

JOINING FORCES

Aligning Community & Military Missions

Technical Appendices

November 2017

Contents

Technical Appendix A. Resources

Technical Appendix B. Compatibility Strategy Menus

Technical Appendix C. Existing Conditions Report

Technical Appendix D. Public Involvement Summary

Technical Appendix E. Land Use Compatibility Assessment Memo

Technical Appendix F. RCC Development Review Tool Memo

Technical Appendix G. Model Energy Infrastructure Permitting Process

Technical Appendix H. Model UAS Ordinance/Guidelines

Technical Appendix I. Model Military Overlay Zone Ordinance

Technical Appendix J. Model Advisory/Coordinating Body Structure and Bylaws

Technical Appendix K. Stormwater Management Memo

Technical Appendix L. Comprehensive Plan Guidelines

Technical Appendix A.

Resources

Resources:

Department of Defense

[Office of Economic Adjustment](#)

[DoD Siting Clearinghouse](#)

[HUD Noise Abatement and Control](#)

State of Texas

[Texas Military Preparedness Commission](#)

[Texas Military Department](#)

[Texas A&M - Military Land Sustainability Program](#)

North Central Texas Council of Governments

[2016-2017 *Joining Forces* Joint Land Use Study](#)

[Regional Coordination Committee and Prior Compatibility](#)

[RCC Development Review Web Tool](#)

[Aviation Planning and Education](#)

[*integrated* Stormwater Management \(iSWM™\)](#)

Ark-Tex Council of Governments

[Ark-Tex Council of Governments](#)

Regional and Local Compatibility Plans and Policies

Agency/Jurisdiction	Plan or Code
City of Benbrook	2008 JLUS
	PLMC
	NAS Overlay District
	Building Code
City of Fort Worth	Comprehensive Plan
	Building Code
	2008 JLUS
	PLMC
	Naval Air Station/JRB Compatible Use Zones Airport Overlay
City of Lake Worth	2008 JLUS
	PLMC
City of River Oaks	2008 JLUS
	PLMC
	State Highway 199 (SH 199) Master Plan
	State Highway 183 (SH 183) Corridor Master Plan
City of Sansom Park	2008 JLUS
	PLMC
City of Westworth Village	2008 JLUS
	PLMC
	Building Regulations
City of White Settlement	2008 JLUS
	PLMC
NCTCOG	2008 JLUS
	PLMC
	SH 199 Corridor Master Plan
	SH 183 Corridor Master Plan

Agency/Jurisdiction	Plan or Code
Tarrant County	2008 JLUS PLMC
City of Dallas	Airport Noise Contours and Airport Height Overlay Hensley Field (Redmond Taylor Army Heliport or RTAHP) Avigation Easement Building Code and One- and Two-family Dwelling Code

Technical Appendix B.

Compatibility Strategy Menus

Compatibility Strategy Menu - Regional

The table describes the recommended strategies and actions for partners in the *Joining Forces* region to enhance compatibility of land uses around military installations, as well as recommendations for continued cooperation on a range of issues. These actions and strategies respond to issues and opportunities (listed below) identified by elected officials, Department of Defense (DoD) staff, and other stakeholders. These strategies typically address compatibility issues that are common across all of the region's installations and their impacts cross jurisdictional boundaries. As a result, these strategies must draw from the support of multiple federal, state, local, and private sector actors.

Issues/Opportunities:

- Declines in regional air quality could trigger air pollution control measures and reduce flexibility to expand aircraft operations due to emissions limits (**Air Quality**)
- Drones/unmanned aircraft systems (UAS) can create physical hazards, such as midair strikes with aircraft; pose security and safety threats to military installations; or interrupt training flights and operations (**Aviation and Airspace Safety**)
- There is no established mechanism for regular communication among all installations and defense communities in North Texas (**Communication and Coordination**)
- Energy-related infrastructure, including utility-scale wind and solar, transmission lines, and gas wells, can create aviation hazards or interfere with air traffic control and onboard aircraft radar systems (**Energy Infrastructure and Statewide Policy/Legislative Actions**)
- The Electric Reliability Council of Texas (ERCOT) has implemented a Planning Guide policy that requires any Interconnecting Entity to certify that it has notified the DoD Siting Clearinghouse of a proposed generation resource and requested an informal or formal review (**Energy Infrastructure and Statewide Policy/Legislative Actions**)
- Less utilized facilities in the region offer opportunities for better coordination and the sharing of military resources across installations (**Military Plans/Operations and Statewide Policy/Legislative Actions**)
- Installations around the region, particularly Naval Air Station (NAS) Fort Worth Joint Reserve Base (JRB), periodically receive complaints about noise that does not originate from their operations (**Noise Management/Avoidance**)

- Counties in the State of Texas lack zoning authority and are thus less able to shape compatible development patterns on unincorporated land near military installations (**Statewide Policy/Legislative Actions**)
- Texas State House and Senate have passed House Bill (HB) 890, which requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest compatibility studies (**Communication and Coordination** and **Statewide Policy/Legislative Actions**)

Summary of High Priority and Short-term Actions – *Joining Forces* Region

Category	Strategy
Airspace	Conduct educational outreach with communities to increase awareness of the security and safety risks associated with UAS operations near airfields and military facilities and offer technical assistance to local law enforcement agencies to identify and prevent unauthorized or unsafe drone use in the community
Communication	Build on existing coordination bodies, such as the NCTCOG’s RCC and the TCC to create a region-wide forum for communication and advocacy of the military missions, assets, and installations across North Texas and participate in statewide JLUS coordination: <ul style="list-style-type: none">• Convene a yearly forum of <i>Joining Forces</i> military and community stakeholders to communicate updates in missions and operational activities, identify common interests and available resources, and jointly pursue legislative and funding opportunities• Participate in statewide JLUS coordination efforts
Energy	Establish guidelines to promote an early notification and consultation process in which local governments provide regular updates on the siting of energy and communications infrastructure near military installations and aviation training areas within their jurisdictions
Energy	Through coordination with installations, the Texas Commanders Council, and Texas Military Preparedness Commission, conduct early outreach with energy developers and regulators during the project planning phase to increase awareness of potential compatibility challenges and offer technical guidance and resources to develop appropriate mitigation and alternate siting strategies that reduce the impacts of energy infrastructure on military operations
Statewide Policy/Legislative	Actively pursue state legislation that enables local governments to implement targeted land use controls on unincorporated land in specified proximity to military installations and training areas: <ul style="list-style-type: none">• Meet with administrative staff of area legislators and discuss the sponsorship and drafting of proposed legislation to mitigate the impact of incompatible development and practices on military operations• Prepare to provide expert testimony during Legislative Session

Regional Compatibility Strategies – *Joining Forces* Region

Strategy	Partners	Area	Priority	Time Frame
Air Quality				
Track future air emissions associated with military aircraft operations in the region as part of compliance with National Ambient Air Quality Standards (NAAQS)	Lead: NCTCOG, NAS Fort Worth JRB Supporting: Federal, state, and local regulatory agencies	Designated NAAQS non-attainment area	Medium	Short to Mid
Aviation and Airspace Safety				
Increase awareness of the multiple uses of regional airspace and establish an outreach and educational process to reduce unintentional encroachment by private general aviation airspace users <ul style="list-style-type: none">Conduct specific outreach to general aviation pilots	Lead: NCTCOG, NAS Fort Worth JRB Supporting: FAA, TxDOT, Aviation Division	Airspace in the 16-county region of North Central Texas	High	Short
Track trends in regional airspace use associated with military mission change and/or new aircraft, such as the F-35: <ul style="list-style-type: none">Identify any areas of increasing air traffic volume or conflict, and collaborate with airports and aviation authorities to develop management actions to deconflict congested areas and maximize airspace safety and capacityUpdate the North Central Texas General Aviation and Heliport System Plan with any additional mitigation strategies identified	Lead: NAS Fort Worth JRB, Dallas-Fort Worth International Airport, Dallas Love Field, Dallas Executive Airport, NCTCOG Supporting: FAA, TxDOT, Aviation Division	Airspace in the 16-county region of North Central Texas	High	Short to Mid

Strategy	Partners	Area	Priority	Time Frame
<p>Conduct educational outreach with communities to increase awareness of the security and safety risks associated with UAS operations near airfields and military facilities, and offer technical assistance to local law enforcement agencies to identify and prevent unauthorized or unsafe drone use in the community</p> <ul style="list-style-type: none">Develop educational materials for distribution during the ongoing outreach and implementation phase	<p>Lead: NCTCOG, Military Installations</p> <p>Supporting: Regional Airports, City and County Governments</p>	<p>Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas</p>	<p>High</p>	<p>Short</p>
<p>Develop model UAS guidance and an ordinance for use by local governments to govern the operation of small UAS:</p> <ul style="list-style-type: none">Coordinate with the Federal Aviation Administration (FAA) to ensure that policies are consistent with FAA regulation of national airspace and align with existing pilot and operating rules for small unmanned aircraftExplore provisions related to restrictions on flying UAS near airports and over specified sensitive uses, such as military installations and training activitiesWork with local jurisdictions to promote the implementation of model UAS ordinance provisions and guidelines	<p>Lead: NCTCOG, Military Installations</p> <p>Supporting: FAA, Regional Airports, City and County Governments</p>	<p>Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas</p>	<p>Medium</p>	<p>Short</p>

Strategy	Partners	Area	Priority	Time Frame
Communication and Coordination				
<p>Build on existing coordination bodies, such as NCTCOG’s RCC and the state TCC to create a region-wide forum for communication and advocacy of the military missions, installations, and training assets across North Texas and participate in statewide JLUS coordination:</p> <ul style="list-style-type: none">• Convene a yearly forum of <i>Joining Forces</i> military and community stakeholders to communicate updates in missions and operational activities, identify common interests and available resources, and jointly pursue legislative and funding opportunities• Participate in statewide JLUS coordination efforts• Address the security and safety risks associated with increasing hobbyist UAS activity near airfields or other secure facilities;• Create a region-wide forum for communication and advocacy for compatible development in communities surrounding military installations;• Promote an early notification and consultation process regarding siting of tall structures (e.g. energy and communications infrastructure);• Promote early outreach with energy developers and regulators during the project planning phase to shape compatible siting decisions; and• Actively pursue state legislation that enables local governments to implement targeted land use controls on unincorporated land.	<p>Lead: NCTCOG</p> <p>Supporting: Military Installations, City and County Governments, Texas Military Department, Texas Military Preparedness Commission</p>	<i>Joining Forces</i> region	High	Short

Strategy	Partners	Area	Priority	Time Frame
Coordinate on the use of UAS by local governments for law enforcement purposes or UAS-related business development to ensure safe public and commercial operations near aviation and military training activities: <ul style="list-style-type: none">Collaborate with military installations to identify any specific training and operational areas that are vulnerable to safety and security threats from unauthorized UAS activity	Lead: NCTCOG Supporting: Military Installations, FAA, Regional Airports, City and County Governments	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	Medium	Short
Energy Infrastructure				
Establish guidelines to promote an early notification and consultation process in which local governments provide regular updates on the siting of energy and communications infrastructure near military installations and aviation training areas within their jurisdictions <ul style="list-style-type: none">Promote compliance with ERCOT Declaration of Department of Defense Notification for proposed generating sources	Lead: NCTCOG, City and County Governments Supporting: Military Installations, ERCOT, TMPC, Texas A&M	SUAs, MOAs, MTRs, airfield clearance zones; drop zones; low-level approach and departure paths	High	Short
Through coordination with installations, the Texas Commanders Council, and Texas Military Preparedness Commission, conduct early outreach with energy developers and regulators during the project planning phase to increase awareness of potential compatibility challenges, and offer technical guidance and resources to develop appropriate mitigation and alternate siting strategies that reduce the impacts of energy infrastructure on military operations	Lead: City and County Governments Supporting: NCTCOG, Military Installations, Texas Military Department, TCC, TMPC, Public Utility Commission of Texas, ERCOT	SUAs, MOAs, MTRs, airfield clearance zones; drop zones; low-level approach and departure paths	High	Short

Strategy	Partners	Area	Priority	Time Frame
Create and maintain an accessible regional spatial database to track major physical obstructions and flight hazards, including utility-scale wind and solar infrastructure, transmission lines, gas wells, and communication towers: <ul style="list-style-type: none">Produce maps to highlight the overlap of major infrastructure with key military aviation training areasUse available spatial data to assist in identifying areas where the siting of infrastructure is at risk of contributing to radar interference, aviation hazards, or other incompatibilities with military operations	Lead: NCTCOG Supporting: Military Installations, City and County Governments, FAA	SUAs, MOAs, MTRs, airfield clearance zones; drop zones; low-level approach and departure paths	Medium	Mid
Strengthen the existing DoD Siting Clearinghouse process and advocate for additional federal guidance to assist in developing compatible energy projects: <ul style="list-style-type: none">Encourage energy generation and transmission developers to obtain a Military Impact Statement from the installation or Site Clearinghouse on proposed energy, and/or transmission projects, that are near installations, military flight paths, or may interfere with air traffic control and onboard aircraft radar systems and low-level flightsEncourage the DoD to send proposed energy projects to major military commands and the local installations for early review and that project evaluation integrates existing local government planning processes	Lead: Military Installations Supporting: City and County Governments, Texas Military Department	SUAs, MOAs, MTRs, airfield clearance zones; drop zones; low-level approach and departure paths	Medium	Mid
Land Use				
Develop a toolbox of land use, development, and infrastructure regulatory options available under current State of Texas law to assist county governments in maximizing their ability to shape compatible development patterns in unincorporated areas near military operations	Lead: NCTCOG Supporting: County Governments	SUAs, MOAs, MTRs, airfield clearance zones; drop zones; low-level approach and departure paths	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Noise Management/Avoidance				
Create an internally coordinated noise complaint management process across DoD services in the <i>Joining Forces</i> region to field and document noise complaints: <ul style="list-style-type: none">Share analysis of complaints received with local governments to highlight patterns of noise exposure and areas of sensitivity, and identify opportunities to enhance public outreach and develop appropriate noise mitigation strategies	Lead: NAS Fort Worth JRB Supporting: Fort Wolters, Camp Maxey, RTAHP, City and County Governments	<i>Joining Forces</i> region	Medium	Mid
Statewide Policy/Legislative Actions				
Actively pursue state legislation that enables local governments to implement targeted land use controls on unincorporated land in specified proximity to military installations and training areas: <ul style="list-style-type: none">Meet with administrative staff of area legislators and discuss the sponsorship and drafting of proposed legislation to mitigate the impact of incompatible development and practices on military operationsPrepare to provide expert testimony during Legislative Session	Lead: Military Installations, TCC, NCTCOG Supporting: City and County Governments	<i>Joining Forces</i> region	High	Short

Strategy	Partners	Area	Priority	Time Frame
Actively pursue state legislation to establish a formal process of consultation under which communities notify and seek comment from an installation for a proposed ordinance, rule, plan, or structure that could affect an installation or military training activities: <ul style="list-style-type: none">Meet with administrative staff of area legislators and discuss the sponsorship and drafting of proposed legislation to mitigate the impact of incompatible development and practices on military operationsPrepare to provide expert testimony during Legislative Session	Lead: Military Installations, TCC, NCTCOG Supporting: City and County Governments	<i>Joining Forces</i> region	Medium	Mid
Actively pursue state legislation to create an early notification process to coordinate on the siting of major energy infrastructure projects, such as utility-scale wind and solar farms, transmission lines, and gas wells: <ul style="list-style-type: none">Meet with administrative staff of area legislators and discuss the sponsorship and drafting of proposed legislation to mitigate the impact of incompatible development and practices on military operationsPrepare to provide expert testimony during Legislative SessionMonitor proposed legislation that encourages alternative energy development; collect data to coordinate efforts to prevent siting and development of wind energy facilities near military training areasBuild on data gathering and planning activities of the ERCOT to facilitate statewide coordination between energy developers, regulators and military installations	Lead: Military Installations, TCC, NCTCOG Supporting: City and County Governments, ERCOT	<i>Joining Forces</i> region	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Actively pursue strategic infrastructure or other physical investments to support increased installation capabilities in the <i>Joining Forces</i> region <ul style="list-style-type: none">Explore opportunities to access funding through the Defense Economic Adjustment Assistance Grant Program and the Texas Military Value Revolving Loan Fund	Lead: Military Installations, TCC, NCTCOG Supporting: City and County Governments, Texas Military Department, TMPC	<i>Joining Forces</i> region	Medium	Mid

Abbreviations:

- DoD – Department of Defense
- ERCOT - Electric Reliability Council of Texas
- FAA – Federal Aviation Administration
- JRB – Joint Reserve Base
- MOAs - Military Operating Areas
- MTRs - Military Training Routes
- NAAQS - National Ambient Air Quality Standards
- NAS – Naval Air Station
- NCTCOG – North Central Texas Council of Governments
- RCC - Regional Coordination Committee
- RTAHP – Redmond Taylor Army Heliport
- TCC - Texas Commander’s Council
- TMPC - Texas Military Preparedness Commission
- UAS - Unmanned Aircraft Systems

Time Frame:

- Short** 1 to 2 years
- Mid** 3 to 5 years
- Long** 5+ years

Compatibility Strategy Menu – Fort Wolters and Communities

The table describes the recommended strategies for Fort Wolters and civilian organizations to continue enhancing compatibility of land uses around Fort Wolters, as well as recommendations for strengthening cooperation on a range of issues. These actions respond to issues and opportunities (listed below) identified by elected officials, Department of Defense (DoD) staff, and other community stakeholders. The menus organize strategies with the highest priority and shorter-term actions at the top of each category followed by less critical and longer-term measures. Partners should revisit the menu to adapt strategies in response to local conditions, available resources, and changing needs and priorities.

