

CALIFORNIA ADVISORY HANDBOOK FOR COMMUNITY AND MILITARY COMPATIBILITY PLANNING



Governor's Office of Planning and Research

State of California

Arnold Schwarzenegger, Governor

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OFFICE OF THE GOVERNOR

February 2006

The State of California, its cities and counties, and the Department of Defense (DOD) have a long history of partnership. The military has helped fuel our local and state economies by bringing installations, staff and support industry to the State. Military investment has contributed to making California home to technological innovation. This is largely due to the diverse landscape of California, which provides unique training opportunities that allow the US Armed Forces to prepare and stay ready to defend our nation.

California realizes that the military is not only an important part of our past and present; it is also an important part of our future. As our vibrant State continues to grow, we must be proactive to ensure that our local communities and our military bases continue to thrive in an atmosphere of mutual cooperation.

This *California Advisory Handbook for Community and Military Compatibility Planning* is a milestone towards encouraging local decision makers, land use planners, developers and the military to work together to achieve sustainability. It will serve as a resource to help them develop processes and plans that will sustain local economies, safeguard military readiness and protect the health and safety of California's residents.

This advisory guide, funded by the DOD Office of Economic Adjustment (OEA), and published by my Office of Planning and Research (OPR), stands as a commitment of my Administration to strengthen the existing partnership among federal, state and local agencies.

Sincerely,

A handwritten signature in black ink, appearing to read "Arnold Schwarzenegger".

Arnold Schwarzenegger

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INTRODUCTION

1.1 Statement of Need

The State of California, its cities and counties, and the Department of Defense (DoD) have a long and successful history of working together to build a stronger California and a more secure nation. California has more military installations and operational areas than any other state in the nation. The state's varied climate, terrain, and coastline provide unique training and testing opportunities for the Army, Marine Corps, Navy, and Air Force. The state's aeronautical and technological heritage also contributes to the

The term "land use compatibility", in relationship to military readiness, can be defined as the balance and/or compromise between community and military needs and interests. Finding this balance promotes an environment where both entities can coexist successfully.

benefits the military receives by locating facilities in California. In return, the benefits to the state are significant. In 2005, California had over 278,000 persons directly employed by the military (active duty, civilian, Reserves, and

National Guard), and military expenditures topping \$42 billion.

However, in addition to the many positive interactions between local communities and military installations, the activities or actions of one entity can negatively impact the other and create conflicts. As

communities develop and expand in response to growth and market demands,

referred to as encroachment, can have negative impacts on community safety, economic development, and sustainment of military activities and readiness. This threat to military readiness activities is currently one of the military's greatest concerns.

The protection of installations and operation areas is vital to the State of California and to overall military readiness.

In the past, incompatible development has been a factor in curtailing training operations, moving (realigning) mission-critical components to other installations, and, in extreme cases, closing installations. Similarly, the impact of military installations on local communities can result in safety issues and environmental degradation. Compatibility between military installations and local communities is essential to protect military missions, the health of local economies and industries, and the quality of life for residents. In order to achieve compatibility, the military and local governments must be collaborative and cooperative.

Once isolated from each other, military areas and communities are now in closer proximity because of a rapidly growing population and expansion of urban boundaries. Over the next 45 years, the

"... the encroachment on our ability to train adequately in an era when training increasingly represents the most important qualitative edge that the US military enjoys, threatens a collision that will endanger the lives of our servicemen and women."

- Former Deputy Secretary of Defense Paul Wolfowitz

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state is projected to grow by over 50 percent, with a projected 2050 population of 54.8 million residents. This growth presents a wide range of planning challenges for local communities, as well as for military installations and operation areas that call California home.

Maintaining the character of California communities and optimizing military assets and operational areas creates immense benefits for the state and the military. Capitalizing on this interdependence through collaboration that promotes compatible land use planning strengthens the ability of the military to fulfill its operational mission and for local communities to provide the quality of life long valued by California residents.

1.2 Handbook Purpose and Objectives

The Governor's Office of Planning and Research (OPR) collaborated with local, state, and federal stakeholders to develop and produce this Advisory Planning Handbook (Handbook) in compliance with SB 1468 (Knight, Chapter 971, Statutes of 2002). The Handbook's primary purpose is to provide guidance to cities, counties, property owners, developers, and military personnel on how best to encourage collaboration. The Handbook will also provide a menu of tools and strategies that help maintain compatibility between community land uses and military activities. To accomplish this, the Handbook presents available planning tools, best practices, and processes. This information will

Government Code 65040.9 required OPR to prepare "an advisory planning handbook for use by local officials, planners, and builders that explains how to reduce land use conflicts between the effects of civilian development and military readiness activities..."

allow local planners, builders, and the military to share information and communicate in a timely and proactive way so that all parties can make fully informed land use decisions. The Handbook also provides advice to cities and counties as they revise and update their general plans.

The following issues are vital to the determination of best practices and land use processes.

This Handbook is an advisory document. Its goal is to provide information on how communities and the military can collaborate to reduce land use conflicts.

Defining the Issues

Land use compatibility is achieved when communities and military installations balance complementary and competing needs and interests. The factors that determine compatibility range from man-made activities (land use, infrastructure, noise, dust, light, and glare) to natural resources (water quality, biological habitats) to the competition for scarce resources (land space, airspace, and sea space). To identify which tools and strategies may work for a given community or installation, compatibility factors applicable to the area must be identified (see Section 2). Understanding the issues and factors that foster land use compatibility will be crucial to identifying the proper tools and strategies for each community.

The unique and varied planning processes used by state, local, and federal entities must also be factored into the collaborative process that is promoted within this Handbook (see Section 3). The ability of local, state, and federal governments to conduct their own planning processes provides flexibility and empowerment for self-governance. However, the documents and plans produced by one jurisdiction can often be oriented towards specific needs and are not coordinated or enforceable over the actions of another entity. In addition, several programs, such as the military's Air Installation Compatible

Use Zone (AICUZ) program, rely on voluntary adoption by local governments.

Although planning processes are separately established, there are opportunities for collaboration which are identified by this Handbook. This Handbook provides a flexible planning toolbox that can be applied in a variety of ways to meet the unique needs of each stakeholder involved in promoting community and military compatibility planning.

Local Planning Needs

Local governments use planning processes to shape and guide growth and development. To capture the future envisioned by its residents, local governments often must balance competing interests and make difficult trade-offs. Recognition of local planning needs and their relationship to military operations is critical to designing collaborative and comprehensive planning processes to avoid incompatible land uses.

Military Planning Needs

The fundamental purpose of military installations in California is to support military readiness, including the testing and training needs of the United States Armed Forces. Military installations must have access to air, land, and sea space, as well as other support items, such as an interference free frequency spectrum, in order to conduct training missions and perform testing. Local governments must recognize the needs of military installations and operation areas to determine what planning tools local communities should use to promote compatibility.

1.3 Regulatory Framework

In 1999, SB 1099 (Knight, Chapter 425, Statutes of 1999) established the California Defense Retention and Conversion Council, effective until January 1, 2007. Comprising all major executive branch agencies of the state, public appointees,

and a non-voting liaison from each branch of the United States Armed Forces, council duties include: 1) identification of major installations in California; 2) determination of how best to defend existing bases and base employment in the state; 3) coordination with communities that may face base closures; 4) development of data and analysis on bases in the state; 5) coordination with the congressional delegation; and 6) preparation of a study considering the long-term protection of lands adjacent to military bases. Findings from this study, performed in 2001 by the University of California, Berkeley, Institute of Urban and Regional Development, noted that more than half of California's military installations are located within, or at the boundary of, major metropolitan areas. Further, impacts from the incompatibility of land uses were also found to include the effect of military installations on nearby residents and environmental issues that arise when endangered species migrate from developing areas to military installations.

In 2002, the California Legislature responded to these findings, passing SB 1468 (Knight, Chapter 971, Statutes of 2002) and AB 1108 (Pavley, Chapter 638, Statutes of 2002). SB 1468, requires cities and counties to consider the impact of growth on military readiness activities when preparing or updating their general plan for lands adjacent to military facilities or underlying designated military aviation routes and airspace. The act encourages cooperation between military installations and local communities when developing strategies to address growth. In addition to requiring OPR to develop an advisory handbook, SB 1468 also directs OPR to include information in its *General Plan Guidelines* on how to reduce land use conflicts between civilian development and military readiness activities.

AB 1108, passed in 2002, amends the California Environmental Quality Act (CEQA) to ensure military agencies are provided notice of proposed projects within two miles of installations or underlying training routes and Special Use Airspace (SUA). To obtain this notification, military installations must provide the local

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planning agencies in their area of the installation's contact person and the relevant information and boundaries of the installation's low-level flight path, military impact zones, or SUA. The local lead agency is required to give notice to the military installation of any project within those boundaries if: (1) the project includes a general plan amendment; (2) the project is of statewide, regional, or area wide significance; or (3) the project is required to be referred to the airport land use commission or appropriately designated body (Public Resources Code 21098). This notification will provide the military with an opportunity to provide early input, so that potential conflicts can be evaluated and addressed proactively.

SB 1462 (Kuehl, Chapter 907, Statutes of 2004) expanded the requirements for local government to notify military installations of proposed development and planning activities. This bill states that before a legislative body adopts or substantially amends a general plan, the planning agency shall refer the proposed action to the designated point of contact at each of the branches of the military when the proposed project is located: (1) within 1,000 feet of a military installation, (2) beneath a low-level flight path, or (3) within special use airspace (SUA) (Government Code 65352(a)(6)).

The bill also requires local jurisdictions to revise their application checklists to require the applicant to identify when a proposed project is located within one of the three areas identified above (Government Code 65940(b)). In turn, the local jurisdiction is required to provide a copy of the completed application to affected branches of the United States Armed Forces (Government Code 65944(d)).

The military provided OPR with electronic maps of SUAs, low-level flight paths, and military installations to assist local governments in complying with SB 1462. As required, OPR has notified cities and counties of the availability of the information on the Internet. This mapping information can be found online in the form of the

California Digital Conservation Atlas, which can be accessed at:

<http://atlas.resources.ca.gov/>

In addition, the State has provided an online mapping system that can be used by applicants and agencies to determine whether specific development applications meet the criteria for referral to the military. The California Military Land Use Compatibility Analyst (CMLUCA) can be found at:

<http://sample1.casil.ucdavis.edu/Calmap8/index.html>

Information on accessing and using the California Digital Conservation Atlas and CMLUCA can be found in Appendix A. Additional information on the legislation identified in this section can be found in Appendix E.

1.4 Public Outreach

Extensive public outreach was conducted during the development of this Handbook. The outreach program engaged and received input from various stakeholders, including, but not limited to, representatives from military installations, the business community, environmental groups, community planners, and the general public. The following outreach tools were used in developing the Handbook.

- **Handbook Advisory Committee.** An Advisory Committee composed of local planners, military representatives, and other stakeholders served in an oversight role throughout the development of the Handbook. This committee was tasked with assisting OPR in the production of an easy-to-use Handbook that would assist planners, agency representatives, landowners, and the public in addressing land use compatibility issues. The Committee members took an active role in reaching out to their peers to obtain input on the development of the Handbook.

- **Public Scoping Workshops.** Three Public Scoping Workshops were held in various geographic regions of the state. These workshops were designed to identify issues pertaining to land use incompatibility and to determine collaborative planning policies and practices currently used throughout the State. Locations for these Public Scoping Workshops were as follows:
 - Lancaster - September 7, 2005
 - San Diego - September 9, 2005
 - Sacramento - September 12, 2005
- **Focus Group Meetings.** In conjunction with the Public Scoping Workshops, three Focus Group Meetings were held at the same locations. These Focus Group sessions provided a platform for the State and the consultant team to identify issues, solicit suggestions, and receive input from participants based on areas of interest and expertise, including local planners, state and federal agencies and departments, military officials and base planners, and private and community stakeholders.
- **Public Hearings.** Three public hearings were held to present the Draft Handbook and receive public comment. Locations for these hearings were as follows:
 - Bakersfield - December 12, 2005
 - Sacramento - December 14, 2005
 - San Diego - December 15, 2005
- **Database.** A database identifying stakeholders was developed and continuously updated throughout the planning process. This database served as one of the primary avenues for distributing information on the development of the Handbook and key outreach and public input opportunities.
- **Web Site.** During development of the Handbook, a Handbook Web site was maintained. The Web site served as a central location for stakeholders and the

general public to learn about the development of the Handbook; find a schedule of events, including meeting and hearing locations; locate documents and meeting minutes; and determine the points of contact for further information.

- **Media Advisories.** To ensure a consistent message, a media guide was created providing basic information, including the purpose of the Handbook, the Project Fact Sheet, a timeline of key events, and points of contact. Separate versions of the media guide were prepared for the regional scoping workshops and public hearings. In addition to the media guide, media advisories preceded each event.

1.5 Handbook Organization

One of OPR's primary objectives for the Handbook was to make the document user-friendly. To do this, the Handbook has been organized into the following sections for quick and easy reference.

Section 1 - Introduction. This section of the Handbook is designed to provide background on the purpose and intent of the Handbook and a general overview and guide to the Handbook.

Section 2 – Compatibility Factors. One of the primary objectives of this Handbook is to provide guidance and planning tools to assist planners – local, federal, and private – in working together to ensure land use compatibility and community economic stability. This section provides a broad definition of land use compatibility and a more detailed look at individual compatibility factors. In order to identify which tools and strategies will work for a given community or installation, jurisdictions must be able to identify the compatibility factors relevant to their planning area.

Section 3 – Planning Process and Implementation. When implementing planning tools and strategies that address sustainability, land use compatibility, and related issues, it is

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important to have a common understanding of the community and military planning processes that shape future land use. This section provides a general discussion of local and military planning processes and the role of federal and state regulators in these planning decisions. It will also provide a discussion of the collaborative planning process and how local and military planners can work together to ensure land use compatibility.

Section 4 - Implementation Strategies. This section provides a guide to a range of planning tools that may be used to address land use compatibility and sustainability issues. This section identifies these planning tools and discusses the definition, purpose, key issues, roles and responsibilities, implementation and maintenance, resources and reference, and, where appropriate, case study and best practices examples.

Section 5 – Implementation Examples. This section provides a brief description of several successful collaborative planning efforts involving states, local governments, and the military. These examples come from around the nation and illustrate planning concepts and implementation strategies that further the goal of military and community land use compatibility.

Section 6 – Acronyms. This section provides a list of acronyms used in the Handbook or related to compatibility planning.

Section 7 – Glossary. Common planning terms for both local governments and military planning are identified in this section.

In addition to these sections, the Handbook contains several appendices that provide detailed information on specific aspects of compatibility planning.

- **Appendix A** – Military Installations in California
- **Appendix B** – General Plan Policy Examples
- **Appendix C** – State and Federal Technical Assistance
- **Appendix D** – Land Use Compatibility Examples
- **Appendix E** – Overview of State Legislation
- **Appendix F** – Advisory Handbook Outreach Plan



COMPATIBILITY FACTORS

California contains an integrated system of military installations, operations areas, ranges, special use airspace (SUA), and military training routes (MTRs). This integrated system of land, air, and sea space is the framework for military readiness activities and provides a key foundation of our nation's security.

Local government planning provides a framework to assist communities with shaping and guiding growth and development. The recognition of both local planning and military readiness needs and objectives is critical in developing a comprehensive, collaborative planning process to address compatibility issues.

To preserve military readiness, it is important to understand the definition of military readiness and the compatibility factors that impact it. This section will help local governments, land owners, agencies, and the military gain a common understanding of these issues. This common understanding is an important first step in developing an ongoing dialogue on compatibility planning.

2.1 Military Readiness

California Senate Bill 1468 (codified in Government Code 65302(a)) defines "military readiness activities" as:

- Training, support, and operations that prepare the men and women of the military for combat;
- Operation, maintenance, and security of any military installation; and
- Testing of military equipment, vehicles, weapons, and sensors for proper operation or suitability for combat use.

Military Areas

People often associate military land uses with the local military base in their region when, in fact, there are many different types of military areas. The various types of military areas are described below.

Military Training Areas

Military training areas are portions of land or sea on an installation or range that are used to conduct military exercises and training. Size, use, terrain type, and training restrictions vary for each training area. Boundaries of training areas also vary (within the confines of the installation or range) and are often defined by natural topographic features.

Land Space

A military unit's land requirements may include:

- The land on which a military installation or area resides;
- Compatible land uses around military areas used for training and operating areas in order to maintain safety and security;
- Compatible land uses under its MTRs and other critical airspace so that pilots can safely test and train in realistic scenarios; and
- Land to support live-fire training exercises.

Airspace – Special Use Airspace

Designated areas of airspace over both land and sea are necessary for military testing and training. Airspace corridors are also needed to provide airspace connectivity to and from military installations, and training and operating areas.

Compatibility Factors

The Interagency Airspace Coordination Guide (<http://www.fs.fed.us/r6/fire/aviation/airspace/web/guide/>) provides a wealth of information on the definition and use of airspace. According to this guide, six types of SUA have been established by the Federal Aviation Administration (FAA), as described below.

- **Military Operations Area (MOA).** A MOA is airspace established to segregate certain non-hazardous flight activities from Instrument Flight Rules (IFR) traffic and to identify Visual Flight Rules (VFR) traffic. Within these areas, the military conducts flight activities, such as acrobatic or abrupt flight maneuvers, intercepts, air combat maneuvering missions, and aerial refueling. In addition to maintaining military readiness in the air, these areas are used to train student pilots. MOAs are three dimensional areas. In addition to the mapped boundaries, MOAs have a defined floor (minimum altitude) and ceiling (maximum altitude). These altitudes can range from the surface up to the maximum ceiling of 17,999 feet above mean sea level (MSL). On sectional charts, IFR enroute charts, and terminal area charts, MOAs are identified in magenta lettering that states a specific name followed by the letters "MOA".
- **Restricted Areas (RA).** Restricted Areas are an important asset to the DoD because they allow for the use of weapons for training and testing purposes. These areas are necessary for ground weapons and artillery firing, aerial gunnery, live and inert practice bomb drops, and guided missile testing. Restricted Areas provide locations for training and testing to support combat readiness of aviation and ground combat units while separating these activities from the public and general aviation users. These areas are identified by the letter "R" followed by a number on sectional charts, IFR enroute charts, and terminal area charts.
- **Warning Areas (WA).** Warning Areas can exist in domestic and international waters. These airspace areas are similar to a combination of restricted airspace areas and MOAs because the activities that occur can be hazardous, non-hazardous, or both. Within these areas, the military can conduct major exercises using dozens of ships and aircraft performing an array of training and testing activities, such as naval gunfire, aerial gunnery, guided missile exercises, and practice interceptions. These areas are identified by a "W" followed by a number on sectional charts, IFR enroute charts, and terminal area charts.
- **Alert Areas (AA).** High volumes of pilot training or an unusual type of aerial activity (e.g., military, aircraft manufacturers, high concentrations of flights in the area) may occur in AAs. No special requirements are needed for operations in an AA, but all operations taking place in an AA must comply with FAA regulations. These areas are defined by an "A" followed by a number on sectional charts, IFR enroute charts, and terminal area charts.
- **Prohibited Areas (PA).** These areas vary in dimensions and are established over sensitive ground facilities (e.g., the White House, Camp David, presidential homes, etc.). Aircraft wishing to navigate in this airspace must receive approval from the FAA or PA controlling agency. PAs are identified with a "P" followed by a number on sectional charts, IFR enroute charts, and terminal area charts.
- **Controlled Firing Areas (CFA).** These areas contain military or civilian activities that could be hazardous to aircraft not

participating in the activity (e.g., rocket testing, ordnance disposal, small arms fire, chemical disposal, etc.). CFAs use ground lookouts or radar to identify aircraft that might be approaching the area. When this happens, all activities in the CFA are suspended until the area is clear again. Non-participating aircraft are not required to change their flight path with regards to a CFA; therefore, CFAs are not charted by the FAA. CFA information can be obtained by contacting the nearest regional FAA headquarters.

Airspace – Military Training Routes (MTRs)

MTRs are similar to complex systems of interrelated and interdependent highways in the sky that connect military installations, ranges, and operation areas. They are used by the DoD to conduct low-altitude navigation and tactical training at airspeeds in excess of 250 knots and at altitudes as low as just above surface level. These low-level, high-speed routes allow pilots to develop the skills necessary to avoid detection by enemy radar. In California Law (AB 1108, Pavley, Chapter 638, Statutes of 2002), a low-altitude MTR is defined as a route where aircraft operate below 1,500 feet MSL.

Sea Space

Proficiency on the sea allows the military to perform many functions, ranging from peacekeeping and humanitarian operations to wartime operations such as Anti-Air Warfare (AAW), Anti-Submarine Warfare (ASW), Amphibious Warfare (AMW), Maritime Interdiction Operations (MIO), and special operations. Sea space, like land space, requires both test and training areas. Dedicated DoD sea space areas are dependent on waterway channels that provide connectivity between the test and training areas located at sea and the ports.

Lines of Communication

The military uses the phrase "Lines of Communication" to define any means of

communicating (via phone, satellite, etc.) or the transporting of military equipment, materials, or forces (via ground, air, or water) for military operations or training. These communication and transportation corridors are necessary infrastructure for military readiness. Often, the military must share these areas and facilities with the public, such as shared use of a roadway. Increased demand for these shared lines of communications is straining their capacity in some parts of California. A concentrated effort between community and military representatives to share and plan for maintenance, expansion, or the development of alternatives for this infrastructure is critical to sustaining military readiness and community services.

Frequency Spectrum

The military's use of frequency spectrum allows for safe operations and the effective delivery of weapons on target without interference. The military's frequency spectrum needs for testing, evaluation, and training is constantly increasing, while the spectrum available for DoD use is decreasing. The National Telecommunications and Information Administration (NTIA) Office of Spectrum Management explains that:

"almost every agency of the Federal Government uses the spectrum in performing mandated missions. The DoD uses the spectrum extensively for tactical uses and non-tactical uses. In the United States tactical uses are generally limited to a number of specific testing sites and training facilities, but DOD's non-tactical applications are extensive and include aircraft command and control, mobile communication in and around military bases, and air fields and long distance communications using satellites."

Challenges to Sustaining Military Readiness

As development moves closer to military operations and facilities, compatibility issues and competition for limited resources become increasingly important. Residents in affected communities can have concerns about the

Compatibility Factors

impacts of military readiness activities. These concerns include noise, safety, traffic, housing availability, and property values. Whether perceived or real, these concerns can directly or indirectly limit the military's ability to conduct training and testing operations; this, in turn, impacts military readiness.

Legislative and Management Issues

Legislative Initiatives

An increase in federal, state, or local legislative initiatives directly or indirectly related to the DoD may limit the military's flexibility to conduct the operations, training, or testing needed to sustain military readiness. Even some legislation originally enacted to protect military training ranges has inadvertently restricted the ability to conduct military missions. Legislative initiatives that seek to protect military readiness should be written with room for flexibility to avoid restricting future testing and training on military ranges and areas.

Interagency Coordination

Each of the military services uses land managed by other state and federal agencies (e.g., U.S. Forest Service [USFS], Bureau of Land Management [BLM], Bureau of Reclamation [BOR], National Park Service [NPS], U.S. Fish and Wildlife Service [USFWS], and state equivalents). The types of allowable uses and restrictions on these lands are often the result of negotiations between the party managing the land and the military.

Land used by the military is normally subject to other federal policies and regulations, such as the Endangered Species Act (ESA). These restrictions can further limit the land available for military training and operations.

2.2 Compatibility Factors

Compatibility, in relationship to military readiness, can be defined as the balance and/or compromise between community needs and

interests and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully.

There are many factors that influence whether community and military plans, programs, and activities are compatible or in conflict. In this Handbook, these factors have been divided into two types: compatibility factors and competitive factors.

Compatibility factors relate to the ability of specific land uses or activities to coexist. These can cover man-made issues such as noise, light and glare, and dust, or natural resource issues such as sensitive habitats. Competitive factors relate to finite resources that are in high demand so there is competition for their allocation and use.

Military sustainment, protection of public health and safety, and economic viability are just a few of the benefits associated with good compatibility planning. When reviewing development proposals or related applications, local governments can use this list of compatibility and competitive factors as a checklist for evaluating compatibility of the proposed use with military readiness.

It is important to understand that compatibility/competitive factors are not one-sided. Just as the military states that placement of incompatible community land uses near military areas can threaten mission capabilities and military readiness, neighboring communities also state that military activities can threaten the community's quality of life and negatively impact property values.

Man-Made Compatibility Factors

Most compatibility factors are man-made. These factors can be generated by a community and conflicting with military activities or they can be factors that are generated by the military and encroaching on nearby communities. Either way, these factors can impact military readiness or a community's viability and quality of life.

Compatible Land Use

Incompatible land uses around military installations and operations may have an impact on the military's ability to conduct its mission and sustain military readiness. Local jurisdictions' general plan and zoning ordinances can be the most effective tools in resolving issues of land use compatibility.

Community land use planning issues around military installations are similar to those around other types of land use operations. Local jurisdictions already consider incompatibility when placing residential developments near commercial or industrial areas. Military installations also have unique functions for consideration by those making community land development and zoning decisions. The DoD has compatible land use standards for airfields relative to noise and safety issues. Samples of how these standards are used by the Air Force and Navy are provided in Appendix D). Some local governments have taken these guidelines and tailored them to their needs, making them more restrictive in some cases (see Appendix D for an example from the State of Arizona).

The location of proposed schools (grades K-12) is frequently noted as a compatibility factor around many military areas. School facilities are governed by school districts and not by the community. Criteria for siting new schools is reviewed by the state, and proposed sites obtain facility siting approval from the Office of the State Architect.

In many cases, military representatives are not aware of new schools until they are built. If a school site is incompatible with military operations, mitigation of the problem after the fact can be very expensive and may force changes in military operations.

Safety Zones

Safety is also a factor that affects land use compatibility. There are several different categories or zones of safety that require some type of compatible land use restrictions. Some

examples of these safety categories or zones include: Accident Potential Zones (APZ), Clear Zones (CZ), and Explosive Safety Quantity Distance Arcs (ESQD). The types of compatible land uses within safety zones are limited. The military compatible land use standards discussed above, and provided in Appendix D, give guidance on compatible land uses relative to APZs and CZs, but do not cover ESQD.

Vertical Obstructions (Height of Structures)

The height of buildings and other structures may encroach into the navigable airspace used by military operations (aircraft approach, transitional, inner horizontal, outer horizontal and conical areas, as well as MTRs), presenting a safety hazard to both the public and military personnel and potentially impacting military readiness.

Local Housing Availability

Given personal choice to live off-base and funding realities, the military only provides on-base housing to a portion of the military personnel assigned to an installation. The remaining housing demand relies on adjacent communities to meet the needs of military personnel. Given the high cost of housing in California, and limited housing supplies in some areas, it may be difficult for military personnel to find affordable housing in neighboring communities. Also, changes in personnel assigned to an installation can impact local supplies. For instance, a large reduction may reduce prices in the market related to lower demand. The opposite occurs when increases result in short- to long-term shortages.

Infrastructure Extensions

Infrastructure plays an interesting role in compatibility. In many areas, the DoD is looking at the viability of obtaining infrastructure services from off-installation providers. For instance, an installation may look at connecting to a community's water system instead of operating an independent system of wells, storage, and treatment facilities on the installation. For this to

Compatibility Factors

work, the installation needs to work with communities, service districts, and other utility providers to ensure that adequate plans are in place to service future demand.

Another example of coordinated planning relates to roadway systems. The military and local governments can work together to plan for adequate capacity and to deal with issues such as delays at installation entrance gates.

The extension or expansion of infrastructure to the installation, or to areas near an installation, also raises the issue of growth inducement. If infrastructure is extended toward military areas, growth may be directed to these areas, causing a potential conflict with sustaining military readiness.

Anti-Terrorism Force Protection Requirements (ATEP)

Since September 11, 2001, military installations and areas have been required to meet new restrictive standards for anti-terrorism force protection. Among these new standards are new entry gate design criteria for all military installations. These new design standards have created long queues that can impact local roadways and circulation adjacent to some installations. Coordination between the local community and the military installation is necessary to work proactively to devise a solution for these situations.

Noise

The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), structures, and land use. Exterior noise can have a significant impact on human activity, health, and safety. The magnitude of the noise problem, resulting complaints, pressure to modify or suspend operations, and threats of litigation are directly related to the degree to which there are people, wildlife, and noise-sensitive land uses in the vicinity of military installations, ranges, and other military areas.

Vibration

Vibration generated from military aircraft and ground training exercises impacts buildings and other structures within adjacent communities. In some cases, vibration impacts from these exercises can occur in areas where a military presence may not be visible, such as under MTRs.

Dust

Ground and range activities can produce dust from vehicle movement and weapons training. From a community side, dust created by grading activities, agriculture, and air emissions can reduce visibility, impacting military operations.

Light and Glare

Light sources from commercial, industrial, and residential uses at night can cause excessive glare and illumination, which impacts the use of military night vision devices and air operations. Voluntary restrictions on military training at night may foster better community relations, but they pose especially critical limits on essential military testing and training. Conversely, high intensity light sources generated from a military area (such as ramp lighting) may have a negative impact on the adjacent community.

Alternative Energy Development

With natural resources becoming increasingly scarce, there is an increased need to develop alternative energy sources to meet energy needs today and in the future. Often, the location of alternative energy sources is under MTRs, SUA, or close to other military operating areas, thus impacting military readiness. Examples of conflicting energy uses include wind energy farms consisting of tall wind turbines that can obstruct the military airspace or offshore energy platforms that can impact military testing and training on off-shore ranges and operating areas.

Air Quality

As a federal agency, the military is required to conform to the Clean Air Act (CAA), which is governed in California by the California Air

Resources Board. Air quality permits are issued at a regional level by the Regional Air Quality Control Boards. Air quality issues, such as dust and exhaust generated from testing and training operations, can impact adjacent communities. When these air impacts are generated by operational, training, and testing missions in non-attainment areas, conformance with individual State Implementation Plans (SIPs) can restrict existing mission requirements or preclude the execution of new missions or the deployment and use of new weapon platforms.

Frequency Spectrum Impedance and Interference

In carrying out readiness activities, the military relies on a range of frequencies for communications and support systems. Public uses also rely on a range of frequencies to support daily life. As the use of the frequency spectrum increases (such as the rapid increase in cellular phone technology over the last decade) and as development expands near military installations and operations, the issue of frequency spectrum impedance, interference, and competition increases. Issues related to frequency spectrum competition are covered in the "Competitive Factors" section.

Key issues to consider relative to frequency spectrum impedance include the construction of buildings or other facilities that block or impede the transmission of signals from antennas, satellite dishes, or other transmission/reception devices affected by line-of-sight requirements. Some transmission/reception devices have what are called "look angles." Look angles relate to a transmission or reception source that is targeted to another device in a specific direction and angle (both horizontal and vertical). For some systems, this look angle is fixed (like a microwave relay tower), for others, such as a satellite tracking facility, the look angles will change over time.

Frequency interference is related to other transmission sources. Interference can result from a number of factors, including: new transmissions using a frequency that is near an

existing frequency, moving an antennae transmitting on a similar frequency to a closer location, increasing the power of a similar transmission signal, use of poorly adjusted transmission devices that transmit outside their assigned frequency, or production of an electromagnetic signal that interferes with a signal transmission.

When reviewing new facilities or transmission sources near a military installation, facility, or operations areas, military and local government planners should consult in order to reduce conflicts.

Public Trespassing

Military areas that are located on other federal lands or are adjacent to federal lands designated for public recreation often experience issues related to public trespassing into training ranges and other areas with safety hazards related to military operations. When trespassing occurs within these areas, military training and operations can be suspended from a few hours to several days.

Cultural Sites

Cultural sites that are located on military training areas can include sites sacred to Native Americans. Operations and training activities are not allowed on these sites. This has an impact on the military mission and training capacity.

Natural Compatibility Factors

In addition to man-made compatibility factors, natural compatibility factors also are potential sources of conflict with military readiness activities. Natural factors impacting compatibility are described below.

Water Quality

Discharge permit requirements and prohibited or restricted access to wetlands or their buffer zones can restrict existing mission training, preclude or restrict the integration of new technology and weapons systems into existing missions and training, or prevent the future growth and

Compatibility Factors

execution of new missions in amphibious, riverine, estuarine, and other salt and fresh water areas.

Threatened and Endangered Species

When development occurs on private land, natural areas that once provided valuable habitat can be diminished or lost. This can result in relatively natural areas within and under training or operational areas to become refuges to wildlife and native vegetation. The diminishing quantity and quality of habitat in a developing area increases the value of the habitat on the military lands. As development continues, regulations designed to protect threatened or endangered species can reduce the military value of an installation, range, or special use airspace by limiting the types of permissible activities in terms of composition, magnitude, or timing. Compatibility planning needs to address species protection from both a military and private development perspective to ensure the burden of protection is evenly distributed.

Marine Environments

Regulatory or permit requirements protecting marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in the marine environment.

Competitive Factors

Competition for finite resources can cause compatibility issues between local governments, the federal government, other agencies, and the military. The following is a description of some of the key finite resources that are in high demand.

Competition for Scarce Natural Resources

Pressures to gain access to valuable natural resources (such as oil, gas, minerals, water, and shoreline areas) located on military installations, within military training areas, or on public lands historically used for military testing and training can affect the ability to use this land or water for operational training or test objectives.

Competition for Land Space, Airspace, and Sea Space

The military manages or uses land, air, and sea space to accomplish testing, training, and operational missions. These resources (land, air, and sea space) must be available and of a sufficient size, cohesiveness, and quality to accommodate effective training and testing. The demands of extended operational reach, both in terms of breadth and depth, make the military installation, training area, airspace, and sea space of the region, and interconnected collaboration between the military training and test installations, more important as requirements and capabilities of weapons and command and control systems continue to improve.

The land, air, and sea spaces used by the military can be owned by the DoD, designated for DoD use by a federal or state agency, provided through easements or other agreements with public or private entities, or maintained as a historic usage right. Public and private requests to share or take over some of these resources may have a negative impact on military training and test objectives.

Competition for Frequency Spectrum Capacity

The competition for available frequency bandwidth reduces available frequency spectrum capacity for training and developmental/operational testing activities. The lack of spectrum capacity decreases the effectiveness of exercises by restricting the number or types of weapons that can participate. In addition, spectrum limitations may restrict the use of state-of-the-art instrumentation systems, resulting in less data for evaluators to use in training assessments. Limitations also may restrict the development testing of new technologies. As the potential for residential and commercial encroachment increases, so does the risk of increased Radio Frequency (RF) emitters and receivers that create electromagnetic interference (EMI) problems between military systems and public or commercial systems. For example, some low power consumer devices, such as

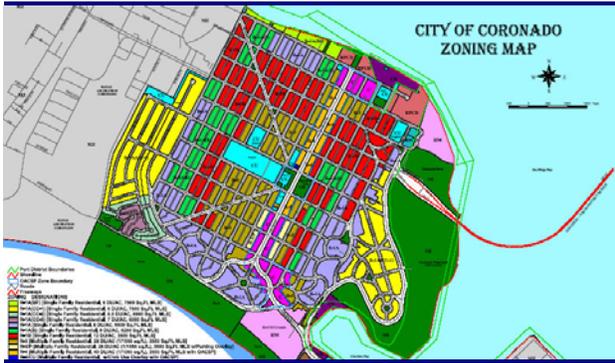
remote controls, cordless phones, garage door openers, and baby monitors, utilize frequencies assigned to the military. These low power, short range systems operate under rules set out in Part 15 of the Federal Communications Commission (FCC). Given their low power output, these are not supposed to impact, or be impacted by, other devices in the assigned frequency ranges. But, as military and community uses have come in closer proximity, conflicts sometimes occur.

Competition for Ground Transportation Capacity

With the expansion of urban development into rural areas, rural county roads are becoming major arterial roadways. These once rural roads are the main transportation corridors for transporting military equipment, munitions, material, and forces to conduct military operations and training. As traffic loads increase on these roadways, military convoys and certain load types become increasingly difficult to mix into the urbanized traffic flow.

Compatibility Factors

Please see the next page.



PLANNING PROCESS AND IMPLEMENTATION

In developing a plan to address land use compatibility and encroachment issues, it is important to have a common understanding of the planning process in general and of its implementation at the state, local, and federal levels, including the Department of Defense (DoD). This section will provide an overview of the planning process in California, describe the organization and key plans prepared at each level, and discuss implementation of the concepts described in this Handbook. Table 3-1 provides a comparison matrix of staff and plans common to local and military planning.

3.1 The Planning Process

The planning process consists of an organized decision making system that ensures that specific actions (i.e., programs, policies, codes and regulations, and legislation) are directed toward achieving agreed-upon goals and objectives. The process also can be used to modify a plan when new information becomes available or conditions change. In other words, planning is an adaptable, ongoing process.

Land use planning is a rational, sequential decision-making process that is performed through a series of well-defined steps. The information generated during each step contributes to the efforts in the next step.

The common steps used in framing a planning process are illustrated in Figure 3-1 and described below.

1 Participation. From the public planning perspective, a plan is only as good as its ability to balance the competing interests involved. Just as a complete understanding of



Figure 3-1. Steps in the Planning Process

existing conditions is vital to plan preparation, input from a full range of agencies, organizations, and interested persons is critical.

The participation process should be used to integrate input from the public, whenever appropriate. Members of the public can be involved in planning in a variety of ways. They can vote for local government officials who support their planning preferences; contact local officials about planning issues; participate in a neighborhood group; learn from and educate others in the community about planning issues; and participate in government-sponsored planning meetings, focus groups, advisory committees and public hearings.

Planning Process and Implementation

Table 3-1. Common Terminology

	Local		Military		
	County	City	Army	Navy/Marine Corps	Air Force
Location					
Primary Installation	n/a	n/a	Post	Base	Base
Staff Resources					
Administrator	County Administrative Officer (CAO)	City Manager (CM)	Garrison Commander (GC)	Commanding Officer (CO)	Wing Commander (CC)
Deputy Administrator	Varies	Deputy CM	Deputy Commander (CD)	Executive Officer (XO)	Vice Commander (CV)
Planning Management	Community Development Director	Community Development Director	Director of Public Works (DPW)	Public Works Officer (PWO)	Base Civil Engineer (BCE)
	Planning Director	Planning Director			
Planning Department	Advanced Planning	Advanced Planning	Plans and Projects	Base / Community Planner	Base / Community Planner
	Current Planning	Current Planning			
Public Information	Varies. Usually a person or persons located in the CAO's or CM's office		Public Affairs Officer (PAO)	Community Liaison	Public Affairs Officer (PAO)
Plans and Programs					
Comprehensive Plan	General Plan (includes 7 state mandated elements)	General Plan (includes 7 state mandated elements)	Installation Master Plan	Regional Shoreline Infrastructure Plan (RSIP)	General Plan
Area Plan	Master Plan	Master Plan	Master Plan	Development Plans	Area Development Plan
	Specific Plan	Specific Plan			
Noise	Noise Element	Noise Element	Operational Noise Management Plan (ONMP)	Air Installation Compatible Use Zone (AICUZ)	AICUZ
	Zoning Ordinance	Zoning Ordinance			
Safety	Safety Element	Safety Element		Range Air Installation Compatible Use Zone (RAICUZ)	
	Hazard Mitigation Plan	Hazard Mitigation Plan			
Natural Resources	Open Space Element	Open Space Element	Integrated Natural Resources Management Plan (INRMP)	INRMP	INRMP
	Conservation Element	Conservation Element			
	Habitat Conservation Plan (HCP)	HCP			
Housing	Housing Element	Housing Element	Installation Military Family Housing (MFH) Plan	Installation MFH Plan	Base MFH Plan
Capital Improvements	Capital Improvements Plan (CIP)	CIP	Military Construction (MILCON) Program	MILCON Program	CIP

Many local planning issues require a public hearing. A public hearing is open to everyone and offers the opportunity to learn about an issue and to express one's opinion about that issue. Individuals and organizations can request that their names be added to a local planning department mailing list to assure that they receive information about specific projects.

As shown on Figure 3-1, participation is not a single point in time, but an ongoing activity. This approach to participation provides:

- Identification of issues early in the planning process;
- Integration of alternative concepts;
- Opportunities to keep all parties involved and informed throughout the process; and
- Improved implementation because of participant support.

During the development and review of plans and projects, integration of military organizations and planners into the local planning process, and vice versa is a key component of successful compatibility planning. Section 3.7 goes into detail on the opportunities available for collaboration between local and military planners on a range of typical planning processes.

2 **Defining the Planning Area.** While not typically designated as a stand-alone step in a planning process, defining the planning area is an important component of collaborative land use planning.

On the local planning side, several political and jurisdictional boundaries are commonly used to define the planning environment. These are described below.

Counties

A general plan must cover a planning area defined by the local jurisdiction and address the broad range of issues associated with the jurisdiction's development (California General Plan Guidelines, 2003). For counties, the planning area is typically coterminous with the

county boundary. However, while the general plan addresses the county as a whole, the jurisdiction for land use decisions can be divided into four generalized groups: (1) unincorporated areas, (2) unincorporated areas under state or federal management, (3) Native American trust lands, and (4) incorporated areas (cities).

- **Unincorporated Areas.** Counties have the authority to make land use planning decisions for unincorporated land that does not fall into one of the other three following categories.
- **Unincorporated Lands under State or Federal Management.** Within many counties, the State of California and the federal government manage broad expanses of land. The California State Lands Commission (CSLC) and California State Department of Parks and Recreation are two agencies that manage property on behalf of the state. On the federal side, land management agencies include the Bureau of Land Management (BLM), the National Parks System (NPS), and the U.S. Forest Service (USFS). The lands managed by these state and federal entities are not subject to county land use controls.
- **Native American Trust Lands.** Lands held in trust for Native American tribes are not subject to county land use controls.
- **Incorporated Areas (Cities).** See the discussion on cities on the next page.

On a county's general plan land use diagram, unincorporated lands under state or federal management, Native American trust lands, and incorporated cities can be shown with a land use designation (such as "Public") or as an area with no designation, which is sometimes shown as white on the map to indicate that it has no county designation.

Planning Process and Implementation

Cities

Cities have their own land use planning policies, programs, and procedures (general plan, zoning ordinance, etc.) that are used for land use decisions on property within the city limits.

Outside of the city limits (including unincorporated county islands within the city), two other boundaries are important in city planning: the planning area boundary of the general plan, and the city's sphere of influence (SOI) (see Figure 3-2). These boundaries represent areas where the county and city have overlapping planning interests.

When establishing its planning area, each city should consider using its SOI as a starting point. The Local Agency Formation Commission (LAFCO) in every county adopts an SOI for each city to represent "the probable physical boundaries and service area" of that city (§56076). Although there is no direct requirement that the SOI and the planning area match, the SOI provides a convenient measure of the city's region of interest (California General Plan Guidelines, 2003).

Military

In the past, areas of interest for an installation were typically expressed in the form of noise contours and accident potential zones. These provided useful guidance on specific health and safety issues. However, as shown in Section 2, effective compatibility planning should address more than just noise and air safety.

A more useful tool for determining a military planning area is the Military Influence Area (MIA). An MIA is a geographic planning or regulatory area that can be defined jointly by local governments and neighboring military installations (refer to Tool 23 in Section 4 regarding definition). The MIA covers the areas where military operations may impact local jurisdictions and, conversely, where local activities may affect the military's ability to carry out its mission. These areas also are referred to as:

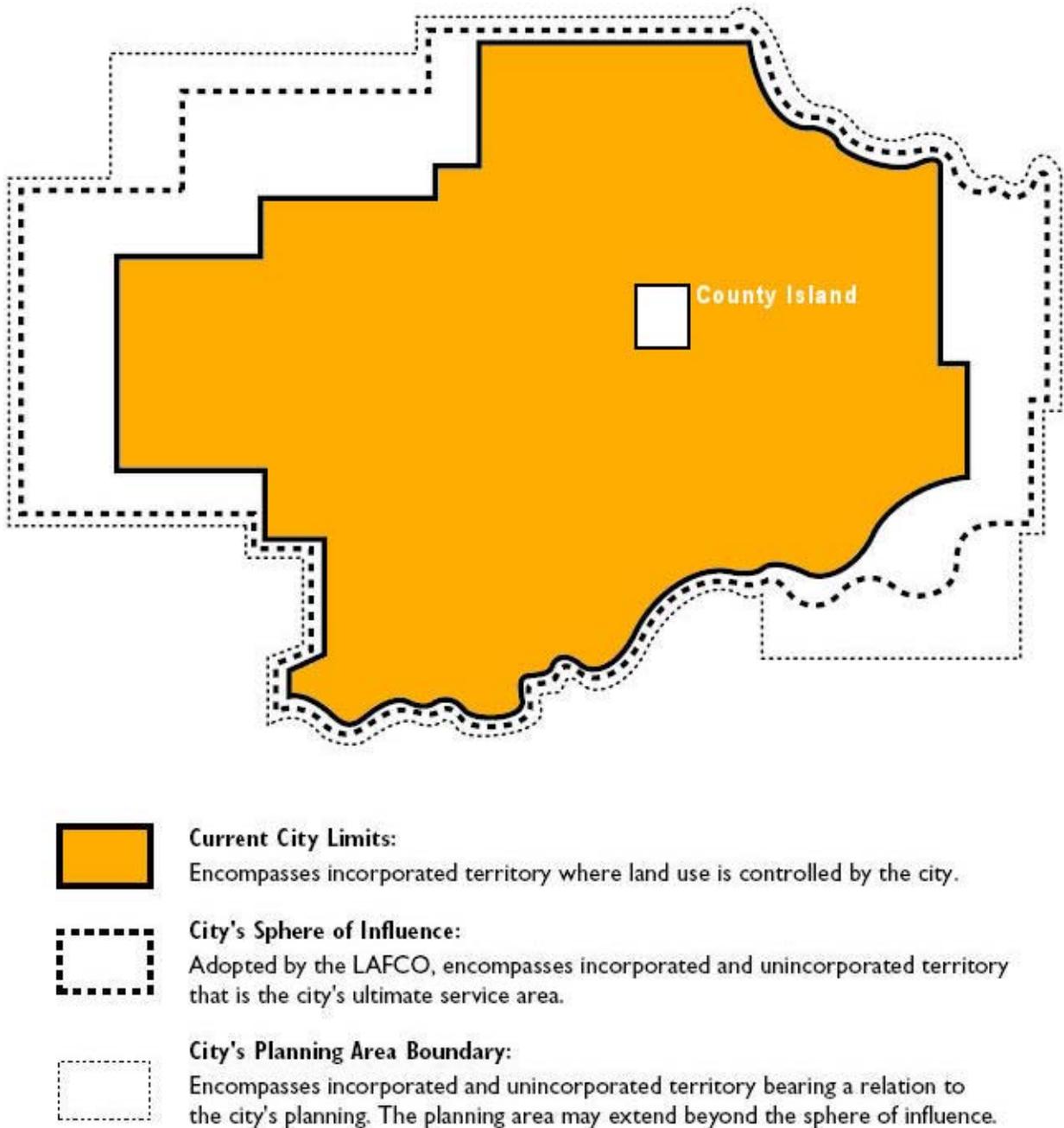
- Regions of Military Influence (RMIs)
- Military Influence Planning Districts (MIPDs)
- Military Influence Overlay Districts (MIODs)
- Military Influence Disclosure Districts (MIDDs)
- Airfield Influence Planning Districts (AIPDs)
- Areas of Critical State Concern (ACSCs)

Depending on military and local needs, an installation or military operation area can have more than one MIA. Local governments, in conjunction with neighboring military installations, can work together to determine the purpose, function, and geographic area covered by each MIA. For example, if the purpose is to enforce real estate disclosure of military activities impacting properties within the MIA, the MIA may be used to require disclosure of these activities at the time of showing, or prior to finalizing a sale or lease contract. Similarly, an MIA could be established to include such air operations as crash zones, departure and arrival tracks, transport corridors between military areas, and military training areas.

Cooperative Planning

Since some issues cannot be confined to political boundaries, California law provides for planning outside of a jurisdiction's territory. Cooperative extraterritorial planning can be used to guide the orderly and efficient extension of services and utilities; ensure the preservation of open space, agricultural, and resource conservation lands; and establish consistent standards for development in the plans of adjoining jurisdictions. Guidance on this extraterritorial planning is targeted primarily at cooperative planning between local governments.

Figure 3-2. Relationship between a City's Planning Area and Sphere of Influence (SOI)



Source: California General Plan Guidelines, 2003 (modified)

Planning Process and Implementation

In the case of compatibility planning between local governments and the military, existing guidance is more limited. For example, although the military may include land use recommendations for local actions in an Air Installation Compatible Use Zone (AICUZ) study, these actions are not mandatory and must be implemented voluntarily at the local level. Similarly, local policies and ordinances are not typically implemented or enforced within areas controlled by the military. The independent nature of jurisdictional authority presents challenges to a multi-jurisdictional planning process. However, these challenges are not insurmountable and can be overcome through a thorough understanding of each entity's unique planning processes, requirements, and a willingness to work cooperatively towards a common solution. Cities, counties, military installations, and state and federal organizations that manage lands can work together to delineate planning areas and may establish formal agreements for processing development proposals. Examples of this cooperative planning process can be found in Section 5.

3 Identification of Existing Conditions/ Issues. The objective of this step is to develop a snapshot of the conditions, trends, and regulations that are influencing the study area at the time the planning study is being prepared. Compiling this information involves reviewing existing studies and documents (e.g., existing specific plans, master plans, special studies, and environmental documents) and contacting appropriate agencies and organizations. Use of the information on existing conditions should lead to a better understanding of the issues facing the area and to the development of a plan that helps local governments and the military address their issues.

During the identification step, the organizations involved should note who is contributing to the planning process and who is missing from the

table. This is a good time to ensure that all agencies and organizations with a stake in the planning process are actively involved.

4 Evaluation. The following are the objectives of this step.

- Solicit input from agencies, organizations, and the public to clearly identify the range of issues and opportunities that exist in the study area that should be addressed by any resulting plan.
- Develop a set of alternatives that will be considered in the selection of a preferred alternative.
- Conduct necessary analyses to gain a good understanding of the trade-offs associated with each alternative. Refine the proposed alternatives as needed to address the identified issues or impacts.

5 Plan Development. In this step, the proposed plan is finalized. First, a draft plan is prepared for review and comment. This is followed by a final plan that is considered by the decision-making body. Public hearings or other public reviews are held during this step.

6 Implementation. The overall objective of the planning process is to develop a plan that can be implemented successfully and, through this implementation, achieves its stated goals.

7 Review and Revise. As illustrated on Figure 3-1, planning is a continuous process. As areas change in response to future conditions and trends, changing demographics, shifting land demands, or changes in military operations, long-range plans need to be reviewed and adjusted to maintain their relevance and effectiveness. Step 7 in the process is designed to build in this continuous feedback loop.

When local governments and the military work together on compatibility planning issues, they should periodically review the plans they produce to ensure that the agreements in place are still: 1) accurately portraying the planning

environment, 2) effective at producing the desired results, and 3) relevant to current planning needs.

3.2 State Planning Process

State of California



The Governor's Office of Planning and Research (OPR) was created by statute in 1970 (Chapter 1534) as the comprehensive statewide planning agency and the research staff for the Governor. The roles of OPR include intergovernmental relations (including the state clearinghouse function), local government planning liaison, environmental policy coordination, and research assistance for the Governor. OPR also has been assigned various other duties by statute and executive order; these are summarized below and can be found on OPR's Web site (<http://www.opr.ca.gov>). These include the responsibility to develop this planning Handbook for local governments and military installations.

The following are the major activities of OPR:

- Recommending and implementing state policies with regard to land use and growth planning;
- Carrying out policy research for the Governor and Cabinet;
- Providing technical planning advice to local governments, and state agencies and departments;
- Advising local governments, the public, and government agencies and departments on provisions of the California Environmental Quality Act (CEQA);
- Operating the State Clearinghouse to distribute environmental documents for state review and process federal grant documents; and

- Conducting other activities at the Governor's direction.

3.3 Local Planning Process

Cities and Counties – Planning Organization

The primary decision-making bodies for local governments are the city council (cities) and the board of supervisors (counties). For most jurisdictions, these elected legislative bodies are comprised of five to seven individuals, although some larger California jurisdictions have larger elected bodies. Depending on the city, city councils can be elected by districts or at-large. The mayor may be elected by a popular vote or appointed by a vote of the city council members.

Counties are usually divided into supervisorial districts, with voters in each district electing a board member to represent that district. County districts cover the entire county, including land within incorporated cities and land managed by federal agencies.

In most local governments, the city council or board of supervisors appoints one or more groups to assist in the review or approval of planning decisions. The following are some of the more common planning groups.

- The **Planning Commission** advises the city council or county board of supervisors on land use planning. It considers general plan amendments and specific plans, zone change requests, and major subdivisions. Commissioners serve at the pleasure of the council or supervisors, so commission membership changes in response to changes in those bodies.
- The **Zoning Adjustment Board** considers conditional use permits, variances, and other minor permits. Depending on the jurisdiction, this can be an administrative review panel headed by city staff, an appointed board, or these

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responsibilities can be handled by another board, such as the planning commission.

- The **Architectural Review or Design Review Board** reviews projects to ensure that they meet aesthetic standards or design guidelines established by the local government. For some jurisdiction, this function is handled by the Planning Commission or conducted as a staff function.
- Local jurisdictions will often have a variety of **advisory commissions and boards** that provide input on specific topics of interest to that jurisdiction. Common topics include historic preservation, parks and recreation, and senior services. A separate advisory committee on military compatibility issues is used by some jurisdictions as a useful way to deal with local/military compatibility issues, where they exist (see Section 3.7).

The responsibilities and approval authority of these appointed groups can vary by jurisdiction. For instance, in some jurisdictions, a planning commission can approve a tract map while in others the planning commission only makes recommendations to the city council or board of supervisors. Some types of planning decisions have state mandated approval processes. For example, general plans and general plan amendments must first be reviewed the planning commission. Their recommendation is then forwarded to the city council or board of supervisors for a final decision.

Cities and Counties – Key Plans and Programs

The following are the key plans and programs typically developed and maintained by local jurisdictions. Details on the implementation of these plans and programs as they relate to coordination between local and military planning processes are presented later in this section.

Figure 3-3 provides an overview of the hierarchy of planning decisions.

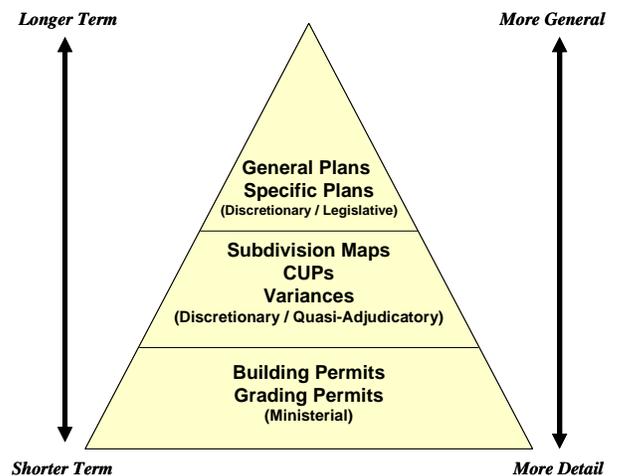


Figure 3-3. Local Planning Pyramid

- **General Plan.** Every city and county in California is required by state law to prepare and maintain a planning document called a general plan. A general plan is a long-term, comprehensive document containing a statement of development policies, including a diagram and text setting forth the objectives of the plan. General plans are designed to serve as the jurisdiction's blueprint for future decisions concerning land use, infrastructure, public services, and resource conservation. All specific plans, subdivisions, public works projects, and zoning decisions made by the city or county must be consistent with the general plan.

The state requires that general plans include seven mandated elements: land use, housing, circulation, noise, safety, open space, and conservation. The local jurisdiction may combine or repackage these seven elements as long the required topics are covered. Local jurisdictions may also include additional elements designed to address specific community issues or opportunities.

Government Code 65352(a) (State Planning Law) requires local governments to notify branches of the military when proposed general plan actions and amendments might have an impact on military facilities and operations. This notification process only applies to jurisdictions that meet one or more of the following criteria:

- located 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.
- **Specific Plan.** A specific plan implements, but is not technically a part of, the local general plan. Specific plans describe allowable land uses, identify open space, and detail infrastructure availability and financing for a specific area. In some jurisdictions, specific plans also take the place of zoning. A specific plan must be consistent with the general plan. In turn, zoning, subdivision, and public works decisions must comply with the provisions of the specific plan. Specific plans require a public hearing for approval.
- **Zoning.** The zoning ordinance (also referred to as a zoning or development code) is used to regulate the types of land use within a jurisdiction. The zoning ordinance is the principal tool used to implement the general plan. While the general plan provides broad policy direction on land use, the zoning ordinance provides the specific rules under which land can be developed and used. This includes standards for building setbacks, height restrictions, lot coverage, and design requirements.

Adoption of the zoning ordinance, zoning changes, or amendments requires review at a public hearing.

- **Subdivision Maps.** Subdivision maps control the division of property and detail the location of individual parcels/lots, road rights-of-way, and easements. The local jurisdiction will typically have a subdivision ordinance that guides the review and approval of new subdivisions based on the State's Subdivision Map Act (commencing at Government Code section 66410).

Basically, there are two types of subdivisions: parcel maps, which are limited to divisions resulting in fewer than five lots (with certain exceptions); and subdivision maps/tract maps, which create five or more lots.

- **Conditional Use Permit (CUP).** Individual use projects (such as an office building on an existing parcel) often are approved administratively by the jurisdiction's planning staff if the project complies with the general plan, zoning, and other local regulations. In some localities, a separate design review may be required.

A locality's zoning ordinance will describe land uses that require a CUP. A CUP process is used to authorize uses not routinely allowed on a particular site, or uses that require site-specific conditions because of their location or operating requirements. A CUP is subject to a public hearing. If the project is approved, the developer must meet specific conditions designed to integrate the project with its surrounding environs.

For compatibility planning with a military use, a jurisdiction could require a CUP to address specific issues of concern. For instance, a local government could

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require a CUP for uses over a certain height in areas under military flight paths.

- **Variance.** A variance is a limited waiver from the requirements of the zoning ordinance. Variance requests are subject to a public hearing and may only be granted under special circumstances. Odd shaped lots or physical constraints on a site (topography) are common reasons for justifying a variance.
- **Building and Grading Permits.** These permits are examples of ministerial actions. City or county staff issue these permits based on compliance with project conditions of approval (if applicable) and compliance with zoning and other local requirements (such as a grading ordinance). Typically, there is no formal public review prior to permit issuance, and no public hearing is required.

Where a public hearing is required, public notice must be given at least 10 days before the hearing. This can be done by advertisement in a newspaper of general circulation or by direct mail to the owners of property located within 300 feet of the proposed project's boundaries. General plan adoptions or updates require a minimum of two public hearings.

In addition to these plans and programs, another key aspect of project review in California is compliance with the California Environmental Quality Act (CEQA). The CEQA environmental evaluation provides information to a public agency as it considers whether to move forward with a project. The CEQA process begins after a project is proposed and must be completed before a project can be approved.

CEQA was enacted in 1970 to protect the environment by requiring public agencies to analyze and disclose the potential environmental impacts of proposed land use decisions. CEQA is modeled after the federal National Environmental Policy Act (NEPA), which was passed in 1969.

The CEQA process is focused on public disclosure and input.

- It discloses to decision makers and the public the significant environmental effects of proposed projects.
- The act requires public agencies to consider the environmental effects of their permitting decisions prior to approval and in a public forum.
- Ways to avoid or reduce environmental damage are identified by the CEQA.
- Through the CEQA the public is informed of the reasons agencies approve projects that will have significant environmental effects.
- Public participation is facilitated in the CEQA planning process.

CEQA establishes the types of projects subject to review, along with a set of exemptions and exclusions. CEQA applies to both private and public (state agencies, cities, counties, and other local agencies and districts) projects.

For any project subject to CEQA, the agency that has the authority to approve the project (the Lead Agency) must do a brief analysis of the environmental impact of the project (an Initial Study). If this analysis reveals that the project will have no significant environmental impacts, then the Lead Agency can prepare a Negative Declaration. If the Initial Study reveals that the project may have significant environmental impacts, and all these impacts can be mitigated to a less than significant level, a Mitigated Negative Declaration can be prepared. If significant impacts can not be mitigated, the Lead Agency must issue a Notice of Preparation (NOP) and prepare an Environmental Impact Report (EIR). The EIR is a comprehensive analysis that includes a thorough discussion of environmental impacts, alternatives, and ways to mitigate the impacts.

Public Resources Code 21098 requires that local jurisdictions provide copies of CEQA documents to the military when projects are within the boundaries of a low-level flight path, military impact zone, or special use airspace and if the project includes a general plan amendment; the

project is of statewide, regional, or areawide significance; or the project is required to be referred to the airport land use commission or appropriately designated body, as defined in the Code. Based on this notice, the military can be involved early in the CEQA process by commenting on the negative declaration, mitigated negative declaration, or NOP. Each of these items has a mandated 30 day public review period. The NOP describes the project and lays out the Lead Agency's approach to the analysis that will be conducted in the EIR. This is an excellent time to express concerns that should be evaluated further in the EIR. Comments also can be made during the public review period for the draft EIR, which typically ranges from 30 to 45 days.

3.4 Private Development

For private developers, the planning process is similar to the planning steps illustrated on Figure 3-1. The major difference is that the steps tend to be internalized within the developer's planning team during plan development. Typically, a developer will consult with the local government planner to obtain a better understanding of local regulations and obtain preliminary feedback on the ideas being considered. Developers may also begin conducting their own coordination with stakeholders and those potentially impacted by the proposed development. If a military installation or operations area is determined to be a potentially affected party, developers may choose to include military representatives early in the planning process. The early identification of potential conflicts is mutually beneficial as concerns can be addressed prior to formal submittal to the jurisdiction optimizing the time and resources of the developer.

A pre-application meeting is common for most major development proposals. During this meeting, developers can review their initial plans with representatives from the local planning and public works departments. Other affected

departments should also attend. Generally, this occurs during the preparation of a concept plan that articulates the developer's vision for the site, preliminary infrastructure concepts, amenities, character of the project, and functional relationships among the proposed land uses.

From this point, an application package can be submitted to the city or county based on the pre-application feedback. State law (SB 1462) requires that the applicant identifies as part of the application when the proposed project is located: (1) within 1,000 feet of a military installation, (2) beneath a low-level flight path, or (3) within special use airspace (SUA).

City or county staff will review the submittal to determine whether the application package is complete. When deemed complete, the local jurisdiction is required to notify the appropriate military branch(es) of the proposed development. Certain application types, such as subdivisions, have mandated review time frames. Before the development proposal can be approved, local planners must ensure that appropriate CEQA review and public hearings are completed.

3.5 Military Planning Process

The military planning process establishes a systematic framework for decision makers with regard to military installations. The process incorporates military programs, such as operations, environmental, urban planning, and others, to identify and assess development alternatives and ensure compliance with applicable federal, state, and local laws, regulations, and policies.

The military planning process incorporates a wide range of data and information that allows commanders to logically and thoroughly analyze various factors before making a decision that affects the installation or the surrounding community. The process generally involves most installation agencies, users and providers of services, base residents, and mission leaders and staffs. The process consolidates plans and

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programs related to the management and development of military lands, facilities, and resources into a management plan to guide future growth and development. It encompasses all land areas under DoD control and surrounding regions of influence, as well as the current and projected capability of local governments to provide services to the military base and personnel. The process includes an analysis of the current, short-range, and long-range development potential of the installation.

The military community is both similar to and different from a comparably sized civilian community. The similarities arise from the broad range of activities that take place at the military installation. Office, commercial, service, industrial, and recreational land uses on military installations are all analogous to the same land uses in a small town. Military installations, particularly those in remote rural areas, can be viewed as self-contained communities that meet all of their inhabitants' day-to-day needs. In this regard, some of the goals of a base comprehensive plan are similar to the goals used by a community: to allocate resources efficiently, protect the natural environment, and enhance the quality of life for the men, women, and children who live and work in the community.

Despite these similarities, the military community differs from the civilian community in one essential aspect. The military community owes its existence to, and is united around, one central purpose: to carry out the mission of the installation. Therefore, military communities are physically and socially more homogeneous than the typical civilian community. Military planners must take into account these unique social characteristics in the development of comprehensive plans for military installations.

In this Handbook, discussions of the military services are ordered by the year they were established: Army (1784), Marine Corps (established 1775 and re-established 1798), Navy (1798), and Air Force (1947).

Army – Planning Organization



At the Army installation level, the Garrison Commander is the primary agent responsible for directing, influencing, and addressing present challenges and implementing future change. The Garrison Commander and staff must create and maintain a vision and a blueprint plan that enables the installation to respond to future Army missions and provide a good quality of life on the post, while providing and maintaining the capability to train, protect, sustain, and support today's force. The Garrison Commander's instrument for unifying planning and programming for installation real property management, development, and associated services is the installation master planning process. Assisting the Garrison Commander in planning decisions is the Real Property Planning Board (RPPB). This board comprises members of the command, operational, engineering, planning, and tenant interests of the installation.

The Garrison Commander receives assistance with real property planning from several entities. The U.S. Army Corps of Engineers (USACE) provides planning assistance to installations. This assistance is provided on a national level (such as the development and publication of technical guidance manuals) and on a regional level through USACE districts. In California, the USACE has district offices in Los Angeles, Sacramento, and San Francisco.

Development and implementation of the installation's master plan is under the direction of the installation's Director of Public Works (DPW) and staff in the Plans and Projects group. The installation's Master Planner coordinates with on-post personnel and adjacent communities.

Army – Key Plans and Programs

The following are the key plans and programs typically developed and maintained by Army installations.

