

Chapter 1

Foundations of Airport Land Use Compatibility Planning



Foundations of Airport Land Use Compatibility Planning

INTRODUCTION

This chapter outlines the policy foundations upon which airport land use compatibility planning in California is based. Much of the material presented here is drawn from the January 2002 edition of the *California Airport Land Use Planning Handbook* published by the California Division of Aeronautics. (For those seeking more detail, the *Handbook* is available on-line at the Division's web site: www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.html.) Also included here is information pertaining specifically to airport land use compatibility planning practice in Riverside County. The final section describes the function of this *March Air Reserve Base/Inland Port Airport Joint Land Use Study* (JLUS) and the manner in which the JLUS is proposed to be implemented by the affected jurisdictions that surround the airport.

In beginning this discussion, it is important to recognize that relatively little of the policy foundations for airport land use compatibility planning come directly from statutes or are otherwise regulatory in nature. The applicable California statutes deal primarily with the *process* of compatibility planning, not with *criteria* defining what land uses are or are not compatible with airports. The statutes require airport land use commissions to “be guided by” information in the state *Handbook*, but the *Handbook* does not constitute formal state policy or regulation. On the federal level, the guidance is even less regulatory in nature. The U.S. Constitution precludes federal government regulation of local land uses. Federal government direct involvement in airport land use compatibility planning occurs mostly because of the federal grant funding upon which airports rely. Beyond this type of involvement, various federal agencies have established nonregulatory guidelines that pertain to airport land use compatibility.

FEDERAL GOVERNMENT POLICIES

Federal airport land use compatibility policies are concerned mostly with noise issues. Several statutes deal specifically with aircraft noise. These statutes are implemented through regulations and policies of individual federal agencies, in particular the Federal Aviation Administration (FAA). Guidance with re-

gard to safety is primarily limited to FAA regulations concerning airport design and protection of airport airspace.

Statutes

Three statutes are of particular relevance to airport land use compatibility planning in that they both support and limit the actions that airports can take to mitigate noise impacts.

- ▶ **Aviation Safety and Noise Abatement Act of 1979 (ASNA)**—Among the stated purposes of this act is “to provide assistance to airport operators to prepare and carry out noise compatibility programs.” The law establishes funding for noise compatibility planning and sets the requirements by which airport operators can apply for funding. The law does not require any airport to develop a noise compatibility program—the decision to do so is the choice of each individual airport proprietor. Regulations implementing the act are set forth in Federal Aviation Regulations Part 150.
- ▶ **Airport and Airway Improvement Act of 1982 (AAIA)**—This act established the Airport Improvement Program (AIP) through which federal funds are made available for airport improvements and noise compatibility planning. The act has been amended several times, but remains in effect as of late 2004. Land use compatibility provisions of the act are implemented primarily by means of the assurances that airports must provide in order to receive federal airport improvement grants.
- ▶ **Airport Noise and Capacity Act of 1990 (ANCA)**—In adopting this legislation, Congress’ stated intention was to try to balance local needs for airport noise abatement with national needs for an effective air transportation system. To accomplish this objective, the act did two things: (1) it directed the FAA to establish a national program to review noise and access restrictions on aircraft operations imposed by airport proprietors; and (2) it established requirements for the phase-out of most older model, comparatively louder, “Stage 2” airline aircraft from the nation’s airline fleet by January 2000. These two requirements are implemented by Federal Aviation Regulations Part 161 and 91, respectively.

Federal Aviation Administration

The most significant FAA policies having a bearing on airport land use compatibility are found in Federal Aviation Regulations and, secondarily, in certain Advisory Circulars.

