Alpine, Douglas (NV) and Carson (NV) counties. Since it is situated in the City and adjoining land may be suited for urban development, continuing residential development within existing subdivisions which could

conflict with Airport use are inevitable. The need to assure compatible use in any adjoining development resulted in the drafting of an ANCLUC study in 1981 by El Dorado County, then owner and operator of the Lake Tahoe Airport. That study was prepared by the consulting firm of Burns and McDonnell.

Recognizing that the unadopted study needed updating and that land use issues in the environs still were unsettled, the City of South Lake Tahoe prepared and adopted this Comprehensive Land Use Plan in 1990. The intent was to reach agreement on uniform policies for development in the planning area.

## **B. OBJECTIVES**

The major objectives of the Plan are:

1. Safeguard the Airport from intrusion by uses that limit the expansion of air service to Lake Tahoe and the surrounding region by recognizing the vital service provided by the Airport and the need to maintain a level of operations necessary to satisfy existing and future aviation requirements of the user communities.
2. Prevent development that will lead to safety problems for air travelers and persons residing or working in the airport environs.
3. To minimize, to the extent reasonably practicable, noise and other potential adverse impacts generated by the operation of the airport.
4. Comply with airport noise standards mandated by the State of California and ensure a development pattern that is compatible with airport-generated noise.
5. Protect the public investment in the airport, a facility for which there is no feasible replacement.
6. Recognize the airport's role as a major transportation facility for the City of South Lake Tahoe and the surrounding counties.
7. Provide sufficient development opportunities for airport-related uses, including those which offer goods and services to air travelers and those which benefit from the proximity to the passenger and air cargo service provided by the airport.
8. Comply with the safety requirements of the Federal Aviation Regulations (FARs).

## **C. SUMMARY**

The Lake Tahoe Basin is located in the Sierra Nevada and Carson Mountain Ranges, straddling the California-Nevada border, approximately 55 miles southwest of Reno, Nevada, and 100 miles east of Sacramento, California. The topography of the Basin is generally steep with only one-seventh of the land having slopes of less than 10%.

The economy of Lake Tahoe is heavily dependent on the resort-tourism industry and is consequently subject to extreme seasonal and annual variations. Only 17 percent of the land area of the Tahoe basin is privately owned. The lack of suitable land resources and regional

transportation facilities has been significant inhibiting factors for economic development within the basin. In consideration of these factors, there are three objectives of this CLUP:

1. To achieve compliance with the requirements established in the California Public Utilities Code for airport land use planning.
2. To provide a means of coordinating joint planning studies for the designation of appropriate land uses in the Airport area.
3. To maintain and protect current commercial zoning in the Airport area for the benefit and welfare of the basin.

The Airport is a relatively recent addition to the Basin. Airport construction started in 1958. Air carrier service is normally provided by major air carriers such as American Airlines and/or their subsidiary regional carrier. General aviation activity is a vital component of the total aviation picture at the Airport.

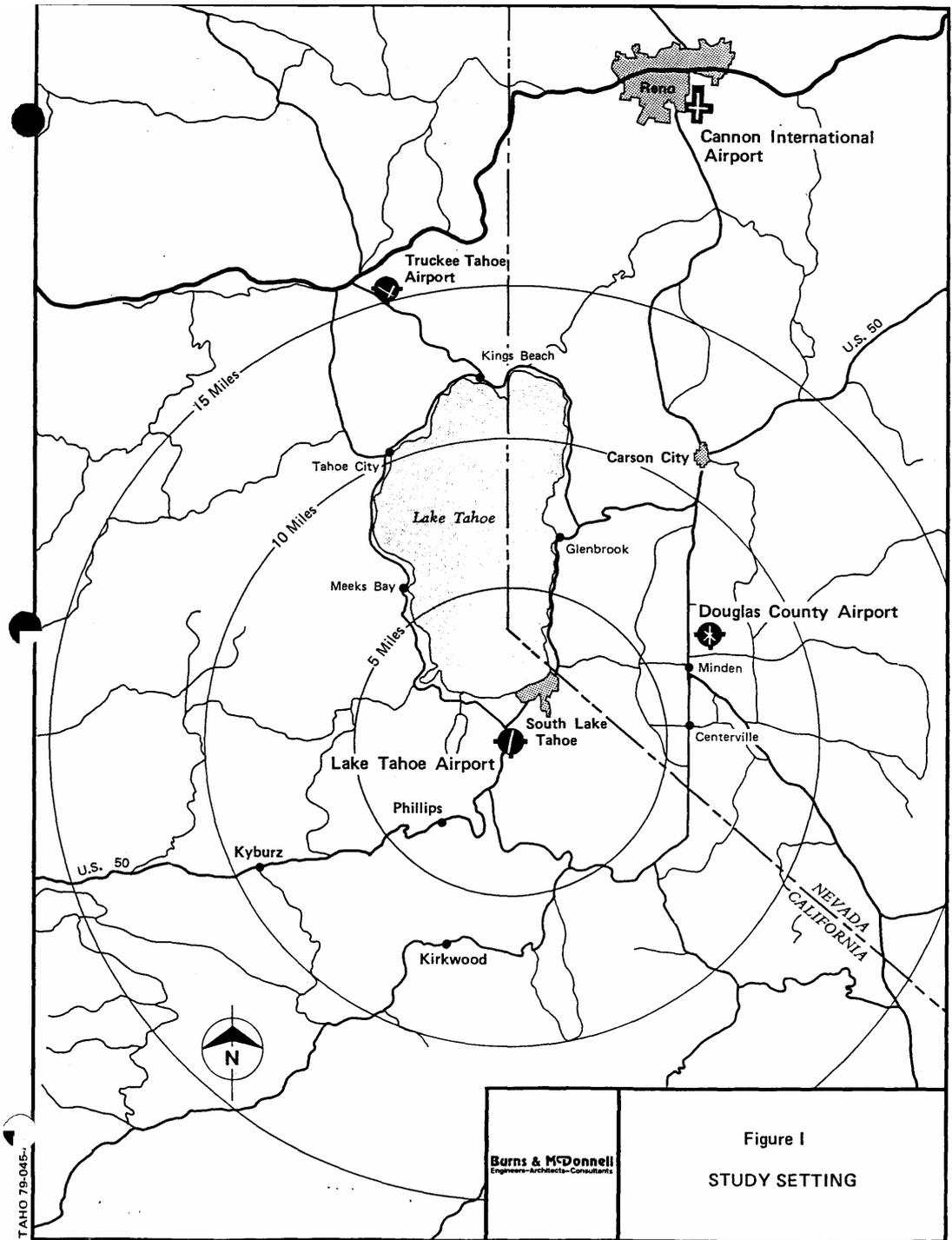
The impact of aircraft noise on the basin can and should play a role in decisions made regarding the development of the Airport and its surrounding area. The fragile environment of the Basin mandates this. This study provides the guidance necessary for developing a reasonable framework for making these decisions.

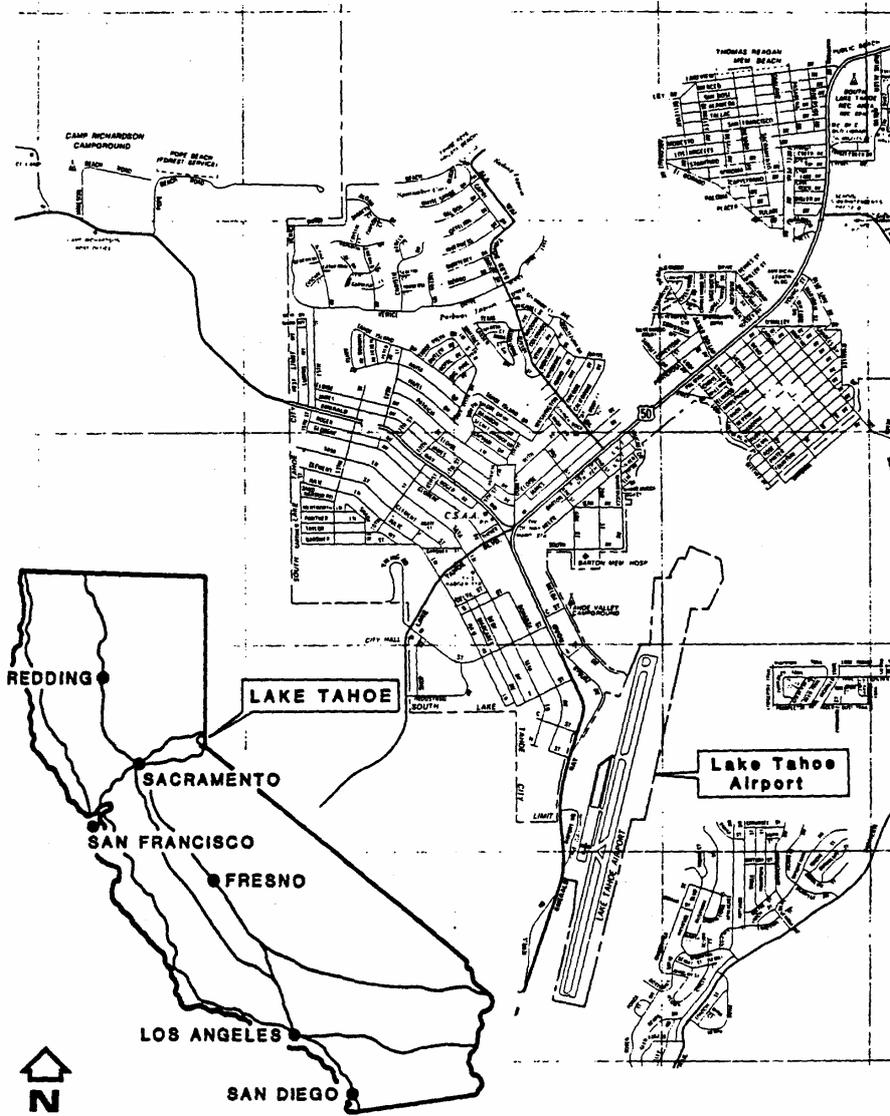
Following this introductory section, Section II describes existing and planned airport facilities, existing airport activity and off-airport land use patterns. Section III discusses land compatibility issues and addresses three critical land use planning concerns:

1. Compatibility of surrounding land uses with respect to airport noise levels;
2. Compatibility of surrounding land uses in terms of exposure of persons on the ground to crash hazards associated with aircraft; and
3. Appropriate height restrictions to protect the airspace used by aircraft.

Within this section, planning boundaries are defined for noise, safety and height areas. Airport noise compatibility guidelines, land use compatibility guidelines, and height restrictions are also presented. The Plan is a positive step taken to realize the full potential of the Plan area in the Lake Tahoe Basin. Paramount concerns were to protect the Airport, to ameliorate serious circulation problems, make due consideration for noises generated, and to protect public health and safety.

