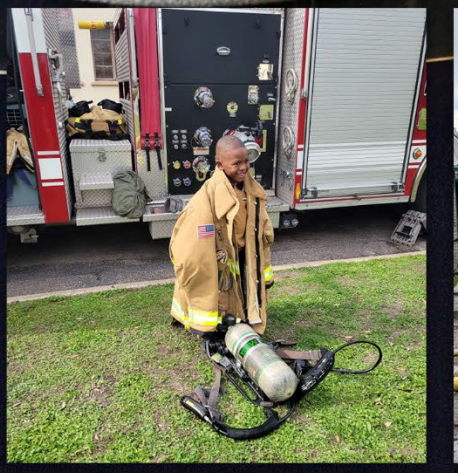
JOINT BASE SAN ANTONIO
FIRE & EMERGENCY SERVICES
COMMUNITY RISK ASSESSMENT/ STANDARDS OF COVER
2024

JOINT BASE SAN ANTONIO
FIRE DEPT
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA
EST 2010
FIRE EMERGENCY SERVICES



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Joint Base San Antonio Fire & Emergency Services

Fire Chief Michael Guzman

Community Risk Assessment/Standards of Cover

Contributors

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2024

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Michael Guzman, Fire Chief

Joint Base San Antonio Fire & Emergency Services (JBSA F&ES) is completely committed to providing world-class firefighting, technical rescue, emergency medical services, hazardous materials response, fire inspections, and public fire and life safety education.

Every single day, the men and women of JBSA F&ES wake up to serve and protect tens of thousands of visitors, in addition to the 85,000 service members, civilians, contractors, and family members, who live and work on this amazing installation.

Every firefighter does their best to live by our motto: "Protecting the Bravest Armed Forces and their Families Every Day!" JBSA has a tremendous history, with its lineage stretching back nearly to the beginning of Texas as a State.

SMSgt Justin Hrusovsky, Deputy Fire Chief

We are humbled and proud to be an integral part of this continuing success and look forward to the challenges the future brings to JBSA and this great Fire & Emergency Services organization.

Executive Summary

Joint Base San Antonio (TX) Fire & Emergency Services (F&ES) developed this Community Risk Assessment-Standard of Cover (CRA/SOC) as a single document to describe the service area and assess the risks of the community, to outline its response capabilities and service levels, and to measure its performance against internal mission goals and the community's expectations.

The Community Risk Assessment (CRA) portion of this document outlines the characteristics of the community, describes the services provided by Joint Base San Antonio F&ES, and provides the methodologies used to assess risks for each service classification to assign risk category levels. Additionally, it outlines critical task analyses across all classifications and categories to determine the number of firefighters required to mitigate a hazard. Through its evaluation of fire and non-fire hazards and risk in the community, the agency was able to concentrate their resources in appropriate locations to ensure effective and positive impacts.

The Standard of Cover (SOC) portion of this document provides an overview of current deployment and response performance, with an in-depth evaluation of Joint Base San Antonio F&ES' response data. The current methodology analyzes response data by fire demand zone, risk classification, and risk category. This allows Joint Base San Antonio F&ES to accurately examine data for performance gaps and improvement opportunities.

As performance gaps were found, this document highlighted the potential root causes and outlined the proposed action plan to improve performance. The immediate remedial actions and long-term solutions were identified and communicated to all internal and external stakeholders. Continuous improvement is an essential factor of Joint Base San Antonio F&ES' ability to meet its mission.

Joint Base San Antonio F&ES is committed to delivering superior risk reduction and all-hazard emergency services delivery to protect lives and property on Joint Base San Antonio by producing the most prepared fire responders across the Department of the Air Force.

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MICHAEL GUZMAN, M.ED., FSCEO, GS-13
Installation Fire Chief
Joint Base San Antonio, TX

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RICHARD TREVINO, JR., P.E., GS-15
Director,
502 Civil Engineer Group

A. Description of Community Served

Introduction

San Antonio is home to one of the largest concentrations of military bases in the United States. It is also home to the Department of Defense's (DoD) largest medical center at Joint Base San Antonio (JBSA). Considered Military City, USA ®, the city's deep roots with the military dates to the first Spanish soldiers who founded the San Antonio de Bexar Presidio in 1718. From its original home at Plaza de Armas in the city's center to the active military bases scattered throughout the city, visitors and residents alike are sure to experience San Antonio's rich military history.

JBSA Fire Emergency Service (F&ES) Community Risk Assessment and Standards of Cover (CRA/SOC) is a compilation of research data and analysis that profiles the emergency service delivery provided to JBSA and its surrounding communities.

JBSA F&ES strives towards continuous improvement and has accepted the model set forth by the Commission on Fire Accreditation International (CFAI). This study serves to describe and evaluate the unique characteristics of JBSA by documentation of area characteristics, all-hazard risk assessment and response strategies, current deployment and performance, and a plan for maintaining and improving response capabilities.

Community and Department Legal Basis

Air Force (AF) Policy Directive 32-20, *Fire Emergency Services* (F&ES), establishes responsibility for F&ES to meet AF needs and obligations and implementation of DoD Instruction 6055.06, *DoD Fire and Emergency Services Program*. Additionally, AF Instruction 32-2001, *Fire Emergency Services Program*, Chapter 1, *Responsibilities*, further assigns and defines the roles and responsibilities of the AF civil engineer to the installation fire chief and all levels in between. These policies clearly define the legal basis for the JBSA F&ES.

History of the Community

Joint Base San Antonio (JBSA) is a US military installation located throughout San Antonio, Texas. The installation is under the jurisdiction of the US Air Force (AF) 502 Air Base Wing, Air Education and Training Command.

JBSA was established in accordance with congressional legislation implementing the recommendations of the 2005 Base Realignment and Closure Commission. The legislation ordered the consolidation of the three installations, which were adjoining but separate military installations. Lackland Air Force Base (AFB), Fort Sam Houston, and Randolph AFB merged into a single joint base. This is one of 12 "Joint Bases" formed in the US due to the instituted law.

Lackland dates from July 4, 1942, when the War Department separated the part of Kelly Field, lying west of Leon Creek, and made it an independent installation. The initial naming of the installation was the San Antonio Aviation Cadet Center (SAACC). On July 11, 1947, the War Department named the base after Brigadier General Frank D. Lackland. "The Gateway to the Air Force" accurately described Lackland after 1946. The mission of Lackland is to provide basic military, professional, and technical skills, as well as English language skills, for the Air Force, other military services, government agencies, and allies. The 737th Training Group provides AF Basic Military Training (BMT) for all new enlistees entering Active AF, AF Reserve, and AF National Guard. Following graduation from BMT, Airmen go on to technical training at Lackland or elsewhere before their first assignment. More than seven million Airmen have completed BMT since 1946.

Fort Sam Houston (FSH) originated in 1845 when the Post at San Antonio was established in the Alamo City. The army established a garrison and regional headquarters in rented buildings and a Quartermaster supply depot in the Alamo. After the Civil War, the construction of the Quadrangle began, and the Quartermaster Depot moved into it in 1877. The Post at San Antonio continued to expand with the addition of the Infantry Post in the 1880s. It was then designated as Fort Sam Houston. These areas, plus the New Post of the 1930s, constitute the largest collection of historic buildings in the DoD (800+) and form the FORT SAM National Historic Landmark. The post is the birthplace of military aviation and saw the development of the concept of airborne operations. The post evolved into the "Home of Army Medicine" after World War II and into the "Home of Military Medicine" with the establishment of the Medical Education and Training Campus in 2010.

FSH also houses a certified Level One Trauma Center, Brooke Army Medical Center (BAMC). BAMC plays a critical role in patient care, graduate medical education, research, and the care of wounded service members. The hospital staff provides inpatient care in a 425-bed facility. It is a 1.5 million-square-foot facility that has the expansion capability of 613 beds.

Camp Bullis is a training camp comprising 27,990 acres located just northwest of San Antonio. The camp is named after Brigadier General John L. Bullis. Camp Bullis and Camp Stanley make up the Leon Springs Military Reservation. This training camp is used primarily as maneuvering grounds for the US Army, Air Force, and Marines combat units. The site is also utilized as a field training site for the various medical units stationed at Brooke Army Medical Center.

Randolph was dedicated on June 20, 1930, as a flying training base. It is named after Captain William Millican Randolph, a native of Austin. Randolph serves as the headquarters of the Air Education and Training Command (AETC) and is known as "The Showplace of the Air Force" due to the Spanish Colonial Revival Style architecture in which all structures, including hangars, were constructed. The symbol of the base is a large water tower atop Building 100, known throughout the Air Force as "The Taj Mahal." As part of the 12 FTW's mission, Seguin Auxiliary Airfield is maintained for T-38 training aircraft and future T-7 next-generation trainer aircraft by 2025.

Community Financial Basis

Financial oversight of JBSA, in part of the DoD Annual Budget Proposal, is established by the President of the USA and passed through Congress. The 502 ABW distributes the Wing's funds from the budget, and the Civil Engineer Squadron determines the annual allotment based on the agency's requests. The budget line items do not include Firefighter employee salary, retirement, healthcare, or other benefits. The budget is totally dedicated to fire operation sustainment, maintenance, training, and fire prevention/education.

Community Boundaries

For analysis and planning, JBSA is divided into three fire districts and fire demand zones within each district. JBSA F&ES operates out of nine fire stations. Stations 1, 2, and 3 are located in Lackland District. Stations 4, 5, 6, and 7 are located in Fort Sam Houston District. Stations 8 and 9 are in Randolph District.

JBSA identifies 11 sites across the region with a military mission and community impact. JBSA F&ES works to build community relations and mutual aid partners to help meet response and provide fire prevention and education across the community mutual and automatic aid coverage areas.

Table 1: JBSA F&ES Mutual and Automatic Aid Agreements

JBSA Fire Emergency Services MAA & Auto Aid Agreements					
Community	Last Signed	Type of Aid	Community	Last Signed	Type of Aid
Alamo Heights	2015	MAA	San Antonio (FD)	2018	MOU (EOD, EM, CEF)
Bexar Bulverde	2015	MAA	Schertz	2015	MAA
Bexar County	Under Renewal 2020	MAA	Selma	2015	MAA
Boeing Aerospace	2014	MAA	Seguin	Under Renewal 2020	MAA
Canyon Lake	Under Renewal 2020	MAA	Shavano Park	2015	MAA
Converse	2015	MAA	Terrell Hills	2015	MAA
Kirby	2015	MAA	*Universal City	2015	AUTOMATIC AID
Leon Springs	2015	MAA	*Windcrest	2017	AUTOMATIC AID
Live Oak	2015	MAA	*CAMP STANLEY*	*2019*	*SUPPORT AGREEMENT*

Mutual Aid Agreement (MAA)

Assistance to outside agencies in the surrounding community for various types of support is expected and provided at the discretion of the JBSA Fire Chief. These services are covered under 17 mutual aid agreements.

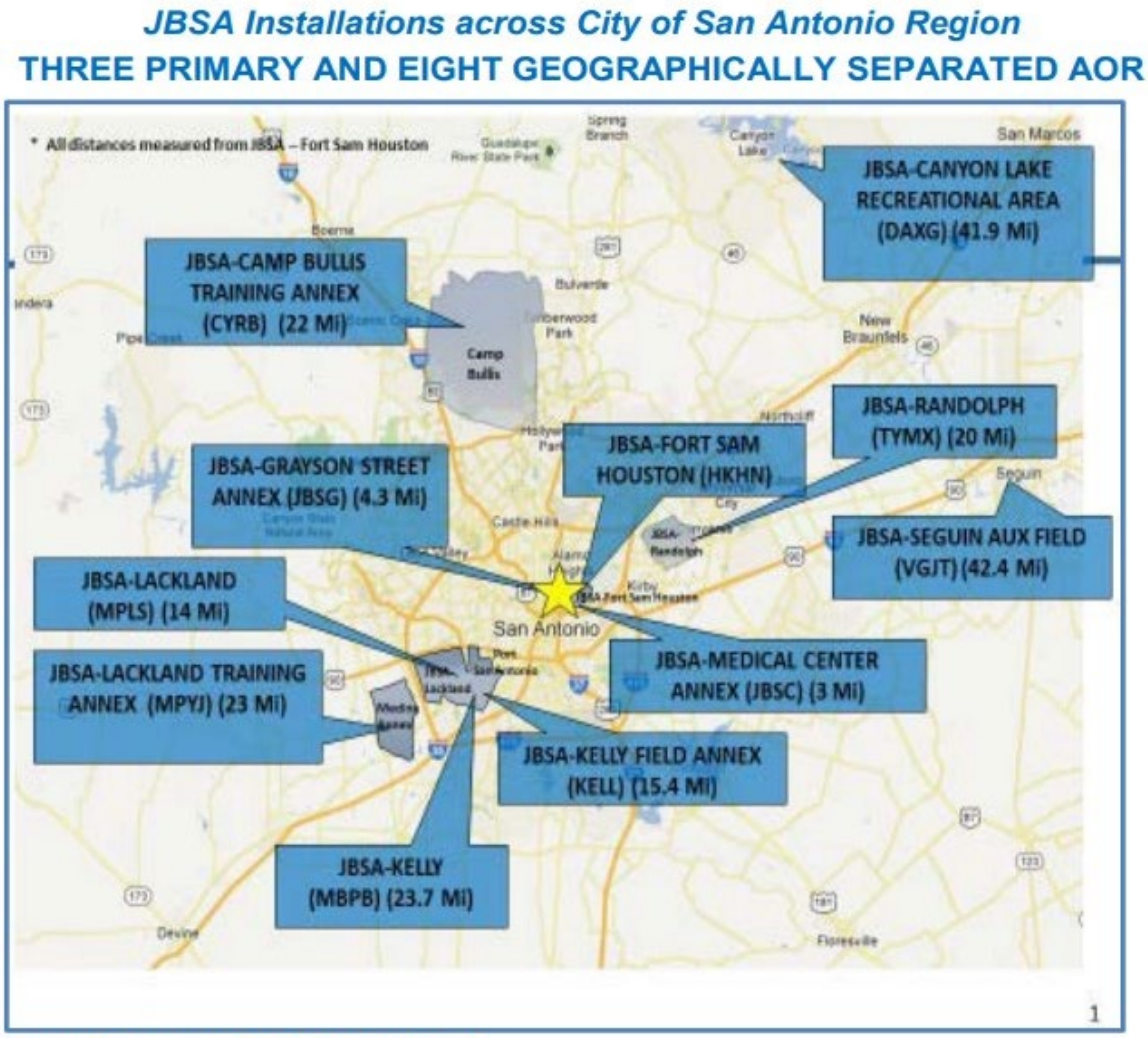
JBSA F&ES has mutual aid agreements with the following municipalities to meet response times without delay in gaining 502d ABW/CC permissions. MAAs are calculated into mission and installation fire protection coverage to minimize impact. All MAAs or support agreements are reviewed annually for accuracy and tracked by the Wings 502 ABW/XP and EM. Updates, changes, and renewals are coordinated through the emergency manager, fire chief, and XP flight chief.

JBSA provides an average of eight to 12 off-base support responses per year historically and seeks assistance during large-scale events, most significantly during wildland fire operations.

Automatic Aid Agreement (AAA)

As part of the auto aid, local dispatchers notify JBSA Emergency Communications Centers (ECC) of responses to the agreed-assigned community districts and automatically dispatch the resource assigned in support. AAAs are approved by the 502d Air Base Wing CC for immediate dispatch.

Map 1: JBSA Installations in the City of San Antonio Region



*Distance based on center of San Antonio

Community Planning Areas

Fire District 1: JBSA Operating Location (OL) Lackland and Chapman Annex.

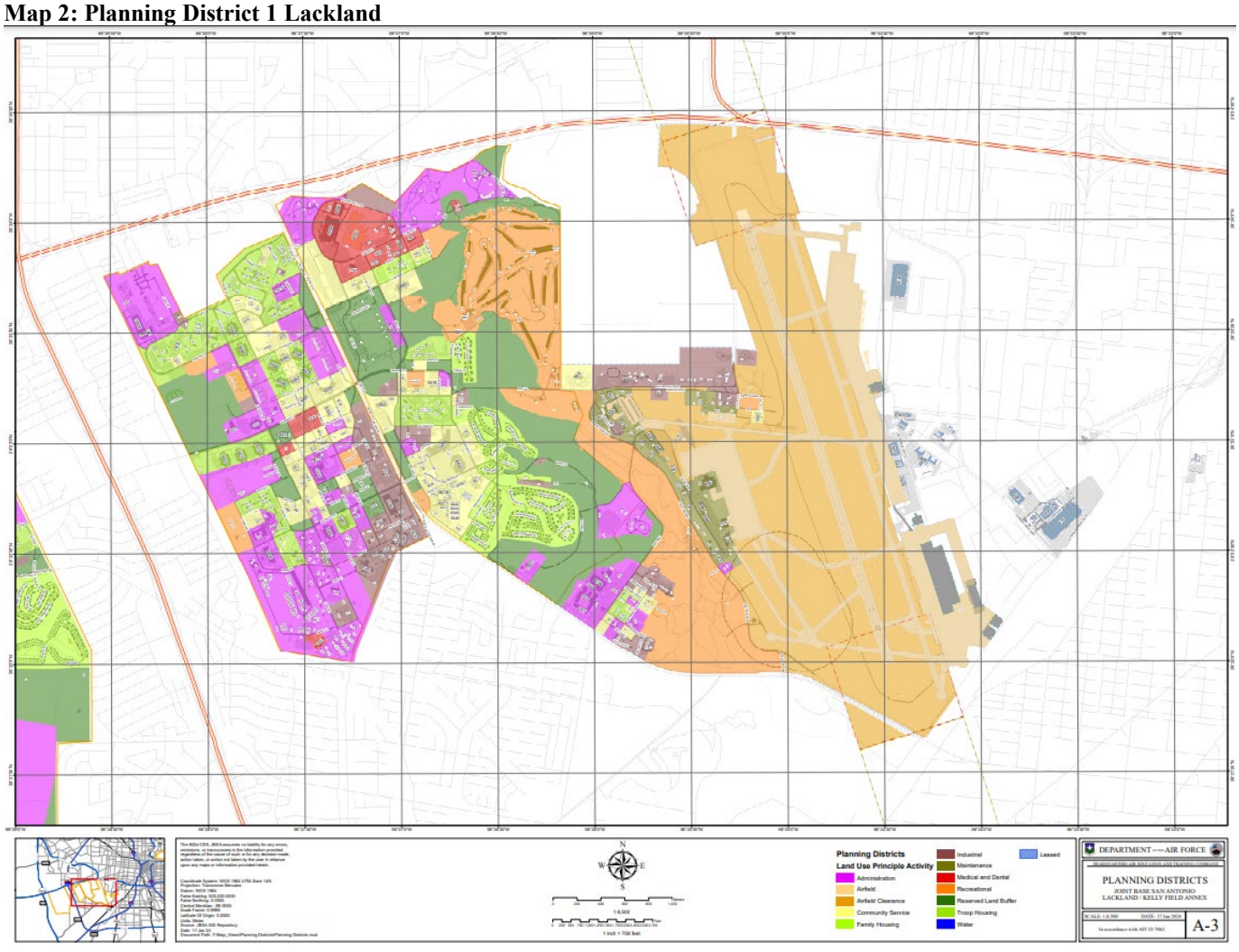
Fire District 2: JBSA OL Fort Sam Houston and Camp Bullis.

Fire District 3: JBSA OL Randolph and Seguin Auxiliary Field.

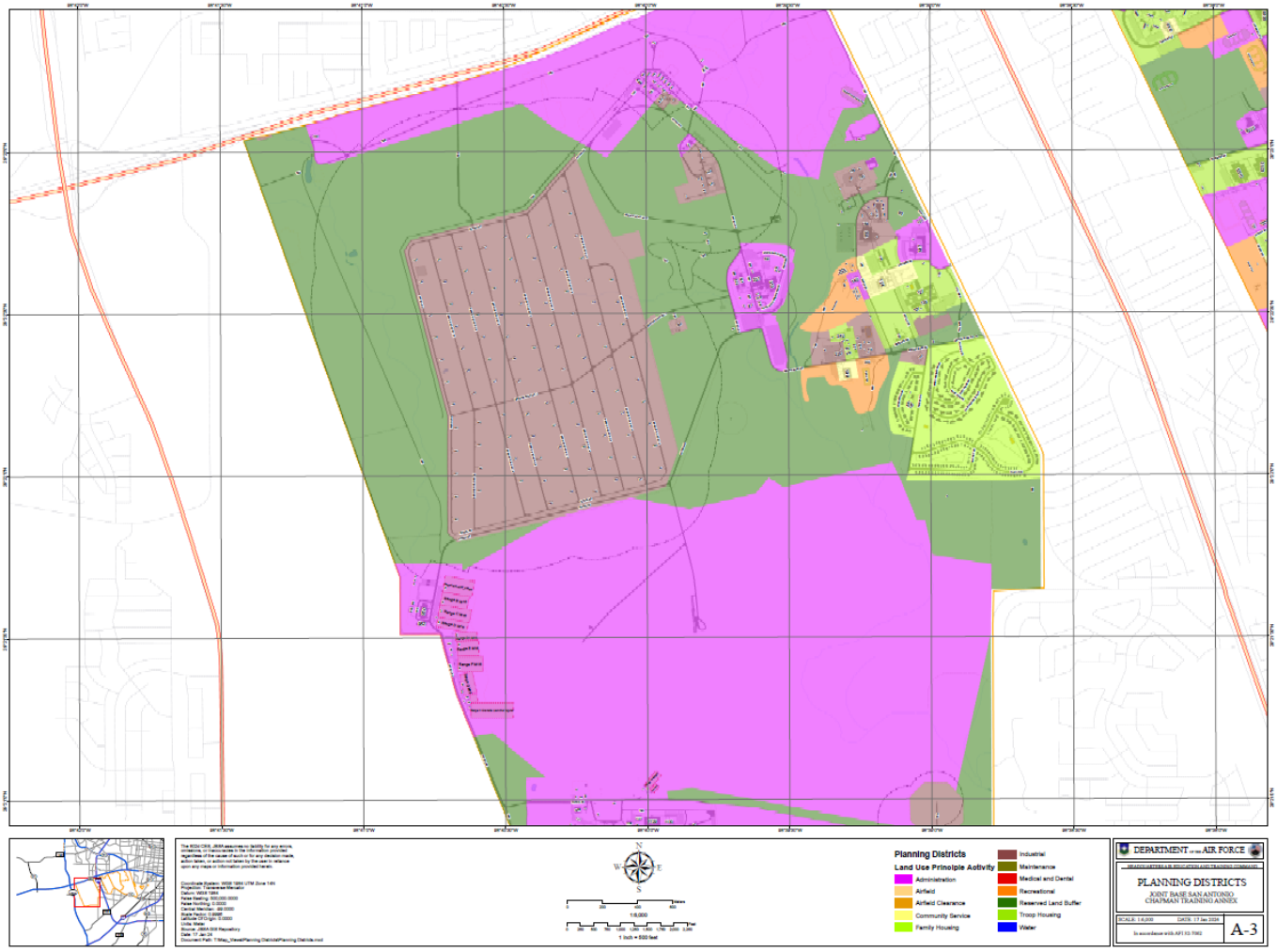
Each fire district is identified based on geographical locations, occupancy type, increased hazards, and life safety considerations. The increased risks in these identified areas increase the potential need for immediate additional response.

District 1 – OL Lackland has nine fire demand zones (FDZ). FDZ 1 and 2 are covered by Fire Station 3. FDZ 1 is mainly comprised of training and weapon ranges. FDZ 2 is residential and office workers. FDZs 3-6 are covered by Fire Station 1. This FDZ contains many students, medical professionals, and office workers. FDZ 9, the airfield, is covered by Fire Station 2.

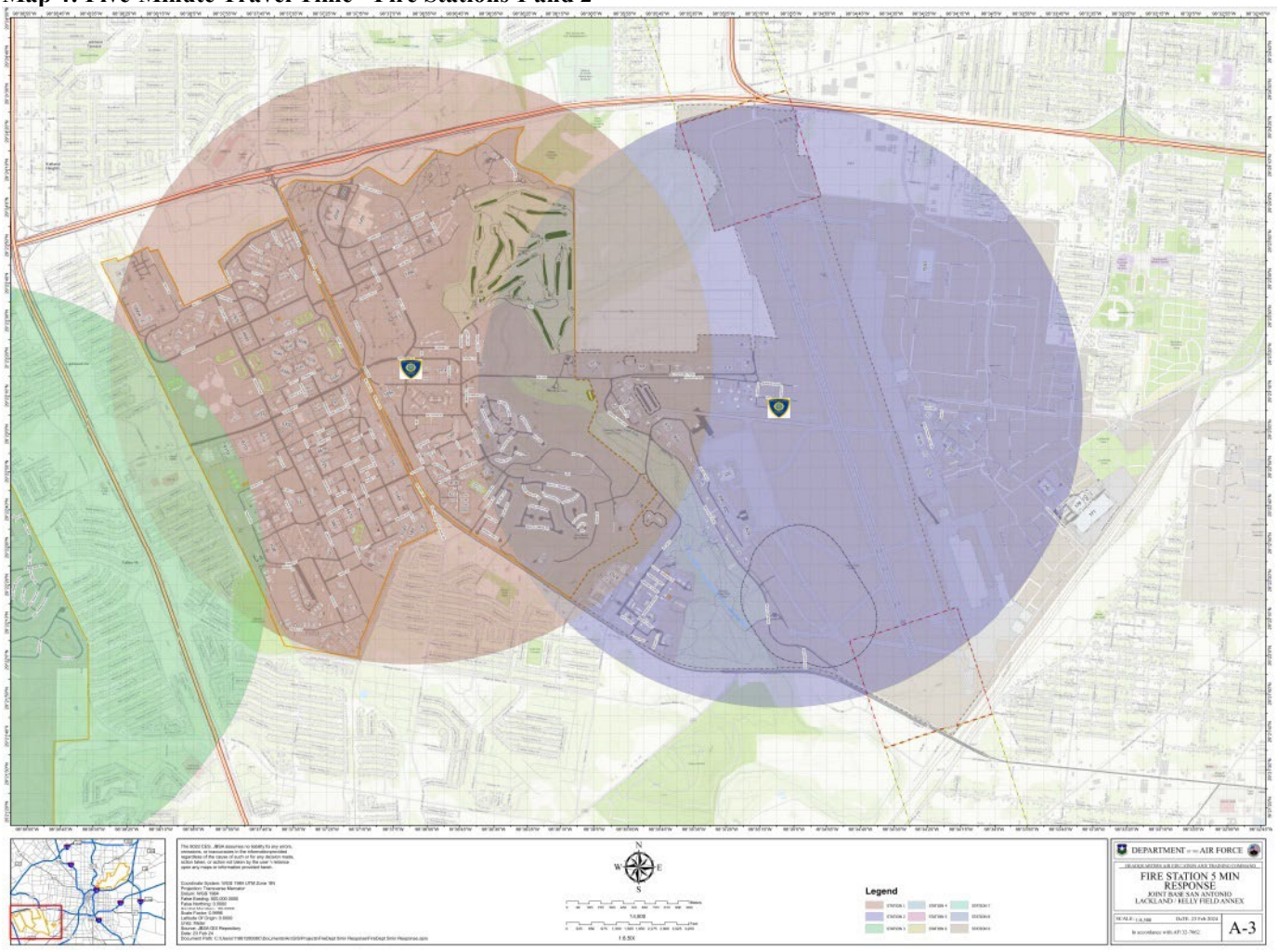
Map 2: Planning District 1 Lackland



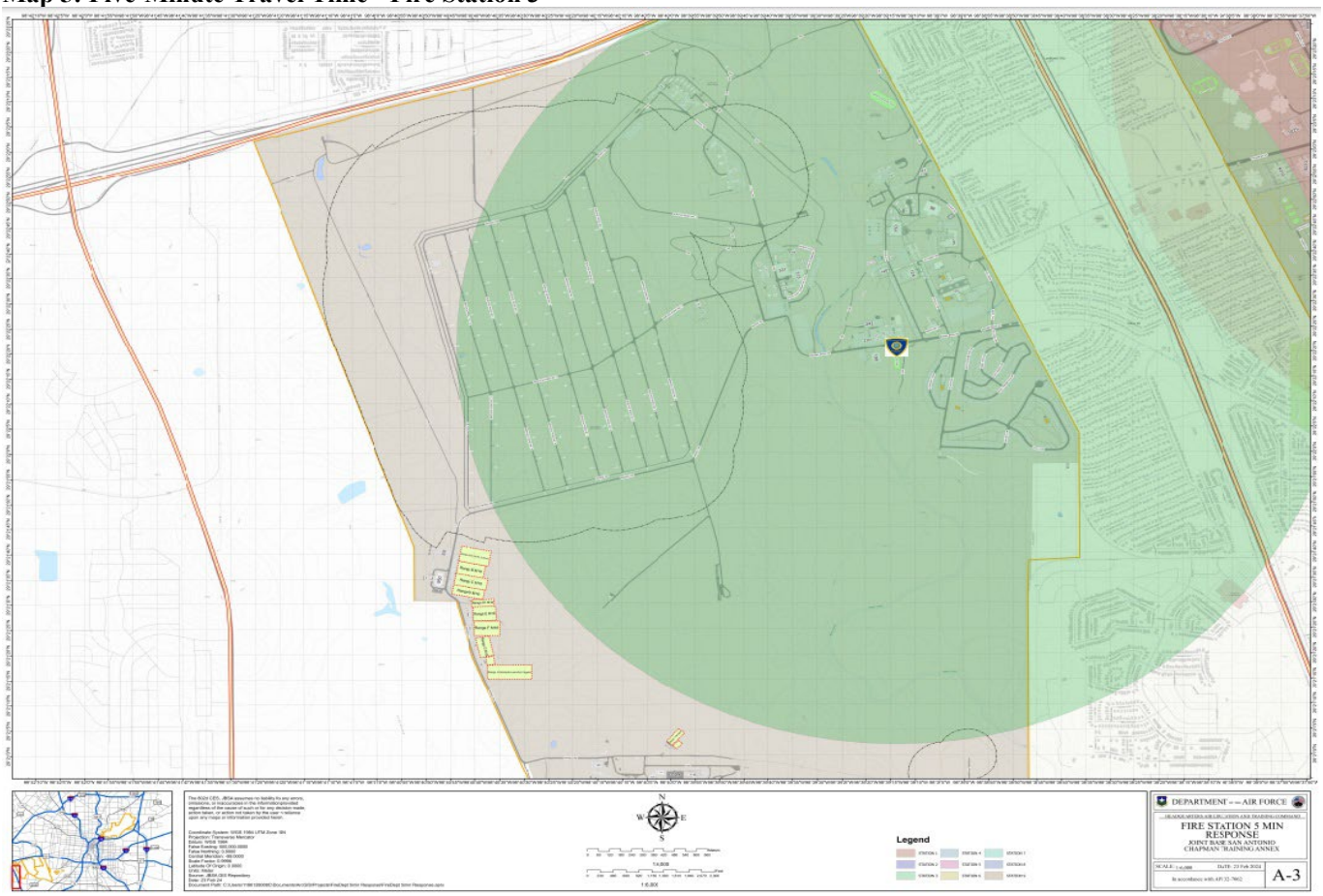
Map 3: Planning District 1 Chapman Annex



