

# SECTION 2



## *Study Area Profile*

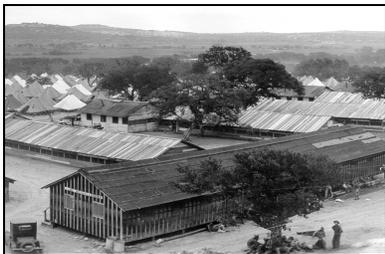
*This section provides important information about the military and civilian entities within the Camp Bullis Joint Land Use Study (JLUS) study area. The following section presents an overview of the history and current operations at Camp Bullis. Profiles and analyses of development trends and growth potential in the jurisdictions within the Camp Bullis JLUS study area are also provided.*

*Identifying and describing the activities performed on the military installation provides valuable insight into the importance of Camp Bullis as a national strategic asset. This information will enable stakeholders to make informed decisions about the future development and economic growth of their communities, which ultimately impacts the continued existence and future role of Camp Bullis. It also provides the military with a baseline understanding of the types of activities occurring outside the installation when considering future missions and operations.*

### **2.1 Camp Bullis**

#### History

In 1890, the Army Post at San Antonio was renamed Fort Sam Houston. At the time, it was one of the largest garrison sites for the United States (U.S.) Army, but lacked an adequate firing range and maneuver area. The Leon Springs Military Reservation was established on 17,273 acres, to the north of San Antonio, in 1906 and 1907. This site allowed for artillery firing. The facilities at Leon Springs Military Reservation were redesignated as Camp Stanley in 1917.



*The early years at Camp Bullis*

Established in 1917, Camp Bullis added 16,000 additional acres to the Leon Springs Military Reservation. The original purpose of Camp Bullis was to train soldiers when the threat of war in Europe was growing. The installation was named after Brigadier General John Lapham Bullis. John L. Bullis earned his reputation as a lieutenant who led the Seminole-Negro scouts in clashes against hostile Indians during the Indian Wars in the 1870's. Although no units were stationed at Camp Bullis during World War I, it provided small arms and rifle firing ranges, as well as maneuver areas for troops stationed at Fort Sam Houston, which did not have the capacity for large-area training. In total, the government owned and leased over 33,000 acres at the time. Following World War I, Camp Stanley was used primarily for storage and testing of ordnance materials, while Camp Bullis was used as a site for demobilization.

As the years passed, Camp Stanley and Camp Bullis became permanent fixtures for the Army and the installations were equipped with cantonment areas and new construction and development projects. The relocation of the old arsenal from downtown San Antonio to Camp Stanley in 1931, essentially stopped the use of the camp for soldier training. Meanwhile, improvements on Camp Bullis included a 10-bed infirmary, an officers' mess, vehicle sheds, a landing field, a post exchange, and a swimming pool, as well as improved firing ranges. It continued to be used by various units and groups as a training site through World War II.

During and following World War II, many changing medical needs in the Army brought several new activities and missions to Fort Sam Houston and Camp Bullis. New medical training missions were brought to Camp Bullis and the Brooke Army Medical Center was established at Fort Sam Houston. Training included basic training for Army nurses, combat obstacle courses for stretcher field training and combat medicine, as well as small arms. Camp Bullis was used for medical, combat, and security training throughout the Korean and Vietnam Wars. The Air Force Security Police Training Site, known as Victor Base, was built in 1977 and the Air Force was the largest single user of Camp Bullis until 1987. Since then, the Army has become the primary user of Camp Bullis as a military training site.

### Units

#### **Camp Bullis**

As the primary training site for Fort Sam Houston, Camp Bullis is under the control of the Commanding General of Fort Sam Houston, U.S. Army Medical Department Center & School (AMEDD C&S) (see Figure 2-1). Installation management for both Fort Sam Houston and Camp Bullis is provided by the U.S. Army Installation Management Command (IMCOM). Activated in October 2006, IMCOM is a single organization with six regional offices worldwide with the mission of overseeing all facets of installation management such as construction; barracks and family housing; family care; food management; environmental programs; well-being; soldier and family morale, welfare and recreation programs; logistics; public works and installation funding. Fort Sam Houston and Camp Bullis are part of IMCOM's West Region, which encompasses 14 states from the west coast to the Midwest.

As of June 2008, the Camp Bullis training site is the host for 745 personnel from the AMEDD C&S, other Active Army units, the Army Reserve, Texas Army National Guard, the U.S. Air Force, and other Department of Defense (DOD) units. Approximately 15 percent of the permanently assigned personnel are military (115) with the remaining 85 percent (630) comprised of DOD civilians, and contractors assigned to the Camp Bullis staff. The Camp Bullis staff performs the functions necessary to coordinate training operations, maintain the training site, and support the overall installation training mission.

The operation of Camp Bullis is under the command of the Fort Sam Houston Garrison Commander, located 21 miles to the southeast. However, according to the Camp Bullis Garrison Manager, Paul Dvorak, this relationship strives to be seamless, making the physical separation between Fort Sam Houston and Camp Bullis transparent. The personnel assigned to the various functions of the Camp Bullis staff are employees of their parent directorates based at Fort Sam Houston, but their place of duty is Camp Bullis with the Camp Bullis Garrison Manager maintaining operational control.

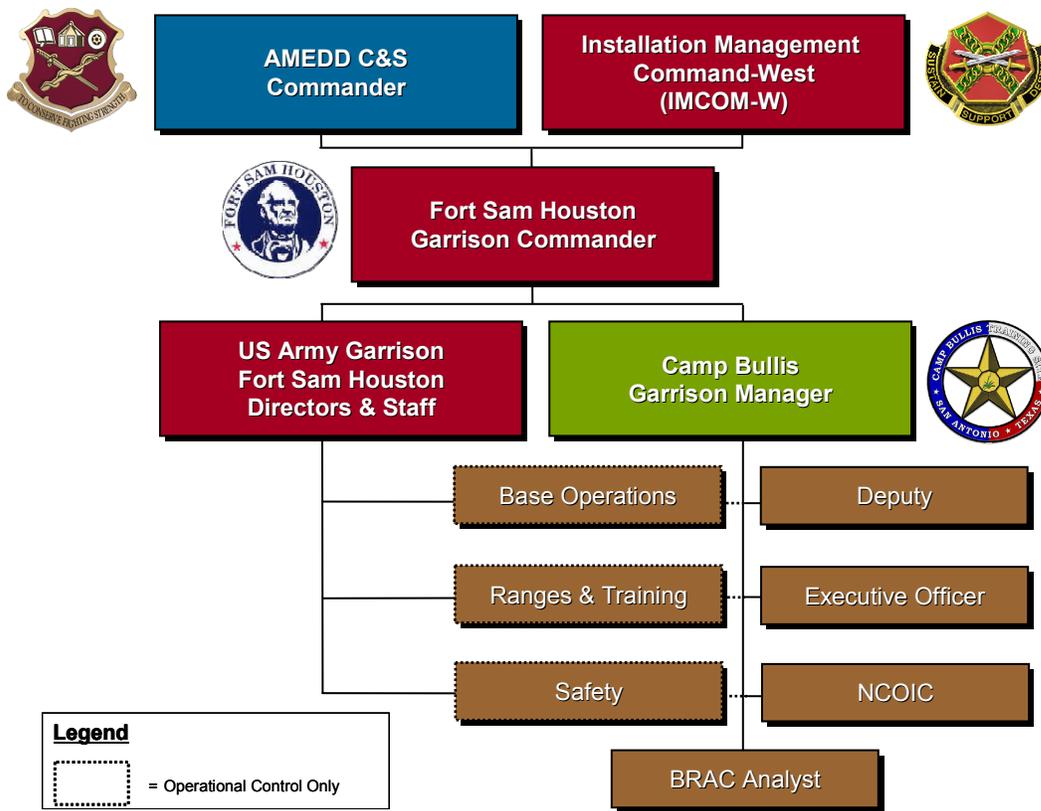


Figure 2-1. Camp Bullis Organization Chart

**Fort Sam Houston**

Fort Sam Houston’s major units include the following:

**Headquarters, U.S. 5th Army**

The U.S. 5<sup>th</sup> Army is headquartered in the historic Quadrangle at Fort Sam Houston, Texas, in San Antonio, with the majority of its personnel forward deployed throughout its 21-state area of responsibility. The command's mission is to assist, evaluate and synchronize all training support activities of Reserve Component (RC) units located west of the Mississippi (excluding Minnesota). The command also plans for and coordinates Military Support to Civil Authorities (MSCA).

**U.S. Army 5th Recruiting Brigade**

The Brigade's mission is to recruit with integrity the high quality men and women necessary to meet the needs of the U.S. Army and Army Reserve, including Army Medical Department (AMEDD), Chaplains, Officer Candidates, Warrant Officer Flight Candidates, and Technical Warrant Officers (USAR).

**Headquarters, U.S. 6th Army**

The U.S. 6<sup>th</sup> Army is the Army Service Component of the U.S. Southern Command and is in charge of all Army operations within the Command’s 26 million square mile area of operations, which includes Central

America, South America, and the Caribbean. Its mission is to conduct Operations and Theater Security Cooperation to detect, deter, and disrupt transnational threats to protect the United States.

#### ***Brooke Army Medical Center (BAMC)***

Brooke Army Medical Center serves a regional mission as one of only five Army Medical Centers providing regional integration, specialty supervision and Army command and control of health care operations. BAMC oversees the Great Plains Health Care Support area, which encompasses 14 states and Panama.

#### ***U.S. Army Medical Department Center & School (AMEDD C&S)***

Occupying more than 300 buildings in its complex at Fort Sam Houston, the AMEDD C&S is the largest health care training center in the world. Its primary mission is to train and educate Army medical department officers and enlisted personnel.

#### ***U.S. Army Medical Command (MEDCOM)***

The MEDCOM provides the Surgeon General with direct command authority, for the first time, over all Army medical activities and operations in the U.S. and Europe, except field medical units.

#### ***U.S. Army Garrison (USAG)***

The USAG missions include command and support of assigned and attached U.S. Army Force Command (FORSCOM) activities. It also provides base operation support and other support (i.e., information systems, security programs, motor pool, contracting, legal services, and civilian personnel services) to Department of the Army, DOD, and other government activities, which are tenants on, supported by, or satellites of the installation. The USAG also develops, establishes and conducts Morale Support Activities programs.

#### ***U.S. Army Center Brigade***

The Center Brigade provides the U.S. Army with trained and ready medical soldiers capable of sustaining the force and surviving on the battlefield.

#### ***470<sup>th</sup> Military Intelligence (MI) Brigade***

The 470<sup>th</sup> MI Brigade provides the U.S. Army South, the U.S. Southern Command, and other national intelligence agencies with intelligence support. It is comprised of the 14<sup>th</sup> MI Battalion (human intelligence operations), the 204<sup>th</sup> MI Battalion (aerial exploitation), the 314<sup>th</sup> MI Battalion, the 377<sup>th</sup> MI Battalion (communications and electronic battalion), and the 201<sup>st</sup> MI Battalion (interrogation).

## ***2.2 Current Mission – Operations***

### ***Camp Bullis***

The official mission statement of Camp Bullis is “To provide an unparalleled training infrastructure offering quality range, training facilities, and maneuver areas that facilitate tough, realistic training for military and government agencies.”

Camp Bullis currently supports training for several branches of the military, including the U.S. Army, Air Force, and the National Guard, as well as for other federal and local agencies, such as the U.S. Secret Service, U.S. Marshals Service, and the San Antonio Police Department. It supports a wide range of

training operations including small arms and large caliber firing ranges, simulation facilities, maneuver areas, combat medicine, and combat air-drop training. According to the Draft Environmental Assessment (EA) for the Camp Bullis Reserve Center, the installation supported 705,309 person-days of training in Fiscal Year (FY) 2005, with a daily average of 1,932. In FY08, 150,852 personnel were trained at Camp Bullis. The anticipated growth of personnel (in response to Base Realignment and Closure [BRAC]), Army Modular Force [AMF], and other activities) are expected to increase these training numbers to reach 1,000,000 person-days annually and a 2,740 daily average.

To support its training mission, Camp Bullis' nearly 22,000 acres of training and maneuver areas occupy the vast majority of the installation's land. A small cantonment area is located in the southwestern portion of the installation near the Camp Bullis entrance and Interstate 10 (I-10) with facilities and personnel to support permanently assigned and training populations.



U.S. Air Force C-130 on assault strip

Camp Bullis currently has one airfield, the Combat Assault Landing Strip (CALs), which was constructed in 1982. The CALs is used primarily by Air Force C-130 Hercules aircraft, but is also capable of supporting the C-17 Globemaster. These fixed-wing aircraft use the CALs to practice combat assault operations, landings under simulated tactical conditions, loading troops, and deploying them over designated flight paths inside the confines of Camp Bullis. The Camp Bullis CALs is the only certified combat assault landing strip in the state of Texas. In 2008, there were a total of 20 flight operations using the Camp Bullis CALs. This number is limited due to the extensive coordination needed for crash fire rescue support. Because Fort Sam Houston/Camp Bullis does not currently maintain the crash fire rescue equipment required to support C-130 landings at the Camp Bullis CALs, the only crash fire rescue equipment/crew that will provide support is the Air Force crew at Randolph Air Force Base (AFB). The number of CALs operations could reportedly double if the Fort Sam Houston Fire Department obtains the needed equipment.

Located in the far northeastern portion of Camp Bullis, the CALs is in close proximity to the installation's northern and eastern fence lines. Except for a very small portion near the northeast end of the airstrip, the majority of the C-130 noise contours are contained within the installation's boundary. Noise contours for the C-17 extend outside of the Camp Bullis boundaries approximately two miles to the east over land that is currently undeveloped. The C-17's 60 A-weighted day-night sound level (ADNL) noise contours extend over eight miles north of the installation over land that is zoned industrial or is undeveloped, according to the City of San Antonio. (See the discussion and maps in Section 3, Compatibility Factor 7, Noise, for additional information.)

There also exists a gas line approximately 400 yards north of the CALs. This gas line is buried several feet underground and is not located within any of the existing clear zones or accident potential zones associated with the airstrip. These areas are zones determined and designated to be at the most risk for accidents involving aircraft operations at the runway. As such, current CALs operations do not pose a threat to public health or safety in relation to the placement of this gas line.

The Army has investigated the possibility of relocating the CALs to another part of Camp Bullis, where it would not be as close to the boundary and be less of an issue for public concerns, however it was determined not to be feasible to move it elsewhere. Much of the middle portion of Camp Bullis is

composed of hilly terrain, which would hinder development of a flat runway as well as cause potential safety issues. Furthermore, the flight tracks for San Antonio International Airport are in the way of a move south. The southern third of Camp Bullis contains the 6,000 acre “no fly” impact area where the firing ranges are located. This area also contains many hills, several flood control dams, and low flood prone valleys that lead into them.

The primary rotary-wing aircraft used at Camp Bullis for flight training and air-drop operations is the UH-60 Blackhawk helicopter. Helicopter flights operating on Camp Bullis originate primarily from Martindale Army Airfield located southeast of Fort Sam Houston. There are four designated points for helicopters to enter and exit Camp Bullis airspace – the northwest corner near the City of Fair Oaks Ranch (County Line Road – West), the northeast corner along Blanco Road (County Line Road – East), the south-central boundary southeast of the cantonment area (Military Highway), and the southwestern corner just west of the cantonment area (Bullis Road). Within the Camp Bullis boundaries, there are 29 medical evacuation landing zones (LZ), which are located at key locations across the training area. Helicopter missions occur in both daytime and nighttime and include nap of the earth (NOE) (low-level) flights, point-to-point flights, and combat air-drops of paratroopers. The NOE flight corridor extends from the cantonment area north along the installation’s west boundary, along the north boundary, and south along the east boundary to the northern extent of the impact area/no fly zone. The NOE noise buffers extend outside of Camp Bullis as well as the extreme southern portion of the air drop flight corridor (see the discussion and maps in Section 3, Compatibility Factor 7, Noise, for additional information).



Army UH-60 conducting night training

Another important facet of training at Camp Bullis is the use of night vision devices (NVD). Electronic night vision tools allow near-daylight operations in complete darkness. Night vision capabilities currently make it possible for U.S. forces to operate with less risk at night when the enemy is visually impaired. To remain proficient in using NVDs during combat operations, the U.S. military (aviators and ground-based personnel) must train with the devices in situations that closely resemble the combat environment so that they can be prepared for ever changing war-time conditions.



Army helicopter pilot wearing NVD

Helicopter pilots supporting Camp Bullis training missions use light-amplifying night vision goggles, which are electro-optical devices that intensify (or amplify) existing light instead of relying on an internal light source. The devices are sensitive to a broad spectrum of light, from visible through infrared. Thus, any amount of on or off-installation light pollution degrades NVD effectiveness and can blind the NVD user. Troops operating on the ground also use light-amplifying monocular or binocular NVDs that may be worn on the head/helmet, held in the hands, or mounted on a weapon.

Fort Sam Houston and Camp Bullis provide premier medical training installations for the Army. Fort Sam Houston is known as the “Home of Army Medicine” and “Home of the Combat Medic.” While Fort Sam Houston includes the AMEDD C&S, which trains over 26,000 students per year, Camp Bullis provides the field training and ranges that are unable to be accommodated on Fort Sam Houston due to size constraints. Fort Sam Houston includes many other medical educational facilities including the Brooke Army Medical Center, the Great Plains Regional Medical Command, Headquarters Dental Command, Headquarters Veterinary Command, the Institute for Surgical Research, the Defense Medical Readiness Training Institute, and the Army Medical Department NCO Academy.

### Lackland Air Force Base (AFB)

Lackland AFB is considered the "Gateway to the Air Force" providing basic training to all Air Force enlisted personnel and joint services training for the Air Force, Army, Navy, and Marines. The installation and the 37th Training Wing (37 TRW) conduct the Air Force's only enlisted recruit training program, ensuring an orderly transition from civilian to military life. Over 86,000 recruits are trained annually in the fundamental skills necessary to be successful in an Expeditionary Air Force. This includes basic war skills, military discipline, physical fitness, drill and ceremonies, Air Force core values and a comprehensive range of subjects relating to Air Force life.