Issues/Opportunities:

- Drones/unmanned aircraft systems (UAS) can create physical hazards, such as midair strikes with aircraft, or pose security and safety threats to military installations (**Aviation and Airspace Safety**)
- There are no formal channels of communication and coordination between Fort Wolters and surrounding communities and a desire for increased military-civilian outreach and coordination (**Communication and Coordination**)
- State, federal, and local entities manage significant land and water resources near *Joining Forces* installations. Changes in ownership or use of resources potentially could alter known compatibility impacts on military operations (**Communication and Coordination**)
- Less utilized facilities in the region offer opportunities for better coordination and sharing of military resources among installations. Communities around Fort Wolters indicated a desire to accommodate expanded military and defense-related operations and economic activity (**Economic Development**)
- Energy-related infrastructure, including utility-scale wind and solar, transmission lines, and gas wells can create aviation hazards near military airfields and MTRs and interfere with air traffic control and onboard aircraft radar systems (**Energy Infrastructure**)
- The presence of rural lands, working farms, and sensitive environmental resources near Fort Wolters offers opportunities to establish conservation partnerships and create natural buffers around military operations (**Environmental/Cultural Resources**)

- Military training, including the use of vehicles, equipment, and ordnance, can contribute to a higher risk of wildfires and resulting safety threats to life and property (**Fire Management**)
- The presence of parks, lakes, detention ponds, sanitary landfills, or certain crops near airfields can attract birds and increase the risk of bird/aircraft strikes (**Land Use**)
- Local government plans set a policy framework for detailed compatibility actions. Some local government comprehensive or strategic planning studies, particularly older documents, lack specific language on compatibility with military installations (**Local Government Plans**)
- Changes in missions or aircraft operational levels or mix can produce new noise, safety, or other impacts on surrounding areas (**Military Plans/Operations**)
- Installations in the region host significant training activity by visiting military units. A lack of familiarity with nearby areas off the installation may contribute to increased noise or safety exposure during training (**Military Plans/Operations**)
- The presence of scattered, unexploded ordnance in areas around Fort Wolters can create a safety risk in surrounding communities (**Military Plans/Operations**)
- Sound attenuation construction practices and energy efficient design can reduce indoor noise exposure from nearby military training activity (**Noise Management/Avoidance**)
- Military installations in the region currently implement a range of avoidance and mitigation strategies to reduce aircraft noise exposure in surrounding areas (**Noise Management/Avoidance**)
- Light pollution and glare from lighting applications and digital billboards can interfere with pilot vision and the use of night-vision training devices (**Outdoor Lighting/Signs**)
- Adjoining recreational amenities increase the risk of trespass onto military lands (**Physical Security**)
- Deficiencies in condition and/or capacity in the transportation network surrounding installations can affect the movement of military personnel or equipment and increase safety risks for all users (**Transportation**)

Summary of High Priority and Short Term Actions – Fort Wolters and Communities

Category	Strategy
Airspace	Identify specific off-installation aviation and range training areas vulnerable to security and safety threats from UAS activity
Communication and Coordination	Continue briefings with regional partners to build support and strengthen engagement in ongoing <i>Joining Forces</i> compatibility activities
Communication and Coordination	Create formal, ongoing channels of communication and coordination between Fort Wolters and local communities to exchange information on major community actions and military operations that have potential compatibility impacts
Communication and Coordination	Develop outreach materials to include information on mission, economic impact, and clear points of contact at Fort Wolters, as well as a map highlighting general operational impacts such as noise in surrounding communities
Communication and Coordination	Establish a formal coordination process with the entities that manage Lake Mineral Wells State Park to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on Fort Wolters operations
Communication and Coordination	Support implementation of Texas House Bill (HB) 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or Joint Land Use Study (JLUS) ¹
Economic Development	Identify strategic investments, such as improvements in infrastructure to support a potential increase in installation capabilities at Fort Wolters and/or compatible re-use of the Fort Wolters Industrial Park:
Energy	<div>Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity<ul style="list-style-type: none">Coordinate to ensure that Fort Wolters and Naval Air Station (NAS) Fort Worth Joint Reserve Base (JRB) receive updated mapping of the location of energy infrastructure</div>
Land Use	Explore use of State of Texas authority to establish a Joint Airport Zone (JAZ) Board to prevent aviation related hazards around Fort Wolters
Military Plans	Collaborate with local communities to reinforce existing safety and reporting guidelines in the event of discovery of unexploded ordnance on off-installation land
Physical Security	Coordinate with Lake Mineral Wells State Park on security issues, and enhance outreach to recreational users on the safety risks associated with trespass onto Fort Wolters

¹ Effective 9/1/17, Texas State House and Senate have passed HB 890, which requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest Air Installation Compatible Use Zone (AICUZ) or JLUS

Compatibility Strategies – Fort Wolters and Communities

Strategy	Partners	Area	Priority	Time Frame
Aviation and Airspace Safety				
Identify specific aviation and range training areas vulnerable to security and safety threats from UAS activity	Lead: Fort Wolters, NAS Fort Worth JRB Supporting: City of Mineral Wells, Palo Pinto County, Parker County, Local Airports	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	High	Short
Communication and Coordination				
Continue briefings with regional partners to build support and strengthen engagement in ongoing <i>Joining Forces</i> compatibility implementation activities	Lead: NCTCOG Supporting: City and County Governments	Palo Pinto and Parker Counties and Municipalities	High	Short
Create formal, ongoing channels of communication and coordination between Fort Wolters and local communities to exchange information on major community actions and military operations that have potential compatibility impacts	Lead: Fort Wolters, City of Mineral Wells Supporting: NCTCOG, Texas Military Department, Parker County, Palo Pinto County	Palo Pinto and Parker Counties and Municipalities	High	Short
Develop outreach materials to include information on mission, economic impact, and clear points of contact at Fort Wolters, as well as map of general operational impacts such as noise in surrounding communities	Lead: Fort Wolters, Texas Military Department Supporting: NCTCOG, City of Mineral Wells, Palo Pinto County, Parker County	Palo Pinto and Parker Counties and Municipalities	High	Short

Strategy	Partners	Area	Priority	Time Frame
Establish a formal coordination process with the entities that manage Lake Mineral Wells State Park to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on Fort Wolters operations	Lead: Fort Wolters, Texas Military Department Supporting: USACE, Texas Parks and Wildlife Department	Areas of Fort Wolters with adjacency to Lake Mineral Wells State Park	High	Short
Support implementation of HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or JLUS	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, NCTCOG, Texas Military Department	Palo Pinto and Parker Counties and Municipalities	High	Short
Conduct at least an annual briefing in partner communities to increase awareness of missions, training schedules and special exercises, and any foreseeable operational changes or training workload	Lead: Fort Wolters, Texas Military Department	Palo Pinto and Parker Counties and Municipalities	Medium	Mid
Conduct on-installation visits, “field trips,” and open houses on an annual basis to increase awareness of the military mission among the public, key stakeholders, and representatives of <i>Joining Forces</i> partner entities	Lead: Fort Wolters, Texas Military Department	Palo Pinto and Parker Counties and Municipalities	Medium	Mid
Invite military representatives to sit as non-voting members of city and county advisory bodies and commissions	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters	Palo Pinto and Parker Counties and Municipalities	Low	Mid

Strategy	Partners	Area	Priority	Time Frame
Prepare and distribute a “welcome packet” with information on base background, mission, and operations for incoming residents to promote an understanding of operations and potential impacts	Lead: Fort Wolters, Texas Military Department Supporting: City of Mineral Wells, Palo Pinto County, Parker County	Areas with adjacency to range and airfield: airfield clearance zones; drop zones; low-level approach and departure paths; Surface Danger Zone; and/or specified distance from installation boundary	Low	Long
Economic Development				
Identify strategic investments, such as improvements in infrastructure to support a potential increase in installation capabilities at Fort Wolters and/or compatible re-use of the Fort Wolters Industrial Park: <ul style="list-style-type: none">Encourage partnerships between military representatives and local economic development organizations, such as the Chamber of Commerce, to identify complementary defense-related spin-off private sector industries that can be recruited to the communityConduct a follow up study to determine the feasible and compatible use of Fort Wolters Industrial Park facilitiesCapitalize on resources at Mineral Wells Airport as an asset for military aviation training	Lead: City of Mineral Wells Supporting: Fort Wolters, Texas Military Department, Mineral Wells Area Chamber of Commerce, NAS Fort Worth JRB	City of Mineral Wells	High	Mid

Strategy	Partners	Area	Priority	Time Frame
Energy Infrastructure				
Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that Fort Wolters and NAS Fort Worth JRB receive updated mapping of the location of energy infrastructure	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Forth Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	High	Short
Establish a formal local permitting/siting process for proposed energy projects that explicitly considers vertical intrusion, radar interference, visual distraction, or other potential impacts on military training and operations	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: NCTCOG, Fort Wolters, Texas Military Department, NAS Forth Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Environmental/Cultural Resources				
<p>Collaborate with conservation partners, non-profit groups, and research entities to identify areas with an overlap of military impact (e.g. noise or safety risk) and natural/working lands/cultural value that thus may be candidates for easement or fee-simple purchases through the Readiness and Environmental Protection Initiative (REPI)/Army Compatible Use Buffer (ACUB), and the Sentinel Landscapes Partnership</p> <ul style="list-style-type: none">Establish a regional partnership or partner with land trusts or research entities to conduct analyses of landscapes and working lands and identify appropriate management strategies, including potential management partnerships with willing landownersIncrease landowner awareness of available programs, such as easements, tax incentives, beginning farmer and rancher grant and loan programs, and local food systems, that support the economic viability and continued operation of existing farms and ranches	<p>Lead: Fort Wolters, Texas Military Department</p> <p>Supporting: Natural Resources Conservation Service, Texas A&M University, Texas A&M AgriLife Extension Service; U.S. Fish & Wildlife Service, DoD</p>	<p>Conservation lands as identified near Fort Wolters</p>	<p>Medium</p>	<p>Mid</p>
Fire Management				
<p>Build on ongoing partnerships to coordinate fire prevention and suppression strategies, including the implementation of fire breaks near training lands to reduce the risk of the spread of wildfires onto or off of the installation</p>	<p>Lead: Fort Wolters</p> <p>Supporting: Texas Forest Service, Natural Resources Conservation Service; U.S. Fish & Wildlife Service</p>	<p>Areas with adjacency to Fort Wolters range training operations</p>	<p>Medium</p>	<p>Mid</p>

Strategy	Partners	Area	Priority	Time Frame
Land Use				
Explore use of State of Texas authority to establish a JAZ Board to prevent aviation-related hazards around Fort Wolters	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Forth Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	High	Short
Work with Fort Wolters to develop a voluntary memorandum of agreement that establishes an area of joint consultation related to changes in military operations and proposed local ordinances, rules, plans, or structures that could create compatibility issues	Lead: City of Mineral Wells, Palo Pinto County, Parker County, Fort Wolters Supporting: Texas Military Department, NCTCOG	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	Medium	Mid
Reduce bird attraction by 1) establishing siting and design standards for uses, such as detention ponds, sanitary landfills, and crops in areas subject to low-level flights, and 2) coordinating on Bird/Animal Aircraft Strike Hazard (BASH) measures with resource management entities	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Forth Worth JRB, Texas Parks and Wildlife Department	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Use capital improvement planning and infrastructure system requirements to shape growth patterns and promote less dense, compatible development in areas exposed to military operational impacts, such as noise and safety risks	Lead: City of Mineral Wells Supporting: Palo Pinto County, Parker County	Areas with adjacency to range and airfield: airfield clearance zones; drop zones; low-level approach and departure paths; Surface Danger Zone; and/or specified distance from installation boundary	Low	Long
Local Government Plans				
Invite military and other <i>Joining Forces</i> partners to participate in local planning and development advisory bodies and major plan updates and amendments, including Comprehensive Plans; neighborhood or corridor plans in areas of sensitivity; and transportation, infrastructure, and natural resource plans	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department	Palo Pinto and Parker Counties and Municipalities	Medium	Mid
Incorporate compatibility in future Comprehensive Plans; sector, neighborhood and corridor plans; and other policy documents, including references to compatibility with Fort Wolters operations, maps, and recommendations identified in the JLUS	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department	Palo Pinto and Parker Counties and Municipalities	Low	Long

Strategy	Partners	Area	Priority	Time Frame
Military Plans/Operations				
Collaborate with local communities to reinforce existing safety and reporting guidelines in the event of discovery of unexploded ordnance on off-installation land	Lead: Fort Wolters, Texas Military Department Supporting: City of Mineral Wells, Palo Pinto County, Parker County	Areas that are the site of former training operations and demonstrate risk of unexploded ordnance based on USACE survey	High	Short
Conduct briefings of visiting military units to increase an understanding of training impacts, such as noise or military vehicle convoys on surrounding areas and promote compliance with existing mitigation procedures	Lead: Fort Wolters Supporting: Texas Military Department	Areas with adjacency to Fort Wolters range training and aviation operations	Medium	Short
Conduct additional analysis as necessary to reflect potentially significant changes in noise, safety, or other operational impacts associated with new military missions or aircraft	Lead: Fort Wolters, Texas Military Department, NAS Forth Worth JRB Supporting: City of Mineral Wells, Palo Pinto County, Parker County	Affected environment as determined by analysis	Low	Long

Strategy	Partners	Area	Priority	Time Frame
Noise Management/Avoidance				
Continue managing off-installation aviation noise impacts through feasible operational or timing adjustments that will not negatively affect training or readiness to reduce noise exposure on local communities and sensitive locations	Lead: Fort Wolters, NAS Fort Worth JRB Supporting: Texas Military Department	Areas exposed to operational noise, including areas in proximity to the airfield, range and drop zones	Medium	Mid
Adopt sound attenuation building standards and/or energy efficiency practices to achieve indoor noise reduction in the construction of sensitive receptors, such as housing, schools, or medical facilities within noise zones associated with range and airfield operations	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: NCTCOG	Areas exposed to operational noise, including areas near the airfield, range and drop zones	Low	Long
Connect homeowners and other noise sensitive receptors to available resources, such as weatherization and energy efficiency programs that offer guidance and incentives for the energy efficient retrofitting of structures	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: NCTCOG, Texas State Energy Conservation Office	Areas exposed to operational noise, including areas in proximity to the airfield, range and drop zones	Low	Long

