



Chapter **4**

LAND USE COMPATIBILITY CRITERIA

Land Use Compatibility Criteria

4.1. Evaluating Land Use Consistency

4.1.1. *Evaluating Compatibility of New Development:* The compatibility of proposed land uses within an airport influence area shall be evaluated in accordance with:

- (a) The specific noise, safety, airspace protection, overflight policies, and special compatibility policies set forth in Sections 4.2 through 4.6;
- (b) The criteria listed in **Table 1**, *Noise Compatibility Criteria*, and **Table 2**, *Safety Compatibility Criteria*, and
- (c) The compatibility zones depicted in Chapter 6 for each airport.

4.1.2. *Compatibility Criteria Tables:* **Table 1**, *Noise Compatibility Criteria*, and **Table 2**, *Safety Compatibility Criteria*, list general land use categories and indicate each use as being either “normally compatible,” “conditionally compatible,” or “incompatible” depending upon the noise and safety compatibility zones in which it is located.

- (a) When evaluating a proposed development, each land use category (e.g., agriculture, industrial, office) of a project shall be evaluated as a separate development and shall individually satisfy the criteria for the respective land use category in the noise and safety criteria tables.
- (b) Land uses not specifically listed in the noise and safety criteria tables shall be evaluated using the criteria for similar listed uses.
- (c) Local agencies may make exceptions for “conditional” or “incompatible” land uses associated with rare special events (e.g., an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.

4.2. Noise Compatibility

Noise Policy Background³¹

Policy Objective:

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

³¹ The following discussion (in different typeface) is provided as background to the policies of this section and does not directly constitute ALUC policy. For additional discussion of noise compatibility concepts, see Appendix D.

Measures of Noise Exposure:

As is standard practice in California, this *ALUCP* uses the Community Noise Equivalent Level (CNEL) metric as the primary basis for evaluating the degree to which lands around each airport are exposed to airport-related noise. Exposure to aircraft noise is depicted by a set of contours, each of which represents points having the same CNEL value. The noise contours depict the greatest annualized noise impact, measured in terms of CNEL, that is anticipated to be generated by each airport over the planning time frame.

In accordance with state law, the planning time frame utilized in this *ALUCP* extends at least 20 years into the future. The long-range noise exposure contours for each airport depicted in Chapter 6 are based on data supplied by the airport manager. A summary of the specific data used to prepare the contours is included in Chapters 7, 8, and 9 of this *ALUCP* for the Cameron Airpark, Georgetown, and Placerville airports. The *ALUC* should periodically review the projected CNEL contours and, in conjunction with the airport owners, update them as necessary to ensure that they continue to have a future time horizon of at least 20 years.

Factors Considered in Setting Noise Compatibility Criteria:

Factors considered in setting the criteria in this section include the following:

- › Established state regulations and guidelines, including noise compatibility recommendations in the *California Airport Land Use Planning Handbook*.
- › The ambient noise levels in the community. Ambient noise levels influence the potential intrusiveness of aircraft noise upon a particular land use and vary greatly between rural, suburban, and urban communities.
- › The extent to which noise would intrude upon and interrupt the activity associated with a particular use. Susceptible to speech interference or sleep disturbance as a result of single-event noise levels is a factor in this regard. Highly noise-sensitive land uses include residences, schools, libraries, and outdoor theaters.
- › The extent to which the land use activity itself generates noise.
- › The extent of outdoor activity, particularly noise-sensitive activities, associated with a particular land use.
- › The extent to which indoor uses associated with a particular land use may be made compatible with application of sound attenuation. (Typical new building construction provides sufficient insulation to attenuate outdoor-to-indoor noise by at least 20 dB.)

Noise Compatibility Policies

4.2.1. *Evaluating Noise Compatibility:* The noise compatibility of proposed land uses within the influence area of each airport addressed in this *ALUCP* shall be evaluated in accordance with the policies set forth in this section together with **Table 1**, Noise Compatibility Criteria, and the Noise Zone Policy Map for each airport provided in Chapter 6.

- (a) The criteria in **Table 1**, Noise Compatibility Criteria, indicate the maximum acceptable noise exposure for a range of land uses that may be proposed within the airport vicinity. Within the various noise exposure ranges, each land use type is shown as being either “normally compatible,” “conditional,” or “incompatible.” The meaning of these terms is stated in the table and differs for indoor versus outdoor uses.
- (b) “Normally compatible” means that the proposed land use shall be presumed to be acceptable within locations having the indicated noise exposure.
 - (1) Indoor uses are “normally compatible” if either: they involve activities that are inherently noisy; or, standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor CNEL. For land use types that are

compatible because of noise levels inherent with the activity, sound attenuation must be provided for associated office, retail, and other noise-sensitive indoor spaces sufficient to reduce exterior noise to an interior maximum of CNEL 50 dB.

- (2) Outdoor uses are “normally compatible” if the activities associated with the land use may be carried out with minimal interference from aircraft noise at the indicated CNEL.
- (c) “Conditional” means that the conditions indicated in **Table 1** must be satisfied in order for the proposed land use to be acceptable.
- (1) Indoor uses must have building structures that are capable of attenuating exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell.
 - (2) The acceptability of outdoor uses is dependent upon characteristics of the specific use. Caution should be exercised with regard to noise-sensitive outdoor uses because these uses are likely to be disrupted by aircraft noise events. This caution is directed at the project proponent and is not intended to preclude approval of the project.
- (d) “Incompatible” means that the proposed land use shall not be allowed under any circumstances.
- (1) Indoor uses would have unacceptable noise levels if windows are open. At exposures above CNEL 65 dB, extensive mitigation techniques would be required to make the indoor environment acceptable for performance of activities associated with the land use even with windows closed.
 - (2) Outdoor uses would be exposed to severe noise interference that would prevent performance of activities associated with the land use.
 - (3) Exceptions to an “incompatible” designation may only be made if site-specific special conditions exist. See Policy 4.6.6.
- 4.2.2. *Maximum Acceptable Exterior Noise Levels:* To minimize noise-sensitive development in areas exposed to significant levels of aircraft noise, new land use development shall be restricted in accordance with the following.
- (a) Within the airport-related CNEL 60 dB contour, new residential development—the creation of new residential lots or increase in density on existing lots—shall be prohibited. However, a portion of a residential lot that does not contain a dwelling site may extend into the CNEL 60 dB contour. Exceptions also are provided for existing residential lots (see Policy 2.3.4).
 - (b) New nonresidential development shall be deemed incompatible in locations where the airport-related noise exposure would be highly disruptive to the specific land use. Applicable criteria are indicated in **Table 1**, Noise Compatibility Criteria.³²
- 4.2.3. *Maximum Acceptable Interior Noise Levels:* To the extent that the criteria in **Table 1**, Noise Compatibility Criteria, and other policies herein permit the development, land uses for

³² Factors considered in establishing the maximum acceptable noise exposure are described in the policy background discussion for this section on page 4-2.

which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria.

- (a) The maximum, aircraft-related, interior noise level that shall be considered acceptable for land uses near airports is:
 - (1) CNEL 45 dB in any habitable room of:
 - Residences;
 - Children’s schools (K-12);
 - Libraries;
 - Long-term lodging (e.g., dormitories), congregate care facilities, and nursing homes
 - Hotels, motels, and other short-term lodging;
 - Adult educational and institutional facilities;
 - Hospitals;
 - Places of worship, meeting halls, theaters, and mortuaries; and
 - Miscellaneous other uses as listed in **Table 1**, Noise Compatibility Criteria.
 - (2) CNEL 50 dB in:
 - Offices and office areas of industrial facilities;
 - Research and Development facilities;
 - Retail centers and stores; and
 - Personal and miscellaneous services.
- (b) The noise contours depicted in Chapter 6 for each airport shall be used to calculate compliance with these criteria. The calculations should assume that windows are closed.
- (c) When a proposed building lies within multiple CNEL range zones (e.g., partly in 55-60 dB and partly in 60-65 dB), the higher range zone shall apply for the purposes of determining sound attenuation requirements unless less than 25% of the building floor area is within that zone. In such case, the lower range zone may be used.
- (d) Where **Table 1**, Noise Compatibility Criteria, indicates that buildings associated with a particular land use must be capable of attenuating exterior noise to the specified maximum interior noise level, acoustical data documenting that the structure will be designed to comply with the criterion shall be provided to the permitting agency as part of the building permit process. The permitting agency shall be responsible for assuring compliance.
- (e) Exceptions to the interior noise level criteria in Paragraph (a) of this policy may be allowed where evidence is provided that the indoor noise generated by the use itself exceeds the listed criteria.

4.2.4. *Avigation Easement Dedication Requirements*: Dedication of an avigation easement is required as a condition for approval of certain proposed development situated within the CNEL 55 dB contour in accordance with Policy 4.6.1 (see Airport Influence Area policy maps in Chapter 6).

4.3. Safety Compatibility

Safety Policy Background³³

Policy Objective:

The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing. The policies focus on reducing the potential consequences of such events should they occur. Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.³⁴

Measures of Risk Exposure:

This *ALUCP* evaluates the risk that potential aircraft accidents pose to lands and people around each airport in terms of two parameters: the likelihood of an accident occurring in a given location near an airport; and the potential consequences if an accident occurs in that location.

- › The accident likelihood is measured in terms of the geographic distribution of where accidents have historically occurred around similar airports. Because aircraft accidents are infrequent occurrences, the pattern of accidents at any one airport cannot be used to predict where future accidents are most likely to happen around that airport. Reliance must be placed on data about aircraft accident locations at similar airports nationally, refined with respect to information about the types and patterns of aircraft use at the individual airport. This methodology is used to delineate the safety zones for each airport shown in Chapter 6.
- › The consequences component of the risk considers the number of people in harm's way and their ability to escape harm. For most nonresidential uses, potential consequences are measured in terms of the usage intensity—the number of people per acre on the site. For residential uses, density—the number of dwelling units per acre—is substituted for intensity. Additional criteria are applicable to specific types of uses.

