

- 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 Caltrans 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.

Federal Aviation Regulations Part 77
Objects Affecting Navigable Airspace

Subpart A
GENERAL

Amdt. 77-11, Sept. 25, 1989.

77.1 Scope.

This part:

- (a) Establishes standards for determining obstructions in navigable airspace;
- (b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;
- (c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;
- (d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and
- (e) Provides for establishing antenna farm areas.

77.2 Definition of Terms.

For the purpose of this part:

“Airport available for public use” means an airport that is open to the general public with or without a prior request to use the airport.

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

“Nonprecision 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 nonprecision 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.

“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.

“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.

77.3 Standards.

- (a) The standards established in this part for determining obstructions to air navigation are used by the Administrator in:
 - (1) Administering the Federal-aid Airport Program and the Surplus Airport Program;
 - (2) Transferring property of the United States under section 16 of the Federal Airport Act;
 - (3) Developing technical standards and guidance in the design and construction of airports;
and
 - (4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.
- (b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this part but are contained in other publications of the Administrator.

77.5 Kinds of Objects Affected.

This part applies to:

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

Subpart B
NOTICE OF CONSTRUCTION OR ALTERATION

77.11 Scope.

- (a) This subpart requires each person proposing any kind of construction or alteration described in § 77.13(a) to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under § 77.13(a).
- (b) Notices received under this subpart provide a basis for:
 - (1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;
 - (2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;
 - (3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590.
 - (4) Determining other appropriate measures to be applied for continued safety of air navigation; and
 - (5) Charting and other notification to airmen of the construction or alteration.

77.13 Construction or Alteration Requiring Notice.

- (a) Except as provided in § 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in § 77.17:
- (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
 - (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
 - (i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.
 - (ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.
 - (iii) 5 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.
 - (3) 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) (1) or (2) of this section.
 - (4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.
 - (5) Any construction or alteration on any of the following airports (including heliports):
 - (i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.
 - (ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that airport will be available for public use.
 - (iii) An airport that is operated by an armed force of the United States.

- (b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.
- (c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if -
 - (1) The construction or alteration is more than 200 feet above the surface level of its site; or
 - (2) An FAA regional office advises him that submission of the form is required.

77.15 Construction or Alteration Not Requiring Notice.

No person is required to notify the Administrator for any of the following construction or alteration:

- (a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.
- (b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.
- (c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.
- (d) Any construction or alteration for which notice is required by any other FAA regulation.

77.17 Form and Time of Notice.

- (a) Each person who is required to notify the Administrator under § 77.13(a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.
- (b) The notice required under § 77.13(a)(1) through (4) must be submitted at least 30 days before the earlier of the following dates:

- (1) The date the proposed construction or alteration is to begin.
- (2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

- (c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this Part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.
- (d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30 day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.
- (e) Each person who is required to notify the Administrator by paragraph (b) or (c) of § 77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

77.19 Acknowledgment of Notice.

- (a) The FAA acknowledges in writing the receipt of each notice submitted under § 77.13(a).
- (b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1, entitled "Obstruction Marking and Lighting," the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.
- (c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration:

- (1) Would not exceed any standard of Subpart C and would not be a hazard to air navigation;
- (2) Would exceed a standard of Subpart C but would not be a hazard to air navigation; or
- (3) Would exceed a standard of Subpart C and further aeronautical study is necessary to determine whether it would be a hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

Subpart C
OBSTRUCTION STANDARDS

77.21 Scope.

- (a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefor is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by § 77.13(a) is filed.
- (b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by appropriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for the landing and taking off of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in § 77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.
- (c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport if, at the time of filing of the notice required by § 77.13(a), that airport is -
 - (1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or

- (2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use; or,
- (3) An airport that is operated by an armed force of the United States.

77.23 Standards for Determining Obstructions.

- (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 500 feet above ground level at the site of the object.
 - (2) A height that is 200 feet above ground level 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 of distance from the airport up to a maximum of 500 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 § 77.25, § 77.28, or § 77.29. 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 air 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) Seventeen 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) Fifteen feet for any other public roadway.

- (3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.
- (4) Twenty-three feet for a railroad, and,
- (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.

77.25 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 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 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, or planned 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 a primary surface is:
 - (1) 250 feet for utility runways having only visual approaches.
 - (2) 500 feet for utility runways having nonprecision 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 nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.
 - (iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

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 nonprecision instrument approach;
 - (iv) 3,500 feet for that end of a nonprecision 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 nonprecision instrument runway, other than utility, having a nonprecision 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 nonprecision 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.

77.27 [Reserved]

77.28 Military 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 an armed force of the United States.
- (1) Inner horizontal surface. A plane 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.

77.29 Airport Imaginary Surfaces for Heliports.

- (a) Heliport primary surface. The area of the primary surface coincides in size and shape with the designated takeoff and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.
- (b) Heliport 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) Heliport transitional surfaces. These surfaces extend outward and upward from the lateral boundaries of the heliport 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 OF EFFECT OF PROPOSED CONSTRUCTION ON NAVIGABLE AIRSPACE

77.31 Scope.

- (a) This subpart applies to the conduct of aeronautical studies of the effect of proposed construction or alteration on the use of air navigation facilities or navigable airspace by aircraft. In the aeronautical studies, present and future IFR and VFR aeronautical operations and procedures are reviewed and any possible changes in those operations and procedures and in the construction proposal that would eliminate or alleviate the conflicting demands are ascertained.
- (b) The conclusion of a study made under this subpart is normally a determination as to whether the specific proposal studied would be a hazard to air navigation.

77.33 Initiation of Studies.

- (a) An aeronautical study is conducted by the FAA:
 - (1) Upon the request of the sponsor of any construction or alteration for which a notice is submitted under Subpart B of this part, unless that construction or alteration would be located within an antenna farm area established under Subpart F of this part; or
 - (2) Whenever the FAA determines it appropriate.

77.35 Aeronautical Studies.

- (a) The Regional Manager, Air Traffic Division of the region in which the proposed construction or alteration would be located, or his designee, conducts the aeronautical study of the effect of the proposal upon the operation of air navigation facilities and the safe and efficient utilization of the navigable airspace. This study may include the physical and electromagnetic radiation effect the proposal may have on the operation of an air navigation facility.
- (b) To the extent considered necessary, the Regional Manager, Air Traffic Division or his designee:
 - (1) Solicits comments from all interested persons;
 - (2) Explores objections to the proposal and attempts to develop recommendations for adjustment of aviation requirements that would accommodate the proposed construction or alteration;
 - (3) Examines possible revisions of the proposal that would eliminate the exceeding of the standards in Subpart C of this part; and
 - (4) Convenes a meeting with all interested persons for the purpose of gathering all facts relevant to the effect of the proposed construction or alteration on the safe and efficient utilization of the navigable airspace.
- (c) The Regional Manager, Air Traffic Division or his designee issues a determination as to whether the proposed construction or alteration would be a hazard to air navigation and sends copies to all known interested persons. This determination is final unless a petition for review is granted under § 77.37.
- (d) If the sponsor revises his proposal to eliminate exceeding of the standards of Subpart C of this part, or withdraws it, the Regional Manager, Air Traffic Division, or his designee, terminates the study and notifies all known interested persons.

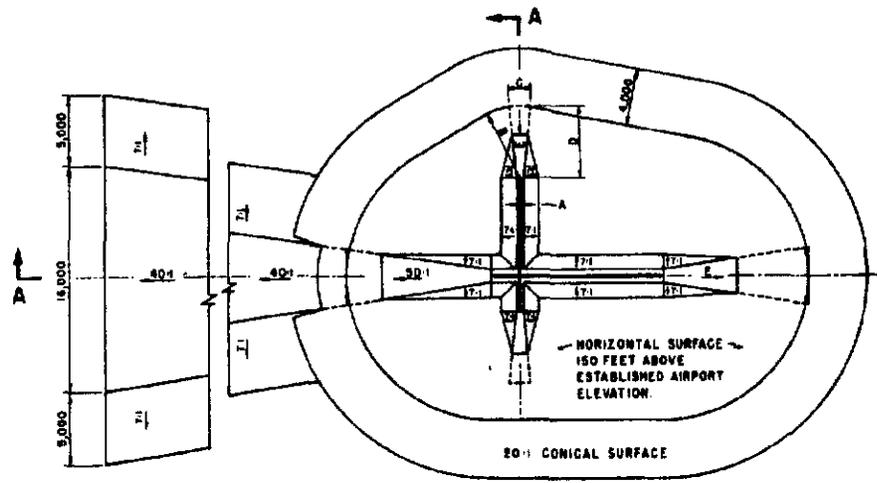
77.37 Discretionary Review.

- (a) The sponsor of any proposed construction or alteration or any person who stated a substantial aeronautical objection to it in an aeronautical study, or any person who has a substantial aeronautical objection to it but was not given an opportunity to state it, may petition the Administrator, within 30 days after issuance of the determination under § 77.19 or § 77.35 or revision or extension of the determination under § 77.39(c), for a review of the determination, revision, or extension. This paragraph does not apply to any acknowledgment issued under § 77.19(c)(1).
- (b) The petition must be in triplicate and contain a full statement of the basis upon which it is made.
- (c) The Administrator examines each petition and decides whether a review will be made and, if so, whether it will be:
 - (1) A review on the basis of written materials, including study of a report by the Regional Manager, Air Traffic Division of the aeronautical study, briefs, and related submissions by any interested party, and other relevant facts, with the Administrator affirming, revising, or reversing the determination issued under § 77.19, § 77.35 or § 77.39(c); or
 - (2) A review on the basis of a public hearing, conducted in accordance with the procedures prescribed in Subpart E of this part.