- ▶ **Federal Aviation Regulations Part 36, Noise Standards: Aircraft Type and Airworthiness Certification**—This part of the Federal Aviation Regulations sets the noise limits that all newly produced aircraft must meet as part of their airworthiness certification.
- ▶ **Federal Aviation Regulations Part 91, General Operating and Flight Rules**—This part of the Federal Aviation Regulations sets many of the rules by which aircraft flights within the United States are to be conducted. Rules governing noise limits are set forth in Subpart I. Within this subpart is a provision which mandated that all Stage 2 civil subsonic aircraft having a maximum gross weight of more than 75,000 pounds be phased out of operation within the United States by January 1, 2000. This FAR implements the requirements set forth in the Airport Noise and Capacity Act of 1990.
- ▶ **Federal Aviation Regulations Part 150, Airport Noise Compatibility Planning**—As a means of implementing the Aviation Safety and Noise Abatement Act of 1979, the FAA adopted these regulations establishing a voluntary program that airports can utilize to conduct airport noise compatibility

planning. “This part prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving these programs.” Part 150 also prescribes a system for measuring airport noise impacts and presents guidelines for identifying incompatible land uses. Airports that choose to undertake a Part 150 study are eligible for federal funding both for the study itself and for implementation of approved components of the local program.

The noise exposure maps are to be depicted in terms of average annual Day-Night Average Sound Level (DNL) contours around the airport. For the purposes of federal regulations, all land uses are considered compatible with noise levels of less than DNL 65 dB. At higher noise exposures, selected land uses are also deemed acceptable, depending upon the nature of the use and the degree of structural noise attenuation provided. In setting the various compatibility guidelines, however, the regulations state that the designations:

“...do not constitute a Federal determination that any use of land covered by the [noise compatibility] program is acceptable or unacceptable under federal, state, or local law. *The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities.* FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.”
[emphasis added]

Note that the DNL noise metric is the same as the CNEL (Community Noise Equivalent Level) metric used in California except that DNL does not include a penalty weighting for evening (7:00 to 10:00 p.m.) operations—each operation is counted as if it were three operations—as does CNEL. Both metrics apply a 10-fold weighting—each operation is counted 10 times—for nighttime activity (10:00 p.m. to 7:00 a.m.).

- ▶ **Federal Aviation Regulations Part 161, Notice and Approval of Airport Noise and Access Restrictions**—This part of the federal regulations implements the Airport Noise and Capacity Act of 1990. It codifies the analysis and notification requirements for airport proprietors proposing aircraft noise and access restrictions on Stage 2 or Stage 3 aircraft weighing 75,000 pounds or more. Among other things, an extensive cost-benefit analysis of proposed restrictions is required. The analysis requirements are closely tied to the process set forth in FAR Part 150 and are more stringent with respect to the quieter, Stage 3 aircraft than for Stage 2.
- ▶ **Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace**—FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the FAA be notified of proposed construction or alteration of objects—whether permanent, temporary, or of natural growth—if those objects would be of a height that would exceed the FAR Part 77 criteria. The height limits are defined in terms of imaginary surfaces in the airspace extending about two to three miles around airport runways and approximately 9.5 miles from the ends of runways having a precision instrument approach.

When notified of a proposed construction, the FAA conducts an aeronautical study to determine whether the object would constitute an airspace hazard. Simply because an object (or the ground) would exceed an airport’s airspace surfaces established in accordance with FAR Part 77 criteria does not mean that the object would be considered a hazard. Various factors, including the extent to

which an object is shielded by nearby taller objects, are taken into account. The FAA may recommend marking and lighting of obstructions.