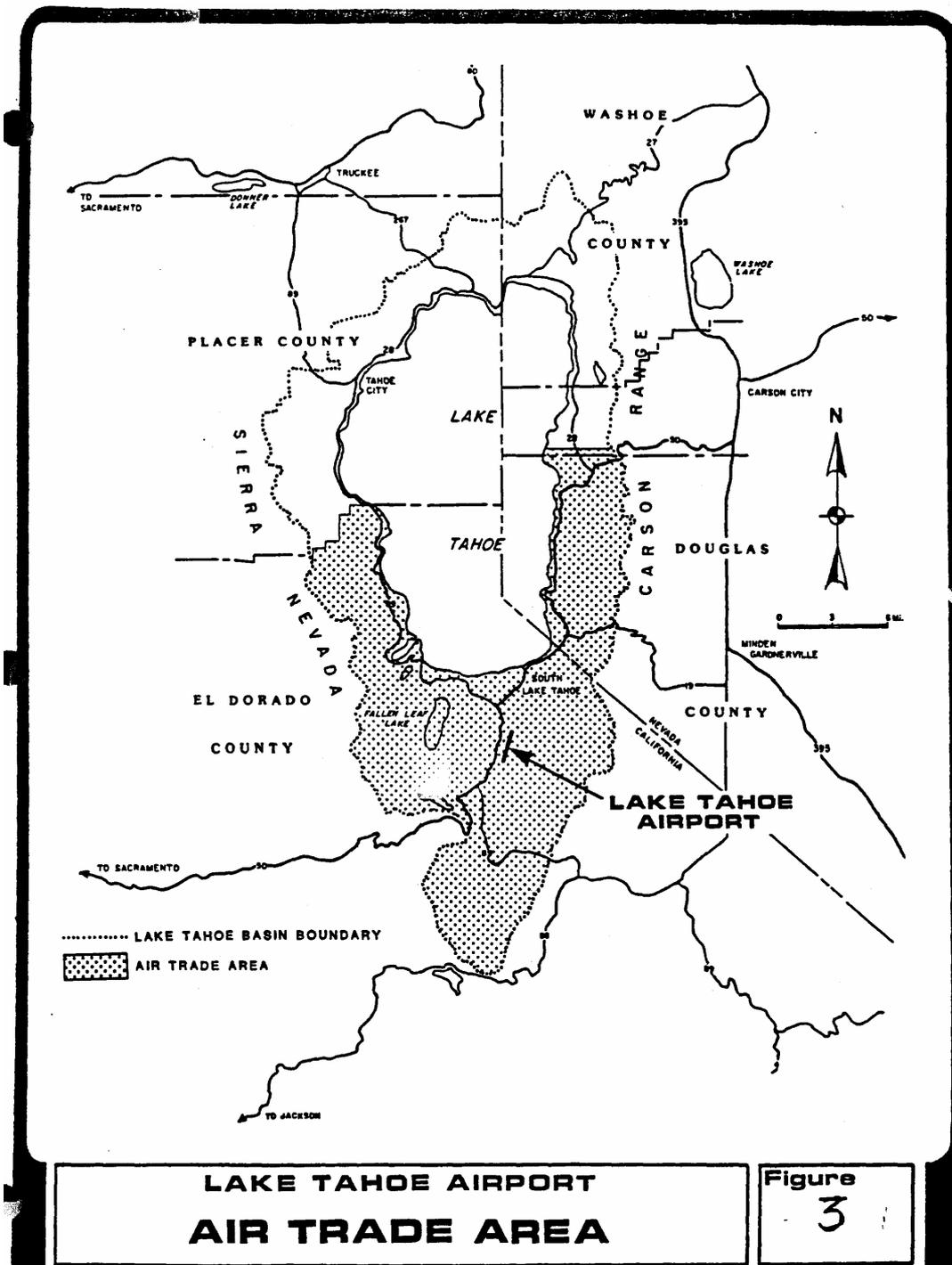
While this Plan sets forth proposals for implementation (see page 16), it does not establish new regulations or legislation nor does it rezone property. The preparation or amendment of any city, county or regional ordinances such as zoning, subdivision, housing, building, or other development control must be enacted separately through the regular legislative process. In the absence of such regulations or when already adopted regulations clearly conflict with the Plan, the Plan shall act as a guide for the development of public and private projects and the making of findings of consistency until such time as new regulations are adopted to implement the Plan. Regulations contained in this Plan do not apply outside of the plan area.





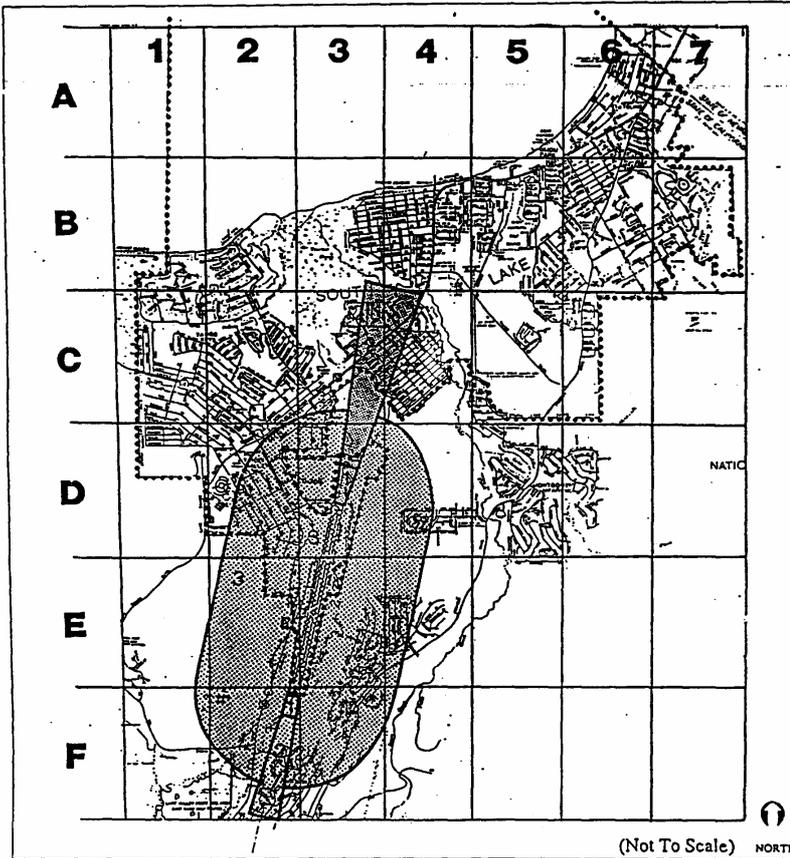
**PROJECT LOCATION**

**Figure 2**



# SOUTH LAKE TAHOE ZONING MAP

EXHIBIT (4)  
ZONING MAP



- |     |                               |     |                              |
|-----|-------------------------------|-----|------------------------------|
| GC  | General Commercial            | OW  | Open Water                   |
| GCI | General Commercial Industrial | PS  | Public Service               |
| G7  | General Forest                | R   | Recreation                   |
| GIP | Planned General Industrial    | RE  | Rural Estate                 |
| HDR | High Density Residential      | RMH | Mobile Home Park Residential |
| LDR | Low Density Residential       | TC  | Tourist Commercial           |
| MDR | Medium Density Residential    | TRC | Transportation Corridor      |
| OS  | Open Space                    | U   | Unclassified                 |

AIRPORT SAFETY AREAS 

CITY LIMIT LINE 

JL /RY - 9/94  
FEB. 12/94  
FIGURE 4

In compliance with State law (PUC, Section 21674.7), an airport land use commission that formulates, adopts or amends a comprehensive airport land use plan shall be guided by the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation. The Handbook must be used as guidance in the development of ALUC policies.

## **II. THE AIRPORT**

### **A. EXISTING FACILITIES AND AIRPORT ACTIVITY**

The Lake Tahoe Airport is located approximately two miles south of the intersection of Highway 50 and Highway 89 in the City of South Lake Tahoe at an elevation of 6,264 feet. The airport is a commercial air carrier/general aviation airport owned and operated by the City of South Lake Tahoe. (See Appendix G for Airport Layout.)

The airport has a single north-south asphalt runway (Runway 18-36) which is 8,544 feet long by 150 feet wide. The runway has a rated weight bearing capacity of 210,000 pounds for aircraft with a dual/tandem wheel landing gear.

Landing aids at the airport consist of a rotating beacon, medium intensity runway lighting (MIRL), and a Localizer/DME. A precision approach path indicator (PAPI) and medium intensity approach lights with sequenced flashers (MALSF) are installed on Runway 18. The displaced threshold for Runway 36 is denoted by runway end identifier lights (REIL).

The fixed base operator maintains a Unicom station for pilot to ground radio communication.

Other airport facilities include a commercial passenger terminal, 169 tie-down spaces including transient spaces, a 57-unit hangar and storage complex, 10 T-sheds, a commercial hangar, an executive hangar, and a fixed base operator pilot lounge. As of June 1, 2002, there were 54 based aircraft. There were 17,705 annual operations counted by the FAA Tower in 2000, but Lake Tahoe Airport has had as high as 63,868 as reported by the FAA for 1979.

### **B. FUTURE AIRPORT DEVELOPMENT**

Airport facility development recommendations and future airport activity predictions are contained in the Airport Master Plan for Lake Tahoe Airport, prepared by Harland Bartholomew Associates of Sacramento, California. The Master Plan and Federal Court Settlement Agreement was adopted by the City of South Lake Tahoe in June 1992, and by the Tahoe Regional Planning Agency in August 1992. Ultimate future airport facilities and service levels are addressed in the Master Plan.

### **C. OFF-AIRPORT LAND USE**

The City of South Lake Tahoe city limits abut the airport property to the north, northwest and west. To the north of the airport, the area is predominantly zoned R-1, single-family residential. Immediately north and adjacent to the airport is the Upper Truckee River and stream environment zone (SEZ) meadowlands which are restricted from development.

The city limit is essentially one parcel wide to the west of the airport. U.S. Forest Service lands are immediately adjacent.

North of the airport there are some commercial areas and a few small pockets of multiple-family designated land, all located along the Highway 50 corridor.

Immediately southwest of the runway exists public lands (formerly a horse ranch) and a golf course, both zoned agricultural. Beyond the golf course there are several large subdivisions and a small commercial and industrial area along Highway 50 and Highway 89.

The SEZ area northeast and the areas located to the east, south and southeast are within El Dorado County and are zoned agricultural. The 1969 General Plan designation for these lands is medium-density (MD) residential, 1 to 5 units per acre, with a "Parks-Organized Recreation" designation at both ends of the runway. The County has designated the residential areas located immediately south and east of the airport as single-family residential with some inclusions of RM and R-2 (multi-family). Further south are single-family residential land uses with designation as MD residential, 1 to 5 units per acre; zoning is R-1, R-2 and RM.

The Tahoe Regional Planning Agency (TRPA) has developed "Plan Area Statements" (PAS) for all lands within the basin. These PAS are a combination of general plan and zoning designations. Any land use proposal must be consistent with both TRPA and County land use designations. Currently, El Dorado County is revising the general plan, and it is anticipated that the PAS will be adopted with some minor changes. A consistent zoning ordinance will then be developed and adopted by the County.

Although with certain restrictions, TRPA anticipates a probability of an additional 6,000 homes in the Lake Tahoe Basin over the next 20 years. These homes are not to be in new subdivisions, but located through in-filling of existing housing areas, many within the areas surrounding the Airport. It is anticipated that the City and County will absorb approximately 3,000-3,500 of these homes during the 20-year period.

