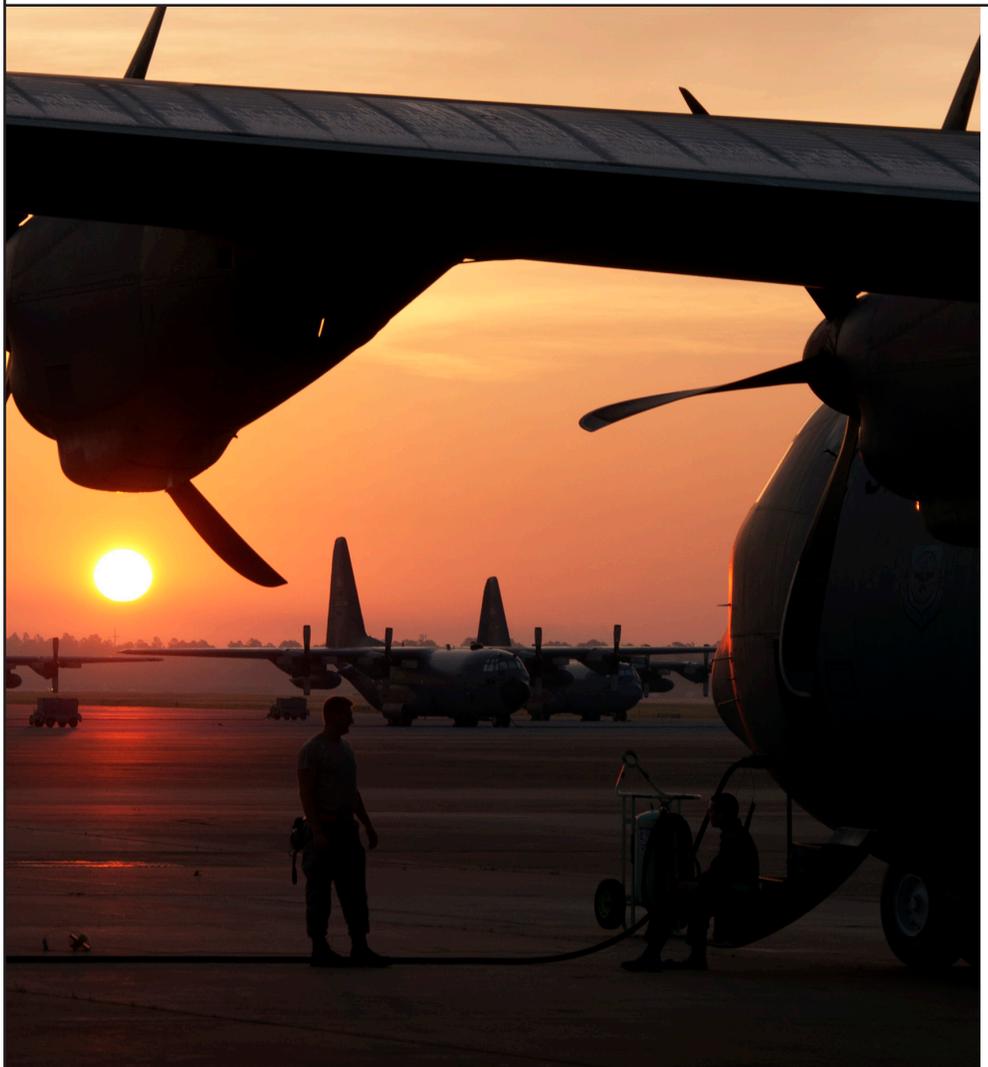


2014 TEXAS MILITARY VALUE TASK FORCE: PREPARING FOR THE FUTURE



Report Documentation Page

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State of Texas

Office of the Governor

Texas Military Preparedness Commission

Texas Military Value Task Force (TMVTF)

To: The Honorable Greg Abbott, The Texas House of Representatives, The Texas State Senate, and The Texas U.S. Congressional Delegation

Subject: Texas Military Value Task Force Recommendations

Dear Governor Abbott,

On behalf of the Texas Military Value Task Force (TMVTF), I am pleased to submit to you the report 'Texas Military Value Task Force: Preparing for the Future'.

Texas is a major contributor and significant partner in our nation's defense. With 15 major installations, numerous headquarters, open spaces for realistic training, low cost of living and outstanding support to military and families, Texas brings a lot to the table. In turn, Texas benefits from the almost \$150B economic impact and 255,000 jobs tied to these installations. If Texas is to remain a significant partner in our nation's defense, action will be required to make installations more effective and efficient.

Significant changes in Department of Defense missions, facilities and personnel are inevitable. The report was prepared to address (1) "what is the right action" to benefit our nation's defense, (2) how to drive down costs, (3) support those serving, and (4) provide tools to installations and communities to build even greater "military value". All four of these actions would help our nation's defense, save taxpayer dollars, help support the military personnel, and posture the State installations for upcoming change.

The time for action is now. Before, during, and after the next Base Realignment and Closure (BRAC), significant changes will occur. Many of the recommended actions will take time. Other states and military communities are taking action to improve their military value and support. Texas must move forward. Standing still will be falling behind and produce risk of loss.

Although a snapshot in time, recommended action is required at all levels. Findings, recommended actions and desired end states are outlined in the report. Key to continued long term success is a focus on a sustained effort, rather than peaks and valleys for a "next" BRAC.

The future of military missions in Texas is promising; however, we need to continue to work with our installations and communities, supporting their needs to make each installation the most valuable and efficient location for the achievement of any assigned mission. With sustained focus and agile support for increased military value and military personnel support, Texas will continue to be both a major contributor and benefactor of our nation's defense communities.

Sincerely,

A handwritten signature in black ink that reads "Mike McMahan".

Mike McMahan
Chair

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Introduction

This report was created by the Texas Military Value Task Force (TMVTF) of the Texas Military Preparedness Commission (TMPC), which was established by the 83rd Texas Legislature. A summary of the law and process used can be found in the appendix of this document. The report focus is on actions to increase “military value” of Department of Defense (DoD) military installations in Texas. It is written as a guide to action for the TMPC, the Texas Legislature, and military communities. In addition, some action items will require changes in national policy or law, as well as, cooperation with military installations, the DoD, and the United States Congress.

Scope

Military installations studied in this report are within the jurisdiction of the Department of Defense (DoD) or the Texas National Guard. The Texas State Guard and U.S. Coast Guard facilities are not part of this report. The Texas State Guard is a state organization and does not fall under the jurisdiction of the DoD. The U.S. Coast Guard is located within the U.S. Department of Homeland Security. Geographically, the study concentrates on installations inside Texas, but surrounding training areas and installations outside Texas are factors in the effectiveness and efficiency of operations.¹

Focus and Criteria

Just like in private sector business, size and operations are affected by budget reductions, changes in strategy, and function. The most cost effective and most productive business sectors remain and can even expand. In the past, DoD decision criteria is based on a measurement of effectiveness and efficiency called “military value”. Whether moving a few people and small mission changes or taking a holistic review of worldwide facilities under Base Realignment and Closure (BRAC) criterion, “military value” has been the “coin of the realm”. The State of Texas and local communities have the opportunity to make Texas the most effective and efficient location for the DoD to train and operate. The second focus is creating initiatives to make Texas the #1 “military friendly” place for service members and their families to live, work and play. This report is not static and focus must be on coordinated action. Initiatives and progress should be reviewed and adjusted often to continue to match the dynamic requirements of the nation’s defense.

Whether moving a few people and small mission changes or taking a holistic review of worldwide facilities under Base Realignment and Closure (BRAC) criterion, “military value” has been the “coin of the realm”.

¹ The Government Owned-Contractor Operated (GOCO) facility at NAS Fort Worth JRB is included in the Texas Comptroller’s overall military economic impact, but because of its unique mission and criteria for use, is outside the scope of this report.

Introduction

Process

To fulfill the Texas Legislature mandate, TMPC nominated and the Governor approved selection of four Texas Military Value Task Force (TMVTF) members. The task was examined and defined. Texas military installations were asked to provide written responses and/or a presentation to the TMVTF, which examined mission capabilities, conditions of training ranges and airspace, ability to accommodate current and future total force missions, cost structure, unique efficiencies, and services to military families. Each major Texas installation was invited to present at TMVTF hearings to facilitate face-to-face conversation and develop an understanding of the intricacies of each installation. Hearing dates and presenters can be found in the appendix of this document. After the presentation, the TMVTF asked points of clarification or elaboration based on presented information.

Findings

Findings are divided into two sections. The first section lists informational findings to establish the present environment and perspective of DoD installation management decision makers. In addition, it also documents the significant impact of DoD on the Texas economy. The second section outlines findings, recommended actions, the desired end state of each recommendation and a partial list of examples of “Best Practices” for communities and installations to utilize.¹

Present Situation

There is always change to DoD installation missions and populations. However, in the next five years, it is likely the DoD will undergo sweeping moves in the way it organizes, trains, and operates. Some changes have already started and will likely accelerate. Texas has a long, significant and proud history of partnership with the defense of our nation. These military installations are also part of the fabric of many communities. They are a source of great pride, provide skilled workforce, add to population growth, and have significant economic impact. If Texas is to remain a significant partner in our nation’s defense, action will be required to make installations more effective and efficient.

There are three factors driving magnitude and timing of change: (1) Cuts to DoD designed to help balance the national budget; (2) the ever-changing world environment; and (3) existing excess installation capacity.²

Budget

The budget cuts have come in three waves resulting in significant budget pressure: (1) A Secretary of Defense directed cut of \$100 billion initiated by Secretary Gates in 2010³, (2) Immediately following this self-imposed cut, was a Congressional led cut of \$54.7 billion per year for 10 years, via the Budget Control Act of 2011 commonly called “sequestration”⁴, (3) As the long wars in Iraq and Afghanistan are drawn down, contingency funding for these conflicts are decreased and eliminated. These funds were for ongoing operations and do not cover long-term reinvestment to repair, replace, and replenish. The culmination of all these budget cuts has a large impact on available dollars to maintain readiness, support installations and maintain personnel levels.

Dynamic World

These large budget cuts are to decrease the national debt, but for DoD resulted in large, arbitrary and capricious cuts, and were not based on strategy change or promise of a more peaceful world. The dynamic world environment has led to changes in mission and organization. Changes are required in force equipment and personnel to meet budget and strategy changes. There are many pressures driving today’s investment requirement. A few examples are: a) changing National Security Strategy with a “pivot” to the Pacific theater, b) growing boldness of Russia, c) continued development of North Korea’s nuclear/missile programs d) Iranian nuclear development, e) the threat from Islamic State of Iraq and Syria (ISIS) and f) humanitarian missions like Ebola and Haiti, to name a few. History has indicated that this list is never static and the Nation, State and communities must continue to adjust their support to people and installations to meet these changing needs and opportunities.

1 The best practices noted in this report may be applicable to more than one recommendation.

2 <http://www.defense.gov/news/newsarticle.aspx?id=122410>

3 <http://www.defense.gov/releases/release.aspx?releaseid=13782>

4 <http://www.budget.senate.gov/republican/public/index.cfm/2012/5/thune-sessions-demand-transparent-plan-from-obama-administration-for-implementing-sequestration-cuts>

Excess Capacity

DoD has testified before Congress on the existence of significant excess capacity. DoD is presently formalizing a study to quantify how much “excess” capacity exists. The past BRAC Commissions did not close sufficient installations to balance force levels and installations. For example, the Air Force stated they estimated a 24% excess capacity after the last BRAC and there had been significant reductions in force structure that lead to an even greater excess.¹ The Army recently stated that they have an average of 18% excess at their installations.² Proposed reductions include shutting down programs such as the 159th Combat Aviation Brigade at Fort Campbell in Kentucky.³ The Air Force has proposed retirement of the A-10 Warthog and U-2 spy plane fleets.⁴ Changes like these are to meet budget constraints.

Timing of BRAC

DoD has asked for a BRAC in the past two President Budget submissions. Congress has denied approval based on lack of savings from the 2005 BRAC. Although a BRAC has not been approved by Congress, smaller changes have and will continue to occur without a BRAC. Some are significant to a particular installation and accumulated change can leave an installation “hollow”. The present “cliff” for DoD funding is 2016. The “significant BRAC” could occur as early as 2017. The BRAC decision will occur when the U.S. Congress reconciles the competing priorities of a significant decrease in budget and significant increase in need for change to the nation’s military size, organization and structure.

Legislative decision makers support the increased efficiency of base closures, but do not want that efficiency in their own district or State. A holistic “BRAC type” restructure will occur, but as important, both before and after BRAC, other significant changes will also take place. Since the criteria of “military value” is the center of gravity for both BRAC and the continuous changes impacting installations today, it follows that BRAC timing is less important than focusing on the criteria for change (large or small).

Communities should document the changes made in military value of their installation. DoD decisions are made based on completed and documented actions and not intention and rhetoric. This removes the buffer of time and makes the time to improve military value now.

A holistic “BRAC type” restructure will occur, but as important, both before and after BRAC, other significant changes will also take place.