USAF Basic Training at Lackland AFB

Over 120 units call Lackland AFB home. Of those units, 36 are assigned to the 37 TRW and another 22 comprise Air Force Reserve Command's (AFRC) 433d Airlift Wing (433 AW). Additionally, 18 Air Combat Command (ACC) units are stationed at Lackland under the Air Force Intelligence, Surveillance, and Reconnaissance Agency and the 67th Network Warfare Wing. The remaining units at Lackland are part of the 59th Medical Wing, the Texas Air National Guard's 149th Fighter Wing, and other tenant units, agencies, centers, and battlelabs.

## 2.3 Future Mission – Operations



Medical training at Camp Bullis

The 2005 BRAC Committee Report was publicly released on May 13, 2005, and became law on November 9, 2005. All BRAC actions must be completed by September 15, 2011. The BRAC Committee presented a number of recommendations that impact the San Antonio metropolitan area. Many of these changes are related to the missions performed at Fort Sam Houston/Camp Bullis, Lackland AFB, Randolph AFB, and Brooks City-Base. The BRAC 2005 requirement for Fort Sam Houston entails consolidating medical enlisted personnel training at the installation to create the world's largest medical education and training institution. The BRAC consolidation includes training currently conducted by the AMEDD C&S; the Navy Corps School in Great Lakes, Illinois;

the Navy School of Health Science in San Diego, California; the Navy School of Health Science in Portsmouth, Virginia; and the 882d Training Group at Sheppard AFB, Texas. The Navy medical training to

relocate to Fort Sam Houston brings an average daily student load of 2,700 students, a maximum student load of 3,032 students, and another 29 courses of which 11 are inter-service. The Air Force training to move to Fort Sam Houston includes an average daily student load of 1,667 students, a maximum student load of 2,375 students, and another 73 courses of which 13 are inter-service. The 2005 BRAC Joint Basing results in the transfer of property and installation support responsibility from the Army to the Air Force. This applies to both Fort Sam Houston and Camp Bullis. Full implementation will occur on 1 October 2010.



Artist's rendering of the Camp Bullis Armed Forces Reserve Center

Numerous facilities are under construction, in design, or under consideration for Camp Bullis. These include new and improved ranges to support enhanced missions, a new medical clinic, a Medical Education

Training Campus (METC) Field Site, and an Armed Forces Reserve Center (AFRC). The METC will be located in the Camp Bullis training area north of the cantonment area. It is projected to contain approximately 19 buildings on 125 acres. The buildings include classrooms, dormitories, dining facilities, administration, a warehouse, and other support structures. The Armed Forces Reserve Center is a BRAC--related military construction (MILCON) project located in the Camp Bullis cantonment area. This facility is scheduled to support 19 National Guard and Army Reserve units (approximately 1,200 drilling soldiers) and is to have a staff of over 70 people.

## 2.4 Installation Setting

Camp Bullis and Camp Stanley are contiguous Army facilities located approximately 21 miles northeast of downtown San Antonio. They were once managed as one installation, known as the Leon Springs Military Reservation; however, they are now separate facilities, each with their own mission and managed by separate commands (see Figure 2-2). Camp Stanley is not a field training facility; rather, it is a weapons and munitions supply, maintenance, test, and storage facility. The site includes 4,000 acres with 630,000 square feet of storage space and supports many military activities. Camp Stanley's workforce has no active duty military personnel, so is supported by civil service employees and contractors. Camp Stanley has industrial buildings, ammunition storage structures, and small arms ranges to facilitate weapons and ammunition testing for quality assurance purposes. Since the facilities and mission at Camp Stanley are so different than those of Camp Bullis, encroachment affects it

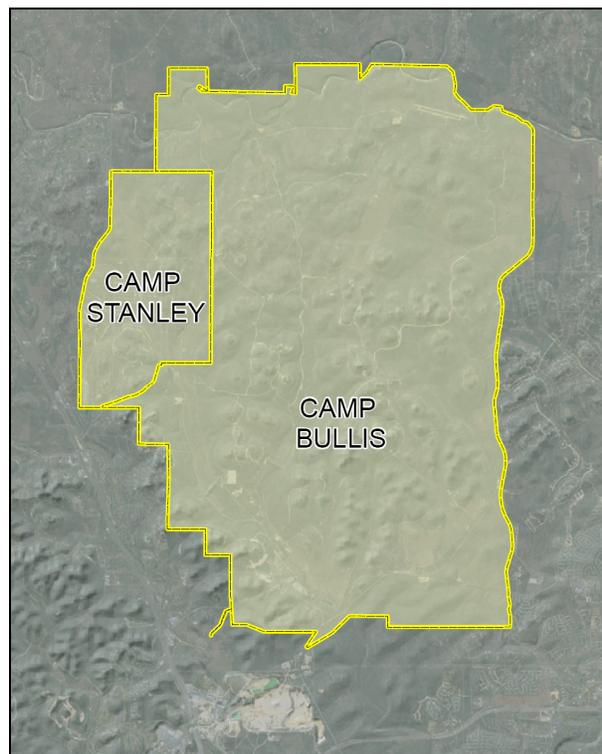


Figure 2-2. Camp Bullis and Camp Stanley Location

quite differently. For this reason, Camp Stanley is generally omitted from this JLUS analysis. However, the land area occupied by Camp Stanley has been included on all maps in relation to Camp Bullis for the purposes of this JLUS.

Camp Bullis is comprised of approximately 28,000 acres and is located about 21 miles northwest of Fort Sam Houston. It is generally bounded by I-10 to the west, Farm-to-Market Road 2696/Blanco Road to the east, Loop 1604 to the south, and West Ammann Road to the north. It is situated on the edge of the Edwards Plateau Land Resource Area in a hilly region known as the Texas Hill Country and locally called the Balcones Canyonlands. Camp Bullis is used for firing ranges, maneuver areas for Army, Air Force, and Marine combat units, and for field training of the various medical units from Fort Sam Houston.

Camp Bullis has two primary areas – a cantonment area and the training/maneuver area. The cantonment area contains the majority of the installation's 362 buildings. The facilities in the cantonment area support administrative and industrial uses. The training area includes 26 field training areas, 14 direct fire ranges (largest caliber is 7.62mm), two automated rifle ranges, one automated pistol range, a live-fire convoy range, grenade launcher range, demolition range, land navigation areas, leader reaction courses, rappel towers, obstacle courses, multiple landing zones for helicopters, and four drop zones (three for cargo and one for personnel). Figure 2-3 illustrates Camp Bullis' training and cantonment areas.

## 2.5 Installation Demographics

As a DOD training site, Camp Bullis maintains staff levels to plan and conduct training, provide installation support, and to properly maintain the installation's assets. As of 10 October 2008, the full-time personnel strength reported for Camp Bullis was 745 people. This includes 115 installation staff, 158 Active Duty Army, 169 AMEDD C&S personnel, 84 Army Reserve, 51 Texas Army National Guard, 88 Air Force, and 80 others assigned to various tenant units. The most recent forecast would add nearly 180 people to current Camp Bullis staffing as a result of BRAC mission increases to Fort Sam Houston and the training area. The number of personnel at Camp Bullis for training varies depending on the needs of the DOD; however, the total personnel trained in FY08 were nearly 151,000 people. Table 2-1 summarizes the personnel trained in FY08.

The total 2007 population for Fort Sam Houston (including employment, students, and dependents) was 56,789 persons. The overall population is expected to increase by over 12,000 people (due to BRAC and AMF initiatives/realignment plans and other moves) although the exact number of additional personnel destined for the installation remains fluid. The installation will receive additional medical training functions, research functions, medical care functions, Reserve/National Guard facilities, and major headquarters. Although the exact number may change prior to execution of the pending changes, there is an anticipated increase of approximately 10,200 personnel related to BRAC.

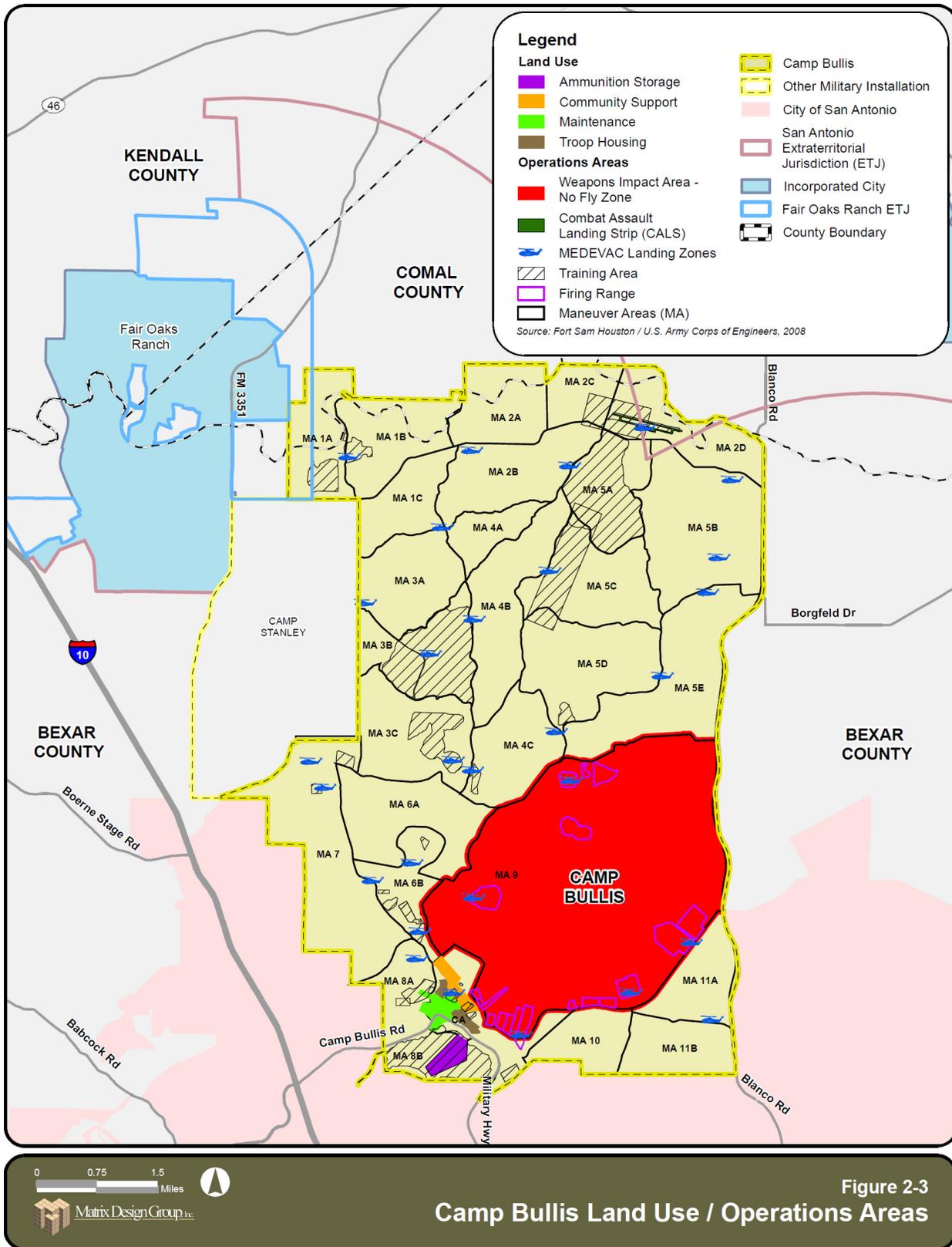


Table 2-1. Transient Personnel, Camp Bullis FYo8

	AMEDD C&S	Active Army	Army Reserve	Texas Army National Guard	Air Force	Other DOD	Other Non- DOD	Total
<b>2007</b>								
October	8,333	279	220	350	2,024	579	1,682	13,467
November	9,699	616	1,045	780	2,101	464	935	15,640
December	3,305	169	45	15	1,400	72	407	5,413
<b>2008</b>								
January	5,721	182	699	427	1,457	242	467	9,195
February	6,126	271	1,250	1,095	1,779	500	637	11,658
March	5,479	401	1,163	1,060	1,520	513	831	10,967
April	10,171	383	1,011	697	1,837	681	1,179	15,959
May	7,409	355	1,088	555	1,531	212	763	11,913
June	10,768	521	175	720	1,528	175	2,097	15,984
July	6,555	327	305	834	1,892	167	225	10,305
August	10,741	325	1,443	974	1,894	137	425	15,939
September	9,732	322	1,031	641	1,882	255	549	14,412
<b>FY Total</b>	<b>94,039</b>	<b>4,151</b>	<b>9,475</b>	<b>8,148</b>	<b>20,845</b>	<b>3,997</b>	<b>10,197</b>	<b>150,852</b>

Source: Phil Morgan, BRAC Analyst, Headquarters, Camp Bullis, 5 January 2009

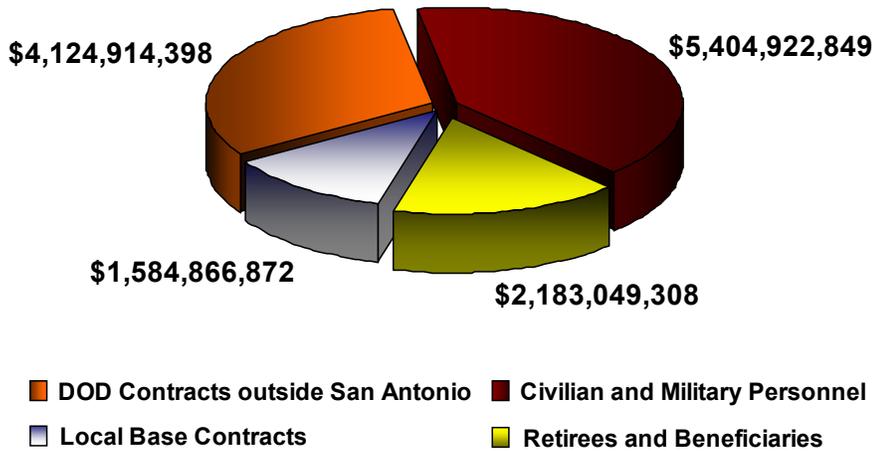
## 2.6 Installation Economic Impact

In 2006, the City of San Antonio Economic Development Department conducted an analysis of the economic impacts of the DOD on the City. This study determined that the economic impact from the DOD, which includes Camp Bullis and Fort Sam Houston, on San Antonio and the surrounding region was significant. In 2006, the DOD was the largest generator of employment in the San Antonio metropolitan area, supporting the employment of 195,075 people including direct, indirect and induced jobs. Employment at the local military bases was estimated to be 68,659, comprised of 44,255 military personnel and 24,404 civilian personnel. The total economic impact of the DOD in San Antonio was over \$13.3 billion in 2006 which includes \$2,183,049,308 in retiree / beneficiary income. This impact is summarized as follows and is illustrated on Figure 2-4:

- Civilian and Military Personnel - \$5,404,922,849
- Retirees and Beneficiaries - \$2,183,049,308
- DOD Contracts - \$5,709,781,270
  - Local Base Contracts – \$1,584,866,872
  - DOD Contracts outside San Antonio – \$4,124,914,398

The 2006 study concluded that the economic activities of the DOD in San Antonio produced the additional benefit of providing diversity and stability to the local economy, as well as a rich source of highly skilled labor. Additionally, the military in San Antonio provides many other non-economic benefits to the local community, such as the world class medical care provided by the military health care facilities at Lackland AFB and Fort Sam Houston, which serves many San Antonio citizens.

According to City Economic Development Department's 2006 economic impact study, the future economic impact on the City (resulting from BRAC activities) would be significant. The study identified



**Figure 2-4. Economic Impact of DOD in San Antonio**

that BRAC activities scheduled to take place by September 2011, “could arguably be one of the largest economic development projects the city has ever seen.”

The projected economic impact of BRAC through 2011 is \$5,652,821,961, most of which will result from BRAC-related construction activities. Spending by new personnel will produce an impact of about \$488,658,075, and the impact from the new operations is estimated to be \$132,505,886 once they begin. The economic impact generated by the 9,000 military students that will flow through San Antonio annually were not part of the projections identified above; however, spending by these personnel is anticipated to increase the projected economic benefits.

Employment resulting from the new operations is anticipated to increase by another 4,886 direct jobs, and the spending of these new personnel will support an additional 4,853 jobs. Additionally, the spending from the new operations will support another 1,363 jobs. The employment resulting from the construction period through 2011 is estimated to contribute 46,339 jobs. This does not mean that 46,339 new jobs will be created from the construction activity, but rather, the activity will support this number of full-time equivalent positions over the period of the construction. Table 2-2 provides a summary of the projected economic impacts to San Antonio through 2011 in the categories of Economic, Employment, and Earnings.

**Table 2-2. BRAC-Related Economic Impacts to San Antonio through 2011**

	Economic Impact	Employment Impact	Earnings Impact
New Personnel	N/A	4,886	\$324,876,979
New Personnel Spending	\$488,658,075	4,853	\$148,289,119
Construction	\$5,031,658,000	46,339	\$1,656,364,000
Operations	\$132,505,886	1,363	\$45,098,471
<b>Total</b>	<b>\$5,652,821,961</b>	<b>57,411</b>	<b>\$2,174,628,569</b>

Source: Economic Impact of the U.S. Department of Defense in San Antonio: 2006, San Antonio Economic Development Department

## 2.7 Military Housing

### Camp Bullis

#### On Base Family Housing

Camp Bullis has no family housing located within the installation for permanently assigned personnel. Assigned personnel reside either in Fort Sam Houston family housing or in the local communities. There are, however, 127 huts (1,524 beds total) for use by personnel training at the Camp. These are used approximately 310 days per year.

### Fort Sam Houston

#### On Base Family Housing

The installation's on-post family housing was privatized in March 2005 under the Residential Communities Initiative (RCI). Under this initiative, Fort Sam Houston and Lincoln Military Housing entered into a 50-year partnership for the management of the installation's family housing assets. Table 2-3 provides an overview of family housing assets at Fort Sam Houston, and Table 2-4 provides a distribution of housing usage by rank as of June 2008.