Factors Considered in Setting Safety Compatibility Criteria:

Factors considered in setting the criteria in this section include the following:

- › The locations, delineated with respect to the airport runway, where aircraft accidents near general aviation airports typically occur and the relative concentration of accidents within these locations. The most stringent land use controls are applied to the areas with the greatest potential accident exposure. The accident location information utilized is the general aviation accident data and analyses contained in the *California Airport Land Use Planning Handbook*.
- › *Handbook* guidance is also used to delineate the safety zone boundaries for each airport as depicted on the maps in Chapter 6. The zone shapes and sizes reflect the existing and future runway length, approach categories, aircraft fleet mix, and normal flight patterns for the airport. Factors considered in adjusting the generic *Handbook* zones to reflect the conditions at each airport are indicated on the Safety Compatibility Factors maps in Chapters 7 through 9.
- › *Handbook* guidance regarding the maximum usage intensities (people per acre) considered acceptable is used for new development near airport runways.
- › Residential density limitations cannot be equated to the usage intensity limitations for nonresidential uses. Consistent with pervasive societal views and as suggested by the *Handbook* guidelines, a greater degree of protection is warranted for residential uses.

³³ The following discussion (in different typeface) is provided as background to the policies of this section and does not directly constitute ALUC policy. For additional discussion of safety compatibility concepts, see Appendix D.

³⁴ Land use features that can be the *cause* of an aircraft accident are addressed under Airspace Protection, Section 4.4.

- › A greater degree of protection is also warranted for certain uses that represent special safety concerns regardless of the number of people present (e.g., schools, hospitals).

Safety Compatibility Policies

4.3.1. *Evaluating Safety Compatibility:* The safety compatibility of proposed land uses within the influence area of each airport addressed in this *ALUCP* shall be evaluated in accordance with the policies set forth in this section together with **Table 2**, Safety Compatibility Criteria, and the Safety Zone Policy Maps for each airport presented in Chapter 6.

- (a) The criteria in **Table 2**, Safety Compatibility Criteria, indicate the acceptability of prospective land uses relative to the risks associated with each safety zone. Within the each safety zone, each land use type is shown as being either “normally compatible,” “conditional,” or “incompatible.”
 - (1) “Normally compatible” means that common examples of the use are compatible with the airport; uncommon examples of the use may require review to ensure compliance with compatibility criteria.
 - (2) “Conditional” means that the use is compatible if the listed conditions are met.
 - (3) “Incompatible” means that the use should not be permitted under any circumstances.

4.3.2. *Residential Development Criteria:* Proposed residential development shall be evaluated in accordance with the following criteria:

- (a) The density of residential development shall be measured in terms of dwelling units per acre. The maximum allowable densities in each safety zone are as follows. Exceptions are provided for existing single-family homes and residential lots (see Policy 2.3.4).
 - (1) Within Safety Zone 1, new residential development shall be prohibited.
 - (2) Within Safety Zone 2, portions of new residential lots are allowed as long as the dwelling site is not situated within the zone boundaries.
 - (3) Within Safety Zones 3, 4 and 5, new residential development shall be limited to a maximum density of 1 dwelling units per 5.0 acres (0.2 dwelling units per acre).
 - (4) Within Safety Zone 6, new residential development shall not be restricted for safety compatibility purposes.
- (b) Density bonuses and any other bonuses or allowances that local agencies may provide for affordable housing developed in accordance with the provisions of state and/or local law or regulation shall be included when calculating residential densities. The overall density of a development project, including any bonuses or allowances, must comply with the allowable density criteria in **Table 2**, Safety Compatibility Criteria.
- (c) Secondary units, as defined by state law, shall be excluded from density calculations.
- (d) A family day care home serving 14 or fewer children may be established in any existing dwelling or in any new dwelling permitted by the policies of this *ALUCP*.

4.3.3. *Nonresidential Development Criteria:* Proposed non-residential development shall be evaluated in accordance with the following criteria:

- (a) All nonresidential uses must comply with both the “sitewide average” and “single-acre” usage intensity limits indicated below and listed in **Table 2**, Safety Compatibility Criteria, for each safety zone.

Safety Zone	1	2	3	4	5	6
	People per Acre					
Maximum Sitewide Average Intensity	10	60	100	160	100	400
Maximum Single-Acre Intensity	20	120	250	400	250	1,000

- (1) The “sitewide average” intensity equals the total number of people expected to be on the entire site divided by the site size in acres.
 - (2) The “single-acre” intensity equals the number of people expected to occupy the most intensively used 1.0-acre area of the site.
- (b) The need to calculate the usage intensity of a particular project proposal for compliance with the intensity criteria in the Paragraph (a) table is to be governed by the following:
- (1) Land use categories indicated in **Table 2** as “Normally compatible” for a particular safety zone are presumed to meet the intensity criteria indicated in the Paragraph (a) table. Unless the particular project proposal represents an atypical example of the usage type, calculation of the usage intensity is not required.
 - (2) Calculation of the usage intensity must be done for all proposed projects where the land use category for the particular safety zone is indicated in **Table 2** as “Conditional” and the criteria column says “Ensure intensity criteria are met.”
 - (3) Where **Table 2** indicates that land use category is “Conditional” for the particular safety zone, but the criteria are other than “Ensure intensity criteria are met,” calculation of the usage intensity is not necessary for typical examples of the use. However, the project proposal must comply with the other criteria listed for the applicable land use category and safety zone.
- (c) No new structures intended to be occupied regularly are allowed in Safety Zone 1.
- (d) Usage intensity calculations shall include all people (e.g., employees, customers/visitors) who may be on the project site at any single point in time, whether indoors or outdoors.
- (1) For the purposes of these calculations, the total number of occupants during normal busiest periods shall be used.³⁵
 - (2) The project site may be composed of multiple parcels.
- (e) Each component use within a nonresidential development that has multiple types of uses shall comply with the safety criteria in **Table 2**, Safety Compatibility Criteria, unless the use is ancillary to the primary use.
- (1) To be considered an ancillary use, the use must be associated with the primary use (e.g. a cafeteria in an office building) and occupy no more than 10% of total building floor area.

³⁵ This number will typically be lower than the absolute maximum number of occupants the facility can accommodate (such as would be used in determining compliance with building and fire codes).

- (2) Ancillary uses must be considered in the sitewide average intensity limits, but may be excluded from the single-acre intensity calculations.
- (3) An ancillary use may be more intensively occupied (more people in a given area) than the primary use, provided that the ancillary use is neither:
 - An assembly room having more than 750 square feet of floor area (this criterion is intended to parallel the Universal Building Code standards) and a capacity of more than 50 people; nor
 - A K-12 school, day care center, or other risk-sensitive use that is “incompatible” within the safety zone where the primary use is to be located.
- (f) Other criteria may be applicable to uses of special concern (see Policy 4.3.5 and conditions in **Table 2**, Safety Compatibility Criteria).
- (g) Rare special events (see Policy 4.1.2(c)) are exempt from satisfying the usage intensity limits in **Table 2**, Safety Compatibility Criteria.

4.3.4. *Methods for Determining Compliance with Nonresidential Intensity Criteria:* Determination of compliance with the intensity criteria indicated in Policy 4.3.3(a) requires calculating the total occupancy of the site and the occupancy within the most intensively used 1.0-acre area(s). Requirements and options for making these calculations are listed below. Additional guidance is found in Appendix E. Regardless of the method or methods used, the proposed project’s compliance with the intensity criteria in Policy 4.3.3(a) must be demonstrated by the applicant or referring agency.

- (a) Calculation of Total Occupancy: The following methods may be used to determine the total occupancy for any category of use. For projects involving multiple nonresidential land use categories, the occupancy for each use must be calculated separately, then added to produce the total occupancy. See Policy 4.3.6 for criteria pertaining to mixed-use projects having both residential and nonresidential components.
 - (1) Fixed Seating: For uses with fixed seats, such as restaurants and theaters, the occupancy should be based upon the number of customer seats plus the number of employees.
 - (2) Occupancy Load Factors: The square footage of the building divided by the typical square footage occupied by each person yields the total occupancy. **Table 2**, Safety Compatibility Criteria, lists typical occupancy load factors for various land use categories.
 - (3) Vehicle Parking Requirements: For many commercial and industrial uses, the occupancy can be estimated by considering the number of parking spaces required by the local agency and multiplying by the average occupancy per vehicle. This method is not suitable for land uses where many users arrive by transit, bicycle, or other means of transportation (see **Appendix E**).
 - (4) Building and Fire Codes: This method is essentially the same as the Occupancy Load Factor method in that the codes provide a square footage per person for various types of building uses. Building and Fire Codes, though, are based on a maximum, never to be exceeded, number of occupants rather than the average busy period that is the basis for airport land use compatibility planning. As such, the total occupancy calculated using these codes must be reduced by some factor—approximately one half for most uses—to provide a number consistent with the intensity limits listed in Policy 4.3.3(a).

- (b) Calculation of Sitewide Average-Acre Intensity: The sitewide average intensity of a proposed development shall be calculated by determining the total number of people expected to be on site at any given time under normal busy use (see Paragraph (a) of this policy) and dividing by the total number of acres of the project site. See **Exhibit 4A** for a calculation example.

Exhibit 4A: Intensity Calculation Example

In this example, both the sitewide and single-acre intensity of a proposed warehouse facility is calculated using the common occupancy load factors [number of square feet per person] information in Table 2, Safety Criteria together with project specifications. The results are then compared with the maximum sitewide and single-acre intensity limits to determine consistency of the project with the safety criteria.