- **Installation Master Plan.** The Installation Master Plan is a long-range plan designed to guide physical growth and future land use changes at the installation. This plan is composed of at least three interdependent elements: a Land Use Plan, a Circulation Plan, and a Utility Service Plan. Other long-range plans also may be prepared for special topics, such as wildlife management or historic preservation. The Installation Master Plan also contains an Existing Conditions Map, a Tabulation of Existing and Required Facilities (TERF), a Future Development Plan Map, and a Phasing Map.
- **Army Compatible Use Buffer (ACUB).** ACUBs are defined as formal agreements between the U.S. Army and eligible entities for the acquisition by the entities of land, or interest in land, and/or water rights, from willing sellers. This program allows partnerships between the military and state, county, or municipal governments, as well as non-profit organizations, to use federal funds to purchase tracts of land or easements on lands that surround installations.
- **Operational Noise Management Program (ONMP).** The Army's ONMP, which incorporates and replaces the Installation Compatible Use Zone Program (ICUZ), is intended to promote compatible land use planning through the incorporation of Land Use Planning Zones (LUPZs), based on noise levels, into military and civilian plans.

Navy and Marine Corps – Planning Organization



Both the Marine Corps and the United States Navy fall under the umbrella of the Department of the Navy. While organizationally separate forces, the two services work closely together and share several key planning resources.



For the Navy, planning administration is divided between shore-based facilities and fleet activities. For the Marine Corps, planning is focused on shore-based facilities.

The Naval Facilities Engineering Command (NAVFAC) manages the planning, design, and construction of shore facilities for Navy and Marine Corps activities around the world. NAVFAC provides technical support and direction on the preparation and content of planning documents, such as the Regional Shoreline Infrastructure Plan (RSIP). The NAVFAC Web site provides technical manuals on the preparation of Navy and Marine Corps planning documents. They also provide installations with technical support on installation planning and housing. Planning resources provided by NAVFAC can be accessed at the following Web address:

<http://www.navfac.navy.mil>

Development and implementation of an installation's land use plans falls under the direction of the Public Works Officer (PWO). For coordination with on-base personnel and adjacent communities, the installation's Community Planner is typically the focal point.

Navy and Marine Corps – Key Plans and Programs

The following are the key plans and programs typically developed and maintained by Navy and Marine Corps installations.

- **RSIP.** A RSIP is the Navy's version of a general or master plan and is an

implementation tool used by the Navy and Marine Corps to evaluate mission requirements on a regional level. RSIPs are facilities-based plans designed to ensure that the shore infrastructure is in alignment with the force structure. The RSIPs also assesses existing environmental and man-made constraints, such as a community's ability to provide housing. In addition to the RSIP program, some Marine Corps installations also utilize a master plan for their facilities.

- **Air Installation Compatible Use Zone (AICUZ).** The primary purpose of the AICUZ program is to promote compatible land use through participation in local, regional, state, and federal land use planning and coordination processes. Compatibility guidance is based on air operation safety zones and noise contours.
- **Encroachment Action Plan (EAP).** An EAP is a document that captures the results of the identification, quantification, and possible mitigation actions for existing and potential land use compatibility challenges for a Navy installation, range, airspace, or training area. This is primarily an internal document used by the Navy in its planning process. EAPs are developed by working with local community planners as the Navy gathers information on proposed plans and projects.
- **Encroachment Control Plan (ECP).** An ECP includes an analysis of a Marine Corps installation's current and future encroachment situation, and an action plan presenting control strategies and actions for reducing the encroachment threat to installation missions.
- **Range Air Installations Compatible Use Zone (RAICUZ) and Range Compatible Use Zone (RCUZ) Programs.** The RAICUZ program

addresses the noise and safety impacts from aerial firing ranges. The program applies to all Navy and Marine Corps air-to-ground range installations within the confines of the United States, its territories, trusts, and possessions. This program is similar to the Navy and Marine Corps AICUZ programs and the Army's ONMP. The RCUZ program is a program used by the Marine Corps to address noise and safety issues from ground-based range activities.

Air Force – Planning Organization



Ultimate responsibility for base development rests with the Installation Commander. To make development decisions, the commander depends on input from the Base Facilities Board, which is typically made up of the base leadership. Another source of information is the installation's Environmental Protection Committee (EPC).

Development and implementation of the installation's land use plans (including general plan and area development plans) are under the direction of the Base Civil Engineer (BCE) and staff in the Civil Engineering flight. The installation's Community Planner is typically the key person involved with on-base personnel and adjacent local governments relative to land use planning.

Support for installation-level planning efforts is provided by several organizations in the Air Force structure. A planner at command level supports each installation. For example, planning support for Edwards Air Force Base (AFB) is provided by the command planner at Air Force Materiel Command (AFMC), and the Air Mobility Command (AMC) command planner supports planning efforts at Travis AFB.

Headquarters Air Force and the Air Force Center for Environmental Excellence (AFCEE) provide technical support and guidance on a wide range of planning issues. AFCEE provides technical

support and guidance on comprehensive planning, AICUZ compliance, and housing issues. Planning resources provided by AFCEE can be accessed at the following Web address.

<http://www.afcee.brooks.af.mil/>

Air Force – Key Plans and Programs

The following key plans and programs typically are developed and maintained by Air Force installations.

- **Commander’s Summary.** The Commander’s Summary is usually updated concurrently with the installation’s general plan, and provides an overview of the installation’s vision for the future and the goals, objectives, and programs that will be used to achieve this vision. It also provides insight into physical and natural constraints, future land use and infrastructure plans, and planned projects.
- **General Plan.** The general plan is the document that provides the installation commander and other decision makers with a condensed picture of an installation’s ability to support the mission, given its current physical assets and delivery systems. The general plan provides a summary of four component plans: Constraints and Opportunities, Infrastructure, Land Use and Transportation, and Capital Improvements Program. In addition, the general plan will summarize other special plans and studies, such as the installation’s AICUZ study, the INRMP, and the Housing Community Plans.
- **Area Development Plan (ADP).** An ADP examines a specific area on base that is unified by its function or by its architectural character and provides a detailed plan for future development in that area.

- **AICUZ.** The primary purpose of the AICUZ program is to promote compatible land use through participation in local, regional, state, and federal land use planning and coordination processes. Compatibility guidance is based on air operation safety zones and noise contours.
- **Integrated Natural Resources Management Plan (INRMP).** This plan is based on ecosystem management and describes and delineates the natural resources and land use activities affecting land management and use. The plan defines the natural resource elements and the activities required to implement the base’s stated goals and objectives for those resources.

3.6 Federal and State Land Management Agencies

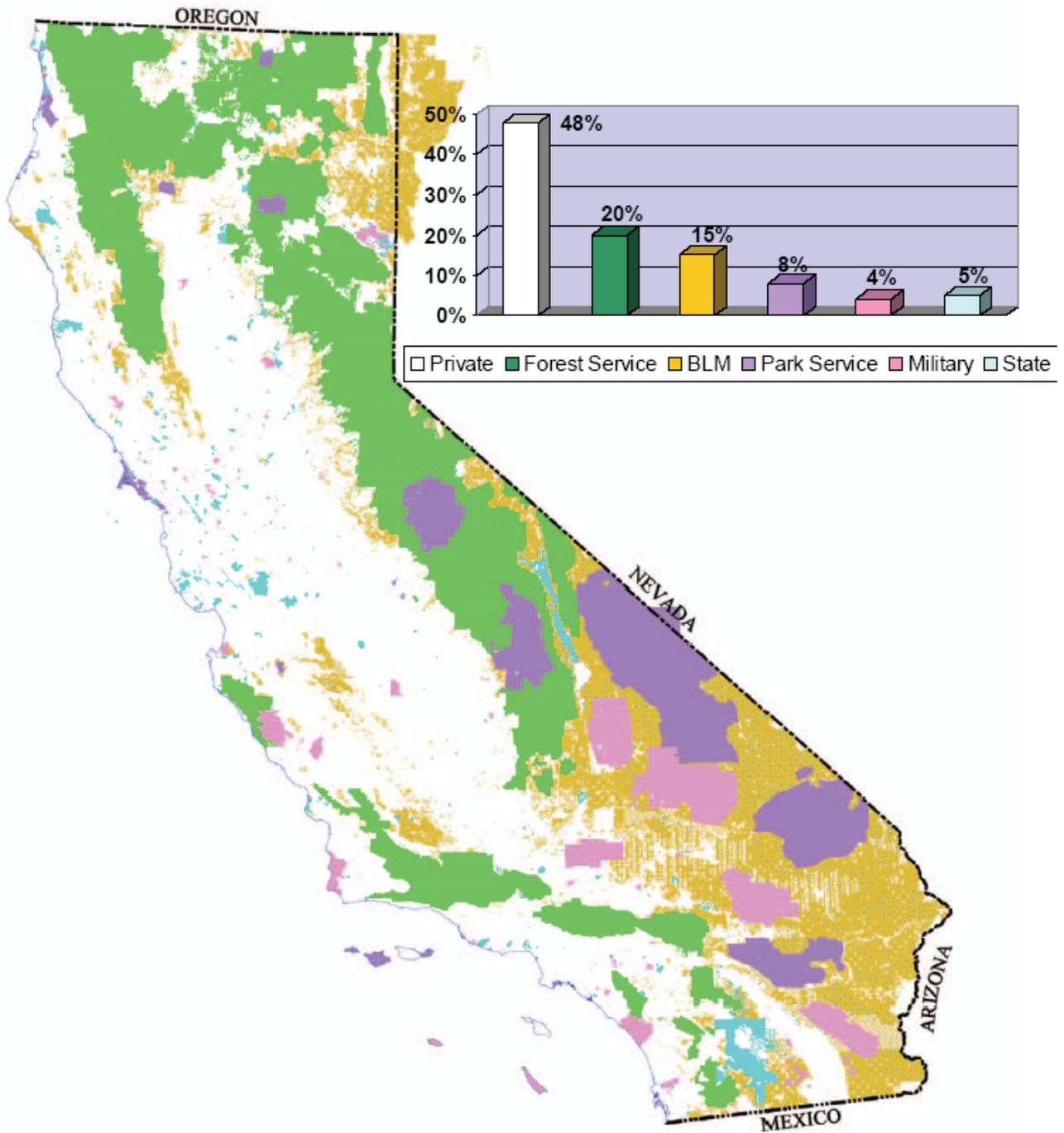
Federal and state agencies manage a wide range of lands within California. To successfully manage these lands, each agency prepares, maintains, and implements plans that describe the utilization and preservation of the land and its resources.

Military installations and operation areas often are adjacent to, or use, lands and airspace within areas managed by these agencies. The management plans of State and federal agencies and the implications they have on military operations are important components in the overall picture of military compatibility planning.

Several agencies have land management responsibilities in California, but the primary land managing agencies are the United States Forest Service (USFS), the Bureau of Land Management (BLM), the National Park Service (NPS), the California State Lands Commission (CSLC), the California State Department of Parks and Recreation. The areas in the state currently managed by these agencies are shown on Figure 3-4.

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Figure 3-4. Public Land Management Areas in California



Source: California Public Lands, BLM, 2005

United States Forest Service. The USFS is an agency of the US Department of Agriculture, and it is charged with managing public lands in national forests and grasslands. According to the USFS Web site, the mission of the USFS is “to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.”



The USFS is organized into 10 regions covering the United States. Region 5, the Pacific Southwest Region, is made up of lands within California and Hawaii. In California, the USFS currently manages lands in 21 national forests covering almost 21 million acres. California also contains one national grassland area.

<http://www.fs.fed.us/>

Bureau of Land Management. The BLM is a bureau within the US Department of the Interior. Its mission is to “...sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.” According to the BLM, they currently manage over 15 million acres of public lands in California. This equates to about 15 percent of the state’s land area.



A summary of existing BLM plans in California includes:

- 12 Management Framework Plans (4.5 million acres);
- 9 Resource Management Plans (12.5 million acres);
- 15 Land Use Plan Updates (14.8 million acres);
- 13.3 million acres of non-federal lands under cooperative HCPs; and
- 5 National Monument/National Conservation Area Plans (700,000 acres).

<http://www.blm.gov/planning/>

National Park Service. The mission of the NPS is to preserve “unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations.” In California, the NPS manages 26 park sites, which include national parks, national monuments, national recreation areas, national seashores, and national historic parks. The largest land areas are within the seven national parks (Channel Islands, Death Valley, Joshua Tree, Lassen Volcanic, Redwood, Sequoia and Kings Canyon, and Yosemite) and the Mojave National Reserve.



<http://planning.nps.gov/>

California State Lands Commission.



According to its Web site, “The CSLC is responsible for the management and protection of important natural and cultural resources on certain public lands within the state and the public’s rights to access these lands”. The public lands under the Commission’s jurisdiction are of two distinct types—sovereign and school lands. Sovereign lands encompass approximately 4 million acres. These lands include the beds of California’s naturally navigable rivers, lakes and streams. It also includes the State’s tide and submerged lands along the California’s more than 1,100 miles of coastline, extending from the shoreline out to three miles offshore. School lands are what remain of the nearly 5.5 million acres throughout the state that were originally granted to California by Congress in 1853 to benefit public education. The state retains surface and mineral ownership of approximately 473,000 acres of these lands and retains the mineral rights to an additional 790,000 acres.”

<http://www.slc.ca.gov/>

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California State Department of Parks and Recreation (State Parks).



California State Parks is responsible for 280 miles, almost one-third, of California's coastline, and manages an area of nearly 1.4 million acres contained within 270 park facilities. The state parks are managed using the Strategic Plan 2001. In addition, there are general plans for each facility, 27 of which are currently in preparation.

<http://www.parks.ca.gov/>

3.7 Other State Planning Agencies

While there are a number of State agencies involved in aspects of compatibility planning, this section highlights a few key agencies: the California Coastal Commission, and the California Department of Transportation (Caltrans).

California Coastal Commission / San Francisco Bay Conservation and Development Commission (BCDC).



The California Coastal Act of 1976 (Public Resources Code §30000, et seq.) was enacted to "protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources" (Public Resources Code §30001.5). The Coastal Act applies to the coastal zone, a strip along the California coast generally "extending seaward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea" (Public Resources Code §30103). The actual coastal zone boundary is delineated on a set of maps adopted by the Legislature and located at the Coastal Commission's San Francisco office.

The Coastal Commission regulates development within portions of the coastal zone and oversees coastal planning efforts along the entire coast.

The Coastal Act's policies (Public Resources Code §30200, et seq. and §30702, et seq.) are implemented through cooperative action between the Commission and local governments. A central feature of this joint action is the local coastal program (LCP). The Coastal Commission certifies the adequacy of Local Coastal Programs, which include relevant portions of local general plans for jurisdictions in the coastal zone. With certain exceptions, development within the coastal zone is subject to a coastal development permit issued either by a local government pursuant to a certified LCP or, where no certified LCP exists, by the Coastal Commission. A city or county that lacks a certified LCP surrenders a good deal of planning authority within the coastal zone.

<http://www.coastal.ca.gov/>

The coastal zone excludes the jurisdiction area of the San Francisco BCDC. BCDC performs activities that are similar to those of the Coastal Commission for areas within its jurisdiction.

<http://www.bcdc.ca.gov/>

California Department of Transportation (Caltrans).



As owner/operator of the State Highway System, the mission and vision of Caltrans is to improve mobility across California. Caltrans is charged by federal and State statute to undertake a continuous statewide planning process, which includes considering access to military installations and operation areas. Coordinating State and local transportation planning is a key to the success of a local agency's general plan circulation element, and it reflects the vital integration of transportation and land use. Caltrans also assists in compatibility planning with aviation resources. The *Airport Land Use Planning Handbook*, prepared by the Caltrans Division of Aeronautics in 2002, supports implementation of the State Aeronautics Act (California Public Utilities Code, Section 21670 et seq.), which established statewide requirements for the conduct of airport land use compatibility planning. In addition, it serves as the primary source of

information regarding compatibility plans. It can be downloaded at:

<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>

<http://www.dot.ca.gov>

3.8 Regional Planning Agencies

Within California, there are a number of regional organizations that provide planning support to local governments. Two key types of organizations are councils of government (COG) and county airport land use commissions (ALUC) or similar entity. These two regional planning organization types are described in the following paragraphs. Other regional organizations that can help in compatibility planning are listed in Appendix C.

Councils of Governments (COG). California's 25 COGs are regional planning agencies comprised of member counties and cities in a given region working together to address regional issues in areas such as land use, housing, environmental quality, and economic development.. COGs do not directly regulate land use. Elected officials from each of the cities and counties belonging to the COG make up its governing board. A listing of COGs in California is provided in Appendix C.

Airport Land Use Compatibility Planning. An Airport Land Use Compatibility Plan (ALUCP) is "a plan, usually adopted by a County Airport Land Use Commission (ALUC) or other entity established to accomplish land use compatibility planning, which sets forth policies for promoting compatibility between airports and the land uses which surround them." (*California Airport Land Use Planning Handbook*, January 2002).

The state law governing creation of ALUCs applies to every county in California having a public airport. The statute also includes provisions for a county to avoid having an ALUC if they establish an alternative method of accomplishing airport

land use compatibility planning. For the purposes of this document, ALUC refers to both officially designated ALUCs and alternative entities designated to perform such functions.

3.9 Collaboration - "Bringing It All Together"

Collaboration is the foundation for the implementation of a successful compatibility program. Collaboration allows for shared leadership, vision, informed decision making, ownership, and responsibility. It also allows participants to discover new solutions.

Many factors support this foundation for successful implementation. These include:

- Buy-in from stakeholders;
- Support from decision makers at all levels;
- Sufficient staffing / manpower resources;
- Sufficient funding resources;
- Realistic time schedule; and
- A workable and collaborative process.

Collaboration should be a constant factor throughout a given process, from the development through the implementation of a plan.

When a local government and military installation agree to work together, it is helpful for each entity to have some knowledge and understanding of the following issues:

- The **land use compatibility factors** that may impact communities and/or military activities (refer to Section 2);
- The types of **planning implementation strategies and tools** available to help prevent or mitigate the impact relative to the compatibility factor(s) (refer to Section 4); and
- The different types of **local government and military planning processes** that may be used to provide collaboration

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opportunities (as described later in this section).

The rest of this section describes, in a general way, how counties, cities, land owners, and the military can collaborate to address land use compatibility issues and factors. These processes represent only a sample of common local and military planning practices that may address compatible land use issues affecting military activities. These processes illustrate the avenues for active collaboration.

The following text and figures provide an overview of the current and long-range planning process for both local governments and the military.

Local Planning Processes

The following local government planning processes provide opportunities for collaboration with the military:

- Development Approvals
- Rezoning Approvals
- Variance and Use Permit Approvals

The steps to implementing local planning processes vary somewhat by jurisdiction. Those presented in this section are representative of typical city and county planning processes.

Development Approval Process

In the development approval process, a property owner or developer seeks approval for the development of land. The landowner or developer submits a development application for review and approval by the local government. Authorized officials of the local government are responsible for reviewing site plans, maps, and other documentation for a proposed development to determine its compliance with the local government's codes and plans. Developments near military installations or activities may have unintended negative impacts on military readiness. The opportunities for the military to actively participate in this process and provide valuable input into the decision making process

are illustrated in the Sample Development Approval Process flowchart, Figure 3-5.

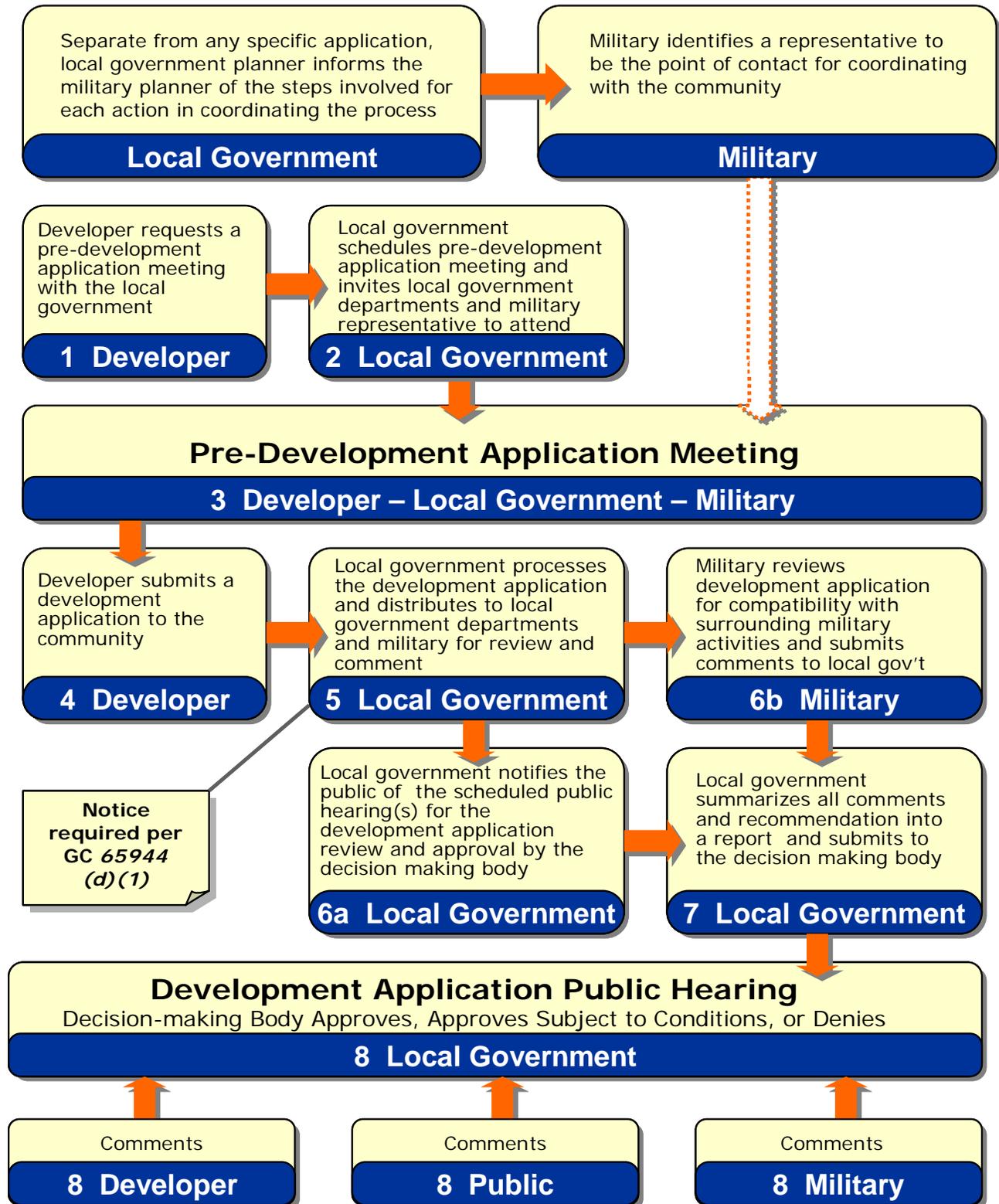
The general steps involved in processing a development request are described below.

- Before submitting a development application for approval, the property owner/developer may request a pre-application meeting with the local government to identify any issues that may affect the approval of the proposed development.
- The property owner/developer submits a development application to the local jurisdiction.
- The local government distributes the application to applicable departments within the organization and other agencies, including the military as required by SB 1462 (Government Code 65944(d)), for review and comment.

The local government is responsible for publishing/posting a public notice of any required public hearing. This notice will describe the proposed project and state the date, time, and location for the public hearing.

- Usually, two public hearings are held (i.e., a planning commission hearing and a city council or board of supervisors hearing) to discuss the development application.
- For items such as general plan amendments, the city council or board of supervisors must be the final approval. Depending on the local jurisdiction's practices, some development applications can be approved by the Planning Commission.

Figure 3-5. Sample Development Approval Process



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Rezoning Request Process

In general, in the rezoning request process, an owner of a piece of property requests an amendment to the map and/or text of a zoning ordinance to change the nature, density, or intensity of uses allowed in a zoning district and/or on a designated parcel.

The following are examples of different types of rezoning requests:

- Requests initiated by a city or county;
- Applicant requests to delete or modify stipulations imposed by the zoning ordinance; or
- Applicant requests to change a type of zoning district to another one that allows for a different use on a parcel of land.

The usual steps involved in processing a rezoning request are illustrated in the Sample Approval Process for Rezoning, Variance, and CUP flowchart on Figure 3-6 and described below:

- The property owner completes and submits a rezoning request application to the local government.
- The local government is responsible for publishing/posting a public notice of any required public hearing. This notice will describe the request and state the date, time, and location for the public hearing.
- The property owner is usually required to notify, via first class letter, all of those who are within a certain distance of the parcel(s) in question.
- A public hearing is held for the rezoning request.
- The planning commission or rezoning officer makes a final recommendation.
- The final recommendation is scheduled for a hearing with the city council or board of supervisors' for approval. Two readings of the change are required.

Rezoning requests could have compatibility impacts on military activities and/or the

community if incompatible land uses are proposed. Input from the military on current and future military operations in the vicinity of a rezoning proposal can make the local government aware of adverse impacts on the military mission.

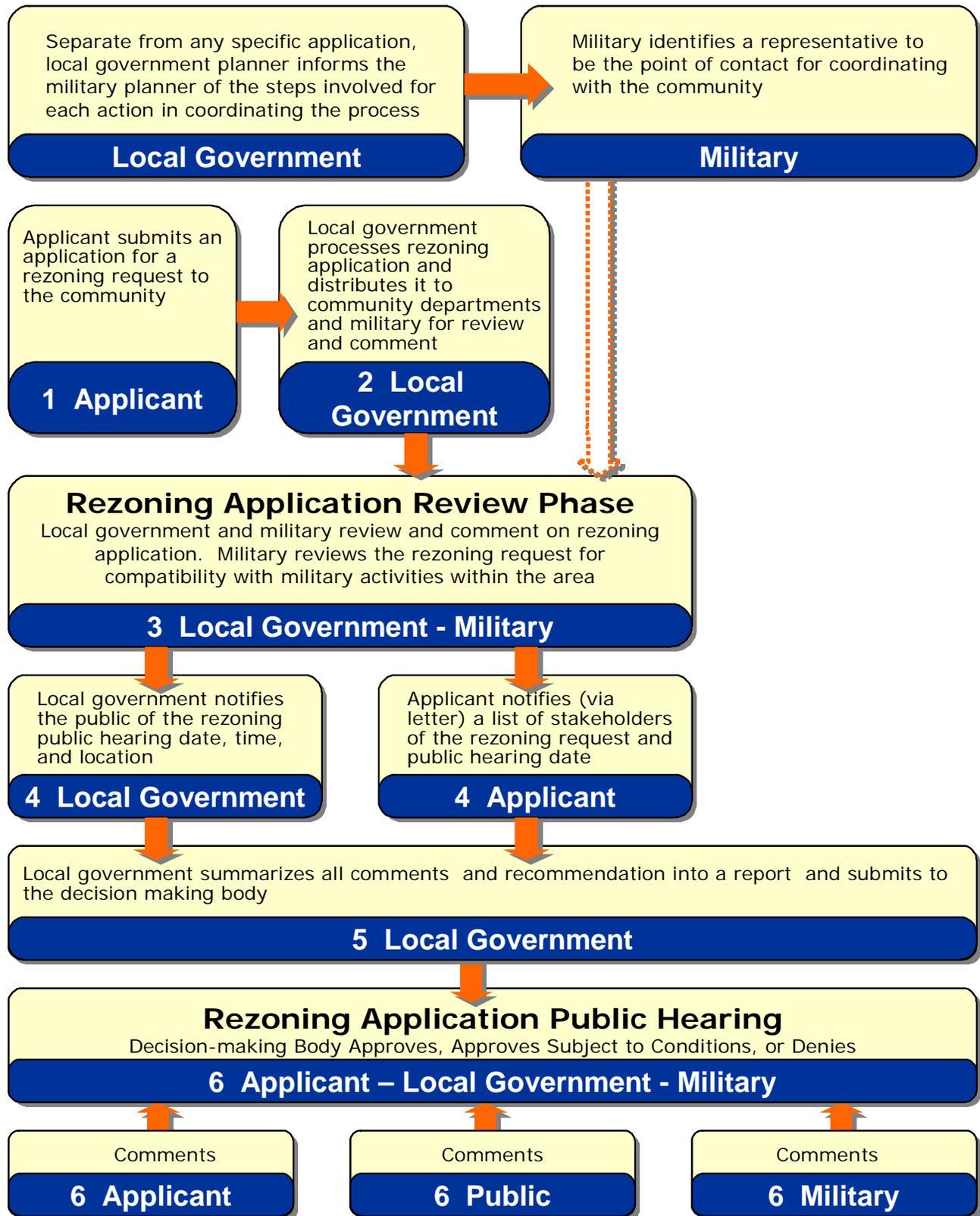
Variance Process

A variance is a request to allow a deviation from a development standard(s) required by the zoning ordinance. There are two different types of zoning variances: area variances and use variances. An area variance allows a deviation from the dimensional (i.e., height, bulk, yards) requirements of the ordinance. A use variance authorizes the property owner to establish a use of land that is otherwise prohibited in that zoning district. Use variances are not allowed in California.

Most variances require substantial proof of unnecessary hardship for approval. In many cases, local governments require that four conditions exist on the subject property for a variance to be approved. It is the burden of the applicant to prove his or her case. The following are the four conditions.

- Special circumstances or conditions apply to the land, building, or use of the subject property that do not apply to other similar properties in the same zoning district. (Special circumstances or conditions would include, for example, an unusual lot size, shape, or topography.) This condition is considered a property hardship and it must be a condition relating to the property that is so unique that it cannot be replicated on any other similarly zoned land in a jurisdiction.
- The applicant, owner, or any previous owner of the property did not create the special circumstances or conditions described above. The property hardship cannot be self-imposed.

Figure 3-6. Sample Approval Process for Rezoning, Variance, and CUP



Note: * This sample process used rezoning as the example

Planning Process and Implementation

- The authorization of a variance is necessary for the owner or applicant to enjoy reasonable and substantial property rights. (In other words, unless a variance is granted, the property cannot be used reasonably.) There is no cause for a variance if the property can be used, even if the use is other than the use desired by the owner or applicant).
- The authorization of a variance will not be materially detrimental to persons residing or working in the vicinity, to the adjacent property, to the neighborhood, or to the public welfare in general.

A decision made in response to a variance request may have an adverse impact on military activities. To prevent this situation, collaboration with, and participation by, the military in a variance approval process (where the variance may impact the installation or its use) is suggested. A typical variance process is illustrated in Figure 3-6.

Conditional Use Permit Approval Process

A conditional use permit (CUP) is a request to allow a use on a property that is conditionally permitted by the zoning ordinance. These uses require project-specific conditions to avoid adverse impacts.

Most CUP approvals require that two conditions exist to rule favorably on a use permit request. The burden of proof is with the applicant and the granting of a use permit is usually at the zoning administrator's or planning commission's discretion. The two conditions are as follows.

- The use will not cause an adverse impact on adjacent property or properties in the area. Adverse impacts would include, for example: a significant increase in vehicular or pedestrian traffic in adjacent residential areas; emission of odor, dust, gas, noise, vibration, smoke, heat, or glare at a level exceeding ambient conditions; contribution in a measurable way to the deterioration of the area or

contribution to the lowering of property values.

- The use will be in compliance with all applicable provisions of the zoning ordinance.

A formal hearing is generally held before the zoning administrator or planning commission. Approvals will include conditions that must be met by the applicant. These conditions usually cover issues related to initial development and operations. A typical CUP process is illustrated in Figure 3-6.

Appeals Process

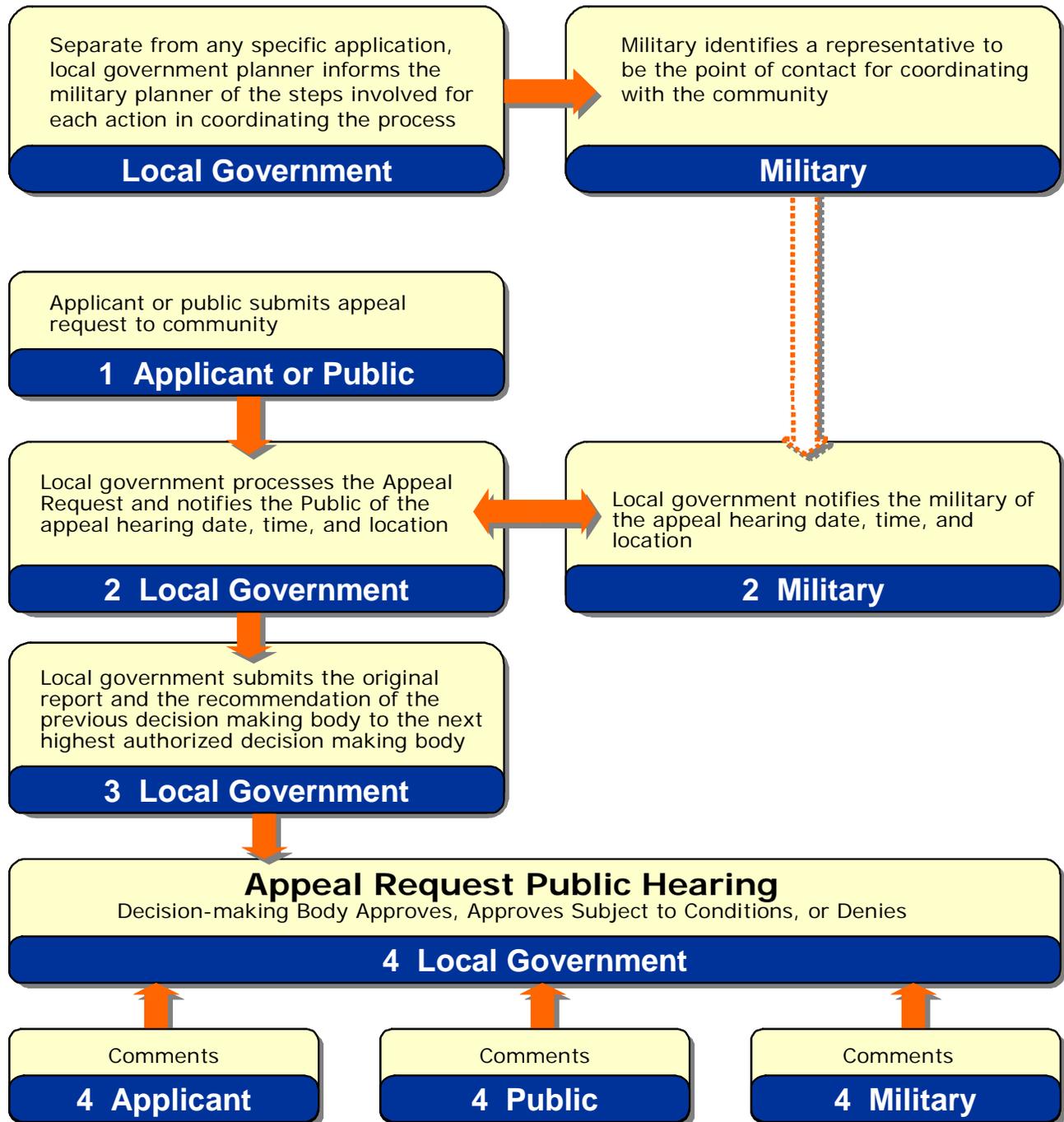
The property owner, the military, or the general public may appeal most local planning decisions, including a rezoning, variance, or use permit. The appeal probably would be heard by the planning commission, if the zoning hearing officer was the last to hear the case, or the city council/board of supervisors, if the planning commission or zoning board was the last to hear the case. A planning commission decision may be appealed to the city council/board of supervisors using the same process already described. Decisions of the city council/board of supervisors are final.

Figure 3-7, the Sample Appeals Process for Rezoning, Variance, or CUP, illustrates the general steps involved in an appeals process and identifies the steps through which the military can continue to participate in a rezoning process if the case is appealed. In some cases, the military may decide to be the entity that initiates the appeal request.

Local Comprehensive Planning Processes

As shown in Figure 3-3, the foundation for the planning processes described above lies in the comprehensive plans adopted by local jurisdictions. The following three common comprehensive planning processes may be used to address compatibility between communities and military activities:

Figure 3-7. Sample Appeals Process for Rezoning, Variance, or CUP



*Note: * This sample process used rezoning as the example*

Planning Process and Implementation

- General Plan Updates
- General Plan Amendments
- Specific Plans

The overall process used for a general plan update, general plan amendment, or specific plan were described in Section 3.1. For each of these comprehensive plans, the potential for collaboration with the military is similar. Using the general plan update process as an example, Figure 3-8 illustrates potential opportunities for military collaboration.

Military Compatibility Planning Processes

The military has several current planning processes. Most of them focus on issues that are internal to the installation and have no impact on the local jurisdiction. The following are the current planning processes that either impact a jurisdiction or provide valid information that local governments can use in their planning processes:

- AICUZ and RAICUZ,
- EAP, and
- ACUB.

AICUZ/RAICUZ

The AICUZ is updated periodically. An update can occur earlier if a mission change occurs that impacts the information in an AICUZ. An AICUZ study is conducted at installations that have a flying mission. For training areas, specifically ranges that may be used for flight training exercises (both air-to-air and/or air-to-ground), a RAICUZ may be completed. Since the Army has a limited flying mission, it is the only service that does not conduct AICUZ studies. The Air Force and Navy/Marine Corps programs are based on the DoD land use compatibility guidance, although each service presents the land use information in a different format.

A local government's involvement is limited during the development of the AICUZ study. Involvement is often related to the local

jurisdiction providing input on existing land uses and their proposed land use plan.

AICUZ and RAICUZ studies are normally based on current missions, but can be used to address possible future missions. The end product identifies the following:

- Noise contours;
- Safety zones (clear zones and accident potential zones); and
- Compatible land use recommendations.

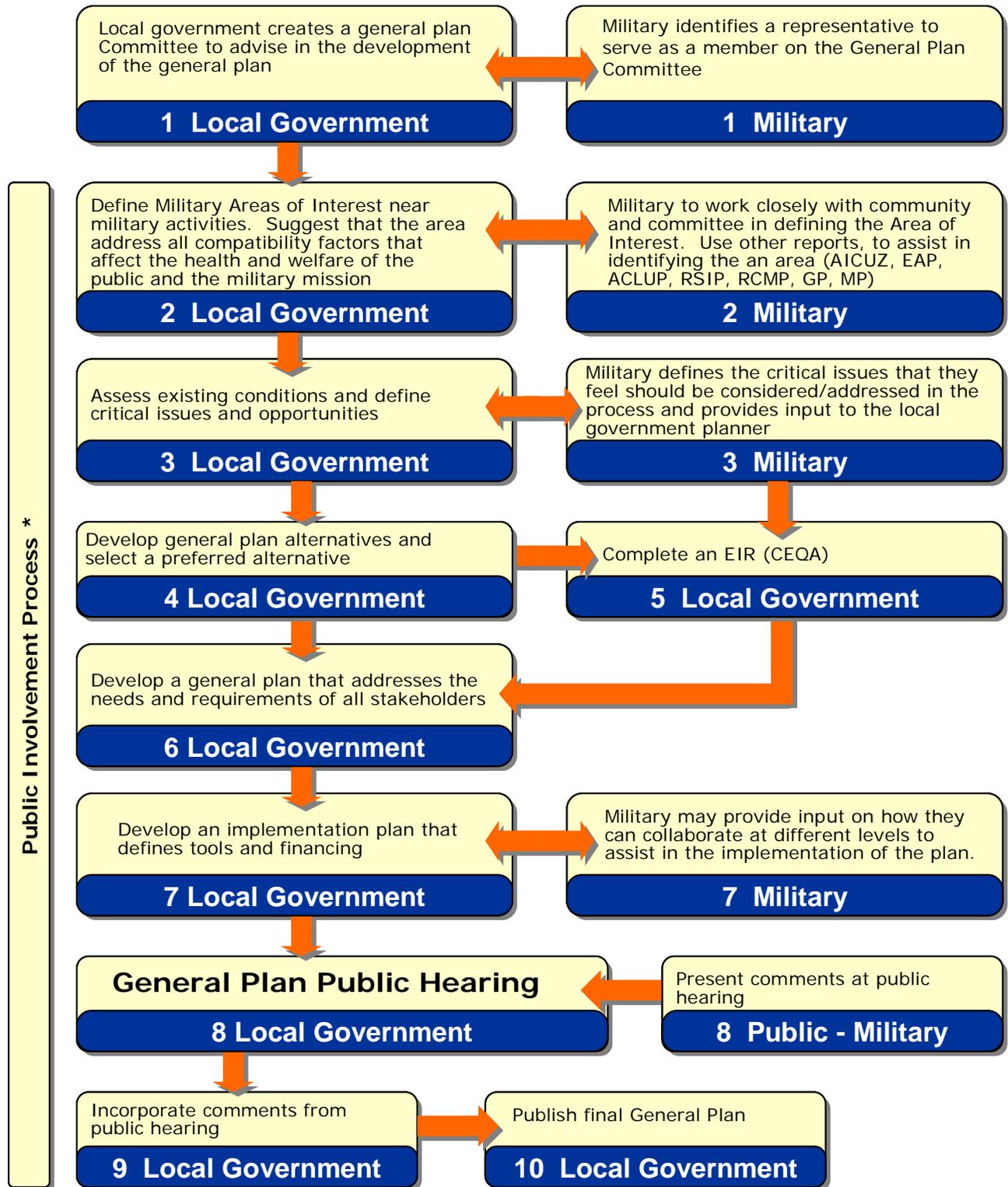
The general steps involved in updating this type of study are illustrated on Figure 3-9 and described below.

- Data are collected for existing mission conditions (i.e., flight tracks, number of operations, noise profiles for aircraft used).
- Flight information is input into the NOISEMAP noise model to produce noise contours.
- Safety zone areas are defined based on Service guidelines.

Encroachment Action Plans (EAP)

Recently, the Navy has developed instructions and a directive for all installations to conduct an EAP as part of the DoD Encroachment Program. An EAP is a comprehensive plan that looks at operations and all applicable compatibility factors, not just aviation noise and safety factors covered by an AICUZ study. As designed, the EAP will utilize information collected from local governments, but the EAP is intended for internal use by the Navy, and will not be released for public review or use. The AICUZ and JLUS programs will continue to be the primary coordination plans.

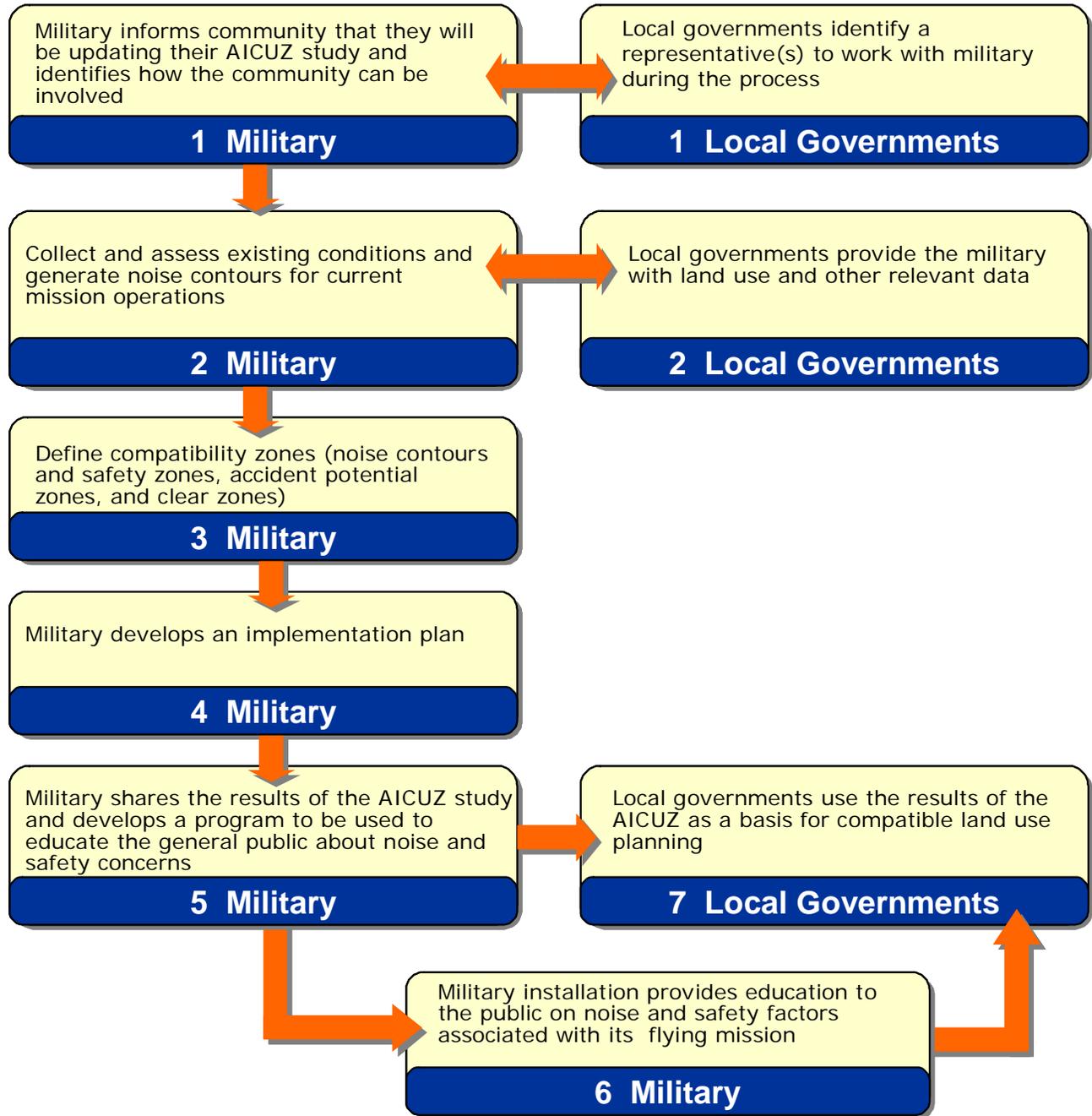
Figure 3-8. Sample Comprehensive Planning Process – The General Plan



Note: * The Military can participate in the Public Involvement Process throughout the development of the plan.

Planning Process and Implementation

Figure 3-9. Sample AICUZ / RAICUZ Process



The general steps of an EAP are illustrated on Figure 3-10 and described below.

- Data are collected to obtain a baseline to identify compatibility factors both on- and off- base.
- Compatibility factors are identified by evaluating and assessing existing data.
- Military influence area(s) are established by the compatibility factors identified in the previous step.
- An implementation plan is developed to address compatible land uses within the established military influence areas.

Military Comprehensive Planning Processes

Similar to local jurisdictions, the military maintains a set of comprehensive plans to guide future development on an installation. The following are the most common long-range studies for each service:

- General Plans (Air Force);
- RSIPs (Navy/Marine Corps)
- Installation Master Plans (Army)

The planning steps involved in a military comprehensive plan are very similar to the steps involved in a local government's comprehensive plan, except for the public involvement component. Public involvement for the military is limited to coordination with the local jurisdiction planners and regulatory agencies. Figure 3-11 illustrates a generic comprehensive planning process for the military.

Joint Land Use Studies (JLUS)

The long-range planning processes already described are the responsibility of the local communities or the military, and are dependent on the willingness of the local government and the military to collaborate.

The JLUS is another long-range planning tool that focuses on the collaboration of local jurisdictions and the military. Unlike other processes, prior to

the development of a JLUS, there must be commitment from both the local government and the military that they will collaborate in the development of the study and work to implement the study recommendations. The relationships and responsibilities among the different participants involved in the development of a JLUS are illustrated in Figure 3-12.

JLUS are a federal program funded by the DoD. For this funding to be provided, the proposed JLUS project requires a state or local sponsor.

A JLUS is one of the most successful tools available for assisting communities and military organizations in promoting compatible land uses in areas of military activity. The JLUS program encourages communities and military installations to study the issues in an open forum, taking into consideration both local government and military viewpoints. A JLUS is viewed as a win-win situation. The results of a JLUS, in most cases, provide a roadmap for implementation strategies and actions that can be used in the local planning process.

Figure 3-10. Sample EAP Process

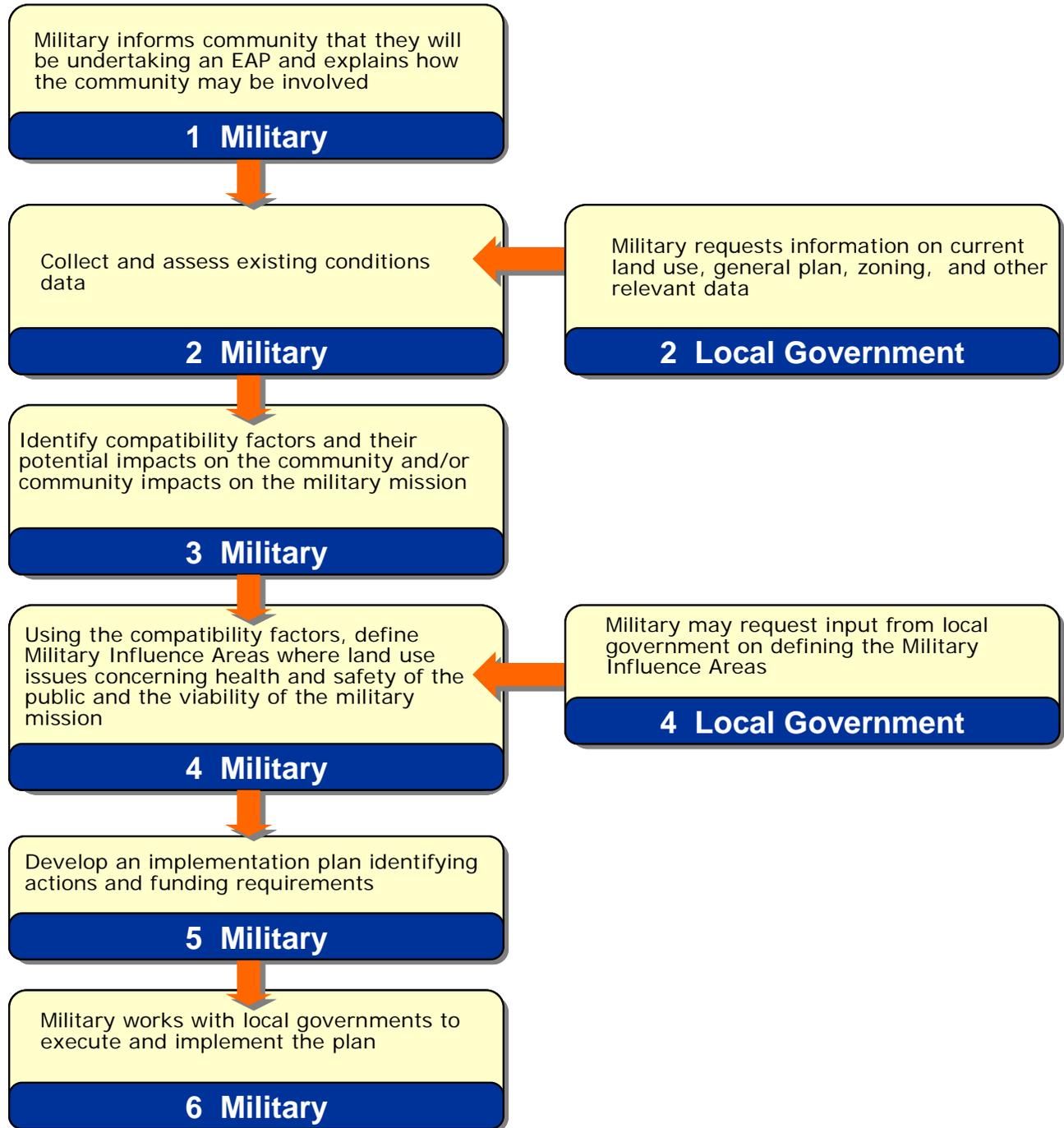


Figure 3-11. Sample Military Comprehensive Planning Process

This process illustrates generic steps for a general plan, master plan, and Regional Shore Infrastructure Plan (RSIP) process.

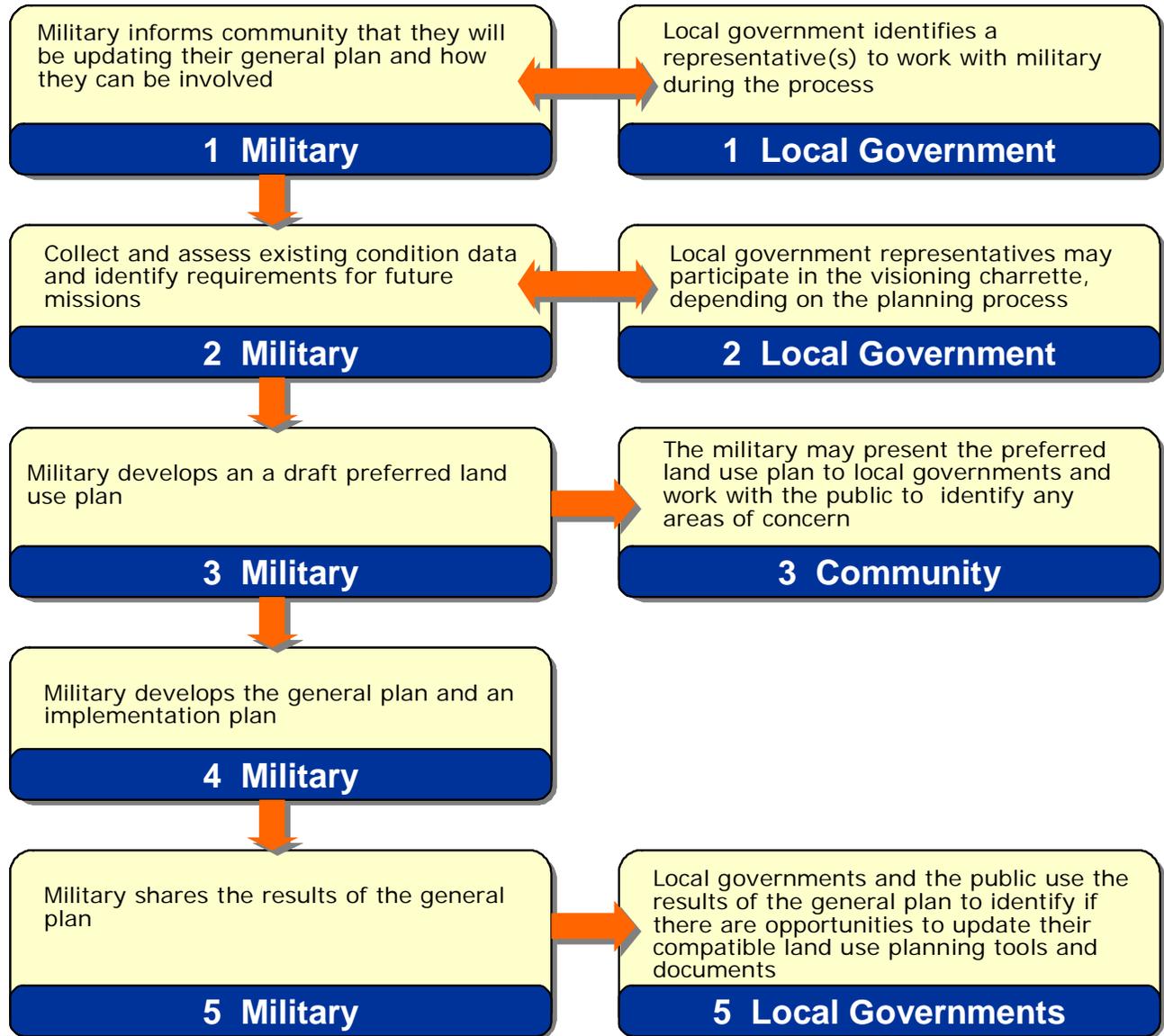
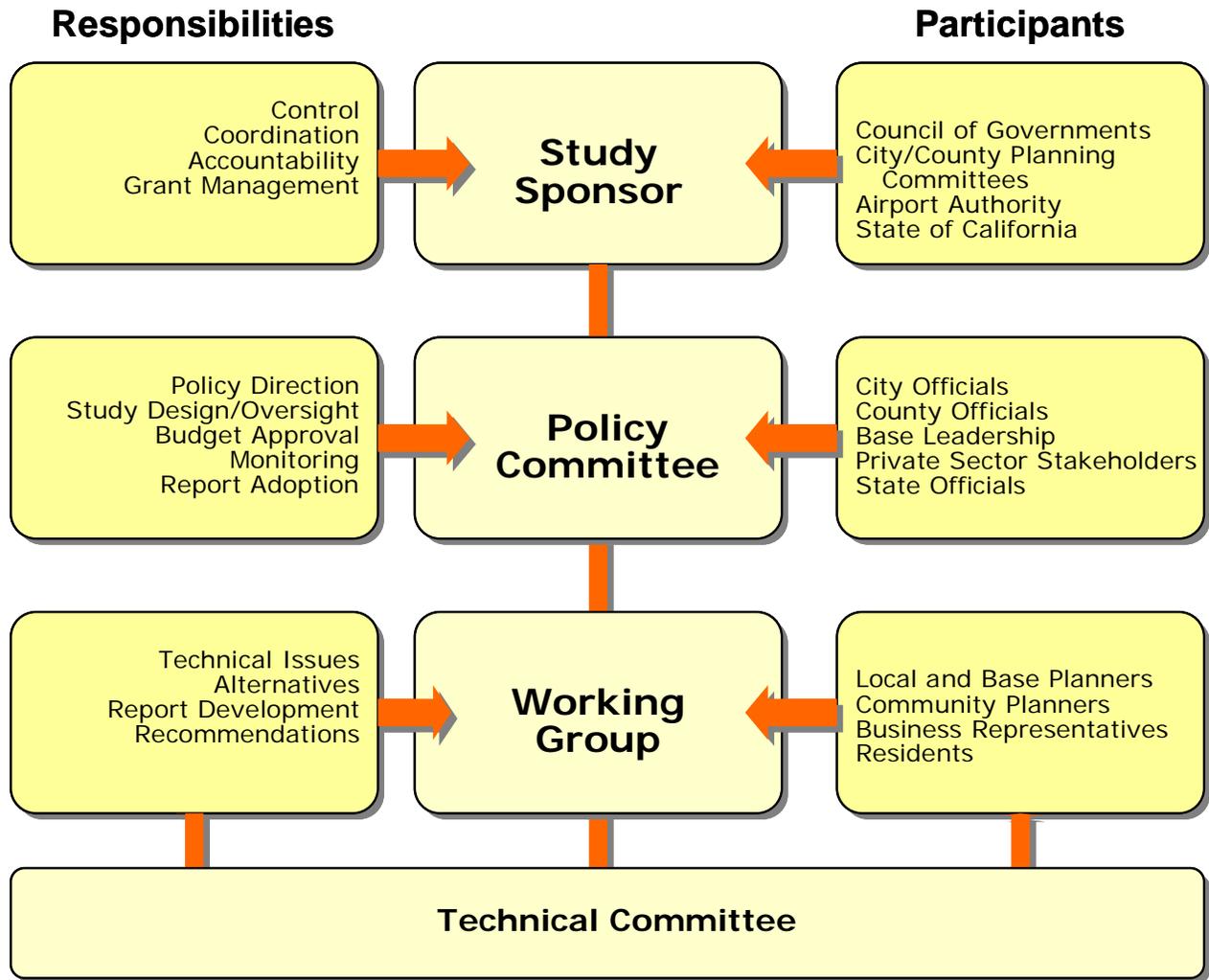


Figure 3-12. Joint Land Use Organization



Source: DoD Joint Land Use Study Military Installation Program Guidance Manual, August 2002



IMPLEMENTATION STRATEGIES

Given the diversity of California communities, there is no universal approach to addressing compatibility issues between local entities and the military. This Handbook is designed to provide local and military planners, decision makers, agency land and resource managers, private landowners and developers, and the public with a comprehensive set of tools and processes that can be applied in any combination that is appropriate to meeting their unique needs.

Section 3 summarized the planning processes used by the State, local communities, private developers, and the military and identified opportunities for collaborative planning efforts. This section provides a reference to the range of planning tools available to address compatibility issues. Communities and military installations should select the tool or combination of tools that are appropriate for their situation and needs.

These planning tools are not meant to stop development from occurring, dictate a planning approach to be taken, or reduce the military's ability to conduct training activities and achieve its mission. The purpose of these tools is to mitigate existing and potential conflicts and facilitate land use compatibility, thereby sustaining military readiness and reducing impacts on local communities.

4.1 Planning Tool Format

This section describes the 30 planning tools described on Table 4-1. Each planning tool is presented using a standard format that addresses the seven topics described below.

- **Primary Responsibility.** The selection and implementation of any tool is a decision left to local communities and the military. This Handbook does not require the implementation of any specific set of tools.

While the tools presented in this section will benefit compatibility for all concerned, the lead on implementing the tool can be the local community, the military, or both. For each tool, the primary implementation responsibility is indicated by the check boxes at the beginning of each tool description.

Primary responsibility: Local Military

- **Definition.** Each planning tool is defined using a widely accepted definition.
- **Purpose.** The purpose of each planning tool is presented, with an emphasis on using it to mitigate conflicts between communities and military installations and operation areas.
- **Key Issues.** The practical limitations related to each planning tool are presented to help identify which tool(s) may be the most appropriate, based on the situation and needs.
- **Roles and Responsibilities.** The roles and responsibilities for both community and military planners are presented. For the purposes of this document, the term community planner refers to both city and county planners.

Implementation Strategies

Table 4-1. Summary of Planning Tools

	Local	Military	Airspace	Environmental	Land Use	Noise	Property	Zoning
1 Acquisition	•	•		•	•		•	
2 Air Installations Compatible Use Zones		•	•			•		•
3 Air Force General Plan		•			•			
4 Airport Land Use Compatibility Plan	•		•		•	•		
5 Avigation Easement	•	•	•		•		•	
6 Bird/Wildlife Strike Hazard Program		•		•				
7 CEQA / NEPA	•	•		•				
8 Cluster Development	•				•			•
9 Code Enforcement	•							•
10 Conditional Use Permit	•				•			•
11 Conservation Easement	•	•		•	•		•	
12 Conservation Partnering Authority	•	•						
13 Construction Standards	•	•						•
14 Deed Restrictions	•	•					•	
15 General Plan	•			•	•	•		
16 Habitat Conservation Tools	•			•				
17 Hazard Mitigation Plan	•			•	•			
18 Installation Encroachment Control Plan								
19 Installation Master Plan		•			•			
20 Joint Land Use Study	•	•			•			
21 Light and Glare Controls	•	•	•					•
22 Military Influence Area	•		•		•	•		
23 Memorandum of Understanding	•	•						
24 Operational Noise Management Program		•				•		
25 Range Air Installation Compatible Use Zone		•	•			•		
26 Real Estate Disclosure	•						•	
27 Regional Shore Infrastructure Plan		•				•		
28 Sound Attenuation	•					•		•
29 Subdivision Ordinance	•				•			
30 Zoning	•				•	•		•

- **Implementation and Maintenance.**

The implementation and maintenance methods for each planning tool are presented under this heading.

- **Resources and References.** Resources and references, including available Internet resources, are included. These resources provide additional or more detailed information on each planning tool.

4.2 Summary of Planning Tools

Each planning tool is listed in Table 4-1. Tools are arranged alphabetically and are cross-referenced by primary responsibility (local government or military) and topic areas. Each topic area relates to one or more of the compatibility factors presented in Section 2. These topic areas include:

- **Airspace.** Airspace tools can be utilized to mitigate impacts associated with military aircraft.
- **Environmental.** Environmental planning tools encourage the preservation and conservation of environmental or critical resources.
- **Land Use.** A variety of tools are included that promote land use compatibility. Many of these tools involve the preparation of installation or local community master or general plans. As long-term plans, these documents establish the entities vision and goals, and provide a detailed examination of future land use.

- **Noise.** These tools seek to mitigate the impacts of military or community related noise through various planning techniques including the establishment of noise overlay zones, promotion of real estate disclose, and integration of sound attenuation.
- **Property.** In order to protect critical lands adjacent to military installations, it may be appropriate for the military or local entities to acquire property or development rights.
- **Zoning.** Zoning ordinances establish land development standards, that when used appropriately, can contribute to the mitigation of land use compatibility conflicts. For example, zoning ordinances often establish the type of use appropriate in designated areas.

Implementation Strategies

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

As a land use planning tool, property rights can be acquired through donation, easement, or the outright purchase of property for public purposes. Types of acquisition include the following:

- **Fee Simple Acquisition.** This option involves the purchase of property and is typically the most costly method to protect open space, sensitive, or critical areas. Cost and the need for a willing seller can be constraints.
- **Fee Simple/Leaseback.** A land trust is established when a government agency purchases the full title to a property, and then the leases it back to the previous owner. The land's natural resource and open space values are protected through lease controls that restrict land uses.
- **Conservation Easement (see also Tool 11).** Conservation easements can be acquired through a number of mechanisms, including donation or purchase. If they are donated, the donor could qualify for a federal income tax deduction making this option more desirable to the property owner. Conservation easements are a more cost effective method to acquire land than outright purchase.
- **Lease.** In cases where the landowner does not want to, or cannot make a permanent commitment, this may be a way to control land uses for a short timeframe. Leases can be obtained by government agencies or jurisdictions, non-profit organizations, land trusts, or private entities.
- **Management Agreement.** A management agreement is a specified plan under which the landowner or the land trust (or combination thereof) will manage the land. Management agreements last for a specific amount of

time making them a short-term approach to protecting land.

- **Eminent Domain.** A local government can use the power of eminent domain to appropriate private property for public use, in exchange for payment of fair market value, through the process of condemnation.

Purpose

The purpose of acquisition tools is to eliminate land use incompatibilities through estate market transaction and the local development process. Acquisition tools are particularly effective because they advance the complementary goals of shifting future growth away from military installations, and preserve community assets such as agriculture, open space, rural character, or sensitive natural habitats. Land use compatibility issues can be addressed by:

- Creating a land barrier between active military installation or training facilities and local land uses;
- Shifting future growth away from critical military lands;
- Protecting public safety by directing incompatible uses to other locations;
- Protecting the natural environment;
- Maintaining and protecting existing agriculture resources; and,
- Conserving open space.