**Table 2-3. On-Base Family Housing Inventory by Location**

Housing Area Location	Total Inventory
Staff Post	15
Infantry	69
Artillery Post/Hancock	54
Wheaton/Graham Dickman	141
Gorgas	15
Harris Heights	181
Patch/Chaffee	200
Watkins Terrace	250
<b>Total</b>	<b>925</b>

Source: Fort Sam Houston Real Property Master Plan, undated

**Table 2-4. On-Base Family Housing Inventory by Rank (Fort Sam Houston)**

Rank	2 Bedroom Units	3 Bedroom Units	4 Bedroom Units	5 Bedroom Units	Total Inventory
Officer	15	160	94	0	269
Enlisted	72	339	227	18	656
<b>Total</b>	<b>87</b>	<b>499</b>	<b>321</b>	<b>18</b>	<b>925</b>

Source: Allyson McKay, Operations Director, Lincoln Military Housing, 25 June 2008

According to the Lincoln Military Housing Operations Director, the pending BRAC changes at Fort Sam Houston have not resulted in any plans to increase the overall number of family housing units on the installation from the current number of 925.

As planned at the inception of privatization, renovations will occur to 140 units in Patch/Chaffee and Artillery Post housing areas to revert the layouts back to their historic floor plans. This will include

renovating some 3-bedroom units into 2-bedrooms and renovating 5-bedroom units into 4-bedrooms. Completion of these renovations is scheduled for 2010.

### Army Lodging

Army lodging at Fort Sam Houston consists of nine buildings offering a total of 706 spaces. Six of the buildings have less than 20 spaces each, and the remaining three buildings have between 150 and 300 spaces.

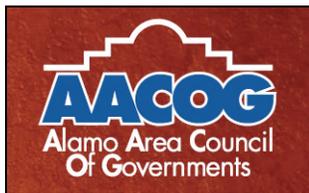
There is a proposed project to construct a new 690-room hotel in either a one or four building complex. The preferred project by the installation is a single facility located north of the existing Post Exchange (PX). The project site is bordered by Allen Road to the south, Funston Road to the east, Schofield Road to the north, and Scott Road to the west.

## 2.8 Study Area Profile and Growth Trends

The Camp Bullis JLUS involves the jurisdictions of Bexar County, Comal County, and Kendall County, as well as the City of Boerne, the City of Bulverde, the City of Fair Oaks Ranch, the Town of Hollywood Park, the City of Hill Country Village, and portions of the City of San Antonio. The JLUS study area is delineated according to the various compatibility issues identified during the JLUS process. For example, the focus area for light pollution extends five miles from the installation's perimeter, while the area of focus for threatened and endangered species is irregularly shaped according to the locations of the identified species and their habitats.

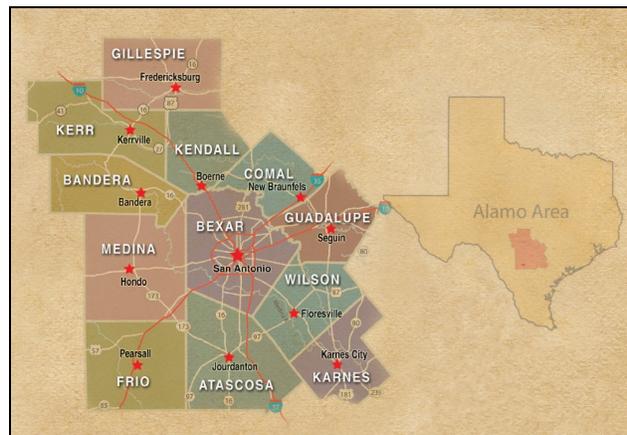
### Study Area Overview

#### Alamo Area Council of Governments



Based in San Antonio, the Alamo Area Council of Governments (AACOG) is a voluntary association of cities, counties, and special governmental districts. AACOG serves the Alamo Area/State Planning Region 18, which covers 11,354 square miles and the 12 counties of Atascosa, Bandera, Bexar, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, Medina, and Wilson.

Local governments organized AACOG as a regional planning commission in 1968 under Chapter 391, Local Government Code. Defined as a political subdivision of the state, AACOG serves as a centralized staff for planning, research, information distribution, and coordination of activities for the twelve regions and membership organizations. AACOG is a clearinghouse for state and federal funding, and it provides technical assistance and administration of funds for local, state, or federal grant fund proposers and recipients. Although AACOG can plan, assist local governments, and deliver public services, it has no power to tax or to regulate. State law requires that the governmental body of AACOG be composed primarily of local government officials.



AACOG Member Counties

Source: 2008 AACOG Annual Report

The AACOG is a member of the Texas Association of Regional Councils. The Texas Association of Regional Councils (TARC) is a state organization composed of Texas' 24 regional councils of governments. Regional councils of governments are voluntary associations of local governments formed under Texas law. These associations address the issues and planning needs that cross the boundaries of individual local governments or are concerns that require regional attention.

### Study Area Trends

#### Population

There are two different entities in the State of Texas that provide population statistics for the state, counties, and cities. These two agencies are the Texas State Data Center (TXSDC) and the Texas Water Development Board (TWDB). Each of these two agencies uses different methods to calculate their population projections and estimates. Thus, they provide population data that varies from one another, and sometimes even from U.S. Census data. Neither one of these entities is necessarily more accurate than the other, and so it is important to consider data from both sources when analyzing population trends in the study area. The following population estimates and analysis shown in Table 2-5, TXSDC data was used since it is based on post-2000 U.S. Census data and other enhanced data bases.

**Table 2-5. Existing Regional Population Estimate (2000–2008)**

Location	2000 Population	2008 Population <sup>1</sup>	Number Change	Percent Change
Texas	20,851,820	23,614,468	3,253,597	15.6%
Atascosa County	38,628	45,004	4,784	12.4%
Bandera County	17,645	20,814	2,241	12.7%
Bexar County	1,392,931	1,528,964	200,928	14.4%
Comal County	78,021	93,698	30,149	38.6%
Guadalupe County	89,023	103,404	30,061	33.8%
Kendall County	23,743	28,575	8,731	36.8%
Medina County	39,304	45,719	4,803	12.2%
Wilson County	32,408	38,916	8,942	27.6%
<b>TOTAL (All Counties)</b>	<b>1,711,703</b>	<b>1,905,094</b>	<b>290,639</b>	<b>17.0%</b>
<b>TOTAL (Study Area)</b>	<b>1,494,695</b>	<b>1,651,237</b>	<b>239,808</b>	<b>16.0%</b>

Note: 1) Scenario 0.5 used. TXSDC states 'From our analyses of these projection scenarios, we believe that the 0.5 scenario is the most appropriate scenario for most counties for use in long-term planning.

Source: Texas State Data Center (<http://txsdc.utsa.edu/tpepp/txpopest.php>)

#### Population – Counties

The three counties included in the study area have experienced differing amounts of growth over the last couple of decades. Between the years 1990 to 2000, Bexar County had the lowest rate of growth of the three with 1.8 percent annually, which was lower than the overall State's rate of 2.3 percent annually. Comparatively, Comal County and Kendall County experienced annual growth rates of 5.0 percent and 6.3 percent, respectively.

Over the past several years, all three counties have continued to grow but at lower annual rates. Between the years of 2000 and 2008, Bexar County maintained a slightly lower annual growth rate of 1.2 percent, while Comal and Kendall counties both declined with a rate of 2.3 percent each. In comparison, the State of Texas had a 1.6 percent annual increase over that same eight-year period.

Both the TXSDC and the TWDB anticipate that continued growth will occur in the three counties that comprise the study area. Currently, Comal and Kendall Counties have the potential to capture a larger percentage of growth, due to the fact that they have a significantly smaller population than Bexar County. Therefore, although Bexar County continues to grow and will continue to exhibit a larger population than the other two counties, its annual percentage of growth will be smaller, even though it will gain more people.

In the case of the three counties that are part of the study area, the TWDB tends to project greater population increases than the TXSDC, due to the different methodologies used to calculate the data. The benefit of these differing forecasts is that they provide a range of potential growth, rather than absolute numbers given any small-area forecast that extends beyond a few years. Table 2-6 provides a side-by-side comparison of the TXSDC and TWDB population forecasts. Figure 2-5 illustrates the counties' growth change trends compared to the overall population change trends of the State Texas (as shown by the orange line).

**Table 2-6. Long Range Regional Population Forecast**

Location	2000			2010		
	TXSDC	TWDB	Difference	TXSDC	TWDB	Difference
Texas	20,851,820	20,851,790	30	24,330,612	24,915,388	-584,776
Atascosa County	38,628	38,628	0	46,704	45,504	1,200
Bandera County	17,645	17,645	0	21,691	26,373	-4,682
Bexar County	1,392,931	1,392,931	0	1,560,695	1,631,935	-71,240
Comal County	78,021	78,021	0	97,985	108,219	-10,234
Guadalupe County	89,023	89,023	0	107,298	114,878	-7,580
Kendall County	23,743	23,743	0	29,937	35,720	-5,783
Medina County	39,304	39,304	0	47,488	46,675	813
Wilson County	32,408	32,408	0	40,684	44,078	-3,394
<b>TOTAL (All Counties)</b>	<b>1,711,703</b>	<b>1,711,703</b>	<b>0</b>	<b>1,952,482</b>	<b>2,053,382</b>	<b>-100,900</b>
<b>TOTAL (Study Area)</b>	<b>1,494,695</b>	<b>1,494,695</b>	<b>0</b>	<b>1,688,617</b>	<b>1,775,874</b>	<b>-87,257</b>

Table 2-6. Long Range Regional Population Forecast (continued)

Location	2020			2030		
	TXSDC	TWDB	Difference	TXSDC	TWDB	Difference
Texas	28,005,788	29,117,537	-1,111,749	31,830,589	33,052,506	-1,221,917
Atascosa County	55,448	52,945	2,503	63,621	59,598	4,023
Bandera County	26,122	37,265	-11,143	30,216	48,577	-18,361
Bexar County	1,702,693	1,857,745	-155,052	1,811,435	2,059,112	-247,677
Comal County	121,438	146,868	25,430	145,494	190,873	-45,379
Guadalupe County	127,934	146,511	-18,577	147,487	180,725	-33,238
Kendall County	37,313	50,283	-12,970	44,420	65,752	-21,332
Medina County	56,541	54,815	1,726	65,158	62,416	2,742
Wilson County	50,641	58,621	-7,980	60,668	74,641	-13,973
<b>TOTAL (All Counties)</b>	<b>2,178,130</b>	<b>2,405,053</b>	<b>-226,923</b>	<b>2,368,499</b>	<b>2,741,694</b>	<b>-373,195</b>
<b>TOTAL (Study Area)</b>	<b>1,861,444</b>	<b>2,054,896</b>	<b>193,452</b>	<b>2,001,349</b>	<b>2,315,737</b>	<b>314,388</b>

Location	2040			Change 2000 - 2040		
	TXSDC	TWDB	Difference	TXSDC	TWDB	Difference
Texas	35,761,201	36,893,267	-1,132,066	72%	77%	-5%
Atascosa County	70,600	64,844	5,756	83%	68%	15%
Bandera County	33,680	54,829	-21,149	91%	211%	-120%
Bexar County	1,882,349	2,222,887	-340,538	35%	60%	-24%
Comal County	167,802	233,964	-66,162	115%	200%	-85%
Guadalupe County	164,216	214,912	-50,696	84%	141%	-57%
Kendall County	50,763	78,690	-27,927	114%	231%	-118%
Medina County	72,778	68,987	3,791	85%	76%	10%
Wilson County	69,833	90,187	-20,354	115%	178%	-63%
<b>TOTAL All Counties</b>	<b>2,512,021</b>	<b>3,029,300</b>	<b>-517,279</b>	<b>47%</b>	<b>77%</b>	<b>-30%</b>
<b>TOTAL (Study Area)</b>	<b>2,100,914</b>	<b>2,535,541</b>	<b>434,627</b>	<b>41%</b>	<b>70%</b>	<b>-29%</b>

Note: 1) TXSDC = Texas State Data Center; TWDB = Texas Water Development Board; 2) TXSDC numbers from Migration Scenario 0.5.

Source: [http://txsdc.utsa.edu/tpepp/2006projections/csv\\_county.php](http://txsdc.utsa.edu/tpepp/2006projections/csv_county.php); <http://www.twdb.state.tx.us/wrpi/data/popproj.htm>; and Matrix Design Group

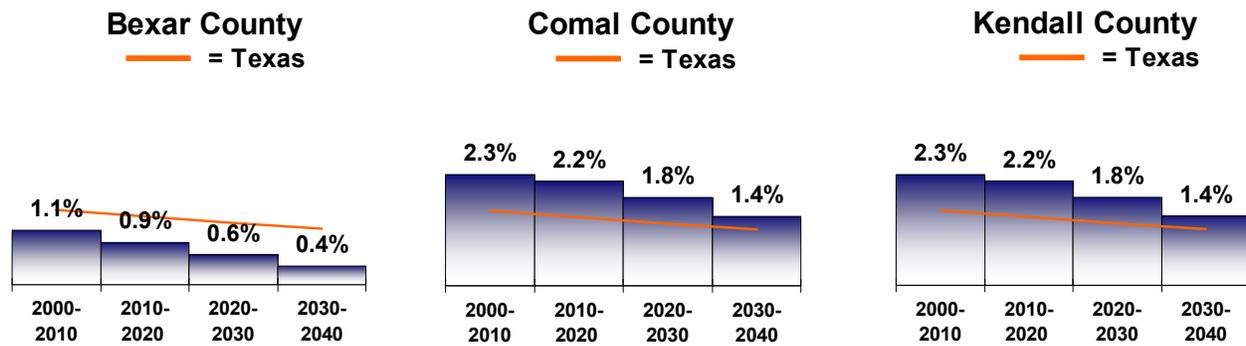


Figure 2-5. Population Change Trends - Counties

**Population – Cities**

Exhibiting a year 2008 population of more than 1.3 million, the City of San Antonio exceeded the U.S. population growth for the period 2000 through 2008 by almost double. The growth rate is slightly larger than the State of Texas’ 15.6 percent increase during this eight year period, and San Antonio’s rate was slightly higher than Bexar County’s rate of 14.4 percent. Of the five cities within the study area, Shavano Park had the highest year 2000 to 2008 percentage increase of 78.2 percent, and Hill Country Village had the lowest growth rate, with only a 5.4 percent increase. Table 2-7 provides an overview of the population estimates in the areas surrounding San Antonio, Camp Bullis, and Fort Sam Houston.

Table 2-7. Existing City Population Estimates, 2000-2008

Location	2000 Population	2008 Population	Percent Change
City of Fair Oaks Ranch	4,695	6,175	31.5%
City of Hill Country Village	1,028	1,083	5.4%
Town of Hollywood Park	2,983	3,341	12.0%
City of San Antonio	1,150,535	1,336,040	16.1%
City of Shavano Park	1,754	3,126	78.2%
<b>Total Population</b>	<b>1,160,995</b>	<b>1,349,765</b>	<b>15.6%</b>

Source: Texas State Data Center (<http://txsdc.utsa.edu/tpepp/txpopest.php>)

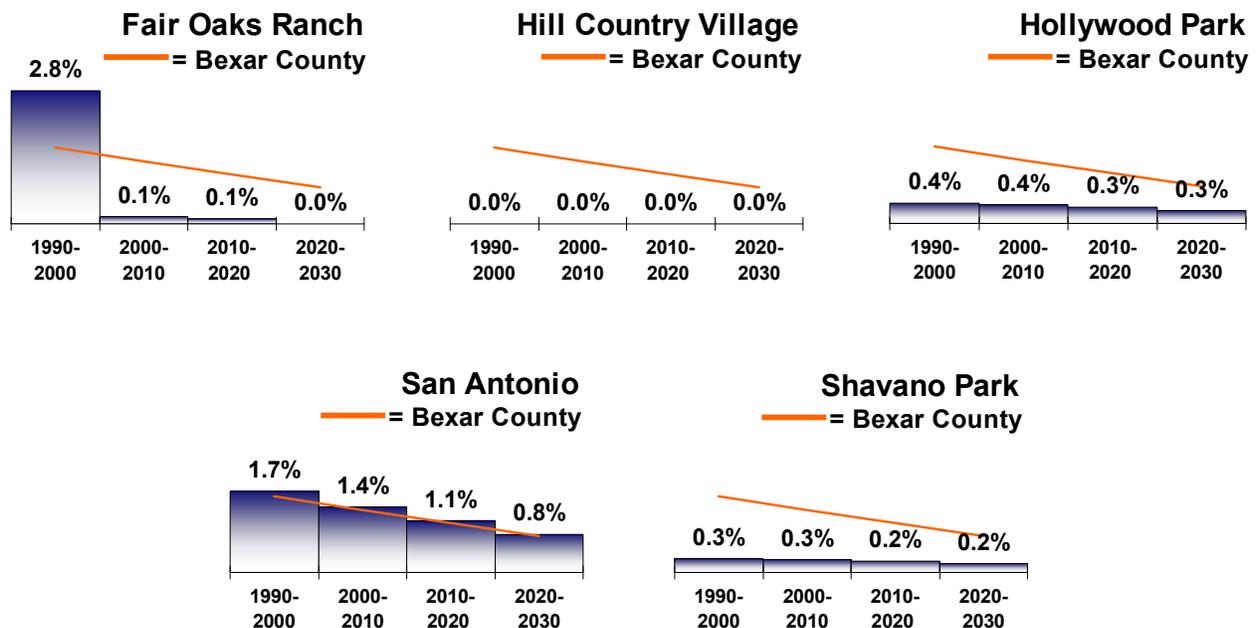
Table 2-8 shows the forecasted populations for the study area cities while Figure 2-6 illustrates the cities’ growth change trends compared to the population change trends of Bexar County, represented by the orange line. Since population forecast data was unavailable from the TXSDC, the following table uses TWDB data.

