

# *PART I*

## *Introduction*

*Increasing population densities and urbanization pressures are encroaching upon and affecting military training and readiness missions nationwide. This Practical Guide encourages military departments to reach beyond the installation fence to actively engage surrounding jurisdictions, to educate them on the nature of the military mission and operations in support of readiness, and in return work to understand the community's concerns by developing working relationships built on mutual respect that can lead to limiting or preventing encroachment pressures.*

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Office of Economic Adjustment



## Introduction

### A. Overview of the Guide and the Encroachment Issue

This *Guide* focuses on the application of local government planning tools and strategies needed to promote compatible urban growth and development near military installations, airfields, and test and training ranges. It is a companion to the *Joint Land Use Study (JLUS) Program Guidance Manual*. The *JLUS Guidance Manual* describes the Department of Defense (DoD) Office of Economic Adjustment (OEA)<sup>1</sup> community planning assistance program. It explains how it works, and how it can support community economic development while protecting and preserving military readiness and defense capabilities of the United States Government.

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*Application of compatible smart land use planning principles and practices can achieve a balance between potentially conflicting interests*

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The goal of this *Guide* is to encourage local governments to work closely together with military installations to preserve and protect the public health, safety, and welfare of those living near an active military base or range and the viability of military missions and operations. The premise is that the application of compatible smart land use planning principles and practices can achieve a balance between potentially conflicting interests and, in the process, mutually support desired outcomes.

Parts II through IV explore the respective local, State, and Federal Government roles in promoting local comprehensive/general planning as it may relate to the presence and operational requirements of the DoD. Part V identifies an extensive toolkit of public planning procedures, practices, and principles that can contribute to and promote compatible civilian development in the vicinity of a military installation while discouraging incompatible development.

There are over 3,845 large, medium, and small military installations throughout the United States and its territories.<sup>2</sup> Of this number, 197 are considered large or medium installations.<sup>3</sup> All DoD installations contribute to the economic health and well-being of State and local governments. In exchange, DoD is afforded an opportunity to function and perform its designated missions uninterrupted by nearby civilian activities.

As the military presence in communities has expanded or taken on new mission responsibilities, so also has the civilian community sought to gain from jobs created and the goods and services required to sustain the military's presence and training readiness.

For years, community planners, environmentalists, neighborhood and community leaders, grassroots organizations, and government leaders have complained about wasteful urban growth patterns. Growth patterns that spread across the landscape, gobbling up and converting pristine farmlands, scenic vistas, river valleys, mountain slopes, and beachfront property to higher density urban and suburban development — in the process changing forever the character of an area or region. The pressures of so-called urban sprawl often strain resources and drain limited public support services, pressuring local government financing capabilities with increased demands for services such as schools, parks, roads, and police.

*“After some forty years of gradual progress, [the] state smart growth movement picked up steam in the 1990s. Thirteen states have now adopted laws to encourage their local governments to guide development according to smart growth precepts.”<sup>4</sup>*

Several states (e.g., Arizona, Georgia, Maryland, and Washington) embarked on “smart growth” initiatives during the 1990s in an effort to manage sprawl at the State level and thereby promote livable and cost-efficient community development. Part III of the *Guide* explores the managed or smart growth movement of the 1990s as the impetus for local government smart growth or “Growing Smarter” programs. This is in recognition that the presence of the military is a viable component of the economic development landscape. Comprehensive compatible land use planning is the key to balancing the needs of the military with the needs of the community.

This *Practical Guide* focuses on the presence and operational characteristics of military installations and their relationships to State and local governments. The question: “Can military installations coexist with concentrated civilian populations and/or development or do they need space to operate, maneuver, and to roam?” The answer to both queries is “yes.” The military demands both isolated rural locations (test and training ranges) and urban locations (ports and airfields). This, in fact, creates the basic issue of encroachment that confronts local governments and military installations across the country.

By their nature, military installations, airfields, and test and training ranges generate noise and present potential for accidents to occur. Incompatible development clustering too close to an active military installation can create anxiety for new residents who may have been unaware of the presence of the installation, its missions, or operational profile at time of home purchase.