1 <http://www.defensecommunities.org/headlines/need-for-brac-is-clear-installation-officials-tell-lawmakers/#>

2 <http://www.defensecommunities.org/headlines/need-for-brac-is-clear-installation-officials-tell-lawmakers/#>

3 <http://www.military.com/daily-news/2014/11/20/army-moves-to-shut-down-159th-combat-aviation-brigade.html>

4 <http://www.military.com/daily-news/2014/02/25/air-force-begins-hill-battle-to-retire-a10-u2.html>

Findings

Original Task Modified

The initial task for TMVTF was to prepare Texas for the next BRAC. As this task was peeled back to look for needed action and timing, it was immediately recognized that change was not waiting for the next BRAC. The original focus on a single event “BRAC” was well intended, but not the right “way ahead”. The way ahead was to prepare for ongoing change and to focus on (1) “what is the right action” to benefit our nation’s defense, (2) how to drive down costs, (3) support needed for those serving, and (4) provide tools to installations and communities to build and continue the positive relationships they enjoy with one another. All four of these actions would help our nation’s defense, save taxpayer dollars, help support the military personnel, and posture the State installations for change. A last task is to make sure there is focus on a sustained effort, rather than peaks and valleys of support for a “next” BRAC. Action needs to be proactive and lasting rather than reactive to a single event.

Authorization

Authorization for change varies from simple verbal agreement for action to US Congressional legislation. The vast majority of actions will not need legislation. Most initiatives will only need approval and simple agreement (with documentation) between willing partners of installation commanders and local officials, volunteer organizations or businesses. The sense of Congress, DoD and Services is cooperation, innovation, and action to improve military value and support the military member and family. The spirit of every discussion and plan for action should lean forward on how to make good ideas work and not be stuck in old ways. Negotiations work best and progress is made, when everyone at the table wins. These initiatives focus on win-win.

Criteria for Action

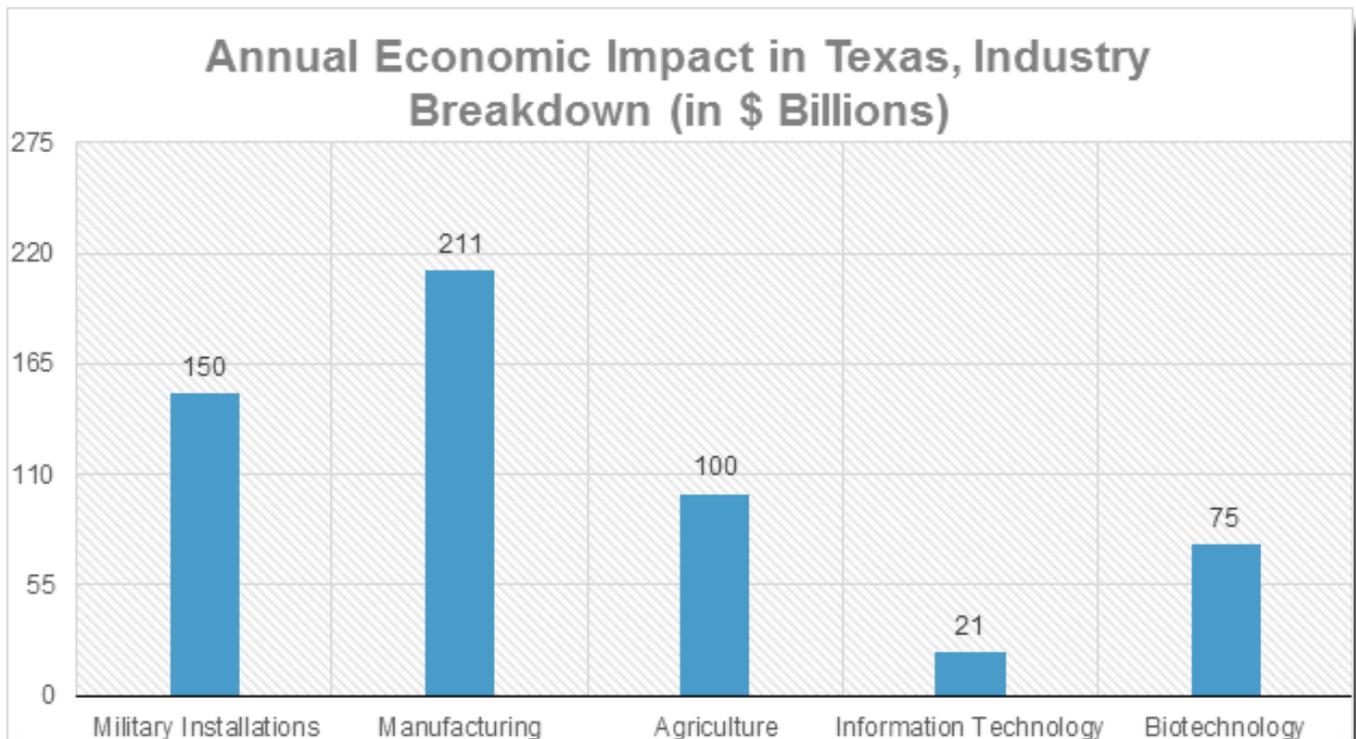
The dominant criteria for both near and long-term change is to make installations the most effective and efficient place to conduct training and operations. This criterion has been the driver for DoD basing decisions and Congress has indicated great interest in dollar savings for any future BRAC actions. These improvements make an installation a place to invest rather than divest. It provides the best training for our military and saves taxpayer money. In the past, this has been called “military value” and is the focus of this task force effort. A smaller, but morally significant factor is support to military and families. The quality of life for installations is a combination of support from installations, their communities and the State. Although smaller in quantitative impact on decisions, it earns significant focus and action.

“The support to the nation’s service members and their families in pursuit of the highest quality of life should reflect the same tenacity with which service members commit to protecting the freedom and survival of the nation.” Lt. Gen. Rick Lynch (Ret.)

The Importance of the Military to Texas

The military installations in Texas are an important and integral part of their communities and economy as the State of Texas continues to support the future longevity of the U.S. military presence in the state. Today, fifteen active duty and reserve installations across the branches of service have an economic impact of roughly a \$150 billion to the Texas economy per year.¹ In comparison, the economic impact of agriculture in Texas is \$100 billion per year. Texas is home to more than 255,000 DoD uniformed and civilian employees which generates a significant amount of sales tax revenue for the State. These military installations are often the largest employers in their community and provide a strong presence for the community and its economy. Many Texas companies have contracts to provide services with local military installations creating jobs and additional tax revenue. The defense sector in Texas is an important partner of various private sectors like: cyber technology, transportation, and aviation to name a few. The cyber technology industry has ranked Texas as the #2 cyber state with over 485,000 jobs. An example of an integral public/private relationship is San Antonio. San Antonio is home to more than 80 defense contractor firms and the 24th Air Force (Air Force Cyber Command) along with the 25th Air Force (Intelligence, Surveillance, and Reconnaissance), is based at **Lackland AFB (JBSA)**. To support this concentration, San Antonio has two major universities with Cyber Security and Information Technology degree programs.

Chart 1²



1 http://www.thetexaseconomy.org/economic-outlook/economy/articles/article.php?name=military_bases
2 Chart 1: Annual Economic Impact in Texas: Military installations: http://www.thetexaseconomy.org/economic-outlook/economy/articles/article.php?name=military_bases; Manufacturing: <http://www.manufacturetexas.org/about>; Agriculture: <https://www.texasagriculture.gov/About/TexasAgStats.aspx>; IT: www.governor.state.tx.us/files/ecodev/IT_Report.pdf; Biotechnology: www.governor.state.tx.us/files/ecodev/Biotech_Report.pdf

The Importance of the Military to Texas

The installations in the state are vital to national security and Texas has specialized in mobilizing and deploying troops, over 1 million, in the past 12 years. To support this mobilization, the installations and depots have dedicated railheads and runways capable of handling large passenger and cargo aircraft. The state has road and rail transportation to Texas ports for deployments with dedicated roll on roll off Navy ships berthed at Texas ports along with the necessary infrastructure at the ports for storage and loading of the ships. For example, other installations have teamed up to improve deployment. The State of Texas and local communities have spent an estimated \$ 750 million on transportation improvement projects to support three Army installations (**Fort Hood, Fort Bliss, and Fort Sam Houston**) to ease the movement of soldiers for deployments and access on an off the forts. These projects have provided jobs for local contractors and the finished projects benefit the community through increased infrastructure and ease of transportation.

The State of Texas is in the top three states for receiving DoD contracts, with the top awards going to aircraft development. One of the top Prime contract awards have gone to aircraft development at Lockheed Martin, which shares the runway with **NAS Fort Worth JRB** and has sub contracts with companies in the state. Other prime awardees include L-3 Communications in Greenville and Waco and the Bell Boeing V-22 program in Amarillo. In 2012, Lockheed Martin, Raytheon, Boeing, and UTC (Sikorsky and Pratt Whitney) had a combined workforce of around 37,000 employees in Texas. Their combined subcontractors in Texas total 8,000 companies with a total of value of contracts of \$5 billion.

Texas industries and military installations are dually integral to national security and economic development. They are also dually integral to their own development in the State of Texas. It is of the utmost importance that both continue to flourish in Texas.



Findings with Recommendations

This section is a discussion of findings for action. Each finding will have a short explanation of the situation followed by recommended action, primary organizations critical to resolution, desired end state and in most cases some examples of “Best Practices”. These recommendations are not always easy to implement, but with teamwork, consultation with TMPC, and help from other installation’s “best practices”, they can be put into action for a more effective and efficient installation. Each community and each installation is unique, and therefore very few “Best Practice” initiatives can be copied and implemented without some modification. “Best Practice” points of contact can be obtained from TMPC. Through exploration of findings for action and Best Practices communities and installations can find lessons learned and discover initiatives to explore.

Finding 1: Public-Public; Public-Private (P4) Partnerships

Public-Public; Public-Private (P4) partnerships are relationships between installations and other local or State government public entities or local community private entities to create projects benefiting installations and communities.¹ The Air Force has formally established the process with a test in FY 2013 at 13 installations. Some installations have operated informal P4 programs, but formalizing these agreements will improve focus, results and documentation for DoD installation decision makers. The strongest TMVTF recommendation makes is to utilize formal P4 partnerships. The DoD is placing more emphasis on utilizing mutually beneficial P4 partnerships with local entities to provide services to military installations at a lower cost and provide mutual support to the community.²

P4 agreements change words to measurable action.

As budgets are tightened on the military, as well as local communities, there is an opportunity for both to benefit from creating innovative team solutions. The areas of agreement will be as unique as the strengths of the community and requirements of a military installation. The most successful and innovative community-installation agreements start with putting “willing leaders” of the community (public and private) and the military installation at the same table to candidly discuss needs, wants and possible solutions. With the leaders at the table and agreeing to be open about problems and solutions, it empowers the details to be worked by the “subject matter experts” with a spirit of “yes, find a solution” rather than “no, we have never done this”. These agreements may be the mechanism for solving many of this report’s action recommendations that follow. Solutions may be as diverse as a land trade to solve encroachment issues, provide land for higher education, mutual disaster support, roads, sewer lines, waste management, or access to fiber optic cables.

1 The National Defense Authorization Act states that “the Secretary may enter into an intergovernmental support agreement with a State or local government to provide, receive, or share installation-support services if the Secretary determines that the agreement will serve the best interests of the department by enhancing mission effectiveness or creating efficiencies or economies of scale, including by reducing costs.” H.R. 4310, Section 331.

2 H.R.4310 – National Defense Authorization Act for Fiscal Year 2013

Findings with Recommendations

P4 programs are an excellent way to reach out and connect with military families. Their needs are in many ways the same as those in the communities and therefore, an opportunity exists to lend meaningful support in the form of childcare, education, gyms, libraries, recreational facilities, public transportation to mention just a few.¹ See support to military and families section for more information.

Finding: The best P4 agreements are of mutual benefit to the community and military installation. P4 formalizes and expands positive relationships. This formal long-term agreement can be used to find solutions for many action findings in this report and codify agreements of cost savings and quality of life initiatives that are proof of unique community support and therefore useful when decisions are made on future changes to installation size and mission. P4 programs with local communities can help ensure continuity of programs, while easing the burden on both installation and community budgets. P4 agreements should be established and reviewed on a regular basis by installation and community leadership. In many instances, a P4 agreement can be the mechanism for accomplishing many of this report's recommended actions.

Action and Desired Outcome: Leaders for communities and installations should bring issues, seek solutions and formalize a P4 agreement as soon as possible. Solutions should look for opportunities beyond current efficiencies, focus on requirements to increase military value, and consider realistic solutions to meet specific goals. Agreements should not be a one-time offer, but instead need to be reviewed on a regular basis and changed when needs and solutions change. The key is to state the challenge, find the solution, document, and execute the plan. **End State:** mutually beneficial P4 agreements that are reviewed often for new initiatives.

Best Practices:

Fort Hood donated land for a Texas A&M University Central Texas (TAMUCT). Local communities, in cooperation with Texas Department of Transportation (TXDOT), invested millions into supporting roads that lead to **Fort Hood** to aid efficiencies in training, mobilization, and improve quality of life.

Joint Base San Antonio (JBSA) has over 300 mission partners including community partnerships with the City of San Antonio, Alamo Area Council of Governments, Alamo Colleges, and CPS Energy. **JBSA** also has active partnership initiatives in animal control, bus operations, and parks and recreation.

Sheppard Air Force Base (AFB) has a range of successful P4 programs that includes refurbishment of the Sheppard Club, transition of golf course to a disc golf course, and a private donor provided water for use at the installation pool.

Ellington Field coordinates with local law enforcement on counter drug missions.

Goodfellow AFB has initiatives with the community to share training ranges, national incident management system training, and a tactical training facility.

Dyess AFB works with first responders to provide cost-effective and timely response to emergencies on the installation and in the community.