The FAA has no authority to remove or to prevent construction or growth of objects deemed to be obstructions. Local governments having jurisdiction over land use are typically responsible for establishing height limitation ordinances that prevent new, and enable removal of existing, obstructions to the FAR Part 77 surfaces. Federal action in response to new airspace obstructions is primarily limited to three possibilities:

- › For airports with instrument approaches, an obstruction could necessitate modification to one or more of the approach procedures (particularly greater visibility and/or cloud ceiling minimums) or even require elimination of an approach procedure.
 - › Airfield changes such as displacement of a landing threshold could be required (especially at airports certificated for commercial air carrier service).
 - › The owner of an airport could be found in noncompliance with the conditions agreed to upon receipt of airport development or property acquisition grant funds and could become ineligible for future grants (or, in extreme cases, be required to repay part of a previous grant).
- ▶ **FAA Advisory Circular 150/5300-13, Airport Design**—The primary function of this Advisory Circular is to establish standards for dimensions and other features of airport runways, taxiways, and other aircraft operating areas. For the most part, these airport components are all on airport property. One that is sometimes not entirely on airport is the runway protection zone (RPZ). RPZs are trapezoidal-shaped areas located at ground level beyond each end of a runway. The Advisory Circular describes their function as being “to enhance protection of people and property on the ground.” The dimensions of RPZs vary depending upon:
- › The type of landing approach available at the airport (visual, nonprecision, or precision); and
 - › Characteristics of the critical aircraft operating at the airport (weight and approach speed).

Ideally, each runway protection zone should be entirely clear of all objects. The *Airport Design* Advisory Circular strongly recommends that airports own this property outright or, when this is impractical, to obtain easements sufficient to control the land use. Acquisition of this property is eligible for FAA grants (except at some small airports which are not part of the national airport system). Even on portions of the RPZs not under airport control, the FAA recommends that churches, schools, hospitals, office buildings, shopping centers, and other places of public assembly, as well as fuel storage facilities, be prohibited. Automobile parking is considered acceptable only on the outer edges of RPZs (outside the extended object free area).

Other Federal Agencies

- ▶ **U.S. Environmental Protection Agency (EPA)**—A report published in 1974 by the EPA Office of Noise Abatement and Control continues to be a source of useful background information. Entitled *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, this report is better known as the “Levels Document.” The document does not constitute EPA regulations or standards. Rather, it is intended to “provide state and local governments as well as the federal government and the private sector with an informational point of departure for the purposes of decision-making.” Using Yearly Day-Night Average Sound Level (DNL) as a measure of noise acceptability, the document states that “undue interference with activity and annoyance” will not occur if *outdoor* noise levels in residential areas are below DNL 55 dB and *indoor*

levels are below DNL 45 dB. These thresholds include an “adequate margin of safety” as the document title indicates.

- ▶ **Department of Housing and Urban Development (HUD)**—HUD guidelines for the acceptability of residential land use are set forth in the Code of Federal Regulations Title 24, Part 51, “Environmental Criteria and Standards.” The guidelines identify a noise exposure of DNL 65 dB or less as acceptable, between 65 and 75 dB as normally acceptable if appropriate sound attenuation is provided, and above DNL 75 dB as unacceptable. The goal for interior noise levels is DNL 45 dB. These guidelines apply only to new construction supported by HUD grants and are not binding upon local communities.
- ▶ **Department of Defense Air Installations Compatibility Use Zones (AICUZ) Program**—The AICUZ Program was established by the DOD in response to growing incompatible urban development around military airfields. DOD Instruction Number 4165.57 (November 8, 1977) provides the overall guidance for the program and mandates preparation of an AICUZ plan for each installation. Each of the military services has its own individual guidelines for implementing the basic instructions. The Air Force guidelines, for example, are defined in Air Force Instruction 32-7063, *Air Installation Compatible Use Zone Program* (April 17, 2002) and Air Force Handbook 32-7084, *AICUZ Program Manager’s Guide* (March 1, 1999). The Air Force publications describe the two objectives of the AICUZ program as being: to assist local, regional, state, and federal agencies in protecting public health, safety, and welfare by promoting compatible development within the area of influence of military installations; and to protect Air Force operational capability from the effects of land uses which are incompatible with aircraft operations. AICUZ plans prepared for individual military airfields serve as recommendations to local land use jurisdictions, but have no regulatory function.