Map 4: Five-Minute Travel Time - Fire Stations 1 and 2

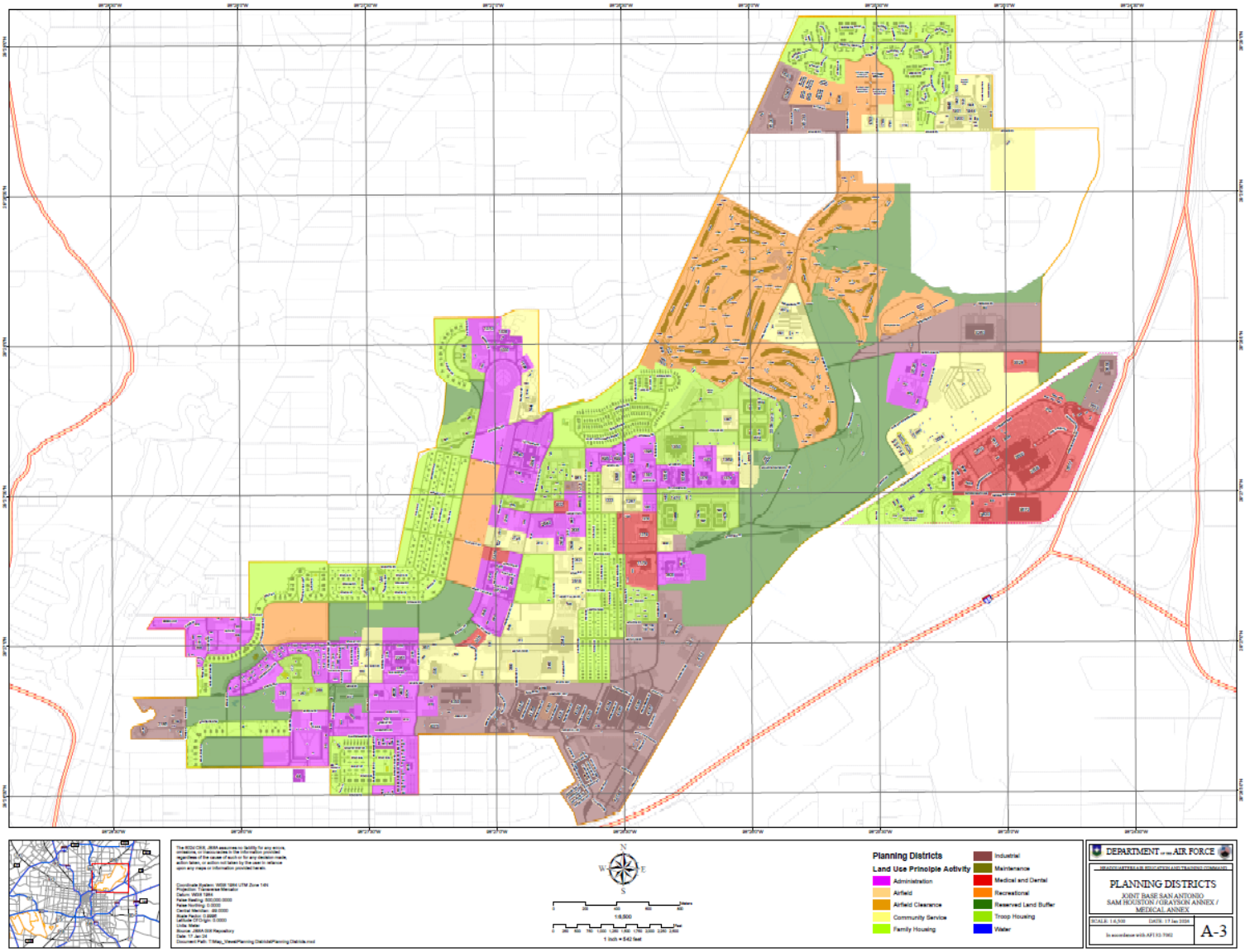


Map 5: Five-Minute Travel Time - Fire Station 3

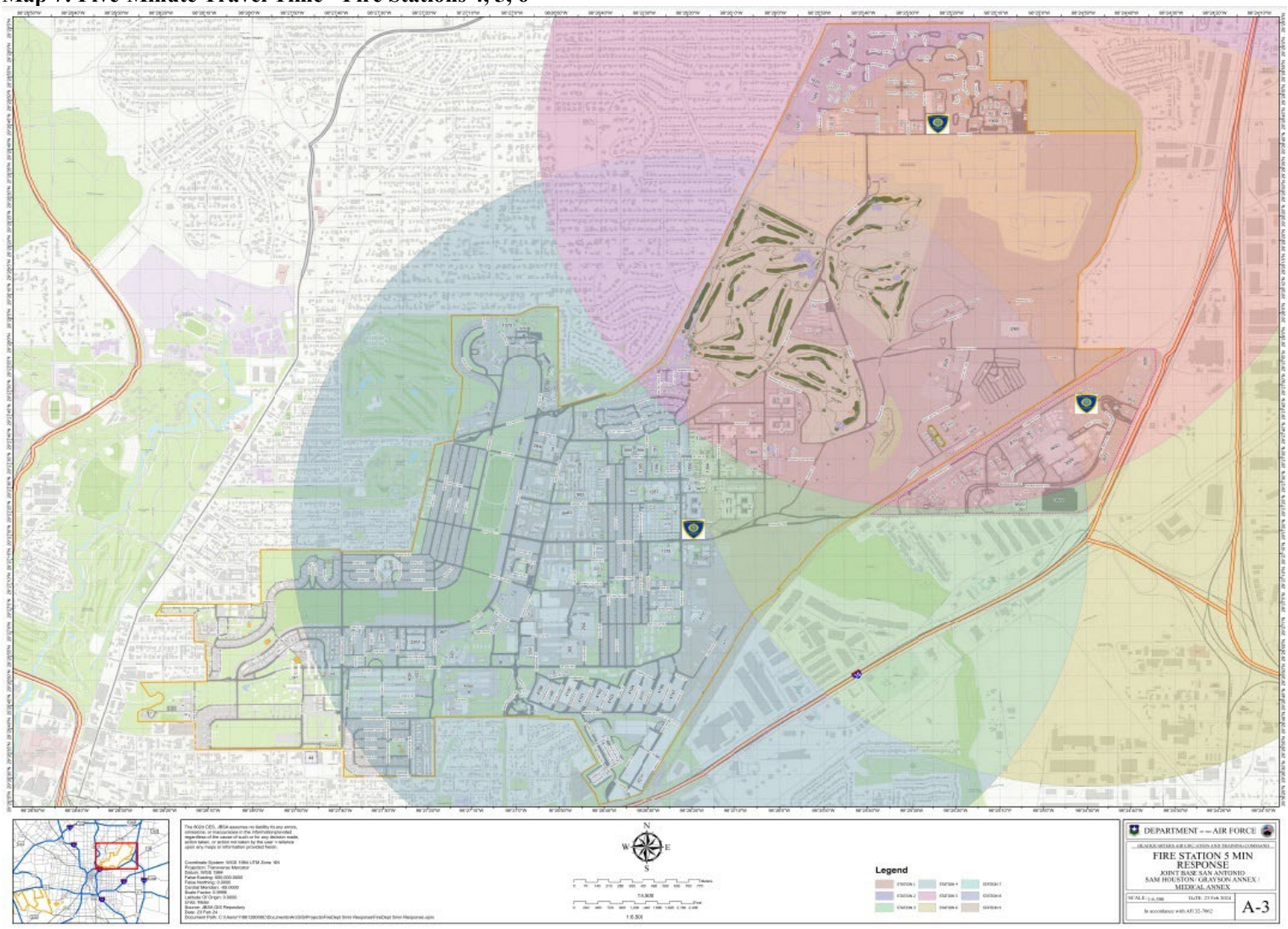


District 2 – OL Fort Sam Houston contains three FDZs that are identified based on the geographical locations of three fire stations. FDZ 1 is residential, student training, medical professionals, and office workers. FDZ 2 contains residential and two schools for children. FDZ 3 is the Brooke Army Medical Center campus, consisting mainly of medical professionals and patients.

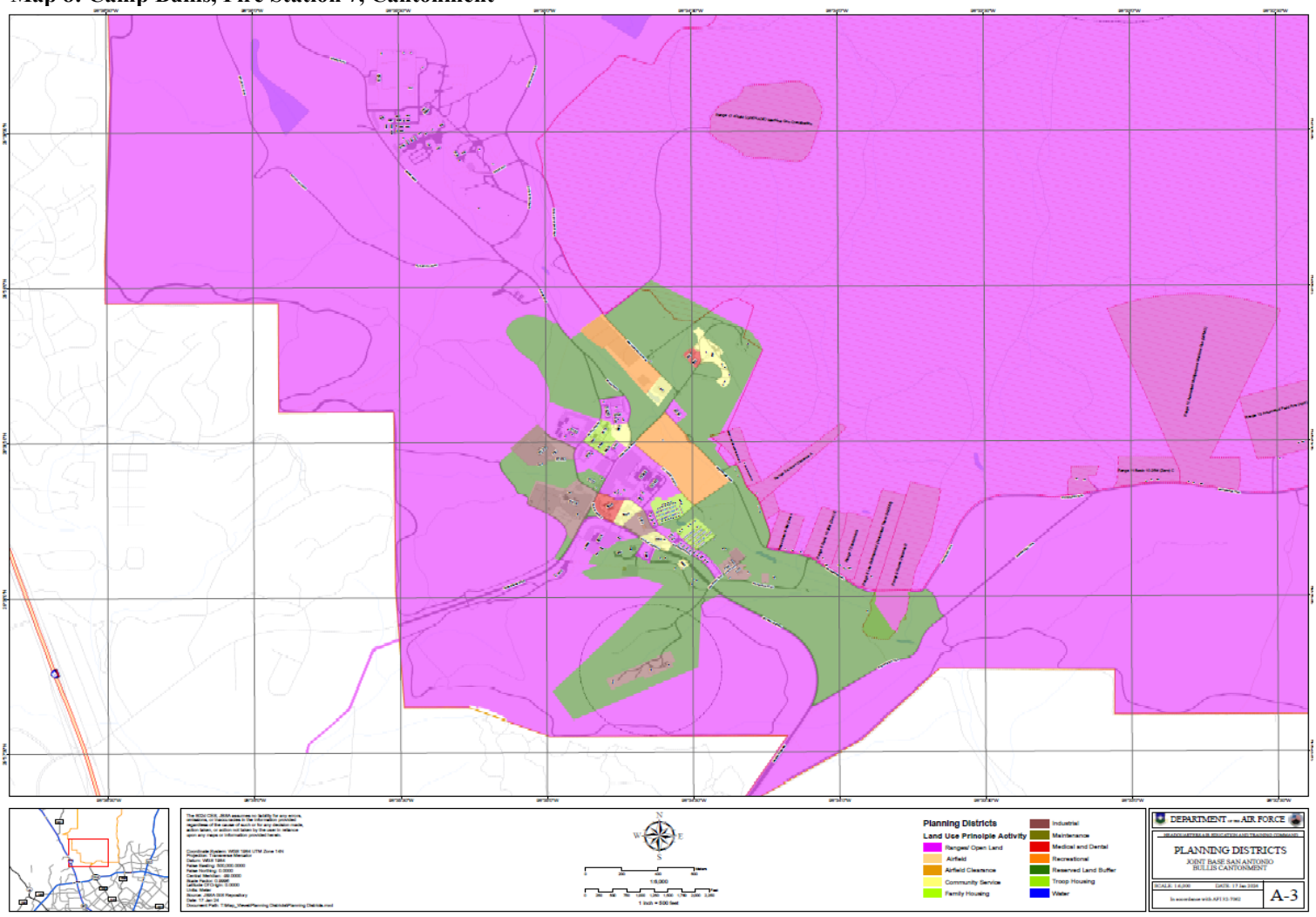
Map 6: Planning District 2 Fort Sam Houston



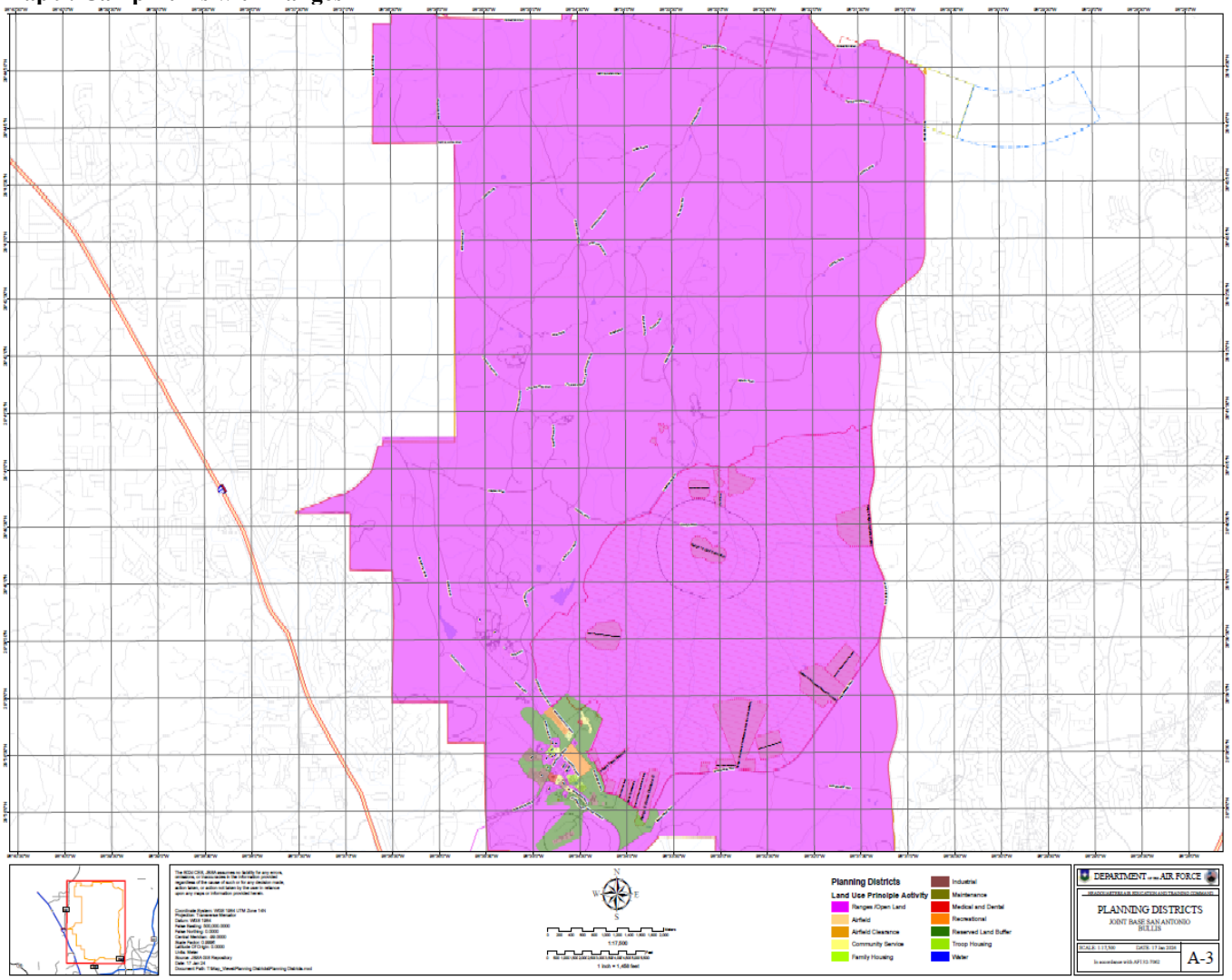
Map 7: Five-Minute Travel Time - Fire Stations 4, 5, 6



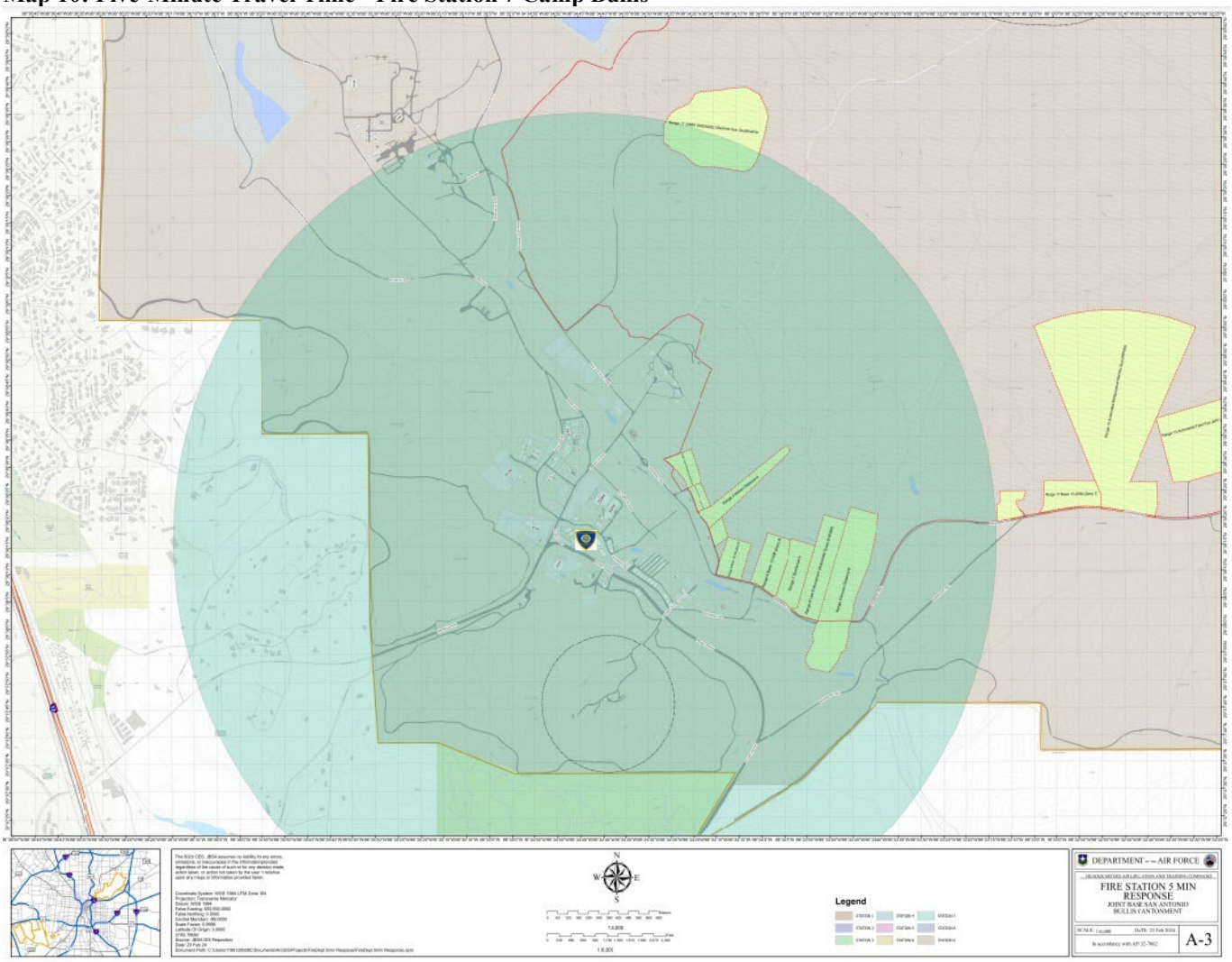
Map 8: Camp Bullis, Fire Station 7, Cantonment



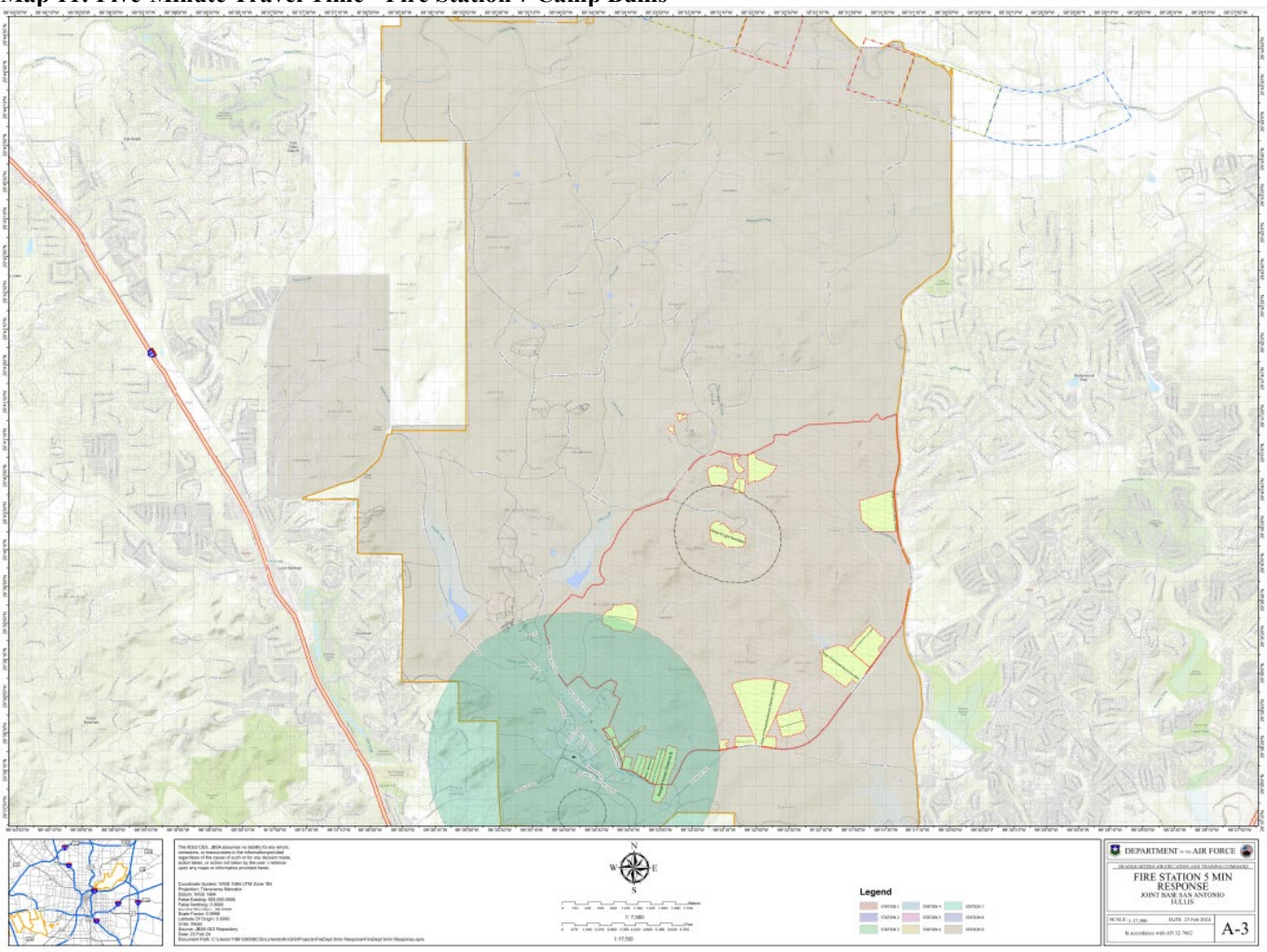
Map 9: Camp Bullis with Ranges



Map 10: Five-Minute Travel Time - Fire Station 7 Camp Bullis



Map 11: Five-Minute Travel Time - Fire Station 7 Camp Bullis



Camp Bullis contains two FDZs identified based on geographical locations. FDZ4, the main cantonment area, houses Fire Station 7. The training ranges cover the 28k acre site. FDZ5 is Camp Stanley (support agreement) covered by Station 7. The increased risks in these identified areas increase the potential need for immediate additional resources. Response times to range and training areas outside the cantonment area are difficult to meet due to distance, terrain, and road conditions. Responses, on average, are 10-to-15-minute travel time when responding outside the cantonment.

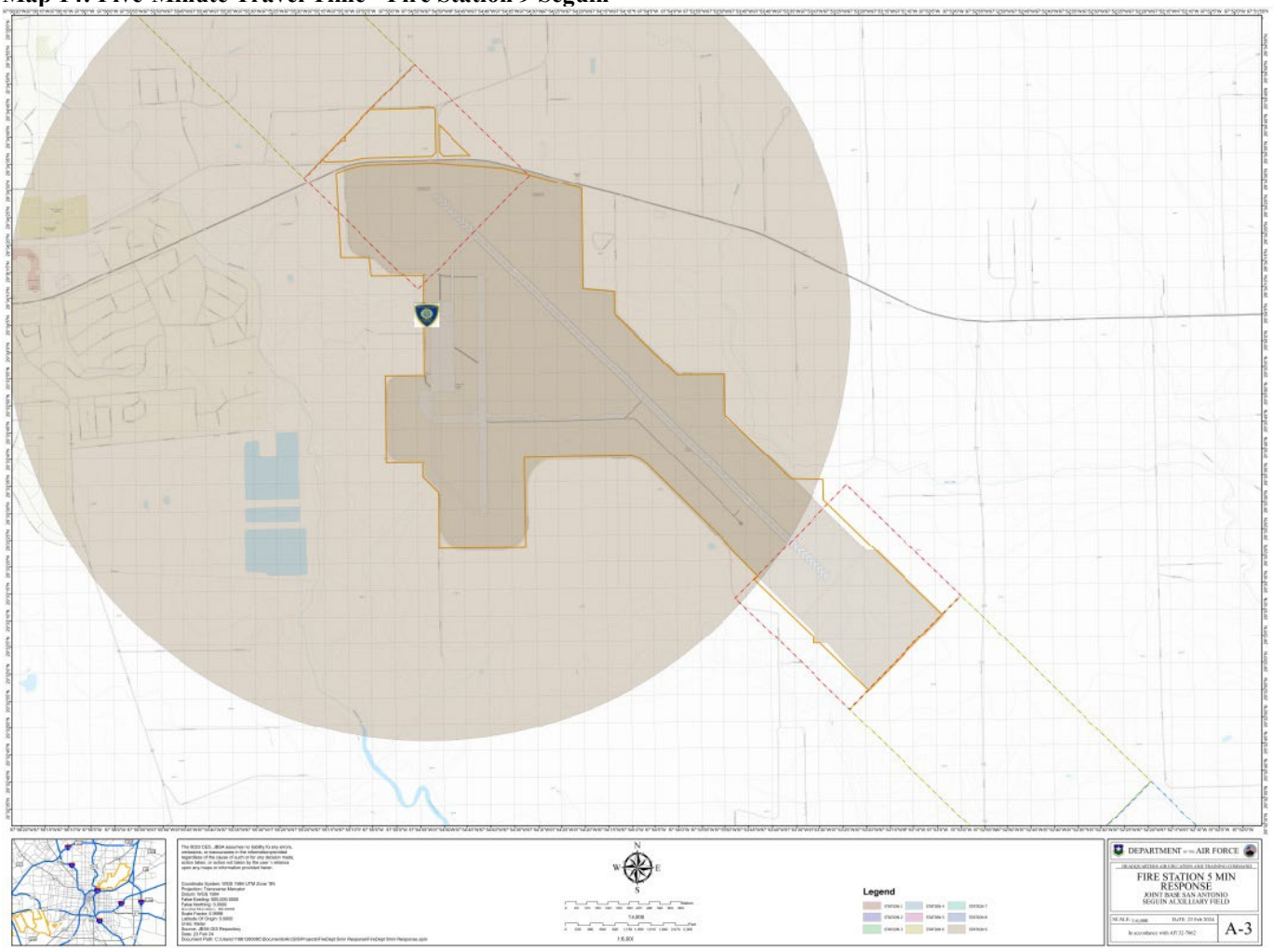
Combat Air Landing Strip (CALS) aircraft missions with fixed-wing aircraft are scheduled and covered at the CALS airstrip with pre-staged crews along the runway, and no landings occur without Crash Fire Support.

Camp Stanley response times average 12-15 minutes. The response requires escorted access to utilize gate access through Gate 8 (from the Camp Bullis side of the fence line). If crews are unable to support emergency response, secondary access from Interstate Highway 10 to Ralph Fair Road Gate can lengthen response time to 15-20 minutes. The use of mutual aid partners is normally utilized to support the shortfall in response times.

Map 12: District 3, OL Randolph - Four FDZs covered by Fire Station 8

Map 13: Five-Minute Travel Time - Fire Station 8

Map 14: Five-Minute Travel Time - Fire Station 9 Seguin



Seguin Aux Field is used for touch-and-go sortie missions conducted by the 12th Fighter Training Wing. Typically, the airfield operates Mondays through Fridays between the hours of 0700-1800. When operational, JBSA F&ES supports the mission with a crew of four personnel to staff an ARFF-RIV and water tender apparatus. Fire Station 9 can sustain 24-hour operations and is a vital State and Federal staging area for FEMA and DLA, functioning as an Installation Support Base and staffing location for disaster response. FEMA has staged resources on the airfield numerous times, including Hurricane Katrina.

Community Transportation Systems

JBSA F&ES has 11 areas of operation that are geographically separated from one another, which rely on support operations from not only mutual aid partners but internally from the 266 mission partners and response agencies. The San Antonio vision continues to forecast and improve transportation corridors, but population growth has been faster. To support each operating location (OL), JBSA may need to navigate highways and city streets during emergency response. This presents several hazards and risks to the responding team. TXDOT requirements are adhered to and monitored for changes.