Fort Bliss has a desalination plant to solve water availability issues through a partnership with El Paso Water Utilities. **Fort Bliss** also has a solar energy farm through a partnership with El Paso Electric.

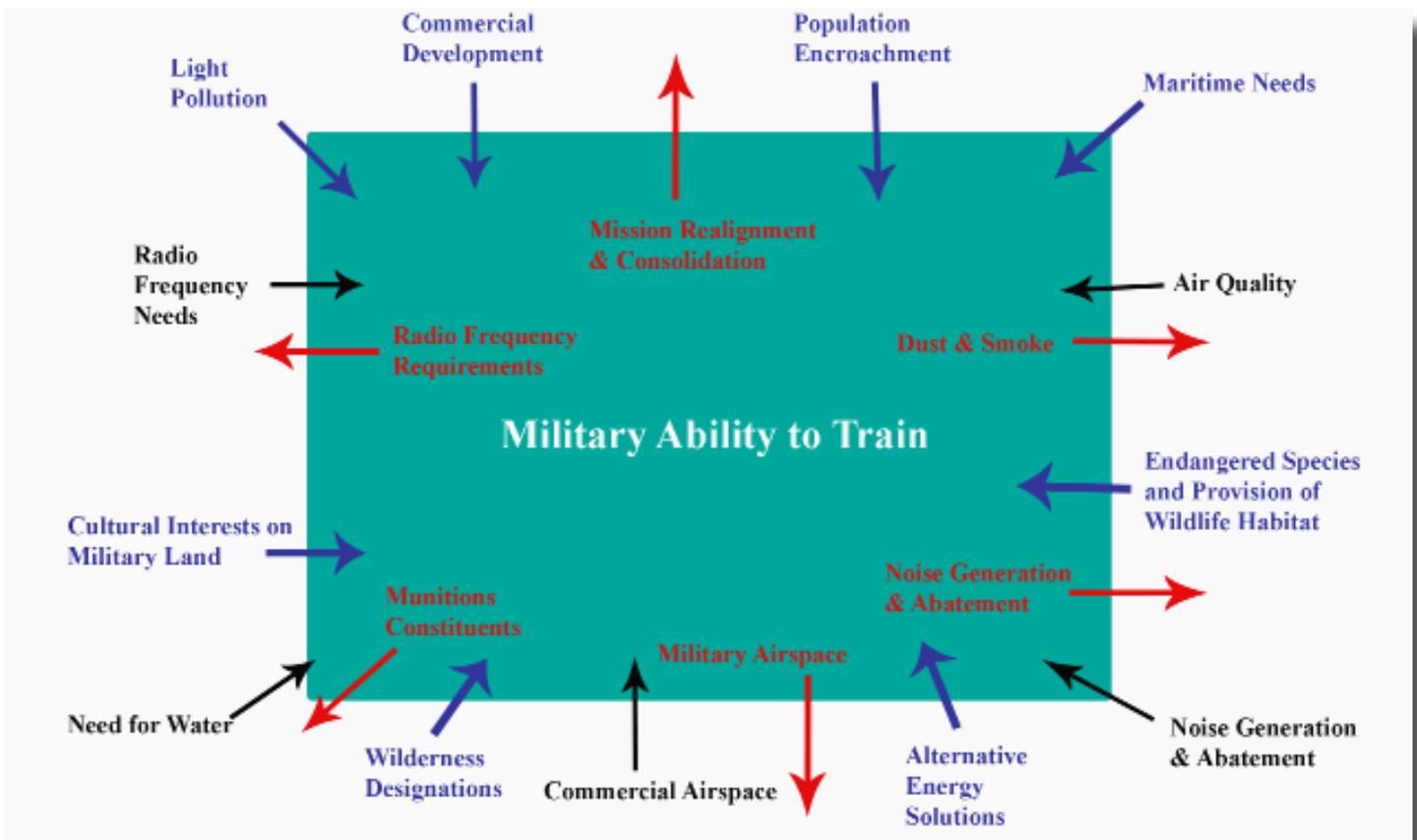
¹ For more information on programs such as these, please see section on military families.

Findings with Recommendations

Finding 2: Encroachment

Encroachment is a complex and important issue that is never completely solved, but can be the “poison pill” for mission growth or even result in an installation closure. The official definition is “any human activities or decisions that impair or may potentially impair the current or future operational capability of an installation complex or may have an adverse effect on nearby communities.” Defined in its simplest terms encroachment is any potential negative impact on mission or local community. Examples are urban growth into airport accident potential zones, wind turbine placement on training routes, frequency spectrum interference impacting operations, endangered species discovered in training areas, noise complaints, or light pollution affecting night training.

Diagram 1¹



Many times, it is the safety of the community that is of major concern. DoD is often reluctant to complain as encroachment takes small bites through mission accommodation. The military makes changes to hours of training, flight paths, or decreases use of training areas rather than take issue with local communities. Before long, training is lost or accommodations increase costs. Quantitative standards for encroachment are established by DoD.² Occasionally, these standards change, but the vast majority of the time it is mission change, a community that is growing or business investment that cause the encroachment change. This creates a dilemma for the community: private growth or support to established installation. Encroachment management includes prevention, mitigation,

1 Air Force Encroachment Management Initiative, Slide 6 of presentation, <http://e2s2.ndia.org/schedule/Documents/Abstracts/12351.pdf>

2 <http://www.dtic.mil/whs/directives/corres/pdf/416557p.pdf>

Findings with Recommendations

education, training and engagement. Tools for engagement include zoning, early communication about plans and impacts, deed restrictions, withholding tax incentives at local state or national levels, purchase of land, exchange of land and relocation of planned growth to name but a few. Each situation is unique, but all solutions start with communication and sharing knowledge.

Formal periodic installations studies can bring extra focus to emerging encroachment issues and solutions. Example of studies are Air Installation Compatible Use Zone (AICUZ), and Installation Complex Executive Management Action Plan (ICEMAP) and Joint Land Use Studies (JLUS).¹ All these studies are conducted by DoD and the installation. Open discussion initiated by the community can open the door and give light to issues before they have significant mission impact.

Finding: Encroachment is an insidious issue that can have large impacts on installation mission growth or survival. Many encroachment standards are based on safety and therefore benefit all. DoD sets the standards, but each community and installation has its own implementation challenges and solution tools. Better to know the issues and mitigate solutions than let encroachment take away options for future growth.

Action and Desired Outcome: Communities encourage installations to conduct formal studies to establish baselines. Communities engage with installation leadership to mitigate solutions. Texas legislature enact laws to discourage or eliminate encroachment at military installations. US Congress pass legislation to remove tax incentives for businesses that encroach on military installations. **End State:** encroachment is not an issue for present or future missions.

Best Practices:

Dyess AFB has an agreement with the city of Abilene to keep residents from expanding in the direction of the base. As a special note, Texas 81st Legislature House Bill 2919 relates to the regulation of land use and the creation of regional military sustainability commissions to ensure compatible development with military installations in certain areas. House Bill 2919 also requires coordination of possible obstructions and encroachment issues from the community to the installation. This is an excellent example of legislation that directly benefits military installations by protecting installations from encroachment issues and encouraging open communications.

Fort Bliss coordinates any encroachment issues with White Sands Missile Range and Holloman AFB in New Mexico.

NAS Corpus Christi has an encroachment management program that focuses on identification, quantification, mitigation, and prevention of encroachment issues.

Finding 3. Partnering

This section discusses the current and future opportunities for installations to collaborate with other governmental organizations to streamline efficiencies and increase opportunities. Partnering at a DoD installation is not a new concept, but it is growing. Thirteen joint bases (including **JBSA**) were created as a result of the 2005 BRAC process. The diverse nature of missions promote cost offsets for host, growth for the local community, protection against single mission cancellation, and enhanced training and operations.

¹ Additional information on completed studies in Texas is available in the appendix

Findings with Recommendations

Net cost decreases to installation host are accomplished by sharing or taking advantage of economic of scale.

Many installation “open the door” costs (security, grounds maintenance, utilities, infrastructure, etc.) are almost constant even when new partners are brought onto the installation. In some cases, partners will bring their own funding for facilities construction/ renovation, yet other times there is excess capacity at an installation and new partners can utilize these facilities with small additional expense. Rent and added variable cost (utilities, maintenance, etc.) need to be captured and compensated. Support and cost sharing agreements must be constructed. During informal discussions with installation hosts, it was found that this type of tenant cost sharing support agreement is not always in existence.

Categories of Partners	
“ Joint ” Services and DoD Agencies	Army, Navy, Marines, Air Force, Defense Intelligence Agency (DIA), National Security Agency (NSA), Defense Logistics Agency (DLA), Defense Systems Information Agency (DSIA), etc.
“ Total Forces ” Service Components	Active Duty Army, Army Reserve, Army National Guard, Active Duty Navy, Navy Reserve, Active Duty Marines, Marine Reserve, Active Duty Air Force, Air Force Reserve, Air National Guard
“ Coalition ” Military of Other Friendly Nations	Norway, Germany, Netherlands, Italy, Saudi Arabia, Singapore, etc.
“ Interagency ” Other Governmental Agency	Drug Enforcement Administration (DEA), Department of Homeland Security (DHS), Department of Energy (DOE), Federal Bureau of Investigation (FBI), etc.

In addition, to decreasing the overall cost to the government and/or DoD, many times there is enhanced training or operations through close association and enhanced communications. In today’s conflicts and operations around the world very few, if any, are accomplished by a single service, component or agency. Instead, successful operations are a result of teamwork and communications. Having these organizations train and work together at home installations can improve effective combat operations in the field.

Forming these partnerships in Texas has several advantages. Diversity of terrain, missions, as well as, international borders, open training areas, excellent weather, etc. lend themselves to quality partnership training and operations. There are several existing coalition partnerships at Texas installations.¹ To have language, basic skills and advanced/continuation training in one area can result in cost and support savings for visiting nations.

For urban areas, the “City Base” and “Federal City Concept” includes an even more diverse set of partners. Although born from a 1997 BRAC closure in San Antonio, the concept is a good model for urban areas to consider in building diverse partnerships at any time. For San Antonio, the community took a creative approach by transferring the property and base operating services at Brooks Air Force Base to the Brooks Development Authority. The mixed-use development included residential, retail, office, and list industrial opportunities.

¹ See Best Practices of Partnerships

Findings with Recommendations

The “Federal City Concept” took it to the next level. It was introduced in New Orleans in 2005. When Naval Support Activity (NSA) New Orleans was recommended for BRAC closure, representatives from the State of Louisiana and the City of New Orleans offered to build a new Marine Forces Reserve Command (MARFORRES) at nearby NSA West Bank. As part of a larger Federal City project, the compound would house additional federal, state, local agencies and contractors. The recommendation was accepted by the Navy and BRAC Commission. The MARFORRES project was developed and deemed a success in 2010.

Findings: It is possible to decrease installation net costs, increase training effectiveness, grow diversity of mission and achieve overall growth at installations through innovative win-win partnerships. Host tenant agreements must be constructed to obtain net savings for installation host. Federal City Concepts can provide a successful model for urban installations. Texas has a competitive advantage for partnership growth.¹

Action and Desired Outcome: Communities should actively support existing partnerships and pursue new partnerships. Installations may want to examine host-tenant agreements for fair recuperations of tenant expenses. The Federal City Concept is suited best for urban area installations. **End State:** increased diversity of mission, effectiveness of operations, and decrease net cost.

Best Practices:

Naval Air Station Fort Worth Joint Reserve Base (NAS Fort Worth JRB) has Lockheed Martin, Texas Air National Guard, Navy Munitions Command, Air Force, Marines, Navy Reserve, Army Reserve, local communities, fire and emergency services, and security.

Sheppard AFB has coalition training partnerships with 21 nations and share the runway with the City of Wichita Falls.

JBSA has the Defense Language Institute English Language Center, Joint medical training, local communities, and local counties, CPS Energy, Alamo College, Alamo Area Council of Governments (AACOG), and The San Antonio River Authority. **JBSA** also has partnerships with local Animal Control, Workforce Development, and Parks and Recreation.

Ellington Field works with total force Texas Air National Guard, Texas Army National Guard, U.S. Coast Guard, U.S. (Army, Navy, and Marine) Reserves, NASA, and joint airfield use with the City of Houston.

Corpus Christi Army Depot (CCAD) has a handful of Office of Emergency Management (OEM) partnerships as well as partnerships with Boeing, General Electric, Honeywell, and Sikorsky Helicopters.

Red River Army Depot (RRAD) has the only authorized Caterpillar Diesel Mechanic Training Program outside of Caterpillar. **RRAD** is partners with BAE, SAIC, DynCorp, Lockheed Martin, local hospitals, rubber/tire manufacturers, and local school districts alongside 16 major DoD organizations.

¹ Also see Mission Growth

Findings with Recommendations

Finding 4. Why Texas?

The synergy of military installations, training ranges, geography, weather and support to the military make Texas the right place for DoD to invest, not divest. There is however, a need for this advantage to be articulated in a concise, easy to understand factual format for use with DoD and legislative decision makers. Facts need to be accurate and convey a consistent message regardless if it comes from a community delegation, Mayor, a State official, or local civic group. The message of “WHY TEXAS” needs to be given to every Texas US Representative, Senator and staff member, and every DoD official at every Headquarters from the Pentagon to local installation level. There is a need to get accurate, consistent, and positive facts out about “Why Texas”. This push must be continual, not just a onetime occurrence. A side benefit of this effort in gathering the facts for this tool is it will also lead to discovery of areas for improvement or enhancement. The goal is to make Texas be the best, NOT be the best-kept secret.