Strategy	Partners	Area	Priority	Time Frame
Outdoor Lighting/Signs				
Explore dark-sky provisions that require or promote the use of fully shielded, cut-off outdoor lighting applications for major new developments (e.g. commercial, industrial uses, airports and airfields, outdoor sports stadiums) near military airfields	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Fort Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure path	Medium	Mid
Coordinate with Fort Wolters on the siting and design of digital billboards in airfield flight paths to reduce visual distraction of pilots	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Fort Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure path	Low	Short
Encourage the retrofitting of older, large-scale unshielded lighting applications (e.g. big-box commercial, major industrial uses, airports and airfields, outdoor sports stadiums) through an outreach campaign and use of energy efficiency incentives	Lead: City of Mineral Wells, Palo Pinto County, Parker County Supporting: Fort Wolters, Texas Military Department, NAS Fort Worth JRB	Airfield clearance zones; drop zones; low-level approach and departure path	Low	Long
Physical Security				
Coordinate with Lake Mineral Wells State Park on security issues, and enhance outreach to recreational users on the safety risks associated with trespass onto Fort Wolters	Lead: Fort Wolters, Texas Military Department Supporting: Texas Parks and Wildlife Department	Areas of Fort Wolters with adjacency to public lands	High	Short

Strategy	Partners	Area	Priority	Time Frame
Explore opportunities to enhance installation perimeter security and entry control points at Fort Wolters <ul style="list-style-type: none">Conduct community outreach on the safety and security risks associated with trespass onto Fort Wolters	Lead: Fort Wolters, Texas Military Department Supporting: City of Mineral Wells, Palo Pinto County, Parker County	Areas of Fort Wolters with adjacency to public lands or public access points	Medium	Mid
Transportation				
Identify any strategic upgrades or improved maintenance necessary to ensure the safety and adequacy of the supporting road network surrounding Fort Wolters	Lead: NCTCOG, TxDOT Supporting: Fort Wolters, City of Mineral Wells, Palo Pinto County, Parker County	Areas of Fort Wolters with adjacency to public lands or public access points	Low	Long

Abbreviations:

ACUB - Army Compatible Use Buffer	MTRs - Military Training Routes
AICUZ – Air Installation Compatible Use Zone	NAS – Naval Air Station
BASH - Bird/Animal Aircraft Strike Hazard	NCTCOG – North Central Texas Council of Governments
DoD – Department of Defense	RCC - Regional Coordination Committee
FAA – Federal Aviation Administration	REPI - Readiness and Environmental Protection Initiative
FCC – Federal Communications Commission	TCC - Texas Commander’s Council
HB – House Bill	TxDOT - Texas Department of Transportation
JAZ - Joint Airport Zone	UAS - Unmanned Aircraft Systems
JLUS – Joint Land Use Study	USACE – U.S. Army Corps of Engineers
JRB – Joint Reserve Base	
MOAs - Military Operating Areas	

Time Frame:

Short	1 to 2 years
Mid	3 to 5 years
Long	5+ years

Compatibility Strategy Menu – Camp Maxey and Communities

The table describes the recommended strategies for Camp Maxey and civilian organizations to continue enhancing compatibility of land uses around Camp Maxey, as well as recommendations for strengthening cooperation on a range of issues. These actions respond to issues and opportunities (listed below) identified by elected officials, Department of Defense (DoD) staff, and other community stakeholders. The menus organize strategies with the highest priority and shorter-term actions at the top of each category followed by less critical and longer-term measures. Partners should revisit the menu to adapt strategies in response to local conditions, available resources, and changing needs and priorities.

Issues/Opportunities:

- Drones/unmanned aircraft systems (UAS) can create physical hazards, such as midair strikes with aircraft, or pose security and safety threats to military installations (**Aviation and Airspace Safety**)
- Civilian aircraft regularly fly over the eastern portion of the installation, creating potential conflicts with firing range activities (**Aviation and Airspace Safety**)
- There are no formal channels of communication and coordination between Camp Maxey and surrounding communities, and there is a desire for increased military-civilian outreach and coordination (**Communication and Coordination**)
- State, federal, and local entities manage significant land and water resources near *Joining Forces* installations. Changes in ownership or use of resources could potentially alter known compatibility impacts on military operations (**Communication and Coordination**)
- Less utilized facilities in the region offer opportunities for better coordination and sharing of military resources across installation boundaries. Communities around Camp Maxey indicated a desire to accommodate expanded military and defense-related operations and economic activity (**Economic Development**)
- Energy-related infrastructure, including utility-scale wind and solar, transmission lines, and gas wells, can create aviation hazards near military airfields and Military Training Routes (MTRs) and interfere with air traffic control and onboard aircraft radar systems (**Energy Infrastructure**)
- The presence of rural lands, working farms, and sensitive environmental resources near Camp Maxey offers opportunities to establish conservation partnerships and create natural buffers around military operations (**Environmental/Cultural Resources**)

- Military training, including the use of vehicles, equipment, and ordnance, can contribute to a higher risk of wildfires and resulting safety threats to life and property (**Fire Management**)
- The presence of parks, lakes, detention ponds, sanitary landfills, or certain crops near airfields can attract birds and increase the risk of bird/aircraft strikes (**Land Use**)
- Local government plans set a policy framework for detailed compatibility actions. Some local government comprehensive or strategic planning studies, particularly older documents, lack specific language on compatibility with military installations (**Local Government Plans**)
- Changes in missions or aircraft operational levels or mix can produce new noise, safety, or other impacts on surrounding areas (**Military Plans/Operations**)
- Installations in the region host significant training activity by visiting military units. A lack of familiarity with nearby areas off the installation may contribute to increased noise or safety exposure during training (**Military Plans/Operations**)
- Sound attenuation construction practices and energy efficient design can reduce indoor noise exposure from nearby military training activity (**Noise Management/Avoidance**)
- Military installations in the region currently implement a range of avoidance and mitigation strategies to reduce aircraft noise exposure in surrounding areas (**Noise Management/Avoidance**)
- Light pollution and glare from lighting applications and digital billboards can interfere with pilot vision and the use of night-vision training devices (**Outdoor Lighting/Signs**)
- Hunters entering from adjacent recreational lands regularly trespass onto Camp Maxey lands, presenting a danger to themselves, as well as Soldiers in the training areas (**Physical Security**)
- Multiple entities use an on-base road built for the City of Paris' use, creating potential conflicts with training activities (**Physical Security**)
- Deficiencies in condition and/or capacity in the transportation network surrounding installations can affect the movement of military personnel or equipment and increase safety risks for all users (**Transportation**)
- Lack of signs can make the installation difficult to locate for visiting Guard members; in addition, better signs would alert the general public to the existence of Camp Maxey (**Transportation**)
- Traffic associated with the mulch plant near Camp Maxey's main gate has increased substantially, creating conflicts with gate traffic (**Transportation**)

Summary of High Priority and Short Term Actions – Camp Maxey and Communities

Category	Strategy
Airspace	Identify specific aviation and range training areas vulnerable to security and safety threats from unauthorized UAS activity
Airspace	Work with local airports, and conduct outreach to the general aviation community to communicate safety risks to low-flying aircraft during active range operations and prevent unauthorized overflight near Camp Maxey
Communication and Coordination	Create formal, ongoing channels of communication and coordination between Camp Maxey and local communities to exchange information on major community actions and military operations that have potential compatibility impacts
Communication and Coordination	Develop outreach materials to include information and a map highlighting mission, economic impact, potential operational or safety issues in surrounding communities, and clear points of contact at Camp Maxey
Communication and Coordination	Establish a formal coordination process with the entities that manage Pat Mayse Lake reservoir and Wildlife Management Area to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on Camp Maxey operations
Communication and Coordination	Support implementation of Texas House Bill (HB) 890 by ensuring the ready availability of compatibility-related studies, such as the most recent Air Installation Compatible Use Zone (AICUZ) and/or Joint Land Use Study (JLUS) ¹
Energy	Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that Camp Maxey receives updated mapping of the location of energy infrastructure
Land Use	Coordinate with the State Legislature and Lamar County representatives to establish the legal authority to implement land use controls that promote compatibility on unincorporated lands near critical Camp Maxey operations
Physical Security	Coordinate with Pat Mayse Lake reservoir and Wildlife Management Area on security issues and enhance outreach to recreational users on the safety risks associated with trespass onto Camp Maxey

¹ Effective 9/1/17, Texas State House and Senate have passed HB 890, requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest AICUZ or JLUS

Category	Strategy
Physical Security	<div>Work with the USACE to explore strategies to reduce the risk of trespass by:</div> <ul style="list-style-type: none">Moving the Camp Maxey boundary north to the lake, thus eliminating hunting at the northern installation boundary and helping to improve anti-trespass enforcement; ORBanning hunting (and restricting other access) to the area between Camp Maxey and the lake
Physical Security	Coordinate maintenance of city road on Camp Maxey and regulate use to reduce potential trespass and safety conflicts with training operations

Revised Compatibility Strategies – Camp Maxey and Communities

Strategy	Partners	Area	Priority	Timeframe
Aviation and Airspace Safety				
Identify specific aviation and range training areas vulnerable to security and safety threats from unauthorized UAS activity	Lead: Camp Maxey Supporting: City of Paris, Lamar County, Local Airports	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	High	Short
Work with local airports and conduct outreach to the general aviation community to communicate safety risks to low-flying aircraft during active range operations and prevent unauthorized overflight near Camp Maxey	Lead: Camp Maxey Supporting: City of Paris, Lamar County, FAA, NCTCOG, Local Airports, General Aviation Organizations	Lamar County and Municipalities	High	Short
Communication and Coordination				
Create formal, ongoing channels of communication and coordination between Camp Maxey and local communities to exchange information on major community actions and military operations that have potential compatibility impacts	Lead: Camp Maxey, City of Paris, Lamar County Supporting: Texas Military Department, Red River Veterans Authority, Ark-Tex Council of Governments (COG)	Lamar County and Municipalities	High	Short
Develop outreach materials to include information and a map highlighting mission, economic impact, potential operational or safety issues in surrounding communities, and clear points of contact at Camp Maxey	Lead: Camp Maxey Supporting: Texas Military Department, Red River Veterans Authority, City of Paris, Lamar County	Lamar County and Municipalities	High	Short

Strategy	Partners	Area	Priority	Timeframe
Establish a formal coordination process with the entities that manage Pat Mayse Lake reservoir and Wildlife Management Area to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on Camp Maxey operations	Lead: Camp Maxey, Texas Military Department Supporting: USACE, Texas Parks and Wildlife Department	Areas of Camp Maxey with adjacency to Pat Mayse Lake reservoir and Wildlife Management Area	High	Short
Support implementation of Texas HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or JLUS	Lead: City of Paris, Lamar County Supporting: RTAHP, NCTCOG, Ark-Tex COG	Lamar County and Municipalities	High	Short
Conduct at least an annual briefing in partner communities to increase awareness of missions, training schedules and special exercises, and any foreseeable operational changes or training workload	Lead: Camp Maxey Supporting: Texas Military Department, Red River Veterans Authority	Lamar County and Municipalities	Medium	Mid
Conduct on-installation visits, “field trips,” and open houses on an annual basis to increase awareness of the military mission among the public, key stakeholders, and representatives of <i>Joining Forces</i> partner entities	Lead: Camp Maxey Supporting: Texas Military Department, Red River Veterans Authority	Lamar County and Municipalities	Medium	Mid
Invite military representatives to sit as non-voting members of city and county advisory bodies and commissions	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department	Lamar County and Municipalities	Medium	Mid

Strategy	Partners	Area	Priority	Timeframe
Prepare and distribute a “welcome packet” with information on base background, mission, and operations for incoming residents to promote an understanding of operations and potential impacts	Lead: Camp Maxey, Texas Military Department Supporting: City of Paris, Lamar County	Areas with adjacency to range and airfield: airfield clearance zones; drop zones; low-level approach and departure paths; Surface Danger Zone; and/or specified distance from installation boundary	Low	Long
Economic Development				
Identify strategic investments, such as improvements in surrounding infrastructure to support a potential increase in installation capabilities at Camp Maxey: <ul style="list-style-type: none">Encourage partnerships between military representatives and local economic development organizations, such as the Chamber of Commerce, to identify complementary defense-related spin-off private sector industries that can be recruited to the community	Lead: City of Paris Supporting: Camp Maxey, Texas Military Department, Paris Chamber of Commerce and other nearby Chambers; Paris Economic Development Corporation	City of Paris	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Energy Infrastructure				
Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that Camp Maxey receives updated mapping of the location of energy infrastructure	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department, Cox Field	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	High	Short
Establish a formal local permitting/siting process for proposed energy projects that explicitly considers vertical intrusion, radar interference, visual distraction, or other potential impacts on military training and operations	Lead: Lamar County Supporting: Camp Maxey, Texas Military Department	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield and range training areas	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Environmental/Cultural Resources				
<p>Drawing from City of Paris’ Evaluation of all Natural and Man-Made Resources, collaborate with conservation partners, non-profit groups, and research entities to identify areas with an overlap of military impact (e.g. noise or safety risk) and natural/working /cultural value that thus may be candidates for easement or fee-simple purchases through the Readiness and Environmental Protection Initiative (REPI)/Army Compatible Use Buffer (ACUB), and Sentinel Landscapes Partnership</p> <ul style="list-style-type: none">Establish a regional partnership or partner with land trusts or research entities to conduct analysis of landscapes and working lands and identify appropriate management strategies, including potential management partnerships with willing landownersIncrease landowner awareness of available programs, such as easements, tax incentives, beginning farmer and rancher grant and loan programs, local food systems, that support the economic viability and continued operation of existing farms and ranches	<p>Lead: Camp Maxey, Texas Military Department</p> <p>Supporting: Natural Resources Conservation Service, Texas A&M University, Texas A&M AgriLife Extension Service; U.S. Fish & Wildlife Service, DoD</p>	<p>Conservation lands as identified near Camp Maxey</p>	<p>Low</p>	<p>Long</p>
Fire Management				
<p>Build on ongoing partnerships to coordinate on fire prevention and suppression strategies, including the implementation of fire breaks near training lands to reduce the risk of the spread of wildfires onto or off of the installation</p>	<p>Lead: Camp Maxey</p> <p>Supporting: Texas Forest Service, Natural Resources Conservation Service; City of Paris, Lamar County</p>	<p>Areas with adjacency to Camp Maxey range training operations</p>	<p>Medium</p>	<p>Mid</p>

Strategy	Partners	Area	Priority	Time Frame
Land Use				
Coordinate with the State Legislature and Lamar County representatives to establish the legal authority to implement land use controls that promote compatibility on unincorporated lands near critical Camp Maxey operations	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department, NCTCOG	Areas with adjacency to range and airfield: airfield clearance zones; drop zones; low-level approach and departure paths; Surface Danger Zone; and/or specified distance from installation boundary	High	Low
Work with Camp Maxey to develop a voluntary memorandum of agreement that establishes an area of joint consultation related to changes in military operations and proposed local ordinances, rules, plans, or structures that could create compatibility issues	Lead: City of Paris, Lamar County, Camp Maxey Supporting: Texas Military Department, NCTCOG	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	High	Mid

Strategy	Partners	Area	Priority	Time Frame
Reduce bird attraction by 1) establishing siting and design standards for uses, such as detention ponds, sanitary landfills, and crops in areas subject to low-level flights and 2) coordinating on Bird/Animal Aircraft Strike Hazard (BASH) measures with resource management entities	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department, U.S. Army Corps of Engineers, Texas Parks and Wildlife Department	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	High	Mid
Explore use State of Texas authority to establish a Joint Airport Zone (JAZ) Board to prevent aviation-related hazards around Camp Maxey	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department	Airfield clearance zones; drop zones; low-level approach and departure paths; and/or specified distance from airfield	High	Mid

