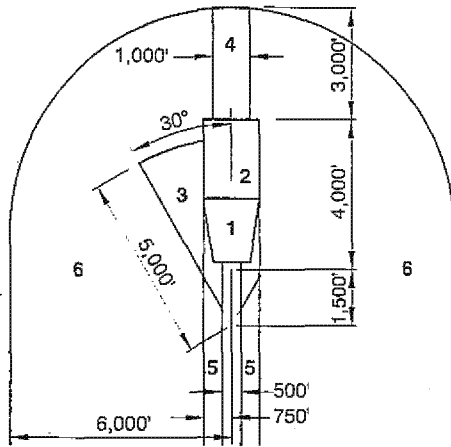


FIGURE 3A

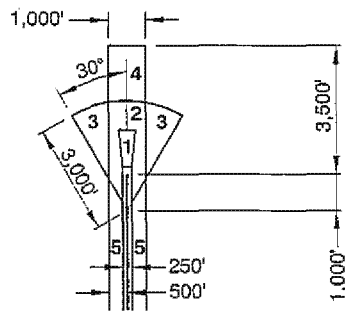
Safety Compatibility Zone Examples – General Aviation Runways



**Example 4:  
General Aviation Runway with  
Single-Sided Traffic Pattern**

**Assumptions:**

- No traffic pattern on right
  - Length 4,000 to 5,999 feet
  - Approach visibility minimums  $\geq 3/4$  mile and  $< 1$  mile
  - Zone 1 = 1,000' x 1,510' x 1,700'
- See Note 1.



**Example 5:  
Low-Activity General Aviation Runway**

**Assumptions:**

- Less than 2,000 takeoffs and landings per year at individual runway end.
  - Length less than 4,000 feet
  - Approach visibility minimums  $\geq 1$  mile or visual approach only
  - Zone 1 = 250' x 450' x 1,000'
- See Note 1.

**Legend**

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

**Notes:**

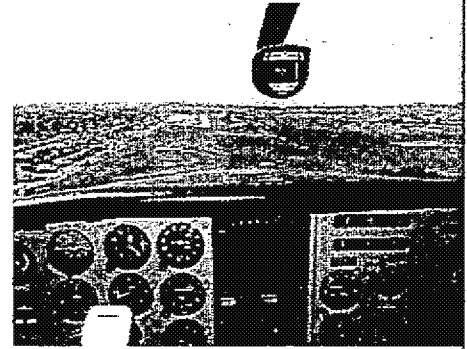
1. RPZ (Zone 1) size in each example is as indicated by FAA criteria for the approach type assumed. Adjustment may be necessary if the Approach type differs.
2. See Figure 3A for factors to consider regarding other possible adjustments to these zones to reflect characteristics of a specific airport runway.
3. See Figures 4B through 4G for guidance on compatibility criteria applicable with each zone.

*These examples are intended to provide general guidance for establishment of airport safety compatibility zones. They do not represent California Department of Transportation standards or policy.*

FIGURE 3A CONTINUED

**Nature of Risk**

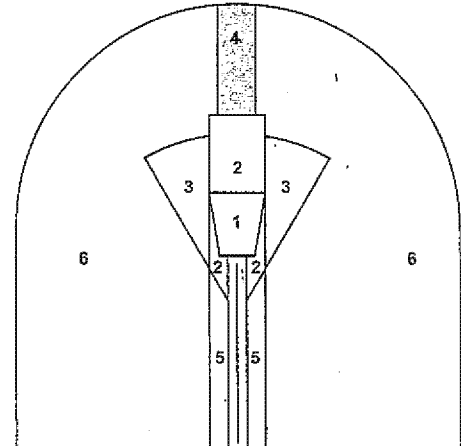
- Normal Maneuvers
  - Approaching aircraft usually at less than traffic pattern altitude. Particularly applicable for busy general aviation runways (because of elongated traffic pattern), runways with straight-in instrument approach procedures, and other runways where straight-in or straight-out flight paths are common
- Altitude
  - Less than 1,000 feet above runway
- Common Accident Types
  - Arrival: Pilot undershoots runway during an instrument approach, aircraft loses engine on approach, forced landing
  - Departure: Mechanical failure on takeoff
- Risk Level
  - Moderate
  - Percentage of near-runway accidents in this zone: 2% - 6%



LONG FINAL

**Basic Compatibility Policies**

- Normally Allow
  - Uses allowed in Zone 3
  - Restaurants, retail, industrial
- Limit
  - Residential uses to low density
- Avoid
  - High-intensity retail or office buildings
- Prohibit
  - Children's schools, large daycare centers, hospitals, nursing homes
  - Stadiums, group recreational uses
- Other Factors
  - Most low to moderate intensity uses are acceptable. Restrict assemblages of people
  - Consider potential airspace protection hazards of certain energy/industrial projects



Refer to Chapter 3 for dimensions.

	Maximum Residential Densities	Maximum Nonresidential Intensities	Maximum Single Acre
	Average number of dwelling units per gross acre	Average number of people per gross acre	3x the Average number of people per gross acre
Rural	See Note A	70 – 100	210 – 300
Suburban	1 per 2 - 5 ac.	100 – 150	300 – 450
Urban	See Note B	150 – 200	450 – 600
Dense Urban	See Note B	See Note B	See Note B

Note A: Maintain current zoning if less than density criteria for suburban setting.