Make Texas the best, **NOT** the best-kept secret.

The end product is a short presentation and “leave behind one page document” of facts, charts and pictures that tell the “WHY TEXAS” story to DoD decision makers and future BRAC Commissioners. It will need to be updated as facts change. The focus should be on Texas as a whole, not each community or installation. What makes a particular installation important is a must for each community, but a compilation of these facts is not the same as why the synergism of the State makes the entire State the right place to invest. A rising tide lifts all boats and the tide is Texas. It should speak to effective training, effective operations (deployment and employment) and efficiency of operating missions and installations in Texas. It must focus on military value, but should have a short fact or two summarizing why it is also the right place for the military and their families. It should be positive about Texas, but not negative towards any other particular State or installation. The packaging and presentation need to be tuned and edited to bring the recipient to the conclusion: this is “Why Texas” is the right place to retain and establish new missions and invest defense dollars. Examples of individual facts can be found in the appendix.

Texas has unencumbered airspace, ground maneuver space, and open water for training of all branches of service with virtually every weapon system. The state has some of the most diverse topography for excellent training scenarios. The weather provides for the ability to train year round. Deployments from Texas installations are efficient due to airfields, road systems, and rail transportation to ports in the state. The cost of living at Texas installations are some of the lowest in the country. This drives down cost for installations to operate and provide a higher quality of life for the military member and families. There is outstanding community support for installations and the military. All of these attributes allow Texas to be the premier state for current and future military missions and operations. Texas installations can absorb missions from around the country at a greater military value to the nations due to training areas, weather, transportation, and deployment efficiencies.

Findings: A presentation and fact sheet should be constructed to answer the question: Why should DoD retain and expand missions and installations in Texas?

Findings with Recommendations

It should be fact based, not emotional. During research and composition of these facts, areas for improvement should be identified for action. Accurate and consistent presentations should be made to DoD and Congressional decision makers at every opportunity.

Action and Desired Outcome: The TMPC should take the lead for collection, and distribution of the product and updates. These facts should be used whenever Texans are discussing the attributes of Texas installations and military contribution. **End State:** DoD and Congressional decision makers understand the facts on why DoD investment in Texas is effective and efficient.

Finding 5. Opportunities for Mission Growth

Over the next 10 years, there will be many opportunities for Texas to make a greater contribution to national defense through emerging missions, replacement of existing force structure and organizational change. Emerging missions such as cyber, robotics, Unmanned Aerial Vehicles (UAVs), hyper velocity and space will mature and expand. Existing mission systems will be replaced, such as, new air refueling tanker¹, Next Generation Bomber (NGB)², Armored-Multi Purpose Vehicle (AMPV), Future Vertical Lift (FVL) helicopter³, and the F-35 fighter⁴, leading to installation bed down decisions. Force level decreases, Active/Reserve/National Guard mix adjustments and organizational changes will lead to consolidation. The overall impact is likely to be a decrease in the number of installations and growth in size of remaining installations.

Criteria will remain military value, but changes in training, technology, definitions of encroachment, and methods of support may change the weight and composition of military value. A simple example could be a change in training methods that increase dependency on virtual combat versus today's maneuver range areas thus communications capacity and speed are weighted heavier than in the past. Opportunities will be dynamic not static so vigilance in this area is warranted.

Installation criteria are constantly being evaluated. In the next 10 years, the following may be opportunities for positive change:

- Creation of a Joint Installation Management Agency at **JBSA**. **JBSA** is the home to both Army Installation Management Command (AIMC) and Air Force Civil Engineering Center (AFCEC). **JBSA** is also a finalist for the Air Force Installation Management and Mission Support Center (AFIMMSC). Navy Installation Command Headquarters is in Washington, D.C. and consolidation could move joint basing forward and create significant efficiencies in staffing and installation management.
- Movement of the National Training Center to **Fort Bliss**. **Fort Bliss** has the training area, capability and capacity to host the functions of the National Training Center. Movement could save DoD significant transportation funds and improve quality of life for soldiers and families.
- Texas currently has the infrastructure to expand cyber technology with the availability to connect universities, technological parks, and installations. The Air National Guard is looking to create new cyber units that would be a perfect fit for the Texas Air National Guard in San Antonio.

1 <http://www.defense.gov/news/newsarticle.aspx?id=122109>

2 <http://aviationweek.com/awin/boeing-lockheed-martin-form-new-bomber-team>

3 http://defenseinnovationmarketplace.mil/resources/AEP_PB_2015_348286.pdf

4 <http://defensetech.org/2014/11/20/navy-plans-for-fighter-to-replace-the-fa-18-hornet-in-2030s/>

Findings with Recommendations

- **Fort Bliss** has worked to establish a technology park
- **JBSA** is currently the Air Force cyber headquarters of the 24th and 25th Air Force.
- Two Marine units were recently moved to **Goodfellow AFB** from Corry Station in Florida. **Goodfellow AFB** has the capacity and infrastructure available to support moving more missions from Corry Station (which is at capacity) as they share similar missions.
- Texas has existing and growing infrastructure to support robotics and technology centers. In terms of robotics and UAVs, Texas is one of only six states chosen by the FAA to test UAVs. With already established focus on robotics, Texas is a perfect candidate for all aspects of testing and production. Texas can provide the confluence of commercial and military needs necessary to join the activity in robotics.
- **NAS Kingsville** is an excellent place to host a new Unmanned Combat Aerial Vehicle (UCAV) Center of Excellence for operators and maintainers.
- Increased Joint and Coalition training at **Fort Bliss** -White Sands Missile Range complex.
- Consolidation of Texas Army National Guard facilities and if favorable consolidate at existing DoD installations.
- Sufficient ramp space is available for consolidation of B-1 bombers at **Dyess AFB**
- UAV center of excellence placed in Texas at a location to take advantage of the open airspace in areas along the coast or West Texas.
- Advantage of security, infrastructure and operations through consolidation of federal agency offices at military installations throughout the state.
- The potential establishment of the Federal City Concept at Ellington Field with growth in the space mission. Expand NASA and Federal Agency aviation presence.
- The SpaceX facility at Boca Chica Beach in South Texas will be operational sometime in 2016 and could lead to expansion from commercial satellites and to DoD missions and capabilities in the future.
- Depot workload growth and consolidation at Texas locations because of low labor cost, high expertise, with state and local investment
- Growth of coalition training and exercises at installations across the state.

Findings: The installation supports the mission. As missions and organizations change, there will be large changes in military installations. The time is now to plant the seeds of change for some long-term changes and aggressively pursue mission growth for near term “pop up” opportunities. Installations should look for missions that fit their installation. Military capacity and value will remain important. Growing and adjusting missions to meet the needs of DoD is the objective.

Action and Desired Outcome: Communities should have open and frank discussions with installation leadership about which missions could fit best and benefit the nation and DoD. Prioritize, build a strategy, and then discussions should begin with headquarters and legislators to aid the process. If it fits and benefits DoD then pursue, if not, then move on to next opportunity. Think 5-10 years in the future. Communities should act now on opportunities.

End State: Texas installations grow in value to national defense and grow in size, diversity and mission to meet the dynamic challenges of the future.

Findings with Recommendations

Finding 6. Infrastructure

Deteriorating infrastructure at installations across the DoD, is one of the most difficult issues the task force considered. It affects the effectiveness of operations, drives up costs and impacts quality of life. The role of the State and communities in solving this issue is complex and important to the military value of each installation.

The repair budget for facilities through Operations and Maintenance (O&M) funds or Sustainment Restoration and Maintenance (SRM) funds has been severely reduced. Cuts in installation maintenance and construction budgets are one of the few options DoD sees in meeting near term federal budget objectives. The “old norm” for major Military Construction (MILCON) was a slow but steady replacement of structures as they became obsolete and were no longer cost effective to maintain and operate. Over the past few years, (MILCON) investment has decreased to the point that only new mission and emergency operational needs are considered. Because facilities are not being replaced, the requirement for added funds for repair and restoration is increasing. Add to this growing requirement are other factors: 1) DoD’s declaration of excess infrastructure; 2) request to divest installations through a BRAC (why invest in facilities DoD will soon divest); 3) US Congress’s inability to pass an “on time” budget so funds can be expended in a logical and efficient manner. A bow wave of postponed investment is rapidly growing into a tsunami.

This overall problem is too large for Texas taxpayers to solve and frankly, the overall issue should remain a federal budget issue, not a state or community issue. Counter this with a sober look at the positive economic impact of Texas military installations (\$150 billion) and add the moral need to support those sacrificing for our collective freedom make the option to do nothing a non-starter.¹ It is argued, if this were private industry, investment would be made to ensure continued efficient operation and prevent closing a business with subsequent job loss and economic impact. In fact, some projects would qualify for limited 4A or 4B sales tax funding (where available).

The Texas Mayors of Military Communities see the issues first hand and are asking the Texas state legislature to appropriate as much as \$150 million (1/10th of 1% of the military’s economic impact in Texas) to the TMPC DEAG fund. The Texas Governor’s office has an exceptional item request of \$30 million for attacking these issues. The Texas legislature will have the opportunity to debate and decide funding levels and criteria in the upcoming 2015 legislative session. See “Funding” recommendations for additional information.

In order to determine the unfunded requirement at Texas installations, the task force requested Texas military communities share the magnitude of their installation’s infrastructure SRM backlog. Of the communities that responded it indicated that over the past several years, Texas installations were funded at an average of 60% of their SRM budget requirement. Installations are occasionally able to supplement their funding through other DoD funding such as “year-end spending”, but even with this supplemental funding the issue continues to grow. The TMVTF is unable to put a hard dollar amount on the infrastructure investment deficit at this time. This urgent task to determine the required Texas legislative funding level must remain with the TMPC staff.

Once the requirement is understood, decisions on where and when to make investments in support of Texas installations should be made by TMPC and based on four criteria: (1) will it add to military value, (2) can it be executed during the budgeted years 2015-2017 biennium, (3) is it right sized to be affordable, (4) should drive down annual cost of operations.

¹ http://www.thetexasconomy.org/economic-outlook/economy/articles/article.php?name=military_bases

Findings with Recommendations

When DoD / BRAC decisions are made installations whose operating costs are high will trend towards **divestment**. Those with lower costs will trend towards the **investment** list. Prudent investment resulting in higher military value and lower operating cost is good business and contributes to our nation's defense.

Several Texas installations have historic facilities. The upkeep of these facilities is restricted and protected due to their historical significance. The result has been disproportionate cost for these unique and historic facilities. Preserving history for generations to come is a worthy objective, but exploring alternative funding and review of standards could result in less of a burden to installations.

Findings: Infrastructure at DoD facilities is severely underfunded impacting efficiency, effectiveness of operations and morale. Installations that are more efficient are more likely to survive cuts and attract mission growth. Expenditure of limited federal funds is less efficient because of Congressional delays in DoD budget approval. Recommended funding levels from the State of Texas vary from \$30M-\$150M. Community's targeted smart investment would improve military value. Historic renovation of facilities significantly increases cost to DoD.

Action & Desired Outcome: Communities fund smart investment candidates that meet 4A & 4B funding criteria. Texas legislature appropriate up to \$150M for grants to communities to support smart investment on or off installation that will result in improved military value and lower operating costs. Communities team with military installations to determine project cost and prioritization. TMPC determines size of requirement, oversees criteria and executes expenditure of these investment funds. Legislative constituents support timely Congressional budget action. TMPC examines criteria and seeks outside DoD funding for military historic building renovations. **End State:** improved military value through smart investment.

Best Practices:

Fort Hood, the Texas Department of Transportation (TXDOT) funded 4 projects since 2005 totaling over \$440 million in road renovation and construction. Other expansion projects supporting influx of personnel to **Fort Hood** are valued at \$160 million.¹

Dyess AFB has demolished excess buildings while maintaining ramp area for future missions. **Dyess AFB** has also invested in fiber optics to streamline and upgrade communications infrastructure.²

Fort Bliss has availability to incorporate additional missions with the support of current infrastructure including mission training complex, joint simulations, an intelligence center, as well as Joint Task Force North.

Red River Army Depot (RRAD) has made infrastructure reductions by transferring over 792 acres and 100 buildings to local development authority.

Finding 7. Utilities

Included in this area are water, electricity, communications, natural gas, fuel, trash, and sewer. With utilities, there are two fundamental components: reliability and cost. Reliability is a fundamental component of all utilities, the standard and expectation is 100%. Reliability is a fundamental assumption for mission accomplishment and

1 More information is available at <http://www.txdot.gov/>.

2 https://www.fbo.gov/index?s=opportunity&mode=form&id=ddf69fbac56b02321d92329e2974b62f&tab=core&_cview=1

Findings with Recommendations

with concerns for security; redundancy is required for many critical operations, as well as, quality of life. Cost is important because of the high volume consumed at many installations. Month after month, year after year this cost must be covered. Therefore, long-term investments can pay big dividends. Technology is constantly evolving and so new ideas and approaches to savings need to be explored. Private sector competition for supplying utilities is aggressive and negotiations can yield significantly lower costs. Communities and private sector suppliers can not only deliver to the “gate”, but can also provide services to installation end users. In many instances, third party investors or private sector contracts allow DoD to achieve savings by avoiding replacement, capital investment and/or personnel costs.