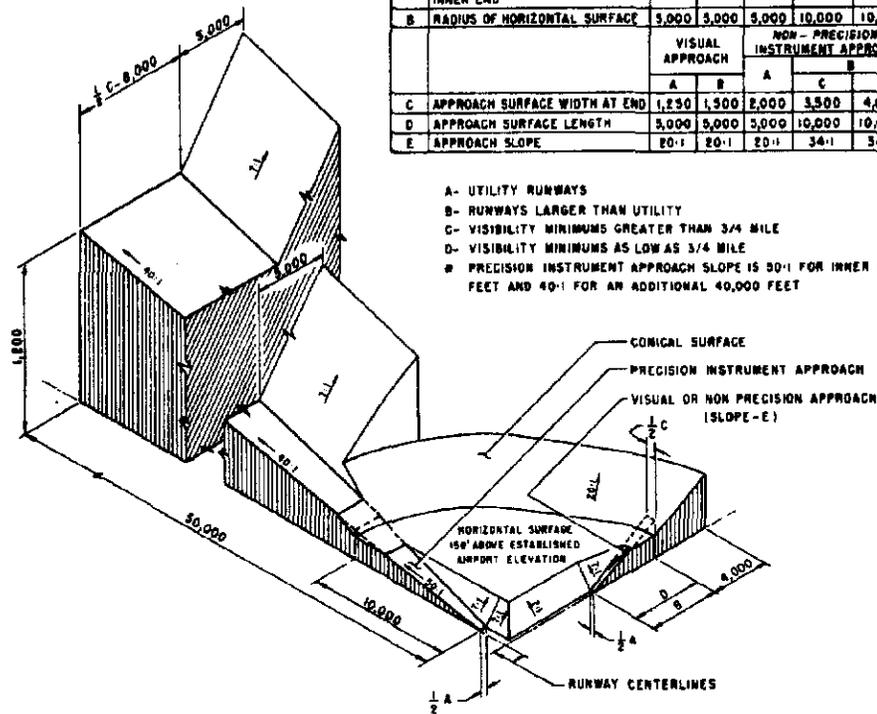
77.39 Effective Period of Determination of No Hazard.

- (a) Unless it is otherwise extended, revised, or terminated, each final determination of no hazard made under this subpart or Subpart B or E of this part expires 18 months after its effective date, regardless of whether the proposed construction or alteration has been started, or on the date the proposed construction or alteration is abandoned, whichever is earlier.
- (b) In any case, including a determination to which paragraph (d) of this section applies, where the proposed construction or alteration has not been started during the applicable period by actual structural work, such as the laying of a foundation, but not including excavation, any interested person may, at least 15 days before the date the final determination expires, petition the FAA official who issued the determination to:
 - (1) Revise the determination based on new facts that change the basis on which it was made;
or
 - (2) Extend its effective period.
- (c) The FAA official who issued the determination reviews each petition presented under paragraph (b) of this section, and revises, extends, or affirms the determination as indicated by his findings.

- (d) *In any case in which a final determination made under this subpart or Subpart B or E of this part relates to proposed construction or alteration that may not be started unless the Federal Communications Commission issues an appropriate construction permit, the effective period of each final determination includes -*
 - (1) *The time required to apply to the Commission for a construction permit, but not more than 6 months after the effective date of the determination; and*
 - (2) *The time necessary for the Commission to process the application except in a case where the Administrator determines a shorter effective period is required by the circumstances.*
- (e) *If the Commission issues a construction permit, the final determination is effective until the date prescribed for completion of the construction. If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.*



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY		PRECISION INSTRUMENT RUNWAY	
		A	B	A	C	B	D
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH		PRECISION INSTRUMENT APPROACH	
		A	B	A	C	B	D
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	18,000
D	APPROACH SURFACE LENGTH	5,000	9,000	5,000	10,000	10,000	#
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	#



- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- #- PRECISION INSTRUMENT APPROACH SLOPE IS 30:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET

ISOMETRIC VIEW OF SECTION A-A

§ 77.25 CIVIL AIRPORT IMAGINARY SURFACES

Source: Federal Aviation Regulations Part 77

Appendix B1

FAR Part 77 Imaginary Surfaces

Please Type or Print on This Form

Form Approved OMB No. 2120-0001

Notice of Proposed Construction or Alteration
 U.S. Department of Transportation Federal Aviation Administration
 Failure To Provide All Requested Information May Delay Processing Of Your Notice
 Aeronautical Study Number

1. Nature of Proposal A. Type <input type="checkbox"/> New Construction <input type="checkbox"/> Alteration * B. Class <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration ___ months) C. Work Schedule Dates Beginning _____ End _____ * If Alteration, provide previous FAA Aeronautical Study Number, if Available		2. Complete Description of Structure Please describe the proposed construction or alteration A. For proposals involving transmitting stations, include effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP. B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures. C. For buildings, include site orientation, dimensions, and construction materials. D. Optional - Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.
3A. Name, address, and telephone number of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State, and Zip Code) () _____ Area Code _____ Telephone Number _____ 3B. Name, address, and telephone number of proponent's representative, if different than 3A. above. () _____ Area Code _____ Telephone Number _____		

4. Location Of Structure A. Coordinates (to hundredths of seconds if known) Latitude 0 . / " " Longitude 0 . / " " 4D. Source for item 4A data. <input type="checkbox"/> USGS 7.5 Quad Chart <input type="checkbox"/> Survey <input type="checkbox"/> Other Specify _____ Indicate the reference datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input type="checkbox"/> Other Specify _____		B. Nearest City or Town and State C. Nearest public, military airport, heliport, flightpark or seaplane base (1) Distance to 4B _____ (2) Direction to 4B _____ (1) Distance from structure to nearest point of nearest runway _____ (2) Direction from structure to airport _____	5. Height and Elevation (to nearest foot) A. Elevation of ground above mean sea level B. Height of structure including all appurtenances and lighting above ground or water C. Overall height above mean sea level 4E. Description of site location with respect to highways, street, airports, prominent terrain, features, existing structures, etc. Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor's certification.
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Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1501). Persons who knowingly and willfully violate the notice requirements of Part 77 are subject to a civil penalty of \$1,000 per day until the notice is received, pursuant to Section 901(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1471 (a)) as well as the fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 901(b) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1472 (a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date: _____ Typed or Printed Name and Title of Person Filing Notice: _____ Signature: _____

FOR FAA USE ONLY The Proposal: <input type="checkbox"/> Does not require a notice to FAA. <input type="checkbox"/> Is not identified as an obstruction under the standards of FAR, Part 77, Subpart C, and would not be a hazard to air navigation. <input type="checkbox"/> Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to air navigation. <input type="checkbox"/> Should be obstruction marked <input type="checkbox"/> marked <input type="checkbox"/> lighted per FAA Advisory Circular 707460-1, Chapter 1. <input type="checkbox"/> Obstruction marking and lighting are not necessary.		FAA will either return this form or issue a separate acknowledgment. Supplemental Notice of Construction, FAA Form 7460-2, is required any time the project is abandoned, or <input type="checkbox"/> At least 48 hours before the start of construction. <input type="checkbox"/> Within five days after the construction reaches its greatest height. This determination expires on _____ 1955. (a) extended, revised or terminated by the issuing office. (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) with an application for construction permit is filed to the FCC, or before the above expiration date. If such event the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC receives the application. NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date. If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that agency.
Remarks: _____ _____ _____		NAD 83 Coordinates (Use these coordinates for any future correspondence with the FAA) Latitude 0 . / " " Longitude 0 . / " " Issued in: _____ Signature: _____ Date: _____

Source: Federal Aviation Administration

Appendix B2

Part 77 Notification
 FAA Form 7460

Methods for Determining Concentrations of People Placer County Airport Land Use Compatibility Plan

One criterion used in the *Airport Land Use Compatibility Plan* is 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 density, it will be considered inconsistent with compatibility planning policies. This appendix provides some guidance on how the people-per-acre determination can be made.

The most difficult part about making a people-per-acre determination is estimating the number of people likely to use a particular facility. There are several methods which can be utilized, depending upon the nature of the proposed use:

- ▶ **Parking Ordinance** — The number of people present in a given area can be calculated based upon the number of parking spaces provided. Some assumption regarding the number of people per vehicle needs to be developed to calculate the number of people on-site. The number of people per acre can then be calculated by dividing the number of people on-site by the size of the parcel in acres. This approach is appropriate where the use is expected to be dependent upon access by vehicles. Depending upon the specific assumptions utilized, this methodology typically results in a number in the low end of the likely intensity for a given land use.

Note: As indicated in the Primary Compatibility Criteria table (Chapter 2, Table 2A, Note 2), the preceding methodology is to be used within unincorporated areas of Placer County.

- ▶ **Maximum Occupancy** — The Uniform or California Building Code can be used as a standard for determining the maximum occupancy of certain uses. The chart provided as Appendix C1 indicates the required number of square feet per occupant. The number of people on the site can be calculated by dividing the total floor area of a proposed use by the minimum square feet per occupant requirement listed in the table. The maximum occupancy can then be divided by the size of the parcel in acres to determine the people per acre. Surveys of actual occupancy levels 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 number of people calculated for office and retail uses should usually be adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination. Even with this adjustment, the UBC-based methodology typically produces intensities at the high end of the likely range.
- ▶ **Survey of Similar Uses** — Certain uses may require an estimate based upon a survey of similar uses. This approach is more difficult, but is appropriate for uses which, because of the nature of the use, cannot be reasonably estimated based upon parking or square footage.