See Figure 4 for current zoning.

### III. FINDINGS, POLICIES AND IMPLEMENTATION

The concerns of airport land use planning fall into three categories:

1. **Height Restrictions** - protecting the navigable airspace around airports for aircraft safety;
2. **Noise Compatibility** - minimizing the degree to which noise from aircraft affects the communities around airports; and
3. **Safety of Persons on the Ground** - minimizing the danger to the population around airports from aircraft accidents.

Thoughtful planning in these three areas, reflected in land use policies and regulations, will minimize the exposure of the public to noise and safety hazards, provide safer aircraft

operations, and help protect airports and the public resource they represent from encroachment by incompatible land development.

At the Lake Tahoe Airport, the airport area of influence is made up of the boundaries of the three areas of major concern - height, noise and safety. The findings, policies, and guidelines contained in this plan have three major functions:

1. **To protect the airport from encroachment by incompatible land uses;**
2. **To safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general by protecting them from the adverse effects, related hazards; and**
3. **To ensure that no structures effect navigable airspace.**

This plan established planning boundaries for the airport and provides a comprehensive plan that defines compatible types and patterns of future land use. This plan provides a basis for determining compatible land uses and is not a specific development plan. This plan neither sets forth specific land uses for any particular parcel or parcels of land, nor is it retroactive with respect to any existing incompatible land uses.

This plan governs the relationship between the airport and the land uses that surround it and contains no recommendations concerning operations of the airport. State law provides no authority to the ALUC over airport operations.

While this plan provides a guide to compatible land uses around the airport, some development already exists that is inconsistent with the compatibility guidelines. This document is primarily directed at preventing new problems of land use incompatibility, not at removing existing incompatible uses. Incompatible development that currently exists is so recognized; however, neither this plan or the ALUC finds these uses to be consistent with this plan.

Airport planning boundaries define areas where height, noise, or safety restrictions are imposed. Height standards for defining obstructions to air navigation are established by the FAA and are defined in Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace. Noise restrictions are governed by California Administrative Code, Title 21, Subchapter 6. Airport safety areas are determined by the Airport Land Use Commission. The total area encompassed by these three sets of boundaries is referred to as the **Airport Area of Influence** (Figure 3 – not to scale due to reduction).

It should be noted that the Public Resources Code, **California Environmental Quality Act Statutes**, at Chapter 2.6, Section 2196, states the following in reference to Airport Planning requirements:

### **21096 Airport Planning**

- (a) If a lead agency prepares an environmental impact report for a project situated within airport comprehensive land use plan boundaries, or, if a comprehensive land use 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.

## **A. AIRPORT HEIGHT RESTRICTION AREA**

---

Height restrictions are necessary to insure that objects will not impair flight safety or decrease the operational capability of the airport. Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace, defines a series of imaginary surfaces surrounding all public use airports.

In the Tahoe basin, some natural terrain features penetrate the FAA defined surfaces. Any proposed object or structure which would penetrate any of these imaginary surfaces as they apply to the Lake Tahoe Airport is considered by the Federal Aviation Administration (FAA) to be an obstruction to air navigation. While an obstruction to air navigation may not necessarily be a hazard to air navigation, the FAA presumes it to be and treats it as such until an FAA aeronautical study has determined that it does not have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft.

While the FAA requires a project sponsor to provide notice to them if a proposed project could exceed any of the imaginary surfaces, they cannot prohibit the construction of any structure determined to be a hazard. State law goes further, however, and prohibits the construction of any structure that would penetrate an imaginary surface, unless the State Division of Aeronautics has first issued a permit allowing its construction.

The imaginary surfaces which the FAA uses to determine whether or not a structure or an object would be an obstruction to air navigation include the primary surface, approach surface, horizontal surface, conical surface and transitional surfaces. These imaginary surfaces are described in section 2.b. below and illustrated in Figure 5.

1. Objective: To assure the safe passage of aircraft in, out and around the Lake Tahoe Airport by safeguarding and preserving navigable airspace.
2. Findings:
  - a. FAR Part 77.13 requires each person proposing any kind of construction or alteration to give notice to the FAA on form 7460-1 (Notice of Proposed Construction or Alteration) if such construction or alteration:
    - i. Is more than 200 feet in height above the ground level at its site, or
    - ii. Is of a greater height than an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from all edges of the runway surface.

- b. Following receipt of a Notice of Construction or Alteration, the FAA determines whether or not the proposed structure is a hazard to air navigation. For the Lake Tahoe Airport, the standards used by the FAA to determine whether or not a proposed structure would be a hazard to air navigation include the following airport imaginary surfaces defined in FAR Part 77.25 and illustrated in Figure 5:
- i. Primary Surface: A surface longitudinally centered along the runway, extending 200 feet beyond each end of the paved runway and having a total width of 500 feet.
  - ii. Horizontal Surface: A horizontal plane 150 feet above the established airport elevation (the highest point of usable landing area measured in feet above mean sea level), the perimeter of which is constructed by swinging arcs 5,000 feet out from the center of each end of the primary surface and connecting the adjacent arcs with lines tangent to these arcs.
  - iii. 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.
  - iv. Approach Surface: A surface longitudinally centered on the extended runway centerline, extending outward and upward from each end of the primary surface. An approach surface is applied to each end of the runway based upon the type of approach available or planned for that runway end. The approach surface for runway 18 has a slope of 34:1; length of 10,000; for runway 36 it is 20:1; length of 5,000 feet. The approach surface for runway 18 has an outer width of 1,500 feet while the approach surface for runway 36 has an outer width of 3,500 feet.
  - v. Transitional Surface: A surface extending outward and upward at right angles to the runway centerline plus 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.

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

- c. State law (California Public Utilities Code Section 21659) prohibits the construction of any proposed structure that would penetrate any of the imaginary surfaces defined above, unless:
- i. The FAA has determined that the proposed structure does not constitute a hazard to air navigation, or
  - ii. The State Division of Aeronautics has issued a permit allowing construction of the proposed structure.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

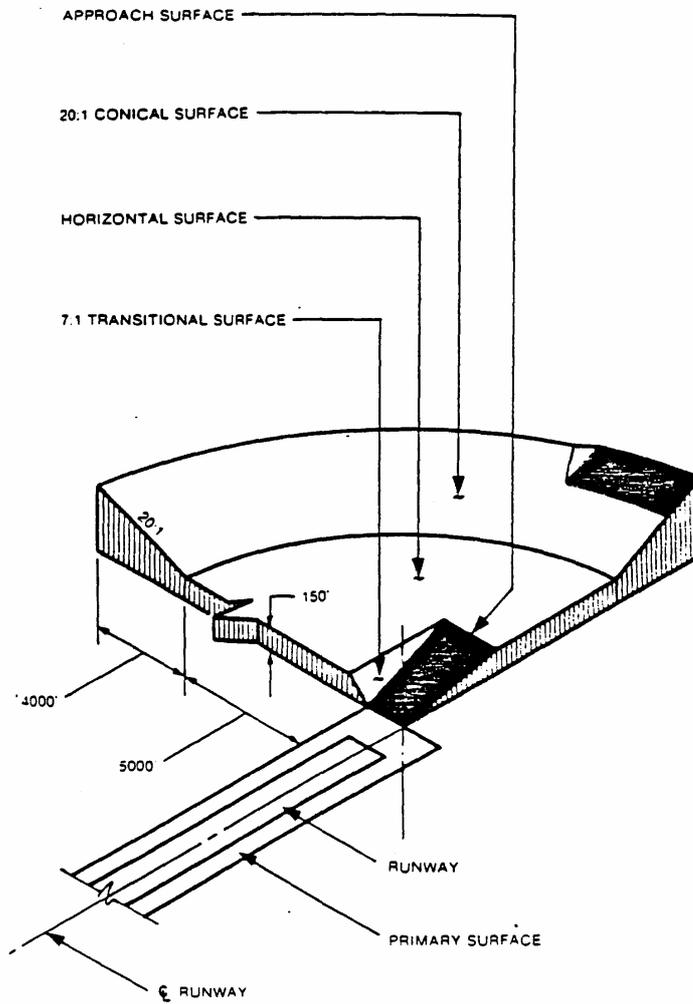
- a. Any proposed structure that would penetrate any of the imaginary surfaces for the Lake Tahoe Airport, as defined in FAR Part 77.25, is deemed to be an incompatible land use, unless either the FAA has determined that the proposed structure does not constitute a hazard to air navigation or the State Division of Aeronautics has issued a permit allowing construction of the proposed structure.
- b. Buildings, antennas, other types of structures, and trees should be limited in height so as not to pose a potential hazard to flight.

4. Implementation of Airport Heights Restriction Policy:

- a. The Lake Tahoe Airport Land Use Commission or the County Land Use Commission, as appropriate, should be notified by the proponent and/or the responsible local jurisdiction of any development proposal that could result in the erection of objects which could penetrate the airport height restrictions contained in this plan. The proponent should also give notice of possible obstructions to navigable airspace to the FAA as required by FAR Part 77.

Before a proposed project that would penetrate the FAR Part 77.25 imaginary surfaces can be approved by the City and/or County, the City and/or County must take action to override the ALUC determination of incompatibility. The action to override, including the required findings, is governed by the Airport Land Use Commission Law, Article 3.5 of the California Public Utilities Code.

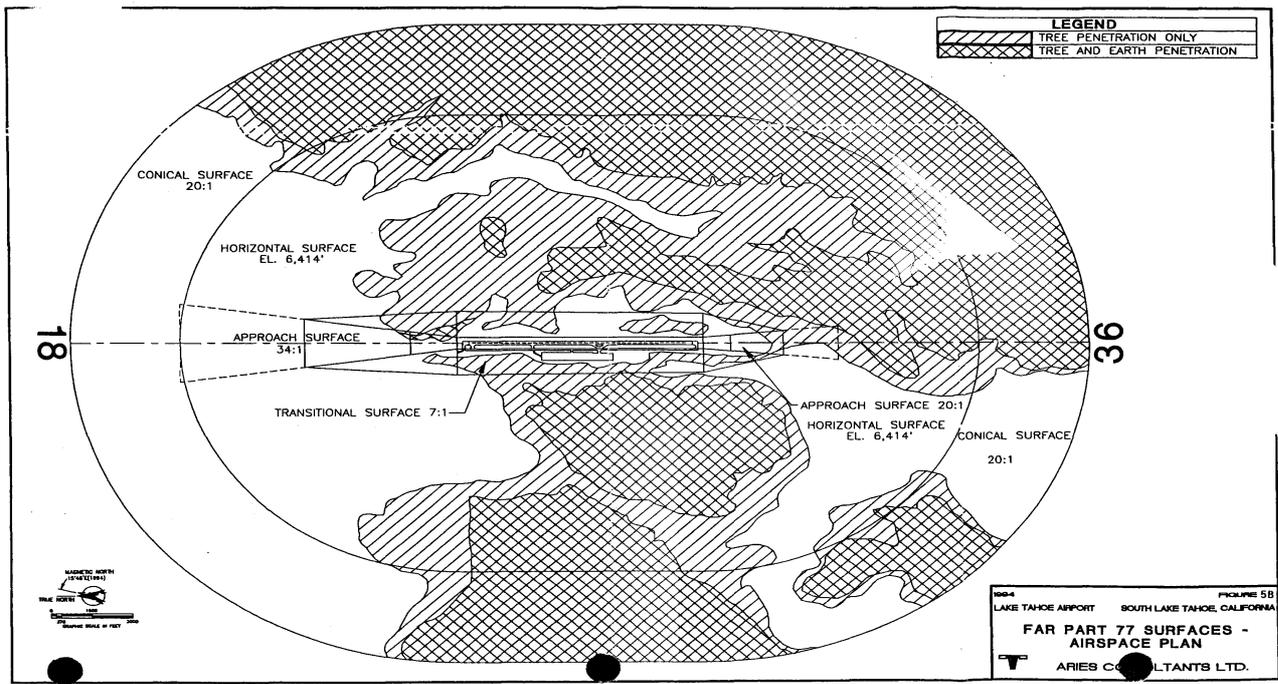
- b. A detailed mapping of the area boundaries should be performed by the City of South Lake Tahoe and the El Dorado County planning departments which specifically delineates those parcels impacted by restrictions.