*What is incompatible development in relationship to a military installation, airfield, or range? That depends on the location and size of the military installation and/or military training or testing range, the type and volume of activity, and the nuisances that can be generated. For example, the compatibility issue relative to airfield operations is focused on noisy high-performance military aircraft. The compatibility issues relative to ground based military operations include ordnance testing, training, practice firing, and proficiency qualifications. These are the issues whether they involve small-arms fire or heavy tracked vehicles such as howitzers and tanks.*

Military installations of all sorts attract commercial, industrial, and residential land use activities such as motels, restaurants, warehousing, shipping, aircraft industries, and a mix of residents who benefit from close access to the military operations. Not all of these uses are compatible with military operations, be they aerial or ground based. In general, higher revenue-producing land use activities, such as lower employment density industrial and commercial uses, are preferable to population-sensitive land use activities such as homes, schools, community centers, libraries, hospitals, day care, long-term senior housing, and buildings housing religious services. Tall structures that encroach into low-level aircraft flight routes may be inconsistent the Federal Aviation Administration regulations as well as incompatible with military air bases.

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*The presence of the military is a viable component of the economic development landscape*

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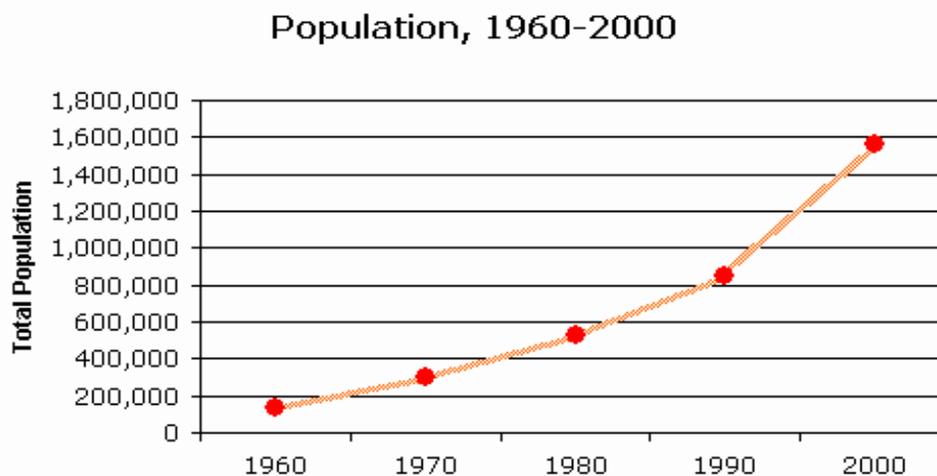
Other uses that are compatible with military operations are large, nonmigratory bird-attracting conservation and open space land uses. However, land uses that involve bird-attracting activities such as wetlands, mitigation habitat, retention ponds, sanitary landfills, and the like are, again, generally incompatible with military airfields because of the potential hazard to air operations, nearby residents, and the birds themselves.

**Urban Growth and Nellis AFB, NV – circa 1960–2000:** Nellis Air Force Base, Nevada, is a good illustration of the conflict between the training needs of the military and the civilian neighborhoods growing closer to military installations. Figures I-1 and I-2 dramatically demonstrate the spread of urban growth in the Las Vegas Valley between the years 1970 and 2004.

Graph I-1 illustrates that between 1960 and 2000, the population of the valley grew from 304,744 to 1,563,328 persons for a 10 percent average annual growth rate.<sup>5</sup> Driven by the burgeoning gaming and hotel industry in Las Vegas and the accompanying demand for increased housing and supporting commercial and industrial establishments, development is now threatening to surround the Air Force base.