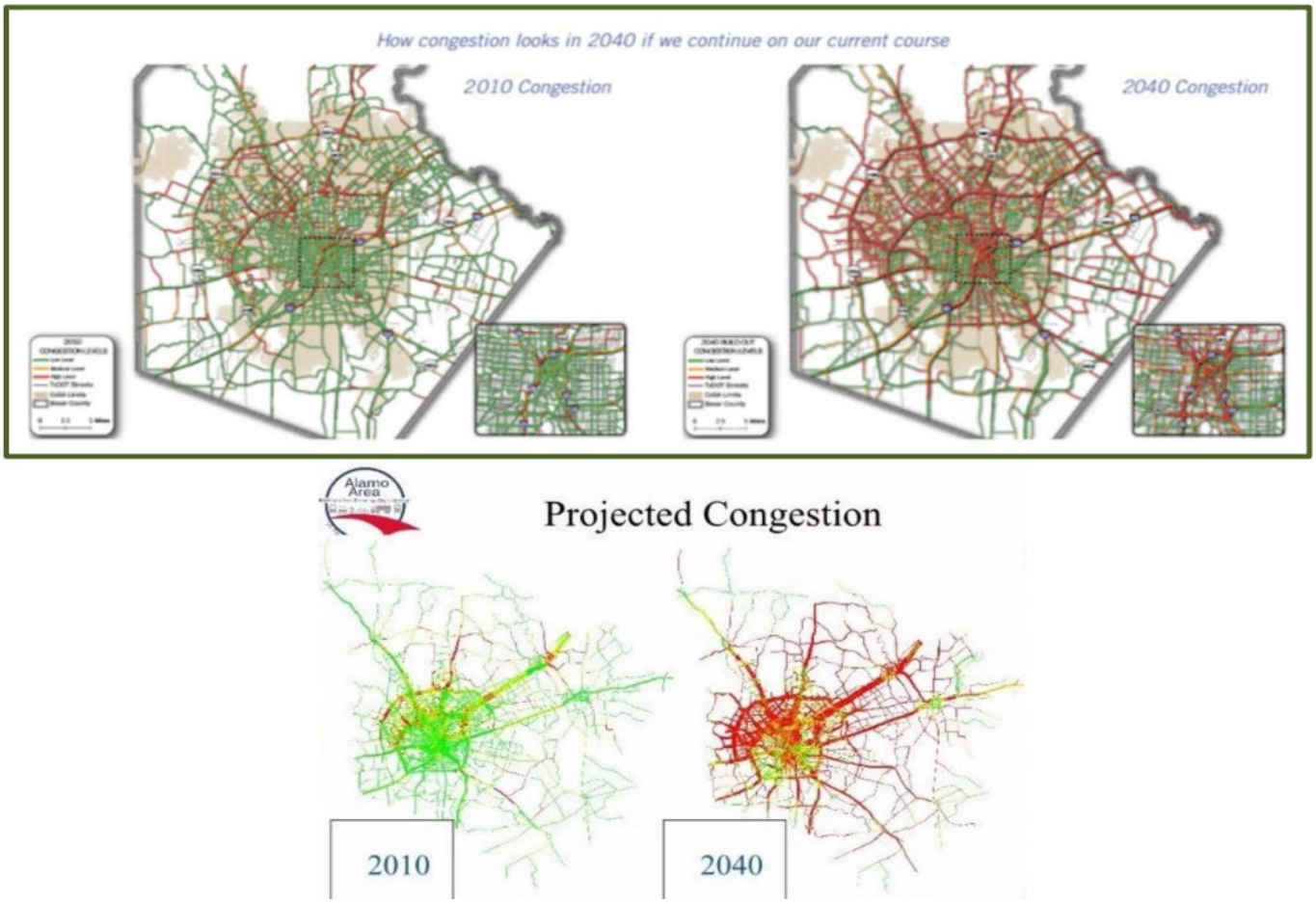
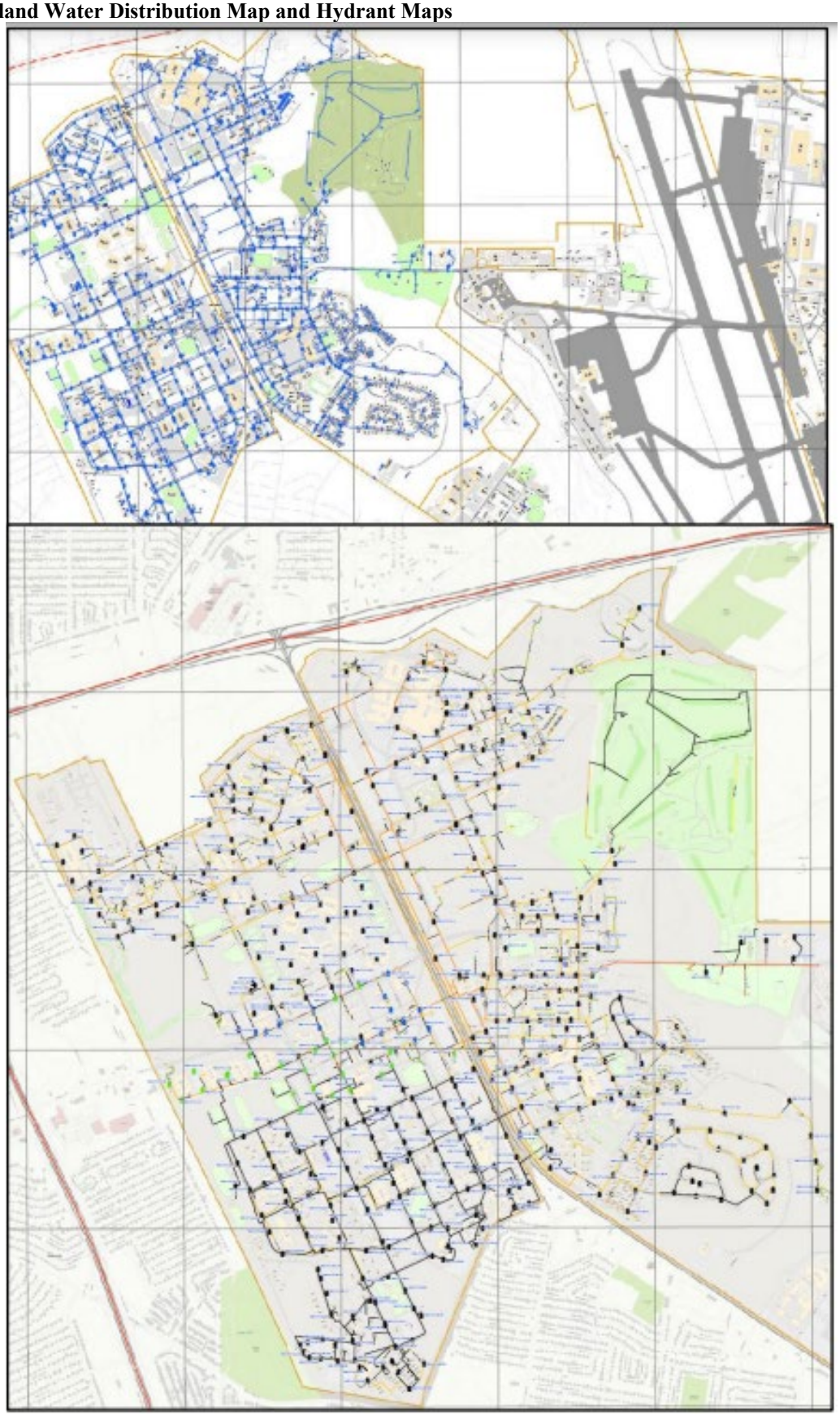


Figure 1: Projected Congestion (2010-2040)

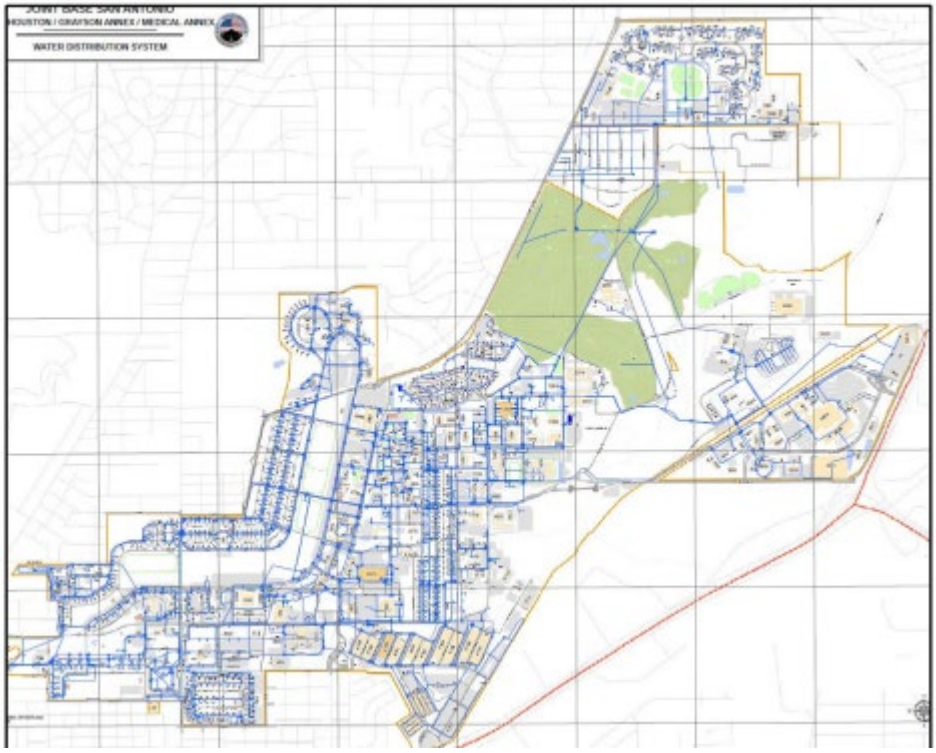
Community Critical Infrastructure

Fire apparatus have about four minutes of firefighting capabilities before needing a steady water source to continue prolonged firefighting. Each district's water distribution system is laid out to protect the high occupancy areas of the occupants and mission assets. Additionally, civil engineers maintain and test the hydrant delivery system. Placement is designed to meet code compliance. In areas where hydrants are not accessible, or water flow is minimal, JBSA F&ES maintains several water tender trucks that carry 4,000 gallons of water each and can set up water dump sites to sustain fire operations.

Map 15: Lackland Water Distribution Map and Hydrant Maps



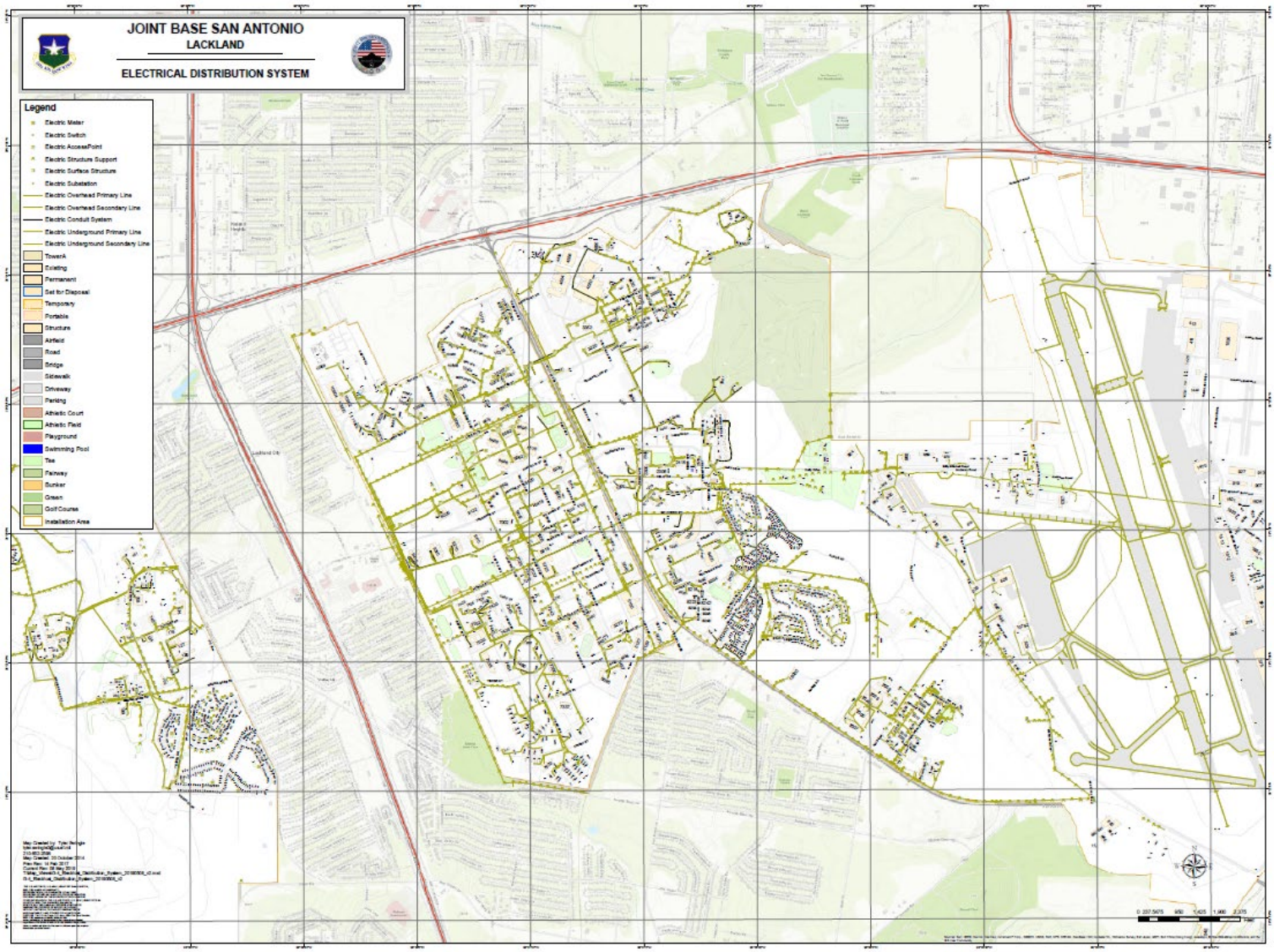
Map 16: Ft. Sam Houston Water Distribution Map



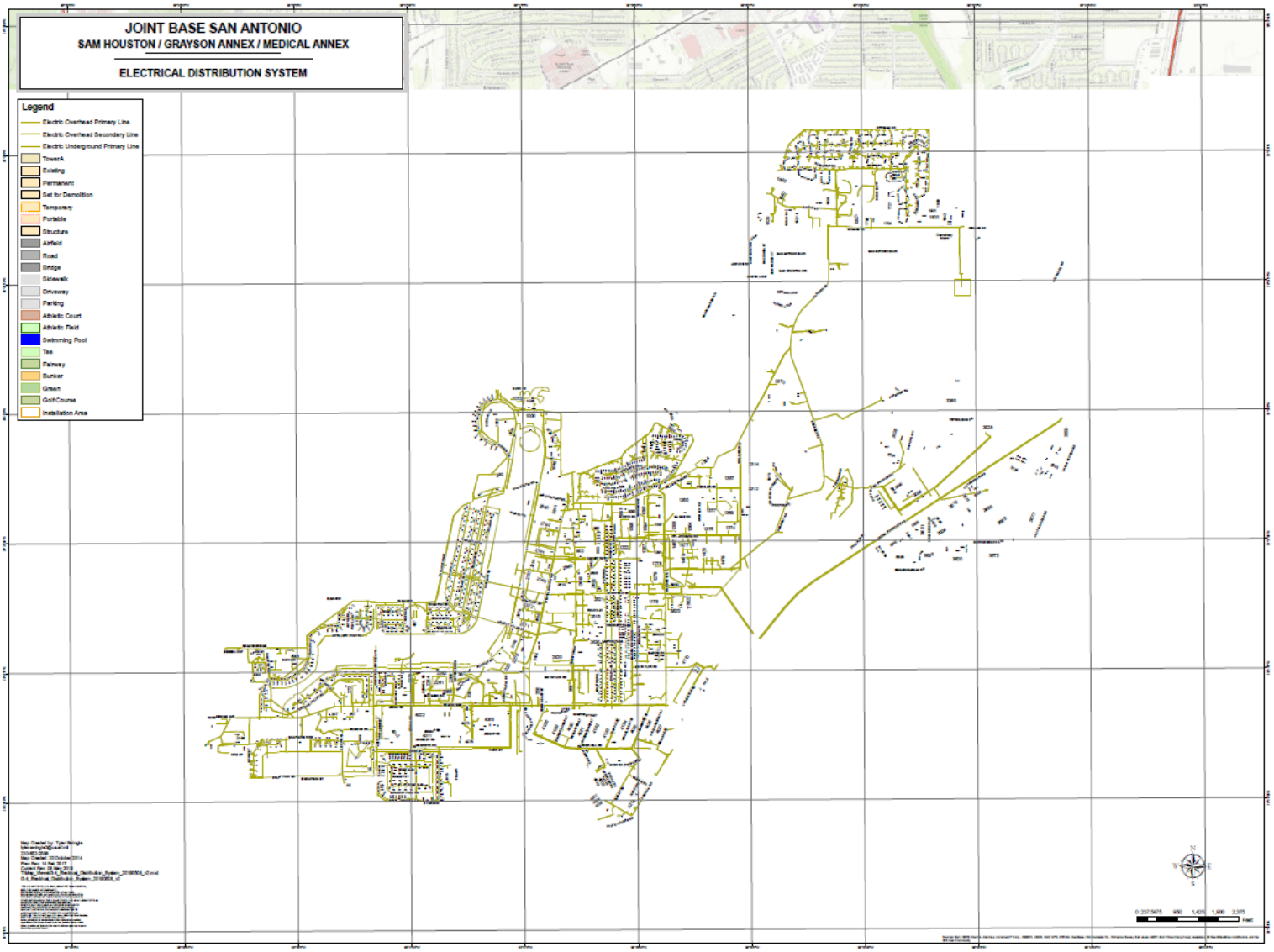
Map 17: Randolph Water Distribution Map

The electrical distribution system (EDS) is the final stage in the delivery of electricity. Electricity is carried from the transmission system to individual consumers/buildings.

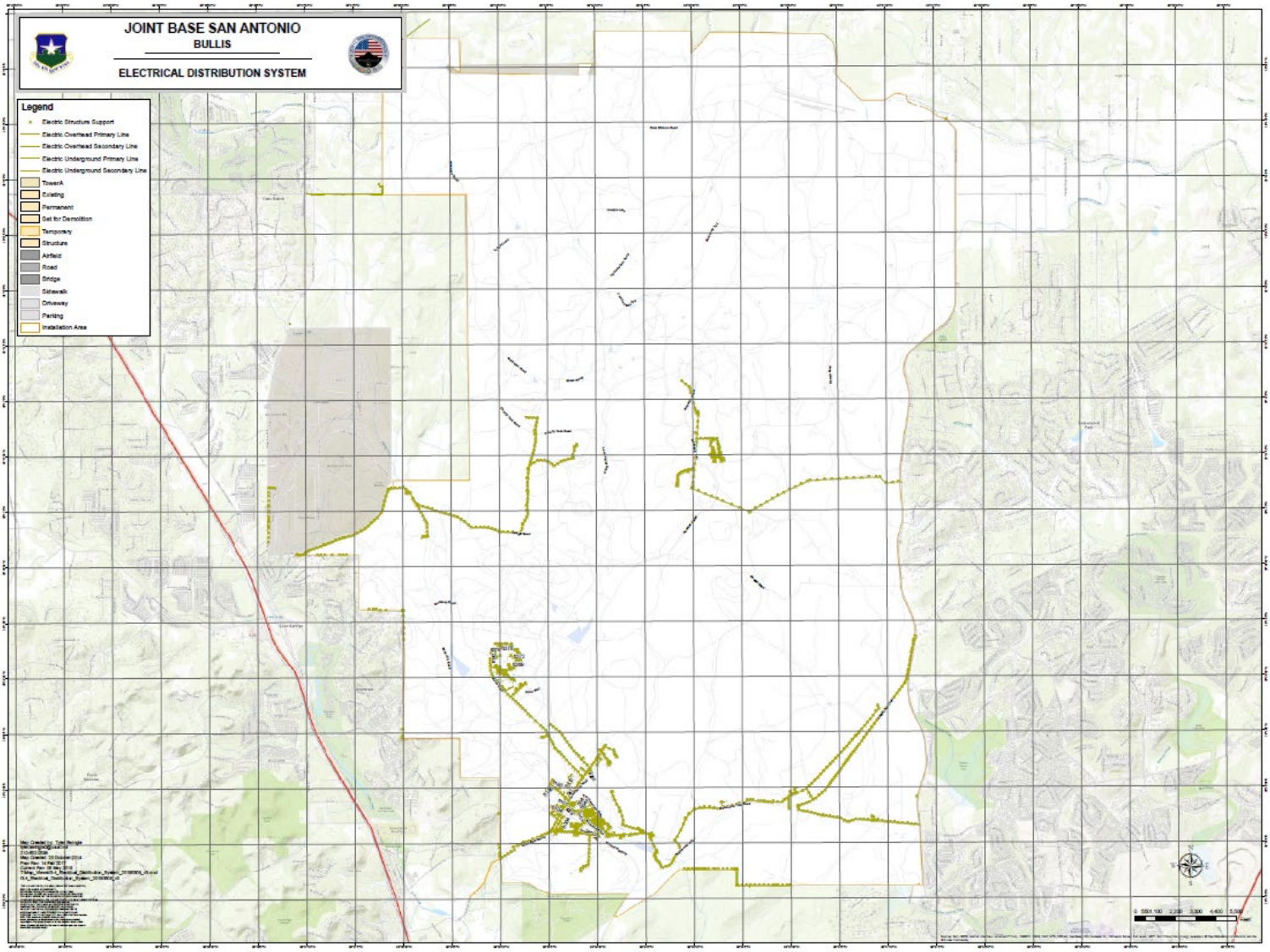
Map 18: Electrical Distribution System – Lackland



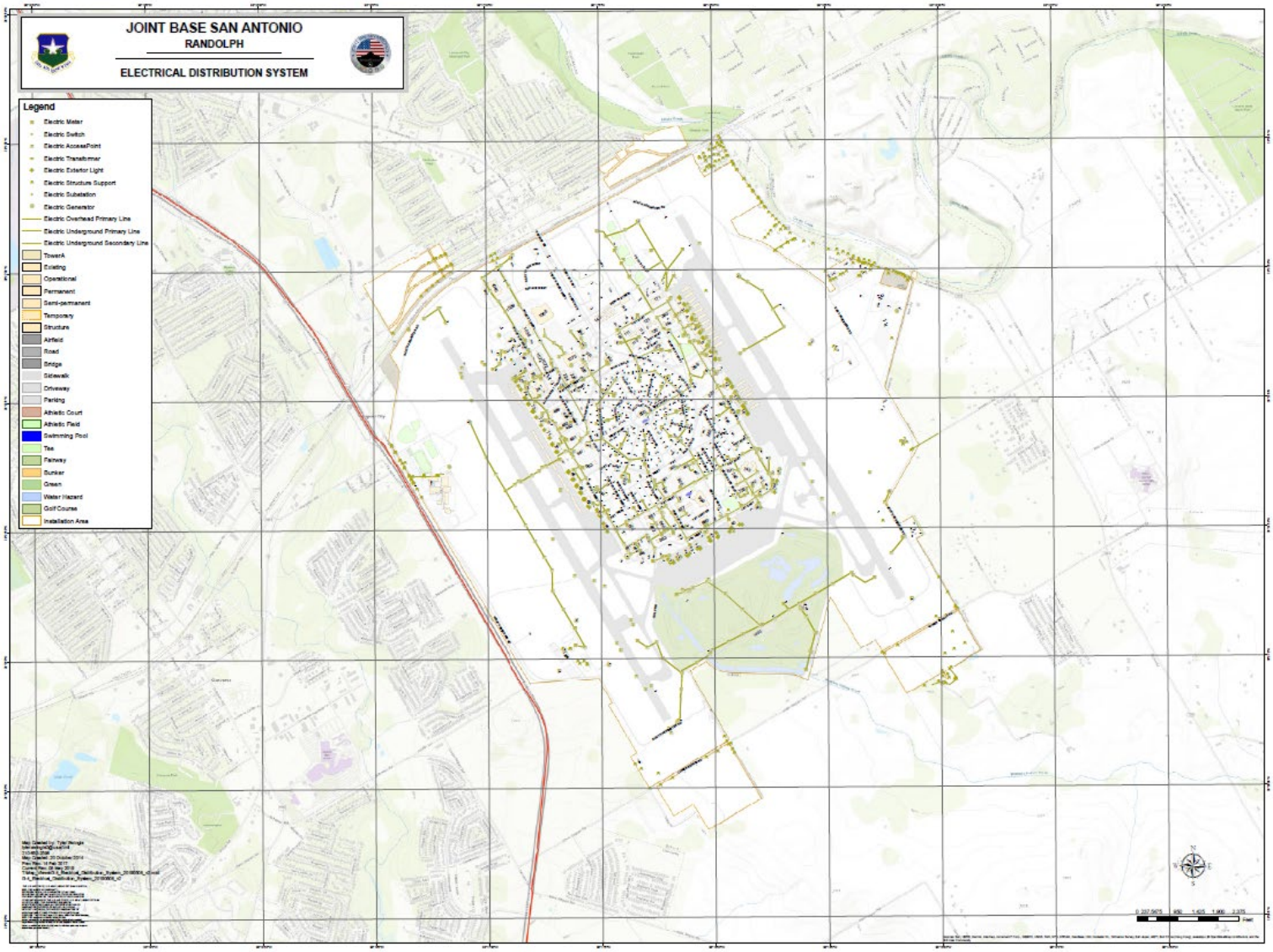
Map 19: Electrical Distribution System – Fort Sam Houston



Map 20: Electrical Distribution System – Camp Bullis

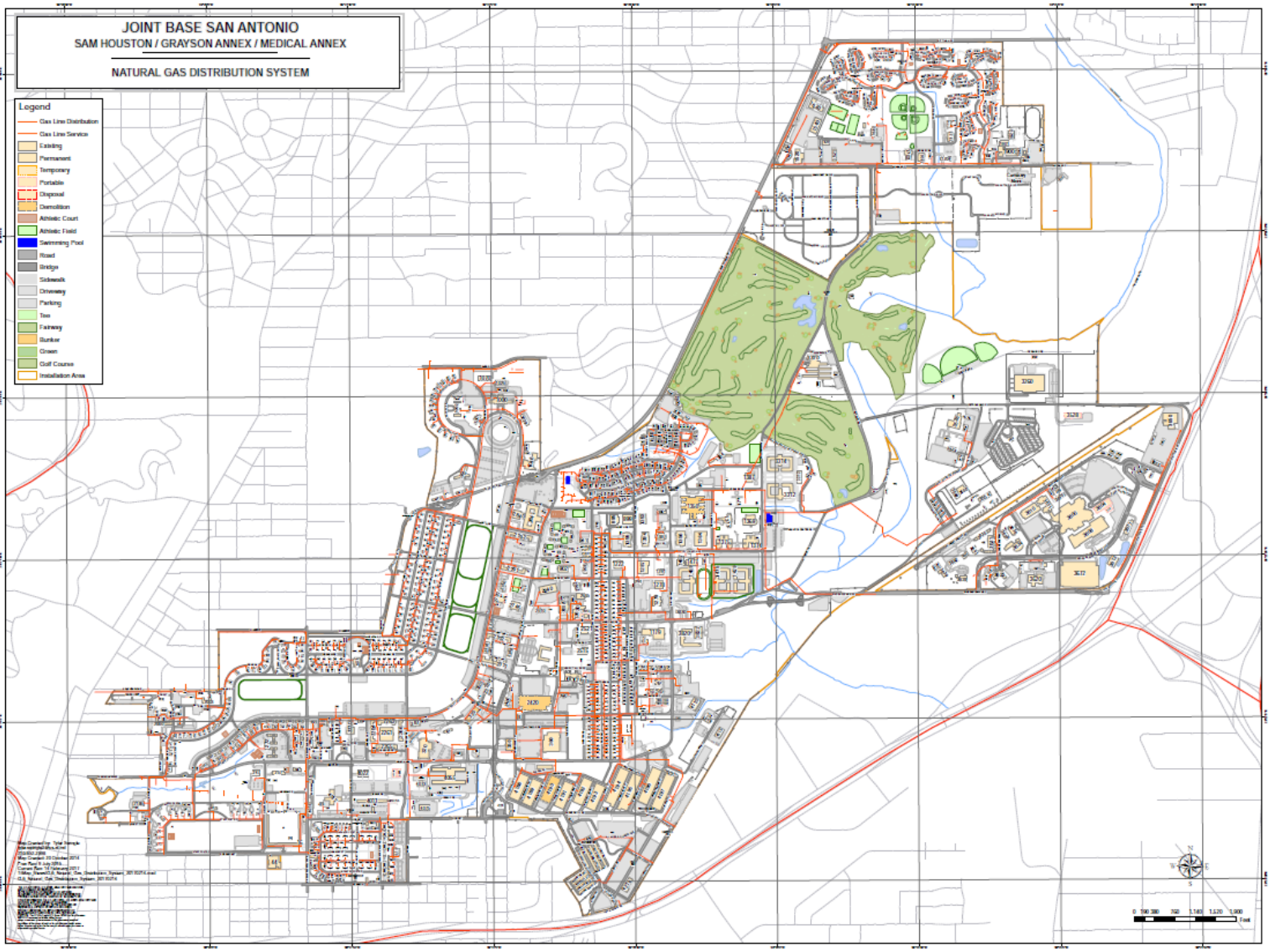


Map 21: Electrical Distribution System – Randolph



Map 22: Natural Gas Distribution System – Lackland

Map 23: Natural Gas Distribution System – Fort Sam Houston



Map 24: Natural Gas Distribution System – Randolph

Community Land Use and Zoning

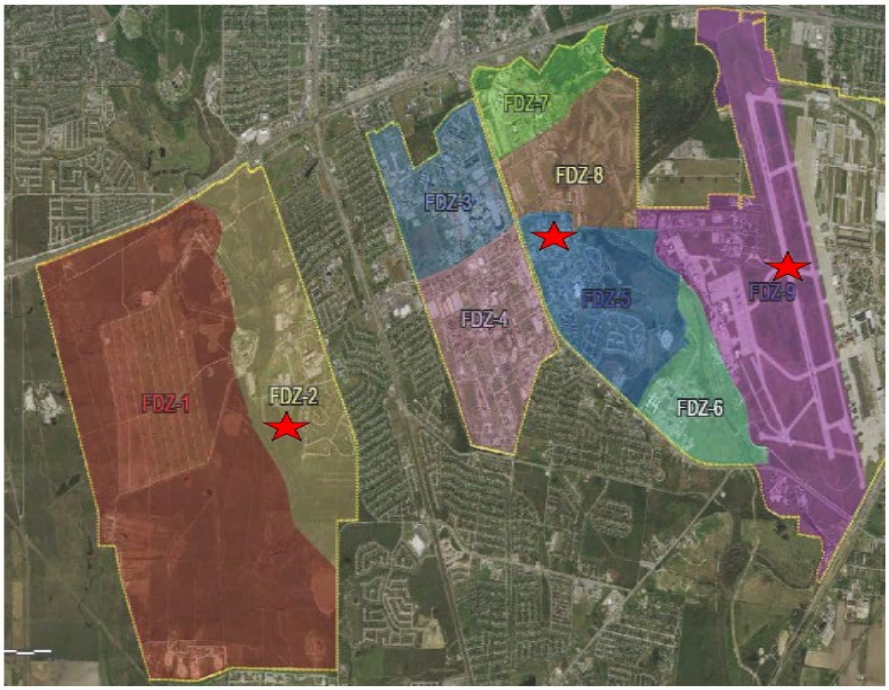
Fire District 1: JBSA Lackland

Fire District 2: JBSA Fort Sam Houston and Camp Bullis

Fire District 3: JBSA Randolph and Seguin Auxiliary Field

Each of the three fire districts is identified based on geographical locations, occupancy type, increased hazards, and life safety considerations. The increased risks in these identified areas increase the potential need for immediate additional response.