**PART 77 CIVIL AIRPORT IMAGINARY SURFACES**

**Isometric View**

**FIGURE 5**



## **B. AIRPORT NOISE RESTRICTION AREA**

---

Complaints of general annoyance caused by aircraft noise are the most common concern associated with land use around airports. The annoyance is usually related to interference with personal activities such as sleeping, conversing, relaxing or watching TV. While individual responses to noise are quite varied, methods have been developed to correlate noise levels with community reaction. Although aircraft noise is often quieter than daily household and environmental activities (See Figure 10B), airport operators should address the perceptual effects of airport noise.

The boundary for an airport noise area is determined by noise contours developed according to noise standards for California airports as defined by California Administrative Code, Title 21, Sections 5000 et. seq. This standard uses the Community Noise Equivalent Level (CNEL) method to determine noise level boundaries. These state regulations establish as a general standard that single-family and multi-family dwellings, mobile homes and schools of standard construction are incompatible with noise levels above 65 CNEL. In addition, California Noise Insulation Standards (California Administrative Code, Title 25, Section 28) require acoustical analysis of residential structures, other than detached single-family dwellings, within a 60 CNEL noise contour.

Noise contours for the Airport were prepared by Brown-Buntin Associates, Inc., as a part of the 1992 Lake Tahoe Airport Master Plan (see Figure 6). Annual updates have been prepared each year since 1993 (Figure 6 - 2000). Estimated CNEL contours for the year 2010 are presented as Figure 7.

Upon TRPA adoption of the Lake Tahoe Airport Master Plan and Settlement Agreement, an air transportation corridor was designated approximating the 60 CNEL contour (see Figure 8). Figure 9 represents a generalized flight pattern for Lake Tahoe Airport. The majority of aircraft overflight occurs in these tracks.

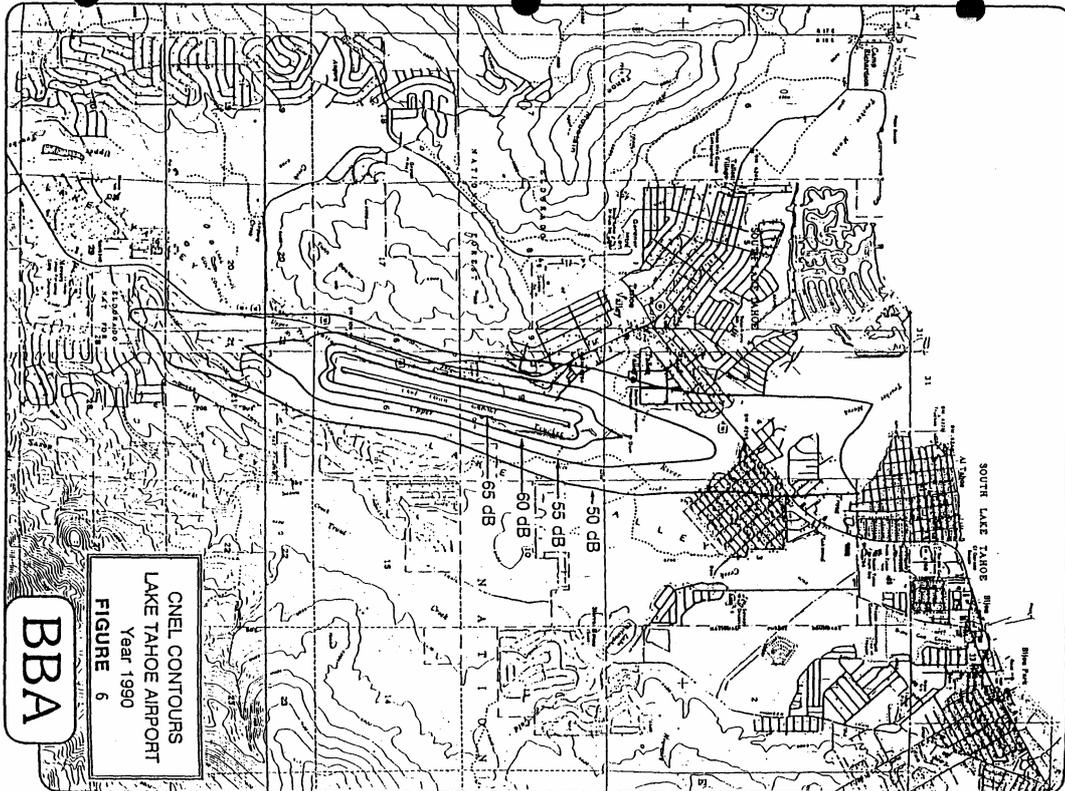
### 1. Objective:

To promote the overall goals and objectives of the California Airport Noise Standards (California Administrative Code, Title 21, Section 5000 et. seq.) and the California Noise Insulation Standards (California Admin. Code, Title 25, Section 28), to prevent the creation of new noise problems around the Airport, and to minimize the public's exposure to excessive aircraft generated noise.

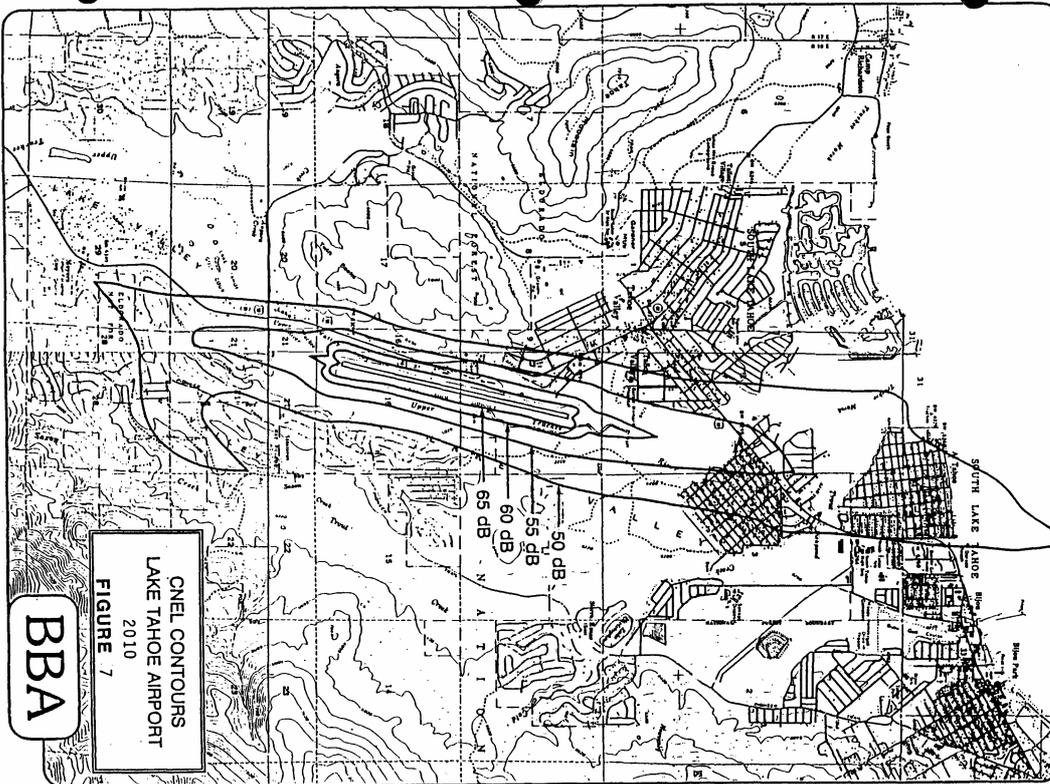
### 2. Findings:

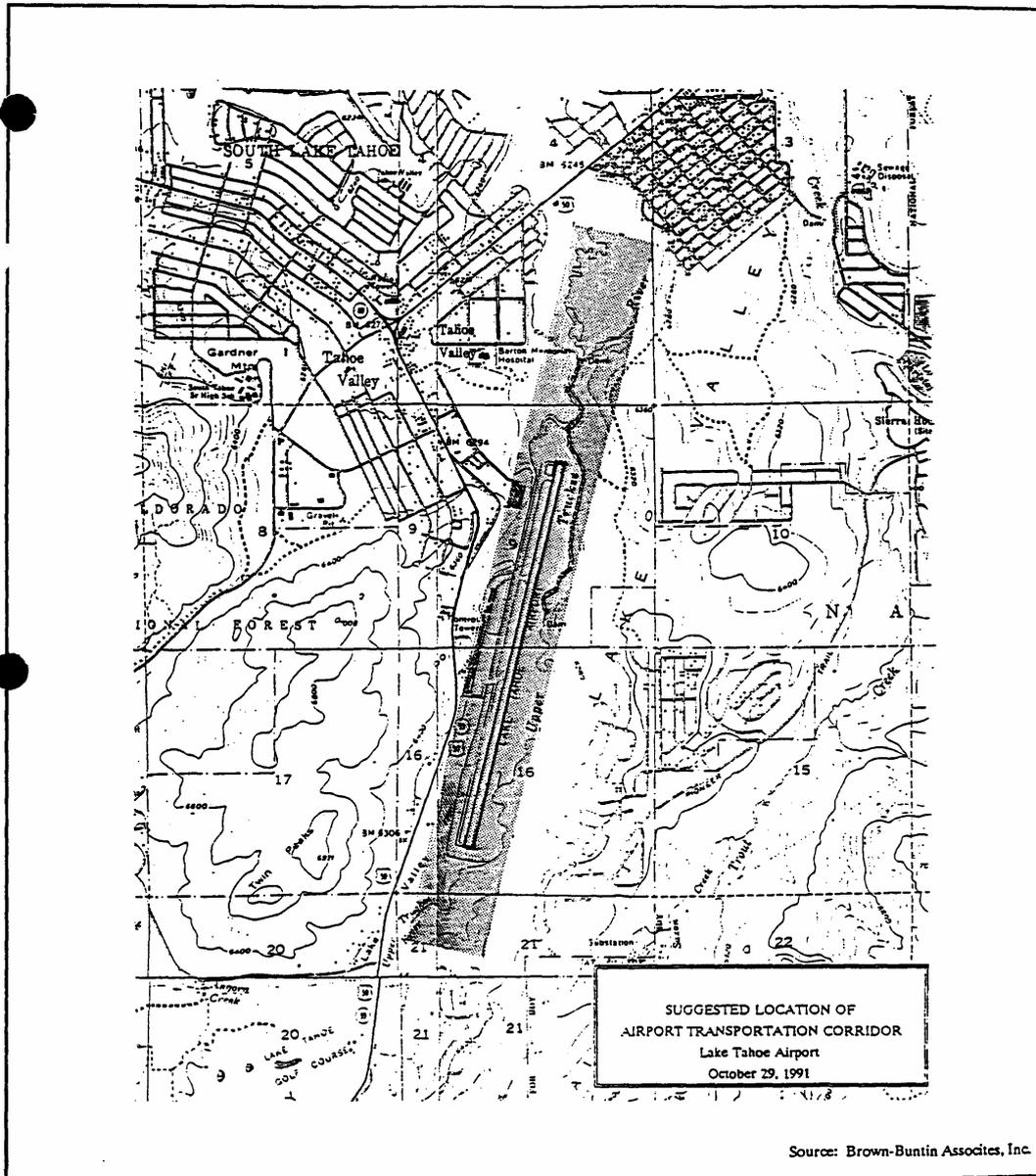
- a. The impact of aircraft generated noise can be influenced in several ways:
  - i. Noise emitted can be reduced at the source by technological advancements and revisions to the aircraft.
  - ii. Aircraft operational procedures can be implemented to reduce or select the ground area impacted by the noise emitted.
  - iii. Special acoustical treatment of structures can reduce interior noise levels.