**Graph I-1.**

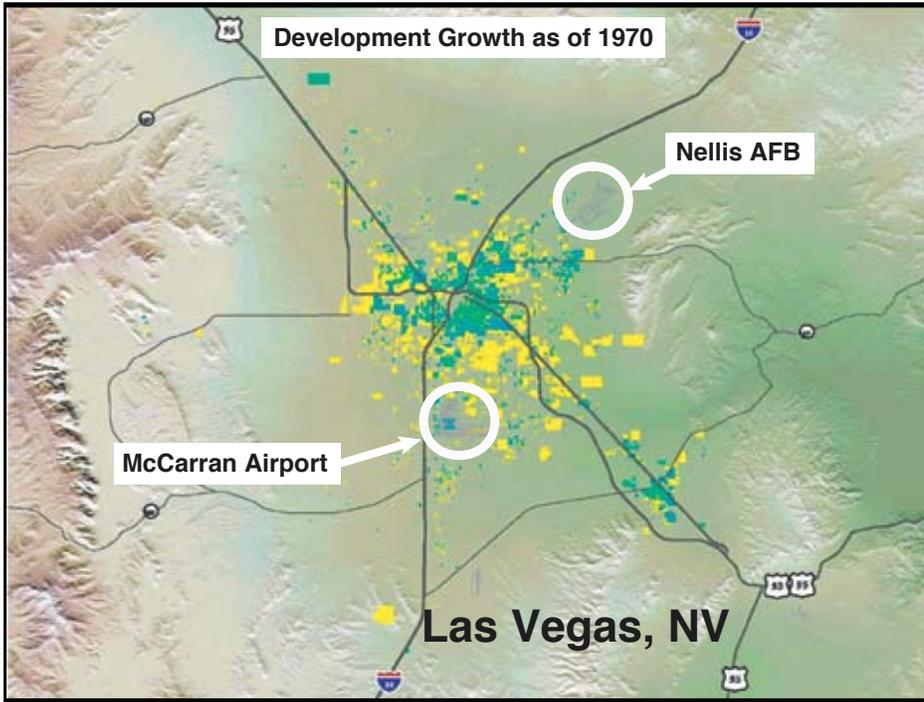
### Las Vegas, NV – POPULATION GROWTH



Source: US Bureau of the Census

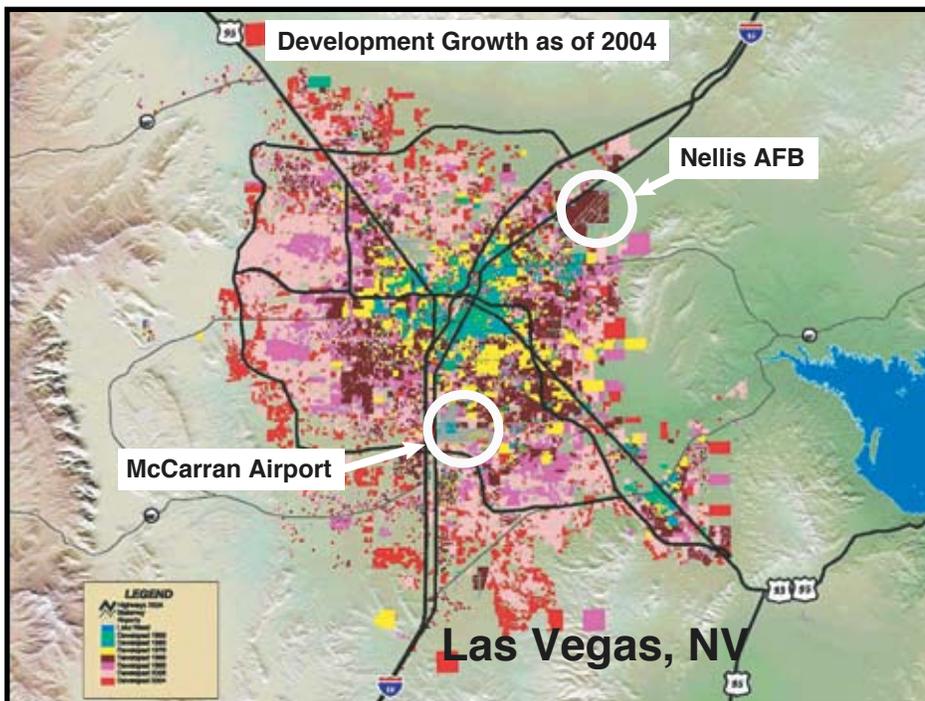
Figures I-1 and I-2 illustrate the dynamics of urban sprawl in one of the fastest growing regions in the country.