**Table 2-8. Long Range City Population Forecasts, 2000-2040**

Location	Population				
	2000 <sup>1</sup>	2010	2020	2030	2040
City of Fair Oaks Ranch	4,695	6,181	6,271	6,339	6,408
Percent Change from Previous Date	N/A	31.7%	1.5%	1.1%	1.1%
City of Hill Country Village	1,028	1,028	1,028	1,028	1,028
Percent Change from Previous Date	N/A	0.0%	0.0%	0.0%	0.0%
Town of Hollywood Park	2,983	3,111	3,232	3,340	3,428
Percent Change from Previous Date	N/A	4.3%	3.9%	3.3%	2.6%
City of San Antonio	1,144,646	1,354,381	1,552,538	1,729,245	1,872,964
Percent Change from Previous Date	N/A	18.3%	14.6%	11.4%	8.3%
City of Shavano Park	1,754	1,806	1,855	1,899	1,935
Percent Change from Previous Date	N/A	3.0%	2.7%	2.4%	1.9%
<b>Total Population</b>	<b>1,155,106</b>	<b>1,366,507</b>	<b>1,564,924</b>	<b>1,741,851</b>	<b>1,885,763</b>
<b>Percent Change from Previous Date</b>	<b>N/A</b>	<b>18.3%</b>	<b>14.5%</b>	<b>11.3%</b>	<b>8.3%</b>

Note: The TWDB shows the actual 2000 Census population for San Antonio. This is lower than that posted by the TXSDC as the TXSDC uses post-2000 Census data

Source: Texas Water Development Board (<http://www.twdb.state.tx.us/wrpi/data/popproj.htm>)



**Figure 2-6. Population Change Trends – Cities**

## Housing Value

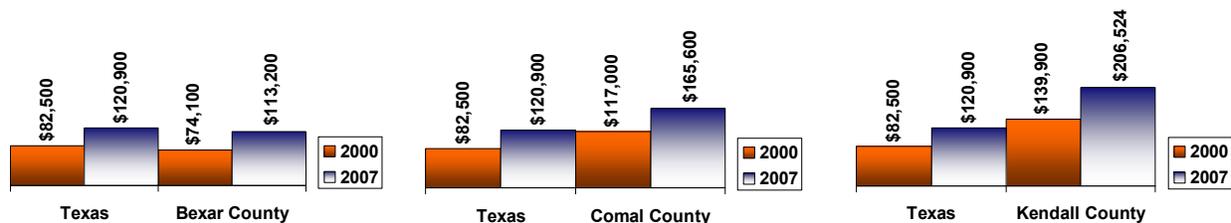
### Housing Value – Counties

Median housing values increased significantly throughout the Camp Bullis study area between 2000 and 2007 (see Table 2-9 and Figure 2-7). During that time, Bexar County, Comal County, and Kendall County all experienced an increase of over 40 percent. Respectively, this amounted to increases in housing value of roughly \$39,000, \$48,000, and \$66,000. Texas had an increase right in the middle of the counties, with 46.5 percent (\$38,400).

**Table 2-9. Median Housing Values**

Jurisdiction	2000	2007	Percent Change	Value Change
Texas	\$82,500	\$120,900	46.5%	\$38,400
Bexar County	\$74,100	\$113,200	52.8%	\$39,100
Comal County	\$117,000	\$165,600	41.5%	\$48,600
Kendall County	\$139,900	\$206,524	47.6%	\$66,624
Fair Oaks Ranch	\$269,800	\$425,400	57.7%	\$155,600
Hill Country Village	\$395,300	\$623,200	57.7%	\$227,900
Hollywood Park	\$150,500	\$237,300	57.7%	\$86,800
San Antonio	\$68,800	\$106,200	54.4%	\$37,400
Shavano Park	\$225,000	\$354,700	57.6%	\$129,700

Source: <http://quickfacts.census.gov> and <http://www.city-data.com>



**Figure 2-7. State and County Comparative Housing Value Trends**

### Housing Value – Cities

The cities located in the study area experienced higher increases in housing value than the counties. All of the cities experienced increases of more than 54 percent, with the lowest being San Antonio at 54.4 percent, and the other four cities' increases being roughly equivalent at just under 58 percent. San Antonio had the lowest monetary increase (\$37,400); however, due to low housing prices in 2000, the City still had a very large increase over the seven-year period. The highest monetary increase was experienced by Hill Country Village with an astounding \$227,900 jump. This value increase was over \$70,000 higher than the next highest, which was Fair Oaks Ranch at \$155,600. Figure 2-8 illustrates the cities' housing value increases from 2000 to 2007.

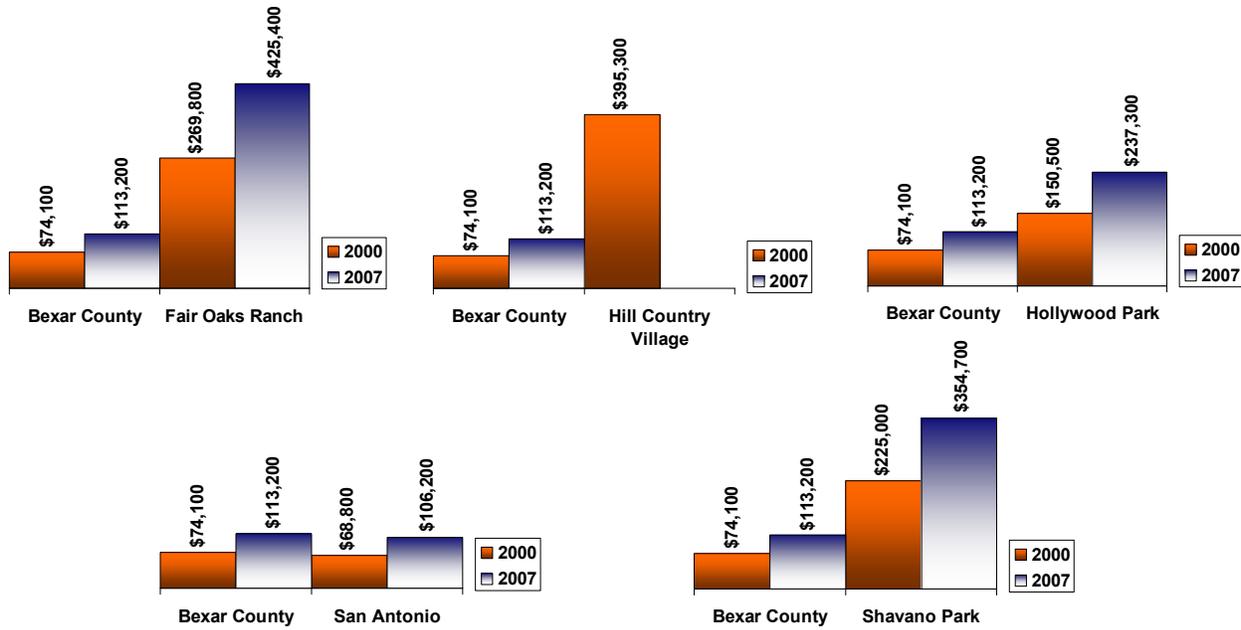
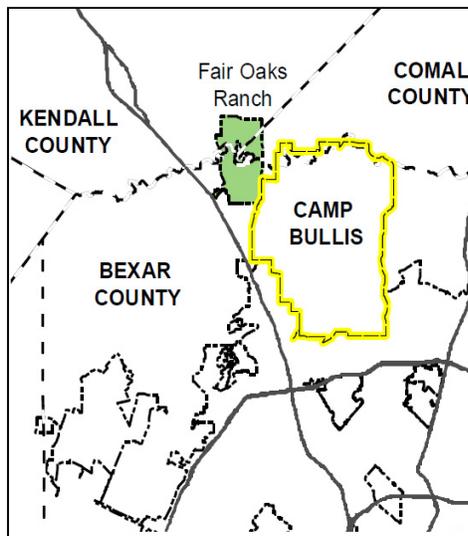


Figure 2-8. County and City Comparative Housing Trends

## 2.9 County and City Profiles

### City of Fair Oaks Ranch



Fair Oaks Ranch occupies 16.5 square miles located in northern Bexar/western Comal/eastern Kendall counties. The City is adjacent to the west side of the Camp Bullis Training Area and is approximately 22 miles northwest of San Antonio and 7 miles southeast of the City of Boerne. Major transportation routes are Interstate 10 located southwest of the City and FM 3351, which separates the City from Camp Bullis.

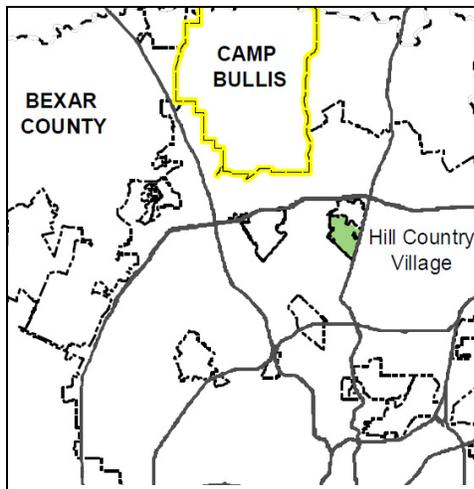
Fair Oaks Ranch is nestled within beautiful Texas Hill Country land, once home to Ralph Fair, Sr., an internationally known oilman and rancher. After his death in 1969, the family members began developing the Ranch into ranchettes of 5 acres or larger tracts located at both the northern and southern ends of the Ranch. Smaller tracts were made available over the years as the development of the Ranch continued.

Due to Texas state laws concerning restrictions on population density and city size, two cities had to be formed first. However, one major impediment to the formation of a new city was the fact that the existing Ranch was located within the extraterritorial jurisdiction (ETJ) of the City of San Antonio. As such, it could not be incorporated without the consent of San Antonio. An agreement was executed whereby the new City of Fair Oaks would be allowed to incorporate if it relinquished all ETJ claims outside the existing boundaries of the Ranch to the City of San Antonio. The cities of Fair Oaks North and Fair Oaks

South were then incorporated. On January 21, 1988, after an election was held, the two cities were combined with the council from the South entity becoming the City Council for the now combined City of Fair Oaks. Subsequently, the name was changed to the City of Fair Oaks Ranch. The City of San Antonio then approved a petition that granted Fair Oaks Ranch 3,258 acres of land as part of a new ETJ in August 2006.

Incorporated in 1988, the City is one of the youngest in Texas. With 1,860 residents in 1990, Fair Oaks Ranch grew to nearly 4,700 residents in 2000 while maintaining its small town character. The City has a new Fair Oaks Ranch elementary school with grades K through 6, which is part of the Boerne Independent School District. The City has its own police force, emergency medical service (EMS), and is served by the Leon Springs Volunteer Fire Department, which operates two fire stations within the City limits.

### City of Hill Country Village



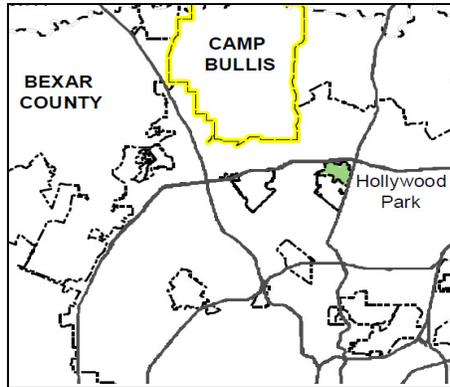
The City of Hill Country Village is a "Type A" general-law municipality founded in 1956. It is located in north-central Bexar County, approximately 12 miles north of Downtown San Antonio and two miles north of the San Antonio International Airport in north-central Bexar County. The 2.1-square mile City is surrounded by the corporate limits of the City of San Antonio and the Town of Hollywood Park. Although situated in an urban environment, its residents enjoy a rural type of living second to none in the area. The City has effectively combined commercial and residential ventures by strategically balancing its commercial district located along its eastern boundary, with the environmentally aware and rustic residential area. Though sometimes thought of as a "bedroom" community, the City is a dynamic example of a professional/residential suburb.

The City of Hill Country Village is an incorporated community located on U.S. Highway 281 about 2 miles north of San Antonio International Airport and 12 miles north of downtown San Antonio in north-central Bexar County. Prior to World War II, the area was a hog farm operated by Clyde Stevens and his stock was fed with garbage from Fort Sam Houston. In 1946, developers Meliff, Todd, and Hill Country Water Works began construction of Village Estates, the first subdivision located north of San Antonio. Tracts were a minimum of 9 acres and offered residents suburban country living. William Roten organized the Hill Country Village Association in 1954. The limitations of selling 9-acre parcels prompted residents to vote to allow for the sale of 2 acre tracts. The incremental encroachment of the San Antonio city limits, and its associated zoning ordinances, prompted the citizens of Hill Country Village to incorporate the community in 1956, establishing a mayor and council form of government. William Roten served as the first mayor.

In 1959, compulsory taxes were enacted to address the City's growing operating costs, but residents valued the area's unique suburban lifestyle which permitted livestock, and the larger tracts promoted privacy. In 1960, the population was 418. That figure increased to 636 in 1970 and 972 in 1980. Through the years, City officials and an active homeowners association continued to debate zoning changes and attempts by developers to increase density. A commercial district is located along the eastern border of

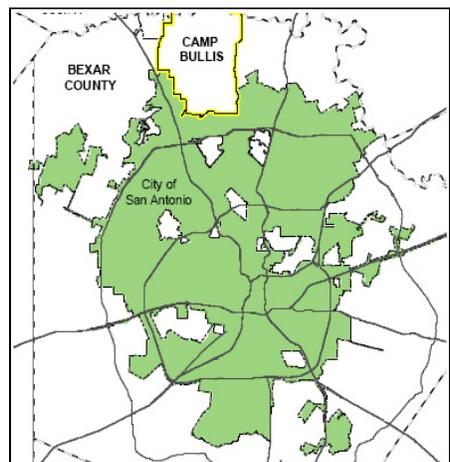
the City. In 2000, the population was 1,028. The City is now built out with the only remaining developable land (approximately 14 acres) located within its Extraterritorial Jurisdiction.

### Town of Hollywood Park



Hollywood Park is a 1.47-square mile suburb of San Antonio located near the junction of Loop 1604 and Highway 281. It is 12 miles north of downtown San Antonio in northern Bexar County and approximately 2.5 miles southeast of Camp Bullis. The Town developed in the late 1940's and was incorporated in 1955. Its population in 1960 was 783, but by 1970, it was 2,299. Hollywood Park had 2,841 residents in 1990 and 2,983 in 2000.

### City of San Antonio



The City of San Antonio is centrally-located in Bexar County at the head of the San Antonio River. Several major transportation roadways transect the City. I-10 is oriented east-west, while I-35 and I-37 are oriented north-south. The City is also served by five U.S. highways, numerous state highways, the San Antonio International Airport, two freight railroads (the Union Pacific and Southern Pacific), and two AMTRAK trains.

As of October 2008, the City's incorporated area measured 470 square miles, which equates to roughly 69 percent of Bexar County's total land area at that time. San Antonio's ETJ area measured 680 square miles. The City's 2000 U.S. Census population of 1,144,646 accounted for 82 percent of the County's residents that year. For the year ending July 2007, San Antonio was ranked the seventh largest City in the U.S. (1,328,984) and produced the third highest numerical gain in population (32,680 people) among the nation's cities for that period. Its third place standing surpasses its 2006 national ranking of fourth. The City also had the third highest percentage gain in population (2.5 percent) over that same period.

Daily temperatures in San Antonio reach above 90 degrees (F) more than 80 percent of the time; however, extremely high temperatures are rare. August produces the highest average temperature of 83.7 degrees (F), and October typically produces the most rain (3.86 inches-average). The winter months bring mild weather much of the time, and freezing temperatures occur approximately 20 days per year.

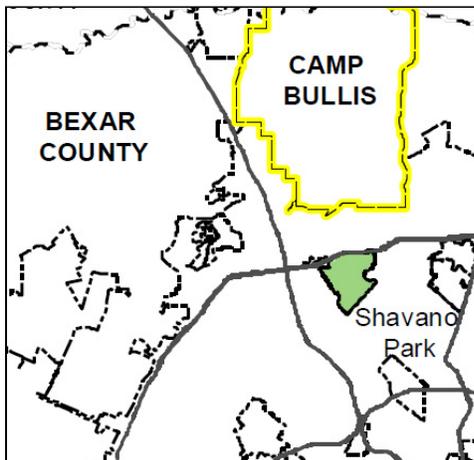
The San Antonio area was explored by Spanish expeditions in 1691 and 1709, which named the San Antonio River and San Pedro Creek. The town grew out of San Antonio de Béxar Presidio, founded in 1718, and the villa of San Fernando de Béxar, chartered by Canary Islanders in 1731. During the Texas Revolution, San Antonio was the site of several battles, including the siege of Bexar (1835) and the battle of the Alamo (1836), which made it one of the most fought-over cities in North America. After the evacuation of Mexican forces, Bexar County was organized by the Republic of Texas in December 1836,

and San Antonio was chartered in January 1837 as its seat. After Texas entered the Union on December 29, 1845, growth became rapid, as the City became a servicing and distribution center for the western movement of the United States. After the Civil War, San Antonio prospered as a cattle, distribution, mercantile, and military center serving the border region and the Southwest. The City was the southern hub and supplier of the cattle trail drives.

San Antonio did not expand beyond its original Spanish charter land until 1940. The land was large enough to allow a numerous incorporated suburbs within the metropolitan area, but the City soon extended beyond these. Like most twentieth-century American cities in the automobile age, its expansion was mainly horizontal, with sprawling neighborhoods but minimal vertical building. Although the first Texas skyscraper and several tall buildings were built in San Antonio in the early twentieth century, vertical construction did not continue, and the City's geographical center of population steadily moved northward.

Although the lack of high-paying manufacturing and finance-industry jobs has kept San Antonio in the bottom tier in terms of average metropolitan income, the City has developed a viable economy from its stable military bases, educational institutions, tourism, and its medical research complex. As of November 2007, the City's largest employer categories included: trade/transportation/utilities (18.1 percent), government (17.1 percent), education and health services (14.1 percent), professional and business services (13.1 percent), and leisure and hospitality (12.1 percent). Tourism is one of the City's most important industries, for San Antonio's many attractions, including sports, draw tens of thousands of visitors every year.