Table 2 Safety Criteria Data

Safety Zone 3 Intensity Limits

Max. Sitewide Average: 100 people per acre
 Max. Single-Acre: 250 people per acre

Common Occupancy Load Factors

Office: approx. 215 s.f. per person
 Light Industrial, Low Intensity: approx. 350 s.f. per person
 Warehouse: approx. 1,000 s.f. per person

Project Data

Site Acreage: 3 acres
 Office: 19,560 s.f.
 Light Industrial: 24,000 s.f.
 Warehouse: 65,000 s.f.

Occupancy

Office: $\frac{19,560 \text{ s.f.}}{215 \text{ s.f. per person}} = 91 \text{ people}$
 L-industrial: $\frac{24,000 \text{ s.f.}}{350 \text{ s.f. per person}} = 69 \text{ people}$
 Warehouse: $\frac{65,000 \text{ s.f.}}{1,000 \text{ s.f. per person}} = 65 \text{ people}$
 Total: = 225 people

Intensity Results

The results of the intensity calculations indicate that the proposed development satisfies the sitewide and single-acre intensity criteria.

Sitewide Average

$\frac{\text{Total people} = 225 \text{ people}}{\text{Site Acreage} = 3 \text{ acres}} = 75 \text{ people per acre}$

Single-Acre Acreage

$\frac{\text{Total people} = 91 + 69 \text{ people}}{\text{Single-Acre} = 1 \text{ acre}} = 160 \text{ people per acre}$

- (c) Calculation of Single-Acre Intensity: The single-acre intensity of a proposed development shall be calculated by determining the total number of people expected to be within any 1.0-acre portion of the site, typically the most intensively used

building or part of a building. Calculation of the single-acre intensity depends upon the building footprint and site sizes and the distribution of activities on the site.

- (1) For sites less than 1.0 acre, the single-acre intensity equals the total number of people on the site divided by the site size.
 - (2) For sites more than 1.0 acre and a building footprint less than 1.0 acre, the single-acre intensity equals the total number of building occupants divided by the site size unless the project includes substantial outdoor occupancy in which case such usage should be taken into account.
 - (3) For sites having both site size and building footprint of more than 1.0 acre, the single-acre intensity shall normally be calculated as the total number of building occupants divided by the building footprint in acres. This calculation assumes that the occupancy of the building is evenly distributed. However, if the occupancy of the building is concentrated in one area—the office area of a large warehouse, for example—then the occupants of that area shall be included in the single-acre calculation.
 - (4) The 1.0-acre areas to be evaluated shall normally match the building footprints provided that the buildings are generally rectangular (reasonably close to square) and not elongated in shape and, for buildings larger than 1.0 acre, may represent a portion of the building.
 - (5) If a building has multiple floors, then the total number of occupants on all floors falling within the 1.0-acre footprint shall be counted.
- (d) Selection of Calculation Method.
- (1) When evaluating Major Land Use Actions referred for ALUC review on a mandatory basis in accordance with Policy 2.4.3, the ALUC shall normally use the Occupancy Load Factor methodology (Paragraph (a)(2) of this policy) for calculating total occupancy and determining compliance with the sitewide average-acre criteria. Occupancy within a single acre shall normally be calculated as described in Paragraph (c) of this policy. However, the ALUC shall consider usage intensity data that the local agency or project applicant has provided for the project using an alternative calculation method.
 - (2) In conjunction with referral of a general plan for consistency review, the local agency may propose a different method for determining compliance with the intensity criteria (e.g., by using vehicle parking requirements). Once the ALUC has determined that the general plan is consistent with this *ALUCP*, referral of Major Land Use Actions to the ALUC becomes voluntary. Therefore, subject to ALUC acceptance of the alternative calculation method, the local agency may then use that method when internally reviewing individual development projects for compliance with the usage intensity criteria.
- (e) Long-Term Changes in Occupancy: In evaluating compliance of a proposed non-residential development with the usage intensity criteria, the ALUC shall take into account the potential for the use of a building to change over time. A building could have planned low-intensity use initially, but later be converted to a higher-intensity use. Local agencies must provide permit language or other mechanisms to ensure continued compliance with the usage intensity criteria. (Note that this provision applies only to new development and redevelopment—projects for which

discretionary local agency action is required—not to tenant improvements or other changes to existing buildings for which local approval is ministerial.)

4.3.5. *Land Uses of Special Concern:* Certain types of land uses represent special safety concerns regardless of the number of people associated with those uses.

(a) Land uses of particular concern and the nature of the concern are:

(1) Uses Having Vulnerable Occupants: These are uses in which the majority of occupants are children, elderly, and/or disabled people who have limited mobility or may be unable to respond appropriately to emergency situations. The primary uses in this category are:

- ▶ Children’s schools (grades K–12).
- ▶ Day care centers (facilities with 15 or more children, as defined in the California Health and Safety Code).
- ▶ Hospitals, health care centers, and similar facilities, especially where patients remain overnight.
- ▶ Nursing homes.
- ▶ Inmate facilities.

(2) Hazardous Materials Storage: Materials that are flammable, explosive, corrosive, or toxic constitute special safety compatibility concerns to the extent that an aircraft accident could cause release of the materials and thereby pose dangers to people and property in the vicinity. Facilities in this category include:

- ▶ Facilities, such as oil refineries and chemical plants, that manufacture, process, and/or store bulk quantities of hazardous materials generally for shipment elsewhere.
- ▶ Facilities associated with otherwise compatible land uses where hazardous materials are stored in smaller quantities primarily for on-site use.

(3) Critical Community Infrastructure: This category pertains to facilities the damage or destruction of which would cause significant adverse effects to public health and welfare well beyond the immediate vicinity of the facility. Among these facilities are:

- ▶ Emergency services facilities such as police and fire stations.
- ▶ Emergency communications facilities; power plants, and other utilities.

(b) The safety criteria for the uses in Paragraph (a) of this policy are included in **Table 2**, Safety Compatibility Criteria. These criteria shall be applied when evaluating these uses.

(1) In some cases, these uses are not allowed in portions of the airport environs regardless of the number of occupants associated with the use.

(2) In other instances these uses should be avoided (that is, allowed only if a site outside the zone would not serve the intended function).

(3) When allowed, special measures for the particular use, such as those listed in **Table 2**, Safety Compatibility Criteria, must be taken as appropriate to minimize hazards to the facility and occupants if the facility were to be struck by an aircraft.

4.3.6. *Mixed-Use Development:* For projects involving a mixture of residential and nonresidential uses, the following policies apply.

- (a) Where the residential and nonresidential uses are proposed to be situated on separate parts of the project site, the project shall be evaluated as separate developments. The residential density shall be calculated with respect to the area(s) to be devoted to residential development and the nonresidential intensity calculated with respect to the area(s) proposed for nonresidential uses. This provision means that the residential density cannot be averaged over the entire project site when nonresidential uses will occupy some of the area. The same limitation applies in reverse—that is, the nonresidential intensity cannot be averaged over an area that includes residential uses.
- (b) Development in which residential uses are proposed to be located in conjunction with nonresidential uses in the same or nearby buildings on the same site must meet both residential density and nonresidential intensity criteria. The number of dwelling units shall not exceed the density limits indicated in **Table 2**, Safety Compatibility Criteria. Additionally, the normal occupancy of the residential portion shall be added to that of the nonresidential portion and the total occupancy shall be evaluated with respect to the nonresidential usage intensity criteria cited in **Table 2**, Safety Compatibility Criteria.
- (c) Mixed-use development shall not be allowed where the residential component would be exposed to noise levels above the limits set in **Table 1**, Noise Compatibility Criteria.

4.3.7. *Parcels Lying Within Two or More Safety Zones:* For the purposes of evaluating consistency with the compatibility criteria set forth in **Table 2**, Safety Compatibility Criteria, any parcel that is split by safety zone boundaries shall be considered as if it were multiple parcels divided at the safety zone boundary line. See **Exhibit 4B**, Site Split by Safety Zones.

- (a) The preceding notwithstanding, where no part of the building(s) or areas of outdoor congregation of people proposed on the project site falls within the more restrictive safety zone, the criteria for the safety zone where the proposed building(s) or outdoor uses are located shall apply.

Exhibit 4B: Site Split by Safety Zones

In this example, the restaurant and office uses are split between Safety Zones 4 and 6. When determining compliance with the Zone 4 intensity limits, only the portions of the uses in Zone 4, together with the retail use that is fully in Zone 4 are considered and the site size is the 3.5 acres in Zone 4.

Safety Zone 4

Retail:	$\frac{50,000 \text{ s.f.}}{170 \text{ s.f. per person}}$	= 294 people
Restaurant:	$\frac{50\% \text{ of } 18,000 \text{ s.f.}}{60 \text{ s.f. per person}}$	= 150 people
Office:	$\frac{50\% \text{ of } 24,000 \text{ s.f.}}{215 \text{ s.f. per person}}$	= 56 people
Total Occupancy		= 500 people
Intensity:	$\frac{500 \text{ people}}{3.5 \text{ acres}}$	= 143 people/acre*

* Meets Zone 4 sitewide average limit of 160 people/acre

Safety Zone 6

All proposed uses are normally compatible.



(b) Modification of the project site plan so as to transfer the allowed density of nonresidential development or intensity of nonresidential development from the more restricted portion to the less restricted portion is encouraged. The purpose of this policy is to move people outside of the higher-risk zones.

(1) This full or partial reallocation of intensity is permitted even if the resulting intensity in the less restricted area would then exceed the sitewide average intensity limits that apply within that safety zone (see **Exhibit 4C**).

(2) The single-acre criterion for the zone to which the use is transferred must still be satisfied.

4.3.8. *Avigation Easement Dedication Requirements*: Dedication of an avigation easement is required as a condition for approval of certain proposed development within Safety Zones 1 through 5 in accordance with Policy 4.6.1 (see Airport Influence Area policy maps in Chapter 6).

