

# Appendices

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## State Laws Related to Airport Land Use Planning

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(as of January 2013)

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**AERONAUTICS LAW**  
**PUBLIC UTILITIES CODE**  
**Division 9—Aviation**  
**Part 1—State Aeronautics Act**  
**Chapter 4—Airports and Air Navigation Facilities**  
**Article 3.5—Airport Land Use Commission**

**21670. Creation; Membership; Selection**

- (a) The Legislature hereby finds and declares that:
- (1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.
  - (2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.
- (b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation. For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:
- (1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.
  - (2) Two representing the county, appointed by the board of supervisors.
  - (3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.
  - (4) One representing the general public, appointed by the other six members of the commission.
- (c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

- (d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.
- (e) A person having an “expertise in aviation” means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport.
- (f) It is the intent of the Legislature to clarify that, for the purposes of this article that special districts, school districts and community college districts are included among the local agencies that are subject to airport land use laws and other requirements of this article.

**21670.1. Action by Designated Body Instead of Commission**

- (a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.
- (b) A body designated pursuant to subdivision (a) that does not include among its membership at least two members having expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.
- (c) (1) Notwithstanding subdivisions (a) and (b), and subdivision (b) of Section 21670, if the board of supervisors of a county and each affected city in that county each makes a determination that proper land use planning pursuant to this article can be accomplished pursuant to this subdivision, then a commission need not be formed in that county.
- (2) If the board of supervisors of a county and each affected city makes a determination that proper land use planning may be accomplished and a commission is not formed pursuant to paragraph (1), that county and the appropriate affected cities having jurisdiction over an airport, subject to the review and approval by the Division of Aeronautics of the department, shall do all of the following:
  - (A) Adopt processes for the preparation, adoption, and amendment of the airport land use compatibility plan for each airport that is served by a scheduled airline or operated for the benefit of the general public.
  - (B) Adopt processes for the notification of the general public, landowners, interested groups, and other public agencies regarding the preparation, adoption, and amendment of the airport land use compatibility plans.
  - (C) Adopt processes for the mediation of disputes arising from the preparation, adoption, and amendment of the airport land use compatibility plans.
  - (D) Adopt processes for the amendment of general and specific plans to be consistent with the airport land use compatibility plans.
  - (E) Designate the agency that shall be responsible for the preparation, adoption, and amendment of each airport land use compatibility plan.

- (3) The Division of Aeronautics of the department shall review the processes adopted pursuant to paragraph (2), and shall approve the processes if the division determines that the processes are consistent with the procedure required by this article and will do all of the following:
    - (A) Result in the preparation, adoption, and implementation of plans within a reasonable amount of time.
    - (B) Rely on the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.
    - (C) Provide adequate opportunities for notice to, review of, and comment by the general public, landowners, interested groups, and other public agencies.
  - (4) If the county does not comply with the requirements of paragraph (2) within 120 days, then the airport land use compatibility plan and amendments shall not be considered adopted pursuant to this article and a commission shall be established within 90 days of the determination of noncompliance by the division and an airport land use compatibility plan shall be adopted pursuant to this article within 90 days of the establishment of the commission.
- (d) A commission need not be formed in a county that has contracted for the preparation of airport land use compatibility plans with the Division of Aeronautics under the California Aid to Airports Program (Chapter 4 (commencing with Section 4050) of Title 21 of the California Code of Regulations), Project Ker-VAR 90-1, and that submits all of the following information to the Division of Aeronautics for review and comment that the county and the cities affected by the airports within the county, as defined by the airport land use compatibility plans:
- (1) Agree to adopt and implement the airport land use compatibility plans that have been developed under contract.
  - (2) Incorporated the height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations as part of the general and specific plans for the county and for each affected city.
  - (3) If the county does not comply with this subdivision on or before May 1, 1995, then a commission shall be established in accordance with this article.
- (e) (1) A commission need not be formed in a county if all of the following conditions are met:
- (A) The county has only one public use airport that is owned by a city.
  - (B) (i) The county and the affected city adopt the elements in paragraph (2) of subdivision (d), as part of their general and specific plans for the county and the affected city.
  - (ii) The general and specific plans shall be submitted, upon adoption, to the Division of Aeronautics. If the county and the affected city do not submit the elements specified in paragraph (2) of subdivision (d), on or before May 1, 1996, then a commission shall be established in accordance with this article.

## **21670.2. Application to Counties Having over 4 Million in Population**

- (a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.
- (b) By January 1, 1992, the county regional planning commission shall adopt the airport land use compatibility plans required pursuant to Section 21675.
- (c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the airport land use compatibility plans required pursuant to Section 21675 are not adopted by the county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the airport land use compatibility plans are adopted.

## **21670.3 San Diego County**

- (a) Sections 21670 and 21670.1 do not apply to the County of San Diego. In that county, the San Diego County Regional Airport Authority, as established pursuant to Section 170002, shall be responsible for the preparation, adoption, and amendment of an airport land use compatibility plan for each airport in San Diego County.
- (b) The San Diego County Regional Airport Authority shall engage in a public collaborative planning process when preparing and updating an airport land use compatibility plan.

## **21670.4. Intercounty Airports**

- (a) As used in this section, “intercounty airport” means any airport bisected by a county line through its runways, runway protection zones, inner safety zones, inner turning zones, outer safety zones, or sideline safety zones, as defined by the department’s Airport Land Use Planning Handbook and referenced in the airport land use compatibility plan formulated under Section 21675.
- (b) It is the purpose of this section to provide the opportunity to establish a separate airport land use commission so that an intercounty airport may be served by a single airport land use planning agency, rather than having to look separately to the airport land use commissions of the affected counties.
- (c) In addition to the airport land use commissions created under Section 21670 or the alternatives established under Section 21670.1, for their respective counties, the boards of supervisors and city selection committees for the affected counties, by independent majority vote of each county’s two delegations, for any intercounty airport, may do either of the following:
  - (1) Establish a single separate airport land use commission for that airport. That commission shall consist of seven members to be selected as follows:
    - (A) One representing the cities in each of the counties, appointed by that county’s city selection committee.
    - (B) One representing each of the counties, appointed by the board of supervisors of each county.

- (C) One from each county having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.
  - (D) One representing the general public, appointed by the other six members of the commission.
- (2) In accordance with subdivision (a) or (b) of Section 21670.1, designate an existing appropriate entity as that airport's land use commission.

### **21670.6. Court and Mediation Proceedings**

Any action brought in the superior court relating to this article may be subject to mediation proceeding conducted pursuant to Chapter 9.3 (commencing with Section 66030) of Division I of Title 7 of the Government Code.

### **21671. Airports Owned by a City, District or County**

In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

### **21671.5. Term of Office**

- (a) Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body that originally appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing that member. The expiration date of the term of office of each member shall be the first Monday in May in the year in which that member's term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.
- (b) Compensation, if any, shall be determined by the board of supervisors.
- (c) Staff assistance, including the mailing of notices and the keeping of minutes and necessary quarters, equipment, and supplies, shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.
- (d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.
- (e) The commission shall meet at the call of the commission chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

- (f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission that has not adopted the airport land use compatibility plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.
- (g) In any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the airport land use compatibility plans are complete by that date, may continue charging fees after June 30, 1992. If the airport land use compatibility plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

**21672. Rules and Regulations**

Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

**21673. Initiation of Proceedings for Creation by Owner of Airport**

In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

**21674. Powers and Duties**

The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

- (a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.
- (b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.
- (c) To prepare and adopt an airport land use compatibility plan pursuant to Section 21675.
- (d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.
- (e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.
- (f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

**21674.5. Training of Airport Land Use Commission's Staff**

- (a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.
- (b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:
  - (1) The establishment of a process for the development and adoption of airport land use compatibility plans.
  - (2) The development of criteria for determining the airport influence area.
  - (3) The identification of essential elements that should be included in the airport land use compatibility plans.
  - (4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.
  - (5) Any other organizational, operational, procedural, or technical responsibilities and functions that the department determines to be appropriate to provide to commission staff and for which it determines there is a need for staff training or development.
- (c) The department may provide training and development programs for airport land use commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:
  - (1) By offering formal courses or training programs.
  - (2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.
  - (3) By producing and making available written information.
  - (4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

**21674.7. Airport Land Use Planning Handbook**

- (a) An airport land use commission that formulates, adopts or amends an airport land use compatibility plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation.
- (b) It is the intent of the Legislature to discourage incompatible land uses near existing airports. Therefore, prior to granting permits for the renovation or remodeling of an existing building, structure, or facility, and before the construction of a new building, it is the intent of the Legislature that local agencies shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, to the extent that the criteria has been incorporated into the plan prepared by a commission pursuant to Section 21675. This subdivision does not limit the jurisdiction of a commission as established by this article. This subdivision does not limit the

authority of local agencies to overrule commission actions or recommendations pursuant to Sections 21676, 21676.5, or 21677.

**21675. Land Use Plan**

- (a) Each commission shall formulate an airport land use compatibility plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission airport land use compatibility plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation that reflects the anticipated growth of the airport during at least the next 20 years. In formulating an airport land use compatibility plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the airport influence area. The airport land use compatibility plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.
- (b) The commission shall include, within its airport land use compatibility plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any military airport for all of the purposes specified in subdivision (a). The airport land use compatibility plan shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport. This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.
- (c) The airport influence area shall be established by the commission after hearing and consultation with the involved agencies.
- (d) The commission shall submit to the Division of Aeronautics of the department one copy of the airport land use compatibility plan and each amendment to the plan.
- (e) If an airport land use compatibility plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

**21675.1. Adoption of Land Use Plan**

- (a) By June 30, 1991, each commission shall adopt the airport land use compatibility plan required pursuant to Section 21675, except that any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, shall adopt that airport land use compatibility plan on or before June 30, 1992.
- (b) Until a commission adopts an airport land use compatibility plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, “vicinity” means land that will be included or reasonably could be included within the airport land use compatibility plan. If the commission has not designated an airport influence area for the airport land use compatibility plan, then “vicinity” means land within two miles of the boundary of a public airport.
- (c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

- (1) The commission is making substantial progress toward the completion of the airport land use compatibility plan.
  - (2) There is a reasonable probability that the action, regulation, or permit will be consistent with the airport land use compatibility plan being prepared by the commission.
  - (3) There is little or no probability of substantial detriment to or interference with the future adopted airport land use compatibility plan if the action, regulation, or permit is ultimately inconsistent with the airport land use compatibility plan.
- (d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.
  - (e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the airport land use compatibility plan.
  - (f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport is not liable for damages to property or personal injury resulting from the city's or county's decision to proceed with the action, regulation, or permit.
  - (g) A commission may adopt rules and regulations that exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:
    - (1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.
    - (2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

## **21675.2. Approval or Disapproval of Actions, Regulations, or Permits**

- (a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or proceedings, except previously filed pending matters of the same character.
- (b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration of the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the location of any proposed development, the application number, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the

public notice is provided. If the applicant provides notice pursuant to this section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

- (c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.
- (d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

## **21676. Review of Local General Plans**

- (a) Each local agency whose general plan includes areas covered by an airport land use compatibility plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the airport land use compatibility plan. If the plan or plans are inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its airport land use compatibility plans. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.
- (b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the public record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.
- (c) Each public agency owning any airport within the boundaries of an airport land use compatibility plan shall, prior to modification of its airport master plan, refer any proposed change to the airport

land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

- (d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the airport land use compatibility plan.

### **21676.5. Review of Local Plans**

- (a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.
- (b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

### **21677. Marin County Override Provisions**

Notwithstanding the two-thirds vote required by Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its

governing body. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the public record of the final decision to overrule the commission, which may be adopted by a majority vote of the governing body.

### **21678. Airport Owner's Immunity**

With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676, 21676.5, or 21677 overrules a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to overrule the commission's action or recommendation.

### **21679. Court Review**

- (a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use compatibility plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, that directly affects the use of land within one mile of the boundary of a public airport within the county.
- (b) The court may issue an injunction that postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency that took the action does one of the following:
  - (1) In the case of an action that is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.
  - (2) In the case of an action that is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.
  - (3) Rescinds the action.
  - (4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2), whichever is applicable.
- (c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency that took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use compatibility plan as provided in Section 21675.
- (d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

- (e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.
- (f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

### **21679.5. Deferral of Court Review**

- (a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport, shall be commenced in any county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan.
- (b) If a commission has been prevented from adopting the airport land use compatibility plan by June 30, 1991, or if the adopted airport land use compatibility plan could not become effective, because of a lawsuit involving the adoption of the airport land use compatibility plan, the June 30, 1991 date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.
- (c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission or other designated body adopts an airport land use compatibility plan on or before June 30, 1991, the action shall be dismissed. If the commission or other designated body does not adopt an airport land use compatibility plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.
- (d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use compatibility plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

**AERONAUTICS LAW**  
**PUBLIC UTILITIES CODE**  
**Division 9, Part 1**  
**Chapter 3—Regulation of Aeronautics**  
**(excerpts)**

**21402. Ownership; Prohibited Use of Airspace**

The ownership of the space above the land and waters of this State is vested in the several owners of the surface beneath, subject to the right of flight described in Section 21403. No use shall be made of such airspace which would interfere with such right of flight; provided that any use of property in conformity with an original zone of approach of an airport shall not be rendered unlawful by reason of a change in such zone of approach.

**21403. Lawful Flight; Flight Within Airport Approach Zone**

- (a) Flight in aircraft over the land and waters of this state is lawful, unless at altitudes below those prescribed by federal authority, or unless conducted so as to be imminently dangerous to persons or property lawfully on the land or water beneath. The landing of an aircraft on the land or waters of another, without his or her consent, is unlawful except in the case of a forced landing or pursuant to Section 21662.1. The owner, lessee, or operator of the aircraft is liable, as provided by law, for damages caused by a forced landing.
- (b) The landing, takeoff, or taxiing of an aircraft on a public freeway, highway, road, or street is unlawful except in the following cases:
  - (1) A forced landing.
  - (2) A landing during a natural disaster or other public emergency if the landing has received prior approval from the public agency having primary jurisdiction over traffic upon the freeway, highway, road, or street.
  - (3) When the landing, takeoff, or taxiing has received prior approval from the public agency having primary jurisdiction over traffic upon the freeway, highway, road or street.

The prosecution bears the burden of proving that none of the exceptions apply to the act which is alleged to be unlawful.

- (c) The right of flight in aircraft includes the right of safe access to public airports, which includes the right of flight within the zone of approach of any public airport without restriction or hazard. The zone of approach of an airport shall conform to the specifications of Part 77 of the Federal Aviation Regulations of the Federal Aviation Administration, Department of Transportation.

**AERONAUTICS LAW**  
**PUBLIC UTILITIES CODE**  
**Division 9, Part 1**  
**Chapter 4—Airports and Air Navigation Facilities**  
**Article 2.7—Regulation of Obstructions**  
*(excerpts)*

**21655. Proposed Site for Construction of State Building Within Two Miles of Airport Boundary**

Notwithstanding any other provision of law, if the proposed site of any state building or other enclosure is within two miles, measured by air line, of that point on an airport runway, or runway proposed by an airport master plan, which is nearest the site, the state agency or office which proposes to construct the building or other enclosure shall, before acquiring title to property for the new state building or other enclosure site or for an addition to a present site, notify the Department of Transportation, in writing, of the proposed acquisition. The department shall investigate the proposed site and, within 30 working days after receipt of the notice, shall submit to the state agency or office which proposes to construct the building or other enclosure a written report of the investigation and its recommendations concerning acquisition of the site.

If the report of the department does not favor acquisition of the site, no state funds shall be expended for the acquisition of the new state building or other enclosure site, or the expansion of the present site, or for the construction of the state building or other enclosure, provided that the provisions of this section shall not affect title to real property once it is acquired.

**21658. Construction of Utility Pole or Line in Vicinity of Aircraft Landing Area**

No public utility shall construct any pole, pole line, distribution or transmission tower, or tower line, or substation structure in the vicinity of the exterior boundary of an aircraft landing area of any airport open to public use, in a location with respect to the airport and at a height so as to constitute an obstruction to air navigation, as an obstruction is defined in accordance with Part 77 of the Federal Aviation Regulations, Federal Aviation Administration, or any corresponding rules or regulations of the Federal Aviation Administration, unless the Federal Aviation Administration has determined that the pole, line, tower, or structure does not constitute a hazard to air navigation. This section shall not apply to existing poles, lines, towers, or structures or to the repair, replacement, or reconstruction thereof if the original height is not materially exceeded and this section shall not apply unless just compensation shall have first been paid to the public utility by the owner of any airport for any property or property rights which would be taken or damaged hereby.

**21659. Hazards Near Airports Prohibited**

- (a) No person shall construct or alter any structure or permit any natural growth to grow at a height which exceeds the obstruction standards set forth in the regulations of the Federal Aviation Administration relating to objects affecting navigable airspace contained in Title 14 of the Code of Federal Regulations, Part 77, Subpart C, unless a permit allowing the construction, alteration, or growth is issued by the department.

- (b) The permit is not required if the Federal Aviation Administration has determined that the construction, alteration, or growth does not constitute a hazard to air navigation or would not create an unsafe condition for air navigation. Subdivision (a) does not apply to a pole, pole line, distribution or transmission tower, or tower line or substation of a public utility.
- (c) Section 21658 is applicable to subdivision (b).

**AERONAUTICS LAW**  
**PUBLIC UTILITIES CODE**  
**Division 9, Part 1, Chapter 4**  
**Article 3—Regulation of Airports**  
**(excerpts)**

**21661.5. City Council or Board of Supervisors and ALUC Approvals**

- (a) No political subdivision, any of its officers or employees, or any person may submit any application for the construction of a new airport to any local, regional, state, or federal agency unless the plan for such construction is first approved by the board of supervisors of the county, or the city council of the city, in which the airport is to be located and unless the plan is submitted to the appropriate commission exercising powers pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Part 1 of Division 9, and acted upon by such commission in accordance with the provisions of such article.
- (b) A county board of supervisors or a city council may, pursuant to Section 65100 of the Government Code, delegate its responsibility under this section for the approval of a plan for construction of new helicopter landing and takeoff areas, to the county or city planning agency.

**21664.5. Amended Airport Permits; Airport Expansion Defined**

- (a) An amended airport permit shall be required for every expansion of an existing airport. An applicant for an amended airport permit shall comply with each requirement of this article pertaining to permits for new airports. The department may by regulation provide for exemptions from the operation of this section pursuant to Section 21661, except that no exemption shall be made limiting the applicability of subdivision (e) of Section 21666, pertaining to environmental considerations, including the requirement for public hearings in connection therewith.
- (b) As used in this section, “airport expansion” includes any of the following:
  - (1) The acquisition of runway protection zones, as defined in Federal Aviation Administration Advisory Circular 150/1500-13 [*sic.* – should be 150/5300-13], or of any interest in land for the purpose of any other expansion as set forth in this section.
  - (2) The construction of a new runway.
  - (3) The extension or realignment of an existing runway.
  - (4) Any other expansion of the airport’s physical facilities for the purpose of accomplishing or which are related to the purpose of paragraph (1), (2), or (3).
- (c) This section does not apply to any expansion of an existing airport if the expansion commenced on or prior to the effective date of this section and the expansion met the approval, on or prior to that effective date, of each governmental agency that required the approval by law.

**PLANNING AND ZONING LAW**  
**GOVERNMENT CODE**  
**Title 7—Planning and Land Use**  
**Division 1—Planning and Zoning**  
**Chapter 3—Local Planning**  
**Article 5—Authority for and Scope of General Plans**  
*(excerpts)*

**65302.3. General and Applicable Specific Plans; Consistency with Airport Land Use Plans; Amendment; Nonconcurrence Findings**

- (a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.
- (b) The general plan, and any applicable specific plan, shall be amended, as necessary, within 180 days of any amendment to the plan required under Section 21675 of the Public Utilities Code.
- (c) If the legislative body does not concur with any of the provisions of the plan required under Section 21675 of the Public Utilities Code, it may satisfy the provisions of this section by adopting findings pursuant to Section 21676 of the Public Utilities Code.
- (d) In each county where an airport land use commission does not exist, but where there is a military airport, the general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport.

**PLANNING AND ZONING LAW****GOVERNMENT CODE****Title 7, Division 1****Chapter 4.5—Review and Approval of Development Projects****Article 3—Application for Development Projects****(excerpts)**

*Note: The following government code sections are referenced in Section 21675.2(c) of the ALUC statutes.*

**65943. Completeness of Application; Determination; Time; Specification of Parts not Complete and Manner of Completion**

- (a) Not later than 30 calendar days after any public agency has received an application for a development project, the agency shall determine in writing whether the application is complete and shall immediately transmit the determination to the applicant for the development project. If the written determination is not made within 30 days after receipt of the application, and the application includes a statement that it is an application for a development permit, the application shall be deemed complete for purposes of this chapter. Upon receipt of any resubmittal of the application, a new 30-day period shall begin, during which the public agency shall determine the completeness of the application. If the application is determined not to be complete, the agency's determination shall specify those parts of the application which are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the public agency in response to the list and description.
- (b) Not later than 30 calendar days after receipt of the submitted materials, the public agency shall determine in writing whether they are complete and shall immediately transmit that determination to the applicant. If the written determination is not made within that 30-day period, the application together with the submitted materials shall be deemed complete for the purposes of this chapter.
- (c) If the application together with the submitted materials are determined not to be complete pursuant to subdivision (b), the public agency shall provide a process for the applicant to appeal that decision in writing to the governing body of the agency or, if there is no governing body, to the director of the agency, as provided by that agency. A city or county shall provide that the right of appeal is to the governing body or, at their option, the planning commission, or both.

There shall be a final written determination by the agency of the appeal not later than 60 calendar days after receipt of the applicant's written appeal. The fact that an appeal is permitted to both the planning commission and to the governing body does not extend the 60-day period. Notwithstanding a decision pursuant to subdivision (b) that the application and submitted materials are not complete, if the final written determination on the appeal is not made within that 60-day period, the application with the submitted materials shall be deemed complete for the purposes of this chapter.

- (d) Nothing in this section precludes an applicant and a public agency from mutually agreeing to an extension of any time limit provided by this section.

- (e) A public agency may charge applicants a fee not to exceed the amount reasonably necessary to provide the service required by this section. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

**65943.5.**

- (a) Notwithstanding any other provision of this chapter, any appeal pursuant to subdivision (c) of Section 65943 involving a permit application to a board, office, or department within the California Environmental Protection Agency shall be made to the Secretary for Environmental Protection.
- (b) Notwithstanding any other provision of this chapter, any appeal pursuant to subdivision (c) of Section 65943 involving an application for the issuance of an environmental permit from an environmental agency shall be made to the Secretary for Environmental Protection under either of the following circumstances:
  - (1) The environmental agency has not adopted an appeals process pursuant to subdivision (c) of Section 65943.
  - (2) The environmental agency declines to accept an appeal for a decision pursuant to subdivision (c) of Section 65943.
- (c) For purposes of subdivision (b), “environmental permit” has the same meaning as defined in Section 72012 of the Public Resources Code, and “environmental agency” has the same meaning as defined in Section 71011 of the Public Resources Code, except that “environmental agency” does not include the agencies described in subdivisions (c) and (h) of Section 71011 of the Public Resources Code.

**65944. Acceptance of Application as Complete; Requests for Additional Information; Restrictions; Clarification, Amplification, Correction, etc; Prior to Notice of Necessary Information**

- (a) After a public agency accepts an application as complete, the agency shall not subsequently request of an applicant any new or additional information which was not specified in the list prepared pursuant to Section 65940. The agency may, in the course of processing the application, request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application.
- (b) The provisions of subdivision (a) shall not be construed as requiring an applicant to submit with his or her initial application the entirety of the information which a public agency may require in order to take final action on the application. Prior to accepting an application, each public agency shall inform the applicant of any information included in the list prepared pursuant to Section 65940 which will subsequently be required from the applicant in order to complete final action on the application.
- (c) This section shall not be construed as limiting the ability of a public agency to request and obtain information which may be needed in order to comply with the provisions of Division 13 (commencing with Section 21000) of the Public Resources Code.
- (d) (1) After a public agency accepts an application as complete, and if the project applicant has identified that the proposed project is located within 1,000 feet of a military installation or within special use airspace or beneath a low-level flight path in accordance with Section 65940, the public agency shall provide a copy of the complete application to any branch of the United States Armed Forces that has provided the Office of Planning and Research with a

single California mailing address within the state for the delivery of a copy of these applications. This subdivision shall apply only to development applications submitted to a public agency 30 days after the Office of Planning and Research has notified cities, counties, and cities and counties of the availability of Department of Defense information on the Internet pursuant to subdivision (d) of Section 65940.

- (2) Except for a project within 1,000 feet of a military installation, the public agency is not required to provide a copy of the application if the project is located entirely in an “urbanized area.” An urbanized area is any urban location that meets the definition used by the United States Department of Commerce’s Bureau of Census for “urban” and includes locations with core census block groups containing at least 1,000 people per square mile and surrounding census block groups containing at least 500 people per square mile.
- (e) Upon receipt of a copy of the application as required in subdivision (d), any branch of the United States Armed Forces may request consultation with the public agency and the project applicant to discuss the effects of the proposed project on military installations, low-level flight paths, or special use airspace, and potential alternatives and mitigation measures.
- (f) (1) Subdivisions (d), (e), and (f) as these relate to low-level flight paths, special use airspace, and urbanized areas shall not be operative until the United States Department of Defense provides electronic maps of low-level flight paths, special use airspace, and military installations, at a scale and in an electronic format that is acceptable to the Office of Planning and Research.
- (2) Within 30 days of a determination by the Office of Planning and Research that the information provided by the Department of Defense is sufficient and in an acceptable scale and format, the office shall notify cities, counties, and cities and counties of the availability of the information on the Internet. Cities, counties, and cities and counties shall comply with subdivision (d) within 30 days of receiving this notice from the office.

**65945. Notice of Proposal to Adopt or Amend Certain Plans or Ordinances by City or County, Fee; Subscription to Periodically Updated Notice as Alternative, Fee**

- (a) At the time of filing an application for a development permit with a city or county, the city or county shall inform the applicant that he or she may make a written request to retrieve notice from the city or county of a proposal to adopt or amend any of the following plans or ordinances:
  - (1) A general plan.
  - (2) A specific plan.
  - (3) A zoning ordinance.
  - (4) An ordinance affecting building permits or grading permits.

The applicant shall specify, in the written request, the types of proposed action for which notice is requested. Prior to taking any of those actions, the city or county shall give notice to any applicant who has requested notice of the type of action proposed and whose development project is pending before the city or county if the city or county determines that the proposal is reasonably related to the applicant’s request for the development permit. Notice shall be given only for those types of actions which the applicant specifies in the request for notification.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of providing that notice.

If a fee is charged pursuant to this subdivision, the fee shall be collected as part of the application fee charged for the development permit.

- (b) As an alternative to the notification procedure prescribed by subdivision (a), a city or county may inform the applicant at the time of filing an application for a development permit that he or she may subscribe to a periodically updated notice or set of notices from the city or county which lists pending proposals to adopt or amend any of the plans or ordinances specified in subdivision (a), together with the status of the proposal and the date of any hearings thereon which have been set.

Only those proposals which are general, as opposed to parcel-specific in nature, and which the city or county determines are reasonably related to requests for development permits, need be listed in the notice. No proposals shall be required to be listed until such time as the first public hearing thereon has been set. The notice shall be updated and mailed at least once every six weeks; except that a notice need not be updated and mailed until a change in its contents is required.

The city or county may charge the applicant for a development permit, to whom notice is provided pursuant to this subdivision, a reasonable fee not to exceed the actual cost of providing that notice, including the costs of updating the notice, for the length of time the applicant requests to be sent the notice or notices.

**65945.3. Notice of Proposal to Adopt or Amend Rules or Regulations Affecting Issuance of Permits by Local Agency other than City or County; Fee**

At the time of filing an application for a development permit with a local agency, other than a city or county, the local agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a rule or regulation affecting the issuance of development permits.

Prior to adopting or amending any such rule or regulation, the local agency shall give notice to any applicant who has requested such notice and whose development project is pending before the agency if the local agency determines that the proposal is reasonably related to the applicant’s request for the development permit.

The local agency may charge the applicant for a development permit, to whom notice is provided pursuant to this section, a reasonable fee not to exceed the actual cost of providing that notice. If a fee is charged pursuant to this section, the fee shall be collected as part of the application fee charged for the development permit.

**65945.5. Notice of Proposal to Adopt or Amend Regulation Affecting Issuance of Permits and Which Implements Statutory Provision by State Agency**

At the time of filing an application for a development permit with a state agency, the state agency shall inform the applicant that he or she may make a written request to receive notice of any proposal to adopt or amend a regulation affecting the issuance of development permits and which implements a statutory provision.

Prior to adopting or amending any such regulation, the state agency shall give notice to any applicant who has requested such notice and whose development project is pending before the state agency if the state agency determines that the proposal is reasonably related to the applicant’s request for the development permit.

**65945.7. Actions, Inactions, or Recommendations Regarding Ordinances, Rules or Regulations; Invalidity or Setting Aside Ground of Error Only if Prejudicial**

No action, inaction, or recommendation regarding any ordinance, rule, or regulation subject to this Section 65945, 65945.3, or 65945.5 by any legislative body, administrative body, or the officials of any state or local agency shall be held void or invalid or be set aside by any court on the ground of any error, irregularity, informality, neglect or omission (hereinafter called "error") as to any matter pertaining to notices, records, determinations, publications, or any matters of procedure whatever, unless after an examination of the entire case, including evidence, the court shall be of the opinion that the error complained of was prejudicial, and that by reason of such error the party complaining or appealing sustained and suffered substantial injury, and that a different result would have been probable if such error had not occurred or existed. There shall be no presumption that error is prejudicial or that injury was done if error is shown.

**65946. [Replaced by AB2351 Statutes of 1993]**

**PLANNING AND ZONING LAW**  
**GOVERNMENT CODE**  
**Title 7, Division 1**  
**Chapter 9.3—Mediation and Resolution of Land Use Disputes**  
**(excerpts)**

**66030.**

- (a) The Legislature finds and declares all of the following:
- (1) Current law provides that aggrieved agencies, project proponents, and affected residents may bring suit against the land use decisions of state and local governmental agencies. In practical terms, nearly anyone can sue once a project has been approved.
  - (2) Contention often arises over projects involving local general plans and zoning, redevelopment plans, the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), development impact fees, annexations and incorporations, and the Permit Streamlining Act (Chapter 4.5 (commencing with Section 65920)).
  - (3) When a public agency approves a development project that is not in accordance with the law, or when the prerogative to bring suit is abused, lawsuits can delay development, add uncertainty and cost to the development process, make housing more expensive, and damage California's competitiveness. This litigation begins in the superior court, and often progresses on appeal to the Court of Appeal and the Supreme Court, adding to the workload of the state's already overburdened judicial system.
- (b) It is, therefore, the intent of the Legislature to help litigants resolve their differences by establishing formal mediation processes for land use disputes. In establishing these mediation processes, it is not the intent of the Legislature to interfere with the ability of litigants to pursue remedies through the courts.