**Figure I-1**  
**Urban Growth Near Nellis AFB, Nevada - Circa 1970**



Source: Southern Nevada Regional Transportation Commission and Clark County Comprehensive Planning Division, Clark County, NV.

**Figure I-2**  
**Urban Growth Near Nellis AFB, Nevada - Circa 2004**



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*Nellis AFB represents a clear example of the urban growth issue confronting military installations*

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**The Encroachment Issue:** Nellis AFB represents a clear example of the urban growth issue confronting military installations. The air base is located in Clark County and adjacent to the city of North Las Vegas, Nevada. Urban sprawl is spreading north and west from Las Vegas, threatening to surround Nellis on four sides, affecting its ability to sustain its flying missions. The northern aircraft departure corridor is now the only air route remaining where aircraft carrying live ordnance (bombs and missiles) may depart for the distant Nellis Test and Training Range or beyond. The southern departure route has long been closed to aircraft carrying bombs and missiles, but remains in use for all other flying missions.

As urban development spreads, concerns are being raised that the emerging development patterns also may affect the northern aircraft departure route, possibly curtailing this important flying mission and bringing the Nellis AFB mission and its future into question.

To forestall this possibility, Nellis AFB received Air Force Military Construction assistance funds to acquire 417 acres of land to protect the northern live ordnance departure corridor and portions of the Live Ordnance Loading Area. In addition, Clark County, Nevada, located to the south of Nellis AFB, is the home of the Las Vegas gaming and hotel industry. The county has taken steps over recent years to protect the flying missions at Nellis by incorporating into its comprehensive planning documents and supporting ordinance the protections it believes will insulate the installation from incompatible development and support its flying mission. The installation leadership and the county are working closely together to support both the installation's military mission and the host community's economic development aspirations.

**Southern California – The Los Angeles–San Diego Regions:** Another example of civilian encroachment is the urban development occurring near Marine Corps Base (MCB) Camp Pendleton, in southern California. MCB Camp Pendleton is an important amphibious training base that today is being squeezed between the growing Los Angeles and San Diego metropolitan regions. A military installation's first priority is to provide its operating forces with a realistic training environment.

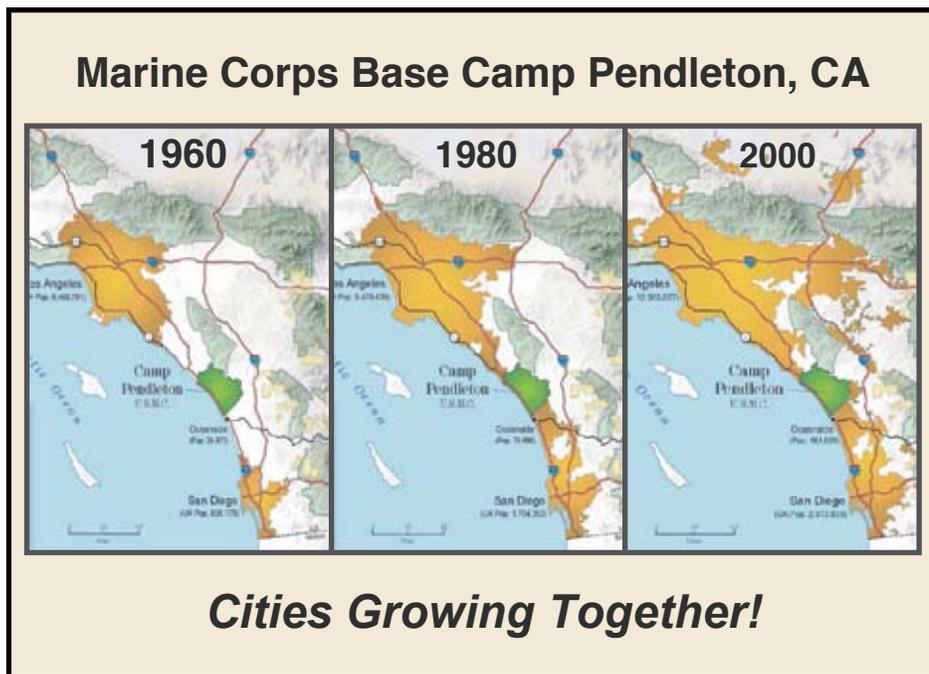
As Los Angeles grows southward and San Diego grows northward along the Pacific coast, MCB Camp Pendleton is experiencing urban development pressures from both directions. The resulting urban growth pressures outside the fence line of Camp Pendleton are disrupting species habitat, driving wildlife onto this pristine Marine Corps training base, and affecting the quality of military training (see Figure I-3).