### City of Shavano Park

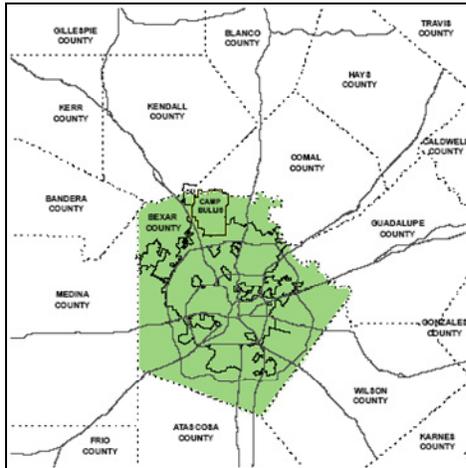


The City of Shavano Park was originally known as Shavano. It is located in northern Bexar County approximately 12 miles north of downtown San Antonio and less than five miles north of I-410 and covers an area of 1.8 square miles. The San Antonio suburb is located along Olmos Creek and FM 1535. Camp Bullis is located approximately three miles north of the City. The City's post office opened in 1881, and three years later Shavano became a small station and switch on the San Antonio and Aransas Pass Railway. In 1890, Shavano included a church, a district school, and had a population of 80. By 1892, its population had grown to 100, where it remained until 1896. After that, the community declined. The post office closed in 1903, after which mail was delivered from San Antonio. The site

of the later Township of Shavano Park became a part of the Stowers Ranch, and it was then sold to Wallace Rogers and Sons for residential development in 1947.

The City of Shavano Park was incorporated on June 19, 1956. The City's 2000 U.S. Census population was 1,754, which increased from 1,708 residents in 1990. Today, the City maintains its own water system to the highest ratings of the State Department of Health; its own fire department with a station and trucks; a police department with a fleet of fully-outfitted patrol cars; a modern communication system, integrating the departments and those of nearby communities; a well-equipped department of public works; and a municipal court.

## Bexar County

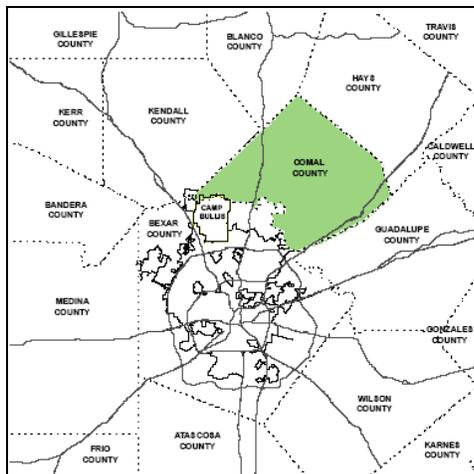


Located in south-central Texas, Bexar County is bounded by Kendall and Comal counties to the north, Guadalupe and Wilson counties to the east, Atascosa County to the south, and Medina and Bandera counties to the west. Bexar County occupies 1,247 square miles of land and has elevations of approximately 1,200 feet above sea level. Its 2000 U.S. Census population was 1,392,931, making it the fourth largest county in Texas. San Antonio is the county seat and is the county's largest city. Major transportation corridors traversing Bexar County include I-10 (connecting Houston and Phoenix, Arizona), I-35 (linking Dallas and Laredo), and I-37 (providing a high-speed route between San Antonio and Corpus Christi and the Gulf of Mexico). The majority of the Camp Bullis Training Area

is located in Bexar County, primarily along its northern boundary with Comal County.

Bexar County was named from San Antonio de Bexar, one of the areas of Texas when it gained its independence. It was first known as Villa of San Fernando de Bexas, the first civil government in the Spanish province of Texas. It was officially established in 1731 when settled by 55 people from the Canary Islands who initially located near the existing missions in the City.

## Comal County

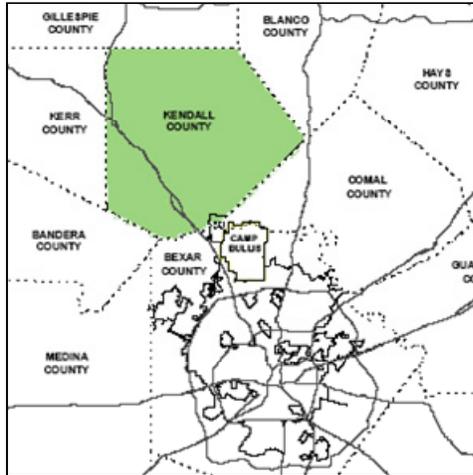


Comal County is located in south-central Texas in the area between the Blackland Prairies and the Balcones Escarpment. The County is bounded on the north by Blanco and Hays counties, Guadalupe County to the east, Bexar County to the southwest, and Kendall County to the west. New Braunfels is Comal County's largest city and the county seat. The City is located 29 miles northeast of San Antonio and 45 miles southwest of Austin. A small amount of the Camp Bullis Training Area is located in Comal County along its southern border with Bexar County. The primary transportation route for Comal County is I-35 linking San Antonio and Dallas within the state.

The County encompasses 562 square miles of land comprised of prairie and hill country terrain. The eastern quarter, below the Balcones Escarpment, is gently rolling grass and crop land ranging in elevation from 600 to 750 feet above sea level. The Blackland Prairie soil of this region is comprised of loam with clay subsoils and is well suited for cultivation. The elevation of the northwestern three-quarters of the County ranges from 750 to approximately 1,500 feet above sea level. Annual precipitation in Comal County averages 33.19 inches, and average temperatures range from a low of 40 degrees Fahrenheit (F) in January to a high of 96 degrees (F) in July. The growing season lasts 265 days.

Permanent settlement of the County began in 1845, when Prince Carl of Solms-Braunfels secured title to 1,265 acres of the Veramendi grant, including the Comal Springs and River, for the Adelsverein. In succeeding years, thousands of Germans and Americans were attracted to the rich farm and ranch land around New Braunfels. Settlement progressed rapidly, and in March 1846, the Texas legislature formed Comal County from the Eighth Precinct of Bexar County and made New Braunfels the county seat. The final boundary determination was made in 1858 with the separation of part of western Comal County to Blanco and Kendall counties.

### Kendall County



Located in south-central Texas, Kendall County is 170 miles inland from the Gulf of Mexico, and is bordered by the counties of Gillespie (north), Blanco (northeast), Comal (southeast), Bexar (south), Bandera (southwest), and Kerr (west). Boerne, the county seat, has an estimated 2008 population of 8,600 residents. It is located on Cibolo Creek adjacent to I-10 at the intersection of Highway 87 and State Highway 46, which is approximately 30 miles northwest of San Antonio. Kendall County's primary high-speed transportation route is I-10 connecting San Antonio and El Paso within the state.

Kendall County comprises 662 square miles of rolling to hilly terrain in the Edwards Plateau region, with elevations ranging from 1,000 to 2,000 feet above sea level. Vegetation native to the region consists primarily of tall grasses, live oak, juniper, and mesquite. The climate is subtropical subhumid with an average minimum temperature of 35 degrees (F) in January and an average high of 94 degrees (F) in July. The growing season in Kendall County averages 231 days annually, and the rainfall averages 32 inches.

The Central Texas region, including Kendall County, has supported human habitation for several thousand years. Hunter and gatherer tribes have been shown by archaeological evidence to have existed as early as 10,000 years ago. The Lipan, Apache, Kiowa, and Comanche became the dominant tribes in the late eighteenth and early nineteenth centuries. They were still present in the 1840s when Germans began exploring the area. German immigrants established Sisterdale in 1847, Tusculum (Boerne) in 1849, Curry's Creek in 1850, and Comfort in 1854. Most of the Kendall County area was part of Bexar County, established by the Republic of Texas in 1836; it later became part of Kerr County, which was separated from Bexar in 1856. Comfort served as the county seat of Kerr County for two years before Kendall County was formed.

## ***2.10 Current Development Overview within Study Area***

### Existing Land Use

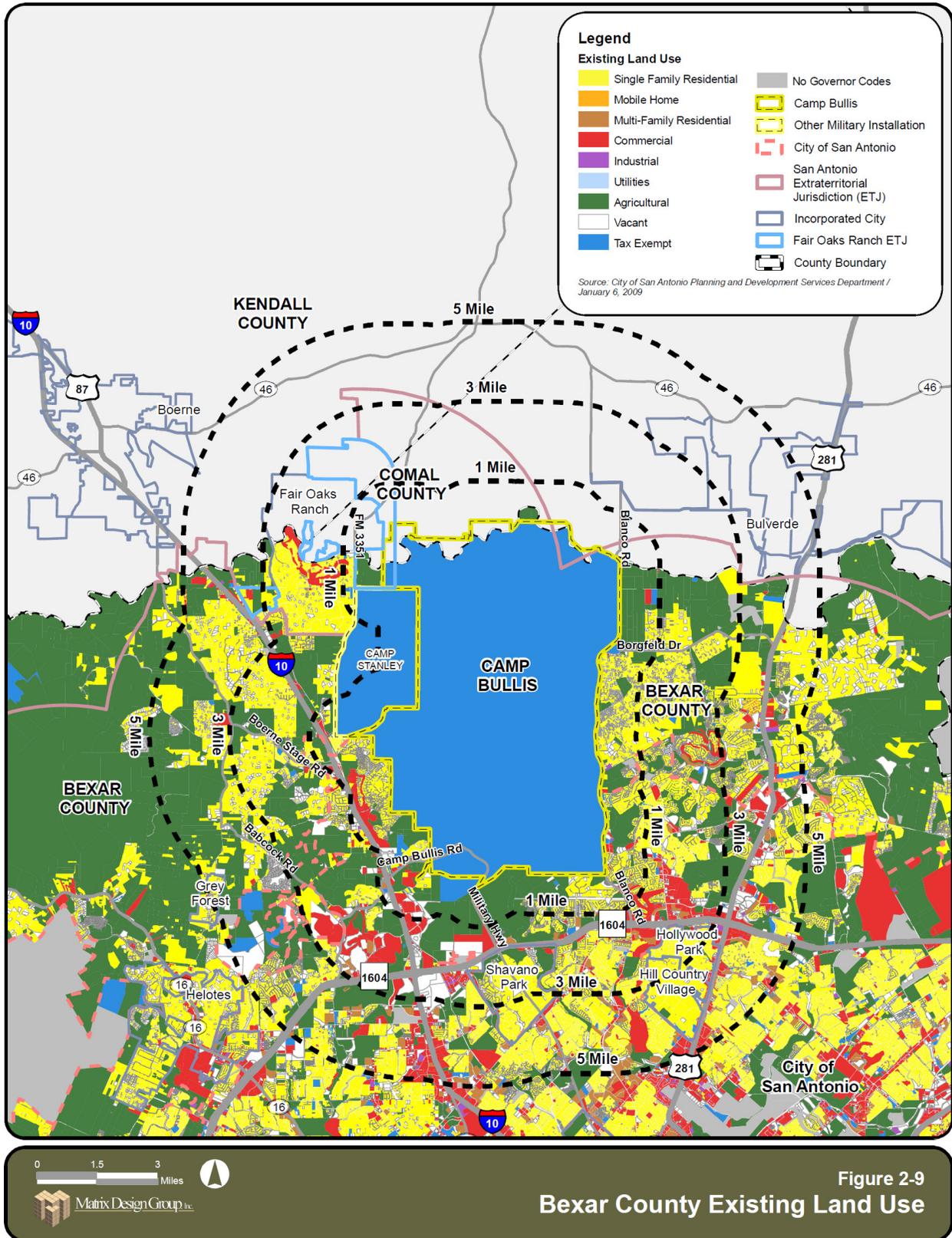
The pattern of existing land use illustrates the current physical use of the land surrounding Camp Bullis. It identifies where existing land use compatibility and incompatibility exists adjacent to, and within proximity of, the installation. The organization of uses within the Camp is also important to understand the relationships that exist, or could exist outside its boundaries. The cantonment area is located in the southwest portion of the installation, which also includes small arms ammunition storage. According to

the Camp Bullis Deputy Garrison Manager, the sole Army ammunition bunker is no longer active; however, the ammunition bunker used by the Air Force is still active. The surrounding land is utilized for training and service uses, but also includes a limited amount of housing and administrative uses. Several facilities are also used for youth recreational activities.

The existing pattern of land use adjacent to and within proximity of Camp Bullis contains a mix of residential, employment and supportive land uses as shown on Figure 2-9. The identification of one, three, and five mile buffer zones have been illustrated on the figure and supporting tables to provide a common foundation of reference for various issues, such as light, which has a pronounced effect on night vision training closer to the installation. It is important to note that the land uses identified on Figure 2-9 are based on Bexar County Appraisal District data, and so may reflect a land use based on tax assessor terms instead of the actual use that exists on the land. For example, some uses, such as the University of Texas at San Antonio and quarry areas south of Camp Bullis are designated as "Agricultural," while other lands are designated as "Tax Exempt" or "No Governor Codes." Tax Exempt lands include areas such as Camp Bullis and Camp Stanley that have special exemptions for taxable lands. Lands designated as No Governor Code are lands where tax information may not be available. Therefore, land use data exhibited on Figure 2-9 and in Tables 2-10 through 2-12 may not be entirely accurate. Furthermore, some lands that are designated as Agricultural in the data could also be considered or identified as vacant land under different methods of land use determination.

The most compatible designations for Camp Bullis include Vacant and Agricultural uses. The most incompatible (ultimately depending on location and proximity to on-installation uses) include Commercial, Single Family, Multi-Family and Mobile Home uses. Existing land use information was compiled from secondary sources and includes information from the City of San Antonio. This information has been provided for adjacent and proximate lands located along the southern, eastern and western boundaries of Camp Bullis. Existing land use information in a quantifiable electronic format does not exist for lands located within and adjacent to the northern portion of Camp Bullis, within the jurisdiction of Comal and Kendall counties.

These existing uses have been quantified by type in Tables 2-10, 2-11, and 2-12, based on a one, three and five mile radius from the Camp Bullis boundary, respectively. Camp Bullis is identified as Exempt due to its status as a military facility under the ownership of the Federal government. Adjacent to the Camp, within one mile, uses are primarily comprised of Agricultural (32.8 percent), Single Family Residential (23.5 percent), Tax Exempt (23.5 percent) or Vacant uses (14.6 percent). Single family uses are primarily located on the western and eastern sides of the Camp. Agricultural uses are predominately located on the northwestern, northeastern and southern boundaries. The majority of the Tax Exempt land is composed of Camp Stanley immediately to the west. Vacant land is interspersed within the Single Family uses. The No Governor Codes area is located along the northern boundary, which indicates that specific land uses are not identified. The land uses located within three miles of the Camp Bullis boundary primarily include Agricultural (32.8 percent) and Single Family Residential (31.9 percent). A significant amount of Commercial use (8.8 percent) is contained within the three mile radius, based on the inclusion of the Interstate 10 corridor and FM 1604. The area included within the five mile radius of the Camp Bullis boundary continues to be dominated by Agricultural (32.5 percent) and Single Family Residential (34.5 percent) uses. Vacant use comprises approximately 15 percent and Commercial use totals approximately 8.7 percent. The data for the following three tables is cumulative, such that Table 2-11 includes the data from Table 2-10 and Table 2-12 includes the data from Table 2-11.



**Table 2-10. Existing Land Use (Within 1 Mile of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Agricultural	5,184	32.8%
Commercial	872	5.5%
Industrial	25	0.2%
Mobile Home	0	0.0%
Multi-Family Residential	27	0.2%
No Governor Codes	103	0.7%
Single-Family Residential	3,572	22.6%
Tax Exempt	3,718	23.5%
Utilities	6	<0.1%
Vacant	2,316	14.6%
<b>Total</b>	<b>15,823</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

**Table 2-11. Existing Land Use (Within 3 Miles of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Agricultural	16,291	32.8%
Commercial	4,389	8.8%
Industrial	60	0.1%
Mobile Home	0	0.0%
Multi-Family Residential	393	0.8%
No Governor Codes	477	1.0%
Single-Family Residential	15,870	31.9%
Tax Exempt	4,746	9.5%
Utilities	10	<0.1%
Vacant	7,505	15.1%
<b>Total</b>	<b>49,741</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

**Table 2-12. Existing Land Use (Within 5 Miles of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Agricultural	28,749	32.5%
Commercial	7,669	8.7%
Industrial	178	0.2%
Mobile Home	0	0.0%
Multi-Family Residential	1,337	1.5%
No Governor Codes	1,077	1.2%
Single-Family Residential	30,565	34.5%
Tax Exempt	5,610	6.3%
Utilities	18	<0.1%
Vacant	13,316	15.0%
<b>Total</b>	<b>88,519</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

Existing Zoning

The pattern of existing zoning is an important component to understand the existing and permissible regulations associated with land development adjacent to, and surrounding, Camp Bullis. Existing zoning information was compiled from data provided by the City of San Antonio for incorporated areas where there are established zoning designations. This information has been provided for adjacent and proximate lands located along the southwestern, southeastern and southern boundaries of Camp Bullis. The unincorporated areas in Bexar, Comal, or Kendall counties, do not have the statutory authority or enabling legislation to zone land within their boundaries. The incorporated cities in the study area either did not have current zoning regulations, or zoning information was not available in an electronic format that could be quantified.

The existing zoning districts established by the City of San Antonio are illustrated on Figure 2-10 and have been quantified in Tables 2-13, 2-14, and 2-15, based on a one, three and five mile radius, respectively, from the Camp Bullis boundary. Of the approximately 22,000 acres within one mile of Camp Bullis, 8,150 acres are designated through zoning by the City of San Antonio (Table 2-13). Table 2-14 shows 22,901 of the approximately 76,000 acres in the three mile area. Table 2-15 includes 41,123 zoned acres out of the roughly 144,000 acres within the five-mile area.