Appendix C2 shows sample calculations.

<u>Use</u>	<u>Minimum Square Feet per Occupant</u>
1. Aircraft Hangars (no repair)	500
2. Auction Rooms	7
3. Assembly Areas, Concentrated Use (without fixed seats)	7
Auditoriums	
Churches and Chapels	
Dance Floors	
Lobby Accessory to Assembly Occupancy	
Lodge Rooms	
Reviewing Stands	
Stadiums	
Waiting Area	3
4. Assembly Areas, Less Concentrated Use	15
Conference Rooms	
Dining Rooms	
Drinking Establishments	
Exhibit Rooms	
Gymnasiums	
Lounges	
Stages	
Gaming	11
5. Bowling Alley (assume no occupant load for bowling lanes)	4
6. Children's Homes and Homes for the Aged	80
7. Classrooms	20
8. Congregate Residences	200
9. Courtrooms	40
10. Dormitories	50
11. Dwellings	300
12. Exercising Rooms	50
13. Garage, Parking	200
14. Health-Care Facilities	80
Sleeping Rooms	120
Treatment Rooms	240
15. Hotels and Apartments	200
16. Kitchen — Commercial	200
17. Library Reading Room	50
Stack Areas	100
18. Locker Rooms	50
19. Malls	Varies
20. Manufacturing Areas	200
21. Mechanical Equipment Room	300
22. Nurseries for Children (Day Care)	35
23. Offices	100
24. School Shops and Vocational Rooms	50
25. Skating Rinks	50 on the skating area; 15 on the deck
26. Storage and Stock Rooms	300
27. Stores — Retail Sales Rooms	
Basements and Ground Floor	30
Upper Floors	60
28. Swimming Pools	50 for the pool area; 15 on the deck
29. Warehouses	500
30. All Others	100

Source: California Building Code (1998), Table 10-A

Appendix C1

Occupancy Levels – 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

Note: This method is specifically to be used in the unincorporated areas of Placer County.

For office uses, the county parking ordinance requires 1 parking space for every 300 square feet of floor area. Note 2 of the Primary Compatibility Criteria (Table 2A) indicates that for all uses except restaurants, theaters, meeting halls, churches, sports facilities, and other indoor or outdoor places of public assembly, the number of people on the property is assumed to equal 1.5 times the number of parking spaces.

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 = 200 people maximum on site
- 3) 200 people ÷ 3.5 acres gross site size = 57 people per acre average for the site

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

B. Calculation Based on Uniform Building Code

Using the UBC (Appendix C1) 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

Conclusions: In this instance, both methodologies yield the same results. With 57 people per average acre, the proposed use would meet the *Compatibility Zones C1, C2, and D* criteria for maximum usage intensity criteria averaged over the entire site (75, 100, and unlimited people/acre, respectively). The maximum single-acre intensity of 100 people also would meet the criteria for these zones (150, 300, and unlimited, respectively) as well for *Zone B1* (100 people per acre).

Example 2

Proposed Development: Single-floor furniture store containing 24,000 square feet of floor area on a site of 1.7 net acres. Counting a portion of the adjacent road, the gross area of the site is 2.0 acres).

A. Calculation Based on Parking Space Requirements

Note: This method is specifically to be used in the unincorporated areas of Placer County.

For furniture stores, the county requires 1 parking space per 1,500 square feet of use area. Assuming 1.5 people per automobile as indicated in the Primary Compatibility Criteria table 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 ÷ 1.26 acres gross site size = 19 people per acre average for the site

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 people per single acre

B. Calculation Based on Uniform Building Code

For the purposes of the UBC-based methodology, the furniture store is assumed to be 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 expected at any one time
- 5) 212 people ÷ 1.26 acres = 168 people per acre average for the site

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 168 people per single acre.

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 19 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 *Zone B2* (50 people per average acre and 100 people per single acre) and potentially also compatible within *Zone B1* (25 people per average acre and 50 people per single acre).

Compatibility Guidelines for Specific Land Uses Placer County Airport Land Use Compatibility Plan

The compatibility evaluations listed below for specific types of land uses can be used by Placer County and other affected jurisdictions as guidelines in implementation of the general compatibility criteria listed in Table 2A. These evaluations are not regarded as adopted ALUC policies or criteria. In case of any conflicts between these evaluations of specific land uses and the policies and criteria in Chapters 2 and 3 of this document, the contents of Chapters 2 and 3 shall prevail.

Land Use	Compatibility Zones					
	A	B1	B2	C1	C2	D
Agricultural Uses						
Truck and Specialty Crops	0	+	+	+	+	+
Field Crops	0	+	+	+	+	+
Pasture and Rangeland	0	+	+	+	+	+
Vineyards	0	+	+	+	+	+
Orchards	-	0	0	+	+	+
Dry Farm and Grain	0	+	+	+	+	+
Tree Farms, Landscape Nurseries and Greenhouses	-	0	0	+	+	+
Fish Farms	-	0	0	+	+	+
Feed Lots and Stockyards	-	0	0	+	+	+
Poultry Farms	-	0	0	0	+	+
Dairy Farms	-	0	0	+	+	+
Natural Uses						
Fish and Game Preserves	0	0	0	0	0	0
Land Preserves and Open Space	0	+	+	+	+	+
Flood and Geological Hazard Areas	0	+	+	+	+	+
Waterways: Rivers, Creeks, Canals, Wetlands, Bays, Lakes	0	0	0	0	0	+

-
- Generally incompatible
 - 0 Potentially compatible with restrictions (see Table 2A)
 - + Generally compatible

Land Use	Compatibility Zones					
	A	B1	B2	C1	C2	D
Residential						
Rural Estate (2.0-10.0 acre parcels)	-	0	0	+	+	+
Rural Residential (0.5-1.0 du / acre)	-	-	-	0	+	+
Low-Density Residential (1.1-5.0 du / acre)	-	-	-	-	+	+
Medium-Density Residential (5.1-15.0 du / acre)	-	-	-	-	+	+
High-Density Residential (>15.0 du / acre)	-	-	-	-	+	+
Mobile Home Parks	-	-	-	-	+	+
Institutional						
Schools, Colleges and Universities	-	-	-	-	-	+
Day Care Centers	-	-	0	0	+	+
Hospitals and Residential Care Facilities	-	-	-	-	-	+
Churches	-	-	-	0	0	+
Memorial Parks / Cemeteries	-	0	+	+	+	+
Recreational						
Golf Courses (except clubhouse)	0	0	0	+	+	+
Golf Course Clubhouses	-	0	0	0	+	+
Parks - low intensity; no group activities	0	+	+	+	+	+
Playgrounds and Picnic Areas	-	0	0	0	+	+
Athletic Fields (with small or no bleachers)	-	0	0	0	+	+
Spectator-Oriented Sports Complexes or Stadiums	-	-	-	-	-	-
Riding Stables	-	0	0	+	+	+
Marinas and Water Recreation	-	0	0	+	+	+
Health Clubs and Spas	-	-	0	0	0	+
Tennis Courts	-	0	0	+	+	+
Swimming Pools	-	0	0	0	0	+
Fairgrounds and Race Tracks	-	-	-	-	-	-
Resorts and Group Camps	-	-	-	0	0	+
Shooting Ranges	-	0	0	0	0	+
Industrial						
Research and Development Laboratories	-	0	0	0	+	+
Warehouses and Distribution Facilities	-	0	+	+	+	+
Manufacturing and Assembly	-	0	0	0	+	+
Cooperage and Bottling Plants	-	0	+	+	+	+
Printing, Publishing and Allied Services	-	0	+	+	+	+
Chemical, Rubber and Plastic Products	-	-	0	0	0	+
Food Processing	-	-	0	0	0	+

- Generally incompatible
- 0 Potentially compatible with restrictions (see Table 2A)
- + Generally compatible

Land Use	Compatibility Zones					
	A	B1	B2	C1	C2	D
Commercial Uses						
Low-Intensity Retail (e.g., auto, furniture sales)	-	0	0	+	+	+
Retail Stores (1 floor)	-	0	0	0	+	+
Retail Stores (2 or 3 floors)	-	-	-	0	0	+
Large Shopping Malls (500,000+ sq. ft.)	-	-	-	-	0	+
Restaurants and Drinking Establishments (no drive-thru)	-	0	0	0	+	+
Fast Food Restaurants	-	-	0	0	0	+
Auto and Marine Services	-	0	0	+	+	+
Building Materials, Hardware and Heavy Equipment	-	0	0	+	+	+
Office Buildings (1 or 2 floors)	-	0	0	+	+	+
Office Buildings (3 floors)	-	-	-	0	0	+
Banks and Financial Institutions (1 or 2 floors)	-	0	0	+	+	+
Repair Services	-	0	0	+	+	+
Gas Stations	-	0	0	+	+	+
Government Services / Public Buildings (1 or 2 floors)	-	0	0	0	+	+
Motels (1 or 2 floors)	-	-	-	0	+	+
Hotels and Motels (3 floors)	-	-	-	0	0	+
Theaters, Auditoriums, Large Assembly Halls	-	-	-	-	0	0
Outdoor Theaters	-	-	-	-	0	0
Truck Terminals	-	+	+	+	+	+
Any Uses with more than 3 habitable floors aboveground	-	-	-	-	-	+
Transportation, Communications and Utilities						
Aircraft Storage	0	+	+	+	+	+
Automobile Parking	0	+	+	+	+	+
Highway and Street Right-of-Ways	0	+	+	+	+	+
Railroad and Public Transit Lines	0	+	+	+	+	+
Taxi, Bus, and Train Terminals	-	0	0	+	+	+
Electrical Substations	-	0	0	0	0	+
Power Plants	-	-	-	0	0	+
Power Lines	-	0	0	0	0	+
Reservoirs	-	0	0	0	0	+
Sewage Treatment and Disposal Facilities	-	0	0	0	0	+
Sanitary Landfills	-	-	-	-	-	0