Each AICUZ plan delineates the installation’s area of influence with respect to height limitations for airspace protection, accident potential, and noise. FAR Part 77 is used for airspace protection criteria. For safety compatibility, three accident potential zones (APZs) are defined: a clear zone (equivalent to the RPZ at civilian airports), and APZs I and II. These zones extend a total of 15,000 feet beyond the ends of runways. Noise contours using the DNL metric, or CNEL in California, indicate the extent of noise impacts. Land use compatibility guidelines are provided with respect to each of these factors. Residential development is considered incompatible within all three APZs except for low-density development in APZ II, as well as within all noise contours above 65 dB.

- ▶ **Department of Defense Joint Land Use Study (JLUS) Program**—In 1985, congress authorized the DOD to make available community planning assistance grants (*Title 10 U.S.C. Section 2391*) to state and local government to help better understand and incorporate the AICUZ technical data into local planning programs. The Office of Economic Adjustment (OEA) manages the JLUS program. A JLUS is a cooperative land use planning effort between the affected local government and the military installation. The JLUS presents a rationale, justification, and a policy framework to support the adoption and implementation of recommended compatible development criteria. These measures are designed to prevent urban encroachment; safeguard the military mission; and protect the public health, safety, and welfare.

STATE OF CALIFORNIA POLICIES

Unlike with federal government policies that are merely advisory as airport land use compatibility planning guidelines, some elements of state policy are regulatory in nature.

State Aeronautics Act

The California State Aeronautics Act—Division 9, Part 1 of the California Public Utilities Code—provides the policy guidance most directly relevant to compatibility planning. Three portions of the act are of particular interest. One, beginning with Section 21670, establishes requirements for airport land use compatibility planning around each public-use and military airport in the state and the creation of an airport land use commission in most counties. Another—Section 21669—requires the State Department of Transportation to adopt, to an extent not prohibited by federal law, noise standards applicable to all airports operating under a state permit. A third effectively makes FAR Part 77 a state law.

- ▶ **Airport Land Use Commission Statutes**—Although numerous changes have been made to the ALUC statutes over the years, the basic requirements for the establishment of ALUCs and the preparation of airport land use compatibility plans have been in place since the law’s enactment in 1967. The fundamental purpose of ALUCs to promote land use compatibility around airports has remained unchanged. As expressed in the present statutes, this purpose is:

“...to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.”

As noted in the introduction to this chapter, the focus of the ALUC statutes is on the process of compatibility planning. Compatibility criteria are not defined. Rather, reference is made to other sources of compatibility criteria, specifically:

- ▶ The preamble to the law indicates that one of the purposes is “to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669” i.e., the California Airport Noise Regulations.
- ▶ Section 21674.7 requires that, when adopting or amending a compatibility plan, ALUCs “be guided by” information contained in the *Airport Land Use Planning Handbook*. This section further states that “prior to granting permits for the renovation or remodeling of an existing building, structure, or facility, and before the construction of a new building, it is the intent of the Legislature that local agencies shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations” as outlined in the *Handbook*. Highlights of the compatibility criteria set forth in the *Handbook* are included later in this chapter.
- ▶ With regard to military airports, Section 21675(b) states that ALUCs must prepare a compatibility plan for them and that such plans “shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone [plan] prepared for that military airport.”

With respect to the compatibility planning process, two sections of the law are particularly significant to local land use agencies:

- ▶ ALUC authority is limited to “areas not already devoted to incompatible uses.” This phrase is generally taken to mean that ALUCs have no authority over existing land uses. However, changing an incompatible land use in a manner that would make it more incompatible is considered to be within the jurisdiction of ALUCs.
- ▶ Section 21676 describes the types of land use actions that must be submitted to an ALUC for review. These actions include adoption or amendment of a general plan or zoning ordinance. Section 21676.5 indicates that until such time as a local agency’s general plan has been made consistent with the ALUC’s plan, the ALUC may require the local agency to submit all “actions, regula-

tions, and permits” for review. After the agency’s general plan has been deemed consistent, then these additional actions are not subject to ALUC review unless agreed upon between the agency and the ALUC.