Strategy	Partners	Area	Priority	Time Frame
Use capital improvement planning and infrastructure system requirements to shape growth patterns and promote less dense, compatible development in areas exposed to military operational impacts, such as noise and safety risks	Lead: City of Paris Supporting: Lamar County	Areas with adjacency to range and airfield: airfield clearance zones; drop zones; low-level approach and departure paths; Surface Danger Zone; and/or specified distance from installation boundary	Medium	Long
Local Government Plans				
Coordinate with Pat Mayse Lake reservoir and Wildlife Management Area on security issues and enhance outreach to recreational users on the safety risks associated with trespass onto Camp Maxey	Lead: Camp Maxey, Texas Military Department Supporting: Texas Parks and Wildlife Department	Areas of Camp Maxey with adjacency to public lands	High	Short

Strategy	Partners	Area	Priority	Time Frame
Invite military and other <i>Joining Forces</i> partners to participate in local planning and development advisory bodies and major plan updates and amendments, including Comprehensive Plans, neighborhood or corridor plans in areas of sensitivity, and transportation, infrastructure, and natural resource plans	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department	Lamar County and Municipalities	Medium	Mid
Incorporate compatibility in a future Comprehensive Plan, sector, neighborhood and corridor plans, and other policy documents, including references to compatibility with Camp Maxey operations, maps, and recommendations identified in the JLUS	Lead: City of Paris, Lamar County Supporting: Camp Maxey, Texas Military Department	Lamar County and Municipalities	Low	Long
Military Plans/Operations				
Conduct briefings of visiting military units to increase the understanding of training impacts, such as noise or military vehicle convoys, on surrounding areas and promote compliance with existing mitigation procedures	Lead: Camp Maxey Supporting: Texas Military Department	Areas with adjacency to Camp Maxey range training and aviation operations	Medium	Short

Strategy	Partners	Area	Priority	Time Frame
Explore opportunities to enhance installation perimeter security and entry control points at Camp Maxey <ul style="list-style-type: none">Conduct community outreach on the safety and security risks associated with trespass onto Camp Maxey	Lead: Camp Maxey, Texas Military Department Supporting: City of Paris, Lamar County	Areas of Camp Maxey with adjacency to public lands or public access points	Medium	Mid
Conduct additional environmental analysis as necessary to reflect potentially significant changes in noise, safety, or other operational impacts associated with new military missions or aircraft <ul style="list-style-type: none">Use Geographic Information System (GIS) department within the Change Center of Command to provide analysis of any environmental impact that is due to military operations	Lead: Camp Maxey, Texas Military Department Supporting: City of Paris, Lamar County	Affected environment as determined by analysis	Low	Long
Physical Security				
Coordinate maintenance of easement road on Camp Maxey and regulate use to reduce trespass and safety conflicts with training operations	Lead: Camp Maxey, City of Paris Supporting: Texas Military Department	Camp Maxey	High	Short
Work with the USACE to explore strategies to reduce the risk of trespass by: <ul style="list-style-type: none">Moving the Camp Maxey boundary north to the lake, thus eliminating hunting at the northern installation boundary and helping to improve anti-trespass enforcement; ORBanning hunting (and restricting other access) to the area between Camp Maxey and the lake	Lead: Camp Maxey, Texas Military Department Supporting: USACE	Areas of Camp Maxey with adjacency to public lands	High	Short

Strategy	Partners	Area	Priority	Time Frame
Explore opportunities to enhance installation perimeter security and entry control points at Camp Maxey <ul style="list-style-type: none">Conduct community outreach on the safety and security risks associated with trespass onto Camp Maxey	Lead: Camp Maxey, Texas Military Department Supporting: City of Paris, Lamar County	Areas of Camp Maxey with adjacency to public lands or public access points	Medium	Mid
Transportation				
Add directional signs and “Military Entrance Ahead” signs to increase awareness of Camp Maxey, facilitate access, and reduce safety risks and conflicts during military convoys	Lead: TxDOT, Lamar County Supporting: Camp Maxey, Texas Military Department	Areas of Camp Maxey with adjacency to public access points	Medium	Short
Develop an access plan for Camp Maxey, including intersection improvements to manage commercial and installation traffic	Lead: TxDOT, Lamar County Supporting: Camp Maxey, Texas Military Department	Areas of Camp Maxey with adjacency to public access points	Medium	Mid
Identify any strategic upgrades or improved maintenance necessary to ensure the safety and adequacy of the supporting road network surrounding Camp Maxey	Lead: Ark-Tex Council of Governments, TxDOT Supporting: Camp Maxey, City of Paris, Lamar County	Areas of Camp Maxey with adjacency to public access points	Low	Long

Abbreviations:

ACUB - Army Compatible Use Buffer	MTRs - Military Training Routes
AICUZ - Air Installation Compatible Use Zone	NCTCOG – North Central Texas Council of Governments
COG - Council of Governments	REPI - Readiness and Environmental Protection Initiative
DoD – Department of Defense	RCC - Regional Coordination Committee
FAA – Federal Aviation Administration	RTAHP – Redmond Taylor Army Heliport
FCC – Federal Communications Commission	TCC - Texas Commander’s Council
GIS - Geographic Information System	TxDOT - Texas Department of Transportation
HB – House Bill	UAS - Unmanned Aircraft Systems
JAZ - Joint Airport Zone	USACE - U.S. Army Corps of Engineers
JLUS – Joint Land Use Study	
MOAs - Military Operating Areas	

Time Frame:

Short	1 to 2 years
Mid	3 to 5 years
Long	5+ years

Compatibility Strategy Menu – Naval Air Station Forth Worth Joint Reserve Base and Communities

The table describes the recommended strategies for Naval Air Station (NAS) Forth Worth Joint Reserve Base (JRB) and civilian organizations to continue enhancing compatibility of land uses around the base, as well as recommendations for strengthening cooperation on a range of issues. These actions respond to issues and opportunities (listed below) identified by elected officials, Department of Defense (DoD) staff, and other community stakeholders. The menus organize strategies with the highest priority and shorter-term actions at the top of each category followed by less critical and longer-term measures. Partners should revisit the menu to adapt strategies in response to local conditions, available resources, and changing needs and priorities.

Issues/Opportunities:

- High levels of commercial and general aviation activity from the Dallas-Fort Worth International Airport, Dallas Love Field, and other regional airports can create areas of aircraft congestion, increasing safety risks and constraining available airspace capacity (**Aviation and Airspace Safety**)
- Drones/unmanned aircraft systems (UAS) can create physical hazards, such as midair strikes with aircraft, pose security and safety threats to military installations, or interrupt training flights and operations (**Aviation and Airspace Safety and Communication and Coordination**)
- Actions implemented since the 2008 Joint Land Use Study (JLUS)¹ and 2013 Planning for Livable Military Communities create a knowledge base to promote ongoing compatibility efforts across the region (**Communication and Coordination**)
- Consistent, active use of the existing Regional Coordination Committee (RCC) Development Review Web Tool among stakeholders would assist in promoting compatibility for proposed projects and broader long-term planning actions around NAS Fort Worth JRB (**Communication and Coordination**)

¹ Effective 9/1/17, Texas State House and Senate have passed HB 890 requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest AICUZ or JLUS

- Residential turnover, and infill and redevelopment opportunities in communities around NAS Fort Worth JRB could bring new residents unfamiliar with military operations close to active training. Lack of familiarity can contribute to an increased perception of nuisance during flight operations (**Communication and Coordination**)
- Texas State House and Senate have passed House Bill (HB) 890, which requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest compatibility studies (**Communication and Coordination** and **Statewide Policy/Legislative Actions**)
- State, federal, and local entities manage significant land and water resources near *Joining Forces* installations. Changes in ownership or use of resources could potentially alter known compatibility impacts on military operations (**Communication and Coordination**)
- Energy-related infrastructure, including utility-scale wind and solar, transmission lines, and gas wells can create aviation hazards near military airfields and Military Training Routes (MTRs), and interfere with air traffic control and onboard aircraft radar systems (**Energy Infrastructure**)
- The Electric Reliability Council of Texas (ERCOT) has implemented a Planning Guide policy that requires any Interconnecting Entity to certify that it has notified the DoD Siting Clearinghouse of a proposed generation resource and requested an informal or formal review (**Energy Infrastructure**)
- Increasing competition for frequency spectrum reduces the availability of bandwidth for military use (**Frequency and Spectrum Management**)
- Areas of higher aircraft accident risk and high average levels of aircraft noise extend from NAS Fort Worth JRB into surrounding communities. A lack of aviation-specific regulatory overlays in some areas may leave land vulnerable to future development or redevelopment that is potentially incompatible with safety risks and noise issues (**Land Use**)
- The presence of nature reserves, detention ponds, or sanitary landfills near airfields can attract birds and increase the risk of bird/aircraft strikes (**Land Use**)
- Local government plans set a policy framework for detailed compatibility actions. Some local government comprehensive planning studies, particularly older documents, lack specific language on compatibility with military installations (**Local Government Plans**)

- Changes in missions or aircraft operational levels or mix can produce new noise, safety, or other impacts on surrounding areas (**Military Plans/Operations**)
- Sound attenuation construction practices and energy efficient design can reduce indoor noise exposure from nearby military training activity (**Noise Management/Avoidance**)
- Military installations in the region currently implement a range of avoidance and mitigation strategies to reduce aircraft noise in surrounding areas (**Noise Management/Avoidance**)
- Lockheed Martin conducts flight testing, which can generate noise impacts on surrounding areas, particularly during aircraft hovering (**Noise Management/Avoidance**)
- NAS Fort Worth JRB aircraft generate noise impacts, including supersonic booms, that can affect communities underlying the Brady and Brownwood Military Operation Areas (MOAs) (**Noise Management/Avoidance**)
- Light pollution and glare from lighting applications and digital billboards can interfere with pilot vision and the use of night-vision training devices (**Outdoor Lighting/Signs**)
- Adjoining recreational amenities increase the risk of trespass onto military lands (**Physical Security**)
- North Central Texas Council of Governments (NCTCOG) and local communities have undertaken numerous studies and projects to enhance transportation access to NAS Fort Worth JRB and improve the function of area roadways (**Transportation**)

Summary of High Priority and Short Term Actions – NAS Forth Worth JRB and Communities

Category	Strategy
Airspace	Identify specific aviation areas vulnerable to security and safety threats from unauthorized UAS activity
Communication and Coordination	Incorporate stakeholder feedback to identify improvements to the RCC Development Review Web Tool to ensure continuity in use and enhance its effectiveness as a coordination and communication platform
Communication and Coordination	Support implementation of HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or JLUS
Communication and Coordination	Prepare and distribute a “welcome packet” with information on base background, mission, and operations for incoming residents to promote an understanding of operations and potential impacts
Communication and Coordination	Create a Technical Subcommittee of the RCC to share best practices and assist in the implementation of changes to the RCC Development Review Tool
Energy	Coordinate on the siting of energy infrastructure, complementary to state policy and legislation, to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that NAS Fort Worth JRB receives updated mapping of the location of energy infrastructurePromote use of the RCC tool to facilitate coordination in the siting of energy infrastructure
Land Use	Explore adoption of a land use/development regulatory overlay to promote compatibility within clearly defined planning zones, including noise contours and airfield Accident Potential Zones
Local Government Plans	Continue to support area development/infill plans and designs that are consistent with the U.S. Navy’s AICUZ land use compatibility guidelines, and maintain safety with aircraft operations along the extended centerline of the assault landing strip on NAS Fort Worth JRB
Noise Management	Adopt sound attenuation building standards and/or energy efficiency practices to achieve indoor noise reduction in the construction of sensitive receptors, such as housing, schools, or medical facilities within noise zones associated with range and airfield operations
Physical Security	Coordinate with RCC members to reduce the risk of trespass onto NAS Fort Worth JRB from Lake Worth or other areas around the installation’s perimeter

Category	Strategy
Stormwater	<p>Strengthen awareness and promote the implementation of <i>integrated</i> stormwater management (iSWM) strategies and Low Impact Development (LID) techniques to reduce flooding risks across the watershed</p> <ul style="list-style-type: none">• Conduct community outreach on the effects of additional impervious areas on stormwater quality and quantity• Connect communities and private sector developers with informational resources on iSWM and LID techniques• Develop an outline for a Stormwater Master Plan using iSWM and LID components for use by city and county governments• Highlight regional best practice examples of iSWM/LID techniques• Encourage creation of stream buffers, the preservation of open space, and limitations on clearing and grading to enhance natural drainage functions• Build on the efforts of the Countywide Watershed Management Roundtable to facilitate continued regional dialogue on stormwater issues and strategies
Stormwater	<p>Enforce National Flood Insurance Program (NFIP) Regulations for the Farmers Branch Watershed to establish freeboard requirements above Federal Emergency Management Agency (FEMA) Base Flood Elevation (BFE)</p> <ul style="list-style-type: none">• Require developments to file a Letter of Map Revision (LOMR) if a project effects the established FEMA BFE
Stormwater	<p>Increase the capacity and function of existing stormwater infrastructure through the re-grading of ditches and cleaning out culverts along highway corridors and the implementation of engineering improvements in storm drain inlets and upstream and on-system capture areas</p> <ul style="list-style-type: none">• Clearly define ongoing operation and maintenance responsibilities
Transportation	<p>Continue implementing priority transportation and mobility projects to enhance access around NAS Fort Worth JRB and surrounding communities, including planned improvements to Meandering Road and the State Highway (SH) 183 and SH 199 corridors</p>

Compatibility Strategies - NAS Fort Worth JRB and Communities

Strategy	Partners	Area	Priority	Time Frame
Aviation and Airspace Safety				
Identify specific aviation areas vulnerable to security and safety threats from unauthorized UAS activity, and coordinate with regional and local government efforts to create appropriate UAS ordinance adhering to relevant federal and state regulations	Lead: NAS Fort Worth JRB Supporting: City and County Governments	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from airfield	High	Short
Communication and Coordination				
Incorporate stakeholder feedback to identify improvements to the RCC Development Review Web Tool to ensure continuity in use and enhance its effectiveness as a coordination and communication platform	Lead: NCTCOG Supporting: NAS Fort Worth JRB, Municipalities, Tarrant County	Tarrant County and Municipalities	High	Short
Support implementation of HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or JLUS <ul style="list-style-type: none">Pursue legislation with TCC and Texas Military Preparedness Commission (TMPC) for adding new development and commercial development as part of the military disclosure process created by HB 890	Lead: Municipalities, Tarrant County Supporting: Greater Fort Worth Association of REALTORS®, NCTCOG, TCC, TMPC, Military Installations	Tarrant County and Municipalities	High	Short
Prepare and distribute a “welcome packet” with information on base background, mission, and operations for incoming residents to promote an understanding of operations and potential impacts	Lead: Municipalities, NAS Fort Worth JRB Supporting: NCTCOG, Tarrant County	Areas inside AICUZ; and/or specified distance from installation boundary	High	Short