Electricity: Cost of electricity in Texas is very reasonable. The Texas Public Utility Commission (PUC) and Electric Reliability Council of Texas (ERCOT) oversee almost all of Texas and therefore Texas utilities are not subject to some federal regulations affecting other parts of the nation. Texas has an abundance of capacity for renewable energy.¹ Many installations have the space for large solar arrays and some host renewable waste to energy projects that decrease waste stream and decrease their cost of electricity. With help from the PUC, installations could not only produce “green” electricity for their own consumption, but also sell to the grid when producing more than they are consuming.

Water, Waste, and Sewer: These are local community functions that are ripe for economies of scale, teaming and P4 agreements. Use of effluent water for certain functions can drive down cost and save on fresh water consumption.

Fuel and communications may be centrally managed by DoD agencies, but reliability and capacity could be areas for P4 initiatives. The proximity of realistic mission training areas can result in very significant savings in fuel costs. Therefore, support for local realistic training areas is critical for military value.

Findings: Utilities functions, objectives and maintenance are similar for installations and communities; therefore, this area is ripe for P4 initiatives. Cost and reliability are important factors for all utilities. Most installations have successfully invested in energy, water and natural gas conservation projects; however, reliability and capacity for utilities should be checked for ability to absorb new missions. Texas installations have the capability to host renewable energy projects that can drive electrical cost to near zero and even have excess to sell to the grid. Protection and support for “local” training areas are essential to keeping fuel consumption and training cost low and add military value.

Actions & Desired Outcome: Communities review with installations utility capacity and reliability for present and added missions. Look for economies of scale for utilities through P4 agreements. TMPC shall work with Texas PUC to ease the sale for any excess electricity capacity from installation renewable energy initiatives. Communities work with installations to ensure the most efficient and realistic mission training areas are available.
End State: low cost, highly reliable utilities with the capacity to grow for added missions and effective efficient training areas that minimize fuel consumption

Best Practices:

Laughlin AFB has a program called Operation 2020 in which the goal is to decrease overall utilities and maintenance by 20%. Projects in this program include a solar array project on the installation.

¹ http://governor.state.tx.us/files/ecodev/renewable_energy.pdf

Findings with Recommendations

Dyess AFB uses effluent water on the installation. With additional holding reservoirs, pump stations, and distribution piping, this project has reduced consumption by 160 million gallons (2% of the city's water supply) and saves the base around \$300,000 per year. This water is also cooled at night when energy costs are lower and then sent through buildings during the day to serve as air conditioning. They reduced fuel transportation costs by installing a pipeline to the base. Proximity of training areas, logistical support, and repair centers are important factors in reduction of transportation and training costs.

Naval Air Station Corpus Christi (NAS Corpus Christi) has a water use reduction project including a water loop and advanced meter infrastructure.

Naval Air Station Kingsville (NAS Kingsville) has a solar energy farm to provide energy to the installation. The project has helped cut energy consumption with plans to continue to decrease usage annually by 30% in 2015.¹ Other major goals include decreasing water use by 16% and petroleum usage by 50% in 2015.

Corpus Christi Army Depot (CCAD) has a new environmental management system, waste stream evaluations, a program focused on the capture and reuse of R22 refrigerant, the elimination of 2 hazardous waste facilities, as well as the substitution of cleaning solvents.

Fort Hood was chosen as an Army net zero waste pilot installation. **Fort Hood** also has additional treated water capacity and a water reuse project.²

Fort Bliss has an on-post recycling program to fund quality of life.

Goodfellow AFB has a waste to energy project that converts waste to electrical energy.³

Finding 8. Environment

Environmental issues at installations are in four categories: (1) decades old issues now in final stages of cleanup, (2) a potential new wave of emerging restrictions from the Environmental Protection Agency (EPA), (3) DoD's perspective on potential impacts of global warming, and (4) mission changes that require Environmental impact studies. In past BRACs, the environmental costs either were taken as sunk cost or were underestimated. For example, The U.S. Governmental Accountability Office (GAO) found that the DoD had allocated \$3.4 billion for the BRAC cleanup process in 1995 and in 1996; the costs were estimated at \$11 billion.⁴ As of 2012, the cost was up at \$35.1 billion.⁵ If Congress continues its focus on cost savings in future BRACs, cost of environmental mitigation could be a factor in locations for change.

In Texas, the regional environmental authority is the Texas Commission on Environmental Quality (TCEQ). TCEQ has a Defense and State Memorandum of Agreement program to provide timely review and assistance to defense installation cleanup programs. The U.S. Environmental Protection Agency (EPA) is also involved in base

1 Baseline goals are a decrease from 100% usage in 2003.

2 <http://www.asaie.army.mil/Public/ES/netzero/>

3 <http://www.afcec.af.mil/energy/>

4 Military Base Closures: Reducing High Costs of Environmental Cleanup Requires Difficult Choices, GAO, 1996

5 GAO-12-709R: Military Base Realignment and Closures: Updated Costs and Savings Estimates from BRAC 2005

Findings with Recommendations

closure cleanup projects in Texas ranging from minor to extensive cleanup.¹

Decades old environmental issues are known, in work, funded, and have a proven and approved way ahead. These are worth revisiting to make sure solutions are still valid and on track. In a few cases, cost for final resolution may be significant. Knowing current status prevents surprises during environmental studies and may lead to community- installation P4 agreements of mutual benefit.

The potential for a new wave of environmental issues is real and has loomed for several years. Executive and EPA policy changes can move very quickly. New changes could include endangered species, clean air, clean water and introduction of new waste stream standards, all impacting cost and mission. When making decisions on a myriad of issues, considering the potential for new rules can sometimes mitigate these issues with little or no cost. As a simple example if communities are considering two potential water sources for support to an installation and a potential new EPA standard impacts one source, simply consider all costs and including potential environmental issues and before making the final decision. Knowledge of potential issues can save a great deal of cost and disruption and allows community informed discussion with Federal and State legislators and officials. The TMPC and Texas Commission on Environmental Quality (TCEQ) are but a couple of sources of knowledge and assistance.

DoD is considering impacts of global climate change on installations. Concern over rising sea levels, changes in endangered species, and increased costs of heating and cooling are but a few of the potential impacts. Again, making decisions with DoD's growing concern in mind may save significant future costs.

With every significant mission change, federal laws require a formal independent Environmental Impact Study. Potential and perceived issues can take an installation out of early consideration for mission growth. These formal studies and findings are very late in the installation selection and decision process. Any issues found in the formal study must be resolved before implementation or mission changes are canceled and moved to alternative locations. Knowledge and resolution of issues (real or perceived), is effort well spent.

Overall Findings: Environmental issues have big impacts on potential mission growth. Knowing the present and potential impacts can lead to cost avoidance or significantly lower cost solutions. Solutions and mitigation are areas for P4 discussions.

Actions & Desired Outcome: Communities work with installations to be proactive in consulting with environmental experts, TCEQ, and the EPA to watch for emerging national issues. **End State:** environmental issues (past, present, and future) are not a factor in training, operations, quality of life and potential mission growth.

Finding 9. Support to Military and Families

The military member, their professionalism, dedication, sense of duty and sacrifice are the reasons we have the freedoms Americans enjoy today. Support for them and their family is right and the level of support should be above and beyond just as their level of service to our nation. Supporting military member families is one of the best ways to thank them for service and allows the member to concentrate on their duties of defending our nation.

¹ http://www.epa.gov/Region06/6pd/rcra_c/pd-n/index.htm

Findings with Recommendations

Many times, there is not a choice of where they serve, so when they come to Texas red tape should be eliminated and welcome mats should be extended.

In today's military many spouses work outside the home. The ability to transition employment at a level commensurate with their capabilities and experience is good for them and good for the community. For the military dependent child, smooth school transition is important. Some communities even have school registration for all grades in one place, making it easy for military families to get all children registered for school. Resolution of transfer of credits, health requirements (shots, physicals, etc.), and meeting special needs are important factors in a smooth transition. Texas is home to the Military Child Education Coalition, which ensures quality educational opportunities for all military children.¹

The State of Texas coordinates multiple programs across a handful of agencies for veterans. The Texas Veterans Commission provides a variety of services including education and job training, employment, claims assistance, and outreach. There are also grants to help fund training and education programs outside of GI Bill programs. Texas provides unemployment support for spouses that must change employment due to change of assignment relocation. Additionally, the Texas Workforce Commission offers tax incentives for employers to hire veterans. The Workforce commission recently created a new web site for veterans called Texas Wide of for Veterans. The newly launched website for veterans and their families with a one-stop opportunity to explore the many reasons for veterans to put down roots in the Lone Star State. For the entrepreneurial veteran, the United States Small Business Administration has small business assistance centers across the country. A few of those are specifically dedicated to veterans and are called Veterans Business Outreach Centers.² In the private sector, corporations have created or increased their veterans hiring programs. More information on these corporation and other programs can be found at Texas Wide Open for Business.³

The Army initiated Community Covenant program is designed to foster and sustain effective state and community partnerships with the military to improve the quality of life for members and their families. It is a formal public commitment of support by the state or local communities to all DoD military Active, Guard and Reserve. In working through the tenants of agreement, areas in need of support are discovered and solutions are found. Some programs, specifically geared for Texas, include Partners Across Texas, United We Serve, Operation Finally Home, and the Texas National Guard Support Family Foundation.⁴

Actions & Desired Outcome: Communities should create written covenants supporting military families. The State of Texas should examine requirement processes, expedite licensing, and waive or lower fees for military members, dependents, and veterans. Communities should make job searches easier and assist with translation of work history to skill sets of local requirements. School districts need to ease the transfer of credits, special needs, and continue offering in-state tuition for military families. End State: Texas is "Military Friendly" to all military, their families and retirees.

1 Military Child Education Coalition, <http://www.militarychild.org/about-us>

2 Please visit <http://www.sba.gov/tools/local-assistance/vboe> for more information.

3 <https://texaswideopenforbusiness.com/small-business/veteran-resources>; tvc.state.tx.us

4 <http://www.army.mil/community/state/TX.html>

Findings with Recommendations

Best Practices:

Fort Hood community programs and services include Adopt-A-Unit, Support for Children, Operation Restful Night, Spouse College Scholarships, Workforce Solutions of Central Texas, and Marriage Management.¹

Fort Bliss community programs and services include Freedom Fiesta, El Paso Community College Scholarships, Job Center Online, and Job Center for Spouses, as well as, Adopt-A-Unit.²

Fort Sam Houston, within **JBSA**, has community programs and services including Returning Heroes Home, Fisher House, and Hiring Heroes Job Fair. In the spirit of Adopt-A-Unit, the City of Boerne has adopted the 388th Military Intelligence Battalion.³

Finding 10. Texas National Guard

The Texas Army National Guard and the Texas Air National Guard are commanded by the Texas Adjutant General, an appointee that falls under the command of the Governor of Texas. They serve the State until federalized such as when they deploy throughout the world to serve our national defense.

The Texas National Guard can be called to respond to counter drug efforts, reconstruction missions, combat missions, and domestic emergencies. The Texas National Guard responds to natural disasters like wildfires or floods. The Texas National Guard is highly valuable to Texas citizens. In 2013, the National Guard was able to alert and rescue citizens in Austin from floodwaters long before emergency services was able to arrive.⁴ The Texas National Guard has been a full partner in combat operations over the past 13 years and supported civilians during Hurricane Katrina, increased border security and the recent Ebola outbreak.⁵

In the next 5 years as the total force mix is adjusted to a new norm, there will be new opportunities for mission adjustments. Aging infrastructure and equipment is in need of replacement and renovation. Existing distribution of unit locations is important for connection to the people they serve, responsiveness to emerging emergencies and recruitment. Counter to this disperse distribution is the opportunity for efficiency by consolidation and movement to some existing infrastructure at active duty installations.

Findings: Texas guard is important to the State and Nation. Missions will evolve and facilities and organization will adjust to new norms. Significant facility replacement and renovation is required.

Action and Desired Outcome: The Texas Adjutant General should continue to lead change through long term planning and execution. As required mission changes occur, adjustments to location size and organization need to be balanced with recruitment and support to the communities, the State and Nation they serve. As facility replacement is considered and to provide more efficient service, strong consideration should be given to some consolidation and change in location to existing DoD installations. Texas' state and federal delegations should support up to date equipment to continue the Texas National Guard missions.

1 <http://www.army.mil/community/state/hood.html>

2 <http://www.army.mil/community/state/bliss.html>

3 <http://www.army.mil/community/state/samhouston.html>

4 <http://www.nationalguard.mil/News/ArticleView/tabid/5563/Article/390/texas-guard-aviators-responded-to-flooded-areas.aspx>

5 <http://governor.state.tx.us/news/press-release/20118/>; <http://kxan.com/2014/11/16/texas-national-guard-deploying-to-west-africa-for-ebola-relief/>

Findings with Recommendations

End State: A Texas National Guard that adjusts with change to make efficient and significant contribution to the safety and security of Community, State and Nation.

Finding 11. Texas Military Preparedness Commission (TMPC)

The TMPC was established in 2003 by the 78th Texas Legislature and placed in the Governor's Office of Economic Development and Tourism in 2009. The Texas Military Preparedness Commission's goal is to preserve, protect, expand, and attract new military missions and assets, at Texas installations.

The commission is composed of thirteen members appointed by the Governor. There are no legislative guidelines for representation from communities or components in the TMPC statute.