**66031.**

- (a) Notwithstanding any other provision of law, any action brought in the superior court relating to any of the following subjects may be subject to a mediation proceeding conducted pursuant to this chapter:
- (1) The approval or denial by a public agency of any development project.
  - (2) Any act or decision of a public agency made pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).
  - (3) The failure of a public agency to meet the time limits specified in Chapter 4.5 (commencing with Section 65920), commonly known as the Permit Streamlining Act, or in the Subdivision Map Act (Division 2 (commencing with Section 66410)).
  - (4) Fees determined pursuant to Sections 53080 to 53082, inclusive, or Chapter 4.9 (commencing with Section 65995).
  - (5) Fees determined pursuant to Chapter 5 (commencing with Section 66000).

- (6) The adequacy of a general plan or specific plan adopted pursuant to Chapter 3 (commencing with Section 65100).
  - (7) The validity of any sphere of influence, urban service area, change of organization or reorganization, or any other decision made pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Division 3 (commencing with Section 56000) of Title 5).
  - (8) The adoption or amendment of a redevelopment plan pursuant to the Community Redevelopment Law (Part 1 (commencing with Section 33000) of Division 24 of the Health and Safety Code).
  - (9) The validity of any zoning decision made pursuant to Chapter 4 (commencing with Section 65800).
  - (10) The validity of any decision made pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Part 1 of Division 9 of the Public Utilities Code.
- (b) Within five days after the deadline for the respondent or defendant to file its reply to an action, the court may invite the parties to consider resolving their dispute by selecting a mutually acceptable person to serve as a mediator, or an organization or agency to provide a mediator.
  - (c) In selecting a person to serve as a mediator, or an organization or agency to provide a mediator, the parties shall consider the following:
    - (1) The council of governments having jurisdiction in the county where the dispute arose.
    - (2) Any subregional or countywide council of governments in the county where the dispute arose.
    - (3) Any other person with experience or training in mediation including those with experience in land use issues, or any other organization or agency which can provide a person with experience or training in mediation, including those with experience in land use issues.
  - (d) If the court invites the parties to consider mediation, the parties shall notify the court within 30 days if they have selected a mutually acceptable person to serve as a mediator. If the parties have not selected a mediator within 30 days, the action shall proceed. The court shall not draw any implication, favorable or otherwise, from the refusal by a party to accept the invitation by the court to consider mediation. Nothing in this section shall preclude the parties from using mediation at any other time while the action is pending.

**PLANNING AND ZONING LAW**  
**GOVERNMENT CODE**  
**Title 7—Planning and Land Use**  
**Division 2—Subdivisions**  
**Chapter 3—Procedure**  
**Article 3—Review of Tentative Map by Other Agencies**  
**(excerpts)**

**66455.9.**

Whenever there is consideration of an area within a development for a public school site, the advisory agency shall give the affected districts and the State Department of Education written notice of the proposed site. The written notice shall include the identification of any existing or proposed runways within the distance specified in Section 17215 of the Education Code. If the site is within the distance of an existing or proposed airport runway as described in Section 17215 of the Education Code, the department shall notify the State Department of Transportation as required by the section and the site shall be investigated by the State Department of Transportation required by Section 17215.

**EDUCATION CODE**  
**Title 1—General Education Code Provisions**  
**Division 1—General Education Code Provisions**  
**Part 10.5—School Facilities**  
**Chapter 1—School Sites**  
**Article 1—General Provisions**  
*(excerpts)*

**17215.**

- (a) In order to promote the safety of pupils, comprehensive community planning, and greater educational usefulness of school sites, before acquiring title to or leasing property for a new school site, the governing board of each school district, including any district governed by a city board of education or a charter school, shall give the State Department of Education written notice of the proposed acquisition or lease and shall submit any information required by the State Department of Education if the site is within two miles, measured by air line, of that point on an airport runway or a potential runway included in an airport master plan that is nearest to the site.
- (b) Upon receipt of the notice required pursuant to subdivision (a), the State Department of Education shall notify the Department of Transportation in writing of the proposed acquisition or lease. If the Department of Transportation is no longer in operation, the State Department of Education shall, in lieu of notifying the Department of Transportation, notify the United States Department of Transportation or any other appropriate agency, in writing, of the proposed acquisition for the purpose of obtaining from the department or other agency any information or assistance that it may desire to give.
- (c) The Department of Transportation shall investigate the proposed site and, within 30 working days after receipt of the notice, shall submit to the State Department of Education a written report of its findings including recommendations concerning acquisition or lease of the site. As part of the investigation, the Department of Transportation shall give notice thereof to the owner and operator of the airport who shall be granted the opportunity to comment upon the site. The Department of Transportation shall adopt regulations setting forth the criteria by which a site will be evaluated pursuant to this section.
- (d) The State Department of Education shall, within 10 days of receiving the Department of Transportation's report, forward the report to the governing board of the school district or charter school. The governing board or charter school may not acquire title to or lease the property until the report of the Department of Transportation has been received. If the report does not favor the acquisition or lease of the property for a school site or an addition to a present school site, the governing board or charter school may not acquire title to or lease the property. If the report does favor the acquisition or lease of the property for a school site or an addition to a present school site, the governing board or charter school shall hold a public hearing on the matter prior to acquiring or leasing the site.
- (e) If the Department of Transportation's recommendation does not favor acquisition or lease of the proposed site, state funds or local funds may not be apportioned or expended for the acquisition of that site, construction of any school building on that site, or for the expansion of any existing site to include that site.
- (f) This section does not apply to sites acquired prior to January 1, 1966, nor to any additions or extensions to those sites.

**EDUCATION CODE**  
**Title 3—Postsecondary Education**  
**Division 7—Community Colleges**  
**Part 49—Community Colleges, Education Facilities**  
**Chapter 1—School Sites**  
**Article 2—School Sites**  
*(excerpts)*

**81033. Investigation: Geologic and Soil Engineering Studies; Airport in Proximity**

- (c) To promote the safety of students, comprehensive community planning, and greater educational usefulness of community college sites, the governing board of each community college district, if the proposed site is within two miles, measured by air line, of that point on an airport runway, or a runway proposed by an airport master plan, which is nearest the site and excluding them if the property is not so located, before acquiring title to property for a new community college site or for an addition to a present site, shall give the board of governors notice in writing of the proposed acquisition and shall submit any information required by the board of governors.

Immediately after receiving notice of the proposed acquisition of property which is within two miles, measured by air line, of that point on an airport runway, or a runway proposed by an airport master plan, which is nearest the site, the board of governors shall notify the Division of Aeronautics of the Department of Transportation, in writing, of the proposed acquisition. The Division of Aeronautics shall make an investigation and report to the board of governors within 30 working days after receipt of the notice. If the Division of Aeronautics is no longer in operation, the board of governors shall, in lieu of notifying the Division of Aeronautics, notify the Federal Aviation Administration or any other appropriate agency, in writing, of the proposed acquisition for the purpose of obtaining from the authority or other agency such information or assistance as it may desire to give.

The board of governors shall investigate the proposed site and within 35 working days after receipt of the notice shall submit to the governing board a written report and its recommendations concerning acquisition of the site. The governing board shall not acquire title to the property until the report of the board of governors has been received. If the report does not favor the acquisition of the property for a community college site or an addition to a present community college site, the governing board shall not acquire title to the property until 30 days after the department's report is received and until the board of governors' report has been read at a public hearing duly called after 10 days' notice published once in a newspaper of general circulation within the community college district, or if there is no such newspaper, then in a newspaper of general circulation within the county in which the property is located.

- (d) If, with respect to a proposed site located within two miles of an operative airport runway, the report of the board of governors submitted to a community college district governing board under subdivision (c) does not favor the acquisition of the site on the sole or partial basis of the unfavorable recommendation of the Division of Aeronautics of the Department of Transportation, no state agency or officer shall grant, apportion, or allow to such community college district for expenditure in connection with that site, any state funds otherwise made available under any state law whatever for a community college site acquisition or college building

construction, or for expansion of existing sites and buildings, and no funds of the community college district or of the county in which the district lies shall be expended for such purposes; provided that provisions of this section shall not be applicable to sites acquired prior to January 1, 1966, nor any additions or extensions to such sites.

If the recommendations of the Division of Aeronautics are unfavorable, such recommendations shall not be overruled without the express approval of the board of governors and the State Allocation Board.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT STATUTES**

### **PUBLIC RESOURCES CODE**

#### **Division 13—Environmental Quality**

#### **Chapter 2.6—General**

*(excerpts)*

#### **21096. Airport Planning**

- (a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with Section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.
- (b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area.

**BUSINESS AND PROFESSIONS CODE**  
**Division 4—Real Estate**  
**Part 2—Regulation of Transactions**  
**Chapter 1—Subdivided Lands**  
**Article 2—Investigation, Regulation and Report**  
*(excerpts)*

**11010.**

- (a) Except as otherwise provided pursuant to subdivision (c) or elsewhere in this chapter, any person who intends to offer subdivided lands within this state for sale or lease shall file with the Department of Real Estate an application for a public report consisting of a notice of intention and a completed questionnaire on a form prepared by the department.
- (b) The notice of intention shall contain the following information about the subdivided lands and the proposed offering:

[Sub-Sections (1) through (12) omitted]

- (13) (A) The location of all existing airports, and of all proposed airports shown on the general plan of any city or county, located within two statute miles of the subdivision. If the property is located within an airport influence area, the following statement shall be included in the notice of intention:

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) For purposes of this section, an “airport influence area,” also known as an “airport referral area,” is 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.

**CIVIL CODE**  
**Division 2—Property**  
**Part 4—Acquisition of Property**  
**Title 4—Transfer**  
**Chapter 2—Transfer of Real Property**  
**Article 1.7—Disclosure of Natural Hazards Upon Transfer of Residential Property**  
**(excerpts)**

**1103.**

- (a) Except as provided in Section 1103.1, this article applies to any transfer by sale, exchange, installment land sale contract, as defined in Section 2985, lease with an option to purchase, any other option to purchase, or ground lease coupled with improvements, of any real property described in subdivision (c), or residential stock cooperative, improved with or consisting of not less than one nor more than four dwelling units.
- (b) Except as provided in Section 1103.1, this article shall apply to a resale transaction entered into on or after January 1, 2000, for a manufactured home, as defined in Section 18007 of the Health and Safety Code, that is classified as personal property intended for use as a residence, or a mobilehome, as defined in Section 18008 of the Health and Safety Code, that is classified as personal property intended for use as a residence, if the real property on which the manufactured home or mobilehome is located is real property described in subdivision (c).
- (c) This article shall apply to the transactions described in subdivisions (a) and (b) only if the transferor or his or her agent are required by one or more of the following to disclose the property's location within a hazard zone:
  - (1) A person who is acting as an agent for a transferor of real property that is located within a special flood hazard area (any type Zone "A" or "V") designated by the Federal Emergency Management Agency, or the transferor if he or she is acting without an agent, shall disclose to any prospective transferee the fact that the property is located within a special flood hazard area if either:
    - (A) The transferor, or the transferor's agent, has actual knowledge that the property is within a special flood hazard area.
    - (B) The local jurisdiction has compiled a list, by parcel, of properties that are within the special flood hazard area and a notice has been posted at the offices of the county recorder, county assessor, and county planning agency that identifies the location of the parcel list.
  - (2) ... is located within an area of potential flooding ... shall disclose to any prospective transferee the fact that the property is located within an area of potential flooding ...
  - (3) ... is located within a very high fire hazard severity zone, designated pursuant to Section 51178 of the Public Resources Code ... shall disclose to any prospective transferee the fact that the property is located within a very high fire hazard severity zone and is subject to the requirements of Section 51182 ...

- (4) ... is located within an earthquake fault zone, designated pursuant to Section 2622 of the Public Resources Code ... shall disclose to any prospective transferee the fact that the property is located within a delineated earthquake fault zone ...
  - (5) ... is located within a seismic hazard zone, designated pursuant to Section 2696 of the Public Resources Code ... shall disclose to any prospective transferee the fact that the property is located within a seismic hazard zone ...
  - (6) ... is located within a state responsibility area determined by the board, pursuant to Section 4125 of the Public Resources Code, shall disclose to any prospective transferee the fact that the property is located within a wildland area that may contain substantial forest fire risks and hazards and is subject to the requirements of Section 4291 ...
- (d) Any waiver of the requirements of this article is void as against public policy.

### **1103.1.**

- (a) This article does not apply to the following transfers:
- (1) Transfers pursuant to court order, including, but not limited to, transfers ordered by a probate court in administration of an estate, transfers pursuant to a writ of execution, transfers by any foreclosure sale, transfers by a trustee in bankruptcy, transfers by eminent domain, and transfers resulting from a decree for specific performance.
  - (2) Transfers to a mortgagee by a mortgagor or successor in interest who is in default, transfers to a beneficiary of a deed of trust by a trustor or successor in interest who is in default, transfers by any foreclosure sale after default, transfers by any foreclosure sale after default in an obligation secured by a mortgage, transfers by a sale under a power of sale or any foreclosure sale under a decree of foreclosure after default in an obligation secured by a deed of trust or secured by any other instrument containing a power of sale, or transfers by a mortgagee or a beneficiary under a deed of trust who has acquired the real property at a sale conducted pursuant to a power of sale under a mortgage or deed of trust or a sale pursuant to a decree of foreclosure or has acquired the real property by a deed in lieu of foreclosure.
  - (3) Transfers by a fiduciary in the course of the administration of a decedent's estate, guardianship, conservatorship, or trust.
  - (4) Transfers from one coowner to one or more other coowners.
  - (5) Transfers made to a spouse, or to a person or persons in the lineal line of consanguinity of one or more of the transferors.
  - (6) Transfers between spouses resulting from a judgment of dissolution of marriage or of legal separation of the parties or from a property settlement agreement incidental to that judgment.
  - (7) Transfers by the Controller in the course of administering Chapter 7 (commencing with Section 1500) of Title 10 of Part 3 of the Code of Civil Procedure.
  - (8) Transfers under Chapter 7 (commencing with Section 3691) or Chapter 8 (commencing with Section 3771) of Part 6 of Division 1 of the Revenue and Taxation Code.
  - (9) Transfers or exchanges to or from any governmental entity.
- (b) Transfers not subject to this article may be subject to other disclosure requirements, including those under Sections 8589.3, 8589.4, and 51183.5 of the Government Code and Sections 2621.9,

2694, and 4136 of the Public Resources Code. In transfers not subject to this article, agents may make required disclosures in a separate writing.

### **1103.2.**

- (a) The disclosures required by this article are set forth in, and shall be made on a copy of, the following Natural Hazard Disclosure Statement: [content omitted].
- (b) If an earthquake fault zone, seismic hazard zone, very high fire hazard severity zone, or wildland fire area map or accompanying information is not of sufficient accuracy or scale that a reasonable person can determine if the subject real property is included in a natural hazard area, the transferor or transferor's agent shall mark "Yes" on the Natural Hazard Disclosure Statement. The transferor or transferor's agent may mark "No" on the Natural Hazard Disclosure Statement if he or she attaches a report prepared pursuant to subdivision (c) of Section 1103.4 that verifies the property is not in the hazard zone. Nothing in this subdivision is intended to limit or abridge any existing duty of the transferor or the transferor's agents to exercise reasonable care in making a determination under this subdivision.

[Sub-Sections (c) through (h) omitted]

[Section 1103.3 omitted]

### **1103.4.**

- (a) Neither the transferor nor any listing or selling agent shall be liable for any error, inaccuracy, or omission of any information delivered pursuant to this article if the error, inaccuracy, or omission was not within the personal knowledge of the transferor or the listing or selling agent, and was based on information timely provided by public agencies or by other persons providing information as specified in subdivision (c) that is required to be disclosed pursuant to this article, and ordinary care was exercised in obtaining and transmitting the information.
- (b) The delivery of any information required to be disclosed by this article to a prospective transferee by a public agency or other person providing information required to be disclosed pursuant to this article shall be deemed to comply with the requirements of this article and shall relieve the transferor or any listing or selling agent of any further duty under this article with respect to that item of information.
- (c) The delivery of a report or opinion prepared by a licensed engineer, land surveyor, geologist, or expert in natural hazard discovery dealing with matters within the scope of the professional's license or expertise, shall be sufficient compliance for application of the exemption provided by subdivision (a) if the information is provided to the prospective transferee pursuant to a request therefor, whether written or oral. In responding to that request, an expert may indicate, in writing, an understanding that the information provided will be used in fulfilling the requirements of Section 1103.2 and, if so, shall indicate the required disclosures, or parts thereof, to which the information being furnished is applicable. Where that statement is furnished, the expert shall not be responsible for any items of information, or parts thereof, other than those expressly set forth in the statement.
  - (1) In responding to the request, the expert shall determine whether the property is within an airport influence area as defined in subdivision (b) of Section 11010 of the Business and Professions Code. If the property is within an airport influence area, the report shall contain the following statement:

**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.

[Remainder of Article 1.7 omitted]

**CIVIL CODE**  
**Division 2, Part 4**  
**Title 6—Common Interest Developments**  
**Chapter 2—County Documents**  
**Article 1—Creation**  
**(excerpts)**

**1353.**

- (a) (1) A declaration, recorded on or after January 1, 1986, shall contain a legal description of the common interest development, and a statement that the common interest development is a community apartment project, condominium project, planned development, stock cooperative, or combination thereof. The declaration shall additionally set forth the name of the association and the restrictions on the use or enjoyment of any portion of the common interest development that are intended to be enforceable equitable servitudes. If the property is located within an airport influence area, a declaration, recorded after January 1, 2004, shall contain the following statement:

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.

- (2) For purposes of this section, an “airport influence area,” also known as an “airport referral area,” is 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.
- (3) [Omitted]
- (4) The statement in a declaration acknowledging that a property is located in an airport influence area does not constitute a title defect, lien, or encumbrance.
- (b) The declaration may contain any other matters the original signator of the declaration or the owners consider appropriate.

**LEGISLATIVE HISTORY SUMMARY**  
**PUBLIC UTILITIES CODE**  
**Sections 21670 et seq.**  
***Airport Land Use Commission Statutes***  
**And Related Statutes**

- 1967 Original ALUC statute enacted.
- › Establishment of ALUCs required in each county containing a public airport served by a certificated air carrier.
  - › The purpose of ALUCs is indicated as being to make recommendations regarding height restrictions on buildings and the use of land surrounding airports.
- 1970 Assembly Bill 1856 (Badham) Chapter 1182, Statutes of 1970—Adds provisions which:
- › Require ALUCs to prepare comprehensive land use plans.
  - › Require such plans to include a long-range plan and to reflect the airport’s forecast growth during the next 20 years.
  - › Require ALUC review of airport construction plans (Section 21661.5).
  - › Exempt Los Angeles County from the requirement of establishing an ALUC.
- 1971 The function of ALUCs is restated as being to require new construction to conform to Department of Aeronautics standards.
- 1973 ALUCs are permitted to establish compatibility plans for military airports.
- 1982 Assembly Bill 2920 (Rogers) Chapter 1041, Statutes of 1982—Adds major changes which:
- › More clearly articulate the purpose of ALUCs.
  - › Eliminate reference to “achieve by zoning.”
  - › Require consistency between local general and specific plans and airport land use commission plans; the requirements define the process for attaining consistency, they do not establish standards for consistency.
  - › Eliminate the requirement for proposed individual development projects to be referred to an ALUC for review once local general/specific plans are consistent with the ALUC’s plan.
  - › Require that local agencies make findings of fact before overriding an ALUC decision.
  - › Change the vote required for an override from 4/5 to 2/3.
- 1984 Assembly Bill 3551 (Mountjoy) Chapter 1117, Statutes of 1984—Amends the law to:
- › Require ALUCs in all counties having an airport which serves the general public unless a county and its cities determine an ALUC is not needed.
  - › Limit amendments to compatibility plans to once per year.
  - › Allow individual projects to continue to be referred to the ALUC by agreement.
  - › Extend immunity to airports if an ALUC action is overridden by a local agency not owning the airport.

- › Provide state funding eligibility for preparation of compatibility plans through the Regional Transportation Improvement Program process.
- 1987 Senate Bill 633 (Rogers) Chapter 1018, Statutes of 1987—Makes revisions which:
- › Require that a designated body serving as an ALUC include two members having “expertise in aviation.”
  - › Allows an interested party to initiate court proceedings to postpone the effective date of a local land use action if a compatibility plan has not been adopted.
  - › Delete *sunset* provisions contained in certain clauses of the law. Allows reimbursement for ALUC costs in accordance with the Commission on State Mandates.
- 1989 Senate Bill 255 (Bergeson) Chapter 54, Statutes of 1989—
- › Sets a requirement that comprehensive land use plans be completed by June 1991.
  - › Establishes a method for compelling ALUCs to act on matters submitted for review.
  - › Allows ALUCs to charge fees for review of projects.
  - › Suspends any lawsuits that would stop development until the ALUC adopts its plan or until June 1, 1991.
- 1989 Senate Bill 235 (Alquist) Chapter 788, Statutes of 1989—Appropriates \$3,672,000 for the payment of claims to counties seeking reimbursement of costs incurred during fiscal years 1985-86 through 1989-90 pursuant to state-mandated requirement (Chapter 1117, Statutes of 1984) for creation of ALUCs in most counties. This statute was repealed in 1993.
- 1990 Assembly Bill 4164 (Mountjoy) Chapter 1008, Statutes of 1990—Adds section 21674.5 requiring the Division of Aeronautics to develop and implement a training program for ALUC staffs.
- 1990 Assembly Bill 4265 (Clute) Chapter 563, Statutes of 1990—With the concurrence of the Division of Aeronautics, allows ALUCs to use an airport layout plan, rather than a long-range airport master plan, as the basis for preparation of a compatibility plan.
- 1990 Senate Bill 1288 (Beverly) Chapter 54, Statutes of 1990—Amends Section 21670.2 to give Los Angeles County additional time to prepare compatibility plans and meet other provisions of the ALUC statutes.
- 1991 Senate Bill 532 (Bergeson) Chapter 140, Statutes of 1991—
- › Allows counties having half of their compatibility plans completed or under preparation by June 30, 1991, an additional year to complete the remainder.
  - › Allows ALUCs to continue to charge fees under these circumstances.
  - › Fees may be charged only until June 30, 1992, if plans are not completed by then.
- 1993 Senate Bill 443 (Committee on Budget and Fiscal Review) Chapter 59, Statutes of 1993—Amends Section 21670(b) to make the formation of ALUCs permissive rather than mandatory as of June 30, 1993. (Note: Section 21670.2 which assigns responsibility for coordinating the airport planning of public agencies in Los Angeles County is not affected by this amendment.)
- 1994 Assembly Bill 2831 (Mountjoy) Chapter 644, Statutes of 1994 —Reinstates the language in Section 21670(b) mandating establishment of ALUCs, but also provides for an alternative airport land use planning process. Lists specific actions which a county and affected cities must take in order for such alternative process to receive Caltrans approval. Requires that

ALUCs be guided by information in the Caltrans *Airport Land Use Planning Handbook* when formulating airport land use plans.

- 1994 Senate Bill 1453 (Rogers) Chapter 438, Statutes of 1994—Amends California Environmental Quality Act (CEQA) statutes as applied to preparation of environmental documents affecting projects in the vicinity of airports. Requires lead agencies to use the *Airport Land Use Planning Handbook* as a technical resource when assessing the airport-related noise and safety impacts of such projects.
- 1997 Assembly Bill 1130 (Oller) Chapter 81, Statutes of 1997—Added Section 21670.4 concerning airports whose planning boundary straddles a county line.
- 2000 Senate Bill 1350 (Rainey) Chapter 506, Statutes of 2000—Added Section 21670(f) clarifying that special districts are among the local agencies to which airport land use planning laws are intended to apply.
- 2001 Assembly Bill 93 (Wayne) Chapter 946, Statutes of 2001—Added Section 21670.3 regarding San Diego County Regional Airport Authority’s responsibility for airport planning within San Diego County.
- 2002 Assembly Bill 3026 (Committee on Transportation) Chapter 438, Statutes of 2002—Changes the term “comprehensive land use plan” to “airport land use compatibility plan.”
- 2002 Assembly Bill 2776 (Simitian) Chapter 496, Statutes of 2002—Requires information regarding the location of a property within an airport influence area be disclosed as part of certain real estate transactions effective January 1, 2004.
- 2002 Senate Bill 1468 (Knight) Chapter 971, Statutes of 2002—Changes ALUC preparation of airport land use compatibility plans for military airports from optional to required. Requires that the plans be consistent with the safety and noise standards in the Air Installation Compatible Use Zone for that airport. Requires that the general plan and any specific plans be consistent with these standards where there is military airport, but an airport land use commission does not exist.
- 2003 Assembly Bill 332 (Mullin) Chapter 351, Statutes of 2003—Clarifies that school districts and community college districts are subject to compatibility plans. Requires local public agencies to notify ALUC and Division of Aeronautics at least 45 days prior to deciding to overrule the ALUC.
- Adds that prior to granting building construction permits, local agencies shall be guided by the criteria established in the *Airport Land Use Planning Handbook* and any related federal aviation regulations to the extent that the criteria has been incorporated into their airport land use compatibility plan.
- 2004 Senate Bill 1223 (Committee on Transportation) Chapter 615, Statutes of 2004—Technical revisions eliminating most remaining references to the term “comprehensive land use plan” and replacing it with “airport land use compatibility plan.” Also replaces the terms “planning area” and “study area” with “airport influence area.”
- 2005 Assembly Bill 1358 (Mullin) Chapter 29, Statutes of 2005—Requires a school district to notify the Department of Transportation before leasing property for a new school site. Also makes these provisions applicable to charter schools.

2007 Senate Bill 10 (Kehoe) Chapter 287, Statutes of 2007—The San Diego County Regional Airport Authority Reform Act of 2007. Restructures the airport authority established in 2001 by AB 93 (Wayne), with a set of goals related to governance, accountability, planning and operations at San Diego International Airport.

# Federal Aviation Regulations Part 77

## Safe, Efficient Use and Preservation of the Navigable Airspace

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*Amdt. 77-13, Effective January 18, 2011*

### Subpart A

### GENERAL

#### **77.1 Purpose.**

This part establishes:

- (a) The requirements to provide notice to the FAA of certain proposed construction, or the alteration of existing structures;
- (b) The standards used to determine obstructions to air navigation, and navigational and communication facilities;
- (c) The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities or equipment; and
- (d) The process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

#### **77.3 Definitions.**

For the purpose of this part:

“Non-precision instrument runway” means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

Planned or proposed airport is an airport that is the subject of at least one of the following documents received by the FAA:

- (1) Airport proposals submitted under 14 CFR Part 157.
- (2) Airport Improvement Program requests for aid.
- (3) Notices of existing airports where prior notice of the airport construction or alteration was not provided as required by 14 CFR Part 157.
- (4) Airport layout plans.
- (5) DOD proposals for airports used only by the U.S. Armed Forces.

- (6) DOD proposals on joint-use (civil-military) airports.
- (7) Completed airport site selection feasibility study.

“Precision instrument runway” means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

“Public use airport” is an airport available for use by the general public without a requirement for prior approval of the airport owner or operator.

“Seaplane base” is considered to be an airport only if its sea lanes are outlined by visual markers.

“Utility runway” means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

“Visual runway” means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

## **Subpart B**

### **NOTICE REQUIREMENTS**

#### **77.5 Applicability.**

- (a) If you propose any construction or alteration described in §77.9, you must provide adequate notice to the FAA of that construction or alteration.
- (b) If requested by the FAA, you must also file supplemental notice before the start date and upon completion of certain construction or alterations that are described in §77.9.
- (c) Notice received by the FAA under this subpart is used to:
  - (1) Evaluate the effect of the proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace and of airport traffic capacity at public use airports;
  - (2) Determine whether the effect of proposed construction or alteration is a hazard to air navigation;
  - (3) Determine appropriate marking and lighting recommendations, using FAA Advisory Circular 70/7460–1, Obstruction Marking and Lighting;
  - (4) Determine other appropriate measures to be applied for continued safety of air navigation; and
  - (5) Notify the aviation community of the construction or alteration of objects that affect the navigable airspace, including the revision of charts, when necessary.

## 77.7 Form and time of notice.

- (a) If you are required to file notice under §77.9, you must submit to the FAA a completed FAA Form 7460–1, Notice of Proposed Construction or Alteration. FAA Form 7460–1 is available at FAA regional offices and on the Internet.
- (b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.
- (c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.
- (d) If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.
- (e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460–1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

## 77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

- (a) Any construction or alteration that is more than 200 ft. AGL at its site.
- (b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
  - (1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.
  - (2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.
  - (3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.
- (c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.
- (d) Any construction or alteration on any of the following airports and heliports:

- (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
  - (2) A military airport under construction, or an airport under construction that will be available for public use;
  - (3) An airport operated by a Federal agency or the DOD.
  - (4) An airport or heliport with at least one FAA-approved instrument approach procedure.
- (e) You do not need to file notice for construction or alteration of:
- (1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;
  - (2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
  - (3) Any construction or alteration for which notice is required by any other FAA regulation.
  - (4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

**77.11 Supplemental notice requirements.**

- (a) You must file supplemental notice with the FAA when:
  - (1) The construction or alteration is more than 200 feet in height AGL at its site; or
  - (2) Requested by the FAA.
- (b) You must file supplemental notice on a prescribed FAA form to be received within the time limits specified in the FAA determination. If no time limit has been specified, you must submit supplemental notice of construction to the FAA within 5 days after the structure reaches its greatest height.
- (c) If you abandon a construction or alteration proposal that requires supplemental notice, you must submit notice to the FAA within 5 days after the project is abandoned.
- (d) If the construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

**Subpart C**

**STANDARDS FOR DETERMINING OBSTRUCTIONS TO  
AIR NAVIGATION OR NAVIGATIONAL AIDS OR FACILITIES**

**77.13 Applicability.**

This subpart describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. These standards apply to the following:

- (a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus.
- (b) The alteration of any permanent or temporary existing structure by a change in its height, including appurtenances, or lateral dimensions, including equipment or material used therein.