Revised 4/92









Suggested Location of Airport  
 Transportation Corridor  
 Lake Tahoe Airport 10/29/91

Figure  
 8

FIGURE 10

Noise Compatibility Criteria					
LAND USE CATEGORY	CNEL, dBA				
	50-55	55-60	60-65	65-70	70-75
<b>Residential</b>					
single family, nursing homes, mobile homes	+	o	-	--	--
multi-family, apartments, condominiums	++	+	o	--	--
<b>Public</b>					
schools, libraries, hospitals	+	o	-	--	--
churches, auditoriums, concert halls	+	o	o	-	--
transportation, parking, cemeteries	++	++	++	+	o
<b>Commercial and Industrial</b>					
offices, retail trade	++	+	o	o	-
service commercial, wholesale trade, warehousing, light industrial	++	++	+	o	o
general manufacturing, utilities, extractive industry	++	++	++	+	+
<b>Agricultural and Recreational</b>					
cropland	++	++	++	++	+
livestock breeding	++	+	o	o	-
parks, playgrounds, zoos	++	+	+	o	-
golf courses, riding stables, water recreation	++	++	+	o	o
outdoor spectator sports amphitheaters	++	+	+	o	-
+	o	-	--	--	

LAND USE AVAILABILITY	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 conditions 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 which have conventionally constructed structures and/or involve outdoor activities which 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.

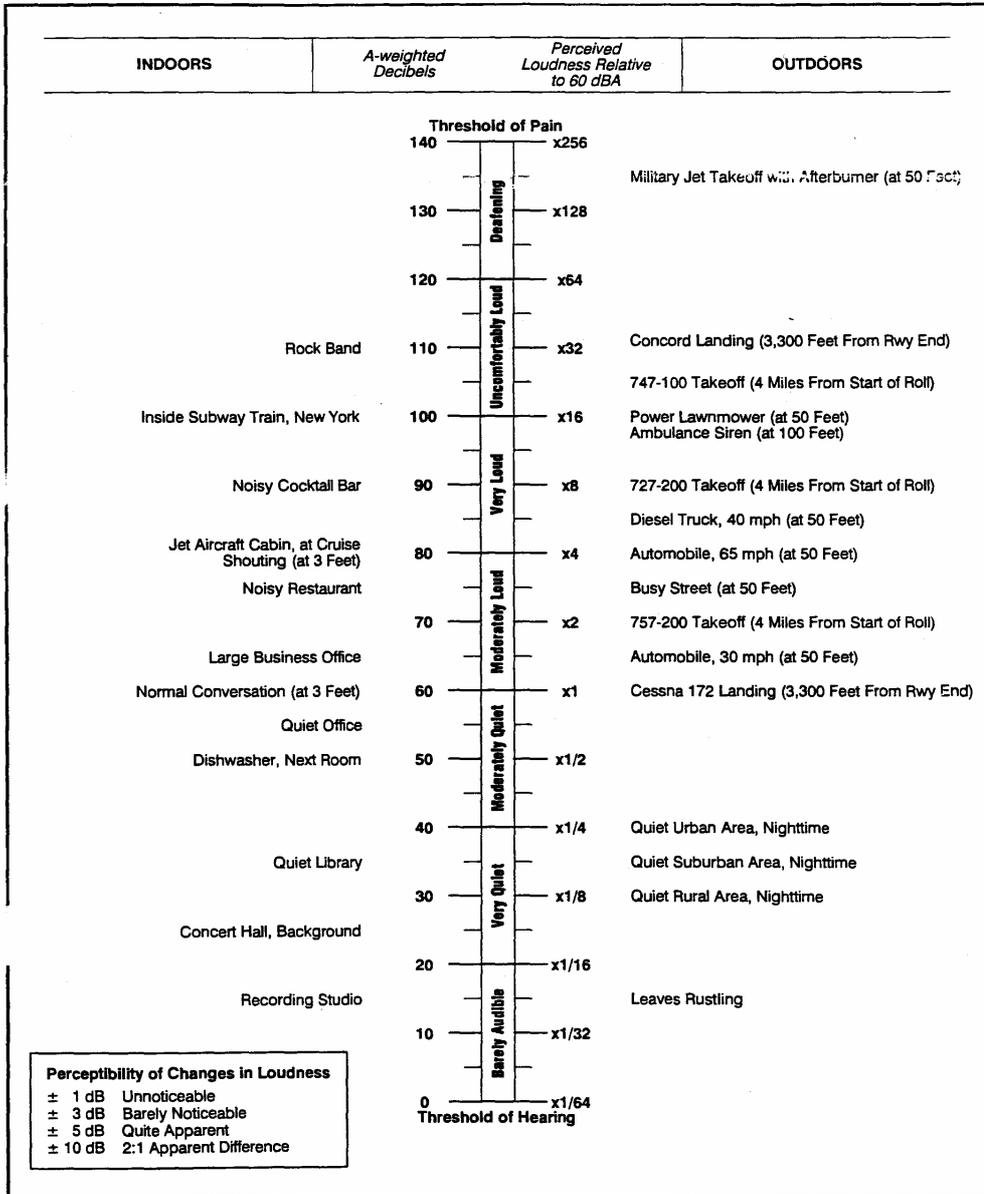
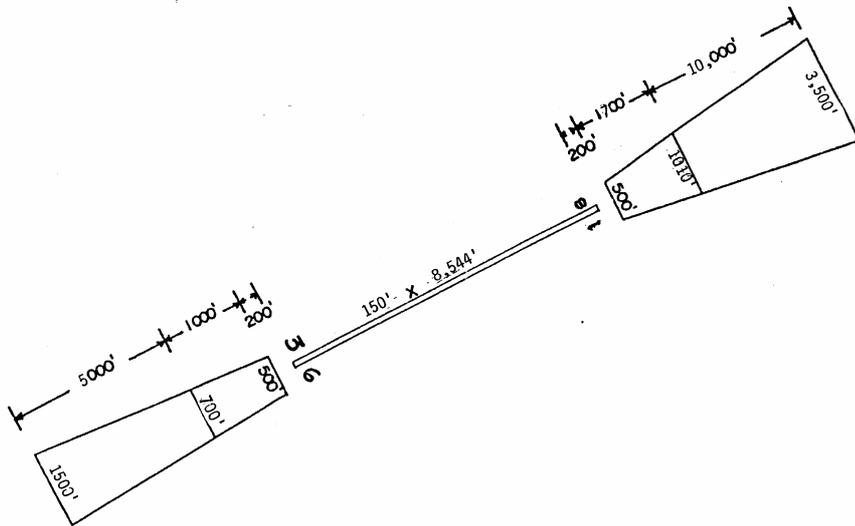


FIGURE  
**Typical Decibel Level of Common Sounds**

California Airport Land Use Planning Handbook (January 2002)

AIRPORT SAFETY AREAS 1 AND 2 (DETAIL)

FIGURE 12



- b. The California Division of Aeronautics has established the Community Noise Equivalent (CNEL) noise rating method for use in measuring noise around airports.
- c. The California Airport Noise Standards establish 65 CNEL as a guideline for the maximum amount of airport noise in residential communities.
- d. The California Noise Insulation Standards require an acoustical analysis of proposed residential structures, other than detached single-family dwellings, located within a 60 CNEL noise contour.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

- a. The CNEL method of rating noise impact is adopted for general guidance by the ALUC.
- b. The creation of new residential parcels in the Lake Tahoe basin is prohibited by the Tahoe Regional Planning Agency. Should regulations be amended, the creation of any new residential parcels or portions thereof, including lot line adjustments of existing parcels to create new parcels or increase density, shall not be allowed within the 65 dB or great CNEL contour at the Lake Tahoe Airport as this is not a noise compatible land use.
- c. On existing single-family parcels within the 60 dB or greater CNEL contour, new residential structures, including detached single family dwellings or alterations of more than 200 square feet of existing dwellings, shall require as a condition of the construction permit process acoustical treatment or other such measures as part of the building plans to limit intruding noise such that interior noise levels shall not exceed 45 CNEL in any habitable room, and the attachment of an avigation/noise easement to the title of the parcel.
- d. A land use compatibility chart for aircraft noise (Figure 10, Noise Compatibility Criteria) is adopted as an aid for the general determination of noise compatible land uses in the area surrounding the Lake Tahoe Airport.

4. Implementation of Airport Noise Policies:

- a. Within the established 65 CNEL noise contour restricting residential development established by this plan, the City of South Lake Tahoe and El Dorado County shall submit for ALUC review any proposed land use changes including general plan or specific plan adoptions or amendments, annexations, rezoning, use permits, variances, and to the extent possible, all new construction within the established noise zone, including for detached single-family dwellings on existing parcels zoned for single-family uses.
- b. For any residential development, including single-family dwellings and improvements to existing structures of more than 200 square feet, occurring between the 55 CNEL

- noise contour and the 60 CNEL noise contour, the City of South Lake Tahoe and El Dorado County shall evaluate the impact of aircraft noise on such development and consider the implementation of appropriate mitigation measures. These measures may include one or more of the following: noise insulation standards (mandatory within the 60 CNEL contour), a buyer notification requirement to inform potential buyers of the exterior noise levels projected by the CNEL method at their property (Appendix B), and the attachment of an avigation easement (Appendix C) to title of all property sold in the areas affected by aircraft noise.
- c. For existing residential development and future residential development, if any, allowed by this plan within the 65 CNEL contour, buyer notification programs, and avigation easements shall be implemented.
- i. New Construction: The City and County building departments shall assure all provisions of this document are complied with, specifically noise insulation and noise and departure path easements, prior to issuance of any permits.
  - ii. Sale/Transfer of Property: The County Clerk of El Dorado County shall assure noise and departure path easements (see Appendix C) are attached to and an integral part of each land transaction within the Plan area.
  - iii. In cases where the 65 dB CNEL contour line splits a parcel, that portion of the parcel within the 65 dB CNEL contour is restricted from residential uses. The remaining portion of the parcel may be developed consistent with the policies for the CNEL contour in which it lies.
- d. A detailed mapping of the CNEL noise contours should be performed by the City and County planning departments which specifically delineates those parcels impacted by noise restrictions.