Key Issues

- Acquisition can be expensive for local governments without the assistance of federal, state, or non-profit organizations.
- Even if funds are available for the purchase of property, future maintenance costs should also be considered and factored into any acquisition decision.
- Acquisition negotiations can be lengthy and complicated. Obtaining professional appraisals for the value of the rights to be

purchased can be controversial and time consuming.

- Certain types of acquisition can be complex and administratively challenging, requiring the local government to make a strong commitment to administering the program and educating residents and developers on its use.

Roles and Responsibilities

Community Planners. Planners should possess a clear understanding of the areas to consider for acquisition. Community officials should work jointly with military officials to determine these areas and reach consensus on acquisition priorities. Both local entities and military installations should establish and maintain partnerships with federal, state, and non-profit agencies as potential sources of acquisition funding.

Military Planners. Military planners and officials should work with local communities to educate the community on the need for the program. Military planners and officials should actively participate in the identification of appropriate areas for protection, and subsequently, acquisition. The military should obtain information about available federal grants, programs, and partnerships with non-profit organizations and share this information with the community.

Implementation and Maintenance

Implementation. The general steps for implementing an acquisition program are as follows:

- Identify areas of concern that also have a conservation interest;
- Explore possible partnerships with non-profit conservation groups or government agencies;
- Establish funding sources for purchase;
- Determine entity to administer the program;

- Adoption of enabling legislation by local governments (if they are to purchase easements directly); and,
- Negotiate purchase with willing sellers of land and easements.

Maintenance. Programs should be reviewed every year at a minimum.

Resources/References

- **Forever Florida.** This is a program in Florida for the acquisition of critical areas of concern.
<http://edis.ifas.ufl.edu/FE331>
- Also refer to these related Handbook tools: (5) Avigation Easement, (11) Conservation Easements, (12) Conservation Partnering Authority, and (14) Deed Restriction.

Luke Air Force Base Departure Corridor Project

The U.S. Army Corp of Engineers will serve as the principle real estate agent for a \$27.3 million easement acquisition project at Luke Air Force Base. The Air Education and Training Command (AETC) plans to acquire more than 2,100 acres of easements around Luke Air Force Base.

The acquisition project includes \$21.3 million targeted for easement rights for more than 1,700 acres, primarily in the southern departure corridor. The property located in the approach zones on the ends of the runways would be acquired to prevent nearby development from impacting flight operations. This is critical for the training of F-16 fighter pilots and maintained the safety and quality of life in the local community.

AETC will use the remaining \$6 million dollars to acquire land and install security improvements on 273 acres near the base munitions storage area located south of the base. Three million dollars is targeted for land purchases and \$3 million will fund security improvements. Acquisition of this land will physically connect the munitions storage area to the base proper and create a security buffer zone around the facility.

- U.S. Army Corp of Engineers, Los Angeles District

Private Acquisition Funding Sources in California

- **Donations.** Donations from private individuals for the acquisition of land. (This is free to the organization, but donations have to be found).
- **Bequests.** Bequests are when a landowner leaves rights to his / her property in a will or trust. In this case, the land does not transfer until the owner dies.
- **Project Campaigning.** Project campaigns can be used to raise the money to fund the protection of open space. This is especially useful when a private developer is trying to develop land that is valued by the community.
- **Land Trades.** Land of no significant open space value can be donated and then sold to protect lands of greater value related to the protection of open space. In this case, the land trust must make clear to the donor their intentions for the property.
- **Loans.** Land trusts can apply for loans if they do not have the funds needed for a purchase. It is possible to receive a loan from private individuals, local businesses, banks, corporations, and non-profit organizations.
- **Revolving Funds.** Land trusts can establish and maintain a fund so that money is always available for the acquisition of land. There are several methods for starting a revolving fund.
- **Charitable Creditors.** These are individuals or organizations that can back up a land trust's purchase of land if the land trust does not have secured funding. They agree to pay back the loan if the land trust, for any reason, is unable to pay.

Public Acquisition Funding Sources in California

- **Federal Land and Water Conservation Fund.** The Land and Water Conservation Fund is authorized to provide up to \$1 billion a year for federal acquisition of open space land.
- **General Funds and Bonds.** These are state and local level funds. General funds, general obligation bond appropriations, and state and local taxes can all be sources of funding.
- **State Department of Parks and Recreation.** This can only be used if the land acquired is going to be in the State Park system.
- **Habitat Conservation Fund.** This is the State's most important source for acquiring open space. The California Wildlife Protection Act requires the State to allocate a minimum of \$30 million a year through the year 2020 to the Habitat Conservation Fund to purchase wildlife habitat. This funding source can help acquire open space lands if they have habitat value.
- **Wildlife Conservation Board.** The Board purchases lands for the Department of Fish and Game. They manage the expenditures under Proposition 117 Habitat Conservation Fund.
- **State Grants and Low interest Loans.** The State can be a source of money for matching grants and low interest loans for land acquisition.
- **Payment in Lieu of Dedication.** Land developers can be required by a local government to make a payment to a municipal trust fund for open space acquisition as a way to mitigate a project's impacts on open space. This can be done in addition to, or instead of, having the developer set aside land on their project site.
- **Special Assessment District.** A special tax district can be another way to acquire the funds necessary to obtain open space lands.
- **Tax Return Funding.** This option gives California taxpayers the option to direct a donation towards the acquisition of habitat lands under the California's Endangered Species Income Tax Donation Checkbox Program. These funds are controlled by the Department of Fish and Game through its Natural Heritage Division. To receive funding from this source, a project must demonstrate that an endangered species or threatened species will be protected.
- **Tobacco Tax.** Funds available from this source are split evenly between park projects and wildlife projects. There are no restrictions on these funds, and they can be used for land acquisition, restoration, maintenance of habitat or parks, and other related activities.
- **Environmental License Plate Fund.** This fund can provide money for acquiring land for environmental protection. This fund can make direct grants to non-profit organizations.
- **Gas Tax.** Gas Tax funds can be used to mitigate the effects of transportation development, including the purchase of land.
- **Wildlife Restoration Fund.** This fund provides about \$750,000 a year and must be used for habitat protection projects that benefit hunters, anglers, and boaters.

Primary responsibility: Local Military

Definition

The Air Installations Compatibility Use Zones (AICUZ) program is a DoD planning program that was developed in response to incompatible urban development and land use conflicts around military airfields. (Note: some Services use the singular form, Air Installation Compatible Use Zone) The AICUZ program seeks to provide information on compatibility, develop a cooperative relationship between communities and military installations, and providing land use compatibility guidelines that protect public health and safety and maintain military readiness.

Purpose

The AICUZ program has two objectives: (1) to assist local, regional, state, and federal officials in protecting the public health, safety, and welfare by promoting compatible development within the AICUZ area of influence; and (2) to protect operational capabilities from the effects of land uses that are incompatible with aircraft operations. While prepared by or for a military installation, the primary users of an AICUZ study are the local communities surrounding the installation or an offsite location (such as auxiliary fields or training areas). The AICUZ study is also a tool used by the installation's community planner to evaluate proposed projects (both on and off the installation) for their compliance with the information presented in the AICUZ study.

Areas contiguous to military installations often provide attractive land development opportunities. Certain types of development are not compatible with the high noise and high potential for aircraft accidents associated with airfield activities. In the absence of compatible land use controls, inappropriate uses may occur near or adjacent to the installation causing eventual conflicts between flight operations and landowners.

Key Issues

- AICUZ studies, and other land use compatibility plans, such as the Airport Land Use Compatibility Plan (ALUCP), are interrelated. The provisions of the AICUZ become mandatory when incorporated into the ALUCP.
- AICUZ studies are designed to provide information, and are not regulatory documents.
- The AICUZ study needs to reflect the current and projected operational environment and should be coordinated closely with an installation's Airfield Operations Board and its flying units.
- To help with implementation, materials prepared for public distribution and use should clearly state the issues involved and the areas of concern.

Roles and Responsibilities

Community Planner's Role. Local governments should be included in the AICUZ planning process and be prepared to provide technical advice to the military in interpretation of the community's general plan, zoning ordinance, and description of existing land uses. Acceptable methods to deal with identified land use conflicts (existing or potential) should also be discussed.

Military Planner's Role. The military planner's role in the process will vary depending on whether the study is conducted in-house or if the study is being prepared using assistance from an outside source. In general, the military planner performs the following tasks:

- Monitor changes in base operations to determine potential impacts on the AICUZ study;
- Identify the need for an AICUZ update and coordinate the update and funding through the Air Force;
- Evaluate base development projects based on AICUZ criteria and requirements;

- Review community project proposals and provide input in relation to AICUZ compatibility guidance;
- Coordinate with local communities to ensure understanding of AICUZ and land use compatibility issues; and,
- Brief local planners and political bodies on AICUZ program studies and updates.

Implementation and Maintenance

Implementation. Local governments have the ability to implement AICUZ guidelines through their police powers, which allow them to protect public health, safety, and welfare. The state conveys these powers to local governments so they can adopt and enforce zoning regulations and other land use controls. As such, the success of the AICUZ program depends on its voluntary acceptance and use by local governments, land owners and developers, and other agency officials. These groups and individuals must understand the recommendations from the AICUZ study.

In order to ensure successful implementation, the following techniques will assist in implementation of the AICUZ recommendations.

- Inform the public and government agencies of the AICUZ program (i.e. formal presentation of AICUZ program by installation personnel).
- Establish both a formal and informal network of contacts to routinely exchange planning information (i.e., Memorandum of Understanding [MOU], establishment of technical and/or working groups with community planners and leaders).
- The local government should use the AICUZ information to identify existing incompatible land uses.
- The local government should include the installation planner as part of project application and CEQA reviews in areas identified in the AICUZ study as having potential compatibility issues.

Maintenance. The AICUZ Program Manager (the installation lead on the project and often the installation's community planner) reviews the AICUZ operational and maintenance data at least once every two years or as part of an Environmental Impact Analysis Process (EIAP) evaluation, or in response to a significant change in aircraft or operations. This review determines if the installation needs an AICUZ update.

Resources/References

- **The Environmental Conservation and Planning Directorate, Air Force Center for Environmental Excellence (AFCEE/TD)** is responsible for executing the Air Force's AICUZ program.
<http://www.afcee.brooks.af.mil/ec/noise/aicuz/aicuz.asp>
- **Air Combat Command's** brochure *Aircraft Noise – An Environmental Perspective*, explains basic noise metrics and how they are used to characterize the noise environment and support community relations.
<http://www.cevp.com/aicuz.html>
- Sample Memorandum of Understanding between an installation and local planning and land use approval agencies.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/MOUSHawAFBSep2000.doc>
- **Chief of Naval Operations Instruction 11010.36** describes the Navy and Marine Corps AICUZ program. It's available at:
http://neds.daps.dla.mil/Directives/11010_36b.pdf
- **NOISEMAP** software can be used to assess noise potential. This can be downloaded from the following Web site:
<http://www.afcee.brooks.af.mil/ec/noise/noisemodels/noisemodels.asp>

Primary responsibility: Local Military

Definition

The Air Force General Plan (AFGP) is the primary document that provides an air force installation commander and other military decision makers with a condensed picture of whether or not an installation has the physical assets and delivery system to support its mission.

Purpose

The purpose of the AFGP is to provide a general assessment of the installation's infrastructure and attributes for the purpose of gauging the installation's development and growth potential.

Key Issues

- The general plan is not a lengthy treatment or detailed study of base development issues or concerns. However, the general plan is the vehicle to document and establish the need for more detailed study.
- Detailed plans for specific area are performed using an Area Development Plan (ADP), which is similar to the specific plan used by local governments.

Roles and Responsibilities

Community Planners. Although community planners do not use the AFGP, they can assist their military counterparts with needed data collection (i.e., transportation infrastructure information, socioeconomic data).

Military Planners. In the development of an Air Force General Plan, the base community planner is responsible for the following:

- Establishing a working relationship with all decision makers and others who use the AFGP;
- Ensuring that all the users of the AFGP understand its importance; and,

- Being aware and monitoring all planning-related base activities; for example, site approvals for all on base construction projects.

Implementation and Maintenance

Implementation. The base community planner should take a proactive approach regarding implementation of the AFGP; it is one of the most important documents that decision makers will use in making short- and long-term decisions affecting the base and surrounding communities. Development proposals on the installation should be consistent with the recommendations of the AFGP.

Maintenance. The AFGP is a living document that requires, at minimum, a yearly review, with a comprehensive update typically done on a 5-year cycle. Plan reviews and updates should be done by the base community planner and base leadership prior to its final review and approval by the Wing Commander. If the AFGP includes information related to tenant organizations (a unit or organization that does not functionally report to the base commander), they should review the plan and provide comments and updates.

Resources/References

- **Air Force Instruction (AFI) 32-706, Comprehensive Planning.** This document provides guidance on the development of the AFGP and is available through the following Air Force sponsored website
<http://www.e-publishing.af.mil/>
- **General Plan Guide.** Available on the Air Force Center for Environmental Excellence (AFCEE) website.
<http://www.afcee.brooks.af.mil>
- **Air Force Pamphlet 32-1010, Land Use Planning Pamphlet.** This document is available at the following website.
<http://www.e-publishing.af.mil/>

- **AFCEEs Planning Primer** This document is available at the following website.
<http://www.afcee.brooks.af.mil/ec/mmgrp/pages/primer/planprm.htm>
- **AFI 31-101, USAF Physical Security.** This document is available at the following website.
<http://www.e-publishing.af.mil/>

Primary responsibility: Local Military

Definition

An Airport Land Use Compatibility Plan (ALUCP) is “a plan, usually adopted by a County Airport Land Use Commission (ALUC) or other entity established to accomplish land use compatibility planning, which sets forth policies for promoting compatibility between airports and the land uses which surround them.” (*California Airport Land Use Planning Handbook*, January 2002).

The California law governing creation of ALUCs applies to every county in California having a public airport. The statute also allows counties to use an alternative to ALUCs to accomplish airport land use compatibility planning. For the purposes of this document, the term “ALUC” refers to both officially designated ALUCs and the alternative entities that perform the same functions.

The California State Aeronautics Act typically refers to these documents as ALUCPs. These plans are also referred to as Comprehensive Land Use Plans (CLUPs), airport land use policy plans, and airport environs land use plans. All of these plans perform the same purpose and are required to conform to state law.

ALUCPs should not to be confused with airport master plan. Airport master plans are designed to plan for airport facilities, circulation, infrastructure, security, and other factors that guide the orderly development of on-airport land uses.

Purpose

The purpose of the ALUCP is to:

- Provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the ALUC.
- Safeguard the general welfare of the people living near airports and the public in general (California Public Utilities Code, Section 21675(a)).

Key Issues

- State statutes require that, once an ALUC has adopted or amended an ALUCP, the county—if it has land use jurisdiction within the airport influence area—and any affected cities must: (1) update their general plans and any applicable specific plans to be consistent with the ALUC’s plan within 180 days (Government Code, Section 65302.3); or (2) take the required steps to overrule all or part of the ALUC’s plan. If a county or city fails to take either action, then it is required to submit all land use development actions involving property within the airport influence area to the ALUC for review (Public Utilities Code, Section 21676.5(a)). (*California Airport Land Use Planning Handbook*, January 2002).
- The primary consequence for communities not meeting the 180-day deadline is that the ALUC can begin requiring – if it is not already doing so – that all of the jurisdiction’s land use actions, regulations, and permits be submitted to the commission for review (Section 21676.5(a)).
- State law (Section 21675(a)) limits amendment of an ALUCP to no more than once per calendar year.
- ALUCPs, and other land use compatibility plans such as the Air Installation Compatible Use Zone (AICUZ) study and airport master plan, are interrelated. As an example, ALUCP shall be consistent with the safety and noise standards in the AICUZ study prepared for a military airport (Public Utilities Code, Section 21675(b)). When preparing an ALUCP, consideration should be given to all land use compatibility plans for inclusion and coordination.

Roles and Responsibilities

Although typically developed by the County ALUC, community and military planners should take an active role and participate in the ALUCP planning process.

Community Planner's Role. Community planners must incorporate the policies of the ALUCP into local general plans, zoning ordinances, subdivision regulations, and any other applicable development regulations and/or plans. To ease the adoption and incorporation of these provisions, community planners should participate in the development of the ALUCP, identifying any areas of potential conflict prior to adoption.

To ensure consistency between the ALUCP and local plans:

- Ensure the implementation criteria for the ALUCP recommendations and general plan policies are consistently applied; and,
- Provide on-going maintenance of the established policies and recommendations within both planning documents.

Military Planner's Role. ALUCs have the option of developing a compatibility plan for any federal military airport in their jurisdiction (California Public Utilities Code, Section 21675(b)). Military personnel can assist by developing cooperative relationships with the ALUC and actively participate in the development of the ALUCP. Military planners can be essential in ensuring the accurate inclusion of the AICUZ findings into the ALUCP. This will enhance compatible land use planning in proximity to military airports.

Implementation and Maintenance

Implementation. Adoption and successful implementation of the ALUCP involves the cooperation and participation of affected local jurisdictions and military installations. During the adoption phase, collaboration usually occurs through both informal and formal means. As a

fundamental tool used by airport land use commissions (or their alternative) in land use review, ALUCPs can be implemented in part through incorporation in local jurisdictions general plans.

Maintenance. Airport Master Plans and ALUCPs should be updated as often as necessary to provide current information to decision makers. Periodic reexamination (every 5-10 years) of the entire plan is strongly encouraged to keep it up to date with changes in state law, local land uses, airport development and activity, and current noise and safety compatibility concepts. The plan should also be updated to reflect major changes in airport operations or land use changes proposed by local jurisdictions.

Resources / References

- ***The California Airport Land Use Planning Handbook.*** Published by the California Department of Transportation Division of Aeronautics, its purpose is to support the State Aeronautics Act (California Public Utilities Code, Section 21670 et seq.), which established statewide requirements for the conduct of airport land use compatibility planning. In addition, it serves as the primary source of information regarding compatibility plans.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>
- **The California Department of Transportation, Division of Aeronautics.** Division of Aeronautics staff is available to respond to inquiries regarding state law, compatibility criteria, review procedures, and any other matters involving airport land use commissions.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/index.php>

- **Other ALUCs.** The experience of other ALUCs is a valuable information resource. Copies of adopted plans can be obtained from other commissions or the Internet. Other commissions are generally willing to discuss methods for developing such plans and “lessons learned.” The Division of Aeronautics maintains a list of contact persons and phone numbers for each of the airport land use commissions in the state.
- **Funding.** The California Department of Transportation has provided grants to local agencies for the preparation of compatibility plans in the past. This funding has primarily come from the California Aid to Airport Program (CAAP) grants, which cover 90% of the cost of an ALUCP. Funding availability varies from year to year. Additional funding possibilities include the Federal Aviation Administration’s (FAA) Airport Improvement Program.
- **Aeronautical GIS Maps.** This site provides links to GIS information and maps pertaining to airports in California. <http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/markel.php>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

An easement is a non-possessory right to use land owned by another party. An avigation easement is an easement that grants the holder one or more of the following rights: the right-of-flight; the right to cause noise, dust, or other impacts related to aircraft flight; the right to restrict or prohibit certain lights, electromagnetic signals, and bird-attracting land uses; the right to unobstructed airspace over the property above a specified height; and, the right of ingress/egress upon the land to exercise those rights.

Avigation easements transfer certain property rights from the owner of the underlying property to another entity. This entity could be the owner of an airport or, in the case of military airports, to a local government agency or authorized federal agency on behalf of the military. The DoD is not authorized to accept avigation easements. Historically, if the military desires such easements, there are several ways they can be obtained. The US Army Corps of Engineers serves as the negotiator and the principle real estate agent for the Army and Air Force. The Navy and Marine Corps use the Naval Facilities Engineering Command to negotiate and acquire real property interests, including easements.

Purpose

Entities acquire avigation easements to the airspace over neighboring properties in order to: (1) prevent construction of buildings and towers, planting of trees, installation of lighting, or any other development that might interfere with aircraft takeoff and landing, or (2) protect against liability for any nuisance caused by aircraft using the airport (i.e. noise, fumes, and vibration) that might impact the use and enjoyment of properties adjacent to an airfield or under its flight paths.

Key Issues

- Communities may view it as outside their authority to require avigation easements

on behalf of a federal entity, but if public health and safety benefits can be linked, these easements may be justified.

- Finding the appropriate entity to hold the avigation easement.
- Although local governments are permitted under California law to use eminent domain for the acquisition of avigation easements for civilian airports, entities should seek legal consultation prior to using a formal condemnation process to obtain an avigation easement related to a military airfield. Key to this determination will be the finding of public benefit, perhaps tied to protecting public health and safety.

Roles and Responsibilities

Community Planner's Role. Local governments should work cooperatively with military installations, developers, and property owners to determine the applicability of avigation easements on specific properties near military air operations. Local governments should ensure that developers building in hazards areas are aware of and educated about the impacts of military operations.

Local governments may decide to create a program for the voluntary offering of avigation easements within identified hazard areas (clear zone, accident potential zones, etc.). This could be tied to a conservation easements program (see Tool 11) or similar arrangement.

Military Planner's Role. Military planners can assist by working closely with local governments to determine areas for which avigation easements should be obtained. Many of these areas are identified through other planning efforts, such as the AICUZ program. Military installations can then work with local governments, trusts, and other federal agencies, such as the U.S. Army Corp of Engineers, to purchase easements, if desired.

Implementation and Maintenance

Implementation. The implementation of avigation easements is usually a complex undertaking. Local governments and military installations must work cooperatively, not only with each other, but with affected property owners as well. Education about the impacts of military installations on the community and of the military's need for training will be vital to ensure a thorough understanding of the reasons for avigation easements. It is generally more common for avigation easements to be acquired by the military with assistance from the US Army Corp of Engineers. However, local entities can be equally effective in using existing planning tools and the development process to seek voluntary avigation easements from developers.

There are several basic steps involved in the acquisition of avigation easements by the U.S. Government on behalf of a military installation. These steps are as follows:

- The need for the avigation easement must be clearly established and identified;
- An appraisal must be conducted to determine market value;
- Environmental documentation must be prepared to satisfy NEPA requirements, typically an Environmental Assessment (EA), for the acquisition of avigation easements;
- A written offer must be made to the landowner or authorized agent;
- The landowner, in writing, can either accept the government offer or make a counter offer;
- Once negotiations are complete, the terms are put in writing and the both entities formally accept the agreement; and,
- Parties close escrow and formally document the easement.

It is generally the policy of the military to acquire the minimal real estate easements needed to

sustain military operations and force protection of critical assets.

Avigation easements are deemed a property right and to be valid and enforceable, must be recorded by the local county Register of Deeds. Recording the avigation easements generally requires preparation of a formal legal document which is then recorded against the title to the real property. This document constitutes notice of potential hazards or restrictions placed on the property to anyone checking on the title. Because this document is recorded, it binds future owners even if they are unaware of its existence at the time of the purchase. All documents affecting title, including avigation easements, are referenced in a preliminary title report issued by a title insurance company.

Maintenance. Properties affected by avigation easements should be periodically reviewed for compliance.

Resources / References

- This **sample avigation easement** was executed in 1995 between the City of Livermore (owner of the Livermore Airport) and a housing developer in the city. The easement was a condition of the city's approval of a housing project by the developer.
<http://home.netvista.net/~hpb/av-ease.html>
- **California Department of Transportation, Noise and Aerospace Projects.** This document can be found at this website.
<http://www.dot.ca.gov/hq/planning/aeronaut/documents/ALUP/CT%20ALUPH%20Appendix%20D.pdf>
- Also refer to these related Handbook tools: (1) Acquisition, (11) Conservation Easements, (12) Conservation Partnering Authority, and (14) Deed Restriction.

Primary responsibility: Local Military

Definition

The Bird/Wildlife Strike Hazard (BASH) program is aimed at minimizing collisions between military aircraft and birds. Knowledge of where birds travel, nest, and feed helps DoD avoid problem areas, and therefore save lives and avoid the destruction of valuable aircraft. The program considers not only wildlife within the confines of the airfield, but also in neighboring areas. The BASH program covers predatory birds, nuisance flocking birds (gulls), and migratory geese and ducks. In addition to birds, the BASH program also addresses other animals that could pose a hazard to aircraft operations including coyotes, deer, moose, and rabbits.

Purpose

The objective of the BASH program is to reduce the potential for collisions between aircraft and birds or other animals, and to minimize damage and injuries when collisions occur. The BASH program promotes land management practices that minimize bird attractants, and safety procedures to recognize, control, and avoid hazardous bird concentrations.

Key Issues

- Some land use practices increase the attractiveness of existing geographic features to wildlife, such as open bodies of water or wetlands that serve as nesting areas for gulls, shore birds, and waterfowl.
- On-airport bird control activities are often needed to reduce bird-strike hazards. However, the effectiveness of these activities is reduced by off-airport land use practices that attract birds.
- Reporting of bird strikes is essential to the success of the program.

- The creation of new water bodies from development runoff or water features on golf courses can be a significant factor in increasing bird hazards.
- In order for BASH programs to be effective, military and federal agencies need to involve local communities that control land uses and activities within airport and aircraft operating areas.

Roles and Responsibilities

Community Planner's Role. Local governments that want to reduce bird hazards to military installations should understand the potential issues associated with BASH programs.

Community planner involvement could include activities that:

- Inform and educate the public and government agencies about BASH and related land use issues.
- Establish both a formal and informal network of public and military contacts to routinely exchange planning information (i.e. Memorandum of Understanding, establishment of technical and/or working groups with military, community, and resource planners).
- Identify land uses and other activities that should not be sited within airport and aircraft operational areas because of their potential to attract birds and other wildlife.
- Work with military installations to reduce the impact of existing land uses that could increase wildlife hazards.

Military Planner's Role. Some installations have full-time personnel to assist in creating, monitoring, and implementing BASH.

Responsibilities can include:

- Identifying a BASH coordinator to implement the program and work with local communities;

- Establishing a Bird Deterrent Dispersal Team to identify potential hazards, maintain airfield conditions, and monitor day-to-day activities that might impact safety;
- Verifying and mapping of bird and other wildlife animal habitats;
- Identification of potential base activities that could pose problems;
- Working with adjacent and nearby communities to minimize land use activities that attract bird and other wildlife that could pose problems to aircraft;
- Implementation of pest control programs; and,
- Formally and informally establishing public contacts for information exchange.

Implementation and Maintenance

Implementation. The main focus of BASH remains bird hazards. However, Wildlife Biologists from the Department of Agriculture's Wildlife Services Division in conjunction with the individual bases are beginning to treat each airfield as its own ecosystem. BASH programs are now based on each base's specific issues and requirements. National and international military and other public and private agencies have organized to promote educational, technical, and related research activities. An implementation program generally encompasses all actions and techniques that may identify, reduce, or eliminate bird or other animal hazards to aviation, including:

- Bird and other wildlife strike reporting/statistics;
- Bird management and control techniques;
- Research on new technologies to reduce wildlife hazards;
- Training in airport wildlife management;
- Policy and airport standards concerning wildlife hazard;

- Land use and environmental issues concerning airports;
- Bird migration and general ornithology related to aviation; and,
- Remote sensing and modeling to detect and predict bird movements.

Development and implementation of an effective BASH program requires constant interaction between military sections covering natural resources, aviation safety, and air operations, as well as pilots, aircrews, and natural resource planners. Habitat modifications and scaring birds away from the runways is an integral part of the answer, but understanding the behavior and movements of birds in relation to the airfield environment and military training routes is also a critical factor in reducing bird strikes.

Maintenance. BASH programs should be periodically reviewed for effectiveness and updated as appropriate.

Resources / References

- **Bird Strike Committee USA.** This is a volunteer organization directed by a 9- to 12-person steering committee consisting of 2-3 members each from the FAA, USDA, DoD, and aviation industry. <http://www.birdstrike.org/birds.htm>
- **Navy and Marine Corps Instruction Manuals.** Current Navy and Marine Corps instructions implementing the BASH program include: OPNAVINST 3750.6R, OPNAVINST 5090.1B, OPNAVINST 11010.36B, and NAVFAC Procedural Manual P-73. Examples of current BASH Plans, local implementing instructions, and SOP's are provided as appendices to the NAVFAC Procedural Manual P-73. <http://www.safetycenter.navy.mil/aviation/operations/bash/>
- **Navy Safety Center.** A repository for all bird/animal strike reports and maintains the strike database. <http://www.safetycenter.navy.mil>

- **Air Force, Aviation Safety Division.**
This division serves as the Air Force's point-of-contact for technical assistance pertaining to the BASH program.
<http://afsafety.af.mil/AFSC/Bash/home.html>
- **Hazardous Wildlife Attractants on or Near Airports**, FAA Advisory Circular 150/5200-33A
- **Airport Safety**, Environmental Protection Agency Regulation, 40 CFR, Section 258.10, "Airport Safety", relates to landfills near municipal airports, but provides information relevant to military airports
<http://www.epa.gov/epahome/cfr40.htm>

Please see the next page

Primary responsibility: ■ Local ■ Military

Definition

The California Environmental Quality Act (CEQA) was enacted in 1970 and requires local governments to consider the potential environmental impacts of a project before they approve it. CEQA also requires that a project's environmental impacts be disclosed to the public so community members have an opportunity to make informed comments on proposed land use decisions. CEQA is modeled after the federal National Environmental Policy Act (NEPA).

The NEPA is the federal law, effective on January 1, 1970, that established a national policy for the environment and requires federal agencies (1) to become aware of the environmental ramifications of their proposed actions, (2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and (3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

Purpose

The primary purpose of CEQA ([Public Resources Code, Section 21000 et seq.](#)) is to develop and maintain a high-quality environment now and in the future. According to statute, CEQA has four major purposes:

- Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities;
- Identify ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring mitigation actions when the governmental agency finds the changes to be feasible; and,
- Disclose to the public the reasons for approval of a project that has significant environmental effects.

CEQA applies to projects undertaken by a public agency, funded by a public agency, or that require issuance of discretionary permits by a local or state public agency. A project is defined as any action that has a potential for resulting in physical change to the environment, and is an activity that may be subject to several discretionary approvals by government agencies (i.e., construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit). A project is exempt from CEQA if it can be said with certainty that there is no possibility that the activity in question will have a significant effect on the environment,

NEPA's purpose, as stated in Section 2 of NEPA legislation, is to "encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to enrich the understanding of the ecological systems and natural resources important to the Nation..." NEPA ensures that the environmental impacts of a proposed action, and potential alternatives to the action, will be considered by a Federal agency before it decides to fund and implement the action. The process required under NEPA is intended to increase the quality of decisions because it demands a full understanding of the various impacts, and because input must be received from a range of stakeholders. Emergency exceptions are made when the immediate health and safety of people are threatened.

Key Issues

- The threat of litigation under CEQA from project opponents can slow down project approvals.
- Although CEQA offers planning benefits at the project level, regional environmental impacts are often not considered.
- The NEPA process generally takes a longer period of time than the CEQA process.

- NEPA generally requires that any cost/benefit analysis prepared for the project be incorporated into or attached to the environmental impact statement (EIS). Incorporation of cost/benefit information is optional under CEQA unless it constitutes the basis for rejecting an environmentally superior alternative.
- NEPA requires that the project and each of the alternatives be analyzed equally and compared. Under CEQA, the analysis of significant effects of alternatives can be evaluated in less detail than the effects of the proposed project; however, each environmental issue should still be addressed for each alternative to allow for comparison of impacts with the proposed project.
- CEQA requires agencies to implement feasible mitigation measures. CEQA also requires the preparation of a Mitigation Monitoring or Reporting Program ([CEQA Statutes Section 21081.6](#)).
- The standards of significance under NEPA generally are less sensitive than under CEQA.

Roles and Responsibilities

Community Planner's Role. Community planners should consider the implications to on-going military operations during the CEQA/NEPA process. Areas of particular concern include: public safety, aviation safety, and land use compatibility. In addition, environmental impact reports (EIRs) should examine the proposed project's compatibility with military installations and operation areas, especially in the Military Influence Area of the installation.

The community planner should also respond to NEPA Notice of Intent (NOI) to prepare an EIS and public comments periods on EIS that relate to compatibility between military installations and operation areas and areas covered by the jurisdictions general plan.

CEQA Notification

AB 1108, passed in 2002, amends the CEQA to provide military agencies with early notice of proposed projects within two miles of installations or underlying training routes and Special Use Airspace (SUA). To obtain this notification, military installations must provide the local planning agencies in their area of the installation's contact person and the relevant information and boundaries of the installation's low-level flight path, military impact zones, or SUA. The local lead agency is required to give notice to the military installation of any project within those boundaries if: (1) the project includes a general plan amendment; (2) the project is of statewide, regional, or area wide significance; or (3) the project is required to be referred to the airport land use commission or appropriately designated body. This notification will provide the military with an opportunity to provide early input, so that potential conflicts can be evaluated and addressed proactively.

Military Planner's Role. The military planner can assist by being an active participant in the CEQA/NEPA process. The military can utilize these processes as an opportunity to make public comment in areas such as public safety, aviation safety, and land use compatibility. The military planner can respond to the CEQA Notice of Preparation (NOP) so military concerns and issues can be noted during the early stages of the local planning process.

Implementation and Maintenance

Implementation. The CEQA process begins when an applicant applies for approval of a project that requires discretionary governmental approval (see flowchart on next page). If the project is not exempt from CEQA, the agency that has the authority to approve the project (the Lead Agency) must do a brief analysis of the environmental impacts of the project. This

evaluation is typically done with the preparation of an Initial Study. If this analysis reveals that the project will have no significant environmental impacts, then the Lead Agency can prepare a Negative Declaration. If the Initial Study reveals that the project may have significant environmental impacts, and all these impacts can be mitigated to a less than significant level, a Mitigated Negative Declaration can be prepared. If significant impacts can not be mitigated, the Lead Agency must issue a Notice of Preparation (NOP) and prepare an Environmental Impact Report (EIR). The EIR is a comprehensive analysis that includes a thorough discussion of environmental impacts, alternatives, and ways to mitigate the impacts.

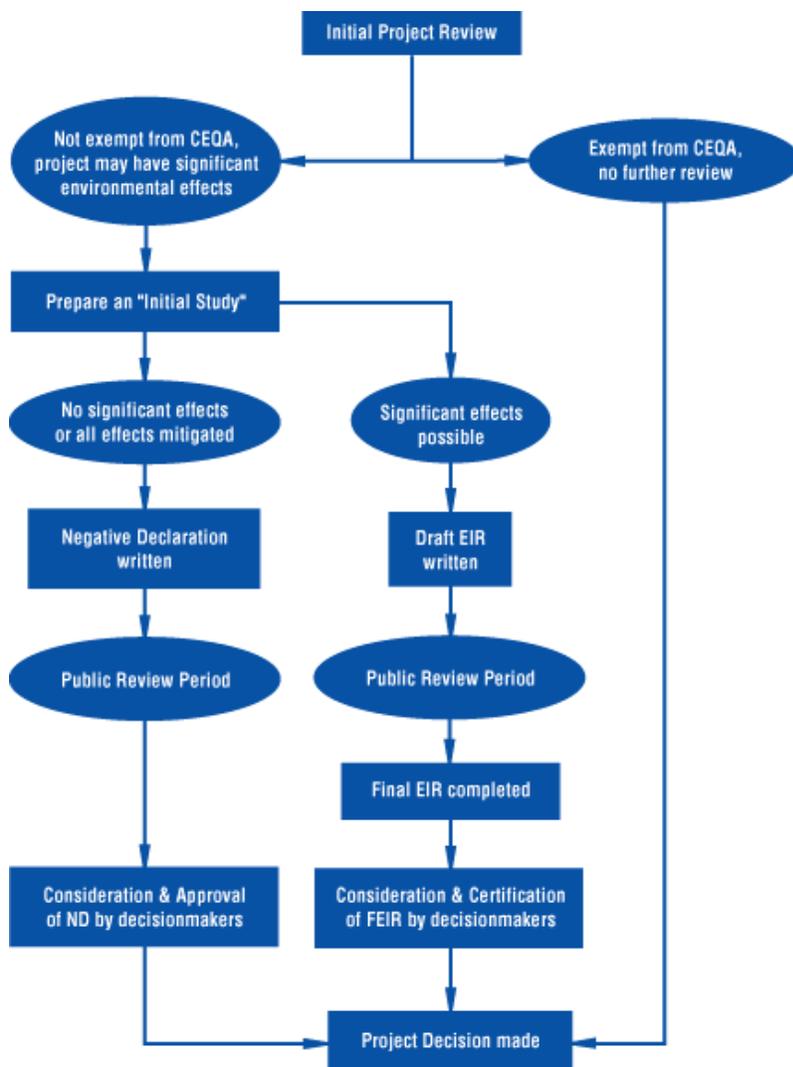
Some projects are exempt from the CEQA process. Statutory exemptions include ministerial projects (i.e. building permits for projects meeting specified building criteria), projects undertaken due to an emergency, as well as specified projects (Public Resources Code, Section 21080 et seq.). Categorical exemptions apply to projects that the Secretary for Resources has found to have no significant effects on the environment, such as minor additions to existing schools (California Code of Regulations, Section 15300 et seq.).

NEPA requires all federal agencies, including the DoD, to prepare and report environmental impact assessments of any federal action before it is undertaken. The DoD implemented NEPA through a series of regulations such as Army Regulation 200-2. Another level of compliance was added on October 13, 1978 when President Carter signed Executive Order 12088. The Order subjects federal facilities (including military installations) to oversight by federal, state, and local environmental regulators. This order was further strengthened in 1992 with the passage of the Federal Facilities Compliance Act, which allows the EPA to inspect federal facilities to ensure environmental regulations are being met.

The NEPA process begins with the definition of the proposed action and a determination of whether this action qualifies for exclusion. If it does qualify, then a categorical exclusion (CATEX) is completed and a decision memo is published. If not excluded, an environmental assessment (EA) can be prepared, or the agency can decide to go straight to the preparation of an EIS.

If the EA finds that significant impacts may result, an EIS is prepared. If the EA determines that no significant effects will occur, a

CEQA Process Overview



Finding of No Significant Impact (FONSI) is completed and published.

Like an EIR, an EIS is a comprehensive analysis of potential significant impacts that includes a thorough discussion of alternatives and potential mitigations. Following completion of the public review of the draft EIS, a final EIS is prepared along with the Record of Decision (ROD).

There are many similarities between the NEPA and CEQA processes, and between an EIS and an EIR (see comparison chart on next page). For instance, the federal Notice of Intent (NOI) is analogous to the State NOP; the federal Notice of Availability performs the same function as the State Notice of Completion; both processes offer the opportunity for other agencies and the public to comment on the environmental document; and the required contents of an EIS are largely the same as those required of an EIR.

Nonetheless, there are also differences. For instance, EIS scoping and notice requirements are, understandably, oriented toward federal agencies and include state and local agencies and groups as necessary. CEQA requires public notice to be published in a local newspaper or otherwise provided locally. Under NEPA, the project and a range of alternatives to the project are examined at the same level of detail (i.e., the proposal is seen as one of several alternatives). CEQA does not require alternatives to be examined in as great a detail as the project (i.e., alternatives are means of avoiding the impacts associated with the project). NEPA requires, as part of the discussion of each alternative, discussion of mitigation measures and growth inducing impacts. CEQA requires a separate discussion of these issues, focusing on the project. NEPA does not require the agency to adopt the mitigation measures identified in an EIS. CEQA mandates adoption unless a measure is found to be infeasible for specific reasons.

EIR / EIS Comparison

EIR (CEQA)	EIS (NEPA)
Preparation of Project Description and environmental information form	Determination by Lead Agency that Permit Application is complete
Preparation of Initial Study	Preparation of Environmental Assessment
Decision to Prepare EIR	Decision to Prepare EIS
Notice of Preparation (NOP)	Notice of Intent (NOI)
Formal Scoping	Formal Scoping
Draft EIR	Draft EIS
Agency and Public Review Period (typically 45 days)	Agency and Public Review Period (typically 45 days)
Preparation of Responses to Comments and Final EIR	Preparation of Responses to Comments and Final EIS
Distribution of Final EIR	Distribution of Final EIS
Comments sent to commenting agencies 10 days before decision	Federal Register Notice Public Notice of Availability (NOA) of Final EIS,
Certification of EIR, Project Approval and Adoption of Mitigation Monitoring Program	--
Notice of Determination (NOD)	Record of Decision (ROD)
30-day Statute of Limitations	--

Source: Based on Figure 2 in *CEQA, NEPA and Base Closure: Recipes for Streamlining Environment Review* March 1996, CEQA Technical Advice Series, Office of Planning Research.

Maintenance. As a result of the CEQA or NEPA process, the proposed project could have been modified in order to reduce or avoid impacts or a set of mitigations measures could have been adopted. In either case, the planner will be responsible to ensure the modifications or mitigations are implemented with the project.

With some projects, changes in the project or conditions could change over time prior to the project being initiated. Both CEQA and NEPA have protocols to review projects and determine if additional or follow-on analysis is warranted.

Resources / References

- **The California Environmental Quality Act.** This site provides general reference materials and case law pertaining to the CEQA legislation.
<http://ceres.ca.gov/ceqa/>
- **The California Environmental Quality Act Guidelines.**
http://ceres.ca.gov/topic/env_law/ceqa/guidelines/
- **CEQAnet.** The State Clearinghouse maintains a searchable database of all environmental documents that it receives from public agencies. The database allows the public to view brief descriptions of these documents, and allows public agencies to electronically submit environmental notices to the State Clearinghouse.
<http://www.ceqanet.ca.gov/>
- **National Environmental Policy Act (NEPA) legislation.**
<http://ceq.eh.doe.gov/nepa/regs/nepa/nepaqia.htm>
- **U.S. Environmental Protection Agency (EPA), Compliance and Enforcement.** This site provides pertinent information resources on the NEPA process, case law, date, reports, statutes, and training.
<http://www.epa.gov/compliance/nepa/>

CEQA – Environmental Checklist Form (Appendix G)

A CEQA checklist is used to identify a proposed project's, potential environmental impacts. The following questions, excerpted from the State's standard CEQA checklist, are applicable to community/military compatibility, and ask if the proposed project would result in any of the following impacts.

XI. Noise

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

XII. Population and Housing

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

XIII. Public Services

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other Public Facilities?

XV. Transportation/Traffic

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

A complete CEQA checklist can be found at the following location:

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/Appendix_G.html

Primary responsibility: Local Military

Definition

Cluster development is a type of subdivision where dwelling units are grouped together, or attached, with the purpose of retaining open space and reducing the impacts of development on the landscape and environment. Cluster development is also referred to as open space zoning, conservation zoning, conservation subdivision, or a type of density transfer. Cluster development may be implemented through the use of a Planned Unit Development (PUD).

Purpose

The purpose of cluster development is to provide for residential development on smaller lots than what is generally permitted under normal zoning requirements, which:

- Results in the permanent preservation of open space that would not normally be preserved under traditional development;
- Encourages creative site planning that is sensitive to the natural characteristics of the land without sacrificing existing, permitted densities;
- Provides for economical development, efficient provision of public services, and minimizes road and driveway construction and paving; and,
- Promotes aesthetics and other amenities.

The open space preserved through this clustering can be used to protect aviation resources (airspace) or provide buffers between military operational areas and community development.

Key Issues

- In many communities, conventional zoning and subdivision requirements can limit the application and use of cluster development. As such, developers must educate and convince local entities to approve variances for cluster

developments, potentially delaying a project.

- Cluster development is generally subject to more rigorous design review than traditional neighborhood design.

Roles and Responsibilities

Communities and military planners can work together to identify areas where additional land buffers or open space may be beneficial to both the community and military installations.

Community Planner's Role. If a community decides to create a cluster development policy, community planners should work with local elected officials, community members, and landowners to adopt flexible development techniques and zoning codes that allow for this type of development. Once established, community planners are responsible for ensuring that development occurs according to local planning policy.

Military Planner's Role. Information pertaining to military training routes and other activities that could impact the general public can be provided, as appropriate, with neighboring jurisdictions (i.e., type and timing of potential impacts). This information assists in the determination of appropriate areas for cluster development and the preservation of open space.

Implementation and Maintenance

Implementation. Clustered development is usually implemented by local governments through their general plans, zoning and subdivision ordinances. Cluster developments may be allowed by right or require a special permit, depending on the community's adopted policies. In designing and modifying cluster development provisions, the following should be taken into account:

- Offer incentives. Density bonuses are commonly used incentives that

communities can offer to encourage cluster development; and,

- **Preserve Intended Lands.** It is important than cluster development provisions result in the preservation of meaningful areas. Generally, this means open space with conservation value, areas with high accident potential, historically significant areas, recreational areas, and other areas of significance. If cluster development provisions do not explicitly state the areas of intended preservation, then development could actually occur on valuable resource areas while preserving less valuable open space.

Maintenance. Ordinances should be reviewed and revised as determined necessary to meet community objectives and obtain consistency with the adopted General Plan. At a minimum, evaluation of the community's cluster development policies should occur on a bi-yearly basis.

To ensure open space is properly managed, review and approval authority over these management plans should be retained by the community. Neighboring military installations could be involved in the management process through the establishment of a formal agreement (such as a Memorandum of Understanding) or informal agreement between the parties involved.

Resources / References

- **Smart Growth Online.** The Smart Growth Network is building a library of resources to assist in educating and informing communities on various smart growth techniques, including cluster development
<http://www.smartgrowth.org>
- **American Planning Association (APA).**
<http://www.planning.org>
- Randall, Arendt. *Rural by Design* (Chicago Planners Press/APA, 1999).
- Also refer to this related Handbook tool: (11) Conservation Easement.

Primary responsibility: Local Military

Definition

Code enforcement attempts to ensure that property owners maintain their property and bring substandard structures and conditions up to Building and Zoning Code standards. Code enforcement programs are responsible for enforcing codes that address public health and safety issues, including regulations related to garbage, specific nuisances, removal of vegetation, zoning violations, and structures. Enforcement actions are taken both proactively and in response to complaints from residents.

Purpose

The purpose of code enforcement programs is to promote and maintain a safe and desirable living and working environment. Related to land use compatibility, code enforcement is a tool used by the community to ensure its rules are enforced. Issues could arise relative to structure heights, light and glare, and fire hazards.

Key Issues

Code enforcement programs can be targeted at specific types of issues. For instance, efforts can be made to control sources of glare, dust generators, or vertical encroachments. While more effective than responding to complaints, these focused efforts can be expensive to initiate and maintain.

Roles and Responsibilities

Community Planner's Role. As local entities are the primary implementers of code enforcement programs, community planners play a vital role in protecting the integrity of city codes and ordinances. Planners may either be directly involved in day-to-day code enforcement or indirectly involved through the provision of assistance to code enforcement officers.

Military Planner's Role. Military planners are not directly involved in the implementation of local code enforcement programs. However, military planners can assist in code enforcement by notifying neighboring jurisdictions of potential code violations that may impact the installations ability to conduct its mission or training activities.

Implementation and Maintenance

Implementation. Code enforcement officers and building inspectors should educate local developers and residents on code compliance regulations, methods, and technologies as needed. In regards to land use compatibility with military installations, codes addressing the following areas are especially relevant:

- Excessive garbage or other activities that would attract birds or other animals potentially hazardous to military operations;
- Presence of incompatible land uses as per the Zoning Code;
- Excessive vegetation or construction of structures exceeding acceptable height standards; and,
- Light producing sources above acceptable limits for night navigation or military operations.

Maintenance. Code enforcement programs should be routinely evaluated for effectiveness. Goals should be reassessed to determine if current activities are sufficiently prioritized.

Resources/References

- **California Association of Code Enforcement (CACE).**
<http://www.cace1.org>
- **American Association of Code Enforcement.**
<http://www.aace1.com>

- **Statewide California Association of Code Enforcement Officials, Inc. (SCACEO).**
<http://www.scaceo.org>
- **International Code Council (ICC).**
<http://iccsafe.org>

Primary responsibility: Local Military

Definition

Conditional Use Permits (CUP) and Special Use Permits (SUP) are discretionary development permits that allow local jurisdictions to evaluate and put conditions on uses that might have an undesirable effect on the area if not conditioned.

Purpose

Some types of land uses are only allowed upon approval of a CUP also called a special use permit. CUPs are issued after a public hearing. Uses that might require a CUP include community facilities (i.e., hospitals or schools), public buildings or grounds (i.e., fire stations or parks), temporary or hard-to-classify uses (i.e., Christmas tree sales), or uses with potentially significant environmental impacts (i.e., hazardous chemical storage or surface mining). The local zoning ordinance specifies the uses for which a conditional use permit is required, the zones they may be allowed in, and the public hearing procedure. When allowing a project, the CUP will impose special development requirements to insure that the use will not be detrimental to its surroundings. Requirements might include additional landscaping, soundproofing, limited hours of operation, additional parking, or road improvements. A CUP does not rezone the land.

In the case of land use compatibility issues, the CUP could ensure a project is conditioned to avoid degrading the ability of nearby military installations to conduct training or mission critical activities.

Key Issues

- CUPs do not authorize uses prohibited by the zoning ordinance.
- The conditions imposed on a CUP must be expressly attached to the permit and cannot be implied.

Roles and Responsibilities

Community Planner's Role. Community planners play an active role in the use of conditional and special use permits as these permits are primarily implemented by local planning departments. In addition to the land entitlement process, planners should educate the public and local developers on the use and procedures of CUPs.

Military Planner's Role. Military planners can work with local entities to determine the applicability of CUPs to help set conditions needed to protect military operations. For example, one area of consideration may involve commonly used flight paths for military aircraft. Community and military planners can work jointly to discuss the potential for conditional approval of land uses, use of lighting or radio frequencies, and structural height, all of which could impact air traffic if not conditioned properly.

Implementation and Maintenance

Implementation. Following submittal of a complete application, the local planning department will process the application. Primary activities include the development of conditions necessary to ensure the compatibility of a proposed use with surrounding land uses and the proposed site. Review of the application and development of conditions can be done in coordination with the appropriate military planners to ensure impacts to military facilities or operations are minimized.

The approval of a conditional use permit is typically acted on by a Planning Commission.

Maintenance. Projects approved under a CUP or SUP should be monitored for compliance with the attached permit conditions.

Resources / References

- **California Permit Handbook**, (California Office of Permit Assistance), 1996-97. A guide to the State permit process and provides guidance for complying with the State's environmental quality and permit streamlining statutes, regulations, and policies.
- Fulton, William. **Guide to California Planning**, (Solano Press Books), October 1999 (2nd edition). A guide to land use planning as practiced in California. It describes common language, the general plan, zoning, subdivisions, annexation and incorporation, and CEQA.
- **Office of Planning Research (OPR)**. The OPR Planner's Training Series includes a section on the Conditional Use Permit.
<http://ceres.ca.gov/planning/cup/condition.htm>

Primary responsibility: ■ Local ■ Military

Definition

A conservation easement is a legally recorded agreement by which landowners may voluntarily restrict specific uses of their land. Conservation easements can assist in retaining land predominantly in its natural, scenic, historical, agricultural, or open-space condition.

Purpose

A conservation easement is a way to protect the resource, open space, or agricultural value of land by keeping it in its current state. The owner maintains ownership of the property and the right to sell or deed the property to another. The owner also keeps the right to use the property for economic gain or recreation as long as the use is allowed by the conditions of the easement. A donation of a conservation easement can reduce estate, income, and property taxes for the owners.

Conservation easements provide a legal mechanism to implement purchase of development rights (PDR) and transfer of development rights (TDR) programs. The purpose of these programs is to use market forces to simultaneously promote conservation in designated areas, while encouraging smart growth in developed and developing areas.

PDR programs are voluntary legal agreements that allow owners with a vested development right to sell the right to develop their property to state and local governments and nonprofit organizations. The development rights associated with a parcel of land can be individually purchased from the bundle of rights that go with the land which include the right to possess, use, develop, lease, or sell the land. This agreement is recorded on the land title and permanently limits the future use of the land as stated by the PDR agreement.

TDR, sometimes referred to as a transfer of development credits, relocates potential

development from areas where proposed land use or environmental impacts are considered undesirable (the donor site) to another area (the receiver site) chosen on the basis of its ability to accommodate additional development, with minimal environmental, social, and aesthetic impacts.

From a land use compatibility perspective, conservation easements provide a mechanism to maintain land in its current undeveloped state while providing benefits to the property owner.

Key Issues

- Donating an easement is not always a financially viable option for landowners.
- Monitoring and enforcing conservation easements requires a serious commitment on the part of the easement holder.
- Conservation easements do not offer protection from eminent domain. If land under easement is taken through eminent domain, both the landowner and the easement holder must be compensated.
- The implementation of PDR and TDR programs can be complex and administratively challenging, requiring the local government to make a strong commitment to administering the program and educating residents and developers on its use.

Roles and Responsibilities

A conservation easement is a voluntary land protection tool. When several individuals own a property, all owners must agree to place the easement. If the property is mortgaged, the mortgage holder must also agree to place the easement.

A conservation easement is designed to protect a property according to the owner's wishes. Since the easement is generally granted in perpetuity, it is necessary for an outside party to be responsible for monitoring and maintaining the

easement. The outside party holds the easement and is required to monitor and enforce the adherence of current and future property owners to the terms of the easement.

Easements are usually held by local government agencies, land trusts, or other nonprofit organizations designed for this purpose. Since personnel are needed to monitor and maintain easements in perpetuity, easement donors often are required to provide financial support for the easement if it is held by a nonprofit organization. Designating both a government agency and a nonprofit or land trust as co-holders of the easement is an alternative selected by many landowners. Such an arrangement may be required by certain public programs wherein the easements are purchased by a government preservation program or organization. This responsibility generally includes:

- Establishing baseline documentation for the easement. This process involves ensuring that the language of the easement is clear and enforceable, developing maps and property descriptions, and recording the property's characteristics.
- Providing information and background data regarding the easement to new or prospective property owners.
- Establishing a review and approval process for the allowable land activities stipulated in the easement.
- Enforcing the restrictions of the easement through the legal system, if necessary.
- Maintaining property and easement-related records.

Community and military planners can work together to identify and prioritize areas where conservation easements would be beneficial to one or both entities. Once prioritized, strategies can be implemented to encourage or require the use of conservation easements.

Implementation and Maintenance

Implementation. Conservation easements are implemented through a conservation easement document that contains a series of restrictions on the use of the land. The owner transfers, by deed of conservation easement to a public agency or nonprofit organization, certain rights that will restrict land uses on the property in the future.

An easement may be granted for a term of years or in perpetuity. However, in order for a landowner to take advantage of the tax benefits of a donated easement, it must be given in perpetuity.

Maintenance. Conservation easements should be periodically reviewed to ensure the terms of the easements are being met. In addition, monitoring the use of the land should occur on a regular basis. This task may require personal visits to the property to ensure that easement restrictions are being upheld.

Resources / References

- **American Farmland Trust.** This group works to maintain farmland resources within the United States using a variety of conservation techniques. (<http://www.farmland.org>)
- **Land Trust Alliance.** The Land Trust Alliance promotes voluntary private land conservation to benefit communities and natural systems. Resources and training on land trusts and conservation techniques are available, in addition to available grant opportunities. (<http://www.lta.org>)
- **Trust for Public Land.** The Trust for Public Land (TPL) is a national, nonprofit, land conservation organization that conserves land for people to enjoy as parks, community gardens, historic sites, rural lands, and other natural places, ensuring livable communities for generations to come. This organization provides information on available federal

and state programs pertaining to conservation and offers services and assistance in conservation transactions, finance, and direction (visioning).

(<http://www.tpl.org/>)

■ **National Park Service (NPS).**

The NPS is the federal government's primary agency for the preservation of America's parks and conservation of natural resources.

<http://www.nps.gov>

■ **The Conservation Fund.**

<http://www.conservationfund.org>

■ **The Nature Conservancy.** The Nature Conservancy's mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. This organization provides information on resources available for the conservation and protection of sensitive lands.

<http://www.nature.org>

■ Byers, Elizabeth and Marchetti Ponte. ***The Conservation Easement Handbook.***

Land Trust Alliance and the Trust for Public Land, 2005. This book provides substantial information on conservation easements and land trusts including the process for creating an easement, developing a stewardship program, and drafting a conservation easement.

■ **Smart Communities Network.** This Internet site provides a wide variety of information on sustainable land use techniques, green buildings and development, and other sustainable development methods.

<http://www.sustainable.doe.gov>

■ **American Planning Association (APA).** APA is a nonprofit public interest and research organization committed to urban, suburban, regional, and rural planning. APA and its professional institute, the American Institute of Certified Planners, advance the art and

science of planning to meet the needs of people and society.

<http://www.planning.org>

■ **Smart Growth Online.** The Smart Growth Network is building a library of resources to assist in educating and informing communities on various smart growth techniques.

<http://www.smartgrowth.org>

■ **Sierra Business Council**

<http://www.sbcouncil.org>

■ **League of Cities' Institute for Local Self Government.** The League of Cities' published an "Open Space Funding Guide" that describes the use of conservation easements.

<http://www.ilsg.org>

■ Also refer to these related Handbook tools: (1) Acquisition, (5) Avigation Easement, (12) Conservation Partnering Authority, and (14) Deed Restrictions.

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

A conservation partnering authority is a land acquisition authority specifically created to address land use compatibility challenges. In conjunction with other land acquisition tools, conservation partnering authorities can be used to reduce or eliminate current or potential land use compatibility issues that are likely to restrict military operations.

The Fiscal Year 2003 Defense Authorization Act (Title 10 U.S. Code 2684a) authorized military agencies to enter into “encroachment partnering” agreements with states, local jurisdictions, and private conservation entities. Private conservators who specialize in identifying and acquiring private land for conservation purposes can be used to speed up the acquisition process.

Purpose

The purpose of a conservation partnering authority is to establish and execute agreements with public and private partners to acquire real property interests from willing sellers adjacent to or near military installations. The acquisition of property allows it to remain in an undeveloped state under control of the authority, thereby reducing incompatible land use issues. It also preserves off-installation habitat to relieve current or avoid future environmental restrictions on operations.

Key Issues

- Local governments should be involved in the strategy for land acquisition to avoid planning for infrastructure and services to an area that will remain undeveloped. Land acquisition can also impact economic development potential in an adjacent community.

Roles and Responsibilities

Community and Military Planner’s Role.

Local and military planners should jointly determine which conservation organizations, as well as government agencies, are interested in partnering for land acquisition. In addition, all interested and affected parties should work cooperatively to determine areas for conservation meeting the needs of both the local community and the military. Both military agencies and public entities should be willing to initiate contact with conservation agencies. A potential method to acquire conservation partners is to issue a request for proposals (RFP) for a partner.

Implementation and Maintenance

Implementation. The formal establishment of conservation partnerships often occurs when interested parties initiate contact with landowners within areas designated for conservation. Once willing landowners for conservation agreements are identified, funds for the purchase of development rights must be obtained. This is where the military or local governments can be active participants in the partnerships as available funding resources for cost sharing can be brought to the table.

Maintenance. Conservation partnerships should be maintained through continual communication between all members. All entities involved in the partnership should be willing to exchange information and discuss conservation priorities and methods. These ongoing discussions should include local communities for the reasons stated under Key Issues.

Resources / References

- **Army Compatible Use Buffer Program.**
<http://www.sustainability.army.mil/acub.htm>
- **Navy Encroachment Partnering (EP) program.**
- **Navy Encroachment Management program.**
- **Chief of Navel Operations Instruction, Encroachment Management,**
OPNAVINST 11010.40
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV Directives links)
-

Also refer to these related Handbook tools: (1) Acquisition (including funding sources), (5) Avigation Easement, (11) Conservation Easement, and (14) Deed Restrictions.

Army Compatible Use Buffer (ACUB)

In response to the congressional expansion of the Private Land Initiative, the Army created the Army Compatible Use Buffer (ACUB) Program to implement conservation partnering. ACUBs are formal agreements between the U.S. Army and eligible entities for the acquisition of land, or interest in land or water rights, from willing sellers. This program allows for the Army to enter into partnerships with state, county, or municipal governments, as well as non-profit organizations, to purchase tracts of land or create easements on lands that surround Army installations using federal funds.

The primary purpose of ACUBs is to provide a natural buffer for perpetuity between military training lands and community activities. This accomplishes several goals including limiting the effects of urban and suburban encroachment on Army installations and training areas, maintaining the Army's ability to use and access current training ranges within the installation boundary, meeting Endangered Species Act recovery responsibilities, and preventing future threatened and endangered species listings in military areas.

As of August 2005, ACUB partnership agreements are currently in place at Camp Riley, MN; Camp Blanding, FL; Fort Carson, CO; U.S. Army Garrison, HI; Fort Sill, OK; Fort Stewart, GA; Fort Bragg, NC; and Fort A.P. Hill, VA.

Additional information on ACUB programs can be obtained at the following locations:

- US Army Sustainability, Army Compatible Use Buffers (ACUBs) Internet Site.
<http://www.sustainability.army.mil/acub>
- US Army Environmental Center (USAEC).
<http://aec.army.mil/usaec/>

Primary responsibility: Local Military

Definition

Construction standards and building codes are ordinances and regulations controlling the design, construction process, materials, alteration, and occupancy of any structure to insure human safety and welfare. They include both technical and functional standards and generally address the following.

- **Structural Safety.** Buildings should be strong enough to resist internally and externally applied forces without collapsing.
- **Fire Safety.** Includes requirements to prevent fire from spreading to and from neighboring structures, provide warning to occupants, provide for safe exit routes from the building, and provide access for fire suppression.
- **Health Requirements.** Provides for adequate plumbing and sanitation facilities for occupation of a structure.
- **Accessibility.** Requires a building to be accessible for persons in wheelchairs or having other disabilities.

Purpose

Construction standards and building codes are designed to protect the health, safety, and welfare of citizens.

Key Issues

- Building and construction codes are not intended to limit the appropriate use of materials, appliances, equipment or methods of design or construction not specifically prescribed by the code, as long as the proposed alternatives are determined by the local building official to be at least equivalent to the prescribed code.

- Construction standards and building codes often vary by state, county, city, and/or town.

Roles and Responsibilities

Community Planner's Role. Community planners should work closely with local building officials to determine areas in proximity to military installations necessitating special building standards, such as incorporation of sound attenuation techniques.

Military Planner's Role. Military personnel can assist local entities by reviewing development in areas impacted by military operations and determining the degree of impact. This assistance would provide local entities the knowledge needed to adopt and enforce building standards as appropriate.

Implementation and Maintenance

Implementation. Implementation of construction standards and building codes are the responsibility of local governments.

Maintenance. Building codes and construction standards should be reviewed and updated as needed. Community planners can work cooperatively with military planners to ensure any change in installation activities are appropriately addressed in local construction and building codes.

Resources/References

- **International Code Council (ICC).**
<http://www.iccsafe.org>
- **National Association of Homebuilders (NAHB)**
<http://www.nahb.org>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

Deed restrictions, or covenants, are written agreements that restrict or limit some of the rights associated with property ownership. These restrictions are recorded with the deed for the property and stay with the property when it is sold to a new owner (i.e., remain in effect). Deed restrictions are private agreements or contracts between an interested buyer and a seller. Deed restrictions are often established by the initial subdivider, either voluntarily or as a condition of approval on the subdivision.

Purpose

Deed restrictions can cover a wide range of restrictions and can be tailored to meet specific needs. Deed restrictions can also be used to eliminate or mitigate impacts associated with local development on military installations. This is done through the incorporation of restrictions or limitations on development types or certain land uses. For instance, specifying a maximum height for trees and structures, restricting the use of motorized vehicles, limiting lighting, and so forth.

Key Issues

- Deed restrictions offer no tax benefits.
- Some restrictions can be obtained during property entitlements as a condition of approval or as environmental mitigation.
- Deed restrictions are often used for specific restrictions such as height limitations.

Roles and Responsibilities

Community Planner’s Role. Local planners should work with installation planners and resource managers to identify those areas where deed restrictions would be beneficial in mitigating the effects of land use conflicts. Within these areas, the community could require new developments to include deed restrictions favorable to the continued operation of military installations.

Military Planner’s Role. Military planners can assist in the identification of areas in adjacent communities or unincorporated areas where deed restrictions would benefit the installation’s ability to conduct its mission and would protect public health and safety. Military agencies can utilize available resources, such as a DoD Conservation Partnering Authority, that authorizes the military to enter into agreements with eligible entities to acquire real estate interests near military installations.

Implementation and Maintenance

Implementation. Deed restrictions are usually created and imposed on lots at the time of subdivision or during development review. At that time, the restrictions are filed in the Deed Records of the County Clerk before the developer sells any lots in the subdivision. Deed restrictions can also be voluntary dedicated or purchased by the military in cooperation with non-profit organizations. Deed restrictions will typically include a variety of information including the following:

- Legal description of the restricted property and parties involved;
- Identification of the property covered by the restrictions;
- Purpose and description of the restrictions placed on property use;

14 *Deed Restrictions*

- Duration of the restrictions, their renewal and maintenance, enforcement and application; and,
- Signatures of the parties entering into the agreements.

Maintenance. The length of time deed restrictions remain in effect is determined by: 1) the specific timeline laid out in the documents creating the deed restrictions, and 2) whether the deed restrictions have been enforced and maintained. While some deed restrictions have specific life spans, most are drafted to remain in effect “in perpetuity” (forever) by a series of automatic renewals.

Resources/References

- Most local planning departments can provide sample deed restriction requirements made as a part of a subdivision approval.
- Also refer to these related Handbook tools: (1) Acquisition, (5) Avigation Easement, (11) Conservation Easements, and (12) Conservation Partnering Authority.

Primary responsibility: Local Military

Definition

Every city and county in California is required by state law to prepare and maintain a policy document called a general plan. General plans are designed to serve as the jurisdiction's blueprint for future decisions concerning physical development, including land use, infrastructure, public services, and resource conservation. Most general plans consist of: (1) a written text discussing the community's goals, objectives, policies, and programs for the distribution of land use; and, (2) one or more diagrams or maps illustrating the general location of existing and future land uses. All specific plans, subdivisions, public works projects, and zoning decisions made by the local government must be consistent with the general plan.