Exhibit 4C: Transferring Usage Intensity

An example of transferring usage intensity to the less restrictive safety zone is provided below.

Project Site

Zone 3: 1.0 acres

Zone 4: 2.0 acres

Allowable Total Occupancy

Zone 3: 100 people/acre = 100 people

Zone 4: 160 people/acre = 320 people

Total Allowed on Site: 420 people

Transfer People from Zone 3 to Zone 4

Zone 3: 0 people

Zone 4: 320 + 100 = 420 people

* 420 people in 2.0 acres exceeds 160 people/acre

4.4. Airspace Protection

Airspace Protection Policy Background³⁶

Policy Objective:

Airspace protection compatibility policies seek to prevent creation of land use features that can pose hazards to the airspace required by aircraft in flight and have the potential for causing an aircraft accident.

Measures of Hazards to Airspace:

Three categories of hazards to airspace are a concern: physical, visual, and electronic.

- › *Physical hazards* include tall structures that have the potential to intrude upon protected airspace as well as land use features that have the potential to attract birds and certain other potentially hazardous wildlife to the airport area.
- › *Visual hazards* include certain types of lights, sources of glare, and sources of dust, steam, or smoke.
- › *Electronic hazards* are ones that may cause interference with aircraft communications or navigation.

Factors Considered in Setting Airspace Protection Compatibility Criteria:

The ALUCP airspace protection policies rely upon the regulations and standards enacted by the Federal Aviation Administration (FAA) and the State of California. The FAA has well defined standards by which potential hazards to flight, especially airspace obstructions, can be

³⁶ The following discussion (in different typeface) is provided as background to the policies of this section and does not directly constitute ALUC policy. For additional discussion of airspace protection compatibility concepts, see Appendix D.

assessed. The following FAA regulations and documents, and any later versions of these documents, are specifically relevant.

- › Federal Aviation Regulations (FAR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace* (provides standard regarding height limits of objects near airports).
- › FAA Advisory Circular 150/5300-13, *Airport Design* (provides standards regarding safety-related areas in the immediate vicinity of runways).
- › FAA Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports* (provides guidance on types of attractants to be avoided).
- › FAA Advisory Circular 150/5200-34A, *Construction or Establishment of Landfills near Public Airports* (sets guidelines on proximity of these facilities to airports).
- › Advisory Circular 70/7460-1K, *Obstruction Marking and Lighting* (sets standards for how essential marking and lighting should be designed).

These regulations and standards do not give the FAA authority to prevent the creation of hazards to flight. That authority rests with state and local government. The State of California has enacted regulations enabling state and local agencies to enforce the FAA standards. The ALUC policies are intended to help implement the federal and state regulations.

Airspace Protection Policies

- 4.4.1. *Evaluating Airspace Protection Compatibility:* The airspace protection compatibility of proposed land uses within the influence area of each airport is addressed in this *ALUCP* shall be evaluated in accordance with the policies in this section together with the airspace protection surfaces depicted on the Airspace Protection Zones policy map in Chapter 6 for each airport.
- (a) The airspace protection surfaces are drawn in accordance with FAR Part 77, Subpart C, and reflect the runway lengths and approach types indicated on the Airspace Protection Zones policy map drawing for each airport.
 - (b) The Critical Airspace Protection Zone for each airport consists of the FAR Part 77 primary surface, the area beneath portions of the approach and transitional surfaces to where these surfaces intersect with the horizontal surface, and the High Terrain Area.
 - (c) The High Terrain Area encompasses locations where the ground elevation exceeds or is within 35 feet beneath an airspace protection surface as defined by FAR Part 77 for the airport.
- 4.4.2. *Airspace Obstruction Criteria:* The criteria for determining the acceptability of a project with respect to height shall be based upon the standards set forth in FAR Part 77, Subpart C. Additionally, where an FAA aeronautical study of a proposed object has been required as described in Policy 4.4.4, the results of that study shall be considered by the ALUC and the local agency.
- (a) Except as provided in Paragraphs (b) and (c) of this policy, no object, including a mobile object such as a vehicle or temporary object such as construction crane, shall have a height that would result in penetration of the airspace protection surfaces depicted on each airport's Airspace Protection Zones policy map in Chapter 6. Any

object that penetrates one of these surfaces is, by FAA definition, deemed an *obstruction*.³⁷

- (b) Objects not situated within a Critical Airspace Protection Zone (see Policy 4.4.1(b)) may be allowed to have heights that penetrate the airspace protection surfaces defined by FAR Part 77 criteria. These objects shall be limited in height as follows:
 - (1) In non-wooded areas, heights of up to 40 feet above ground level are permitted.
 - (2) In wooded areas, heights of up to the average of surrounding trees are permitted.
 - (3) The height of all objects is subject to local agency zoning limits.
- (c) Unless exempted under Paragraph (b) of this policy, a proposed object that exceeds the airport's airspace protection surface shall be allowed only if *all* of the following apply:
 - (1) As the result of an aeronautical study, the FAA determines that the object would not be a hazard to air navigation.
 - (2) FAA or other expert analysis conducted under the auspices of the ALUC or the airport owner concludes that, despite being an airspace obstruction (not necessarily a hazard), the object would not cause any of the following:
 - An increase in the ceiling or visibility minimums of the airport for an existing or planned instrument procedure (a planned procedure is one that is formally on file with the FAA);
 - A reduction of the established operational efficiency and capacity of the airport, such as by causing the usable length of the runway to be reduced; or
 - A conflict with the visual flight rules (VFR) airspace used for the airport traffic pattern or en route navigation to and from the airport.
 - (3) Marking and lighting of the object will be installed as directed by the FAA aeronautical study or the California Division of Aeronautics and in a manner consistent with FAA standards in effect at the time the construction is proposed.
 - (4) An aviation easement is dedicated, in accordance with Policy 4.6.1.
 - (5) The proposed project/plan complies with all other policies of this *ALUCP*.

4.4.3. *Other Flight Hazards:* Land uses that may cause visual, electronic, or wildlife hazards, particularly bird strike hazards, to aircraft in flight or taking off or landing at the airport shall be allowed within the airport influence area only if the uses are consistent with FAA rules and regulations.

- (a) Specific characteristics to be avoided include:
 - (1) Sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights and laser light displays);
 - (2) Distracting lights that could be mistaken for airport lights;
 - (3) Sources of dust, steam, or smoke that may impair pilots' vision;
 - (4) Sources of steam or other emissions that cause thermal plumes or other forms of unstable air;

³⁷ An *obstruction* may or may not be a *hazard*. The purpose of the FAA aeronautical study is to determine whether an obstruction is a hazard and, if so, what remedy is recommended. The FAA's remedies are limited to making changes to the airspace and an airport's approach procedures, but it also can indicate an objection to proposed structures that it deems to be a hazard.

- (5) Sources of electrical interference with aircraft communications or navigation; and
- (6) Any proposed use that creates an increased attraction for wildlife and that is inconsistent with FAA rules and regulations. Of particular concern are landfills, conservation areas, and certain recreational or agricultural uses that attract large flocks of birds which pose bird strike hazards to aircraft in flight.³⁸

- (b) To resolve any uncertainties with regard to the significance of the above types of flight hazards, the ALUC and local agencies should consult with the FAA, California Division of Aeronautics, and airport management.

4.4.4. *Requirements for FAA Notification of Proposed Construction or Alteration:* The project proponent is responsible for notifying the FAA about proposed construction that may affect navigable airspace.³⁹ The following is ALUC policy on this topic.

- (a) Reference to FAA notification requirements is included here for informational purposes only, not as an ALUC policy. Local agencies should inform project proponents of the requirements for FAA notification.
- (b) Any proposed development project that includes construction of a structure or other object and that must be referred to the ALUC for a consistency review in accordance with Policies 2.4.3 or 2.4.5 shall include a copy of the completed FAR Part 77 notification form (Form 7460-1) submitted to the FAA, if applicable, and the findings of the FAA's aeronautical study (i.e., notice of determination letter). A proposed project may be referred to the ALUC in advance of the completion of the FAA aeronautical study. However, the completed study must be forwarded to the ALUC when available and the ALUC may reconsider its previous consistency determination if the FAA study provides new information and airspace protection was a factor in the ALUC's determination.

³⁸ See FAA Advisory Circulars 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, and 150/5200-34A, *Construction or Establishment of Landfills near Public Airports*.

³⁹ FAR Part 77 requires that a project proponent submit notification of a proposal to the FAA where required by the provisions of FAR Part 77, Subpart B. California Public Utilities Code Sections 21658 and 21659 likewise includes this requirement. FAA notification requirements apply to all objects including structures, antennas, trees, mobile objects, and temporary objects such as construction cranes. The FAA will conduct an "aeronautical study" of the object(s) and determine whether the object(s) would be of a height that would constitute a hazard to air navigation. (See Appendix C of this *ALUCP* for a copy of FAR Part 77 and online procedures for filing Form 7460-1.) FAA notification is required under the following circumstances:

(a) The project contains proposed structures or other objects that exceed the height standards defined in FAR Part 77, Subpart B. Objects shielded by nearby taller objects are exempted in accordance with FAR Part 77, Paragraph 77.15. Note that notification to the FAA under FAR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations. Also, the FAA notification area extends beyond the airport influence area depicted on the Airport Influence Area policy map for that airport in Chapter 6 of this *ALUCP*. For the airports addressed by this *ALUCP*, the Subpart B notification airspace surface extends outward and upward as follows:

- At Cameron Airpark Airport, a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point on the runway.
- At Placerville Airport, a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point on the runway.
- At Georgetown Airport, a slope of 50 to 1 for a horizontal distance of 10,000 feet from the nearest point on the runway (the shorter distance is because the Georgetown Airport runway is less than 3,200 feet in length).

(b) Any proposal for construction or alteration of a structure, including antennas, taller than 200 feet above the ground level at the site regardless of proximity to any airport.

