

POLICY GUIDELINES FOR COMPATIBILITY FACTORS: SAFETY

SAFETY

Objective:

Establish safety criteria and strategies that minimize risks associated with potential aircraft accidents:

- (i) Safety for people on the ground in the event of an aircraft accident; and
- (ii) Safety for occupants of an aircraft involved in an accident.

Adjustment of safety compatibility zones in response to existing urban development patterns may be reasonable in locations where safety concerns are moderate to low.

Measurement:

Risk assessment – what is the potential for an accident to occur (both where and when):

- (i) Spatial Distribution – Where can aircraft accidents be expected to occur?
- (ii) Frequency of Occurrences – What is the chance that an accident will occur in a specified period of time?
- (iii) Potential Consequences – What could happen if incompatible development is allowed to occur?

Compatibility Zone Delineation:

- (i) Historical spatial distribution of aircraft accidents for various categories of runways (i.e., where accidents are most likely to occur when they occur.)
- (ii) Type of aircraft usage, flight procedures and other operational characteristics particular to each runway end.
- (iii) Physical limitations of aircraft maneuverability.

Compatibility Strategies and Criteria for General Aviation and Commercial Airports:¹

Note: The subcommittee members represent a number of different constituencies with different interests. Various members of the subcommittee and staff have, therefore, been unable to reach consensus on a number of the recommendations relating to use limitations in the safety zones. Therefore, in a number of circumstances, the compatibility strategies and criteria provided below for the safety zones reflect a “range” of recommendations from staff and the subcommittee members (i.e., “recommend allowance to limitations”). This range of recommendations often reflects differences depending, upon where, in the zone, the use would be located. This range will be provided to the ALUC for consideration.

- (i) *Runway Protection Zone (Zone 1): Risk Level – Very High.*
 - Subcommittee note: Runway Protection Zone (RPZ) recommendations should be consistent with FAA requirements/ Advisory Circulars.*
 - (a) Recommend Allowance: Airport ownership of property strongly encouraged.
 - (b) Recommend Avoidance: Nonresidential land uses except if very low intensity in character and confined to the sides and outer end of the area.
 - (c) Recommend Prohibition: All new structures, except as provided by infill/reconstruction/redevelopment provisions.
 - (d) Recommend Prohibition: All residential land uses.

- (ii) *Inner Approach/Departure Zone (Zone 2): Risk Level – High.*
 - (a) Recommend Limitations: Nonresidential uses generally compatible with limitations, including intensity limitations (eliminate single acre approach). Locate structures maximum distance from extended runway centerline.
 - (b) Recommend Prohibition to Avoidance: Residential uses (avoidance recommended when residential tied to established residential communities). Exception: see infill provisions.
 - (c) Recommend Prohibition to Avoidance: Children’s schools, day care centers (avoidance recommended when schools/day care centers tied to established communities and/or existing schools/day care centers require expansion to meet increased demand).

¹ Airport-specific modifications to the Compatibility Strategies And Criteria for San Diego International Airport will be addressed as part of the airport land use compatibility plan revision process.

- (d) Recommend Prohibition: Hospitals, nursing homes, places of worship.

Subcommittee note: "Prohibition" recommended for hospitals and nursing homes in light of the density often associated with these uses as well as the fulltime residency aspect of these uses. "Prohibition" recommended for places of worship in light of the potential large congregation of individuals.

- (e) Recommend Prohibition to Avoidance: Storage of large quantities of hazardous materials.

- (f) Recommend Prohibition to Avoidance: Critical community infrastructure facilities.

(iii) *Inner Turning Zone (Zone 3): Risk Level – Moderate.*

Subcommittee note: Many subcommittee members have voiced concern regarding the potential width of Zone 3 – some subcommittee members would like to see the boundaries of Zone 3 narrowly defined.

- (a) Recommend Limitations to Allowance: Residential use generally compatible with limitations.