- Generally incompatible
- 0 Potentially compatible with restrictions (see Table 2A)
- + Generally compatible

**Project Referral Form
Placer County Airport Land Use Compatibility Plan**

APPLICATION FOR MAJOR LAND USE ACTION REVIEW PLACER COUNTY AIRPORT LAND USE COMMISSION		ALUC Identification No.
PROJECT PROPONENT (TO BE COMPLETED BY APPLICANT)		
Date of Application	_____	
Property Owner	_____	Phone Number _____
Mailing Address	_____ _____ _____	
Agent (if any)	_____	Phone Number _____
Mailing Address	_____ _____ _____	
PROJECT LOCATION (TO BE COMPLETED BY APPLICANT)		
<i>Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways</i>		
Street Address	_____ _____	
Assessor's Parcel No.	_____	Parcel Size _____
Subdivision Name	_____	Zoning _____
Lot Number	_____	Classification _____
PROJECT DESCRIPTION (TO BE COMPLETED BY APPLICANT)		
<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>		
Existing Land Use (describe)	_____ _____ _____	
Proposed Land Use (describe)	_____ _____ _____	
For Residential Uses	Number of Parcels or Units on Site (incl. secondary units) _____	
For Other Land Uses	Hours of Use _____	
	Number of People on Site...	Maximum Number _____ Method of Calculation _____
Height Data	Height above Ground of Tallest Object (including antennas & trees) _____ ft.	
	Highest Elevation (above sea level) of Any Object or Terrain on Site _____ ft.	
Flight Hazards	Does the project involve any characteristics which 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	
	If yes, describe _____ _____	

REFERRING AGENCY (TO BE COMPLETED BY AGENCY STAFF)	
Date Received _____	Type of Project
Agency Name _____	<input type="checkbox"/> General Plan Amendment
Staff Contact _____	<input type="checkbox"/> Zoning Amendment or Variance
Phone Number _____	<input type="checkbox"/> Subdivision Approval
Agency's Project No. _____	<input type="checkbox"/> Use Permit
	<input type="checkbox"/> Public Facility
	<input type="checkbox"/> Other _____
ALUC SECRETARY'S REVIEW (TO BE COMPLETED BY ALUC SECRETARY)	
Application Receipt	Date Received _____ By _____
	Is Application Complete? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If no, cite reasons _____
Airport	<input type="checkbox"/> Auburn Municipal <input type="checkbox"/> Blue Canyon <input type="checkbox"/> Lincoln Regional
	<input type="checkbox"/> Other Location (describe) _____
Primary Criteria Review	Compatibility Zone(s) <input type="checkbox"/> A <input type="checkbox"/> B1 <input type="checkbox"/> B2 <input type="checkbox"/> C1 <input type="checkbox"/> C2 <input type="checkbox"/> D
	Allowable (not prohibited) Use? <input type="checkbox"/> Yes <input type="checkbox"/> No _____
	Density/Intensity Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No _____
	Open Land Requirement Met? <input type="checkbox"/> Yes <input type="checkbox"/> No _____
	Height Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No _____
	Easement/Deed Notice Provided? <input type="checkbox"/> Yes <input type="checkbox"/> No _____
Special Conditions	Describe: _____
Supplemental Criteria Review	Noise _____
	Safety _____
	Airspace Protection _____
	Overflight _____
ACTIONS TAKEN (TO BE COMPLETED BY ALUC SECRETARY)	
ALUC Secretary's Action	<input type="checkbox"/> Approve Date _____
	<input type="checkbox"/> Refer to ALUC
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)

September 1999	

Sample Implementation Documents
Placer County Airport Land Use Compatibility Plan

The responsibility for implementation of the compatibility criteria set forth in the *Placer County Airport Land Use Compatibility Plan* rests largely with the affected local jurisdictions. Modification of general plans and applicable specific plans for consistency with the *Compatibility Plan* is the major step in this process. However, not all of the detailed policies necessary for achieving full general plan consistency are necessarily included in general plans and specific plans — many can be established through other documents. Also, certain of the buyer awareness measures required or encouraged by the *Compatibility Plan* need to be implemented on a parcel-specific basis.

Airport Combining Zone Ordinance

One local option for compatibility criteria implementation 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 by the *Compatibility Plan*, but only suggested as an option. Appendix F1 describes some of the potential components of an airport combining zone ordinance.

Buyer Awareness Measures

Buyer awareness is an umbrella category for several measures whose objective is to ensure that prospective buyers of airport area property, particularly residential property, are informed about the airport's impact on the property. *Placer County Airport Land Use Compatibility Plan* policies include use of each of these measures.

- **Avigation Easement** — Avigation easements go beyond mere buyer awareness by setting limitations on the heights of structures and other objects on the affected property. An avigation easement thus conveys to the airport owner not only rights associated with aircraft overflight of the property, but also the right to limit the height of objects and, after reasonable notice, the right to access the property in order to assure compliance with those limitations. As indicated in the Chapter 2 Airspace Protection policies, dedication of an avigation easement is an Airport Land Use Commission requirement for approval of land use development within *Compatibility Zones A* and *B1* and the *Height Review Overlay Zone*. These all are locations where objects potentially must be restricted to heights less than often exists with similar land uses. A sample of a standard avigation easement is included in Appendix F2.
- **Deed Notice** — As used in the *Compatibility Plan*, a deed notice (Appendix F3) is similar to an overflight easement in that it only addresses overflight issues. Unlike an easement, however, a deed notice does not convey property rights from the property owner to the airport

and it does not restrict the height of objects. It only documents the existence of certain conditions which affect the property — in this case, the proximity of the airport and common occurrence of aircraft overflights at or below the airport traffic pattern altitude. Deed notices are requisite for project approval on parcels located in *Zone B2* and *Zone C*.

- **Real Estate 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 the 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. This requirement already exists in California state real estate law, but it can be reinforced by local policy. A real estate disclosure policy can be included as a component of an airport combining zone ordinance. Additionally, notification describing the airport influence area and discussing its significance could be formally sent to all local real estate brokers and title companies. Having received this information, the brokers would be obligated by state law to pass it along to prospective buyers. The *Placer County Airport Land Use Compatibility Plan* indicates that real estate disclosure policies should be adopted by the county and the cities having land use jurisdiction near the airports in the county, but implementation is not mandatory.

An airport combining zone ordinance might include some or all of the following elements:

- **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 Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, Subpart C. 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 require 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.
- **Maximum Densities** — 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 implications of the density limitations are not as clear.

One step that can be taken by local governments is to establish a matrix indicating whether each specific type of land use is compatible with each compatibility zone. To be useful, the land use categories will need to be more detailed than typically provided by general plan or zoning ordinance land use designations.

- **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 assure compliance with this requirement. The combining district also could extend this criterion to single-family dwellings.
- **Open Areas for Emergency Landing of Aircraft** — In most circumstances in which an aircraft accident 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 area readily available. Airport compatibility plans often contain criteria establishing open space requirements for this purpose. 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: Shutt Moen Associates, based upon Caltrans Airport Land Use Planning Handbook (1993)

This indenture made this ____ day of _____, 19 __, between _____ hereinafter referred to as Grantor, and the [Insert County or City name], 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 official runway end elevation of ____ feet Above Mean Sea Level (AMSL), as determined by [Insert name and Date of Survey or Airport Layout Plan that determines the elevation] 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 or 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 or 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.

Appendix F2

Typical Avigation Easement
Placer County Airport Land Use Compatibility Plan

For and on behalf of itself, its successors and assigns, the Grantor hereby covenants with the [Insert County or City name], for the direct benefit of the real property constituting the _____ Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the hereinabove described real property, nor will they permit to allow, any building structure, improvement, tree or other object which extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the _____ Airport, in the [Insert County or City name], State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from or operating such aircraft in or about the _____ Airport, or in otherwise flying through said Airspace.

This grant of easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this instrument, the real property firstly hereinabove described is the servient tenement and said _____ Airport is the dominant tenement.

DATED: _____

STATE OF }
 ss
COUNTY OF }

On _____, before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Notary Public

A statement similar to the following should be included on the deed for any real property subject to the deed notice requirements set forth in the *Placer County Airport Land Use Compatibility Plan*. Such notice should be recorded by the county of Placer. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.

The *Placer County Airport Land Use Compatibility Plan* and Placer County Ordinance (Ordinance No. _____) identify a [Insert County / City Name] [Insert Airport Name] Airport Influence Area. Properties within this area are routinely subject to overflights by aircraft using this public-use airport and, as a result, residents may experience inconvenience, annoyance, or discomfort arising from the noise of such operations. State law (Public Utilities Code Section 21670 et seq.) establishes the importance of public-use airports to protection of the public interest of the people of the state of California. Residents of property near such airports should therefore be prepared to accept the inconvenience, annoyance, or discomfort from normal aircraft operations. Residents also should be aware that the current volume of aircraft activity may increase in the future in response to Placer County population and economic growth. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.

Buyer awareness is an umbrella category for several measures whose objective is to ensure that prospective buyers of airport area property, particularly residential property, are informed about the airport's impact on the property.