**77.15 Scope.**

- (a) This subpart describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Such facilities include air navigation aids, communication equipment, airports, Federal airways, instrument approach or departure procedures, and approved off-airway routes.
- (b) Objects that are considered obstructions under the standards described in this subpart are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard. Once further aeronautical study has been initiated, the FAA will use the standards in this subpart, along with FAA policy and guidance material, to determine if the object is a hazard to air navigation.
- (c) The FAA will apply these standards with reference to an existing airport facility, and airport proposals received by the FAA, or the appropriate military service, before it issues a final determination.
- (d) For airports having defined runways with specially prepared hard surfaces, the primary surface for each runway extends 200 feet beyond each end of the runway. For airports having defined strips or pathways used regularly for aircraft takeoffs and landings, and designated runways, without specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for aircraft takeoffs and landings, a determination must be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those determined pathways must be considered runways, and an appropriate primary surface as defined in §77.19 will be considered as longitudinally centered on each such runway. Each end of that primary surface must coincide with the corresponding end of that runway.
- (e) The standards in this subpart apply to construction or alteration proposals on an airport (including heliports and seaplane bases with marked lanes) if that airport is one of the following before the issuance of the final determination:

- (1) Available for public use and is listed in the Airport/Facility Directory, Supplement Alaska, or Supplement Pacific of the U.S. Government Flight Information Publications; or
- (2) A planned or proposed airport or an airport under construction of which the FAA has received actual notice, except DOD airports, where there is a clear indication the airport will be available for public use; or,
- (3) An airport operated by a Federal agency or the DOD; or,
- (4) An airport that has at least one FAA-approved instrument approach.

**77.17 Obstruction standards.**

- (a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
  - (1) A height of 499 feet AGL at the site of the object.
  - (2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet.
  - (3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.
  - (4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.
  - (5) The surface of a takeoff and landing area of an airport or any imaginary surface established under §77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.
- (b) Except for traverse ways on or near an airport with an operative ground traffic control service furnished by an airport traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:
  - (1) 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.
  - (2) 15 feet for any other public roadway.
  - (3) 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.
  - (4) 23 feet for a railroad.

- (5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

### **77.19 Civil airport imaginary surfaces.**

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach procedure existing or planned for that runway end.

- (a) Horizontal surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by Swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:
- (1) 5,000 feet for all runways designated as utility or visual;
  - (2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.
- (b) Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
- (c) Primary surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:
- (1) 250 feet for utility runways having only visual approaches.
  - (2) 500 feet for utility runways having non-precision instrument approaches.
  - (3) For other than utility runways, the width is:
    - (i) 500 feet for visual runways having only visual approaches.
    - (ii) 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statute mile.
    - (iii) 1,000 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.
    - (iv) The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.
- (d) Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is

applied to each end of each runway based upon the type of approach available or planned for that runway end.

- (1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    - (i) 1,250 feet for that end of a utility runway with only visual approaches;
    - (ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;
    - (iii) 2,000 feet for that end of a utility runway with a non-precision instrument approach;
    - (iv) 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;
    - (v) 4,000 feet for that end of a non-precision instrument runway, other than utility, having a non-precision instrument approach with visibility minimums as low as three-fourths statute mile; and
    - (vi) 16,000 feet for precision instrument runways.
  - (2) The approach surface extends for a horizontal distance of:
    - (i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;
    - (ii) 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and
    - (iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.
  - (3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.
- (e) Transitional surface. These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

## **77.21 Department of Defense (DoD) airport imaginary surfaces.**

- (a) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section, a military airport is any airport operated by the DOD.
  - (1) Inner horizontal surface. A plane that is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

- (2) Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.
  - (3) Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.
- (b) Related to runways. These surfaces apply to all military airports.
- (1) Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.
  - (2) Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.
  - (3) Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.
  - (4) Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

### **77.23 Heliport imaginary surfaces.**

- (a) Primary surface. The area of the primary surface coincides in size and shape with the designated take-off and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.
- (b) Approach surface. The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.
- (c) Transitional surfaces. These surfaces extend outward and upward from the lateral boundaries of the primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

## **Subpart D**

### **AERONAUTICAL STUDIES AND DETERMINATIONS**

#### **77.25 Applicability.**

- (a) This subpart applies to any aeronautical study of a proposed construction or alteration for which notice to the FAA is required under 77.9.
- (b) The purpose of an aeronautical study is to determine whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of other existing or proposed structures, would constitute a hazard to air navigation.
- (c) The obstruction standards in subpart C of this part are supplemented by other manuals and directives used in determining the effect on the navigable airspace of a proposed construction or alteration. When the FAA needs additional information, it may circulate a study to interested parties for comment.

#### **77.27 Initiation of studies.**

The FAA will conduct an aeronautical study when:

- (a) Requested by the sponsor of any proposed construction or alteration for which a notice is submitted; or
- (b) The FAA determines a study is necessary.

#### **77.29 Evaluating aeronautical effect.**

- (a) The FAA conducts an aeronautical study to determine the impact of a proposed structure, an existing structure that has not yet been studied by the FAA, or an alteration of an existing structure on aeronautical operations, procedures, and the safety of flight. These studies include evaluating:
  - (1) The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;
  - (2) The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;
  - (3) The impact on existing and planned public use airports;
  - (4) Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final determination;
  - (5) Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;
  - (6) The potential effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;

- (7) The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.
- (b) If you withdraw the proposed construction or alteration or revise it so that it is no longer identified as an obstruction, or if no further aeronautical study is necessary, the FAA may terminate the study.

### **77.31 Determinations.**

- (a) The FAA will issue a determination stating whether the proposed construction or alteration would be a hazard to air navigation, and will advise all known interested persons.
- (b) The FAA will make determinations based on the aeronautical study findings and will identify the following:
  - (1) The effects on VFR/IFR aeronautical departure/arrival operations, air traffic procedures, minimum flight altitudes, and existing, planned, or proposed airports listed in §77.15(e) of which the FAA has received actual notice prior to issuance of a final determination.
  - (2) The extent of the physical and/or electromagnetic effect on the operation of existing or proposed air navigation facilities, communication aids, or surveillance systems.
- (c) The FAA will issue a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.
- (d) A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation. A Determination of No Hazard to Air Navigation may include the following:
  - (1) Conditional provisions of a determination.
  - (2) Limitations necessary to minimize potential problems, such as the use of temporary construction equipment.
  - (3) Supplemental notice requirements, when required.
  - (4) Marking and lighting recommendations, as appropriate.
- (e) The FAA will issue a Determination of No Hazard to Air Navigation when a proposed structure does not exceed any of the obstruction standards and would not be a hazard to air navigation.

### **77.33 Effective period of determinations.**

- (a) A determination issued under this subpart is effective 40 days after the date of issuance, unless a petition for discretionary review is received by the FAA within 30 days after issuance. The determination will not become final pending disposition of a petition for discretionary review.
- (b) Unless extended, revised, or terminated, each Determination of No Hazard to Air Navigation issued under this subpart expires 18 months after the effective date of the determination, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

- (c) A Determination of Hazard to Air Navigation has no expiration date.

**77.35 Extensions, terminations, revisions and corrections.**

- (a) You may petition the FAA official that issued the Determination of No Hazard to Air Navigation to revise or reconsider the determination based on new facts or to extend the effective period of the determination, provided that:
  - (1) Actual structural work of the proposed construction or alteration, such as the laying of a foundation, but not including excavation, has not been started; and
  - (2) The petition is submitted at least 15 days before the expiration date of the Determination of No Hazard to Air Navigation.
- (b) A Determination of No Hazard to Air Navigation issued for those construction or alteration proposals not requiring an FCC construction permit may be extended by the FAA one time for a period not to exceed 18 months.
- (c) A Determination of No Hazard to Air Navigation issued for a proposal requiring an FCC construction permit may be granted extensions for up to 18 months, provided that:
  - (1) You submit evidence that an application for a construction permit/license was filed with the FCC for the associated site within 6 months of issuance of the determination; and
  - (2) You submit evidence that additional time is warranted because of FCC requirements; and
  - (3) Where the FCC issues a construction permit, a final Determination of No Hazard to Air Navigation is effective until the date prescribed by the FCC for completion of the construction. If an extension of the original FCC completion date is needed, an extension of the FAA determination must be requested from the Obstruction Evaluation Service (OES).
  - (4) If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

**Subpart E**

**PETITIONS FOR DISCRETIONARY REVIEW**

**77.37 General.**

- (a) If you are the sponsor, provided a substantive aeronautical comment on a proposal in an aeronautical study, or have a substantive aeronautical comment on the proposal but were not given an opportunity to state it, you may petition the FAA for a discretionary review of a determination, revision, or extension of a determination issued by the FAA.
- (b) You may not file a petition for discretionary review for a Determination of No Hazard that is issued for a temporary structure, marking and lighting recommendation, or when a proposed structure or alteration does not exceed obstruction standards contained in subpart C of this part.

**77.39 Contents of a petition.**

- (a) You must file a petition for discretionary review in writing and it must be received by the FAA within 30 days after the issuance of a determination under 77.31, or a revision or extension of the determination under 77.35.
- (b) The petition must contain a full statement of the aeronautical basis on which the petition is made, and must include new information or facts not previously considered or presented during the aeronautical study, including valid aeronautical reasons why the determination, revisions, or extension made by the FAA should be reviewed.
- (c) In the event that the last day of the 30-day filing period falls on a weekend or a day the Federal government is closed, the last day of the filing period is the next day that the government is open.
- (d) The FAA will inform the petitioner or sponsor (if other than the petitioner) and the FCC (whenever an FCC-related proposal is involved) of the filing of the petition and that the determination is not final pending disposition of the petition.

**77.41 Discretionary review results.**

- (a) If discretionary review is granted, the FAA will inform the petitioner and the sponsor (if other than the petitioner) of the issues to be studied and reviewed. The review may include a request for comments and a review of all records from the initial aeronautical study.
- (b) If discretionary review is denied, the FAA will notify the petitioner and the sponsor (if other than the petitioner), and the FCC, whenever a FCC-related proposal is involved, of the basis for the denial along with a statement that the determination is final.
- (c) After concluding the discretionary review process, the FAA will revise, affirm, or reverse the determination.

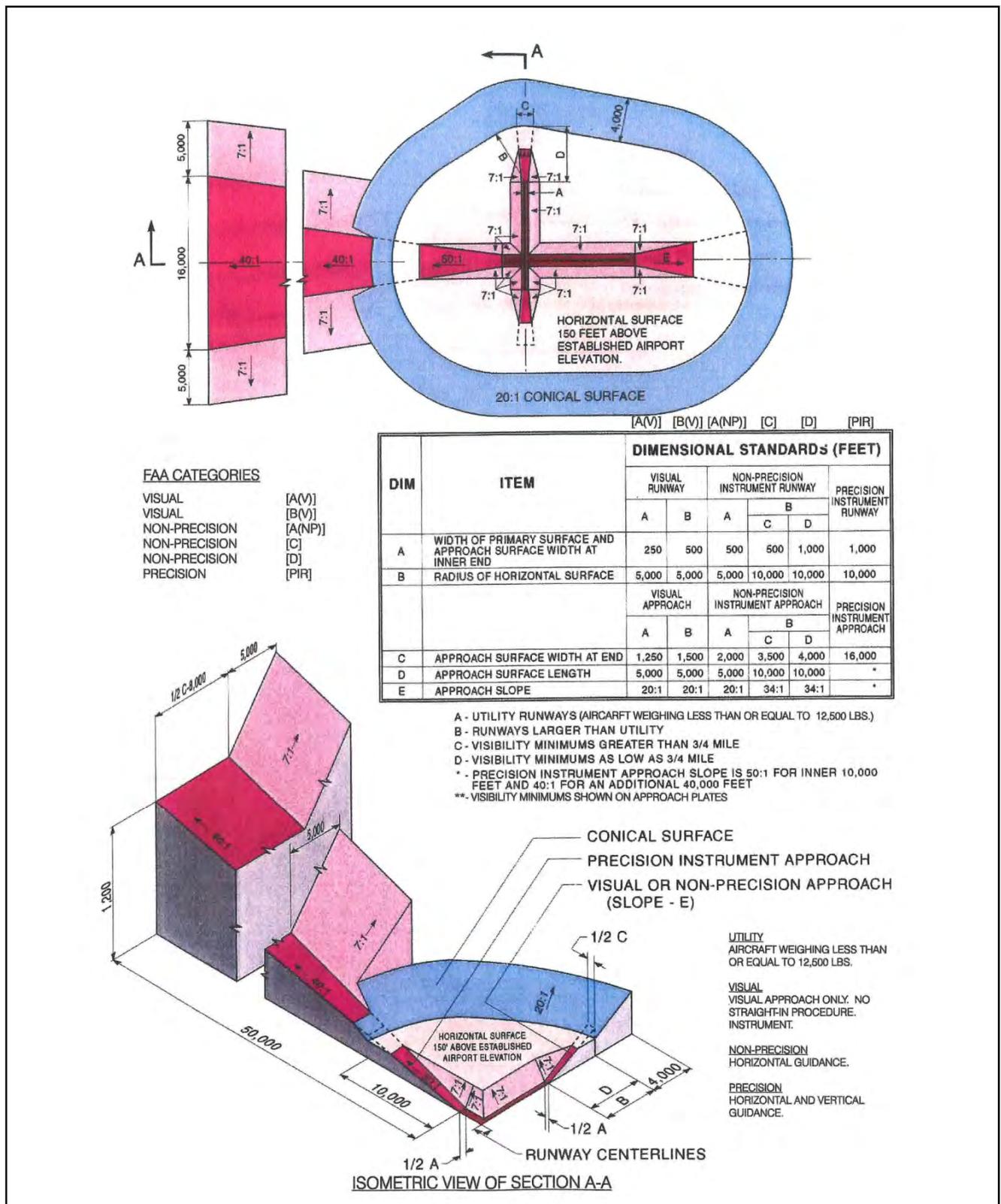


Figure B1

# FAR Part 77 Imaginary Surfaces



**Figure B3****Online Submittal of Form 7460-1:  
Notice of Proposed Construction or Alteration**

Historically a paper form called a “7460-1” was required to be submitted to the FAA for any project proposed on airport property and certain projects near airports. Recently, the FAA has moved from paper forms to an on-line system of evaluating the effects of a proposed project on the national airspace system.

- ▶ The on-line system can be accessed at <https://oeaaa.faa.gov>.

This new system allows project proponents to submit and track their proposal as it progresses through the FAA evaluation process.

The purpose of this guidance is to supplement and clarify the FAA user guide for the 7460 website.

- ▶ available at: [https://oeaaa.faa.gov/oeaaa/external/content/OEexternal\\_Guide\\_v3.1.pdf](https://oeaaa.faa.gov/oeaaa/external/content/OEexternal_Guide_v3.1.pdf)

We recommend that the user first read the entire guide provided by the FAA, and then use this document to clarify some of the more complicated aspects of the online 7460 system.

**When a project must be submitted to the FAA**

CFR Title 14 Part 77.13 states that any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- ▶ Any construction or alteration exceeding 200 ft. above ground level
- ▶ Any construction or alteration:
  - ▶ within 20,000 ft. of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft.
  - ▶ within 10,000 ft. of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft.
  - ▶ within 5,000 ft. of a public use heliport which exceeds a 25:1 surface
- ▶ Any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards
- ▶ When requested by the FAA
- ▶ Any construction or alteration located on a public use airport or heliport regardless of height or location.

The FAA has been continuously improving the oe/aaa website to be more user friendly and increase the on-line functionality. The look and feel of the website may change in the future, but the majority of the content should remain as is.

**Create an account**

Before accessing the features of the website, the user will be required to create a username and password to access the website.

**Obstruction Evaluation**  
Version 2010, 1.0

- Home
- FAA OE/AAA Offices
- View Determined Cases
- View Proposed Cases
- View Supplemental Notices (Form 7460-2)
- View Circularized Cases
- Search Archives
- Download Archives
- Circle Search for Cases
- Circle Search for Airports
- Discretionary Review FAQs
- Notice Criteria Tool
- DoD Preliminary Screening Tool
- Distance Calculation Tool

## Obstruction Evaluation / Airport Airspace Analysis (OE/AAA)

In administering Title 14 of the Code of Federal Regulations CFR Part 77, the prime objectives of the FAA are to promote air safety and the efficient use of the navigable airspace. To accomplish this mission, aeronautical studies are conducted based on information provided by proponents on an FAA Form 7460-1, Notice of Proposed Construction or Alteration.

Advisory Circular 70/7460-1K, Obstruction Marking and Lighting, describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc.

**OE/AAA Filing Process**

If your organization is planning to sponsor any construction or alterations which may affect navigable airspace, you must file a **Notice of Proposed Construction or Alteration** (Form 7460-1) with the FAA.

**CLICK HERE**  
for Instructions on how to E-file  
your proposal with the FAA

**If construction or alteration IS NOT LOCATED on an airport:**

You may file forms 7460-1 and 7460-2 electronically via this website - [New User Registration](#).

or

You may file forms 7460-1 and 7460-2 via US Postal Mail to:

Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Service, AJR-322  
2601 Meacham Boulevard  
Fort Worth, TX 76193

**Questions?** Please contact the appropriate representative.

**If construction or alteration IS LOCATED on an airport:**

You may file forms 7460-1 electronically via this website - [New User Registration](#).

or

Find the FAA Airports Region / District Office having jurisdiction over the airport on which the construction is located, and file to that address.

faa.gov Tools Print this page

**OE/AAA Account**

- Login
- New User Registration

**Information Resources**

- FAA Acronyms
- Forms
- Regulatory Policy

Once a user has created an account, they will be able to log in and will be directed to the OE/AAA Portal Page. This page displays a summary of any projects which have been entered into the website, categorized by off-airport and on-airport projects.

### Adding a Sponsor

Before a user can enter project specific information, a project sponsor must be created. A sponsor is the person who is ultimately responsible for the construction or alteration. All FAA correspondence will be addressed to the sponsor. The sponsor could be the airport manager for projects proposed by the airport, or the developer proposing off airport construction. To create a sponsor contact, click “Add New Sponsor” on the “portal” page. From there the user can add sponsors for various projects.

OE/AAA Portal Page

faa.gov Tools: Print this page

<p><b>My Account</b></p> <p><b>Name:</b>  <b>User Name:</b>  <b>Login Time:</b>  <b>IP Address:</b></p> <p><b>Actions:</b>  <a href="#">What's New</a>  <a href="#">Update Account Information</a>  <a href="#">Change Password</a>  <a href="#">Logout</a></p>	<p><b>Off Airport Construction (includes on Military Airport)</b></p> <p><a href="#">My Cases (Off Airport)</a>   <a href="#">Add New Case (Off Airport)</a>  <a href="#">My Sponsors</a>   <a href="#">Add New Sponsor</a>  <a href="#">Air Traffic Areas of Responsibility</a></p> <p><b>My Cases by Status:</b></p> <table border="1"> <tr><td>Draft</td><td>0</td></tr> <tr><td>Accepted</td><td>0</td></tr> <tr><td>Add Letter</td><td>0</td></tr> <tr><td>Work in Progress</td><td>0</td></tr> <tr><td>Determined</td><td>0</td></tr> <tr><td>Circularized</td><td>0</td></tr> <tr><td>Terminated</td><td>0</td></tr> <tr><td>All</td><td>0</td></tr> </table> <p><b>Draft:</b> Cases that have been saved by the user but have not been submitted to the FAA.  <b>Accepted:</b> Cases that have been submitted to the FAA.  <b>Add Letter:</b> Cases that have been reviewed by the FAA and require additional information from the user.  <b>Work in Progress:</b> Cases that are being evaluated by the FAA.  <b>Determined:</b> Cases that have a completed aeronautical study and an FAA determination.  <b>Terminated:</b> Cases that are no longer valid.  Please allow the FAA a minimum of 30 days to complete a study.  <a href="#">Click here to contact the appropriate representative.</a></p>	Draft	0	Accepted	0	Add Letter	0	Work in Progress	0	Determined	0	Circularized	0	Terminated	0	All	0	<p><b>On Airport Construction (excludes on Military Airport)</b></p> <p><a href="#">My Cases (On Airport)</a>   <a href="#">Add New Case (On Airport)</a>  <a href="#">My Sponsors</a>   <a href="#">Add New Sponsor</a> ←  <a href="#">Airports Regional Contacts</a></p> <p><b>My Cases by Status:</b></p> <table border="1"> <tr><td>Draft</td><td>0</td></tr> <tr><td>Waiting</td><td>0</td></tr> <tr><td>Accepted</td><td>179</td></tr> <tr><td>Add Letter</td><td>0</td></tr> <tr><td>Work In Progress</td><td>64</td></tr> <tr><td>Determined</td><td>4</td></tr> <tr><td>Terminated</td><td>0</td></tr> <tr><td>Deleted</td><td>0</td></tr> <tr><td>All</td><td>247</td></tr> </table> <p><b>Draft:</b> Cases that have been saved by the user but have not been submitted to the FAA.  <b>Waiting:</b> Cases that have not been submitted to the FAA and are waiting for an action from the user, either to verify the map or attach a sketch.  <b>Accepted:</b> Cases that have been submitted to the FAA.  <b>Add Letter:</b> Cases that have been reviewed by the FAA and require additional information from the user.  <b>Work in Progress:</b> Cases that are being evaluated by the FAA.  <b>Determined:</b> Cases that have completed a aeronautical study and an FAA determination.  <b>Terminated:</b> Cases that are no longer valid.</p> <p>NOTE: Please use this section for filing on-airport constructions electronically.</p>	Draft	0	Waiting	0	Accepted	179	Add Letter	0	Work In Progress	64	Determined	4	Terminated	0	Deleted	0	All	247
Draft	0																																			
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<p><b>Email Notifications</b></p> <p><a href="#">Circularized Case Notification</a></p>	<p><b>Help</b></p> <p>OE/AAA Support Desk  <b>Phone:</b> 202-580-7500  <b>Email:</b> oeaaa_helpdesk@cghitech.com</p>	<p><b>Documents</b></p> <ul style="list-style-type: none"> <li>OE/AAA System User Guide</li> <li>FAA Acronyms</li> </ul>																																		

When the user selects “Add New Sponsor”, they will be presented with the following screen:

Add New Sponsor

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- The Sponsor can be you, your company, or your client. The sponsor is the person or business ultimately responsible for the construction or alteration. The sponsor appears as the addressee on all correspondence from the FAA.
- Please populate the following form to add or update a Sponsor.
- Required fields indicated with \*

\* Sponsor Name:

\* Attention Of:

\* Address:

Address2:

\* City:

\* State:

-OR-

\* Non-US State:

\* Country:

\* Zip / Post Code:

\* Phone:  -  -  ext

\* Fax:  -  -

\* Email:

**NOTE:** The party submitting information through the FAA website **DOES NOT** have to be the same as the sponsor. Often, a consultant or other party under direction from the sponsor makes the submittal through the website

## Creating a New Submittal

There are two options for creating a new 7460 submittal. Again on the left side, either click “Add New Case (off airport)” or “Add New Case (on airport)”

The screenshot displays the OE/AAA Portal Page. On the left is a navigation sidebar with the following items:

- Obstruction Evaluation Version 2010.1.0
- Home
- FAA OE/AAA Offices
- View Determined Cases
- View Proposed Cases
- View Supplemental Notices (Form 7460-2)
- View Circularized Cases
- Search Archives
- Download Archives
- Circle Search for Cases
- Circle Search for Airports
- Discretionary Review FAQs
- Notice Criteria Tool
- DoD Preliminary Screening Tool
- Distance Calculation Tool
- OE/AAA Account
- Portal Page
- My Cases (Off Airport)
- My Cases (On Airport)
- My Sponsors
- Add New Case (Off Airport)
- Add New Case (On Airport)
- Update User Account
- What's New
- Change Password
- Logout

The main content area is titled "OE/AAA Portal Page" and features a "My Account" section with the following details:

- Name:**
- User Name:**
- Login Time:**
- IP Address:**
- Actions:**
  - What's New
  - Update Account Information
  - Change Password
  - Logout

At the bottom of the page, there is an "Email Notifications" section with a link for "Circularized Case Notification". Two red arrows in the screenshot point to the "Add New Case (Off Airport)" and "Add New Case (On Airport)" links in the sidebar.

There are some differences in the required fields for “on airport” vs. “off airport” but the differences are minor and self-explanatory. One tip: for off airport submittals there is a field for “requested marking/lighting”. If the user does not have a preference, select other from the pull down menu and in the “other field” state “no preference”.

Notice of Proposed Construction or Alteration - Off Airport

faa.gov

**Sponsor (person, company, etc. proposing this action)**  
 \* Sponsor:

**Construction / Alteration Information**  
 \* Notice Of:   
 \* Duration:   
 if Temporary : Months:  Days:   
 Work Schedule - Start:  (mm/dd/yyyy)  
 Work Schedule - End:  (mm/dd/yyyy)  
 State Filing:

**Structure Summary**  
 \* Structure Type:   
 \* Structure Name:   
 FCC Number:   
 Prior ASN:  -  -

**Structure Details**  
 \* Latitude:  °  '  " N   
 \* Longitude:  °  '  " W   
 \* Horizontal Datum:  NAD83  
 \* Site Elevation (SE):  (nearest foot)  
 \* Structure Height (AGL):  (nearest foot)  
 \* Requested Marking/Lighting:  None  
 Other :   
 Audio Visual Warning System(AVWS):  Yes  
 \* Current Marking/Lighting:  Select One  
 Other :   
 \* Nearest City:   
 \* Nearest State:   
 \* Description of Location:   
 \* Description of Proposal:

**Common Frequency Bands**

	Low Freq	High Freq	Freq U
<input type="checkbox"/>	806	824	M
<input type="checkbox"/>	824	849	M
<input type="checkbox"/>	851	866	M
<input type="checkbox"/>	869	894	M
<input type="checkbox"/>	896	901	M
<input type="checkbox"/>	901	902	M
<input type="checkbox"/>	930	931	M
<input type="checkbox"/>	931	932	M
<input type="checkbox"/>	932	932.5	M
<input type="checkbox"/>	935	940	M
<input type="checkbox"/>	940	941	M
<input type="checkbox"/>	1850	1910	M
<input type="checkbox"/>	1930	1990	M
<input type="checkbox"/>	2305	2310	M
<input type="checkbox"/>	2345	2360	M

**Specific Frequencies**  
 Add Specific Frequency

**Additional Location(s)**  
 Add New Location(s)

Accurate lat/long and site elevation is critical for an accurate airspace determination.

It is recommended that survey quality data be obtained from a recent survey, a GPS unit, or worst case, scaled from a topo quad.

- The most common “notice of” is construction. Select from pull down menu.
- Latitude and longitude must be entered for the structure/construction activity.
- Most 7460 submittals will require multiple points with lat/long unless the 7460 is for a pole/tower/ or other single point object. Buildings and construction areas all require points indicating the extents of the building or area. More information is provided below on how to add additional points to a submittal.
- There is a field to describe the activity taking place. In some complex activities the field does not provide enough room for the required text. An additional explanatory letter can be attached. Additional information is provided in this section on how to add a letter or document to the submittal.
- Red asterisks indicate the required fields.
- Unless there has been a previous aeronautical study for this submittal leave the “prior study” fields blank.
- Only select “common frequency bands” if the proposed structure will transmit a signal.

If the submittal is a building or construction area that is more than a single lat/long point the user must save the data first. Click save at the bottom of the page. This will bring up a summary screen of the case. To add more points click “clone” under the heading “actions”.

Notice of Proposed Construction or Alteration - Off Airport faa.gov Tools: Print this page

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Project Name: TEST1-000119804-09 Sponsor: test10

---

**Project Summary : TEST1-000119804-09**  
Add Another Case to this Project

Structure	City, State	Lat/Long	Map	Actions
sadv Draft	edfv, TX	30° 30' 30.00" N 95° 30' 30.00" W	Verify Map	Delete Clone Upload a PDF
sadv Draft	edfv, TX	30° 30' 3.00" N 95° 41' 1.00" W	Verify Map	Delete Clone Upload a PDF
sadv Draft	edfv, TX	30° 30' 30.00" N 95° 1' 1.00" W	Verify Map	Delete Clone Upload a PDF
sadv Draft	edfv, TX	30° 30' 9.00" N 94° 4' 7.00" W	Verify Map	Delete Clone Upload a PDF
sadv Draft	edfv, TX	30° 30' 15.00" N 95° 41' 4.00" W	Verify Map	Delete Clone Upload a PDF

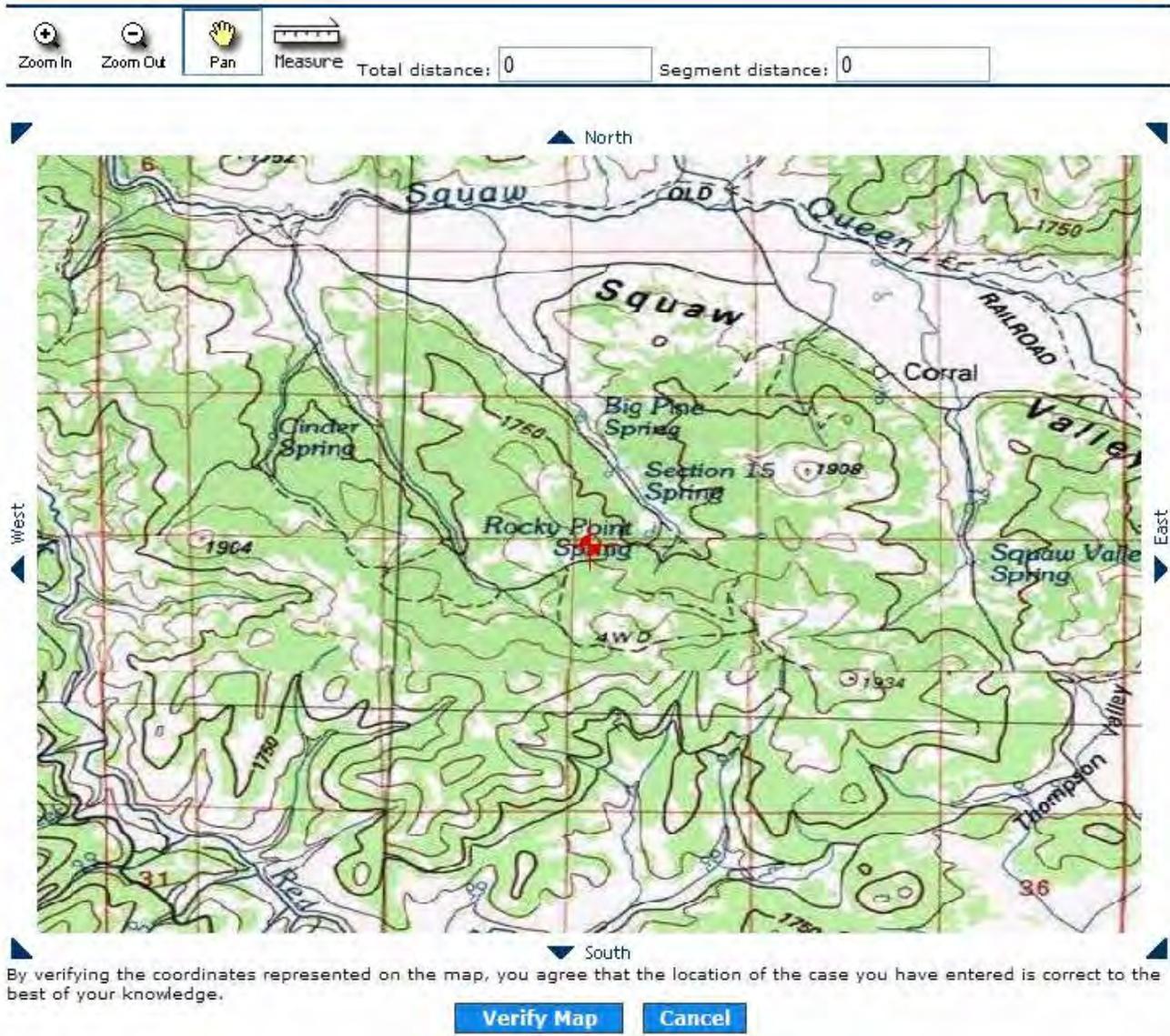
To submit this project, you must verify the coordinates of each case listed above.