- ▶ **California Airport Noise Regulations**—The airport noise standards promulgated in accordance with the State Aeronautics Act are set forth in Section 5000 et seq. of the California Code of Regulations (Title 21, Division 2.5, Chapter 6). The regulations establish criteria under which a county board of supervisors can declare an airport as having a “noise problem.” The specifics of the regulations are applicable only to a few, primarily major airline, airports that have been declared as having a noise problem (March ARB is not one of these). Nevertheless, some of the provisions are of interest in a nonregulatory manner to other airports.

Most relevant are the criteria that define what are considered incompatible land uses with respect to noise. Section 5006 states that:

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

Of particular note in the above is that the 65 dB CNEL criterion has been set specifically with respect to *urban* residential areas. The regulations provide no guidance with respect to other community settings.

Four types of land uses are defined as incompatible within the 65 dB CNEL contour:

- ▶ Residences of all types;
- ▶ Public and private schools;
- ▶ Hospitals and convalescent homes; and
- ▶ Churches, synagogues, temples, and other places of worship.

However, these uses are not deemed incompatible if any of several mitigative actions has been taken as spelled out in Section 5014. Among these measures are airport acquisition of an aviation easement for aircraft noise and, except for some residential uses, acoustical insulation adequate to ensure that the interior CNEL due to aircraft noise is 45 dB or less in all habitable rooms.

- ▶ **Regulation of Obstructions**—Section 21659 gives the state authority to enforce the standards set by FAR Part 77. No structure or tree is permitted to reach a height that exceeds FAR Part 77 obstruction standards unless the FAA has determined that the object would not constitute a hazard to air navigation or create an unsafe condition for flight.

Other State Regulations

Additional state regulations having a bearing on airport land use compatibility planning include the following:

- ▶ **Government Code**—Section 65302.3 requires that local agencies must either modify their general plans and any applicable specific plans to be consistent with the compatibility plan adopted by an ALUC or take the steps indicated in Public Utilities Code Section 21676 to overrule the ALUC. The local plans are to be amended within 180 days of when the ALUC plan is adopted or amended.

- ▶ **California Building Code**—California Code of Regulations Title 24, known as the California Building Code, contains standards for allowable interior noise levels associated with exterior noise sources. The standards apply to new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family residences.

The standards state that:

“Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either the Day- Night Average Sound Level (L_{dn}) or the Community Noise Equivalent Level (CNEL), consistent with the noise element of the local general plan. Worst-case noise levels, either existing or future, shall be used as the basis for determining compliance with [these standards]. Future noise levels shall be predicted for a period of at least 10 years from the time of building permit application.”

With regard to airport noise sources, the code goes on to indicate that:

“Residential structures to be located where the annual L_{dn} or CNEL exceeds 60 dB shall require an acoustical analysis showing that the proposed design will achieve the prescribed allowable interior level. For public use airports or heliports, the L_{dn} or CNEL shall be determined from the airport land use plan prepared by the county wherein the airport is located. For military bases, the L_{dn} shall be determined from the facility Air Installation Compatible Use Zone (AICUZ) plan. For all other airports or heliports, or public use airports or heliports for which a land use plan has not been developed, the L_{dn} or CNEL shall be determined from the noise element of the general plan of the local jurisdiction. “When aircraft noise is not the only significant source, noise levels from all sources shall be added to determine the composite site noise level.”