- **Dedication of Avigation Easements** — As a means of assuring buyer awareness, some communities — many times in response to ALUC policies — require that developers of property near an airport dedicate an avigation or overflight easement to the airport as a condition for approval of the development. This approach is particularly common with residential development, but has also been applied with regard to other land uses. In recent years, however, the legality of requiring avigation easement dedication has sometimes been questioned, particularly in circumstances where buyer awareness is the primary objective. A connection (*nexus*) between the easement dedication requirement and the negative consequences of land use development near an airport can more readily be made in locations where substantial noise and safety impacts can be demonstrated. Regardless of whether the nexus concern is valid in many circumstances, other forms of buyer awareness may be equally effective and simpler to implement.
- **Recorded Deed Notices** — A deed notice is an official statement which is recorded in county records as part of a tentative or final subdivision map prepared at the time a parcel is subdivided. As used for airport compatibility planning, the purpose of a deed notice is to disclose that the property is subject to routine overflights and associated noise and other impacts by aircraft operating at a nearby airport. Because this information becomes part of the deed to each property in the subdivision, it should show up in a title report prepared when one of the parcels is being sold.

In one sense, deed notices are similar to avigation or other aviation-related easements in that they become part of the title to a property and thus are a permanent form of buyer awareness. The distinguishing difference between deed notices and avigation easements is that deed notices only serve as a disclosure of potential overflights (and the property's location within an airport combining district and/or ALUC planning area), whereas avigation easements convey an identified set of property rights. In locations where height limitations or other land use restrictions are unnecessary, deed notices have the advantage of being less cumbersome to define. Also, they give less appearance of having a negative affect on the value of the property. An ideal application of deed notices is as a condition of approval for development of residential land uses in airport-vicinity locations where neither noise nor safety are significant factors, but frequent aircraft overflights might be annoying to some people.

- **Real Estate Disclosure Statements** — A less definitive, but more all-encompassing, form of buyer awareness program is to require that information about an airport's influence area be disclosed to prospective buyers of all airport-vicinity properties prior to the 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. This requirement already exists in California state real estate law, but it can be reinforced by local policy established in conjunction with the adoption of an airport combining zone. Notification describing the zone and discussing its significance could be formally sent to all local real estate brokers and title companies. Having received this information, the brokers would be obligated by state law to pass it along to prospective buyers. [As discussed at the end of this chapter, airport proprietors also can carry out a real estate disclosure program, although generally on a less formal basis than can be accomplished by the local land use jurisdiction.]

At a minimum, the area covered by a real estate disclosure program should include the airport planning area as established by the compatibility plan. The boundary also could be defined to coincide with the boundaries of an airport combining zone.

Source: *Caltrans Airport Land Use Planning Handbook (1993)*

Appendix F4

Possible Buyer Awareness Program Elements Placer County Airport Land Use Compatibility Plan

Comparison Between New and Old ALUC Plans Placer County Airport Land Use Commission

OVERVIEW

The 1999 *Placer County Airport Land Use Compatibility Plan* sets forth land use compatibility criteria for the environs of Auburn Municipal, Blue Canyon, and Lincoln Regional airports. This new plan replaces separate plans previously prepared for the Auburn and Lincoln airports: the *Auburn Airport Comprehensive Land Use Plan* and the *Lincoln Municipal Airport Comprehensive Land Use Plan* originally adopted by the Foothill Airport Land Use Commission in February 1987 and October 1986, respectively. No compatibility plan has previously been prepared for Blue Canyon Airport.

The new plan changes not only the compatibility policies applicable to each of the airports in the county, but also the procedures by which the ALUC conducts compatibility reviews. Also, the 1999 document adds various background data regarding each airport and its environs.

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 which have occurred over the same time frame.

COMPATIBILITY POLICIES

The original plans divide compatibility policies into three groups: noise, safety, and height restrictions. Separate maps are provided which identify the safety zone boundaries and noise contours for each airport. Height restriction criteria are described, but not mapped. In contrast, the new plan establishes a composite set of criteria and maps which take into account noise, safety, and height restrictions and also overflight concerns. Policies addressing each of these concerns individually are included as well, but they serve a supporting function rather than as the primary review criteria.

The overall boundary of the influence area for both Auburn Municipal Airport and Lincoln Regional Airport is nearly the same under both the old and new plans. The slight difference at Auburn reflects the planned extension of the runway. For Lincoln, the new plan adds an area along the precision instrument approach corridor to the north. In each instance, though, it should be noted that the new plan establishes limitations on residential densities and nonresidential intensities in locations where height limits are the only restrictions under the old plan.

The degree of restrictiveness applicable to land uses in the vicinity of each airport is greater in some locations and less in others under the new plan compared to the previous plans. Where restrictiveness is increased, it is mostly a reflection of safety concerns and, to a lesser extent, noise and over-

flight considerations. General aviation aircraft accident data presented in Caltrans' 1993 *Airport Land Use Planning Handbook* indicates that significant risks exist near the ends of runways, but not just within the runway protection zones and approach zones. The new compatibility zones thus take into account the turning movements of aircraft approaching and departing the runways. Also, the new policies are more specific than the previous ones with respect to restricting the intensity (measured in term of the number of people per acre) of nonresidential uses. Overflight factors are incorporated into the compatibility criteria not so much in the form of land use restrictions, but in terms of buyer awareness measures. A key component of the new policies addresses the fact that some people may be bothered by the frequent overflight of aircraft which occurs in the vicinity of an airport.

Auburn Municipal Airport

Appendices G1 and G2 summarize the differences between the new and old ALUC plans for Auburn Municipal Airport in tabular and map form. Specific differences are highlighted in the following paragraphs.

- **Compatibility Zone A** — This zone encompasses the old plan's Safety Area 1 and most of its 60-dB CNEL contour. The new boundaries are adjusted to reflect the planned runway extension. Both plans restrict uses to certain aviation-related functions, open space, and some agricultural uses. In both cases, the affected area is on airport property.
- **Compatibility Zone B1** — With regard to safety, *Zone B1* is equivalent to the old Safety Area 2, but covers a larger area. Also, *Zone B1* restricts nonresidential uses to a maximum of 25 people per acre at any time, whereas Safety Zone 2 allowed a 24-hour average of up to 25 people per acre with up to 50 people per acre at any one time. The allowable residential development density is reduced from 0.5 dwelling units per acre under the old plan to 0.1 under the new plan. With regard to noise, *Zone B1* encompasses most of the currently projected 60-dB CNEL noise impact area. (The noise contours used in the new plan are the ones calculated for the *Environmental Impact Report* prepared in conjunction with the 1996 *Airport Master Plan*.) Because of different activity level assumptions, the new 60-dB CNEL contour is almost as large as the previous 55-dB CNEL contour.
- **Compatibility Zone B2** — In the area adjacent to the runway, the 1987 compatibility plan was concerned only with noise impacts, not safety concerns. The noise contours used in the 1999 plan are wider than those depicted in the 1987 plan, particularly around the eastern end of the runway. With regard to safety, the new plan precludes high-intensity uses adjacent to the runway. These restrictions are a reflection of the aircraft accident data presented in the 1993 Caltrans *Airport Land Use Planning Handbook* which indicate that a moderate degree of risk is present in areas close to the sides of runways.
- **Compatibility Zone C1** — Within the new *Zone C1*, the criterion for maximum residential density is 0.5 dwelling units per acre. This standard is the same as in the Safety Zone 3 un-

der the old plan for Auburn Municipal Airport. The affected area is longer and narrower under the new plan than the old one, however. It encompasses additional property to the east and west, but eliminates most of the land beneath the relatively little used north-side airport traffic pattern. Most of the newly restricted property is already developed or is planned for nonresidential uses, thus the practical effect of this increased restrictiveness on residential development potential is expected to be minimal.

Nonresidential development within *Zone C1* will now be limited to an intensity of no more than 50 people per acre. This criterion will preclude many retail uses — particularly intensive, “regional” shopping centers — multi-story offices, and hotels. Schools and hospitals also are explicitly prohibited. Under the old plan, most nonresidential uses are unrestricted in Safety Zone 3 except for prohibition on stadiums, auditoriums, theaters, and several heavy industrial uses which could pose hazards to flight. The old plan, though, also has a standard limiting structural coverage to a maximum of 35% of the parcel. The net effect is that the types of nonresidential uses allowed in this area under the old and new plans is probably similar.

- **Compatibility Zone C2** — Except north of the airport, *Zone C2* covers areas not within either the noise or safety zones of the previous plan. There are two notable consequences to this expansion. First, some high-intensity uses permitted under the old plan may now be precluded by the 100-people-per-acre limit of the new plan. Secondly, the prohibition on children’s schools, hospitals, and nursing homes now covers a wider area.
- **Compatibility Zone D and Height Review Overlay Zone** — Compatibility criteria applicable within new *Zone D* and the *Height Review Overlay Zone* are mostly concerned with limits on the height of objects and avoidance of other hazards to flight. In this regard, the new policies are similar to the previous ones and have similar geographic coverage. In addition, the *Zone D* criteria address the need to avoid land uses for which the consequences would be potentially catastrophic if an aircraft accident should occur at the site. Specifically prohibited are spectator-oriented sports stadiums, amphitheatres, concert halls, and buildings having more than three habitable floors above ground. An additional difference between the old and new plans is that the recommendation for real estate disclosure applies to the entire airport influence area defined in the new plan, including *Zone D*.