- (b) Recommend Limitations to Allowance: Nonresidential uses generally compatible with limitations, where appropriate.

- (c) Recommend Prohibition to Allowance: Children's schools (allowance when schools tied to established communities – or when necessary to accommodate new residential communities within Zone 3).

- (d) Recommend Prohibition to Limitations: Day care centers (with density/intensity limitations), hospitals, nursing homes, places of worship.

- (e) Recommend Avoidance to Limitations: Storage of large quantities of hazardous materials.

- (f) Recommend Avoidance to Limitations: Critical community infrastructure.

(iv) *Outer Approach/Departure Zone (Zone 4): Risk Level – Moderate.*

Note: Generally, the use limitations in Zone 4 are similar to Zone 3; however, the density/intensity limitations may be less stringent than Zone 3).

- (a) Recommend Limitations to Allowance: Residential uses generally compatible with limitations, including density limitations.

- (b) Recommend Limitations to Allowance: Nonresidential uses having moderate to higher usage intensities.

- (c) Recommend Prohibition to Allowance: Children's schools (allowance when schools tied to established communities – or when necessary to accommodate new residential communities within Zone 4).
 - (d) Recommend Prohibition to Limitations: Day care centers (with density/intensity limitations), hospitals, nursing homes, places of worship.
 - (e) Recommend Limitations: Storage of large quantities of hazardous materials.
 - (f) Recommend Limitations: Critical community infrastructure facilities.
- (v) *Sideline Zone (Zone 5): Risk Level – Low to Moderate.*
- (a) Recommend Avoidance: Residential uses.
 - (b) Recommend Limitations: Nonresidential uses generally compatible with limitations, including intensity limitations.
 - (c) Recommend Prohibition to Avoidance: Children's schools.
 - (d) Recommend Prohibition: Day care centers, hospitals, nursing homes, places of worship.
 - (e) Recommend Limitations: Storage of large quantities of hazardous materials.
 - (f) Recommend Avoidance: Critical community infrastructure.
- (vi) *Traffic Pattern Zone (Zone 6): Risk Level – Low.*
- (a) Recommend Allowance: Residential uses.
 - (b) Recommend Allowance: Nonresidential uses.
 - (c) Recommend Allowance: Children's schools, day care centers, hospitals, nursing homes, places of worship.
 - (d) Recommend Allowance: Outdoor stadiums and similar uses with very high intensities. (Concerns where outdoor stadium use may impact ability to have aircraft operations in the vicinity of an existing airport).
 - (e) Recommend Allowance: Storage of large quantities of hazardous materials.
 - (f) Recommend Allowance: Critical community infrastructure.

Definitions:

The compatibility strategies and criteria have been defined in terms of "recommendations" to reflect the nature of the ALUC's role in land use planning.

Specifically, the ALUC provides “recommendations” to the local land use jurisdiction with respect to the uses that it believes are “compatible” (i.e., “recommend allowance”), “conditionally compatible” (i.e., recommend limitations or avoidance”) or “incompatible” (i.e., recommend prohibition) in a given location. Each of these terms is defined further below.

Recommend Allowance: Use is acceptable.

Recommend Limitations: Use is acceptable only if density/intensity restrictions are met, or if use is conditioned upon implementation of other specific mitigation measures to minimize or avoid safety concerns related to the use being located in close proximity to the Airport.

Recommend Avoidance: Use generally not permitted unless no feasible alternative is available, or unless the safety impacts of the use can be mitigated to minimize or avoid safety concerns related to the use being located in proximity to the Airport.

Recommend Prohibition: Use should not be permitted under any circumstances.

Schools: Through grade 12.

Hazardous Materials: If the material is labeled danger, warning, toxic, caution, poison, flammable, corrosive or reactive, the material is very likely to be a hazardous material. *Source: County of San Diego, Dept. of Environmental Health, Hazardous Materials Division.*

Density: The number of dwelling units per acre of land.

Intensity: The number of persons per acre of land.