The clone tool copies all the relevant information to a new page where an additional lat/long and elevation can be entered. However, the clone process does not number the various points of a proposed project. When entering the details for a point (see Image 5) it is helpful if the user assigns a number to the point and references the total number of points for the project (e.g. point 2 of 20). The numbering can be included in the project “description/remarks” field for each point.

It should be noted that each individual point associated with a project (e.g. each corner of a building) is evaluated individually, thus the importance of including a numbering system (2 of 20) in the text/description box.

Once done, click “save” again. Now the user will see two records under the “project summary” heading. Continue this process of cloning for all the remaining points.

Once all the points have been entered, each point must be verified. There is a red X with the words “verify map” indicating the user has not verified the location. Click Verify Map, a popup will display the lat/long point on a topo map and the user must verify that it is in the correct location. After clicking “verify map” on the popup, the red X will become a blue checkmark. It seems to be more efficient to enter all of the points associated with a project and then return to verify each point on the map at one time.



All on-airport project submittals must have a “project sketch” included. Under the “actions” column select “upload a PDF”. Once you have uploaded a sketch for all the points associated with the project the red X under “sketch” will turn to a green check mark. Off-airport projects do not require a “project sketch”, but the user can still upload one for informational purposes.

If the user needs to add any other information such as an explanatory letter, clicking on “upload a PDF” will allow the user to upload more documents, although only one at a time. Keep in mind that if additional PDFs or information are being provided, like the project sketch it must be uploaded to every point associated with the project.

Once the maps have been verified and sketches uploaded for all points associated with the case, the user will be able to submit the 7460 to the FAA for review.

## Status of Submitted Projects

To check the status of a submittal, click on either “my cases (off airport)” or “my cases (on airport)” to see a list of what has been submitted. Each of the multiple points associated with one project will be listed as if they are separate, although still associated. The points will have a status:

**ALL of My Cases (Off Airport)** faa.gov Tools: [Print this page](#)

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All Cases	Filter by Case Status	Cases Requiring Action
<a href="#">Show All Cases (31)</a>	<a href="#">Draft (15)</a>   <a href="#">Accepted (0)</a>   <a href="#">Work in Progress (0)</a> <a href="#">Determined (0)</a>   <a href="#">Circularized (0)</a>   <a href="#">Terminated (16)</a>	<a href="#">7460-2 Required (0)</a>   <a href="#">Add Letter (0)</a>

Records 1 to 20 of 31 Page 1 of 2  
[Next page →](#)

Project Name	Structure Name	ASN	Status	Date Accepted	Date Determined	City	State
CITY -000038834-06	Test	2007-ASW-11935-OE	Terminated	12/27/2007	12/27/2007	Test	TX
CITY -000059482-07	adv		Draft			ljknasd	AS
CITY -000059483-07			Draft			1WADC	TX
CITY -000060676-07	Clearing		Draft			Loackhaven	PA
GLYN -000102789-08	Belgrade		Draft			Memphis	TN
TEST -000017393-05			Draft			Test	TX
TEST -000017393-05			Draft			Test	VA
TEST -000026823-05	-2 Test	2005-ASW-5900-OE	Terminated	10/24/2005	01/26/2006	Test	TX
TEST-000042518-06			Draft			Test	PW
TEST-000054890-06			Draft			Miami	HI
TEST-000062979-07	Test	2007-ASW-2891-OE	Terminated	03/31/2007	03/31/2007	Test	TX
TEST-000068985-07	Test	2007-ASW-4498-OE	Terminated	06/06/2007	06/06/2007	Test	TX
TEST-000070702-07	Test	2007-AAL-169-OE	Terminated	06/28/2007	06/28/2007	test	AK
TEST-000073196-07	Test	2007-ASW-6665-OE	Terminated	07/28/2007	07/28/2007	Test	TX
TEST-000076148-07	Test Case	2007-ASW-7840-OE	Terminated	08/30/2007	09/24/2007	Test	TX
TEST-000080619-07	Test	2007-ASW-9818-OE	Terminated	10/25/2007	10/25/2007	Test	TX
TEST-000089176-08	Test	2008-ASW-1637-OE	Terminated	02/28/2008	02/28/2008	Test	TX
TEST-000100444-08	test	2008-ASW-5488-OE	Terminated	08/04/2008	08/04/2008	Test	TX
TEST-000102395-08	test	2008-ASW-5898-OE	Terminated	08/28/2008	10/03/2008	Test	TX
TEST-000104649-08	test	2008-ASW-6317-OE	Terminated	10/03/2008	10/09/2008	test	TX

Rows per Page: 20 [Next page →](#)

Records 1 to 20 of 31 Page 1 of 2

### Project Status Definitions:

**Draft:** Cases that have been saved by the user but have not been submitted to the FAA.

**Waiting:** Cases that have not been submitted to the FAA and are waiting for an action from the user, either to verify the map or attach a sketch.

**Accepted:** Cases that have been submitted to the FAA.

**Add Letter:** Cases that have been reviewed by the FAA and require additional information from the user.

**Work in Progress:** Cases that are being evaluated by the FAA.

**Determined:** Cases that have a completed aeronautical study and an FAA determination.

**Terminated:** Cases that are no longer valid.

These definitions are also shown at the bottom of the summary screen.

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# Airport Land Use Compatibility Concepts

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## INTRODUCTION

This appendix provides basic information regarding the concepts and rationale used to develop the compatibility policies and maps set forth in Chapters 2 through 6 of this *Placer County Airport Land Use Compatibility Plan (ALUCP)*. Some of the material is excerpted directly from the *California Airport Land Use Planning Handbook (Handbook)* published by the California Division of Aeronautics in January 2011. Other portions are based upon concepts that evolved from technical input obtained during review and discussion of preliminary drafts of key policies.

State law requires that airport land use commissions “be guided by” the information presented in the *Handbook*. Despite the statutory reference to it, though, the *Handbook* does not constitute formal state policy or regulation. Indeed, adjustment of the guidelines to fit the circumstances of individual airports is suggested by the *Handbook*. The *Handbook* guidance does not supersede or otherwise take precedence over the policies adopted by the Placer County Transportation Planning Agency (PCTPA), acting in its capacity as the Airport Land Use Commission (*ALUC*) for Placer County, in this *ALUCP*. Furthermore, this appendix itself does not constitute *ALUC* policy. If the material herein conflicts in any manner with the actual policy language or maps, the policies and maps prevail.

As outlined in the *Handbook*, the noise and safety compatibility concerns of *ALUCs* fall into four categories. This *ALUCP* refers to these categories as “factors” and establishes compatibility zones that consider all four factors in a composite manner:

- *Noise*: As defined by cumulative noise exposure contours describing noise from aircraft operations near an airport.
- *Overflight*: The impacts of routine aircraft flight over a community.
- *Safety*: From the perspective of minimizing the risks of aircraft accidents beyond the runway environment.
- *Airspace Protection*: Accomplished by limits on the height of structures and other objects in the airport vicinity and restrictions on other uses that potentially pose hazards to flight.

The documentation in the remainder of this appendix is organized under these four categories. Under each of the four compatibility category headings, the discussion is organized around four topics:

- *Compatibility Objective*: The objective to be sought by establishment and implementation of the compatibility policies;
- *Measurement*: The scale on which attainment of the objectives can be measured;
- *Compatibility Strategies*: The types of strategies which, when formulated as compatibility policies, can be used to accomplish the objectives; and
- *Basis for Setting Criteria*: The factors which should be considered in setting the respective compatibility criteria.

## NOISE

Noise is perhaps the most basic airport land use compatibility concern. Certainly, it is the most noticeable form of airport impact.

### Compatibility Objective

The purpose of noise compatibility policies is to avoid establishment of new noise-sensitive land uses in the portions of an airport environs that are exposed to significant levels of aircraft noise, taking into account the characteristics of the airport and the community surrounding the airport.

### Measurement

For the purposes of airport land use compatibility planning, noise generated by the operation of aircraft to, from, and around an airport is primarily measured in terms of the cumulative noise levels of all aircraft operations. In California, the cumulative noise level metric established by state regulations, including for measurement of airport noise, is the Community Noise Equivalent Level (CNEL). Cumulative noise level metrics measure the noise levels of all aircraft operating at an airport on an average day (1/365) of the year. The calculations take into account not only the number of operations of each aircraft type and the noise levels they produce, but also their distribution geographically (the runways and flight tracks used) and by time of day. To reflect an assumed greater community sensitivity to nighttime and evening noise, the CNEL metric counts events during these periods as being louder than actually measured.

Cumulative noise level metrics provide a single measure of the average sound level in decibels (dB) to which any point near an airport is exposed over the course of a day. Although the maximum noise levels produced by individual aircraft are a major component of the calculations, cumulative noise level metrics do not explicitly measure these peak values. Cumulative noise levels are usually illustrated on airport area maps as contour lines connecting points of equal noise exposure. Mapped noise contours primarily show areas of significant noise exposures—ones affected by high concentrations of aircraft takeoffs and landings.

For civilian airports, noise contours are typically calculated using the Federal Aviation Administration's Integrated Noise Model (INM) computer program. Inputs to this model are of two basic types: standardized data regarding aircraft performance and noise levels generated (this data can be adjusted for a particular airport if necessary); and airport-specific data including aircraft types and number of operations, time of day of aircraft operations, runway usage distribution, and the location and usage of flight tracks. Airport elevation and surrounding topographic data can also be entered. For airports with airport traffic control towers, some of these inputs can be obtained from recorded data. Noise monitoring and radar flight tracking data available for airports in metropolitan areas are other sources of valuable information. At most airports, though, the individual input variables must be estimated.

### Compatibility Strategies

The basic strategy for achieving noise compatibility in an airport's vicinity is to limit development of land uses that are particularly sensitive to noise. The most acceptable land uses are ones that either involve few people (especially people engaged in noise-sensitive activities) or generate significant noise levels themselves (such as other transportation facilities or some industrial uses).

California state law regards any residential land uses as normally incompatible where the noise exposure exceeds 65 dB CNEL (although the state airport noise regulations explicitly apply only to identified “noise problem airports” in the context of providing the ability of these airports to operate under a noise variance from the State, the *Handbook* and other state guidelines extend this criterion to all airports as discussed below). This standard, however, is set with respect to high-activity airports, particularly major air carrier airports, in urban locations, where ambient noise levels are generally higher than in suburban and rural areas. As also discussed below and as provided in the *Handbook*, a lower threshold of incompatibility is often appropriate at certain airports, particularly around airports in suburban or rural locations where the ambient noise levels are lower than those found in more urban areas.

In places where the noise exposure is not so severe as to warrant exclusion of new residential development, the ideal strategy is to have very low densities—that is, parcels large enough that the dwelling can be placed in a less impacted part of the property. In urban areas, however, this strategy is seldom viable. The alternative for such locations is to encourage high-density, multi-family residential development with little, if any, outdoor areas, provided that the 65 dB CNEL standard and limitations based upon safety are not exceeded. Compared to single-family subdivisions, ambient noise levels are typically higher in multi-family developments, outdoor living space is less, and sound insulation features can be more easily added to the buildings. All of these factors tend to make aircraft noise less intrusive.

Sound insulation is an important requirement for residential and other noise-sensitive indoor uses in high noise areas. The California Building Code requires that sufficient acoustic insulation be provided in any habitable rooms of new hotels, motels, dormitories, dwellings other than detached single-family residences to assure that aircraft noise is reduced to an interior noise level of 45 dB CNEL or less. To demonstrate compliance with this standard, an acoustical analysis must be done for any residential structure proposed to be located where the annual CNEL exceeds 60 dB. This *ALUCP* extends the 45 dB CNEL interior noise limit standard to single-family dwellings. The *ALUCP* further requires dedication of an aviation easement (see later discussion in this appendix) as a condition for development approval in locations where these standards come into play.

## **Basis for Setting Criteria**

Compatibility criteria related to cumulative noise levels are well-established in federal and state laws and regulations. The California Airport Noise Regulations (California Code of Regulations Section 5000 *et seq.*) states that:

“The level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a community noise equivalent level (CNEL) value of 65 dB for purposes of these regulations. This criterion level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep and community reaction.”

No airport declared by a county’s board of supervisors as having a “noise problem” is to operate in a manner that result in incompatible uses being located within the 65 dB CNEL contour. Incompatible uses are defined as being: residences of all types; public and private schools; hospitals and convalescent homes; and places of worship. However, these uses are not regarded as incompatible where acoustical insulation necessary to reduce the interior noise level to 45 dB CNEL has been installed or the airport proprietor has acquired an aviation easement for aircraft noise.

As noted in the regulations, the 65 dB CNEL standard is set with respect to urban areas. For many airports and many communities, 65 dB CNEL is too high to be considered acceptable to “reasonable per-

sons.” Through a process called “normalization,” adjustments can be made to take into account such factors as the background noise levels of the community and previous exposure to particular noise sources. This process suggests, for example, that 60 dB CNEL may be a more suitable criterion for suburban communities not exposed to significant industrial noise and 55 dB CNEL may be appropriate for quiet suburban or rural communities remote from industrial noise and truck traffic. On the other hand, even though exceeding state standards, 70 dB CNEL may be regarded as an acceptable noise exposure in noisy urban residential communities near industrial areas and busy roads.

Industrial activity and transportation noise are undoubtedly two of the most prominent contributors to background noise levels in a community. According to a U.S. Environmental Protection Agency (EPA) study however, the variable that correlates best with ambient noise levels across a broad range of communities is population density (*Population Distribution of the United States as a Function of Outdoor Noise Level*, EPA Report No. 550/9-74-009, June 1974). This study established the following formula as a means of estimating the typical background noise level of a community:

$$DNL_{EPA} = 22 + 10 * \log(p)$$

where “p” is the population density measured in people per square statute mile.

These factors are reflected in the policies of this *ALUCP*. The ALUC considers 60 dB CNEL to be the maximum normally acceptable noise exposure for new residential development near Placer County Airports. Based upon the above EPA equation, these criteria are a minimum of 5 dB above the predicted ambient noise levels in the respective communities.

Similar considerations come into play with respect to establishing maximum acceptable noise exposure for nonresidential land uses, particularly those that are noise sensitive. For schools, lodging, and other such uses, a higher noise exposure may be tolerated in noisy urban communities than in quieter suburban and rural areas. For uses that are not noise sensitive or which generate their own noise, the maximum acceptable noise exposure levels tend to be the same regardless of ambient noise conditions. The criteria listed in Chapters 3 through 6 of this *ALUCP* are set with these various factors in mind.

## OVERFLIGHT

Experience at many airports has shown that noise-related concerns do not stop at the boundary of the outermost mapped CNEL contours. Many people are sensitive to the frequent presence of aircraft overhead even at low levels of noise. These reactions can mostly be expressed in the form of *annoyance*.

The *Handbook* notes that at many airports, particularly air carrier airports, complaints often come from locations beyond any of the defined noise contours. Indeed, heavily used flight corridors to and from metropolitan areas are known to generate noise complaints 50 miles or more from the associated airport. The basis for such complaints may be a desire and expectation that outside noise sources not be intrusive—or, in some circumstances, even distinctly audible—above the quiet, natural background noise level. Elsewhere, especially in locations beneath the traffic patterns of general aviation airports, a fear factor also contributes to some individuals’ sensitivity to aircraft overflights.

While these impacts may be important community concerns, the question of importance here is whether any land use planning actions can be taken to avoid or mitigate the impacts or otherwise address the concerns. Commonly, when overflight impacts are under discussion in a community, the focus is on modification of the flight routes. Indeed, some might argue that overflight impacts should be ad-

dressed solely through the aviation side of the equation—not only flight route changes, but other modifications to where, when, and how aircraft are operated. Such changes are not always possible because of terrain, aircraft performance capabilities, FAA regulations, and other factors. In any case, though, ALUCs are particularly limited in their ability to deal with overflight concerns. Most significantly, they have no authority over aircraft operations. The most they can do to bring about changes is to make requests or recommendations. Even with regard to land use, the authority of ALUCs extends only to proposed new development and the delineation of an airport's overall influence area. The authority and responsibility for implementing the *ALUCP*'s policies and criteria rests with the local governments.

These limitations notwithstanding, there are steps which ALUCs can and should take to help minimize overflight impacts.

## **Compatibility Objective**

In an idealistic sense, the compatibility objective with respect to overflight is the same as for noise: avoid new land use development that can disrupt activities and lead to annoyance and complaints. However, given the extensive geographic area over which the impacts occur, this objective is unrealistic except relatively close to the airport. A more realistic objective of overflight compatibility policies therefore is to help notify people about the presence of overflights near airports so that they can make more informed decisions regarding acquisition or lease of property in the affected areas.

## **Measurement**

Cumulative noise metrics such as CNEL are well-suited for use in establishing land use compatibility policy criteria and are the only noise metrics for which widely accepted standards have been adopted. However, these metrics are not very helpful in determining the extent of overflight impact areas. Locations where overflight concerns may be significant are typically well beyond where noise contours can be drawn with precision. Flight tracks tend to be quite divergent and noise monitoring data is seldom available. Moreover, even if the contours could be drawn precisely, the noise levels they would indicate may not be much above the ambient noise levels.

For the purposes of airport land use compatibility planning, two other forms of noise exposure information are more useful. One measure is the momentary, maximum sound level ( $L_{\max}$ ) experienced on the ground as the aircraft flies over while landing at and taking off from a runway. These noise levels can be depicted in the form of a noise “footprint” as shown in Figure C1 for a variety of airline and general aviation aircraft. Each of these footprints is broadly representative of those produced by other aircraft similar to the ones shown. The actual sound level produced by any single aircraft takeoff or landing will vary not only among specific makes and models of aircraft, but also from one operation to another of identical aircraft.

In examining the footprints, two additional points are important to note. One is the importance of the outermost contour. This noise level (65 dBA  $L_{\max}$ ) is the level at which interference with speech begins to be significant. Land uses anywhere within the noise footprint of a given aircraft would experience a noise level, even if only briefly, that could be disruptive to outdoor conversation. Indoors, with windows closed, the aircraft noise level would have to be at least 20 dBA louder to present similar impacts. A second point to note concerns the differences among various aircraft, particularly business jets. As the data shows, business jets manufactured in the 1990s are much quieter than those of 10 and 20 years earlier. The impacts of the 1990s era jets are similar to those of twin-engine piston aircraft and jets being made in the 2000s are quieter yet. At many general aviation airports, the size of the CNEL con-

tours is driven by a relatively small number of operations by the older, noisier business jets. These aircraft are gradually disappearing from the nationwide aircraft fleet and will likely be mostly gone within 20 years, but at this point in time it is uncertain when they will be completely eliminated.

Another useful form of overflight information is a mapping of the common flight tracks used by aircraft when approaching and departing an airport. Where available, recorded radar data is an ideal source for flight track mapping. Even more revealing is to refine the simple flight track mapping with data such as the frequency of use and/or aircraft altitudes.

## Compatibility Strategies

As noted above, the ideal land use compatibility strategy with respect to overflight annoyance is to avoid development of new residential and other noise-sensitive uses in the affected locations. To the extent that this approach is not practical, other strategies need to be explored.

The strategy emphasized in this *ALUCP* is to help people with above-average sensitivity to aircraft overflights—people who are highly *annoyed* by overflights—to avoid living in locations where frequent overflights occur. This strategy involves making people more aware of an airport’s proximity and its current and potential aircraft noise impacts on the community before they move to the area. This can be accomplished through buyer awareness measures such as dedication of avigation or overflight easements, recorded deed notices, and/or real estate disclosure statements. In new residential developments, posting of signs in the real estate sales office and/or at key locations in the subdivision itself can be further means of alerting the initial purchasers about the impacts (signs, however, generally do not remain in place beyond the initial sales period and therefore are of little long-term value).

A second strategy is to minimize annoyance in by promoting types of land uses that tend to mask or reduce the intrusiveness of aircraft noise. Although this strategy does not directly appear in the overflight policies of this *ALUCP*, the objectives of the plan would be well-served if local jurisdictions take this concept into consideration in their own planning efforts. To the extent that residential land uses must be located in aircraft overflight areas, multi-family residences—because they tend to have comparatively little outdoor living areas, fewer external walls through which aircraft noise can intrude, and relatively high noise levels of their own—are preferable to single-family dwellings. Particularly undesirable are “ranchette” style residential areas consisting of large (about an acre on average) lots. Such developments are dense enough to expose many people to overflight noise, yet sufficiently rural in character that background noise levels are likely to be low.

## Basis for Setting Criteria

In California, the most definitive guidance on where overflight impacts are significant or what actions should be taken in response comes from a state law that took effect in January 2004. California statutes (Business and Profession Code Section 11010 and Civil Code Sections 1103 and 1353) now require most residential real estate transactions, including all involving new subdivisions, to include disclosure that an airport is nearby. The area encompassed by the disclosure requirements is two miles from the airport or the airport influence area established by the county’s airport land use commission. The law defines the 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.” This *ALUCP* requires that the disclosure of airport proximity be applied to all new development within both the primary and secondary

airport influence areas and recommends that disclosure be provided as part of all real estate transactions involving private property, especially any sale, lease, or rental of residential property.

## **SAFETY**

Compared to noise, safety is in many respects a more difficult concern to address in airport land use compatibility policies. A major reason for this difference is that safety policies address uncertain events that *may occur* with *occasional* aircraft operations, whereas noise policies deal with known, more or less predictable events which *do occur* with *every* aircraft operation. Because aircraft accidents happen infrequently and the time, place, and consequences of an individual accident's occurrence cannot be predicted, the concept of *risk* is central to the assessment of safety compatibility.

### **Compatibility Objective**

The overall objective of safety compatibility criteria is to minimize the risks associated with potential off-airport aircraft accidents and emergency landings beyond the runway environment. There are two components to this objective:

- *Safety on the Ground:* The most fundamental safety compatibility component is to provide for the safety of people and property on the ground in the event of an aircraft accident near an airport.
- *Safety for Aircraft Occupants:* The other important component is to enhance the chances of survival of the occupants of an aircraft involved in an accident that takes place beyond the immediate runway environment.

### **Measurement**

Because aircraft accidents happen infrequently, measuring the risks associated with their occurrence is difficult. It is necessary to look beyond an individual airport in order to assemble enough data to be statistically valid. It is beyond the intent of this discussion to provide statistical data about aircraft accidents. Much can be found on that topic in the *Handbook*. However, certain aspects of aircraft accidents are necessary to discuss in that they have a direct bearing on land use compatibility strategies.

From the standpoint of land use planning, two variables determine the degree of risk posed by potential aircraft accidents: frequency and consequences.

The frequency variable measures *where* and *when* aircraft accidents occur in the vicinity of an airport. More specifically, these two elements can be described as follows:

- *Spatial Element:* The spatial element describes *where* aircraft accidents can be expected to occur. Of all the accidents that take place in the vicinity of airports, what percentage occurs in any given location?
- *Time Element:* The time element adds a *when* variable to the assessment of accident frequency. In any given location around a particular airport, what is the chance that an accident will occur in a specified period of time?

### ***Spatial Distribution of Aircraft Accidents***

Of these two elements, the spatial element is the one most meaningfully applied to land use compatibility planning around an individual airport. Looking at airports nationwide, enough accidents have occurred to provide useful data regarding where they mostly occur in the environs of airports. As described below, the *Handbook* uses this data to define a set of safety zones. Additionally, the relative concentration of accidents in certain parts of the airport environs is a key consideration in the establishment of compatibility criteria applicable within those zones.

In contrast, the time element is not very useful for land use compatibility planning purposes for several reasons. First, at any given airport, the number of accidents is, with rare exceptions, too few to be statistically meaningful in determining where future accidents might occur. Secondly, a calculation of accident frequency over time depends upon the size of the area under consideration—the smaller the area examined, the less likely it is that an accident will occur in that spot. Lastly, even if the accident frequency over a period of time is calculated, there are no clear baselines with which to compare the results—is once per 100 or 1,000 years significant or not?

The *Handbook* presents a set of diagrams indicating where accidents are most likely to occur around airline and general aviation airports. Figures C2 and C3 show the spatial distribution of general aviation aircraft accidents in the vicinity of airports. (Note that these charts show data for all general aviation accidents in the *Handbook* database. Data on accidents associated with different lengths of runway is also provided, though, and is considered in delineation of the safety zones depicted in Chapters 7 through 9 of this *ALUCP*.)

The charts reveal several facts:

- About half of arrival accidents and a third of departure accidents take place within the FAA-defined runway protection zone for a runway with a low-visibility instrument approach procedure (a 2,500-foot long trapezoid, varying from 1,000 feet wide at the inner edge to 1,750 feet in width at the outer end). This fact lends validity to the importance of the runway protection zones as an area within which land use activities should be minimal.
- Although the runway protection zones represent the locations within which risk levels are highest, a significant degree of risk exists well beyond the runway protection zone boundaries. Among all near-airport (within 5 miles) accidents, over 80% are concentrated within 1.5 to 2.0 miles of a runway end.
- Arrival accidents tend to be concentrated relatively close to the extended runway centerline. Some 80% occur within a strip extending 10,000 feet from the runway landing threshold and 2,000 feet to each side of the runway centerline.
- Departure accidents are comparatively more dispersed laterally from the runway centerline, but are concentrated closer to the runway end. Many departure accidents also occur lateral to the runway itself, particularly when the runway is long. Approximately 80% of the departure accident sites lie within an area 2,500 feet from the runway centerline and 6,000 feet beyond the runway end or adjacent to the runway.

To provide some sense of order to the scatter of individual accident points, an analysis presented in the *Handbook* involves aggregating the accident location points (the scatter diagrams of where accidents have occurred relative to the runway) in a manner that better identifies where the accident sites are most concentrated. The results are presented as risk intensity contours—Figure C2 shows arrival accident risks and Figure C3 portrays departure accident risks. The two drawings divide the near-airport

accident location points into five groups of 20% each (note that only accident sites that were not on a runway, but were within 5 miles of an airport are included in the database). The 20% contour represents the highest or most concentrated risk intensity, the 40% contour represents the next highest risk intensity, and so on up to 80%. The final 20% of the accident sites are beyond the 80% contour. Each contour is drawn so as to encompass 20% of the points within the most compact area. The contours are irregular in shape. No attempt has been made to create geometric shapes. However, the risk contours can serve as the basis for creating geometric shapes that can then be used as safety zones. The *Handbook* contains several examples.

The *Handbook* takes the additional step of translating the risk contours into several sets of generic safety zones having regular geometric shapes. Generic safety zones are illustrated for different types and lengths of runways. The shapes of these zones reflect not just the accident distribution data, but also the ways in which different phases of aircraft operations create different accident risk characteristics near an airport. For most runways, the *Handbook* suggests creation of six zones. The locations, typical dimensions, and characteristics of the accident risks within each zone are outlined in Table C1. In more general terms, the relative degree of the risk exposure in each zone can be described as listed below.

- *Zone 1* clearly is exposed to the greatest risk of aircraft accidents. For civilian airports, the dimensions of this zone are established by FAA standards. The FAA encourages airport ownership of this zone and provides specific land use standards to the extent that land is airport owned. Where the land is not airport owned, the FAA says these standards serve as recommendations.
- *Zone 2* lies beyond *Zone 1* and also has a significant degree of risk as reflected in both national and local accident location data.
- *Zone 3* has less risk than *Zone 2*, but more than *Zones 4, 5, or 6*. *Zone 3* encompasses locations where aircraft often turn at low altitude while approaching or departing the runway.
- *Zone 4* lies along the extended runway centerline beyond *Zone 2* and is especially significant at airports that have straight-in instrument approach procedures or a high volume of operations that result in an extended traffic pattern.
- *Zone 5* is a unique area lying adjacent to the runway and, for most airports, lies on airport property. The risk is comparable to *Zone 4*.
- *Zone 6* contains the aircraft traffic pattern. Although a high percentage of accidents occur within *Zone 6*, for any given runway *Zone 6* is larger than all the other zones combined. Relative to the other zones, the risks in *Zone 6* are much less, but are still greater than in locations more distant from the airport.

Although accident location data, together with information on how aircraft flight parameters affect where accidents occur, are the bases for delineation of the generic safety zones, the *Handbook* indicates that adjustments to the zone sizes and shapes must be made in recognition of airport-specific characteristics. Among these characteristics are:

- The particular mix of aircraft types operating at the airport. Larger aircraft generally are faster than smaller planes and thus fly longer and wider traffic patterns or make straight-in approaches.
- The overall volume of aircraft operations. At busy airports, a larger traffic pattern is common because aircraft have to get in sequence for landing.
- Nearby terrain or other airports. These physical features may, for example, limit a traffic pattern to a single side of the airport or dictate “nonstandard” approach and departure routes.

- Instrument approach procedures. Aircraft following these procedures typically fly long, straight-in, gradual descents to the runway. In some cases, though, an approach route may be aligned at an angle to the runway rather than straight in.
- Existence of an air traffic control tower. When a tower is present, controllers may direct or allow pilots to fly unusual routes in order to expedite traffic flow. By comparison, at relatively busy but non-towered airports, aircraft mostly follow the “standard” pattern dictated by federal aviation regulations.
- A dominant direction of traffic flow. As reflected in the *Handbook* analysis of accident locations, landing aircraft tend to follow routes directly in line with the runway during final descent and thus accident sites also are concentrated along this alignment. Departing aircraft are more likely to turn to head to their intended destination and the accident pattern is thus more dispersed. On runways where the flow of aircraft operations is almost always in one direction, this distinction in accident patterns is considered.