A general plan typically has three defining features:

- **General.** As the name implies, a general plan provides general policy guidance that will direct community land use and resource decisions.
- **Comprehensive.** A general plan covers a wide range of social, economic, infrastructure, and natural resource factors as they relate to land use and development. These include topics such as land use, housing, circulation, utilities, public services, recreation, agriculture, biological resources, noise, safety, and other issues that are relevant to the jurisdiction.
- **Long-range.** General plans provide guidance on reaching an envisioned future. To fulfill this vision, the general plan will include policies and actions that address both immediate and long-term needs. Most general plans look 20 years into the future.

Purpose

The primary purposes of a general plan are to:

- Identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to future development in the community;
- Provide a basis for local government decision making, including decisions on development approvals;
- Provide citizens with opportunities to participate in the planning and decision making processes of their communities; and,
- Inform citizens, developers, decision makers, and other cities and counties of the policies that guide development within a particular community.

Key Issues

- The state mandates that each general plan cover a set of specific topics, but the issues that need to be addressed under these topic areas will vary from community to community. An issues and opportunities evaluation, based on input from the public and local decision makers, is a typical precursor to the development of a general plan.
- During the adoption or update of a general plan, the city or county must allow public involvement. Military services with facilities or operations within the area included in the jurisdiction's general plan should work with local planners to be actively involved. Government Code, Section 65352(a) requires that general plan revisions or amendments are referred to the military prior to adoption, under certain circumstances.
- During a general plan update, a range of land use and policy alternatives are typically developed. Military planners should be involved early in this phase to

ensure that compatibility issues are understood in the development of alternatives.

Roles and Responsibilities

Community Planner's Role. Local planners are actively engaged in all aspects of general plan development. The complexity of issues involved in developing a general plan may require a community to hire consultants to assist the local agency planning staff. Local planners, or their consultant team, should consult with the military early in the general plan process to thoroughly understand the military's mission, the potential or existence of impacts from military operations on the community, and the impact of the local community on military installation and activities. In addition to consultation, local governments may consider inviting military representatives to serve on general plan steering or technical committees.

Once the draft plan is prepared, the community planner needs to circulate the general plan revision or amendment to the military prior to adoption, as specified in Government Code, Section 65352(a).

Military Planner's Role. Military planners can assist by being engaged and participating in the preparation of general plans that affect the military mission. Providing the following information would assist local governments in compatibility planning.

- Location of existing and proposed military aviation routes.
- Military housing needs that cannot be met by on-base facilities.
- Existing land use compatibility issues.
- Training and other vital installation areas potentially impacted by adjacent community development.
- Conservation areas and natural habitats within the installation or adjacent to the installation that could be impacted by neighboring development.

- Primary transportation corridors used by the military within the planning area.
- Safety considerations applicable to off-installation areas related to military facilities or operations.

Implementation and Maintenance

Implementation. The adopted general plan becomes the basis for all future local government decisions about growth and development. Communities enforce the general plan through the approval or denial of development and infrastructure projects based on their consistency with the general plan policies and objectives. These policies and objectives are implemented through tools such as the zoning ordinance, specific plans, subdivision ordinances, capital improvement plans, growth management ordinances and policies, building codes, and other such codes and regulations.

Senate Bill (SB) 1468 (Knight, Chapter 971, Statutes of 2002) requires that general plans address military compatibility issues when military facilities, installations, or operations are near to, or within, the jurisdiction. This is codified in the California Government Code, Sections 65302 and 65560. Appendix B contains examples of how general plan policies might be crafted to satisfy the requirements of state planning law.

The following is an overview of the seven elements that must be covered in a general plan.

- **Land Use.** This element covers the description of land use types, the general location and extent of proposed land uses, and standards of population density and building intensity. It also provides a map of existing and future land uses.

The land use element must consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas.

- **Circulation.** The Circulation Element provides guidance on the movement of people and goods. This includes planning for roads, transit, boating, bicycles, and pedestrians and their interconnections. The circulation element must address military airports, ports, and installations in the community and correlate these facilities with the land use element of the plan.
- **Housing.** The Housing Element contains goals, policies, implementation measures, and quantified objectives to facilitate the development of housing for all economic sectors of the community. The housing element strives to achieve a balanced mix of housing opportunities and should consider the housing needs of military installations.
- **Conservation.** This element discusses a community’s plan for the conservation, development, and use of natural resources such as water, forests, soils, fisheries, and mineral deposits .

The conservation element must consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands, including military installations.

- **Open Space.** This element discusses the plans and actions for preserving open space for natural resources; agriculture; outdoor recreation, and public health and safety. Open space land is defined to include areas adjacent to military installations, military training routes, and restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.
- **Noise.** The noise element addresses all types of noise generating land uses, including transportation-related noise (roadway, rail, and air) and industrial and commercial noise sources.

The noise element should address noise generated by military airport operations, aircraft overflights, jet engine test stands, ground facilities and maintenance functions related to airport operation, and other ground stationary noise sources from military installations that have off-installation impacts.

- **Safety.** This element establishes policies to protect the community from unreasonable risks associated with floods, fire, and seismic/geologic hazards. The element also includes a diagram of known geologic hazards.

The Safety Element of the general plan should address public safety impacts associated with military installations, airports, training areas, and activities adjacent to the community.

In each county where an airport land use commission does not exist, but where there is a military airport, the general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone (AICUZ) prepared for that military airport.

Although not required by law, cities and counties may elect to adopt a separate military element as a component of the general plan. This element could consider the impact of new growth on military readiness activities carried out on military bases, installations and operating and training areas, on property adjacent to the military facilities and underlying designation military aviation routes and airspace. It could also address any other policies a community may have regarding military installations and activities.

Maintenance. Every city and county has a responsibility to keep the general plan current. Typically, general plans are updated every five to ten years or when the area has a major change

that needs to be updated in the plan. Each mandatory element of the general plan can be amended up to four times a year. However, this limitation does not apply to the following situations.

- Optional elements, such as a military element.
- Amendments requested and necessary for the provision of affordable housing (Government Code, Section 65358(c)).
- Any amendment necessary to comply with a court decision in a case involving the legal adequacy of the general plan (Government Code, Section 65358(d)(1)).
- Amendments after January 1, 1984, to bring a general plan into compliance with an airport land use plan (Government Code, Section 65302.3).
- Amendments needed in connection with the adoption of a comprehensive development plan under the Urban Development Incentive Act (Health and Safety Code, Section 56032(d)).
- Any amendments for the purpose of developing a certified Local Coastal Program (Public Resources Code, Section 30500(b)).

Resources / References

- ***State of California, General Plan Guidelines 2003.*** Governor's Office of Planning and Research (OPR). <http://www.opr.ca.gov/publications/>
- Fulton, William. ***Guide to California Planning***, (Solano Press Books), October 1999 (2nd edition). A guide to land use planning in California.
- **California Land Use Planning Information Network (LUPIN).** Includes sources for adopted county and city general plans in California. <http://ceres.ca.gov/planning/plans/>

Primary responsibility: Local Military

Definition

The California Natural Community Conservation Planning Act and the Federal Endangered Species Act allow for the development of Natural Community Conservation Plans (NCCPs) and Habitat Conservation Plans (HCPs). An NCCP identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

Incidental take permits help landowners legally proceed with activities that might otherwise result in illegal impacts to a listed species. A HCP is a document that supports an incidental take permit application pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act. HCPs are an evolving tool. Initially designed to address individual projects, HCP are currently more likely to be broad-based plans covering a large area. The geographically broader HCP is used as the basis for an incidental take permit for any project within the boundaries of the HCP. Regardless of size, a HCP should include measures that, when implemented, minimize and mitigate impacts to the designated species to the maximum extent possible, and the means by which these efforts will be funded.

Purpose

The primary objective of the NCCP and HCP programs is to conserve natural communities at the ecosystem level while accommodating compatible land use. The programs seek to anticipate and prevent the controversies and gridlock that can be caused by species' listings. Instead, they focus on the long-term stability of wildlife and plant communities. The programs also include key stakeholders in the development process for the plan.

Key Issues

- One of the most difficult issues for the preservation of natural habitats is

funding. Habitat acquisition in fast-urbanizing areas can be expensive.

- The success of the habitat conservation planning process largely depends on the success of the process. These tools require a collaborative, stakeholder driven process requiring a broad consensus to ensure program success.
- Different areas are encouraged to develop their own approaches to conservation planning while maintaining close communication with state and federal agencies to ensure that any NCCP or HCP is consistent with established conservation standards.

Roles and Responsibilities

Community Planners. There are many incentives for local governments to participate in the NCCP and HCP processes. These incentives include:

- Greater predictability and control for land development in their jurisdictions. Local governments with approved plans can receive permits for the incidental take of species covered by the plans; and,
- The benefits associated with regional open space planning. The NCCP and HCP processes can assist communities to assemble biodiversity reserves that provide open space, aesthetic, and recreational benefits.

Local governments have several integral responsibilities during the development and implementation of the NCCP and HCP. These responsibilities include:

- Initiating the planning process;
- Applying for any necessary grant monies to fund the planning process;
- Supplying necessary background data;
- Fostering a collaborative planning process;
- Developing effective stakeholder work groups;

- Funding land acquisition;
- Monitoring and management of reserve lands; and,
- Adopting and enforcing local land use regulations. These include requirements for developers to set aside open space and to avoid and mitigate development impacts.

Military Planners. Representatives from the military can actively participate in the NCCP and HCP process as a designated member of a working committee or project steering group. In addition, any environmental data or other information compiled by the military can be shared with the project team to ensure biological communities within installation boundaries are included in the plan.

Implementation and Maintenance

Implementation. Typically, the preparation of NCCPs and HCPs follow a similar process. One of the first steps is the formation of a steering committee with representation from landowners and developers, the environmental community, government representatives (local, state, and federal), and other affected stakeholders. Frequently, consultants are hired to prepare background biological and land use studies, the NCCP and HCP plan documentation, and any other accompanying environmental studies and data needed. The content of these plans vary substantially depending on the species studied and potential threats, but most create habitat preserves through land acquisition or dedication.

Most of the deliberation surrounding the development of a habitat conservation plan centers on the delineation and configuration of the proposed reserves, the funding available to finance the plan, and the determination of which entities or organizations will have management responsibilities to manage the habitat once it is obtained.

Basic Tenets of Reserve Design

1. Conserve target species throughout the planning area.
2. Larger reserves are better.
3. Keep reserve areas close to each other.
4. Keep habitat contiguous.
5. Link reserves with corridors.
6. Reserves should be diverse.
7. Protect reserves from urban impacts.

(NCCP Scientific Review Panel)

Maintenance. The NCCP and HCP plans determine the monitoring needed to ensure the plan is implemented. The monitoring plan varies based on the specifics of each species or the environmental threats. Monitoring plans can include the following components:

- Habitat monitoring, such as measuring trends in vegetation cover over time to detect declines in habitat quality.
- Corridor monitoring, such as assessing how well animals are able to traverse the linkages between habitat reserves.
- Monitoring for species covered by the plan, such as monitoring population trends for those plant species most susceptible to population declines or threats.
- Animal species monitoring, this includes focusing on indicators of ecosystem function, as well as those of special concern to regulatory agencies, to detect changes in population levels.
- Land acquisition.

Resources / References

- **California Department of Fish and Game (DFG), Natural Community Conservation Planning.** The DFG site provides information on the NCCP program, habitat conservation, and available grants.
<http://www.dfg.ca.gov/nccp/index.html>
- **U.S. Fish and Wildlife Service (FWS).** The U.S. FWS internet site provides vast information on the HCP program including access to the *Habitat Conservation Handbook*, recent HCPs, and grant information.
<http://www.fws.gov/endangered/hcp/index.html>
- **National Audubon Society.** *A Citizen's Guide to Habitat Conservation Plans.*
<http://www.audubon.org/campaign/esa/hcp-guide.html>
- **Beatley, Timothy.** *Habitat Conservation Plans: A New Tool to Resolve Land Use Conflicts.*
<http://www.lincolnst.edu/pubs/pub-detail.asp?id=539>

Habitat Conservation Funding Opportunities

- **Federal**
 - **Habitat Conservation Planning Grants.** Section 6 of the Endangered Species Act offers grant opportunities for incidental take permit applicants to plan and develop an HCP. (<http://www.fws.gov/endangered/grants/index.html>)
 - **Habitat Conservation Plan Land Acquisition Grants.** Section 6 of the Endangered Species Act provides grant opportunities to incidental take permit holders to expand their conservation efforts by adding more area to their conserved lands. (<http://www.fws.gov/endangered/grants/index.html>)
 - **Recovery Land Acquisition Grants.** Section 6 of the Endangered Species Act provides grant opportunities to purchase lands and conservation easements that promote the recovery of federally listed species. (<http://www.fws.gov/endangered/grants/index.html>)
- **State**
 - **California Department of Fish and Game (DFG).** The DFG offers grants to public and non-profit entities for urgent tasks associated with implementation of approved NCCPs, or NCCPs anticipated to be approved within 12 months of a grant application submittal.

Additional Habitat Conservation Tools

- **Safe Harbor Agreements.** A Safe Harbor Agreement is a voluntary agreement between the U.S. Fish and Wildlife Service and cooperating non-Federal landowners. Under such an agreement, a landowner is encouraged to maintain and/or modify habitat in order to attract endangered or threatened species to his or her property.
- **Candidate Conservation Agreements.** Candidate Conservation Agreements are voluntary agreements between the U.S. Fish and Wildlife Service and one or more parties to address the conservation needs of proposed or candidate species, or species likely to become candidates, before they become listed as endangered or threatened.
- **Conservation Banking.** Conservation banks are permanently protected privately or publicly owned lands that are managed for endangered, threatened, and at-risk species. A conservation bank is similar to a biological bank account. Instead of money, the bank owner has habitat or species credits to sell to other landowners or entities in need of a mitigation tool.

Primary responsibility: Local Military

Definition

Hazard Mitigation is defined as any sustained, cost-effective action taken to reduce or eliminate long-term risk to people, property, and the environment from natural and man-made hazards and their effects. Hazard Mitigation Plans include actions that have a positive impact over an extended period of time. This distinguishes them from emergency planning or emergency services, which are associated with preparedness for immediate response to, and short-term recovery from, a specific event. Hazard mitigation actions, which can be used to eliminate or minimize the risk to life and property, fall into three categories: (1) those that keep the hazard away from people, property, and structures; (2) those that keep people, property, and structures away from the hazard; and (3) those that reduce the impact of the hazard, such as property insurance.

Purpose

The primary purpose of a hazard mitigation plan is to reduce fatalities, injuries, and property damage resulting from natural and man-made hazards. The hazard mitigation plan provides guidance for hazard mitigation activities in the designated planning area. It identifies hazard mitigation goals, objectives, and recommended actions that will reduce or prevent injury and damage to people and property from natural and man-made hazards.

For land use compatibility planning, hazard mitigation planning applies when the actions of one group increase the hazard potential for another group. For example, when development outside an installation increases flood risk on an installation or when a natural area on an installation becomes a wildfire hazard to a nearby community due to poor management.

Key Issues

- Hazard mitigation plans should not be confused with emergency management plans. Mitigation and preparedness are the primary purposes of a hazard mitigation plan.
- Communities with hazard mitigation plans in place have a priority on receiving disaster assistance from the Federal Emergency Management Agency (FEMA). This requirement gives local communities an incentive to increase regional coordination and to integrate mitigation activities into existing plans and policies.

Roles and Responsibilities

Community Planners. Community planners, public works employees, and emergency response personnel are generally involved in the preparation of hazard mitigation plans. When developing the FEMA required Hazard Mitigation Steering team, local governments should include representatives from local military installations.

Military Planners. Military planners can bring their knowledge of potential safety threats from natural and man-made hazards within the military installation to help determine the appropriate mitigation actions.

Implementation and Maintenance

Implementation. Hazard mitigation plan recommendations are generally implemented by local communities. However, military installations should take an active role in developing and implementing any necessary mitigation actions spelled out in the plan that have bearing on the installation or military operation area.

17 *Hazard Mitigation Plan (HMP)*

Maintenance. Federal hazard mitigation planning regulations require local plans to be reviewed, revised, and submitted for approval to the Regional Director of the FEMA every five years. The regulations require a plan maintenance process that includes an established method and schedule for monitoring, evaluating, and updating the plan; a system for monitoring implementation of mitigation measures; and a system for reviewing progress.

Resources/References

- **Federal Emergency Management Administration (FEMA).**
<http://www.fema.gov/fima/>

Primary responsibility: Local Military

Definition

An Installation Encroachment Control Plan (ECP) includes an analysis of a Marine Corps installation's current and future encroachment situation, and an action plan presenting control strategies and actions for reducing the encroachment threat to installation missions.

Purpose

An ECP is designed to:

- Identify the full range of encroachment issues impacting the installation;
- Develop an Action Plan that promotes actions for influencing compatible land use development;
- Document problems and corrective actions for developing plans, programs, and budgets relative to encroachment; and,
- Involve multiple stakeholders in plan development and actions.

Key Issues

- An ECP is designed to discuss issues relative to the installation and the surrounding communities.
- An ECP cannot be implemented solely by the installation.
- An ECP must be in compliance with federal, state, and local land use legislation and regulations.

Roles and Responsibilities

Community Planners. State and local governments are included in the ECP planning process to provide technical advice in land use planning around Marine Corps installations in the following areas.

- Residential and commercial development

- Transportation infrastructure improvements
- Natural resources promotion and conservation
- Environmental protections
- Economic development

Military Planners. A Marine Corps installation's Community Plans and Liaison Office performs the following tasks to successfully develop and implement an ECP.

- Actively engage in legislative and regulatory processes at the local, regional, state, and federal levels to monitor and manage encroachment.
- Use land use planning tools such as the following to promote development of a long-term sustainment strategy.
 - Air Installation Compatible Use Zones (AICUZ)
 - Range Installation Compatible Use Zones (RAICUZ)
 - Range Compatible Use Zones (RCUZ)
 - Joint Land Use Study (JLUS)
- Promote planning efforts for airspace, land space, sea space, and spectrum frequency that are consistent with sustaining the installation's mission.
- Foster development of proactive partnerships and formal and informal relationships/agreements with other services, federal, state, and local agencies, private organizations, and non-profit groups.

Implementation and Maintenance

Implementation. Implementation of the ECP is dependent on the preparation and implementation of an action plan. The action plan contains encroachment control strategies and actions for reducing the threat to installation missions posed by encroachment.

Since encroachment is primarily driven by non-military entities, close coordination with local communities and planners will help in the success of the ECP. A next step in implementation could include development of a Joint Land Use Study (JLUS) with neighboring jurisdictions. The JLUS can help provide a local framework upon which a collaborative partnership can be built.

Maintenance. As with any plan, periodic review and evaluation is important. In addition to periodic reviews, major changes on the installation (such as mission changes) and in the surrounding region (such as major development proposals) can be triggers for a more comprehensive review and update.

Resources / References

- **Headquarters, U.S. Marine Corps, Installations & Logistics Department.**
<http://hqinet001.hqmc.usmc.mil/i&L/v2/index.htm>

Primary responsibility: Local Military

Definition

The Installation Master Plan is an Army program for developing and maintaining a long-range development plan for the installation. The following documents comprising the Installation Master Plan.

- **Existing Condition Maps.** These maps provide accurate and current information on the layout and physical conditions of the installation.
- **Master Plan Report.** This report provides a written record of existing operational and environmental conditions at the installation.
- **Tabulation of Existing and Required Facilities (TERF).** This document is an inventory of existing and long-range facility requirements corresponding to the installation's mission.
- **Future Development Plans.** These plans provide for the logical and efficient development of the installation.
- **Project Phasing Map.** This map depicts the installation's five-year construction program in relation to an overall future facilities' site plan.

Purpose

The purpose of an Installation Master Plan is to provide a concise, comprehensive description of the planning proposals designed to solve current problems and meet future needs. It also serves as a record of the analytical process and rationale by which these proposals were developed.

Key Issues

- Based upon the comprehensive analysis of on-post and off-post conditions, a summary of limitations should be prepared as per Army Technical Manual instructions. The purpose of this summary is to identify those specific conditions that

most directly affect the installation's ability to carry out its mission. These conditions/issues should then be shared with local planners so collaborative solutions can be developed.

Roles and Responsibilities

Community Planners. Although local planners are not intended users of the Installation Master Plan, there are required aspects of the plan (such as off-post data collection) where they can assist their military counterparts.

Military Planners. Army planners are responsible for the following:

- Collecting all required on- and off-post data;
- Establishing working relationships with neighboring jurisdictions and agencies for the collection of off-post data; and,
- Providing information to local entities on the future development plans of the installation.

Implementation and Maintenance

Implementation. Installation Master Plans are implemented by the Garrison Commander.

Maintenance. As with any iterative planning document, periodic review and evaluation is necessary. In addition, mission changes or other factors impacting on-post infrastructure should trigger a comprehensive review and update of the Installation Master Plan.

Resources/References

- **U.S. Army Engineering and Support Center.**
<http://www.hnd.usace.army.mil/techinfo/UFC/UFC2-000-02AN/UFC2-000-02AN.pdf>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

The Department of Defense (DoD) initiated the Joint Land Use Study (JLUS) program in 1985 in an effort to achieve greater implementation and application of the Air Force and Navy Air Installation Compatible Use Zone (AICUZ) programs, the Navy Range Air Installation Compatible Use Zone (RAICUZ) program, and the Army's Operational Noise Management Program (ONMP). The JLUS process encourages residents, local decision makers, and installation representatives to study issues of compatibility in an open forum with the goal of balancing both military and civilian interests. The resulting recommendations are intended to guide the local governments and the military in the implementation of appropriate controls to enhance compatibility near military installations and operations areas.

A JLUS is an excellent means of long-range, practical land use planning around military installations or operation areas. Three factors should be present when judging suitability for a JLUS:

- Incompatible land use or potentially incompatible land use from local development,
- Strong support from base leadership, and
- Good relationship between base and community.

Purpose

According to the JLUS Program Manual (2002), the primary objectives of the JLUS program are: (1) to encourage cooperative land use planning between military installations and the surrounding communities so that future community growth and development are compatible with the training or operational missions of the installation; and (2) to seek ways to reduce the operational impacts on adjacent lands. The participants in a JLUS program will review current and planned land use around a military installation and identify current

or potential incompatibilities with the military mission. The study assesses both the military's capability to adjust its mission profile to reduce impacts on the surrounding community, and the community's capacity to revise or update its plans to be more responsive to the military mission. The following objectives for communities and military installations are also important.

Community

- Protect the health, safety, and welfare of residents and maintain quality of life.
- Manage development in the vicinity of military installations that would interfere with the continued operations of these facilities.
- Provide for new growth in an economically, environmentally, and socially sustainable manner.
- Maintain the economic vitality of the community.

Military

- Promote the health, safety, and welfare of the military and civilian personnel living and working at or near the military installation.
- Ensure the ability of the installation to achieve its mission, maintain military readiness, and support national defense objectives.

Key Issues

- A JLUS defines a common policy framework for an area, but is not itself a regulatory document.
- Implementation depends on the adoption of recommended planning measures by participants, including local governments and the military.
- A JLUS is usually completed within 12 months, although the degree of coordination and complexity may substantially increase the time needed.

Roles and Responsibilities

The process of preparing a JLUS involves recognition of a range of competing and complementary interests. A successful JLUS depends on building consensus between local communities and the military installations in the area. Once jurisdictions agree to conduct a JLUS, participants must determine who will be responsible for managing the study, also referred to as the sponsor. When one or two jurisdictions are involved, a city or county planning agency may be the logical sponsor. When many jurisdictions are involved, a regional planning agency, a council of governments, or the state may be the agency necessary to achieve consensus.

A JLUS typically uses two primary stakeholder groups to build consensus, incorporate concerns, and develop practical solutions – a Policy Committee (or Advisory Committee) and a Working Group (or Technical Committee). The Policy Committee is responsible for the overall direction of the JLUS, approval of the budget, preparation of the study design, review of draft and final written reports, consideration of policy recommendations, and monitoring the implementation of any adopted policies. The Technical Committee usually consists of area planners, city and county managers and professional staff, military planners, and representatives from natural resource protection organizations. This committee is responsible for data collection, identifying and studying technical issues, and developing recommendations for further consideration by the Policy Committee.

Implementation and Maintenance

Implementation. The first step in the implementation process is the adoption of the JLUS recommendations by the Policy Committee and transmittal of the JLUS report to affected local governing bodies urging implementation through incorporation of the recommendations in the jurisdiction's general plan. It is then dependent on each jurisdiction and the

installation to adopt the findings of the report and agree to the implementation outlined. This agreement is often in the form of an MOU between the partners involved.

The implementation process can be institutionalized through creation of a permanent advisory board or commission, with representatives from each participating jurisdiction and the military. Recommendations may include:

- Adjusting specific military operations to reduce impacts on adjacent land
- Purchase of private land by the military or other federal agencies,
- Purchase of development rights and easements,
- Real estate disclosure requirements for safety or noise issues,
- Zoning and general plan designations to guide compatible development
- Siting criteria for specific uses such as cell towers and wind turbines,
- Building code changes for sound attenuation, and
- Local and state legislation.

As an incentive for communities to participate in a joint planning process, the Office of Economic Adjustment (OEA) offers matching grants for a study. The sponsoring agency is generally expected to provide a 25 percent match.

Maintenance. JLUS studies should be updated or revised whenever significant changes to land uses or military operations occur.

Resources/References

- **Office of Economic Adjustment (OEA).** OEA is the primary office of the Department of Defense with responsibility for providing adjustment assistance to communities, regions, and states adversely impacted by significant Defense program changes.
<http://www.oea.gov>

- **Joint Land Use Study, Program Guidance Manual**, August 2002.
Accessible on the OEA internet site.
<http://www.oea.gov>.
- **Cost-shared Community Planning Assistance** grants are available to state and local governments from the Office of Economic Adjustment (OEA) (*Title 10 U.S.C. Section 2391*).
- **Practical Guide to Compatible Civilian Development Near Military Installations**, July 2005
<http://www.oea.gov>
(under "Encroachment Program")

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

This tool is designed to address significant light sources that can cause unwanted spillover lighting (off site illumination), increasing background light in the night sky (an issue with training and the use of night vision equipment), or glare. At the local level, light and glare can be reduced through design and placement requirements in a zoning code, a stand-alone ordinance, and/or specific development conditions. The intent of these is to establish and define permitted and prohibited lighting practices to limit the obtrusive aspects of lighting. For the military, each installation has design standards that reflect the operational and security parameters appropriate for the use. For both local and military lighting, mitigations, such as shielding, may be appropriate methods for controlling unwanted illumination and glare.

Purpose

From a land use compatibility standpoint, both installation and community land uses and activities can have light and glare impacts on each other that should be considered when reviewing projects. Communities should be particularly cognizant of glare impacts on air operations. Water bodies, glass on buildings, and even vehicle windows can be a concern.

Light and glare controls allow a community to express its expectations about quality lighting. A significant amount of improvement can be achieved if the requirements are well written, implemented, and enforced. Effective shielding standards will virtually eliminate glare from a light source. They will also reduce the amount of light escaping into the sky by fifty percent or more as compared to an unshielded light source.

Key Issues

- Lighting should be evaluated on a case-by-case basis in areas of the community with different developed and natural conditions. Varying conditions will result in location specific lighting needs to reduce adverse impacts associated with these conditions.
- Reduction in glare and light intrusion can be achieved through lighting codes. Lighting codes should cover overall light reduction, focused lighting, shielding, and utilizing appropriate lighting types. Some lighting conditions can be difficult or impractical to mitigate, such as lighting for athletic fields. This should be considered when siting these uses.

Roles and Responsibilities

Community Planners. In most communities, awareness of the issues and the characteristics of quality lighting must be understood by both planners and policymakers before enacting a lighting ordinance. Once the community understands the ordinance’s objectives and its necessity, the process of drafting, enacting, and implementing an appropriate code can occur.

Military Planners. Military planners can assist local entities by identifying sources of light and glare that have a negative impact on the installation’s mission and ability to conduct training. Military planners can assist communities by investigating installation light and glare impacts on community residents and the environment.

Implementation and Maintenance

Implementation. Implementation and enforcement of a lighting code will have impacts on planning and code enforcement staff. In addition to the time required to review materials related to lighting, and on-site follow-up to verify compliance, the staff will need to develop some

familiarity with lighting terms and how to reliably evaluate the effectiveness of mitigation methods.

Maintenance. Enforcement is required to ensure conformance with the standards of the lighting code. Monitoring code compliance after the project is completed is also recommended.

Resources/References

The best source for information on this topic is to consult with the local jurisdiction or military service on applicable design requirements.

Primary responsibility: Local Military

Definition

A Military Influence Area (MIA) is a formally designated geographic planning area where military operations may impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. These areas are also referred to as: Region of Military Influence (RMI), Military Influence Planning District (MIPD), Military Influence Overlay District (MIOD), Military District Disclose District (MIDD), Airfield Influence Planning District (AIPD), and Areas of Critical State Concern (ACSC).

Purpose

An MIA is designated to accomplish the following purposes.

- Promote an orderly transition between community and military land uses so that land uses remain compatible.
- Protect public health, safety, and welfare.
- Maintain operational capabilities of military installations and areas.
- Promote the awareness of the size and scope of military training areas in order to protect areas separate from the actual military installation (i.e., critical air and sea space) used for training purposes.
- Establish compatibility requirements within the designation area, such as requirements for sound attenuation, real estate disclosure, and aviation easements.

Key Issues

- Local entities may determine that more than one MIA is needed because each MIA will serve a distinct purpose.
- When determining the boundary of a MIA, the range of applicable compatibility factors listed in Section 2 should be considered.

- When appropriate, potential mission changes should be considered in determining the MIA boundary. New weapons systems can require larger noise and safety zones.

Roles and Responsibilities

Community and Military Planners' Role. Both entities should work jointly to determine the appropriate areas and purposes of a MIA. Planners should educate local officials, residents, military personnel, and other stakeholders of the benefits and ramifications resulting from the designation of MIAs.

Implementation and Maintenance

Implementation. MIAs should be incorporated into the local planning process through the community's general plan and zoning ordinance.

Communities, in conjunction with neighboring military installations, should determine the purpose, function, and boundary for a MIA. For example, if the purpose is the disclosure of the impact of military activities on real estate, the MIA may be used to require such disclosure at the time of showing, sale, or lease contract signing.

Maintenance. Periodic review of the military's mission and the boundaries of the MIA should occur to determine its effectiveness and accuracy. The MIA should reflect any changes to the military's mission and training activities.

Resources/References

- **The City of Aurora (CO)** designates Airport Influence Districts, near Buckley AFB, which is an example of the use of MIAs.
<http://www.auroragov.org>

Please see next page

Primary responsibility: ■ Local ■ Military

Definition

A Memorandum of Understanding (MOU) is a contract between two or more government entities. The governing bodies of the participating public agencies must take appropriate legal actions, often adoption of an ordinance or resolution, before such agreements become effective. These agreements are also known as a Joint Powers Agreement or Interlocal Agreement.

California Government Code, Section 6500 et seq. allows public agencies to enter into joint agreements. The definition of public agency includes, but is not limited to, the federal government or a federal agency, the state or any state department or agency, a county, city, county board of education or school superintendent, public corporation, or public district.

Purpose

The purpose of an MOU is to establish a formal framework for coordination and cooperation. These agreements may also assign roles and responsibilities for all of the agreement's signatories. MOUs generally promote:

- Coordination and collaboration by sharing information on specific community development proposals, such as rezonings and subdivisions.
- Joint communication between participating jurisdictions and the military ensuring that residents, developers, businesses, and local decision makers have adequate information about military operations, possible impacts on surrounding lands, procedures to submit comments, and any additional local measures to promote land use compatibility around installations.
- Formal agreement on land use planning activities, such as implementation of a Joint Land Use Study (JLUS).

Key Issues

- Negotiating an MOU can take a considerable amount of resources and staff time. This is necessary, as parties signing the agreement will be bound by its terms.

Roles and Responsibilities

MOUs offer substantial advantages for laying out and documenting a common understanding on land use planning and information sharing.

Community Planner's Role. Communities should utilize their statutory right to enter into MOUs or joint agreements with federal installations. These agreements can be used to develop joint solutions to land use issues.

Military Planner's Role. Military planners can assist in providing communities with a better understanding of military missions, functions, and resources needed for mission accomplishment. Military planners can establish MOUs to create a long-term commitment to a common planning agreement.

Implementation and Maintenance

Implementation. In order to implement MOUs, local communities and military installations should work cooperatively to determine the goals, objectives, terms, roles, and responsibilities of the agreement.

Maintenance. As with any legal document, the terms and conditions of the MOU should be periodically evaluated to determine its relevance to current conditions. As conditions change, the MOU should be modified to meet the new needs. It is important to include a procedure for modifying the MOU in the text of the agreement.

Resources / References

- **Sample MOU** between an installation and local entities.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/MOUSHawAFBSep2000.doc>

Primary responsibility: Local Military

Definition

The Army's Operational Noise Management Program (ONMP) incorporates and replaces the Installation Compatible Use Zone Program (ICUZ) previously used by the Army. The ONMP is intended to promote compatible land use planning through the use of Land Use Planning Zones (LUPZs) based on noise levels.

Purpose

The primary purposes of the ONMP program are to accomplish the following initiatives.

- Protect the health and welfare of people from environmental noise generated by Army activities both on and off installations.
- Reduce the impacts of Army generated noise on communities to the extent feasible without curtailing necessary Army activities.

Key Issues

- Impacts on a community from Army installations can vary widely from aircraft noise intrusion, to vibration and dust from bombing ranges. Although the ONMP is primarily concerned with noise intrusion, all Army installation impacts on the community should be addressed in some capacity.

Roles and Responsibilities

Community Planner's Role. Local planners should actively participate in the development of the noise zones for use in the ONMP. Community planners should provide Army planners with technical advice and information on land use plans within the vicinity of the installation. To assist with ONMP implementation, community planners can:

- Inform and include neighboring military installations in the land entitlement process for projects proposed within or in close proximity to established ONMP zones. Strategies for inclusion could include inviting military counterparts to serve as ex-officio members of local planning boards and commissions, and providing information on land entitlement requests to the military installations for review and comment prior to local action.
- Review and amend, when appropriate, local planning documents (zoning ordinance, subdivision guidelines, building codes) and policies (general plan) to mitigate land use conflicts within and in close proximity to ONMP zones.

Military Planner's Role. Military planners are responsible for the following ONMP related activities:

- Identifying areas where noise levels from military sound sources are high enough to be incompatible with noise-sensitive uses such as housing, schools, churches, and hospitals. Conversely, identifying areas where off post civilian sound sources create incompatible noise environments on post.
- Complying with applicable Federal laws and regulations on the management of environmental noise.
- Maintaining an active environmental noise management program to protect the present and future operational capabilities of the installation and training areas. The accurate prediction of long-term operations at the installation can reduce future land use conflicts from neighboring incompatible land uses because it allows neighboring communities to understand installation needs.
- Assessing the effect of military noise and identifying measures to mitigate impacts on off-installation land uses.
- Maintaining a noise compliant management program and handle all

complaints with integrity, sensitivity, and timeliness.

- Continually monitoring the noise environment to verify levels are acceptable for adjacent land uses.
- Developing and procuring weapons systems and other military combat equipment that produce less noise, but are consistent with operational and mission requirements.
- Considering acquisition of property rights solely on the basis of incompatible noise levels only after all practical means of achieving acceptable levels have been exhausted, and the operational integrity of the installation's mission is threatened.

Implementation and Maintenance

Implementation. The Army is responsible for the implementation of the ONMP program. Coordination with local government entities is required by the Department of the Army. In order to ensure successful implementation, the following actions should be taken:

- Inform local government agencies of the ONMP program through formal actions (i.e., presentations to local elected officials) or informally (i.e., technical memorandum); and,
- Establish both a formal and informal network of contacts to routinely exchange planning information such as MOUs and the establishment of technical and working groups with community planners and leaders.

Maintenance. ONMPs should be periodically reviewed in accordance with Army regulations. Substantial mission and operation changes warrant a thorough review of noise zones and their potential impacts to neighboring land uses.

Resources / References

- **U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM)** provides information on the Army's Operational/Environmental Noise Management Program.
<http://chppm-www.apgea.army.mil/dehe/morenoise/>
- **US Army Environmental Center** works at all levels to assure that the Army's land base is sustainable for soldier training and weapons testing.
<http://aec.army.mil/usaec/>
- **Army Regulation 200-1, Environmental Protection and Enhancement.** 1997.
http://www.asaie.army.mil/pitoolbox/documents/ar200_1.pdf

Primary responsibility: Local Military

Definition

The Navy's Range Air Installations Compatible Use Zones (RAICUZ) program delineates the noise impacts from aerial firing ranges from other military noise sources. The program applies to all Navy and Marine Corps air-to-ground range installations in the United States and its territories. This program is similar to the Navy and Marine Corps Air Installations Compatible Use Zones (AICUZ) program and the Army's Operational Noise Management (ONMP) program. The primary focus of the RAICUZ is weapons safety. Aircraft and blast noise are also addressed, including ingress and egress to the targets on Military Training Routes (MTR).

Purpose

The RAICUZ program is designed to protect public health, safety, and welfare, and to prevent community development from degrading the operational capability of air-to-ground ranges by meeting the following objectives:

- Preclude public exposure to hazards associated with air-to-ground weapons delivery;
- Prevent incompatible land development near training range operations to reduce hazards such as low level flight, equipment and high noise;
- Protect Navy and Marine Corps investment by safeguarding the operational capabilities of ranges; and,
- Inform the public about the RAICUZ program and seek cooperation from communities to minimize potential safety issues and noise impacts on residents from air-to-ground ranges.

Key Issues

- The presence of the following factors should be considered in determining appropriate mitigation tools: low and

frequent overflights, aircraft noise, light emissions, electromagnetic and radio frequency emissions, and height of trees and other obstructions.

- Installations should review all assumptions and model inputs to ensure accurate results and determination of RAICUZ planning areas.
- All potential users, including local governments, other federal agencies, Native American Nations, etc., should be included early in the development of the RAICUZ study.
- When land use compatibility issues arise, acquisition should be the mitigation action of last resort.

Roles and Responsibilities

Community Planner's Role. Local entities should be included in the planning process and be prepared to provide technical advice to the military during the preparation of the RAICUZ. Local community capital improvement plans and general plans provide foresight into potential areas where land use conflicts may arise. These plans should be shared with adjacent military installations for their input. To assist in the implementation of the RAICUZ, community planners can perform the following actions.

- Inform and include neighboring military installations in the land entitlement process for projects proposed within or in close proximity to established RAICUZ zones. Strategies for inclusion could include inviting military counterparts to serve as ex-officio members of local planning boards and commissions or providing information on land entitlement requests to the military installations for review and comment prior to local action.
- Review and amend, when appropriate, local planning documents (zoning ordinance, subdivision guidelines, building codes) and policies (general plan) to mitigate land use compatibility within and in close proximity to RAICUZ zones.

Military Planner's Role. In general the following tasks are performed by the military planner.

- Inform local and state governmental agencies, and other federal agencies, community groups, and the general public on (1) the requirements of military flying, (2) range operations, (3) efforts underway and planned to reduce potential off-range weapons impacts and noise, and (4) the local command's position on specific land uses.
- Monitor and comment on proposed development outside of the RAICUZ boundary to reduce its potential impacts. Development that occurs up to the RAICUZ boundary could prevent mission changes or mission expansion in the future.
- Monitor changes in base operations to determine their potential impacts on the RAICUZ study.
- Evaluate base development projects based on RAICUZ criteria and requirements.
- Discuss incompatible land use proposals in adjacent communities with local elected officials and other community decision makers.

Implementation and Maintenance

Implementation. Implementation of the RAICUZ policy is predicated upon cooperation with other federal agencies, local governments, and Native American tribes responsible for land management in areas impacted by, or adjacent to, the RAICUZ study area. Local governments are responsible for protecting their residents' health, safety, and welfare through controls like zoning ordinances, building codes, subdivision regulations, building permits, and disclosure statements. As such, success of the RAICUZ program depends on the voluntary participation, acceptance, and use by local governments,

private individuals, and other interested parties. The JLUS is an excellent means of incorporating RAICUZ recommendations in local general plans.

In order to ensure successful implementation, the following techniques should be utilized.

- Inform local governmental agencies of the RAICUZ program through formal actions (i.e., presentations to local elected officials) or informally (i.e., technical memorandum).
- Establish both a formal and informal network of contacts to routinely exchange planning information (i.e., Memorandum of Understanding, establishment of technical and working groups with community planners and leaders).

Maintenance. To maintain currency, RAICUZ studies should be reviewed every two years and updated as necessary to reflect changing operational and training requirements, new aircraft types, new weapons and delivery tactics, current levels of aviation activity, and land use development. The Navy requires the updating of weapon footprints if operations and training tactics have changes since the previous RAICUZ update.

Resources/References

- **Chief of Naval Operations Instruction, Encroachment Management,** OPNAVINST 3550.1, 1998
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV Directives links)
- **US Navy, Operational Naval Instruction (OPNAVINST) 3550.1 (1998).**
http://neds.daps.dla.mil/Directives/3550_1.pdf
- **Sample Memorandum of Understanding** between an installation and local planning and land use approval agencies.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/>

Primary Responsibility: Local Military

Definition

Prior to the transfer of real property to a new owner, California law requires sellers and/or their agents to disclose all actual know facts related to the condition of the property (California Civil Code, Section 1102). This disclosure should include noise or other proximity impacts associated with property located near a military installation or operations area.

Purpose

The purpose of real estate disclosure is to protect the seller, buyer, and sales agent from potential litigation resulting from specified conditions (i.e., hazard areas, existing easements). Real estate disclosure can be used to inform potential buyers and renters of the possible affects from nearby military installations. This disclosure can be one of the most practical and cost effective land use compatibility tools. California has enabled local governments, working in cooperation with the real estate industry, to establish noise disclosure by regulation or voluntary initiation (California Civil Code, Section 1102).

Key Issues

- For information maintained by local jurisdictions, maintaining an easy-to-access source of current and accurate information for use by real estate professionals and the public.
- For land owners, developers, and the public, an issue is having access to up-to-date information on military installations and operation areas.

Roles and Responsibilities

Community Planner's Role. Local planners should work within their communities and cooperatively with military installations and other agencies to accomplish the following tasks pertaining to real estate disclosure.

- Planners need to identify areas of disclosure for military impacts.
- Disclose compatibility issues with military installations or operations on Real Estate Transfer Disclosure Statements, as appropriate to the location.
- Educate local citizens, real estate professionals, and developers of the process and benefits of real estate disclosure.

Military Planner's Role. In cooperation with local entities, military planners can assist in the real estate disclosure process by:

- Working jointly with local planners to identify areas and topics for disclosure, and
- Providing information on potential disclosure issues to the local Board of Realtors, and the local tax assessor and property records agency.

Implementation and Maintenance

Implementation. Real estate disclosure is required by California Civil Code. In order to complete the Real Estate Transfer Disclosure Statement, sellers and their agents often depend on local planning departments for the necessary information, such as general plan and zoning maps. The key to disclosure compliance is having information on military land use compatibility factors readily available for public use. The disclosure should contain the presence and proximity of a military installation, the nature of its operations, and the potential for noise and accidents affecting adjacent properties. Cooperation with local real estate professionals and developers is essential for successful implementation.

Maintenance. For disclosure to be successful, local planning departments need a system that provides up-to-date information on military operational areas. Local and military planners can work jointly to develop the processes for communication and information exchange.

Resources / References

- State of California, Department of Real Estate, *Disclosures in Real Property transactions*.
<http://www.dre.ca.gov/disclosures.htm>

Primary Responsibility: Local Military

Definition

A Regional Shore Infrastructure Plan (RSIP) is the Navy's version of a general or master plan. RSIPs are facility infrastructure plans that also evaluate environmental and manmade constraints in developing facility solutions. The RSIP also addresses the community's ability to provide the facility requirements through shared or joint use facilities.

Purpose

One of the main purposes of an RSIP is to achieve cost savings by eliminating infrastructure duplication by using existing off-base community facilities and services. To do this, the RSIP identifies alternatives for optimizing the use of land and facilities, and incorporates the strategic vision of the Navy through functional consolidations, regionalization, outsourcing, privatization and joint use with other DoD and federal and government entities.

Key Issues

- Data requirements for the RSIP are extensive and require the use of GIS and other advanced analysis tools.
- The RSIP process must include a regional planning component for Navy installations. This results in long-term plans that look beyond the boundaries of an installation and consider opportunities and constraints in the surrounding region.

Roles and Responsibilities

Community Planner's Role. Local planners should actively participate in the development of a RSIP, as the RSIP focuses on regional planning and looking outside the installation boundaries. Local planners should participate in the visioning process and stakeholder meetings, and provide the following information, if available.

- Current information on existing and planned land use and demographics.
- Accurate information on the biological, physical, and man-made environment (i.e., vegetation and wildlife, topography, utilities, geology, etc.).
- Current aerial photography, topographic, and cadastral information, including real estate information describing jurisdiction and installation boundaries.

Military Planner's Role. Military planners are active participants in the development of the RSIP and perform a variety of tasks pertaining to its preparation, including, but not limited to the following:

- Collection of all pertinent information needed for the facilities and areas included in the RSIP, such as community plans, topography, geology, soils, hydrology, oceanography and coastal zones, water quality, air quality, climate energy, vegetation, wildlife, archaeology, socioeconomic, community facilities and services, political structures, and built environment; and,
- Coordination with local and regional planning and political entities.

Implementation and Maintenance

Implementation. As with most general planning documents, the RSIP is implemented through the development of goals and policies, a thorough examination of existing conditions, and a detailed facilities plan.

Maintenance. Periodic review of existing conditions is advised and the RSIP should be reassessment if there is a mission change. It is recommended that an RSIP be updated on a five to ten year cycle.

Resources / References

- **Chief of Navel Operations Instruction,
Encroachment Management,**
OPNAVINST 11010.45
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV
Directives links)

Primary responsibility: Local Military

Definition

Sound attenuation refers to special construction techniques and materials designed to lower the amount of noise that penetrates the windows, doors, and walls of a building.

Purpose

Noise is defined as any unwanted sound. The introduction of a noise source into a given environment can be objectionable to nearby residents and potentially harmful, depending on the sound level. Excessive noise can impair hearing, and may also put stress on the heart, the circulatory system, and other parts of the body. Urbanization near military installations can be subjected to noise resulting from aircraft, training facilities and activities, and daily operations. Sound attenuation tools attempt to reduce the impact of military-related noise to nearby residents and the general public.

Key Issues

- The first choice in noise attenuation is avoidance. When possible, noise sensitive uses should not be located close to military installations or noise sources.
- Some land uses are more sensitive to noise, including residential development, schools, hospitals, etc.
- When evaluating noise impacts on sensitive receptors, remember to look at acceptable levels for outdoor spaces as well as indoor space.
- Noise is a cumulative condition. Programs such as the DoDs AICUZ program look at noise levels associated with typical flight operations and aircraft, but do not incorporate noise from other sound generators. Therefore, a home just outside the AICUZ 65 dBA contour may have a cumulative noise exposure of over

65 dBA when roadway noise and other local noise sources are added.

- While noise is typically measured and mitigated based on a daily average noise level, some circumstances may require an evaluation of peak noise levels.
- Retrofitting of existing structures can be expensive and cost-prohibited in certain instances.

Roles and Responsibilities

Community Planner's Role. Local and military planners should work cooperatively to identify areas where sound attenuation regulations should be implemented. At the community level, avoiding the placement of noise sensitive land use designations in high noise environments is recommended.

Military Planner's Role. Military planners can assist local entities in determining areas appropriate for sound avoidance and attenuation.

Implementation and Maintenance

Implementation. Sound attenuation standards are generally implemented through local zoning and building codes. Local building officials, inspectors, and planners should be familiar with their use and applicability in land use compatibility situations.

Maintenance. Building codes and construction standards should be reviewed and evaluated according to community needs and goals. In addition, as technological innovations in sound attenuation become available, codes and standards can be updated to allow these advanced tools and materials to be used.

Resources / References

- **Caltrans Highway Traffic Noise Abatement.** This guide provides ideas on noise attenuation that can be applied to non-highway situations as well.
<http://www.dot.ca.gov/hq/oppd/hdm/pdf/chp1100.pdf>
- **Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations,** April 2005.
<http://www.navfac.navy.mil>

Primary responsibility: Local Military

Definition

Land cannot be divided in California without local government approval. Dividing land for sale, lease or financing is regulated by local ordinances based on the State Subdivision Map Act (commencing with Government Code, Section 66410). The local general plan, zoning, subdivision, and other ordinances govern the design of the subdivision, the size of its lots, and the types of required improvements, such as street construction, sewer lines, and drainage facilities.

There are two types of subdivisions:

- Parcel maps, which create fewer than five new lots; and,
- Tentative subdivision maps (also called tract maps), which create five or more new lots.

Applications for both types of subdivisions must be submitted to the local government for consideration.

Purpose

Subdivision ordinances set forth the minimum requirements deemed necessary to protect the health, safety, and welfare of the public. More specifically, the subdivision ordinances are designed to accomplish the following initiatives.

- Assure that effective protection is given to the natural resources of the community, especially ground water and surface waters.
- Encourage well-planned subdivisions through the establishment of adequate design standards.
- Facilitate adequate provisions for transportation and other public facilities.
- Secure the rights of the public with respect to public lands and waters.

- Improve land records by the establishment of standards for surveys and plats.
- Safeguard the interests of the public, the homeowner, the subdivider, and units of local government.
- Prevent, where possible, excessive governmental operating and maintenance costs.

Key Issues

- Subdivision approval is conditioned upon the subdivider providing public improvements such as streets, drainage facilities, water supply, and sewer service to serve the subdivision. These improvements must generally be installed or secured by bond before the city or county will grant final map approval and allow the subdivision to be recorded in the county recorder's office.
- Lots within the subdivision cannot be sold and are not legal divisions of land until a final map has been recorded. The subdivider has at least two years (and with extensions, usually more) in which to comply with the improvement requirements, gain final administrative approval, and record the final map.

Roles and Responsibilities

Community Planner's Role. In nearly all cases, the local Planning Commission is the subdivision approving authority. Upon receiving an application for a subdivision map, the city or county staff will examine the design of the subdivision to ensure that it meets the requirements of the general plan, the zoning ordinance, and the local subdivision ordinance. A public hearing must be held prior to approval of a tentative tract map. Parcel maps may also be subject to a public hearing, depending upon the requirements of the local subdivision ordinance. Approval of a subdivision plan or plat is

considered an administrative action as opposed to a quasi-judicial action.

The subdivision plat is an appropriate place to specify any special conditions placed on the use of the land, usually in the form of an easement or deed restriction.

Military Planner's Role. Participation by a military base representative on a local development review committee could decrease potential conflicts prior to development. The military planner can assist by reviewing subdivision submittals in areas potentially affected by installation operations or where new development may impact these operations. Recommendations on proposed subdivisions would assist provided to local planners prior to planning commission consideration.

Implementation and Maintenance

Implementation. Subdivision ordinances are implemented by local governments as a component of the land entitlement process. Overall guidance is provided by the State's Subdivision Map Act.

Maintenance. Periodic review and evaluation of subdivision ordinances should occur routinely, especially after the adoption of changes to the general plan or zoning ordinance.

Resources / References

- **California Subdivision Map Act (California Code, Sections 66410-66499.58).** This act establishes the standards and procedures for the approval of subdivision maps (plats) within the State of California.
http://www.opr.ca.gov/publications/PDFs/PZD_200s.pdf
- **California Land Use Planning Information Network (LUPIN).** This site provides a wealth of information on a variety of planning topics within the State of California.
<http://ceres.ca.gov/planning/>
- **A Citizen's Guide to Planning.** This is a guide to land use planning as it is practiced in California. Its purpose is to explain, in general terms, how local communities regulate land use and to define some commonly used planning terms.
http://ceres.ca.gov/planning/planning_guide/plan_index.html/#anchor189968
- **California Department of Real Estate (DRE).** DRE offers information on a variety of subdivision related topics including training opportunities, subdivision process, and a glossary of real estate terms.
http://www.dre.ca.gov/subs_sub.htm

Primary responsibility: Local Military

Definition

Zoning is the division of a jurisdiction into districts (zones) within which permissible uses are prescribed and restrictions on building height, bulk, layout, and other requirements are defined.

Purpose

The primary purpose of zoning is the protection of public health, safety, and welfare. Refining this goal further, zoning provides opportunities for the implementation of regulations supporting land use compatibility, as shown in following examples.

- Protection against physical danger, particularly safety considerations for properties in proximity to military ranges or within military flight areas.
- Protection against nuisances associated with military operations, such as noise, vibration, air emissions, etc.
- Protection against heavy traffic flows or truck routes in residential areas.
- Protection against aesthetic nuisances impacting military installations.
- Protection against “psychological nuisances”, such as perceived and actual dangers associated with military operations.
- Protection from light and glare, air emissions, and loss of privacy.
- Provision of open space and agricultural preservation.

Key Issues

- Zoning and the general plan are inexorably tied to each other. Policies recommended within the general plan should be reflected within the zoning ordinance or development code.
- Zoning ordinances requiring rigid separation of uses or inflexible provisions can make creative solutions to land use

compatibility, such as cluster development, difficult or impossible.

- When designating military compatible use districts, the ordinance should recognize that the local community has no regulatory control over development or activities on federal property.

Roles and Responsibilities

Community Planner’s Role. Local jurisdictions possess sole responsibility for implementing their zoning ordinance, or development code. As such, local planners should be familiar with their jurisdiction’s zoning ordinance and its potential use as a tool in promoting land use compatibility with neighboring military installations. Community planners should work cooperatively with military planners to determine applicable regulations and should invite military planners to review draft ordinances prior to adoption.

Military Planner’s Role. Military planners can assist by working jointly with local jurisdictions in determining potential applications of a local jurisdiction’s zoning ordinance to resolve land use compatibility issues. Examples of collaboration include identifying areas for inclusion within various overlay zoning districts pertaining to military operations and determination of appropriate land uses and/or land use intensities in proximity to military installations.

Implementation and Maintenance

Implementation. There are several ways in which a zoning ordinance can improve land use compatibility between military installations and surrounding jurisdictions. One of the primary zoning tools includes the use of Overlay Zoning Districts.

An overlay district is an additional zoning requirement placed on a geographic area, but does not change the underlying zoning. Overlay zoning is used for dealing with special situations or accomplishing special goals, such as land use

compatibility with neighboring military installations. Applicable zoning overlay districts include the following types.

- **Airport Overlay District.** An Airport Overlay Zone is a zone that promotes compatible land uses for specific distances around airports. An Airport Overlay Zone applies additional conditions or restrictions to a specified area while retaining the existing base zoning classification. This zone can be highly effective in addressing a number of potential incompatibilities with airports and airport operations. For example, the Airport Overlay Zone may limit the height of objects surrounding an airport, restrict uses producing conditions that may be hazardous to air navigation (e.g., smoke, glare), and limit uses that are noise-sensitive.
- **Airport Development Zoning.** This type of zoning is applied to areas around an airport identified for airport related and dependent uses. It often replaces industrial, public facility or other designations currently given to the airport site and immediate vicinity. The Airport Development Zone can also be a base zoning district that identifies outright and conditionally permitted uses on airport property. This district may be most applicable to joint use airports where local jurisdictions share facilities within a military installation.
- **Military Influence Area/District (see Tool 22).** A military installation area/district is intended to recognize the location of military installations within or adjacent to a community. Specific uses or regulations are generally established within these areas.
- **Agricultural Overlay District.** Agricultural overlay districts exist to promote agricultural land uses, protect prime soils, and prevent non-agricultural uses from negatively impacting

agriculture as the primary land use. These areas can be used to provide appropriate buffers surrounding military installations.

- **Planned Development District.** A Planned Development (PD) District can be a base district, a floating zone, or could be adopted as an overlay zone depending on city desires. PDs are designed to encourage the efficient use of land and resources, promote greater efficiency in public and utility services, and encourage innovation in the planning, design, and building of all types of development. Generally, communities can establish development standards favoring land use compatibility.

Other tools that generally are, or can be, implemented through zoning ordinances are discussed in more detail within this Handbook, including:

- Avigation Easement (see Tool 5)
- Cluster Development (see Tool 8)
- Conditional Use Permit (see Tool 10)
- Conservation Easement (see Tool 11)
- Light and Glare Controls (see Tool 21)
- Military Influence Area (see Tool 22)
- Real Estate Disclosure (see Tool 26)
- Sound Attenuation (see Tool 28)

Maintenance. Zoning regulations should be periodically reviewed for effectiveness and applicability. A comprehensive review of the entire zoning ordinance, or development code, should occur in conjunction with an update to the community's general plan.

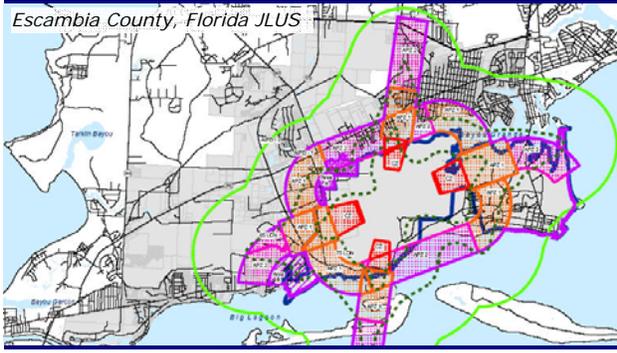
Resources / References

- ***Airport Land Use Planning Handbook***, prepared by the California Department of Transportation (Caltrans) Division of Aeronautics. January 2002.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>
- ***A Model Zoning Ordinance to Limit Height of Objects Around Airports*** (FAA Advisory Circular AC 150/5190-4A), prepared by the FAA, December 14, 1987.

Sample Military Compatible Use District

The following provisions provide examples of regulations and/or policies for inclusion within Airport Overlay Zoning Districts.

- 1. Visual and electrical interference.** Notwithstanding any other provisions of these regulations, no use shall be made of land within the Military Airport Overlay Zones in such a manner to:
 - a. Release into the air any substance which would impair visibility or otherwise interfere with the operation of aircraft, e.g. steam, dust, smoke, etc.;
 - b. Produce light emissions, either direct or indirect (reflective) which would interfere with pilot vision;
 - c. Produce electrical emissions which would interfere with aircraft communication systems or navigational equipment; or
 - d. Attract birds or waterfowl, or in any other manner constitute an airport hazard.
- 2. Storage of flammables.** The provisions of this section shall apply throughout the Military Airport Overlay Zones.
 - a. Solid Materials**
 - i. The storage or manufacture of flammable solid materials or products is permitted only if the flammable material or products are stored or manufactured within completely enclosed buildings having noncombustible exterior walls and protected throughout by an automatic fire extinguishing system.
 - ii. The storage or manufacture of explosive materials and of materials or products that decompose by detonation is prohibited.
 - b. Liquid Materials**
 - i. The manufacture of flammable or combustible liquids or materials that produce flammable or combustible vapors or gases is prohibited.
 - ii. The storage of flammable and combustible liquids, or of materials that produce flammable or combustible vapors or gases, shall be permitted only in accordance with the Uniform Fire Code (or applicable regulations).
- 3. Height Regulations.**
 - a. No structure shall be constructed or maintained so that it exceeds the greater of:
 - i. Thirty-five feet above ground elevation (*or applicable height limitation as set by jurisdiction in cooperation with the neighboring military installation*); or
 - ii. The maximum height permitted under FAR part 77, subpart C, as depicted on any airport height zone map as adopted by the jurisdiction.
- 4. Subdivision Public Reports.** Subdivision public reports shall disclose the location of the Airport and potential aircraft overflights. The following statement shall be included in the public report: "This property, due to its proximity to (military airport), is likely to experience aircraft overflights, which could generate noise levels which may be of concern to some individuals."
- 5. Avigation Easement.** The owners of a new development within the overlay district, including mortgagees, other lien holders and easement holders, shall execute an avigation easement prior to or concurrently with the recordation of any final plat or approval of a final Design Review plan for the new project.



IMPLEMENTATION EXAMPLES

5.1 INTRODUCTION

This section provides a brief description of several successful collaborative planning efforts involving states, local governments, and the military. These examples come from around the nation and illustrate planning concepts and implementation strategies that further the goal of military and community land use compatibility. Table 5-1 identifies the planning tools described in Section 4 that are illustrated by each example.

It should be recognized that land use planning statutes and processes are very different among the states and their local governments. These examples are not meant to portray appropriate models for California. However, they do illustrate how specific tools mentioned in Section 4 were implemented. Local governments should make sure that any tool they plan to implement meets the specific needs and specific planning requirements of California law and their local jurisdiction.

The following is a list of the implementation examples described in this section:

- Kern County, California Restricted Height Ordinance - Edwards AFB,
- City of Fairfield, California – Travis AFB Protection Element;
- Escambia County, Florida – Joint Land Use Study (Naval Air Station [NAS] Pensacola, Navy Outlying Landing Field Saufley, and Navy Outlying Landing Field Site 8);
- Arizona Department of Commerce - Arizona Military Regional Compatibility Project;
- State of South Dakota – Ellsworth AFB;
- State of Florida and Nature Conservancy – Eglin AFB;
- Regions of Military Influence;
- Military Influence Areas;
- Coastal Georgia Regional Development Center – Joint Land Use Study (Fort Stewart/Hunter Army Air Field [AAF]); and
- City of Aurora, Colorado – Airport Zoning District (Buckley AFB).

Implementation Examples

Table 5-1. Implementation Examples for Planning Tools

Planning Tools (see Section 4 for details)	Kern County Restricted Height	Fairfield – Travis AFB, California	Escambia County JLUS, Florida	Arizona Military Compatibility	South Dakota - Ellsworth AFB	Florida, Eglin AFB	Regions of Military influence	Military Influence Areas	Ft. Stewart AAF, Georgia	Aurora-Buckley AFB, Colorado
1 Acquisition		●	●							
2 Air Installation Compatible Use Zone		●	●	●	●		●	●	●	●
3 Air Force General Plan		●		●						
4 Airport Land Use Compatibility Plan		●		●			●	●	●	●
5 Avigation Easement				●	●	●	●	●		
6 Bird/Wildlife Strike Hazard Program										
7 CEQA / NEPA						●				
8 Cluster Development										
9 Code Enforcement										
10 Conditional Use Permit										
11 Conservation Easement			●			●		●		
12 Conservation Partnering Authority						●		●		
13 Construction Standards										●
14 Deed Restrictions		●	●					●	●	●
15 General Plan		●	●	●			●	●	●	●
16 Habitat Conservation Tools			●							
17 Hazard Mitigation Plan					●					
18 Installation Encroachment Control Plan				●						
19 Installation Master Plan				●			●		●	
20 Joint Land Use Study		●	●	●	●		●	●	●	
21 Light and Glare Controls										
22 Military Influence Area		●	●	●			●	●	●	●
23 Memorandum of Understanding				●	●	●	●			
24 Operational Noise Management Program									●	
25 Range Air Installation Compatible Use Zone			●	●			●			
26 Real Estate Disclosure			●				●	●	●	●
27 Regional Shore Infrastructure Plan										
28 Sound Attenuation			●	●			●	●	●	●
29 Subdivision Ordinance										
30 Zoning	●			●	●		●	●	●	●

**5.2 KERN COUNTY,
CALIFORNIA RESTRICTED
HEIGHT ORDINANCE-
EDWARDS AFB**

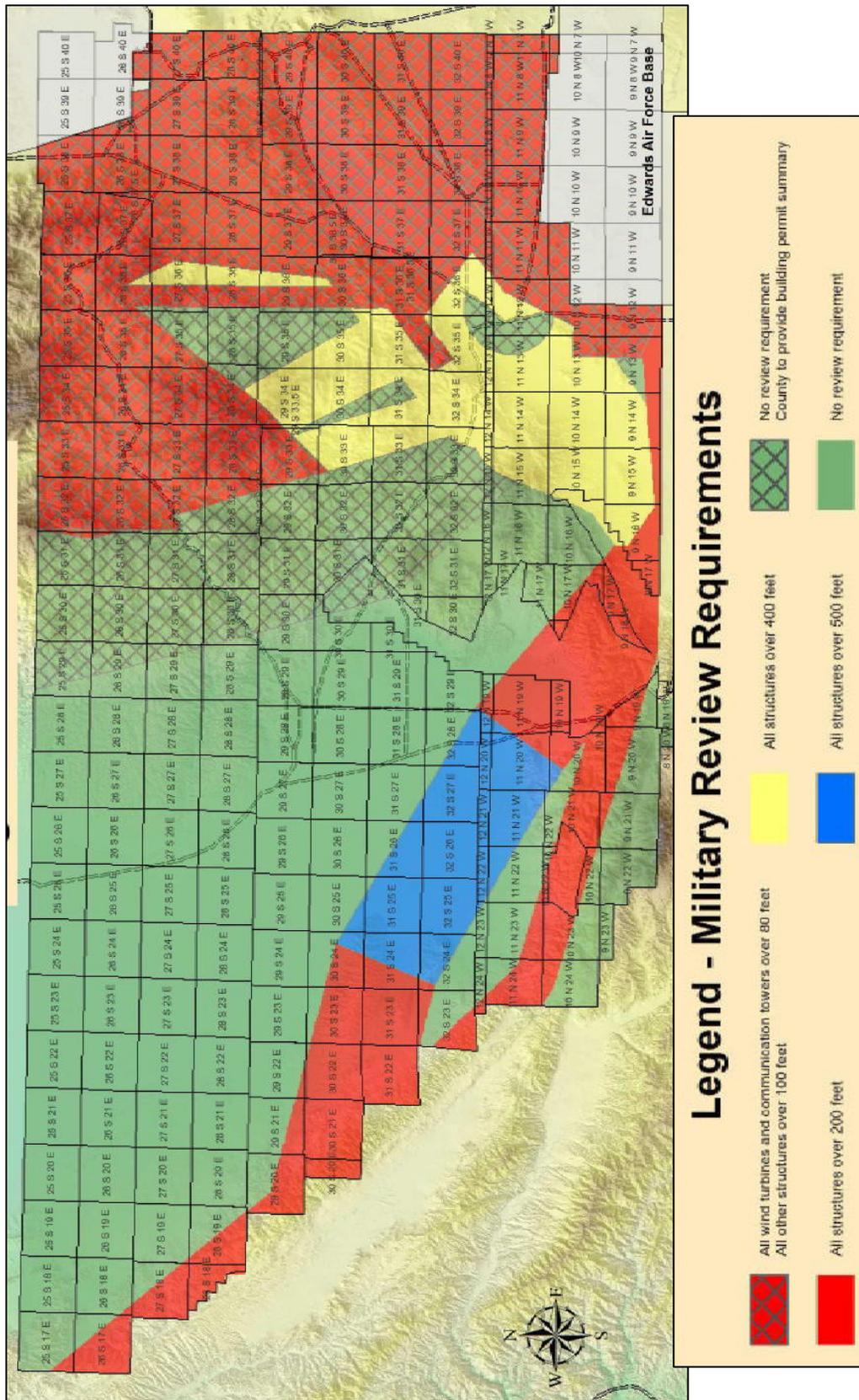
In order to protect the viability of Edwards AFB and its flying mission, the Kern County Board of Supervisors teamed with the base to identify existing areas of military concern and to develop a restricted height ordinance to insure the compatibility of future development in Kern County.