### **C. AIRPORT SAFETY RESTRICTION AREA**

The most important concern for airport land use planning is the safety of persons on the ground. While the safety record of general aviation is quite good, accidents do happen and they must be considered in land use planning around airports. Safety is a factor in the interaction between airports and nearby land uses in three distinct ways:

- Protecting people and property on the ground;
- Minimizing injury to aircraft occupants; and
- Preventing creation of hazards to flight.

Recorded data on nationwide general aviation accidents from 1983-1991 showed that 45 percent of accidents occurred on airport property, 15 percent were in the traffic pattern or within one mile of the airport boundary. Those general accident patterns are confirmed in the 2002 State Division of Aeronautics [Airport Land Use Planning Handbook](#). The data suggests that land use off the immediate ends of the runway and under the airport traffic pattern is a significant safety concern in preparing airport land use safety zones.

From a risk reduction perspective, a fundamental objective of airport land use compatibility planning is to minimize the consequences of aircraft accidents when they happen. Allowing more intensive nearby development can only increase the frequency with which more severe

consequences occur. Moreover, in terms of airport land use compatibility planning, the issue is what could happen if incompatible development is allowed to occur.

**Intensity of Use:** The most direct means of limiting the potential consequences of an off-airport accident is to limit the intensity of use. Intensity of use is measured in terms of the number of people which the development can attract per acre. This metric serves as a common denominator among various types of non-residential uses. Except for certain especially risk-sensitive uses, the degree of safety compatibility is usually considered the same for any two land uses having similar usage intensities.

1. Objective:

To protect the safety and general welfare of people in the vicinity of the Lake Tahoe Airport by minimizing the public exposure to airport-related safety hazards.

2. Findings:

- a. Controls over aircraft operating procedures and hazardous land uses around airports can greatly reduce the likelihood of aircraft accidents around airports. These precautions, however, cannot guarantee absolute safety. Policies can be established to prevent development of land use related hazards to air navigation and to limit casualties on the ground in the event of a crash.
- b. Nationwide studies of air accidents indicate that:
  - i. Almost half of all accidents occur on airport property.
  - ii. An additional 15 percent of aircraft accidents occur outside airport property but within one mile of the airport runway(s).
  - iii. A substantial concentration of aircraft accidents occur within the initial climb out and the final approach sectors of airports.
- c. Bird strike and other forms of wildlife hazard have become a major concern internationally. In the United States and Canada, reduction and management of wildlife hazards are of particular concern. With regard to bird strike hazards, the FAA specifically considers waste disposal sites (sanitary landfills to be incompatible land uses if located within 10,000 feet of a runway used by turbine-powered aircraft or 5,000 feet of other runways. Any waste disposal site located within five statute miles of an airport is also deemed incompatible if it results in a hazardous movement of birds across a runway or aircraft approach and departure paths.

Additionally, Federal statutes (49 USC §44718(d)) now prohibit new municipal solid waste landfills within six miles of airports that receive FAA grants and primarily serve general aviation aircraft and scheduled air carrier operations using aircraft with less than 60 passenger seats, unless the FAA concludes that it would have no adverse effect on aviation safety.

- d. Other land uses that may become artificial attractors include:
  - Golf courses with water hazards;
  - Drainage detention and retention basins;
  - Wetlands created as mitigation measures;
  - Landscaping, particularly water features;
  - Wildlife refuges; and
  - Agriculture, especially cereal grains.
- e. Land uses and developments that can create hazards to air navigation are objects that exceed FAR Part 77 height standards, attract large concentrations of birds within approach/departure areas, produce smoke, have flashing lights, reflect light or generate electronic interference.
- f. The choice of safety criteria appropriate for a particular safety zone is largely a function of risk acceptability. Land uses which, for a given proximity to the airport, are judged to represent intolerable risks usually 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 intrinsically acceptable, generally require no limitations.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

- a. The ALUC designates airport safety areas identified as Safety Area 1 (Runway Protection Zone/Clear Zone), Safety Area 2 (Approach/Departure Zone), and Safety Area 3 (Overflight Zone). These safety areas are illustrated in Figure 11, detailed in Figures 12, 13 & 14, and have the following dimensions:
  - i. Safety Area 1 (Runway Protection Zone/Clear Zone) - Runway 18: Begins 200' beyond the end of the runway surface and is centered along the extended runway centerline. Safety Area 1 for runway 18 has an inner width of 500', and outward length of 1,700' and an outer width of 1,010'.
  - ii. Safety Area 1 (Runway Protection Zone/Clear Zone) - Runway 36: Begins 200' beyond the end of the runway surface, and is centered along the extended runway centerline. Safety Area 1 for runway 36 has an inner width of 500', and outward length of 1,000', and an outer width of 700'.
  - iii. Safety Area 2 (Approach/Departure Zone) - Runway 18: Begins at the outer end of Safety Area 1 and is centered along the extended runway centerline, has an inner width of 1,010', an outward length of 10,000' and an outer width of 3,500'.
  - iv. Safety Area 2 (Approach/Departure Zone) - Runway 36: Begins at the outer end of Safety Area 1 and is centered along the extended runway centerline. Safety Area 2 from runway 36 has an inner width of 700', extends outward for a length of 5,000', and has an outer width of 1,500'.

- v. Safety Area 3 (Overflight Zone): Generally coincides with the area overflowed by aircraft during traffic pattern procedures but consists only of that area underlying the horizontal surface (Figure 5) which is outside of Safety Area 1 and Safety Area 2. For the Lake Tahoe Airport, the perimeter of the Overflight Zone is constructed by swinging arcs of 5,000-foot radii from the center of each end of the primary surface of the runway and connecting these arcs by lines tangent to the arcs.

Note: Safety area dimensions for each runway end are different because runway 18 has visual omni directional range (VOR) and localizer (LOC-LDA) approaches which allow for non-precision instrument approaches. See Figure 12 for detail.

- b. The Noise Compatibility Criteria (Figure 10) and the Land Use Compatibility Guidelines for Safety (Figure 15), are adopted as the criteria to be used when reviewing projects in Safety Areas 1, 2 and 3. The Guidelines list potential uses and indicate compatibility, conditional compatibility or non-compatibility for each safety area. In the event compatibility cannot be determined through use of the Guidelines, the ALUC should be contacted by the local jurisdiction to make a determination. The guidelines address safety concerns only, and noise or height restrictions may also apply to specific projects under review.
- c. In addition to the uses specified in the Land Use Compatibility Guidelines for Safety, the following generalized land uses are defined as non-compatible for the Lake Tahoe Airport:
  - i. Safety Areas 1 and 2 Combined (Runway Protection Zones/Clear Zones and Approach/Departure Zones):
    - a) Any use which would direct a steady light or flashing light of white, red, green or amber color toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at the airport, other than an FAA approved navigational signal light or precision approach path indicator (PAPI).
    - b) Any use which would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at the airport.
    - c) Any use which would generate smoke or which could attract large concentrations of birds, or which may otherwise affect safe air navigation within this area.
    - d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or airport instrumentation.
    - e) Any hazardous installations such as above-ground oil, gas or chemical storage facilities, excluding facilities for non-commercial, private domestic or private agricultural use.

ii. Safety Area 1 (Runway Protection Zones/Clear Zones):

- a) Permanent structures (not necessarily including such items as roads or underground vaults).
- b) Any use resulting in a gathering of more than ten persons per acre at any time.

iii. Safety Area 2 (Approach/Departure Zones):

- a) Except as provided in Section 4.c., any new residential development which would result in a building density of greater than two (2) dwelling units per acre excepting:
  - i. minor alteration to existing structures; and
  - ii. the construction of new structures on single-family residential lots created by residential subdivision maps recorded prior to the date this plan was adopted.
- b) Except as provided in Section 4.c., incompatible uses as outline in the Land Use Compatibility Guidelines for Safety, Figure 15.

iv. Safety Area 3 (Overflight Zone):

- a) Schools not satisfying the requirements of Section 39005 of the State Education Code, stadiums, arenas, spectator sports facilities, auditoriums, concert halls, outdoor amphitheaters, and theaters.

4. Implementation of Airport Safety Policies:

- a. The Land Use Compatibility Guidelines for Safety (Figure 15) provide the basis for determining compatibility of a particular land use with ALUC safety policies for Lake Tahoe Airport. Basic compatibility may be determined by first identifying the safety area within which a project is located, and then finding the use category on the guidelines chart. If a "yes" is indicated for the use in the particular zone, the project is compatible with ALUC policy. A "no" indicates incompatibility. A "yes" with a footnote indicates a conditional compatibility depending upon the size and intensity of use. In the event that a particular parcel lies close to any safety area boundary, the City or County planning department should be contacted to determine precisely which safety area the parcel in question is located within.
- b. In the case of a safety area line splitting a parcel, the parcel may be developed to split uses and densities as long as the individual portions of the parcel are consistent with the land use policies for the safety zone in which they lie.
- c. Upon adoption or subsequent revision of this plan by the ALUC, existing land uses which are inconsistent may be continued. In Zones 2 and 3, infill of vacant parcels with new single family residences, duplexes, and the residential component of mixed-use projects (not to exceed two units), or changes of use and reconstruction within

areas of existing development not ordinarily permitted by the CLUP shall be permitted if:

- i. the proposed development is consistent with the property's Plan Area Statement, Community Plan and related City land use provisions, and,
  - ii. there are other similar uses within the area of existing development; or,
  - iii. there is no increase in the "Concentration of People" (see calculation method in Notes to Figure 15).
- d. In Zones 2 and 3, new construction of incompatible uses other than those discussed in 4.c,\*\* infill of vacant parcels with incompatible uses and expansion of incompatible uses shall be limited to proposals which:
- i. Meets all the findings in (4.c) above; and
  - ii. The proposed project would not extend the perimeter of the area of existing development within Zones 2 and 3, with incompatible uses, and
  - iii. fall under TRPA Code Section 33.3A(2)b(ii) i.e., once every ten years allows an exemption to expand existing commercial floor area up to 500 square feet or 5% of the existing commercial floor area, whichever is less; or
  - iv. relocate rights to build from other incompatible uses from within the airport safety zone in which the development is to occur (In Zone 2, incompatible uses and their rights can be relocated to Zone 3, however, in Zone 3, incompatible uses and their rights can not be relocated to Zone 2 to expand incompatible uses in Zone 2); and
  - v. restrict the sending parcel to open space to avoid increasing the level of intensity and/or incompatibility of use within the airport safety zone in which the development is to occur.

