

Zone	Noise and Overflight Factors		Safety and Airspace Protection Factors	
	Noise Impact	Overflight Factors	Relative Risk Level (% of accidents)	Nature of Accident Risk ¹
A <i>Runway Protection Zone and Object Free Area</i>	Very High	<ul style="list-style-type: none"> Contains the 65-CNEL contour. Exposed to loud overflight of departing aircraft. 	Very High - 39%	<ul style="list-style-type: none"> Landing undershoots and overshoots; overruns on aborted takeoffs; loss of control on takeoff.
B1 <i>Inner Approach/Departure Area</i>	High	<ul style="list-style-type: none"> Generally contains the 60-CNEL contour. Single-event aircraft noise sufficient to disrupt wide range of land use activities including indoors if windows open. 	High - 22%	<ul style="list-style-type: none"> Aircraft at low altitude with limited directional options in emergencies, typically below 200-400 feet on approach, engine at maximum stress on takeoff with essentially no chance of turning back to the airport.
B2 <i>Extended Approach/Departure Area and Inner Turning Area</i>	Moderate	<ul style="list-style-type: none"> Aircraft typically below 1,000 feet above ground on arrival and departure. Individual events occasionally loud enough to intrude upon indoor activities; may disrupt noise-sensitive outdoor activities such as music concerts. 	Moderate - 6%	<ul style="list-style-type: none"> Includes areas where aircraft turn from base to final approach legs of standard pattern and descend toward runway. On departure, normally complete transition from takeoff power and flap settings to climb configuration and begin turns
C <i>Runway Sideline</i>	Moderate to High	<ul style="list-style-type: none"> Generally contains the 60-CNEL contour. Exposed to loud single-event from takeoffs and jet thrust-reverse on landing; also from pre-flight run-ups and extended idling on the ramp. 	Low to Moderate - 5%	<ul style="list-style-type: none"> Area not normally overflown by aircraft; primary risk is with aircraft (especially twins) losing directional control on takeoff.
D <i>Primary Traffic Pattern</i>	Moderate	<ul style="list-style-type: none"> Aircraft at or above traffic pattern altitude. More concern with respect to individual loud events than with cumulative noise contours. Outdoor events, such as music concerts, may be affected by single events or repetitive overflight. Residential density criteria for this zone provide two options on the basis that noise concerns can be minimized either by limiting number of dwelling units in affected areas or by allowing high-density development that tends to have comparatively high ambient noise levels. 	Low - 18%	<ul style="list-style-type: none"> Aircraft at traffic pattern altitude Risk concern is primarily with uses for which potential consequence are severe (e.g., very busy day, high intensity of activity in a confined area) Significant percentage of accidents, but spread over a wide area.
E <i>Other Airport Environs</i>	Low	<ul style="list-style-type: none"> Occasional overflights intrusive to some outdoor activities 	Low	<ul style="list-style-type: none"> Risk concerns only with uses for which potential consequences are severe.

Table 2-3 Compatibility Zone Factors

1. Accident rates are based on the CalTrans Handbook

Zone	Location	Maximum Densities / Intensities				Req'd Open Land ³	Additional Comments	
		Residential (du/ac) ¹	Other Uses (People/ac) ²				Prohibited Uses ⁴	Other Development Conditions ⁵
			Avg ⁶	Single Acre ⁷	with Bonus ⁸			
A	Runway Protection Zone, and Object Free Area	0	10	10	10	All remaining land	<ul style="list-style-type: none"> All structures except ones with location set by aeronautical function Assemblages of people Objects exceeding FAR Part 77 height limits Storage of hazardous materials Hazards to flight⁹ 	<ul style="list-style-type: none"> Avigation easement dedication
B1	Inner Approach / Departure area	.1 (10-acre parcel)	40	80	60	30%	<ul style="list-style-type: none"> Children's schools, day care centers, libraries Hospitals, nursing homes Noise-sensitive outdoor nonresidential use¹⁶ Critical community infrastructure facilities¹³ Above ground bulk storage of hazardous materials¹⁰ Hazards to flight⁹ Bldgs with >2 above-ground habitable floors 	<ul style="list-style-type: none"> Aviation easement dedication Locate structures maximum distance from extended runway centerline Maximum of 45db CNEL in residential and office buildings¹¹ Airspace review required for objects >35 feet tall¹²
B2	Extended Approach / Departure area, and Turning areas	.4 (2.5 acre parcel)	60	120	120	20%	<ul style="list-style-type: none"> Children's schools, day care centers, libraries Hospitals, nursing homes Highly noise-sensitive uses Hazards to flight⁹ Bldgs with >2 above-ground habitable floors 	<ul style="list-style-type: none"> Aviation easement dedication Locate structures maximum distance from extended runway centerline Maximum of 45db CNEL in residential and office buildings¹¹ Airspace review required for objects >70 feet tall¹²
C	Runway Sideline	.2 (5-acre parcel)	80	160	160	30%	Same as B1	Same as B1
D	Primary Traffic Pattern	Single Family: 4 du/ac Multi- ¹⁸ Family: ≥8 du/ac	150	450	300	10%	<ul style="list-style-type: none"> Noise-sensitive outdoor nonresidential use¹⁶ Hazards to flight⁹ 	<ul style="list-style-type: none"> Deed notice required Airspace review required for objects >70 feet tall¹⁴ Children's schools, hospitals, nursing home discouraged¹⁵
E	Other Airport Environs	No limit	No limit ¹⁷			No Req't	<ul style="list-style-type: none"> Hazards to flight⁹ 	<ul style="list-style-type: none"> Airspace review required for objects >150 feet tall¹⁴ Major spectator-oriented sports stadiums, amphitheaters, concert halls discouraged beneath principal flight tracks¹⁷