Today, Camp Pendleton is recognized as one of the last bastions of large natural open space for wildlife habitat and rare flora and fauna, wetlands, and other natural ecological features in southern California. About 28,000 acres of Camp Pendleton's 127,000 acres have some form of use restriction in order to comply with the Endangered Species Act and other environmental regulations. In addition, community complaints about noise from live fire exercises have led to sharp limits on how Marines train.

Nowhere are those restrictions more visible than at the camp's Red Beach, where Marines once trained before landing on Iwo Jima in 1945. The military training value of this mile-long stretch of beach on the Pacific coast has been sharply curtailed in recent years. For example, Marines once ashore at Red Beach cannot tactically disperse as they normally would during a landing, but rather can only move in designated areas. Marines are not allowed to entrench or "dig in" because they might disturb environmentally sensitive endangered species or habitat. Vehicle and troop movements also have been isolated to a few designated trails. Helicopter training flights and live-fire exercises are limited by concern over community noise complaints.

**Figure I-3**

***Los Angeles San Diego Metropolitan Areas***



Source: U.S. Army Corps of Engineers Research Development Center Construction, Construction Engineering Research Laboratory (CERL)

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*Nowhere are those restrictions more visible than at the camp's Red Beach, where Marines once trained before landing on Iwo Jima in 1945*

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In 2003, the Marine Corps conducted an encroachment impact study on training and readiness at Camp Pendleton. An assessment of 739 training tasks determined that civilian development encroaching and surrounding the installation has had a measurable negative impact on the quality of training at Camp Pendleton. The quantitative assessment determined that a Battalion Landing Team's training on Camp Pendleton was able to complete its required nonfiring tasks to only approximately 68 percent of the Marine Corps standard.

The findings of this assessment demonstrate that Camp Pendleton's ability to provide the full range of realistic combat training opportunities for Marines operating on and deploying from the base is significantly hindered by civilian encroachment.<sup>6</sup>

Encroachment takes many forms. The solutions to land use encroachment management are outlined in this *Practical Guide*. The strategy is threefold: public outreach and engagement, legislative clarification, and compatible, collaborative land use planning between the installation and the surrounding jurisdictions.

This *Guide* is not meant to provide an exhaustive treatment of Federal support of State or local government's efforts to protect against the effects of encroachment of incompatible development near military installations. Rather, it is focused on local government regulations and actions that could affect the presence of the military and its missions and operations at the local level and, conversely, DoD actions that could affect State and local government interests.

### ***B. The Audience for This Guide***

Practitioners in the fields of planning, law, and economic and community development are the intended audience. This *Practical Guide* also is directed toward local government officials and military base command and planning staffs who deal daily with issues of community development and incompatible land use activity that could infringe on the rights and prerogatives of either neighbor — the landowner or the military. It is designed to provide guidance in the application of government planning, zoning, subdivision, and development regulations to support compatible, smart development in areas near military operations.

### ***C. Organization of This Guide***

This *Practical Guide* explores the planning tools available to Federal, State, and local governments that recognize the inherent incompatibilities between a military installation's operations and the neighboring community.

This *Guide* promotes community development that is compatible with neighboring land use activities. The incompatibilities of use promote friction between residents and the military and may expose civilians to public health and safety issues.

The *Guide* is organized into five parts. Each part concentrates on a particular aspect of the legal authority for local, State, and Federal governments to promote compatible development near military installations, test facilities, and training ranges.

**Part I** outlines the core problem of urban encroachment confronting military installations. It provides examples to illustrate the issue of urban sprawl and its impact on the military mission's sustainability and national defenses. It notes that there is a movement among several States toward smart growth and smart planning. Capitalizing on these initiatives is a primary theme of this *Practical Guide*. The *Guide* attempts to balance smart land-use planning principles and practices as proactive and strategic measures to both minimize incongruities in land use matters and to capitalize on the economic enrichment that carefully planned growth and development at the local level can provide to a sustained and vibrantly growing community.