Create a Technical Subcommittee of the RCC to share best practices and assist in the implementation of changes to the RCC Development Review Tool	Lead: Municipalities, NAS Fort Worth JRB Supporting: NCTCOG, Tarrant County	Areas inside AICUZ; and/or specified distance from installation boundary	High	Short
Update existing community outreach materials on compatibility to identify emerging issues, such as UAS operations and energy development	Lead: NAS Fort Worth JRB, NCTCOG Supporting: Municipalities, Tarrant County	Tarrant County and Municipalities	Medium	Short
Tailor communication and outreach to concentrations of vulnerable population groups, such as senior citizens, lower-income households, or households with limited English proficiency, based on spatial analysis of noise and safety impacts and population demographics	Lead: NCTCOG Supporting: Municipalities, Tarrant County, NAS Fort Worth JRB	Tarrant County and Municipalities	Medium	Short
Maintain an ongoing inventory of military-civilian compatibility actions implemented within the region to demonstrate best practices for knowledge sharing within the region <ul style="list-style-type: none">Develop and report on metrics to track progress in promoting compatible growth	Lead: NCTCOG Supporting: Municipalities, Tarrant County, NAS Fort Worth JRB	Tarrant County and Municipalities	Medium	Short
Establish a formal coordination process with the entities that manage the Lake Worth reservoir to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on NAS Fort Worth JRB operations <ul style="list-style-type: none">Incorporate Lake Worth Watershed Greenprint findings and recommendations to maintain buffers around the installationExplore Readiness and Environmental Protection Integration (REPI)-based opportunities to create buffers around the base and Lake Worth	Lead: NAS Fort Worth JRB, City of Lake Worth, City of Fort Worth Supporting: NCTCOG	Areas of NAS Fort Worth with adjacency to public access points	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Energy Infrastructure				
Coordinate on the siting of energy infrastructure, complementary to state policy and legislation, to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that NAS Fort Worth JRB receives updated mapping of the location of energy infrastructurePromote use of the RCC tool to facilitate coordination in the siting of energy infrastructure	Lead: Municipalities, Tarrant County Supporting: NAS Fort Worth JRB, NCTCOG	SUAs; MOAs; MTRs; Areas inside AICUZ; and/or specified distance from installation	High	Short
Establish a formal local permitting/siting process for proposed energy projects that explicitly considers vertical intrusion, radar interference, visual distraction, or other potential impacts on military training and operations	Lead: Municipalities Supporting: NAS Fort Worth JRB, NCTCOG, Tarrant County	SUAs; MOAs; MTRs; Areas inside AICUZ; and/or specified distance from installation	Medium	Mid
Environmental/Cultural Resources				
Explore REPI Program projects within areas around the main base or/and near off-base training areas: <ul style="list-style-type: none">Identify potential areas for land preservation and conservation programs through partnerships with installation and land conservation organizations, and land trust agencies to initiate land acquisition and military bufferingAlign possible REPI areas with regional and local conservation priorities or opportunities for the voluntary acquisition of land in airfield Clear Zones, Accident Potential Zones, AICUZ, and other training areasMeet with stakeholders to introduce conservation objectives, partnerships, and benefits to the community and base	Lead: NAS Fort Worth JRB Supporting: Natural Resources Conservation Service, Texas A&M University, Texas A&M AgriLife Extension Service; U.S. Fish & Wildlife Service, DoD, City and County Governments	Conservation lands as identified near NAS Fort Worth JRB or off base training areas	Medium	Short

Strategy	Partners	Area	Priority	Time Frame
Frequency and Spectrum Management				
Identify “Exclusion Zones” for military Navigational Aid (NAVAID) protection to assist local governments in siting decisions: <ul style="list-style-type: none">Provide guidelines and maps of exclusion zones and notification areas to city and county governments and relevant state agenciesPursue implementation of guidelines and exclusion zones in local zoning codePursue state legislation to support notification areas	Lead: NAS Fort Worth JRB Supporting: Muncipalities, Tarrant County, NCTCOG	Designated Exclusions Zones as identified	High	Mid
Land Use				
Explore adoption of a land use/development regulatory overlay to promote compatibility within clearly defined planning zones, including noise contours, and airfield Accident Potential Zones	Lead: Muncipalities Supporting: NCTCOG, Tarrant County	Areas inside AICUZ	High	Short to Mid
Reduce bird attraction by 1) establishing siting and design standards for uses, such as detention ponds, sanitary landfills, and crops in areas subject to low-level flights, 2) planting of vegetation and habitats compatible with missions at base, and 3) coordinating on Bird/Animal Aircraft Strike Hazard (BASH) measures with resource management entities <ul style="list-style-type: none">Coordinate with dredging operators in the Lake Worth area to ensure that any future dredging activities are scheduled and planned to minimize BASH occurrences; e.g., avoid dredging during winterContinue approved/appropriate maintenance and trimming of vegetation and trees within and around property boundaryCoordinate with business owners adjacent to the installation to ensure debris and trash are properly covered	Lead: Muncipalities Supporting: NAS Fort Worth JRB, Tarrant County, NCTCOG	Areas inside AICUZ; low-level approach and departure paths; and/or specified distance from airfield	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Use capital improvement planning and infrastructure system requirements to shape growth patterns and promote less dense, compatible development or infill redevelopment in areas exposed to military operational impacts, such as noise and safety risks	Lead: Municipalities Supporting: Tarrant County, NCTCOG, NAS Fort Worth JRB	Tarrant County and Municipalities	Medium	Long
Explore feasibility of the voluntary acquisition of land in airfield Clear Zones and Accident Potential Zones	Lead: Municipalities Supporting: NAS Fort Worth JRB, Tarrant County, NCTCOG	Airfield Clear Zones and Accident Potential Zones	Low	Long
Local Government Plans				
Continue to support area development/infill plans and designs that are consistent with the U.S. Navy’s Air Installation Compatible Use Zone (AICUZ) land use compatibility guidelines, and maintain safety with aircraft operations along the extended centerline of the assault landing strip on NAS Fort Worth JRB	Lead: City of Fort Worth Supporting: NCTCOG, NAS Fort Worth JRB	City of Fort Worth	High	Short
Continue to implement the recommendations in the Planning for Livable Military Communities (PLMC) document	Lead: Municipalities, Tarrant County Supporting: NCTCOG, NAS Fort Worth JRB	Tarrant County and Municipalities	Medium	Mid
Incorporate compatibility in updates of Comprehensive Plans; sector, neighborhood, and corridor plans; and other policy documents, including references to compatibility with NAS Fort Worth JRB, maps, and recommendations identified in the JLUS or other plans, such as PLMC	Lead: Municipalities, Tarrant County Supporting: NCTCOG, NAS Fort Worth JRB	Tarrant County and Municipalities	Medium	Mid
Military Plans/Operations				
Conduct additional analysis as necessary to reflect potentially significant changes in noise, safety, or other operational impacts associated with new military missions or aircraft	Lead: NAS Fort Worth JRB Supporting: Municipalities, Tarrant County	Affected environment as determined by analysis	Medium	Long

Strategy	Partners	Area	Priority	Time Frame
Noise Management/Avoidance				
Adopt sound attenuation building standards and/or energy efficiency practices to achieve indoor noise reduction in the construction of sensitive receptors, such as housing, schools, or medical facilities within noise zones associated with range and airfield operations	Lead: Municipalities, Tarrant County Supporting: NCTCOG	Areas inside AICUZ	High	Short to Mid
Continue managing off-installation aviation noise impacts through feasible operational or timing adjustments that will not negatively affect training or readiness to reduce noise exposure on local communities and sensitive locations	Lead: NAS Fort Worth JRB	SUAs; MOAs; MTRs; Areas inside AICUZ	Medium	Short
Conduct additional outreach on noise impacts in affected communities underlying MOAs and MTRs	Lead: NAS Fort Worth JRB Supporting: Municipalities and Counties	Brady and Brownwood MOAs	Medium	Mid
Explore development of an incentive program, in partnership with the business community, to offer assistance (either grants or low-interest loans) to low- and moderate-income homeowners and other noise sensitive receptors to retrofit structures to provide sound attenuation	Lead: NCTCOG Supporting: Municipalities, Tarrant County, HUD, private sector	Areas inside AICUZ	Medium	Mid
Establish a sound mitigation certification program and certification program for homebuilders to promote implementation of noise attenuation construction practices	Lead: NCTCOG Supporting: Municipalities, Tarrant County, private sector	Areas inside AICUZ	Medium	Mid
Connect homeowners and other noise sensitive receptors to available resources, such as weatherization and energy efficiency programs, that offer guidance and incentives for the energy efficient retrofitting of structures	Lead: Municipalities, Tarrant County Supporting: NCTCOG, Texas State Energy Conservation Office	Areas inside AICUZ	Low	Mid

Strategy	Partners	Area	Priority	Time Frame
Outdoor Lighting/Signs				
Explore dark-sky provisions that require or promote the use of fully shielded, cut-off outdoor lighting applications for major new developments (e.g. commercial, industrial uses, airports and airfields, outdoor sports stadiums) near military airfields	Lead: Municipalities, Tarrant County Supporting: NAS Fort Worth JRB	Areas inside AICUZ; low-level approach and departure path	High	Medium
Coordinate with military installations on the siting and design of digital billboards and light-emitting diode (LED) lighting in airfield flight paths to reduce visual distraction of pilots	Lead: Municipalities, Tarrant County Supporting: NAS Fort Worth JRB	Areas inside AICUZ; low-level approach and departure paths	Medium	Short
Encourage the retrofitting of older, large-scale unshielded lighting applications (e.g. big-box commercial, major industrial uses, airports and airfields, outdoor sports stadiums) through an outreach campaign and use of energy efficiency incentives	Lead: Municipalities, Tarrant County Supporting: NAS Fort Worth JRB	Areas inside AICUZ; low-level approach and departure paths	Low	Long
Physical Security				
Explore opportunities to enhance installation perimeter security and entry control points at NAS Fort Worth JRB <ul style="list-style-type: none">Coordinate with RCC members to reduce the risk of trespass onto NAS Fort Worth JRB from Lake Worth or other areas around the installation’s perimeterConduct community outreach on the safety and security risks associated with trespass on NAS Fort Worth JRB, including the prohibition of photography or any other recording of imagery of base property	Lead: Municipalities, Tarrant County Supporting: NAS Fort Worth JRB	Areas of NAS Fort Worth, JRB with adjacency to public lands or public access points	Medium	Mid

Strategy	Partners	Area	Priority	Time Frame
Stormwater/Drainage				
<p>Strengthen awareness and promote the implementation of iSWM strategies and LID techniques to reduce flooding risks across the watershed</p> <ul style="list-style-type: none">Conduct community outreach on the effects of additional impervious areas on stormwater quality and quantityConnect communities and private sector developers with informational resources on iSWM and LID techniquesDevelop an outline for a Stormwater Master Plan using iSWM and LID components for use by city and county governmentsHighlight regional best practice examples of iSWM/LID techniquesEncourage creation of stream buffers, the preservation of open space, and limitations on clearing and grading to enhance natural drainage functionsBuild on the efforts of the Countywide Watershed Management Roundtable to facilitate continued regional dialogue on stormwater issues and strategies	<p>Lead: NCTCOG</p> <p>Supporting: Municipalities, Tarrant County</p>	<p>Watershed</p>	<p>High</p>	<p>Short</p>
<p>Increase the capacity and function of existing stormwater infrastructure through the re-grading of ditches and cleaning out culverts along highway corridors and the implementation of engineering improvements in storm drain inlets and upstream and on-system capture areas</p> <ul style="list-style-type: none">Clearly define ongoing operation and maintenance responsibilities	<p>Lead: TxDOT, City of White Settlement, City of Fort Worth</p> <p>Supporting: Tarrant County</p>	<p>Watershed</p> <p>NAS Fort Worth JRB</p>	<p>High</p>	<p>Short to Mid</p>

Strategy	Partners	Area	Priority	Time Frame
Enhance erosion control to assist in maintaining the function and capacity of stormwater infrastructure through the use of measures, including: <ul style="list-style-type: none">Drop structuresBaffle blocksRock riprap downstream of culverts and bridge abutmentsConcrete line ditches	Lead: TxDOT, City of White Settlement, City of Fort Worth Supporting: Tarrant County, NAS Fort Worth JRB	Watershed NAS Fort Worth JRB	High	Short to Mid
Conduct a detailed hydrology and hydraulic study for the Farmers Branch Watershed and NAS Fort Worth JRB by updating the 2005 Section 205 hydrology and hydraulics: <ul style="list-style-type: none">Incorporate best available information from LIDAR and new survey for channels and bridge, culverts and storm drains, overtopping elevations, gutters, flowlines, and pipe invertsUse the analysis to set higher design standards for state and city facilities, including providing freeboard at roadway crossings	Lead: TxDOT, City of White Settlement, City of Fort Worth Supporting: FEMA, USACE, NCTCOG, Tarrant County, NAS Fort Worth JRB, private sector	Watershed NAS Fort Worth JRB	High	Mid to Long
Maintain pre-development site runoff levels through the use of strategies, including: <ul style="list-style-type: none">Detention ponds or underground storageVegetated swalesRain gardensRe-routing of storm drain systemsMaintenance of green spaceBuyout of properties in floodplains	Lead: FEMA Supporting: Municipalities, Tarrant County, NCTCOG, USACE, private sector	Watershed	Medium	Mid to Long

Strategy	Partners	Area	Priority	Time Frame
Transportation				
Continue implementing priority transportation and mobility projects to enhance access into and around NAS Fort Worth JRB and surrounding communities, including planned improvements to Meandering Road and the SH 183 and 199 corridors	Lead: Municipalities, Tarrant County, NCTCOG, TxDOT Supporting: NAS Fort Worth JRB	Areas of NAS Fort Worth JRB with adjacency to public access points	High	Short to Mid
Alleviate traffic congestion issues on base and in the surrounding communities through measures such as: <ul style="list-style-type: none">Continuing joint coordination of drill weekend schedulesPromoting alternative transportation and flexible work hoursPromoting shuttles to and from the base during drill weekendsSeeking public transportation options to/from Dallas/Fort Worth International AirportOrganizing and promoting incentive programs and transportation alternativesPromoting awareness of existing federal incentive alternative transportation programs and NCTCOG regional transportation programs	Lead: NAS Fort Worth JRB Supporting: Municipalities, Tarrant County, NCTCOG, TxDOT, private sector	Areas of NAS Fort Worth JRB with adjacency to public access points	Medium	Short to Mid

Abbreviations:

AICUZ - Air Installation Compatible Use Zones
BASH - Bird/Animal Aircraft Strike Hazard
BFE - Base Flood Elevation
DoD – Department of Defense
ERCOT - Electric Reliability Council of Texas
FAA – Federal Aviation Administration
FCC – Federal Communications Commission
FEMA - Federal Emergency Management Agency
HB – House Bill
HUD – Department of Housing and Urban Development
JRB - Joint Reserve Base
iSWM - *integrated* Stormwater Management
LED - light-emitting diode (
LID - Low Impact Development
LOMR - Letter of Map Revision
MOAs - Military Operating Areas
MTRs - Military Training Routes
NAS - Naval Air Station
NAVAID - Navigational Aid
NCTCOG – North Central Texas Council of Governments
NFIP - National Flood Insurance Program

PLMC - Planning for Livable Military
Communities
RCC - Regional Coordination Committee
SH – State Highway
SUA – Special Use Airspace
TCC - Texas Commander’s Council
TMPC - Texas Military Preparedness Commission
TxDOT - Texas Department of Transportation
UAS - Unmanned Aircraft Systems
USACE - U.S. Army Corps of Engineers

Time Frame:

Short 1 to 2 years
Mid 3 to 5 years
Long 5+ years

Compatibility Strategy Menu – Redmond Taylor Army Heliport and Communities

The table describes the recommended strategies for Redmond Taylor Army Heliport (RTAHP) and civilian organizations to continue enhancing compatibility of land uses around RTAHP, as well as recommendations for strengthening cooperation on a range of issues. These actions respond to issues and opportunities (listed below) identified by elected officials, Department of Defense (DoD) staff, and other community stakeholders. The menus organize strategies with the highest priority and shorter-term actions at the top of each category followed by less critical and longer-term measures. Partners should revisit the menu to adapt strategies in response to local conditions, available resources, and changing needs and priorities.