- 4.4.5. *ALUC Review:* The requirement for notification to the FAA shall not by itself trigger ALUC review of an individual project. If the ALUC has determined that the local agency's general plan associated with the proposed project location is consistent with this *ALUCP*, then no ALUC review is required. If the general plan has not been made consistent, then the proposed project must be referred to the ALUC for review (see Policies 2.4.3 and 2.4.5).

4.5. Overflight Compatibility

Overflight Policy Background⁴⁰

Policy Objective:

Noise from individual aircraft operations, especially by comparatively loud aircraft, can be intrusive and annoying in locations beyond the limits of the noise exposure areas addressed by the policies in Section 4.2. Sensitivity to aircraft overflight varies from one person to another.

The policies in this section serve primarily to establish the form and requirements for notification about airport proximity and aircraft overflight to be given in conjunction with local agency approval of new residential development and with certain real estate transactions involving existing residential development. Overflight policies do not apply to nonresidential development.

Measures of Overflight Exposure:

The loudness of individual aircraft noise events is a key determinant of where airport proximity and aircraft overflight notification is warranted. Single-event noise levels are especially important in areas that are overflown regularly by aircraft, but that do not produce significant CNEL contours (helicopter overflight areas are a particular example). For general aviation airports, the principal areas of overflight exposure are the locations beneath the airport traffic pattern and the common entry routes to the traffic pattern.

Factors Considered in Setting Overflight Compatibility Criteria:

Factors considered in establishing overflight criteria include the following:

- › The boundary of the overflight area for each airport, as depicted on the respective Airspace Protection Zones policy map in Chapter 6, is drawn to encompass locations where aircraft approaching and departing the airport typically fly at an altitude of less than approximately 1,000 feet above the airport elevation. Note that the flight altitude above ground level will be more or less than this amount depending upon the terrain below. Areas of high terrain beneath the traffic patterns are exposed to comparatively greater noise levels, a factor that is considered in the overflight policies.
- › To be most effective, overflight policies should establish notification requirements for transactions involving existing land uses, not just future development. 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.
- › State real estate transfer disclosure law applies to existing development, but not to all transactions.⁴¹

⁴⁰ The following discussion (in different typeface) is provided as background to the policies of this section and does not directly constitute ALUC policy. For additional discussion of overflight compatibility concepts, see Appendix D.

⁴¹ California state statutes (*Business and Professional Code Section 11010* and *Civil Code Sections 1102.6, 1103.4, and 1353*) require that, as part of many residential real estate transactions, information be disclosed regarding whether the property is situated within an airport influence area. These state requirements apply to the sale or lease of newly subdivided lands and condominium conversions and to the sale of certain existing residential property. In general, airport proximity disclosure is required with existing residential property transfer only when certain natural conditions (earthquake, fire, or flood hazards) warrant disclosure.

- › To the extent that the ALUC notification requirements for new development, the policy should ensure that the notification runs with the land and is provided to prospective future owners and tenants.
- › Avigation easements involve conveyance of property rights from the property owner to the party owning the easement and are best suited to locations where land use restrictions for noise, safety, or airspace protection purposes are necessary. Property rights conveyance is not needed for buyer awareness purposes.

Overflight Policies

4.5.1. *Evaluating Overflight Compatibility:* The boundaries of the overflight zones around each airport are shown on the Overflight Zones policy maps in Chapter 4 and are delineated as follows:

- (a) The High Noise/Risk Zone encompasses all areas within the CNEL 55 dB contour, Safety Zones 1 through 5, and the Critical Airspace Protection Zone.
- (b) The Routine Overflight Zone boundary reflects areas commonly overflown by aircraft at an altitude of approximately 1,000 feet or less. This area lies within the outer boundary of the horizontal surface as defined by FAR Part 77, Subpart C.
- (c) The Airport Influence Area boundary includes all areas within the established airport influence area for each airport. This area lies within the outer boundary of the conical surface as defined by FAR Part 77, Subpart C.

4.5.2. *Recorded Overflight Notification:* As a condition for local agency approval of residential development within the Routine Overflight Zone boundary indicated on the Overflight Zones policy maps in Chapter 6, an overflight notification shall be recorded.

- (a) The notification shall be of a format similar to that indicated in Appendix G and shall contain the following language dictated by state law with regard to real estate transaction disclosure:

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.

- (b) The notification shall be evident to prospective purchasers of new residential property and shall appear on the property deed.
- (c) A separate recorded overflight notification is not required where an avigation easement is provided.
- (d) Recording of an overflight notification is not required for nonresidential development.

The statutes define an *airport influence area* as “the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission.”

- 4.5.3. *Real Estate Transaction Disclosure:* Provisions for real estate transaction disclosure are primarily established by state law. Further, to the extent that real estate transactions involve existing land uses, the ALUC has no authority to set requirements regarding them. Thus, except as indicated in Paragraph (a) below, ALUC polices with regard to real estate transaction disclosures advisory.
- (a) The disclosure provisions of state law are deemed mandatory for *new* residential development anywhere within an airport influence area and shall continue in effect as ALUC policy even if the state law is made less stringent or rescinded. The disclosure shall be of a format similar to that indicated in Appendix G and shall contain the language dictated by state law (see Policy 4.5.2(a)).
 - (b) State law indicates that the ALUC is responsible for delineating the area within which airport proximity disclosure is appropriate. The recommended disclosure area for each airport addressed by this *ALUCP* is identified on the respective Overflight Zones policy map provided in Chapter 6.
 - (c) Airport proximity disclosure should be provided as part of *all* real estate transactions (sale, lease, or rental) involving residential property anywhere within an airport influence area.
 - (d) Signs providing the above notice and a map of the airport influence area be prominently posted in the real estate sales office and/or other key locations at any new residential development within the airport influence area.
 - (e) It is not the responsibility of either the ALUC or local agencies to enforce real estate transfer disclosure with regard to the transfer of existing residences. Disclosure is a matter to be handled between private parties. The responsibility of the ALUC and local agencies is merely to provide information as to the locations within which airport proximity disclosure is appropriate and the suitable disclosure language to be used.

4.6. Policies for Special Circumstances

- 4.6.1. *Avigation Easement Dedication:* As a condition for approval of projects that are subject to the review provisions of this *ALUCP* and that meet the conditions in Paragraphs (a) and (b) of this policy, the property owner shall be required to dedicate an avigation easement to the County of El Dorado.⁴²
- (a) As depicted the Overflight Zones policy maps in Chapter 6, avigation easement dedication is required for any project whose site lies fully or partially within the High Noise/Risk Zone boundary as described in Policy 4.5.1(a).
 - (b) Avigation easement dedication shall be required for any proposed development, including infill development, for which discretionary local approval is required. Avigation easement dedication is not required for ministerial approvals such as building permits.
 - (c) The avigation easement shall:
 - (1) Provide the right of flight in the airspace above the property;

⁴² Note: the County is the appropriate recipient because it is the entity that owns Georgetown and Placerville airports and that has land use control authority over the lands surrounding privately owned Cameron Airport.

- (2) Allow the generation of noise and other impacts associated with aircraft overflight;
- (3) Restrict the height of structures, trees and other objects in accordance with the policies in Section 4.4 and the Compatibility Policy Maps: *Airspace Protection Zones* in Chapter 6 herein;
- (4) Permit access to the property for the removal or aeronautical marking of objects exceeding the established height limit; and
- (5) Prohibit electrical interference, glare, and other potential hazards to flight from being created on the property.

(d) An example of an aviation easement is provided in Appendix G.

4.6.2. *Infill*: Where land uses not in conformance with the criteria set forth in this *ALUCP* exist at the time of the plan’s adoption, infill development of similar land uses may be allowed to occur in that area even if the proposed land use is otherwise incompatible with respect to the compatibility criteria for that location.

(a) Infill development is not permitted in the following locations:⁴³

- (1) Within Safety Zone 1 (the runway protection zones and within the runway primary surface), no type of infill development shall be permitted.
- (2) Within Safety Zones 2 (inner approach/departure zone) and 5 (sideline zone), residential infill development shall not be permitted except as allowed by Policy 2.3.4.
- (3) Within the CNEL 65 dB noise contour of any airport, residential infill development shall not be allowed.⁴⁴

(b) In other locations within Review Area 1, a project site can be considered for infill development if it either:

- (1) Is part of a cohesive area, defined by the local land use jurisdiction and accepted by the ALUC, within which at least 65% of the uses were developed prior to the *ALUCP* adoption with uses not in conformance with the plan; or
- (2) Meets *all* of the following conditions:
 - › The site is already served with streets, water, sewer, and other infrastructure;
 - › At least 65% of the site’s perimeter is bounded (disregarding roads) by existing uses similar to, or more intensive than, those proposed;
 - › A project site within an identified infill area must be no larger than 20 acres;
 - › The proposed project would not extend the perimeter of the infill area defined by the surrounding, already developed, incompatible uses; and
 - › Land uses proposed for the infill area are consistent with the local agency’s zoning regulations governing the existing, already developed, surrounding area.

⁴³ Note that these locations are all within Review Area 1. Land uses are not restricted within Review Area 2 except with respect to height limits, thus infill is not relevant in this area.

⁴⁴ The effect of this policy is that infill residential development is allowed at a 5 dB higher noise level than is the acceptable limit for other new residential development as set by Policy 4.2.2(a).

- (c) For infill residential development in Safety Zones 3 and 4, the average development density (dwelling units per acre) of the site shall not exceed the median density represented by all existing residential lots that lie fully or partially within a distance of 300 feet from the boundary of the defined infill area.
- (d) For infill nonresidential development, the average usage intensity (the number of people per acre) of the site's proposed use shall not exceed the lesser of:
 - (1) The median intensity of all existing nonresidential uses that lie fully or partially within a distance of 300 feet from the boundary of the defined infill area; or
 - (2) Double the intensity permitted in accordance with the criteria for that location as indicated in **Table 2**.