- ▶ **Real Estate Disclosure Laws**—State legislation that took effect in January 2004 (Building and Professions Code Section 11010 and Government Code Sections 1103 and 1353) requires that the presence of an airport nearby be disclosed as part of most residential real estate transactions. This requirement applies within the airport influence area as defined by the airport land use commission in the county. The law provides the following specific language to be used in the disclosure:

“This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.”
- ▶ **State Education Code**—Provisions of the Education Code applying to elementary and secondary schools (Section 17215) and community colleges (Section 81033) require the California Division of Aeronautics to review proposals for acquisition of a school site situated within two miles of an existing or planned airport runway. The Division must then investigate the proposed site and report back to the Department of Education its recommendations as to whether the site should be acquired for school purposes. The Division is also required to establish criteria to be used in this review process.
- ▶ **General Plan Guidelines**—Section 65302(f) of the California Government Code, requires that a noise element be included as part of local general plans. Airports and heliports are among the noise sources specifically to be analyzed. To the extent practical, both current and future noise contours (expressed in terms of either CNEL or DNL) are to be included. The noise contours are to be

“used as a guide for establishing a pattern of land uses... that minimizes the exposure of community residents to excessive noise.”

Guidance on the preparation and content of general plan noise elements is provided by the Office of Planning and Research in its *General Plan Guidelines* publication (last revised in 2003). This guidance represents an updated version of guidelines originally published by the State Department of Health Services in 1976. Included in the document is a table indicating noise compatibility criteria for a variety of land use categories. Another table outlines a set of adjustment or “normalization” factors that “may be used in order to arrive at noise acceptability standards which reflect the noise control goals of the community, the particular community’s sensitivity to noise..., and their assessment of the relative importance of noise pollution.”

- ▶ **Senate Bill 1462, Military Readiness Activities: Special Use Airspace**—Approved September 2004, this bill amends the Planning and Zoning Law to require that a local planning agency, prior to adopting or substantially amending its general plan, refer the proposed action to specified entities, including the branches of the U.S. Armed Forces. For land use actions within the airport influence area of March Air Reserve Base (see Exhibit 3-3), the contacts are:

- ▶ Air Force Center for Engineering and the Environment (AFCEE)
Regional Environmental Office
333 Market Street, Suite 625
San Francisco, CA 94105
(415) 977-8884
- ▶ March ARB Community Planner
452nd Base Engineering Building 2403
1261 Graeber Street
Riverside, CA 92518
(951) 655-7216

This requirement applies to all proposed actions that would affect lands within 1,000-feet of a military installation, beneath a low-level flight path, or within special use airspace as defined in Section 21098 of the Public Resources Code. The DOD must provide electronic maps identifying these areas (the military installation, low-level flight areas and special use airspace) to the Office of Planning and Research (OPR), which will make this information available to cities and counties. This law also allows the military branches to request consultation with the local agency and the project applicant to discuss the effects of the proposed project on the military installation, potential alternatives and mitigation measures.

- ▶ **Senate Bill 926, Economic Development**—Approved September 2004, the law consolidates efforts to retain military bases under a single state office—the Office of Military and Aerospace Support—in the Business, Transportation and Housing Agency. This bill also modifies the Planning and Zoning Law to require that when a local agency is evaluating the impact of the proposed general plan amendment on military installations, military training routes, and restricted airspace, that this evaluation be based not only on information provided by the military, but on other sources, as well. With respect to open-space, the Planning and Zoning Law defines the lands adjacent to military installations, military training routes, and restricted airspace as open space in support of the mission of military installations. These open-space areas are intended to provide buffer zones to military activities and complement the resource value of the military lands. This bill also requires that a city or county reflect the open-space provisions as part of their next general plan revision.

Airport Land Use Planning Handbook

Drawing from original research and a variety of other sources such as those described herein, the *California Airport Land Use Planning Handbook* provides an extensive amount of information upon which local airport land use compatibility criteria can be based. Indeed, as noted earlier herein, local compatibility planning must “be guided by” the information in the *Handbook*. On most topics, the *Handbook* provides a significant degree of latitude in setting compatibility criteria to best suit the characteristics of a particular airport and its environs. Moreover, agencies can deviate from this guidance where there is strong rationale for doing so and compliance with the basic objectives of the statutes can still be demonstrated.