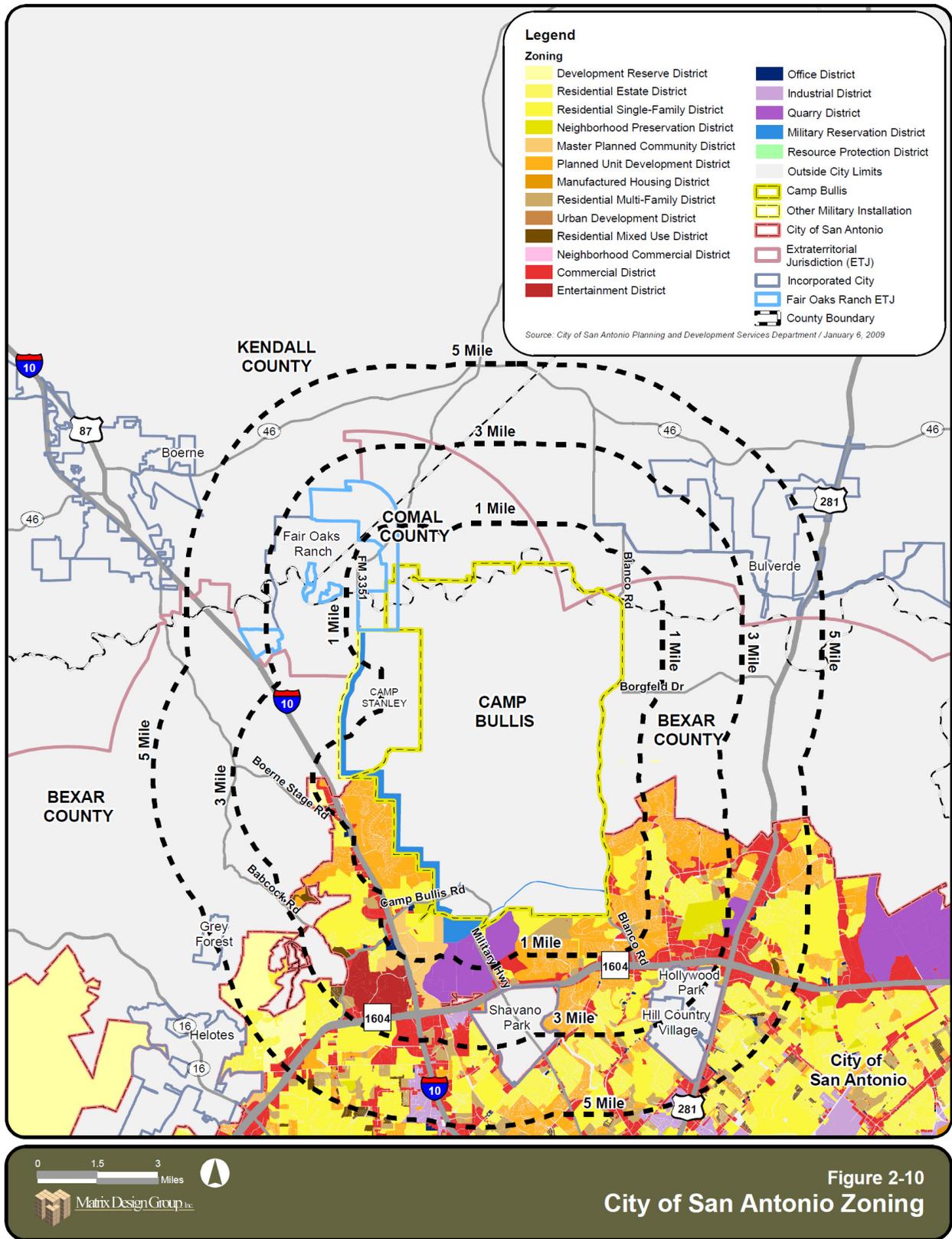
**Table 2-13. City of San Antonio Existing Zoning in Acres (Within 1 Mile of Camp Bullis)**

Zoning Classification	Acreage*	Percent of Total Acreage
Development Reserve District	49	0.6%
Residential Single-Family District	1,517	18.6%
Neighborhood Preservation District	84	1.0%
Master Planned Community District	557	6.8%
Planned Unit Development District	3,569	43.8%
Manufactured Housing District	18	0.2%
Residential Multi-Family District	329	4.0%
Urban Development District	1	<0.1%
Neighborhood Commercial District	3	<0.1%
Commercial District	517	6.3%
Office District	53	0.7%
Quarry District	877	10.8%
Military Reservation District	576	7.1%
<b>Total</b>	<b>8,150</b>	<b>100%</b>

Note: Development Reserve District” is a zoning district issues upon annexation and it equates to “Residential Single Family Zoning District.”

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

\* Acreage only includes land that falls within the incorporated city limits of San Antonio. Does not include acres outside of the city limits.



**Table 2-14. City of San Antonio Existing Zoning in Acres (Within 3 Miles of Camp Bullis)**

Zoning Classification	Acreage*	Percent of Total Acreage
Development Reserve District	117	0.5%
Residential Single Family District	5,370	23.4%
Neighborhood Preservation District	674	2.9%
Master Planned Community District	1,024	4.5%
Planned Unit Development District	7,289	31.8%
Manufactured Housing District	18	0.1%
Residential Multi-Family District	821	3.6%
Urban Development District	1	<0.1%
Residential Mixed Use District	205	0.9%
Neighborhood Commercial District	3	<0.1%
Commercial District	3,301	14.4%
Entertainment District	1,218	5.3%
Office District	118	0.5%
Industrial District	105	0.5%
Quarry District	1,814	7.9%
Military Reservation District	823	3.6%
<b>Total</b>	<b>22,901</b>	<b>100.0%</b>

Note: "Development Reserve District" is a zoning district issues upon annexation and it equates to "Residential Single Family Zoning District."

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

\*Acreage only includes land that falls within the incorporated city limits of San Antonio. Does not include acres outside of the city limits.

**Table 2-15. City of San Antonio Existing Zoning in Acres (Within 5 Miles of Camp Bullis)**

Zoning Classification	Acreage	Percent of Total Acreage
Development Reserve District	1,718	4.2%
Residential Estate District	307	0.7%
Residential Single Family District	13,278	32.3%
Neighborhood Preservation District	818	2.0%
Master Planned Community District	1,024	2.5%
Planned Unit Development District	9,596	23.3%
Manufactured Housing District	41	0.1%
Residential Multi-Family District	2,016	4.9%
Urban Development District	1	<0.1%
Residential Mixed Use District	370	0.9%
Neighborhood Commercial District	3	<0.1%
Commercial District	7,085	17.2%
Entertainment District	1,218	3.0%
Office District	203	0.5%
Business Park District	19	<0.1%
Industrial District	578	1.4%
Quarry District	2,013	4.9%
Military Reservation District	823	2.0%
Resource Protection District	12	<0.1%
<b>Total</b>	<b>41,123</b>	<b>100.0%</b>

Note: "Development Reserve District" is a zoning district issues upon annexation and it equates to "Residential Single Family Zoning District."

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

\*Acreage only includes land that falls within the incorporated city limits of San Antonio. Does not include acres outside of the city limits.

Adjacent to Camp Bullis, within one mile, zoning for City of San Antonio lands is primarily comprised of the Planned Unit Development (PUD) District (43.8 percent), as well as 18.6 percent Single Family Residential. The City of San Antonio zoning pattern located within three miles of the Camp Bullis boundary primarily includes the PUD District (31.8 percent), Single Family Residential District (23.4 percent) and Commercial District (14.4 percent). The area included in the city limits of San Antonio within the five mile radius of the Camp boundary continues to be dominated by Single Family Residential (32.3 percent), PUD District (23.3 percent) and Commercial (17.2 percent) districts. The data for the following three tables is cumulative, such that Table 2-14 includes the data from Table 2-13 and Table 2-15 includes the data from Table 2-14.

Although Tables 2-13, 2-14, and 2-15 illustrate the amount of acreage within one, three, and five miles of Camp Bullis that is zoned by the City of San Antonio, they do not provide an overall analysis of the total amount of acreage included within each buffer distance. Lands incorporated within the City of San Antonio only account for a portion of the total land surrounding Camp Bullis. The tables are intended to quantify the amount of land that is within the regulatory authority of San Antonio, and thus can be zoned to allow the types of uses that are compatible with the activities of Camp Bullis.

Tables 2-16, 2-17, and 2-18 have been created to illustrate the percentage of land that is contained within the city limits of San Antonio, compared to the other jurisdictions around Camp Bullis. The intent is to provide a baseline of the amount of land that is able to currently be regulated through zoning. Within one mile of the Camp Bullis boundary, approximately 39 percent of the land is located within the city limits of San Antonio. Roughly 33 percent of the land within three miles is located in San Antonio, as well as approximately 32 percent of the land within five miles of the installation. It is important to note that the lands displayed in the tables are not mutually exclusive. For example, lands that are located within the ETJ of San Antonio are not included as lands within Unincorporated Bexar County, although they may be considered as part of the unincorporated county for other analysis purposes within this chapter. Also note that the data for the following three tables is cumulative, such that Table 2-17 includes the data from Table 2-16 and Table 2-18 includes the data from Table 2-17.

**Table 2-16. Jurisdictional Acreage (Within 1 Mile of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Camp Stanley	3,128	13.9%
City of San Antonio	8,779	39.0%
City of San Antonio Extraterritorial Jurisdiction	8,017	35.6%
Other Incorporated Cities	924	4.1%
Unincorporated Bexar County	0	0.0%
Unincorporated Comal County	1,654	7.4%
Unincorporated Kendall County	0	0.0%
<b>Total</b>	<b>22,502</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

**Table 2-17. Jurisdictional Acreage (Within 3 Miles of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Camp Stanley	3,993	5.2%
City of San Antonio	25,170	33.1%
City of San Antonio Extraterritorial Jurisdiction	28,892	37.9%
Other Incorporated Cities	7,944	10.4%
Unincorporated Bexar County	161	0.2%
Unincorporated Comal County	9,182	12.1%
Unincorporated Kendall County	794	1.0%
<b>Total</b>	<b>76,136</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

**Table 2-18. Jurisdictional Acreage (Within 5 Miles of Camp Bullis)**

Land Use Classification	Acreage	Percentage of Total
Camp Stanley	3,993	2.8%
City of San Antonio	46,409	32.1%
City of San Antonio Extraterritorial Jurisdiction	48,599	33.6%
Other Incorporated Cities	13,033	9.0%
Unincorporated Bexar County	582	0.4%
Unincorporated Comal County	19,246	13.3%
Unincorporated Kendall County	12,818	8.9%
<b>Total</b>	<b>144,680</b>	<b>100.0%</b>

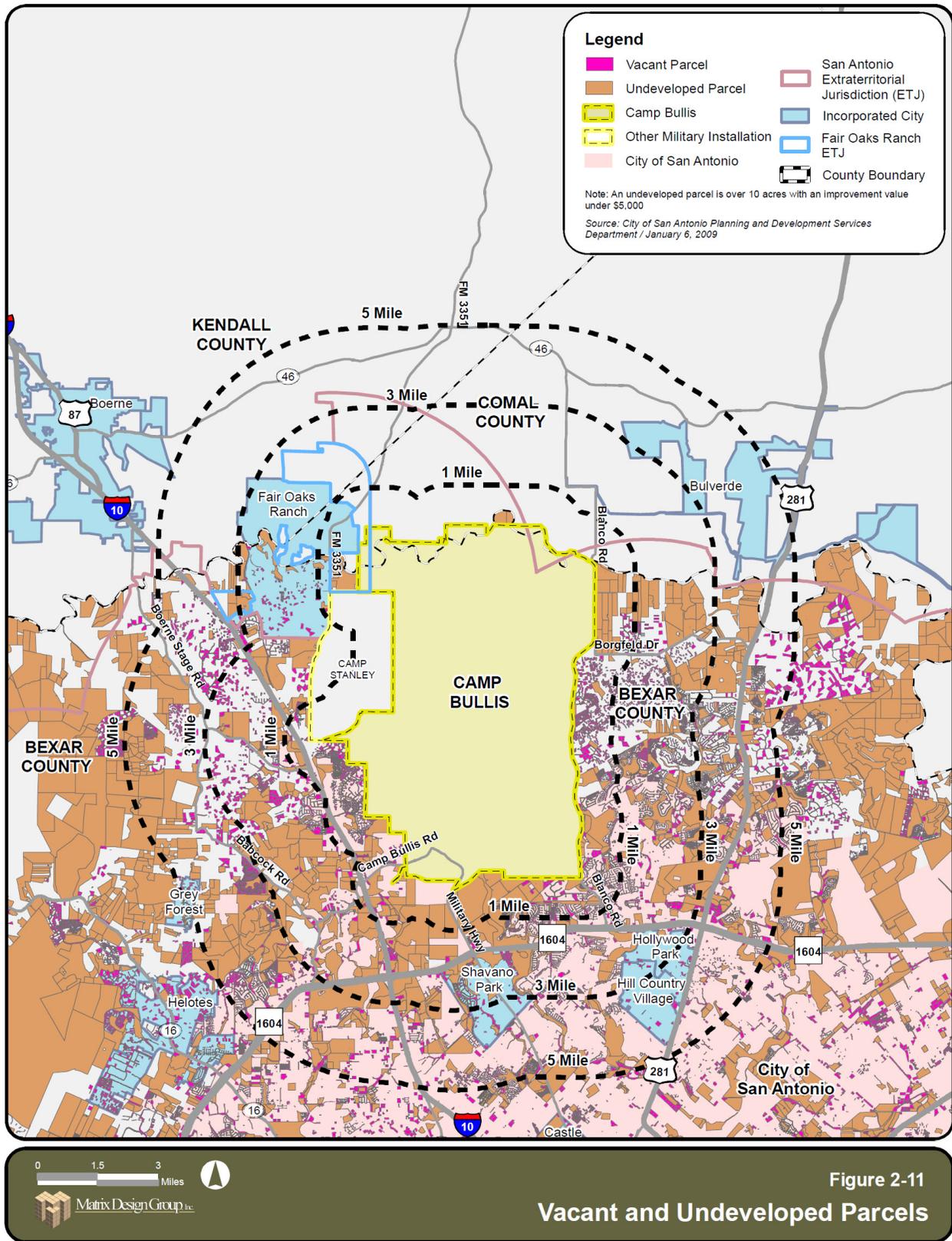
Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

### Vacant and Undeveloped Land

During the inventory and analysis of adjacent and proximate lands, it is important to quantify the opportunities and constraints associated with parcels that are not currently developed or that exhibit minimal improvements. To that end, there are two categories of land that identify their potential to be developed or significantly improved in the future: Undeveloped and Vacant, as defined below:

- ‘Undeveloped’ designates parcels that exceed 10 acres in size and contain improvements valued at less than \$5,000.
- ‘Vacant’ designates land that has not been developed according to the Bexar County Appraisal District.

Both vacant and undeveloped lands within Bexar County and in proximity to Camp Bullis have been identified on Figure 2-11. In addition, their proximity to Camp Bullis (within a one-, three- and five-mile radius) has also been quantified as shown in Tables 2-19, 2-20 and 2-21. These three tables also include the underlying zoning that would guide (unless proposed to be rezoned) the ultimate development of these parcels in the future. The purpose for discussing vacant and undeveloped land is to inform stakeholders of the potential for additional lands to be developed around Camp Bullis. The reason for showing the underlying zoning is to convey the types of use that could currently be developed on these vacant and undeveloped lands. In this manner, the land supply and allowable use assists in determining the potential for incompatibility with military operations.



**Table 2-19. Vacant and Undeveloped Land Summary – Bexar County (Within 1 Mile of Camp Bullis)**

Zoning Classification	Undeveloped Land			Vacant Land		
	Number of Parcels	Total Acreage	Percent of Total Acreage	Number of Parcels	Total Acreage	Percent of Total Acreage
Development Reserve District	0	0	0.0%	16	7	0.3%
Residential Single-Family District	16	921	18.3%	83	217	9.4%
Neighborhood Preservation District	2	38	0.7%	0	0	0.0%
Manufactured Housing District	0	0	0.0%	18	2	0.1%
Master Planned Community District	9	384	7.6%	18	142	6.2%
Planned Unit Development District	19	583	11.6%	1,100	657	28.6%
Residential Multi-Family District	4	270	5.4%	16	16	0.7%
Commercial District	11	181	3.6%	35	102	4.4%
Office District	1	27	0.5%	5	35	1.5%
Quarry District	3	926	18.4%	0	0	0.0%
Outside City Limits	38	1,530	30.4%	1,004	700	30.4%
Right of Way (ROW)	11	166	3.3%	124	423	18.4%
<b>Totals</b>	<b>114</b>	<b>5,026</b>	<b>100.0%</b>	<b>2,419</b>	<b>2,301</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

Table 2-20. Vacant and Undeveloped Land Summary – Bexar County (Within 3 Miles of Camp Bullis)

Zoning Classification	Undeveloped Land			Vacant Land		
	Number of Parcels	Total Acreage	Percent of Total Acreage	Number of Parcels	Total Acreage	Percent of Total Acreage
Development Reserve District	0	0	0.0%	46	21	0.3%
Residential Single-Family District	48	2,475	14.0%	270	417	5.5%
Neighborhood Preservation District	6	672	3.8%	70	29	0.4%
Master Planned Community District	16	704	4.0%	42	237	3.1%
Planned Unit Development District	37	1,398	7.9%	1,995	1,269	16.9%
Manufactured Housing District	0	0	0.0%	18	2	<0.1%
Residential Multi-Family District	13	493	2.8%	133	123	1.6%
Residential Mixed Use District	1	13	0.1%	17	25	0.3%
Commercial District	52	1,486	8.4%	215	1,043	13.9%
Entertainment District	12	547	3.1%	16	233	3.1%
Office District	1	27	0.2%	9	53	0.7%
Industrial District	0	0	0.0%	7	20	0.3%
Quarry District	10	1,852	10.5%	3	229	3.0%
Outside City Limits	166	7,557	42.9%	3,531	2,821	37.5%
Right of Way (ROW)	27	411	2.3%	287	1,007	13.4%
<b>Totals</b>	<b>389</b>	<b>17,635</b>	<b>100.0%</b>	<b>6,659</b>	<b>7,529</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

**Table 2-21. Vacant and Undeveloped Land Summary – Bexar County (Within 5 Miles of Camp Bullis)**

Zoning Classification	Undeveloped Land			Vacant Land		
	Number of Parcels	Total Acreage	Percent of Total Acreage	Number of Parcels	Total Acreage	Percent of Total Acreage
Development Reserve District	10	998	3.3%	270	525	3.9%
Residential Estate District	0	0	0.0%	13	22	0.2%
Residential Single-Family District	98	5,096	16.7%	897	999	7.5%
Neighborhood Preservation District	8	727	2.4%	71	29	0.2%
Master Planned Community District	16	704	2.3%	42	237	1.8%
Planned Unit Development District	46	1,593	5.2%	2,793	1,637	12.3%
Manufactured Housing District	0	0	0.0%	32	4	<0.1%
Residential Multi-Family District	31	938	3.1%	223	351	2.6%
Residential Mixed Use District	2	28	0.1%	27	52	0.4%
Commercial District	102	2,691	8.8%	490	1,940	14.6%
Entertainment District	12	547	1.8%	16	233	1.8%
Office District	1	27	0.1%	36	75	0.6%
Business Park District	2	35	0.1%	1	10	0.1%
Industrial District	4	106	0.3%	34	89	0.7%
Quarry District	12	1,946	6.4%	3	229	1.7%
Outside City Limits	337	14,335	47.0%	5,651	5,283	39.7%
Right of Way (ROW)	49	760	2.5%	448	1,605	12.1%
<b>Totals</b>	<b>730</b>	<b>30,531</b>	<b>100.0%</b>	<b>11,047</b>	<b>13,320</b>	<b>100.0%</b>

Source: City of San Antonio Planning and Development Services Department, January 6, 2009; and Matrix Design Group, 2009

It is important to note that the data in these tables is only provided for lands within Bexar County, as it was not available for areas within Comal or Kendall counties. As such it does not match with the total amount of land contained within the one, three, and five mile extents. The data for the following three tables is cumulative, such that Table 2-20 includes the data from Table 2-19 and Table 2-21 includes the data from Table 2-20.