(For example, if the zone allows 100 people per acre and the median of nearby existing uses is 150 people per acre, the infill development would be limited to 150 people per acre rather than 200.)
- (e) The single-acre intensity limits for nonresidential development described in Policy 4.3.3 and listed in Table 2 are applicable to infill development. Also, the sound attenuation and avigation easement dedication requirements set by Policies 4.2.3 and 4.6.1 shall apply to infill development.
- (f) The ALUC prefers that all parcels eligible for infill be identified at one time by the local agency.
 - (1) The local agency is responsible for identifying, in its general plan or other adopted planning document reviewed by the ALUC, the qualifying locations that lie within that agency's boundaries. This action may take place in conjunction with the process of amending a general plan for consistency with the ALUC plan or may be submitted by the local agency for consideration by the ALUC in conjunction with initial adoption of this *ALUCP*.
 - (2) If a map identifying locations suitable for infill has not been submitted by the local agency and reviewed by the ALUC or the site of an individual project proposal does not fall within the identified infill area, the ALUC may evaluate the project to determine whether it would meet the qualifying conditions listed in Paragraphs (a) through (e) of this policy.
 - (3) In either case, the burden for demonstrating that an area or an individual site qualifies as infill rests with the affected land use agency and/or project proponent and is not the responsibility of the ALUC.

4.6.3. *Existing Nonconforming Uses:* Proposed changes to existing nonconforming uses are subject to ALUC review if the changes would result in increased nonconformity with the compatibility criteria. Proposed changes, whether to a parcel or a building, are limited as follows:

- (a) Residential Uses:
 - (1) A nonconforming residential land use may be continued, sold, leased, or rented without ALUC restriction or review.
 - (2) A nonconforming single-family dwelling may be maintained, remodeled, reconstructed, or expanded in size. The lot line of an existing single-family residential parcel may be adjusted. Also, a new single-family residence may be constructed on an existing lot in accordance with Policy 2.3.4. However:

- ▶ Any remodeling, reconstruction, or expansion must not increase the number of dwelling units. For example, a bedroom could be added to an existing residence, but an additional dwelling unit could not be built on the parcel unless that unit is a secondary dwelling unit as defined by state and local laws.
 - ▶ A single-family residential parcel may not be divided for the purpose of allowing additional dwellings to be constructed.
- (3) Nonconforming multi-family residential dwellings may be maintained, remodeled, or reconstructed (see Policy 4.6.4). The size of individual dwelling units may be increased, but additional dwelling units may not be added.
 - (4) Sound attenuation and avigation easement dedication shall be provided where required by Policies 4.2.3 and 4.6.1, respectively.

(b) Nonresidential Uses (except Children’s Schools):

- (1) A nonconforming nonresidential use may be continued, sold, leased, or rented without ALUC restriction or review.
- (2) Nonconforming nonresidential facilities may be maintained, altered, or, if required by state law, reconstructed (see Policy 4.6.4). However, any such work:
 - ▶ Must not result in expansion of either the portion of the site devoted to the nonconforming use or the floor area of the buildings; and
 - ▶ Must not result in an increase in the usage intensity (the number of people per acre) above the levels existing at the time of adoption of this *ALUCP*.
- (3) Sound attenuation and avigation easement dedication shall be provided where required by Policies 4.2.3 and 4.6.1, respectively.

(c) Children’s Schools (including grades K-12, day care centers with more than 14 children, and school libraries):

- (1) Land acquisition for new schools or for expansion of existing schools is not permitted in any safety zone except portions of Safety Zone 6 beyond 0.5 mile from the nearest runway.
- (2) Replacement or expansion of buildings at existing school sites is not allowed in Safety Zones 2 or 5. One-time replacement or expansion of buildings at existing school sites in Safety Zones 3 and 4 and the portion of Safety Zone 6 within 0.5 mile of the nearest runway is allowed only if the expansion accommodates no more than 50 students. These limitations do not preclude work required for normal maintenance or repair.

4.6.4. *Reconstruction:* An existing nonconforming development that has been fully or partially destroyed as the result of a calamity, and would otherwise not be reconstructed but for the calamity, may be rebuilt only under the following conditions.

- (a) Nonconforming single-family or multi-family residential uses may be rebuilt provided that the reconstruction does not result in more dwelling units than existed on the parcel at the time of the damage. Addition of a secondary dwelling unit to a single-family residence is permitted if in accordance with state law and local regulations.
- (b) A nonconforming nonresidential development may be rebuilt provided that the reconstruction does not increase the floor area of the previous structure or result in an increased usage intensity (people per acre).
- (c) Reconstruction under Paragraphs (a) or (b) above:

- (1) Must have a permit deemed complete by the local agency within twelve (12) months of the date the damage occurred.
- (2) Shall incorporate sound attenuation features to the extent required by Policy 4.2.3.
- (3) Shall be conditioned upon dedication of an avigation easement to the County of El Dorado if required under Policy 4.6.1.
- (4) Shall comply with Federal Aviation Regulations Part 77 requirements (see Policy 4.4.2).
- (5) Shall not preclude work required for normal maintenance and repair.

4.6.5. *Redevelopment:* Proposed redevelopment of a property is subject to ALUC review the same as new development if it qualifies as a major land use action (see Policies 2.4.3 and 2.4.5). Review is mandatory even if the applicable general plan or specific plan has been found consistent with the *ALUCP*.

- (a) This requirement applies because the land use designations for existing development would not ordinarily have been evaluated at the time of the general plan or specific plan consistency review because the ALUC has no authority over existing land uses. The proposed redevelopment thus could be consistent with the general plan or specific plan, yet be inconsistent with the *ALUCP*. Proposed redevelopment of such lands voids the general plan/specific plan consistency status.
- (b) Limited expansion of existing non-conforming uses is allowed under Policy 4.6.3 and reconstruction of a destroyed use is allowed subject to the provisions of Policy 4.6.4.
- (c) Sound attenuation and avigation easement dedication shall be provided where required by Policies 4.2.3 and 4.6.1, respectively.

4.6.6. *Special Conditions Exception:* The compatibility criteria set forth in this *ALUCP* are intended to be applicable to all locations within the influence areas of airports in El Dorado County that are under the jurisdiction of the El Dorado County ALUC. However, there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site.

- (a) After consideration of all the factors involved in such situations, the ALUC may find a normally incompatible use to be acceptable.
- (b) In reaching such a decision, the ALUC shall make specific findings as to why the exception is being made and the nature of the extraordinary circumstances that warrant the policy exception. Additionally, the ALUC shall make the following specific findings that the land use will neither:
 - (1) Create a safety hazard to people on the ground or aircraft in flight; nor
 - (2) Result in excessive noise exposure for the proposed use.
- (c) Approval of a special conditions exception for a proposed project shall require a two-thirds approval of the ALUC members voting on the matter.
- (d) The burden for demonstrating that special conditions apply to a particular development proposal rests with the project proponent and/or the referring agency, not with the ALUC.

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

Land Use Category	Exterior Noise Exposure ¹ (CNEL dB)					Criteria for Conditional Uses
	≤ 55	55-60	60-65	65-70	≥ 70	
<ul style="list-style-type: none"> Multiple land use categories and compatibility criteria may apply to a project Land uses not specifically listed shall be evaluated using the criteria for similar uses 						<ul style="list-style-type: none"> Interior noise level limits shown in yellow cells also apply (see Policy 4.2.3) An acoustical study may be prudent for noise-sensitive uses proposed in areas exposed to CNEL 60 dB or greater (see Policy 4.2.3(d))
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible
Outdoor Uses (limited or no activities in buildings)						
Natural Land Areas: woods, brush lands, desert						Compatible at levels indicated, but noise disruption of natural quiet will occur
Water: flood plains, wetlands, lakes, reservoirs						
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land						
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables						Exercise caution with uses involving noise-sensitive animals ²
Outdoor Major Assembly Facilities (capacity ≥ 1,000 people): spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos						Exercise caution if clear audibility by users is essential ³
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas						Exercise caution if clear audibility by users is essential ³
Small/Non-Group Recreation: golf courses, tennis courts, shooting ranges						Exercise caution if clear audibility by users is essential ³
Local Parks: children-oriented neighborhood parks, playgrounds						Exercise caution if clear audibility by users is essential ³
Camping: campgrounds, recreational vehicle/motor home parks						
Cemeteries (excluding chapels)						Compatible at levels indicated, but noise disruption of outdoor activities will occur
Residential and Lodging Uses						
Single-Family Residential: individual dwellings, townhouses, mobile homes, bed & breakfast inns		45				
Multi-Family Residential (≥ 8 d.u./acre)		45				
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories		45				
Short-Term Lodging (≤30 nights): hotels, motels, other transient lodging (except conference/assembly facilities)		45				
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities		45				
Educational and Institutional Uses						
Family day care homes (≤ 14 children)		45				
Children's Schools: K-12, day care centers (>14 children); school libraries		45				