Lincoln Regional Airport

A tabular and map summary of the differences between the new and old ALUC plans for Lincoln Regional Airport is contained in Appendices G3 and G4. The following paragraphs describe specific differences.

- **Compatibility Zone A** — *Zone A* is similar to the old Safety Zone 1 and covers similar areas mostly on airport property. However, some private property south of the airport was not previously in Safety Zone 1, but is now in *Zone A*, thus restricting future development.

- **Compatibility Zone B1** — *Zone B1* is similar in concept to the old Safety Area 2, but it also encompasses most of the projected 55-dB CNEL contour. To the north, however, *Zone B1* is 2,500 feet shorter than Safety Area 2. Even though this end of the runway has a precision instrument approach procedure, placing the area in *Compatibility Zone C1* is more consistent with the degree of noise and safety concerns involved. Future residential development is restricted to 1.0 dwelling unit per 10 acres under the new plan compared to 2.0 and 5.0 dwelling units per acre inside Safety Area 2 and the inner 1.0 mile of Safety Area 3, respectively, in the old plan. Also, *Zone B1* covers a larger area and restricts nonresidential uses to a maximum of 25 people per acre at any time, whereas Safety Zone 2 allowed a 24-hour average of up to 25 people per acre with up to 50 people per acre at any one time. Most of *Zone B1* is planned for compatible industrial or continued agricultural uses.
- **Compatibility Zone B2** — This zone encompasses the area adjacent to the existing and proposed runways which were essentially unrestricted under the old plan. The new criteria will preclude high-intensity uses. Most of the affected land is on airport property.
- **Compatibility Zone C1** — The width of *Zone C1* matches the inner 1-mile width of the previous Safety Area 3A, but the length is greater. The maximum allowable residential density is reduced from 5.0 dwelling units per acre under the old plan to 0.5 under the new plan, thus precluding major subdivisions. Nonresidential uses, previously mostly unrestricted, are now subject to a 50-people-per-acre limitation. Additionally, uses such as schools and hospitals are specifically prohibited. The newly restricted areas are currently planned to remain agricultural or to be developed with industrial uses.
- **Compatibility Zone C2** — *Zone C2* encompasses about half of the eastern and western sides of the old Safety Area 3B. Residential development is unrestricted in both plans. The new plan adds prohibitions on schools, hospitals, and intensive nonresidential activities having more than 100 people per acre. Except the area within the Lincoln city limits southeast of the airport, lands within *Zone C2* are expected to remain in agricultural production.
- **Compatibility Zone D and Height Review Overlay Zone** — *Zone D* includes part of the old Safety Zone 3B plus areas outside the old safety zone boundaries. Points noted in the preceding comparison for Auburn Municipal Airport also apply to *Zone D* and the *Height Review Overlay Zone* at Lincoln Regional Airport.

PROCEDURAL POLICIES

The procedural aspects of airport land use commission compatibility reviews are more fully defined in the 1999 plan. The new policies repeat some of the *Rules and Procedures* and the *Administrative Procedures* previously adopted by the Placer County Airport Land Use Commission. Generally, though, the new procedural policies are supplemental to the other operating guidelines and are not intended as a replacement of them.

Most significant among the new procedural policies is a more complete identification of which types of land use and airport-related actions are required to be reviewed by the ALUC. ALUC review of certain types of actions — particularly general plan and zoning changes — is mandatory under state law. Decisions on these types of actions must be made by the ALUC and cannot be delegated to staff. Furthermore, other land use actions may also present compatibility issues which appropriately should be addressed by the commission. The new policies list a set of *major land use actions* which should initially be reviewed by the ALUC secretary and forwarded to the commission if significant compatibility issues are apparent.

Another procedural matter covered in the new plan is the types of information to be submitted to the commission in conjunction with a project review. A project referral form is included as Appendix E of this document.

Comparison Between Old and New ALUC Plans / Appendix G

		Map Location:	1- B1	2- B1	3- B1	3- B2	3- C1	4- B1	4- B2	4- C1	4- C2	4- D	5- C1	5- G2	5- D	6- D	
Compatibility Criteria from Old Plan	Max. Res.	▶ 1 d.u./2 acres	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
	Maximum Nonresidential	▶ 50 people/acre (25 people/acre average over 24 hours)	✓	✓													
		▶ 50 people/acre for churches & motels ▶ No limit for other uses			✓	✓	✓	✓	✓	✓	✓	✓	✓				
	Prohibited Uses	▶ Retail uses	✓	✓													
		▶ Hazardous industries	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		▶ Schools, hospitals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		▶ Stadiums, theaters, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
	Other Conditions	▶ Noise easement required for residential uses	✓		✓	✓											
		▶ Max. 35% structural coverage for retail uses			✓	✓		✓	✓	✓	✓	✓	✓				
		▶ No visual, electronic, or bird strike hazards	✓	✓													
▶ Height restrictions		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Proposed New Compatibility Criteria	Maximum Residential	▶ 1 d.u./10 acres	✓	✓	✓	✓		✓	✓								
		▶ 1 d.u./2 acres					✓			✓			✓				
		▶ No limit									✓	✓		✓	✓	✓	
	Maximum Nonresidential	▶ 25 people/acre average (65 people/single acre with bonus)	✓	✓	✓			✓									
		▶ 50 people/acre average (130 people/single acre with bonus)				✓			✓								
		▶ 75 people/acre average (195 people/single acre with bonus)					✓				✓			✓			
		▶ 100 people/acre average (390 people/single acre with bonus)										✓			✓		
		▶ No limit											✓			✓	✓
	Prohibited Uses	▶ Children's schools	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		▶ Day care centers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		▶ Hospitals; nursing homes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		▶ Highly noise-sensitive uses	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		▶ Spectator-oriented sports stadiums, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		▶ Hazards to flight (including height limits)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Other Conditions	▶ Avigation easement dedication required	✓	✓	✓	✓			✓	✓							
		▶ Deed notice required						✓			✓	✓		✓	✓		
▶ Real estate disclosure recommended		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
▶ 30% open land		✓	✓	✓	✓			✓	✓								
▶ 20% open land							✓			✓			✓				
▶ 10% open land											✓			✓			
▶ 25 dB sound attenuation in residences & offices		✓	✓	✓	✓			✓	✓								
▶ 20 dB sound attenuation in residences & offices						✓			✓			✓					

Source: Shutt Moen Associates (April 27, 2000)

Appendix G1

Comparison Between Old and New Compatibility Criteria
Auburn Municipal Airport

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		Map Location:	1- A	2- B1	3- B1	3- C1	4- B1	4- B2	4- C1	5- C1	5- C2	5- D	6- C1	6- C2	6- D	7- C1		
Compatibility Criteria from Old Plan	Max. Res.	▶ No new dwelling units	✓															
		▶ 2 d.u./acre		✓	✓	✓												
		▶ 5 d.u./acre					✓	✓	✓									
	Max. Nonres:1	▶ 10 people/acre	✓															
		▶ 50 people/ac. (25 people/ac. avg. over 24 hrs.)		✓	✓	✓												
		▶ 6 persons under care in hospitals, custodial care, or preschool					✓	✓	✓	✓	✓	✓						
	Prohibited Uses	▶ Permanent structures	✓															
		▶ Retail uses; hazardous industries	✓	✓	✓	✓												
		▶ Schools, hospitals	✓	✓	✓	✓												
		▶ Stadiums, theaters, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
	Other Conditions	▶ Noise insulation required for residential uses		✓														
		▶ No visual, electronic, or bird strike hazards	✓	✓	✓	✓												
▶ Height restrictions		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Proposed New Compatibility Criteria	Maximum Residential	▶ No new dwelling units	✓															
		▶ 1 d.u./10 acres		✓	✓		✓	✓										
		▶ 1 d.u./2 acres				✓			✓	✓			✓				✓	
		▶ No limit									✓	✓		✓	✓			
	Maximum Nonresidential	▶ 10 people/acre average	✓															
		▶ 25 people/acre average (65 people/single acre with bonus)		✓	✓		✓											
		▶ 50 people/acre average (130 people/single acre with bonus)						✓										
		▶ 75 people/acre average (195 people/single acre with bonus)				✓			✓	✓			✓				✓	
		▶ 100 people/acre average (390 people/single acre with bonus)									✓			✓				
		▶ No limit										✓				✓		
	Prohibited Uses	▶ No new structures	✓															
		▶ Children's schools	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		
		▶ Day care centers	✓	✓	✓		✓	✓						✓	✓		✓	
		▶ Hospitals; nursing homes	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	
		▶ Highly noise-sensitive uses	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	
		▶ Spectator-oriented sports stadiums, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		▶ Hazards to flight (including height limits)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Other Conditions	▶ Avigation easement dedication required	✓	✓	✓		✓	✓						✓	✓		✓	
▶ Deed notice required					✓				✓	✓	✓		✓	✓		✓		
▶ Real estate disclosure recommended		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
▶ 30% open land			✓	✓		✓	✓									✓		
▶ 20% open land					✓				✓	✓			✓			✓		
▶ 10% open land											✓			✓				
▶ 25 dB sound attenuation in residences & offices			✓	✓		✓	✓									✓		
▶ 20 dB sound attenuation in residences & offices				✓				✓	✓				✓		✓			

Source: Shutt Moen Associates (April 27, 2000)

Appendix G3

Comparison Between Old and New Compatibility Criteria
Lincoln Regional Airport

**Local Plans Consistency Review
Placer County Airport Land Use Compatibility Plan**

CONSISTENCY REQUIREMENTS

As indicated in Chapter 1, state law requires each local agency having jurisdiction over land uses within an ALUC's planning area to modify its general plan and any affected specific plans to be consistent with the compatibility plan. The local agency must take this action within 180 days of when the ALUC adopts or amends its plan. Alternatively, a local agency can override the ALUC by a two-thirds vote after first holding a public hearing and making findings that the agency's plans are consistent with the intent of state law.