Issues/Opportunities:

- High levels of commercial and general aviation activity from the Dallas-Fort Worth International Airport, Dallas Love Field, and other regional airports can create areas of aircraft congestion, increasing safety risks and constraining available airspace capacity. Aviation congestion restricts the use of airspace for RTAHP training operations. (**Aviation and Airspace Safety**)
- Drones/unmanned aircraft systems (UAS) can create physical hazards, such as midair strikes with aircraft, or pose security and safety threats to military installations (**Aviation and Airspace Safety**)
- There is an absence of formal channels of communication and coordination between RTAHP and surrounding communities and a desire for increased military-civilian outreach and coordination (**Communication and Coordination**)
- The City of Dallas has explored re-use opportunities for the Hensley Field site. RTAHP is the “long term” tenant for this portion of Hensley Field with expectation of tenancy to continue until the 2037-39 period (**Communication and Coordination**)
- There is an existing settlement agreement between the City of Dallas and the U.S. Navy that requires the Navy to complete a full soil and water cleanup to residential standards by 2017
- Residential turnover and infill and redevelopment opportunities in communities could bring new residents unfamiliar with military operations close to active training. Lack of familiarity can contribute to an increased perception of nuisance during flight operations (**Communication and Coordination**)

- Texas State House and Senate have passed House Bill (HB) 890, which requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest compatibility studies (**Communication and Coordination** and **Statewide Policy/Legislative Actions**)
- State, federal, and local entities manage significant land and water resources near *Joining Forces* installations. Changes in ownership or use of resources could potentially alter known compatibility impacts on military operations (**Communication and Coordination**)
- Energy-related infrastructure, including utility-scale wind and solar, transmission lines, and gas wells, can create aviation hazards near military airfields and Military Training Routes (MTRs) and interfere with air traffic control and onboard aircraft radar systems (**Energy Infrastructure**)
- Areas of higher aircraft accident risk and high average levels of aircraft noise extend from RTAHP into surrounding communities. The City of Dallas has identified noise contours (indicating areas of higher noise exposure) over Hensley Field, and an avigation easement is in place. (**Land Use**)
- The presence of parks, lakes, detention ponds, or sanitary landfills near airfields can attract birds and increase the risk of bird/aircraft strikes (**Land Use**)
- Local government plans set a policy framework for detailed compatibility actions. Some local government comprehensive planning studies, particularly older documents, lack specific language on compatibility with military installations (**Local Government Plans**)
- Changes in missions or aircraft operational levels or mix can produce new noise, safety, or other impacts on surrounding areas (**Military Plans/Operations**)
- Installations in the region host significant training activity by visiting military units. A lack of familiarity with nearby areas off the installation may contribute to increased noise or safety exposure during training (**Military Plans/Operations**)
- RTAHP helicopter operations generate noise impacts that affect residents in the Redbird community of Dallas and near Dallas Executive Airport (**Noise Management/Avoidance**)
- Sound attenuation construction practices and energy efficient design can reduce indoor noise exposure from nearby military training activity (**Noise Management/Avoidance**)
- RTAHP currently implements a range of avoidance and mitigation strategies to reduce aircraft noise exposure in surrounding areas (**Noise Management/Avoidance**)
- Light pollution and glare from lighting applications and digital billboards can interfere with pilot vision and the use of night-vision training devices (**Outdoor Lighting/Signs**)

- Adjoining recreational amenities and nearby residential areas increase the potential for trespass onto military lands and expose people to safety risks (**Physical Security**)
- Deficiencies in condition and/or capacity in the transportation network surrounding RTAHP can affect the movement of military personnel or equipment and increase safety risks for all users (**Transportation**)
- The need for military personnel to move heavy equipment through the adjacent residential area can be disruptive to residents and harmful to residential streets (**Transportation**)
- The bridge inside the installation gate is aging and may need repair (**Transportation**)

Summary of High Priority and Short Term Actions – RTAHP and Communities

Category	Strategy
Airspace	Identify specific aviation areas vulnerable to security and safety threats from unauthorized UAS activity
Communication and Coordination	Continue briefings with regional partners to build support and strengthen engagement in ongoing <i>Joining Forces</i> compatibility implementation activities
Communication and Coordination	RTAHP to enhance its participation in established channels of communication for major community actions, such as proposed zoning changes, that have potential compatibility impacts: <ul style="list-style-type: none">Leverage relevant existing meetings and communication methods in departments, such as the City of Dallas Real Estate Division of the Sustainable Development and Construction Department and the City of Dallas Aviation Department
Communication and Coordination	Support implementation of HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent Air Installation Compatible Use Zone (AICUZ) and/or Joint Land Use Study (JLUS) ¹
Communication and Coordination	Develop outreach materials to include information on mission, economic impact, and clear points of contact at RTAHP, as well as a map highlighting general operational impacts such as noise in surrounding communities
Communication and Coordination	Support implementation of HB 890 by ensuring the ready availability of compatibility-related studies, such as the most recent AICUZ and/or JLUS
Communication and Coordination	Collaboratively develop a framework for on-site maintenance, infrastructure, and tenant activity that promotes compatible community and military uses at RTAHP
Energy	Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that RTAHP receives updated mapping of the location of energy infrastructure
Noise Management	Use aircraft noise attenuation requirements in the existing building code to promote compatible development within noise contours established for Hensley Field
Noise Management	Consider sound attenuation building standards and/or energy efficiency practices to achieve indoor noise reduction in the construction of sensitive receptors, such as housing, schools, or medical facilities within noise zones
Noise Management	Initiate outreach to neighborhoods experiencing noise impacts from RTAHP operations, including areas in proximity to RTAHP and Dallas Executive Airport

¹ Effective 9/1/17, Texas State House and Senate have passed HB 890, which requires notice to purchasers of real property regarding the impact of military installations; cities and counties must provide access to the latest AICUZ or JLUS

Revised Compatibility Strategies – RTAHP and Communities

Strategy	Partners	Area	Priority	Timeframe
Aviation and Airspace Safety				
Identify specific aviation areas vulnerable to security and safety threats from unauthorized UAS activity	Lead: RTAHP Supporting: City of Dallas, City of Grand Prairie, Dallas County	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from airfield	High	Short
Communication and Coordination				
Continue briefings with regional partners to build support and strengthen engagement in ongoing <i>Joining Forces</i> compatibility implementation activities	Lead: NCTCOG Supporting: City and County Governments	City of Dallas, City of Grand Prairie, Dallas County	High	Short
RTAHP to enhance its participation in established channels of communication regarding major community actions, such as proposed zoning changes, that have potential compatibility impacts: <ul style="list-style-type: none">Leverage relevant existing meetings, communication methods, and points of contact in departments, such as the City of Dallas Real Estate Division of the Sustainable Development and Construction Department, the City of Dallas Aviation Department, the City of Grand Prairie City Council Development Committee, and Real Property at the Texas Military Department	Lead: RTAHP, City of Dallas, City of Grand Prairie Supporting: NCTCOG, Real Property - Texas Military Department, Dallas County	City of Dallas, City of Grand Prairie, Dallas County	High	Short

Strategy	Partners	Area	Priority	Timeframe
Post compatibility-related studies, such as the most recent AICUZ and/or JLUS, on local government websites to comply with HB 890	Lead: NCTCOG Supporting: City of Dallas, City of Grand Prairie, Dallas County, RTAHP, MetroTex Association of REALTORS	City of Dallas, City of Grand Prairie, Dallas County	High	Short
Develop outreach materials to include information on mission, economic impact, and clear points of contact at RTAHP, as well as a map highlighting general operational impacts such as noise in surrounding communities	Lead: RTAHP Supporting: Texas Military Department, NCTCOG, City of Dallas, City of Grand Prairie, Dallas County	City of Dallas, City of Grand Prairie, Dallas County	High	Short
RTAHP to continue communications through contact established in its lease agreement	Lead: RTAHP, City of Dallas, City of Grand Prairie, Dallas County Supporting: NCTCOG, Texas Military Department	RTAP	High	Short to Mid
Work with RTAHP to develop a voluntary memorandum of agreement that establishes joint consultation and communication procedures for changes in military operations and proposed local ordinances, rules, plans or structures that could create compatibility issues	Lead: , City of Grand Prairie, Dallas County Supporting: RTAHP, Texas Military Department, NCTCOG	Areas inside low-level approach and departure paths; and/or specified distance from airfield	Medium	Mid
Conduct at least an annual briefing in partner communities to increase awareness of missions, training schedules and special exercises, and any foreseeable operational changes or training workload	Lead: RTAHP Supporting: Texas Military Department	City of Dallas, City of Grand Prairie, Dallas County	Medium	Mid

Strategy	Partners	Area	Priority	Timeframe
Continue to conduct on-installation visits, “field trips,” and open houses on an annual basis to increase awareness of the military mission among the public, key stakeholders, and representatives of <i>Joining Forces</i> partner entities <ul style="list-style-type: none">Build on existing efforts such as coordination with aviation program at Grand Prairie ISD	Lead: RTAHP Supporting: Texas Military Department	City of Dallas, City of Grand Prairie, Dallas County	Medium	Mid
Prepare and distribute a “welcome packet” with information on base background, mission, and operations for incoming residents to promote an understanding of operations and potential impacts	Lead: RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County	Areas with adjacency to base and airfield: airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	Medium	Mid
Establish a formal coordination process with the entities that manage Mountain Creek Lake to ensure that ongoing operations, management actions, and plans consider environmental and security impacts on RTAHP operations	Lead: RTAHP, Texas Military Department, U.S. Army Corps of Engineers, Texas Parks and Wildlife Department, Excelon Energy Company Supporting: City of Dallas, City of Grand Prairie, Dallas County	Areas of RTAHP with adjacency to public lands	Medium	Mid

Strategy	Partners	Area	Priority	Timeframe
Energy Infrastructure				
Coordinate on the siting of energy infrastructure to reduce safety threats to aviation activity <ul style="list-style-type: none">Coordinate to ensure that RTAHP receives updated mapping of the location of energy infrastructure	Lead: City of Grand Prairie, Dallas County Supporting: RTAHP, NCTCOG	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	High	Short
RTAHP to monitor and comment, as appropriate the permitting and the siting process for proposed energy projects to consider vertical intrusion, radar interference, visual distraction or other potential compatibility impacts on military training and operations.	Lead: RTAHP, NCTCOG Supporting: City of Grand Prairie, Dallas County	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	Medium	Mid
Land Use				
Explore adoption of a land use/development regulatory overlay to promote compatible development within clearly defined planning zones around RTAHP, including noise contours and airfield Accident Potential Zones	Lead: City of Grand Prairie Supporting: RTAHP, NCTCOG	Areas inside noise contours	Medium	Mid
Use existing siting and design standards in the City of Dallas, as well as North Central Texas Council of Governments’ (NCTCOG’s) General Aviation and Heliport System Plan to reduce bird attraction associated with uses, such as detention ponds, sanitary landfills, and crops in low-level flight areas: Coordinate on Bird/Animal Aircraft Strike Hazard (BASH) measures with resource management entities	Lead: City of Dallas, City of Grand Prairie Supporting: RTAHP, NCTCOG, Dallas County	Areas inside low-level approach and departure paths; and/or specified distance from airfield	Medium	Mid
Consider capital improvement planning and infrastructure system requirements that promote compatible development or redevelopment in areas exposed to military operational impacts, such as noise and safety risks	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: NCTCOG	City of Dallas, City of Grand Prairie, Dallas County	Medium	Mid

Strategy	Partners	Area	Priority	Timeframe
Local Government Plans				
Consider Inviting <i>Joining Forces</i> partners, as relevant, to participate as a stakeholder in major plan updates and amendments, including Comprehensive Plans, and area, neighborhood, or corridor plans, which could affect RTAHP operations	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: RTAHP, Texas Military Department	City of Dallas, City of Grand Prairie, Dallas County	High	Short
Consider compatibility in updates of Comprehensive Plans; and area, neighborhood, or corridor plans, which could affect RTAHP operations	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: RTAHP, Texas Military Department	City of Dallas, City of Grand Prairie, Dallas County	High	Ongoing
Military Plans/Operations				
Conduct briefings of visiting military units and U.S. training detachments to increase an understanding of training impacts, such as noise or military vehicle convoys on surrounding areas and promote compliance with existing mitigation procedures	Lead: RTAHP Supporting: Texas Military Department	Areas with adjacency to RTAHP training and aviation operations	Medium	Short
Conduct additional analysis as necessary to provide local governments with information on potentially significant changes in noise, safety, or other operational impacts associated with new military missions or aircraft	Lead: RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County	Affected environment as determined by analysis	Low	Long
Conduct additional analysis as necessary to determine the feasibility of the relocation of the RTAHP military mission to other regional facilities	Lead: RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County	Affected environment as determined by analysis	Low	Long

Strategy	Partners	Area	Priority	Timeframe
Noise Management/Avoidance				
Use aircraft noise attenuation requirements in the existing building code to promote compatible development within noise contours established for Hensley Field	Lead: City of Dallas Supporting: RTAHP	Areas inside noise contours	High	Short
Consider sound attenuation building standards and/or energy efficiency practices to achieve indoor noise reduction in the construction of sensitive receptors, such as housing, schools, or medical facilities within noise zones	Lead: City of Grand Prairie Supporting: RTAHP	Areas inside noise contours	High	Short to Mid
Initiate outreach to neighborhoods experiencing noise impacts from RTAHP operations, including areas in proximity to RTAHP, Dallas Executive Airport, and Midway Regional Airport	Lead: RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County, NCTCOG	Noise contours or other noise exposed training areas	High	Short to Mid
Manage and reduce off-installation aviation noise impacts through feasible operational or timing adjustments that will not negatively affect training or readiness	Lead: RTAHP, Texas Military Department	Noise contours or other noise exposed training areas	Medium	Short
Connect homeowners and other noise sensitive receptors to available resources, such as weatherization and energy efficiency programs, that offer guidance and incentives for the energy efficient retrofitting of structures	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: NCTCOG, Texas State Energy Conservation Office	Noise contours or other noise exposed training areas	Low	Mid

Strategy	Partners	Area	Priority	Timeframe
Outdoor Lighting/Signs				
Explore dark-sky provisions that require or promote the use of fully shielded, cut-off outdoor lighting applications for major new developments (e.g. commercial, industrial uses, airports and airfields, outdoor sports stadiums) near military airfields	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: RTAHP	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	Medium	Mid
Use existing approval processes to coordinate with military installations on the siting and design of digital billboards in airfield flight paths to reduce visual distraction of pilots	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: RTAHP	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	Medium	Short
Encourage the retrofitting of older, large-scale unshielded lighting applications (e.g. big-box commercial, major industrial uses, airports and airfields, outdoor sports stadiums)	Lead: City of Dallas, City of Grand Prairie, Dallas County Supporting: RTAHP	Airfield clearance zones; low-level approach and departure paths; and/or specified distance from installation boundary	Low	Long
Physical Security				
Explore opportunities to enhance installation perimeter security and entry control points at RTAHP <ul style="list-style-type: none">Conduct community outreach on the safety and security risks associated with trespass on RTAHP	Lead: RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County	Areas of RTAHP with adjacency to public lands or public access points	Medium	Mid

Coordinate with Mountain Creek Lake management entities on security issues, and enhance outreach to recreational users on the safety risks associated with trespass onto RTAHP	Lead: RTAHP, Texas Military Department, U.S. Army Corps of Engineers, Texas Parks and Wildlife Department, Excelon Energy Company Supporting: City of Dallas, City of Grand Prairie	Areas of RTAHP with adjacency to public lands or public access points	Medium	Mid
Transportation				
Identify any strategic upgrades or improved maintenance necessary to ensure the safety and adequacy of the supporting road network surrounding RTAHP	Lead: NCTCOG, TxDOT, RTAHP, Texas Military Department Supporting: City of Dallas, City of Grand Prairie, Dallas County	Areas of RTAHP with adjacency to public access points	Medium	Mid
Explore the possibility of moving the entrance gate to the northeast side of RTAHP to enhance safety and reduce conflicts with the surrounding residential neighborhood	Lead: RTAHP, Texas Military Department Supporting: NCTCOG, City of Dallas, City of Grand Prairie	Entry point of RTAHP	Medium	Long

Abbreviations:

AICUZ - Air Installation Compatible Use Zone	NCTCOG – North Central Texas Council of Governments
BASH - Bird/Animal Aircraft Strike Hazard	RCC - Regional Coordination Committee
DoD – Department of Defense	TCC - Texas Commander’s Council
FAA – Federal Aviation Administration	TxDOT - Texas Department of Transportation
FCC – Federal Communications Commission	UAS - Unmanned Aircraft Systems
MOAs - Military Operating Areas	
MTRs - Military Training Routes	

Timeframe:

Short	1 to 2 years
Mid	3 to 5 years
Long	5+ years

Technical Appendix C.