In 2004, the Kern County Board of Supervisors adopted into the Zoning Ordinance, a section that regulates the heights of permitted structures in areas impacted by military air space and flight corridors. Eastern Kern County includes over 3,200 square miles of the Joint Service R –2508 complex. This innovative solution was the result of a collaborative effort between the Kern Wind Energy Association (KWEA), representatives from the China Lake Naval Weapons Center, Edwards Air Force Base, and the Kern County Planning Department. The ordinance contains both text and a map that identifies military areas of concern.

The map shown in Figure 5-1, Kern County Military Areas of Concern illustrates the level of military concern through a series of colors. Red is used for areas of extreme military concern. Yellow applies to areas of slightly less concern. Green indicates areas where the military does not expect new construction to adversely impact their mission and activities. There is also a blue area that corresponds with a major military flight corridor where new structures above 500 feet could also adversely impact military operations. Each color has different development requirements associated with it. Structures within red areas are limited to 100 feet, except for wind turbines (commercial and noncommercial) and communication towers, for which a maximum height of 80 feet is recommended. Structures within the yellow areas are limited to a height of 400 feet.

Applicants seeking structures that would exceed the permitted heights are required to secure a letter from the appropriate military authority. The letter must indicate that the military has reviewed the proposed structure and determined it will not impact military operations. If the military concludes that the structure will adversely affect them and will not issue a letter, the applicant must either revise their request or petition the Board of Supervisors to allow the structure over the objections of the military. To date, no appeals have been presented to the Board of Supervisors. The ordinance provides guidance and direction for applicants. The military has the certainty of knowing that they will be consulted and their concerns discussed.

Figure 5-1. Kern County Military Areas of Concern



**5.3 CITY OF FAIRFIELD,
CALIFORNIA – TRAVIS
AFB PROTECTION
ELEMENT**

In compatibility planning, protections are often based on existing operations, leaving little room for change over time. The City of Fairfield, the Solano County Airport Land Use Commission, other jurisdictions in Solano County, and Travis AFB worked together to look at long-range needs and to create a land use plan that protected future operational needs at the base. The key components were a future maximum mission AICUZ, the incorporation of the Travis Influence Area as a separate element in the City's General Plan, and an updated Airport Land Use Plan for Travis AFB.

The City of Fairfield incorporated a specific element into the City's General Plan to demonstrate the city's strong support for Travis AFB. This element is called the Travis Air Force Base Protection Element. Many of the policies contained in this element also are discussed in other elements of the General Plan, including the land use, circulation, open space, conservation and recreation, health and safety, and economic development. Grouping these components into one cohesive element ensures that pertinent general plan policies related to the protection of Travis AFB can be recognized and used easily. The City of Fairfield voters also adopted an initiative measure, Ordinance 2003-10, which requires that certain provisions of the general plan relating to Travis Air Force Base, the urban limit line, and airport noise standards can be amended only by the voters.

During the development of the Travis Air Force Base Protection Element, the Air Force released a new AICUZ for Travis AFB. The new AICUZ differs from the earlier AICUZ by the inclusion of a maximum mission scenario, in addition to the current mission scenario. The maximum mission noise contours were generated by expanding current aircraft operations and the range of

aircraft types to reflect projected training and operational requirements. The intent of the maximum mission AICUZ was to assist local agencies in long-range land use planning in the vicinity of the base.

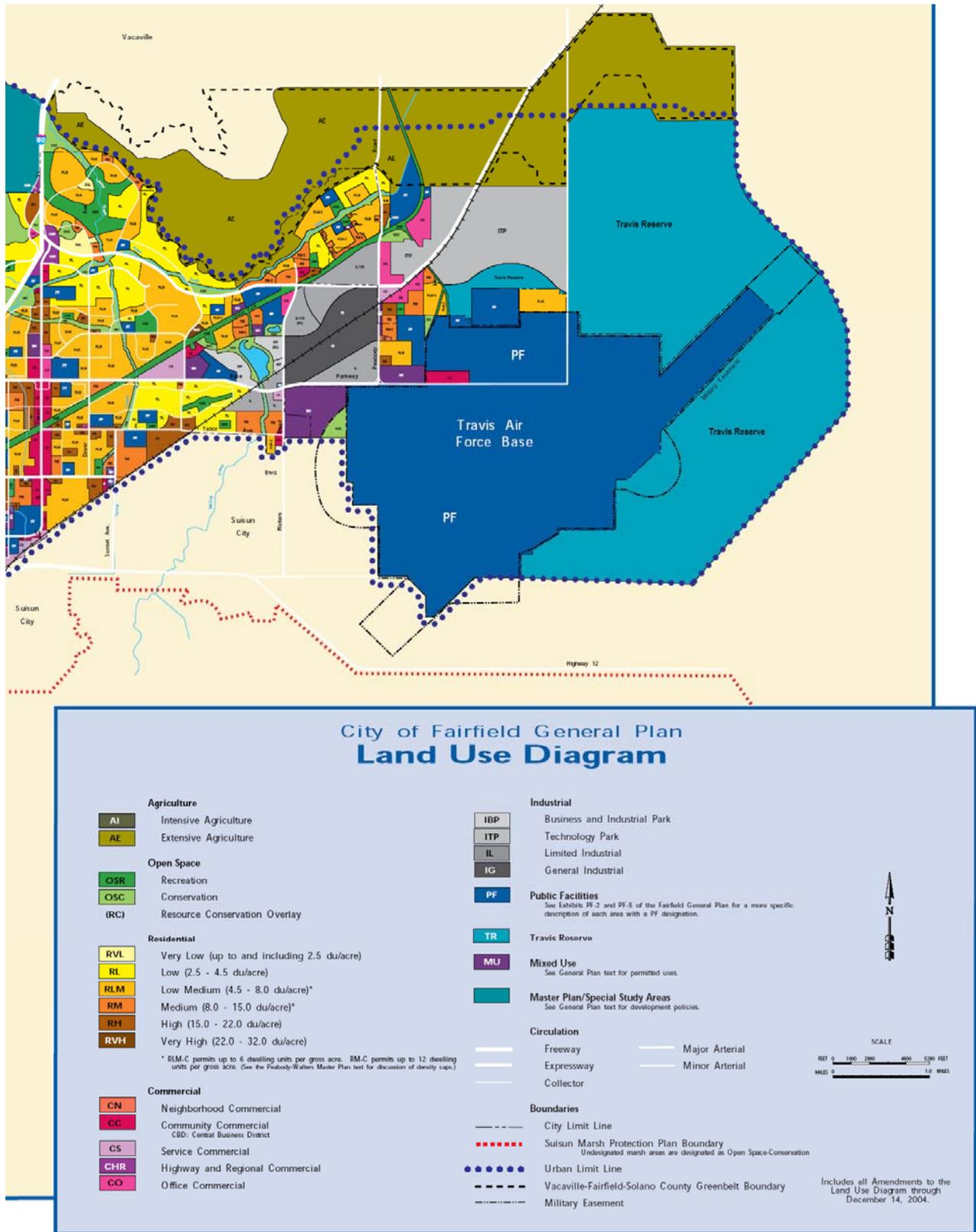
The updated Fairfield General Plan incorporated the AICUZ maximum mission scenario when developing the specific actions related to the Travis AFB Element. In addition, several tracts of land encompassing the installation were designated "Travis Reserve" (Figure 5-2). The intent of this designation was to preclude incompatible development on this land and to preserve its use for future Travis AFB mission requirements.

The County of Solano and the City of Fairfield jointly acquired approximately 1,848 acres of land located north and east of Travis AFB within the area designated as "Travis Reserve". The County and City recorded a deed restriction on this property limiting it to agricultural uses and prohibiting the construction of any improvements on the property, unless and until that property should be needed for air facility expansion.

The Comprehensive Airport Land Use Plan (ALUP) for Travis AFB was created to protect Travis AFB, the safety and general welfare of the people in the vicinity of the Base, and to ensure safe air navigation. This plan was updated by the Solano County Airport Land Use Commission, in a cooperative effort with the adjacent cities. The new ALUP is called the Travis AFB Land Use Compatibility Plan, and incorporates a future mission scenario for Travis AFB.

Implementation Examples

Figure 5-2. City of Fairfield General Plan (portion near Base)



5.4 ESCAMBIA COUNTY, FLORIDA JOINT LAND USE STUDY (JLUS)

This example effectively used Military Influence Areas (MIAs), and the application of the AICUZ and JLUS tools.

This JLUS incorporated several tools in addressing current and future land use compatibility issues. These tools enhanced and strengthened the ability of communities and the Navy to address development and land use compatibility surrounding NAS Pensacola, Navy Outlying Landing Field Saufley, and Navy Outlying Landing Field Site 8. This cooperative effort put in place a plan that can be adapted to mission changes, as well as new mission opportunities.

The following are the JLUS' key recommended implementation actions (Figure 5-3).

1. Airport Influence Planning District (AIPD)

This JLUS creates two separate MIAs referred to as AIPD-1 and AIPD-2.

- AIPD-1 includes the current Clear Zone (CZ), Accident Potential Zones (APZs), areas inside of the 65-decibel (dB) noise contour, and areas near to, or next to, the airfields.
- AIPD-2 includes land that is close enough to the airfield to potentially affect or be affected by operations.

2. Revise City of Pensacola Comprehensive Plan

Within the AIPD-1 area, the following are required:

- Reduced density and specific land use regulations;
- A mandatory referral of proposed projects to the Navy for review and comment;
- The dedication of avigation easements;
- Disclosure for real estate transactions; and
- Sound attenuation in new construction.

Within the AIPD-2 area, the following are required:

- A mandatory referral of proposed projects; to the Navy for review and comment;
- The dedication of avigation easements;
- Disclosure for real estate transactions;
- Sound attenuation in new construction; and
- Discouraging property rezoning that results in increased density.

3. Strengthen Real Estate Disclosure Ordinance

- Revise the ordinance to address disclosure in both AIPDs.

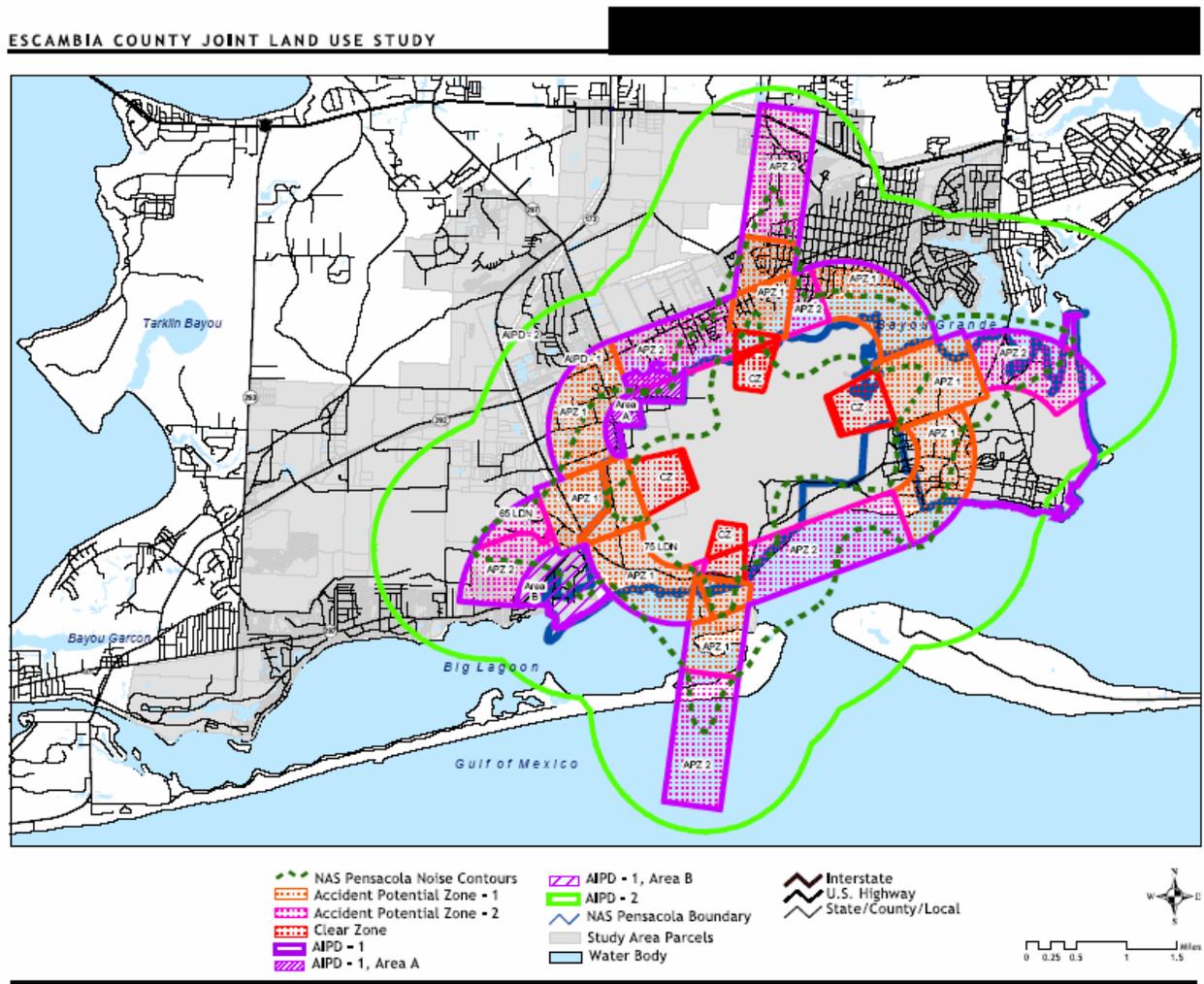
4. Transfer of Development Rights (TDR) – Long Term

- Review opportunities to implement TDRs within both AIPD areas.

5. Land Acquisition Program – Long Term

- Identify opportunities to develop and fund a land acquisition program.

Figure 5-3. Escambia County JLUS



5.5 ARIZONA MILITARY REGIONAL COMPATIBILITY PROJECT

This approach combines a broad spectrum of tools, including state legislative guidance, regional cooperation through the creation of an expanded MIA, and local implementation guidance for general planning processes.

Arizona is home to a network of U.S. military airports and installations that include Davis-Monthan AFB, Luke AFB, Yuma Proving Grounds, Yuma Marine Corps Air Station (MCAS), Fort Huachuca, and the Barry M. Goldwater Range Complex. As the communities near these installations have expanded, land use compatibility issues have moved to the forefront in many areas of Arizona. The military installations and surrounding jurisdictions play key roles in addressing compatibility.

The Arizona Military Compatibility Project was conceived as a proactive statewide program to convene the stakeholders on and around each installation – local jurisdictions, base personnel, landowners, and other interested parties – to address land use compatibility issues. The objective of this project was to provide the tools needed to address land use conflicts that might affect the ability of each installation and military area to conduct its mission, with emphasis on ensuring land use compatibility around active military airports.

To accomplish this objective, the state revised its statutes to address land use compatibility, safety, noise, community planning, and the rezoning processes. The legislation required the following.

- High-noise areas (>65 dB) or APZs should be addressed in municipal general plans and county comprehensive plans.
- Land development within the high-noise zones (>65 dB) or APZs should be compatible with military airport operations.

The state also enacted Growing Smarter and Growing Smarter Plus measures that address growth and land development issues through

changes in the community planning and rezoning processes. These measures require the following.

- Political jurisdictions with land within the vicinity of a military airport shall include consideration of military operations in their general plans and comprehensive plans.
- Military airport officials shall have the opportunity to comment officially on the general plans.
- Plans will provide for a rational pattern of land development.
- An extensive public participation program will be provided for the general plan. .

Controlled areas at Luke AFB are shown on Figure 5-4.

5.6 STATE OF SOUTH DAKOTA AND THE BLACK HILLS COUNCIL OF GOVERNMENTS – ELLSWORTH AFB

This approach involves directing state capital expenditures to remove current incompatible land uses and avoid creating new incompatibilities.

States can influence where and when growth will take place through capital investment decisions, such as the placement of roadways or other infrastructure systems.

The State of South Dakota and the Black Hills Council of Governments, along with Ellsworth AFB, coordinated the movement of an interchange along I-90, out of APZ I and the noise contour exceeding 80 db. The need to relocate this interchange was critical, given the associated development attracted by the exit and its proximity to the Ellsworth AFB main entrance (Figure 5-5).

Figure 5-4. Airport Vicinity Map – Luke AFB

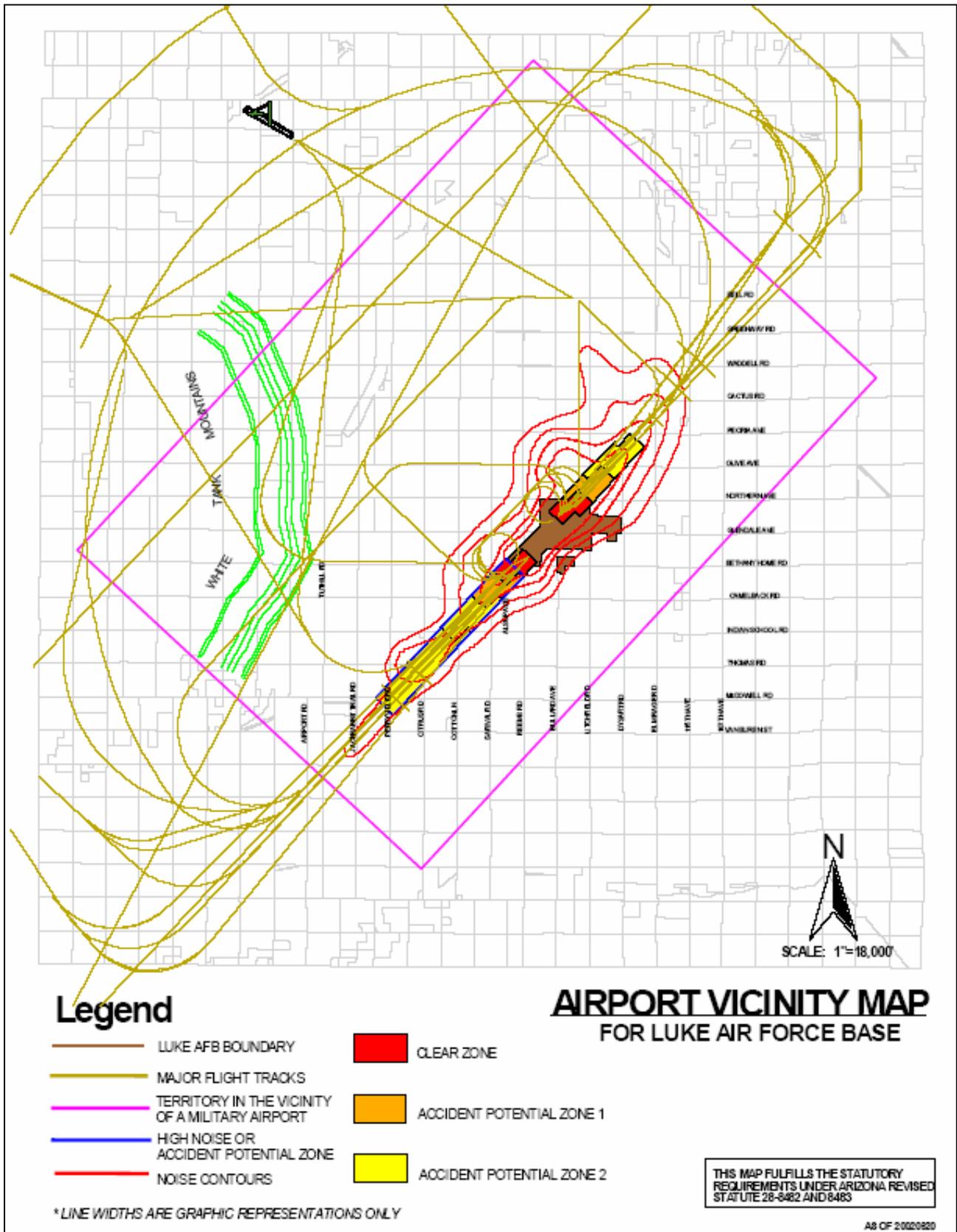


Figure 5-5. South Dakota Capital Improvements Planning



The use of the State's capital investment assisted in redirecting non-compatible development, as well as alleviating a current flight safety issue.

5.7 STATE OF FLORIDA – EGLIN AFB

This effort underscores a significant effort to leverage encroachment protection for a vast region by using DoD Conservation Partnering.

The Northwest Florida Greenway is an unprecedented partnership of military, federal, state, local governments, and nonprofit organizations that will conserve critical ecosystems in one of the most biologically diverse regions in the US. As designed, this project will enhance the Panhandle's economy and help protect military missions in northwest Florida.

For this project, a memorandum of partnership was created to establish a 100-mile protected corridor that connects Eglin AFB and the Apalachicola National Forest. This corridor protects the use of the Eglin AFB range complex and provides significant air routes from the Gulf of Mexico to the range complex for fleet pre-deployment training (Figure 5-6).

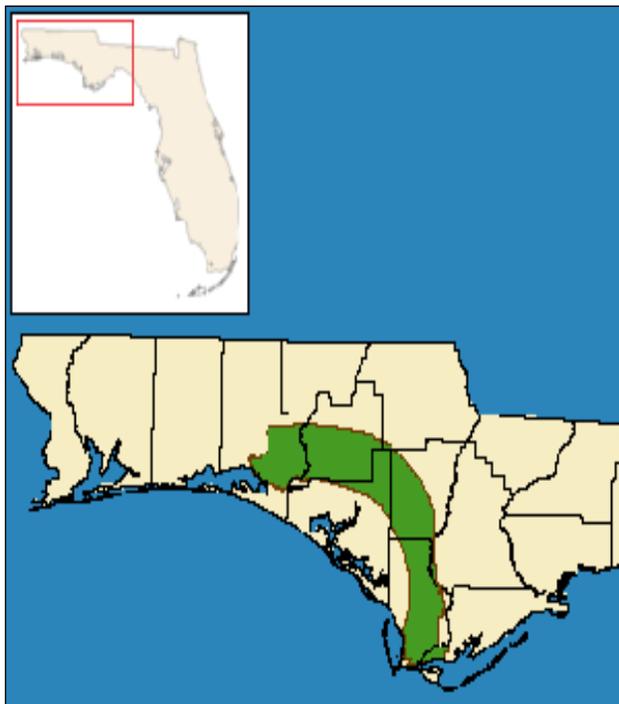
The Northwest Florida Greenway project has the following goals:

- Promote the sustainability of the military mission in northwest Florida to meet national defense testing, and operational and training requirements;
- Protect lands that will sustain the high biodiversity of the region, link protected areas, and provide for outdoor recreation; and

Implementation Examples

Strengthen the regional economy by sustaining the mission capabilities of the military in the region and enhancing outdoor recreation and tourism areas. The Northwest Florida Greenway will create a buffer zone between nearby communities and critical flight paths needed for military personnel training and defense development. This in turn protects the viability of the entire system.

Figure 5-6. Northwest Florida Greenway



5.8 REGIONS OF MILITARY INFLUENCE (RMI) – EXAMPLES

Following are some examples of the use of RMIs.

RMIs are new three-dimensional planning models that look beyond the immediate environs of the military base and adjacent jurisdictions.

RMIs are used to identify where DoD operations have impacts and where local activities can affect the DoD's ability to carry out its national defense missions. RMIs that cross large geographical areas within a state, or those that cross state

boundaries, are more complex and have broader effects on communities.

Samples of the use of RMIs are highlighted below.

- An RMI can include military training routes (MTRs) that connect a home base with distant testing and training ranges. For example, an RMI links Barry M. Goldwater Range Complex (BMGRC) with Luke AFB, Gila Bend Air Force Auxiliary Field (AFAF), and Yuma MCAS (Figure 5-7).
- Nellis AFB, outside of Las Vegas, Nevada, uses a very large airspace to accomplish its training and qualifying missions. The RMI includes the Nellis AFB complex, the range, and Indian Springs Field, now called Creech Air Force Station (AFS).
- The Naval Air Warfare Center (NAWC) China Lake and Edwards AFB use an MOA larger than 20,000 square miles, as well as MTRs. This RMI encompasses two major flight testing and training complexes.
- RMIs can cover portions of multiple states and jurisdictions. The states of Arizona, California, Nevada, and New Mexico function as a multi-state RMI. Each state is advised to communicate with its counterparts to assure the contiguity and functionality of this integrated system of installations, MTRs, and distant ranges.

5.9 MILITARY INFLUENCE AREAS (MIA) –EXAMPLES

Following are some examples of the use of the MIA concepts.

MIAS present a new framework for communities to integrate the military into their comprehensive planning process. This approach to joint military and community land use planning helps sustain military readiness. Examples of this concept are described below and illustrated on Figure 5-8.

Figure 5-7. Barry M. Goldwater Range Complex RMI

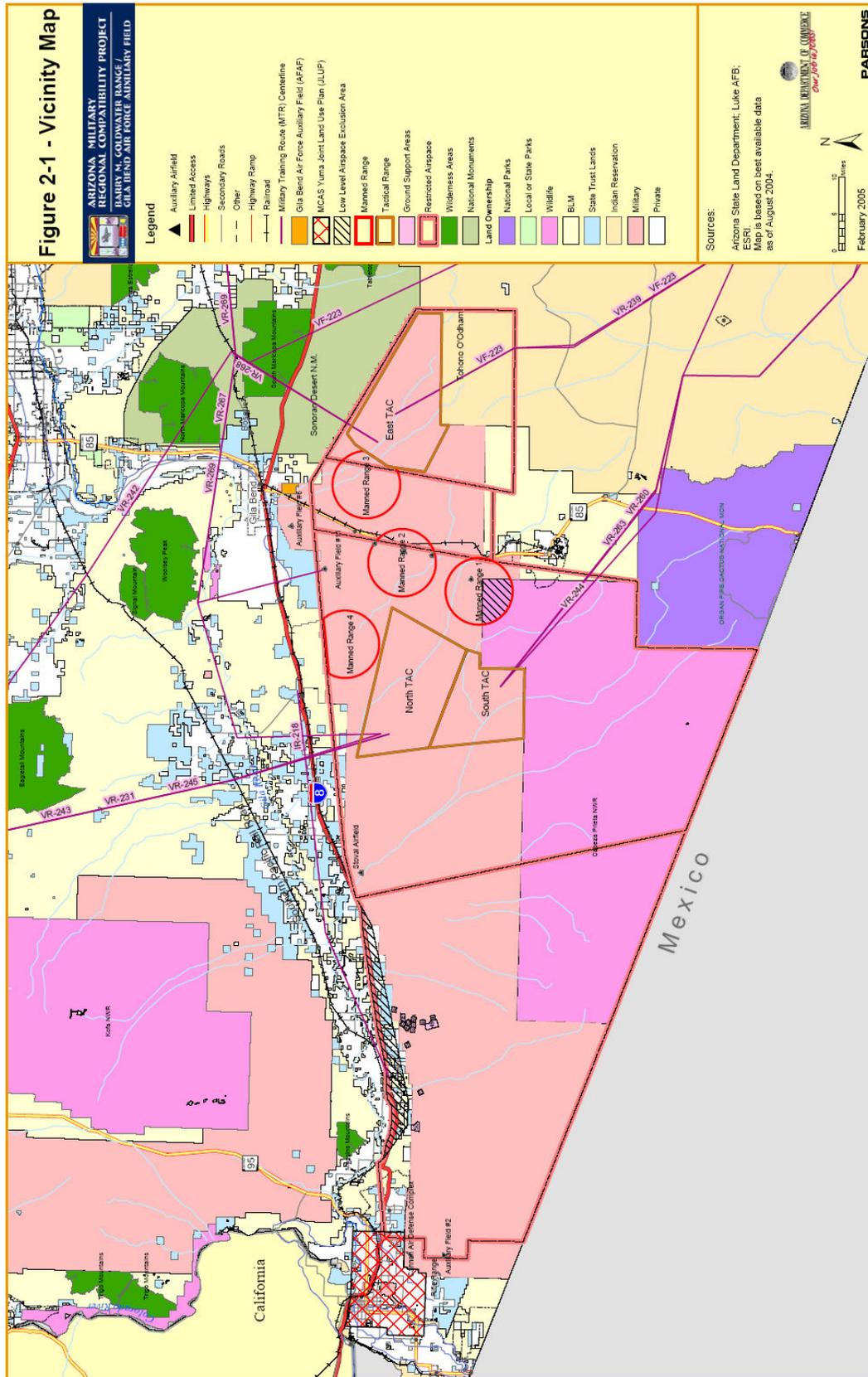
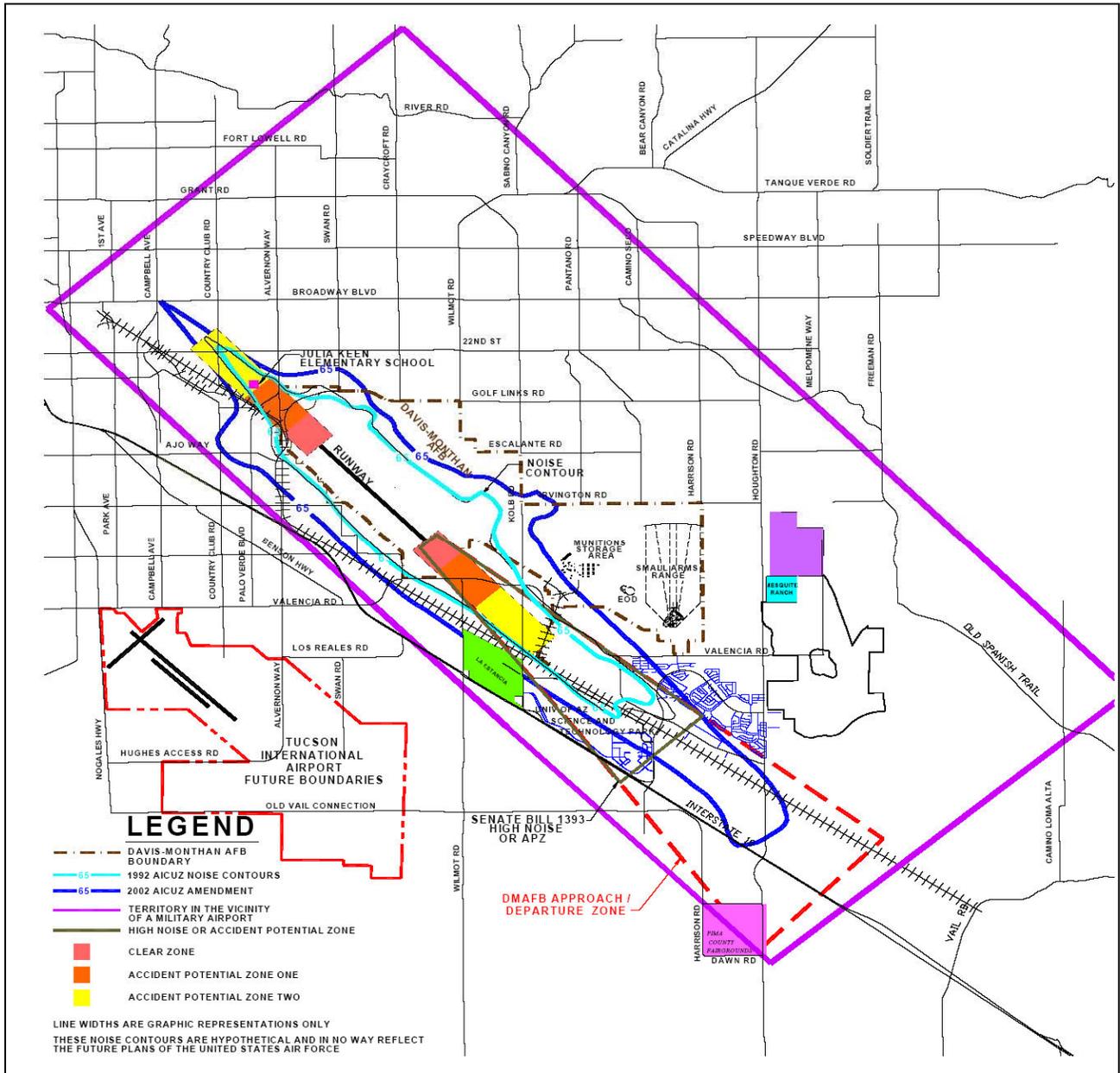


Figure 5-8. Military Influence Area



Military Influence Planning District (MIPD)

This application would call upon state legislatures or local governments to integrate the military presence and missions with the fabric and comprehensive picture of the community's future. MIPDs recognize the existence and mission of a military installation within a community's or region's sphere of influence (SOI) through integration into the general plan. State or local government initiatives are responsible for designation of an MIPD as an official planning policy area surrounding a military installation.

- The State of Arizona created a "Vicinity Box" to capture the territory in the vicinity of a military airport. The Vicinity Box contains all areas of potential conflict near the airport, such as the high noise areas defined in the installation's AICUZ study, approach and departure corridors, and local land uses around the airfield.
- For Luke AFB, the State of Arizona created an extended APZ II that extends the AICUZ required APZ II to include arrival and departure zones.
- Escambia County, Florida, defined the Airfield Influence Planning District (AIPD) by delineating an area that was one mile beyond the 65-dB noise contour defined in the Navy's AICUZ study.

Military Influence Overlay District (MIOD)

Complementing the MIPD is the MIOD. The MIOD is an adopted, mapped zoning overlay district used by a local government entity. A MIOD can prescribe more stringent requirements in terms of land use and development than the underlying zoning classification of the property in order to protect public health and safety.

- Arizona created an area designated as APZ II extended. The APZ II extended is larger than the standard APZ II and provides more specific and restrictive zoning than is required by the current DoD AICUZ. This new area adds additional layers

of protection for the live ordnance departure corridor. The area extends the normal APZ II zone by an additional 35,200 feet, for a total of 50,200 feet (9.8 miles) from the end of the runway. This area requires conforming zoning and land use ordinances that are supported by Arizona statute.

Military Influence Disclosure District (MIDD)

Real estate disclosure allows prospective purchasers of property the opportunity to make informed decisions. The MIDD planning area can designate the area requiring real estate disclosure.

Enhanced local notification and disclosure is recommended by the State of Arizona. The following specific requirements achieve enhanced public notification and disclosure:

- Notices and maps in real estate and leasing offices;
- Notices in model homes and sales offices advising the buyer that the area is subject to military over flight;
- Avigation easements and indemnification/release language on recorded subdivision plats; and
- Installation of over flight signage at road intersections within noise contour lines.

5.10 FT. STEWART/HUNTER ARMY AIR FIELD, GORGIA - JLUS

This approach effectively used the development of MIAs, the application of the AICUZ and JLUS tools, legislatively designated buffer zones, and conservation easements.

This JLUS incorporated several tools in addressing current and future compatibility issues. These tools provide policy that enhances and strengthens the ability of communities and the Army to address urban expansion issues and

Implementation Examples

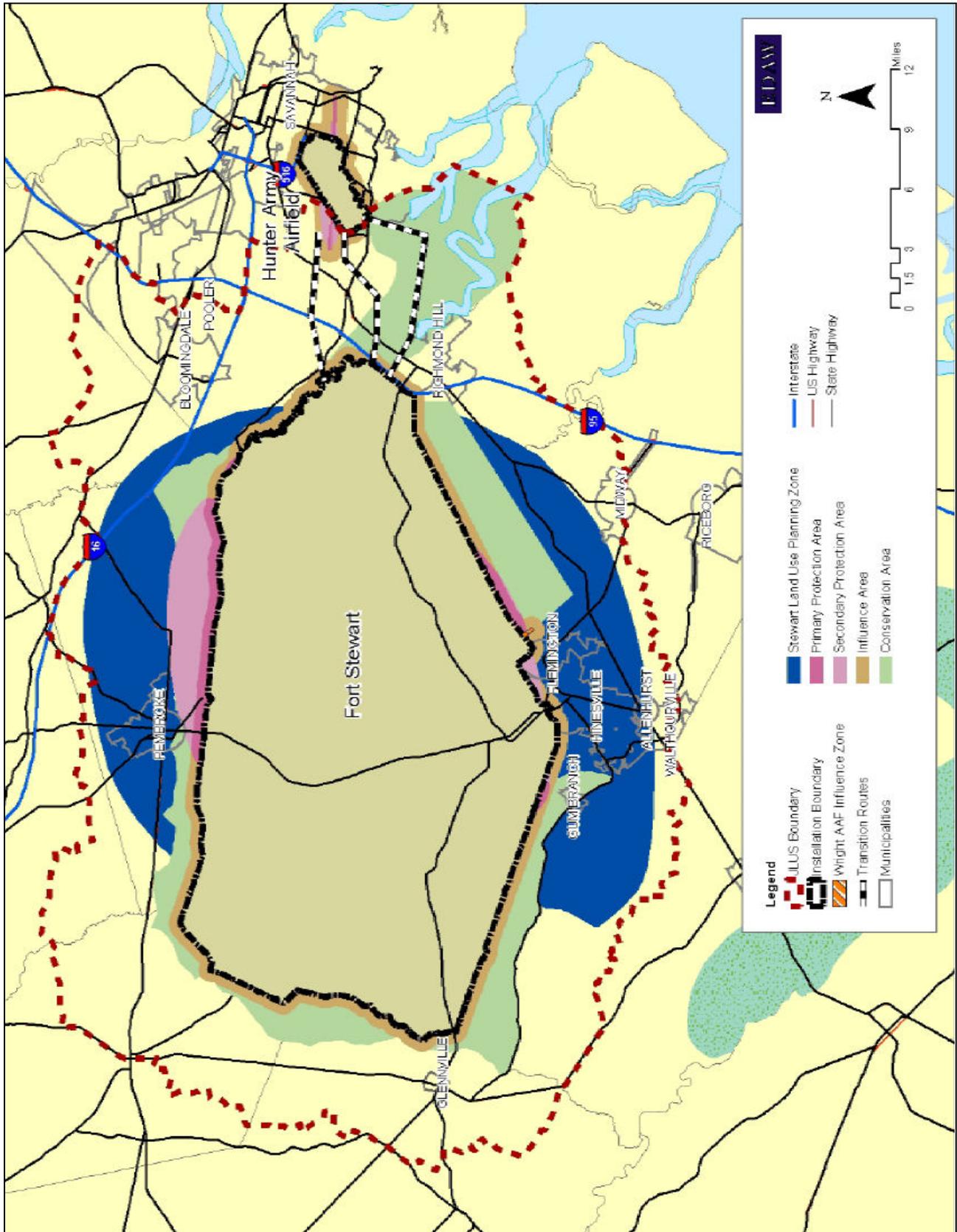
encroachment challenges. This cooperative effort put in place a plan that can adapt better to mission changes and new mission opportunities.

The Fort Stewart/Hunter Army Air Field Military Complex in southeastern Georgia consists of maneuver areas, ranges, a main base, impact areas, and two aviation complexes.

The JLUS incorporated the following planning tools (Figure 5-9).

- 3,000 foot Buffer. The State of Georgia passed legislation that requires local planning entities to request written comments from military commanders when considering proposed zoning decisions on land that is adjacent to or within 3,000 feet of an installation, or within the 3,000-foot CZ and APZs I and II.
- Army Compatible Use Boundary (ACUB). The ACUB represents an area of possible conservation interest, as identified by partners of the Coastal Georgia Private Lands Initiative. The criteria used to identify this boundary were based on factors such as adjacency to Fort Stewart/Hunter AAF, environmental features, and impacts from Fort Stewart/Hunter AAF operations.
- Fort Stewart Land Use Planning Zone (LUPZ). A special LUPZ was created to address non-compatible development. This zone comprises land extending off of the installation boundary that falls within the >55 to 62 dB zone created by small and large caliber weapons noise.

Figure 5-9. Areas of Concern, Ft. Stewart



Implementation Examples

5.11 CITY OF AURORA, COLORADO – BUCKLEY AFB

This example highlights a partnership between the City of Aurora and Buckley AFB. The use of airport and military influence areas, along with well defined zoning and land use regulations, provides protection of the military mission and enhanced safety and well being for the citizens of Aurora.

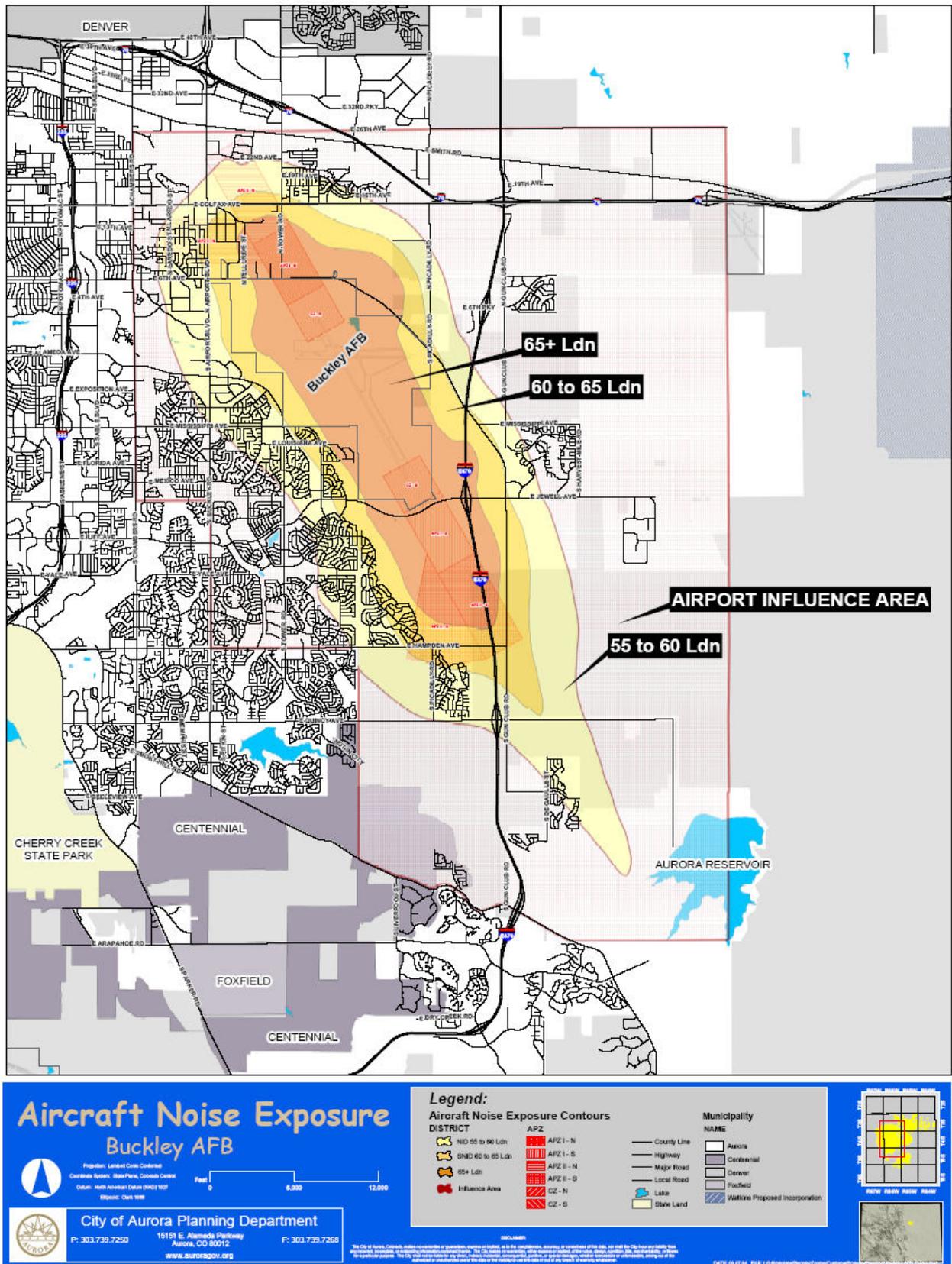
The City of Aurora, Colorado, is a neighbor to four airports: Denver International Airport, Buckley AFB, Front Range Airport, and Centennial Airport. The City of Aurora proactively addressed possible airport noise issues through the incorporation of a specific element into the City's General Plan, demonstrating the City's strong support for Buckley AFB.

There is a long-standing example of the MIPD concept within the City of Aurora zoning ordinance. The City of Aurora has an Airport Influence District (AID) that depicts noise zones and APZs and includes a real estate disclosure area. This ordinance covers commercial, executive, and military airfields. The 60-dB Day-Night Average Sound Level (Ldn) is the beginning of the noise district. This zoning ordinance is one of the strongest ordinances in the country (Figure 5-10). Following are specifics of the ordinance.

- No new residential zoning is permitted where existing or projected noise may exceed 60 dB DNL/Ldn.
- New residential uses may be permitted within the 55 Ldn and outside of the 60-dB DNL/Ldn noise contours, provided specific criteria are met.
- A Special Noise Impact District (SNID) comprised of areas between the 60 dB Ldn and the 65 dB Ldn noise contour lines.
- A Buckley AFB District specifically designed to address Buckley AFB flight operations.

The Aurora City Council intends to maintain an open process of negotiation and interpretation of AIDs and to inform citizens of potential impacts of AIDs on them and their properties.

Figure 5-10. Buckley AFB Airport Influence Area



Implementation Examples

Please see the next page.



ACRONYMS

- A** **AA** Alert Areas
- AAF** Army Air Field
- AAW** Anti-Air Warfare
- AB** Assembly Bill
- ACSC** Area of Critical State Concern
- ACUB** Army Compatible Use Buffer
- AF** Air Force (US)
- AFAF** Air Force Auxiliary Field
- AFB** Air Force Base
- AFCEE** Air Force Center for Environmental Excellence
- AFGP** Air Force General Plan
- AFH** Air Force Handbook
- AFI** Air Force Instruction
- AFMC** Air Force Materiel Command
- AFPAM** Air Force Pamphlet
- AFS** Air Force Station
- AICUZ** Air Installation Compatible Use Zone
- AID** Airport Influence District
- AIPD** Airfield Influence Planning District
- ALUC** Airport Land Use Commission
- ALUCP** Airport Land Use Compatibility Plan
- ALUP** Airfield (Airport) Land Use Plan
- AFMC** Air Force Materiel Command
- AMC** Air Mobility Command
- AMW** Amphibious Warfare
- APA** American Planning Association

- APFO** Adequate Public Facilities Ordinance
- APZ** Accident Potential Zones
- ASW** Anti-Submarine Warfare
- AT/FP** Anti-Terrorism/Force Protection

-
- B** **BASH** Bird/Wildlife Aircraft Strike Hazard
 - BCDC** Bay Conservation and Development Commission
 - BCE** Base Civil Engineer
 - BIA** Building Industry Association
 - BLM** Bureau of Land Management
 - BMGRC** Barry M Goldwater Range Complex
 - BOR** Bureau of Reclamation
 - BRAC** Base Realignment and Closure

-
- C** **CAA** California Aid to Airports
 - CAA** Clean Air Act
 - CAAP** California Aid to Airports Program
 - CACE** California Association of Code Enforcement
 - CADD** Computer Automated Design and Drafting
 - CALEPA** California Environmental Protection Agency
 - Caltrans** California Department of Transportation
 - CAO** County Administrative Officer
 - CAO** Critical Area Ordinance

Acronyms

CATEX	Categorical Exclusion
CEQA	California Environmental Quality Act
CFA	Controlled Firing Area
CIP	Capital Improvements Plan
CIP	Critical Infrastructure Protection
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CNO	Chief of Naval Operations
COE	Corps of Engineers (Army)
COG	Council of Governments (see Section 7 for a list of California COGs)
CONUS	Continental United States
CSDGM	Content Standards for Digital Geospatial Metadata
CUP	Conditional Use Permit
CZ	Clear Zone

D	DARR	Department of the Army Regional Representative
	dB	Decibel
	dB(A)	A-Weighted Decibel
	DEM	Digital Elevation Model
	DFAR	Defense Federal Acquisition Regulations
	DISDI	Defense Installations Spatial Data Infrastructure Initiative
	DLA	Defense Logistics Agency
	DNL	Day-Night Average Sound Level
	DoD	Department of Defense
	DOT	Department of Transportation
	DPW	Department of Public Works
	DRE	California Department of Real Estate

E	EA	Environmental Assessment
	EAP	Encroachment Action Plan
	ECP	Encroachment Control Plan
	EIA	Environmental Impact Analysis
	EIAP	Environmental Impact Analysis Process
	EIR	Environmental Impact Report
	EIS	Environmental Impact Statement
	EMI	Electro-magnetic Interference
	EP	Encroachment Partnering
	EPA	Environmental Protection Agency
	EPC	Environmental Protection Committee
	ESA	Endangered Species Act
	ESQD	Explosive Safety Quantity Distance

F	FAA	Federal Aviation Administration
	FAR	Floor Area Ratio
	FCC	Federal Communications Commission
	FEC	Facility Engineering Command
	FEMA	Federal Emergency Management Agency
	FGDC	Federal Geographic Data Committee
	FMC	Future Mission Contour
	FMSFIE	Facilities Management Standards for Facilities, Installation, and Environment
	FONSI	Finding of No Significant Impact
	FS	Feasibility Study
	FY	Fiscal Year

G **GAO** Government Accountability Office
GIS Geographic Information Systems
GP General Plan
GPL General Plan Law

H **HAZMAT** Hazardous Materials

HCP Habitat Conservation Plan
HGC High Ground Cover
HMP Hazard Mitigation Plan
HNZ High Noise (Impact) Zone

I **IA** Inter-local Agreement

ICC International Code Council
ICUZ Installation Compatible Use Zone
IECP Installation Encroachment Control Plan (ECP used in this Handbook)
IENMP Installation Environmental Noise Management Program
IFR Instrument Flight Rule
IFSAR Interferometric Synthetic Aperture Radar
INRMP Integrated Natural Resources Management Plan
IPA International Dark-Sky Association
IVT Installation Visualization Tool

J **JLUS** Joint Land Use Study

K **KEWA** Kern Wind Energy Association

L **LAFCO** Local Agency Formation Commission

LBCS Land Based Classification System
LGC Low Ground Cover

LIDAR Light Detection and Ranging (also LDAR)

LUCP Land Use Compatibility Plan

LUPIN Land Use Planning Information Network

LUPZ Land Use Planning Zones

M **MARCORPS** US Marine Corps

MC&G Mapping, Charting, and Geodesy

MCGWG Marine Corps GIS Working Group

MAGTFTC Marine Air Ground Task Force Training Center

MCC Maximum Capacity Contour

MIDD Military Influence Disclosure District

MILCON Military Construction

MIOD Military Influence Overlay District

MIPD Military Influence Planning District

MIPE Military Installation Planning Element

MIZOD Military Influence Overlay Zoning District

MLS Multiple Listing Service

MMC Maximum Mission Contour

MOA Military Operations Area

MOD Military Overlay District

MOU Memorandum of Understanding

MSHCP Multiple Species Habitat Conservation Plan

MSL Mean Sea Level

MTR Military Training Route

MUPD Multiple-Use Planning District

MxPD Mixed-Use Planned Development

Acronyms

N	N45	Environmental Protection, Safety and Occupational Health Division, CNO (Navy)	NPP	NIMA's Imagery and Geospatial Policy Division
	NAHB	National Association of Homebuilders	NPS	National Park Service
	NAID	National Association of Installation Developers	NSSDA	National Standards for Spatial Data Accuracy
	NAS	Naval Air Station	NTIA	National Telecommunications and Information Administration
	NAVFAC	Naval Facilities Engineering Command		
	NAVFACINST	Naval Facilities Instruction	O	O&M Operations and Maintenance
	NAWC	Naval Air Warfare Center	OEA	Office of Economic Adjustment
	NAWS	Naval Air Weapons Station	OMAS	Office of Military and Aerospace Support
	NC	Noise Contours	OMB	Office of Management and Budget
	NCCP	Natural Communities Conservation Plan	OMBRR	Office of Military Base Retention and Reuse
	NCITS	National Committee for Information Technology Standard	ONMP	Operational Noise Management Program
	ND	Negative Declaration	OPNAVINST	Operational Naval Instruction
	NDAA	National Defense Authorization Act	OPR	Governor's Office of Planning and Research
	NEPA	National Environmental Policy Act	OSD	Office of the Secretary of Defense
	NGA	National Geospatial-Intelligence Agency		
	NGO	Non-Governmental Organization	P	PA Prohibited Areas
	NIMA	National Imagery and Mapping Agency (renamed to NGA)	PD	Planned Development
	NMAS	National Map Accuracy Standards	PDR	Purchase of Development Rights
	NMCI	Navy/Marine Corps Intranet	PUD	Planned Unit Development
	NOA	Notice of Availability	PWO	Public Works Officer
	NOD	Notice of Determination	PZDL	Planning, Zoning, and Development Laws
	NOI	Notice of Intent		
	NOP	Notice of Preparation	Q	QD Arc Quantity Distance Arc
	NP	NIMA's International and Policy Office		
			R	RA Restricted Areas
				RAICUZ Range Air Installation Compatible Use Zone

RCMP Range Complex Management Plan
REC Regional Environmental Coordinator
RF Radio Frequency
RFI Radio Frequency Interference
RFP Request for Proposals
ROD Record of Decision
RMI Region of Military Influence
RPMP Real Property Master Plan
RPPB Real Property Planning Board
RSIP Regional Shore Infrastructure Plan

S **SB** Senate Bill
SCACEO Statewide California Association of Code Enforcement Officials
SDS/FMSFIE Spatial Data Standards for Facilities, Installation, and Environment
SECDEF Secretary of Defense
SECNAV Secretary of the Navy
SIP State Implementation Plan
SLR Sound Level Reduction
SLUCM Standard Land Use Coding Manual
SNID Special Noise Impact District
SOI Sphere of Influence
SUA Special Use Airspace
SUP Special Use Permit

T **TAP** Theater Assessment Program
TDR Transfer Development Rights
TERF Tabulation of Existing and Required Facilities
TM Technical Manual
TNC The Nature Conservancy

TPL Trust for Public Land
TSM Transportation Systems Management
TTCA Technology, Trade, and Commerce Agency

U **US** United States
USA United States Army
USACE United States Army Corps of Engineers
USAEC United States Army Environmental Center
USAF United States Air Force
USC United States Code
USCG United States Coast Guard
USFS United States Forest Service
USFWS United States Fish and Wildlife Service
USGS United States Geological Survey
USMC United States Marine Corps
USN United States Navy
UXO Unexploded Ordnance

V **VFR** Visual Flight Rules

W **WA** Warning Areas

Z **ZOI** Zone of Influence

Acronyms

Please see the next page.



GLOSSARY

A **A-Weighted Decibel (dBA)** – Is a numerical method of rating human judgment of loudness. The A-weighted scale reduces the effects of low and high frequencies in order to simulate human hearing.

Accessory Use - An activity or structure that is incidental to the main use of a site.

Accident Potential Zone (APZ) - The area immediately beyond the end of the clear zone that possesses a high potential for accidents.

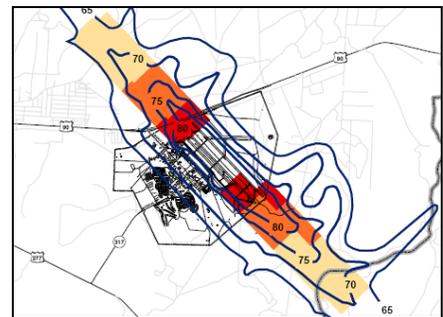
Air Installations Compatible Use Zones (AICUZ) - A DoD program designed to promote compatible development around military airfields and to protect the integrity of the installation's flying mission. Some services refer to the program in a singular form "Air Installation Compatible Use Zone."

Airfield Influence Planning District (AIPD) - -An area specially designated that encompasses airfield, clear zones, accident potential zones, excess noise contours, and other aircraft operation areas.

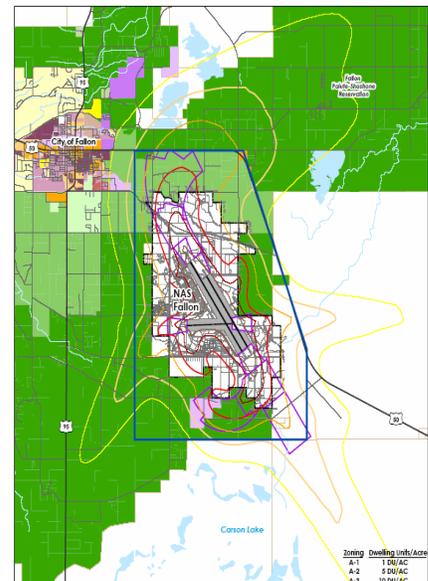
Airport Land Use Compatibility Plan (ALUCP) – A plan, usually adopted by a County Airport Land Use Commission (ALUC) which sets forth policies for promoting compatibility between airports and the land uses which surround them.

Army Compatible Use Buffer (ACUB) - A formal agreement between the Army and eligible entities for acquisition of land or interest in land and/or water rights from willing sellers. This agreement may provide for limiting encroachment on the installation through acquisition of development rights, cooperative agreements, conservation easements, and other means in accordance with applicable laws.

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 land uses surrounding them.



APZs extend outward from each end of the runway (in orange and tan)



AICUZ Map

Alert Areas (AA) – High volumes of pilot training or an unusual type of aerial activity (e.g., military, aircraft manufacturers, high concentrations of flights in the area) may occur in AAs. All operations taking place in an AA must comply with FAA regulations; however, no special requirements are needed for operations in an AA. These areas are defined by an “A” followed by a number on sectional charts, IFR enroute charts, and terminal area charts.

Avigation - The science of determining and plotting the position of an aircraft and of determining the course to steer to reach any required destination.

Avigation Easement – An easement that grants one of the following rights: the right of flight; the right to cause noise, dust, etc. related to aircraft flight; the right to restrict or prohibit certain lights, electromagnetic signals, and bird-attracting land uses; the right to unobstructed airspace over the property above a specified height; and the right of ingress/egress upon the land to exercise those rights. Also referred to as an aviation easement.

B **Bird/Wildlife Aircraft Strike Hazard (BASH)** – An Air Force term for wildlife-related hazards to aircraft. The Air Force maintains a program to reduce these hazards at all of its installations.

Building Envelope - The space remaining on a site for structures after all building setback, height limit, and bulk requirements have been met.

C **California Aid to Airports (CAA)** – A program designed to assist in establishing and improving a California-wide system of safe and environmentally compatible airports whose primary benefit is for general aviation.

California Environmental Quality Act (CEQA) - CEQA was enacted in 1970 to protect the environment by requiring public agencies to analyze and disclose the potential environmental impacts of proposed land use decisions. CEQA is modeled after the federal National Environmental Policy Act (NEPA).

Capital Improvement Program (CIP) - A timetable for the installation of permanent public structures, facilities, roads, and other improvements based upon budget projections.

Categorical Exclusion (CATEX) – A project type that an agency excludes from detailed NEPA review because it has little potential for impact.

CEQA - The California Environmental Quality Act (see Public Resources Code section 21000). CEQA requires that private and public projects' potential adverse effects upon the environment be reviewed by decision makers and the public.

Charter City - A city which has been incorporated under its own charter rather than under the general laws of the state. Charter cities have broader powers than do general law cities.

Clear Zone (CZ) – The area of highest accident potential beginning at the runway threshold and extending 3,000 feet. The width of the CZ is based on the class of runway and Service policy.



A Clear Zone depicted at the end of the runway (yellow area)

Cluster Development - Development which is clustered in a portion of a site, leaving the remainder in open-space. The amount of development allowed equals the amount that would have otherwise been allowed on the entire site.

Code Enforcement - Code enforcement is a process that works to ensure that property owners maintain property or bring substandard structures and conditions up to Building and Zoning Code standards.

Community Noise Equivalent Level (CNEL) - The average equivalent sound level during a 24 hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

Community Plan - A portion of the local general plan that focuses on a particular area or community within a city or county. Community plans supplement the contents of the general plan.

Comprehensive/Master Plan (Army) - The comprehensive plan, often referred to as the general or master plan, is usually an official public document adopted by a government projecting the future uses of land development.

Comprehensive Plan – In a general sense, this term is used to describe any planning process that addresses the broad spectrum of issues and resources for a jurisdiction, installation, or other large planning area. For local governments, this can include the jurisdictions general plan or a large area specific plan. The Air Force uses this term to describe a compilation plan that includes the plans and specific resource documents and processes determined to be essential for planning and managing an installation's physical assets in support of the mission.

Conditional Use Permit (CUP) - A permit authorizing a use not routinely allowed on a particular site, subject to a public hearing. If approval is granted, the developer must meet certain conditions to harmonize the project with its surroundings.

Conservation Easement - Any limitation in a deed, will or other instrument in the form of an easement, restriction, covenant, or condition, which is or has been executed by or on behalf of the owner of the land subject to such easement and is binding upon successive owners of such land, and the purpose of which is to retain land predominantly in its natural, scenic, historical, agricultural, forested or open-space condition.

Conservation Partnering Authority - A conservation partnering authority is a land acquisition authority specifically enacted to address land use compatibility challenges.

Controlled Firing Areas (CFA) – These areas contain military or civilian activities that could be hazardous to aircraft not participating in the activity (e.g., rocket testing, ordnance disposal, small arms fire, chemical disposal, etc.). CFAs use ground lookouts or radar to identify aircraft that might be approaching the area. When this happens, all activities in the CFA are suspended until the area is clear again. Non participating aircraft are not required to change their flight path with regards to a CFA; therefore, CFAs are not charted by the FAA. Personnel may contact the nearest regional FAA headquarters to obtain CFA information.

Council of Governments (COG) - California's 25 COGs are regional planning agencies comprised of member counties and cities in a given region working together to address regional issues in areas such as land use, housing, environmental quality, and economic development.. COGs do not directly regulate land use. Elected officials from each of the cities and counties

belonging to the COG make up its governing board. A listing of COGs in California is provided in Appendix C.

Critical Infrastructure Protection (CIP) – Term describing activities that enhance the cyber and physical security of the public and private infrastructures that are critical to national security, national economic security, and national public health and safety.



Infrastructure protection may incorporate protective bollards

D

Day-Night Average Sound Level (DNL) – The average equivalent sound level during a 24 hour day, obtained after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

Decibel (dB / dBA) - A unit for describing the amplitude of sound, as it is heard by the human ear.

Dedication - A grant of private land to a public agency for public use. Dedications are often used to obtain roads and parkland needed to serve a project.

Defense Installations Spatial Data Infrastructure Initiative (DISDI) – A program in the Business Transformation Directorate under the Deputy Undersecretary of Defense for Installations and Environment, within the Office of the Secretary of Defense. Its goal is to organize the broad geospatial data investments found across the business mission area of the DoD's Global Information Grid.

Density Averaging (or Transfer) - The density of development on a portion of a site is allowed to exceed usual limits provided that the overall density of the site does not do so. Density increases in one area are offset by a corresponding decrease in allowable density in another part of the site.

Density Bonus – Is an increase in the allowable number of dwelling units. A Density Bonus is granted by the city or county in return for the proposed development project providing low- or moderate-income housing. (See Government Code section 65915)

Design Review Board - A group appointed by the city council to consider the design and aesthetics of development within all or a portion of the community.

Development Agreement – Is a binding contract between a developer and a city or county establishing the conditions under which a particular development may occur. The local government "freezes" the regulations applicable to the site for an agreed upon period of time. (see Government Code section 65864)

Development Fees - Fees charged as a precondition to construction or development approval. The most common are: (1) impact fees (such as parkland acquisition fees, school facilities fees, or street construction fees) related to funding public improvements necessitated in part or in whole by the development; (2) connection fees (such as water fees) to cover the cost of installing public services to the development; (3) permit fees (such as building permits or grading permits) for the administrative costs of processing development plans; and, (4) application fees (rezoning, variance, etc.) for the administrative costs of reviewing and hearing development proposals.

Digital Elevation Model (DEM) – The terminology adopted by the USGS to describe terrain elevation data sets in a digital raster form.

Downzone - A change of zoning to a more restrictive zone (for example, from multi-family residential to single-family residential).

E **Easement** - The right to use property owned by another for a specific purpose. Power line easements are a common example.

Emblem – A symbol depicting a specific organization and rank. Can also be referred to as an insignia.