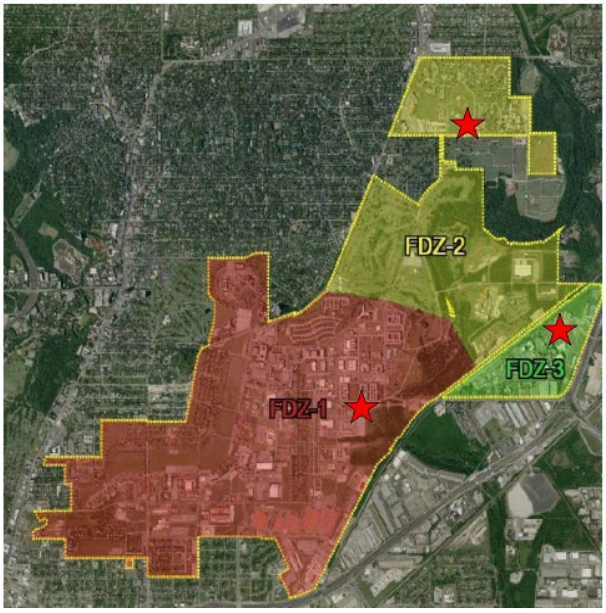
Map 25: Fire District 1 - Lackland (Nine FDZs)



High-Risk Facilities
- Munitions storage igloos
- Munitions mx facilities
- Firing ranges
- EOD range
- Privatized Housing
- Gyms
- Enlisted dorms
- Bowling center
- Fuel Stations
- Gateway Inn
- Mini Malls
- Base Exchange
- Commissary
- Youth Center
- Lackland School
- 149th munitions storage area
- Wilford Hall Medical Center
- Child Development Center
- Temporary Living Facilities
- Total Energy Plant
- Gateway Club
- Aircraft operating areas

Highest Service Demands
- EMS
- Hazmat

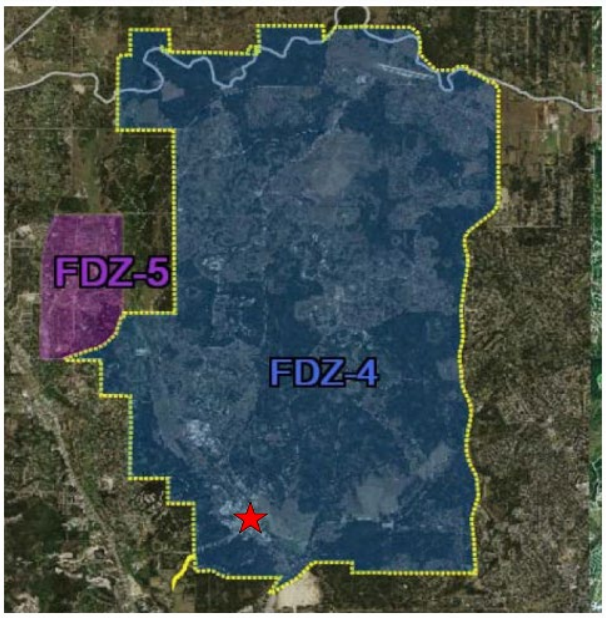
Map 26: Fire District 2 - Fort Sam Houston (Three FDZs)



High Risk Facilities
- METC Campus
- Child Development Center
- Privatized Family Housing
- Base Lodging
- Dorms
- Commissary
- Base Exchange
- Mini Mall
- Commissary
- Bowling Center
- Gym
- Bldg. 44 No Sprinkler System
- Fort Sam Schools
- San Antonio Military Medical Center
- Helicopter Pad (Medical)

Highest Service Demands
- Structural
- EMS/Rescue

Map 27: Fire District 2 – Camp Bullis (Two FDZs)



High Risk Facilities
- Enlisted Dorms
- Base Lodging
- Gym
- Mini Mall
- Munitions Storage Area
- Combat Arms Firing Ranges
- Secured Facilities (unknown content)

Highest Service Demands
- Structural
- Wildland

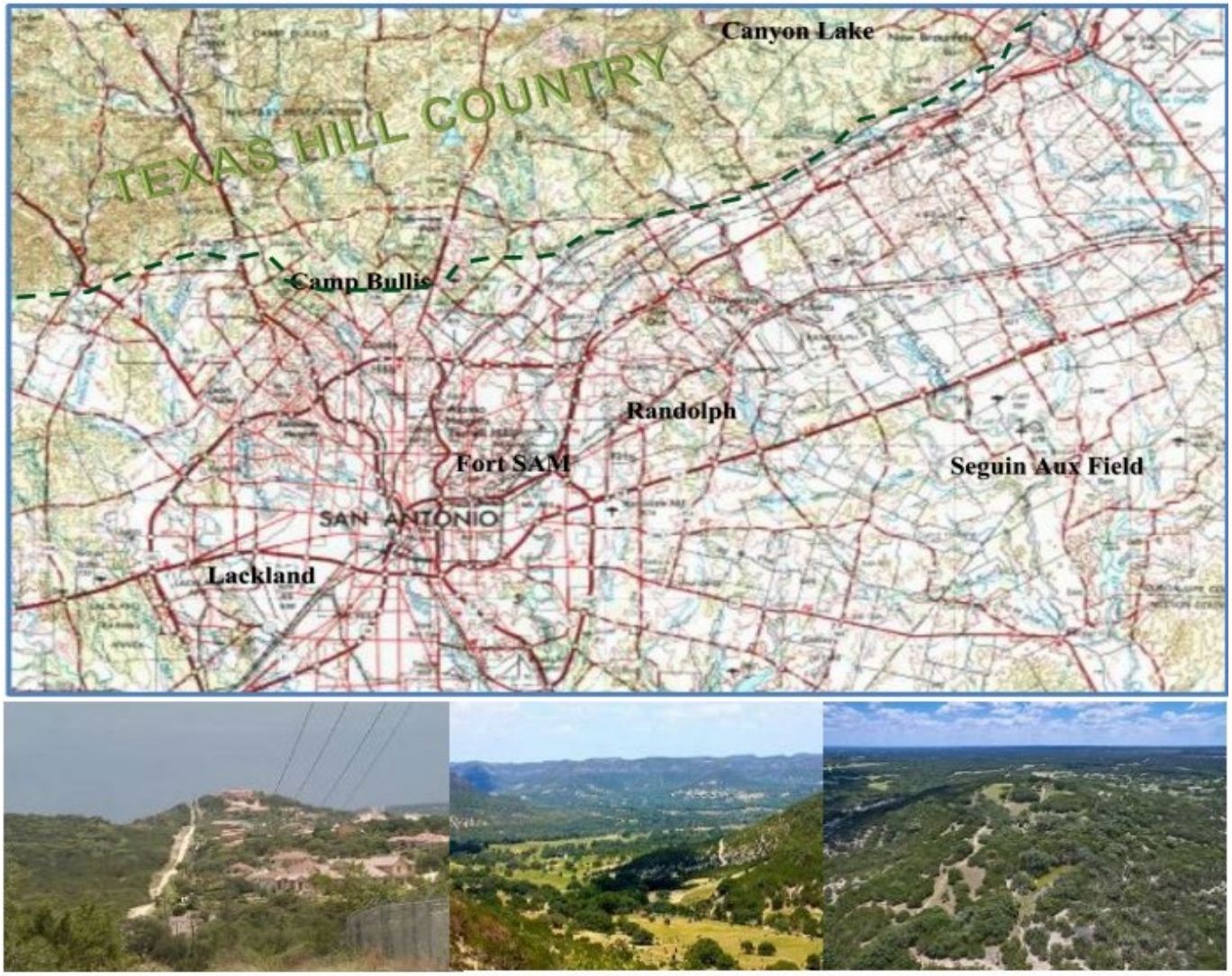
Map 28: Fire District 3 – Randolph (Four FDZs)

High Risk Facilities
- Aircraft Operating Areas
- Aircraft Hangars
- East & West Critical Fire Rescue Access Areas
- East & West Rapid Response Areas (Parallel Runways)
- Munitions Storage
- POL Bulk Storage/Fuel Depots
- Enlisted Dorms/TLF's/Lodging
- Base Exchange/BXtra
- Medical Clinic
- Kendrick/Parr Clubs
- AFPC Complex (bldg. 499, 492, 493 & 494)
- MPF (bldg. 399)
- Randolph Schools

Highest Service Demand
- Structural
- EMS/Rescue

Community Topography

San Antonio has a gently rolling terrain that is dotted with live oak trees, forested land, mesquite, and cacti. The Texas Hill Country reaches into the northern portions of the city and Bexar County. The area sits on the Balcones Escarpment. The water supply is from the primary source of Edwards Aquifer. The elevation sits at around 650 feet above sea level. The longitude/latitude is 29.4241 degrees north and 98.4936 degrees west.



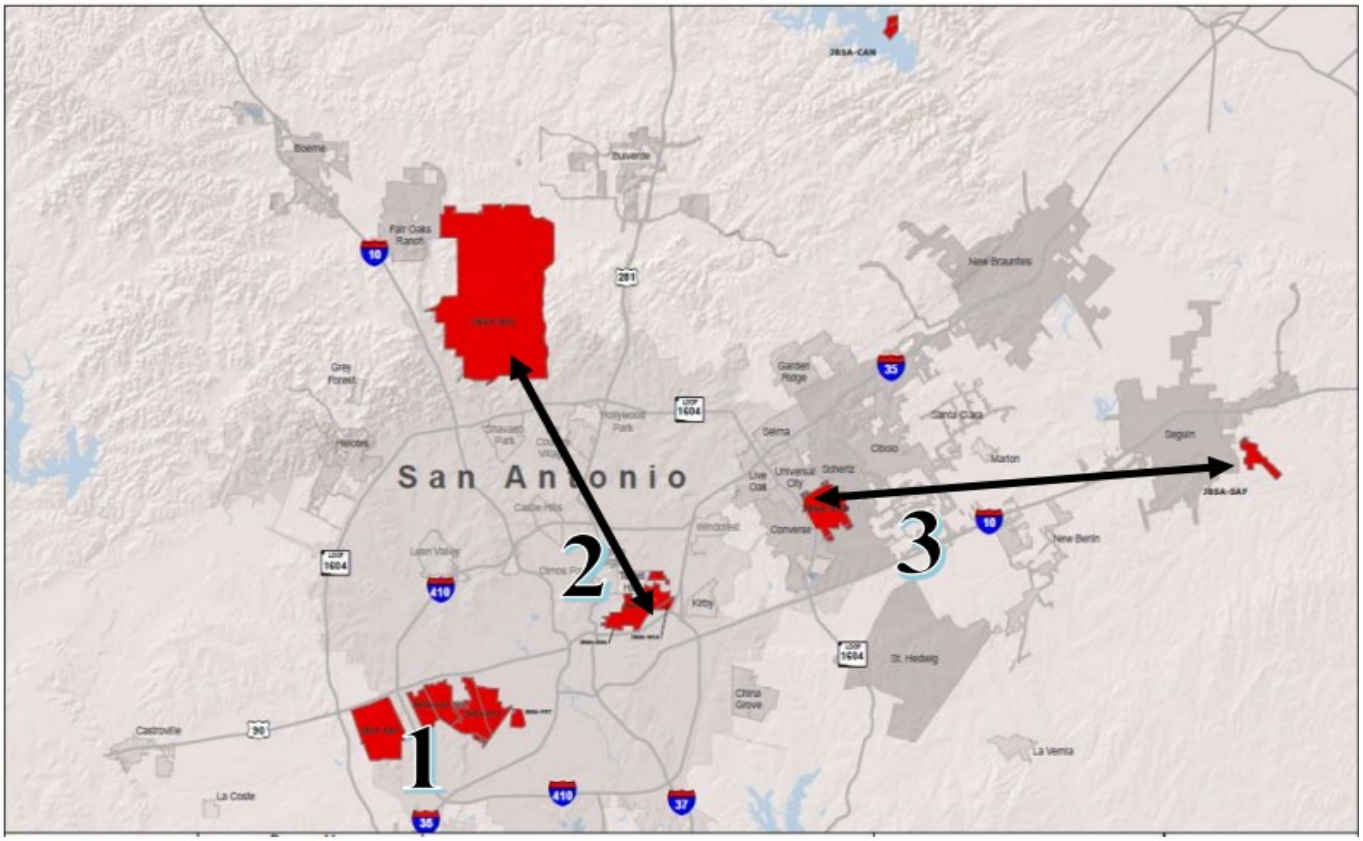
*Bexar County/Camp Bullis Hill Country Topography

Figure 2: Topography Example

Community Geography

JBSA Installations are located across the city of San Antonio Region. There are three primary and eight geographically separated areas of responsibility. The map shows the vast geographical spread that JBSA has within the city of San Antonio, Bexar County, and the surrounding region. JBSA identifies 11 sites across the region that have both a military mission and community impact.

Map 29: JBSA Properties



Community Geology

Geology has helped shape the San Antonio Region, although much of the evidence lies hidden beneath vegetation and soil. The underlying rock explains why the creeks often go dry. It is the reason rainfall filters in or runs off quickly. The soil is mostly thin and alkaline. Most of central Texas sits atop thick layers of limestone. Typically, white, beige, or light gray limestone forms in warm, shallow marine areas such as today's Gulf of Mexico.

The limestone beneath the soil of San Antonio dates to the Cretaceous Period, some 100 million years ago. During this period, this area of Texas was usually covered by shallow seas. The cycle of seas advancing and retreating due to sea levels changing led to the different rock layers with distinct characteristics and unique sets of fossils when the Cretaceous Period ended 66 million years ago.

Figure 3: Texas Geology

Community Physiography

San Antonio has a gently rolling terrain that is dotted with live oak trees, forested land, mesquite, and cacti. The Texas Hill Country reaches into the northern portions of the city and Bexar County. The area sits on the Balcones Escarpment. The water supply is from the primary source of Edwards Aquifer. The elevation sits at around 650 feet above sea level. The longitude/latitude is 29.4241 degrees North, 98.4936 degrees West.

Community Climate

San Antonio has a transitional humid subtropical climate that borders a semi-arid climate towards the west of the city and features very hot, long, humid summers and mild to cool winters. The area is subject to descending northern cold fronts in the winter.

San Antonio receives about a dozen subfreezing nights each year, typically seeing snow, sleet, or freezing rain about once every two winters. Accumulation and snow itself are very rare. Winters may pass without any frozen precipitation at all.

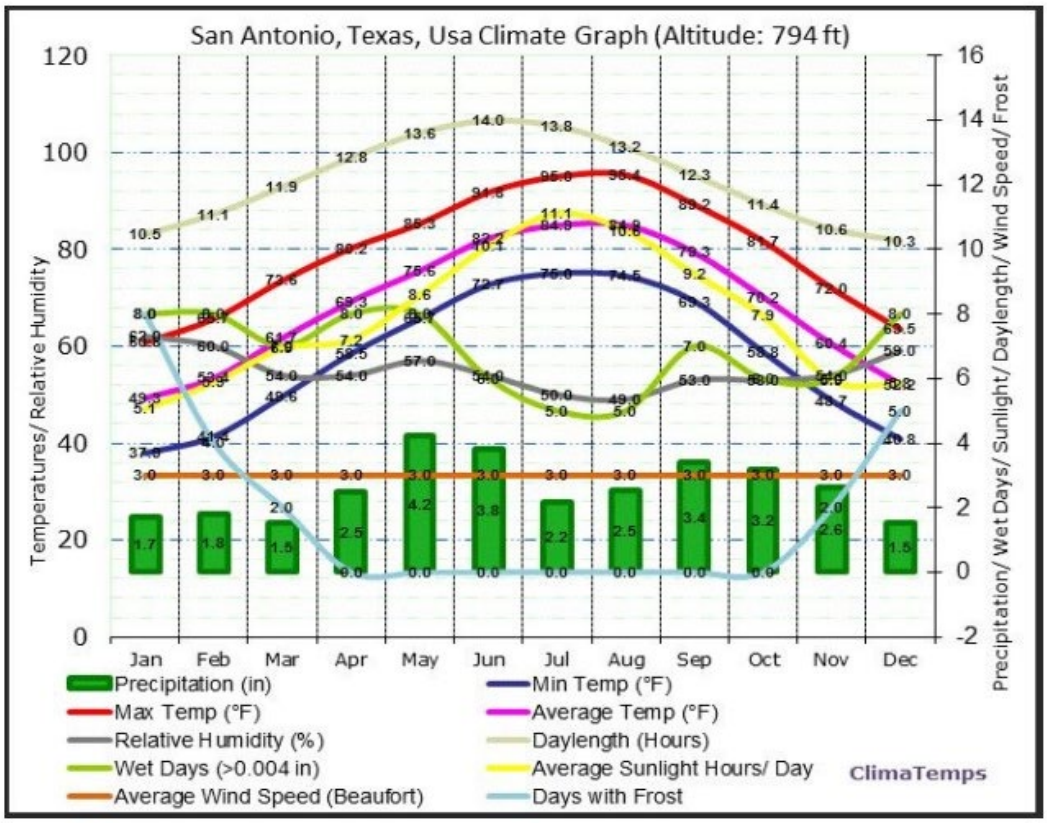
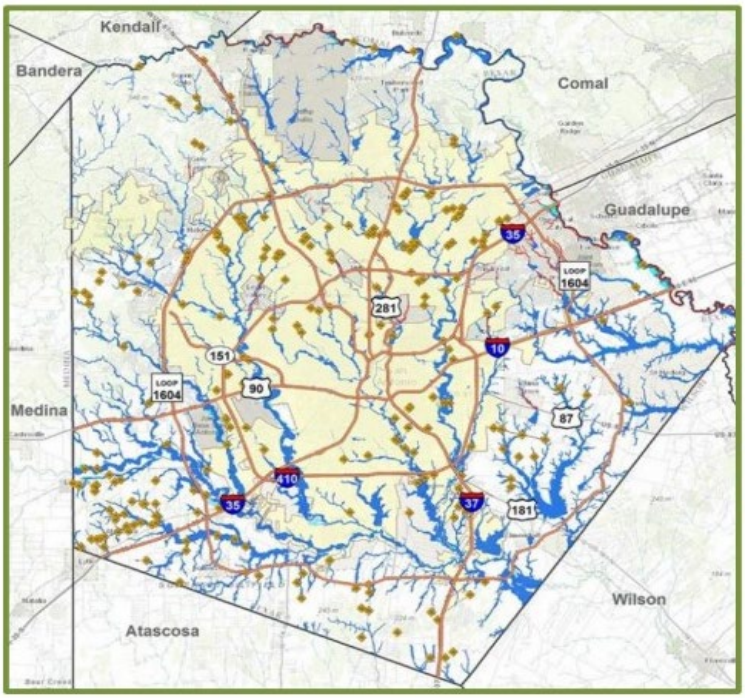


Figure 4: San Antonio Climate

JBSA F&ES pays attention to the temperatures and humidity in the region. PPE, work/rest cycles, and rehab are priorities on almost every response. A solid risk assessment is required by Incident Commanders and Safety Officers to ensure personnel are protected.

Texas is prone to extremely heavy rains and flooding, with half of the world record rainfall rates (48 hours or less). Central Texas is particularly vulnerable because storms stall out along the Balcones Escarpment. Most flood-related deaths are caused by people attempting to drive through moving water.

Map 30: Flooding by Area



The JBSA region can experience long periods of drought and high temperatures. These conditions can create water level issues with the Edwards Aquifer. Based on the Aquifer levels, San Antonio goes into different stages of water conservation modes. These restrictions can have an impact on training and general apparatus maintenance. JBSA F&ES takes reasonable measures to not waste water during these periods.

Historical severe weather events in San Antonio include hail, tornado, hurricane, flash flooding, ice and snowstorms, and extreme heat and drought.

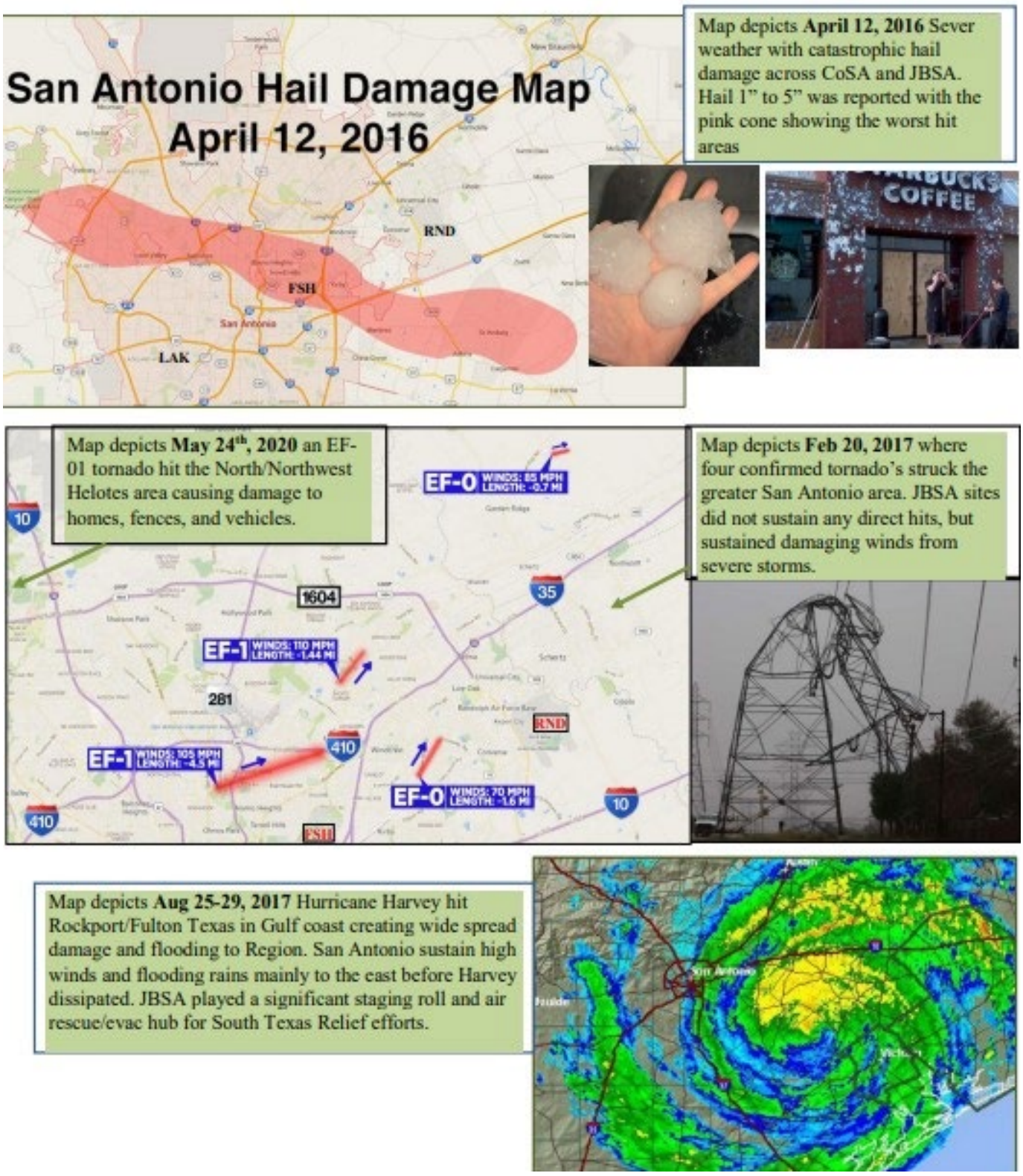
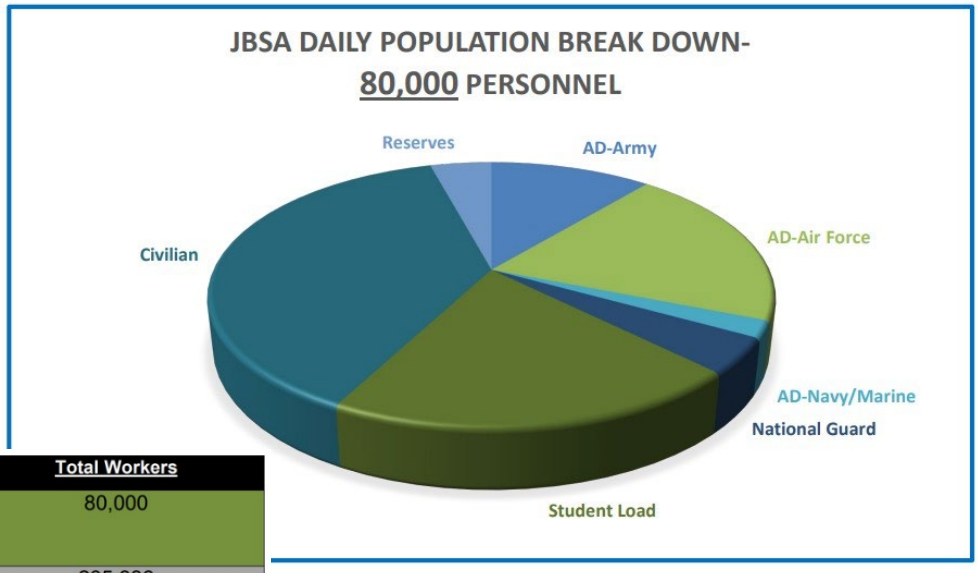


Figure 5: San Antonio Hail Damage (April 12, 2016)

Community Population/Population Densities

Joint Base San Antonio (JBSA) supports a population of 80,000 and supports students at three installations annually of up to 138,000.



JBSA EMPLOYMENT GROUP	Total Workers
DIRECT EMPLOYMENT	80,000
INDIRECT EMPLOYMENT	205,336
JBSA TOTAL EMPLOYMENT IMPACT	282,995

Figure 6: Daily Population

Community Demographic Features

JBSA civilian workforce is a diversified community. The figure below breaks down the skills that make up JBSA civilian workforce across the three primary operating locations.

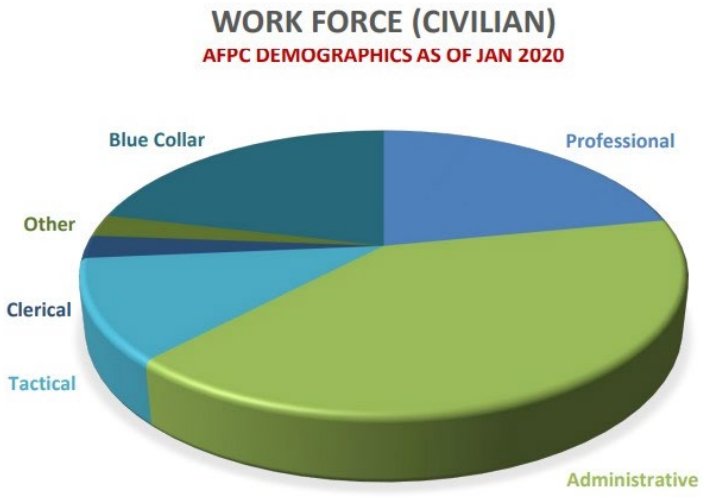


Figure 7: Civilian Workforce Types (January 2020)

The civilian workforce demographics are very similar to the City of San Antonio (CoSA) demographics.

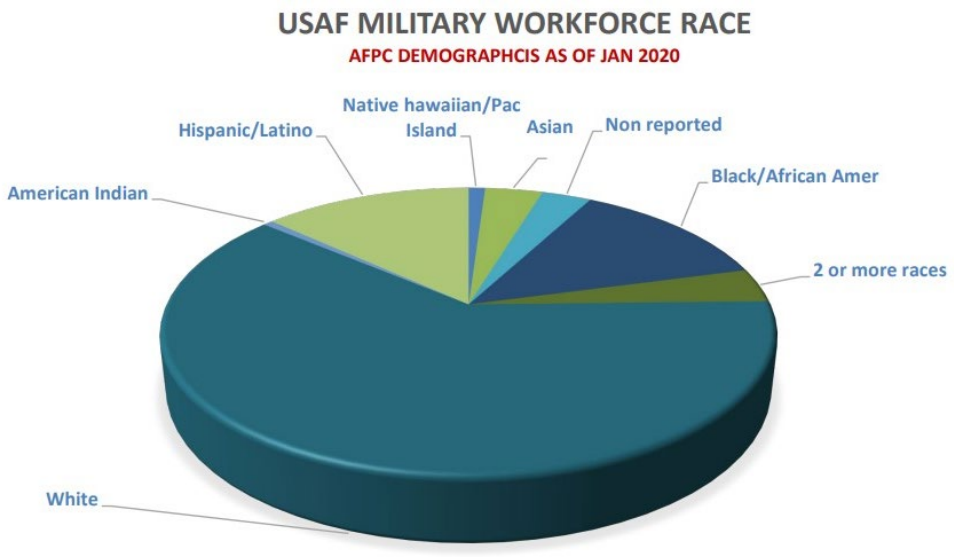


Figure 8: USAF Miliary Workforce Racial Demographics (January 2020)

The JBSA active-duty demographics make up a vast demographic and cultural difference that makes both CoSA and JBSA a unique cultural community.

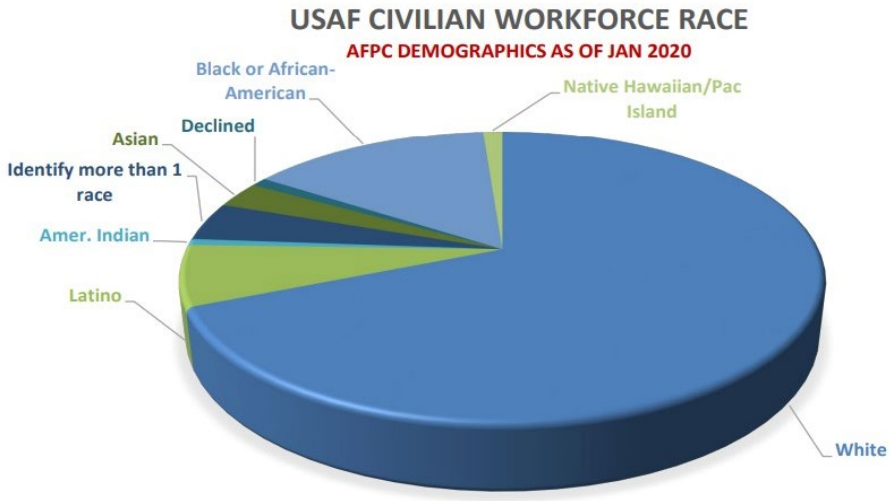


Figure 9: USAF Civilian Workforce Racial Demographics (January 2020)

B. History of the Agency

Major Historical Milestones of the Department

Since the Civil War, firefighters have supported the United States military, extinguishing fires and saving lives, structures, and equipment throughout the ages. However, it was not until WWI that the first organized fire department in the military was established. The Great War's Order of Battle of the United States Land Forces documented the structure under the Quartermaster Corps, which consisted of two types of military firefighting companies that protected each installation during the war. Fire truck and hose companies were formed at Army and National Guard cantonments and other important facilities. The soldiers of these companies had only one duty, which was to staff the fire stations and fire apparatus at these garrisons. Guard and fire companies were also established at smaller Army installations, depots, and storage areas, which provided both fire protection and security at facilities. Fire trucks and hose companies were comprised of three officers and seventy-five enlisted men. In 1917, Kelly Field, San Antonio, Texas, was also equipped with fire units and firefighters. On August 20, 1917, Kelly Field launched its first fire department unit, consisting of one hand-drawn, 50-gallon chemical wagon pulled by four men. This was located in a little tent in the back of the Officers' Mess in the training brigade on Kelly No. 1. Later, several other little companies and pieces of fire equipment were also added to the system of vehicles, but it was not until June 1918 that the department possessed enough modern chemical trucks and up-to-date fire engines, to warrant the name of a strictly modern department.

The Kelly Fire Department was one of the most important organizations on Kelly Field. The department's track record, efficiency, organization, and personnel were incredible and had no record of fires that could not be put out. The program and systems were so effective that the fire chiefs of different cities in Texas made a special trip to the fire department from San Antonio to inspect it. The personnel of the department had also been through the fire school of San Antonio. The department answered many alarms, but the largest fire at the time was downtown Kelly Field, when several large businesses were burned. The San Antonio Department also answered this alarm, but the Kelly Field Department rendered the most valuable service, being on the ground first. Later, another early fire station was constructed on Randolph Field in the 1930s, which was built for only $14,904, paving the way for future stations to be established throughout the San Antonio military community. Although Duncan and Kelly Field housed its firefighters, Lackland would also build its first two fire stations in 1941.

In 1949, Lackland experienced the first of many installation fires that tested the courage and resolve of its firefighters. On one Sunday afternoon, the alarm sounded at Lackland fire station for a raging inferno at the Officers Club, and the estimated damages were almost $200,000. Once a beautiful building and one of the most modern officers' clubs in the country, Lackland's Officers Club was just a pile of charred ruins as the fire was extinguished.

Throughout the 1950s, the basic firefighting and advanced training courses were revised to meet modern needs. Special structural training facilities were introduced to teach structural firefighting techniques in a realistic environment. Training films about aircraft firefighting and rescue techniques were also completed, and comprehensive handbooks and chart series were developed to support the effectiveness of firefighting practices.

In 1971, Lackland's firefighters would again be called into action to confront another major structure fire, this time inside a twenty-year-old school building known as "Sebille Hall." One early Sunday morning, a fire destroyed the

upper floor of Sebille Hall, located in the southwest portion of Lackland Air Force Base. Sebille Hall housed the offices and classrooms of technical recruiters and the instructor training branch, as well as sound recording equipment.

However, as the 2first century arrived, fire chiefs and civil engineers met and evaluated various staffing options. After discussions, the fire chiefs agreed to reduce the number of military and civilian firefighters throughout the Air Force by 901 positions or 14 percent. A new firefighting concept of operations was published in June 2007. This plan transitioned Air Force firefighting capabilities from risk avoidance to risk management. Under this plan, firefighters emphasized "fire prevention, early intervention at fires, cross-staffing of the New Century 571 vehicles, while continuing to leverage technology. This redefined capability enabled the Air Force to reduce Fire Emergency Services by 901 authorizations across the service.

Although cutbacks occurred, they did not decrease the number of fires, nor did they restrict the quality and resilience of the firefighters and their mission. A great example of this occurred on June 1, 2021, on Fort Sam Houston at Staff Post housing when a massive blaze consumed an on-base garage building. Deploying post firefighters along with the city of San Antonio and Alamo Heights Fire Departments, they extinguished the fire with zero casualties. Another fire occurred on April 9, 2022, a massive brush fire in the demolition range area on JBSA Camp Bullis that spanned over 2,800 acres, affecting over 150 residents who were evacuated. The fire involved not only local fire departments but JBSA firefighters. As military fire departments and firefighters evolve, the JBSA community continues to depend on the world-class firefighting, technical rescue, emergency medical services, hazardous materials response, fire inspections, and public fire and life safety education provided by JBSA's finest while protecting over 85,000 service members, civilians' contractors, and their families 365 days of the year.

Provisionally formed in 2010, Joint Base San Antonio (JBSA) F&ES is comprised of the three legacy F&ES agencies from Fort Sam Houston, Lackland Air Force Base, and Randolph Air Force Base.

1955 – Fire Station 3 was established in the Medina Annex of Lackland AFB to provide structural and wildland services.

1966 – Fire Station 8 was established on Randolph AFB to provide ARFF and structural services.

1991 – Fire Station 9 was established on Seguin Auxiliary Airfield to provide ARFF services.

1995 – Fire station 1 was established on Lackland AFB to provide structural and EMS services

1995 – Fire Station 7 was established on Camp Bullis to provide structural and wildland services.

1996 – Fire Station 4 was established on Fort Sam Houston to provide structural and EMS services.