Radar data is particularly helpful in showing exactly where aircraft fly when approaching or departing an airport. This data can be used to further support adjustments to the safety zones based upon the above characteristics. Radar data, though, is not available for many of outlying airports. In these instances, information on normal traffic pattern locations can be obtained through contact with local flight instructors and others highly familiar with a particular airport.

### ***Accident Consequences***

The consequences variable describes *what* happens when an aircraft accident occurs. Specific measures can be defined in terms of deaths, injuries, property damage, or other such characteristics. In many respects, the consequences component of aircraft accident risk assessment is a more important variable than accident frequency. Not only can a single accident cost many lives, it can indirectly force operational changes or even airport closure.

Relatively little data is available specifically documenting the consequences of aircraft accidents. Except with regard to numbers of deaths or injuries to people on the ground, data on various aspects of aircraft accidents must be used to infer what the consequences have been. Swath size is one useful piece of information. It indicates the area over which accident debris is spread. Swath size in turn depends upon the type of aircraft and the nature of the accident: was the aircraft in controlled flight (an engine failure for example), but then collided with something on the ground or did a catastrophic event (such as a mid-air collision or stall-spin) result in the aircraft making an uncontrolled descent? For small general aviation aircraft, the swath size data suggests that a controlled emergency landing in which the aircraft occupants have a strong chance of surviving is possible in an area about the size of a football field: 75 feet by 300 feet or about 0.5 acre. For larger aircraft, the minimum flight speed is so much higher that the consequences for people on board and anyone on the ground are likely to be high regardless of the land use or terrain characteristics.

### **Compatibility Strategies**

The relatively low numbers of deaths and injuries from aircraft accidents is sometimes cited as indicating that the risks are low. Clearly, though, the more people occupying the critical areas around airports, the greater the risks are. Aircraft accidents may be rare occurrences, but when they occur, the consequences can be severe.

From a land use compatibility perspective, it is therefore essential to avoid conditions that can lead to catastrophic results. Basically, the question is: what land use planning measures can be taken to reduce the severity of an aircraft accident if one occurs in a particular location near an airport? Although there is a significant overlap, specific strategies must consider both components of the safety compatibility objective: protecting people and property on the ground; and, primarily for general aviation airports, enhancing safety for aircraft occupants. In each case, the primary strategy is to limit the intensity of use (the number of people concentrated on the site) in locations most susceptible to an off-airport aircraft accident. This is accomplished by three types of criteria.

### ***Density and Intensity Limitations***

Establishment of criteria limiting the maximum number of dwellings or people in areas close to the airport is the most direct method of reducing the potential severity of an aircraft accident. In setting these criteria, consideration must be given to the two different forms of aircraft accidents: those in which the aircraft is descending, but is flying and under directional control of the pilot; and those in which the aircraft is out of control as it falls. Additionally, these data do not include the incidents in which the pilot made a successful emergency landing—the latter generally are categorized as “incidents” rather than as accidents and do not appear in the National Transportation Safety Board data from which the database in the *Handbook* is drawn.

Limits on usage intensity—the number of people per acre—must take into account both types of potential aircraft accidents. To the extent that accidents and incidents are of the controlled variety, then allowing high concentrations of people in a small area would be sensible, as long as intervening areas are little populated. However, concentrated populations present a greater risk for severe consequences in the event of an uncontrolled accident at that location. The policies in Chapters 3 through 6 address both of these circumstances. Limiting the average usage intensity over a site reduces the risks associated with either type of accident. In most types of land use development, though, people are not spread equally throughout the site. To minimize the risks from an uncontrolled accident, the policies also limit the extent to which people can be concentrated and development can be clustered in any small area.

### ***Open Land Requirements***

Creation of requirements for open land near an airport addresses the objective of enhancing safety for the occupants of an aircraft forced to make an emergency landing away from a runway. If sufficiently large and clear of obstacles, open land areas can be valuable for light aircraft anywhere near an airport. For large and high-performance aircraft, however, open land has little value for emergency landing purposes and is useful primarily where it is an extension of the clear areas immediately adjoining a runway.

### ***Highly Risk-Sensitive Uses***

Certain critical types of land uses—particularly schools, hospitals, and other uses in which the mobility of occupants is effectively limited—should be avoided near the ends of runways regardless of the number of people involved. Critical community infrastructure also should be avoided near airports. These types of facilities include power plants, electrical substations, public communications facilities and other facilities, the damage or destruction of which could cause significant adverse effects to public health and welfare well beyond the immediate vicinity of the facility. Lastly, aboveground storage of large quantities of highly flammable or hazardous materials may pose high risks if involved in an aircraft accident and therefore are generally incompatible close to runway ends.

## Basis for Setting Criteria

As with noise contours, risk data by itself does not answer the question of what degree of land use restrictions should be established in response to the risks. Although most ALUCs have policies that restrict certain land use activities in locations beyond the runway protection zones, the size of the area in which restrictions are established and the specific restrictions applied vary from one county to another.

Data useful in defining the geographic extent of airport safety areas was discussed above. To set safety compatibility criteria applicable within these zones presents the fundamental question of what is safe. Expressed in another way: what is an *acceptable risk*? In one respect, it may seem ideal to reduce risks to a minimum by prohibiting most types of land use development from areas near airports. However, as addressed in the *Handbook*, there are usually costs associated with such high degrees of restrictiveness. In practice, safety criteria are set on a progressive scale with the greatest restrictions established in locations with the greatest potential for aircraft accidents.

Little established guidance is available to ALUCs regarding how restrictive to make safety criteria for various parts of an airport's environs. Unlike the case with noise, there are no formal federal or state laws or regulations which set safety criteria for airport area land uses for civilian airports except within *runway protection zones* (and with regard to airspace obstructions as described separately in the next section). Federal Aviation Administration safety criteria primarily are focused on the runway and its immediate environment. Runway protection zones—then called *clear zones*—were originally established mostly for the purpose of protecting the occupants of aircraft which overrun or land short of a runway. Now, they are defined by the FAA as intended to enhance the protection of people and property on the ground.

The most useful place from which ALUCs can begin to determine appropriate safety compatibility criteria for airport environs is the *Handbook* itself. Although not regulatory in nature, state law obligates ALUCs to “be guided by” the information presented in the *Handbook*. Suggested usage intensity limitations, measured in terms of people per acre, are set forth along with other safety criteria. Reference should be made to that document for detailed description of the suggested criteria. Three risk-related variables discussed in the *Handbook* are worth noting here, however.

- *Runway Proximity:* In general, the areas of highest risk are closest to the runway ends and secondarily along the extended runway centerline. However, many common aircraft flight tracks do not follow along the runway alignment, particularly on departures. Also, where an aircraft crashes may not be along the flight path that was intended to be followed. As indicated in Figures C2 and C3, these factors affect the risk distribution.
- *Urban versus Rural Areas:* Irrespective of airports, people living in urban areas face different types of risks than those living in rural areas. The cost of avoiding risks differs between these two settings as well. The *Handbook* acknowledges these differences by indicating that usage intensities can be higher in heavily developed urban areas compared to partially undeveloped suburban areas or minimally developed rural locations, yet be equivalent in terms of the level of acceptable risk.
- *Existing versus Proposed Uses:* Another distinction in compatibility policies can be drawn between existing and proposed development. It is reasonable for safety-related policies to be established which prohibit certain types of new development while considering identical existing development to be acceptable. The *Handbook* notes that cost is an important factor in this regard. The range of risks can be divided into three levels (see page 9-15 of the *Handbook*). At the bottom of this scale are negligible and acceptable risks for which no action is necessary. At the top are intolerable risks for which action is necessary regardless of the cost. In between are risks that are significant, but

tolerable. Whether action should be taken to reduce these risks depends upon the costs involved. Typically, the cost of removing an incompatible development is greater than the cost of avoiding its construction in the first place.

Preparation of this *ALUCP* has been greatly guided by the *Handbook* information. The *Handbook*, though, also recognizes the importance of tailoring compatibility plans to local circumstances. Such has been the case with the safety compatibility criteria included in this *ALUCP*.

## AIRSPACE PROTECTION

Relatively few aircraft accidents are caused by land use conditions that are hazards to flight. The potential exists, however, and protecting against it is essential to airport land use safety compatibility. In addition, and importantly, land use conditions that are hazards to flight may impact the continued viability of airport operations and limit the ability of an airport to operate in the manner identified by the airport proprietor in an adopted airport master plan and airport layout plan.

### Compatibility Objective

Because airspace protection is in effect a safety factor, its objective can likewise be thought of in terms of risk. Specifically, the objective is to avoid development of land use conditions that, by posing hazards to flight, can increase the risk of an accident occurring. The particular hazards of concern are:

- Airspace obstructions;
- Wildlife hazards, particularly bird strikes; and
- Land use characteristics that pose other potential hazards to flight by creating visual or electronic interference with air navigation.

The purpose of the airspace protection policies is to ensure that structures and other uses do not cause hazards to aircraft in flight in the airport vicinity. Hazards to flight include physical obstructions to the navigable airspace, wildlife hazards, particularly bird strikes and land use characteristics that create visual or electronic interference with aircraft navigation or communication. This purpose is accomplished by policies that place limits on the height of structures and other objects in the airport vicinity and restrictions on other uses that potentially pose hazards to flight.

### Measurement

The measurement of requirements for airspace protection around an airport is a function of several variables including: the dimensions and layout of the runway system; the type of operating procedures established for the airport; and, indirectly, the performance capabilities of aircraft operated at the airport.

- *Airspace Obstructions:* Whether a particular object constitutes an airspace obstruction depends upon two factors: the height of the object relative to the runway elevation; and its proximity to the airport. The acceptable height of objects near an airport is most commonly determined by application of standards set forth in Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*. These regulations establish a three-dimensional space in the air above an airport. Any object which penetrates this volume of airspace is considered to be an “obstruction” and may affect the aeronautical use of the airspace. Additionally, as described below, another set of airspace protec-

tion surfaces is defined by the *U.S. Standard for Terminal Instrument Procedures*, known as TERPS. Although the intended function of these standards is in design of instrument approach and departure procedures, they can be important in land use compatibility planning in situations where ground elevations near an airport exceed the FAR Part 77 criteria.

- *Wildlife and Other Hazards to Flight:* The significance of other potential hazards to flight is principally measured in terms of the hazards' specific characteristics and their distance from the airport and/or its normal traffic patterns.

## Compatibility Strategies

Compatibility strategies for the protection of airport airspace are relatively simple and are directly associated with the individual types of hazards:

- *Airspace Obstructions:* Buildings, antennas, other types of structures, and trees should be limited in height so as not to pose a potential hazard to flight.
- *Wildlife and Other Hazards to Flight:* Land uses that may create other types of hazards to flight near an airport should be avoided or modified so as not to include the offending characteristic.

## Basis for Setting Criteria

The criteria for determining airspace obstructions have been long-established in FAR Part 77. Also, state of California regulation of obstructions under the State Aeronautics Act (Public Utilities Code, Section 21659) is based on FAR Part 77 criteria. A shortcoming of FAR Part 77 criteria, however, is that they often are too generic to fit the conditions specific to individual airports. The airspace protection surfaces defined in these regulations can be either more or less restrictive than appropriate for a particular airport. The surfaces can be less restrictive than essential in instances where an instrument approach procedure or its missed approach segment are not aligned with the runway. FAR Part 77 also does not take into account instrument departure procedures which, at some airports, can have critical airspace requirements. Oppositely, FAR Part 77 provides no useful guidance as to acceptable heights of objects located where the ground level already penetrates the airspace surfaces.

To define airspace protection surfaces better suited to these situations, reference must be made the TERPS standards mentioned above. These standards are used for creation of instrument approach and departure procedures. Thus they exactly match the procedures in effect at an individual airport. Unlike the FAR Part 77 surfaces, the elevations of which are set relative to the runway end elevations irrespective of surrounding terrain and obstacles, the TERPS surface elevations are directly determined by the location and elevation of critical obstacles. By design, neither the ground nor any obstacles can penetrate a TERPS surface. However, construction of a tall object that penetrates a TERPS surface can dictate immediate modifications to the location and elevation of the surfaces and directly cause minimum flight visibility and altitudes to be raised or the instrument course to be realigned. In severe instances, obstructions can force a procedure to be cancelled altogether. A significant downside to use of TERPS surfaces for compatibility planning purposes is that they are highly complex compared to the relative simplicity of FAR Part 77 surfaces. Also, the configuration and/or elevations of TERPS surfaces can change not only in response to new obstacles, but as implementation of new navigational technologies permits additional or modified instrument procedures to be established at an airport.

The Airspace Protection Surfaces Maps presented in Chapters 4 through 6 of this *ALUCP* rely only upon FAR Part 77 criteria. Although Auburn Municipal and Lincoln Regional Airports have instrument

approach procedures, their critical airspace is adequately protected by FAR Part 77 surfaces and use of TERPS is not necessary. Blue Canyon Airport only has visual approaches.

Among other hazards to flight, bird strikes no doubt represent the most widespread concern. The FAA recommends that uses known to attract birds—sanitary landfills being a primary example—be kept at least 10,000 feet away from any runway used by turbine-powered aircraft. More information regarding criteria for avoidance of uses that can attract wildlife to airports can be found in FAA Advisory Circulars 150/5200-34 and 150/5300-33.

Other flight hazards include land uses that may cause visual or electronic hazards to aircraft in flight or taking off or landing at the airport. Specific characteristics to be avoided include sources of glare or bright lights, distracting lights that could be mistaken for airport lights, sources of dust, steam, or smoke that may impair pilot visibility, and sources of electrical interference with aircraft communications or navigation.

## **COMBINED CRITERIA**

To simplify application of the compatibility strategies outlined in this appendix, this *ALUCP* combines most of the strategies into a single set of compatibility criteria set forth in the Basic Compatibility Criteria tables in Chapters 4 through 6. The tables list a range of land use categories, then indicates whether each category is “normally compatible,” “conditional,” or “incompatible” within each of the six compatibility zones depicted on the Compatibility Policy Map for each airport in Chapters 4 through 6. As with the criteria table, the compatibility map represents a combination of each of the four types of compatibility factors: noise, safety, airspace protection, and overflight. The manner in which the airport impacts associated with these concerns were combined to form the composite compatibility zones is described in Chapters 4 through 6.

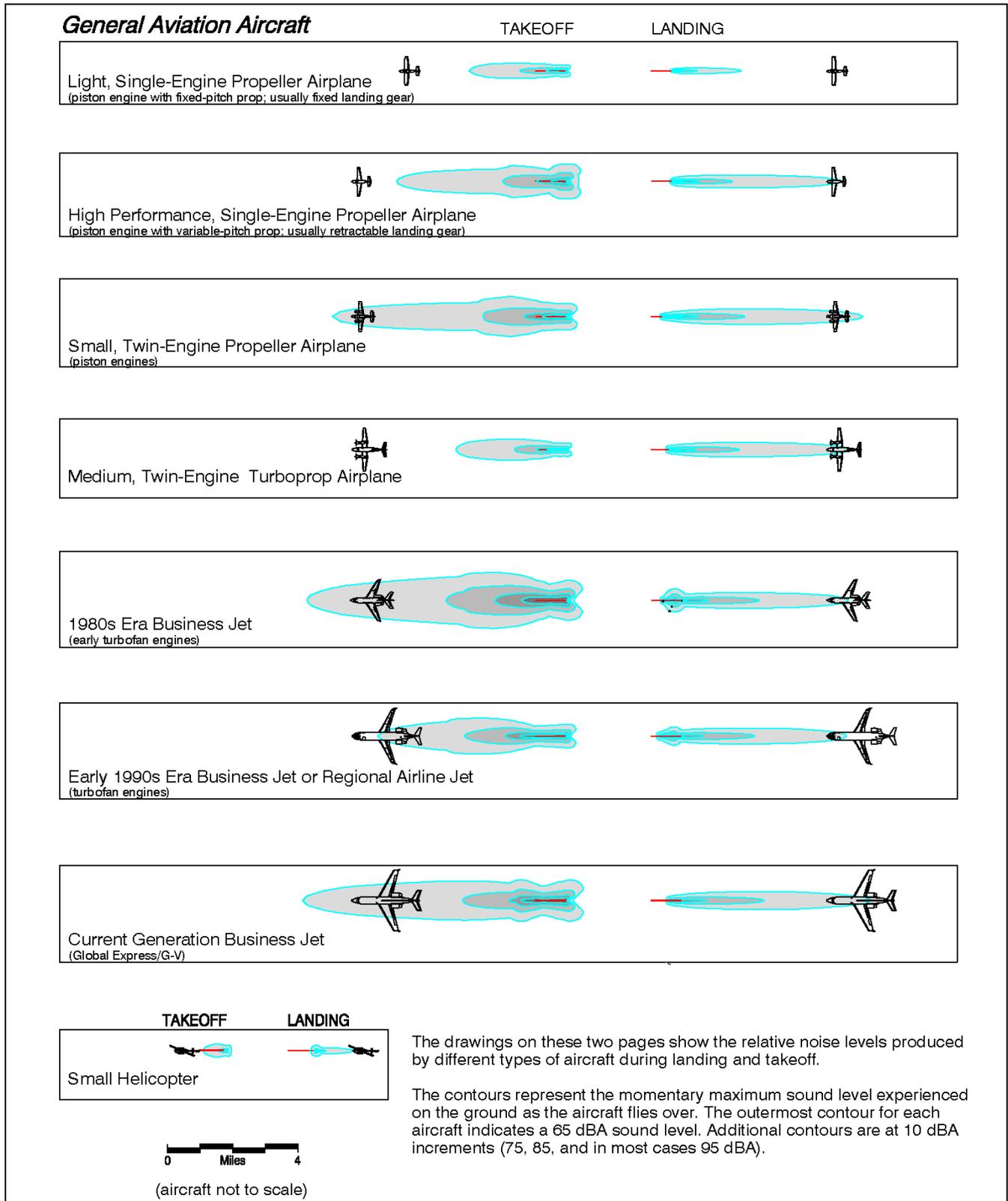


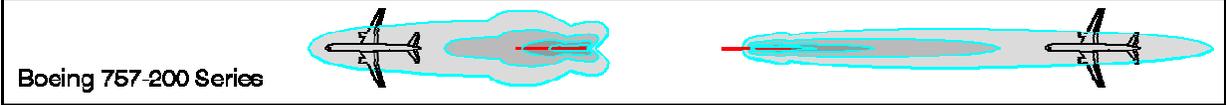
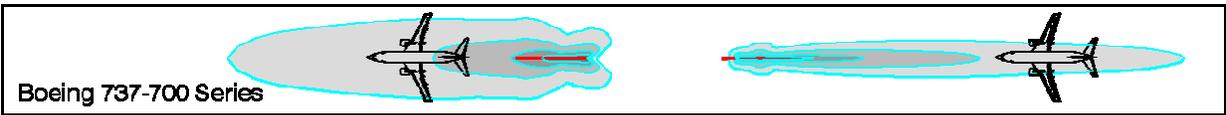
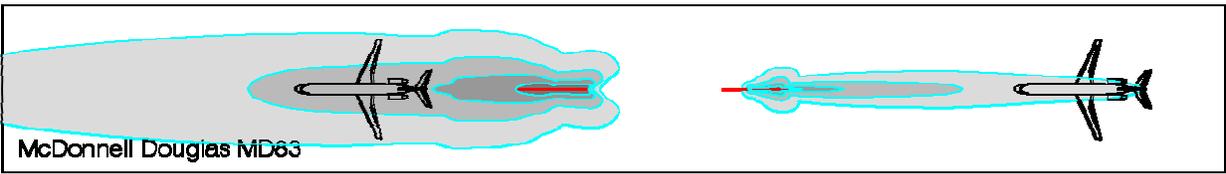
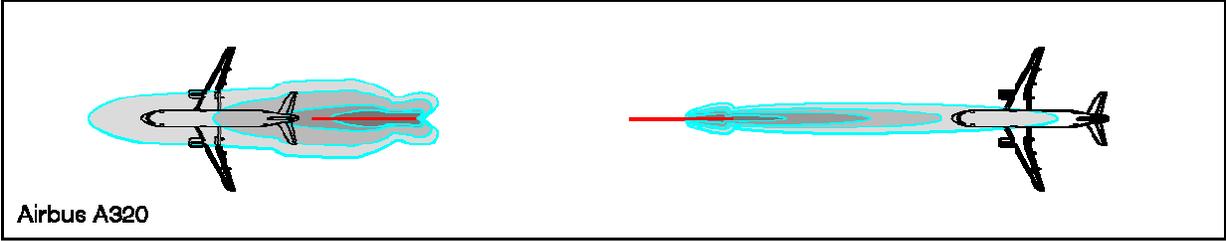
Figure C1

## Noise Footprints of Selected Aircraft

**Airline Aircraft**

TAKEOFF

LANDING



**Military Aircraft**

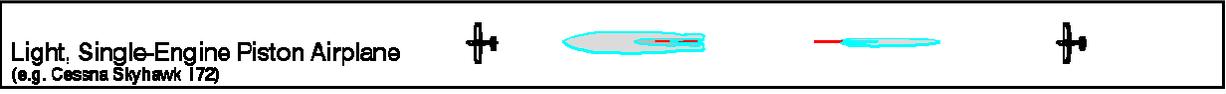
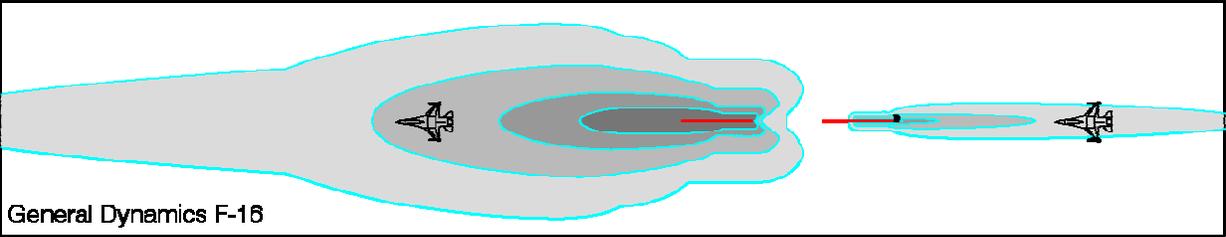
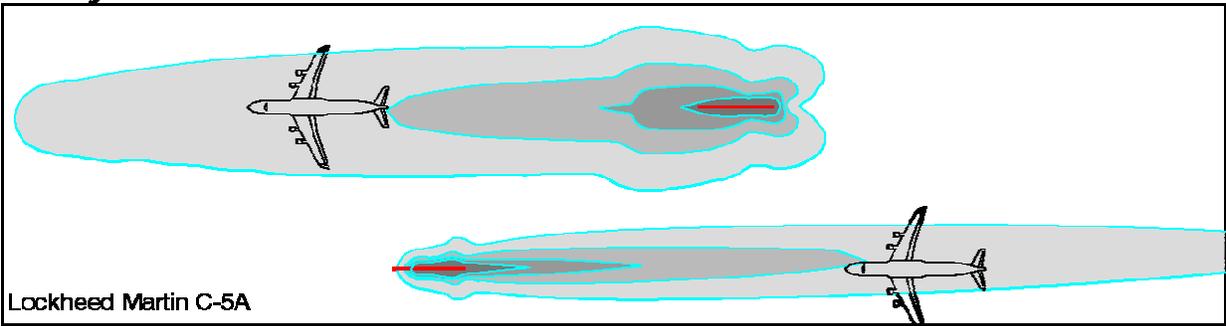
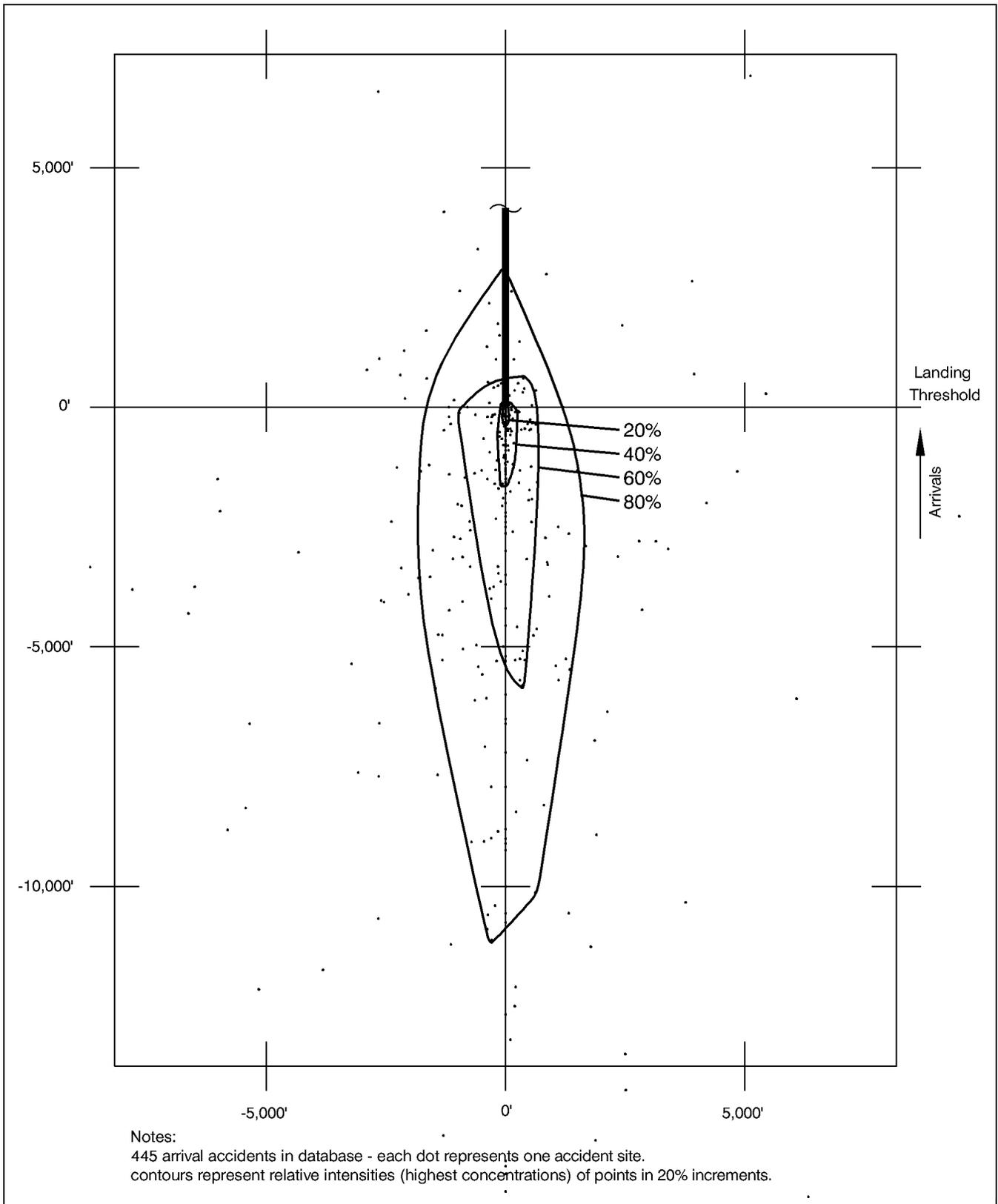


Figure C1, continued

<b>Zone</b>	<b>Description</b>	<b>Nominal Dimensions</b> (California Airport Land Use Planning Handbook)	<b>Relative Risk Level</b>	<b>Nature of Accident Risk</b>	<b>% of Accidents in Zone</b> (Handbook Database)
1	Runway Protection Zone and within Runway Primary Surface primarily on airport property; airport ownership encouraged	Depending upon approach visibility minimums: 1,200 feet minimum, 2,700 feet maximum beyond runway ends; 125 to 500 feet from centerline adjacent to runway (zone dimensions established by FAA standards)  Acreage (one runway end): 8 to 79 (RPZ only)	Very High	Landing undershoots and overshoots; overruns on aborted takeoffs; loss of control on takeoff	Arrivals: 28%–56% Departures: 23%–29% Total: 33%–39%
2	Inner Safety Zone	Along extended runway centerline, to a distance of 2,000 feet minimum, 6,000 feet maximum beyond runway ends  Acreage (one runway end): 44 to 114	High	Aircraft at low altitude with limited directional options in emergencies: typically under 400 feet on landing; on takeoff, engine at maximum stress	Arrivals: 9%–15% Departures: 3%–28% Total: 8%–22%
3	Inner Turning Zone	Fan-shaped area adjacent to Zone 2 extending 2,000 feet minimum, 4,000 feet maximum from runway ends  Acreage (one runway end): 50 to 151	Moderate	Turns at low altitude on arrival for aircraft flying tight base leg present stall-spin potential; likely touchdown area if emergency at low altitude on takeoff, especially to left of centerline	Arrivals: 2%–6% Departures: 5%–9% Total: 4%–7%
4	Outer Safety Zone	Along extended runway centerline extending 3,500 feet minimum, 10,000 feet maximum beyond runway ends  Acreage (one runway end): 35 to 92	Low to Moderate	Low altitude overflight for aircraft on straight-in approaches, especially instrument approaches; on departure, aircraft normally complete transition from takeoff power and flap settings to climb mode and begin turns to en route heading	Arrivals: 3%–8% Departures: 2%–4% Total: 2%–6%
5	Sideline Zone primarily on airport property	Adjacent to runway, 500 feet minimum, 1,000 feet maximum from centerline  Acreage: varies with runway length	Low to Moderate	Low risk on landing; moderate risk from loss of directional control on takeoff, especially with twin-engine aircraft	Arrivals: 1%–3% Departures: 5%–8% Total: 3%–5%
6	Traffic Pattern Zone	Oval area around other zones: 5,000 feet minimum, 10,000 feet maximum beyond runway ends; 4,500 feet minimum, 6,000 feet maximum from runway centerline  Acreage: varies with runway length	Low	Significant percentage of accidents, but spread over wide area; widely varied causes	Arrivals: 10%–21% Departures: 24%–39% Total: 18%–29%

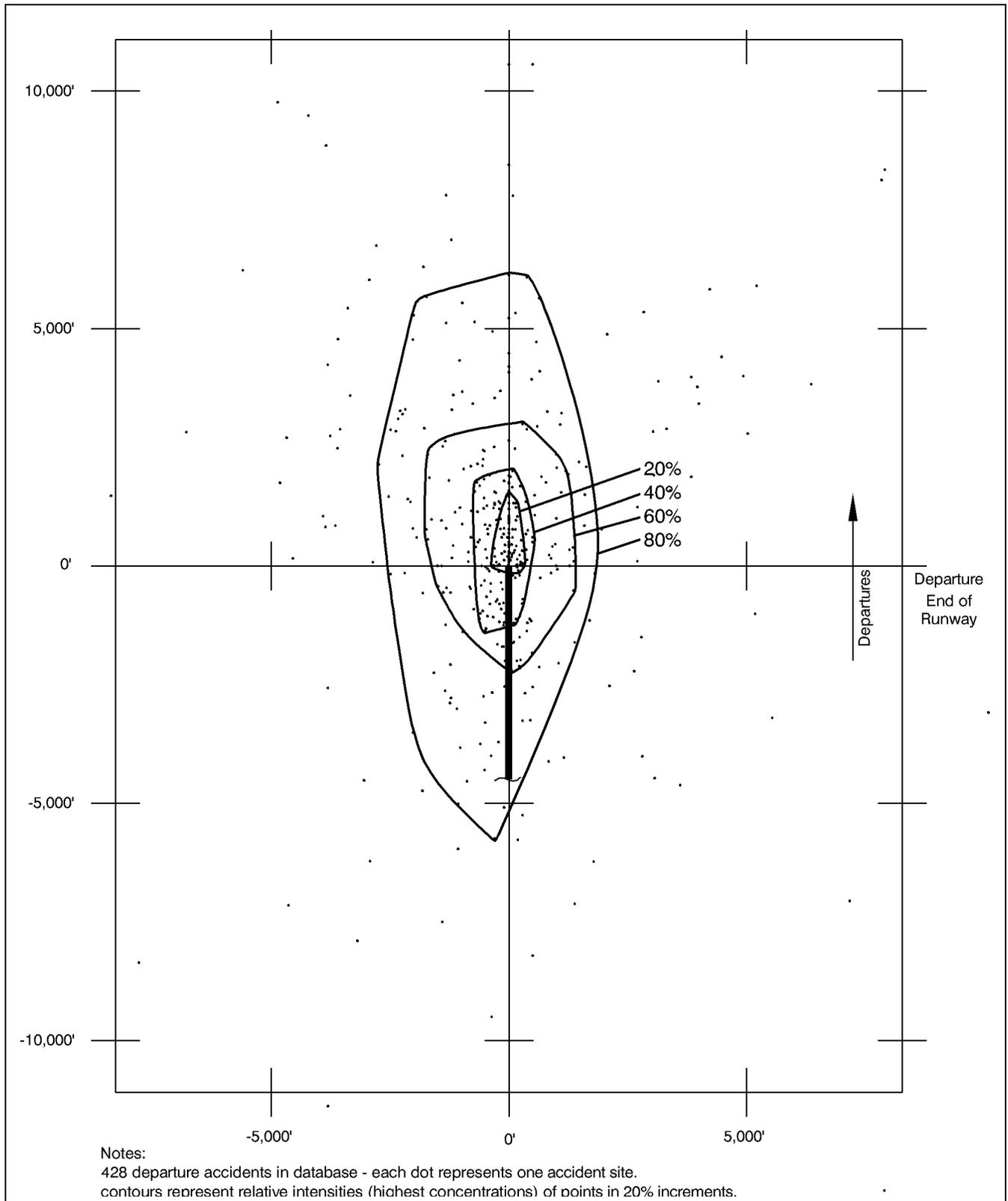
Table C1

## Safety Zone Aircraft Accident Risk Characteristic



**Figure C2**

**General Aviation Accident Distribution Contours**  
**All Arrivals**



Notes:  
428 departure accidents in database - each dot represents one accident site.  
contours represent relative intensities (highest concentrations) of points in 20% increments.