Two other groups in Texas that support the military mission in the state is the Texas Commanders Council and the Mayors of Military Communities. The Texas Commander's Council is composed of members of each active duty installation in the state and the Texas National Guard. The group is designed to identify common issues each installation has and share that with the TMPC to convey to the Governor and legislature. The Commander's Council is struggling to have regular scheduled meetings. The Mayors of Military Communities was formed in 2014 to advocate for legislative support for military installations. It is not a part of the TMPC structure but the Director of TMPC is an Ex-Officio member of the group.

Action and Desired Outcome: TMPC staffing and funding should be representative of the importance of military presence and support to the nation and the State of Texas. The TMPC should be the first stop on all military issues, installations, mission and adjustments to personnel levels. They should maintain knowledge in how military installations and missions are changed and have the ear of legislators and staff working military issues. Best practices should be proactively shared. The TMPC should be appropriated grant funds and oversee distribution of the funds in support of military installations.

Annual meetings with installation military and community leaders should occur at their location a minimum of once a year. The purpose is to get first-hand knowledge of issues, achievements, potential actions and build trust. TMPC representation should be from all major installation communities, components (Active Army, Navy, Air Force, Marine, as well as, Army, Navy, Air Force, Marine Reserve, Air National Guard and Army National Guard. The Texas Adjutant General (TAG) should have Staff ex-officio representation at TMPC meetings. Meeting agendas should be meaningful, important sessions that result in decisions, action and results. Information should be pushed to members in a form easy to digest and distribute to their constituents.

TMPC staff should take this report for action and gain TMPC approval for closure of appropriate action items.

End State: TMPC should become "one stop shop" for all military matters in Texas. Texas Legislature should: 1) fund TMPC and 2) change TMPC charter for representation of all major installation communities and military components. TMPC staff should improve communication with military and communities.

Findings with Recommendations

Finding 12. Funding

While many initiatives may only require communication and cooperation, others may require significant funds. Sources of funding depend on the project cost, location and make up. For communities with 4A & 4B sales tax revenue, they may utilize these funds for eligible projects. Large projects may require bonds. Local citizens may choose to make monetary or in kind contributions to raise money.

Presently, the TMPC has two programs to assist defense communities and installations to protect against a BRAC- or BRAC like decision. The Defense Economic Adjustment Assistance Grant (DEAAG) and the Texas Military Value Revolving Loan Fund (TMVRLF). The DEAAG program is designed to assist defense communities that are responding to or recovering from a reduction or termination of defense contracts or BRAC and to assist defense communities that have been positively affected with new or expanded military missions, as well as, qualified job retention.¹ During the 83rd Regular Session, SB 1200 passed giving the TMPC more flexibility to use the DEAAG Program to be proactive in support of military installations in Texas. The DEAAG has not been funded by the Texas Legislature during the past two legislative sessions. However, the Governor has submitted a special budget line item of \$30 million to fund the DEAAG program for an appropriation during the next legislative session in 2015.

The Texas Military Value Revolving Loan Fund (TMVRLF) assists defense communities in enhancing the military value of a military facility in their area; provides financial assistance to defense communities for job creating economic development projects that minimize the negative effects of a defense base realignment or closure decision; provide financial assistance to defense communities for an infrastructure project to accommodate new or expanded military missions resulting from a base realignment and closure decision or adds military value.² Up to 80 percent of a project can be funded and the minimum loan amount is \$1 million.

Recently, a group of mayors have emerged to add to the protection of the military installations. The Texas Mayors of Military Communities have been meeting during 2014 to unite their military communities to preserve and promote the installations in Texas. They plan to ask the Texas Legislature for an appropriation to the DEAAG Program (\$150 million) for projects to protect defense jobs and enhance military installations around Texas. These projects range from repairing water lines to additional security entry gates, to flood control projects at installations. Other projects focus on assisting the military within the community. State and federal funding normally require legislation or prioritization and application from existing funding programs. Consultation with TMPC for solutions beyond the communities is recommended.

The whole State, as well as the military communities benefit from DoD presence. The Texas Comptroller has estimated the economic impact of military installations and missions at approximately \$150 billion per year. Well beyond the \$150B impact on the economy, the synergism of the wide variety of missions and installations throughout Texas provide our nation's military the opportunity for excellent joint, coalition and interagency training on land, the sea and in the air. The State also benefits from a skilled, "work ready" workforce, and the diversity of skills. Intellectual capital the military and their families bring to Texas is an important thread in the fabric of the entire State. The true value of the military presence and potential for growth makes "military value added projects" a wise investment near and long term. In the end, finding the right requirements that increase

1 <http://governor.state.tx.us/military/grants/>

2 <http://governor.state.tx.us/military/loans/>

Findings with Recommendations

military value will drive the priority list of projects, but total cost, funding source, and ability to execute while funds are available, may dictate which projects are actually accomplished.

Findings: In the next five years, communities will need to take action to improve the military value of their installations. Increased military value will retain DoD investment in Texas and recruit new military missions to the State. Communities have limited funds from a variety of sources to fund specific projects. The Texas Comptroller estimates the economic impact of military installations at \$150 billion dollars a year.

Action and Desired Outcome: TMPC should create community tools for increasing military value at Texas installations. The Texas Legislature should appropriate up to \$150 million to fund the DEAAG program for these tool sets for the next biennium. The DEAAG cap should be raised from \$2 million per project to at least \$5 million per project. The DEAAG program should be made more flexible to support military value at installations. The State should look at creating a jobs tax credit program for new DoD contractor positions on military installations similar to Oklahoma. In order to make the significant and meaningful change required, TMPC Commissioners, communities and Texans supporting our military will need to educate legislative decision makers on why increased funding and flexibility are needed to ensure Texas is the best place to invest not divest.

Communities and the State of Texas have the funds available to retain and grow military missions in Texas.

A: Statute Establishing the Task Force

B: Task Force and Process

Task Force Members and Staff

Task Force Hearings & Presenters

Data Call (Example)

C: DEAAG & TMVRLF Funding Guidelines

D: Military Installations and Economic Impact Maps

E: Texas Military and Industry Facts

F: JLUS/AICUZ Completion

G: Contact Information

A: Statute Establishing the Task Force

Sec. 436.105. MILITARY BASE REALIGNMENT AND CLOSURE TASK FORCE.

(a) The commission shall establish a task force to seek advice to prepare for possible action by the United States Department of Defense related to the realignment or closure of military installations in this state.

(b) The task force established under this section must consist of not more than seven members who have demonstrated experience or expertise in the United States Department of Defense's base realignment and closure process.

(c) The task force established under this section shall:

(1) confer with defense communities and military installations located in this state to identify strategies, policies, plans, projects, and other ways to improve base realignment scores; and

(2) advise and make recommendations to the commission and legislature on any strategy, policy, plan, project, or action the task force believes will strengthen the defense communities and military installations in the state and prevent the closure or a significant reduction of the operations of the military installations.

Added by Acts 2013, 83rd Leg., R.S., Ch. 777 (S.B. 1200), Sec. 6, eff. September 1, 2013.

B: Task Force and Process

The Texas Military Value Task Force (TMVTF) was formed by the TMPC according to Texas Statute, Sec. 436.105. The TMPC asked for applicants, reviewed, and chose three members and one chair. Each Texas installation was invited to present at the TMVTF hearings to facilitate face-to-face conversation and develop an understanding of the intricacies of each installation. The installations were asked to provide written responses or a presentation to the TMVTF, which examined mission capabilities, conditions of training ranges and airspace, ability to accommodate current and future total force, cost structure, unique efficiencies, and services to military families. After the presentation, the TMVTF asked points of clarification or elaboration based on presented information. From these hearings, overall strengths and impediments were examined on the local and state level. The TMVTF then made recommendations to strengthen the positive attributes and assist with any impediments the installation or community may have. The TMVTF considers the relationship between the installation and community to be a strong factor in success and want this report to reflect the positive relationships that Texas installations have with their communities.

Appointed Members	Position	Short Biography
Allen, Kirby	Member	Colonel Allen (Ret.) has a professional background with an expertise in the base closure process, privatization, transition, strategic planning and P3 partnerships. Served in the Office of the Secretary of Defense - Base Closure Office.
Coleman, Darrell	Member	Mr. Coleman assisted in establishing military affairs committees in Wichita Falls and Corpus Christi, TX. Worked closely with the BRAC Commission on behalf of Wichita Falls in 2005.
Lynch, Rick	Member	Lieutenant General Lynch (Ret.) is the former Commanding General of III Corps and head of all U.S. Army installations with over 120,000 civilian employees and soldiers worldwide.
McMahan, Michael	Chairman	Major General McMahan (Ret.) is the former Commander of Air Force Personnel Center and headed the Abilene Chamber of Commerce for 10 years. Led the Abilene/Dyess AFB effort during BRAC 2005. Career included General Office assignments at both Randolph AFB and the Pentagon.

Staff

Keith Graf, Director, Texas Military Preparedness Commission
Alexandra Taylor, Program Manager, Texas Military Preparedness Commission
Tim Ginn, Research Department, Economic Development and Tourism

Task Force Hearings & Presenters

July 28, 2014 - San Antonio, TX

1. Texas Military Forces
2. Goodfellow Air Force Base, San Angelo Chamber of Commerce
3. Fort Hood, City of Killeen

August 22, 2014 - Corpus Christi, TX

1. Laughlin Air Force Base, Mayor Robert Garza, Del Rio Chamber of Commerce
2. Ellington Field, Ellington Field Task Force, Bay Area Houston Partnership
3. Naval Air Station Kingsville, Mayor of Kingsville Sam Fugate, Kingsville Economic Development Corporation
4. Naval Air Station Corpus Christi, Mayor Nelda Martinez, City of Corpus Christi
5. Corpus Christi Army Depot

September 22, 2014 - Fort Worth, TX

1. Fort Bliss, Greater El Paso Chamber of Commerce
2. Joint Base San Antonio, City of San Antonio
Fort Sam Houston
Lackland Air Force Base
Randolph Air Force Base
3. Red River Army Depot, Mayor Bob Bruggeman, City of Texarkana
4. Naval Air Station Fort Worth Joint Reserve Base, City of Fort Worth
5. Dyess Air Force Base, Mayor Norm Archibald, City of Abilene, Abilene Chamber of Commerce
6. Sheppard Air Force Base, Mayor Glenn Barham, City of Wichita Falls

Texas Military Value Task Force Questionnaire

Please address the following topics in the written response or presentation to the Military Value Task Force.

Section 1: Please examine current and future mission capabilities.

- A.) What is the impact of these capabilities on the operational readiness for the total force of the Department of Defense?
- B.) What is the impact of these capabilities on the joint warfighter, training, readiness and support?

Section 2: Please examine the availability and condition of land, sea and/or air facilities, ranges, airspace and training areas at the installation.

- A.) What activities do the facilities and training areas allow?
- B.) What are the limitations to your facilities, ranges, airspace and training areas?
- C.) How may the State of Texas support infrastructure upgrades to increase the military value of the location?
- D.) How may the installation efficiently reduce excess capacity while maintaining the ability to absorb future missions and increase military value?

Section 3: Please examine the ability to accommodate contingency, mobilization and future total force requirements to support operations and training.

- A.) Do operations on the installation demonstrate "jointness" as a key component?
- B.) Are there opportunities on the installation to integrate joint activities/operations within the installation and outside the gate?
- C.) How does the installation fit into future defense policy strategy?

Section 4: Please examine the cost structure of achieving mission success.

- A.) What is the driving cost of operations?
- B.) Is the installation positioned to achieve the assigned mission in a more cost efficient manner?
- C.) What are potential cost saving measures the state can do to drive down the cost of the installation?
- D.) What are potential cost saving measures the surrounding community can do to drive down the cost of the installation?

Section 5: Please explain the unique efficiencies of the installation and community regarding mission achievement and sustainability.

- A.) Has the installation and local community engaged in an organized partnership study or enhanced use leases?
- B.) Are there existing partnerships between the installation and local/regional providers?

Section 6: Please examine the services provided to military families.

- A.) What services does the installations provide military families? Is there area for improvement or collaboration?
- B.) Are there Department of Defense operated schools on the installations?
- C.) What is the state of local school districts in the surrounding community? What can be done to help Department of Defense military and dependent education?
- D.) How are military children integrated into the greater community?
- E.) Are there opportunities for spouses to easily transition into and out of the local workforce?
- F.) How are transitioning service members being set up for success upon existing the military?

C: Defense Economic Adjustment Assistance Grant (DEAAG) Program

The Defense Economic Adjustment Assistance Grant Program (DEAAG), created in 1997, is a job creation grant program designed to assist defense communities that are responding to or recovering from a reduction or termination of defense contracts or BRAC. The program was later expanded to assist defense communities that have been positively affected with new or expanded military missions, as well as, qualified job retention.

DEAAG funding is available to local municipalities, counties, defense base development authorities, junior college districts and Texas State Technical College campuses, and regional planning commissions representing these communities. DEAAG funding is available to meet matching requirements for federal funding.

Funding for negatively affected communities can be used for the purchase of Department of Defense property, new construction or rehabilitation of facilities in support of job creating projects and opportunities. Funding for positively affected communities can be used for infrastructure projects directly supporting the new military mission. Additionally, funds can be awarded to Public Junior Colleges or Texas State Technical College System for the purchase or leasing of capital equipment for the purpose of (re)training displaced defense workers. Grants awarded may range from \$50,000 to \$2 million per project.

For additional information regarding the Defense Economic Adjustment Assistance Grant Program, please contact the Texas Military Preparedness Commission at tmprc@governor.state.tx.us or visit <http://governor.state.tx.us/military/grants/>.