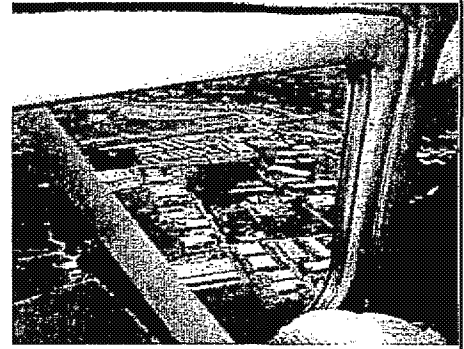
Note B: Allow infill at up average density/intensity of comparable surrounding users.

FIGURE 4E

**Safety Zone 4 – Outer Approach/Departure Zone**

**Nature of Risk**

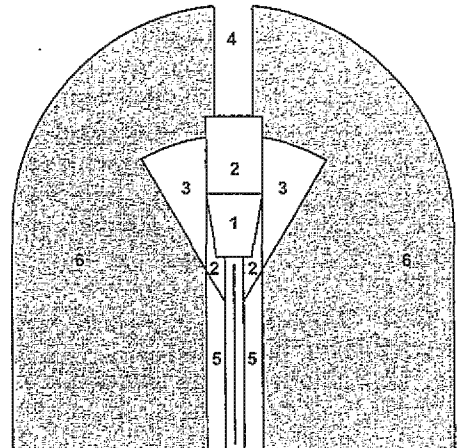
- Normal Maneuvers
  - Aircraft within a regular traffic pattern and pattern entry routes
- Altitude
  - Ranging from 1,000 to 1,500 feet above runway
- Common Accident Types
  - Arrival: Pattern accidents in proximity of airport
  - Departure: Emergency landings
- Risk Level
  - Low
  - Percentage of near-runway accidents in this zone: 18% - 29% (percentage is high because of large area encompassed)



IN TRAFFIC PATTERN

**Basic Compatibility Policies**

- Normally Allow
  - Residential uses (however, noise and overflight impacts should be considered where ambient noise levels are low)
- Limit
  - Children's schools, large day care centers, hospitals, and nursing homes
  - Processing and storage of bulk quantities of highly hazardous materials
- Avoid
  - Outdoor stadiums and similar uses with very high intensities
- Prohibit
  - None



Refer to Chapter 3 for dimensions.

	Maximum Residential Densities	Maximum Nonresidential Intensities	Maximum Single Acre
	Average number of dwelling units per gross acre	Average number of people per gross acre	4x the Average number of people per gross acre
Rural	No Limit – See Note A	150 – 200	600 – 800
Suburban	No Limit – See Note A	200 – 300	800 – 1,200
Urban	No Limit – See Note A	No Limit – See Note B	No Limit – See Note B
Dense Urban	No Limit – See Note A	No Limit – See Note B	No Limit – See Note B

Note A: Noise and overflight should be considered.

Note B: Large stadiums and similar uses should be avoided.

FIGURE 4G

**Safety Zone 6 – Traffic Pattern Zone**

### Regional Planning Agencies

Some single- or multi-county regional planning agencies in the state have responsibilities for reviewing grant applications and setting regional priorities for the use of federal and state grant funds. These agencies also frequently review and comment upon airport master plans and environmental documents for airport plans and improvements.

### Airport Proprietors

No state laws require the participation of airport proprietors in the review of proposed land use development in the airport vicinity. These agencies are nevertheless often the most knowledgeable about the effects that nearby development would have upon the operation of their airports.

---

*Proponents of major development projects and the local agencies that have land use jurisdiction over airport environs are urged to seek the input of airport management when preparing local plans and evaluating development proposals.*

---

## 5.4 COMPATIBILITY PLANNING IN COUNTIES WITHOUT ALUCS

### 5.4.1 Requirements

As a result of either a special exemption or through establishment of a designated agency (alternative process), several counties in the state do not have an airport land use commission. As emphasized in Chapter 1, however, the lack of an ALUC does not eliminate, but increases the responsibilities of local agencies to engage in airport land use compatibility planning. The obligations of local agencies in a county without an ALUC extend both to preparation of ALUCPs and to the subsequent review of individual development proposals.

In accordance with state law (PUC Section 21670.1(c)(2)), establishment of this formation choice in a county requires the county and “the appropriate affected cities having jurisdiction over an airport” to designate an agency and adopt processes which provide for:

- ◆ Preparation, adoption, and amendment of an ALUCP for each public-use airport in the county and designation of an agency responsible for these actions;
- ◆ Public and agency notification regarding ALUCP preparation, adoption, or amendment;
- ◆ Mediation of disputes regarding preparation, adoption, or amendment of ALUCPs;
- ◆ Amendment of general plans and specific plans to be consistent with the ALUCPs.

---

*Under the law, the Division of Aeronautics has the responsibility for reviewing and approving the processes by which a county and each affected city in the county establish and implement compatibility planning under the designated agency. To be acceptable, the process must, at a minimum, address all of the topics associated with making local plans consistent with an ALUCP.*

---