Figure C3

## General Aviation Accident Distribution Contours

All Departures

## Methods for Determining Concentrations of People

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### INTRODUCTION

The underlying safety compatibility criterion employed in this *ALUCP* is “usage intensity”—the maximum number of people per acre that can be present in a given area at any one time. If a proposed use exceeds the maximum intensity, it is considered incompatible and thus inconsistent with compatibility planning policies. The usage intensity concept is identified in the *California Airport Land Use Planning Handbook* as the measure best suited for assessment of land use safety compatibility with airports. The *Handbook* is published by the California Division of Aeronautics and is required under state law to be used as a guide in preparation of airport land use compatibility plans.

It is recognized, though, that “people per acre” is not a common measure in other facets of land use planning. This *ALUCP* therefore also utilizes the more common measure of floor area ratio (FAR) as a means of implementing the usage intensity criteria on the local level. This appendix both provides guidance on how the usage intensity determination can be made and defines the relationships between this measure, FAR, and other measures found in land use planning. For a discussion of the rationale for use of people per acre as a measure of risk exposure, see Appendix C. Appendix D2 shows sample calculations.

### COUNTING PEOPLE

The most difficult part about calculating a use’s intensity is estimating the number of people expected to use a particular facility under normal circumstances. All people—not just employees, but also customers and visitors—who may be on the property at a single point in time, whether indoors or outside, must be counted. The only exceptions are for rare special events, such as an air show at an airport, for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.

Ideally, the actual number of people for which the facility is designed would be known. For example, the number of seats in a proposed movie theater can be determined with high accuracy once the theater size is decided. Other buildings, though, may be built as a shell and the eventual number of occupants not known until a specific tenant is found. Furthermore, even then, the number of occupants can change in the future as tenants change. Even greater uncertainty is involved with relatively open uses not having fixed seating—retail stores or sports parks, for example.

Absent clearly measurable occupancy numbers, other sources must be relied upon to estimate the number of people in a proposed development.

## Survey of Similar Uses

A survey of similar uses already in existence is one option. Gathering data in this manner can be time-consuming and costly, however. Also, unless the survey sample is sufficiently large and conducted at various times, inconsistent numbers may result. Except for uncommon uses for which occupancy levels cannot be estimated through other means, surveys are most appropriate as supplemental information.

## Maximum Occupancy

A second option for estimating the number of people who will be on a site is to rely upon data indicating the maximum occupancy of a building measured in terms of Occupancy Load Factor—the number of square feet per occupant. The number of people on the site, assuming limited outdoor or peripheral uses, can be calculated by dividing the total floor area of a proposed use by the Occupancy Load Factor. The challenge of this methodology lies in establishing realistic figures for square feet per occupant. The number varies greatly from one use to another and, for some uses, has changed over time as well.

A commonly used source of maximum occupancy data is the standards set in the California Building Code (CBC). The chart reproduced as Table D1 indicates the Occupancy Load Factors for various types of uses. The CBC, though, is intended primarily for purposes of structural design and fire safety and represents a legal maximum occupancy in most jurisdictions. A CBC-based methodology consequently results in occupancy numbers that are higher than normal maximum usage in most instances. The numbers also are based upon usable floor area and do not take into account corridors, stairs, building equipment rooms, and other functions that are part of a building’s gross square footage. Surveys of actual Occupancy Load Factors conducted by various agencies have indicated that many retail and office uses are generally occupied at no more than 50% of their maximum occupancy levels, even at the busiest times of day. Therefore, the *Handbook* indicates that the number of people calculated for office and retail uses can usually be divided in half to reflect the actual occupancy levels before making the final people-per-acre determination. Even with this adjustment, the CBC-based methodology typically produces intensities at the high end of the likely range.

Another source of data on square footage per occupant comes from the facility management industry. The data is used to help businesses determine how much building space they need to build or lease and thus tends to be more generous than the CBC standards. The numbers vary not only by the type of facility, as with the CBC, but also by type of industry. The following are selected examples of square footage per *employee* gathered from a variety of sources.

- Call centers 150 – 175
- Typical offices 180 – 250
- Law, finance, real estate offices 300 – 325
- Research & development, light industry 300 – 500
- Health services 500

The numbers above do not take into account the customers who may also be present for certain uses. For retail business, dining establishments, theaters, and other uses where customers outnumber employees, either direct measures of occupancy—the number of seats, for example—or other methodologies must be used to estimate the potential number of people on the site.

## Parking Space Requirements

For many jurisdictions and a wide variety of uses, the number of people present on a site can be calculated based upon the number of automobile parking spaces that are required. Certain limitations and assumptions must be considered when applying this methodology, however. An obvious limitation is that parking space requirements can be correlated with occupancy numbers only where nearly all users arrive by private vehicle rather than by public transportation, walking, or other method. Secondly, the jurisdiction needs to have a well-defined parking ordinance that lists parking space requirements for a wide range of land uses. For most uses, these requirements are typically stated in terms of the number of parking spaces that must be provided per 1,000 square feet of gross building size or a similar ratio. Lastly, assumptions must be made with regard to the average number of people who will arrive in each car.

Both of the critical ratios associated with this methodology—parking spaces to building size and occupants to vehicles—vary from one jurisdiction to another even for the same types of uses. Research of local ordinances and other sources, though, indicates that the following ratios are typical.

- ▶ **Parking Space Ratios**—These examples of required parking space requirements are typical of those found in ordinances adopted by urban and suburban jurisdictions. The numbers are ratios of spaces required per 1,000 square feet of gross floor area. Gross floor area is normally measured to the outside surfaces of a building and includes all floor levels as well as stairways, elevators, storage, and mechanical rooms.

▪ Small Restaurants	10.0
▪ Medical Offices	4.0 – 5.7
▪ Shopping Centers	4.0 – 5.0
▪ Health Clubs	3.3 – 5.0
▪ Business Professional Offices	3.3 – 4.0
▪ Retail Stores	3.0 – 3.5
▪ Research & Development	2.5 – 4.0
▪ Manufacturing	2.0 – 2.5
▪ Furniture, Building Supply Stores	0.7 – 1.0

- ▶ **Vehicle Occupancy**—Data indicating the average number of people occupying each vehicle parking at a particular business or other land use can be found in various transportation surveys. The numbers vary both from one community or region to another and over time, thus current local data is best if available. The following data represent typical vehicle occupancy for different trip purposes.

▪ Work	1.05 – 1.2
▪ Education	1.2 – 2.0
▪ Medical	1.5 – 1.7
▪ Shopping	1.5 – 1.8
▪ Dining, Social, Recreational	1.7 – 2.3

## USAGE INTENSITY RELATIONSHIP TO OTHER DEVELOPMENT MEASURES

### Calculating Usage Intensities

Once the number of people expected in a particular development—both over the entire site and within individual buildings—has been estimated, the usage intensity can be calculated. The criteria in Chapters 3 through 6 of this *ALUCP* are measured in terms of the average intensity over the entire project site.

The average intensity is calculated by dividing the total number of people on the site by the site size. A 10-acre site expected to be occupied by as many as 1,000 people at a time, thus would have an average intensity of 100 people per acre. The site size equals the total size of the parcel or parcels to be developed.

Having calculated the usage intensities of a proposed development, a comparison can be made with the criteria set forth in the *ALUCP* to determine whether the proposal is consistent or inconsistent with the policies.

### Comparison with Floor Area Ratio

As noted earlier, usage intensity or people per acre is not a common metric in land use planning. Floor area ratio or FAR—the gross square footage of the buildings on a site divided by the site size—is a more common measure in land use planning. Some counties and cities adopt explicit FAR limits in their zoning ordinance or other policies. Those that do not set FAR limits often have other requirements such as, a maximum number of floors a building can have, minimum setback distances from the property line, and minimum number of parking spaces. These requirements effectively limit the floor area ratio as well.

To facilitate local jurisdiction implementation, the safety compatibility criteria in the Basic Compatibility Criteria tables in Chapters 4 through 6 have been structured around FAR measures to determine usage intensity limits for many types of nonresidential land use development. To utilize FAR in this manner, a critical additional piece of information is necessary to overcome the major shortcoming of FAR as a safety compatibility measure. The problem with FAR is that it does not directly correlate with risks to people because different types of buildings with the same FAR can have vastly different numbers of people inside—a low-intensity warehouse versus a high-intensity restaurant, for example. For FAR to be applied as a factor in setting development limitations, assumptions must be made as to how much space each person (employees and others) in the building will occupy. The Safety Compatibility Criteria table therefore indicates the assumed Occupancy Load Factor for various land uses. Mathematically, the relationship between usage intensity and FAR is:

$$\text{FAR} = \frac{\text{(allowable usage intensity)} \times \text{(Occupancy Load Factor)}}{43,560}$$

where *usage intensity* is measured in terms of people per acre and *Occupancy Load Factor* as square feet per person.

Selection of the usage intensity, occupancy level, and FAR numbers that appear in the Basic Compatibility Criteria table was done in an iterative manner that considered each of the components both separately and together. Usage intensities were initially set with respect to guidelines provided in the *California Airport Land Use Planning Handbook* (see Appendix C of this *ALUCP*). Occupancy levels were de-

rived from the CBC, but were adjusted based upon additional research from both local and national sources in the manner discussed earlier in this appendix. The FAR limits were initially calculated from these other two numbers using the formula above.

### **Comparison with Parking Space Requirements**

As discussed above, many jurisdictions have adopted parking space requirements that vary from one land use type to another. Factoring in an estimated vehicle occupancy rate for various land uses as described earlier, the Occupancy Load Factor can be calculated. For example, a typical parking space requirement for office uses is 4.0 spaces per 1,000 square feet or 1 space per 250 square feet. If each vehicle is assumed to be occupied by 1.1 persons, the equivalent Occupancy Load Factor would be 1 person per 227 square feet. This number falls squarely within the range noted above that was found through separate research of norms used by the facility management industry.

As an added note, the Occupancy Load Factor of 215 square feet per person indicated in the Basic Compatibility Criteria table for office uses is slightly more conservative than the above calculation produces. This means that, for a given usage intensity standard, the FAR limit in the table is slightly more restrictive than would result from a higher Occupancy Load Factor.

Function of Space	Floor area per occupant (sq. ft.)
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Assembly with fixed seats	See Section 1004.7
Assembly without fixed seats	
Concentrated (chairs only-not fixed)	15 net
Standing space	5 net
Unconcentrated (tables and chairs)	7 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms-other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient treatment areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Laboratory	
Educational	50 net
Laboratories, non-educational	100 net
Laboratory suite	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mercantile	
Areas on other floors	60 gross
Basement and grade floor areas	30 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

Source: California Building Code (2007), Table 1004.1.1

Table D1

## Occupant Load Factors

### California Building Code

**Example 1**

*Proposed Development:* Two office buildings, each two stories and containing 20,000 square feet of floor area per building. Site size is 3.0 net acres. Counting a portion of the adjacent road, the gross area of the site is 3.5± acres.

**A. Calculation Based on Parking Space Requirements**

For office uses, assume that a county or city parking ordinance requires 1 parking space for every 300 square feet of floor area. Data from traffic studies or other sources can be used to estimate the average vehicle occupancy. For the purposes of this example, the typical vehicle occupancy is assumed to equal 1.5 people per vehicle.

The average usage intensity would therefore be calculated as follows:

- 1) 40,000 sq. ft. floor area x 1.0 parking space per 300 sq. ft. = 134 required parking spaces
- 2) 134 parking spaces x 1.5 people per space = 201 people maximum on site
- 3) 201 people ÷ 3.5 acres gross site size = 57 people per acre average for the site

**B. Calculation Based on Uniform Building Code**

Using the UBC (Table D1) as the basis for estimating building occupancy yields the following results for the above example:

- 1) 40,000 sq. ft. bldg. ÷ 100 sq. ft./occupant = 400 people max. bldg. occupancy (under UBC)
- 2) 400 max. bldg. occupancy x 50% adjustment = 200 people maximum on site
- 3) 200 people ÷ 3.5 acres gross site size = 57 people per acre average for the site

**C. Calculation of Single Acre Intensity**

Assuming that occupancy of each building is relatively equal throughout, but that there is some separation between the buildings and outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:

- 1) 20,000 sq. ft. bldg. ÷ 2 stories = 10,000 sq. ft. bldg. footprint
- 2) 10,000 sq. ft. bldg. footprint ÷ 43,560 sq. ft. per acre = 0.23 acre bldg. footprint
- 3) Building footprint < 1.0 acre; therefore maximum people in 1 acre = bldg. occupancy = 100 people per single acre (i.e., 200 people max. on site ÷ 2 bldgs.)

*Conclusions:* In this instance, both methodologies yield the same results. The 57 people per average acre and the 100 people per single acre results must be compared with the intensity limits provided in the Basic Compatibility Criteria tables in Chapters 4, 5, and 6. For Auburn Municipal Airport, the proposed use would meet the *Compatibility Zones B2, C1, C2, and D* criteria for maximum usage intensity criteria averaged over the entire site (70, 100, 200, and unlimited people/acre, respectively). The maximum single-acre intensity of 100 people also would meet the criteria for these zones (210, 300, 800, and unlimited, respectively).

**Table D2****Sample People-Per-Acre Calculations**

**Example 2**

*Proposed Development:* Single-floor furniture store containing 24,000 square feet of floor area on a site of 2.0 gross acres and the net acreage (less internal roadways) is 1.7 acres.

**A. Calculation Based on Parking Space Requirements**

For furniture stores, assume that a county or city parking ordinance requires 1 parking space per 1,500 square feet of use area. Assuming 1.5 people per automobile results in the following intensity estimates:

The average usage intensity would be:

- 1) 24,000 sq. ft. bldg. x 1.0 parking space per 1,500 sq. ft. = 16 required parking spaces
- 2) 16 parking spaces x 1.5 people per space = 24 people maximum on site
- 3) 24 people ÷ 2.0 acres gross site size = 12 people per acre average for the site

**B. Calculation Based on Uniform Building Code**

For the purposes of the UBC-based methodology, the furniture store is assumed to consist of 50% retail sales floor (at 30 square feet per occupant) and 50% warehouse (at 500 square feet per occupant). Usage intensities would therefore be estimated as follows:

- 1) 12,000 sq. ft. retail floor area ÷ 30 sq. ft./occupant = 400 people max. occupancy in retail area
- 2) 12,000 sq. ft. warehouse floor area ÷ 500 sq. ft./occupant = 24 people max. occupancy in warehouse area
- 3) Maximum occupancy under UBC assumptions = 400 + 24 = 424 people
- 4) Assuming typical peak occupancy is 50% of UBC numbers = 212 people maximum on site
- 5) 212 people ÷ 2.0 acres = 106 people per acre average for the site

**C. Calculation for Single Acre Intensity**

With respect to the single-acre intensity criteria, the entire building occupancy would again be within less than 1.0 acre, thus yielding the same intensity of 24 or 212 people per single acre.

Again assuming a relatively balanced occupancy throughout the building and that outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:

- 1) 24,000 sq. ft. bldg. footprint ÷ 43,560 sq. ft. per acre = 0.55 acre bldg. footprint
- 3) Building footprint < 1.0 acre; therefore maximum people in 1 acre = bldg. occupancy = 24 or 212 people per single acre under parking space or UBC methodology, respectively

*Conclusions:* In this instance, the two methods produce very different results. The occupancy estimate of 30 square feet per person is undoubtedly low for a furniture store even after the 50% adjustment. On the other hand, the 12 people-per-acre estimate using the parking requirement methodology appears low, but is probably closer to being realistic. Unless better data is available from surveys of similar uses, this proposal should reasonably be considered compatible within most compatibility zones, except *Zone A* and possibly *Zone B1*.

**Table D2, Continued**

## General Plan Consistency Checklist

This checklist is intended to assist local agencies with modifications necessary to make their local plans and other local policies consistent with the ALUCP. It is also designed to facilitate ALUC reviews of these local plans and policies. The list will need to be modified to reflect the policies of each individual ALUC and is not intended as a state requirement.

### COMPATIBILITY CRITERIA

#### General Plan Document

The following items typically appear directly in a general plan document. Amendment of the general plan will be required if there are any conflicts with the ALUCP.

- **Land Use Map**—No direct conflicts should exist between proposed new land uses indicated on a general plan land use map and the ALUC land use compatibility criteria.
  - Residential densities (dwelling units per acre) should not exceed the set limits.
  - Proposed nonresidential development needs to be assessed with respect to applicable intensity limits (see below).
  - No new land uses of a type listed as specifically prohibited should be shown within affected areas.
- **Noise Element**—General plan noise elements typically include criteria indicating the maximum noise exposure for which residential development is normally acceptable. This limit must be made consistent with the equivalent ALUCP criteria. Note, however, that a general plan may establish a different limit with respect to aviation-related noise than for noise from other sources (this may be appropriate in that aviation-related noise is sometimes judged to be more objectionable than other types of equally loud noises).

#### Zoning or Other Policy Documents

The following items need to be reflected either in the general plan or in a separate policy document such as a combining zone ordinance. If a separate policy document is adopted, modification of the general plan to achieve consistency with the ALUCP may not be required. Modifications would normally be needed only to eliminate any conflicting language which may be present and to make reference to the separate policy document

- **Intensity Limitations on Nonresidential Uses**—ALUCPs may establish limits on the usage intensities of commercial, industrial, and other nonresidential land uses. This can be done by duplication of the performance-oriented criteria—specifically, the number of people per acre—indicated in the ALUCP. Alternatively, ALUCs may create a detailed list of land uses which are allowable and/or not allowable within each compatibility zone. For certain land uses, such a list may need to include limits on building sizes, floor area ratios, habitable floors, and/or other design parameters which are equivalent to the usage intensity criteria.
- **Identification of Prohibited Uses**—ALUCPs may prohibit schools, day care centers, assisted living centers, hospitals, and other uses within a majority of an airport's influence area. The facilities often are permitted or conditionally permitted uses within many commercial or industrial land use designations.
- **Open Land Requirements**—ALUCP requirements, if any, for assuring that a minimum amount of open land is preserved in the airport vicinity must be reflected in local policies. Normally, the locations which are intended to be maintained as open land would be identified on a map with the total acreage within each compatibility zone indicated. If some of the area included as open land is private property, then policies must be established which assure that the open land will continue to exist as the property develops. Policies specifying the required characteristics of eligible open land should also be established
- **Infill Development**—If an ALUCP contains infill policies and a jurisdiction wishes to take advantage of them, the lands that meet the qualifications must be shown on a map.

**Zoning or Other Policy Documents, Continued**

- **Height Limitations and Other Hazards to Flight**—To protect the airport airspace, limitations must be set on the height of structures and other objects near airports. These limitations are to be based upon FAR Part 77. Restrictions also must be established on other land use characteristics which can cause hazards to flight (specifically, visual or electronic interference with navigation and uses which attract birds). Note that many jurisdictions have already adopted an airport-related hazard and height limit zoning ordinance which, if up to date, will satisfy this consistency requirement.
- **Buyer Awareness Measures**—Besides disclosure rules already required by state law, as a condition for approval of development within certain compatibility zones, some ALUCPs require either dedication of an avigation easement to the airport proprietor or placement on deeds of a notice regarding airport impacts. If so, local agency policies must contain similar requirements.
- **Nonconforming Uses and Reconstruction**—Local agency policies regarding nonconforming uses and reconstruction must be equivalent to or more restrictive than those in the ALUCP, if any.

**REVIEW PROCEDURES**

In addition to incorporation of ALUC compatibility criteria, local agency implementing documents must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria.

- **Actions Always Required to be Submitted for ALUC Review**—PUC Section 21676 identifies the types of actions that must be submitted for airport land use commission review. Local policies should either list these actions or, at a minimum, note the local agency’s intent to comply with the state statute.
- **Other Land Use Actions Potentially Subject to ALUC Review**—In addition to the above actions, ALUCPs may identify certain major land use actions for which referral to the ALUC is dependent upon agreement between the local agency and ALUC. If the local agency fully complies with all of the items in this general plan consistency check list or has taken the necessary steps to overrule the ALUC, then referral of the additional actions is voluntary. On the other hand, a local agency may elect not to incorporate all of the necessary compatibility criteria and review procedures into its own policies. In this case, referral of major land use actions to the ALUC is mandatory. Local policies should indicate the local agency’s intentions in this regard..
- **Process for Compatibility Reviews by Local Jurisdictions**—If a local agency chooses to submit only the mandatory actions for ALUC review, then it must establish a policy indicating the procedures which will be used to assure that airport compatibility criteria are addressed during review of other projects. Possibilities include: a standard review procedure checklist which includes reference to compatibility criteria; use of a geographic information system to identify all parcels within the airport influence area; etc.
- **Variance Procedures**—Local procedures for granting of variances to the zoning ordinance must make certain that any such variances do not result in a conflict with the compatibility criteria. Any variance that involves issues of noise, safety, airspace protection, or overflight compatibility as addressed in the ALUCP must be referred to the ALUC for review.
- **Enforcement**—Policies must be established to assure compliance with compatibility criteria during the lifetime of the development. Enforcement procedures are especially necessary with regard to limitations on usage intensities and the heights of trees. An airport combining district zoning ordinance is one means of implementing enforcement requirements.

Source: *California Airport Land Use Planning Handbook (October 2011)*

## Sample Implementation Documents

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The responsibility for implementation of the compatibility criteria set forth in the *Placer County Airport Land Use Compatibility Plan* rests largely with the Placer County Transportation Planning Agency (PCTPA), acting in its capacity as the Airport Land Use Commission (*ALUC*) for Placer County. As described in Appendix E, modification of general plans and specific plans for consistency with applicable *ALUCP* is the major step in this process. However, not all of the measures necessary for achievement of airport land use compatibility are necessarily included in general plans and specific plans. Other types of documents also serve to implement the *ALUCP* policies. Samples of such implementation documents are included in this appendix.

### Airport Combining Zone Ordinance

As noted in Chapter 1 of this document, one option that the affected local jurisdictions can utilize to implement airport land use compatibility criteria and associated policies is adoption of an airport combining zone ordinance. An airport combining zone ordinance is a way of collecting various airport-related development conditions into one local policy document. Adoption of a combining zone is not required, but is suggested as an option. Table F1 describes some of the potential components of an airport combining zone ordinance.

### Buyer Awareness Measures

Buyer awareness is an umbrella category for several types of implementation documents all of which have the objective of ensuring that prospective buyers of airport area property, particularly residential property, are informed about the airport's impact on the property. The *Placer County Airport Land Use ALUCP* policies include each of these measures.

- **Avigation Easement**—Avigation easements transfer certain property rights from the owner of the underlying property to the owner of an airport or, in the case of military airports, to a local government agency on behalf of the federal government (the U.S. Department of Defense is not authorized to accept avigation easements). This *ALUCP* requires avigation easement dedication as a condition for approval of development on property subject to high noise levels or a need to restrict heights of structures and trees to less than might ordinarily occur on the property. Specific easement dedication requirements are set forth in Chapter 3. Also, airports may require avigation easements in conjunction with programs for noise insulation of existing structures in the airport vicinity. A sample of a standard avigation easement is included in Table F2.
- **Recorded Overflight Notification**—An overflight notification informs property owners that the property is subject to aircraft overflight and generation of noise and other impacts. No restrictions on the heights of objects, requirements for marking or lighting of objects, or access to the property for these purposes are included. An overflight notification serves only as buyer acceptance of overflight conditions. Suggested wording of an overflight notification is included in Table F3. Unlike an avigation easement, overflight easement, or other type of easement, an overflight notification is not a conveyance of property rights. However, like an easement, an overflight notification is recorded

on the property deed and therefore remains in effect with sale of the property to subsequent owners. Overflight notifications are generally appropriate in areas outside the 60 dB CNEL noise contour, outside Safety Zones, and within areas where the height of structures and other objects would not pose a significant potential of being airspace obstruction hazards.

- **Airport Proximity Disclosure**—A less definitive, but more all-encompassing, form of buyer awareness measure is for the ALUC and local jurisdictions to establish a policy indicating that information about an airport's influence area should be disclosed to prospective buyers of all airport-vicinity properties prior to transfer of title. The advantage of this type of program is that it applies to previously existing land uses as well as to new development. The requirement for disclosure of information about the proximity of an airport has been present in state law for some time, but legislation adopted in 2002 and effective in January 2004 explicitly ties the requirement to the airport influence areas established by airport land use commissions (see Appendix A for excerpts from sections of the Business and Professions Code and Civil Code that define these requirements). With certain exceptions, these statutes require disclosure of a property's location within an airport influence area under any of the following three circumstances: (1) sale or lease of subdivided lands; (2) sale of common interest developments; and (3) sale of residential real property. In each case, the disclosure statement to be used is defined by state law as follows:

#### 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.

An airport compatibility combining zoning ordinance might include some or all of the following components:

- **Airspace Protection**—A combining district can establish restrictions on the height of buildings, antennas, trees, and other objects as necessary to protect the airspace needed for operation of the airport. These restrictions should be based upon the current version of the Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, Subpart C. Additions or adjustment to take into account instrument approach (TERPS) surfaces should be made as necessary. Provisions prohibiting smoke, glare, bird attractions, and other hazards to flight should also be included.
- **FAA Notification Requirements**—Combining districts also can be used to ensure that project developers are informed about the need for compliance with the notification requirements of FAR Part 77. Subpart B of the regulations requires that the proponent of any project which exceeds a specified set of height criteria submit a Notice of Proposed Construction or Alteration (Form 7460-1) to the Federal Aviation Administration prior to commencement of construction. The height criteria associated with this notification requirement are lower than those spelled out in Part 77, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.
- **State Regulation of Obstructions**—State law prohibits anyone from constructing or altering a structure or altering a structure or permitting an object of natural growth to exceed the heights established by FAR Part 77, Subpart C, unless the FAA has determined the object would or does not constitute a hazard to air navigation (Public Utilities Code, Section 21659). Additionally, a permit from the Department of Transportation is required for any structure taller than 500 feet above the ground unless the height is reviewed and approved by the Federal Communications Commission or the FAA (Section 21656).
- **Designation of High Noise-Impact Areas**—California state statutes require that multi-family residential structures in high-noise exposure areas be constructed so as to limit the interior noise to a Community Noise Equivalent Level of no more than 45 dB. A combining district could be used to indicate the locations where special construction techniques may be necessary in order to ensure compliance with this requirement. The combining district also could extend this criterion to single-family dwellings.
- **Maximum Densities/Intensities**—Airport noise and safety compatibility criteria are frequently expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. These standards can either be directly included in a combining zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the method of calculating the intensity limitations needs to be defined. Alternatively, a matrix can be established indicating whether each specific type of land use is compatible with each compatibility zone. To be useful, the land use categories need to be more detailed than typically provided by general plan or zoning ordinance land use designations.
- **Open Areas for Emergency Landing of Aircraft**—In most circumstances in which an accident involving a small aircraft occurs near an airport, the aircraft is under control as it descends. When forced to make an off-airport emergency landing, pilots will usually attempt to do so in the most open areas readily available. To enhance safety both for people on the ground and the occupants of the aircraft, airport compatibility plans often contain criteria requiring a certain amount of open land near airports. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be included in a combining district so that they will be applied to development of large parcels. Adequate open areas can often be provided by clustering of development on adjacent land.
- **Areas of Special Compatibility Concern**—A significant drawback of standard general plan and zoning ordinance land use designations is that they can be changed. Uses that are currently compatible are not assured of staying that way in the future. Designation of areas of special compatibility concern would serve as a reminder that airport impacts should be carefully considered in any decision to change the existing land use designation. [A legal consideration which supports the value of this concept is that down-zoning of a property to a less intensive use is becoming more difficult. It is much better not to have inappropriately up-zoned the property in the first place.]
- **Real Estate Disclosure Policies**—The geographic extent and specific language of recommended real estate disclosure statements can be described in an airport combining zone ordinance.