The *Handbook* discussion of compatibility issues is divided into chapters on noise and safety. The noise discussion includes overflight issues and safety includes airspace protection. A few highlights are worth noting.

- ▶ **Noise**—The *Handbook* notes that 65 dB CNEL is the maximum noise level normally compatible with urban residential land uses, but that this level is too high for many airports. The “normalization” process is cited as a means for adjusting this criterion to reflect community characteristics. Additional factors to be considered are listed in Table 7C.
- ▶ **Overflight**—Overflight concerns are addressed in terms of the need for buyer awareness measures and avoidance of particularly noise-sensitive land uses.
- ▶ **Safety**—Safety compatibility guidelines in the *Handbook* utilize accident location data to identify the areas of greatest risk near runways. Several sample sets of safety zones are depicted along with suggested maximum residential density and nonresidential intensity criteria. Distinctions between rural, suburban, and urban settings are taken into account in these criteria.
- ▶ **Airspace Protection**—The criteria for this topic stem directly from FAR Part 77 standards for avoidance of airspace obstructions and other FAA regulations with respect to bird strike concerns and other hazards to flight.

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION POLICIES

The role played by the Riverside County Airport Land Use Commission in airport land use compatibility planning within the county is defined by state ALUC statutes outlined earlier. The ALUC meets monthly to review land use development projects submitted to it in accordance with state law.

Between 2004 and 2006, the commission adopted an updated compatibility plan for most of the public-use airports in the county and adoption of the remaining plans is pending as of mid 2007. The plan is organized around a set of procedural policies and compatibility criteria generally applicable to all airports in the county. Excerpts of these policies are contained in Appendix B herein. For each airport, a set of maps is provided to give the essential geographical context to the compatibility criteria. The maps are drawn to take into account the specific characteristics of the airport and its operations, as well as its environs. Additionally, airport-specific policies are included to supplement or modify the countywide policies as appropriate. Appendix A of this *JLUS* document itemizes the airport-specific policies proposed to apply to March ARB/IPA.

Preparation of a compatibility plan for March ARB was not included in the countywide project because of funding issues. The overall organization of the plan, though, allows a section on March ARB to be added. The work scope for the present *Joint Land Use Study* includes providing a recommended March ARB/IPA compatibility plan to the ALUC for its consideration.

The plan's procedural policies are based upon the ALUC statutes. They indicate what types of local land use actions are to be submitted for review and what choices of actions the ALUC can take when conducting its reviews. Submittal of certain types of land use actions is mandatory under state law. These include proposed adoption or amendment of a general plan or zoning ordinance affecting land within the influence area of an airport. Submittal of other types of land use actions—referred to in the plan as *major land use actions*—is mandatory only until such time as a local land use jurisdiction has modified its general plan for consistency with the compatibility plan or has overruled the ALUC, but is requested to continue thereafter on a voluntary basis.

The compatibility policies define a set of six zones covering the environs of each airport. The zones take into account a combination of noise and safety compatibility concerns. For each zone, various compatibility criteria are established including acceptable residential densities, maximum usage intensities (the number of people per acre) for nonresidential uses, height limitations on structures, and certain other requirements. With respect to noise, the draft plan sets a basic standard of CNEL 60 dB as the maximum acceptable noise exposure for new residential development around airports in the county. This criterion was adjusted upward to CNEL 62 and 65 dB for the Palm Springs International and Riverside Municipal airports, respectively, in recognition of the noisy urban character of their environs. Similarly, a lower threshold of CNEL 55 dB was adopted for the three low-activity desert airports.

As required by state law, each land use jurisdiction having territory within an airport influence area delineated by the ALUC, must modify its general plan and any applicable specific plans to be consistent with the ALUC's plan. Alternatively, local jurisdictions have the option to overrule the ALUC by taking a specific set of actions defined in state law. In particular, overruling the ALUC requires that the jurisdiction's governing body make findings as to how the general plan or specific plan complies with the purposes of state airport land use compatibility planning statutes. Local jurisdictions also can use the overruling process with regard to individual land use development actions submitted to the ALUC for review and found by the ALUC to be inconsistent with its adopted compatibility criteria.