OFFICERS INSIGNIA OF THE UNITED STATES ARMED FORCES										
O-1	O-2	O-3	O-4	O-5	O-6	O-7	O-8	O-9	O-10	SPECIAL
NAVY										
ENSIGN	LIEUTENANT JUNIOR GRADE	LIEUTENANT	LIEUTENANT COMMANDER	COMMANDER	CAPTAIN	COMMODORE ADMIRAL*	REAR ADMIRAL (O-7 & O-8)	VICE ADMIRAL	ADMIRAL	FLEET ADMIRAL
MARINES										
SECOND LIEUTENANT	FIRST LIEUTENANT	CAPTAIN	MAJOR	LIEUTENANT COLONEL	COLONEL	BRIGADIER GENERAL	MAJOR GENERAL	LIEUTENANT GENERAL	GENERAL	
ARMY										
SECOND LIEUTENANT	FIRST LIEUTENANT	CAPTAIN	MAJOR	LIEUTENANT COLONEL	COLONEL	BRIGADIER GENERAL	MAJOR GENERAL	LIEUTENANT GENERAL	GENERAL	GENERAL OF THE ARMY
AIR FORCE										
SECOND LIEUTENANT	FIRST LIEUTENANT	CAPTAIN	MAJOR	LIEUTENANT COLONEL	COLONEL	BRIGADIER GENERAL	MAJOR GENERAL	LIEUTENANT GENERAL	GENERAL	GENERAL OF THE AIR FORCE

Eminent Domain - The right of government to take private property for public use upon the payment of just compensation to the owner. This is also called condemnation (condemnation can also mean the closing of an unsafe structure by a public agency to protect the community safety).

Encroachment – The DoD defines encroachment as the cumulative result of any and all outside influences that inhibit normal military training and testing. As communities develop and expand in response to growth and market demands, land use decisions can push urban development closer to military installations and operation areas. The resulting land use conflicts (encroachment), can have negative impacts on community safety, economic development, and sustainment of military activities and readiness. This threat to military readiness activities is currently one of the military's greatest concerns.

Encroachment Action Plan (EAP) - A document that captures the results of the identification, quantification, and mitigation of existing and potential land use compatibility challenges to a naval installation, range, airspace, and/or training area.

Encroachment Control Plan (ECP) – An installation ECP is a document that describes the results of an analysis of a Marine Corps installation's current and future encroachment situation, and an action plan presenting encroachment control strategies and actions for reducing the threat to installation missions posed by encroachment.

Environmental Impact Assessment (EIA) – An assessment of the likely human environmental health impact, risk to ecological health, and changes to nature's services that a project may have. An EIA is a creation of the Environmental Protection Agency used to monitor toxics.

Environmental Impact Report (EIR) - CEQA requires an Environmental Impact Report (EIR) whenever an Initial Study indicates that a proposed project may cause one or more significant effects on the environment. An EIR is a document that describes and analyzes the significant environmental effects of a project and discusses ways to mitigate or avoid these effects (California Code of Regulations §15362). The EIR must list alternatives to the proposed project, including not proceeding with the project. An EIR may be certified and the project approved even though there could be potentially significant impacts.

Environmental Impact Statement (EIS) – According to the NEPA, whenever the US Federal Government takes a major Federal action significantly affecting the quality of the human environment, it must first consider the environmental impact presented in this document.

Environmental Noise - The intensity, duration, and character of sounds from all sources.

Environmental Noise Management Program (ENMP) – A program, usually at a military installation, that provides a methodology for analyzing exposure to noise and safety hazards associated with military operations, and land use guidelines for achieving compatibility between the military installation and the surrounding communities.

Exaction – A fee or dedication required as a condition of development permit approval.

Explosive Safety Quantity Distance (ESQD) - The quantity of explosives material and distance separation relationships that provide definitive types of protection. These relationships are based on the level of risk considered acceptable for each stipulated exposure. Separation distances are not absolute safe distances but are relative protective or safe distances.

F

Facilities Management Standards for Facilities, Installation, and Environment (FMSFIE) - An initiative assigned to the CADD/GIS Technology Center to provide integration with the CADD/GIS Technology Center's CADD (AEC CADD Standard) and GIS (SDSFIE) data standards. The Center was established to promote CADD/GIS and FM technology applications.

Final Map Subdivision (*also, tract map or major subdivision*) -

Land divisions creating 5 or more lots. They are generally subject to stricter standards than parcel



ESQD arcs around munitions facilities (red areas)

maps. Requirements may include road improvements, the construction of drainage and sewer facilities, park land dedications, and more.

Finding of No Significant Impact (FONSI) – One of two results from the EA. The other result is the decision to do an EIS.

Findings – The legal "footprints" which an agency must leave to bridge the analytical gap between the raw data considered by the agency and its ultimate decision. They expose its mode of analysis of facts, regulations, and policies.

Floor Area Ratio (FAR) – A measure of development intensity. FAR is the ratio of the floor area of a building to the area of its site. For instance, both a two-story building that covers an entire lot and a four-story building that covers 1/2 of a lot have a FAR of 2.

Flight Path - The line connecting the successive positions occupied, or to be occupied, by an aircraft, missile, or space vehicle as it moves through air or space.

Future Mission Contour (FMC) – Specially developed AICUZ and noise maps that reflect potential and future aircraft and aircraft operations.



Flight paths and corridors

G

General Plan - A statement of policies, including text and diagrams, setting forth objectives, principles, standards, and plan proposals, for the future physical development of the city or county. (see Government Code section 65300)

General Law City - A city incorporated under and subject to the general laws of the state.

Geographic Information System (GIS) – A collection of computer hardware, software, and geographic data for capturing, storing, manipulating, analyzing, and displaying all forms of geographically referenced information.

Growth Management – A process by which local governments attempt to minimize the negative effects of rapid development by controlling the timing, location, amount, and/or density of growth. Growth management strategies are determined by each local government, and can include standard zoning controls, limiting the annual number of building permits, relating allowable development intensity to certain levels of infrastructure service, limiting the location of new development, and so forth.

H

Habitat Conservation Plan (HCP) – Incidental take permits help landowners legally proceed with activities that might otherwise result in the illegal impacts to a listed species. A HCP is a document that supports an incidental take permit application pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act. HCPs are an evolving tool. Initially designed to address individual projects, HCP are more likely today to be broad-based plans covering a large area. The geographically broader HCP is then used as the basis for an incidental take permit for a project within the boundaries of the HCP. Regardless of size, a HCP should include measures that would be implemented to minimize and mitigate impacts to the species to the maximum extent possible, and the means by which these efforts will be funded.

Hazard Mitigation Plan (HMP) – A formal document detailing the steps or actions taken to reduce or eliminate long-term risk to life and property from a hazard event.

Hazardous Materials (HAZMAT) - Defined under the US Department of Transportation regulations as chemicals that are determined by the Secretary of Transportation to present risks to safety, health, and property during transportation.

I

Impact Fees – See *Development Fees*

Infrastructure - A general term for public and quasi-public utilities and facilities such as roads, bridges, sewer plants, water lines, power lines, fire stations, etc.

Initial Study – An analysis of a project's potential environmental effects and their relative significance. An initial study is preliminary to deciding whether to prepare a negative declaration or an EIR.

Initiative - A ballot measure which has qualified for election as a result of voter petition. At the local level, initiatives usually focus on changes or additions to the general plan and zoning ordinance. The initiative power is reserved for the public by the California Constitution.

Installation Environmental Noise Management Program (IENMP) – See Environmental Noise Management Program.

Inverse Condemnation – The illegal removal of property value through excessive government regulation. Legal advice should be sought before proceeding in cases of potential inverse condemnation.

J

Joint Land Use Study (JLUS) – The Joint Land Use Study (JLUS) is a continuation and implementation of the ONMP (Operational Noise Management Plan). It is a collaborative land use planning effort involving the military installation and adjacent local governments. The study evaluates the planning rationale necessary to support and encourage compatible land use development surrounding the installation. Its purpose is to provide support to sustain and provide flexibility to military missions on the installation while guiding the long-term land use needs of the neighboring counties and communities.

L

Land Based Classification System (LBCS) - Classification, coding, and data standards for land-use data to ensure that a broad variety of land-based data collected and stored at the local, regional, state, and national levels in a variety of formats and classification systems be standardized so that such data would be compatible and, thus, easily transferable between jurisdictions, agencies, and institutions.

Land Entitlement - Permitted uses for a parcel of property as approved by the local government entity in which the property is located.

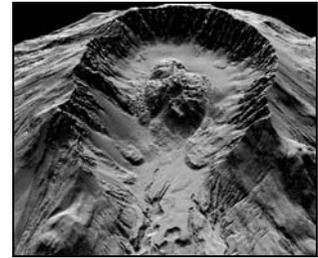
Land Trusts - A nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisitions, or through its stewardship of such land or easements. Land trusts are not government agencies, they are independent organizations that work with landowners who are interested in protecting open space. Land trusts often work cooperatively with government agencies by acquiring or managing land, researching open space needs and priorities, or assisting the development of open space plans.

Lead Agency – The primary public agency responsible for managing and carrying out a project.



Hazardous materials (HAZMAT) protective suit

Light Detection and Ranging (LDAR or LIDAR) - A remote sensing technique that uses a laser mounted to an aircraft to measure vertical height of a land surface.



LDAR image of a mountain

Local Agency Formation Commission (LAFCO) - A five or seven member commission within each California county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals.

M

Maximum Mission Contour (MMC) – The noise level associated with the military installation's highest level of activity.

Memorandum of Understanding (MOU) - A Memorandum of Understanding (MOU) is contract between two or more government entities.

Military Construction (MILCON) - Appropriations fund major projects such as bases, schools, missile storage facilities, maintenance facilities, medical/dental clinics, libraries, and military family housing.



MILCON projects include facility construction

Military Influence Area (MIA) - A Military Influence Area (MIA) is an official geographic planning or regulatory area where military operations impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. (These areas are also referred to as a Region of Military Influence (RMI), Military Influence Planning District (MIPD), Military Influence Overlay District (MIOD), Military District Disclose District (MIDD), Airfield Influence Planning District (AIPD), and Areas of Critical State Concern (ACSC)).

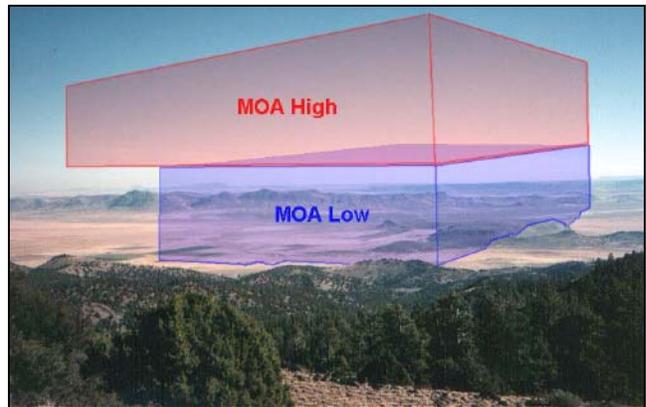
Military Influence Disclosure District (MIDD) – a designed zoning district where real estate transactions are required to have disclosure related to exposure to excessive noise from military operations of types, including aerial over-flight, weapons and munitions firing.

Military Influence Overlay District (MIOD) –a designated contiguous overlay-zoning district that may conform to the perimeter boundaries of a MIPD. The zoning address compatible uses related to hazards, safety, and noise issues.

Military Influence Planning District (MIPD) – A designate official planning area surrounding a military installation. Its purpose is to promote compatible land use planning and development patterns that will sustain the military mission while promoting the public health, safety, and welfare.

Military Installation – The term military installation means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the United States Department of Defense as defined in paragraph (1) of subsection (e) of Section 2687 of Title 10 of the United States Code. (Definition per Government Code 65302(a)).

Military Operating Area (MOA) - A MOA is airspace established to segregate certain non-hazardous flight activities from Instrument Flight Rules (IFR) traffic and to identify Visual Flight Rules (VFR) traffic. Within these areas, the military conducts flight activities, such as acrobatic or abrupt flight maneuvers, intercepts, air combat maneuvering missions, and aerial refueling. These areas are used to maintain military readiness in the air and to train student pilots.



Source: *Interagency Airspace Coordination Guide*

MOAs are three dimensional areas. In addition to the mapped boundaries, MOAs have a defined floor (minimum altitude) and ceiling (maximum altitude). These altitudes can range from the surface up to the maximum ceiling of 18,000 feet above mean sea level (MSL). MOAs can be “stacked” vertically, as illustrated in the figure. On sectional charts, IFR enroute charts, and terminal area charts, these are identified in magenta lettering that states a specific name followed by the letters “MOA”.

Military Readiness – “Military readiness activities” mean all of the following:

- Training, support, and operations that prepare the men and women of the military for combat.
- Operation, maintenance, and security of any military installation.
- Testing of military equipment, vehicles, weapons, and sensors for proper operation or suitability for combat use. (Definition per Government Code 65302(a))

Military Training Route (MTR) – An airspace of defined dimensions established for the conduct of military aircraft training flights. MTRs are similar to complex systems of interrelated and interdependent highways in the sky that connect military installations and training ranges. They are used by the DoD to conduct low-altitude navigation and tactical training at airspeeds in excess of 250 knots and at altitudes as low as 200 feet above MSL. These low-level, high-speed routes allow pilots to develop the skills necessary to avoid detection by enemy radar. For purposes of California Law (AB 1108, Pavley, Chapter 638, Statutes of 2002), a low-altitude MTR is defined as a route where aircraft operate below 1,500 feet MSL.

Ministerial Projects – Ministerial projects receive automatic approval if certain conditions are met. For example, a local Planning Department might automatically issue a building permit if a project meets specified building criteria.

Mitigation Measure - The California Environmental Quality Act requires that when an environmental impact or potential impact will occur, measures must be proposed that will eliminate, avoid, rectify, compensate for or reduce that effect.

Moratorium - A halt to new development or the issuance of permits. Moratoria are often imposed while a new general plan or zoning ordinance is written or when sewer or water facilities are



Mitigation measure at water outfall
(white float collecting contaminants)

inadequate to serve additional development. (See Government Code section 65858)

Multiple Species Habitat Conservation Plan (MSHCP) - regional study undertaken to determine the preferred habitats and ecology of native plants and animals throughout an area in an attempt to balance habitat and species protection with economic development.

N

Natural Communities Conservation Plan (NCCP) – An NCCP identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

National Environmental Policy Act (NEPA) -. The United States' basic national charter for protection of the environment, which establishes policy, sets goals, and provides means for carrying out the policy.

Negative Declaration - A negative declaration is written when a project is subject to CEQA, but will not have a significant effect upon the environment. The negative declaration describes why the project will not have a significant effect. A mitigated negative declaration is prepared when mitigations can be incorporated into the project that will result in the avoidance of all possible significant impacts related to the project.

Noise Contours (NC) - Continuous lines of equal noise level usually drawn around a noise source. The lines are generally drawn in 5-decibel increments so that they resemble elevation contours found in topographic maps except that they represent contours of equal noise level. Noise contours are generally used in depicting the noise exposure around airports, highways, and industrial plants.



Noise level contours on an AICUZ map measured in dB.

Nonconforming Use - A land use which does not meet current zoning requirements.

O

Operations and Maintenance (O&M) - Appropriations fund expenses such as civilian salaries, travel, minor construction projects, operating military forces, training and education, depot maintenance, stock funds, and base operations support.

Overlay Zone – A zone which is superimposed upon other zoning. Overlay zones are used in areas which need special protection (as in a historic preservation district) or have special problems (such as steep slopes or flooding). Development of land subject to an overlay must comply with the regulations of both zones.

P

Parcel Map - A minor subdivision resulting in fewer than five lots.

Planned Unit Development (PUD) - Land use zoning which allows the adoption of a set of development standards that are specific to a particular project. PUD zones usually do not contain detailed development standards; those are established during the process of considering proposals and adopted by ordinance upon project approval.

Prohibited Areas (PA) – These areas vary in dimensions and are established over sensitive ground facilities (e.g., the White House, Camp David, presidential homes, etc.). Aircraft wishing to navigate in this airspace must receive approval from the FAA or PA controlling agency. PAs are identified with a “P” followed by a number on sectional charts, IFR enroute charts, and terminal area charts.

Purchase of Development Rights (PDR) –A PDR is a voluntary program where a land trust or some other agency usually linked to local government makes an offer to a landowner to buy the vested development rights on a land parcel. The landowner is free to turn down the offer, or to try to negotiate a higher price. A PDR can be used to establish a conservation easement as defined in Section 815.1 of California's Civil Code.

R

Range - Military range means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas (definition of range per 40 CFR 266.201)



Munitions explosion on a range

Range Air Installation Compatible Use Zone (RAICUZ) – Navy/Marine Corps and Air Force programs designed to protect public health, safety, and welfare, and to prevent encroachment from degrading the operational capability of air-to-ground ranges. This program is similar to the AICUZ Program. It includes range safety and noise analyses, and provides land use recommendations, which will be compatible with range safety zones and noise levels associated with the military range operations.

Record of Decision (ROD) – A public document, under the NEPA, that reflects the agency's final decision, rationale behind that decision, and commitments to monitoring and mitigation.

Referendum - A voter challenge to legislative action taken by a city council or county board of supervisors. If enough voters' signatures are filed before the legislative action becomes final, the council or board must either rescind its decision or call an election on the issue. The California Constitution guarantees the public's power of referendum.

Region of Military Influence (RMI) – A new three dimensional planning model that looks beyond the immediate environs of the home military base and the surrounding jurisdictions. It recognizes the connectivity between the home base and distant test and training ranges.

Regional Shore Infrastructure Plan (RSIP) - A comprehensive, long-range regional plan encompassing a specific geographic region. The RSIP identifies alternatives for optimizing the use of land and facilities, and incorporates strategic CNO and Installation Management Claimant (IMC) visions through functional consolidations, regionalization, outsourcing, privatization and joint use with other DoD, federal and government entities. RSIP content reflects the requirements defined for the comprehensive land and facilities planning process.

Restricted Areas (RA). Restricted Areas are an important asset to the DoD because they allow for the use of weapons for training purposes. These areas are necessary for ground weapons and artillery firing, aerial gunnery, live and inert practice bomb dropping, and guided missile testing. Military Restricted Airspace ensures the combat readiness of aviation and ground combat units while separating these activities from the public and general aviation users. . These areas are identified by the letter "R" followed by a number on sectional charts, IFR enroute charts, and terminal area charts. The floor and ceiling altitudes, operating hours, and controlling agency can be found in the sectional chart legend.

S **School Impact Fees** - Fees imposed on new developments to offset their impacts on area schools.

Setback - The minimum distance required by zoning to be maintained between two structures or between a structure and a property line.

Sound Attenuation - Sound attenuation refers to special construction practices designed to lower the amount of noise that penetrates the windows, doors, and walls of a building.

Special Use Airspace (SUA) - Airspace wherein activities must be confined because of their nature or wherein limitations are imposed upon aircraft operations that are not a part of those activities, or both. Except for controlled firing areas, special use airspace areas are depicted on aeronautical charts.

Specific Plan - A plan addressing land use distribution and intensity, open space availability, infrastructure, and infrastructure financing for a portion of the community. Specific plans put the provisions of the local general plan into action (see Government Code section 65450).

Sphere of Influence - A plan for the "probable physical boundary and service area of a local agency" as approved by the LAFCO. It identifies the area available to a city for future annexation. However, unless another arrangement has been made, the city has no actual authority over land outside its city limits.

Spot Zoning - The zoning of an isolated parcel in a manner which is inconsistent or incompatible with surrounding zoning or land uses, particularly if done to favor a particular landowner. A conditional use permit is not a spot zone.

Strip Development - Commercial and high-density residential development located adjacent to major streets. This type of development is characterized by its shallow depth, street-oriented layout, lack of unified design theme, and numerous points of street access. It impedes smooth traffic flow.

Subdivision Ordinance - An ordinance used by local governments that sets forth the regulations that guide site development standards such as road and grading requirements, utility provision, etc. (Also known as land development control ordinance, platting).

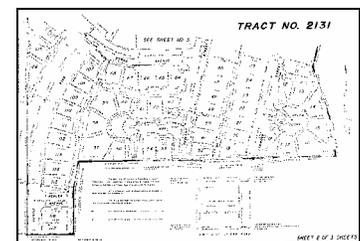
T **Tentative Map** - The map or drawing illustrating a subdivision proposal. The city or county will conditionally approve or deny the proposed subdivision based upon the design depicted on the tentative map.

Tract Map – See *Final Map Subdivision*

Transfer Development Rights (TDR) – Also known as "Transfer of Development Credits," a Transfer of Development Rights (TDR) program is utilized to relocate potential development from areas where proposed land use or environmental impacts are considered undesirable (the "donor" site) to another ("receiver") site chosen on the basis of its ability to accommodate additional units of development beyond that for which it was zoned, with minimal environmental, social, and aesthetic impacts.



Setback between building on left and building at center



Tract Map (Subdivision)

Transportation Systems Management (TSM) - A program coordinating many forms of transportation (car, bus, carpool, rapid transit, bicycle, etc.) in order to distribute the traffic impacts of new development. Instead of emphasizing road expansion or construction, TSM examines methods of increasing road efficiency.

V

Variance - A limited waiver from the requirements of the zoning ordinance. Variance requests are subject to public hearing and may only be granted under special circumstances.

Vested Tentative Tract Map – A vested tentative tract map follows a procedure for the approval of tentative maps that will provide certain statutorily vested rights to a subdivider. When a local agency approves or conditionally approves a vesting tentative map, that approval shall confer a vested right to proceed with development in substantial compliance with the ordinances, policies, and standards in effect at the time the vesting tentative map is approved or conditionally approved.

W

Warning Areas (WA) – Warning Areas can exist in domestic and international waters. These airspace areas are similar to a combination of restricted airspace areas and MOAs because the activities that occur can be hazardous, non-hazardous, or both. Within these areas, the military can conduct major exercises using dozens of ships and aircraft performing an array of training, such as naval gunfire, aerial gunnery, guided missile exercises, and practice interceptions. These areas are identified by a “W” followed by a number on sectional charts, IFR enroute charts, and terminal area charts.

Z

Zone of Influence (ZOI) - The Zone of Influence consists of an area in which local communities should disclose, to existing and potential landowners within a minimum 1.6 kilometers (1 mile) of the boundary the existence of the military installation and its activities, e.g., weapons firing, aircraft operations, heavy vehicle movements, etc. and associated noise levels.

Zoning - Local codes regulating the use and development of property. The zoning ordinance divides the city or county into land use districts or “zones”, illustrated on zoning maps, and specifies the allowable uses within each such zone. It establishes development standards such as minimum lot size, maximum structure height, building setbacks, and yard size.



MILITARY INSTALLATIONS IN CALIFORNIA

While major military installations are easy to locate, other military facilities and operation areas (i.e., ranges, special use air space, etc.) are not as well known. In order to adequately plan for compatibility, local planners, agency planners, land owners, and developers need information on the military installations and operations in California. This appendix provides information on how to access this information online from the California Digital Atlas and other resources. This appendix also provides a printed location map identifying the major DoD installations, a series of detailed maps identifying the major DoD military operation areas, and a comprehensive list of military installations in the State of California.

A.1 DIGITAL MAPPING RESOURCES

There are several electronic mapping resources that can be of great use when evaluating compatibility issues related to a proposed project or plan or for evaluating potential compatibility issues in an area. The main resources that will be described in this appendix are as follows:

California Digital Conservation Atlas (Atlas)

<http://atlas.resources.ca.gov/atlas/app.asp>

Department of Defense Land Use Planning Map (DoD Map)

<http://atlas.resources.ca.gov/cadamil/app.htm>

California Military Land Use Compatibility Analyst (CMLUCA)

<http://sample1.casil.ucdavis.edu/Calmap8/index.html>

The Atlas and DoD Map sites provide access to a range of base map, military, and resource layers. These sites are best suited for users that want to graphically review the spatial relationships between the available databases, select, query, and download the provided databases, and print out customized maps. The CMLUCA site is targeted at providing an automated method to determine what military resources are near a proposed project site. On this site, once a project site is entered, the CMLUCA application will provide a summary form that identifies the military resources that are on, over, or adjacent to a proposed project site based on the criteria established in Government Code 65940. This form can be printed and provided to a local jurisdiction for evaluation with a proposed project or plan.

Atlas and DoD Map – Data Available

The Atlas and the DoD Map sites are both built using of the same interface, called iMaps. The iMaps interface is an internet map portal created by the California Department of Fish and Game. It has been adapted for use by the California Resources Agency for both the Atlas and the DoD Map applications. Since the two applications use the same iMaps interface, the basic instructions regarding the use of the two applications are very similar.

In addition to sharing the same interface, the Atlas and DoD Map application utilize similar data layers, such as a color relief map, USGS topographic maps, and special use airspace. To display a map or query

Appendix A

the database to determine needed information, these data layers can be toggled on and off from within the applications. The data layers available in each application are shown on Table A-1.

Table A-1. Available Data Layers

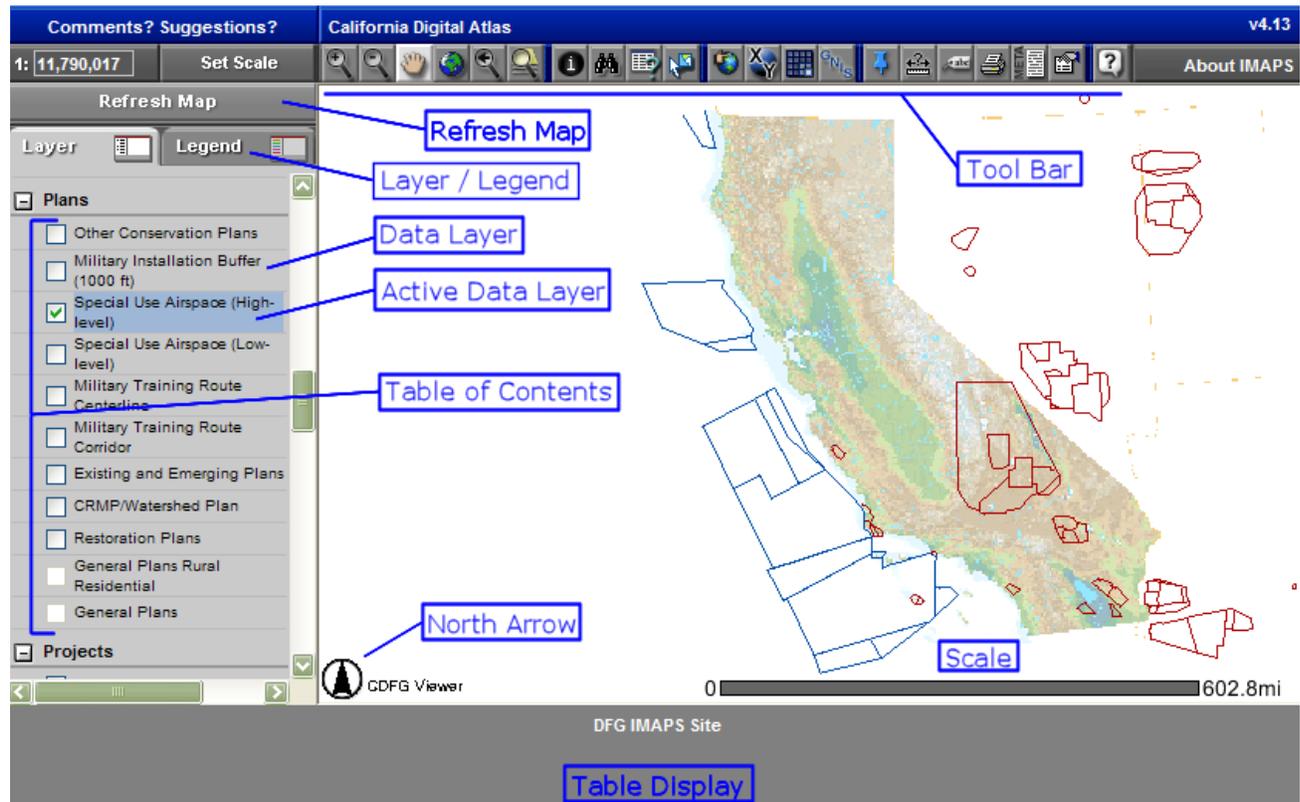
Data Layers	Atlas	DoD Map	Data Layers	Atlas	DoD Map
Environmental Hazards			Biodiversity		
Fire History	●		USDA Ecoregions	●	
Organics (TSMP)	●		Riparian Areas	●	
Metals (TSMP)	●		National Wetlands Inventory	●	
Lipids	●		Hydrology		
PAHS	●		Rivers and Creeks	●	
PCBS	●		California River Basins	●	
Organics	●		Hydrology 100K	●	●
Metals (SMWP)	●		Calwater Watersheds	●	●
Toxicity	●		Physical Geography		
CHEM	●		Benthic	●	
Fish Consumption Warnings	●		Wild and Scenic Rivers	●	
Fish Advisories	●		Demographics		
Solid Waste Sites	●		2000 Census Blocks	●	
Groundwater Monitoring Wells	●		2000 Census Block Groups	●	
Dams	●		Urbanized Areas	●	
Impaired Water Bodies	●		Growth Projections 20 Year	●	
FEMA 100 year Flood Data	●		Growth Projections 50 Year	●	
Roads / PLS			Urban Populated Areas	●	
Highways	●	●	Land Ownership		
Roadways	●		State Parks	●	
PLSS (projected)	●	●	Regional Parks	●	
Jurisdictions			DoD Installations and Ranges	●	●
BLM Special Management	●		DFG Facilities	●	
National Forest Boundaries	●		State and Federal Easements	●	
National Parks	●		Public Trust Lands 2005	●	
National Forest Management	●		Land Use / Cover		
Cities and Populated Places	●		Timberland Lands 1945	●	
California Counties	●		Landcover Bioregions	●	
Mexico	●	●	Coarse Landcover	●	
Western States	●	●	Colorado Desert Landcover	●	
Land Trust Offices	●		South Coast Landcover	●	
Senate Districts	●		Mojave Landcover	●	
Assembly Districts	●		San Joaquin Valley Landcover	●	
Zip Code Boundaries	●		Central Coast Landcover	●	
Local Water Districts	●		Bay Area Landcover	●	
State Water Districts	●		Sacramento Land cover	●	
Federal Water Districts	●		Sierra Nevada Landcover	●	
Plans			Modoc Landcover	●	
Other Conservation Plans	●		North Coast Landcover	●	
Military Installation Buffer (1000 ft)	●	●	Base Map Imagery		
Special Use Airspace (High-level)	●	●	DRG Topos (24K)	●	●
Special Use Airspace (Low-level)	●	●	DRG Topos (100K)	●	●
Military Training Route Centerline	●	●	DRG Topos (250K)	●	●
Military Training Route Corridor	●	●	Base Map (500K)	●	●
Existing and Emerging Plans	●		Hillshade (30M)	●	●
ERMP/Watershed Plans	●		Hillshade (100M)	●	●
Restoration Plans	●		Color Relief	●	●
General Plans Rural Residential	●				
General Plans	●				
Projects					
N.R. Project Inventory	●				

As shown in Table A-1, the DoD Map site is primarily a subset of the Atlas application. Given the wider set of locational layers and the availability of general plan information in the Atlas application, this application is a good place to start for your data needs. In the following discussion, the Atlas application will be used for demonstration purposes.

Atlas and DoD Map –iMaps Application Overview

Figure A-1 provides an overview of the iMaps interface for the Atlas application. The key terms used to describe the interface are described below.

Figure A-1. iMaps Interface



Map Window. The map window (not labeled) is the white area that occupies the majority of the screen and displays the map selected. By default, the application will start with a color relief map of the State of California.

Table of Contents. The table of contents is located along the left edge of the screen and contains a list of available data layers. You can select which layers you wish to view using the check boxes to the left of each layer name. A check box with a dark border is available to view. If the box does not have a dark border (such as the General Plan layer in Figure A-1) then it is governed by a scale dependency and is not visible at the current scale. You'll have to zoom in (most likely) or out to view the layer.

Tool Bar. Above the Map Window is a series of buttons that comprise the tool bar for the application. This contains the tools that you use to interact with the map and its contents. Each tool will have one of three characteristics. Immediate Tools, like Zoom to Previous Extent and Full Extent, take effect immediately.

Appendix A

Active Tools, like Zoom, Pan, and Identify, require further input from the user. Input Tools will open a pop-up window to ask for direct input from the user. An example of this is the Query Active Layer tool.

Along the tool bar, the tools are clustered into five groups (moving left to right along the tool bar): display tools, query tools, locational tools, supporting tools, and help. A description of each tool is provided below.

Display Tools



Zoom In. Active tool. Click on the tool, then click and drag on the map to create a box around the area you wish to zoom into (increase scale). As you zoom in, the base map will change to a USGS topographic series background.



Zoom Out. Active tool. Click on the tool, then click and drag on the map to draw a box that will be the center of the new view. The smaller the area drawn, the more the map will be zoomed out (decrease scale).



Pan. Active tool. Click and drag the map in the direction you wish to move the area being viewed.



Zoom to Full Extent. Immediate tool. Click on the tool to zoom to the maximum extent of all the visible layers (layers that have been turned on in the map view).



Return to Previous Extent. Immediate tool. Click on this tool to return to the view shown prior to the last Display Tool action. For instance, use the Zoom In tool to look at an area in more detail, then click this tool to zoom back to the area shown on the screen before you zoomed in.



Zoom to Layer. Immediate tool. Click on the tool to zoom to the extent of the active data layer. The active data layer is highlighted in blue on the Table of Contents (see Figure A-1).

Query Tools (all tools work only on the active data layer)



Identify Feature. Active tool. Click on the tool then click on a feature to display information about the feature in the Table Display window.



Text Search. Input tool. Click on the tool and a dialog box will appear. Enter the text that you wish to search for and whether you wish to create a new selection set, select from an existing selection set, or add to an existing selection set. Depending on your previous actions, not all of these choices may be available. For instance, if you have not previously selected a feature, you will not be able to add to your selection.



Query Active Layer. Input tool. Click on the tool and a dialog box will appear. From the dialog box, you can construct a SQL query using the query builder provided in the dialog box.



Graphically Select Features from Active Layer. Active tool. Click on the tool and then select features by clicking on them. Multiple features may be selected by holding down the Shift key while selecting. This tool works only on the active data layer.

Locational Tools



Graphically Obtain Information About a Point. Active tool. Clicking on a spot on the map will give you a range of locational information about the point, including its latitude and longitude, the name of the county and USGS quadrangle it is in, UTM coordinates, and more.



Zoom to Known X and Y Coordinate. Input tool. When clicked, this tool will display a dialog box asking the user to enter a latitude and longitude using a geographic or UTM coordinate format.



Zoom to Township, Range, and Section. Input tool. Click on the tool. A dialog box will appear. Input the Township, Range, Section, and Meridian that you wish to zoom to. Depending on how specific your query was, one or more locations will appear in the Table Display window. For each result returned, there will be a number in the first column labeled "Zoom." Clicking this number will zoom the Map Window to show the area meeting your criteria.



Search for Place Name. Input tool. When clicked, a dialog box will appear. Type in the name of the location you are looking for and select what type of feature it is from a drop down menu. A list of results meeting your criteria will appear in the Table Display window.

Supporting Tools



Create/Zoom to Bookmarks. Input tool. When using this application regularly, there may be locations you typically zoom into (i.e., a city boundary, military installation, etc.). This tool will bookmark the current view displayed in the Map Window. Next time you start the application, loading a bookmark will take you back to the location you are interested in. Currently, bookmarks are deleted 21 days after their last use.



Measurement Tool. Active tool. Click the tool and then click on the map to measure the distance or area you are interested in. To measure a distance, click on two or more locations. The distance will be displayed in the Table Display window. As you continue to click on points, the display will show the segment distance (the distance between the last two points) and the total distance covered. Linear measurements are shown in meters, feet, and miles.

The tool can also be used to measure area. Just click on three or more points to create a polygon bounding the area you wish to measure. Again, the results will be updated with each click, this time showing the length of the last segment and the total area. Area is displayed as square meters, acres, and square miles.

Clicking the button labeled "Clear Measure Information" will reset the Measurement Tool.



Label Tool. Active / Input tool. Click the tool and then click on the map in the location you wish the label to be added (note: the label will be centered vertically and to the right of where you click on the map). Once the location is clicked, a dialog box will appear. Enter the desired text and click the "Add Label to Map" button. The user does not have control over the font or style of the label, and labels can not be removed.



Print Map. Input tool. Click on the tool and a window will appear with a preview of the map to be printed. The printed map will typically cover the area shown on your screen and some additional area. The additional area is related to differences in the height to width ratio between your screen and your printer. Some of the text titles can be changed prior to printing, but the user have limited controls over the final output. All maps print in a landscape format.



View Metadata for Active Layer. Active tool. Click on the tool. If available the metadata will be displayed.



Properties of Active Layer. Input tool. Once clicked, a dialog box will pop up with some basic information about the active data layer (note: this tool works only on the active data layer). From the dialog, you can click the "View Metadata" button to get an overview of the active data layer. Metadata is a description of the data itself and can vary depending on the data source. Metadata will typically provide an overview of the data source, keywords that describe the data, and information on the creation and maintenance of the data layer.

From the original dialog box, you can also click on the "Edit Symbology" button. This will open another dialog box that will let you change the color and symbol type used to display the data.

Help



Help. Active tool. Open the iMaps help created by the Department of Fish and Game.

Refresh Map. Whenever the check box for a data layer (or several data layers) is checked or unchecked, the Refresh Map button will flash. Turning data layers on or off using the check box will not change the map displayed in the Map Window until the Refresh Map button is clicked.

Layer / Legend. Click on the tab titled "Layer" to display the Table of Contents listing of available data layers (this is shown in Figure A-1). "Legend" at the top next to the "Layers" tab to view the legend for the currently visible map.

Appendix A

Data Layer. A data layer is a collection of similar geographic features—such as cities, special use airspace, or highways—of a particular area or place (in this case, within California) that can be displayed on a map. The data layers available in the Atlas and DoD Map are shown in Table A-1.

Active Data Layer. Many of the tools in the iMaps interface apply only to the active (selected) data layer. To make a data layer the active layer, just click on its name in the Table of Contents. The active layer is highlighted in blue on the Table of Contents (see Figure A-1) and is named at the top of the Table of Contents. You may need to scroll up on the Table of Contents to see the name.

North Arrow. The north arrow indicates which direction on the map is true (geographic) north.

Scale. The scale bar, located at the bottom of the Map Window, provides a visual means for estimating distance on the map as currently viewed. If a specific scale is desired, type the value in the box just above the Table of Contents and click the “Set Scale” button.

Table Display. Located along the bottom of the application window, the results of queries (related to using one of the Query Tools) will be displayed here. Each feature in the selection can be zoomed to by clicking on the number in the leftmost column. Error messages may also appear here should there be a problem with the table operation.

CMLUCA

The CMLUCA application is more focused in its use than either the Atlas or DoD Map applications. CMLUCA was developed by the Resources Agency in conjunction with OPR to allow users to locate a project location (or other area of interest) using a single point location, and then running a query to determine if any military assets are on, under, or adjacent to the location selected. This project locator tool is available for use by local planners, permit applicants, and developers to easily determine if a project triggers military notification.

When started, the screen shown on Figure A-2 is displayed. This screen gives the user a number of choices on how to identify the project site or area of interest. To select the location from a map, the “Go Directly to Map” button will bring the user to a map screen showing the state of California. Figure A-3 shows a sample map that has been zoomed into the March Air Reserve Base area. There are two modes available (selected in the upper right part of the screen) – Navigate and Mark Project Location.

In Navigate mode, the map works similar to mapping resources typically found on the Internet. To navigate to your location:

- Click anywhere on the map to recenter on that location.
- Use the scale bar along the top of the map to adjust the level of zoom displayed.
- Use the arrows along margin of the map to pan.

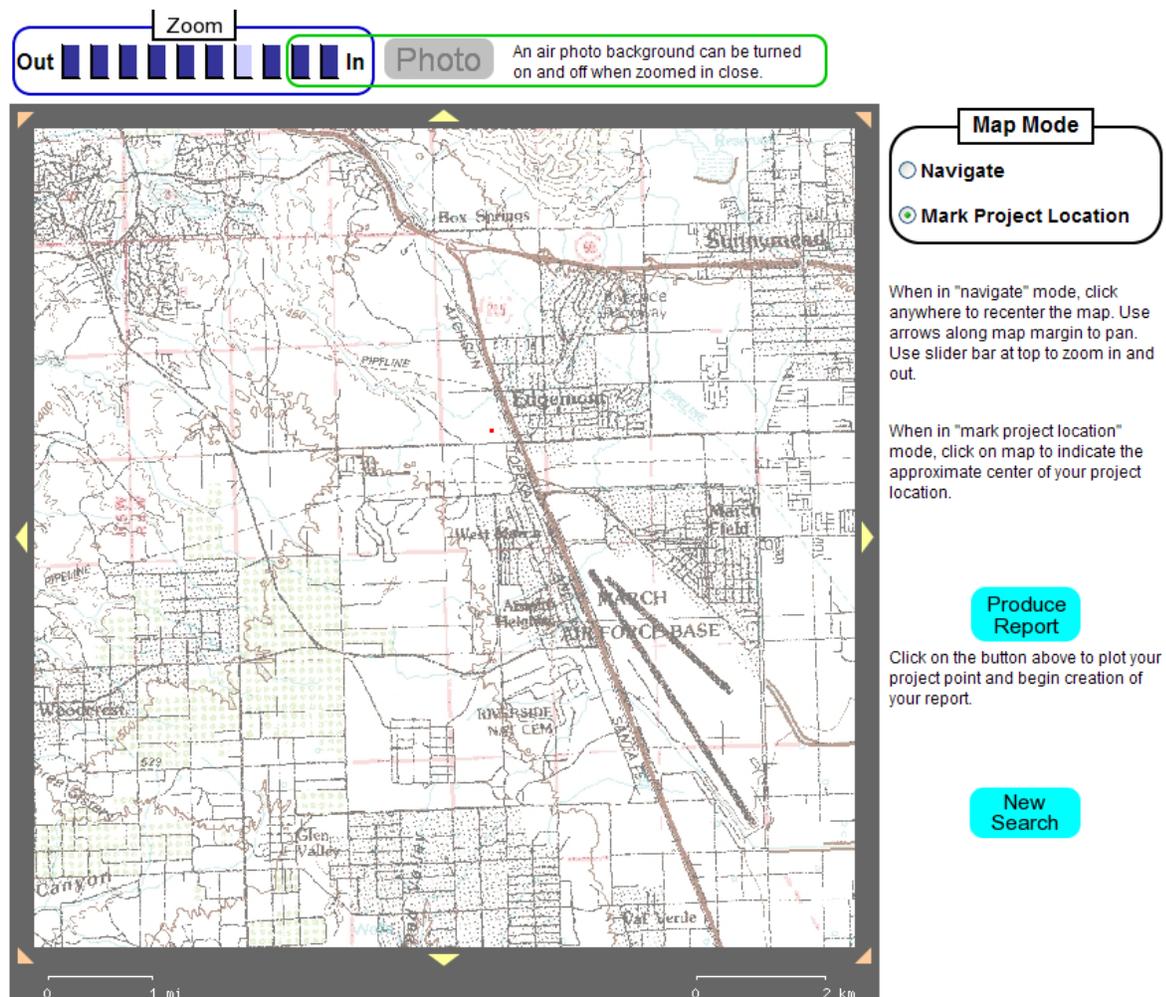
Once you are in the area of interest, change to Mark Project Location mode by clicking its button. When in Mark Project Location mode, click on the map to indicate the approximate center of your project location. If you marked an incorrect location, just click again to mark your desired location. Once a location is selected, the “Produce Report” button will be highlighted. Press this button. A dialog box will pop up asking the size of your project using a range (1 to 5 acres, 6 to 15 acres, etc.). Select the appropriate range and click “Generate Report” to complete your query.

The application will then prepare a report highlighting the military installations or operations areas near the site selected. A sample report is shown on Figure A-4.

Figure A-2. CMLUCA Front Main Menu



Figure A-3. Sample CMLUCA Map View



Appendix A

Figure A-4. Sample CMLUCA Results

California Military Land Use Compatibility Analyst Report	
Date of Report:	12/1/2005
Project Title:	<input type="text"/>
Project Applicant:	<input type="text"/>
State	County
	
Project Location: -117° 17' 16", 33° 55' 7" (Longitude/Latitude, in DD/MM/SS format)	
Based on the information you have provided, potential impacts from your project to areas important to military readiness activities are as follows:	
	Within 1,000 feet of a military base
Your project location intersects with the above military layers. Please provide the above information to your local planning agency as part of your permit application.	
A copy of your permit application <u>must</u> be sent by the city/county to the appropriate branch(es) of the U.S. Military, per Government Codes 65352, 65940, and 65944.	
Thank you.	

A.2 CALIFORNIA REGIONAL MAPS

The following pages contain a set of detailed maps that highlight installations, facilities, and operation areas in the state. Figure A-5 is a map of California identifying county boundaries and major DoD installations. Each Military Service is color coded for easier identification.

Figures A-6 through A-12 identifies the location of military installations and training areas within California. These figures also identify Military Special Use Areas which includes Military Operating Areas (MOAs), Restricted Areas, and Warning Areas. The locations of all Military Training Routes (MTRs) including Lower MTRs, Low MTRs, and Upper MTRs are also shown. This information is presented in a series of seven regional maps.

The regional maps portray the MTRs and MOAs as well as counties, cities, and key communities in the region.

Figure A-5 Regional Map Extents

Figure A-6 Region 1 – Northern California

Figure A-7 Region 2 – North Central California

Figure A-8 Region 3 – West Central California

Figure A-9 Region 4 – East Central California

Figure A-10 Region 5 – West Southern California

Figure A-11 Region 6 – East Southern California

Figure A-12 Region 7 – South Southern California

Map Notes

Special Use Airspace and Military Training Route (MTR) data are from the National Geospatial Intelligence Agency (NGA), Digital Aeronautical Flight Information File (DAFIF), Version 0404 (Effective dates: April 15, 2004 to May 12, 2004). Please refer to the DoD Flight Information Publication AP/1A and AP/1B for additional information.

Military Training Routes are low-level training routes. Each segment of an MTR is allocated an upper and lower altitude, a centerline, and lateral boundaries (or corridor). The map displays the MTR centerlines and corridors, classified by the minimum altitudes for the entire route. The corridors are approximate and were developed by buffering the MTR centerlines by the lateral limits defined in the DAFIF data set. Please refer to the DoD Flight Information Publication AP/1A and AP/1B to access more information on individual MTRs or MTR segments.

Public and Conservation Land data are from the California Resources Agency Digital Atlas. It is intended to provide general ownership information for conservation and other planning purposes only and must not be used for parcel or property boundary mapping or analysis.

DoD Special Use Airspace areas were classified based on airspace type and altitude. The major types of DoD Special Use Airspace are Military Operating Areas (MOAs), Restricted Areas (R), and Warning Areas (W). Airspace has defined boundaries and upper and lower altitudes. The airspace was classified based on the minimum altitudes for each individual area. Please refer to the DoD Flight Information Publication AP/1A and AP/1B to access more information on Special Use Airspace areas.

Census Urbanized Area data are from the U.S. Census Bureau, CENSUS 2000 data set and were developed at the block group level. Please refer to the U.S. Census Bureau for more information on the dataset.

Interstate and State Highway information was derived from the U.S. Department of Transportation, U.S. National Transportation Atlas, and Public and Conservation Land data.

Military Installation data were developed and extracted from the U.S. Geological Survey, U.S. Atlas of Federal and Indian Lands, and the Public and Conservation Land data.

Appendix A

Map Legend

On Figures A-6 through A-12, legend shown on the next page will apply to each map.

 Urbanized Areas (Census 2000)

 Military Installation Buffer (1000 ft)

Major Installations by Service

 DoD

 Army

 Air Force

 Marine Corps

 Navy

Public and Conservation Lands (2003)

 Bureau of Land Management

 Local

 Non-Governmental Organizations

 National Park Service

 State

 U.S. Forest Service

 Other Federal

Military Training Routes (MTRs)

Classification based on minimum altitude:

Lower MTR: At or below 1500 ft AGL

 Lower MTR Centerline

 Lower MTR Corridor

Low MTR: Contains at least one segment at or below 1500 ft AGL

 Low MTR Centerline

 Low MTR Corridor

Upper MTR: Above 1500 ft AGL

 Upper MTR Centerline

 Upper MTR Corridor

Military Special Use Airspace

Classification based on minimum altitude:

Military Operating Area (MOA)

 100 to 1500 ft AGL

 300 to 1500 ft MSL

 Above 1500 ft MSL

Restricted Area (R)

 Surface

 100 to 1500 ft AGL

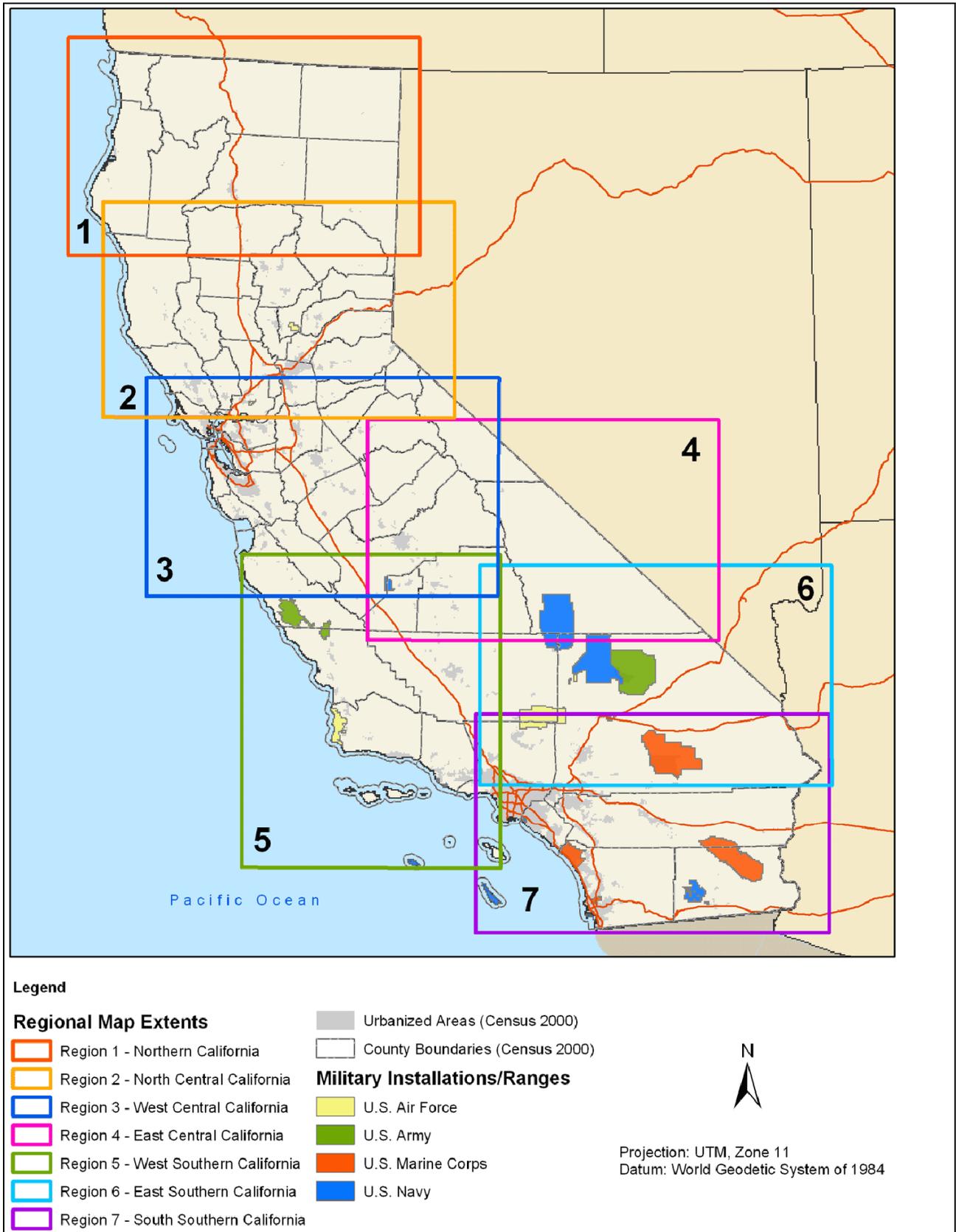
 Above 1500 ft MSL

Warning Area

 Surface

 8000 ft MSL

Figure A-5. Regional Map Extents



Appendix A

Figure A-6. Region 1 – Northern California

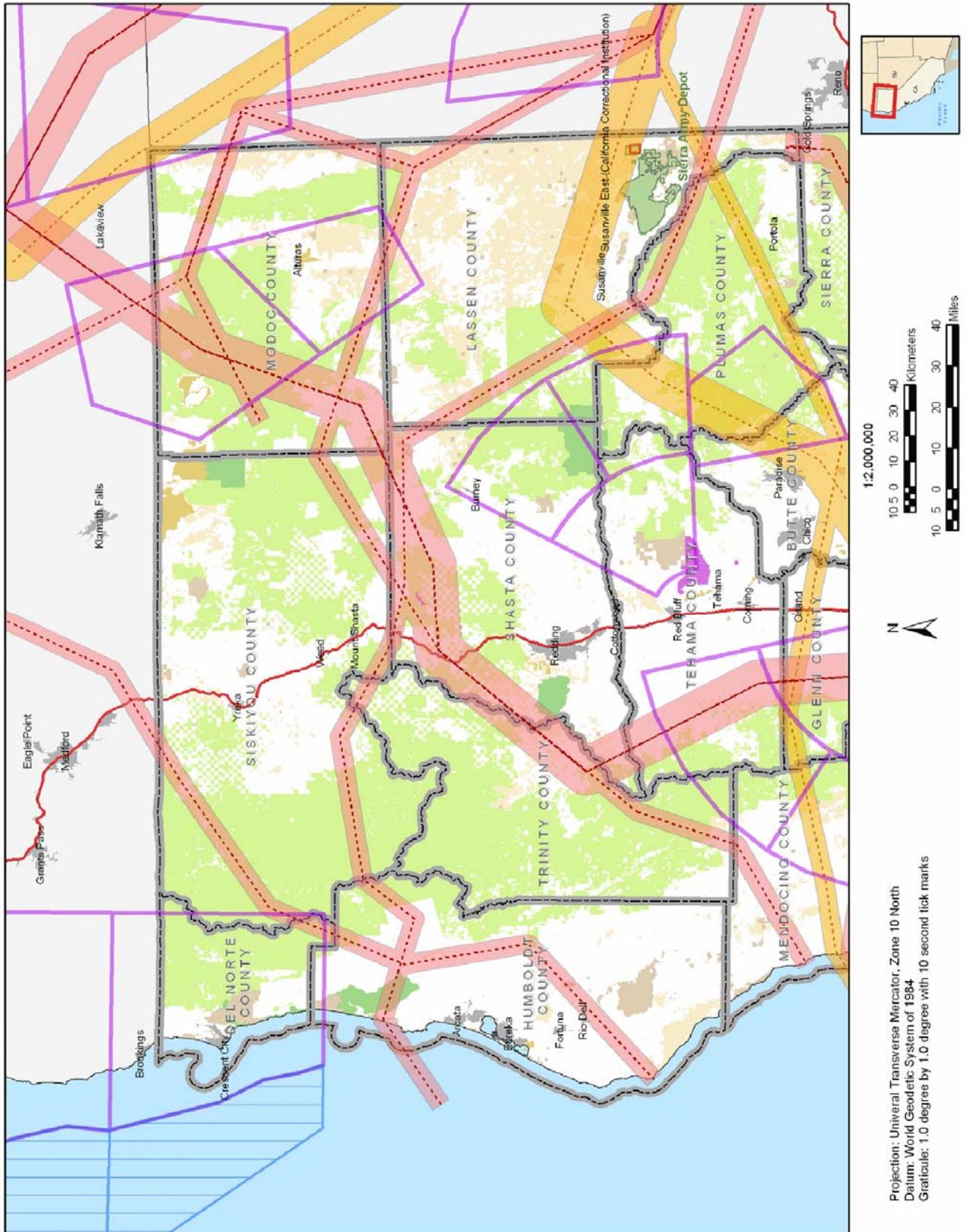


Figure A-7. Region 2 – North Central California

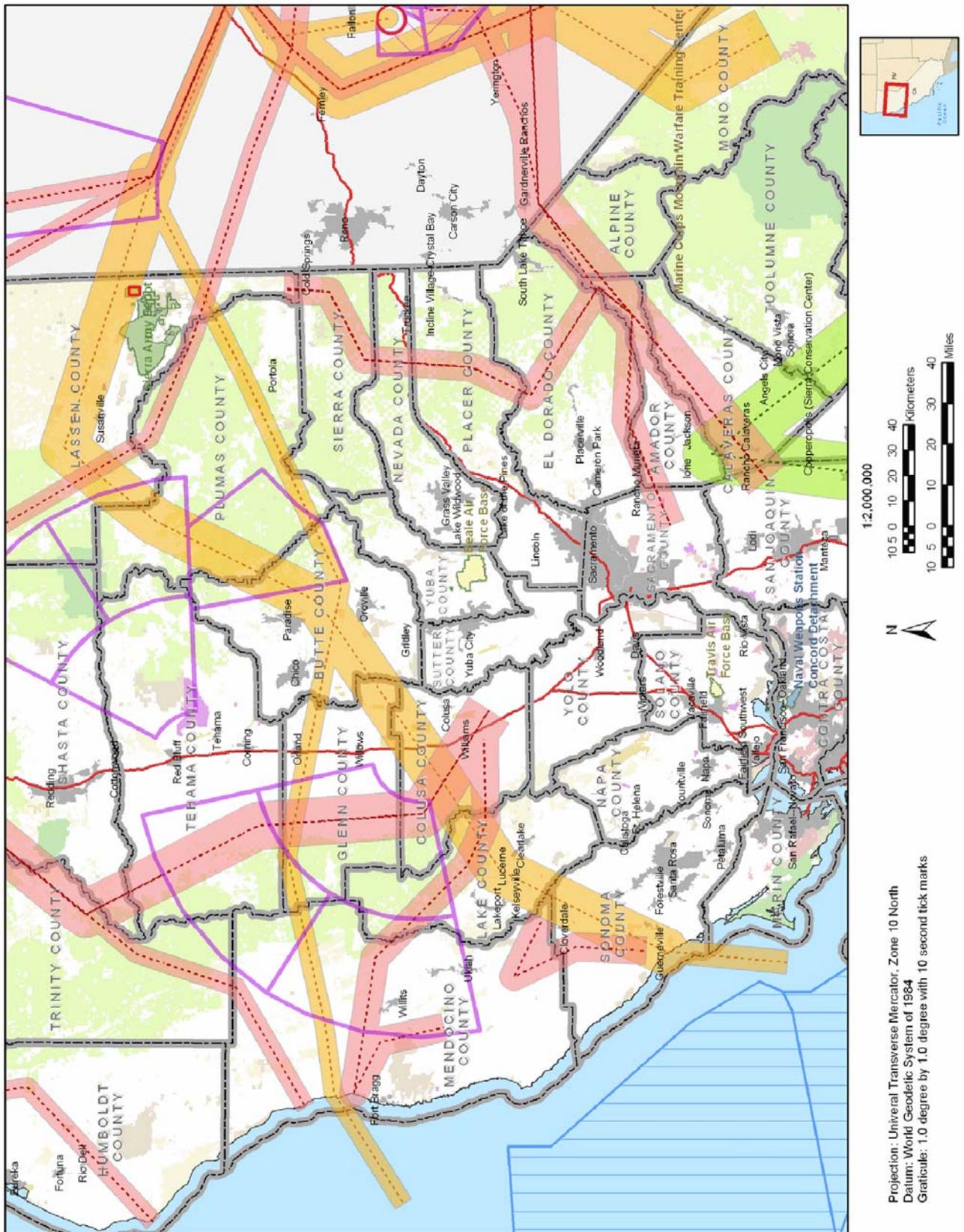


Figure A-9. Region 4 – East Central California

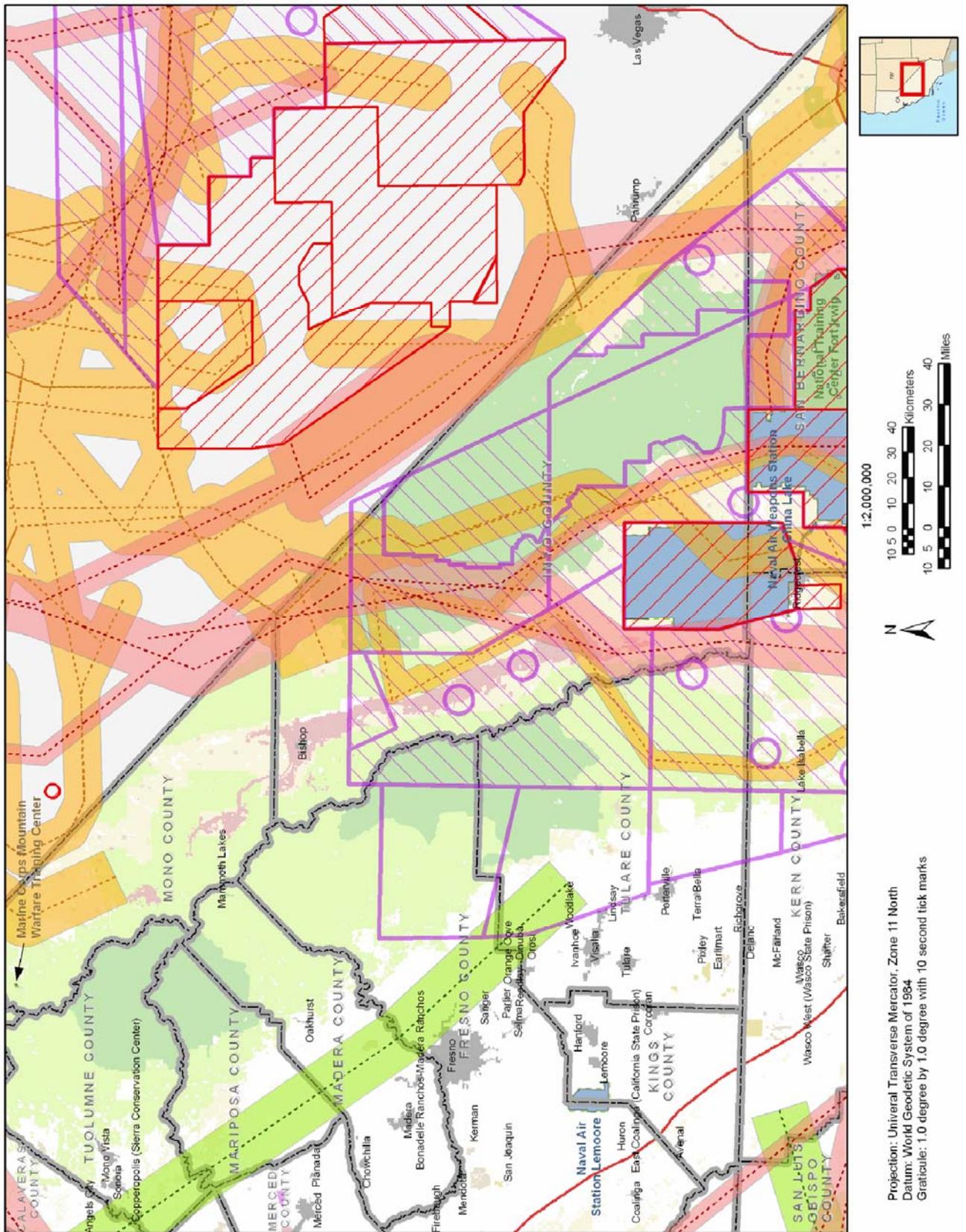
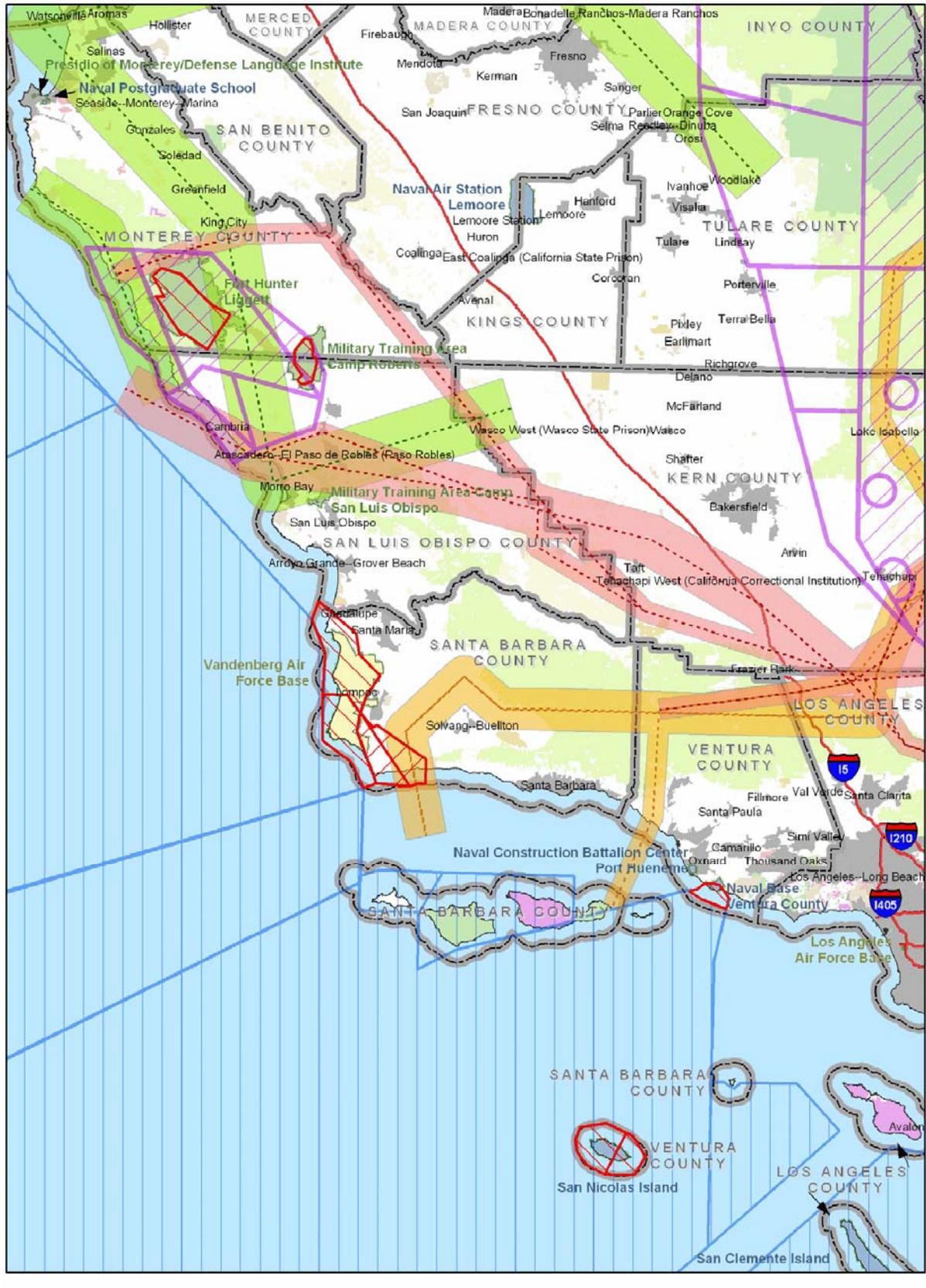


Figure A-10. Region 5 – West Southern California



A.3 INSTALLATION INVENTORY

Tables A-2 through A-4 provide a comprehensive inventory of the Department of Defense (DoD), Air Force, Army, Marine Corps, and Navy military installations located in California. These tables include the installation's type and name, the military service supported, service component (active, reserve, or National Guard), the nearest city, the county where the installation is primarily located (some operation areas and installations are located in multiple counties), and the installation's point of contact information.