To facilitate the general plan consistency process, this appendix contains an overview of the consistencies and conflicts between the *Compatibility Plan* and the current general plan and applicable specific or community plans of the three jurisdictions affected by the plan. The analysis which follows includes issues noted by the staff of each jurisdiction during the course of the *Compatibility Plan* review and adoption process. The review also reflects changes made to the compatibility criteria and individual airport maps subsequent to issuance of the draft plan in September 1999. Although all major points of conflict are believed to be identified here, each jurisdiction will need to conduct a more systematic review in conjunction with the process of making general plan modifications. The final step in this process for each jurisdiction will be submittal of proposed general plan changes and other implementing actions to the ALUC for concurrence that the requirements for consistency with the *Compatibility Plan* have been met.

The emphasis in this review is on comparing the adopted local land use designations with the compatibility zone criteria set forth in Chapter 2 herein. Other elements of the general plans (the noise elements in particular) also need to be consistent with the *Compatibility Plan*. With regard to land use designations, consideration is given to whether the designation is for future development or merely reflects existing uses. Where a local plan's land use designation represents an existing use, changing the designation is not required for the purposes of consistency with the *Compatibility Plan*. The existing development could remain as a nonconforming use as indicated in the plan policies. Any future redevelopment of the property, however, would need to be consistent with *Compatibility Plan* criteria.

COUNTY OF PLACER

Placer County has jurisdiction over land uses in the vicinity of all three airports.

- **Land Use Designations, Auburn Municipal Airport Vicinity** — Although Auburn Municipal Airport vicinity lies within the city of Auburn sphere of influence, all but the airport itself and part of the adjacent industrial area is currently unincorporated Placer County territory. County land use designations for this area are established by the *Auburn/Bowman Community Plan* adopted by the county Board of Supervisors in 1994.
- ▶ *Zone A* lies on airport property and solely within the Auburn city limits.
 - ▶ Most of the unincorporated land within *Zone B1* is designated for industrial uses. This designation is consistent with the *Zone B1* criteria provided that specific uses are limited to warehousing, mini-storage, and other low-intensity activities having no more than 25 people per acre. A substantial portion of the area is already developed. Most of the existing uses appear to be of a type which would meet the intensity criteria. However, the existing convalescent hospital is an incompatible use. It could remain as a nonconforming use, but expansion would be restricted.
 - ▶ East of the airport, *Zone B1* overlays existing rural residential development (minimum 2.3-acre parcel size) and a large (160-acre) block of undeveloped land designated rural estate (4.6- to 10.0-acre parcel size). The *Compatibility Plan* will require that any new residential development of the roughly 55-acre portion of the rural estate parcel which lies within *Zone B* contain no more than five parcels (that is, a density of no more than 0.1 dwelling units per acre). The existing rural residential development would remain — and any vacant parcels could be built upon — as nonconforming uses.
 - ▶ Very little of *Zone B2* around Auburn Municipal Airport extends into unincorporated areas. Most of the affected area is existing residential development north of the runway. Limitations on intensity of uses could affect some remaining undeveloped light industrial lands southeast of the airport.
 - ▶ The western end of *Zone C1* encompasses a mixture of land designations, including commercial, industrial, and low- and medium-density residential. The majority of the area is already developed. The commercial and industrial uses are predominantly low-intensity and consistent with the 75-people-per-acre limit set by the *Compatibility Plan*. Additional development of a similar character would be compatible. Typical, “big-box” type retail uses would be precluded, however. The existing mobile home parks and other residential development are not consistent with the 0.5-dwelling-units-per-acre criterion of *Zone C1*, but would continue as nonconforming uses. Two existing schools (Chana High School and Rock Creek Elementary School) in the zone are inconsistent with the compatibility criteria. These facilities should not be expanded. The same limitation applies with regard to future expansion of Auburn Faith Community Hospital. No conflicts between *Compatibility Plan* criteria and either existing development or land use designations are apparent within the remainder of *Zone C1*.

- ▶ *Zone C2* (as revised from the draft plan) consists primarily of existing and planned rural residential development, plus some higher-density residential areas west and southwest of the airport. These uses are all consistent with the compatibility criteria. The *Zone C2* limitation on usage intensities for nonresidential development is potentially a constraint with regard to large shopping centers, theaters, office complexes, and other such high-intensity uses. Future land uses within *Zone C2* which might be affected include the northeastern edge of the Placer County government complex (DeWitt Center) and expansion of existing retail centers along Highway 49 south of Bell Road.
- ▶ *Zone D* criteria (as revised from the draft plan) restrict only very-high-intensity uses such as spectator-oriented sports facilities and concert halls. No development of this type is currently indicated on local plans for locations within this zone.

- ▶ **Land Use Designations, Blue Canyon Airport Vicinity** — The *Placer County General Plan* and associated zoning designate most of the Blue Canyon Airport vicinity as timberland. Except for the need to restrict tree height in locations close to the runway, this designation is consistent with the *Compatibility Plan*.

The miscellaneous facilities which have been constructed around the airport apron area on the east side of the runway are on U.S. Forest Service property. Federal lands are not subject to ALUC or Placer County land use jurisdiction. Nevertheless, the Forest Service should take airport land use compatibility criteria into account when considering future uses of land near the airport.

- ▶ **Land Use Designations, Lincoln Regional Airport Vicinity** — Nearly all of the unincorporated land in the vicinity of Lincoln Regional Airport is currently in agricultural production on large parcels. Land use designations in the *Placer County General Plan* indicate these uses to remain unchanged. These designations are basically consistent with the *Compatibility Plan*. However, certain types of activities often allowed within agricultural zones — such as farm worker housing, food processing plants, and poultry farms — are unacceptable within certain parts of the airport environs.

The only location not designated agricultural is the existing rural residential subdivision immediately south of the airport. Most of the parcels in this area are 5.0 acres or larger. The *Compatibility Plan* standard of no more than 0.1 dwelling units per acre (10-acre parcels) within *Zone B1* would preclude splitting the few remaining 10-to-20-acre lots. The compatibility policies, though, will allow a new dwelling to be built on any vacant lot regardless of the parcel size.

- ▶ **Noise Compatibility Criteria** — The ALUC *Compatibility Plan* considers 60 dB CNEL to be the maximum normally acceptable noise level for new residential uses in the vicinity of airports. The noise policies within the *Placer County General Plan* and the *Auburn/Bowman Community Plan* set the same basic limit, but allow exceptions for a noise exposure up to 65 dB CNEL if adequate exterior noise level reduction measures are implemented and interior

noise levels do not exceed 45 dB CNEL. No change in the current county policy is necessary for consistency purposes. However, in application of the policy, it should be recognized that aviation-related noise barriers are practical only with regard to noise created by aircraft while on the runway or run-up pad, not while in the air.

- **Other Compatibility Criteria** — The *Auburn/Bowman Community Plan* summarizes height limit and safety criteria contained in the *Auburn Airport Comprehensive Land Use Plan* and further incorporates the complete plan by reference. Similar action with regard to the new *Airport Land Use Compatibility Plan* would help assure that the two plans are consistent as required by law. Furthermore, county plans and/or the zoning ordinance should include specific reference to other compatibility criteria such as intensity limits on nonresidential uses and real estate disclosure requirements in order to be fully consistent with the *Compatibility Plan*. This could be accomplished by expansion of the county's existing Aircraft Overflight combining district zoning ordinance.
- **Relationship to ALUC** — Placer County plans acknowledge the function of the Placer County ALUC and the need to review development projects for consistency with the *Airport Land Use Compatibility Plan*. The present policies are satisfactory even though no specific mention is made of the requirement for certain actions to be submitted to the ALUC for review. In implementation of the policies, the county has historically submitted appropriate land use actions to the ALUC and should continue to do so.

CITY OF AUBURN

Although only the airport itself and some of the adjacent industrial park are within the Auburn city limits, most of the Auburn Municipal Airport environs are within the city's sphere of influence and are addressed by the 1992 *City of Auburn General Plan*.

- **Land Use Designations** — The city's land use designations for the unincorporated portion of the airport environs are, with minor exceptions, comparable to the county designations. The preceding comments regarding the county's *Auburn/Bowman Community Plan* thus apply to the *City of Auburn General Plan* as well. Lands within the city limits are designated as Industrial and Public in the *General Plan* and are zoned as Airport Industrial with Design Control. These designations do not conflict with the compatibility criteria set by the *Compatibility Plan*. However, some restrictions to prevent high-intensity development close to the sides of the runway would be required for consistency with the *Compatibility Plan*. The prohibition on day care centers within *Zone B2* also is a factor with regard to a portion of the industrial park south of the airport.
- **Noise Compatibility Criteria** — The city has adopted the same noise policies as contained in Placer County plans. The comments above thus also apply to the *Auburn General Plan*.

- **Other Compatibility Factors** — The city's *General Plan* does not explicitly address airport-related safety, airspace protection, or overflight issues. Indirectly, though, these concerns are covered by the city's adoption of the previous compatibility plan for Auburn Municipal Airport. City adoption of the new *Compatibility Plan* would be one means of complying with the requirement for consistency between the city and ALUC plans. Implementation of these policies could be accomplished by city adoption of an airport environs combining zone such discussed above with respect to county policies and as outlined in Appendix F of this *Compatibility Plan*.
- **Relationship to ALUC** — A *General Plan* policy states that the city will abide by the criteria included in the airport compatibility plan. City policy also says that the city will "continue participation with the Airport Land Use Commission." Implementation of this policy is presumed to include referring proposed land use and airport development actions to the ALUC as appropriate.