Table 2-4 Primary Compatibility Criteria

Primary Criteria Footnotes:

- 1** Residential development should not contain more than the indicated number of dwelling units (both primary and secondary) per gross acre. Clustering of units is encouraged. See Policy 8.4.7 “Limitations on Clustering”.
- 2** Usage calculations shall include all people who may be on the property (e.g., employees, customers/visitors, etc.) both indoors and outside. These criteria are intended as general planning guidelines to aid in determining the acceptability of proposed land uses.
- 3** Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects. See supporting compatibility policies on safety for a definition of open land. Policy 8.4.6 “Open Space Requirement”
- 4** The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.
- 5** Airport proximity and the existence of aircraft overflights should be disclosed as part of all real estate transactions involving property within an Airport Influence Area. Easement dedication and deed notice requirements apply only to new development.
- 6** The total number of people permitted on a project site at any time, except rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Rare special events are ones (such as 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.
- 7** Clustering of nonresidential development is permitted. However, no single acre of a project site shall exceed the indicated number of people per acre. See Policy 8.4.7 “Limitations on Clustering”
- 8** An intensity bonus may be allowed if the building design includes features intend to reduce risks to occupants in the event of an aircraft collision with the building. See policy 8.4.11 “Risk Reduction through Building Design”.
- 9** Hazards to flight include physical, visual, and electric forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is prohibited. See policies in Policy 8.5 “Airspace Protection Compatibility” and 8.7 “Wildlife Compatibility”.
- 10** Storage of aviation fuel and other aviation-related flammable materials on the airport is exempted from this criterion. Storage of up to 6,000 gallons of nonaviation flammable materials is also exempted. See Policy 8.4.10 “Land Uses of Special Concern”.
- 11** See the supporting compatibility policy on interior noise, Policy 8.2.5 “Interior Noise Levels”
- 12** Objects up to the specified height are permitted. However the FAA may require marking and lighting of certain objects. See Policy 8.5.2 “ALUC Review of Height of Proposed Objects”.
- 13** Critical community facilities including power plants, electrical substations, and public communications facilities. See Policy 8.4.10(d).
- 14** This height criteria is for general guidance. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not to be obstructions. See policies in 8.3 “Height Compatibility”.
- 15** Discouraged uses should generally not be permitted unless no feasible alternative is available.
- 16** Examples of highly noise-sensitive outdoor nonresidential uses that should be prohibited include amphitheatres and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
- 17** Although no explicit upper limit on usage intensity is defined for Zone E, land uses of the types listed-uses that attract very high concentrations of people in confined areas-are discouraged in locations below or near the principal arrival and departure flight tracks. This limitation notwithstanding, no use shall be prohibited in Zone E if its usage intensity is such that it would be permitted in Zone D.
- 18** Two options are provided for residential densities in Zone D. Option 1 has a density limit of 4 dwelling units per acre (*i.e.*, an average parcel size of 1/4 gross acre). Option 2 requires that the density be a *minimum* of 8 dwelling units per acre (*i.e.*, multifamily). The choice between these two options is at the discretion of the local land use jurisdiction. See Table 2-3 for an explanation of the rationale. All other criteria for Zone D apply to both options.

Table 2-4 “Primary Compatibility Criteria” (continued)