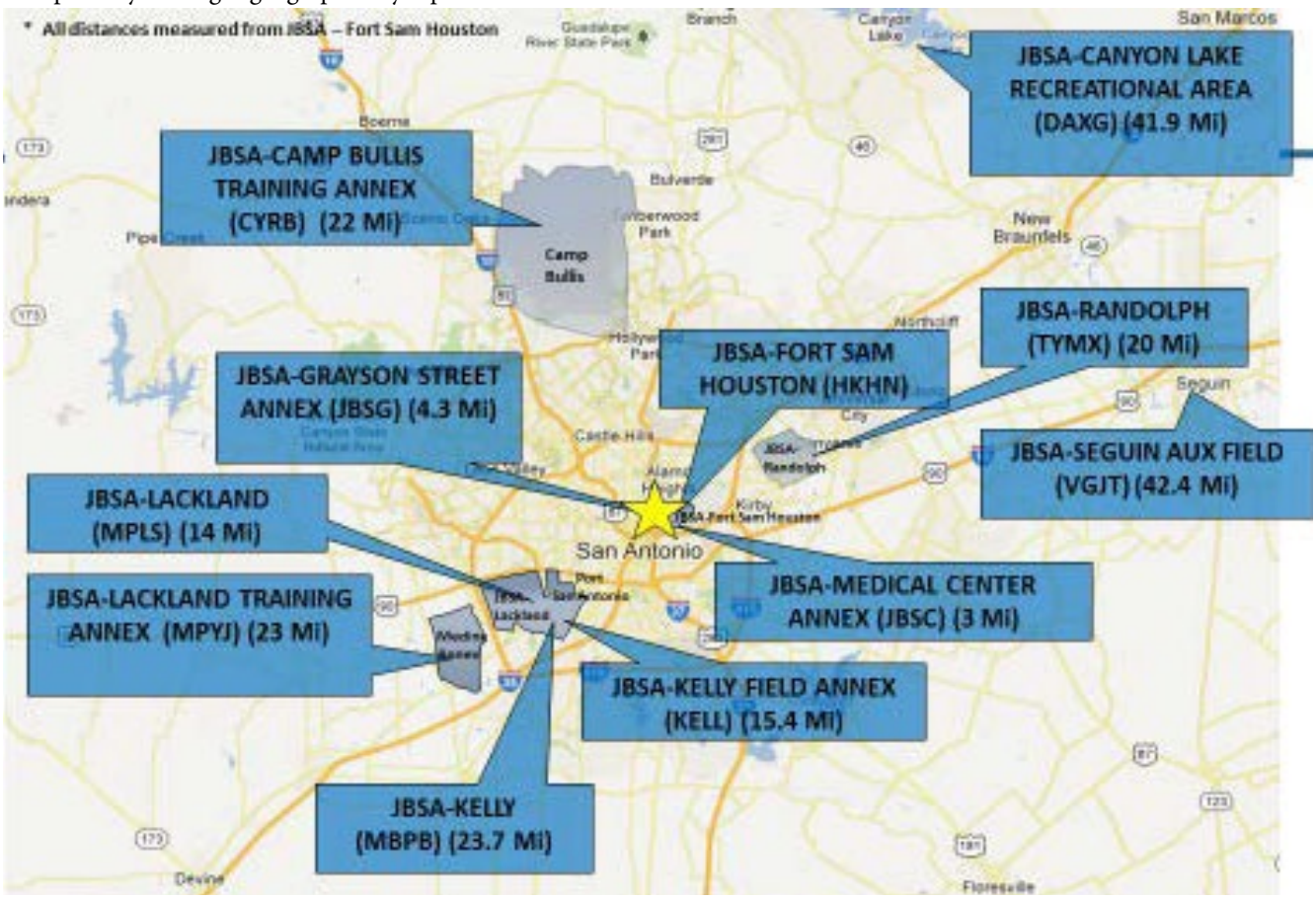
2001 – Fire Station 2 was established on Lackland AFB to provide ARFF services.

2013 – Fire Station 5 was established on JBSA Fort Sam Houston to provide structural services.

2022 – Fire Station 6 was established on JBSA Fort Sam Houston to provide structural and hazmat services.

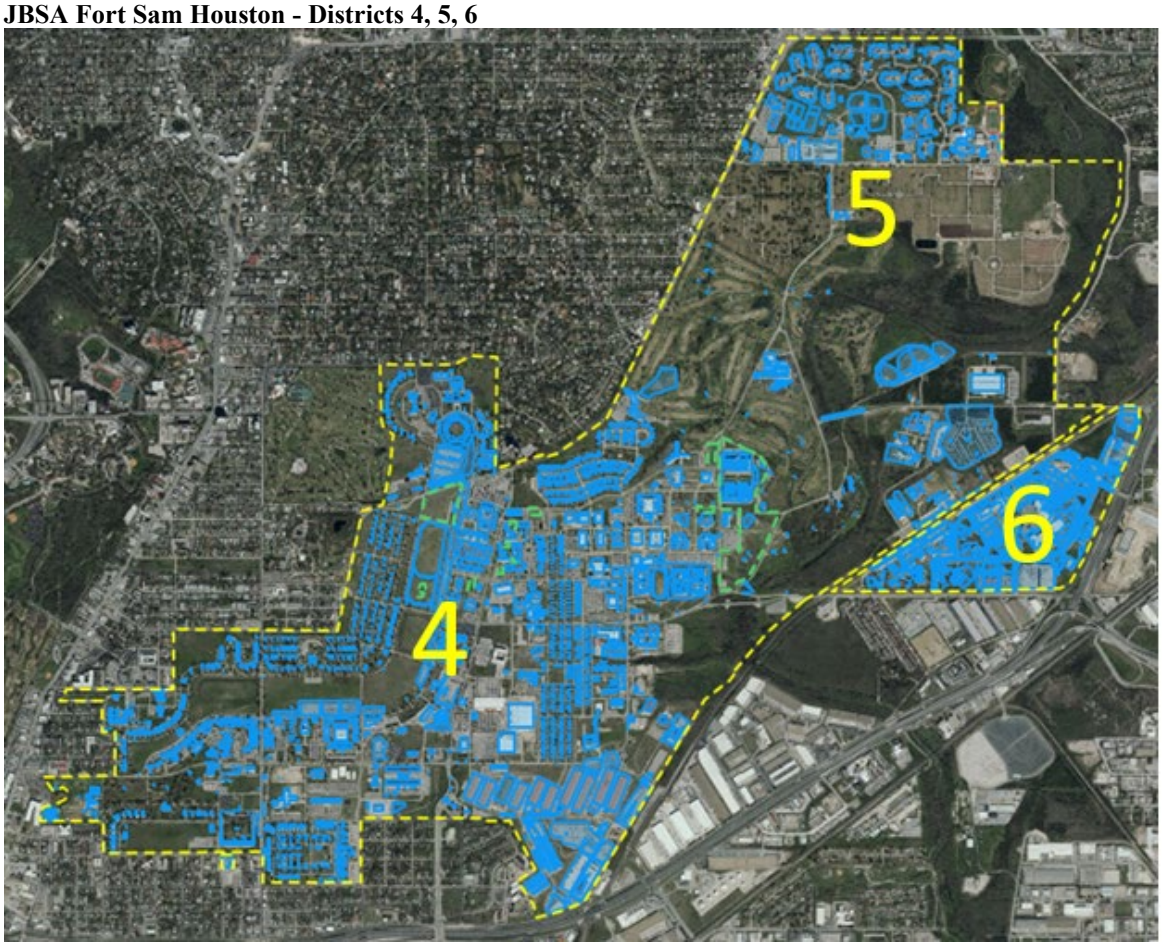
Current Legal Boundary of Service Area

Map 31: JBSA Installations in the City of San Antonio Region
Three primary and eight geographically separated AOR

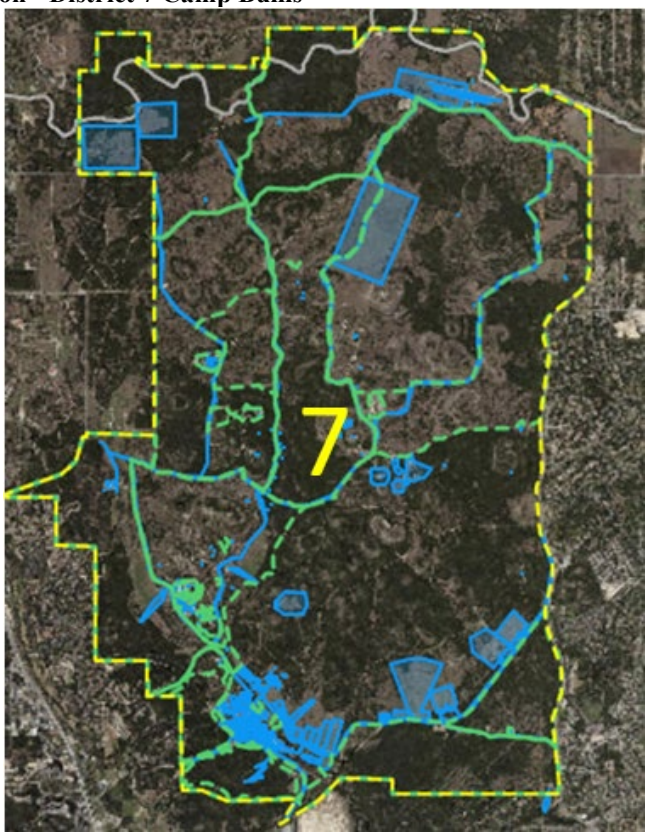


Map 32: JBSA Lackland - Districts 1, 2, 3

Map 33: JBSA Fort Sam Houston - Districts 4, 5, 6



Map 34: JBSA Fort Sam Houston - District 7 Camp Bullis



Map 35: JBSA Randolph – District 8

Map 36: JBSA Randolph– District 9, Seguin Field

These maps show the vast geographical spread of JBSA within the City of San Antonio, Bexar County, and the surrounding region. JBSA identifies 11 sites across the region that have a military mission and community impact. JBSA F&ES works to build community relations and mutual aid partners to help meet response and provide fire prevention and education across the entire region.

Current Organization, Divisions, Programs and Services

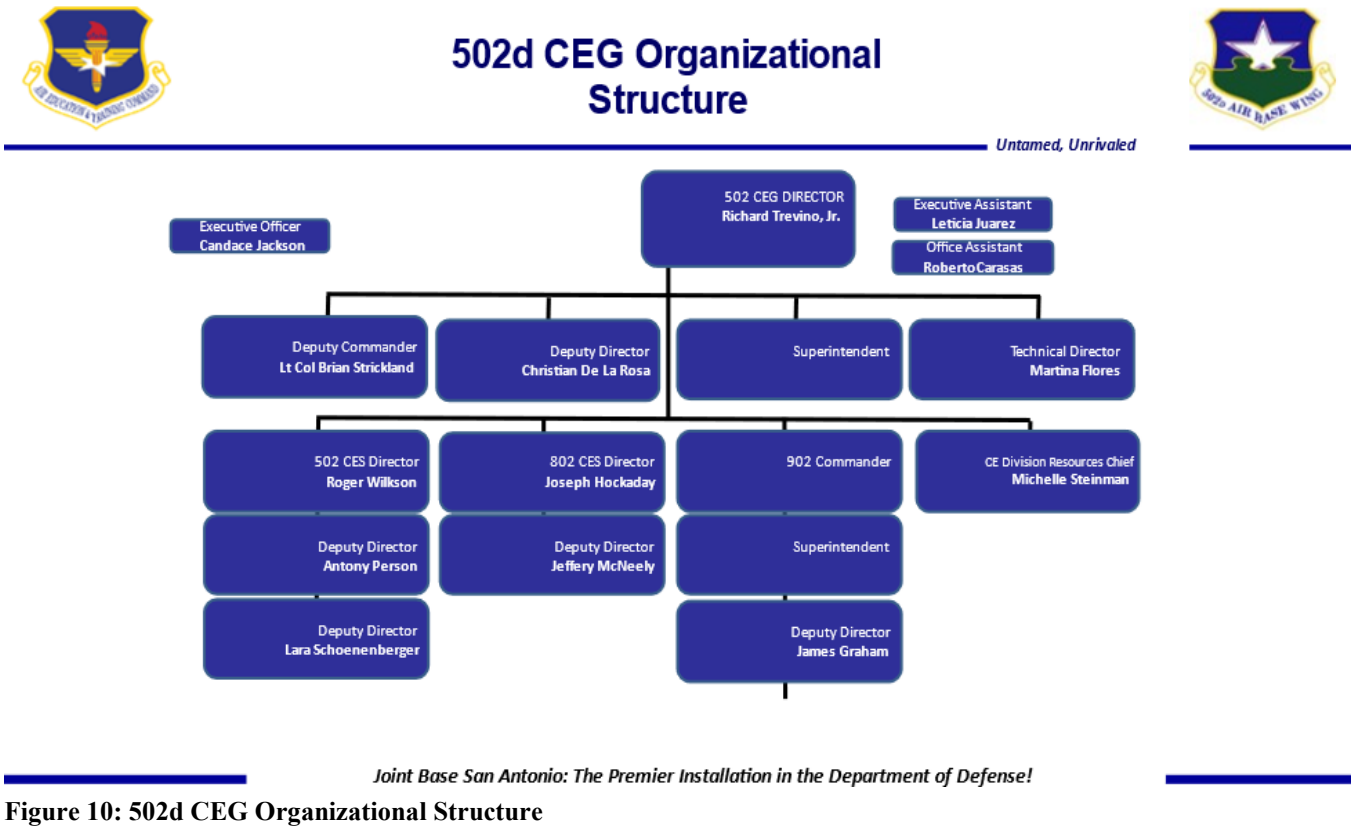


Figure 10: 502d CEG Organizational Structure

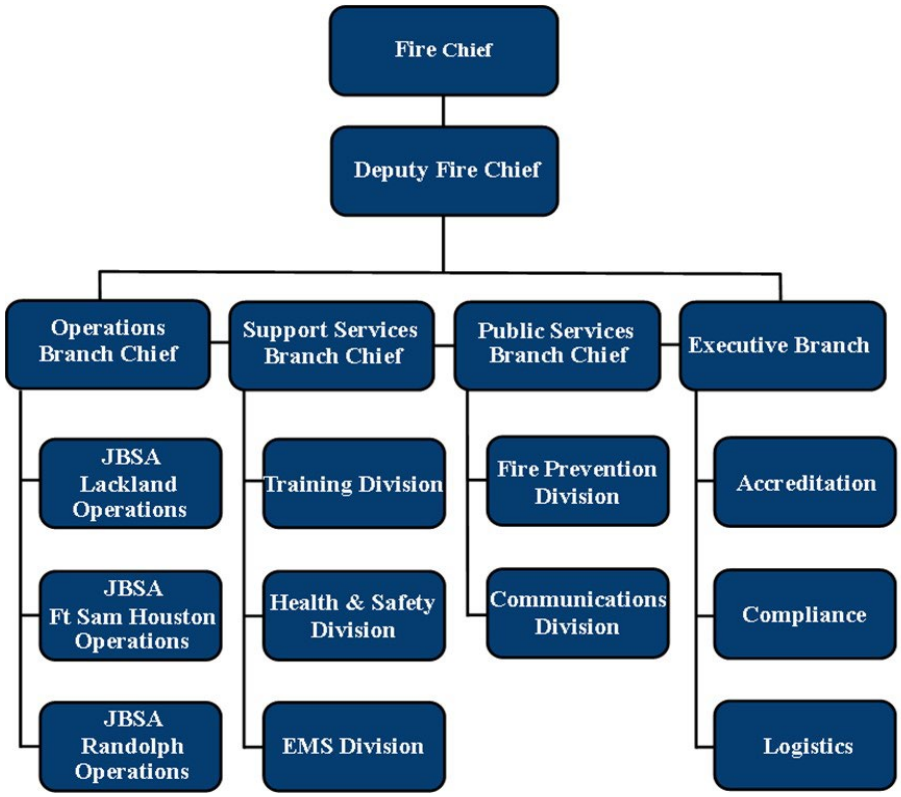


Figure 11: JBSA F&ES Organizational Structure

The agency is currently authorized 208 personnel, including 34 military and 174 permanent civilian positions. Additional authorizations may include up to five over-hire positions and three Overseas Contingency Operations (OCO) funded term positions, bringing the team to 216 personnel. The agency is broken into seven internal functional elements.

1. Management

Comprised of five chief officers: the JBSA Fire Chief, Deputy Fire Chief (Military), and three Branch Chiefs (Operations, Public Services, and Support).

(1) Manages the base F&ES's organization using risk management techniques, (2) Implements operational policy and procedures, and develops contingency plans, (3) Prepares and endorses evaluation for subordinate work center personnel, (4) Prepare logistics requests and budgets as needed, (5) Manages firefighting readiness programs, (6) Indoctrinates newly assigned personnel, (7) Ensures proficiency of operations, (8) Provides technical assistance, (9) Negotiates labor relations, (10) Resolves problems, (11) Oversees agency compliance program.

2. Fire Prevention

Comprised of 17 personnel, including one Lead Fire Prevention Chief, two Assistant Chiefs, and 14 Inspectors (dispersed across the operating locations).

(1) Evaluates corrective action and keeps commanders informed, (2) Develops and reviews fire prevention regulations or supplements, (3) Attends preconstruction conferences and monitors compliance, (4) Conducts scheduled and unscheduled facility inspections, (5) Assists facility managers in fire extinguisher training, (6) Issues USAF welding, cutting, and brazing permits, (7) Conducts seasonal fire prevention campaigns, (8) Investigates and reports causes of fires, (9) Monitors construction programs

3. Training

Comprised of three fire officers, one civilian Lead Assistant Training Chief, one civilian Assistant Chief, and one military Assistant Chief.

(1) Conducts quality assessment checks and evaluations of fire service instructors; (2) Administers the OJT program and maintains training documents and records; (3) Plans, develops, and manages training program IAW established directives; (4) Participates as members of the Wing Inspection Team (WIT), (5) Maintains Live Fire Training Facilities through Contract, (6) Establishes, conducts, and evaluates training

4. Health and Safety

Comprised of three fire officers, one military Health and Safety Officer (HSO) Assistant Chief, and two civilian Assistant Chiefs.

(1) Conducts quality assessment checks and evaluations of fire station facilities/compliance, (2) Participates as members of the Wing Safety Team and CE Environmental Programs, (3) Administers the safety program, and maintains safety documents and records, (4) Plans, develops, and manages HSO program IAW established directives, (5) Coordinates and tracks member occupational health appointments, (6) Agency focal point for Traumatic Support Response (TSR), (7) Manages employee injury reports and claims process, (8) Investigates accidents and injuries.

5. Operations

Authorized 163 personnel assigned to A and B shifts that work alternating 24-hour shifts.

Responsible for all fire suppression and rescue operations (1) Performs fire suppression, rescue, fire operations, EMS, confined space and technical rescue, fundamental wildland, and hazardous materials mitigation, (2) Each shift trains firefighters and responds to Urban Interface/Wildland fires, (3) Each shift maintains certified and trained confined space rescue personnel, (4) Each shift maintains certified and trained DoD hazardous materials technicians, (5) Each shift maintains trained responders for technical rescue situations, (6) Maintains and service tests fire suppression and rescue equipment, (7) Assists in the implementation of the NFPA 1500, (8) Oversees the agency's EMS CEU training and CPR, (9) Develops and maintains pre-fire plans, (10) Investigates and reports causes of fires

6. Communications

Each OL district within JBSA F&ES currently operates an Emergency Communication Center (ECC). There are 15 assigned Dispatchers (including one Lead Dispatcher) per OL and one overall JBSA Lead Dispatcher to coordinate and have oversight to sync the three ECC to meet response objectives.

(1) Maintains publications pertinent to the ECC and operational functions of the department, (2) Receives telephone calls and transfers them to the appropriate person or agency, (3) Alerts and dispatches fire/emergency response crews, (4) Monitors emergencies request support agencies, (5) Receives fire and trouble alarms, (6) Follows Emergency Checklists, (7) Logs all traffic/responses, (8) Answers enhanced 9-1-1, (9) Makes follow-up notifications

7. Compliance

The compliance Fire Officer is an appointed position with the responsibility for running a checklist against standards and policies.

Fire Stations, Training Facilities, Apparatus, Equipment, and Staffing

JBSA F&ES operates out of nine fire stations: four in the Fort Sam Houston District, three in the Lackland District, and two in the Randolph District.

Station 1

1910 Kenly Avenue
JBSA LAK, TX 78236
Year Built: 1995
Renovation: 2006
13,735 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Engine 51	4	**4**
Rescue 31	Reserve	

Station 2

120 Dominguez
JBSA LAK, TX 78236
Year Built: 2001
Renovation: 2006
27,891 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Chief 3	1	**14**
Engine 52	4	
Crash 12	Reserve	
Crash 13	3	
Crash 14	3	
Crash 15	3	

Station 3

200 Medina Base Road
JBSA LAK, TX 78236
Year Built: 1955
Renovation: 2006
3,264 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Engine 53	4	**4**

Station 4

3201 Schofield Rd
JBSA FSH, TX 78234
Year Built: 1996
Renovation: 2010
8,449 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Chief 4	1	**5**
Engine 54	4	
Rescue 34	Reserve	

Station 5

1704 Winans Road
JBSA FSH, TX 78234
Year Built: 2013
Renovation: N/A
10,000 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Engine 55	4	**4**

Station 6

BLDG 3734
3930 Chambers Pass
JBSA FSH, TX 78234
Year Built: 2022
13,500 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Ladder 36	4	**4**
HAZMAT 66	Reserve	

Station 7

4716 Wilkerson Road
JBSA FSH, TX 78257
Year Built: 1995
Renovation: 2012
6,500 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Engine 57	4	**4**
Tender 47	Reserve	
Brush 77	Reserve	

Station 8

2080 5th Street East
JBSA RND, TX 78150
Year Built: 1966
Renovation: 2012
21,919 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Chief 5	1	**12**
Engine 58	4	
Engine 59	Reserve	
Rescue 38	Reserve	
Crash 20	3	
Crash 21	3	
Crash 22	Reserve	
Tender 48	1	

Station 9

1033 Airport Road
JBSA Seguin, TX 78150
Year Built: 1991
Renovation: 2014
2,810 square feet

Apparatus	Minimum Staffing	Optimal On Duty
Crash 23	3	**3**
Tender 49	Reserve	

JBSA F&ES operates a fleet of 55 response apparatus/vehicles and 13 special operations trailers. The vehicles are distributed according to each district's service demands. The following reflects the current distribution of JBSA fire vehicle assets.

Command Vehicles: 7 Units

Aircraft Rescue: 10 Apparatus

Engine Companies: 9 Apparatus

Rescue Companies: 4 Apparatus

Ladder Company: 1 Apparatus

Tenders (Mobile Water Supply): 4 Apparatus

Wildland Companies: 2 Apparatus

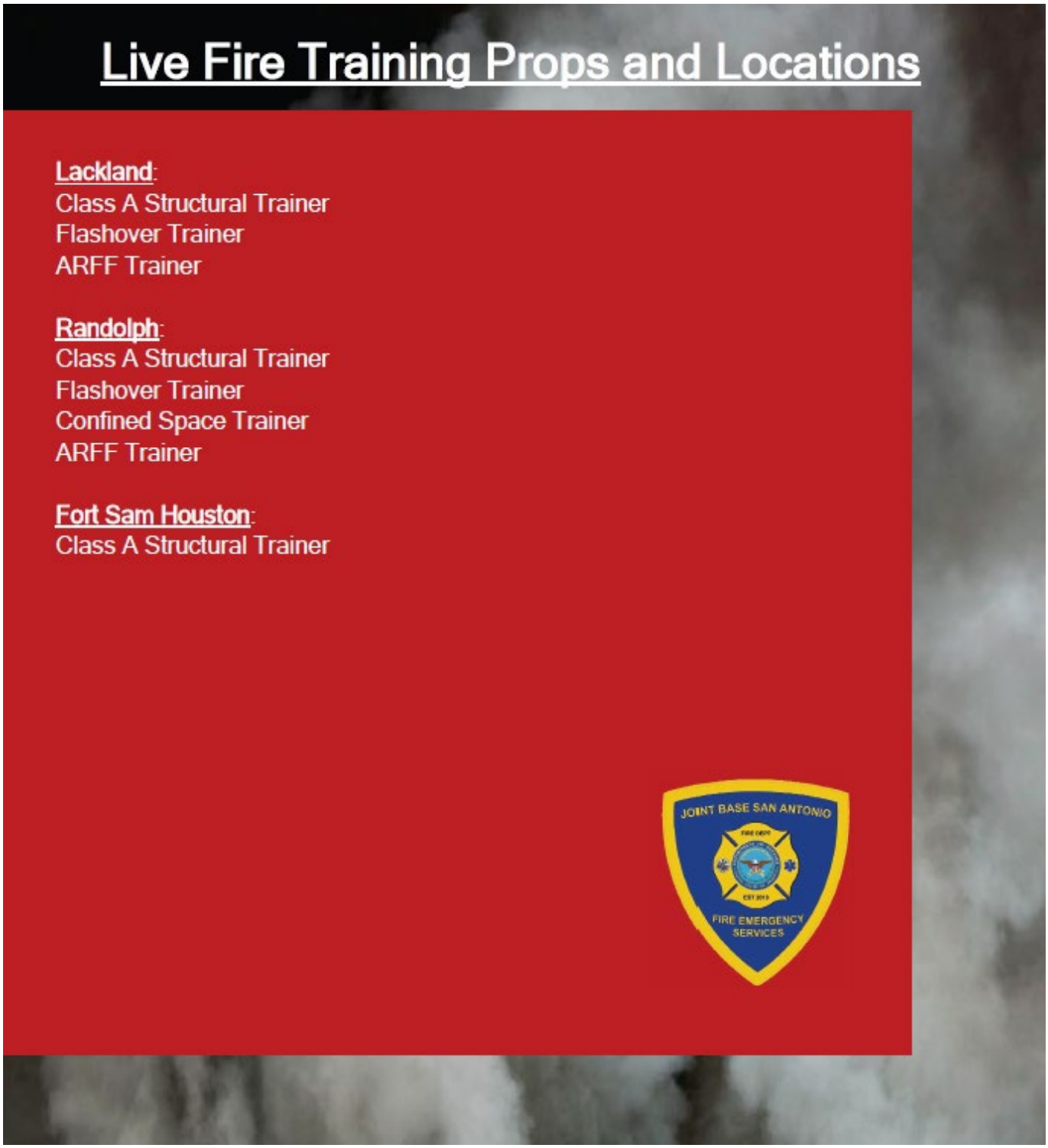
Special Operations: 1 Apparatus

Response and Education Trailers: 13

Table 2: JBSA Staffing Levels

JBSA DISTRICT STAFFING LEVELS		
DISTRICT	APPARATUS	STAFFING
DISTRICT 1	ENGINE 51	4
	RESCUE 31	Reserve
DISTRICT 2	CHIEF 3	1
	ENGINE 52	4
	CRASH 12	Reserve
	CRASH 13	3
	CRASH 14	3
	CRASH 15	3
	RESCUE 32	Reserve
DISTRICT 3	ENGINE 53	4
	TENDER 43	Reserve
DISTRICT 4	CHIEF 4	1
	ENGINE 54	4
	RESCUE 34	Reserve
DISTRICT 5	ENGINE 55	4
DISTRICT 6	TRUCK 36	4
	HAZMAT 66	Reserve
DISTRICT 7	ENGINE 57	4
	TENDER 47	Reserve
	BRUSH 77	Reserve
DISTRICT 8	CHIEF 5	1
	ENGINE 58	4
	ENGINE 59	Reserve
	RESCUE 38	Reserve
	CRASH 20	3
	CRASH 21	3
	CRASH 22	Reserve
	TENDER 48	1

Training Inventory



Lackland Live Fire Training Building

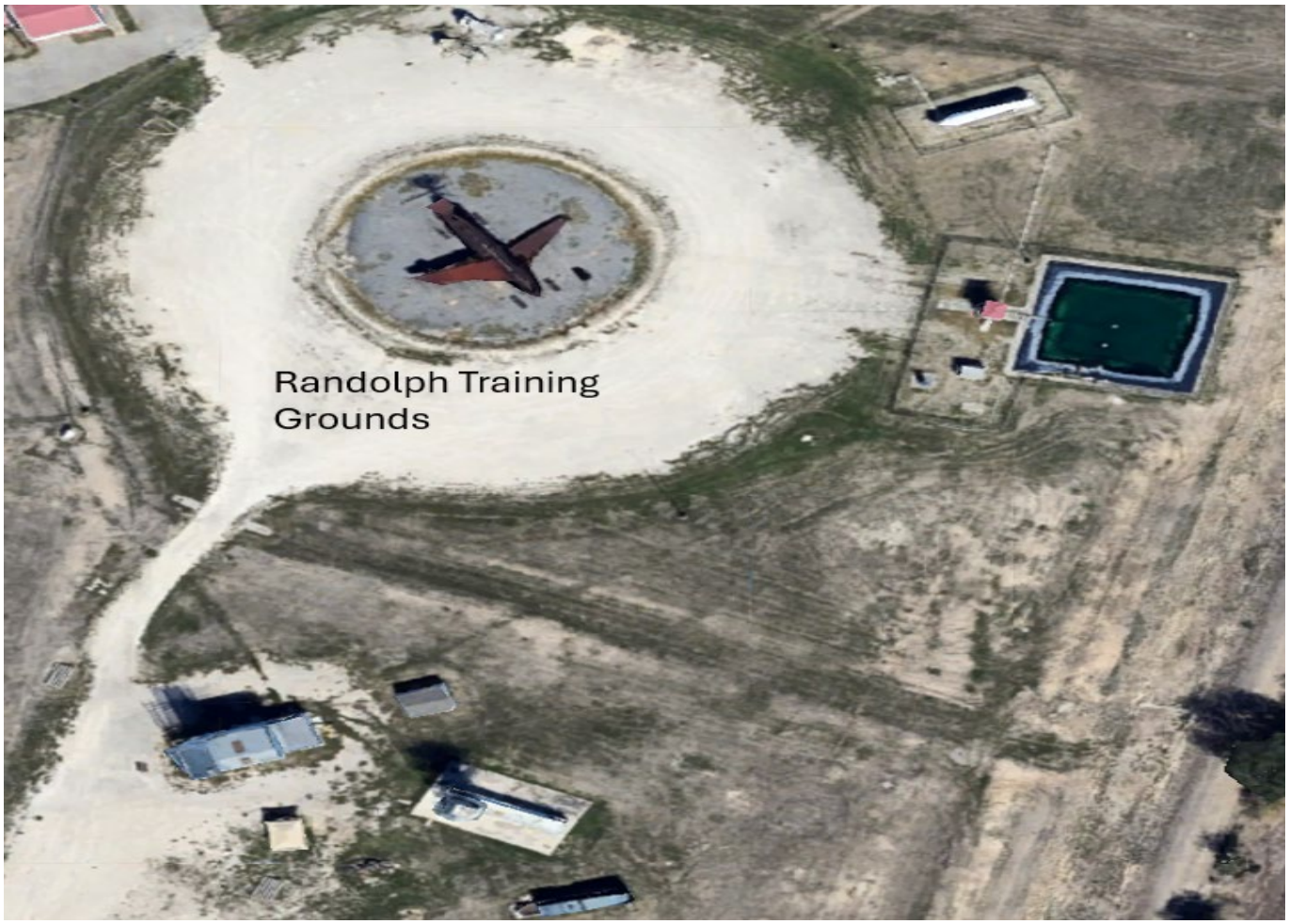
Lackland Training Grounds

Fort Sam Houston Live Fire Training Building

Fort Sam Houston Training Grounds

Randolph Live Fire Training Building

Randolph Training Grounds



C. Current Descriptions of Levels of Service with Delivery Programs

Fire Suppression

JBSA F&ES is responsible for mitigating a wide range of fire-related incidents, from low-risk dumpster fires to the high risk associated with a high-rise fire. Each of the facilities on JBSA has been analyzed to ensure the required fire flow requirements for each facility are met in all fire demand zones. A fire scene can be unpredictable, and while it is possible to state what critical tasks must be accomplished to extinguish the fire, it is not always feasible to predict how many firefighters it will take to accomplish those tasks. Fire conditions dictate the required response for any given fire, even if that response exceeds the standards listed in this document. The agency relies on the experience and professional judgment of company and chief officers to request additional resources during the initial stages of an incident.

Emergency Medical Services

JBSA F&ES is a first-responder organization that plays an integral role in stabilizing and treating pre-hospital medical emergencies. All members are certified emergency medical responders. Over the past few years, the JBSA F&ES leadership has implemented a plan to expand its response capabilities further, including advanced life support equipment and staffing. Cardiac arrest outcomes are highly influenced by early activation of 911 and initiation of pre-hospital stabilization and emergent transport. The ability to arrive quickly with trained personnel is essential to reducing life loss. JBSA F&ES relies upon contract agreements for ambulance transport services.