Texas Military Value Revolving Loan Fund (TMVRLF)

Created by the 78th Legislature and signed into law by Governor Rick Perry, the Texas Military Value Revolving Loan Fund, or the “Revolving Loan Fund” as it has become known, is designed to:

- Assist defense communities in enhancing the military value of a military facility in their area.
- Provide financial assistance to defense communities for job creating economic development projects that minimize the negative effects of a defense base realignment or closure decision that occurred in 2005 or later.
- Provide financial assistance to defense communities for an infrastructure project to accommodate new or expanded military missions resulting from a base realignment and closure decision that occurred in 2005 or later.

The Revolving Loan Fund provides a low cost source of revenue to eligible communities who meet the application criteria. The minimum amount of a loan is \$1,000,000 while the maximum amount of a loan is determined by the availability of funds and the creditworthiness of the applicant, State funding will be obtained through the sale of general obligation bonds. The State may provide up to 100% of the cost of the described project, dependent upon the creditworthiness of the applicant.

For additional information regarding the Texas Military Value Revolving Loan Fund, please contact the Texas Military Preparedness Commission at (512) 475-1475 or email at tmprc@governor.state.tx.us.

Please visit <http://governor.state.tx.us/military/loans/> for the application.

D. Military Installations and Economic Impact

Each installation submitted data for analysis by Texas Comptroller of Public Accounts to determine their economic impact within the state. This information was incorporated into the REMI model to generate estimates of the facility's impacts on state-level employment and economic impact/output. In this assessment the following definitions were used and reflected in the following maps:

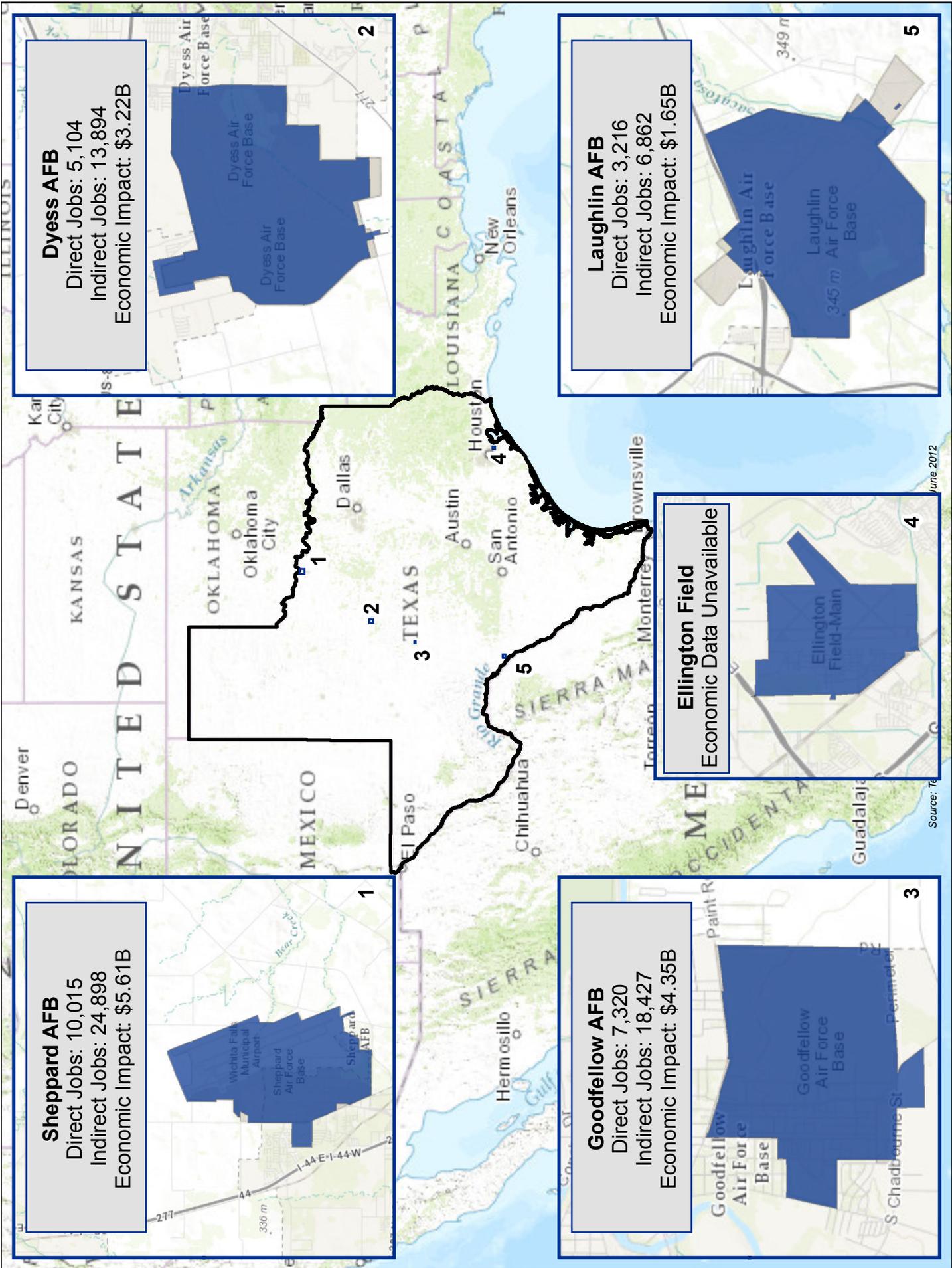
- **Direct jobs** are those that are directly attributed to the installation's operations. The number of persons in each category were provided by each installation. Job numbers include appropriate full-time equivalents of: active duty, trainees/students, contractors, DoD civilians (appropriated and non-appropriated fund), and other employees in direct support of the installation. National Guard, Reserve drill personnel and all dependents are not included in direct jobs, but are appropriately reflected in estimated economic impact in the REMI model.
- **Indirect jobs** are calculated by the REMI model as indirectly supporting the installation and result from its presence.
- **Output** represents the total dollar value of all goods and services (both intermediate and final) that are produced in Texas resulting from the demand for goods and services needed by the installation's operations. Intermediate goods and services are generally inputs that are used to produce final goods and services. These final goods and services are those produced in the state economy that are consumed by the installation, its personnel and their families, and the workers (and their families) in other industries in the state that provided inputs to the production of final goods and services needed/demanded by the installation.
- **Gross Domestic Product (GDP)** represents the total dollar value of all final goods and services produced in Texas resulting from the demand for goods and services needed by the installation's operations. GDP is the most common economic measure of growth. **Economic Impact** refers to the effects on the economy associated with expenditures made by the installation. Economic impact is measured in terms of changes in employment, income, output and GDP that results from the demands for goods and services needed by an installation's operations. The expenditures made by the installation to purchase needed goods and services is generally referred to as the direct impact. Changes in employment, income, output (and GDP) associated with industries that supply inputs to the installation are referred to as indirect impacts. Changes in employment, income, output (and GDP) to all other industries in the economy are referred to as induced impacts. The sum of direct, indirect, and induced impacts are collectively referred to as total (economic) impact.

Employment at each installation is subject to fluctuation and change.

Special Notes:

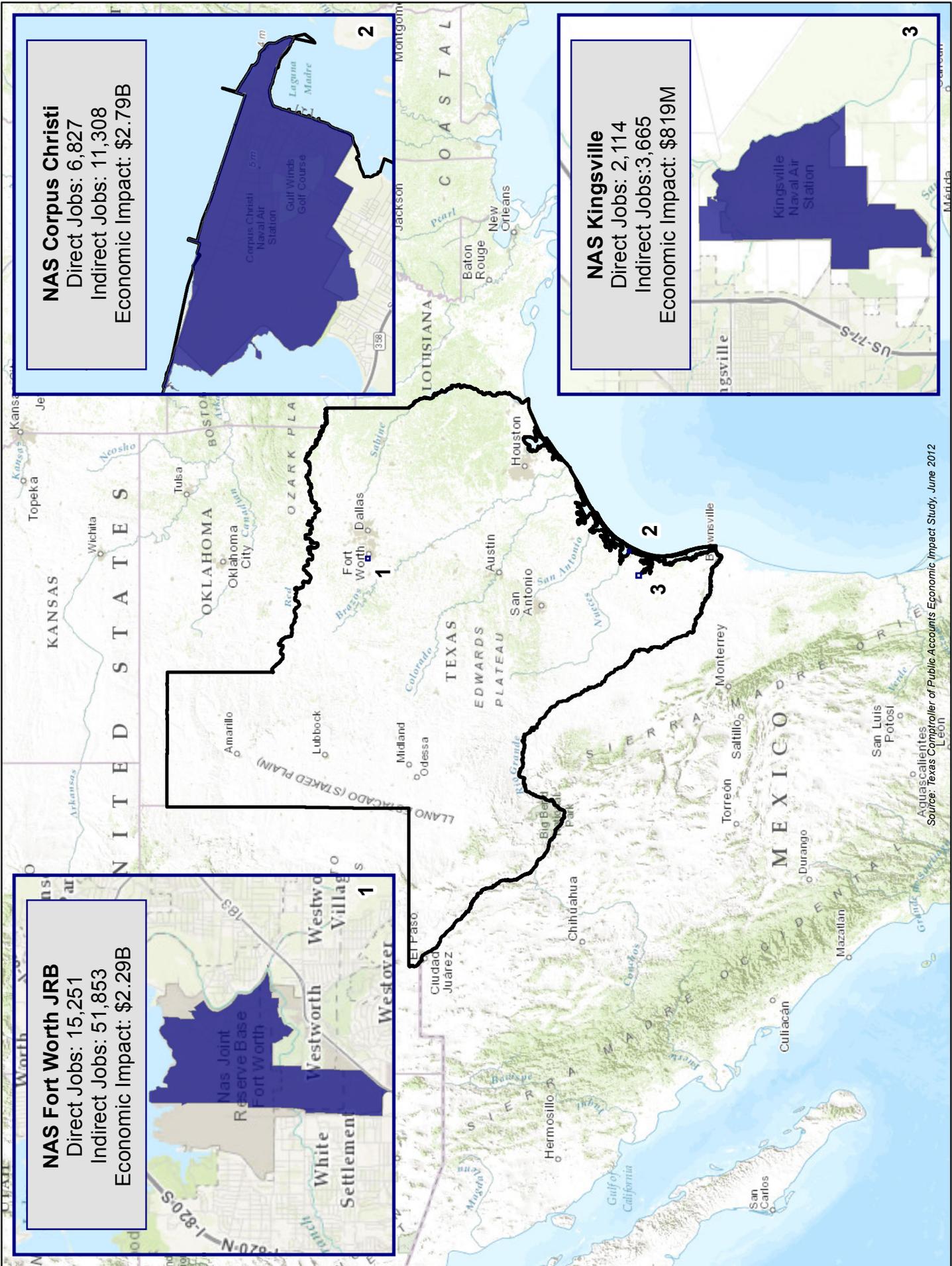
Air Force Weapons Plant 4 houses Lockheed Martin, a contractor co-located at NAS Fort Worth JRB. Lockheed Martin has been added in the economic impact of NAS Fort Worth JRB (along with Federal Medical Center Carswell) during the economic analysis completed by the Texas Comptroller of Public Accounts. The facility that Lockheed Martin utilizes is predominately owned by the US Air Force which deems the Lockheed Martin facility a Government-Owned Contractor-Operated (GOCO) defense manufacturing facility. The facility shares access to the runways and taxiways along with the support facilities at NAS Fort Worth. NAS Fort Worth JRB has an economic impact of \$2.29 billion and employment totaling 15,251 (direct and indirect) jobs. With the co-located facilities, NAS Fort Worth JRB has an economic impact of \$9.26 billion and employment totaling 61,853 (direct and indirect jobs).

Ellington Field Joint Reserve Base is a 190 acre joint use civil and military airport located approximately 20 miles south of Houston. Hosted by the Texas Air National Guard's 147th Reconnaissance Wing, Ellington Field JRB is the home to numerous units including Texas Army National Guard, US Army Reserve, US Navy Reserve, Marine Corps Reserve, and Air Force Reserve among others. Because it is a Texas National Guard facility, TMPC did not request an economic analysis by the Texas Comptroller and therefore figures of economic output are not available.



June 2012

Source: T&E



Source: Texas Comptroller of Public Accounts Economic Impact Study, June 2012

E: Texas Industry and Military Facts

Military Rankings

Fort Bliss ranked #1 in military value following the 2005 BRAC proceedings.

Fort Hood ranked #3 in military value, #1 for future stationing, and #5 for power projection (out of 97) following the 2005 BRAC proceedings.

The variety, size, and capability of maneuver training areas (land and sea) with adjacent ranges or overhead airspace

At Fort Bliss, the maneuver area totals 965,166 acres, which means it can fit Fort Riley, Fort Hood, Fort Polk, and the Fort Irwin National Training Center within the boundaries. Including infrastructure, Fort Bliss has over 1.12 million acres.

Sheppard AFB has 36,123 total feet of runways, which it uses to train domestic and foreign pilots.

Laughlin AFB is the fifth busiest airport in U.S. Air Force and the largest pilot producer. With the 2nd largest aircraft fleet in Air Education Training Command (AETC), Laughlin AFB trains in over 10,000 square miles of military airspace plus 11 low level routes at 2,400 nautical miles and has a local training range of 400 nautical miles.

Ellington Field operates combat support missions, surveillance, reconnaissance, and air support. Ellington Field operates in 12,000 square miles of airspace, three restricted areas, and three bombings ranges.

NAS Kingsville had 240,919 air operations in 2013 across 36,000 cubic miles of airspace.