Source: *California Airport Land Use Planning Handbook (January 2002)*

**Table F1**

## Sample Airport Combining Zone Components

**TYPICAL AVIGATION EASEMENT**

**Airport Name**

This indenture made this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, between \_\_\_\_\_ hereinafter referred to as Grantor, and the County of Placer, a political subdivision in the State of California, hereinafter referred to as Grantee.

The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds a fee simple estate. The property which is subject to this easement is depicted as \_\_\_\_\_ on “Exhibit A” attached and is more particularly described as follows:

[Insert legal description of real property]

The easement applies to the Airspace above an imaginary plane over the real property. The plane is described as follows:

The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations, and consists of a plane [describe approach, transition, or horizontal surface]; the elevation of said plane being based upon the Airport Name official airport elevation of \_\_\_\_ feet Above Mean Sea Level (AMSL), as determined by the Airport Layout Plan, the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

- (1) For the use and benefit of the public, the easement and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Airspace hereinabove described; and
- (2) The easement and right to cause or create, or permit or allow to be caused and created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real property, such noise, vibration, currents and other effects of air illumination and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and
- (3) A continuing right to clear and keep clear from the Airspace any portions of buildings, structures or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and
- (4) The right to mark and light, or cause or require to be marked and lighted, as obstructions to air navigation, any and all buildings, structures or other improvements, and trees or other objects, which extend into or above the Airspace; and
- (5) The right of ingress to, passage within, and egress from the hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

**Table F2**

**Typical Avigation Easement**



**RECORDED OVERFLIGHT NOTIFICATION**

This *Overflight Notification* concerns the real property situated in the County of Placer and *[insert if applicable]* the City of \_\_\_\_\_, State of California, described as \_\_\_\_\_ [APN No.:].

This *Overflight Notification* provides notification of the condition of the above described property in recognition of, and in compliance with, CALIFORNIA BUSINESS & PROFESSIONS CODE Section 11010 and CALIFORNIA CIVIL CODE Sections 1102.6, 1103.4 and 1353, effective January 1, 2004, and related state and local regulations and consistent with policies of the Airport Land Use Commission for Placer County for overflight notification provided in the Placer County Airport Land Use Compatibility Plan.

*NOTICE OF AIRPORT IN VICINITY: This property is located in the vicinity of an airport and within the airport influence area. The property may be subject to some of the annoyances or inconveniences associated with proximity to an airport and aircraft operations (for example: noise, vibration, overflights or odors). Individual sensitivities to those annoyances can vary from person to person. You should consider what airport annoyances, if any, affect the Property before you complete your purchase and whether they are acceptable to you.*

The Federal Aviation Administration (FAA) has regulatory authority over the operation of aircraft in flight and on the runway and taxiway surfaces at Airport Name. The FAA is, therefore, exclusively responsible for airspace and air traffic management, including ensuring the safe and efficient use of navigable airspace, developing air traffic rules, assigning the use of airspace and controlling air traffic. Please contact the FAA for more detailed information regarding overflight and airspace protection issues associated with the operation of military aircraft.

The airport operator, the County of Placer, maintains information regarding hours of operation and other relevant information regarding airport operations. Please contact your local airport operator for more detailed information regarding airport specific operational issues including hours of operation.

This *Overflight Notification* shall be duly recorded with the Placer County Assessor’s Office, shall run with the Property, and shall be binding upon all parties having or acquiring any right, title or interest in the Property.

*Effective Date:* \_\_\_\_\_, 20\_\_

**Table F3**

**Sample Recorded Overflight Notification**

Project Referral Form

	<p><b>PLACER COUNTY AIRPORT LAND USE COMMISSION</b></p>	<p><b>PROJECT APPLICATION FOR LAND USE ACTION REVIEW</b></p>	<p>ALUC Identification No. _____</p>
<p><b>PROJECT PROPONENT</b> (TO BE COMPLETED BY APPLICANT)</p>			
<p>Date of Application _____</p>			
Applicant _____		Phone Number _____	
Mailing Address _____			
Mailing Address _____			
Mailing Address _____			
Agent (if any) _____ Phone Number _____			
Mailing Address _____			
Mailing Address _____			
<p><b>PROJECT LOCATION</b> (TO BE COMPLETED BY APPLICANT)</p> <p><i>Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways</i></p>			
Street Address _____			
Assessor's Parcel No. _____ Parcel Size _____			
Subdivision Name _____		Zoning _____	
Lot Number _____		Classification _____	
<p><b>PROJECT DESCRIPTION</b> (TO BE COMPLETED BY APPLICANT)</p> <p><i>If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; include additional project description data as needed</i></p>			
Existing Land Use _____			
(describe) _____			
Proposed Land Use _____			
(describe) _____			
For Residential Uses Number of Parcels or Units on Site (exclude secondary units) _____			
For Other Land Uses Hours of Use _____			
Number of People _____		Maximum Number _____	
On Site... _____		Method of Calculation _____	
Height Data Height above Ground of Tallest Object (including antennas and trees) _____ ft.			
Highest Elevation (above sea level) of Any Object or Terrain on Site _____ ft.			
Flight Hazards Does the Project Involve Characteristics that:			
<ul style="list-style-type: none"> <li>▪ Could Create Electrical Interference, Confusing Lights, Glare, Smoke, or Other Electrical or Visual Hazards to Aircraft Flight? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>▪ Could Attract Birds or Other Wildlife to the Airport or Vicinity? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> </ul>			
If Yes, Describe _____			
_____			

<b>REFERRING AGENCY</b> (TO BE COMPLETED BY SUBMITTING AGENCY STAFF)	
Date Received _____ Agency Name _____ Staff Contact _____ Phone Number _____ Agency's Project No. _____	Type of Project <input type="checkbox"/> General Plan Amendment <input type="checkbox"/> Zoning Amendment or Variance <input type="checkbox"/> Subdivision Approval <input type="checkbox"/> Use Permit <input type="checkbox"/> Public Facility <input type="checkbox"/> Other _____
Placer County Inter-Agency Coordination: Indicate neighboring agencies that have been notified of project. <input type="checkbox"/> County of Placer <input type="checkbox"/> City of Auburn <input type="checkbox"/> City of Lincoln <input type="checkbox"/> Other _____	
<b>ALUC REVIEW</b> (TO BE COMPLETED BY ALUC STAFF / ATTACH ADDITIONAL PAGES IF NECESSARY)	
Application Receipt Date Received _____ Is Application Complete? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, cite reasons _____	By _____ Airport <input type="checkbox"/> Auburn Municipal <input type="checkbox"/> Blue Canyon <input type="checkbox"/> Lincoln Regional
Land Use Category/Categories _____	
Noise Compatibility Exterior Noise Exposure (CNEL) Land Use Acceptability Applicable Conditions Met?	<input type="checkbox"/> ≤ 55 <input type="checkbox"/> 55 - 60 <input type="checkbox"/> 60 - 65 <input type="checkbox"/> 65 - 70 <input type="checkbox"/> ≥ 70 <input type="checkbox"/> Normally Compatible <input type="checkbox"/> Conditional <input type="checkbox"/> Incompatible <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Compatibility Land Use Acceptability Sitewide Avg. Density/Intensity Criteria Met? Single-Acre Density/Intensity Criteria Met? Other Applicable Conditions Met?	Safety Zone <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> None <input type="checkbox"/> Normally Compatible <input type="checkbox"/> Conditional <input type="checkbox"/> Incompatible <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Airspace Protection Compatibility	Height Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No FAA Notified if Applicable? <input type="checkbox"/> Yes <input type="checkbox"/> No Other Hazards to Flight Excluded? <input type="checkbox"/> Yes <input type="checkbox"/> No
Other Requirements	Easement/Deed Notice Required? <input type="checkbox"/> Yes <input type="checkbox"/> No Executed? <input type="checkbox"/> Yes <input type="checkbox"/> No
Special Site/Project Conditions	Infill Parcel? <input type="checkbox"/> Yes <input type="checkbox"/> No Other (describe) _____
<b>ACTIONS TAKEN</b> (TO BE COMPLETED BY ALUC STAFF)	
ALUC Staff Action	<input type="checkbox"/> Approve as Submitted      Date _____ <input type="checkbox"/> Refer to ALUC <input type="checkbox"/> Include Conditions? <input type="checkbox"/> Yes <input type="checkbox"/> No Conditions: _____
ALUC Action	<input type="checkbox"/> Consistent      Date _____ <input type="checkbox"/> Consistent with Conditions (list conditions / attach additional pages if needed) _____ _____ <input type="checkbox"/> Inconsistent (list reasons / attach additional pages if needed) _____ _____

## Comparison Between Old and New ALUC Plans

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### OVERVIEW

This *Placer County Airport Land Use Compatibility Plan (ALUCP)* sets forth land use compatibility criteria for the environs of Auburn Municipal, Blue Canyon, and Lincoln Regional Airports. This new *ALUCP* replaces the 2000 *ALUCP*.

The impetus for updating the *ALUCP* was three-fold. First, new master plans were adopted in 2007 for Auburn Municipal and Lincoln Regional Airports. Second, the California Department of Transportation (Caltrans), Division of Aeronautics published a new edition of the *California Airport Land Use Planning Handbook (Handbook)* in October 2011. *ALUC* statutes say that, when preparing compatibility plans for individual airports, designated bodies functioning as *ALUCs*, such as the Placer County Transportation Planning Agency (PCTPA) functioning as the Placer County Airport Land Use Commission (*ALUC*), shall “rely on” the compatibility information contained in the *Handbook*. Lastly, at least eight state laws concerning *ALUCs* or airport land use compatibility matters have been enacted by the state since the 2000 *ALUCP* was adopted.

Changes to the compatibility policies are largely based upon new noise and safety compatibility data and concepts which have become available over the last decade. Many of the procedural policy modifications reflect changes in state law or new practices adopted by other *ALUCs* in the state. This appendix summarizes the principal differences between the new and 2000 *ALUCPs*.

### PROCEDURAL POLICIES

Procedural policies are ones that spell out what types of local agency actions are subject to *ALUC* review and the process the *ALUC* uses in conducting the reviews. Principal changes include:

- **ALUC Format:** Added Policy 2.2.1 acknowledging that the Placer County Transportation Planning Agency (PCTPA) is designated as the *ALUC* for Placer County.
- **Individual Plans:** Added Policy 2.2.2 clarifying that, while there is a single document for all three airports in the county, the *ALUCP* for each airport is separate and distinct from the plans for the other airports and will be acted upon separately by the *ALUC*.
- **Effective Date:** To the extent that certain projects may be somewhere in the local agency review process pipeline at the time the new *ALUCP* is adopted, Policy 2.2.4 was added defining the effective date of the new *ALUCP* and the manner in which any revised policies apply to projects in the pipeline.

- **Existing Land Uses:** Because *ALUCs* have no authority over existing land uses, the details of this definition can be a contentious topic with regard to projects that have received some degree of local approval, but do not yet physically exist. Policy 2.7.3 expands the previous definition of existing land uses to better reflect what local actions result in projects having sufficient entitlement to be effectively “devoted to” a particular land use under the meaning of the *ALUC* statutes.
- **Use by Local Agencies:** Policy 2.2.6 specifies how the *ALUC*, county and affected cities are to use the *ALUCP*. In accordance with state law, the policy expands the previous policy to specify that special districts, school districts and community college districts are also subject to the *ALUCP* criteria.
- **Interagency Coordination.** Policy 2.2.8 encourages the local agencies in Placer County to coordinate with each other on airport land use compatibility matters. Policy 2.2.9 encourages coordination between the County of Nevada, Placer County *ALUC* and County of Placer regarding airport impacts from Blue Canyon Airport. Similarly, Policy 2.2.10 addresses impacts in Placer County from airports in neighboring jurisdictions (e.g., McClellan Field and Sacramento International Airport in Sacramento County and Beale Air Force Base in Yuba County). The policy also acknowledges that a portion of the Truckee Tahoe Airport lies within Placer County but that a separate *ALUC* is established for that airport.
- **Major Land Use Actions:** Policy 2.5.2 specifies the types of projects (i.e., major land use actions) that are subject to *ALUC* review. The previous list of projects was modified to reflect industry trends and changes to the *ALUCP* density and intensity criteria. A few examples of new projects added to the list of *Major Land Use Actions* include:
  - Proposed pre-zoning associated with future annexation of land to a city
  - Proposed development agreements or amendments to such agreements
  - Any proposal for nonaviation uses of land within *Compatibility Zone A*
  - Proposed redevelopment
- **Limitations of the ALUC and ALUCP:** In accordance with *ALUC* statutes, Section 2.7 was added specifying that lands controlled by federal or state agencies or by Native American tribes are not subject to the provisions of the *ALUCP*. Other exemptions include airport operations, existing land uses, and single-family homes on existing parcels.
- **Fees:** Policy 2.8.4 was added to indicate that any applicable fees charged by the *ALUC* for review of submitted projects must accompany the submittal and that fees are subject to change at the discretion of the *ALUC*.
- **Overruling of ALUC by Local Agency:** Section 2.12 was added to detail the *ALUC's* policy regarding circumstances in which a *Local Agency* proceeds with overruling an *ALUC's* determination. The specific requirements of the local agency in overruling the *ALUC*, including the 45-day notice requirement created by the statutes of 2003, is summarized in Chapter 1 of the new *ALUCP* as it is set by state law rather than *ALUC* policy.

- **Reviews by ALUC Secretary:** The 2000 *ALUCP* authorizes the *ALUC Secretary* to make an initial consistency determination of all actions, except those requiring mandatory review by the *ALUC* (e.g., general plans). Proposals with significant compatibility issues are forwarded to the *ALUC* for review and decision. Several variations are provided in the new *ALUCP*.
  - Policy 2.4.1(a)(3) allows the *ALUC Secretary* to review amendments to general plans, specific plans, zoning ordinances or building regulations that are parcel specific (e.g., zoning variance associated with a development proposal). Amendments involving general applicability throughout lands within an *Airport Influence Area* requires review by the *ALUC*.
  - Policies 2.6.1(d) and 2.6.2(a) allows the *ALUC Secretary* to provide comments on behalf of the *ALUC* on all actions and environmental documents referred to the *ALUC* on a voluntary basis.
  - Policy 2.10.2 allows the *ALUC Secretary* to make consistency determinations on Major Land Use Actions including ones that are conditionally consistent or inconsistent. The *ALUC Secretary* would still have the choice of forwarding challenging or controversial projects to the *ALUC* for a decision, but this approach would speed up the review process for actions that simply do not comply with *ALUCP* criteria. It also would perhaps encourage the applicant to modify the proposal sooner rather than waiting for an *ALUC* decision.
- **Appeals of ALUC Secretary Decisions:** Policy 2.10.4 is added indicating that consistency determinations made by the *ALUC Secretary* can be appealed to the *ALUC*. This addition is important given that the *ALUC Secretary's* review authority is increased as indicated above.
- **Infill:** Policy 3.7.2 is added to recognize that some properties may be bordered by existing development that does not conform to the *ALUCP* criteria. This policy allows infill development of similar land uses to occur in an area even if the proposed land use is otherwise incompatible with respect to the compatibility criteria for that location. This policy provides parameters for proposed infill sites.

## COMPATIBILITY CRITERIA

The overall compatibility policy framework provided in the 2000 *ALUCP* is maintained in the new *ALUCP*. For example, the four compatibility concerns (noise, overflight, safety and airspace) continue to be addressed in a composite manner. The principal differences between the two *ALUCPs* include the following:

- **Compatibility Criteria:** Table 2A in the 2000 *ALUCP* identifies the primary compatibility criteria applicable within each compatibility zone. The criteria establish limits on densities (dwelling units per acre) of residential uses and usage intensities (number of people per acre) of nonresidential uses. The table also provides a list of uses to be prohibited within various portions of the *airport influence area*. Other development conditions and compatibility considerations are noted as well. The general compatibility criteria listed in Table 2A, together with the compatibility policies and the compatibility map for each airport, are used by the *ALUC* or local jurisdictions to evaluate the compatibility of specific types of land uses.

Although described as an implementation tool rather than *ALUC* policy, a detailed land use matrix is provided in Appendix D of the 2000 *ALUCP*. The matrix makes an initial determination of the compatibility of specific land use types with the general compatibility criteria listed in Table 2A. The matrix categorizes each land use as incompatible, potentially compatible with restrictions, or compatible.

To simplify compatibility reviews, the new *ALUCP* combines the general compatibility criteria with the detailed land use matrix as a form of policy. The detailed list and evaluation of individual land uses provides greater clarity as to how the criteria would affect specific types of development and can facilitate implementation at the local agency level.

Additionally, the 2000 *ALUCP* applies a single set of criteria uniformly across all three airports. To more accurately reflect the unique characteristics of each airport and its environs, a separate set of criteria and criteria tables are provided (see Tables AUB-4A, BLU-5A and LIN-6A). Tables H1 through H3 below compare the criteria from the 2000 *ALUCP* with the new guidance in the 2011 *Handbook* and the criteria in the new *ALUCP*.

In terms of safety, the *Handbook* sets criteria differently for airports in urban areas than for rural locations. Although the compatibility criteria for the new *ALUCP* address all four compatibility concerns, the *Handbook* safety criteria is used as the basis for establishing residential density and nonresidential intensity limits.

- *Auburn Municipal Airport* – In terms of establishing residential density limits, the criteria of the 2000 *ALUCP* are maintained. Guidance from the *Handbook* is used to establish intensity limits for nonresidential uses. Specifically, the low end of the allowable intensity range for suburban airports is used. These intensity limits are higher than provided in the 2000 *ALUCP*. See Table H1 for comparison of criteria.
  - *Blue Canyon Airport* – The residential density and nonresidential intensity limits provided in the 2000 *ALUCP* are maintained. These limits are in line with the *Handbook* criteria for rural airports. See Table H2 for comparison of criteria.
  - *Lincoln Regional Airport* – The residential density limits established in the 2000 *ALUCP* are maintained. As for nonresidential intensity limits, the high end of the allowable intensity range for suburban airports is used. These intensity limits are higher than provided in the 2000 *ALUCP*. See Table H3 for comparison of criteria.
- **Compatibility Policy Maps:** The compatibility policy zones in the new *ALUCP* reflect aeronautical changes reflected in the newly adopted airport master plans or airport layout plan drawings.
- *Auburn Municipal Airport* – The anticipated growth of the Auburn Municipal Airport as reflected in the current (2007) Master Plan remains consistent with the development assumptions considered in the 2000 *ALUCP*. Therefore, no significant changes are needed to the 2000 *ALUCP* compatibility zones, except to *Zone A*. *Zone A* was widened by 100 feet to fully encompass the areas which lie within the FAR Part 77 primary surface and Runway Protection Zones (RPZs). In accordance with Federal Aviation Administration (FAA) stand-

ards, these areas should be restricted to aeronautical functions, only. *Zone A* remains entirely on airport property. See Exhibit H1 for comparison of the 2000 and new *ALUCP* zones.

- *Blue Canyon Airport* – Since adoption of the 2000 *ALUCP*, the principal change at the airport is a 400-foot reduction in runway length (200-feet off each end) completed in 2003 in order to bring the runway design into conformance with FAA runway safety area criteria. As such, all of the compatibility zones in the new *ALUCP* are contracted to reflect the shorter runway. Additionally, *Zone C1* is wider to provide a transition between *Zone B2* and *D*. See Exhibit H2 for comparison of the 2000 and new *ALUCP* zones.
- *Lincoln Regional Airport* – The principal change from the assumptions provided in the City’s 2007 Airport Master Plan and reflected in the 2000 *ALUCP* is a proposal to extend the current runway by 1,000 feet to the north. The master plan proposal for a short parallel runway to be located east of the current runway is considered in the 2000 *ALUCP* and no changes have been made to the previously proposed length or location. The new *ALUCP* reflects the runway extension by shifting all of the zones an equal amount to the north. *Zone A* is modified to encompass the FAR Part 77 primary surface and Runway Protection Zones (RPZs). At the south end of the airport, *Zone B1* is adjusted to follow Nelson Lane for ease of implementing the compatibility criteria. The width of *Zone C1* is narrowed to reflect that the principal compatibility concern is with regard to overflight annoyance. The City’s 2050 General Plan reflects future suburban development north, south and west of the airport. The completion of the Highway 65 bypass, which passes close to the airport on the south and west, is anticipated to encourage highway commercial uses and other suburban development in the airport environs. These suburban uses are anticipated to generate their own level of noise thereby masking potential annoyance with aircraft overflights. For this reason, the outer portions of the primary traffic pattern are excluded from *Zone C1*. At the south end, *Zone C1* is squared off (approximately 12,000 feet from the end of the runway). Within *Zone C1* north and south of the airport, aircraft on instrument approaches may overfly these areas at altitudes under 600 feet above the ground. See Exhibit H3 for comparison of the 2000 and new *ALUCP* zones.

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**Table H1: Auburn Municipal Airport**

<b>Comparison of Density Criteria</b>							
<b>Composite Zone</b>	<b>Current 2000 ALUCP Criteria<sup>1</sup></b>		<b>2011 Handbook Suburban Safety Criteria<sup>2</sup></b>			<b>Draft ALUCP Criteria<sup>1</sup></b>	
	<b>Average</b>		<b>Equivalent Safety Zone</b>	<b>Average</b>		<b>Average</b>	
<b>A</b>	0		1	0		0	
<b>B1</b>	0.1 (10-acre parcel)		2 3 4	1 du per 10- 20 acres 1 du per 2- 5 acres 1 du per 2- 5 acres		0.1 (10-acre parcel)	
<b>B2</b>	0.1 (10-acre parcel)		5	1 du per 1- 2 acres		0.1 (10-acre parcel)	
<b>C1</b>	0.5 (2-acre parcel)		3 4	1 du per 2- 5 acres		0.5 (2-acre parcel)	
<b>C2</b>	No Limit		6	No Limit		No Limit	
<b>D</b>	No Limit		NA	NA		No Limit	
<b>Comparison of Intensity Criteria</b>							
<b>Composite Zone</b>	<b>Average</b>	<b>Single-Acre</b>	<b>Equivalent Safety Zone</b>	<b>Average</b>	<b>Single-Acre</b>	<b>Average</b>	<b>Single-Acre</b>
<b>A</b>	10	10	1	0	0	0	0
<b>B1</b>	25	50	2 3 4	40-60 70-100 100-150	80-120 210-300 300-450	40	80
<b>B2</b>	50	100	5	70-100	210-300	70	210
<b>C1</b>	75	150	3 4	70-100 100-150	210-300 300-450	100	300
<b>C2</b>	100	300	6	200-300	800-1,200	200	800
<b>D</b>	No Limit	No Limit	NA	NA	NA	No Limit	No Limit
<b>Comparison of Open Land Criteria</b>							
<b>Composite Zone</b>	<b>Percent</b>		<b>Equivalent Safety Zone</b>	<b>Percent</b>		<b>Percent</b>	
<b>A</b>	All Remaining		1	All Remaining		All Remaining	
<b>B1</b>	30%		2 3 and 4	25-30% 15-20%		30%	
<b>B2</b>	No Requirement		5	25-30%		No Requirement	
<b>C1</b>	20%		3 and 4 6	15-20% 10%		20%	
<b>C2</b>	10%		6	10%		10%	
<b>D</b>	No Requirement		NA	No Requirement		No Requirement	

<sup>1</sup> ALUCP criteria considers all four compatibility concerns: noise, overflight, safety, and airspace.

<sup>2</sup> Handbook safety criteria do not address the other three compatibility concerns.

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Table H2: Blue Canyon Airport

Comparison of Density Criteria							
Composite Zone	Current 2000 ALUCP Criteria <sup>3</sup>		2011 Handbook Rural Safety Criteria <sup>4</sup>			Draft ALUCP Criteria <sup>3</sup>	
	Average		Equivalent Safety Zone	Average		Average	
A	0		1	0		0	
B1	0.1 (10-acre parcel)		2 4	1 du per 10- 20 acres 1 du per 2- 5 acres		0.1 (10-acre parcel)	
B2	0.1 (10-acre parcel)		5	1 du per 1- 2 acres		0.1 (10-acre parcel)	
C1	0.5 (2-acre parcel)		3 and 4	1 du per 2- 5 acres		0.5 (2-acre parcel)	
C2	NA		NA	NA		NA	
D	No Limit		NA	NA		No Limit	
Comparison of Intensity Criteria							
Composite Zone	Average		Equivalent Safety Zone	Average		Average	
	Single-Acre	Single-Acre		Single-Acre	Single-Acre		
A	10	10	1	0	0	0	0
B1	25	50	2 3	10-40 50-70	50-80 150-210	25	50
B2	50	100	5	50-70	150-210	50	100
C1	75	150	3 4	50-70 70-100	150-210 210-300	75	150
C2	NA	NA	NA	NA	NA	NA	NA
D	No Limit	No Limit	NA	NA	NA	No Limit	No Limit
Comparison of Open Land Criteria							
Composite Zone	Percent		Equivalent Safety Zone	Percent		Percent	
	Percent			Percent		Percent	
A	All Remaining		1	All Remaining		All Remaining	
B1	30%		2 3	25-30% 15-20%		30%	
B2	No Requirement		5	25-30%		No Requirement	
C1	20%		3 and 4 6	15-20% 10%		20%	
C2	NA		NA	NA		NA	
D	No Requirement		NA	No Requirement		No Requirement	

<sup>3</sup> ALUCP criteria considers all four compatibility factors: noise, overflight, safety, and airspace. Compatibility Zone C2 is not established for Blue Canyon Airport given the low level of aircraft activity.

<sup>4</sup> Handbook safety criteria do not address the other three compatibility concerns. Handbook recommends maintaining current zoning if less than density criteria for suburban setting which is shown in table.

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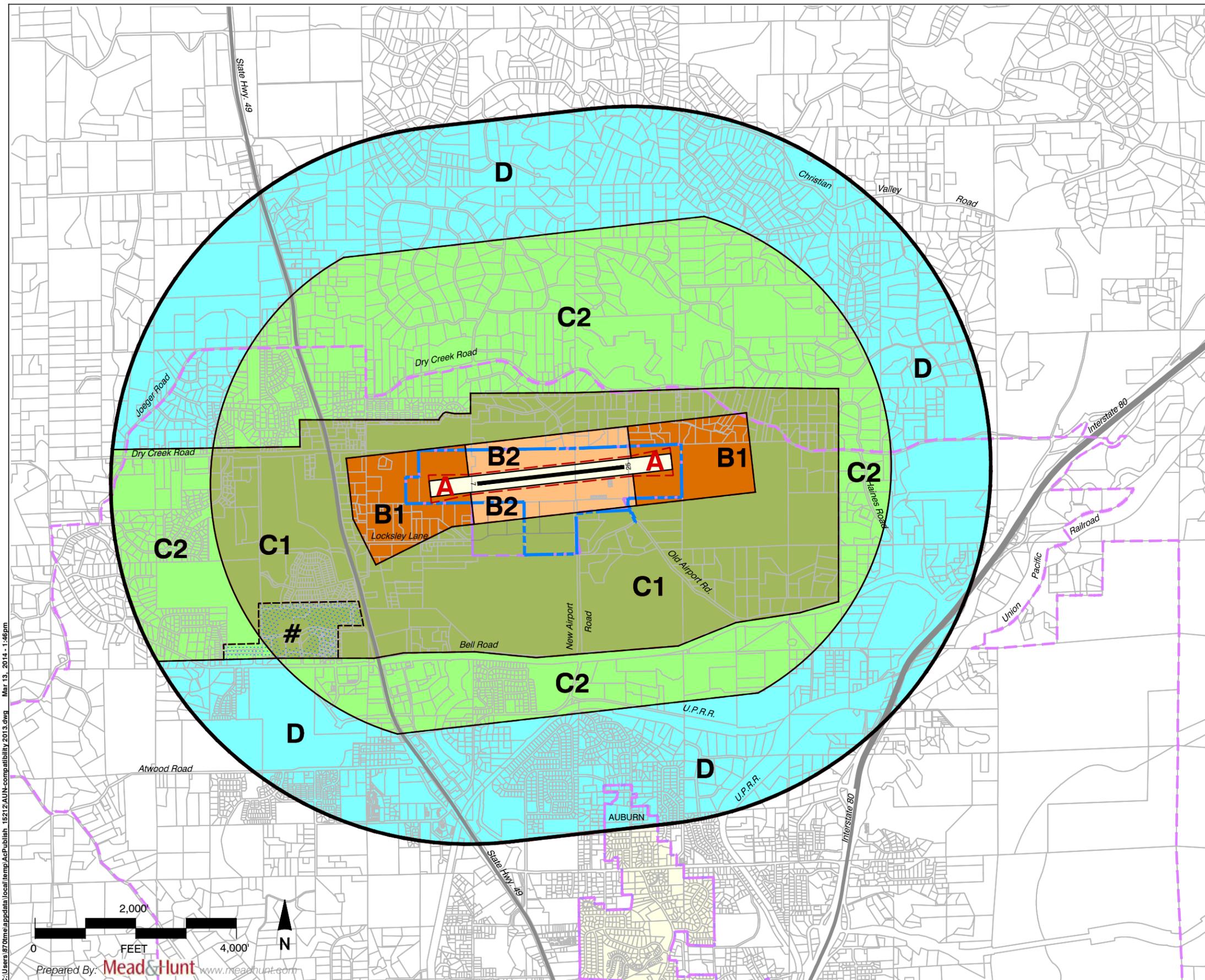
**Table H3: Lincoln Regional Airport**

<b>Comparison of Density Criteria</b>							
<b>Composite Zone</b>	<b>Current 2000 ALUCP Criteria<sup>5</sup></b>		<b>Equivalent Safety Zone</b>	<b>2011 Handbook Suburban Safety Criteria<sup>6</sup></b>		<b>Draft ALUCP Criteria<sup>5</sup></b>	
	<b>Average</b>			<b>Average</b>		<b>Average</b>	
<b>A</b>	0		1	0		0	
<b>B1</b>	0.1 (10-acre parcel)		2 3	1 du per 10- 20 acres 1 du per 2- 5 acres		0.1 (10-acre parcel)	
<b>B2</b>	0.1 (10-acre parcel)		5	1 du per 1- 2 acres		0.1 (10-acre parcel)	
<b>C1</b>	0.5 (2-acre parcel)		3 and 4	1 du per 2- 5 acres		0.5 (2-acre parcel)	
<b>C2</b>	No Limit		6	No Limit		No Limit	
<b>D</b>	No Limit		NA	NA		No Limit	
<b>Comparison of Intensity Criteria</b>							
<b>Composite Zone</b>	<b>Current 2000 ALUCP Criteria<sup>5</sup></b>		<b>Equivalent Safety Zone</b>	<b>2011 Handbook Suburban Safety Criteria<sup>6</sup></b>		<b>Draft ALUCP Criteria<sup>5</sup></b>	
	<b>Average</b>	<b>Single-Acre</b>		<b>Average</b>	<b>Single-Acre</b>	<b>Average</b>	<b>Single-Acre</b>
<b>A</b>	10	10	1	0	0	0	0
<b>B1</b>	25	50	2 3	40-60 70-100	80-120 210-300	60	120
<b>B2</b>	50	100	5	70-100	210-300	100	300
<b>C1</b>	75	150	3 4	70-100 100-150	210-300 300-450	150	450
<b>C2</b>	100	300	6	200-300	800-1,200	300	1,200
<b>D</b>	No Limit	No Limit	NA	NA	NA	No Limit	No Limit
<b>Comparison of Open Land Criteria</b>							
<b>Composite Zone</b>	<b>Current 2000 ALUCP Criteria<sup>5</sup></b>		<b>Equivalent Safety Zone</b>	<b>2011 Handbook Suburban Safety Criteria<sup>6</sup></b>		<b>Draft ALUCP Criteria<sup>5</sup></b>	
	<b>Percent</b>			<b>Percent</b>		<b>Percent</b>	
<b>A</b>	All Remaining		1	All Remaining		All Remaining	
<b>B1</b>	30%		2 3	25-30% 15-20%		25%	
<b>B2</b>	No Requirement		5	25-30%		No Requirement	
<b>C1</b>	20%		3 and 4 6	15-20% 10%		15%	
<b>C2</b>	10%		6	10%		10%	
<b>D</b>	No Requirement		NA	No Requirement		No Requirement	

<sup>5</sup> ALUCP criteria considers all four compatibility factors: noise, overflight, safety, and airspace.