On each table, the military installations are assigned a code to clarify the difference between major installations and smaller support bases and facilities. Four codes are used on the tables. The definition of each code is shown below.

- **Category "0"** is not used for actual installations, but for area commands under which multiple sites fall. For example, Naval Base San Diego is the area commander for the Naval Station San Diego, Fleet Industrial Supply Center, Broadway Complex, and Naval Medical Center San Diego.
- **Category "1"** denotes major installations used for operations, training, or testing.
- **Category "2"** is assigned to installations whose mission is to support major installations. Often times these bases are utilized for supply, logistics, and National Guard functions.
- **Category "3"** denotes support activities, but these support activities are not stand-alone bases. These facilities can be collocated with major installations or they may simply be independent structures in civilian areas (e.g., Reserve Centers or production plants).

Table A-2 separates the installations into two categories: Major Installations and Adjoining Support Activities; and Stand-Alone Support Activities. Major Installations are facilities that perform operational, training, and testing missions. Support facilities provide assistance to major installations, but do not directly perform the operational, training, and testing missions. Support activities can be either collocated with major installations or stand alone as separate and distinct facilities.

Table A-3 sorts installations by the county they are primarily located in and then by installation name.

Table A-4 provides the list of installations sorted by installation name.

**CALIFORNIA ADVISORY PLANNING HANDBOOK
MILITARY INSTALLATIONS**

**Table A-2 - Major California Military Installations
Major Installations and Adjoining Support Activities**

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
1	Parks Reserve Forces Training Area	Army	Reserve	Dublin	Alameda	94568	Public Affairs	(925)875-4636
1	Naval Air Facility El Centro	Navy	Active	El Centro	Imperial	92243	Environmental Affairs	(760)339-2262
1	Marine Corps Recruit Depot San Diego	USMC	Active	San Diego	San Diego	92140	Community Relations	(619)524-8732
1	Military Training Area Camp Roberts	Army	Natl Guard	San Miguel	San Luis Obispo	93451	Public Affairs	(805)238-8308
1	Military Training Area Camp San Luis Obispo	Army	Natl Guard	San Luis Obispo	San Luis Obispo	93401	Public Affairs	(805)594-6235
1	Vandenberg Air Force Base	Air Force	Active	Lompoc	Santa Barbara	93437	Plans Office	(805)605-8661
1	Travis Air Force Base	Air Force	Active	Fairfield	Solano	94535	Public Affairs	(707)424-2011
1	Marine Corps Air Ground Combat Center 29 Palms	USMC	Active	Twentynine Palms	San Bernardino	92278	Environmental Affairs	(760)830-5188
1	Beale Air Force Base	Air Force	Active	Marysville	Yuba	95903	Community Relations	(530)634-8889
1	Sierra Army Depot	Army	Active	Herlong	Lassen	96113	Public Affairs	(530)827-4343
1	Los Angeles Air Force Base	Air Force	Active	El Segundo	Los Angeles	90245	Community Relations	(310)363-2056
1	Marine Corps Mountain Warfare Training Center	USMC	Active	Bridgeport	Mono	93517	Executive Officer	(760)932-8202
1	Fort Hunter Liggett	Army	Reserve	King City	Monterey	93928	Public Affairs	(831)386-2605
1	March Air Reserve Base	Air Force	Reserve	Moreno Valley	Riverside	92518	Public Affairs	(909)655-4137
1	National Training Center Fort Irwin	Army	Active	Barstow	San Bernardino	92310	Dir. Strategic Programs	(760)380-3035
1	Joint Forces Training Base Los Alamitos	Army	Natl Guard	Los Alamitos	Orange	90720	Commanding Officer	(562)795-2090
0	Naval Weapons Station Seal Beach	Navy	Active	various	various	various	Dir. Enviro Programs	(562)626-6068
1	Naval Weapons Station Seal Beach	Navy	Active	Seal Beach	Orange	90740	Dir. Enviro Programs	(562)626-6068
3	Marine Corps Reserve Center Seal Beach	USMC	Reserve	Seal Beach	Orange	90740	Inspector-Instructor	(562)626-6191
3	Naval Weapons Station Fallbrook Detachment	Navy	Active	Fallbrook	San Diego	92028	Dir. Enviro Programs	(562)626-6068
3	Naval Weapons Station Concord Detachment	Navy	Active	Concord	Contra Costa	94519	Dir. Enviro Programs	(562)626-6068
1	Marine Corps Air Station Miramar	USMC	Active	San Diego	San Diego	92145	Comm. Plans & Liaison	(619)577-6603
3	Navy-Marine Corps Reserve Center Miramar	Navy/USMC	Reserve	San Diego	San Diego	92145	Inspector-Instructor	(619)577-6603
1	Naval Air Station Lemoore	Navy	Active	Lemoore	Kings	93246	Public Affairs	(559)998-3394
3	Naval Reserve Center Lemoore	Navy	Reserve	Lemoore	Kings	93246	Commanding Officer	(866)799-4244
1	Marine Corps Logistics Base Barstow	USMC	Active	Barstow	San Bernardino	92311	Environmental Affairs	(760)577-6742
2	Defense Distribution Depot Barstow	DoD	Active	Barstow	San Bernardino	92311	Commander	(760)577-6434
1	Marine Corps Base Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Comm. Plans & Liaison	(760)725-6513
2	Naval Hospital Camp Pendleton	Navy	Active	Oceanside	San Diego	92055	Customer Relations	(619)524-8732
2	Marine Corps Air Station Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Environmental Affairs	(760)725-8460
3	Marine Corps Reserve Center Camp Pendleton	USMC	Reserve	Oceanside	San Diego	92055	Inspector-Instructor	(760)725-4215

*Categories

- 0 = Area Command; Multi-Site Locations fall under its Command
- 1 = Military Operations, Training, or Testing Installation
- 2 = Military Support Activity (Installation)
- 3 = Military Support Activity (Non-Installation)

**CALIFORNIA ADVISORY PLANNING HANDBOOK
MILITARY INSTALLATIONS**

**Table A-2 - Major California Military Installations
Major Installations and Adjoining Support Activities**

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
0	Naval Base Point Loma	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)553-7175
1	Naval Submarine Base San Diego (Point Loma)	Navy	Active	San Diego	San Diego	92106	Public Affairs	(619)553-7175
2	Fleet Anti-Submarine Warfare Training Center	Navy	Active	San Diego	San Diego	92147	Admin Dept	(619)524-0721
2	Fleet Combat Training Center Pacific San Diego	Navy	Active	San Diego	San Diego	92147	Officer in Charge	(619)553-9847
2	Space and Naval Warfare Systems Command (Nat'l HQ)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)553-2725
0	Naval Base Coronado	Navy	Active	various	San Diego	various	Public Affairs	(619)545-8167
1	Naval Air Station North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
2	Naval Amphibious Base Coronado	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
2	San Clemente Island	Navy	Active	offshore	SoCal Coast		Public Affairs	(619)545-8167
2	La Posta Mountain Warfare Training Facility	Navy	Active	Campo	San Diego	91906	Public Affairs	(619)545-8167
3	Naval Air Depot, North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
3	Navy-Marine Corps Reserve Center San Diego	Navy/USMC	Reserve	San Diego	San Diego	92135	Commanding Officer	(866)843-0431
3	Navy Computer and Telecom Station San Diego	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
3	Navy Radio Receiving Facility San Diego	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
3	Naval Outlying Field Imperial Beach	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
0	Naval Base San Diego	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)545-7356
1	Naval Station San Diego	Navy	Active	San Diego	San Diego	92136	Public Affairs	(619)532-1430
2	Fleet Industrial Supply Center San Diego	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1442
2	Defense Distribution Depot San Diego	DoD	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1430
3	Broadway Complex	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)545-7356
3	Naval Medical Center San Diego (Balboa Hospital)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)532-6400
1	Naval Air Weapons Station China Lake	Navy	Active	Ridgecrest	Kern	93555	Environmental Affairs	(760)939-3213
0	Naval Base Ventura County	Navy	Active	various	Ventura	various	Planning Office	(805)989-9752
1	Naval Air Station Point Mugu	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
2	Naval Construction Battalion Center, Port Hueneme	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
3	Naval Facilities Engineering Service Center	Navy	Active	Port Hueneme	Ventura	93043	Environmental Programs	(805)982-3584
3	Naval Reserve Center Port Hueneme	Navy	Reserve	Port Hueneme	Ventura	93043	Commanding Officer	(866)295-2805
2	San Nicholas Island	Navy	Active	offshore	SoCal Coast		Planning Office	(805)989-9752
2	Channel Islands Air National Guard Station	Air Force	Natl Guard	Oxnard	Ventura	93041	Commanding Officer	(805)986-7431
1	Edwards Air Force Base	Air Force	Active	various	various	various	Environmental Mgmt	(661)277-2412
2	Production Flight Test Installation AF Plant 42	Air Force	Active	Palmdale	Los Angeles	93550	Public Affairs	(661)277-3510
3	Marine Corps Reserve Center, Edwards AFB	USMC	Reserve	Lancaster	Kern	93301	Commanding Officer	(661)275-3441

Note: Installations/Activities separated by dotted lines are co-located

***Categories**

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**CALIFORNIA ADVISORY PLANNING HANDBOOK
MILITARY INSTALLATIONS**

**Table A-2 - Major California Military Installations
Stand-Alone Support Activities**

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
2	Hayward Municipal Airport Air National Guard Base	Air Force	Nat'l Guard	Hayward	Alameda	94545	Public Affairs	(510)264-5600
3	Oakland Army RC/Army Medical Surveillance Activity 85	Army	Reserve	Oakland	Alameda	94626	Public Affairs	(510)238-6427
3	Navy-Marine Corps Reserve Center Alameda	Navy/USMC	Reserve	Alameda	Alameda	94501	Commanding Officer	(800)748-2224
2	Fresno Yosemite Int'l Air National Guard Base	Air Force	Nat'l Guard	Fresno	Fresno	93727	Community Affairs	(559)454-5262
3	Sepulveda National Guard Station	Air Force	Nat'l Guard	Van Nuys	Los Angeles	91406	Public Affairs	(818)909-2300
3	Navy-Marine Corps Reserve Center Los Angeles	Navy/USMC	Reserve	Long Beach	Los Angeles	90731	Commanding Officer	(866)534-6295
2	Naval Warfare Assessment Station Corona	Navy	Active	Corona	Riverside	91718	Public Affairs	(909)273-5482
3	AF Center for Enviro. Excellence, West Region Office	Air Force	Active	San Francisco	San Francisco	94105	Regional Enviro. Office	(415)977-8850
3	Naval Facilities Engineering Command SW Div	Navy	Active	San Diego	San Diego	92135	Enviro. Public Affairs	(619)532-3100
2	Defense Distribution Depot San Joaquin - Tracy Site	DoD	Active	Tracy	San Joaquin	95296	Public Affairs	(209)839-4009
2	Defense Distribution Depot San Joaquin - Sharpe Site	DoD	Active	Lanthrop	San Joaquin	95296	Public Affairs	(209)839-4009
3	Navy-Marine Corps Reserve Center Sacramento	Navy/USMC	Reserve	Sacramento	Sacramento	95828	Commanding Officer	(866)254-6450
3	Navy-Marine Corps Reserve Center Encino	Navy	Reserve	Encino	Los Angeles	91316	Commanding Officer	(800)511-6289
3	Navy-Marine Corps Reserve Center Moreno Valley	Navy/USMC	Reserve	Riverside	Riverside	92508	Commanding Officer	(800)683-3551
3	Marine Corps Reserve Center Bakersfield	USMC	Reserve	Bakersfield	Kern	93301	Inspector-Instructor	(861)325-2797
3	Marine Corps Reserve Center Fresno	USMC	Reserve	Fresno	Fresno	93737	Inspector-Instructor	(559)294-1095
3	Marine Corps Reserve Center San Bruno	USMC	Reserve	San Bruno	San Mateo	94066	Inspector-Instructor	(650)244-9806
3	Marine Corps Reserve Center Pasadena	USMC	Reserve	Pasadena	Los Angeles	91107	Inspector-Instructor	(626)398-0295
3	Marine Corps Reserve Center Pico Rivera	USMC	Reserve	Pico Rivera	Los Angeles	90660	Inspector-Instructor	(562)695-1981
3	Marine Corps Reserve Center Los Alamitos	USMC	Reserve	Los Alamitos	Orange	90720	Inspector-Instructor	(562)795-2390
3	Engineering Field Activity West	Navy	Active	Daly City	San Mateo	94066	Commanding Officer	(650)746-7300
2	Moffett Field Air National Guard Base	Air Force	Nat'l Guard	Sunnyvale	Santa Clara	94035	Command Master Sgt	(650)603-9202
2	Onizuka Air Force Station	Air Force	Active	Sunnyvale	Santa Clara	94088	Public Affairs	(408)752-4035
3	Air Force Reserve Center Concord	Air Force	Reserve	Concord	Contra Costa	94519	Public Affairs	(707)424-3111
3	Navy-Marine Corps Reserve Center San Jose	Navy/USMC	Reserve	San Jose	Santa Clara	95112	Commanding Officer	(800)710-6289
3	Riverbank Army Ammunition Plant	Army	Active	Riverbank	Stanislaus	95367	Public Affairs	(209)869-2577
2	Naval Postgraduate School	Navy	Active	Monterey	Monterey	93943	Public Affairs	(831)656-3649
3	Silas B. Hays Defense Finance and Accounting Service Center	DoD	Active	Seaside	Monterey	93944	Director	(831)583-6005
2	Presidio of Monterey/Defense Language Institute	Army	Active	Monterey	Monterey	93944	Community Relations	(831)242-6429
3	Portions of Bob Stump Training Complex	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214
3	Chocolate Mountain Aerial Gunnery Range	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214

Note: Installations/Activities separated by dotted lines are co-located

***Categories**

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**CALIFORNIA ADVISORY PLANNING HANDBOOK
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Table A-3 - Major California Military Installations by County

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
2	Hayward Municipal Airport Air National Guard Base	Air Force	Nat'l Guard	Hayward	Alameda	94545	Public Affairs	(510)264-5600
3	Navy-Marine Corps Reserve Center Alameda	Navy/USMC	Reserve	Alameda	Alameda	94501	Commanding Officer	(800)748-2224
3	Oakland Army RC/Army Medical Surveillance Activity 85	Army	Reserve	Oakland	Alameda	94626	Public Affairs	(510)238-6427
1	Parks Reserve Forces Training Area	Army	Reserve	Dublin	Alameda	94568	Public Affairs	(925)875-4636
3	Air Force Reserve Center Concord	Air Force	Reserve	Concord	Contra Costa	94519	Public Affairs	(707)424-3111
3	Naval Weapons Station Concord Detachment	Navy	Active	Concord	Contra Costa	94519	Dir. Enviro Programs	(562)626-6068
2	Fresno Yosemite Int'l Air National Guard Base	Air Force	Nat'l Guard	Fresno	Fresno	93727	Community Affairs	(559)454-5262
3	Marine Corps Reserve Center Fresno	USMC	Reserve	Fresno	Fresno	93737	Inspector-Instructor	(559)294-1095
3	Chocolate Mountain Aerial Gunnery Range	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214
1	Naval Air Facility El Centro	Navy	Active	El Centro	Imperial	92243	Environmental Affairs	(760)339-2262
3	Portions of Bob Stump Training Complex	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214
3	Marine Corps Reserve Center Bakersfield	USMC	Reserve	Bakersfield	Kern	93301	Inspector-Instructor	(661)325-2797
3	Marine Corps Reserve Center, Edwards AFB	USMC	Reserve	Lancaster	Kern	93301	Commanding Officer	(661)275-3441
1	Naval Air Weapons Station China Lake	Navy	Active	Ridgecrest	Kern	93555	Environmental Affairs	(760)939-3213
1	Edwards Air Force Base	Air Force	Active	various	Kern, Los Angeles, San Bernardino	various	Environmental Mgmt	(661)277-2412
1	Naval Air Station Lemoore	Navy	Active	Lemoore	Kings	93246	Public Affairs	(559)998-3394
3	Naval Reserve Center Lemoore	Navy	Reserve	Lemoore	Kings	93246	Commanding Officer	(866)799-4244
1	Sierra Army Depot	Army	Active	Herfong	Lassen	96113	Public Affairs	(530)827-4343
1	Los Angeles Air Force Base	Air Force	Active	El Segundo	Los Angeles	90245	Community Relations	(310)363-2056
3	Marine Corps Reserve Center Pasadena	USMC	Reserve	Pasadena	Los Angeles	91107	Inspector-Instructor	(626)398-0295
3	Marine Corps Reserve Center Pico Rivera	USMC	Reserve	Pico Rivera	Los Angeles	90660	Inspector-Instructor	(562)695-1981
3	Navy-Marine Corps Reserve Center Encino	Navy	Reserve	Encino	Los Angeles	91316	Commanding Officer	(800)511-6289
3	Navy-Marine Corps Reserve Center Los Angeles	Navy/USMC	Reserve	Long Beach	Los Angeles	90731	Commanding Officer	(866)534-6295
2	Production Flight Test Installation AF Plant 42	Air Force	Active	Palmdale	Los Angeles	93550	Public Affairs	(661)277-3510
3	Sepulveda National Guard Station	Air Force	Nat'l Guard	Van Nuys	Los Angeles	91406	Public Affairs	(818)909-2300
1	Marine Corps Mountain Warfare Training Center	USMC	Active	Bridgeport	Mono	93517	Executive Officer	(760)932-8202
1	Fort Hunter Liggett	Army	Reserve	King City	Monterey	93928	Public Affairs	(831)386-2605
2	Naval Postgraduate School	Navy	Active	Monterey	Monterey	93943	Public Affairs	(831)656-3649
2	Presidio of Monterey/Defense Language Institute	Army	Active	Monterey	Monterey	93944	Community Relations	(831)242-6429
3	Silas B. Hays Defense Finance and Accounting Service Center	DoD	Active	Seaside	Monterey	93944	Director	(831)583-6005
1	Joint Forces Training Base Los Alamitos	Army	Nat'l Guard	Los Alamitos	Orange	90720	Commanding Officer	(562)795-2090
3	Marine Corps Reserve Center Los Alamitos	USMC	Reserve	Los Alamitos	Orange	90720	Inspector-Instructor	(562)795-2390

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**CALIFORNIA ADVISORY PLANNING HANDBOOK
MILITARY INSTALLATIONS**

Table A-3 - Major California Military Installations by County

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
3	Marine Corps Reserve Center Seal Beach	USMC	Reserve	Seal Beach	Orange	90740	Inspector-Instructor	(562)626-6191
1	Naval Weapons Station Seal Beach	Navy	Active	Seal Beach	Orange	90740	Dir. Enviro Programs	(562)626-6068
1	March Air Reserve Base	Air Force	Reserve	Moreno Valley	Riverside	92518	Public Affairs	(909)655-4137
2	Naval Warfare Assessment Station Corona	Navy	Active	Corona	Riverside	91718	Public Affairs	(909)273-5482
3	Navy-Marine Corps Reserve Center Moreno Valley	Navy/USMC	Reserve	Riverside	Riverside	92508	Commanding Officer	(800)683-3551
3	Navy-Marine Corps Reserve Center Sacramento	Navy/USMC	Reserve	Sacramento	Sacramento	95828	Commanding Officer	(866)254-6450
2	Defense Distribution Depot Barstow	DoD	Active	Barstow	San Bernardino	92311	Commander	(760)577-6434
1	Marine Corps Air Ground Combat Center 29 Palms	USMC	Active	Twenty-nine Palms	San Bernardino	92278	Environmental Affairs	(760)830-5188
1	Marine Corps Logistics Base Barstow	USMC	Active	Barstow	San Bernardino	92311	Environmental Affairs	(760)577-6742
1	National Training Center Fort Irwin	Army	Active	Barstow	San Bernardino	92310	Dir. Strategic Programs	(760)380-3035
3	Broadway Complex	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)545-7356
2	Defense Distribution Depot San Diego	DoD	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1430
2	Fleet Anti-Submarine Warfare Training Center	Navy	Active	San Diego	San Diego	92147	Admin Dept	(619)524-0721
2	Fleet Combat Training Center Pacific San Diego	Navy	Active	San Diego	San Diego	92147	Officer in Charge	(619)553-9847
2	Fleet Industrial Supply Center San Diego	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1442
2	La Posta Mountain Warfare Training Facility	Navy	Active	Campo	San Diego	91906	Public Affairs	(619)545-8167
2	Marine Corps Air Station Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Environmental Affairs	(760)725-8460
1	Marine Corps Air Station Miramar	USMC	Active	San Diego	San Diego	92145	Comm. Plans & Liaison	(858)577-6603
1	Marine Corps Base Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Comm. Plans & Liaison	(760)725-6513
1	Marine Corps Recruit Depot San Diego	USMC	Active	San Diego	San Diego	92140	Community Relations	(619)524-8732
3	Marine Corps Reserve Center Camp Pendleton	USMC	Reserve	Oceanside	San Diego	92055	Inspector-Instructor	(760)725-4215
3	Naval Air Depot, North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
1	Naval Air Station North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
2	Naval Amphibious Base Coronado	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
0	Naval Base Coronado	Navy	Active	various	San Diego	various	Public Affairs	(619)545-8167
0	Naval Base Point Loma	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)553-7175
0	Naval Base San Diego	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)545-7356
3	Naval Facilities Engineering Command SW Div	Navy	Active	San Diego	San Diego	92135	Enviro. Public Affairs	(619)532-3100
2	Naval Hospital Camp Pendleton	Navy	Active	Oceanside	San Diego	92055	Customer Relations	(619)524-8732
3	Naval Medical Center San Diego (Balboa Hospital)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)532-6400
3	Naval Outlying Field Imperial Beach	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
1	Naval Station San Diego	Navy	Active	San Diego	San Diego	92136	Public Affairs	(619)532-1430
1	Naval Submarine Base San Diego (Point Loma)	Navy	Active	San Diego	San Diego	92106	Public Affairs	(619)553-7175
3	Naval Weapons Station Fallbrook Detachment	Navy	Active	Fallbrook	San Diego	92028	Dir. Enviro Programs	(562)626-6068
3	Navy Computer and Telecom Station San Diego	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167

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**CALIFORNIA ADVISORY PLANNING HANDBOOK
MILITARY INSTALLATIONS**

Table A-3 - Major California Military Installations by County

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
3	Navy Radio Receiving Facility San Diego	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
3	Navy-Marine Corps Reserve Center Miramar	Navy/USMC	Reserve	San Diego	San Diego	92145	Inspector-Instructor	(858)537-8109
3	Navy-Marine Corps Reserve Center San Diego	Navy/USMC	Reserve	San Diego	San Diego	92135	Commanding Officer	(866)843-0431
2	Space and Naval Warfare Systems Command (Nat'l HQ)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)553-2725
3	AFCenter for Enviro. Excellence, West Region Office	Air Force	Active	San Francisco	San Francisco	94105	Regional Enviro. Office	(415)977-8850
2	Defense Distribution Depot San Joaquin - Sharpe Site	DoD	Active	Lanthrop	San Joaquin	95296	Public Affairs	(209)839-4009
2	Defense Distribution Depot San Joaquin - Tracy Site	DoD	Active	Tracy	San Joaquin	95296	Public Affairs	(209)839-4009
1	Military Training Area Camp Roberts	Army	Nat'l Guard	San Miguel	San Luis Obispo	93451	Public Affairs	(805)238-8308
1	Military Training Area Camp San Luis Obispo	Army	Nat'l Guard	San Luis Obispo	San Luis Obispo	93401	Public Affairs	(805)594-6235
3	Engineering Field Activity West	Navy	Active	Daly City	San Mateo	94066	Commanding Officer	(650)746-7300
3	Marine Corps Reserve Center San Bruno	USMC	Reserve	San Bruno	San Mateo	94066	Inspector-Instructor	(650)244-9806
1	Vandenberg Air Force Base	Air Force	Active	Lompoc	Santa Barbara	93437	Plans Office	(805)605-8661
2	Moffett Field Air National Guard Base	Air Force	Nat'l Guard	Sunnyvale	Santa Clara	94035	Command Master Sgt	(650)603-9202
3	Navy-Marine Corps Reserve Center San Jose	Navy/USMC	Reserve	San Jose	Santa Clara	95112	Commanding Officer	(800)710-6289
2	Onizuka Air Force Station	Air Force	Active	Sunnyvale	Santa Clara	94088	Public Affairs	(408)752-4035
2	San Clemente Island	Navy	Active	offshore	SoCal Coast		Public Affairs	(619)545-8167
2	San Nicholas Island	Navy	Active	offshore	SoCal Coast		Planning Office	(805)989-9752
1	Travis Air Force Base	Air Force	Active	Fairfield	Solano	94535	Public Affairs	(707)424-2011
3	Riverbank Army Ammunition Plant	Army	Active	Riverbank	Stanislaus	95367	Public Affairs	(209)869-2577
0	Naval Weapons Station Seal Beach	Navy	Active	various	various	various	Dir. Enviro Programs	(562)626-6068
2	Channel Islands Air National Guard Station	Air Force	Nat'l Guard	Oxnard	Ventura	93041	Commanding Officer	(805)986-7431
1	Naval Air Station Point Mugu	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
0	Naval Base Ventura County	Navy	Active	various	Ventura	various	Planning Office	(805)989-9752
2	Naval Construction Battalion Center, Port Hueneme	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
3	Naval Facilities Engineering Service Center	Navy	Active	Port Hueneme	Ventura	93043	Environmental Programs	(805)982-3584
3	Naval Reserve Center Port Hueneme	Navy	Reserve	Port Hueneme	Ventura	93043	Commanding Officer	(866)295-2805
1	Beale Air Force Base	Air Force	Active	Marysville	Yuba	95903	Community Relations	(530)634-8889

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**CALIFORNIA PLANNING HANDBOOK
MILITARY INSTALLATIONS**

Table A-4 - Major California Military Installations by Name

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
3	AFCenter for Enviro. Excellence, West Region Office	Air Force	Active	San Francisco	San Francisco	94105	Regional Enviro. Office	(415)977-8850
3	Air Force Reserve Center Concord	Air Force	Reserve	Concord	Contra Costa	94519	Public Affairs	(707)424-3111
1	Beale Air Force Base	Air Force	Active	Marysville	Yuba	95903	Community Relations	(530)634-8889
3	Broadway Complex	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)545-7356
2	Channel Islands Air National Guard Station	Air Force	Nat'l Guard	Oxnard	Ventura	93041	Commanding Officer	(805)986-7431
3	Chocolate Mountain Aerial Gunnery Range	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214
2	Defense Distribution Depot Barstow	DoD	Active	Barstow	San Bernardino	92311	Commander	(760)577-6434
2	Defense Distribution Depot San Diego	DoD	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1430
2	Defense Distribution Depot San Joaquin - Sharpe Site	DoD	Active	Lanthrop	San Joaquin	95296	Public Affairs	(209)839-4009
2	Defense Distribution Depot San Joaquin - Tracy Site	DoD	Active	Tracy	San Joaquin	95296	Public Affairs	(209)839-4009
1	Edwards Air Force Base	Air Force	Active	various	Kern, Los Angeles, San Bernardino	various	Environmental Mgmt	(661)277-2412
3	Engineering Field Activity West	Navy	Active	Daly City	San Mateo	94066	Commanding Officer	(650)746-7300
2	Fleet Anti-Submarine Warfare Training Center	Navy	Active	San Diego	San Diego	92147	Admin Dept	(619)524-0721
2	Fleet Combat Training Center Pacific San Diego	Navy	Active	San Diego	San Diego	92147	Officer in Charge	(619)553-9847
2	Fleet Industrial Supply Center San Diego	Navy	Active	San Diego	San Diego	92132	Public Affairs	(619)532-1442
1	Fort Hunter Liggett	Army	Reserve	King City	Monterey	93928	Public Affairs	(831)386-2605
2	Fresno Yosemite Int'l Air National Guard Base	Air Force	Nat'l Guard	Fresno	Fresno	93727	Community Affairs	(559)454-5262
2	Hayward Municipal Airport Air National Guard Base	Air Force	Nat'l Guard	Hayward	Alameda	94545	Public Affairs	(510)264-5600
1	Joint Forces Training Base Los Alamitos	Army	Nat'l Guard	Los Alamitos	Orange	90720	Commanding Officer	(562)795-2090
2	La Posta Mountain Warfare Training Facility	Navy	Active	Campo	San Diego	91906	Public Affairs	(619)545-8167
1	Los Angeles Air Force Base	Air Force	Active	El Segundo	Los Angeles	90245	Community Relations	(310)363-2056
1	March Air Reserve Base	Air Force	Reserve	Moreno Valley	Riverside	92518	Public Affairs	(909)655-4137
1	Marine Corps Air Ground Combat Center 29 Palms	USMC	Active	Twentynine Palms	San Bernardino	92278	Environmental Affairs	(760)830-5188
2	Marine Corps Air Station Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Environmental Affairs	(760)725-8460
1	Marine Corps Air Station Miramar	USMC	Active	San Diego	San Diego	92145	Comm. Plans & Liaison	(858)577-6603
1	Marine Corps Base Camp Pendleton	USMC	Active	Oceanside	San Diego	92055	Comm. Plans & Liaison	(760)725-6513
1	Marine Corps Logistics Base Barstow	USMC	Active	Barstow	San Bernardino	92311	Environmental Affairs	(760)577-6742
1	Marine Corps Mountain Warfare Training Center	USMC	Active	Bridgeport	Mono	93517	Executive Officer	(760)932-8202
1	Marine Corps Recruit Depot San Diego	USMC	Active	San Diego	San Diego	92140	Community Relations	(619)524-8732
3	Marine Corps Reserve Center Bakersfield	USMC	Reserve	Bakersfield	Kern	93301	Inspector-Instructor	(661)325-2797
3	Marine Corps Reserve Center Camp Pendleton	USMC	Reserve	Oceanside	San Diego	92055	Inspector-Instructor	(760)725-4215
3	Marine Corps Reserve Center Fresno	USMC	Reserve	Fresno	Fresno	93737	Inspector-Instructor	(559)294-1095

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**CALIFORNIA PLANNING HANDBOOK
MILITARY INSTALLATIONS**

Table A-4 - Major California Military Installations by Name

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
3	Marine Corps Reserve Center Los Alamitos	USMC	Reserve	Los Alamitos	Orange	90720	Inspector-Instructor	(562)795-2390
3	Marine Corps Reserve Center Pasadena	USMC	Reserve	Pasadena	Los Angeles	91107	Inspector-Instructor	(626)398-0295
3	Marine Corps Reserve Center Pico Rivera	USMC	Reserve	Pico Rivera	Los Angeles	90660	Inspector-Instructor	(562)695-1981
3	Marine Corps Reserve Center San Bruno	USMC	Reserve	San Bruno	San Mateo	94066	Inspector-Instructor	(650)244-9806
3	Marine Corps Reserve Center Seal Beach	USMC	Reserve	Seal Beach	Orange	90740	Inspector-Instructor	(562)626-6191
3	Marine Corps Reserve Center, Edwards AFB	USMC	Reserve	Lancaster	Kern	93301	Commanding Officer	(661)275-3441
1	Military Training Area Camp Roberts	Army	Nat'l Guard	San Miguel	San Luis Obispo	93451	Public Affairs	(805)238-8308
1	Military Training Area Camp San Luis Obispo	Army	Nat'l Guard	San Luis Obispo	San Luis Obispo	93401	Public Affairs	(805)594-6235
2	Moffett Field Air National Guard Base	Air Force	Nat'l Guard	Sunnyvale	Santa Clara	94035	Command Master Sgt	(650)603-9202
1	National Training Center Fort Irwin	Army	Active	Barstow	San Bernardino	92310	Dir. Strategic Programs	(760)380-3035
3	Naval Air Depot, North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
1	Naval Air Facility El Centro	Navy	Active	El Centro	Imperial	92243	Environmental Affairs	(760)339-2262
1	Naval Air Station Lemoore	Navy	Active	Lemoore	Kings	93246	Public Affairs	(559)998-3394
1	Naval Air Station North Island	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
1	Naval Air Station Point Mugu	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
1	Naval Air Weapons Station China Lake	Navy	Active	Ridgecrest	Kern	93555	Environmental Affairs	(760)939-3213
2	Naval Amphibious Base Coronado	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
0	Naval Base Coronado	Navy	Active	various	San Diego	various	Public Affairs	(619)545-8167
0	Naval Base Point Loma	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)553-7175
0	Naval Base San Diego	Navy	Active	San Diego	San Diego	various	Public Affairs	(619)545-7356
0	Naval Base Ventura County	Navy	Active	various	Ventura	various	Planning Office	(805)989-9752
2	Naval Construction Battalion Center, Port Hueneme	Navy	Active	Port Hueneme	Ventura	93043	Planning Office	(805)989-9752
3	Naval Facilities Engineering Command SW Div	Navy	Active	San Diego	San Diego	92135	Enviro. Public Affairs	(619)532-3100
3	Naval Facilities Engineering Service Center	Navy	Active	Port Hueneme	Ventura	93043	Environmental Programs	(805)982-3584
2	Naval Hospital Camp Pendleton	Navy	Active	Oceanside	San Diego	92055	Customer Relations	(619)524-8732
3	Naval Medical Center San Diego (Balboa Hospital)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)532-6400
3	Naval Outlying Field Imperial Beach	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
2	Naval Postgraduate School	Navy	Active	Monterey	Monterey	93943	Public Affairs	(831)656-3649
3	Naval Reserve Center Lemoore	Navy	Reserve	Lemoore	Kings	93246	Commanding Officer	(866)799-4244
3	Naval Reserve Center Port Hueneme	Navy	Reserve	Port Hueneme	Ventura	93043	Commanding Officer	(866)295-2805
1	Naval Station San Diego	Navy	Active	San Diego	San Diego	92136	Public Affairs	(619)532-1430
1	Naval Submarine Base San Diego (Point Loma)	Navy	Active	San Diego	San Diego	92106	Public Affairs	(619)553-7175
2	Naval Warfare Assessment Station Corona	Navy	Active	Corona	Riverside	91718	Public Affairs	(909)273-5482

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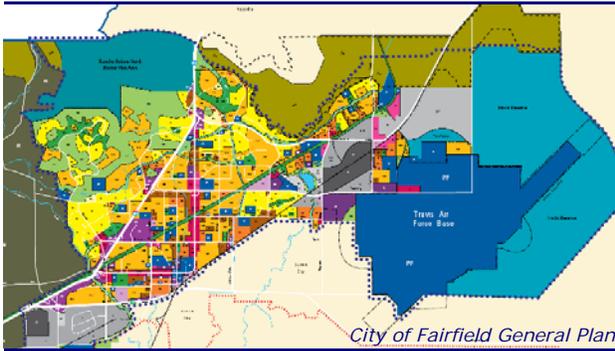
**CALIFORNIA PLANNING HANDBOOK
MILITARY INSTALLATIONS**

Table A-4 - Major California Military Installations by Name

Cat.*	Installation Name	Service	Component	Nearest City	County	Zip Code	Point of Contact	Phone Number
3	Naval Weapons Station Concord Detachment	Navy	Active	Concord	Contra Costa	94519	Dir. Enviro Programs	(562)626-6068
3	Naval Weapons Station Fallbrook Detachment	Navy	Active	Fallbrook	San Diego	92028	Dir. Enviro Programs	(562)626-6068
0	Naval Weapons Station Seal Beach	Navy	Active	various	various	various	Dir. Enviro Programs	(562)626-6068
1	Naval Weapons Station Seal Beach	Navy	Active	Seal Beach	Orange	90740	Dir. Enviro Programs	(562)626-6068
3	Navy Computer and Telecom Station San Diego	Navy	Active	San Diego	San Diego	92135	Public Affairs	(619)545-8167
3	Navy Radio Receiving Facility San Diego	Navy	Active	Imperial Beach	San Diego	91932	Public Affairs	(619)545-8167
3	Navy-Marine Corps Reserve Center Alameda	Navy/USMC	Reserve	Alameda	Alameda	94501	Commanding Officer	(800)748-2224
3	Navy-Marine Corps Reserve Center Encino	Navy	Reserve	Encino	Los Angeles	91316	Commanding Officer	(800)511-6289
3	Navy-Marine Corps Reserve Center Los Angeles	Navy/USMC	Reserve	Long Beach	Los Angeles	90731	Commanding Officer	(866)534-6295
3	Navy-Marine Corps Reserve Center Miramar	Navy/USMC	Reserve	San Diego	San Diego	92145	Inspector-Instructor	(858)537-8109
3	Navy-Marine Corps Reserve Center Moreno Valley	Navy/USMC	Reserve	Riverside	Riverside	92508	Commanding Officer	(800)683-3551
3	Navy-Marine Corps Reserve Center Sacramento	Navy/USMC	Reserve	Sacramento	Sacramento	95828	Commanding Officer	(866)254-6450
3	Navy-Marine Corps Reserve Center San Diego	Navy/USMC	Reserve	San Diego	San Diego	92135	Commanding Officer	(866)843-0431
3	Navy-Marine Corps Reserve Center San Jose	Navy/USMC	Reserve	San Jose	Santa Clara	95112	Commanding Officer	(800)710-6289
3	Oakland Army RC/Army Medical Surveillance Activity 85	Army	Reserve	Oakland	Alameda	94626	Public Affairs	(510)238-6427
2	Onizuka Air Force Station	Air Force	Active	Sunnyvale	Santa Clara	94088	Public Affairs	(408)752-4035
1	Parks Reserve Forces Training Area	Army	Reserve	Dublin	Alameda	94568	Public Affairs	(925)875-4636
3	Portions of Bob Stump Training Complex	USMC	Active	El Centro	Imperial	92243	MCAS Yuma Sched	(928)269-2214
2	Presidio of Monterey/Defense Language Institute	Army	Active	Monterey	Monterey	93944	Community Relations	(831)242-6429
2	Production Flight Test Installation AF Plant 42	Air Force	Active	Palmdale	Los Angeles	93550	Public Affairs	(661)277-3510
3	Riverbank Army Ammunition Plant	Army	Active	Riverbank	Stanislaus	95367	Public Affairs	(209)869-2577
2	San Clemente Island	Navy	Active	offshore	SoCal Coast		Public Affairs	(619)545-8167
2	San Nicholas Island	Navy	Active	offshore	SoCal Coast		Planning Office	(805)989-9752
3	Sepulveda National Guard Station	Air Force	Nat'l Guard	Van Nuys	Los Angeles	91406	Public Affairs	(818)909-2300
1	Sierra Army Depot	Army	Active	Herlong	Lassen	96113	Public Affairs	(530)827-4343
3	Silas B. Hays Defense Finance and Accounting Service Center	DoD	Active	Seaside	Monterey	93944	Director	(831)583-6005
2	Space and Naval Warfare Systems Command (Nat'l HQ)	Navy	Active	San Diego	San Diego	92134	Public Affairs	(619)553-2725
1	Travis Air Force Base	Air Force	Active	Fairfield	Solano	94535	Public Affairs	(707)424-2011
1	Vandenberg Air Force Base	Air Force	Active	Lompoc	Santa Barbara	93437	Plans Office	(805)605-8661

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GENERAL PLAN POLICY EXAMPLES

Senate Bill (SB) 1468 (Knight, Chapter 971, Statutes of 2002) requires cities and counties to consider military readiness issues (defined in Section 2) into their general plans and to ensure early and systematic awareness of potential land use conflicts. The purpose of SB 1468 was to address the need for better collaborative planning between local jurisdictions and military installations and operational areas.

The following appendix provides examples of general plan goals and policies that can be used by local governments in addressing military readiness in their general plans. These examples can be used and/or modified to fit the needs of each local jurisdiction. There is no requirement to use these examples.

B.1 Concepts to Consider when Updating a General Plan

The goal of SB 1468 is to “integrate balanced and compatible land use development in areas where military readiness activities occur. This would include military installations, ranges, and associated airspace.” The following sample general plan goals and policies are provided to assist local governments (cities and counties) to achieve this goal.

The general plan expresses the development policies of the jurisdiction using text (in the form of goals, policies, standards, and implementation measures) and maps and diagrams. Together, these components guide the jurisdiction’s future development. A definition of goals, policies, standards, and implementation measures follows.

- **Goal.** A goal is a direction setter. For each topic, a goal provides a statement describing a desired future condition.
- **Policy.** A policy is a specific statement designed to guide decision-making. It is a statement that provides a specific course of action to reach a goal.
- **Standard.** A standard is a rule or measure establishing a level of quality or quantity that must be complied with or satisfied. Standards define the abstract terms of objectives and policies with concrete specifications. Standards are not used by all jurisdictions but can provide a good method for evaluating success.
- **Implementation Measure.** An implementation measure is a specific measure, program, procedure, or technique that will be used to carry out plan policies. To increase effectiveness, an implementation measure should include a description of the action to be taken, describe who is responsible for implementing this action, and provide a time frame for when this action should be completed.

B.2 Policy Examples

The following sample goals, policies, and implementation measures respond to SB 1468 general plan requirements and can be used as a starting point for addressing military sustainability when updating or revising the general plan. These suggestions can be used to form the basis for an optional military element or to update individual elements within the general plan. Each community will have different issues and needs. A jurisdiction must decide whether

Appendix B

these examples address their particular situation. As applicable, each of the examples provided should be tailored to address the needs and issues facing the specific county or city and the military installations and operational areas impacted.

Goal 1

To ensure compatible land use and provide buffering (if necessary) in areas where military readiness activities are performed.

Policy 1.1 Updated Diagrams

The [county/city] shall ensure that the land use and circulation diagrams accurately represent the operational constraints associated with the military installations/ operations in or impacting the planning area.

Policy 1.2 Compatible Land Use

As appropriate, the [county/city] land use diagram will designate compatible land uses in areas where military operations could impact public health and safety (noise, accident potential, incompatible land use) or where private activities could impact current or future military operations negatively.

Policy 1.3 Noise Attenuation

The [county/city] shall establish sound attenuation requirements in areas subject to high noise levels associated with military training activities.

Policy 1.4 Height Restrictions

The [county/city] shall establish development height restrictions (if necessary) beneath military low-level training routes, corridors, or operating areas.

Policy 1.5 Project Review

The [county/city] shall provide early notification to the military installation of proposed

developments that have the potential to affect military operations, testing, or training activities.

Standards

- Use available planning tools and resources provided by the military installation, such as AICUZ, RAICUZ, Master Plan, GIS maps, and the base mission statement.

Implementation Measures:

- Meet with the military to obtain appropriate GIS data to incorporate into community land use maps.
- Encourage military involvement in general plan updates and other important community planning activities. Conduct cooperative planning meetings with military planners to exchange information.
- Schedule regular informal planning meetings with military planners to ensure appropriate and timely exchange of information.
- Schedule regular meetings with other jurisdictions to ensure regional military compatibility issues are addressed throughout the region.
- Identify areas where sound attenuation will be required because of noise impacts associated with military training activities.
- Amend zoning maps to ensure consistency with the new land use designations, including sound attenuation and enhanced disclosure.
- Establish a zoning overlay to identify areas where height restrictions will be required because of the location of military low-level training routes and corridors.
- The [county/city] shall provide copies of development applications to the community planner at the installation (or to the person charged with planning for a

given operational area) that may be impacted by the project.

- The [county/city] shall ensure that the installation and the Defense Mapping Agency are notified of any proposed vertical obstructions (towers, power lines, and any other structures) that may impede aircraft over flight, prior to construction.

**Goal
2**

To ensure adequate circulation routes are maintained between the installation and related operational areas (training areas, supply depots, etc.)

Policy 2.1 Military Transportation Corridors

The [county/city] shall ensure community and military transportation corridors are protected to maintain viability of the installation and its operations.

Policy 2.2 Public Transportation Servicing Military Installations

The [county/city] will consider the needs of military installations when planning public transportation projects and service.

Standards

- Military installations will have adequate ingress and egress routes.

Implementation Measures:

- Consult regularly with the military to ensure military routes are depicted accurately on the general plan land use diagram and maps.
- Ensure that military transportation corridors in the planning area are denoted on the general plan circulation diagram to avoid circulation conflicts.
- If any changes are proposed to the general plan's circulation element, the community should consult with military

planners to ensure that military training activities are not affected.

**Goal
3**

To recognize and plan for the housing needs of all potential residents, including military personnel.

Policy 3.1 Military Off-Base Housing Needs

The [county/city] shall incorporate military off-base housing needs in the [county's/city's] housing element.

Standards

- Military personnel can find affordable and suitable housing in the community.

Implementation Measures:

- Meet with the military to determine its housing needs. Work to accommodate those needs in concert with those of the community.

**Goal
4**

To preserve natural resources, including those on military installations.

Policy 4.1 Natural Resource Coordination

The [county/city] will coordinate natural resource programs with the military. For example, coordinate local Multiple Species Conservation Plan (MSCP) with military Integrated Natural Resources Plan (INRMP) for consistency in conservation efforts.

Policy 4.2 Balanced Natural Resource Protection

Before approving new development projects, the [county/city] will make findings or adopt appropriate mitigation measures to ensure that habitat protection burdens are not inappropriately shifted to lands utilized by the military.

Appendix B

Standards

- Ensure consistency with the conservation and land use elements, so that flora, fauna, and natural resources management is consistent with federal and state environmental laws and regulations.

Implementation Measures:

- Work with the military to address mitigation efforts proactively.

Goal 5

To maintain open-space areas near military installations and underlying low-level military airspace corridors and ranges.

Policy 5.1 Open Space Buffers

The [county/city] will work with the military to protect current and future mission requirements by maintaining or designating open space, agricultural uses, or similar low intensity land uses in areas within, adjacent to, or proximate to military installations.

Standards

- Areas critical to maintaining land use compatibility and public safety are appropriately protected from incompatible development.

Implementation Measures:

- Meet regularly with military representatives to discuss appropriate land use restrictions in areas potentially affected by military operations, testing, or training activities. Determine whether buffer areas or open space should be designated to minimize impacts.

Goal 6

To mitigate noise issues from military activities and installations.

Policy 6.1 Public Education

The [county/city] will work with the military to educate the general public on noise impacts associated with military operations.

Policy 6.2 Real Estate Disclosure

The [county/city] shall require disclosure statements for all real estate transactions in areas where noise impacts from military operations, testing, or training activities might occur.

Policy 6.3 Noise Compatible Land Uses

The [county/city] shall ensure that noise impacts are minimized by designating compatible land uses in areas exposed to high noise levels.

Standards

- Use AICUZ, RAICUZ, and other information supplied by the military to ensure appropriate land designations.

Implementation Measures

- Adopt an ordinance that establishes noise guidelines, compatible uses within specified noise level areas, and appropriate attenuation requirements for all new development.
- Develop noise attenuation standards for new construction. Higher standards of attenuation should be investigated for noise sensitive uses, such as residences, libraries, schools, and churches.
- Designate compatible land uses adjacent to military installations and land underlying military airspace to minimize noise impacts on the public.

**Goal
7**

Promote land use compatibility through a cooperative planning environment.

Policy 7.1 Land Use Compatibility

Ensure compatible land use designations in areas adjacent to military installations and where military operations, testing, and training activities occur.

Policy 7.2 Collaboration

The [county/city] will work closely with military officials in regard to sharing information and discussing land use planning issues.

Standards

- Community and military members are free from safety hazards.

Implementation Measures

- Ensure that public officials are familiar with military operations, testing, and training activities and associated safety issues and have made appropriate action plans to protect the public.
- Meet regularly with military officials to exchange information.

Appendix B

Please see the next page.



TECHNICAL ASSISTANCE AND PLANNING RESOURCES

This section of the Handbook provides an overview of the key planning resources available to help local and military planners with compatibility planning. This section highlights key planning and technical resources (designated with the reference symbol ) and the agencies and organizations involved in land and resource planning in California (designated by an information symbol ) .

These resources are divided into the following subsections:

- C.1 State of California
- C.2 Local Governments
- C.3 Department of Defense
- C.4 Army
- C.5 Navy / Marine Corps
- C.6 Air Force
- C.7 Other Federal Agencies

C.1 STATE OF CALIFORNIA

California Airport Land Use Planning Handbook

January 2002

An Airport Land Use Compatibility Plan (ALUCP) is “a plan, usually adopted by a County Airport Land Use Commission (ALUC), which sets forth policies for promoting compatibility between airports and the land uses which surround them.” The California Airport Land Use Planning Handbook is published by the California Department of Transportation Division of Aeronautics. Its purpose is to support and amplify the article of the State Aeronautics Act (California Public Utilities Code, Section 21670 et seq.), which established statewide requirements for the conduct of airport land use compatibility planning. In addition, it serves as the primary source of

information regarding airport compatibility plans. It can be downloaded at:

<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>

California Air Resources Board

This agency provides policy, guidance, coordination, management, and enforcement of California air quality issues. It also provides technical support related to air quality policy.

Office / Mailing Address / Phone:

1001 I Street
Sacramento, CA 95814
916.322.2990
800.242.4450

<http://www.arb.ca.gov/homepage.htm>

California Coastal Commission

The Coastal Commission regulates development within portions of the coastal zone and oversees coastal planning efforts along the entire coast. A central feature of this joint action is the Local Coastal Program (LCP). With certain exceptions, development within the coastal zone is subject to a Coastal Development Permit issued either by a local government pursuant to a certified LCP or, where no certified LCP exists, by the Coastal Commission. The Coastal Commission is a good source of information on coastal resources, coastal zone boundaries, and regulations concerning coastal development.

Office / Mailing Address / Phone (Headquarters)

45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219
415.904.5200

Appendix C

<http://www.coastal.ca.gov/>

The Coastal Commission also has regional office located throughout California's coastal regions. The location of these offices can be found on the agency's web site at the following address:

<http://www.coastal.ca.gov/address.html>



California Digital Conservation Atlas

The Atlas is a product of the California Resources Agency. It was developed in coordination with the California Environmental Protection Agency (CALEPA) and its Office of Health Hazard Assessment (OEHHA). The Digital Atlas was created to recognize areas of natural resource value, assess the health and conditions of such areas, and help identify appropriate and strategic conservation investments.

<http://atlas.resources.ca.gov/>



California Environmental Protection Agency (CALEPA)

This agency provides policy, guidance, coordination, management, and enforcement of California environmental issues, and provides technical support related to environmental policy.

Mailing Address:

PO Box 2815
Sacramento, CA 95812

Office Address / Phone:

1001 I Street
Sacramento, CA 95814
916.323.2514

<http://www.calepa.ca.gov/>



California Environmental Quality Act (CEQA) Guidelines

September 7, 2004 Edition

The California Environmental Quality Act (CEQA) was enacted in 1970 to protect the environment by requiring public agencies to analyze and

disclose the potential environmental impacts of proposed land use decisions (Public Resources Code Section 21000, et. Seq). CEQA is modeled after the federal National Environmental Policy Act (NEPA).

To provide guidance on the implementation of the CEQA statute, OPR prepares the CEQA Guidelines for adoption by the Secretary for Resources in accordance with Section 21083. Additional information may be obtained by writing:

Office / Mailing Address

Secretary for Resources
1416 Ninth Street, Room 1311
Sacramento, CA 95814

The statute can be downloaded at:

http://ceres.ca.gov/topic/env_law/ceqa/stat/

The CEQA Guidelines can be found at:

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/



California Environmental Resources Evaluation System (CERES)

CERES is an information system developed by the California Resources Agency to facilitate access to a variety of electronic data describing California's rich and diverse environments. The goal of CERES is to improve environmental analysis and planning by integrating natural and cultural resource information from multiple contributors and then making it available and useful to a wide variety of users.

<http://www.ceres.ca.gov>



California General Plan Guidelines

October 2003 Edition

Every city and county in California is required by state law to prepare and maintain a planning document called a general plan. A general plan is designed to serve as the jurisdiction's "constitution" or "blueprint" for future decisions concerning land use, infrastructure, public

services, and resource conservation. To assist local governments in meeting this responsibility, the Governor's Office of Planning and Research (OPR) is required to adopt and periodically revise guidelines for the preparation and content of local general plans (Government Code §65040.2).

The 2003 General Plan Guidelines provide extensive guidance on the preparation, adoption, and maintenance of a general plan. The guidelines can be downloaded at:

http://www.opr.ca.gov/planning/PDFs/General_Plan_Guidelines_2003.pdf

California Military Land Use Compatibility Analyst (CMLUCA)

CMLUCA lets you determine if your project has the potential to affect areas important to military readiness. SB 1462 (Kuehl, Chapter 907, Statutes of 2004) requires local planning agencies to notify the military whenever a proposed development project or general plan amendment meets one or more of the following conditions:

- Is located within 1,000 feet of a military installation,
- Is located within special use airspace, or
- Is located beneath a low-level flight path.

<http://sample1.casil.ucdavis.edu/Calmap8/index.html>

California Office of Environmental Health Hazard Assessment (OEHHA)

OEHHA's overall mission is to protect and enhance public health and the environment by scientific evaluation of risks posed by hazardous substances.

Mailing Address (Sacramento):

PO Box 4010
Sacramento, CA 95812

Office Address / Phone (Sacramento):

1001 I Street
Sacramento, CA 95814
916.324.7572

Office / Mailing Address / Phone (Oakland Office):

1515 Clay Street, 16th Floor
Oakland, California 94612
510.622.3200

<http://www.oehha.ca.gov/>

California Planners' Information Network (CALPIN)

This site provides basic information on California local planning agencies, including an annual survey that identifies recent planning activities, accomplishments, and trends.

<http://www.calpin.ca.gov/>

Governor's Office of Planning and Research (OPR)

The Governor's Office of Planning and Research (OPR) was created by statute in 1970 (Chapter 1534) as the comprehensive statewide planning agency and the research staff to the Governor. The roles of the OPR include intergovernmental relations (including the state clearinghouse function), local government planning liaison, environmental policy coordination; and research assistance for the Governor. OPR has also been assigned various other duties, summarized below, by statute and executive order which can be found on their web site (<http://www.opr.ca.gov>). This includes the responsibility to develop this planning handbook for communities and military installations.

The major activities of the office include:

- Recommending and implementing state policies with regard to land use and growth planning;
- Carrying out policy research for the Governor and Cabinet;

Appendix C

- Providing technical planning advice to local governments, and state agencies and departments;
- Advising local governments, the public, and government agencies and departments on provisions of the California Environmental Quality Act (CEQA);
- Operating the State Clearinghouse to distribute environmental documents for state review and process federal grant documents; and
- Conducting other activities at the Governor's direction.

Mailing Address:

PO Box 3044
Sacramento, CA 95812

Office Address / Phone:

1400 Tenth Street
Sacramento, CA 95814
916.322.2318

<http://www.opr.ca.gov/>



Planning, Zoning, and Development Laws

March 2005 Edition

The Planning, Zoning and Development Laws (PZDL) is an important tool provided by OPR to help land use professionals keep abreast of ever changing land use laws and regulations. It is a compendium of state statutes related to land use planning, supplemented with legislative bill summaries and Attorney General opinions. The PZDL is divided into three parts: planning and zoning law (California Government Code Section 65000-66037), the Subdivision Map Act (California Government Code 66410-66499.58), and miscellaneous planning related laws.

The PZDL can be downloaded at:

http://www.opr.ca.gov/publications/PDFs/PZD_2005.pdf

① State Water Resources Control Board

This agency provides policy, guidance, coordination, management, and enforcement of California water issues. It also provides technical support on related water policy.

Mailing Address:

PO Box 100
Sacramento, CA 95812

Office Address / Phone:

1001 I Street
Sacramento, CA 95814
916.323.2514

<http://www.swrcb.ca.gov/>

C.2 LOCAL GOVERNMENT RESOURCES

① California State Association of Counties (CSAC)

According to the Association's web site, "the primary purpose of CSAC is to represent county government before the California Legislature, administrative agencies and the federal government. CSAC places a strong emphasis on educating the public about the value and need for county programs and services."

The CSAC web site provides a listing of counties and the cities within each county, statistical information on each county, and a list of county websites.

Office Address / Phone:

1100 K Street, Suite 101
Sacramento, CA 95814
916.327.7500

<http://www.csac.counties.org/>

① Council of Governments (COG)

California's 25 COGs are regional planning agencies comprised of member counties and cities in a defined region. These entities work together

to address regional issues such as land use, housing, environmental quality, and economic development. COGs do not directly regulate land use. Elected officials from each of the cities and counties belonging to the COG make up its governing board. The following is a list of the COGs within California, including the California Association of COGs (CALCOG). A link to each COGs website is provided, if available.

- [California Association of COGs](#) (CALCOG)
- [ABAG-Association of Bay Area Governments](#) (SF Bay Area COG)
- [BCAG-Butte County Association of Governments](#)
- [COFCG-Council of Fresno County Governments](#)
- [Council of San Benito County Governments](#)
- [Coachella Valley Association of Governments](#)
- [MCAG-Merced County Association of Governments](#)
- [Kern Council of Governments](#)
- [Kings County Association of Governments](#)
- [Mendocino Council of Governments](#)
- [Association of Monterey Bay Area Governments](#)
- [Orange County Council of Governments](#)
- [SACOG-Sacramento Area Council of Governments](#)
- [San Bernardino Associated Governments](#)
- [SANDAG-San Diego Association of Governments](#)
- [SBCAG-Santa Barbara County Association of Governments](#)
- [SCAG-Southern California Association of Governments](#)
- [SCRTPA-Shasta County Regional Transportational Planning Agency](#)

- [SEDD & SPO-Sierra Economic Development District & Sierra Planning Organization](#)
- [SGVCOG-San Gabriel Valley Council of Governments](#)
- [SJCOG-San Joaquin Council of Governments](#)
- [SLOCOG-San Luis Obispo Council of Governments](#)
- [StanCOG - Stanislaus Council of Governments](#)
- [WRCOG-Western Riverside Council of Governments](#)
- TCAG-Tulare County Association of Governments

① League of California Cities

This organization is the leading advocacy organization for California cities. Its mission is: "To restore and protect local control for cities through education and advocacy in order to enhance the quality of life for all Californians." For planners, the organization's web site provides a wealth of information on cities within the state. From the web site, users can obtain a list of cities in the state, links to city web sites, and a searchable database of city officials.

Office Address / Phone:

League of California Cities
1400 K Street, Suite 400
Sacramento, CA 95814
916.658.8200

<http://www.cacities.org>

C.3 DEPARTMENT OF DEFENSE (DOD)

① Office of the Secretary of Defense (OSD)

The OSD provides policy guidance, coordination, and management direction for the Department of Defense, as well as management oversight of the Military Services.

Office Address:

Office of the Deputy Under Secretary of Defense (Installations & Environment)
3400 Defense Pentagon, Room 3E792
Washington, DC 20301-3400

http://www.acq.osd.mil/ie/ie_contact.htm

① Office of Economic Adjustment (OEA)

This agency provides policy guidance, coordination, and management support to communities affected by DOD installations and operations. It also provides technical support related to Base Realignment and Closure (BRAC) and encroachment issues.

The OEA web site offers a wealth of information on programs and references, and has links to web sites applicable to compatibility planning.

Office / Mailing Address / Phone (Headquarters):

400 Army Navy Drive, Suite 200
Arlington, VA 22202-4704
703.604.6020

<http://www.oea.gov>

OEA operates a regional office in Sacramento for the Western US, including California.

Office / Mailing Address / Phone (Sacramento):

Office of Economic Adjustment
ODASD Western Regional Office
1325 J Street, Suite 1500
Sacramento, CA 95814
916.557.7365

wso.oewebfeedback@wso.whs.mil

① DoD Regional Environmental Coordinators (REC), Region 9

This agency provides guidance and coordination support to installations and regulatory agencies affected by DoD installations and operations.

Regional Officer 415.977.8843

① Air Force – Component REC

This agency provides guidance and coordination support to installations and regulatory agencies affected by Air Force installations and operations.

Office / Mailing Address / Phone:

AFCEE/CCR-S
333 Market Street, Suite 625
San Francisco, CA 94105
415.977.8888
888.324.9254

<http://www.afcee.brooks.af.mil/sf/sfhome.asp>

① Army – Component REC

This agency provides guidance and coordination support to installations and regulatory agencies affected by Army installations and operations.

Phone:

U.S. Army Environmental Center
303.289.0353

① Marine Corps – Component REC

This agency provides guidance and coordination support to installations and regulatory agencies affected by Marine installations and operations.

Office / Mailing Address / Phone:

Western Regional Environmental
Coordinator Team
Camp Pendleton, CA 92055
760.725.2674
415.977.8888

① Navy – Lead REC

This agency provides guidance, and coordination support to installations and regulatory agencies affected by Navy installations and operations.

Phone:

COMNAVREGSW
San Diego, CA 92132
619.532.4534

 **Joint Land Use Study (JLUS)
Guidelines**

The Department of Defense (DoD) initiated the Joint Land Use Study (JLUS) program in 1985 to achieve greater implementation and application of the Air Force Air Installation Compatible Use Zone (AICUZ) program, the Navy and Marine Corps' Range Air Installation Compatible Use Zone (RAICUZ) and Range Compatible Use Zone (RCUZ) programs, and the Army's Environmental Noise Management Program (ENMP). The JLUS process encourages residents, local decision-makers, and installation representatives to study issues of compatibility in an open forum with the goal of balancing both military and civilian interests. The resulting recommendations are intended to guide the local government in the implementation of appropriate land use controls around military installations.

The OEA is the primary office of the DoD with responsibility for providing adjustment assistance to communities, regions, and states adversely impacted by significant Defense program changes.

The *Joint Land Use Study, Program Guidance Manual*, August 2002, can be found at:

<http://www.oea.gov>

OEA can be contacted for additional information at:

400 Army Navy Drive, Suite 200
Arlington, VA 22202-2884
703.604.6020

<http://www.oea.gov>

 **Installation Master Planning**

UFC 2-200-02AN, March 1, 2005

This Technical Manual (TM) provides guidance on preparing the Master Plan Report. The Master Plan Report provides a concise, comprehensive definition of planning proposals to solve current problems and meet future needs, as well as a record of the analytical process and rationale by which these proposals were developed.

This technical manual may be found at:

<http://www.hnd.usace.army.mil/techinfo/UFC/UF C2-000-02AN/UFC2-000-02AN.pdf>

 **Minimum Antiterrorism Standards for Buildings**

UFC 4-010-01, October 8, 2003

This United Facilities Criteria (UFC) provides planning, design, construction, sustainment, restoration, and modernization criteria. It applies to the US Military Departments, the Defense Agencies, and the DoD Field Activities. This publication provides technical criteria for military facilities construction by presenting minimum anti-terrorism/force protection (AT/FP) standards for DoD facilities (e.g., standoff distances, building hardening, proper site planning). Each DoD Service may set more stringent AT/FP building standards to meet the specific threats in its area of responsibility. The overall goal of this UFC is to minimize the likelihood of mass casualties from terrorist attacks against DoD personnel in the buildings in which they work and live. The standards presented in this publication, and in its four appendices, apply to new and existing inhabited facilities.

This publication may be found at:

http://65.204.17.188//report/doc_ufc.html

C.4 ARMY

U.S. Army Corps of Engineers (USACE)

The USACE serves the Armed Forces and the Nation by providing vital engineering services and capabilities, as a public service, across the full spectrum of operations—from peace to war—in support of national interests.

Corps missions include five broad areas:

- Water Resources
- Environment
- Infrastructure
- Homeland Security
- Warfighting

Phone:

Headquarters, USACE
202.761.1024/0727
Environmental: 202-528-4285

<http://www.usace.army.mil/>

U.S. Army Engineer Division, South Pacific (CESPD)

Office / Mailing Address / Phone:

333 Market St
San Francisco, CA 64105
415.977.8323

<http://www.spd.usace.army.mil/>

U.S. Army Engineer District, San Francisco (CESPN)

Mailing Address:

333 Market St
San Francisco, CA 94105

<http://www.spn.usace.army.mil/>

U.S. Army Engineer District, Sacramento (CESPK)

Office / Mailing Address / Phone:

1325 J Street
Sacramento, CA 95814
916.557.7490

<http://www.spk.usace.army.mil/>

US Army Engineer District, Los Angeles (CESPL)

Mailing Address:

PO Box 2711
Los Angeles, CA 90053

Office Address / Phone:

911 Wilshire Blvd
Los Angeles, CA 90017
213.452.3961

<http://www.spl.usace.army.mil/>

Master Planning for Army Installations

AR 210-20, May 16, 2005

This Army Regulation (AR) defines the real property master planning concept and requirement and also establishes policies and responsibilities for implementing the real property master planning process for Army communities. A Real Property Master Plan (RPMP) is the garrison commander's instrument for unifying the planning and programming for an installation's real property management and development. It defines the installation real property master plan digest as a component of the RPMP. It integrates real property master planning with the installation status report, the focused facility strategy, land use controls, and the core sustainable range program elements (the Range and Training Land Program and Integrated Training Area Management Program), the range and training land strategy, integrated natural resources management plan (INRMP), and integrated cultural resources management plan processes.