CITY OF LINCOLN

The planning area addressed by the 1988 *Lincoln General Plan* includes the airport, land to the east, and limited property to the north.

- **Land Use Designations** — Land uses indicated on the city's *General Plan* map are basically consistent with the *Airport Land Use Compatibility Plan*.
 - ▶ All of the *Zone A* land lying within the city limits is airport property and designated for airport purposes.
 - ▶ Incorporated areas within *Zones B1* and *B2* are designated either Industrial Planned Development, Agricultural, or Open Space and most is on airport property. The planned development classification enables the city to apply any restrictions necessary to assure that development is consistent with the *Compatibility Plan* criteria. The eastern edge of the *Zone B2* boundary skirts the airport flightline, but is intended to allow the usual types of airport-related facilities including a small terminal building and restaurant.
 - ▶ Nearly all of *Zone C1* is planned for various categories of industrial uses. Some of this land is already developed. The overall character of the industrial development planned for this area is consistent with the *Zone C1* compatibility criteria. A small piece of a large, existing, residential subdivision lies just inside the eastern edge of *Zone C1*. The density exceeds the criteria for the zone, thus making it a nonconforming use with respect to criteria in this *Compatibility Plan*. The only other land uses within the city portion of *Zone C1* are open space and the existing city sewage treatment plant. The city anticipates closing the existing sewage treatment plant in 2003. Conversion of the property to industrial uses on the western portion and residential uses on the eastern portion is con-

templated. Typical uses of this type would be consistent with the *Compatibility Plan* density/intensity criteria. A portion of the proposed replacement treatment plant is also situated within *Zone C1*, but at the southern edge. As long as this portion of the new facility is designed in a manner which does not cause bird attraction to become a problem, this land use is consistent with the *Compatibility Plan* criteria.

- ▶ The principle concern with regard to future land uses within *Compatibility Zone C2* is the city's planned community sports complex, the site for which is situated along the eastern edge of this zone. If this facility is designed to be primarily recreation oriented, it would comply with the intensity limitations of this zone. However, if the emphasis is on spectator sports — with extensive bleacher seating and/or paid admissions, for example — then the facility probably would not meet the *Zone C2* criteria.
- ▶ No compatibility conflicts are apparent with regard to *Compatibility Zone D*. A school site originally proposed in the draft *Compatibility Plan* to be in *Zone C2* is now in *Zone D* and is an acceptable land use.
- **Noise and Safety Policies** — Policies in the city's *General Plan* require that development around the airport be consistent with the noise and safety policies and land use compatibility guidelines contained in the approved Airport Land Use Commission plan. In effect, the city has incorporated ALUC policies by reference. A city resolution to specifically acknowledge the new *Compatibility Plan* would nevertheless be advisable to avoid potential for confusion over which set of ALUC policies are in effect.
- **Other Compatibility Policies** — The city has required buyer awareness measures — a deed notice or reference in covenants, conditions, and restrictions — to be established as part of the approval of residential subdivisions within the airport influence area. This practice should be continued with regard to any new development in the expanded airport influence area of the new *Compatibility Plan*.
- **Relationship to ALUC** — The *Lincoln General Plan* does not contain any specific mention of the requirement that specific land use and airport-related actions be submitted to the ALUC for review. If the city has not adopted such a policy in some other format, a resolution to that effect would be necessary in order for the *General Plan* to be considered fully consistent with the *Compatibility Plan*.

Glossary of Terms

Placer County Airport Land Use Compatibility Plan

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 Zone (AICUZ): A land use compatibility plan prepared by the U.S. Department of Defense for military airfields. AICUZ plans serve as recommendations to local government 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 which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which 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 or serious injuries nor substantial damage to the aircraft occur.

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 usable 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, Sections 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 operational 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 Aeronautics Program classifies airports into the following categories. (CAC)

- *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 at or as near as practical to a medical emergency; a transfer point; or a site at or near a medical facility preselected and approved by an officer authorized by a public safety agency, using criteria deemed reasonable and prudent by that public safety agency, used for the landing and taking off of EMS helicopters, but not designed or used exclusively for helicopter flight operations.
- *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 an occasional invited guest.
- *Public-Use Airport:* A publicly or privately owned airport that offers the use of its facilities to the public without prior notice or special invitation or clearance and that has been issued a California Airport Permit by the Aeronautics Program of the California Department of Transportation.
- *Seaplane Landing Site:* An area of water used, or intended for use, for landing and taking off 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 services, and/or personal use.

- **Temporary Helicopter Landing Site:** A site for purposes other than emergency medical service operations which is used, but not exclusively, for landing and taking off of helicopters. These sites are generally limited to one year, except for recurrent annual events and public safety agency operations. No site may be used as a temporary helicopter landing site except in an emergency, or unless it is in accordance with 14 CFR (FARs), Public Utilities Code 21000, et seq. and local ordinances.

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 which 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)

Avigation Easement: A type of easement which 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, which 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)

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

Commercial Activities: Airport-related activities which 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. (CAC)

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, which sets forth policies for promoting compatibility between airports and the land uses which 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* (sometimes 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)

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 which, in the given situation and time period, has the same average sound energy as does a time-varying sound.

FAR Part 77: The part of the Federal Aviation Regulations which deals with objects affecting navigable 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 which 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 which expose a government agency's mode of analysis of facts, regulations, and policies, and which bridge the analytical gap between raw data and ultimate decision.

Fixed Base Operator (FBO): A business which 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 which 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 relatively new navigational system which 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 site used for the landing and taking off of helicopters which consists of a takeoff and landing area, helipad/helideck, approach-departure paths, heliport imaginary surfaces, a functioning wind cone, and sufficient lighting.

Infill: Development which takes place on vacant property largely surrounded by existing development, especially development which 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 which 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 which provides course guidance to the runway. (AIM)

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 which 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 which 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 which 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 exceeds the standards established in Subpart C of Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace*.

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

Overflight Easement: An easement which 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.

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 Aeronautics Program 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. (CAC)

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) which 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)

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 (1998).*

Airport Design AC: Federal Aviation Administration, *Airport Design Advisory Circular 150/5300-13.* (1993)

CAC: California Administrative Code, Title 21, *Aeronautics Program.*

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

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

NTSB: National Transportation and Safety Board.

Attachments



DEPARTMENT OF TRANSPORTATION
AERONAUTICS PROGRAM MS #40
1120 N STREET – Room 3300
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531



January 6, 2000

Mr. Ken Brody
Shutt Moen Associates
707 Aviation Boulevard
Santa Rosa, CA 95403

Dear Mr. Brody:

Placer County Airport Compatibility Plan (CLUP)

The Department of Transportation (Caltrans), Aeronautics Program, has reviewed the Airport Layout Plan (ALP) for the Placer County Blue Canyon Airport. In accordance with Public Utilities Code Section 21675(a), the Aeronautics Program of Caltrans approves the use of the ALP for CLUP development purposes. We are returning a copy of the ALP with some comments on the document for your information.

The draft compatibility plan was also reviewed. We would offer one suggestion for your consideration on item 4.3.5 in Chapter 2, Section (d). It may be helpful to reference the FAA Order 5200.5A, "Waste Disposal Sites On or Near Airports" and Advisory Circular 150/5200-33, "Hazardous Wildlife Attractants On or Near Airports" in that section.

Should you have any questions regarding this information, do not hesitate to contact me at (916) 654-5553.

Sincerely,

A handwritten signature in black ink, appearing to read "Christa-Maria Engle".

CHRISTA-MARIA ENGLE
Aviation Planner

Enclosure

RECEIVED

JAN 18 2000

SMA

Notice of Exemption

Appendix E

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: (Public Agency) _____

Placer County Transportation Planning Agency
(Address)

County Clerk
County of Placer County

550 High Street, Suite 107
Auburn, California 95603

Project Title: Placer County Airport Land Use Compatibility Plan

Project Location - Specific: All land within approx. 1.7 miles of runways of Auburn Municipal and Blue Canyon airports, 2.7 miles of runway at Lincoln Municipal Airport.

Project Location - City: Auburn and Lincoln Project Location - County: Placer

Description of Nature, Purpose, and Beneficiaries of Project:

Placer County Airport Land Use Commission adoption of Compatibility Plan for each public use airport in county as required by California PUC 21670 et seq.

Name of Public Agency Approving Project: Placer County Airport Land Use Commission

Name of Person or Agency Carrying Out Project: same

Exempt Status: (check one)

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: Class 8 - Actions by Regulatory Agencies for Protection of the Environment
- Statutory Exemptions. State code number:

Reasons why project is exempt: The plan restricts future land use development in the vicinity of airports for purposes of noise and safety compatibility. Proposed criteria are more restrictive than ones currently in effect.

Lead Agency

Contact Person: Kathryn Mathews Area Code/Telephone/Extension: 530/823-4033

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: _____ Date: _____ Title: _____

- Signed by Lead Agency Date received for filing at OPR:
- Signed by Applicant

Revised October 1989

Michael A. Shutt, P.E.
Kenneth A. Brody
David P. Dietz, A.I.C.P.
Todd Eroh
Coleen Atmore

Shutt Moen Associates

Principal-In-Charge
Project Manager
Director of Planning Projects
Graphics Technician
Publication Coordinator