With regard to this requirement for local jurisdictions to modify their general plans and specific plans for consistency with the ALUC's plan, it is important to recognize that the requirement applies only to proposed development. ALUCs have no authority over existing development. Furthermore, existing development is usually taken to include most development for which no local jurisdiction discretionary actions to change the land use remain to be taken—that is, a vested right to proceed with the development has been established. Therefore, to the extent that land use designations in a general plan or specific plan merely reflect existing conditions, no local jurisdiction plan changes are necessary. The land use would become a nonconforming use with respect to the ALUC policies, but not in relation to the general plan or specific plan. A caveat to this “grandfathered” status is that changes to existing nonconforming land uses which would result in increased nonconformance with compatibility criteria would be inconsistent with ALUC policies. More details on this topic are included in Chapter 2, “Countywide Policies,” of the *Riverside County Airport Land Use Compatibility Plan*.

MARCH JOINT LAND USE STUDY

The March Joint Powers Authority (JPA) is comprised of the four surrounding land use jurisdictions: the County of Riverside and the cities of Moreno Valley, Perris, and Riverside. The March JPA has full land use and redevelopment authority—comparable to that of the county and cities—over the portions of the former base that are now under its direct control and shares responsibility for operation and maintenance of the airport through a joint use agreement with the U.S. Department of Defense.

In order to address airport land use compatibility issues around the March ARB/IPA, the March JPA, as proprietor of the airport, sought and obtained funding from the U.S. Department of Defense Office of Economic Adjustment (OEA). The OEA funding provides for preparation of a Joint Land Use Study (JLUS) which is broadly intended to assist military installations and nearby communities with efforts to mitigate and avoid land use compatibility conflicts.

The *March ARB/IPA JLUS* is an unusual planning study in that, while it is conducted under the auspices of the March JPA, the primary actions required for its adoption and implementation are intended to be taken by the entities having jurisdiction over land uses around the airport: the four-member jurisdictions and the JPA itself. The *JLUS* merely serves as the JPA's land use compatibility planning recommendations to each of these entities—it need not be adopted by the JPA except as it applies to the lands under the JPA's direct control. Additionally, though, the *JLUS* is recommended to the Riverside County ALUC for adoption as the Airport Land Use Compatibility Plan for March ARB/IPA. Once the ALUC adopts the *JLUS* as a Compatibility Plan, potentially with modifications, then each of the five jurisdictions exercising land use authority would be obligated to either bring its general plan and any specific plans into consistency with the ALUC plan or to overrule the ALUC as described in the preceding section.

The remainder of the *JLUS* document is organized into three chapters and a set of appendices.

- ▶ *Chapter 2* contains background data and technical information used to develop the compatibility criteria to mitigate the impact of military operations at March ARB/IPA on adjacent land uses.
- ▶ *Chapter 3* sets forth the recommended land use compatibility criteria and associated map. The factors upon which the criteria and map are based are described. Also, selected ALUC countywide policies that would be applicable to March ARB/IPA are noted.
- ▶ *Chapter 4* examines the relationship between the recommended compatibility criteria/map and the plans and policies of each of the five affected land use jurisdictions. Notable conflicts are listed. Additionally, the role that each jurisdiction and the ALUC is expected to play in implementation of the *JLUS* recommendations is outlined along with options for how the compatibility criteria can be incorporated into these entities' respective plans.
- ▶ *Appendices* contain the March ARB/IPA Compatibility Plan recommended to the ALUC for adoption, excerpts from the policies adopted by the ALUC for other airports in the county, a copy of the Federal Aviation Regulations Part 77 pertaining to airspace protection, details on the methodology for calculating usage intensities (a key criterion in the compatibility criteria), and a glossary.