Existing Conditions Report

Table of Contents

Executive Summary C-4

1. Purpose and Background..... C-7

1.1 *Joining Forces* Goals C-7

1.2 Purpose of Existing Conditions Report C-8

1.3 Study Area C-8

1.4 Formal Study PartnersC-13

2. Regional ProfileC-15

2.1 Regional Land Use and Growth TrendsC-15

2.2 Regional Economic ProfileC-19

2.3 Regional Energy InfrastructureC-20

2.4 Regional Environmental ResourcesC-23

2.4.1 Conservation Resources.....C-24

2.4.3 FEMA Flood ZonesC-37

2.4.4 Existing Stormwater Planning StudiesC-38

3. Federal, State, and Regional Policy Context for Compatibility.....C-40

3.1 Federal InitiativesC-40

3.1.1 Joint Land Use Study.....C-40

3.1.2 AICUZ and Encroachment Action PlanC-40

3.1.3 Readiness and Environmental Protection Integration.....C-41

3.1.4 Department of Defense Siting Clearinghouse.....C-43

3.1.5 Unmanned Aircraft System PoliciesC-44

3.2 State ProgramsC-45

3.2.1 Texas Military Preparedness CommissionC-45

3.2.2 Texas MilitaryC-46

3.3 State Regulatory Context.....C-46

3.4 Regional Partnerships.....C-48

3.4.1 North Central Texas Council of GovernmentsC-48

3.4.2 2008 Joint Land Use StudyC-49

3.4.3 Joint Land Use Study ImplementationC-50

4. NAS Fort Worth, Joint Reserve Base ProfileC-53

4.1 HistoryC-53

4.2 Installation Mission and Operations.....C-55

4.3 Initial Compatibility Concerns.....C-56

5. Camp Maxey Training Center ProfileC-58

5.1 HistoryC-58

5.2 Installation Mission and Operations.....C-58

5.3 Initial Compatibility Concerns.....C-60

6. Redmond Taylor Army Heliport ProfileC-63

6.1 HistoryC-63

6.2 Installation Mission and Operations.....C-63

6.3 Initial Compatibility Concerns.....C-64

7. Fort Wolters Training Center Profile.....C-68

7.1 HistoryC-68

7.2 Installation Mission and Operations.....C-69

7.3 Initial Compatibility Concerns.....C-70

8. Ancillary SitesC-73

8.1 Eagle Mountain Lake FacilityC-73

8.2 Colonel Stone Army Reserve Center.....C-75

8.3 Brownwood and Brady Military Operating AreasC-77

9. Community ProfilesC-81

9.1 Overview of Community Plans and Regulatory Policy – NAS Fort Worth, JRBC-82

9.1.1 City of Benbrook.....C-83

9.1.2 City of Fort Worth.....C-84

9.1.3 City of Lake Worth.....C-85

9.1.4 City of River Oaks.....C-86

9.1.5 City of Sansom Park.....C-87

9.1.6 Town of Westover Hills.....C-88

9.1.7 City of Westworth Village.....C-88

9.1.8 City of White Settlement.....C-89

9.1.9 Tarrant County.....C-90

9.2 Overview of Community Plans and Regulatory Policy – Redmond Taylor Army Heliport.....C-92

9.2.1 City of Dallas.....C-92

9.2.2 City of Grand Prairie.....C-93

9.3 Overview of Community Plans and Regulatory Policy – Fort WoltersC-94

9.3.1 City of Mineral Wells.....C-95

9.4.1 Community of Powderly.....C-96

9.4.2 City of ParisC-96

10. Other Study Area Partners.....C-97

10.1 Lockheed MartinC-97

11. Community and Stakeholder EngagementC-99

11.1 Stakeholder Interviews.....C-99

11.2 Public Input Opportunities.....C-101

Executive Summary

The *Joining Forces* Joint Land Use Study (JLUS) is a collaborative process among local, state, and regional jurisdictions; the public; federal, state, and regional agencies; and military installations within the North Texas region. The JLUS will present recommendations for consideration by local and state governments to promote compatible development that protects public health, safety, and welfare, and the ability of the military to accomplish its vital training and operational missions. The study is designed to create dialogue around complex issues such as land use, economic development, infrastructure, environmental sustainability, and the operational demands and mission changes of military entities. The intent of the study is to highlight common interests such as economic growth, more efficient infrastructure, healthier and safer environments, improved quality of life, and the protection of Department of Defense (DoD) and civilian investments.

The Final JLUS Report will provide a series of recommendations to guide future decisions and policy actions by public agencies, military installations, and other *Joining Forces* partners. The purpose of the Existing Conditions Report is to describe the regional military installations and surrounding communities, and identify preliminarily existing compatibility issues within the study area.

The *Joining Forces* study area consists of the major military training facilities and related airspace in the North Texas region and surrounding communities (See **Table 1** and **Figure 1**). Military installations included in the study are Naval Air Station Fort Worth, Joint Reserve Base (NAS Fort Worth, JRB); Redmond Taylor Army Heliport (RTAHP); Fort Wolters Training Center; Camp Maxey Training Center; Eagle Mountain Training Center; Brownwood and Brady Military Operating Areas (MOAs); and Colonel Stone Army Reserve Center. The area surrounding these

facilities encompasses 24,200 square miles, including portions of 18 counties and more than 60 cities or census-designated communities in proximity to military operations. The final JLUS document will produce a tailored set of compatibility recommendations to reflect the diversity of the region and its stakeholders.

Members of the planning team have collected information about existing conditions and plans for all military installations, as well as the major adjacent and affected communities. In addition, team members conducted numerous individual interviews with military and community leaders and held four public meetings in various locations around the region.

This initial investigation has identified the following key themes, as well as compatibility issues for further study in the next phase of the *Joining Forces* process.

- Strong support for the military mission in surrounding communities and an understanding of the positive economic impact of the installations and military missions;
- Relatively few complaints related to existing noise or operational impacts with the exception of specific pockets of noise sensitivity, particularly near RTAHP;
- Recognition that even in mature, stable communities with long-standing ties to the military, residential turnover and infill and redevelopment opportunities could bring new residents unfamiliar with military operations close to active training;
- Lack of county regulatory tools, such as zoning, to address even modest growth on unincorporated land in rural areas;
- Strong westward growth trajectory within the region that could bring new development to previously rural areas surrounding installations and to areas underlying MOAs;
- Effectiveness of existing coordination mechanisms, such as the Regional Coordination Committee Development Review Web Tool and ongoing military outreach around NAS Fort Worth, JRB;

- Successful implementation of zoning overlay tools around NAS Fort Worth, JRB in the Cities of Benbrook and Fort Worth and sound attenuation guidelines in other communities;
- Presence of sensitive environmental resources around Fort Wolters and Camp Maxey and resulting training constraints at Camp Maxey;
- Specific encroachment challenges related to noise, land use, and airspace at RTAHP;
- Absence of formal channels of communication and coordination outside of the NAS Fort Worth, JRB portion of the region and a desire for increased military-civilian outreach and coordination in communities surrounding RTAHP, Camp Maxey, and Fort Wolters;
- Risk of trespass onto military lands from adjoining recreational amenities or residential areas;
- Risk of wildfires around Fort Wolters and Camp Maxey;
- Need for strategies to address emerging challenges related to energy infrastructure siting (wind farms) especially in unincorporated areas and UAS operations near airfields; several cities indicated interest in operating drones for law enforcement or other public purposes;
- Opportunities for better coordination and sharing of military resources across installation boundaries; and
- Support for additional compatibility measures previously identified but not yet implemented, such as Notification agreements by defense communities that propose to adopt or amend an ordinance, rule, or plan that would be applicable in a controlled compatible land use area around the installation.

1. Purpose and Background

A Joint Land Use Study (JLUS) is a collaborative process among local governments, military installations, citizens, and other stakeholders to identify and help mitigate and prevent encroachment issues that may affect current and future military missions and nearby communities. Encroachment occurs when conditions outside the military installation limit the ability of the military to perform its mission safely and effectively, or when military operations diminish quality of life in surrounding areas. This JLUS effort for the North Texas region—*Joining Forces*—seeks to facilitate dialogue around common interests and strengthen community-military compatibility through communication, education, and the planning process.

1.1 *Joining Forces* Goals

Joining Forces builds on the momentum of ongoing regional planning initiatives and prior compatibility studies. Reflecting the size, complexity, and economic dynamism of the region, the goals of this study are to:

- Balance the region’s strong population growth and development while providing a mission sustainable environment for protection of current and future military operational capabilities;
- Address encroachment issues associated with emerging technologies, such as renewable energy and unmanned aerial systems;
- Maintain the long-term viability and positive economic impact of military facilities in North Texas; and

- Carry forward specific recommendations from the 2008 JLUS for Naval Air Station Fort Worth Joint Reserve Base (NAS Fort Worth, JRB) and foster additional partnerships across installations and communities throughout the region.

1.2 Purpose of Existing Conditions Report

To establish a baseline for the broader planning context, an initial step of the *Joining Forces* effort is to analyze current conditions in the study area. The purpose of this Existing Conditions Report is to summarize compatibility issues, trends, available tools, and priorities. Research for this report focuses on:

- Regional and community growth and land use patterns;
- Current military missions and any foreseeable mission change;
- Current land use policy and regulatory measures and ongoing compatibility initiatives; and
- Stakeholder and public input gathered to date.

Findings will inform development of recommendations in subsequent phases of the study.

1.3 Study Area

The study area consists of the major military training facilities and related airspace in North Texas and surrounding communities (See **Table 1** and **Figure 1**). This area encompasses 24,200 square miles, including six installations, two Military Operating Areas (MOAs), and portions of 18 counties and more than 60 cities or census designated communities near military operations. It also stretches across two regional planning areas. The North Central Texas Council of Governments (NCTCOG) covers 16 counties, including three counties with a

major installation (Dallas, Tarrant, and Parker). The Ark-Tex Council of Governments includes Lamar County, the fourth county that hosts a major installation.

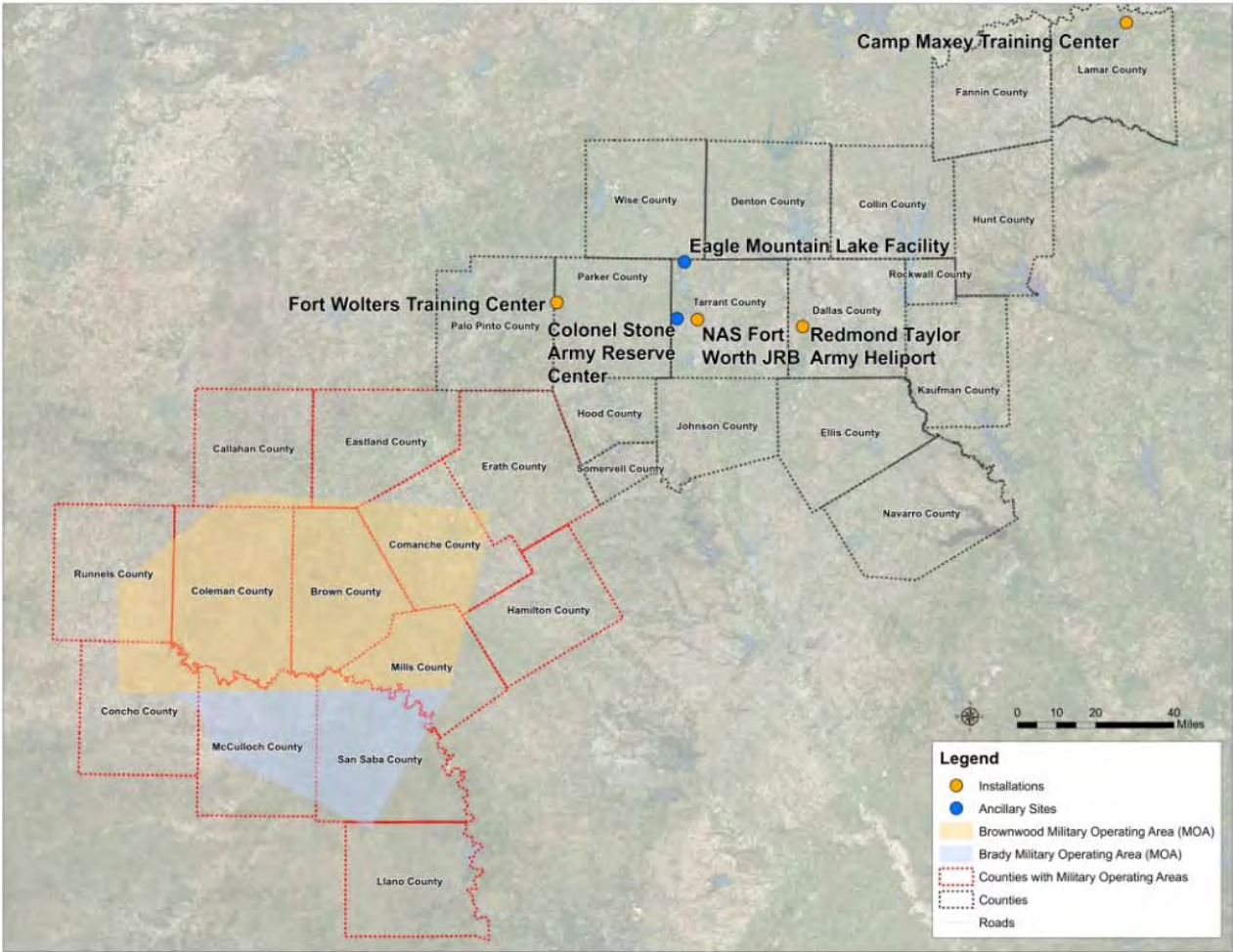
Given the scale of the region, the JLUS process organizes the installations into functional categories based on the intensity of their activities, tenant mix, and operational missions as shown in **Table 1**. The high-intensity installations employ large numbers of full-time active-duty, Reservists, and civilian personnel or serve as active training centers for the Texas Military Forces. The high-intensity installations also manage ancillary sites for training purposes. The remaining facilities (i.e., not high-intensity) include maintenance sites, administrative centers, or training areas with lower impact operations. To focus effort on the most critical areas with the highest risk of encroachment, the study will conduct detailed analyses around high-intensity operations. The public outreach process also emphasizes continued collaboration and the building of partnerships between these active installations and their neighboring communities. Overall, the JLUS document will produce a tailored set of compatibility recommendations to reflect the diversity of the region and its stakeholders.

Table 1. *Joining Forces* Installations and Local Governments

Level of Operations	Installation/MOA	County	Location	Local Governments
High-Intensity Operations	Naval Air Station Fort Worth, Joint Reserve Base	Tarrant	Fort Worth, TX	Cities of Benbrook, Fort Worth, Lake Worth, River Oaks, Sansom Park, Westworth Village, and White Settlement; Tarrant County
	Redmond Taylor Army Heliport	Dallas	Dallas, TX	Cities of Dallas and Grand Prairie
	Fort Wolters Training Center	Palo-Pinto / Parker	Mineral Wells, TX	City of Mineral Wells; Palo Pinto and Parker Counties
	Camp Maxey Training Center	Lamar	Unincorporated Lamar County	City of Paris, Powderly CDP; Lamar County

Level of Operations	Installation/MOA	County	Location	Local Governments
Ancillary Sites	Eagle Mountain Training Center	Tarrant	Pecan Acres Census Designated Place, TX	Pecan Acres Census Designated Place and Tarrant County
	Brownwood and Brady Military Operating Areas	Portions of Brown, Callahan, Coleman, Comanche, Concho, Eastland, Erath, Llano, Hamilton, McCulloch, Mills, Runnels, and San Saba	Brownwood, TX	Portions of Brown, Callahan, Coleman, Comanche, Concho, Eastland, Erath, Llano, Hamilton, McCulloch, Mills, Runnels, and San Saba Counties
Low-Intensity Training/Maintenance Sites	Colonel Stone Army Reserve Center	Tarrant	Fort Worth, TX	City of Fort Worth; Tarrant County

Figure 1. *Joining Forces* Regional Study Area



1.4 Formal Study Partners

NCTCOG received a grant from the Department of Defense (DoD), Office of Economic Adjustment (OEA) to coordinate the efforts of *Joining Forces* participants. To balance multiple community, operational, and mission needs within a large region, NCTCOG formed four Policy Committees, representing interests around each of the high-intensity installations (See **Table 2**). The Committees will guide the study, assisting the planning team in identifying key issues, gathering technical data, evaluating the feasibility of strategies, and developing recommendations. While the Committees will meet regularly to offer strategic direction, *Joining Forces* also seeks to facilitate a collaborative and inclusive process that engages residents, businesses, landowners, community groups, and other stakeholders beyond the list of formal participants.