**Note 1:**

In Zones 2 and 3, the purpose of implementing the Airport Safety Policies is to insure that new construction of incompatible uses, infill of vacant parcels with incompatible uses and expansion of incompatible uses shall not be allowed unless the Rights to Build come from existing non conforming development within the specific Zones, consistent with the Airport Safety Policies. As a result there will be no increase in the amount of non complying uses.

**Note 2: Definitions**

- New construction: Construction on a vacant parcel that requires the transfer in of any rights to build.
- Reconstruction: Construction on a vacant parcel in which the rights to build are on the property and require no additional rights to build to be transferred in.

- Rights to build: These rights include commercial floor area, residential units of use, tourist accommodation uses, land coverage, development rights (bonus units) and the like.
- Infill: Property which is not included on the edge of a Safety Zone.

**Note 3: Examples**

- If a development burns down and all the rights remain onsite and the project can be rebuilt as it previously existed, it is considered to be a reconstruction, i.e., the development previously existed and it is merely being rebuilt as it existed before. If the development that burns down and is rebuilt as it existed previously and then an addition is requested, requiring more rights to build such as more commercial floor area, more tourist accommodation units or more units of use, then the addition is considered to be new construction and subject to the findings of (4.d) above).
  - If a parcel is vacant, but all the rights to build have been banked on the property and the development does not require any transfers in to build the development, then it is considered to be a reconstruction, subject to only the findings of (c) above.
  - If a parcel is vacant and requires a transfer in of any rights to build, this is considered to be new construction and subject to the findings of (d) above.
  - If the development requires land coverage to be transferred in, i.e., the land coverage was entirely transferred off or only a portion of the development needs additional land coverage up to it's Bailey Land Classification, then it is considered to be new construction. If the land was never developed, and it can be built under it's Bailey Land Classification, then this coverage is considered to be a part of the parcel and is not counted as a transfer in.
  - If a parcel is restricted to open space as required under (d) v. and a new development is proposed for the parcel, the rights to build must be transferred in and the development is considered to be new construction and the restriction may be removed. The new use must comply with Figure 15, Land Use Compatibility Guidelines for Safety as well as the applicable Plan Area Statement (PAS).
- e. Strict applications of the Land Use Compatibility Guidelines for Safety may create undue hardships which outweigh interests of public health and safety. Deviation from the guidelines through an overrule by the City of South Lake Tahoe or El Dorado County should be approved only upon a specific finding that such hardships clearly outweigh the public health, safety and welfare objectives of this plan, and that the change in position will still achieve consistency with the purpose of the ALUP law stated in Section 21670 of the Public Utilities Code.
- f. The City of South Lake Tahoe and El Dorado County should implement the airport safety policies established by this plan through such actions as preparing and adopting an airport safety area zoning ordinance (Figure 15), the preparation and adoption of a specific plan for the airport area of influence, or inclusion of appropriate

standards in the general plan for each jurisdiction. Further, City and County general and specific plans and zoning ordinances must be reviewed and revised to be consistent with this CLUP and adopted as such.

- g. Within the safety areas established by this plan, the City of South Lake Tahoe and El Dorado County will submit for FALUC review any proposed land use changes including general plan or specific plan adoptions or amendments, rezonings, use permits or variances.
- h. A detailed mapping of the safety area boundaries should be performed by the City of South Lake Tahoe and El Dorado County that specifically delineates those parcels impacted by safety restrictions.
- i. Although the presence of commercial air service, or the levels of such service, may vary on a year-to-year basis, the Lake Tahoe Airport remains an Aircraft Design Group III airport under FAA standards. Therefore, dimensions of safety areas shall not be reduced during periods of lower activity.

**Figure 15  
LAND USE COMPATIBILITY GUIDELINES FOR SAFETY**

LAND USE CATEGORY	COMPATIBILITY W/SAFETY AREAS		
	Zone 1 RPZ	Zone 2 Approach Zone	Zone 3 Over flight Zone
<b>RESIDENTIAL</b>			
Domestic animal raising	No	Yes 2	Yes
Nursing and personal care	No	No	Yes 6
Employee housing	No	No	Yes
Residential care	No	No	Yes 6
Mobile home dwelling	No	No	Yes
Single family dwelling	No	Yes 1	Yes
Multiple family dwelling	No	No 8	Yes
Summer home	No	Yes 1	Yes
Multi-person dwelling	No	No	Yes
Secondary Residence	No	Yes 1	Yes
<b>TOURIST ACCOMMODATION</b>			
Bed and Breakfast facilities	No	No	Yes
Time sharing (hotel/motel design)	No	No	Yes
Hotel, motel, and other transient dwelling units	No	No	Yes
Time sharing (residential design)	No	No	Yes
<b>COMMERCIAL</b>			
<b>Retail</b>			
Auto, mobile home and vehicle Dealers	No	No	Yes
General merchandise stores	No	No	Yes
Mail order and vending	No	No	Yes
Building materials and hardware	No	No	Yes
Nursery	No	No	Yes
Outdoor retail sales	No	No	Yes
Eating and drinking places	No	No	Yes
Service stations	No	No	Yes
Food and beverage retail sales	No	No	Yes
Furniture, home furnishings and equip.	No	No	Yes
<b>Entertainment</b>			
Amusements and recreation services	No	Yes 2	Yes
Outdoor amusements	No	Yes 2	Yes
Privately owned assembly and entertainment	No	No	No

**Services**

Animal husbandry services	No	Yes 2	Yes
Personal services	No	Yes 2	Yes
Auto repair and service	No	No	Yes
Professional office	No	Yes 2	Yes
Broadcasting studios	No	Yes 2	Yes
Repair services	No	Yes 2	Yes
Business support services	No	Yes 2	Yes
Sales lots	No	No	Yes
Contract construction services	No	Yes 2	Yes
Schools - business and vocational	No	No	Yes 7
Financial services	No	Yes 2	Yes
Secondary storage	No	Yes 2	Yes
Health care services	No	Yes 2	Yes
Laundries and dry cleaning plant	No	No	Yes

**Light Industrial**

Batch plants	No	Yes 2	Yes
Printing and publishing	No	Yes 2	Yes
Food and kindred products	No	Yes 2	Yes
Recycling and scrap	No	Yes 2	Yes
Fuel and ice dealers	No	No	Yes
Small scale manufacturing	No	Yes 2	Yes
Industrial services	No	Yes 2	Yes

**Wholesale/Storage**

Storage yards	No	Yes 2	Yes
Warehousing	No	Yes 2	Yes
Vehicle and freight terminals	No	Yes 2	Yes
Wholesale and distribution	No	Yes 2	Yes
Vehicle storage & parking	No	Yes 2	Yes

**PUBLIC SERVICE****General**

Airfields, landing strips and heliports (new non-emergency sites prohibited)	No	No	Yes
Local public health and safety Facilities	No	No	Yes
Membership Organizations	No	No	Yes
Cemeteries	No	Yes 2	Yes
Power generating	No	No	Yes
Churches	No	No	Yes
Public owned assembly and Entertainment	No	No	No
Collection Stations	No	No	No
Cultural Facilities	No	No	Yes
Public Utility Centers	No	No	Yes

Day care centers/pre-schools	No	No	Yes
Regional public health and safety facilities	No	No	Yes
Government offices	No	No	Yes
Hospitals	No	No	Yes 6
Schools - college	No	No	Yes
Local assembly and entertainment	No	Yes 2	Yes
Schools - kindergarten through Secondary	No	No	Yes
Local post office	No	No	Yes
Social service organizations	No	No	Yes
Threshold Related Research Facilities [Am. 10/28/98]	No	Yes 2	Yes

### **Linear Public Facilities**

Pipelines and power transmission	Yes 3	Yes 2	Yes
Transportation routes	Yes 3	Yes	Yes
Transit stations and terminals	No	Yes 2	Yes
Transmission and receiving facilities	Yes 3	Yes 2	Yes

### **RECREATION**

Beach recreation	No	Yes 2,4,5	Yes
Outdoor recreation concessions	No	Yes 2, 4	Yes
Boat launching facilities	No	Yes 2, 4,5	Yes
Participant sports facilities	No	No	Yes
Cross country ski courses	No	Yes 2, 4	Yes
Recreation centers	No	No	Yes
Day use areas	No	Yes 2, 4	Yes
Recreational vehicle parks	No	No	Yes
Developed campgrounds	No	No	Yes
Riding and hiking trails	No	Yes 2, 4	Yes
Skiing facilities	No	Yes 2, 4	Yes
Rural sports	No	Yes 2, 4	Yes
Golf courses	No	Yes 2	Yes
Snowmobile courses	No	Yes 2, 4	Yes
Group facilities	No	No	Yes
Sport assembly	No	No	No
Marinas	No	Yes 2, 4,5	Yes
Undeveloped campgrounds	No	No	Yes
Off-road vehicle courses	No	Yes 2,4	Yes
Visitor information centers	No	Yes 2, 4	Yes

### **RESOURCE MANAGEMENT**

#### **Timber Management**

Reforestation	Yes 3,5	Yes 5	Yes
Special cut	Yes 3,5	Yes 5	Yes
Regeneration harvest	Yes 3,5	Yes	Yes
Thinning	Yes 3,5	Yes 5	Yes
Sanitation salvage cut	Yes 3,5	Yes 5	Yes

Timber stand improvement	Yes 3,5	Yes 5	Yes
Selection cut	Yes 3,5	Yes 5	Yes
Tree farms	Yes 3,5	Yes 2,5	Yes

**Wildlife and Fishes**

Early successional vegetation Management	Yes 3,5	Yes 5	Yes
Structural fish habitat Management	Yes 3,5	Yes 5	Yes
Nonstructural fish habitat Management	Yes 3,5	Yes 5	Yes
Structural wildlife habitat Management	Yes 3,5	Yes 5	Yes
Nonstructural wildlife habitat management	Yes 3,5	Yes 5	Yes

**Range**

Farm/Ranch accessory structures	Yes 3,5	Yes 5	Yes
Range pasture management	Yes 3,5	Yes 5	Yes
Grazing	Yes 3,5	Yes 5	Yes
Range improvement	Yes 3,5	Yes 5	Yes

**Open Space**

Allowed in all areas of the region	Yes 3,5	Yes 5	Yes
------------------------------------	---------	-------	-----

**Vegetation Protection**

Fire detection and suppression	Yes 3,5	Yes 5	Yes
Prescribed fire/burning management	Yes 3,5	Yes 5	Yes
Fuels treatment management	Yes 3,5	Yes 5	Yes
Sensitive plant management	Yes 3,5	Yes 5	Yes
Insect and disease suppression	Yes 3,5	Yes 5	Yes
Uncommon plant community management	Yes 3,5	Yes 5	Yes

**Watershed Improvements**

Erosion control	Yes 3,5	Yes 5	Yes
Stream environment zone restoration	Yes 3,5	Yes 5	Yes
Runoff control	Yes 3,5	Yes 5	Yes

Footnotes

1. Single Family Residential is a compatible land use only if the building density is one dwelling unit per five (5) acres. If the density standard cannot be met, Policy 4.c may allow construction of new single family residential uses.
2. Uses compatible only if they do not result in a large concentration of people. A large concentration of people is defined as a gathering of individuals in an area that would

- result in an average density of greater than 25 people per acre during a 24 hour period, not to exceed 50 persons per acre at one time. See methodology in the Application Notes below to determine concentration of people.
3. No building, structures, fences, above ground transmission lines or storage of flammable or explosive material above ground, and uses resulting in a gathering of more than one (1) persons per acre at any one time.
  4. No high intensity use of facilities, such as structured playgrounds, ball fields or picnic pavilions.
  5. Uses compatible only if they do not result in a possibility of creating ground fog type conditions or result in a bird hazard.
  6. No more than six (6) persons under care for low mobility occupancies, which include children less than 18 years old.
  7. If the requirements of Section 39005 of the Education Code have been satisfied.
  8. Duplexes only may be allowed in Zone 2 provided the duplex use is permitted (allowed or special use) in the PAS.