## 2.11 Regional Assessment

### Transportation

#### Roadways

The City of San Antonio is a major city in Texas and is a hub for transportation. As a result, it is served by many freeways and highways. The major highways and freeways serving the area include I-10, which extends east through the city center to the northwest; I-35, which extends northeast to southwest; I-37, which travels from the city center southeast out of the City; I-410, which loops around the City, Highway 281, which extends north to south, and Loop 1604, which serves as the outer loop for San Antonio (see Figure 2-12 on the next page).

Due to the size and growth rate of San Antonio and its surrounding suburbs, traffic congestion is a major issue of the highways and freeways that support the City. For instance, during peak and non peak hours, congestion along Highway 281 causes the majority of roadway and intersections to operate at a Level of Service ranging from E / F. Automobile accidents and fatalities have also seen a rise, and in 2005, the Texas Transportation Institute (TTI) estimated the total cost of congestion on the San Antonio economy to be \$530 million.

The Alamo Regional Mobility Authority (RMA) is an independent governmental agency created in 2003 to help accelerate critical transportation projects within Bexar County. The Alamo RMA has several projects forecasted that are designed to improve vehicular transportation on Loop 1604 on the north side of San Antonio (see Figure 2-13). One such project is expansion of Highway 281 north of Loop 1604, which will

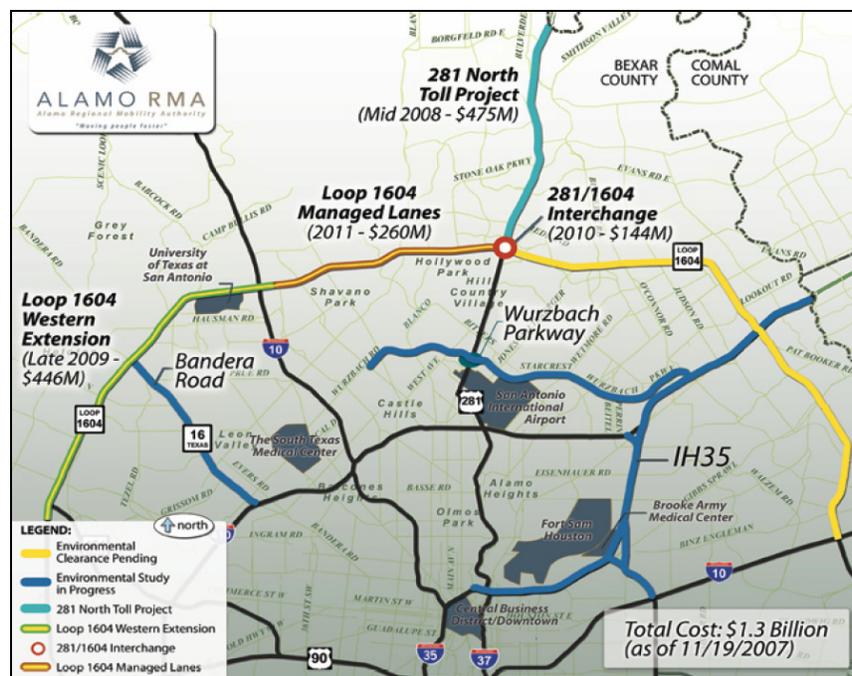
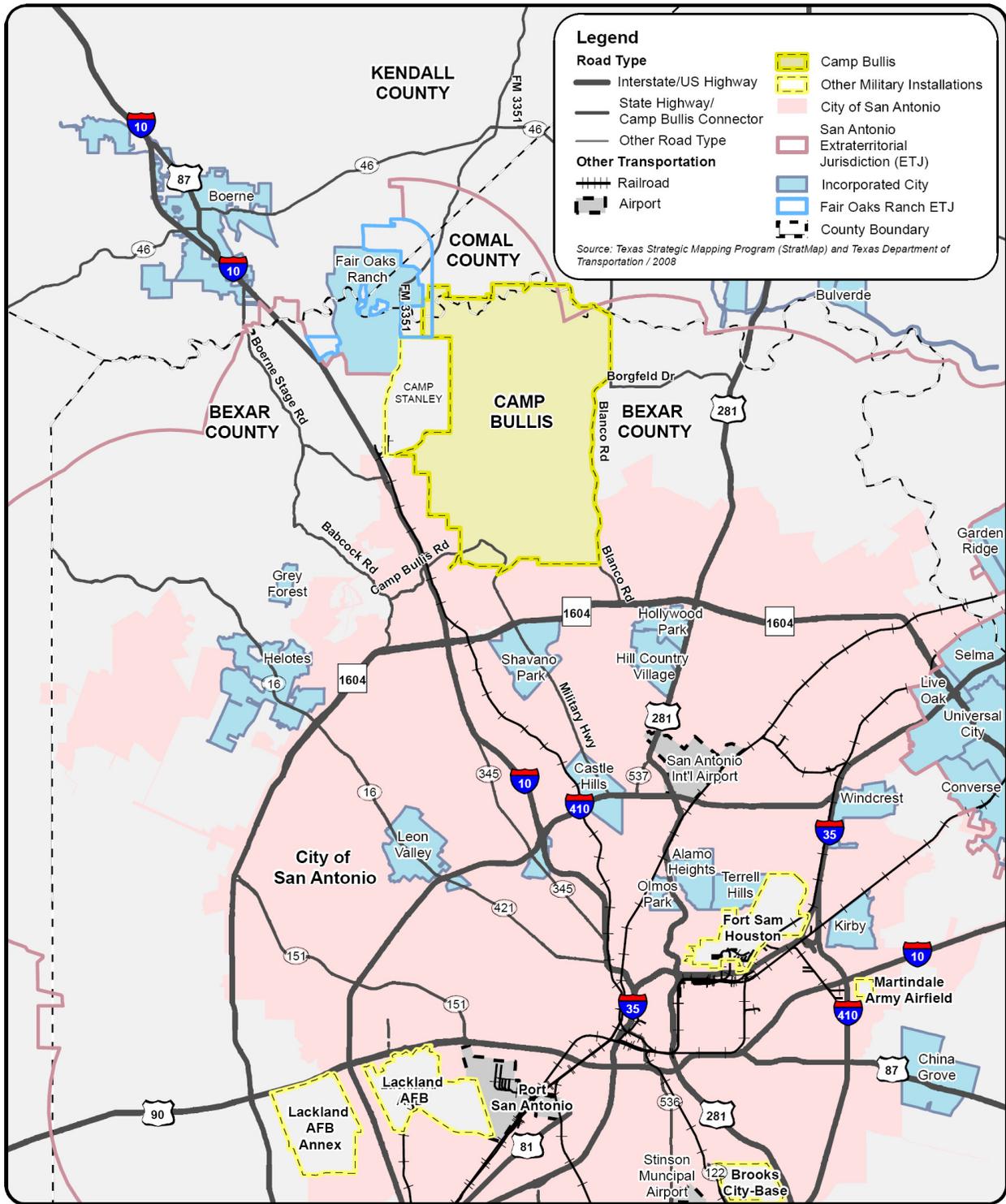


Figure 2-13. Alamo RMA Projects - North San Antonio

Source: Alamo RMA Presentation to Bulverde City Council, 22 July 2008

add several travel lanes to help reduce traffic congestion entering and exiting the City. As of January 2009, the 281 North Toll Project is on hold pending the preparation of a new Environmental Impact Statement (EIS). On October 24, 2008, the Federal Highway Administration (FHWA) withdrew the previous "Finding of No Significant Impact (FONSI)". The Alamo RMA is soliciting Requests for Qualifications / Proposals (RFQ/P) from environmental firms and is anticipating a March/April 2009 selection. The current goal is to complete the EIS in 36 months, pending litigation delays.



0 2 4 Miles  
 Matrix Design Group, Inc.  
**Figure 2-12**  
**Regional Transportation**

The boundaries of the expansion will extend from Loop 1604 north to the Bexar / Comal County line. It is set for three phases of construction to minimize its impact to drivers. Once started, the project is expected to be completed within four years; however, the project cannot move forward until the EIS is completed and approved by the Federal Highway Administration. In the interim, safety improvements are being examined to reduce accidents and injuries on Highway 281.

The Wurzbach Parkway project is a joint venture between the Alamo RMA and the Texas Department of Transportation. This project is intended to relieve traffic congestion on San Antonio roadways and portions have already been completed. The Alamo RMA is responsible for the interchange at Highway 281 and Wurzbach Parkway, which is currently in the process of an EIS. Other unfinished portions of the project are also in the process of an EIS.

Another project, along I-35, is in the preliminary stage of the environmental evaluation process. It is currently undergoing a traffic and revenue study, which consists of three phases. The project limits extend approximately 16 miles from the Central Business District to the Bexar / Guadalupe County line.

### **Transportation of Troops to and from Camp Bullis**

Camp Bullis is a training site for personnel stationed at Fort Sam Houston and Lackland AFB. Since these personnel are not stationed at Camp Bullis, they must be transported from their respective bases to the training grounds. The routes that are accessed by trainees are also used by the general public.

Based on estimates provided by Fort Sam Houston personnel, approximately 887 students are transported from Fort Sam Houston to Camp Bullis on a weekly basis, depending on training demands and schedules. Transportation is typically conducted with buses and six-passenger vans requiring approximately 21 vehicles each way per week, depending on the number of troops and the equipment required for training exercises. The preferred route that the buses usually take from Fort Sam Houston to Camp Bullis is Pershing Road to Broadway Boulevard to Hildebrand Road to Highway 281 to Loop 1604 to Military Highway to Camp Bullis. Sometimes an alternate route is used, which proceeds up Walters Street to I-35 to I-10 to Loop 1604 to Military Highway to Camp Bullis. There are normally four to six round trips per week, which depart the “home” bases between the hours of 7:30 to 9:00 in the morning, and return between 3:00 and 6:00 in the afternoon or evening.

Troops also travel from Lackland AFB to Camp Bullis on a regular basis. This primarily occurs in convoy fashion, with approximately 12 convoys departing from Lackland AFB to Camp Bullis and 12 convoys returning in the opposite direction. The types of vehicles that constitute these convoys are buses, flat bed trucks, and 6-passenger trucks, carrying approximately 60 students, as well as instructors and equipment. Collectively, approximately 24 vehicles and over 1,100 personnel are transported weekly in each direction. The route that is used from Lackland AFB to Camp Bullis is Military Highway to Highway 90 to Loop 410 to I-10 to Loop 1604 back to Military Highway. The convoys are scheduled daily from 6:00 a.m. to 6:00 p.m.

A substantial amount of personnel also transport themselves to Camp Bullis using privately operated vehicles. Privately operated vehicle traffic is not tracked or managed by the Department of Logistics at Fort Sam Houston, or by Lackland AFB, and is not included in the numbers listed above.

### **Air Transportation**

The San Antonio International Airport is located approximately five miles to the southeast of Camp Bullis, and is sited in the northern part of San Antonio. It is a public airport with two main runways, which are 8,500 feet and 7,500 feet in length, and one general aviation runway that is 5,500 feet long. End-of-year statistics for 2007 indicated that the airport conducts a daily average of 260 departures and arrivals, both domestic and international. As of 2007, 49 percent of aircraft operations were generated by commercial, 38 percent by local general aviation, 10 percent by air taxi, 2 percent by military, and 2 percent by transient general aviation.

Stinson Municipal Airport is a reliever airport for San Antonio International Airport, and is located six miles south of downtown San Antonio. This airport includes two runways, which are 4,800 and 4,100 feet long. The majority of operations at Stinson are local and transient general aviation flights.

Many of the helicopter operations that take place at Camp Bullis originate from Martindale Army Airfield. This Texas Army National Guard facility, located about two miles southeast of Fort Sam Houston, was built during World War II as a satellite airfield for Randolph Army Airfield. Extensive renovations have taken place in recent years that improved the ramp areas and built multiple new helicopter pads over the northern portion of one of the former runways.

### **Environmental Resources**

The study area is sited in the Balcones Canyonlands Subregion of the Edwards Plateau. The landscape was once characterized by lush grassland, but due to overgrazing and urban development, it has now become predominately brushland with trees consisting of Ashe juniper and oak. These trees provide valuable habitat for various bird species. Some of the geological features include steep sloped hills and canyons and networks of underground cave systems that provide important habitat for ground-dwelling invertebrates.

The lands within Camp Bullis contain over 500 identified plant species. Approximately 16,500 acres, or 59 percent of the land is covered with dense Ashe juniper stands, while roughly 32 percent is composed of oak / grassland savannas. The remaining grounds are either developed areas or open grassland and scattered patches of trees. The topography in Camp Bullis is composed of many hills, valleys, and streambeds. The most prominent hill features in Camp Bullis are King Ridge, with an elevation of 1,515 feet; High Hill, with an elevation of 1,490 feet; and Otis Ridge, at 1,480 feet. The major drainage sources are Salado Creek, which flows from the northwestern boundary in a south-southeasterly route, and Lewis Creek, which flows centrally through the installation and into Salado Creek in the southwest.

### **Edwards and Trinity Aquifers**

Camp Bullis sits on top of roughly 3,880 acres of the Edwards Aquifer recharge zone. This breaks down to approximately 2,430 acres in the south portion of the grounds, and 1,450 acres in the north (see Figure 3-16 in Section 3, Compatibility under the heading “Water Quality/Quantity.” The aquifer is divided into three zones; the contributing zone, the recharge zone, and the artesian zone. The contributing zone is about 5,400 square miles and is also referred to as the drainage or catchment zone. This zone “catches” water from rainfall, which then flows from streams into the recharge zone. The 1,250 square mile recharge zone allows large quantities of water to flow into the aquifer through solution features, related to faults and fractures, where Edwards Limestone is at the land surface. Cibolo Creek, which forms the border between Bexar and Comal County, is believed to provide a significant amount of

recharge to the Edwards Aquifer. Once inside the aquifer, the water flows laterally through highly transmissive zones to the artesian zone. In the Edwards Aquifer artesian zone, water is confined between the relatively less permeable Glen Rose Formation below and generally impermeable Del Rio Clay above. Artesian pressure resulting from this confined condition results in water flowing back to the land surface at large springs, primarily in Comal and Hays counties.

The study area lies at the boundary between the Edwards Aquifer contributing and recharge zones. The entire aquifer system spans across 14 counties and occupies over 8,800 square miles. The aquifer is one of the most important sources of water in Texas, providing the supply for over 2 million people annually. The largest user of this water is San Antonio. Edwards Aquifer is also an important natural environment, providing habitat to over 40 known aquatic subterranean species. Not all of these species reside within the study area, however. In the past several decades, due to increased growth and demand for water, the ability of the aquifer to meet the needs of the region has prompted concerns for its continued use, as well as serving the needs of threatened and endangered species.

Another important water feature of the study area is the Trinity Aquifer. Recent models suggest that it provides up to 10 percent of the annual amount of recharge to the Edwards Aquifer. The Trinity Aquifer provides water for Bexar, Comal, Kendall and several other counties, but not to the degree of the Edwards Aquifer. It recharges much slower than the Edwards Aquifer, due in part to the slow movement of water, as well as the contribution of water to the Edwards Aquifer. New urban growth and development also threatens the Trinity Aquifer, and the TWDB has projected steep drops in well levels for the next 50 years.

### **Threatened and Endangered Species**

There are several endangered species located within the Camp Bullis study area. Two of the species are birds, while the other species are all underground invertebrates, known as karst species. The Golden-cheeked Warbler is the most controversial species in the study area and currently has the biggest implication for training operations on Camp Bullis. The other bird is the Black-capped Vireo.

The Golden-cheeked Warbler was placed on the federal endangered species list on May 5, 1990. Warblers are distinguished by their jet black, white, and olive colored bodies and golden-colored cheeks. Reaching a length of only 4.5 inches at adulthood, their habitat consists mainly of canyons and steep slope areas containing mature Ashe juniper, oak, and other hardwood trees. Golden-cheeked Warblers have been known to also occupy flat riparian drainage areas, but population stability and productivity for these areas has not been determined. Trees that make up the habitat are characterized by a canopy closure of over 50 percent and a height of over 15 feet. The density of the trees ranges from 140 to 775 trees per acre. Typically the tree stands contain at least ten percent Ashe juniper as well. Areas containing thinner amounts of trees than those discussed above are not determined to provide Golden-cheeked warbler habitat.