Table 1

Noise Compatibility Criteria

Cameron Airpark Airport, Georgetown Airport, Placerville Airport

Land Use Category	Exterior Noise Exposure ¹ (CNEL dB)					Criteria for Conditional Uses
	≤ 55	55-60	60-65	65-70	≥ 70	
<ul style="list-style-type: none"> › Multiple land use categories and compatibility criteria may apply to a project › Land uses not specifically listed shall be evaluated using the criteria for similar uses 						<ul style="list-style-type: none"> › Interior noise level limits shown in yellow cells also apply (see Policy 4.2.3) › An acoustical study may be prudent for noise-sensitive uses proposed in areas exposed to CNEL 60 dB or greater (see Policy 4.2.3(d))
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible
Adult Education classroom space: adult schools, colleges, universities (excluding aviation-related schools)		45	45			Applies only to classrooms (acoustical study may be warranted); offices, laboratory facilities, gymnasiums, outdoor athletic facilities, and other uses to be evaluated as indicated for those land use categories
Community Libraries		45				
Indoor Major Assembly Facilities (capacity ≥ 1,000 people): auditoriums, conference centers, concert halls, indoor arenas			45	45		
Indoor Large Assembly Facilities (capacity 300 to 999 people): movie theaters, places of worship, cemetery chapels, mortuaries			45	45		Acoustical study may be warranted for noise-sensitive uses (e.g., places of worship) See Policy 4.2.3(d)
Indoor Small Assembly Facilities (capacity < 300 people): places of worship, cemetery chapels, mortuaries, meeting halls			45	45		Acoustical study may be warranted for noise-sensitive uses (e.g., places of worship) See Policy 4.2.3(d)
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios				45		
In-Patient Medical: hospitals, mental hospitals			45			Acoustical study may be warranted See Policy 4.2.3(d)
Out-Patient Medical: health care centers, clinics			45	45		
Penal Institutions: prisons, reformatories			45			
Public Safety Facilities: police, fire stations				45		
Commercial, Office, and Service Uses						
Major Retail: regional shopping centers, 'big box' retail				50		Outdoor dining or gathering places incompatible above CNEL 65 dB
Local Retail: community/neighborhood shopping centers, grocery stores				50		Outdoor dining or gathering places incompatible above CNEL 65 dB
Eating/Drinking Establishments: restaurants, fast-food dining, bars						Outdoor dining or gathering places incompatible above CNEL 65 dB
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries						Noise attenuation required for office areas See Policy 4.2.3
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses				50		
Personal & Miscellaneous Services: barbers, car washes, print shops				50		
Vehicle Fueling: gas stations, trucking & transportation terminals					50	Noise attenuation required for office areas See Policy 4.2.3

Table 1, continued

Land Use Category	Exterior Noise Exposure ¹ (CNEL dB)					Criteria for Conditional Uses
	≤ 55	55-60	60-65	65-70	≥ 70	
<ul style="list-style-type: none"> › Multiple land use categories and compatibility criteria may apply to a project › Land uses not specifically listed shall be evaluated using the criteria for similar uses 						<ul style="list-style-type: none"> › Interior noise level limits shown in yellow cells also apply (<i>see Policy 4.2.3</i>) › An acoustical study may be prudent for noise-sensitive uses proposed in areas exposed to CNEL 60 dB or greater (<i>see Policy 4.2.3(d)</i>)
Legend (<i>see last page of table for interpretation</i>)	Normally Compatible			Conditional		Incompatible
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants				50	50	Noise attenuation required for office areas <i>See Policy 4.2.3</i>
Heavy Industrial				50	50	Noise attenuation required for office areas <i>See Policy 4.2.3</i>
Light Industrial, High Intensity: food products preparation, electronic equipment				50	50	Noise attenuation required for office areas <i>See Policy 4.2.3</i>
Light Industrial, Low Intensity: machine shops, wood products, auto repair				50	50	Noise attenuation required for office areas <i>See Policy 4.2.3</i>
Research & Development				50		Noise attenuation required for office areas <i>See Policy 4.2.3</i>
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses						
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						
Transportation, Communication, and Utilities						
Rail & Bus Stations					50	Noise attenuation required for public and office areas <i>See Policy 4.2.3</i>
Transportation Routes: road & rail rights-of-way, bus stops						
Auto Parking: surface lots, structures						
Communications Facilities: emergency communications, broadcast & cell towers						
Power Plants						
Electrical Substations						
Wastewater Facilities: treatment, disposal						
Solid Waste Disposal Facilities: landfill, incineration						
Solid Waste Transfer Facilities, Recycle Centers						

Table 1, continued

Land Use Acceptability	Interpretation/Comments
	<p><i>Normally Compatible</i></p> <p><i>Indoor Uses:</i> Either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL). For land use types that are compatible because of inherent noise levels, sound attenuation must be provided for associated office, retail, and other noise-sensitive indoor spaces sufficient to reduce exterior noise to an interior maximum of CNEL 45 dB.</p> <p><i>Outdoor Uses:</i> Except as noted in the table, activities associated with the land use may be carried out with minimal interference from aircraft noise.</p>
	<p><i>Conditional</i></p> <p><i>Indoor Uses:</i> Building structure must be capable of attenuating exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (40, 45 or 50). See <i>Policy 4.2.3</i>.</p> <p><i>Outdoor Uses:</i> Caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use.²</p>
	<p><i>Incompatible</i></p> <p><i>Indoor Uses:</i> Unacceptable noise interference if windows are open; at exposures above CNEL 65 dB, extensive mitigation techniques required to make the indoor environment acceptable for performance of activities associated with the land use.</p> <p><i>Outdoor Uses:</i> Severe noise interference makes the outdoor environment unacceptable for performance of activities associated with the land use.</p>
<p>Notes</p> <p>¹ For the purposes of these criteria, the exterior noise exposure generated by aircraft activity at airport involved is defined by the projected noise contours illustrated in Chapter 6 of this <i>Compatibility Plan</i>.</p> <p>² This caution is directed at the project proponent and is not intended to preclude approval of the project.</p> <p>³ Noise-sensitive land uses are ones for which the associated primary activities, whether indoor or outdoor, are susceptible to disruption by loud noise events. See <i>Policy 2.7.19</i> for examples of noise-sensitive uses.</p>	

Table 1, continued

Land Use Category	Safety Zone						Criteria for Conditional Uses
	1	2	3	4	5	6	
<ul style="list-style-type: none"> Multiple land use categories and compatibility criteria may apply to a project Land uses not specifically listed shall be evaluated using the criteria for similar uses Numbers in brackets for some uses are occupancy load factors ¹ 							<ul style="list-style-type: none"> Numbers below indicate zone in which condition applies Nonresidential development must satisfy both forms of intensity limits (see Policy 4.3.3) Up to 10% of total floor area may be devoted to ancillary use (see Policy 4.3.3(d)) See Policy 4.3.4 for information on how to calculate nonresidential intensity Maximum Intensity criteria apply to Normally Compatible as well as Conditional land uses
Max. Sitewide Average Intensity (people/acre) Max. Single-Acre Intensity (people/acre) <i>applicable to all nonresidential development</i>	10 20 ²	60 120	100 250	160 400	100 250	400 1000	
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible	
Outdoor Uses (limited or no activities in buildings)							
Natural Land Areas: woods, brush lands, desert	Yellow	Green	Green	Green	Green	Green	1: Objects above runway elevation not allowed in Object Free Area (OFA) ³ All: Also see Airspace Protection Policy 4.4.3 regarding wildlife hazards to flight
Water: flood plains, wetlands, lakes, reservoirs ⁴	Yellow	Green	Green	Green	Green	Green	1: Objects above runway elevation not allowed in Object Free Area (OFA) ³ All: Also see Airspace Protection Policy 4.4.3 regarding wildlife hazards to flight
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land	Yellow	Green	Green	Green	Green	Green	1: Not allowed in Object Free Area (OFA) ³ All: Also see Airspace Protection Policy 4.4.3 regarding wildlife hazards to flight
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables ⁴	Red	Green	Green	Green	Green	Green	All: Also see Airspace Protection Policy 4.4.3 regarding wildlife hazards to flight
Outdoor Major Assembly Facilities (capacity ≥ 1,000 people): spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos ⁵	Red	Red	Red	Red	Red	Yellow	6: Allowed only if alternative site outside zone would not serve intended function
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas	Red	Red	Yellow	Yellow	Red	Green	3, 4: Allowed only if alternative site outside zone would not serve intended function
Small/Non-Group Recreation: golf courses, ⁴ tennis courts, shooting ranges	Red	Yellow	Green	Green	Red	Green	2: Allowed only if alternative site outside zone would not serve intended function and intensity criteria met
Local Parks: children-oriented neighborhood parks, playgrounds	Red	Red	Red	Red	Red	Green	
Camping: campgrounds, recreational vehicle/motor home parks	Red	Red	Yellow	Yellow	Red	Green	3, 4: Allowed only if intensity criteria met
Cemeteries (except chapels)	Red	Green	Green	Green	Green	Green	
Residential and Lodging Uses							
Single-Family Residential (<8 d.u./acre): individual dwellings, townhouses, mobile homes, bed & breakfast inns ⁶	Red	Yellow	Yellow	Yellow	Red	Green	2: Acceptable only if dwelling site is not within of zone boundaries 3, 4: Incompatible at density >1 d.u./5.0 acres sitewide average or >2.0 d.u. per any single acre See Policy 4.3.2
Multi-Family Residential (≥8 d.u./acre): condominiums, apartments, agricultural-related housing ⁶	Red	Red	Red	Red	Red	Green	
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories	Red	Red	Red	Red	Red	Green	