This publication may be found at:

http://www.army.mil/usapa/epubs/pdf/r210_20.pdf

Additional Army planning information may be found in *Technical Manual (TM) 5-803-14, Site Planning and Design*, October 14, 1994, (<http://www.usace.army.mil/usace-docs/armytm/tm5-803-14/entire.pdf>) and UFC 2-200-02AN, Installation Master Planning, March 1, 2005

 **Environmental Protection and Enhancement**

AR 200-1, February 21, 1997

This regulation provides a brief overview of army environmental programs and requirements. It does not provide a complete listing of requirements or detailed guidance on complying with environmental laws and regulations. This regulation supplements federal, state, and local environmental laws for preserving, protecting, and restoring the quality of the environment. It also integrates pollution prevention, natural and cultural resources, and the National Environmental Policy Act (NEPA) into the Army Environmental Program. Chapter 7 outlines the Army Environmental Noise Management Program

This publication may be found at:

http://www.usapa.army.mil/pdf/files/r200_1.pdf

Another publication that provides information on the Operational Noise Management Program is *Environmental Noise Management: An Orientation Handbook for Army Facilities*. This may be found at:

<http://chppm-www.apgea.army.mil/dehe/morenoise/noisman.doc>

The Army maintains a web site dedicated to its Operational Noise Program at:

<http://chppm-www.apgea.army.mil/dehe/morenoise/default.aspx>

C.5 NAVY AND MARINE CORPS

 **HQ Marine Corps Installation and Logistics**

This agency provides policy, guidance, coordination, and management of Marine installations and operations.

Office Address / Phone:

Headquarter Marine Corps
Pentagon
Washington, DC 20301
703.695.8572

<http://hqinet001.hqmc.usmc.mil/i&L.htm>

 **Naval Facilities Engineering Command (NAVFACHQ)**

This agency provides policy, guidance, coordination, and management of support to Navy and Marine Corps installation and operations, as well as provides technical and contracting support within area of responsibility.

Mailing Address:

Naval Facilities Engineering Command
Attn: Base Development Directorate
1322 Patterson Ave SE, Ste 1000
Washington, DC 20374

Office Address / Phone:

1322 Patterson Ave. SE, Ste 1000
Washington Navy Yard, D.C. 20374
202.685.9181

https://portal.navfac.navy.mil/portal/page?_pageid=181,3446484&_dad=portal&_schema=PORTAL

 **Naval Facilities Engineering Command, Southwest (NAVFAC Southwest)**

This agency provides policy, guidance, coordination, and management of support to Navy and Marine installation and operations, as well as provides technical and contracting support within area of responsibility.

Office / Mailing Address / Phone:

Naval Facilities Engineering Command
Southwest
1220 Pacific Highway
San Diego, CA 92132
Commander: 619.532.2317
Natural/Cultural Resources: 619.532.2319

https://portal.navfac.navy.mil/portal/page?_pageid=181_3451081,181_3451904&_dad=portal&_sc_hema=PORTAL



Environmental and Natural Resource Program Manual

OPNAVINST 5090.1B, June 4, 2003

This Operational Naval Instruction (OPNAVINST) discusses requirements, delineates responsibilities, and issues policy for the management of the environment and natural resources for all Navy ships and shore installations. Chapter 17 discusses requirements and responsibilities for reducing environmental noise from Navy shore operations.

This publication may be found at:

<http://neds.daps.dla.mil/5090.htm>



Range Air Installations Compatible Use Zones (RAICUZ) Program

OPNAVINST 3550.1, August 7, 1998

This instruction establishes the Department of the Navy policy, procedures, and guidelines for implementation of RAICUZ studies. The RAICUZ program depends upon the local command's to work with nearby communities, as well as federal, state, and local agencies to prevent incompatible development of land adjacent to military training ranges. This program is designed to protect public health, safety, and welfare, and to prevent encroachment from degrading the operational capability of air-to-ground ranges. This program is similar to the Air Installations Compatible Use Zones (AICUZ) program. A RAICUZ includes

range safety and noise analyses. It provides land use recommendations that are compatible with range safety zones and noise levels associated with the military range operations.

This publication may be found at:

<http://www.navfac.navy.mil>



Air Installations Compatible Use Zones (AICUZ) Program

OPNAVINST 11010.36B, December 19, 2002

This instruction provides Navy policy, procedures, and guidelines for implementation of the AICUZ program. It also establishes centers of excellence on the east and west coasts of the United States. The AICUZ program depends on an active local command effort to work with local, regional, state, other federal agencies, and community leaders to encourage compatible development of land adjacent to military airfields. This document outlines AICUZ study contents, update procedures, and implementation steps.

This publication may be found at:

<http://www.navfac.navy.mil>



US Navy BASH Program

OPNAVINST 3750.6R

OPNAVINST 5090.1B

NAVFAC Procedural Manual P-73

There are two Navy and Marine Corps instructions implementing aspects of the BASH program. OPNAVINST 3750.6R (Chapter 4) outlines the procedures for submitting hazard reports for bird and animal strikes. OPNAVINST 5090.1B is the Environmental and Natural Resources Program Manual. Chapter 22 of this instruction outlines the responsibilities of the Natural Resource Manager to prepare and implement BASH plans for installations with a flying mission. This plan is an integral part of the Integrated Natural Resources Management Plan (INRMP). The NAVFAC P-73 Manual provides guidance for the

natural resource manager in developing a BASH program.

These publications may be found at:

OPNAVINST 3750.6R:

<http://www.safetycenter.navy.mil/instructions/aviation/opnav3750/default.htm>

OPNAVINST 5090.1B:

<http://neds.daps.dla.mil/5090.htm>

NAVFAC P-73:

Not available online

The Navy's Safety Center also maintains a safety web site at:

<http://www.safetycenter.navy.mil/aviation/operations/bash/newsletter.htm>



Comprehensive Regional Planning Instruction (CRPI)

NAVFACINST 11010.45, August 24, 2000

The CRPI is the Naval Facilities Instruction (NAVFACINST) that provides an organizing framework for all planning instructions, guidance, and advice for the Navy shore infrastructure. The CRPI introduces the Regional Shore Infrastructure Planning (RSIP) process and individual policy topics that provide instruction, guidance, and advice for elements of regional planning. It also establishes the overall structure for Navy comprehensive regional planning. It is an extension of OPNAVINST 11000.16A, *Command Responsibility for Shore Land and Facilities Planning*, which establishes regional planning for the Navy shore establishment.

This publication may be found at:

http://www.navfac.navy.mil/doclib/files/11010_45.pdf

OPNAVINST 11000.16A may be found at:

<http://neds.daps.dla.mil/Directives/1100016a.pdf>



Regional Planning Instruction – Regional Shore Infrastructure Planning

NAVFACINST 11010.45 (Rev 1), December 2003.

The Navy's RSIP instructions are contained in eight publications, all of which published under the identifier NAVFACINST 11010.45. Revision 1 of this instruction provides an update to the initial publication produced in 2000.

This Naval Facilities Instruction (NAVFACINST) describes the Regional Shore Infrastructure Planning (RSIP) process that results in the Overview and Functional Plans of the shore establishment regions, Navy concentration areas (NCA), and stand-alone activities. Two levels of analysis exist in the regional planning paradigm for the Navy. Analysis occurs at the broad level, as well as a detailed level. The outcome of these two types of planning processes, the Overview and Functional Plans, are long-range planning documents which guide the Navy in its future decisions regarding infrastructure, facilities, and land.

This publication may be found at:

<http://www2.navfac.navy.mil/doclib/files/rsip-rev-1december-2003.pdf>

All eight RSIP publications may be found at:

<http://www2.navfac.navy.mil/instr/default.cfm?ty pe=2>

C.6 AIR FORCE



Air Force Center for Environmental Excellence (AFCEE)

This agency provides policy, guidance, coordination, and management support to Air Force installations and operations, as well as provides technical and contracting support.

Office / Mailing Address / Phone:

HQAFCEE
3300 Sidney Brooks
Brooks City-Base TX 78235
210.536.5626

<http://www.afcee.brooks.af.mil/>

AICUZ Program Manager's Guide Air Force Handbook (AFH) 32-7084

March 1, 1999

The Air Installation Compatible Use Zone (AICUZ) Program is a DoD planning program developed in response to growing incompatible development (encroachment) around military airfields. The Air Force AICUZ program policy is to promote compatible land use through participation in local, regional, state and federal land use planning activities and coordination processes. Complaints from local communities over the effects of aircraft operations (e.g., noise, low aircraft overflight, etc.) can lead to operational changes which negatively impact the installation's flying mission. This can ultimately result in the inability of the base to fulfill its mission and lead to base closures. This AF handbook provides an overview of the Air Force AICUZ Program. It details guidance concerning the organizational tasks and procedures necessary to implement the AICUZ program. It is written in a "how to" format to guide a person through the five phases of an AICUZ study. It also includes a sample AICUZ Study Report, a Citizen Brochure, and an Implementation and Maintenance Plan. The AF handbook summarizes the data collection steps and procedures for developing USAF-approved noise contours. There are five attachments in the AF handbook: (1) a glossary of terms, (2) an explanation of the Day-Night Average Sound Level (DNL), (3) an explanation of Accident Potential Zones (APZ), (4) land use/noise compatibility, and (5) a generic AICUZ study report.

This publication may be found at:

<http://www.e-publishing.af.mil/mastercatalog/product.asp?cat=sub&code=H>

Additional AF AICUZ information may be found in AFH 32-7063 at:

<http://www.afcee.brooks.af.mil/ec/noise/aicuz/AICUZ.asp>

Air Force Comprehensive Planning

AFI 32-7062, October 1, 1997

This Air Force Instruction (AFI) contains the responsibilities and requirements for comprehensive planning and describes procedures for developing, implementing, and maintaining an installation general plan. The general plan is the document that provides the installation commander and other decision-makers with a concise picture of an installation's capability to support the mission with its physical assets and delivery systems. It is a general assessment of the installation's infrastructure and attributes for the purpose of gauging development potential. This document furthers the policies and goals of the National Environmental Policy Act (NEPA) to improve and coordinate plans, and to use the physical and social sciences in planning and decision making.

The publication contains seven attachments including:

- A glossary of terms
- A list of comprehensive planning guides
- An outline for the general plan document
- Descriptions of the AF component plans
- Details regarding component plan advocacy
- A listing of the minimum level of detail for the general plan and related graphics
- A listing of the plan map and graphic layers

This publication may be found at:

<http://www.e-publishing.af.mil/pubfiles/af/32/afi32-7062/afi32-7062.pdf>

Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques

AF Pamphlet 91-212, February 1, 2004

This AF Pamphlet (AFPAM) provides guidance for implementing an effective bird/wildlife aircraft strike hazard reduction program. It provides additional information on BASH as specified in AFI 91-202, The US Air Force Mishap Prevention

Program. The document includes seven attachments:

- A glossary of terms
- A BASH self-inspection checklist
- A list of low-level flight BASH considerations
- Contact information for US Department of Agriculture Animal Wildlife Services and US Fish and Wildlife Service offices
- An authorized BASH equipment list
- A BASH video list
- A BASH deployment kit

This publication may be found at:

<http://www.e-publishing.af.mil/search.asp?keywo rd=afpam+91-212>

The AF also maintains a web site dedicated to BASH that can be found at:

<http://afsafety.af.mil/AFSC/Bash/home.html>

C.7 OTHER FEDERAL AGENCIES

① Bureau of Land Management (BLM)

This agency provides policy, guidance, coordination, and management of Federal Lands.

Office /Mailing Address / Phone (Sacramento):

Bureau of Land Management
California State Office
2800 Cottage Way, Suite W-1834
Sacramento, CA 95825-1886
916.978.4400

<http://www.ca.blm.gov/>

① Department of the Interior

This agency provides policy, guidance, coordination, and management of federal lands. The department also oversees several key land management agencies, such as the Bureau of Land Management (BLM).

Office /Mailing Address / Phone (Headquarters):

1849 C Street, N.W.
Washington DC 20240
202.208.3100

<http://www.doi.gov>

① Federal Aviation Administration (FAA)

This agency provides policy, guidance, and coordination in matters dealing with civilian and military airspace, air traffic, and airports.

Office /Mailing Address / Phone (Headquarters):

U.S. Department of Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591
866.835.5322

<http://www.faa.gov/>

The FAA publishes a range of reporting documents that contain details on the military's use of airspace. These Flight Information Publications (FLIP) contain DoD planning documents, enroute supplements, and terminal instrument procedures in PDF format. One of the FLIP reports, referred to as AP1 Bravo (AP1/B), is the area planning document for military training routes in North and South America. A link to the current version of this document is provided below.

https://164.214.2.62/dafif/dafif_0512_ed8/DAFIF_PLAN/plan/ap1b.pdf

① National Park Service (NPS)

This agency provides policy, guidance, coordination, and management of the National Park System and the lands and facilities therein.

Office / Mailing Address / Phone (Headquarters):

1849 C Street NW
Washington, DC 20240
202.208.6843

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Office / Mailing Address / Phone (Region):

Pacific West Region
National Park Service
One Jackson Center
1111 Jackson Street, Suite 700
Oakland, CA 94607
510.817.1304

<http://www.nps.gov/>

① US Fish and Wildlife Service

This agency provides policy, guidance, coordination, and management of federal reserves, as well as provides technical support related to fish and wildlife management.

Office / Mailing Address (Headquarters):

U.S. Fish and Wildlife Service
1849 C Street, NW
Washington, DC 20242

<http://www.fws.gov/>

① US Forest Service

This agency provides policy, guidance, coordination, and management of Federal Land, and National Forests.

Office / Mailing Address / Phone (Headquarters):

Headquarters USDA Forest Service
1400 Independence Ave., SW
Washington, D.C. 20250-0003
202.205.8333

<http://www.fs.fed.us/>

The regional office covering California is located in Vallejo.

Office / Mailing Address / Phone (Region):

Pacific Southwest Region
1323 Club Drive
Vallejo, CA 94592
707.562.8737

<http://www.fs.fed.us/r5/>



LAND USE COMPATIBILITY STANDARDS

This appendix contains sample land use compatibility matrices developed by the Military Services. These matrices represent the Services recommendations on compatible land uses to assist local governments in developing land use plans near military installations or operations areas. The compatible land use matrix examples are recommendations from the following:

- Figure D-1
Air Force AICUZ Instructions
- Figure D-2
Navy AICUZ Instructions

Also included in this appendix is a sample land use compatibility table developed for the Arizona Regional Military Compatibility Study. This example is provided only as an illustration of a local government implementation of military compatibility standards.

- Figure D-3
Arizona Regional Military Compatibility Study

Figure D-1. Air Force AICUZ Land Use Compatibility Standards

LAND USE COMPATIBILITY

Table A4.1. Land Use Compatibility With Respect To Noise And Accident Potential.

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y ¹	A ¹¹	B ¹¹	N	N
11.12	Single units; semidetached	N	N	N	A ¹¹	B ¹¹	N	N
11.13	Single units; attached row	N	N	N	A ¹¹	B ¹¹	N	N
11.21	Two units; side-by-side	N	N	N	A ¹¹	B ¹¹	N	N
11.22	Two units; one above the other	N	N	N	A ¹¹	B ¹¹	N	N
11.31	Apartments; walk up	N	N	N	A ¹¹	B ¹¹	N	N
11.32	Apartments; elevator	N	N	N	A ¹¹	B ¹¹	N	N
12	Group quarters	N	N	N	A ¹¹	B ¹¹	N	N
13	Residential hotels	N	N	N	A ¹¹	B ¹¹	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A ¹¹	B ¹¹	C ¹¹	N
16	Other residential	N	N	N ¹	A ¹¹	B ¹¹	N	N
20	Manufacturing							
21	Food & kindred products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
22	Textile mill products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
24	Lumber and wood products (except furniture); manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
25	Furniture and fixtures; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
26	Paper & allied products; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
27	Printing, publishing, and allied industries	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
28	Chemicals and allied products; manufacturing	N	N	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
29	Petroleum refining and related industries	N	N	N	Y	Y ¹²	Y ¹³	Y ¹⁴
30	Manufacturing							
31	Rubber and misc. plastic products; manufacturing	N	N ²	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
32	Stone, clay and glass products manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
33	Primary metal industries	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
34	Fabricated metal products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N ²	Y	A	B	N
39	Miscellaneous manufacturing	N	Y ²	Y ²	Y	Y ¹²	Y ¹³	Y ¹⁴
40	Transportation, communications and utilities							
41	Railroad, rapid rail transit and street railroad transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
42	Motor vehicle transportation	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
43	Aircraft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
44	Marine craft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
45	Highway & street right-of-way	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
46	Automobile parking	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
47	Communications	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
48	Utilities	N ³	Y ⁴	Y	Y	Y	Y ¹²	Y ¹³
49	Other transportation communications and utilities	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
50	Trade							
51	Wholesale trade	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
52	Retail trade-building materials, hardware and farm equipment	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
53	Retail trade-general merchandise	N	N ²	Y ²	Y	A	B	N
54	Retail trade-food	N	N ²	Y ²	Y	A	B	N
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y ²	Y ²	Y	A	B	N
56	Retail trade-apparel and accessories	N	N ²	Y ²	Y	A	B	N
57	Retail trade-furniture, home furnishings and equipment	N	N ²	Y ²	Y	A	B	N
58	Retail trade-eating and drinking establishments	N	N	N ²	Y	A	B	N
59	Other retail trade	N	N ²	Y ²	Y	A	B	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y ⁶	Y	A	B	N
62	Personal services	N	N	Y ⁶	Y	A	B	N
62.4	Cemeteries	N	Y ⁷	Y ⁷	Y	Y ¹²	Y ¹³	Y ^{14,2}
63	Business services	N	Y ⁸	Y ⁸	Y	A	B	N
64	Repair services	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
65	Professional services	N	N	Y ⁶	Y	A	B	N

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LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO.	NAME	CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y ⁶	Y	Y	A	B	N
67	Governmental services	N	N	Y ⁶	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N ²	Y ²	Y	A	B	N
70	Cultural, entertainment and recreational							
71	Cultural activities (including churches)	N	N	N ²	A*	B*	N	N
71.2	Nature exhibits	N	Y ²	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	N	N
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y ¹⁷	Y ¹⁷	N	N
73	Amusements	N	N	Y ⁸	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y ^{8,9,10}	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y ⁸	Y ⁸	Y*	Y*	N	N
79	Other cultural, entertainment and recreation	N	Y ⁹	Y ⁹	Y*	Y*	N	N
80	Resources production and extraction							
81	Agriculture (except livestock)	Y ¹⁶	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
82	Agricultural related activities	N	Y ⁵	Y	Y ¹⁸	Y ¹⁹	N	N
83	Forestry activities and related services	N ⁵	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
84	Fishing activities and related services	N ⁵	Y ⁵	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y ⁵	Y	Y	Y	Y	Y
89	Other resources production and extraction	N	Y ⁵	Y	Y	Y	Y	Y

LEGEND

SLUCM - Standard Land Use Coding Manual, U.S. Department of Transportation.

Y - (Yes) - Land use and related structures are compatible without restriction.

N - (No) - Land use and related structures are not compatible and should be prohibited.

Yx - (yes with restrictions) - Land use and related structures generally compatible; see notes indicated by the superscript.

Nx - (no with exceptions) - See notes indicated by the superscript.

NLR - (Noise Level Reduction) - NLR (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.

A, B, or C - Land use and related structures generally compatible; measures to achieve NLR for A(DNL/CNEL 65-69), B(DNL/CNEL 70-74), C(DNL/CNEL 75-79), need to be incorporated into the design and construction of structures.

A*, B*, and C* - Land use generally compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate footnotes.

* - The designation of these uses as "compatible" in this zone reflects individual federal agencies' and program considerations of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider.

NOTES:

1. Suggested maximum density of 1-2 dwelling units per acre, possibly increased under a Planned Unit Development (PUD) where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further deliberating by local authorities may be needed due to the variation of densities in people and structures. Shopping malls and shopping centers are considered incompatible use in any accident potential zone (CZ, APZ I, or APZ II).
3. The placing of structures, buildings, or above-ground utility lines in the clear zone is subject to severe restrictions. In a majority of the clear zones, these items are prohibited. See AFI 32-7060 (formerly AFR 19-9) and AFJM 32-8008 (formerly AFM 86-14) for specific guidance.
4. No passenger terminals and no major above-ground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, etc., are not recommended.
7. Excludes chapels.
8. Facilities must be low intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
- 11a. Although local conditions may require residential use, it is discouraged in DNL/CNEL 65-69 dB and strongly discouraged in DNL/CNEL 70-74 dB. The absence of viable alternative development options

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should be determined and an evaluation indicating a demonstrated community need for residential use would not be met if development were prohibited in these zones should be conducted prior to approvals.

11b. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) for DNL/CNEL 65-69 dB and DNL/CNEL 70-74 dB should be incorporated into building codes and considered in individual approvals

11c. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.

12. Measures to achieve the same NLR as required for facilities in DNL/CNEL 65-69 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

13. Measures to achieve the same NLR as required for facilities in DNL/CNEL 70-74 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

14. Measures to achieve the same NLR as required for facilities in DNL/CNEL 75-79 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

15. If noise sensitive, use indicated NLR; if not, the use is compatible.

16. No buildings.

17. Land use is compatible provided special sound reinforcement systems are installed.

18. Residential buildings require the same NLR as required for facilities in DNL/CNEL 65-69 dB range.

19. Residential buildings require the same NLR as required for facilities in DNL/CNEL 70-74 dB range.

20. Residential buildings are not permitted.

21. Land use is not recommended. If the community decides the use is necessary, hearing protection devices should be worn by personnel.

Figure D-2. Navy AICUZ Land Use Compatibility Standards

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55- 64	65 - 69	70 -74	75- 79	80 -84	85+
	<i>Residential</i>							
11	Household units	Y	Y ¹	N ¹	N ¹	N	N	N
11.11	Single units: detached	Y	Y ¹	N ¹	N ¹	N	N	N
11.12	Single units: semidetached	Y	Y ¹	N ¹	N ¹	N	N	N
11.13	Single units: attached row	Y	Y ¹	N ¹	N ¹	N	N	N
11.21	Two units: side-by-side	Y	Y ¹	N ¹	N ¹	N	N	N
11.22	Two units: one above the other	Y	Y ¹	N ¹	N ¹	N	N	N
11.31	Apartments: walk-up	Y	Y ¹	N ¹	N ¹	N	N	N
11.32	Apartments: elevator	Y	Y ¹	N ¹	N ¹	N	N	N
12	Group quarters	Y	Y ¹	N ¹	N ¹	N	N	N
13	Residential hotels	Y	Y ¹	N ¹	N ¹	N	N	N
14	Mobile home parks or courts	Y	Y ¹	N	N	N	N	N
15	Transient lodgings	Y	Y ¹	N ¹	N ¹	N ¹	N	N
16	Other residential	Y	Y ¹	N ¹	N ¹	N	N	N
20	<i>Manufacturing</i>							
21	Food and kindred products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
22	Textile mill products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
23	Apparel and other finished products; products made from fabrics, leather and similar materials; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
24	Lumber and wood products (except furniture); manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
25	Furniture and fixtures; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
26	Paper and allied products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
27	Printing, publishing, and allied industries	Y	Y	Y	Y ²	Y ³	Y ⁴	N
28	Chemicals and allied products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
29	Petroleum refining and related industries	Y	Y	Y	Y ²	Y ³	Y ⁴	N

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Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55- 64	65 - 69	70 -74	75- 79	80 -84	85+
30	Manufacturing (continued)							
31	Rubber and misc. plastic products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
32	Stone, clay, and glass products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
33	Primary metal products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
34	Fabricated metal products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks	Y	Y	Y	25	30	N	N
39	Miscellaneous manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
40	Transportation, communication and utilities.							
41	Railroad, rapid rail transit, and street railway transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
42	Motor vehicle transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
43	Aircraft transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
44	Marine craft transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
45	Highway and street right-of-way	Y	Y	Y	Y ²	Y ³	Y ⁴	N
46	Automobile parking	Y	Y	Y	Y ²	Y ³	Y ⁴	N
47	Communication	Y	Y	Y	25 ⁵	30 ⁵	N	N
48	Utilities	Y	Y	Y	Y ²	Y ³	Y ⁴	N
49	Other transportation, communication, and utilities	Y	Y	Y	25 ⁵	30 ⁵	N	N
50	Trade							
51	Wholesale trade	Y	Y	Y	Y ²	Y ³	Y ⁴	N
52	Retail trade - building materials, hardware, and farm equipment	Y	Y	Y	Y ²	Y ³	Y ⁴	N
53	Retail trade - shopping centers	Y	Y	Y	25	30	N	N
54	Retail trade - food	Y	Y	Y	25	30	N	N

(Continued Next Page)

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55- 64	65 - 69	70 - 74	75- 79	80 -84	85+
50	Trade (Continued)							
55	Retail trade – automotive, marine craft, aircraft, and accessories	Y	Y	Y	25	30	N	N
56	Retail trade – apparel and accessories	Y	Y	Y	25	30	N	N
57	Retail trade – furniture, home furnishings, and equipment	Y	Y	Y	25	30	N	N
58	Retail trade – eating and drinking establishments	Y	Y	Y	25	30	N	N
59	Other retail trade	Y	Y	Y	25	30	N	N
60	Services							
61	Finance, insurance, and real estate services	Y	Y	Y	25	30	N	N
62	Personal services	Y	Y	Y	25	30	N	N
62.4	Cemeteries	Y	Y	Y	Y ²	Y ³	Y ^{4,1)}	Y ^{4,1)}
63	Business services	Y	Y	Y	25	30	N	N
63.7	Warehousing and storage	Y	Y	Y	Y ²	Y ³	Y ⁴	N
64	Repair services	Y	Y	Y	Y ²	Y ³	Y ⁴	N
65	Professional services	Y	Y	Y	25	30	N	N
65.1	Hospitals, other medical facilities	Y	Y ¹	25	30	N	N	N
65.16	Nursing homes	Y	Y	N ¹	N ¹	N	N	N
66	Contract construction services	Y	Y	Y	25	30	N	N
67	Government services	Y	Y ¹	Y ¹	25	30	N	N
68	Educational services	Y	Y ¹	25	30	N	N	N
69	Miscellaneous	Y	Y	Y	25	30	N	N
70	Cultural, entertainment and recreational							
71	Cultural activities (and churches)	Y	Y ¹	25	30	N	N	N
71.2	Nature exhibits	Y	Y ¹	Y ¹	N	N	N	N
72	Public assembly	Y	Y ¹	Y	N	N	N	N
72.1	Auditoriums, concert halls	Y	Y	25	30	N	N	N
72.11	Outdoor music shells, amphitheatres	Y	Y ¹	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	Y	Y	Y ²	Y ²	N	N	N
73	Amusements	Y	Y	Y	Y	N	N	N
74	Recreational activities (include golf courses, riding stables, water recreation)	Y	Y ¹	Y ¹	25	30	N	N
75	Resorts and group camps	Y	Y ¹	Y ¹	Y ¹	N	N	N
76	Parks	Y	Y ¹	Y ¹	Y ¹	N	N	N
79	Other cultural, entertainment, and recreation	Y	Y ¹	Y ¹	Y ¹	N	N	N

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Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55- 64	65 - 69	70 -74	75- 79	80 -84	85
80	Resource Production and Extraction							
81	Agriculture (except livestock)	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y
81.5	Livestock farming	Y	Y	Y ⁸	Y ⁹	N	N	
81.7	Animal breeding	Y	Y	Y ⁸	Y ⁹	N	N	
82	Agriculture-related activities	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y
83	Forestry activities	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y
84	Fishing activities	Y	Y	Y	Y	Y	Y	
85	Mining activities	Y	Y	Y	Y	Y	Y	
89	Other resource production or extraction	Y	Y	Y	Y	Y	Y	

Key:

SLUCM Standard Land Use Coding Manual, U.S. Department of Transportation

Y (Yes) Land use and related structures compatible without restrictions.

N (No) Land use and related structures are not compatible and should be prohibited.

Y* (Yes with Restrictions) Land use and related structures are generally compatible. However, see note(s) indicated by the superscript.

N⁸ (No with Exceptions) Land use and related structures are generally incompatible. However, see notes indicated by the superscript.

NLR (Noise Level Reduction) Noise level reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

25, 30, or 35 The numbers refer to NLR levels. Land use and related structures are generally compatible; however, measures to achieve NLR of 25, 30, or 35 must be incorporated into design and construction of structures. However, measures to achieve an overall noise reduction do not necessarily solve noise difficulties outside the structure, and additional evaluation is warranted. Also, see notes indicated by superscripts.

DNL Day night average sound level.

CNEL Community noise equivalent level (normally within a very small decibel difference of DNL).

Ldn Mathematical symbol for DNL.

Notes:

1.

- a) Although local conditions regarding the need for housing may require residential use in these zones, residential use is discouraged in 65-69 dB NL and strongly discouraged in 70-74 dB DNL. The absence of viable alternative development options should be determined and an evaluation should be conducted locally prior to local approvals, indicating that a demonstrated community need for the residential use would not be met if development were prohibited in these zones.
- b) Where the community determines that these uses must be allowed, measures to achieve an outdoor to indoor NLR of at least 25 dB in DNL 65-69 and NLR of 30 dB in DNL 70-74 should be incorporated into building codes and be in individual approvals; for transient housing a NLR of at least 35 dB should be incorporated in DNL 75-79.
- c) Normal permanent construction can be expected to provide a NLR of 20 dB; thus the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation, upgraded Sound Transmission Class (STC) ratings in windows and doors, and closed windows year round. Additional consideration should be given to modifying NLR levels based on peak noise levels or vibrations.
- d) NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, design and use of berms and barriers can help mitigate outdoor noise exposure NLR, particularly from ground-level sources. Measures that reduce noise at a site should be used wherever practical in preference to measures that protect only interior spaces.

Figure D-3. Arizona Regional Military Compatibility Study

Selected Land Uses	Clear Zone	APZ I	APZ II	65-69	70-74	75-80	80+
S-F Residential	N	N	Y	Y	Y	N	N
Schools	N	N	N	Y	Y	N	N
Churches	N	N	N	Y	Y	N	N
Hospitals	N	N	N	Y	Y	N	N
Public Assembly	N	N	N	Y	N	N	N
Outdoor Amphitheaters	N	N	N	N	N	N	N
Retail-Food	N	N	Y	Y	Y	Y	N

Source: Prepared by Parsons from USAF data.

Although ARS §28-8481 does not permit single-family residential uses in any of the hazard or noise zones (Table 3-2), it is silent about uses in the Clear Zone, since the law does not define such a zone.

Table 3-2: Compatibility of Uses – ARS §28-8481

Selected Land Uses	APZ I	APZ II	65-69	70-74	75-79	80-84	85+
S-F Residential	N	N ¹²	N ¹²	N ¹²	N	N	N
Schools ¹³	N	N	N	N	N	N	N
Churches	N	N	Y	Y	N	N	N
Hospitals	N	N	Y	Y	N	N	N
Public Assembly ¹⁴	N	N	N	N	N	N	N
Outdoor Amphitheaters	N	N	Y ¹⁵	Y ¹⁵	Y ¹⁵	N	
Retail-Food	N	N ¹²	Y	Y	Y	N	

Source: Prepared by Parsons from ARS §28-8481 data.

Various uses that concentrate and congregate population are permitted by ARS §28-8481 in the accident potential and high noise zones. All categories of personal and business services that are listed in the statute, including indoor recreation, and several types of commercial-retail trade, wholesale trade, retail sale of building materials and government services are permitted within APZ II and noise zones 65 dnl through 79 dnl. The above-mentioned uses are incompatible with military aircraft carrying live ordinance and high noise zones. Outdoor amphitheaters and music shells, retail sale of general merchandise, retail apparel, water-based recreation, eating and drinking, and retail-food uses are permitted within noise zones 65 dnl through 79 dnl. Churches, medical and health services, auditoriums and concert halls, and other public and quasi-public services are permitted within noise zones 65 dnl through 74dnl.

¹² The use is allowed in the AICUZ Guidance but is not permitted under Arizona law.

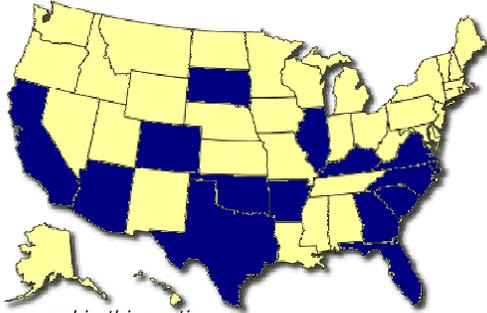
¹³ Schools as a specific land use category are not addressed in ARS §28-8481; the data provided above are for the category: Other Public and Quasi-Public Services.

¹⁴ Public Assembly as a specific land use category is not addressed and it is not defined in ARS §28-8481; the data provided above are for the category: Other Public and Quasi-Public Services.

¹⁵ The use is allowed under Arizona law, but not under the AICUZ Program.

Appendix D

Please see the next page.



States covered in this section

OVERVIEW OF STATE LEGISLATION

E.1 LEGISLATIVE OVERVIEW – CALIFORNIA

The state of California has taken several proactive steps to support its military installations at the local, regional, and state level.

SB 1099 (Knight, Chapter 425, Statutes of 1999)

Between 1988 and 1999, California experienced the closure or realignment of 29 military bases. SB 1099 hoped to prevent additional military base closures in California.

In 1999, the passage of SB 1099 established the California Defense Retention and Conversion Council in the Trade and Commerce Agency, to be active until January 1, 2007. The membership of this organization could include major executive branch agencies and public appointees. Representatives from California colleges and universities and California-based branches of the United States Armed Forces could participate as nonvoting members.

The bill had a provision to grant funds to communities to develop military base retention

strategies. The Council was directed to determine how best to defend existing California bases and base employment in California and to work with communities that may face base closures. The Council was mandated to prepare a study considering strategies for long-term protection of lands next to military bases. These strategies were to address land use compatibility issues to prevent encroachment from affecting the missions of these bases.

The requirement for a study was met in 2001 by a draft report entitled *Forecasting and Mitigating Future Urban Encroachment Adjacent to California Military Installations: A Spatial Approach* written by the University of California, Berkeley, Institute of Urban and Regional Development. According to the report, “more than half of California’s military installations are located within, at the edge of, or within a stone’s throw of major metropolitan areas.”

The study defines the issue of encroachment is more than just increased population and “urban growth edging closer to installation boundaries.” It is also the effect that military installations have on nearby residents, and the environmental issues that are created as endangered species

California Legislation

SB 1099 **1999**

http://info.sen.ca.gov/pub/99-00/bill/sen/sb_1051-1100/sb_1099_bill_19990916_chaptered.pdf

AB 1108 **2002**

http://info.sen.ca.gov/pub/01-02/bill/asm/ab_1101-1150/ab_1108_bill_20020918_chaptered.pdf

SB 1468 **2002**

http://info.sen.ca.gov/pub/01-02/bill/sen/sb_1451-1500/sb_1468_bill_20020927_chaptered.pdf

SB 926 **2004**

http://info.sen.ca.gov/pub/03-04/bill/sen/sb_0901-0950/sb_926_bill_20040930_chaptered.pdf

SB 1462 **2004**

http://info.sen.ca.gov/pub/03-04/bill/sen/sb_1451-1500/sb_1462_bill_20040930_chaptered.pdf

Planning, Zoning, and Development Laws (PZDL)

Source for Government Code references

http://www.opr.ca.gov/publications/PDFs/PZD_2005.pdf

migrate to military lands in order to survive.

This study applied a growth model to estimate the potential for urbanization near military installations. As a result of this evaluation, the study provides six general policy options for review and consideration.

AB 1108 (Pavley, Chapter 638, Statutes of 2002)

AB 1108, Chapter 638, Statutes of 2002 amends CEQA law by requiring CEQA lead agencies to notify military installations if a project meets certain criteria. The criteria includes property located within an established operational area, a general plan amendment, or is of statewide, regional, or area-wide significance, or is required to be referred to the local ALUC. This notification is meant to provide the military with an opportunity to provide early input so that potential land use conflicts can be resolved in a proactive manner. Military input on projects allows local decision makers to have the information they need to make informed decisions when they approve a project.

SB 1468 (Knight, Chapter 971, Statutes of 2002)

The general plan is one of the key tools that local decision makers and planners use to guide land use decisions within their community. SB 1468 changed the Planning and Zoning Law regarding the contents of the required general plan elements. These elements must now consider the impact of growth on military readiness activities carried out on military bases, installations, and operating and training areas.

This bill requires the land use element to consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas, when proposing zoning ordinances or designating land uses covered by the general plan for land or other territory adjacent to those military facilities, or underlying designated military aviation routes and airspace. With respect to the open-space

element, open-space land is defined to include areas adjacent to military installations, military training routes, and restricted airspace. This bill also required the circulation element to also include the general location and extent of existing and proposed military airports and ports.

SB 1468 promotes the concept of a partnership between communities and the military that allows them to collaborate on addressing land use compatibility issues around military installations.

This bill also called for OPR to prepare and publish an advisory planning handbook for local officials, planners, and builders. The handbook is required to include advice on:

- Collecting and preparing data and analysis;
- Preparing and adopting goals, policies, and standards;
- Adopting and monitoring feasible implementation measures;
- Methods to resolve conflicts between civilian and military land uses and activities; and,
- "Recommendations for cities and counties . . . to consult with military base personnel prior to approving development adjacent to military facilities."

SB 926 (Knight, Chapter 907, Statutes of 2004)

In 2004, SB 926 established the Office of Military and Aerospace Support (OMAS) in the Business, Transportation and Housing Agency (BT&H). This bill renamed the office responsible for military base retention activities and moved it from the nonexistent Trade and Commerce Agency to BT&H.

The Bergeson-Peace Infrastructure and Economic Development Bank Act authorizes the California Infrastructure and Economic Development Bank to make loans to public and private entities for public development facilities. SB 926 specifies that military infrastructure projects are included in the definition of public development facilities.

Local governments may apply for Bank loans to fund military infrastructure projects. SB 926 also updates the requirements of SB 1468 to require cities and counties to use information from other sources, in addition to the military, when they address new growth impacts on military installations and activities in their general plans.

SB 1462 (Kuehl, Chapter 907, Statutes of 2004)

SB 1462 expanded the requirements for local government to notify military installations of proposed development and planning activities. This bill stated that "prior to action by a legislative body to adopt or substantially amend a general plan, the planning agency shall refer the proposed action to . . . the branches of the United States Armed Forces when the proposed project is located within 1,000 feet of a military installation, beneath a low-level flight path, or within special use airspace [SUA] . . ." The military is responsible for providing the Office of Planning and Research (OPR) with electronic maps of SUA, low-level flight paths, and military installations. OPR is then responsible for notifying cities and counties of the information's availability on the Internet.

SB 1462 revises the information required in the application for development projects located within 1,000 feet of a military installation, a SUA, or a low-level flight path. The public agency must provide a complete copy of the application to the military as specified. Lastly, the bill authorizes any branch of the US Armed Forces "to request consultation" to avoid potential conflict and to discuss "alternatives, mitigation measures, and the effects of the proposed project on military installations."

E.2 LEGISLATION OVERVIEW – OTHER STATES

In addition to measures adopted in California, other states have also enacted legislation to protect military activities and installations. Compatibility planning tools and strategies

adopted in other states provide California planners with additional ideas or concepts to consider when approaching land use compatibility issues. The information presented in this section was obtained from the following website managed by the Defense Environmental Network and Information Exchange (DENIX) at:

<https://www.denix.osd.mil/denix/Public/Library/Sustain/Ranges/StateLeg/textversion.html>

ARIZONA

Land Use Planning Around Military Airports

Arizona laws dating back to 1978 provide statutory guidance on compatible land use planning around Military Airports. Most recent legislation includes SB 1062, 1995; SB 1514, 2000; SB 1525, 2001; SB 1393, 2002; HB 2140, 2004 and HB 2141, 2004 that set forth the following:

Established "high noise or accident potential zone" (generally the noise contours and the arrival departure corridors) around each military airport and their ancillary military facility and requires:

- Cities, towns, and counties to adopt and enforce zoning regulations to "assure development compatible with the high noise and accident potential generated by military airport and ancillary military facility operations that have or may have an adverse effect on public health and safety."
- A defined "compatible" land use matrix (A.R.S. 28-8481 (J)) within high noise or Accident Potential Zones. (One military airport is to use their Joint Land Use Study in order to determine compatibility.)
- Cities, towns, and counties to identify these boundaries within their general/comprehensive plan by December 31, 2005.

Appendix E

- Cities, towns, and counties must send a copy of their general/comprehensive plan or an element or major amendment of the general plan to the attorney general at least 60 days prior to adoption.
 - Cities, towns, and counties must provide notice to the Attorney General within three days of approval, adoption, or re-adoption of the general/comprehensive plan.
 - The Attorney General has 25 days after receipt of the plan to determine if it is compatible with the land use matrix set forth in ARS 28-8481 (J).
 - The governing body thirty days after receipt of notice from Attorney General to reconsider their actions. If actions are reaffirmed, the Attorney General may institute a civil action.
 - In order to facilitate development set forth in the compatibility land use matrix (ARS 28-8481 (J)), a county may approve transfer of development rights and enter into an intergovernmental agreement with another political subdivision.
 - Provides a "fair market value" of minimum one residential dwelling unit per acre for political subdivisions, state, or an agency or instrument of the United States when purchasing land or development rights.
 - Prohibits local jurisdictions from permitting or approving new divisions of land zoned for residential use if the division would result in a lot, parcel, or fractional interest of four acres or less. A waiver may be granted.
 - Applications for public reports must include a statement that the property is located in a high noise or accident potential zone. (This is in addition to a statement that the property is located in a territory in the vicinity.)
- Established "territory in the vicinity" (a larger area designed to capture major military operating areas) requirements for military airports and ancillary military facilities:
- The State Land Department is to prepare a map with a legal description of the territory in the vicinity of ancillary military facilities and the accompanying high noise or accident potential zone, accident potential zone ones and two. This information is to be sent to the appropriate county, and made available to the public at the State Land Department and the Department of Real Estate.
 - Establishes sound attenuation requirements for: new residential development; portions of buildings where the public is received; office areas in new buildings; schools; libraries, and churches.
 - Cities, towns and counties must:
 - Provide the military airport notice and an opportunity to provide comments on general and comprehensive plans or amendments prior to adoption.
 - Provide the military airport notice of public hearings for zoning changes. If a military airport provides comments concerning the compatibility of the proposed rezoning prior to the first hearing, the governing body must hold a public hearing and consider the comments before a final decision is made. This insures that plans are not adopted on a consent agenda.
 - Consider military airport or ancillary military facility operations in the local land use element.
 - The School Facilities Board must notify military airports of hearings regarding any applications for School Facilities Funding. Any comments or analysis received from the military must be considered and analysis prior to a final decision.
 - Department of Real Estate and local governments shall request and maintain map of military operations and military

Established "territory in the vicinity" (a larger area designed to capture major military operating

airport contact information and make this information available to the public.

- A disclosure statement upon transfer or sale of land for residential property must be on the first page of public report and include, if available, a map of military operations.
- The Department of Real Estate shall execute and record a document with the appropriate county recorder for land with the following disclosure: "this property is located within territory in the vicinity of a military airport or ancillary military facility and may be subject to increased noise and accident potential."
- ARS 28-8480 provides that a political subdivision "may acquire, by exchange, purchase, lease, donation, devise, or condemnation, land or interests in land for the continued operation of a military airport or ancillary military facility."

ARIZONA

Natural Gas Storage Facility Restriction

ARS 49-1302 (HB 2134, 2004) prohibits the location of a natural gas facility within nine miles of Luke Air Force Base. The ARS 49-1302 includes a legislative findings section that states such activities "are subject to state regulation as provided by 49 United States Code 60104c."

ARKANSAS

Land Use Planning Around Military Installations

Arkansas' Ark. Code Section 14-56-426 (Act 530, 1995) requires cities over 2,500 residents and with an active-duty United States Air Force Base to "enact a city ordinance specifying that within five (5) miles of the corporate limits future uses on property which might be hazardous to aircraft operation shall be restricted or prohibited." The city ordinance shall:

- Be consistent with the recommendations and studies made by the October 1992 United States Air Force document titled

Air Installation Compatible Use Zone Study, Volumes I, II, and III.

- Restrict or prohibit future uses that violate the height restriction criteria of Federal Aviation Regulation, part 77, subpart C.
- Consider recommendations or studies in order to protect the public and provide for safe aircraft operations.
- Not prohibit single-family residential uses on an acre or more if future construction complies with Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations, Wyle Research Report WR 89-7.

Specifically, the ordinance shall restrict or prohibit future land uses that meet the following categories within the five-mile area:

- Uses that interfere or impair visibility with the operation of aircraft by releasing substances such as steam, dust, or smoke into the air.
- Uses that interfere with pilot vision by producing light emissions (direct, indirect, or reflective).
- Uses that interfere with aircraft communications systems or navigational equipment by producing electrical emissions.
- Uses that attract birds or waterfowl such as sanitary landfill operations, maintenance of feeding stations, or growing certain vegetation.
- Structures within ten feet of aircraft approach, departure, or transitional surfaces.
- Uses that expose persons to noise greater than seventy-five decibels.

COLORADO

Enhanced Planning Communication and Notification

- Colo. Rev. Stat. § 29-1-207, 30-28-106, 31-23-206 (Acts 2005, Chapter 59, SB

05-080) states that the General Assembly declares that local governments should cooperate with military installations in "order to encourage compatible land use, help prevent incompatible urban encroachment upon military installations, and facilitate the continued presence of major military installations within the state." Local governments with a military installation in excess of 1,000 acres (other than the Rocky Mountain Arsenal or any facility used primarily for civil works, river or flood control projects) located partially or within its boundaries shall provide "timely" notification of certain actions to the military installation commander or his or her designee. Information shall include changes in the comprehensive plan, its amendments, or its land use regulations that, if approved, would "significantly affect the intensity, density or use of any area within the territorial boundaries of the local government that is within two miles of the military installation." This requirement does not require information related to site-specific development applications under consideration by the local government.

- After providing the prescribed information to the military, the local government must also provide the commanding officer of the military installation (or his or her designee) an opportunity to review and comment on the military mission impact of the proposed change. Comments may include:
 - Impact on the airfield's safety and noise impact set forth in their Air Installation Compatible Use Zone (AICUZ);
 - Incompatibility with the Installation Environmental Noise Management Program (IENMP) of the United States Army;
 - Incompatibility with the area's Joint Land Use Study (JLUS) findings; and

- If the mission will be adversely affected by the proposed actions.
- The local government when considering approval of the comprehensive plan, its amendments, or its land use regulations shall review the comments and forward a copy of the comments to the Office of Smart Growth.
- This provision is effective beginning August 8, 2005 and shall apply to any requested changes in a local government's comprehensive plan, its amendments, or land use regulations submitted for approval on or after that date.

FLORIDA Land Use Planning Around Military Installations

Florida's Fla. Stat. § 163.3175 (SB 1604, 2004) states, "the Legislature finds that incompatible development of land close to military installations can adversely affect the ability of such an installation to carry out its mission." Counties that have a military installation within its jurisdiction and each affected local government must:

- Send the installation commanding officer information "relating to proposed changes to comprehensive plans, plan amendments, and proposed changes to land development regulations which, if approved, would affect the intensity, density, or use of the land adjacent to or in close proximity to the military installation."
- Provide the "military installation an opportunity to review and comment on the proposed changes."
- Consider the military's comments when making comprehensive planning or land development regulation decisions and forward a copy of the comments to the state land planning agency.
- Include a military representative to serve as an ex-officio, non-voting member on

the land planning or zoning board representing all installations within the political jurisdiction.

The military may provide comments on the proposed change's impact on the mission. Comments may address:

- Impact on the airfield's safety and noise impact set forth in their Air Installation Compatible Use Zone (AICUZ);
- Incompatibility with the Installation Environmental Noise Management Program (IENMP) of the United States Army;
- Incompatibility with the area's Joint Land Use Study (JLUS) findings; and
- If the mission will be adversely affected by the proposed actions.

The Commanding Officer is encouraged to provide information regarding any community planning assistance grants available through the DOD Office of Economic Adjustment.

Florida's Fla. Stat. § 163.3177 (SB 1604, 2004): requires local governments' future comprehensive land use plan elements to address compatibility of land uses "adjacent or closely proximate" to military installations and include criteria to achieve that compatibility. This update or amendment must be submitted to the Department of Community Affairs by June 30, 2006. The Department must consider land use compatibility issues "adjacent to or in close proximity to all military installations in coordination with the Department of Defense."

Florida's Fla. Stat. § 163.3191 (SB 1604, 2004): requires local governments' evaluation of its comprehensive plan to include an assessment of whether the criteria in the future land use plan element was successful in achieving compatibility with military installations.

GEORGIA

Land Use Planning Around Military Bases and Installations

Georgia's Ga. Code Ann. §36-66-6 (SB 261, 2003) requires planning entities to investigate and make recommendations on proposed zoning decisions on land that is "adjacent to or within 3,000 feet of any military base or military installation or within the 3,000 foot Clear Zone and Accident Prevention Zones Numbers I and II as prescribed in the definition of an Air Installation Compatible Use Zone of a military airport." Given the proposed land use's proximity to the military facility, planning entities are to determine:

- If the proposal will permit a suitable use;
- If the proposal will adversely affect the existing use or usability of nearby property;
- If the affected property has a reasonable economic use as currently zoned;
- If the proposed use could cause safety issues to streets, transportation facilities, utilities or schools;
- If a land use plan has been adopted and if so, if the proposed change conforms with the policy and intent of the land use plan; and
- If there are existing or changing conditions that would affect the use of nearby property.

The planning entity at least 30 days prior to the hearing must request that the military commander provide "written recommendation and supporting facts relating to the proposed land use change." If the military commander does not submit a response by the date of the public hearing then the proposed zoning change is presumed to not have an adverse effect on the military installation. Any information received shall become part of the public record.

ILLINOIS

County Air Corridor Protection Act

HB 1338, 2003, known as the "County Air Corridor Protection Act," gives counties with a U.S. Air Force installation with runways that are at least 7,500 feet in length with the authority to:

- "Protect the safety of the community by controlling" land uses designated in the Air Installation Compatible Use Zone (AICUZ) Study adopted by the United States Air Force.
- Utilize eminent domain powers to acquire land or an easement when a land use exists or when a municipality approves a use that is not compatible with the AICUZ and falls within the following areas:
 - clear zones and runway protection zones;
 - accident potential zones I and II; or
 - within the 65 decibel contour.

KENTUCKY

Land Use Planning Around Military Bases and Installations

Kentucky's Rev.Stat. § 100.187 (HB 357, 2003) requires that a planning entity, when drafting a comprehensive plan, shall include provisions for accommodating military installations that are at least 300 acres and located partially, within, or "abutting" the planning entity's boundaries. The statute is intended to help "minimize conflicts between the relevant military installations and the planning unit's residential population."

The planning entity shall consult with the military commander to determine their needs, and shall request information regarding:

- "installation expansion;
- environmental impact;
- installation safety; and
- airspace usage, to include noise pollution, air pollution, and air safety concerns."

NORTH CAROLINA

Land Use Planning Around Military Bases

N.C. Gen. Stat. § 153A-323 and § 160A-364 (SB 1161, 2004) requires cities and counties to provide military installation commanders written notice at least ten days (but not more than 25 days) prior to a public hearing to consider any ordinance that would change zoning or affect the permitted uses of land within five miles of a military base. Prior to making a final decision, the governing body shall consider any comments or analysis received from the military regarding the compatibility of the proposed ordinance or amendment.

OKLAHOMA

Land Use Planning Around Military Installations

Okla. Rev. Stat. § 11-43-101.1 (HB 2472, 2004; HB 2115, 2002; SB 658, 2001) permits any municipality that has an active-duty United States Air Force Base to enact a city ordinance specifying that within 5 miles of the military installation future uses on the property by the municipality which may be hazardous to aircraft operation shall be restricted or prohibited.

The city ordinance shall:

- Be consistent with the most current recommendations and studies titled " Air Installation Compatible Use Zone Study" made by the United States Air Force installations at Altus AFB, Tinker AFB, and Vance AFB or studies made by United States Department of the Army installation at Fort Sill titled "Army Compatible Use Buffers" or "similar zoning relating to or surrounding a military installation as adopted by a county, city, or town or a combination of those governmental entities."
- Restrict or prohibit future uses that violate the height restriction of any Federal Aviation Regulation criteria.

- Consider the recommendations or studies in order to protect the public and provide for safe aircraft operations.
- Subject to the provisions and requirements of item 1, not prohibit single-family residential uses on an acre or more if future construction complies with Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations, Wyle Research Report WR 89-7.
- Specifically, the ordinance shall restrict or prohibit future land uses that meet the following categories within the five-mile area:
 - Uses that interfere or impair visibility with the operation of aircraft by releasing substances such as steam, dust or smoke into the air unless the substance is generated from an agricultural use.
 - Uses that interfere with pilot vision by producing light emissions (direct, indirect, or reflective).
 - Uses that interfere with aircraft communications systems or navigational equipment by producing electrical emissions.
 - Uses that attract birds or waterfowl such as sanitary landfill operations, or maintenance of feeding stations.
 - Structures within ten feet of aircraft approach, departure, or transitional surfaces.
 - Exposure of persons to noise greater than seventy-five decibels.
 - Uses that detract from the aesthetic appearance or make for an unsightly entrance to the installation such as automobile salvage yards, disposal sites, and waste storage.

SOUTH CAROLINA Land Use Planning Around Military Installations

South Carolina's S.C. Code § 6-29-1530 (H4482, 2004) requires planning entities to provide planning information to the military installation commander 30 days prior to the public hearing and request "written recommendation with supporting facts" on land that is located within:

- A federal overlay zone; or
- Within 3,000 feet of either a military installation, or Clear Zone and Accident Potential Zones Numbers I and II

The commander's comments and the planning entity are to make recommendations and findings regarding:

- If the proposed use is suitable given the proximity of the military installation;
- If the proposal will adversely affect the existing use or usability of nearby property;
- If the affected property has a reasonable economic use as currently zoned;
- If the proposed use could cause safety issues to such items as streets, transportation facilities, utilities or schools;
- If a land use plan has been adopted, and if so, if the proposed change conforms with the policy and intent of the land use plan; and
- If there are existing or changing conditions that would affect the use of nearby property.

If the military commander does not submit a response by the date of the public hearing then the proposed zoning change is presumed to not have an adverse effect. Any information received shall become part of the public record. Local governments are to "incorporate identified boundaries, easements, and restrictions for federal military installations into official maps."

SOUTH DAKOTA

Military Airport Zoning Regulations

S.D. Codified Laws § 50-10-32 to 50-10-35 (SL 1996, Ch 278) permits political subdivisions to “adopt, administer, and enforce, under its police power” zoning regulations “to prevent the creation of a military airport hazard.” The military airport hazard area, defined as an area of land or water with a hazard such as a structure which obstructs or interferes with military aircraft zoning regulations, may be divided into zones and include:

- Specifying land uses that are permitted;
- Regulating type and density of structures; and
- Restricting height of structures to prevent obstructions to flight operations or air navigation.

The political subdivision may also adopt, by ordinance or resolution, any federal laws or rules to assist in “controlling the use of land located adjacent to or in the immediate vicinity of the military airport.”

TEXAS

Military Preparedness Act

SB 652, 2003 established the Texas Military Preparedness Commission replacing the Strategic Military Planning Commission. This office is within the Governor's Office and reports to the Governor or his designee. Commission duties include:

- Advising the Governor and Legislature on military issues and their related economic and industrial development.
- Making recommendations regarding policies and plans to support the long-term military mission viability including best methods for communities to enhance their relationship with their military installation.
- Preparing a biennial strategic plan to assist the longevity and expand the mission of Texas military installations.

- Preparing an annual report to the Governor and the Legislature regarding the military installations and their communities and the associated defense related business within the state. State agencies are to assist with this report.
- Coordinating annual meetings to discuss the report with state agencies and legislators whose district includes an active or former military installation.
- The Commission may solicit and accept gifts and grants.
- Military Installation Commanders may request commission assistance to coordinate with other state agencies to prepare base evaluation criteria.
- Authorizes the Commission to provide a loan of financial assistance to defense community projects that meet set criteria including enhancing “military value of a military facility located in, near, or adjacent” to the community. Loans must be paid within five years and may not exceed the total cost of the project.
- Creating the Texas Military Value Revolving Loan Account.
 - A community that applies for financial assistance shall prepare “in consultation with the authorities from each defense base associated with the community, a defense base military value enhancement statement.”
 - A community may request financial assistance to prepare a “comprehensive defense installation and community strategic impact plan that states the defense community's long-range goals and development proposals.” This plan includes the following elements as they relate to the military base – land use, transportation, population growth, water resources, conservation, open-space, restricted airspace and military training route elements.

- The plan should minimize encroachment and control negative effects of future growth on the military mission.
 - The land use element should identify "existing and proposed regulations of land uses" and their distribution and location that may impact the military base.
 - The open space element should identify existing areas along with an analysis of the military's need for "open-space areas to conduct its military training activities."
 - The restricted airspace element should create needed buffer zones between the base and the community.
 - The military training route element should identify existing routes and if needed, proposes a plan for additional routes.
- Communities that developed a comprehensive defense installation and community strategic impact plan are encouraged to develop with their military base a "planning manual based upon the proposals contained in the plan." If changes are needed in the plan, then the community should consult with the military.
 - Defense communities that determine a proposed ordinance, rule or plan may impact the military mission shall "seek comments and analysis" from the military concerning the compatibility. The community "shall consider and analyze the comments and analysis before making a final determination relating to the proposed ordinance, rule or plan."
 - An agency's strategic plans are to also include an "analysis of the agency's expected expenditures" related military installations or communities with military installations.
 - State agencies are to consider, when establishing goals, the enhancement of military value to a military installation or facility. If the agency "determines that an expenditure will enhance the military value" of an installation or facility (based on the base realignment and closure criteria) the agency shall make the expenditure a priority.
 - The state may sell, lease or grant easements on unused or underused state property to the United States Armed Forces if "after consultation with appropriate military authorities" it is determined that this property would materially assist the military in mission accomplishment.
 - The state is required to "retain all minerals it owns with respect to the land, but it may relinquish the right to use the surface to extract them."
 - The state is prohibited from the selling and leasing "of upland within 2,500 feet of a military base" unless after "consultation with appropriate military authorities" it is determined that the sale or lease would not have an adverse affect on the military.
 - Prohibits prospecting in a "location within 2,500 feet of a military base, but prospectors may, from a location more than 2,500 feet from a base, look for minerals within the 2,500-foot strip."
 - "Any lease covering land adjacent to a military base shall require the lessee to forego the right to use the surface within 2,500 feet of the military base while exploiting the minerals."

VIRGINIA

Land Use Planning Around Military Bases, Installations or Military Airports

Virginia's Va. Code § 15.2-2204, 15.2-2223 15.2-2283 (H714, 2004) requires local planning commissions to provide the military ten days' advance notice of any land use changes (including comprehensive plan or amendment, zoning map, or an application for special exception for a change in use) within 3,000 feet of a "military base, military installation, or military airport, excluding armories operated by the Virginia National Guard."

- This notification also provides the military an opportunity to submit comments for consideration.
- Local comprehensive plans may include the location of military bases, installations, and military airports and their adjacent safety areas.
- Stipulates that zoning ordinances shall provide reasonable protection against encroachment upon military bases, installations and military airports and their adjacent safety areas "excluding armories operated by the Virginia National Guard."

WASHINGTON

Land Use Planning Around Military Installations

Wash. Rev. Code § 36.70A.530 (ESSB 6401, 2004) requires that cities and counties' comprehensive plans, development regulations, or their amendments "should not allow development in the vicinity of a military installation that is incompatible with the installation's ability to carry out its mission requirements." Cities and counties with military installations other than a reserve center of more than 100 personnel must notify the installation commander of their intent to amend the comprehensive plan or development regulations to "address lands adjacent to military installations to ensure those lands are protected from

incompatible development." This notice shall provide the commander 60 days to provide a written recommendation with supporting facts. If no response is received from the commander, than the local government may presume that the "implementation of the proposed plan or amendment" will not have an adverse effect on the installation's operations.



ADVISORY HANDBOOK OUTREACH PLAN

The Advisory Planning Handbook (Handbook) Outreach Plan documents the outreach strategies and procedures that were used to identify and engage a diverse group of affected stakeholders. The outreach program ensured a high level of participation in the development of a final Handbook that represents the needs of the various stakeholder groups.

The following is a summary of the outreach plan used during the development of the Handbook. The outreach plan included the creation of an Advisory Committee, a stakeholder database, and a website. During development of the Handbook, opportunities for stakeholder and public input included: stakeholder focus groups, a survey, public regional scoping workshops, and statewide public hearings.

F.1 OUTREACH TOOLS

Media Plan

To ensure a consistent message, a fact sheet was created to provide basic information about the Handbook project including a timeline of key events and points of contact.

A press release preceded each event and media availability was arranged by request.

Database

A database was developed to identify the numerous stakeholders to be consulted as the Handbook was developed. The Project Team, with advice and input from the Advisory Committee, added stakeholders to the database throughout the development of the Handbook.

The stakeholder groups were organized into the following categories:

- Advisory Committee
- State Government (elected officials, state agencies, governmental organizations)
- Federal Government (elected officials, federal agencies)
- Local Government (elected officials, local planners, local government organizations)
- Business (local, regional, statewide)
- Community stakeholders (environmental organizations, community interest associations, interested members of the public)
- Statewide planning professionals (planning directors, community development directors)
- Military representatives (installation planners, command staff, senior civilians)

Media contacts, although not generally considered stakeholders, were included in the database for use in distributing information about the project to the press.

Website

The development of an easy to navigate website created a central location for stakeholders and the general public to learn about the Handbook. It included information about:

- The purpose and use of the Handbook
- A calendar of meeting and hearing locations
- A roster of the Advisory Committee members
- A draft of the Handbook
- The minutes and handouts of meetings, workshops and hearings

Appendix F

- Instructions on how stakeholders and the general public could participate
- Points of Contact at OPR for additional information

F.2 PUBLIC PARTICIPATION

The Governor's Office of Planning and Research (OPR) formed an Advisory Committee consisting of a broad cross-section of stakeholders to assist during the development of the Handbook. The Advisory Committee consisted of representatives from all levels of government, business and community organizations, and military representatives.

To identify issues of the various communities and stakeholders, small focus group meetings and regional scoping meetings were held throughout the State. The focus group meetings and the regional workshops were conducted early in the Handbook process so that participant input could be incorporated into the draft version of the Handbook.

After the public release of the draft Handbook, three public hearings were held to provide the public an opportunity to comment on the draft Handbook. Public comments were incorporated into the final Handbook, as appropriate.

All public workshops/hearings were accessible and special accommodations were available upon request.

Advisory Committee

The Advisory Committee played an active and important role in the development of the Handbook. The Committee provided the Project Team with suggestions and comments during the development of the Handbook. Their input ensured that the final Handbook was an easy-to-use resource for California cities, counties, builders, and military installations.

The Project Team conferred with the Advisory Committee regularly during the Handbook development process to ensure that they were an integral part of the development of the Handbook.

Members of the Advisory Committee were also asked to play an active role in the Handbook's Outreach Program. Members participated in regional workshops and statewide public hearings and provided information to their organizations regarding the Handbook and opportunities for participation.

Focus Group Meetings

The Project Team sent a notification letter and fact sheet to elected officials in regions with one or more military installations. A letter was mailed to all the stakeholders identified in the database, which included planners, military, private and community interests, and Federal and State agencies. The Project Team sent an additional email invitation to military planners. OPR made follow-up phone calls to local planners to ensure that they were represented.

The focus group sessions were designed to identify issues and solicit suggestions and feedback from the participants. The focus groups met in the morning prior to the Regional Scoping Workshops. The following separate stakeholder group sessions were held:

- Group 1 – Local Planners
- Group 2 – State & Federal Agencies and Departments
- Group 3 – Military Officials & Base Planners
- Group 4 – Private/Community Stakeholders

A member of the Project Team moderated each group session.

Surveys

OPR mailed surveys to everyone who was invited to a focus group but was unable to attend. This enabled OPR to get a wide range of feedback.

Public Scoping Workshops

The Project Team coordinated and facilitated three (3) regional scoping workshops at the locations described below. These workshops were open to the public. The Project Team sent a press release to media outlets throughout the State.

Workshop Locations and Dates

Lancaster

County of Los Angeles, Lancaster
Library
September 7, 2005

San Diego

California State Building
September 9, 2005

Sacramento

California State Association of
Counties Conference Center
September 12, 2005

Hearing Locations and Dates

Bakersfield

Kern County Board Chambers
December 12, 2005

Sacramento

State Capitol, Governor's
Council Room
December 14, 2005

San Diego

Mission Valley Branch Library
December 15, 2005

During the workshops, the Project Team reviewed what was discussed during the focus group sessions and then facilitated an open forum among the participants. The workshops allowed all of the participants to hear and discuss differing points of view, and provided the Project Team with insight on the topics that needed to be addressed in the Handbook.

Public Hearings

Three public hearings were held to receive public comment on the draft Handbook. Copies of the draft Handbook were available upon request and accessible via the project website. Stakeholders identified in the database received a postcard notifying them of the three public hearings. OPR sent a notification letter and a fact sheet to all mayors, city clerks, county board chairs, and county clerks of the board in the State. OPR sent a notification email to planning and local government associations through several listservs, and an email notification and fact sheet were sent to all city and county planning directors in the State. The Project Team provided the Advisory Committee with a newsletter article for distribution to their professional associations that announced the hearings and the availability of the draft Handbook. The Project Team sent a press release to media outlets throughout the State.

Appendix F

Please see the next page.