Technical Rescue

JBSA F&ES is trained and equipped to manage low to high-risk incidents that range from routine elevator rescue to more technical and resource-intensive rescue. JBSA F&ES has full capabilities to handle technician-level responses to confined space, low-angle, and high-angle emergencies. Primarily low-angle rescue operations are possible and realistic threats on the installation. The majority of the incidents involving swift water are vehicles trapped by rising waters in local creeks. Select firefighters train through the TEEX swift water technician course. The potential for structural collapse in JBSA is significantly low. There is a potential for tornadoes occasionally, which would be the predominant source of risk for this type of emergency response.

Hazardous Materials

As is common in the primary service areas, hazardous materials responses range from routine and low-risk fuel spills to the more extreme risk associated unknown or dangerous commodities. JBSA's equipment for hazardous materials response is located at JBSA FSH in a prepositioned response apparatus. The equipment package contains all necessary items to conduct offensive control measures with hazmat technicians assigned to the agency teamed up with bio-environmental technicians. Each fire district only contains the necessary equipment and personnel to conduct defensive control measures until the ERF arrives.

Aviation Rescue and Firefighting Services

JBSA F&ES utilizes NFPA 403-18 TIG and AFCEC's Q-factor chart to determine the maximum agent required to respond to all aircraft emergencies as determined by the largest permanently assigned aircraft to that installation. JBSA-Lackland is identified as ARFF Vehicle Core Set-6 configuration. Lackland is required to respond with 12,626 gallons of first-strike agent capability to conduct a worst-case interior or exterior fire scenario for Lackland's largest permanently assigned aircraft, the C-5 Galaxy. JBSA-Randolph is identified as an ARFF Vehicle Core Set-1 configuration. Randolph is required to have 577 gallons of first-strike agent capability to conduct a worst-case scenario interior and exterior fire for the largest assigned aircraft, which is a T1A.

Wildland Fire Services

The predominant causes of wildland responses are military-grade pyrotechnics, firing range ballistics, severe weather (i.e., lightning), and discarded smoking materials. JBSA F&ES continues to analyze each incident and develop solutions to prevent wildfires. Annual prescribed burn plans are developed and coordinated with the Texas Department of Wildland/Forestry. There is a potential risk associated with the surrounding housing community within hundreds of feet of base perimeters.

Community Safety and Remediation Programs

Fire prevention is designed to minimize life and property loss before an incident occurs. This is accomplished through a rigorous inspection program and public education with the goal of minimizing the consequences of the most probable incidents likely to occur at JBSA (i.e., pre-hospital medical emergencies; a structure fire contained in the room or area of origin via early notification and suppression systems; an aircraft fire at one location where hangar systems activate or flightline extinguishers are utilized early). JBSA F&ES has a team of 17 fire inspectors who ensure the fire safety of all 266 mission partners that work and serve the military function in over 39,542 million square feet in 1764 facilities. The prevention team completes the following annually, on average:

FACILITY INSPECTIONS

2,200 conducted

FIRE DRILLS

250 Drills / **26,000** occupants

PUBLIC EDUCATION

26 Classes
2,531 Trained

KITCHEN SUPPRESSION

55 Classes
800 Trained

WELDING CLASSES

4 Briefs
160 Trained

D. Current Deployment and Coverage Areas

Points of Service Delivery

9 Fire Stations

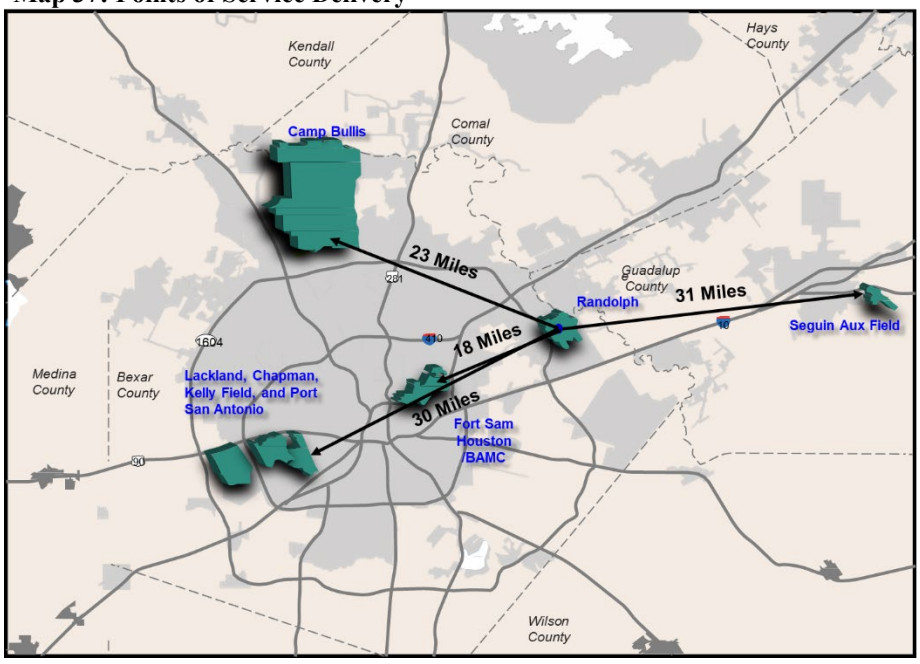
3 ECC 9-1-1 Communication Centers

3 Operating Locations

11 geographically separated sites

48 square mile coverage

Map 37: Points of Service Delivery



Minimum Deployment Resources

Levels of service are established and defined by AFI 32-2001 and 44F1 (Staffing) as:

Optimum Level of Service (OLS)

The OLS is available when all authorized resources (vehicles set to provide a required agent, required discharge capacity, and authorized staffing for fire ground capability) are available. At the OLS, a maximum level of service can be continuously provided, when determined appropriate by the Fire Chief. During OLS, firefighting forces are capable of providing all services continuously throughout an event with reasonable expectations of successful offensive fire attack operations, search and rescue, and property conservation.

Reduced Level of Service (RLS)

The RLS is when available resources are less than the OLS requirements but greater than CLS. During this level, adequate firefighting capability can be provided by utilizing cross-staffing, selective response, and sound fire ground tactics. At the RLS, firefighting forces should be successful in offensive fire attack operations, search and rescue, and property conservation. However, operations may not be sustainable throughout an event without additional resources.

Critical Level of Service (CLS)

The CLS is when resources are available to provide at least one appropriate vehicle and crew to each FDZ within the response time standard. Although acceptable, CLS is the absolute minimum level of service and should only be allowed for short durations. At this level, it is reasonable to expect firefighting forces will be successful in quick fire attack operations. Firefighting crews may provide limited search and rescue and property conservation during this period. However, these operational capabilities cannot be sustained without additional resources.

Inadequate Level of Service (ILS)

The level of service when emergency response capability required for CLS is unavailable. Inadequate Levels of Service is comprised of a minimum of one appropriate emergency response vehicle consisting of six personnel or less. The property involved in the fire is expected to be destroyed.

Table 3: JBSA Lackland Staffing Guide

JBSA LACKLAND STAFFING GUIDE																								
DISTRICT #1	OLS					RLS			CLS										ILS					
	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6
Engine-51	0	0	0	0	4	4	5	4	5	4	5	4	5	4	4	4	4	5	4	4	0	0	0	0
Rescue-32 (Support Crew: T-43, Bauer, Foam Trailer)	0	0	0	0	0	2	0	0	2	2	0	0	2	2	0	0	2	0	0	0	2	2	0	0
DISTRICT #3	OLS					RLS			CLS										ILS					
Engine-53	0	0	0	0	4	4	4	4	4	4	4	4	0	0	4									
DISTRICT #2	OLS					RLS			CLS										ILS					
Engine-52	0	0	0	0	4	4	4	4																
(RIV) Crash-10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(P-23) Crash-12	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(P-23) Crash-13	0	0	0	0	3	3	3	3	3	3	3	3	3	3	0	3	0	0	0	0	0	0	0	0
(P-23) Crash-14	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
(P-23) Crash-15	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
AC Ops CH-3	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0
STAFFING LEVEL	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6

Table 4: JBSA Fort Sam Houston Staffing Guide

JBSA FORT SAM HOUSTON STAFFING GUIDE																			
DISTRICT #4	OLS						RLS			CLS						ILS			
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
AC Ops CH-4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Engine 54	5	5	5	5	4	4	4	4	4	4	4	4	4	5	4	5	4	4	
Rescue 34	2	2	2	2	2	2	2			2	2			2	2				
DISTRICT #5	OLS						RLS			CLS						ILS			
Engine 55	5	4	4	4	4	4	4	4	4	Station Closed									
DISTRICT #6	OLS						RLS			CLS						ILS			
Truck 36	5	5	5	4	4	4	4	4	4	5	4	5	4	Station Closed					
HAZMAT 66																			
DISTRICT #7	OLS						RLS			CLS									ILS
Engine 57	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Tender 47	2	2	2	2	2	1		1											
STAFFING LEVEL	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	0
MISSION IMPACT	Full Mission									Limited			CRITICAL MISSION IMPACT - REDUCE SERVICE						
													SUSPEND OFF BASE MOU - SUPPORT						

Table 5: JBSA Randolph Staffing Guide

JBSA RANDOLPH STAFFING GUIDE														
DISTRICT #8	OLS		RLS			CLS						ILS		
	20	19	18	17	16	15	14	13	12	11	10	9	8	7
AC Ops CH-5	1	1	1	1	1	1	1	1	1	1		1	1	
Engine 58	5	4	4	5	4	4	4	4	4	4	4	5	4	4
Engine 59	4	4												
Rescue 38			2				2							
P-19 HR Crash 20	3	3	3	3	3	3	3	3	3	3	3	3	3	3
(RIV) Crash 21	3	3	3	3	3	3								
(RIV) Crash 22														
Tender 48			1	1	1			1						
DISTRICT #9	OLS		RLS			CLS						ILS		
RIV Crash 23	3	3	3	3	3	3	3	3	3	3	3			
Tender 49	1	1	1	1	1	1	1	1	1					
STAFFING LEVEL	20	19	18	17	16	15	14	13	12	11	10	9	8	7
MISSION IMPACT	Full Mission										Red	Critical Mission		
										SUSPEND OFF BASE MOU - SUPPORT				

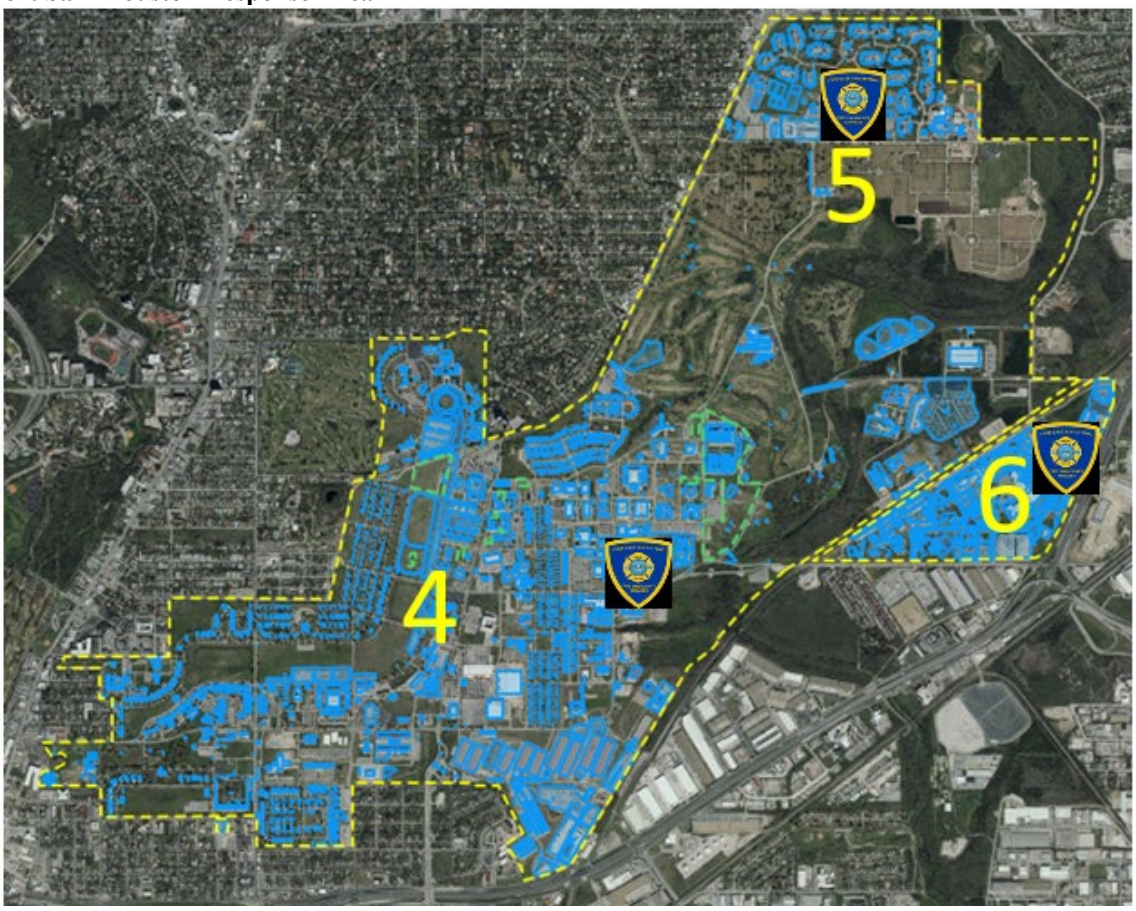
Response Areas

JBSA Lackland: The current population of Lackland is approximately 49,000 personnel comprised of active-duty military, civilian employees, and dependents. The installation also serves military retirees. There are 1,295 buildings on the installation. The population is limited by the number of personnel assigned and the number of contractors working on the installation. Lackland encompasses 9,572 acres of land. The base is situated along the Southwest side of the City of San Antonio. Some new missions are being assigned, while others are being downsized as a result of the ongoing BRAC.

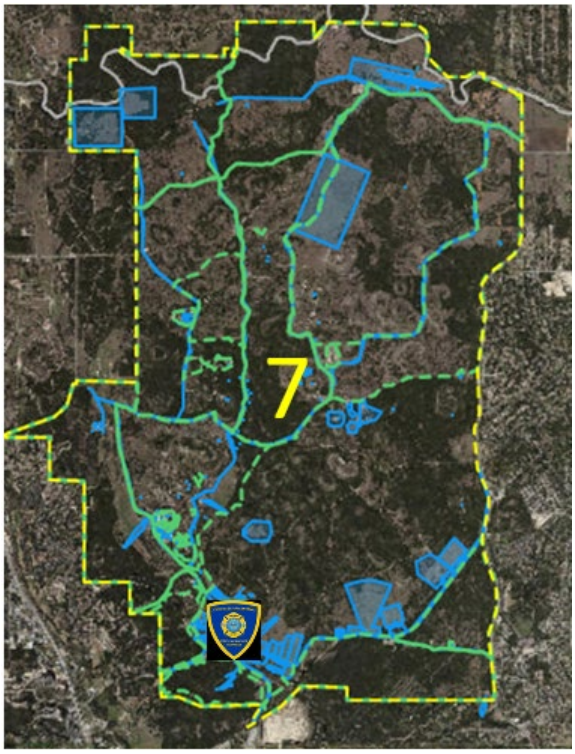
Map 38: Lackland Response Area

Fort Sam Houston encompasses 3,000 acres of land, while 2,900 square acres of the base are considered to be developed (approximately 97%). The F&ES protects approximately $4 billion of real property. The majority of the real property is administrative, medical, and community support. The developed areas on Fort Sam Houston are comprised of 418 acres of residential, including 925 homes, 457 acres of industrial/commercial, and 1,250 acres for administrative, medical, and community support facilities, including MWR areas.

Map 39: Fort Sam Houston Response Area



Map 40: Camp Bullis Response Area



Camp Bullis Military Training Reservation is a US Army training camp comprising 27,990 acres and 285 facilities located just northwest of San Antonio. Camp Bullis provides Base Operations Support and Training Support to Joint Base San Antonio. The camp is named for Brigadier General John L. Bullis.

JBSA Randolph: Personnel that work on base total 4,499 military and 5,844 civilians. Dependents account for another 5,517 for a total base population of nearly 16K. The base has 609 buildings located on 5,098 acres, 961 acres at Seguin Auxiliary Airfield with four facilities, and 141 acres at the Canyon Lackland recreational area with 36 facilities. Military family housing consists of 397 units housing 1,700+ people, two visiting airmen quarters, seven visiting officers' quarters, and four temporary living facilities for families.

Map 41: Randolph Response Area

Seguin Auxiliary Airfield: As part of the 12 FTW's mission, Seguin Auxiliary Airfield is maintained for T-38 training and future T7 next-generation trainer aircraft. SAF Operations can quickly convert and support FEMA/DLA operations during the HURCON season for the southwest region of the US.

Map 42: Seguin Auxiliary Airfield Response Area

E. Summary of Community Response History

As a Joint Base, the agency has experienced over 3,000 responses annually since 2015 among all operating locations. Station 1 and Station 4 are usually the busiest stations, in part due to multiple medical responses to the Basic Military Training (Lackland) and Medical Education Training Campus (METC-Fort Sam Houston) training mission partners that are in those response district assignments. Each OL addresses responses and district coverage uniquely based on mission impact.

Table 6: Randolph Response Area (2020-2021)

Primary Response Areas					
	2021	2020		2021	2020
All Fires	25	11	All Rescues	25	26
Structure	20	8	Confined Space	1	
Wildland		2	Vehicle Ext.	18	24
Aircraft			Elevator Rescues		
Boat			Water Rescues		
Vehicle	2	1	Equip. Rescues	6	2
All Others	3		All Other Rescues		
Fire Alarms	120	55	All ARFF	144	139
			IFE		
EMS	129	113	Ground		
HAZMAT	31	20	Service Calls	27	15
			Stand By Assign.		
Unknown			Cancelled Onroute		

2021	2020	Change	% of Total	Combined Total
501	379	+122	100.00%	501/501

Table 7: Randolph Response Area (2021-2022)

Primary Response Areas					
	2022	2021		2022	2021
All Fires	37	25	All Rescues	22	25
Structure	22	20	Confined Space		1
Wildland	9		Vehicle Ext.	14	18
Aircraft			Elevator Rescues	5	
Boat			Water Rescues		
Vehicle	1	2	Equip. Rescues	2	6
All Others	5	3	All Other Rescues	1	
Fire Alarms	68	120	All ARFF	101	144
			IFE		
EMS	143	129	Ground		
HAZMAT	33	31	Service Calls	23	27
			Stand By Assign.		
Unknown			Cancelled Onroute		

2022	2021	Change	% of Total	Combined Total
427	501	-74	100.00%	427/427

Table 8: Fort Sam Houston Response Area (2020-2021)

Primary Response Areas					
	2021	2020		2021	2020
All Fires	127	132	All Rescues	38	39
Structure	114	117	Confined Space		
Wildland	5	7	Vehicle Ext.	17	15
Aircraft			Elevator Rescues	12	16
Boat			Water Rescues		
Vehicle	1		Equip. Rescues	9	8
All Others	7	8	All Other Rescues		
Fire Alarms	204	125	All ARFF		
			IFE		
EMS	890	753	Ground		
HAZMAT	60	78	Service Calls	43	25
			Stand By Assign.	3	3
Unknown			Cancelled Onroute		

2021	2020	Change	% of Total	Combined Total
1365	1155	+210	100.00%	1365/1365

Table 9: Fort Sam Houston Response Area (2021-2022)

Primary Response Areas					
	2022	2021		2022	2021
All Fires	120	127	All Rescues	49	38
Structure	92	114	Confined Space		
Wildland	21	5	Vehicle Ext.	21	17
Aircraft			Elevator Rescues	16	12
Boat			Water Rescues		
Vehicle	1	1	Equip. Rescues	10	9
All Others	6	7	All Other Rescues	2	
Fire Alarms	154	204	All ARFF		
			IFE		
EMS	1027	890	Ground		
HAZMAT	119	60	Service Calls	27	43
			Stand By Assign.	3	3
Unknown			Cancelled Onroute		

2022	2021	Change	% of Total	Combined Total
1499	1365	+134	100.00%	1499/1499

Table 10: Lackland Response Area (2020)

Primary Response Areas					
	2020	2019		2020	2019
All Fires	27	4	All Rescues	32	4
Structure	18	4	Confined Space	1	
Wildland	5		Vehicle Ext.	21	2
Aircraft	1		Elevator Rescues	5	2
Boat			Water Rescues		
Vehicle	1		Equip. Rescues	4	
All Others	2		All Other Rescues	1	
Fire Alarms	145	5	All ARFF	45	
			IFE		
EMS	1506	96	Ground		
HAZMAT	47	3	Service Calls	220	17
			Stand By Assign.		
Unknown			Cancelled Onroute		

2020	2019	Change	% of Total	Combined Total
2022	129	+1893	100.00%	2022/2022

Table 11: Lackland Response Area (2021-2022)

Primary Response Areas					
	2022	2021		2022	2021
All Fires	50	43	All Rescues	59	52
Structure	32	35	Confined Space	1	5
Wildland	13	3	Vehicle Ext.	32	27
Aircraft			Elevator Rescues	8	7
Boat			Water Rescues		
Vehicle	1	2	Equip. Rescues	15	12
All Others	4	3	All Other Rescues	3	1
Fire Alarms	151	174	All ARFF	41	37
			IFE		
EMS	1869	1785	Ground		
HAZMAT	49	49	Service Calls	153	208
			Stand By Assign.		
Unknown			Cancelled Onroute		

2022	2021	Change	% of Total	Combined Total
2372	2348	+24	100.00%	2372/2372

F. Community Priorities, Expectations, and Performance Goals

Mission Statement

In January 2024, a workgroup of JBSA F&ES employees updated its mission statement in conjunction with its new Strategic Plan. Working together in a consensus process, the following new mission statement was created:

JBSA Fire & Emergency Services provides high-quality all-hazard response to save lives and protect property with courage and compassion that exceed established standards and community expectations.

"Because We Care"

Community Service Priorities

On September 27, 28, and 29, 2023, community meetings were held with the stakeholders of Joint Base San Antonio Fire Emergency Services (JBSA F&ES) at Fort Sam Houston, Randolph, and Lackland to establish a representative baseline of feedback regarding their organization. The meetings were facilitated by a representative from the Center for Public Safety Excellence. Feedback was provided through instruments utilized in the meeting where stakeholders voted on and prioritized fire department programs and services, prioritized community expectations and concerns in their own words, and indicated perceived strengths. The input themes, along with weighted ranking and values received from that meeting, are presented on the following pages.

Participants were provided with an instrument to determine the prioritization of the identified ten core programs and services provided by JBSA F&ES. In the survey, participants were asked to do a "direct comparison" between two different programs as to which, in the participants' mind, takes priority in each specific comparison. Each program is directly compared to another program, and this continues until all services are compared to all other department programs. Responses were then tabulated together to formulate the combined stakeholder result as listed in the table. This quantitative and cumulative approach provides the agency with a numerical prioritization ranking. It is understood that this snapshot of information contains some bias as to the specific respondents. Additionally, it is understood that the use of the prioritization matrix provides greater statistical significance.

Additionally, the data can be impacted by cognitive dissonance. Because of this, the responses may be affected in their priority due to shifting personal biases or impacts from external sources. For instance, there may be a shift toward more prioritization for disaster preparedness in a region recently impacted by a natural disaster. It is hard to determine if cognitive dissonance impacts prioritization in a non-normal way without further researching the external impacts and exposures provided to the respondents. Therefore, the department must consider the role of cognitive dissonance and its potential impact on prioritization when analyzing the overall feedback provided.

The priorities of the programs and services as provided by the community respondents are as follows:

Table 12: Community Service Priorities

Programs	Ranking	Score
Emergency Medical Services (EMS)	1	282
Rescue	2	251
Fire Suppression	3	235
Aviation Rescue and Firefighting	4	226
Domestic Preparedness (Emergency Management)	5	160
Hazardous Materials (Hazmat)	6	158
Fire Prevention	7	141
Wildland Fire Program	8	131
Public Education	9	93
Fire Investigation, Origin, and Cause	10	78

Community Service Expectations

Understanding what the community expects of its fire service organization is critically important to developing a long-range perspective. With this knowledge, internal emphasis may need to be changed or bolstered to fulfill the community's needs.

Respondents were asked to list, in priority order, up to three subjects relative to the expectations they have for JBSA F&ES. Responses were then analyzed for themes and weighted. The weighting of the prioritized responses was as follows: if it was the respondent's first entry, then it received five weighted points. Weighting gradually decreased so that if it was the respondent's third entry, then it received one weighted point. The weighted themes were then sorted from the highest cumulative weight to the lowest cumulative weight and listed below. The numbers in the parentheses are the cumulative weighted values that correlated with the theme identified. While the themes are listed in prioritized, weighted order, all responses were important in the planning process. The following are the top five expectations of the community stakeholders:

1. **Response time:** Rapid response time. Timely response to emergency issues. Timely response to calls or situations. First responder emergency response on the installation within 5-10 minutes. Promptness to calls. Safe and quick response times. Rapid response for emergency aircraft events to rescue pilots. Emergency response for flying or domestic incidents. Emergency response in natural or artificial incidents. That there is immediate availability of fire and emergency service response – arrive on-base at an emergency within 10 minutes of initial call. Rapid response for facility emergency. Quick response to incidents. Timeliness. Quick, safe, and efficient crash rescue services. Immediate in-flight emergency/mishap response. Prioritize emergency response. Be ready when called with good response times. (135)
2. **Training and professional development:** Education and on-the-job training. Proper training. Be well-trained to perform firefighting and rescue. Have the best trained and qualified personnel. Knowledge of

medical training. Trained and familiar with the geographical layout of the installations. Active training for aircraft crashes. Be proficient and competent. Expert understanding of the facilities' layouts and locations. It is important to know where important areas are prior to incidents. Training in fire practices. Have the best training to combat fire/medical incidents. (37)

3. **Community involvement:** Assign a responsible and responsive person as the department's communications point of contact. Community involvement enhancement to access community readiness and to respond safely to emergencies. More community interaction. That the community knows what the fire department expects of us. Continued engagement. Open communications. Community presence and training. Awareness of fire safety to residents. Community outreach – remain engaged with the community by attending community events. (33)
4. **Fire Prevention:** Fire safety inspections of buildings on base. Facility inspections. Proactive prevention efforts with drills, inspections, etc. Quarterly fire inspections. Yearly fire drills. Inspections to ensure proactive approach to fire prevention. Thorough building inspections. Ensure that fire detection devices are connected with the dispatch center for immediate information. Have a solid fire prevention program. Fire prevention suppression systems. Inspection of facilities. (27)
5. **Emergency management:** Professional emergency management training for mass casualty exercises. Participate in the development of the Base Defense Plan and the Antiterrorism Plan to include plans for the protection of fire assets and water assets. Participate in Antiterrorism Force Protection Exercise planning and exercise as appropriate regarding the Base Defense Plan, Antiterrorism Plan, Barrier Plan, and Critical Response Plan. Participate in the installation's Integrated Defense Risk Management process. Specifically understanding the threats and fire vulnerabilities. Participation in joint exercises. Work well with other emergency response groups. (19)

Historical Performance Goals

Response times are measured by the arrival of the first and then subsequent fire suppression units at the scene. ARFF vehicles must be on scene of an aircraft emergency within 5 minutes for an unannounced call and 1 minute for an announced emergency. On structural responses, including EMS, the first arriving structural company must arrive within 7 minutes. In every emergency, there is a sequence of events that are critical elements with respect to time and evaluation of the response system, known as the cascade of events, and it occurs on every emergency call. Part of the risk assessment includes the evaluation of the department's ability to respond to emergencies. DoDI 6055.06 Table E3.T1 below outlines aggregate response times (ART) regarding minimum LOS objectives to the emergency scene. If ART objectives are missed, then the cascade of event time will increase before the initial and full alarm assignment arrives on scene.

Table 13: Response Times and Level of Service for FES Operations

Response Times and Level of Service for FES Operations					
PROGRAM ELEMENT	O =OLS R =RLS C =CLS	ART (minutes)	RATE (%)	COMPANIES	STAFF
Structural Fire					
First Arriving Company	C	7	90	1	4
Initial Full Alarm Assignment	O	12	90	3	13
Other Fire Response/Investigative Response					
First Arriving Company	C	7	90	1	4
HazMat/CBRNE					
First Arriving Company (Defensive Operations)	C	7	90	1	4
Full Alarm Assignment (Offensive Operations)	O	22	90	3	15
Emergency Medical					
First Arriving Company (basic life support (BLS) with automatic external defibrillator (AED)) (no EMT)	O	7	90	1	2
Transport Unit (BLS with AED)	N/A	10	90	1	2
Advanced Life Support (ALS) Capability	N/A	12	90	1	2
ARFF					
Unannounced First Arriving Company	C	5	90	1	3
Announced First Arriving Company	C	1	90	1	3
Additional Units – should arrive at 30-second intervals					
Technical Rescue					
First Arriving Company	C	7	90	1	4
Full Alarm Assignment	O	22	90	3	13

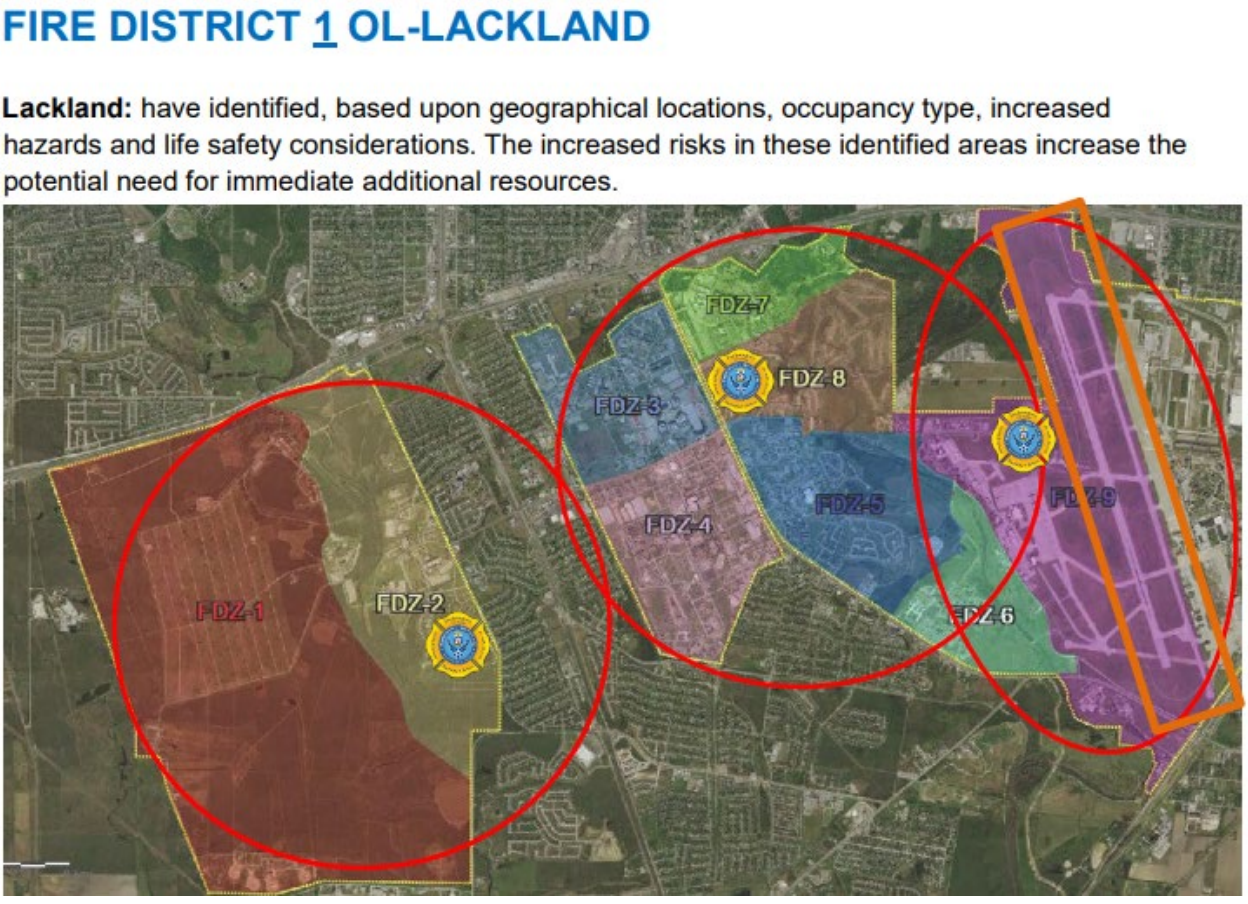
G. Community Risk Assessment and Risk Levels

Geographical Planning Areas/Zones

Fire Response Districts (FRD): JBSA F&ES has divided its area of responsibility into three operating locations (OL) as fire response districts. Each OL has historical internal fire response districts (FRD) for tracking data and response times. The districts define the geographic area of first-run responsibility for each particular fire station. The concept of placing resources in a location to effect required first-arriving apparatus response times is known as "Distribution." Distribution goals should match DoD and AF requirements.