Table 2

Safety Compatibility Criteria

Cameron Airpark Airport, Georgetown Airport, Placerville Airport

Land Use Category	Safety Zone						Criteria for Conditional Uses
	1	2	3	4	5	6	
<ul style="list-style-type: none"> Multiple land use categories and compatibility criteria may apply to a project Land uses not specifically listed shall be evaluated using the criteria for similar uses Numbers in brackets for some uses are occupancy load factors ¹ 							<ul style="list-style-type: none"> Numbers below indicate zone in which condition applies Nonresidential development must satisfy both forms of intensity limits (see Policy 4.3.3) Up to 10% of total floor area may be devoted to ancillary use (see Policy 4.3.3(d)) See Policy 4.3.4 for information on how to calculate nonresidential intensity Maximum Intensity criteria apply to Normally Compatible as well as Conditional land uses
Max. Sitewide Average Intensity (people/acre) Max. Single-Acre Intensity (people/acre) <i>applicable to all nonresidential development</i>	10 20 ²	60 120	100 250	160 400	100 250	400 1000	
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible	
Short-Term Lodging (≤30 nights): hotels, motels, other transient lodging (except conference/assembly facilities) [approx. 200 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities ⁷	Red	Red	Red	Red	Red	Green	
Educational and Institutional Uses							
Family day care homes (≤14 children)	Red	Red	Yellow	Yellow	Red	Green	3, 4: Allowed only in existing dwellings or where new single-family residential is allowed See Policy 4.3.2(d)
Children’s Schools: K-12, day care centers (>14 children); school libraries ⁷	Red	Red	Yellow	Yellow	Red	Yellow	3, 4: No new sites or land acquisition 6: No new sites or land acquisition within ½ mile of runway 3, 4, 6: Bldg replacement/expansion allowed for existing school sites; expansion limited to ≤50 students (not school staff) See Policy 4.6.3(c)
Adult Education classroom space: adult schools, colleges, universities [approx. 40 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met; also see individual components of campus facilities (e.g., assembly facilities, offices, gymnasiums)
Community Libraries [approx. 100 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met
Indoor Major Assembly Facilities (capacity ≥1,000 people): auditoriums, conference centers, concert halls, indoor arenas ⁴	Red	Red	Red	Red	Red	Yellow	6: Allowed only if beyond ½ mile from runway and alternative site outside zone would not serve intended function; not allowed within ½ mile of runway
Indoor Large Assembly Facilities (capacity 300 to 999 people): movie theaters, places of worship, cemetery chapels, mortuaries ⁴ [approx. 15 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met
Indoor Small Assembly Facilities (capacity <300 people): places of worship, cemetery chapels, mortuaries, meeting halls [approx. 30 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios [approx. 60 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met
In-Patient Medical: hospitals, mental hospitals ⁷	Red	Red	Yellow	Yellow	Red	Green	3, 4: No new sites or land acquisition; replacement/expansion of existing facilities limited to existing size
Out-Patient Medical: health care centers, clinics [approx. 240 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met

Table 2, continued

Land Use Category	Safety Zone						Criteria for Conditional Uses
	1	2	3	4	5	6	
<ul style="list-style-type: none"> Multiple land use categories and compatibility criteria may apply to a project Land uses not specifically listed shall be evaluated using the criteria for similar uses Numbers in brackets for some uses are occupancy load factors ¹ 							<ul style="list-style-type: none"> Numbers below indicate zone in which condition applies Nonresidential development must satisfy both forms of intensity limits (see Policy 4.3.3) Up to 10% of total floor area may be devoted to ancillary use (see Policy 4.3.3(d)) See Policy 4.3.4 for information on how to calculate nonresidential intensity Maximum Intensity criteria apply to Normally Compatible as well as Conditional land uses
Max. Site-wide Average Intensity (people/acre) Max. Single-Acre Intensity (people/acre) <i>applicable to all nonresidential development</i>	10 20 ²	60 120	100 250	160 400	100 250	400 1000	
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible	
Penal Institutions: prisons, reformatories ⁷	Red	Red	Red	Red	Red	Green	
Public Safety Facilities: police, fire stations ⁷	Red	Red	Yellow	Yellow	Yellow	Green	3, 4: Allowed only if alternative site outside zone would not serve intended public function 5: Allowed only if airport serving
Commercial, Office, and Service Use							
Major Retail: regional shopping centers, 'big box' retail [approx. 110 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met; capacity <1,000 people per bldg; evaluate eating/ drinking areas separately if >10% of total floor area
Local Retail: community/neighborhood shopping centers, grocery stores [approx. 170 s.f./person]	Red	Red	Yellow	Yellow	Red	Green	3, 4: Ensure intensity criteria met; evaluate eating/ drinking areas separately if >10% of total floor area
Eating/Drinking Establishments: restaurants, fast-food dining, bars [approx. 60 s.f./person]	Red	Red	Yellow	Yellow	Yellow	Green	3-5: Ensure intensity criteria met
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries [approx. 250 s.f./person]	Red	Yellow	Green	Green	Yellow	Green	2, 5: Ensure intensity criteria met; design site to place parking inside and bldgs outside of zone if possible
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses [approx. 215 s.f./person]	Red	Yellow	Yellow	Yellow	Yellow	Yellow	2-5: Ensure intensity criteria met 6: Review intensity compliance if >3 story bldg and <½ mile from runway
Personal & Miscellaneous Services: barbers, car washes, print shops [approx. 200 s.f./person]	Red	Yellow	Yellow	Yellow	Yellow	Green	2-5: Ensure intensity criteria met
Vehicle Fueling: gas stations, trucking & transportation terminals	Red	Red	Green	Green	Yellow	Green	5: Allowed only if airport serving
Industrial, Manufacturing, and Storage Uses							
Hazardous Materials Production: oil refineries, chemical plants ⁷	Red	Red	Red	Red	Red	Yellow	6: Allowed only if alternative site outside zone would not serve intended function
Heavy Industrial ⁷	Red	Red	Yellow	Yellow	Red	Green	3, 4: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, High Intensity: food products preparation, electronic equipment [approx. 200 s.f./person]	Red	Yellow	Yellow	Yellow	Red	Green	2-4: Ensure intensity criteria met; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft

Table 2, continued

Land Use Category	Safety Zone						Criteria for Conditional Uses
	1	2	3	4	5	6	
<ul style="list-style-type: none"> ▶ Multiple land use categories and compatibility criteria may apply to a project ▶ Land uses not specifically listed shall be evaluated using the criteria for similar uses ▶ Numbers in brackets for some uses are occupancy load factors ¹ 							<ul style="list-style-type: none"> ▶ Numbers below indicate zone in which condition applies ▶ Nonresidential development must satisfy both forms of intensity limits (see Policy 4.3.3) ▶ Up to 10% of total floor area may be devoted to ancillary use (see Policy 4.3.3(d)) ▶ See Policy 4.3.4 for information on how to calculate nonresidential intensity ▶ Maximum Intensity criteria apply to Normally Compatible as well as Conditional land uses
Max. Sitewide Average Intensity (people/acre) Max. Single-Acre Intensity (people/acre) <i>applicable to all nonresidential development</i>	10 20 ²	60 120	100 250	160 400	100 250	400 1000	
Legend (see last page of table for interpretation)	Normally Compatible			Conditional		Incompatible	
Light Industrial, Low Intensity: machine shops, wood products, auto repair [approx. 350 s.f./person]							2-4: Ensure intensity criteria met 5: Single story only; max. 10% in mezzanine 2-5: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses [approx. 1,000 s.f./person]							2, 5: Single story only; max. 10% in mezzanine
Research & Development [approx. 300 s.f./person]							3, 4: Ensure intensity criteria met; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Outdoor Storage: public works yards, automobile dismantling							
Mining & Extraction ⁸							2: Allowed only if intensity criteria met
Transportation, Communication, and Utilities							
Airport Terminals: airline, general aviation							
Rail & Bus Stations							2: Allowed only if alternative site outside zone would not serve intended public function 5: Allowed only if airport serving
Transportation Routes: road & rail rights-of-way, bus stops							1: Not allowed in Object Free Area (OFA) ²
Auto Parking: surface lots, structures							1: Not allowed in Object Free Area (OFA) ²
Communications Facilities: emergency communications, broadcast & cell towers ^{7,9}							3-5: Allowed only if alternative site outside zone would not serve intended public function; not allowed within ½ of runway 6: Not allowed within ½ mile of runway
Power Plants ^{7,9}							
Electrical Substations ⁷							2, 5: Allowed only if alternative site outside zone would not serve intended public function
Wastewater Facilities: treatment, disposal ⁷							2, 5: Allowed only if alternative site outside zone would not serve intended public function
Solid Waste Disposal Facilities: landfill, incineration ⁴							2: Allowed only if alternative site outside zone would not serve intended public function
Solid Waste Transfer Facilities, Recycle Centers ³							

Table 2, continued

	Land Use Acceptability	Interpretation/Comments
	<i>Normally Compatible</i>	Normal examples of the use are compatible under the presumption that usage criteria will be met. Atypical examples may require review to ensure compliance with usage intensity criteria. Noise, airspace protection, and/or overflight limitations may apply.
	<i>Conditional</i>	Use is compatible if indicated conditions are met.
	<i>Incompatible</i>	Use should not be permitted under any circumstances.
<p>Notes</p> <p>¹ Common occupancy load factors source (approx. number of square feet per person): compiled by Mead & Hunt, Inc. based upon information from various sources including building and fire codes, facility management industry sources, and ALUC surveys.</p> <p>² No new structures intended to be regularly occupied are allowed.</p> <p>³ Object Free Area (OFA): Dimensions are established by FAA airport design standards for the runway and are depicted on the respective Safety Zones Policy Maps in Chapter 6.</p> <p>⁴ These uses may attract birds or other wildlife that could pose hazards to flight. See <i>Section 4.4</i> for applicable airspace protection policies.</p> <p>⁵ Occupancy limits for Large and Major Assembly Facilities coincide with International Building Code categories.</p> <p>⁶ Construction of a single-family home, including a second dwelling unit as defined by state law, allowed on a legal lot of record if such use is permitted by local land use regulations. A family day care home (serving ≤ 14 children) may be established in any dwelling. See <i>Policies 2.3.4(a)(4)</i> and <i>4.3.2(d)</i>.</p> <p>⁷ These uses constitute uses of special concern for which safety restrictions apply irrespective of usage intensities. See <i>Policy 4.3.5</i>.</p> <p>⁸ These uses may generate dust or other hazards to flight. See <i>Section 4.4</i> for applicable policies.</p> <p>⁹ Power lines or other tall objects associated with these uses may be hazards to flight. See <i>Section 4.4</i> for applicable policies.</p>		

Table 2, continued