Application Notes:

- a. These guidelines define only those land uses that are compatible within the safety area. Where proposed land use fall within the established noise contours or may penetrate any of the imaginary surfaces, additional restrictions apply as contained in the height and noise policy sections of this plan.
- b. The definitions of the land uses identified in the Land Use Compatibility Guidelines for Safety are contained in the TRPA Code of Ordinances, Chapter 18.
- c. Methodology to determine "Concentrations of People."
  - The method to determine the "Concentration of People" will be based on the averaging of two methods: the Parking Ordinance Method and the Maximum Occupancy Method. The averaging approach is used to compensate for the inherently low number of people per acre derived from the Parking Ordinance Method and the inherent high number of people derived from the Maximum Occupancy Method.
  - The Parking Ordinance Method determines the number of persons on-site based on the number of parking spaces required by the Parking Ordinance multiplied by the appropriate vehicle occupancy factor. The number of persons per acre is calculated by dividing the number of people on-site by the parcel size in acres. based on the TRPA tables are provided below (next page).

### Vehicle Occupancy Factors

<u>RESIDENT TRIPS</u>	<u>VEHICLE OCCUPANCY</u>
<u>Home-based Work (RHBW)</u>	<u>1.27</u>
<u>Home-based Other (RHBO)</u>	<u>1.41</u>
<u>Home-based Recreation (RHBR)</u>	<u>2.42</u>
<u>Not Home-based (RNHB)</u>	<u>1.35</u>
<b><u>VISITOR TRIPS</u></b>	
<u>Home-based Other (VHBO)</u>	<u>2.12</u>
<u>Home-based Recreation (VHBR)</u>	<u>3.44</u>
<u>Not Home-based (VNHB)</u>	<u>2.53</u>
<u>Not home based = trips from one not home location to another (store to store; store to rec. site, etc.): 15-20% split typical not home based. Data from 1974 survey.</u>	

- The Maximum Occupancy Method determines the number of persons on-site based on the maximum building occupancy per the Uniform or California Building Code. The number of people per acre is calculated by dividing the number of people on-site by the parcel size in acres. Because surveys have shown that actual occupancy for retail and office uses, even at peak times, is only 50% of the maximum allowed occupancy, these uses should be adjusted by 50% to more closely reflect actual peak occupancy levels. [See Appendix C - Methods for Determining Concentrations of People in the *California Airport Land Use Planning Handbook* published by Caltrans in January 2002 for more information.]

#### **D. COMPREHENSIVE LAND USE PLAN IMPLEMENTATION PROCESS**

1. Adoption of this plan sets in motion a 180-day period within which the City of South Lake Tahoe and El Dorado County must take one of two possible actions:
  - a. The first option is to amend the city and county general plans and other land use controls and regulations, where necessary, to be consistent with this plan.
  - b. The second options, if the city or county does not concur with provisions of this plan, is to overrule that portion of the plan it does not agree with. The overruling must, however, be by two-third (2/3) vote of the governing body and must be based on findings that the action to overrule is consistent with Section 21670 of the California Public Utilities Code.

Section 21670 of the California Public Utilities Code makes it clear that the purpose of the California Airport Land Use Commission Law is to protect the 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.

2. Prior to the amendment of the general plans or specific plan, or the adoption or approval of a zoning ordinance or building regulations that would affect land that lies within the airport area of influence, the proposal must be submitted to the Airport Land Use Commission for review and determination of compatibility. The City and County are responsible for submitting such proposals to the ALUC.

#### **IV. RELATED LAND USE CONSISTENCY REQUIREMENTS**

*In addition to the land use compatibility requirements contained in the Airport Land Use Commission Law, there are other requirements in the Public Utilities Code and the Education Code for projects proposed near airports. The City of South Lake Tahoe and El Dorado County shall review the requirements to assure local consistency with State law. Inconsistencies with each section of State law shall be noted, and code/regulation amendments adopted as necessary.*

#### **A. PUBLIC UTILITIES CODE**

##### **Section 21655: Notification to, and investigation by, department before acquiring site for state building.**

Notwithstanding any other provision of law, if the proposed site of any state building is within two miles, measured by air line, of that point on an airport boundary which is nearest the site, the state agency or office which proposes to construct the building shall, before acquiring title to property for the new state building 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 25 days after receipt of the notice, shall submit to the state agency or office which proposes to construct the

building, a written report of the investigation and its recommendations concerning acquisition of the site.

**Section 21656: Permit for structures having height in excess of prescribed maximum: Exception where approval by federal agency required.**

No person shall erect or add to the height of any structure within the boundaries of this state which will result in a structure that extends more than 50 feet above the ground on which such structure rests until a permit therefore has been issued for such purpose by the Department of Transportation. This section is not applicable to the construction of any structure if the Federal Communications commission is required to approve the height of the structure or if the height of the structure is required to be approved under the Federal Aviation Act of 195 (Public Law 85-726;72 State 731)

**Section 21658: Prohibition against public utility construction constituting obstruction to air navigation.**

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, 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 Regulation, 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.

**Section 21659: Permit for structure or growth constituting hazard to air navigation under federal regulation: Exceptions.**

No person shall construct any structure or permit any natural growth to grow at a height so as to constitute a hazard to air navigation, as a hazard to air navigation is defined in accordance with 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, unless a permit allowing the construction of growth is issued by the Department of Transportation.

The permit shall not be required if the Federal Aviation Administration has determined that the construction or growth does not constitute a hazard to air navigation or would not create an unsafe condition for air navigation. The previous paragraph does not apply to a pole, pole line, distribution or transmission tower, or tower line or substation of a public utility.

**Section 21661.5: Approval of plan for new airport.**

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 such construction is first approved by the board of supervisor 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 of Part 1 or division 9, and acted upon by such commission in accordance with the provisions of such article.

**Section 21661.6: Submission and approval of plan for expanding publicly owned airport: Conformity to approved plan, and approval of variance.**

Prior to the acquisition of land by any political subdivision for the purpose of expanding or enlarging and existing publicly owned airport, the acquiring entity shall submit a plan of such expansion or enlargement to the board of supervisors of the county, or the city council of the city, in which property proposed to be acquired is located.

The plan shall show in detail the airport-related uses and other uses proposed for the property to be acquired. The board of supervisors or the city council, as the case may be, shall, upon notice, conduct a public hearing on such plan, and shall thereafter approve or disapprove the plan. Upon approval of the plan, the proposed acquisition of property may begin.

The use of property so acquired shall thereafter conform to the approved plan, and any variance from such plan, or changes proposed therein, shall first be approved by the appropriate board of supervisors of city council after a public hearing on the subject of the variance or plan change.

The requirements of this section are in addition to any other requirements of law relating to construction or expansion or airports.

**Section 21662: Approval of airport sites and issuance of airport permits.**

The Department of Transportation shall have the authority to issue airport site approval permits, amended airport site approval permits, airport permits, and amended airport permits. No charge shall be made for the issuance of any permit.

**B. EDUCATION CODE**

---

*These sections reflect provisions of the Education Code related to proposed sites near airports.*

**Section 39005: Investigation of school sites near airports.**

To promote the safety of pupils, comprehensive community planning, and greater educational usefulness of school sites, the governing board of each school district, if a proposed school site is within two miles, measure by air line, of that point on an airport boundary which is nearest the site, before acquiring title to property for a new school site or for an addition to a present site, shall give the Department of Education notice in writing of the proposed acquisition and shall submit any information required by the Department of Education.

Immediately after receiving notice of the proposed acquisition, the Department of Education shall notify the Department of Transportation, in writing, of the proposed acquisition. The Department of Transportation shall make an investigation and report to the Department of Transportation. If no longer in operation, the Department of

Education shall, in lieu of notifying the Department of Transportation, notify the Civil Aeronautics Board or any other appropriate agency, in writing, of the proposed acquisition for the purpose of obtaining from the board or other agency any information or assistance that it may desire to give.

The Department of Education shall investigate the proposed site and, within 30 days after receipt of the notice, shall submit to the governing board a written report and its recommendations concerning acquisition of the site.

**Section 39066: Notice and public hearing.**

Notwithstanding Section 39005, immediately after receiving notice of a proposed acquisition of property which is within two miles, measured by air line, of that point on an airport boundary which is nearest the site, the Department of Education shall notify the Department of Transportation, in writing, of the proposed acquisition. The Department of Transportation shall make an investigation and report to the Department of Education within 25 days after receipt of the notice.

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 proposed school site.

If the report of the Department of Education required by Section 39005 does not favor the acquisition of the property for a school site, or an addition to a present school site, the governing body shall not acquire title to the property until 30 days after the department's report is received and until the department's report has been read at a public hearing duly called after 10 days notice by publication in a newspaper of general circulation within the school district or, if there is no such newspaper, in a newspaper of general circulation within the county in which the property is located.

**Section 39007: Proposed school site within two miles of airport runway.**

If, with respect to a proposed site located within two miles of an operative airport runway, the report of the Department of Education submitted to a school district governing board under Section 39005 or 39006 does not favor the acquisition of the site on the sole or partial basis of the unfavorable recommendation of the Department of Transportation, no state agency or officer shall grant, apportion, or allow to the school district for expenditure, in connection with that site, any state funds otherwise made available under any state law whatever for school site acquisition or school building construction, or for expansion of existing sites and buildings, and no funds of the school district or of the county in which the district lies shall be expended for those purposes, except that the provisions of this section shall not apply to sites acquired prior to January 1, 1996, nor to any additions to extensions to those sites.

If the recommendation of the Department of Transportation is unfavorable, the recommendation shall not be overruled without the express approval of the Department of Education and the State Allocation Board.

*In addition to the land use consistency requirements, the Public Utilities Code contains the following provisions relation to land use around airports.*

**Section 81036: Investigation of community college site near airport.**

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 the point on an airport boundary which is nearest the site, 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, 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 report to the board of governors within 25 days after receipt of the notice. If the Division of Aeronautics is no longer in operation, the board of governors shall, in lieu of notifying the Division of Aeronautics, 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 such information or assistance as it may desire to give.

The board of governors shall investigate the proposed site and within 30 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 not such newspaper, then in a newspaper of general circulation within the county in which the property is located.

**Section 81038: Effect of disfavor of acquisition of community college site near airport.**

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 Section 81036 does not favor the acquisition of the site on the sole of 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 such 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 the county in which the district lies shall be expended for such purposes, provided that the provisions of the section shall be applicable to sites acquired prior to January 1, 1966, not to any addition to extensions to such sites.

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