Fire Demand Zones (FDZ): DoDI 6055.06 defines FDZs as small areas that represent a single demand for fire service (i.e., the time-dependent number of firefighting resources required to suppress a fire). It might be more appropriate to visualize an FDZ as an area that has a common demand for firefighting services rather than a random geographic area. For example, an area may have a predominant risk type with ancillary facilities interspersed throughout the area. The demand for service should be based on the predominant risk in a specific area unless a target hazard or High/Key risk is identified in the zone. An AF installation can be divided into both FRDs and FDZs. The fire demand zones are the numbered areas that are used to assess risk, determine response resources, and analyze the performance of a specific area or occupancy group. These fire demand zones should be used to assess risk, establish/validate a standard of cover, measure performance, and inform the governing body on F&ES capability. Another significant consideration when determining fire demand zones is loss values in both dollars and mission impact.

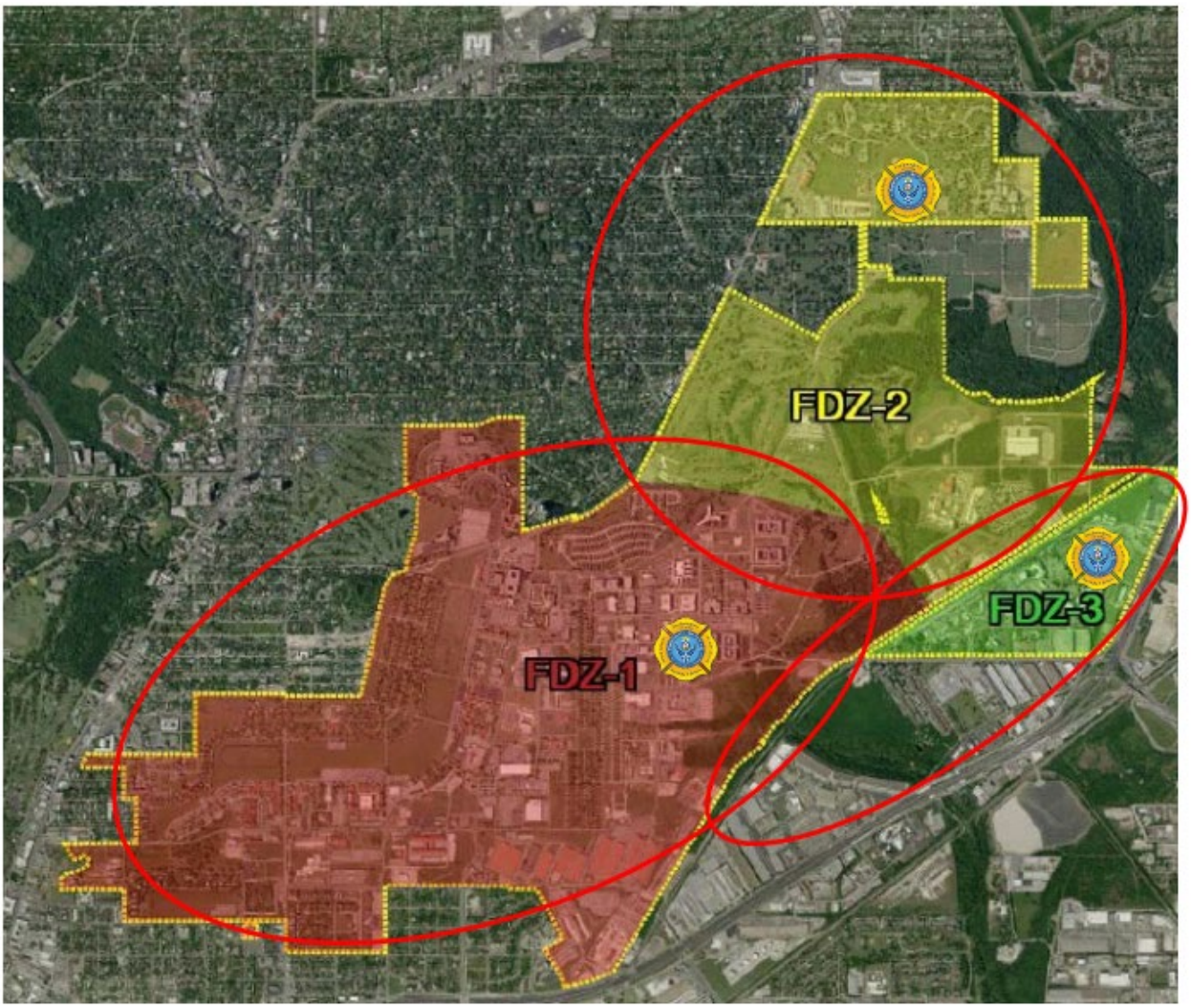
Map 43: Lackland FDZs



Map 44: Fort Sam Houston FDZs

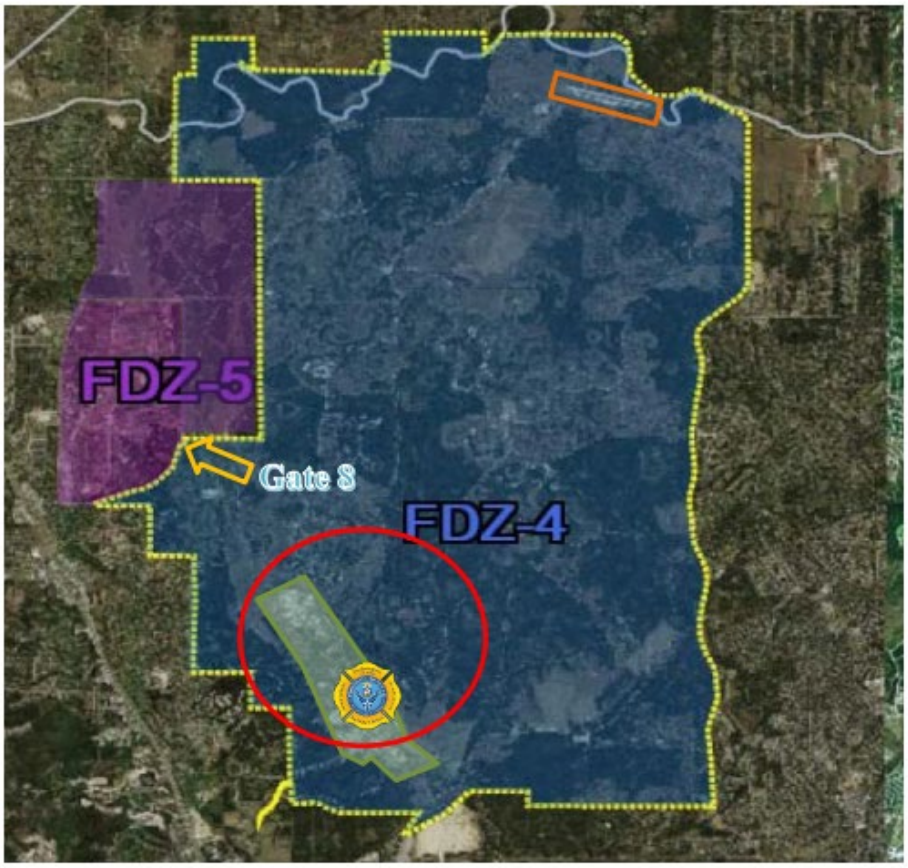
FIRE DISTRICT 2
OL-FORT SAM HOUSTON & CAMP BULLIS

Fort Sam Houston: District 2 contains 3 FDZ's and are identified based upon geographical locations of three fire stations (FDZ-3 building station #6). The increased risks in these identified areas increase the potential need for immediate additional resources.



Map 45: Camp Bullis FDZs

CAMP BULLIS: contains 2 FDZ's and are identified based upon geographical locations. FDZ-4 main cantonment area houses a fire station and then the training ranges cover the 28K acre site. FDZ-5 is Camp Stanley (Support Agreement) covered by station 7.The increased risks in these identified areas increase the potential need for immediate additional resources.



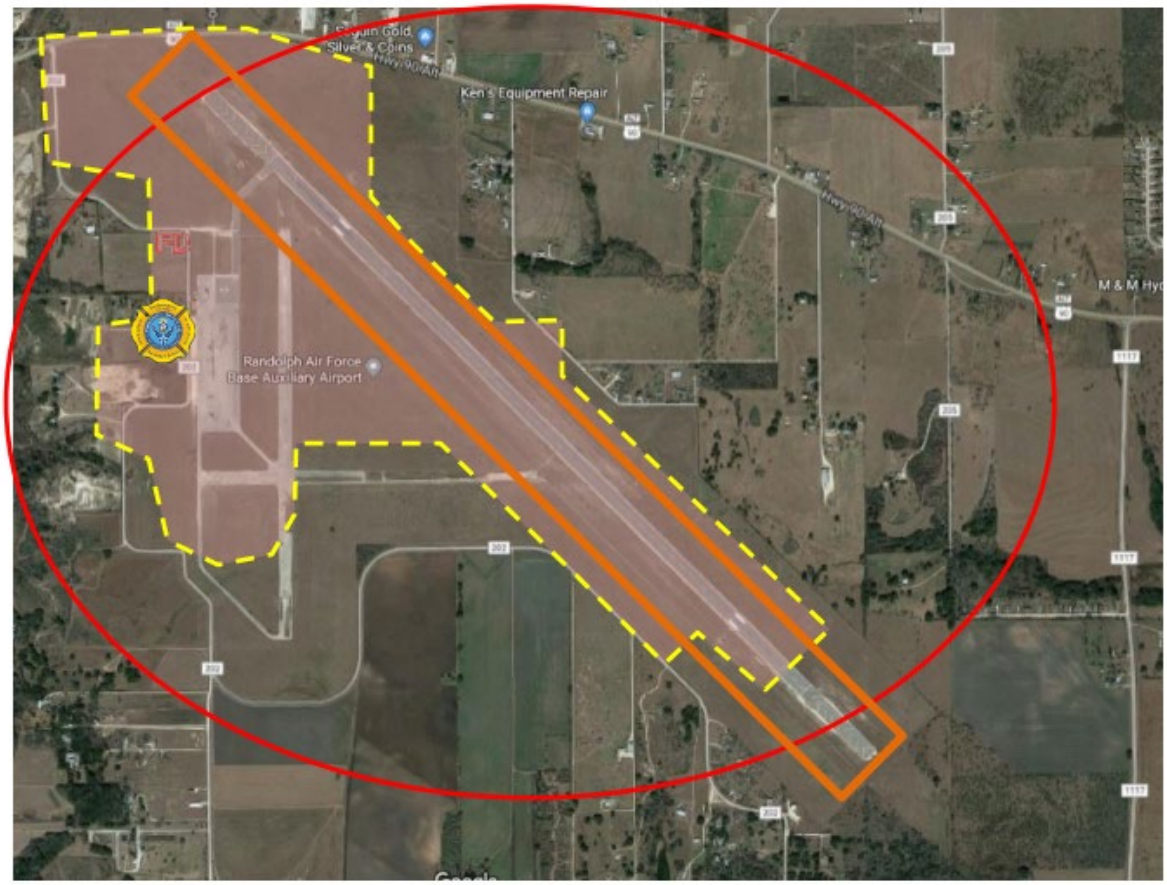
Map 46: Randolph FDZs

FIRE DISTRICT 3 OL-RANDOLPH

Randolph: has been identified based upon geographical locations, occupancy type, increased hazards and life safety considerations. The increased risks in these identified areas increase the potential need for immediate additional resources.

Map 47: Seguin Auxiliary Field FDZs

SEGUIN AUX FIELD: Auxiliary Landing Strip for touch and go sortie missions conducted by the 12th FTW. Typically the air field operates Mondays to Fridays between the hours of 0700-1800 hrs. When operational, the JBSA FES supports the mission with a Crew of four personnel to staff an ARFF-RIV and Water Tender apparatus. Fire station 9 is capable of sustained 24 hour operations and is a vital State and Federal Staging area for FEMA and DLA functioning as an Installation Support Base and staffing location for disaster response. FEMA has staged resources on the air field numerous times starting with Hurricane Katrina.

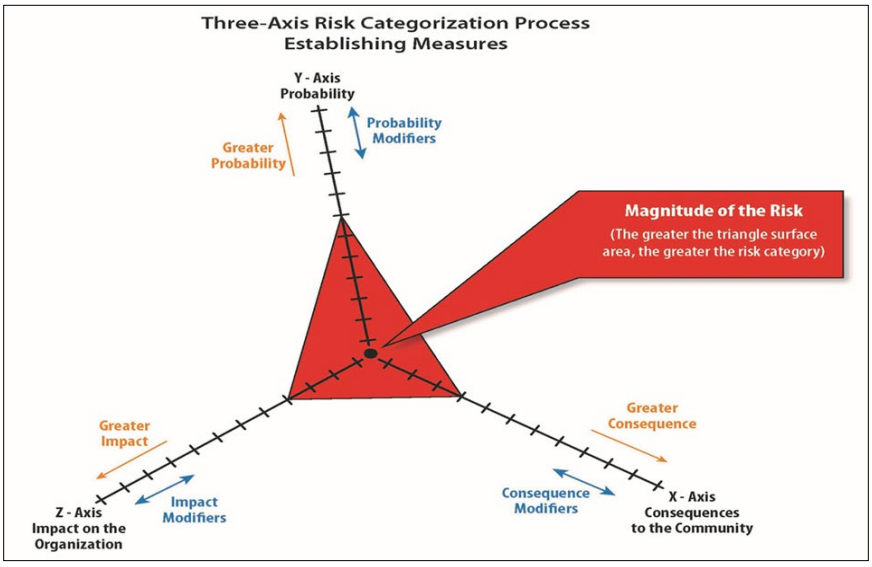


Methodology

Heron's three-axis formula was used to calculate risk. This model was selected because it provided a more accurate means of communicating the organizational impact of the emergent responses. The formula considers the probability of occurrence, the severity of consequence, and the impact on fire department resources.

The risk is graphically illustrated through a three-axis model as follows:

- P = Probability (Y-Axis)
- C = Consequences (X-Axis)
- I = Impact (Z-Axis)



The probability of risk was determined through a review of the JBSA F&ES incident response records from 2020 to 2022 to determine the likelihood of an event. The consequences to the community were determined through an evaluation of the incidents' impact on lives and property. The organizational impact was determined through a critical tasking and analysis of the JBSA F&ES personnel needed to mitigate the risk. The following figure illustrates the assessment model.

Table 14: Risk Assessment Scoring Methodology

Score	Probability	Consequence	Impact
2	Yearly	No life impairment/Single Vehicle	< 5 Personnel
4	Quarterly	Life impairment/Single Occupancy	5 – 8 Personnel
6	Monthly	Significant life impairment or loss/Multiple Vehicles/Multi-Occupancy	9 – 13 Personnel
8	Weekly	Loss > 1 life/Public Assembly/Aircraft < $1M	14 – 18 Personnel
10	Daily	Loss of > 3 lives/Major Hazard Class/Aircraft > $1M	> 18 Personnel

Table 15: Risk Assessment Scoring Categorization

Description	Low	Moderate	High	Extreme
Risk Score Range	0 to 24.99	25 to 49.99	50 to 69.99	70 to 100

JBSA F&ES is responsible for providing six major services: aircraft, structural, medical, rescue, hazardous materials, and wildland. This risk assessment was applied to each of the aforementioned areas to calculate a risk category of low, moderate, high, and extreme. The ranking scale was set to establish two as the lowest score and ten as the highest score to illustrate the risk score.

Critical Task Analysis

Analysis of the critical tasking serves as the foundation of the deployment section of this report to encourage a stronger correlation between risk and resources. To determine this, JBSA F&ES leadership reviewed the critical tasking to establish the personnel required to mitigate the incident. This is formally known as the *effective response force* (ERF). Additionally, the *ERF Remaining* of the organization is determined by quantifying the remaining personnel available to respond to a concurrent incident(s). The following figures illustrate the critical tasking and personnel requirements for each emergency event type for each risk classification.

The utilization of assigned personnel at varying response risk levels is further explained in the critical tasking portion. From governing documents, the following verbiage from the DoDI 6055.06, DoD F&ES, delineates staffing requirements for all operations in Table E3.T1, "Minimum Level of Service Objectives – Operations," and indicates the minimum number of companies and personnel required to safely and effectively perform initial operations for the respective program element. These minimum requirements do not provide sustainment capability and will not provide sufficient resources for major incidents.

Aviation Rescue Fire Fighting

Low Risk: Generally involves routine standbys and requires the response of a single ARFF apparatus with a minimum of two personnel.

Moderate Risk: Generally involves a declared in-flight or ground emergency, with an ERF based on the requirements of the airfield.

High Risk: Generally involves actual crashes, with or without crew ejection, declared in-flight emergencies with known/reported significant issues that may result in a crash/fire.

Extreme Risk: Generally involves actual crashes outside of the boundaries of the main airfield or in areas where access is difficult. Resourcing off-installation crashes is done on a case-by-case basis.

Table 16: Critical Tasking and ERF - Aircraft Rescue

Critical Tasking & ERF for Aircraft Categories				
Task	Low Risk	Moderate Risk	High risk	Extreme Risk
Command	1	1	1	1
Safety	0	0	1	1
Fire Attack	4	6	6	6
Rescue	2	2	5	6
Medical	2	2	2	4
Total	**9**	**11**	**15**	**18**

Fire Suppression

Low Risk: No life hazards, such as small outbuildings, small unoccupied structures, small vegetation fires, mobile property, and dumpster fires. It also includes fire alarm activations or investigations with no confirmed fire. Fires involving this type of risk will generally be mitigated with an effective response force (ERF) of four personnel arriving in a single engine/truck company.

Moderate Risk: Involving facilities including housing, barracks, business occupancies, and a limited number of industrial occupancies. Fires with this type of risk will require the ERF of 13 personnel, arriving in multiple engine/truck companies with an incident command unit.

High Risk: Include large industrial or aircraft hangar occupancies. Fires with this type of risk will require the ERF of 13 personnel, arriving in multiple engine/truck companies with an incident command unit. Additional support/command personnel will be deployed to meet critical tasking.

Extreme Risk: Include facilities that have known fire protection issues, including insufficient water supply, presence of aircraft (hangars), and other factors that may increase characterized risk. Fires with this type of risk will require the ERF of 13 personnel, arriving in multiple engine/truck companies with an incident command unit. Additional support/command/Mutual Aid operations personnel will be deployed to meet critical tasking.

Table 17: Critical Tasking and ERF - Fire Suppression

Critical Tasking and ERF for Structural Categories				
Task	Low Risk	Moderate Risk	High risk	Extreme Risk
Command	1	1	1	1
Safety	0	0	1	1
Fire Attack	0	2	4	4
Back-Up Line	0	2	2	4
Pump Operator	1	2	2	2
Rescue	2	2	2	4
Rapid Intervention Team	0	2	2	2
Medical	0	2	2	2
Total	**4**	**13**	**16**	**20**

Emergency Medical Services

Low Risk: Consists of a single BLS ambulance or fire apparatus. Low-risk incidents are non-severe and most often are mitigated with two certified NR-EMRs, resulting in transport refusal on behalf of the patient.

Moderate Risk: Responses that result in patient transport or may require additional staffing from other JBSA resources. Moderate EMS consists of but is not limited to minor trauma, bone fractures, illness, and minor lacerations.

High Risk: All advanced life support (ALS) incidents are considered high risk and require response and transport by a paramedic-level transport unit. High risk incidents consist of but are not limited to shortness of breath, major trauma, cardiac, and stroke.

Extreme Risk: Active shooter, mass-casualty, requiring multiple jurisdictions and deploying an Incident Command System.

Table 18: Critical Tasking and ERF - EMS

Critical Tasking & ERF for Medical Categories				
Task	Low Risk	Moderate Risk	High risk	Extreme Risk
Command	1	1	1	1
Safety	0	0	0	1
Treatment	3	6	8	8
Triage Officer	0	0	1	1
Transport Officer	0	0	0	1
Total	**4**	**7**	**10**	**12**

Technical Rescue

Low Risk: Include incidents such as elevator rescues, persons locked in vehicles or other spaces, involving simple removals where the victim(s) can be readily accessed and removed through the door once interlocks are defeated or access is easily accomplished. No medical or trauma issues are associated with the entrapment. These incidents can be mitigated by a single company.

Moderate Risk: Include incidents such as vehicle and aircraft accidents. These incidents can be mitigated by available resources on base and would involve the response of an appropriate ERF ranging from six to 13 personnel, including a designated safety officer. In cases where organic staffing or technical expertise is unavailable/insufficient to meet the initial DoD-required ERF, mutual aid will be utilized to fill out the initial assignment.

High Risk: Include incidents requiring the technical rescue of victims trapped by machinery, equipment, structures, or earth. This includes confined space rescues and incidents involving lowering or raising rescuers and victims. These incidents can be initiated by available resources on base and would require the response of a full ERF comprised of a minimum of 13 personnel. In cases where organic staffing is unavailable/insufficient to meet the initial DoD-required ERF, mutual aid will be utilized to fill out the initial assignment.

Table 19: Critical Tasking and ERF - Technical Rescue

Critical Tasking & ERF for Rescue Categories			
Task	Low Risk	Moderate Risk	High risk
Command	1	1	1
Safety	0	1	1
Rescue	3	2	2
Back-Up	0	2	2
Rigger	0	2	0
Groud Support	0	2	0
Air Monitor	0	1	0
Medical	0	2	2
Rope Tender	0	0	2
Upstream	0	0	2
Downstream	0	0	2
Total	**4**	**13**	**14**

Hazardous Materials

Low Risk: Involves small quantities of "home use" products, as well as small spills of petroleum products. These incidents are generally managed with a single engine or ARFF apparatus.

Moderate Risk: Involves products with no acute health hazards or products that are contained in engineered containment tanks or reservoirs.

High Risk: Involves known and unknown products that pose significant health risks, as well as larger uncontrolled releases of combustible or flammable liquids. These incidents require the response of a full ERF.

Table 20: Critical Tasking and ERF - Hazardous Materials

Critical Tasking & ERF for Hazmat Categories			
Task	Low Risk	Moderate Risk	High risk
Command	1	1	1
Safety	0	1	1
Accountability	0	0	1
Research Officer	0	0	1
Entry Team	3	2	2
Back Up Team	0	2	2
Decon Officer	0	0	1
Decon Team	0	2	4
Medical	0	2	2
Total	**4**	**10**	**15**

Wildland

Low Risk: Incidents that consist of small grass/light brush fires, and can be extinguished/controlled by one company.

Moderate Risk: Incidents that consist of large grass/heavy brush fires. They require multiple companies to extinguish/control the fire spread.

High Risk: Incidents that consist of large/grass/structural exposure fires. They require multiple JBSA companies and mutual aid partners to extinguish/control fire spread.

Table 21: Critical Tasking and ERF - Wildland

Critical Tasking & ERF for Wildland Categories			
Task	Low Risk	Moderate Risk	High risk
Command	1	1	1
Safety	0	1	1
Fire Attack	2	2	4
Water Supply	1	1	2
Type 6 Attack/ATV	0	4	4
Medical	0	2	2
Total	**4**	**11**	**14**

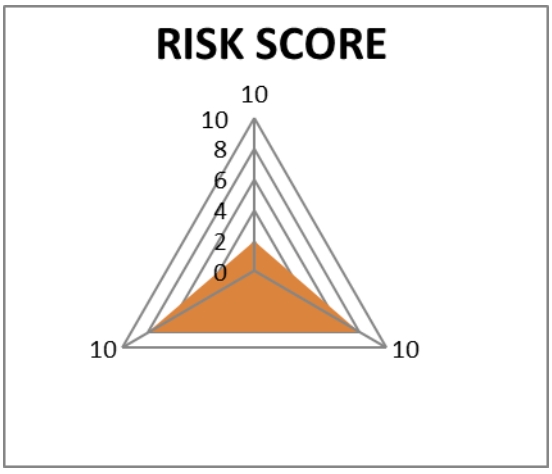
Risk Assessment

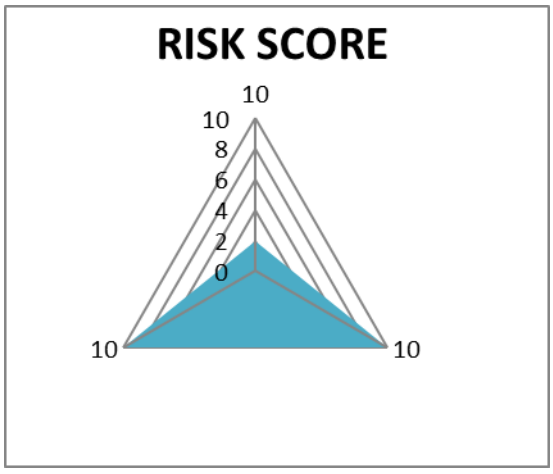
Aircraft Rescue Services

Aircraft emergencies are rare occurrences where aggressive fire actions are needed. Pre-planning and emergency staging during events are met daily. When an aircraft fire or crash occurs, the goal is to rapidly respond by utilizing firefighting agents to extinguish fires and perform rescues for those who may be injured or trapped.

Table 22: Risk Assessment - Aircraft Rescue

Aircraft	Probability	Consequence	Impact	Risk Score	Risk Assessment
Small Frame	2	8	8	48	Moderate
Large Frame	2	10	10	73.48	Extreme



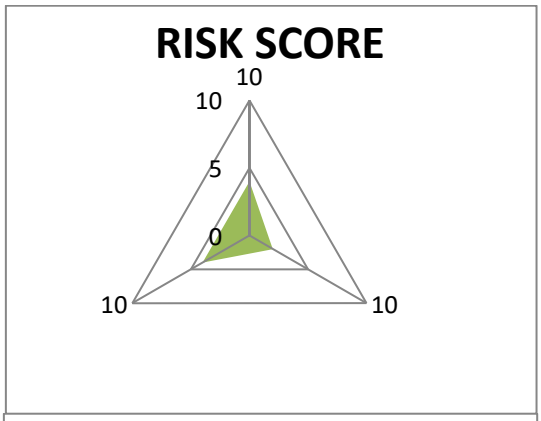


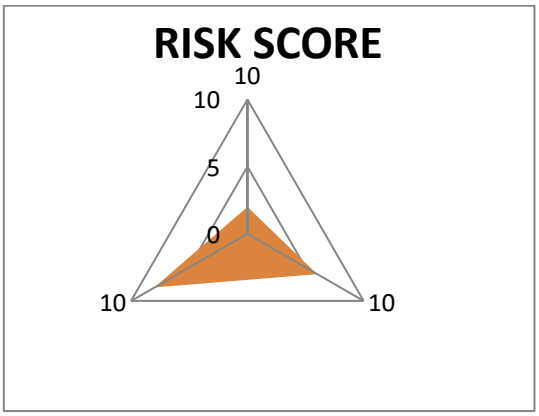
Fire Suppression Services

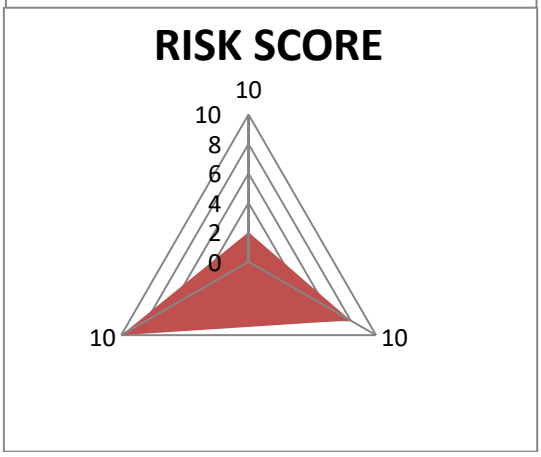
Structural fire responses are critical to early notification by alarm systems or 9-1-1 witnessed calls. The response based on the seven-minute goal is to place firefighters on scene to quickly contain the fire to the point of origin, or single room content, by pre-planning and bringing first alarm assets to the scene.

Table 23: Risk Assessment - Fire Suppression

Structural	Probability	Consequence	Impact	Risk Score	Risk Assessment
Dumpster Fire	4	2	4	13.86	Low
Vehicle Fire	4	2	4	13.86	Low
House Fire	4	4	6	26.53	Moderate
Dormitory Fire	2	6	8	36.77	Moderate
High Rise	2	8	10	59.4	High
Warehouse	2	8	10	59.4	High
BX/Commissary	2	8	10	59.4	High
Hospital	2	8	10	59.4	High
Hangar	2	10	8	59.4	High
POL Storage	2	10	8	59.4	High
Munitions Storage	2	10	8	59.4	High





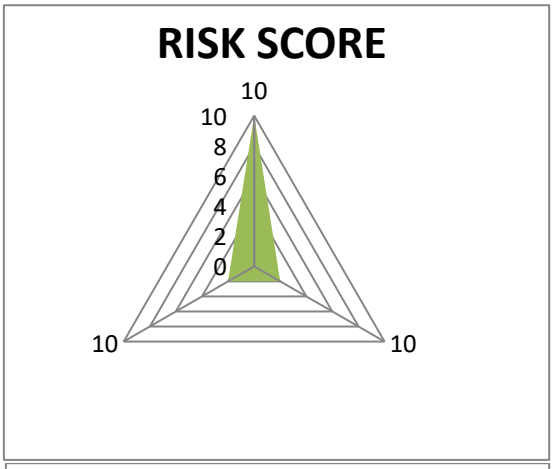


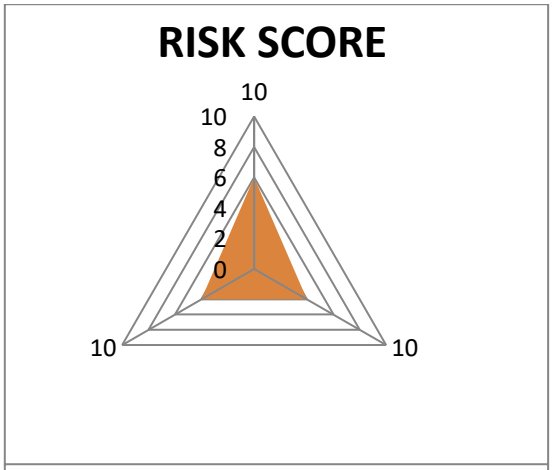
Emergency Medical Services

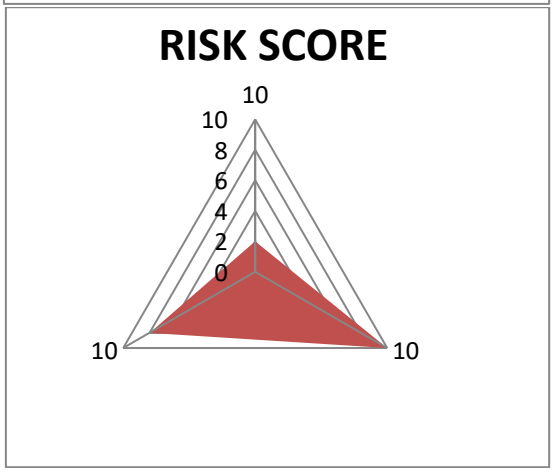
Medical emergencies make up a large majority of responses. As first responders, JBSA F&ES will respond to all incidents to make patient contact and begin basic life-saving measures. JBSA F&ES maintains a National Registry (NR) Emergency Medical Responder (EMR) level. The responders utilize the Air Force Medical Protocols and obtain further medical direction from the JBSA Medical Director. The advanced life support (ALS) ambulance responders are either 50th MWG or contract ambulances that further treat beyond the EMR/EMT capabilities of F&ES and transport patients to the emergency departments.