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*This Practical Guide is directed toward local government officials and military base command and planning staffs who deal daily with issues of incompatible land use activity*

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**Part II** reviews the role of local government in community planning and its responsibility to act on a State’s delegated authority to wisely plan and accommodate a variety of land use activities within fiscal, planning, and time constraints.

It discusses the role of the comprehensive/general plan that empowers local cities and counties to plan for future growth and, in the process, regulate development and the use of land for the overall public good. It reviews property right issues and local governments’ constitutional right to undertake land use planning and institute corresponding regulations to direct the tone, content, and density of development and its impact on the ecology of the region.

**Part III** discusses the authority and roles that States play in seeking balance among competing ends while protecting the public health, safety, and welfare of all State residents. It describes the pivotal roles and responsibilities required to support economic development and to conserve State funds while recognizing the military presence as a viable, sustaining, and recession-proof industry providing local job opportunities and helping to sustain the surrounding communities. It also sets the framework for the local government to effectively plan and accommodate the continuing presence of this economic engine.

**Part IV** explores the role of the Federal Government in supporting compatible development near military installations as it relates to urban growth and development, local land use planning and zoning, Federal legislation, and the courts. It also discusses the means by which Federal agencies may interact with State and local governing bodies and the Federal programs that are available to support a “smart” planning posture on the part of State and local governments.

**Part V** presents case studies, samples of State and local land use codes and ordinances, and practical land use planning ideas and techniques that, if implemented, could create a more perfect and symbiotic relationship between DoD missions and the development goals of a host community.

The goal of this effort is to provide practical guidance to practitioners in the field of planning. It is designed to assist military personnel and military base commanders to conduct land use planning more effectively — one of the strongest tools available to achieve balance among competing ends.

The endnotes and appendix provide “hot links” to examples of existing State statutes and local codes and regulations that collectively comprise a planner’s toolkit of smart planning and land use regulatory practices and techniques. If applied wisely, these tools can promote compatible civilian development near military installations, airfields, and test and training ranges. The appendices also include examples of best-case applications.

**Editor’s Note:** *The “Web-based hot links” were operable as of April 2005. Beyond this date, no assurance is given as Web addresses often become out of date, change, or are discontinued.*

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*Land use  
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## ENDNOTES

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<sup>1</sup> Office of Economic Adjustment, Joint Land Use Study, Program Guidance Manual (2002), available at [http://www.oea.gov/OEAWeb.nsf/FD3D3C042BA4EC1285256E83004497AD/\\$File/JLUS%20program%20manual.pdf](http://www.oea.gov/OEAWeb.nsf/FD3D3C042BA4EC1285256E83004497AD/$File/JLUS%20program%20manual.pdf) For more information, visit the Office's Web site at <http://www.oea.gov>.

<sup>2</sup> Department of Defense, Base Structure Report – Fiscal Year 2004 Baseline, p. 11. available at [http://www.acq.osd.mil/ie/irm/irm\\_library/Base%20Structure%20Report%20FY%202004%20Baseline.pdf](http://www.acq.osd.mil/ie/irm/irm_library/Base%20Structure%20Report%20FY%202004%20Baseline.pdf).

<sup>3</sup> *Id.* Large military installations are defined as those installations whose total plant replacement value (PRV) is greater than or equal to \$1.53B. Medium installations are defined as those installations whose total PRV is less than \$1.553B and greater than or equal to \$828b. PRV is the cost to replace facilities using today's construction costs and standards, p. 2.

<sup>4</sup> David R. Godschalk, Smart Growth Efforts around the Nation, Popular Government (2000), available at <http://ncinfo.iog.unc.edu/pubs/electronicversions/pg/pgfal00/article2.pdf>.

<sup>5</sup> U.S. Bureau of the Census, Las Vegas, NV, Population Growth 1960-000, available at <http://www.census.gov/hhes/geo/data/totals/states/nv.html>.

<sup>6</sup> Headquarters U.S. Marine Corps, Land Use and Military Construction Branch (2005).