Warblers can be found throughout central Texas in the Edwards Plateau, where they spend the spring and early summer months breeding before returning to Mexico and Central America in July for the winter months. Development within the City of San Antonio's ETJ is subject to the City's Tree Preservation Ordinance during the development process. The U.S. Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife Department (TPWD) believe that the habitat within the study area is reaching a critical point as increasing old growth Ashe juniper and oak areas described above are cut down to make way for new

development. As this occurs, it can potentially cause the Warblers to extend further onto Camp Bullis land where they can find trees and make nests. This condition impacts training operations at the installation. Roughly 10,000 acres of the total 28,000 acres that comprise Camp Bullis are potential habitat. Of this total, approximately 3,000 acres are known to be current habitat for this species.

The Black-capped Vireo was listed as a federally endangered species on October 6, 1987. The Vireo's body is olive and white, while the head is adorned with a black "cap." They spend their nesting period of April to July in Texas, and migrate south to Mexico during the winter. Unlike the Golden-cheeked Warbler, their habitat consists of rangelands with open grassland and scattered clumps of shrubs. Vireos are found throughout the Edwards Plateau of central Texas and the eastern Trans-Pecos region. Nesting typically occurs in shrubs that are low to the ground (between two to four feet) and provide cover to conceal the nests. The territory for a male Vireo is usually between two and four acres, and they return to the same area every year. Habitat loss for these birds has occurred from poor livestock practices, improper wildland fire management, and urban development. This species does not present as much of an issue as the Golden-cheeked Warbler to the study area since they are not as numerous, nor is there as much ideal habitat for them within the boundaries of Camp Bullis.

On December 26, 2000 nine Bexar County karst invertebrates were placed on the federal endangered species list. These species live in various subterranean caves throughout Bexar County. As a result, many have adapted uniquely to their specific cave and only exist within that particular ecosystem. It is very important to preserve these caves so that the species within them are retained. Habitat loss for these organisms occurs when caves or cave entrances are filled in due to development, when rock that makes up the cave is quarried away, or when above-ground systems are altered that are essential to support below-ground environments. The nine karst species that have been identified in Bexar County are:

- *Rhadine exilis* (no common name) – small, essentially eyeless ground beetle known from 45 caves
- *Rhadine infernalis* (no common name) – small, essentially eyeless ground beetle known from 26 caves
- *Batrisodes venyivi* (Helotes mold beetle) – small, eyeless beetle known from two caves
- *Texella cokendolpheri* (Cokendolpher cave harvestman) – small, eyeless daddy-longlegs spider known from one cave
- *Cicurina baronia* (Robber Baron Cave meshweaver) – small, eyeless spider known from one cave
- *Cicurina madla* (Madla Cave meshweaver) – small, eyeless spider known from eight caves
- *Cicurina venii* (Braken Baron Cave meshweaver) – small, eyeless spider known from one cave
- *Cicurina vespera* (Government Canyon Bat Cave meshweaver) – small, eyeless spider known from two caves
- *Neoleptoneta microps* (Government Canyon Bat Cave spider) – small, essentially eyeless spider known from two caves

In 2003, USFWS released a final ruling for critical habitat designation of karst invertebrates in Bexar County. The term critical habitat refers to specific areas that are essential for endangered karst species and may require special management to protect the species. This ruling designated 1,063 acres in 22 units as critical habitat for seven species. This did not include areas in Government Canyon State Natural Area or Camp Bullis due to karst management plans in effect for these areas. Furthermore, in March 2008, the USFWS released the Bexar County Karst Invertebrate Draft Recovery Plan, which aims to protect karst cave features and habitat from outside factors that could potentially result in loss of habitat.

Based on cave surveys by George Veni and Associates, there are 23 caves on Camp Bullis that are known to contain endangered karst species. The recorded species are *Rhadine exilis*, found in 21 caves, *Rhadine infernalis*, found in three caves, and *Circurina madla*, found in one cave. Six other karst species are considered to potentially exist within the borders of Camp Bullis. If these species continue to decline or their habitat continues to deteriorate or is destroyed on or off the installation, regulatory restrictions associated with these listed species could increase and further restrict Camp Bullis' operational flexibility on the installation. The mechanism that would cause this regulatory pressure is the periodic review of recovery goals set forth in the USFWS March 2008 Draft Bexar County Karst Invertebrate Recovery Plan. All three of the karst invertebrates that are known to exist on Camp Bullis exist in other karst faunal zones. If goals in the recovery plan are not met because karst off-post is not conserved, the recovery team and/or USFWS may modify existing restrictions on remaining karst in order to be able to still meet recovery plan goals. This modification could include measures such as increasing the size of karst buffer zones, further restricting activities within or near karst features, and requiring additional mitigation measures for activities affecting karst features. If this condition occurs, it could cause increased restrictions to the types of activities conducted on-site and could even increase acreage restrictions in order to protect the remaining species. For species that are single cave endemic, there will not be an impact to Camp Bullis.

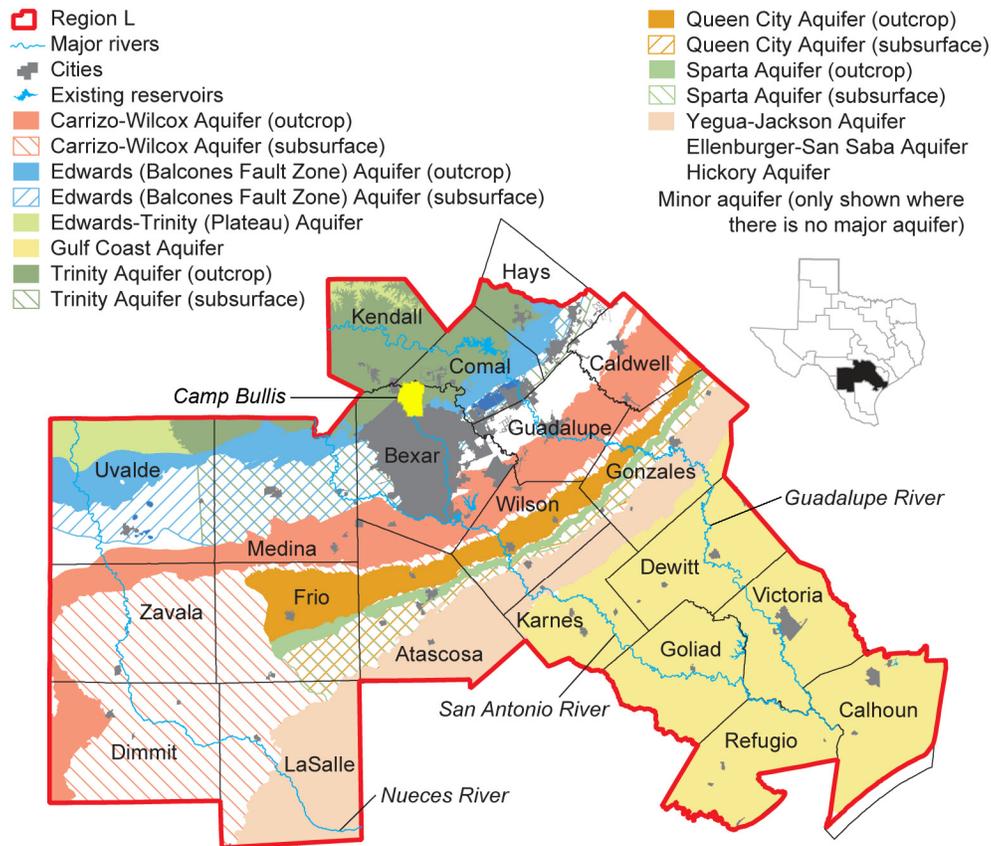
### Water Resources

#### **Texas Water Development Board**

In 1957, the Texas Water Development Board (TWDB) was created through state legislation and constitutional amendment. Today, the objective of the Board is to provide long range water resources planning and project financing to local jurisdictions. To better understand and assess the demand for water in the State of Texas, the TWDB established 16 planning regions. Each region is required by the TWDB to develop water management strategies through a Regional Water Plan to meet potential water supply shortages.

#### **South Central Texas Regional Water Planning Area**

The study area resides in the South Central Texas Regional Water Planning Area, which consists of all or parts of 21 counties, including Bexar, Comal, and Kendall (see Figure 2-14). The planning area stretches from the Gulf Coast to the Hill Country and includes portions of the Rio Grande, Nueces, San Antonio, Guadalupe, Colorado, and Lavaca River Basins, as well as the Colorado-Lavaca, Lavaca-Guadalupe, and San Antonio-Nueces coastal basins, the Guadalupe Estuary, and San Antonio Bay. San Antonio is the largest city within the planning area. Other large cities within the region include Victoria, San Marcos, and New Braunfels.



Source: Texas Water Development Board, 2007 State Water Plan, November 2006

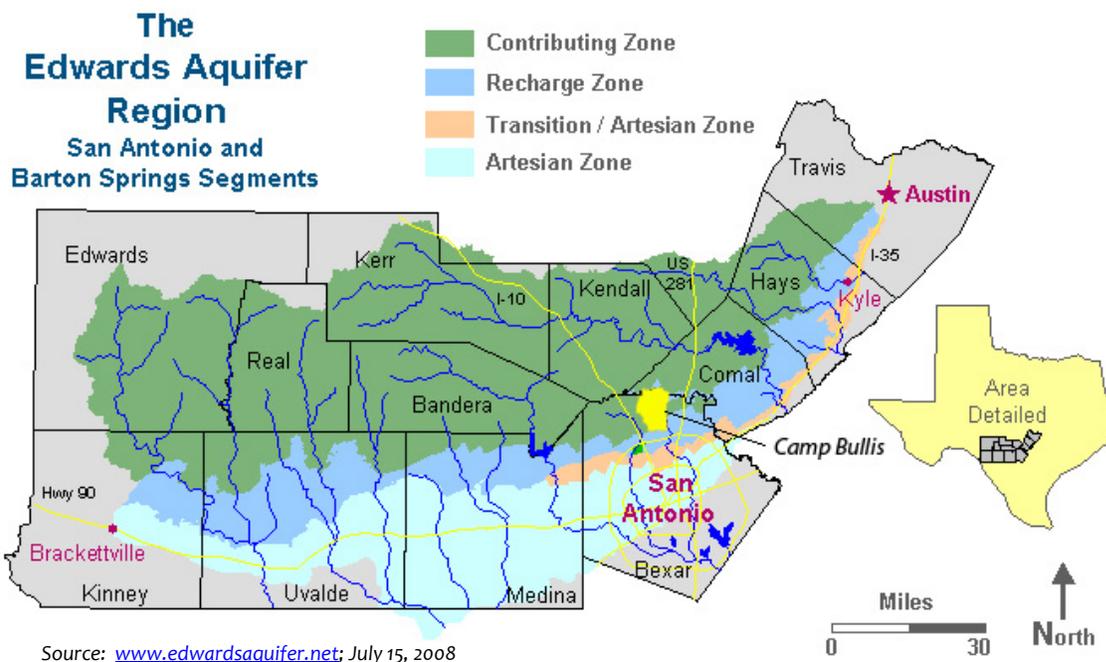
**Figure 2-14. South Central Texas Regional Water Board Planning Area**

**Edwards Aquifer Authority**

In 1993, the Texas Legislature passed Senate Bill 1477 to create the Edwards Aquifer Authority. The agency was created to manage the quantity and quality of the San Antonio segment of the Balcones Fault Zone Edwards Aquifer, as well as conserve and protect the water resources and habitat and to regulate pumping for the benefit of protecting threatened and endangered species that are within the scope of their charter. Covering all or parts of eight counties including Uvalde, Medina, Bexar, Comal, Hays, Caldwell, Guadalupe, and Atascosa counties, the agency administers regulations regarding Edwards Aquifer withdrawal permitting and various water quality protection measures. The agency’s enabling legislation caps the amount of water that can be withdrawn from the aquifer and stipulates restrictions on aquifer pumping during periods of drought.

The 2007 State Water Plan anticipates that approximately 10 percent of Texas’ population will reside in the South Central Texas Region by 2010. A projected 75 percent population increase by 2060 in this region is expected to increase water demands by 29 percent. This equates to an estimated demand of 985,237 acre-feet in 2010 to 1,273,003 acre-feet in 2060. During this timeframe, municipal water usage is expected to increase by 62 percent, from 369,694 acre-feet to 597,619 acre-feet. Agricultural irrigation demand is projected to drop 20 percent, from 379,026 acre-feet to 301,679 acre-feet.

There are five major aquifers that supply groundwater to the South Central Region. They are: the Edwards (Balcones Fault Zone), which is projected to provide almost 50 percent of the supply in 2010; Carrizo-Wilcox, which provides approximately 30 percent; and Trinity- Gulf Coast aquifers; and Edwards-Trinity (Plateau) aquifers, which comprise the remaining 20 percent. The three primary sources for surface water in the region are the Guadalupe, San Antonio, and Nueces Rivers (see Figure 2-15).



**Figure 2-15. Edwards Aquifer Region**

### Trinity Glen-Rose Groundwater Conservation District

The Trinity Glen Rose Groundwater Conservation District (TGRGCD) was created in September 2001 in order to conserve and protect part of the Trinity Aquifer in northern Bexar County. In January 2001, the Texas Natural Resources Conservation Commission designated this area as part of a Priority Groundwater Management Area. This designation is applied to areas that are currently, or in the future, expected to experience critical groundwater problems due to issues such as urban development (as was the case for this area). The TGRGCD is responsible for ensuring that water within the aquifer is properly managed in a balanced manner that allows for growth and also preserves the quality and quantity of water for future generations.

### San Antonio Water System (SAWS)

The SAWS is the largest water and sewer provider in the San Antonio area, and serves approximately 1 million people in central Bexar County and surrounding urbanized areas. SAWS receives most of its water, between 90 to 95 percent, from the Edwards Aquifer. New sources of water are being sought to be able to balance supplies with future projected demands, which exceed the anticipated amounts available from the Edwards Aquifer. SAWS approved a contract in 1998 between the Guadalupe River Authority to buy and extract a limited amount of surface water from Canyon Lake in Comal County. Also, in 2002, the Trinity Aquifer was introduced as a new source of water. The Oliver Ranch and Bulverde

Sneckner Ranch projects in northern Bexar County are small scale projects which provide partial relief for the growing water demand through Trinity Aquifer water distribution.

The 2005 SAWS Water Resources Plan Update includes two scenarios that could potentially impact water demand and quantity in the future. Planning Scenario 1 (PS 1) assumes that SAWS will serve a geographic region that is almost equal to, if not slightly greater than, its current service area. This area includes the majority of San Antonio, the cities of Alamo Heights, Elmendorf, Kirby, Leon Valley, and Shavano Park, and also parts of adjacent Bexar County. In Planning Scenario 2 (PS 2), SAWS will serve all jurisdictions listed for PS 1, and will also serve as the wholesale water provider for Atascosa Water Supply Corporation, Bexar Metropolitan Water District, East Central Water Supply Corporation, the cities of Converse, Fair Oaks Ranch, Live Oaks, Selma, Windcrest, and portions of Comal, Kendall, and Medina counties.

When projecting the future demand of SAWS for water distribution, each planning scenario generated a different forecast. PS 1 is projected to create a demand increase of 37 percent between the years between 2006 and 2050. This results in an increase in demand from 172,203 acre-feet in 2006 to 232,604 acre-feet in 2050. For PS 2, the increase in demand is projected to be 48 percent, increasing from 213,328 acre-feet in 2006 to 312,028 acre-feet in 2050. In order to accommodate these increases, the Water Resources Plan contains recommendations, which include the use of recycled water and obtaining water from sources other than the Edwards Aquifer. These sources could include the Lower Glen Rose / Cow Creek portion of the Trinity Aquifer in Northern Bexar County and the Carrizo Aquifer in southern Bexar County.

### *Cultural Resources*

The City of San Antonio, Bexar County, and the surrounding areas have a rich human history dating back over 11,000 years. Native American tribes played an important role in the history of the area. Some of the important late Paleolithic Indian sites located within Bexar County are Pavo Real, St. Mary's Hall, the Richard Beene Site, and the Chandler Site. The Southern Texas Archaeological Association has had a role in the excavation of these sites. Some important sites for Archaic cultures are Panther Springs Creek, Medina River sites, and the Culebra Creek sites.

During the 18<sup>th</sup> Century, Spanish colonization brought a new influence to the area. Several Spanish missions were built, which were used to convert local Native American populations. The San Antonio de Valero, known today as the Alamo, is probably the most well known historic site in San Antonio. The other four missions in the City are Concepcion, San Jose, San Juan Capistrano, and Espada. The missions, as well as their associated acequias, fields, and other features are located in areas that have been protected to preserve their importance. Other historic landmarks include the Municipal Auditorium and the Irish Flats housing neighborhood. More than 1,600 archaeological sites have been identified and recorded in San Antonio and Bexar County.

The City of San Antonio's Unified Development Code defines a historic district as an urban or rural area that may contain one or more buildings, objects, sites or structures designated as exceptional or significant historic landmarks or clusters. These districts are defined as a historic district by City Council, state, or federal authority. San Antonio contains 22 different locally designated historic districts, ranging in size from three parcels to seven miles. The following is a list of the local historic districts within San Antonio:

- Alamo Plaza
- Arsenal
- Auditorium Circle
- Cattleman Square
- Dignowity Hill
- Fulton Avenue
- Government Hill
- Healy-Murphy
- Hemis Fair
- King William
- La Villita
- Lavaca
- Leon Springs
- Main and Military Plaza
- Mission
- Monte Vista
- Monticello Park
- Old Lone Star Brewery
- School of Aerospace Medicine
- St. Paul Square
- Ursuline Academy
- Woodlawn Lake

According to the Camp Bullis Integrated Cultural Resources Management Plan (ICRMP), dated February 2008, five different cultural resource property types have been identified within the boundaries of Camp Bullis. These five property types are buildings, structures, districts, objects, and sites. There have been 350 archaeological sites, roughly 21 percent of the state-registered sites in Bexar County, identified on the installation, with 24 of these being eligible or potentially eligible for listing in the National Register of Historic Properties (NRHP). These sites include prehistoric camp sites, military bunkers and trenches, and historic farmstead-related sites. There is also one potential Cantonment Historic District, which is considered NRHP-eligible, although it has not been formally listed. The Cantonment Historic District includes 40 buildings and 32 landscape features.

Please see next page.