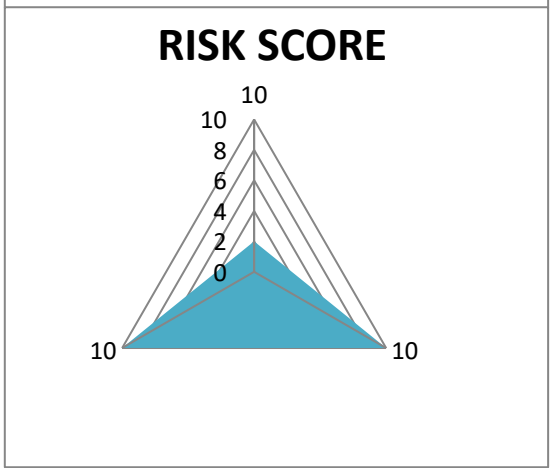
Table 24: Risk Assessment - EMS

Medical	Probability	Consequence	Impact	Risk Score	Risk Assessment
Sick/Minor Trauma	10	2	2	20.2	Low
Fractures/Head/Neck/Spine Trauma	6	4	4	26.53	Moderate
Cardiac Arrest	4	6	6	34.99	Moderate
Mass Casualty	2	10	8	59.39	High
Active Shooter/RTF	2	10	10	73.48	Extreme







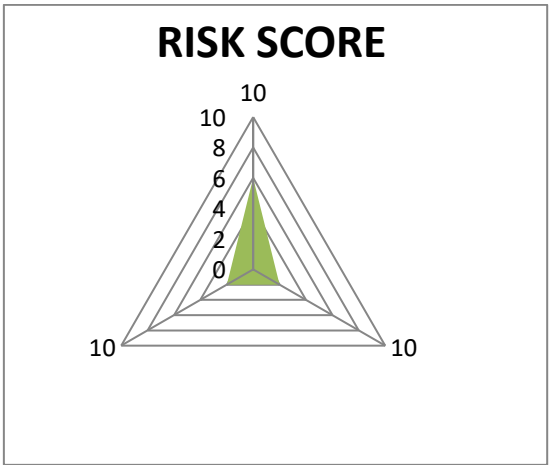


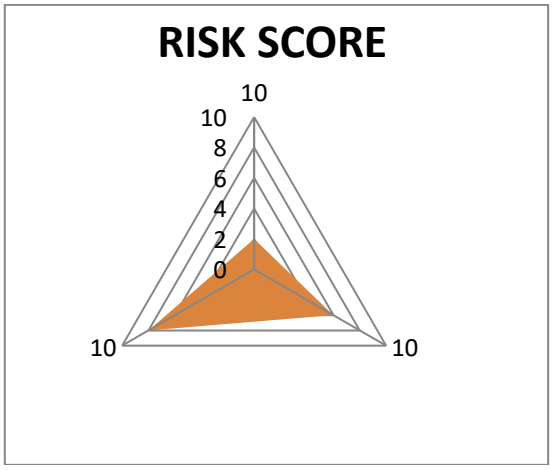
Technical Rescue Services

Technical Rescue: Confined space; each OL maintains the capability to respond and conduct rescue/recovery operations in a confined space. The JBSA Safety Office maintains a rigorous confined space program and ensures each pre-entry is assessed and evaluated. The F&ES Safety Officers oversee the F&ES program and ensure Operations personnel are aware of the entries and permit entry to confined spaces. Swiftwater, trench, and technical rope are not core response resources, but are trained and maintained skills of JBSA F&ES.

Table 25: Risk Assessment - Technical Rescue

Rescue	Probability	Consequence	Impact	Risk Score	Risk Assessment
Elevator	6	2	2	12.33	Low
Vehicle	6	2	2	12.33	Low
Confined Space	2	6	8	36.77	Moderate
Swift Water	2	6	8	36.77	Moderate



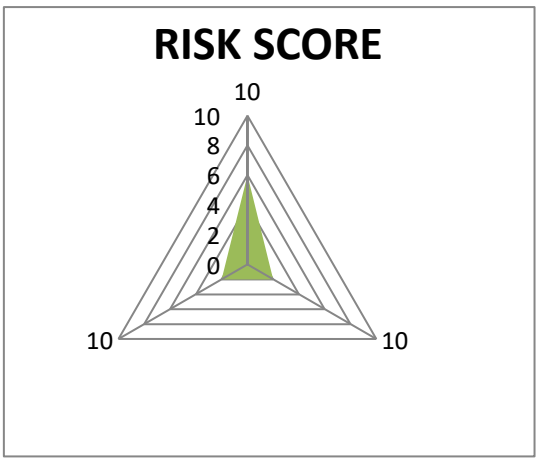


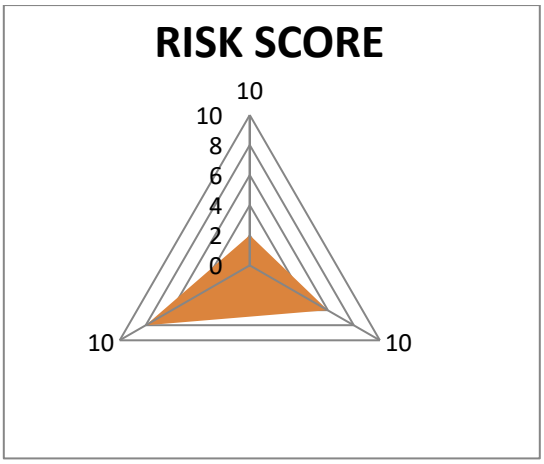
Hazardous Materials Services

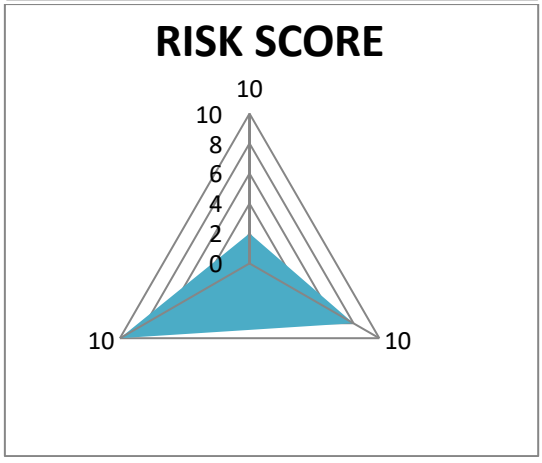
Defensive hazardous materials release is part of the F&ES core response capabilities for each OL. If a release of a vapor, toxic chemical, or other high-risk hazmat occurs, defensive strategies are implemented, and the Offensive JBSA Hazmat truck is dispatched to bring a higher-level response capability. Primary defensive actions are releases of fuels on flightline or roadways by commercial vehicles or accidents.

Table 26: Risk Assessment - Hazardous Materials

Hazmat	Probability	Consequence	Impact	Risk Score	Risk Assessment
Gas Leak	8	2	2	16.25	Low
Fuel Spill	6	2	2	12.33	Low
Chlorine Leak	2	6	8	36.77	Moderate
Defensive	2	2	4	13.86	Low
Offensive	2	4	8	25.92	Moderate
Offensive w/rescue	2	8	10	59.4	High





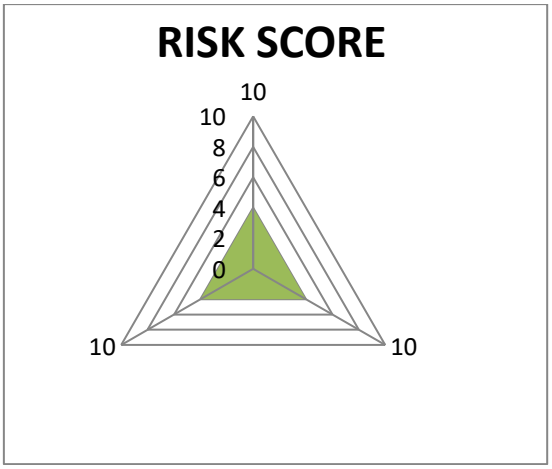


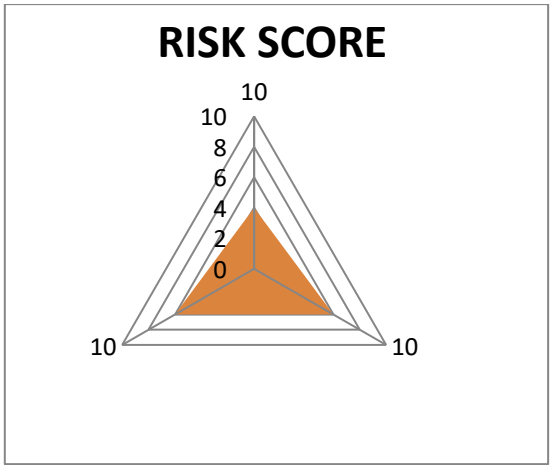
Wildland

Urban interface and wildland fires, though not a large portion of the annual response, do threaten the training mission at Camp Bullis and Chapman Annex. Prevention is the best defense, and utilizing the Air Force Civil Engineer Center Wildland Module Team to conduct prescribed burns and fuel management yields positive results. JBSA F&ES places a high value on its capabilities and continues to train and meet National Wildfire Coordination Group standards to ensure compliance and its members' safety on fireground.

Table 27: Risk Assessment - Wildland

Wildland	Probability	Consequence	Impact	Risk Score	Risk Assessment
Small Grass	4	4	4	19.6	Low
Large Grass	4	6	6	34.99	Moderate
Urban Interface	4	6	6	34.99	Moderate





Risk Classification and Categories

Risk is categorized by severity and drives the agency's resource capacity, capability, and operational performance.

Hazard – The causes of danger and/or peril

Probability – the likelihood measured regarding injury or loss from danger/peril.

Consequence – The measure of disparate outcome significance from perilous injury/loss.

Impact – The measured "drain effect" regarding adverse service area resource availability and coverage caused by emergency incident mitigation demand.

Risk classification elements of structural (fire suppression), aircraft, medical (EMS), technical rescue, hazardous materials, and wildland are categorized as low, moderate, high, and extreme if applicable.

Table 28: Risk Classification and Categories

Structural	Probability	Consequence	Impact	Risk Score	Risk Assessment
Dumpster Fire	4	2	4	13.86	Low
Vehicle Fire	4	2	4	13.86	Low
House Fire	4	4	6	26.53	Moderate
Dormitory Fire	2	6	8	36.77	Moderate
High Rise	2	8	10	59.4	High
Warehouse	2	8	10	59.4	High
BX/Commissary	2	8	10	59.4	High
Hospital	2	8	10	59.4	High
Hangar	2	10	8	59.4	High
POL Storage	2	10	8	59.4	High
Munitions Storage	2	10	8	59.4	High
Aircraft	**Probability**	**Consequence**	**Impact**	**Risk Score**	**Risk Assessment**
Small Frame	2	8	8	48	Moderate
Large Frame	2	10	10	73.48	Extreme
Medical	**Probability**	**Consequence**	**Impact**	**Risk Score**	**Risk Assessment**
Sick/Minor Trauma	10	2	2	20.2	Low
Fractures/Head/Neck/Spine Trauma	6	4	4	26.53	Moderate
Cardiac Arrest	4	6	6	34.99	Moderate
Mass Casualty	2	10	8	59.39	High
Active Shooter/RTF	2	10	10	73.48	Extreme
Rescue	**Probability**	**Consequence**	**Impact**	**Risk Score**	**Risk Assessment**
Elevator	6	2	2	12.33	Low
Vehicle	6	2	2	12.33	Low
Confined Space	2	6	8	36.77	Moderate
Swift Water	2	6	8	36.77	Moderate
Hazmat	**Probability**	**Consequence**	**Impact**	**Risk Score**	**Risk Assessment**
Gas Leak	8	2	2	16.25	Low
Fuel Spill	6	2	2	12.33	Low
Chlorine Leak	2	6	8	36.77	Moderate
Defensive	2	2	4	13.86	Low
Offensive	2	4	8	25.92	Moderate
Offensive w/rescue	2	8	10	59.4	High
Wildland	**Probability**	**Consequence**	**Impact**	**Risk Score**	**Risk Assessment**
Small Grass	4	4	4	19.6	Low
Large Grass	4	6	6	34.99	Moderate
Urban Interface	4	6	6	34.99	Moderate

H. Historical Perspective and Summary of System Performance

Distribution Factors

Distribution factors focus on the geographic location of all first-due resources for initial intervention. This is generally measured from fixed response points, such as fire stations, and expressed as a measure of time. JBSA F&ES operates out of nine fire stations distributed throughout JBSA to provide consistent response times. This distribution allows first-arriving units to begin rapid mitigation efforts, such as fire attack, search and rescue, and early CPR/AED.

Concentration Factors

Concentration is about having enough of the right equipment and staffing in a timeframe that allows the assembled effective response force (ERF) to mitigate emergencies effectively, efficiently, and safely. This focuses on the spacing of multiple resources arranged so that an initial ERF can arrive on scene within the timeframes outlined in the on-scene performance expectations.

Reliability Factors

Reliability is the ability of the system to consistently deliver services within performance expectations.

Table 29: Apparatus Reliability

JBSA F&ES Vehicle Performance				
Station	**Vehicle**	**2023**	**2022**	**2021**
1	Rescue 31	100%	100%	100%
	Engine 51	100%	100%	100%
2	Engine 52	85%	87%	100%
	Crash 12	100%	57%	100%
	Crash 13			
	Crash 14			
	Crash 15			
3	Engine 53	57%	79%	82%
4	Rescue 34	100%	100%	100%
	Engine 54	100%	100%	100%
5	Engine 55	100%	100%	100%
6	Truck 36	100%	100%	100%
	Hazmat 64	100%	100%	100%
7	Brush 70	100%	100%	100%
	Engine 57	89%	100%	100%
8	Engine 58	100%	100%	100%
	Engine 59	100%	100%	100%
	Crash 20	100%	96%	100%
	Crash 21			
	Crash 22			
	Crash 23			

Dataset Qualification

Dataset qualification is vital for accurate incident analysis, resource allocation, planning and prevention strategies, and performance evaluation in the delivery of fire services. They form the foundation for evidence-based decision-making and enable fire departments to provide efficient and effective fire response and prevention services to their communities. JBSA works closely with the Emergency Communications Center to provide highly accurate data.

Response Time Outlier Policy

Values for exclusion were created by evaluating incident responses. Incidents were excluded using a combination of three criteria:

- Incomplete data entries (incidents missing or erroneous response times)
- Any incident with a total response time over 14 minutes or less than 1 second.
- Applying one standard deviation from the mean for each classification of datasets. The formula used is shown below:

$$\sigma = \sqrt{\frac{\Sigma (x - \mu)^2}{N}}$$

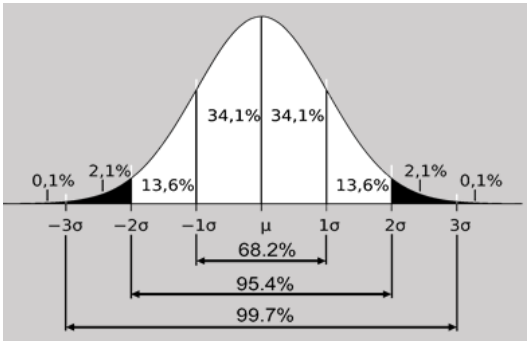
σ = standard deviation

Σ = the sum of

x = each individual incident value

μ = mean of the total of the entire incident data set

N = total number of incidents



JBSA F&ES has chosen to apply an upper time limit parameter to the formula. Therefore, the percentage of incidents excluded from a given data set from the upper deviation constitutes 2.5 percent of the total number of calls in the dataset.

Baseline Performance Tables

Table 30: Baseline Performance - All Risk Fire Suppression (2021-2023)

All Risk Fire Suppression 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	00:51	00:51	00:52	00:50
Turnout Time	Turnout Time First Unit	Urban	01:55	01:57	01:38	02:06
Travel Time	Travel Time First Unit **Distribution**	Urban	05:39	05:41	05:37	05:37
	Travel Time ERF **Concentration**	Urban	11:27	11:27	21:37	09:06
Total Response Time	Total Response Time First Unit on Scene **Distribution**	Urban	07:21	07:25	07:14	07:33
			n=1,811	n= 606	n= 701	n= 504
	Total Response Time ERF **Concentration**	Urban	13:38	13:22	23:06	10:45
			n=36	n=14	n=9	n=13

Table 31: Baseline Performance - All Risk EMS (2021-2023)

All Risk Emergency Medical Services 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	00:50	00:49	00:55	00:43
Turnout Time	Turnout Time First Unit	Urban	01:31	01:32	01:20	01:37
Travel Time	Travel Time First Unit **Distribution**	Urban	05:07	05:17	04:41	04:56
Total Response Time	Total Response Time First Unit on Scene **Distribution**	Urban	06:14	06:33	05:59	06:14
			n=7,737	n= 2,793	n= 2,904	n= 2,040

Table 32: Baseline Performance - All Risk Technical Rescue (2021-2023)

All Risk Technical Rescue 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	1:00	00:53	01:01	01:04
Turnout Time	Turnout Time First Unit	Urban	01:27	01:29	01:02	02:00
Travel Time	Travel Time First Unit **Distribution**	Urban	04:42	04:25	04:20	04:54
Total Response Time	Total Response Time First Unit on Scene **Distribution**	Urban	06:31	06:45	06:05	06:42
			n=209	n= 66	n= 98	n= 45

Table 33: Baseline Performance - All Risk Hazardous Materials (2021-2023)

All Risk Hazardous Materials 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	01:06	00:52	01:08	01:36
Turnout Time	Turnout Time First Unit	Urban	01:38	00:56	01:38	02:01
Travel Time	Travel Time First Unit **Distribution**	Urban	05:37	05:22	06:02	04:30
Total Response Time	Total Response Time First Unit on Scene **Distribution**	Urban	07:03	06:22	07:05	05:49
			n=57	n=19	n=24	n=14

Table 34: Baseline Performance - All Risk Aircraft Announced (2021-2023)

All Risk ARFF (Announced) 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	00:55	00:55	00:59	00:55
Turnout Time	Turnout Time First Unit	Urban	01:00	01:07	00:56	01:01
Travel Time	Travel Time First Unit **Distribution**	Urban	01:31	01:14	02:00	01:31
Total Response Time	Total Response Time First Unit on Scene **Distribution**	Urban	02:56	02:22	03:14	02:59
			n=227	n= 76	n= 60	n= 91

Table 35: Baseline Performance - All Risk Aircraft Unannounced (2021-2023)

All Risk ARFF (Unannounced) 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	01:01	01:40	01:09	00:52
Turnout Time	Turnout Time First Unit	Urban	01:24	00:57	01:29	00:55
Travel Time	Travel Time First Unit **Distribution**	Urban	03:51	03:26	03:58	03:44
Total Response Time	Total Response Time First Unit on Scene	Urban	05:02	04:32	06:10	04:28
	Distribution		n=39	n= 8	n=13	n= 18

Table 36: Baseline Performance - All Risk Wildland (2021-2023)

All Risk Wildland 90th Percentile Times Baseline Performance			2021-2023	2023	2022	2021
Alarm Handling	Pick-up to Dispatch	Urban	01:00	01:06	01:00	N/A
Turnout Time	Turnout Time First Unit	Urban	01:47	01:00	01:46	N/A
Travel Time	Travel Time First Unit **Distribution**	Urban	16:01	17:30	15:30	N/A
Total Response Time	Total Response Time First Unit on Scene	Urban	19:15	19:15	18:25	N/A
	Distribution		n=52	n= 11	n= 41	n= 0

I. Evaluation of Service Delivery

Performance Objectives – Benchmarks

Fire Suppression Services Program

For 90 percent of all fire suppression responses, the total response time for the arrival of the first-due unit, staffed with three firefighters and one officer, shall be 7 minutes. The first-due unit for all risk levels shall be capable of providing 500 gallons of water and 1,250 gallons per minute (GPM) pumping capacity, initiating command, requesting additional resources, establishing a backup line and advancing an attack line, establishing an uninterrupted water supply, containing the fire, rescuing at-risk victims, and performing salvage operations.

For 90 percent of moderate fire suppression responses, the total response time for the arrival of the effective response force (ERF), staffed with 13 firefighters and officers, shall be 12 minutes. For 90 percent of all high and extreme risk fire suppression responses, the total response time for the arrival of the ERF, staffed with 14 firefighters and officers, shall be 22 minutes. The ERF for all moderate risk structure fires shall be capable of establishing command; appointing a site safety officer; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the Occupational Safety and Health Administration (OSHA) requirements of two-in and two-out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; and performing salvage and overhaul.

Emergency Medical Services Program

For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of two firefighters, shall be 7 minutes. The first-due unit shall be capable of assessing scene safety and establishing command, sizing-up the situation. The unit will be conducting an initial patient assessment, determining if additional resources are required, obtaining vitals and the patient's medical history, providing first responder medical aid including AED, and if BLS transport is warranted, assisting the ambulance unit in packaging the patient.

Technical Rescue Services Program

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with four firefighters, shall be 7 minutes. The first-due unit shall be capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all technical rescue incidents, the total response time for the arrival of the ERF, staffed with 13 firefighters and officers, shall be 22 minutes". The ERF shall be capable of appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

Hazardous Materials Services Program

For 90 percent of all hazardous materials incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters and one officer, shall be 7 minutes. The first-due unit is capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 15 firefighters and officers, shall be 22 minutes. The ERF is capable of appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident.

Aviation Rescue Fire Fighting (ARFF) Program

Announced ARFF emergencies are those that the crew of the aircraft declares an emergency prior to arriving at an airfield. These incidents allow the crew to take up a prepositioned location and then must be able to reach the aircraft within one minute of the aircraft coming to a complete stop.

For 90 percent of all announced ARFF incidents, the total response time for the arrival of the first-due unit that is staffed with three firefighters shall be one minute. The first-due unit shall be capable of establishing command, sizing up, and assessing the situation to determine the need for additional resources, and, if warranted, taking initial action to combat fire or rescue occupants.

Unannounced ARFF emergencies occur without advance warning or notice. The response time criterion is for an incident that occurs on the installation runways and adjacent airfield areas, such as taxiways and parking aprons.

For 90 percent of all unannounced ARFF incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be five minutes. The first-due unit shall be capable of establishing command, sizing up, and assessing the situation to determine the need for additional resources, and, if warranted, taking initial action to combat fire or rescue occupants.

Wildland Firefighting Program

For 90 percent of all wildland incidents, the total response time for the arrival of the first-due unit shall be 20 minutes with an initial response crew of four firefighters. The first due unit shall be capable of establishing command, sizing up and assessing the need for additional resources, and taking initial actions to combat fire.

For 90 percent of all wildland incidents, the total response time for the arrival of the ERF, staffed with 13 personnel, shall be on scene within 30 minutes. Utilizing the AF Incident Management System, the fire chief or designated senior fire officer (SFO) will become the Initial Attack IC of any wildfire on installation property. The IC will initially size up the incident to determine the safest and most efficient incident action plan to provide maximum protection for the safety of personnel, facilities, and natural resources. When requested by IC, the E-911 Center operator will make notifications to the Bexar County Dispatch Center once size-up information is available. Heavy equipment will be requested for wildfire reports to establish a firebreak around the fire when containment is at risk of expanding beyond perimeters.

Performance Objectives – Baselines

Fire Suppression Services Program

For 90 percent of all fire suppression responses, the total response time for the arrival of the first-due unit, staffed with four firefighters, is 07:21. The first-due unit for all risk levels is capable of providing 500 gallons of water and 1,250 gallons per minute (GPM) pumping capacity; initiating command; requesting additional resources; establishing a back-up line and advancing an attack line, establishing an uninterrupted water supply, containing the fire, rescuing at-risk victims, and performing salvage operations.

For 90 percent of moderate fire suppression responses, the total response time for the arrival of the effective response force (ERF), staffed with 13 firefighters and officers, is 13:38. The ERF for all moderate risk structure fires is capable of establishing command; appointing a site safety officer; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the Occupational Safety and Health Administration (OSHA) requirements of two-in and two-out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; and performing salvage and overhaul.

Emergency Medical Services Program

For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of two firefighters, is 06:14. The first-due unit can assess scene safety and establish command, size up the situation, conduct an initial patient assessment, determine if additional resources are required, obtain vitals and the patient's medical history, provide first responder medical aid including AED, and if BLS transport is warranted, assist the ambulance unit in packaging the patient.

JBSA does not provide patient transport services; therefore, no ERF baseline statements are provided for this program.

Technical Rescue Services Program

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters and one officer, is 06:31. The first-due unit is capable of establishing command, sizing up to determine if a technical rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel.

JBSA had a statistically insignificant number of technical rescue events that required an ERF to provide data, so no ERF baseline statement is provided for this program.

Hazardous Materials Services Program

For 90 percent of all hazardous materials incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters and one officer, is 7:03. The first-due unit is capable of establishing command, sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device, determining the need for additional resources, estimating the potential harm without intervention, and beginning the establishment of a hot, warm, and cold zone.

JBSA had a statistically insignificant number of hazardous materials events that required an ERF to provide data, so no ERF baseline statement is provided for this program.

Aviation Rescue Fire Fighting (ARFF) Program

For 90 percent of all announced ARFF incidents, the total response time for the arrival of the first-due unit that is prepositioned and staffed with three firefighters is 02:56. The first-due unit is capable of establishing command, sizing up and assessing the situation to determine the need for additional resources, and if warranted taking initial action to combat fire or rescue occupants.

For 90 percent of all unannounced airfield rescue and firefighting (ARFF) incidents, the total response time for the arrival of the first-due unit that is prepositioned and staffed with three firefighters is 5:02. The first-due unit is capable of establishing command, sizing up, and assessing the situation to determine the need for additional resources, and if warranted taking initial action to combat fire or rescue occupants.

Wildland Firefighting Program

For 90 percent of all wildland incidents, the total response time for the arrival of the first-due unit, staffed with four personnel, is 19:15. The first due unit is capable of establishing command, sizing up and assessing the need for additional resources, and taking initial actions to combat fire.

JBSA had a statistically insignificant number of wildland fire events that required an ERF to provide data, so no ERF baseline statement is provided for this program.

Performance Gaps – Baseline to Benchmark Time Gap

Fire Suppression Services Program

2021-2023 All Risk Fire Suppression Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	7:21	7:00	00:21
		n=1,811		
ERF	Urban	13:38	12:00	01:38
		n=36		

Emergency Medical Services Program

2021-2023 All Risk EMS Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	6:14	7:00	00:46
		n=7,737		

Technical Rescue Services Program

2021-2023 All Risk Tech Rescue Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	6:31	7:00	00:29
		n=209		

Hazardous Materials Services Program

2021-2023 All Risk Hazmat Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	7:03	7:00	00:03
		n=57		

Aviation Rescue and Firefighting Services

2021-2023 All Risk ARFF Announced Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	2:56	3:00	00:04
		n=227		

2021-2023 All Risk ARFF Unannounced Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	5:02	5:00	00:02
		n=39		

2021-2023 All Risk Wildland Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	19:15	20:00	00:45
		n=52		

Community Areas for Program Delivery and Coverage Improvement

Currently, there are three emergency service programs within JBSA's jurisdiction that pose a challenge in meeting efficient program delivery. The fire suppression program requires improvement to close the 00:21 performance gap for first due and the 01:38 performance gap for ERF that has prevailed for the past three years.

The hazardous materials program requires improvement to close the 00:03 performance gap for the first due that has prevailed for the past three years.

The ARFF unannounced program requires improvement to close the 00:02 performance gap for the first due that has prevailed for the past three years.

Of the nine districts within JBSA's jurisdiction, three districts have posed a challenge in meeting efficient program delivery. Districts 2, 4, and 6 contain most responses that did not meet benchmark response times. Until 2023, District 6 didn't have a fire station and was out of a five-minute travel range for surrounding fire stations to meet response times. Since Station 6 has been put into service, District 6 has met all benchmark standards. Analysis of Districts 2 and 4 shows that current performance gaps exist due to assigned first due apparatus being on another call or being out of district. Additionally, District 4 has a large housing area that resides outside of any fire station's 5-minute travel time.

Recommendations for Improved Effectiveness in Deployment and Coverage

JBSA F&ES has developed five recommendations to improve effectiveness in deployment and coverage for three emergency service programs identified above that have performance gaps.

1. Staff a full-time structural apparatus at Fire Station 2 to meet fire suppression and hazmat responses within District 2.
2. Keep structural apparatus from Fire Station 3 in District 3 (rather than leaving to cover another district) so that fire suppression and hazmat services are provided adequately.
3. Keep structural apparatus from Fire Station 6 in District 6 (rather than leaving to cover another district) so that fire suppression and hazmat services are provided adequately.
4. Move structural apparatus from Fire Station 5 to Fire Station 4 to cover District 4 when the assigned apparatus is on another call.
5. Pursue approval to add a second fire station in the southwest corner of District 4 to cover the housing area that is outside Fire Station 4's five-minute travel radius.

J. Performance Maintenance and Improvement Plans

Compliance Team / Responsibility

The Compliance Team, made up of members from all branches of the organization, plays a crucial role in ensuring adherence to regulations, protocols, and standards. The team is responsible for monitoring and enforcing compliance with local, state, and federal laws related to the fire service. By conducting monthly inspections, audits, and training sessions, the Compliance Team helps maintain a safe environment for both firefighters and the community. The Executive Branch will lead the Compliance Team, and members will hold weekly meetings to ensure that all elements of the agency's compliance standards are upheld. Participation in the compliance program will continuously be encouraged and open to all members of the agency. The Compliance Team will update the Community Risk Assessment/Standards of Cover annually.

Performance Evaluation and Compliance Strategy

The Compliance Team will monitor and formally report its baseline service-delivery performance monthly and provide performance gaps quarterly to the Executive Branch. Additionally, the report should be made available to the department via the JBSA F&ES *SharePoint* page to enhance communication and emphasize performance importance. Regular evaluation of service-level performance will allow the department to develop improvement options throughout the year and provide a sound strategy for constant improvement. The table below lists the various review requirements for the CFAI model, including not just the CRA/SOC but several other review requirements as well.

Table 37: Review Requirements

Requirement	Frequency
Internally report performance data.	Quarterly
Monitor altering conditions in the community.	Annually
Review performance monitoring methodology.	Annually
Determining performance gaps.	Annually
Inform AHJ of performance gaps.	Annually
Review goals and objectives.	Annually
Review system performance and adjust goals and objectives.	Annually
Goals and objectives progress update to AHJ.	Annually
Review financial position and budget execution.	Annually
Conduct independent financial audit.	Annually
Set annual fire loss reduction benchmarks.	Annually
Review COOP.	Annually
Review EMS protocols.	Annually
Review human resources policies.	Annually
Evaluate training materials.	Annually
Review hydrant maps.	Annually
Ensure the adequacy of water system.	Annually
Review time-based dispatch objectives.	Annually
Review external agency performance.	Annually
Conduct program appraisals.	Annually
Meet with external stakeholders.	Every three years
Review financial policies.	Every three years
Review internal policies and procedures.	Every three years
Review all external agency agreements.	Every three years

Compliance Verification Reporting

The Compliance Team's reporting policy and procedures will be outlined in the JBSA F&ES Executive Branch Compliance Program Flight Management Plan (FMP). The Compliance Team will utilize the Baseline Performance Tables in this CRA/SOC to report monthly service-delivery performance and utilize the Performance Gap Tables to report quarterly response time gaps.

Continuous Improvement Strategy

JBSA F&ES performance monitoring methodology is documented in the CRA/SOC. The methodology uses contemporary best practices to assess performance at the 90th percentile for all risk categories and classifications across the total response area to identify areas for improvement. The Compliance Team currently monitors and reports service-delivery performance monthly and provides a quarterly response time gap report. Additionally, the quarterly report provides improvement options to meet expected delivery system outcomes. The Prevention Division uses an Annual Report to identify altering conditions, growth and development trends, and new or changing risks to analyze the balance of service capabilities with new conditions or demands. Monthly performance monitoring provides each service program with the necessary data to conduct the annual program appraisal. The Prevention Division currently assesses the community risk reduction and public education programs annually and considers the impact on incident mitigation program efforts.

JOINT BASE SAN ANTONIO
FIRE & EMERGENCY SERVICES

COMMUNITY RISK ASSESSMENT/STANDARDS OF COVER