<sup>6</sup> Handbook safety criteria do not address the other three compatibility concerns.

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**Legend**

**Boundary Lines**

- Placer County Limits
- Auburn City Limits
- Auburn Sphere of Influence
- Airport Property Line
- Existing Runway 7-25 (3,700 ft.)

**Compatibility Policy Zones (Adopted 2000)**

**Airport Influence Area**

- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D

- Compatibility Zone Changes (Adopted 2014)<sup>2</sup>
- See Inter-Agency Coordination Policy 5.2.3.

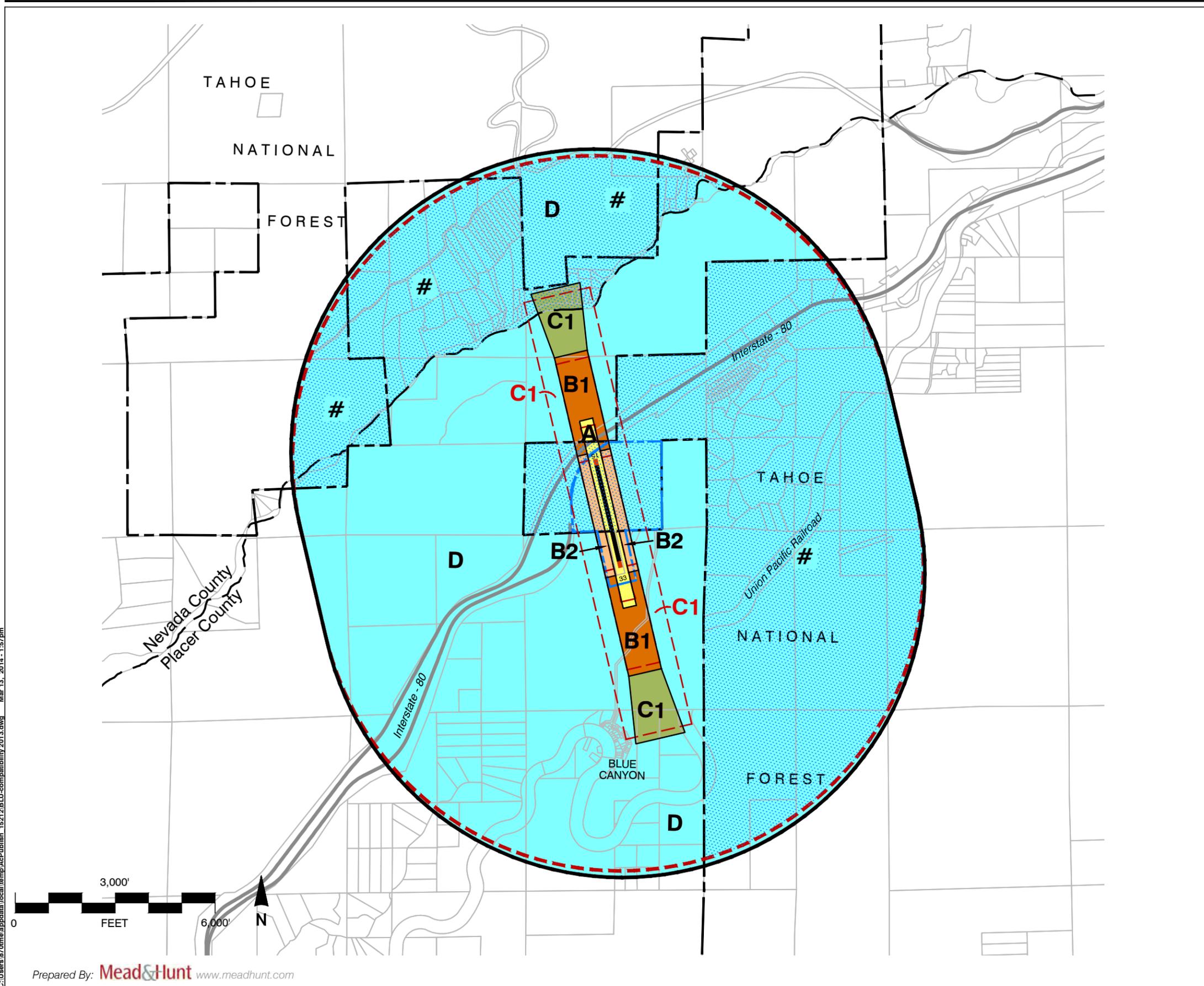
**Notes:**

1. Source: Placer County Airport Land Use Compatibility Plan, adopted October 2000.
2. Zone changes shown with red dashed lines and red labels.
3. This ALUCP utilizes composite compatibility zones addressing four compatibility concerns: noise, safety, overflight and airspace protection.

**Auburn Municipal Airport  
Land Use Compatibility Plan  
(Adopted February 26, 2014)**

Figure H-1

**Policy Map Changes  
Auburn Municipal Airport**



**Legend**

**Boundary Lines**

- Placer County Limits
- Tahoe National Forest
- Existing Airport Property Line
- Future Airport Property Line
- Existing Runway 15-33 (2,900 ft.)

**Compatibility Policy Zones (Adopted 2000)**

- Airport Influence Area
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone D

- Compatibility Zone Changes (Adopted 2014) <sup>2</sup>
- See Inter-Agency Coordination Policy 5.2.3.

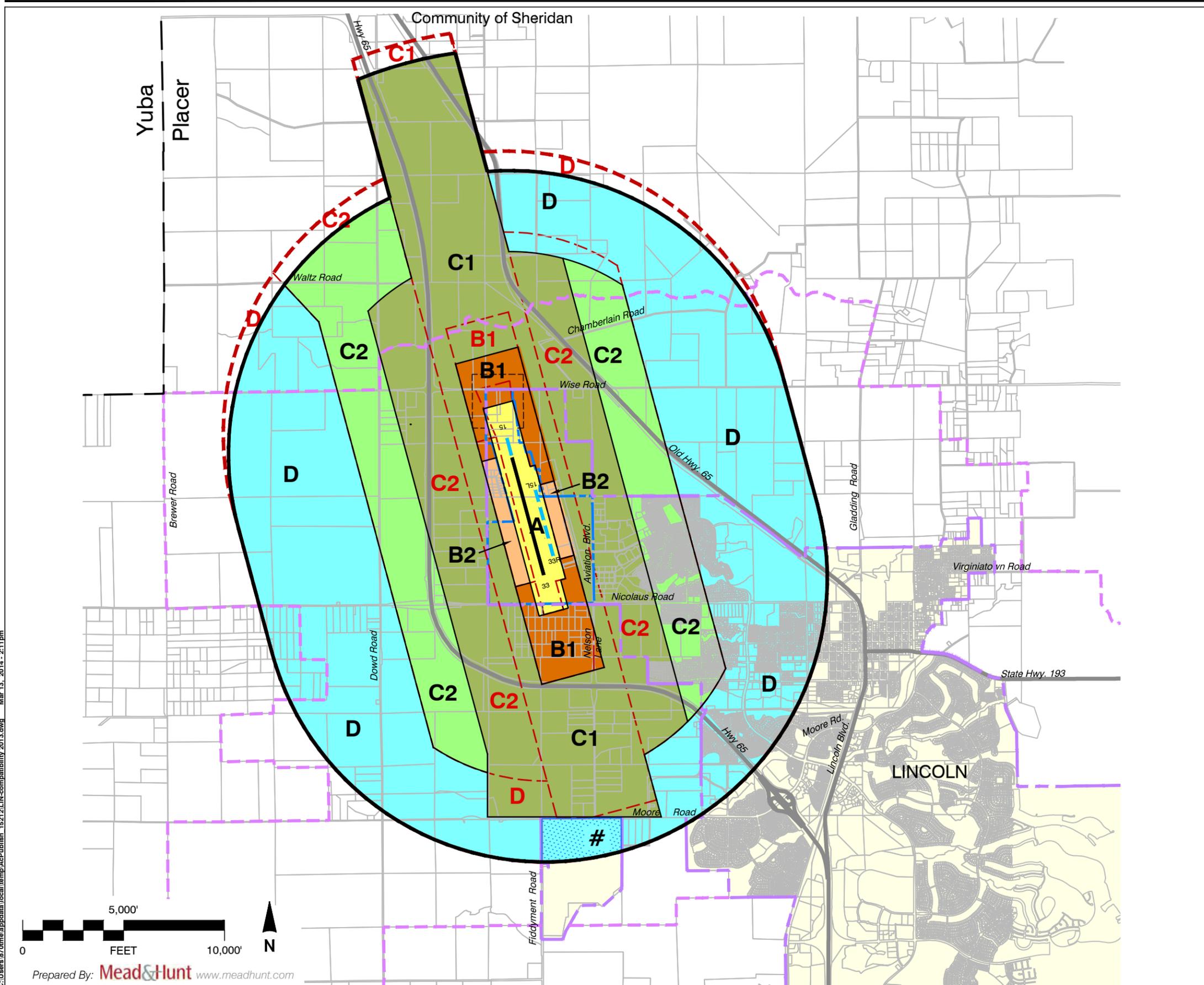
**Notes:**

1. Source: Placer County Airport Land Use Compatibility Plan, adopted October 2000. Compatibility Zone C2 is not established for Blue Canyon Airport given low level of aircraft activity.
2. Zone changes shown with red dashed lines and red labels.
3. This ALUCP utilizes composite compatibility zones addressing four compatibility concerns: noise, safety, overflight and airspace protection.

**Blue Canyon Airport**  
**Land Use Compatibility Plan**  
 (Adopted February 26, 2014)

Figure H-2

**Policy Map Changes**  
 Blue Canyon Airport



**Legend**

**Boundary Lines**

- Placer County Limits
- Lincoln City Limits
- - - Lincoln Sphere of Influence
- Existing Airport Property Line
- - - Future Airport Property Line
- - - Future Avigation Easement
- Existing Runway 15-33 (6,000 ft.)
- Future Runway 15R-33L (7,000 ft.)
- Future Runway 15L-33R (3,350 ft.)

**Compatibility Policy Zones (Adopted 2000)<sup>1</sup>**

- Airport Influence Area
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D

**Compatibility Zone Changes (Adopted 2014)<sup>2</sup>**

- # See Inter-Agency Coordination Policy 5.2.3.

- Notes:**
1. This ALUCP utilizes composite compatibility zones addressing four compatibility concerns: noise, safety, overflight and airspace protection.
  2. Zone changes shown with red dashed lines and red labels.
  3. Longitudinal dimensions measure from end of primary surface, 200' from ends of runway.

**Lincoln Regional Airport  
Land Use Compatibility Plan  
(Adopted February 26, 2014)**

Figure H-3

**Policy Map Changes  
Lincoln Regional Airport**

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## Glossary of Terms

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**Above Ground Level (AGL):** An elevation datum given in feet above ground level.

**Accident Potential Zones (APZs):** A set of safety-related zones defined by AICUZ studies for areas beyond the ends of military airport runways. Typically, three types of zones are established: a clear zone closest to the runway end, then APZ I and APZ II. The potential for aircraft accidents and the corresponding need for land use restrictions is greatest with the clear zone and diminish with increased distance from the runway.

**Air Carriers:** The commercial system of air transportation, consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

**Air Installation Compatible Use Zones (AICUZ):** A land use compatible plan prepared by the U.S. Department of Defense for military airfields. AICUZ plans serve as recommendations to local governments bodies having jurisdiction over land uses surrounding these facilities.

**Aircraft Accident:** An occurrence incident to flight in which, as a result of the operation of an aircraft, a person (occupant or nonoccupant) receives fatal or serious injury or an aircraft receives substantial damage.

- Except as provided below, *substantial damage* means damage or structural failure that adversely affects the structural strength, performance, or flight characteristics of the aircraft, and that would normally require major repair or replacement of the affected component.
- Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered substantial damage.

**Aircraft Incident:** A mishap associated with the operation of an aircraft in which neither fatal nor serious injuries nor substantial damage to the aircraft occurs.

**Aircraft Mishap:** The collective term for an aircraft accident or an incident.

**Aircraft Operation:** The airborne movement of aircraft at an airport or about an en route fix or at other point where counts can be made. There are two types of operations: local and itinerant. An operation is counted for each landing and each departure, such that a touch-and-go flight is counted as two operations. (FAA Stats)

**Airport:** An area of land or water that is used or intended to be used for the landing and taking off of aircraft, and includes its buildings and facilities if any. (FAR 1)

**Airport Elevation:** The highest point of an airport's useable runways, measured in feet above mean sea level. (AIM)

**Airport Land Use Commission (ALUC):** A commission authorized under the provisions of California Public Utilities Code, Section 21670 et seq. and established (in any county within which a public-use airport is located) for the purpose of promoting compatibility between airports and the land uses surrounding them.

**Airport Layout Plan (ALP):** A scale drawing of existing and proposed airport facilities, their location on an airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

**Airport Master Plan (AMP):** A long-range plan for development of an airport, including descriptions of the data and analyses on which the plan is based.

**Airport Reference Code (ARC):** A coding system used to relate airport design criteria to the operation and physical characteristics of the airplanes intended to operate at an airport. (Airport Design AC)

**Airports, Classes of:** For the purposes of issuing a Site Approval Permit, The California Department of Transportation, Division of Aeronautics classifies airports into the following categories: (CCR)

- *Agricultural Airport or Heliport:* An airport restricted to use only by agricultural aerial applicator aircraft (FAR Part 137 operators).
- *Emergency Medical Services (EMS) Landing Site:* A site used for the landing and taking off of EMS helicopters that is located at or as near as practical to a medical emergency or at or near a medical facility and
  - (1) has been designated an EMS landing site by an officer authorized by a public safety agency, as defined in PUC Section 21662.1, using criteria that the public safety agency has determined is reasonable and prudent for the safe operation of EMS helicopters and
  - (2) is used, over any twelve month period, for no more than an average of six landings per month with a patient or patients on the helicopter, except to allow for adequate medical response to a mass casualty event even if that response causes the site to be used beyond these limits, and
  - (3) is not marked as a permitted heliport as described in Section 3554 of these regulations and
  - (4) is used only for emergency medical purposes.
- *Heliport on Offshore Oil Platform:* A heliport located on a structure in the ocean, not connected to the shore by pier, bridge, wharf, dock or breakwater, used in the support of petroleum exploration or production.
- *Personal-Use Airport:* An airport limited to the non-commercial use of an individual owner or family and occasional invited guests.
- *Public-Use Airport:* An airport that is open for aircraft operations to the general public and is listed in the current edition of the *Airport/Facility Directory* that is published by the National Ocean Service of the U.S. Department of Commerce.
- *Seaplane Landing Site:* An area of water used, or intended for use, for landing and takeoff of seaplanes.
- *Special-Use Airport or Heliport:* An airport not open to the general public, access to which is controlled by the owner in support of commercial activities, public service operations, and/or personal use.
- *Temporary Helicopter Landing Site:* A site, other than an emergency medical service landing site at or near a medical facility, which is used for landing and taking off of helicopters and

- (1) is used or intended to be used for less than one year, except for recurrent annual events and
- (2) is not marked or lighted to be distinguishable as a heliport and
- (3) is not used exclusively for helicopter operations.

**Ambient Noise Level:** The level of noise that is all encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.

**Approach Protection Easement:** A form of easement that both conveys all of the rights of an aviation easement and sets specified limitations on the type of land uses allowed to be developed on the property.

**Approach Speed:** The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration. (AIM)

**Aviation-Related Use:** Any facility or activity directly associated with the air transportation of persons or cargo or the operation, storage, or maintenance of aircraft at an airport or heliport. Such uses specifically include runways, taxiways, and their associated protected areas defined by the Federal Aviation Administration, together with aircraft aprons, hangars, fixed base operations, terminal buildings, etc.

**Avigation Easement:** A type of easement that typically conveys the following rights:

- A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (usually set in accordance with FAR Part 77 criteria).
- A right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal airport activity.
- A right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace.
- A right-of-entry onto the property, with proper advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.
- A right to prohibit electrical interference, glare, misleading lights, visual impairments, and other hazards to aircraft flight from being created on the property.

**Based Aircraft:** Aircraft stationed at an airport on a long-term basis.

**California Environmental Quality Act (CEQA):** Statutes adopted by the state legislature for the purpose of maintaining a quality environment for the people of the state now and in the future. The Act establishes a process for state and local agency review of projects, as defined in the implementing guidelines that may adversely affect the environment.

**Ceiling:** Height above the earth's surface to the lowest layer of clouds or obscuring phenomena. (AIM)

**Circling Approach/Circle-to-Land Maneuver:** A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or not desirable. (AIM)

**Clear Zone:** The military airport equivalent of runway protection zones at civilian airports.

**Combining District:** A zoning district that establishes development standards in areas of special concern over and above the standards applicable to basic underlying zoning districts.

**Commercial Activities:** Airport-related activities that may offer a facility, service or commodity for sale, hire or profit. Examples of commodities for sale are: food, lodging, entertainment, real estate, petroleum products, parts and equipment. Examples of services are: flight training, charter flights, maintenance, aircraft storage, and tiedown. (CCR)

**Commercial Operator:** A person who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property, other than as an air carrier. (FAR 1)

**Community Noise Equivalent Level (CNEL):** The noise metric adopted by the State of California for evaluating airport noise. It represents the average daytime noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and nighttime periods relative to the daytime period. (State Airport Noise Standards)

**Compatibility Plan:** As used herein, a plan, usually adopted by an Airport Land Use Commission that sets forth policies for promoting compatibility between airports and the land uses that surround them. Often referred to as a *Comprehensive Land Use Plan (CLUP)*.

**Controlled Airspace:** Any of several types of airspace within which some or all aircraft may be subject to air traffic control. (FAR 1)

**Day-Night Average Sound Level (DNL):** The noise metric adopted by the U.S. Environmental Protection Agency for measurement of environmental noise. It represents the average daytime noise level during a 24-hour day, measured in decibels and adjusted to account for the lower tolerance of people to noise during nighttime periods. The mathematical symbol is  $L_{dn}$ .

**Decibel (dB):** A unit measuring the magnitude of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound, specifically a sound just barely audible to an unimpaired human ear. For environmental noise from aircraft and other transportation sources, an *A-weighted sound level* (abbreviated dBA) is normally used. The A-weighting scale adjusts the values of different sound frequencies to approximate the auditory sensitivity of the human ear.

**Deed Notice:** A formal statement added to the legal description of a deed to a property and on any subdivision map. As used in airport land use planning, a deed notice would state that the property is subject to aircraft overflights. Deed notices are used as a form of buyer notification as a means of ensuring that those who are particularly sensitive to aircraft overflights can avoid moving to the affected areas.

**Designated Body:** A local government entity, such as a regional planning agency or a county planning commission, chosen by the county board of supervisors and the selection committee of city mayors to act in the capacity of an airport land use commission.

**Displaced Threshold:** A landing threshold that is located at a point on the runway other than the designated beginning of the runway (see *Threshold*). (AIM)

**Dwelling Unit:** Any building, structure or portion thereof which is occupied as, or designed or intended for occupancy as, a residence by one or more families, and any vacant land which is offered for sale or lease for the construction or location thereon of any such building, structure, or portion thereof. (HUD)

**Easement:** A less-than-fee-title transfer of real property rights from the property owner to the holder of the easement.

**Equivalent Sound Level ( $L_{eq}$ ):** The level of constant sound that, in the given situation and time period, has the same average sound energy as does a time-varying sound.

**Federal Aviation Regulations (FAR) Part 77:** The part of Federal Aviation Regulations that deals with objects affecting navigable airspace in the vicinity of airports. Objects that exceed the Part 77 height limits constitute airspace obstructions. FAR Part 77 establishes standards for identifying obstructions to navigable airspace, sets forth requirements for notice to the FAA of certain proposed construction or alteration, and provides for aeronautical studies of obstructions to determine their effect on the safe and efficient use of airspace.

**FAR Part 77 Surfaces:** Imaginary airspace surfaces established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

**Federal Aviation Administration (FAA):** The U.S. government agency that is responsible for ensuring the safe and efficient use of the nation's airports and airspace.

**Federal Aviation Regulations (FAR):** Regulations formally issued by the FAA to regulate air commerce.

**Findings:** Legally relevant subconclusions that expose a government agency's mode of analysis of facts, regulations, and policies, and that bridge the analytical gap between raw data and ultimate decision.

**Fixed Base Operator (FBO):** A business that operates at an airport and provides aircraft services to the general public including, but not limited to, sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tiedown or storage of aircraft; flight training; air taxi/charter operations; and specialty services, such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, or pipeline patrol.

**General Aviation:** That portion of civil aviation that encompasses all facets of aviation except air carriers. (FAA Stats)

**Glide Slope:** An electronic signal radiated by a component of an ILS to provide vertical guidance for aircraft during approach and landing.

**Global Positioning System (GPS):** A navigational system that utilizes a network of satellites to determine a positional fix almost anywhere on or above the earth. Developed and operated by the U.S. Department of Defense, GPS has been made available to the civilian sector for surface, marine, and aerial navigational use. For aviation purposes, the current form of GPS guidance provides en route aerial navigation and selected types of nonprecision instrument approaches. Eventual application of GPS as the principal system of navigational guidance throughout the world is anticipated.

**Helipad:** A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. (AIM)

**Heliport:** A facility used for operating, basing, housing, and maintaining helicopters. (HAI)

**Infill:** Development that takes place on vacant property largely surrounded by existing development, especially development that is similar in character.

**Instrument Approach Procedure:** A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority (refer to *Nonprecision Approach Procedure* and *Precision Approach Procedure*). (AIM)

**Instrument Flight Rules (IFR):** Rules governing the procedures for conducting instrument flight. Generally, IFR applies when meteorological conditions with a ceiling below 1,000 feet and visibility less than 3 miles prevail. (AIM)

**Instrument Landing System (ILS):** A precision instrument approach system that normally consists of the following electronic components and visual aids: (1) Localizer; (2) Glide Slope; (3) Outer Marker; (4) Middle Marker; (5) Approach Lights. (AIM)

**Instrument Operation:** An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility. (FAA ATA)

**Instrument Runway:** A runway equipped with electronic and visual navigation aids for which a precision or nonprecision approach procedure having straight-in landing minimums has been approved. (AIM)

**Inverse Condemnation:** An action brought by a property owner seeking just compensation for land taken for a public use against a government or private entity having the power of eminent domain. It is a remedy peculiar to the property owner and is exercisable by that party where it appears that the taker of the property does not intend to bring eminent domain proceedings.

**Land Use Density:** A measure of the concentration of land use development in an area. Mostly the term is used with respect to residential development and refers to the number of dwelling units per acre. Unless otherwise noted, policies in this compatibility plan refer to *gross* rather than *net* acreage.

**Land Use Intensity:** A measure of the concentration of nonresidential land use development in an area. For the purposes of airport land use planning, the term indicates the number of people per acre attracted by the land use. Unless otherwise noted, policies in this compatibility plan refer to *gross* rather than *net* acreage.

**Large Airplane:** An airplane of more than 12,500 pounds maximum certificated takeoff weight. (Airport Design AC)

**Localizer (LOC):** The component of an ILS that provides course guidance to the runway. (AIM)

**Mean Sea Level (MSL):** An elevation datum given in feet from mean sea level.

**Minimum Descent Altitude (MDA):** The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided. (FAR 1)

**Missed Approach:** A maneuver conducted by a pilot when an instrument approach cannot be completed to a landing. (AIM)

**National Transportation Safety Board (NTSB):** The U.S. government agency responsible for investigating transportation accidents and incidents.

**Navigational Aid (Navaid):** Any visual or electronic device airborne or on the surface that provides point-to-point guidance information or position data to aircraft in flight. (AIM)

**Noise Contours:** Continuous lines of equal noise level usually drawn around a noise source, such as an airport or highway. The lines are generally drawn in 5-decibel increments so that they resemble elevation contours in topographic maps.

**Noise Level Reduction (NLR):** A measure used to describe the reduction in sound level from environmental noise sources occurring between the outside and the inside of a structure.

**Nonconforming Use:** An existing land use that does not conform to subsequently adopted or amended zoning or other land use development standards.

**Nonprecision Approach Procedure:** A standard instrument approach procedure in which no electronic glide slope is provided. (FAR 1)

**Nonprecision Instrument Runway:** A runway with an approved or planned straight-in instrument approach procedure that has no existing or planned precision instrument approach procedure. (Airport Design AC)

**Obstruction:** Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceed the standards established in Subpart C of Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace*.

**Overflight:** Any distinctly visible and/or audible passage of an aircraft in flight, not necessarily directly overhead.

**Overflight Easement:** An easement that describes the right to overfly the property above a specified surface and includes the right to subject the property to noise, vibrations, fumes, and emissions. An overflight easement is used primarily as a form of buyer notification.

**Overflight Zone:** The area(s) where aircraft maneuver to enter or leave the traffic pattern, typically defined by the FAR Part 77 horizontal surface.

**Overlay Zone:** See *Combining District*.

**Planning Area Boundary:** An area surrounding an airport designated by an ALUC for the purpose of airport land use compatibility planning conducted in accordance with provisions of the State Aeronautics Act.

**Precision Approach Procedure:** A standard instrument approach procedure where an electronic glide slope is provided. (FAR 1)

**Precision Instrument Runway:** A runway with an existing or planned precision instrument approach procedure. (Airport Design AC)

**Referral Area:** The area around an airport defined by the planning area boundary adopted by an airport land use commission within which certain land use proposals are to be referred to the commission for review.

**Runway Protection Zone (RPZ):** An area (formerly called a *clear zone*) off the end of a runway used to enhance the protection of people and property on the ground. (Airport Design AC)

**Safety Zone:** For the purpose of airport land use planning, an area near an airport in which land use restrictions are established to protect the safety of the public from potential aircraft accidents.

**Secondary Dwelling Unit:** An attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. (California Department of Housing and Community Development)

**Single-Event Noise:** As used in herein, the noise from an individual aircraft operation or overflight.

**Single Event Noise Exposure Level (SENEL):** A measure, in decibels, of the noise exposure level of a single event, such as an aircraft flyby, measured over the time interval between the initial and final times for which the noise level of the event exceeds a threshold noise level and normalized to a reference duration of one second. SENEL is a noise metric established for use in California by the state Airport Noise Standards and is essentially identical to *Sound Exposure Level (SEL)*.

**Site Approval Permit:** A written approval issued by the California Department of Transportation authorizing construction of an airport in accordance with approved plans, specifications, and conditions. Both public-use and special-use airports require a site approval permit. (CCR)

**Small Airplane:** An airplane of 12,500 pounds or less maximum certificated takeoff weight. (Airport Design AC)

**Sound Exposure Level (SEL):** A time-integrated metric (i.e., continuously summed over a time period) that quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.

**Straight-In Instrument Approach:** An instrument approach wherein a final approach is begun without first having executed a procedure turn; it is not necessarily completed with a straight-in landing or made to straight-in landing weather minimums. (AIM)

**Structure:** Something that is constructed or erected.

**Taking:** Government appropriation of private land for which compensation must be paid as required by the Fifth Amendment of the U.S. Constitution. It is not essential that there be physical seizure or appropriation for a *taking* to occur, only that the government action directly interferes with or substantially disturbs the owner's right to use and enjoyment of the property.

**Terminal Instrument Procedures (TERPS):** Procedures for instrument approach and departure of aircraft to and from civil and military airports. There are four types of terminal instrument procedures: precision approach, nonprecision approach, circling, and departure.

**Threshold:** The beginning of that portion of the runway usable for landing (also see *Displaced Threshold*). (AIM)

**Touch-and-Go:** An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway. (AIM)

**Traffic Pattern:** The traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from an airport. The components of a typical traffic pattern are upwind leg, crosswind leg, downwind leg, base leg, and final approach. (AIM)

**Visual Approach:** An approach where the pilot must use visual reference to the runway for landing under VFR conditions.

**Visual Flight Rules (VFR):** Rules that govern the procedures for conducting flight under visual conditions. VFR applies when meteorological conditions are equal to or greater than the specified minimum—generally, a 1,000-foot ceiling and 3-mile visibility.

**Visual Runway:** A runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan. (Airport Design AC)

**Zoning:** A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted and special uses are established, as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from district to district, but they must be uniform within districts. A zoning ordinance consists of two parts: the text and a map.

## **Glossary Sources**

**FAR 1:** Federal Aviation Regulations Part 1, Definitions and Abbreviations

**AIM:** Aeronautical Information Manual

**Airport Design AC:** Federal Aviation Administration, *Airport Design* Advisory Circular 150/5300-13

**CCR:** California Code of Regulations, Title 21, Section 3525 et seq., *Division of Aeronautics*

**FAA ATA:** Federal Aviation Administration, *Air Traffic Activity*

**FAA Stats:** Federal Aviation Administration, *Statistical Handbook of Aviation*

**HAI:** Helicopter Association International

**NTSB:** National Transportation and Safety Board