NAS Corpus Christi had 261,615 operations utilizing 10 airfields and runways in 2013.

Fort Hood, has one of the largest maneuver areas in the Army and operates over 18,000 square miles of airspace. Additionally, Fort Hood has 200,000+ acres in land maneuver space: 20,000 acres are permanently duded impact area, two Unmanned Aerial Vehicle (UAV) airfields, and three airborne drop zones among other attributes.

Dyess AFB operates in 17,000 cubic miles of training airspace.

NAS Fort Worth JRB operates in 4,700 square miles of airspace around the busy Dallas/Fort Worth area.

Fort Sam Houston has over 35 training sites.

Cyber Capabilities in Military, Education, and Private Industry

Private Industry

Texas is ranked as 2nd cyber state with over 485,000 tech workers (2012).

Texas added 10,000 net jobs in cyber technology between 2011 and 2012

Texas's National Industry Sector Rankings:

2nd in Internet and telecommunication services employment with 118,700 jobs

2nd in engineering services employment with 97,500 jobs

2nd in semiconductor manufacturing employment with 29,000 jobs

3rd in computer systems design and related services employment with 117,000 jobs

Military/DoD

24th Air Force (AKA Air Force Cyber Command) at Lackland AFB

National Security Agency's Texas Cryptology Center – San Antonio, TX

San Antonio is home to more than 80 defense contractor firms, many of which are focused on information security

Goodfellow AFB is home to the Air Force's largest Secure Compartmented Information Facility (SCIF).

E: Texas Industry and Military Facts

Education

University of Texas at Austin – Center for Identity: established in 2010 as a center for excellence in identity management, privacy, and security

- Conducts research, identifies best practices and technology solutions
- Collaborates with government, corporate and other academic entities

Texas A&M University at San Antonio – Center for Information Technology and Cyber Security

- Sponsored by the NSA and US Department of Homeland Security
- Prepare students for face-paced demands of the cyber security field

University of Texas at San Antonio – Center for Infrastructure Assurance and Security

- Designated in 2002 by the NSA as a Center of Academic Excellence in Information Assurance Education
- Works to improve the overall security of state and community technology infrastructures

University of Texas at San Antonio – Institute for Cyber Security

- Created in 2007 with the assistance of a \$3.5M TETF grant
- Conducts basic and applied research in cyber security

Language Training, Military and University

Lackland AFB English Language Center: The Defense Language Institute English Language Center (DLIELC) is a Department of Defense agency is responsible for training international military and civilian personnel to speak and teach English. Over 100 countries are represented among the student body at DLIELC at any given time.

Every installation has access to higher education, all but one have access to a local four-year university.

Low Cost of Utilities and Cost of Living

With the average COL being a 100 average the following information is for MSA's which contain defense communities (ALL DATA for 1Q 2014 unless otherwise stated):

Average Cost of Living Score for Texas Defense Communities: 92.58

Corpus Christi (NAS Corpus Christi, CCAD, NAS Kingsville): Composite – 92.1

El Paso (Fort Bliss): Composite – 92.3

Fort Worth (NAS Fort Worth JRB): Composite – 99.2

Houston (Ellington Field): Composite – 98.2

Killeen (Fort Hood): Composite – 85.0

San Antonio (JBSA): Composite – 92.5

Texarkana (RRAD): Composite – 94.6

Wichita Falls (Sheppard AFB): Composite – 90.4

San Angelo (Goodfellow AFB) – 2013 Annual Average: Composite – 88.9

Excellent Weather for Training and Operations

Average days of sunshine across Texas Defense Communities: 64.86%.

The range from Houston (59%) to El Paso (84%).

El Paso – 84%, Abilene – 70%, Dallas/Fort Worth – 60%, Austin/City – 60%,

Corpus Christi – 60%, San Antonio – 60%, Houston – 59%

Ease of Worldwide Deployment to the East, West, North or South

Average 3-hour flight to arrive at West Coast, East Coast, Canada, or South America from Texas.

Fort Bliss has the largest Army airfield and the 3rd largest runway in the DoD. Fort Bliss can accommodate any commercial or military aircraft.

The infrastructure of Texas allows ease in transportation across the state.

E: Texas Industry and Military Facts

Established Lines of Communication for Deployment with Rail, Highway, and Port

Fort Bliss and Fort Hood have dedicated railheads to deploy soldiers to two major ports on Texas coast.

Fort Bliss is able to process 320 rail cars in 24 hours and has invested over \$1.5 million in transportation infrastructure.

Red River Army Depot (RRAD) has 34.4 miles of railroad, and 205 miles of road to transmit necessary support and supplies.

During the Global War on Terrorism, more civilians were deployed to Iraq and Afghanistan from RRAD than all the other Army Material Command depots and arsenals combined. More than 5,000 were deployed to provide vital logistics and maintenance assistance.

NAS Corpus Christi supports quick delivery of weapon systems. The runways at NAS Corpus Christi are capable of handling C-5 and C-17 aircraft, making NAS Corpus Christi an excellent place to prep and load for deployments. Personnel from Corpus Christi Army Depot can deploy anywhere around the world from NAS Corpus Christi.

Fort Hood has deployed 900,000 troops in 12 years, mobilized and deployed 90,000 National Guard and army reserve. Fort Hood can load 360 rail cars in 24 hours and has an enhanced road network to Gulf coast ports.

Fort Hood has almost \$200M in Texas Department of Transportation (TXDOT) funded projects to support the installation.

Ranges

Fort Bliss: Three complete major range complexes including Mission Training Center, Close Combat Tactical Trainer, Simulation Center, Training Support Center, Engagement Skills Trainer, Aviation Combined Arms Tactical Trainer, Medical Support Training Center, Digital Multi-Purpose Range Complex, to the Digital Air and Ground Integrated Range.

Red River Army Depot: Three ranges: small arms, pistol, and .25mm test range

Fort Hood: 80+ ranges

Fort Sam Houston: 20 ranges

Dyess AFB has a newly upgraded firing range.

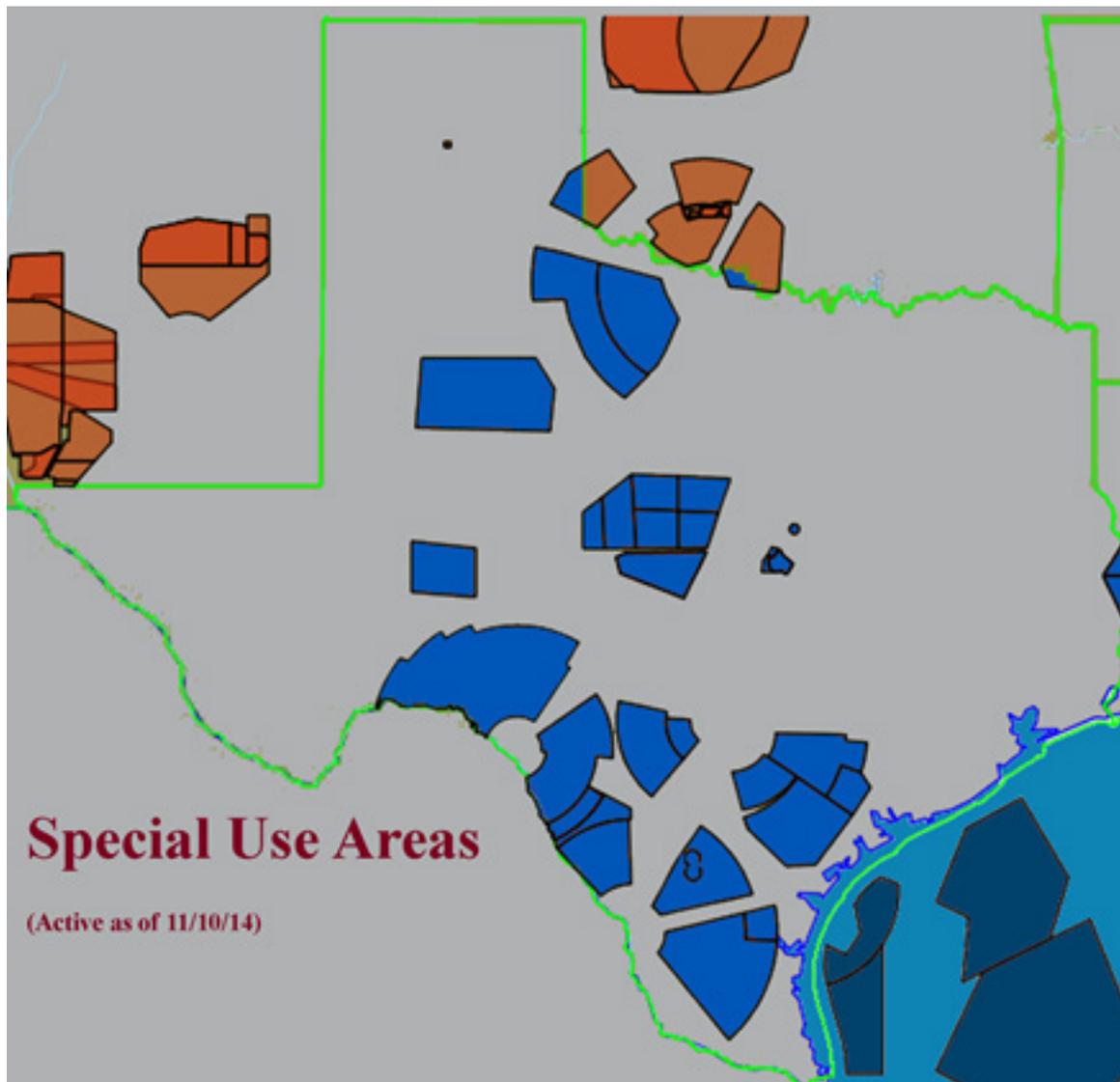
Goodfellow AFB has an indoor firing range.

Size and number of open airspace

Fort Bliss has the largest contiguous unrestricted airspace in the US, allowing for unimpeded UAS operations and missile firings as well as freedom of maneuver for army and other military aircraft (343 million cubic acres of airspace).

Other installations, especially those with missions concerning airspace, have dedicated military operation areas (MOAs) in Texas. The total is only second to California in the number of MOAs.

Special Use Airspace (as designated by the Federal Aviation Administration) ¹	Texas (Total)	United States (Total)
Alert Areas ²	11 (More than any other state)	36
Restricted Areas ³	9	399
Prohibited Areas	2 (More than any other state)	8
Military Operation Areas (MOAs) ⁴	38	426
Warning Areas	10	140



The map above shows special use airspace as designated by the Federal Aviation Administration. There may be more DoD restricted airspace than what is shown above.

Existing Headquarters for Future Consolidation and Savings

Fort Bliss has the largest training and doctrine command (TRADOC) on a US Army Forces Command (FORSCOM) installation and has room to grow.

- Interagency training (El Paso Intelligence Center (EPIC), Joint Task Force North (JTF-N), Department of Homeland Security (DHS) elements
- Major US Air Force Training Center

JBSA is the headquarters for US Army North, Installation Management command, US Army Medical Command, US Army South, Air Education & Training Command, etc. Fort Hood is home to III Corps.

E: Texas Industry and Military Facts

Regional Hospitals for Support to Military and Families

Fort Bliss has a major trauma center and new William Beaumont Army Medical Center (WBMAC). There has been an investment of \$935M in healthcare since 2005 and 6 major hospitals serve Fort Bliss.

JBSA is served by 36 hospitals (general and specialty) including the Brooke Army Medical Center, which has the only stateside Level 1 Trauma center in the U.S. Army Medical Command. The main component of Brooke Army Medical Center is the San Antonio Military Medical Center (SAMMC), which is the largest inpatient medical facility in the DoD and the only DoD Burn Center.

NAS Corpus Christi and Corpus Christi Army Depot are served by 12 area hospitals.

NAS Fort Worth JRB is served by 16 area hospitals. This is not including those in surrounding cities like Arlington and Dallas.

Fort Hood is served by three hospitals including Darnall Medical Center at Fort Hood.

Red River Army Depot is served by five area hospitals.

Sheppard AFB is served by seven area hospitals.

Dyess AFB is served by seven area hospitals.

Goodfellow AFB is served by five area hospitals.

Laughlin AFB is served by one area hospital.

Ellington Field is served by 62 area hospitals (in the Houston city limits).

F. JLUS/AICUZ Completion

Joint Land Use Studies (JLUS)	JLUS Complete?	Date	Notes
Air Force			
Dyess AFB	No		Completed ACUIZ in 2008; Installation Complex Encroachment Management Action Plan (CEMAP) study in Fall 2012; Dyess AFB zoned as an airport.
Goodfellow AFB	No		Multiagency focus group meets twice a year with development community to address any encroachment or environmental concerns; Goodfellow AFB has no active flight line
Laughlin AFB	Yes	2008	
Sheppard AFB	Yes	2014	
Army			
Corpus Christi Army Depot	Yes	2013	
Fort Bliss	Yes	2014	
Fort Hood	No		Requested JLUS in 2005 and was denied by Army.
Red River Army Depot	No		RRAD has restricted development zones
Navy			
NAS Corpus Christi	Yes	2014	
NAS Kingsville	Yes	2008	
NAS Fort Worth JRB	Yes	2008	
Joint Base San Antonio (JBSA)			
Fort Sam Houston	No		FSH is located in downtown San Antonio and mission does not require land use study
Lackland AFB	Yes	2011	
Randolph AFB	In Process	2015	

G: Contact Information

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