Table 2. *Joining Forces* Policy Committees

Installation	Stakeholder Representatives
Redmond Taylor Army Heliport	City of Grand Prairie City of Dallas Redmond Taylor Army Heliport Texas Military Department – TX Army National Guard
Fort Wolters Training Center	Palo Pinto County City of Mineral Wells Fort Wolters Mineral Wells/Palo Pinto County Area Growth Council Mineral Wells Area Chamber of Commerce Natural Resources Conservation Service Texas Military Department– TX Army National Guard Lake Mineral Wells State Park/Texas Parks & Wildlife

Installation	Stakeholder Representatives
Camp Maxey Training Center	Lamar County City of Paris Camp Maxey Texas Military Department– TX Army National Guard Ark-Tex COG
Naval Air Station Fort Worth, Joint Reserve Base	City of Benbrook City of Fort Worth City of Lake Worth City of River Oaks City of Sansom Park City of Westworth Village City of White Settlement Tarrant County NAS Fort Worth, JRB

2. Regional Profile

2.1 Regional Land Use and Growth Trends

North Texas is a vast mix of urban centers and suburban-style development with smaller, lightly populated communities on the edges of the metropolitan area. The dynamic Dallas-Fort Worth (DFW) core anchors the region, while rural counties define the northern and far western portions of the study area (See **Figure 2**).

While prior growth occurred at the region's center and in proximity to installations such as NAS Fort Worth, JRB and the Redmond Taylor Army Heliport (RTAHP), forecasts indicate a continued expansion of development throughout the NCTCOG counties. According to the Census Bureau, the region was the second fastest-growing metro in the United States from July 2014 to July 2015, trailing only Houston.¹ The region was also second among America's major metros in new housing starts in 2015, behind New York. NCTCOG anticipates that the region will continue its rapid growth, with a population increase of 64 percent over the next two decades. If trends hold, the 12 counties that constitute the NCTCOG Metropolitan Planning Area (Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise) should add more than 4 million people, bringing the 2040 population to approximately 11 million.

People and development do not spread evenly across the study region (See **Table 3**). The most densely populated is Dallas County with more than four people for each acre of land. In contrast, Palo Pinto County on the western edge of the region has 21 acres of land for every resident. Growth patterns serve as an indicator of future compatibility risk. Growth in core and

¹ The Explosive Northern Growth of Metro Dallas, Forbes, Jul 1, 2016

inner tier counties, especially in suburbs north of the City of Dallas and to the west near Fort Worth, should be robust in the years ahead. Current trends should not significantly alter the predominantly rural character of counties to the far north and southwest. As described more fully in the individual city profiles in **Section 9**, the centrally located communities surrounding NAS Fort Worth, JRB and RTAHP are primarily built out, while land near Fort Wolters and Camp Maxey remains mostly rural. The particularly strong growth in Parker and Tarrant Counties, however, reflects both infill development opportunities and new development that could draw increased activity near military installations. The JLUS framework will help communities evaluate these growth trajectories and implement appropriate land use and communication tools in advance of development.

Figure 2. Urbanized Areas, *Joining Forces* Region

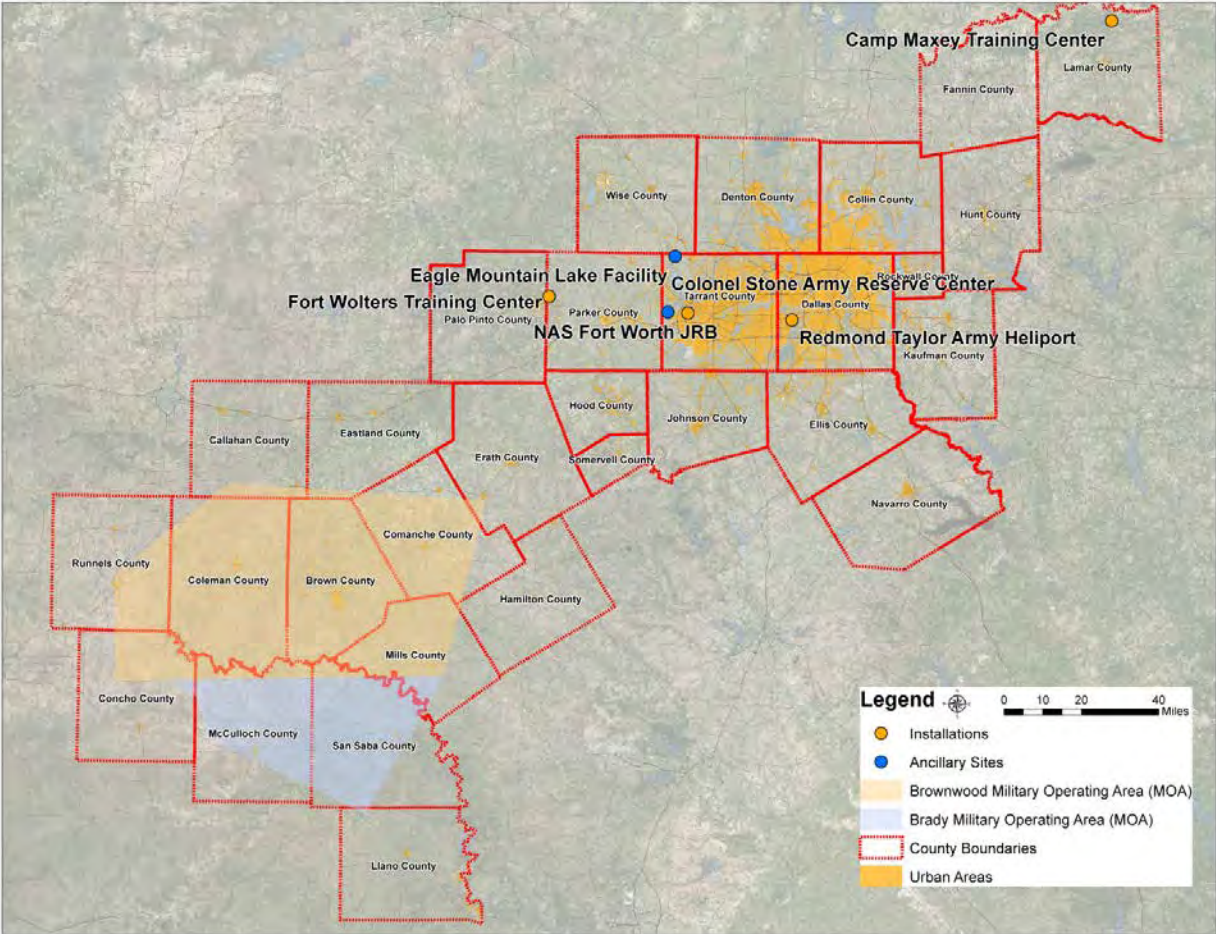


Table 3. Population Trends in the *Joining Forces* Region

County	2010	2040	% Change
Collin*	782,341	1,560,421	99.5%
Dallas*	2,368,139	3,357,469	41.8%
Denton*	662,614	1,241,681	87.4%
Ellis*	149,610	283,898	89.8%
Hood*	51,182	81,578	59.4%
Hunt*	86,129	131,022	52.1%
Johnson*	150,934	252,521	67.3%
Kaufman*	103,350	210,097	103.3%
Parker*	116,927	195,286	67.0%
Rockwall*	78,337	166,357	112.4%
Tarrant*	1,809,034	3,094,649	71.1%
Wise*	59,127	101,865	72.3%
Brown**	38,106	41,184	8.08%
Callahan**	13,544	15,196	12.20%
Coleman**	8,895	9,063	1.89%
Comanche**	13,974	15,640	11.92%
Concho**	4,087	4,322	5.75%
Eastland**	18,583	19,830	6.71%
Erath**	37,890	47,464	25.27%
Fannin**	33,915	39,458	16.34%
Hamilton**	8,517	8,593	0.89%
Lamar **	49,793	56,265	13.00%
Llano**	19,307	18,654	-3.38%
McCulloch**	8,283	8,949	8.04%
Mills**	4,936	5,352	8.43%
Palo Pinto**	28,103	31,209	11.1%

County	2010	2040	% Change
Runnels**	10,501	11,140	6.09%
San Saba**	6,131	6,289	2.58%
TOTAL	6,722,289	11,015,452	63.9%

Source: *2010 data obtained from the U.S. Census Bureau and 2040 forecasts obtained from NCTCOG Mobility 2040; **2010 data obtained from the U.S. Census Bureau and forecasts obtained from the Texas State Demographer, Population Forecasts 2016

2.2 Regional Economic Profile

The DFW region is one of the most diverse and dynamic economies in the nation. Significant industry clusters include aviation/aerospace, finance, healthcare, high technology, logistics, and manufacturing. Military-related facilities are also major contributors to the region's solid economic base. Installations provide direct jobs to enlisted personnel, contractors, civilians, and support staff. Additionally, personnel boost local economies by spending wages on goods and services produced in their communities. Along with active personnel, veterans compose a substantial percentage of the population, making up 6.5 percent of civilians age 18 or older in the 12-county DFW region and 9.8 percent of civilians age 18 or older in Lamar County, home of Camp Maxey. Approximately 210,000 retirees in the region access NAS Fort Worth, JRB for a variety of services.

Regionally, NAS Fort Worth, JRB generates an estimated \$6.6 billion in goods and services and \$2.7 billion in post-income-tax personal income.² The installation supports jobs for 17,466 people, and provides direct and indirect employment to 47,256 workers. The presence of the base and nearby Lockheed Martin has elevated the region to a top aviation and aerospace hub. From 2004 through 2014, employment in Tarrant County attributed to the military increased

² Naval Air Station Fort Worth Joint Reserve Base Estimated Contribution to the Texas Economy, 2015

by six percent. Although no comparable economic data is available for Texas Army National Guard facilities, Camp Maxey and Fort Wolters both saw a substantial increase in use of training facilities between 2012 and 2014.

The Texas military footprint is among the largest in the United States. According to the latest analysis from the Texas Comptroller, the state's 15 major DoD installations generate \$136 billion in economic activity, support more than 800,000 jobs, and create \$48 billion in personal income annually.³ The impact of Texas military installations ranked ahead of agriculture and just behind energy as the state's biggest economic drivers.

2.3 Regional Energy Infrastructure

Wind generation claims a rapidly growing share of the Texas energy sector. Texas produced 10 percent of its in-state electricity from wind in 2015 and industry forecasts suggest that this percentage could rise to 37 percent by 2030.⁴ Growth in wind-powered electricity is the result of the state's naturally windy conditions combined with incentives and strategic infrastructure investments. In 2005, the Public Utility Commission of Texas established Competitive Renewable Energy Zones to connect remote wind resources in the west to the electric grid. The \$7 billion project includes construction of 3,600 miles of transmission lines and network upgrades to substations, switches, and terminals. A 2,500-mile 345-kilovolt grid will bring 18,500 megawatts (MW) of wind energy to consumers in DFW and Austin (See **Figure 3**).

³ U.S. Military Installations and the Texas Economy, <http://texasahead.org/economic-data/military/>

⁴ Wind energy technology booms, increases role in Texas electricity power

Wind resource potential based on average wind speed is highest along the coast near Corpus Christi, the Panhandle region, and areas west of DFW near Abilene⁵. However, renewable energy infrastructure could begin to spread east with changing technologies and demands. Facebook, for example, is powering its new data center in Fort Worth with energy generated solely by a 200-MW wind farm in Clay County about 90 miles west of the site.

Figure 3. Competitive Renewable Energy Zones



Source: Public Utility Commission of Texas

Energy production and transmission infrastructure, particularly tall structures such as wind turbines and transmission-line towers, can pose a collision hazard to military aircraft

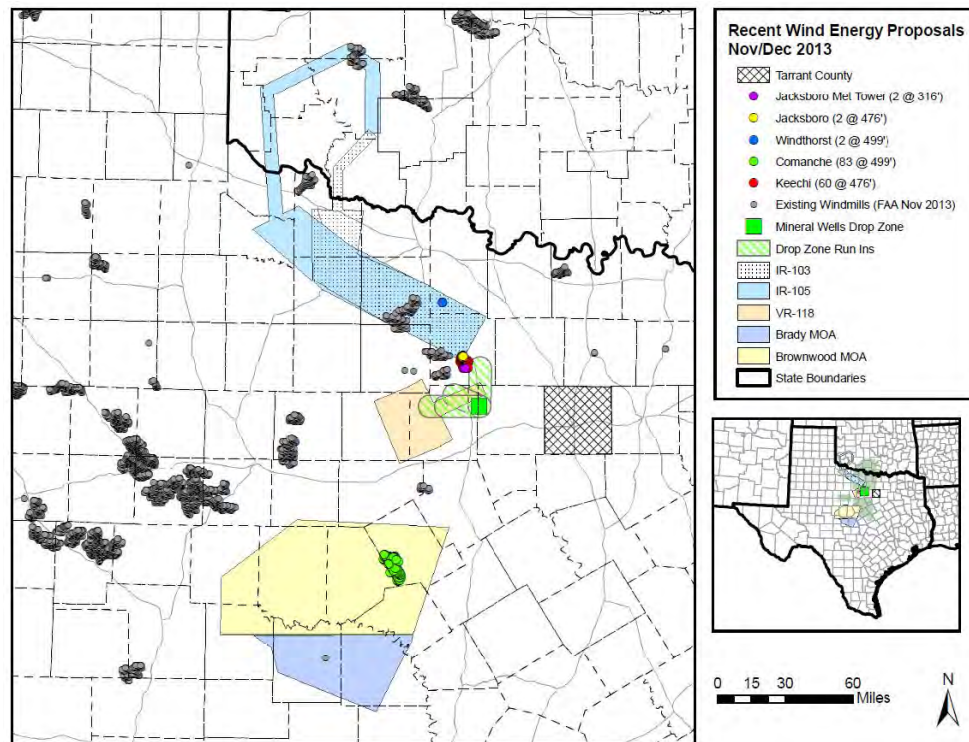
⁵ Texas Wind Resource Map and Potential Wind Capacity,
http://apps2.eere.energy.gov/wind/windexchange/wind_resource_maps.asp?stateab=tx

operations, especially in designated low-altitude Military Training Routes (MTRs). Wind turbines can also cause “clutter” on sensitive radars used by the DoD and other agencies, such as the Federal Aviation Administration (FAA). The resulting interference can cause radar to lose or misidentify aircraft targets. As described in **Section 4**, the DoD has established a process for evaluating the mission compatibility of proposed energy projects. The presence of renewable energy infrastructure is particularly relevant for NAS Fort Worth, JRB aircraft operating within MTRs and the training airspace defined by the MOAs. **Figure 4** shows the overlap of existing and recently proposed wind energy infrastructure and aviation-related training areas. The Electric Reliability Council of Texas (ERCOT) plays a major role in managing the flow of 90 percent of the state’s electric power.

Gas wells are another type of energy-related infrastructure that can create aviation hazards in proximity to military airfields. Personnel at RTAHP have noted the presence of gas wells at the Eagle Mountain Training Area and energy developers have proposed wells near other *Joining Forces* installations. Although officials denied those proposals, they indicate that the area is suitable for gas wells, and there may be additional proposals in the future.

Military representatives have been engaging ERCOT in exploring notification processes to coordinate infrastructure decisions that could affect aviation safety. As of 2016, the ERCOT *Planning Guide* contains a Declaration of Department of Defense Notification for an Interconnecting Entity (IE). Any IE seeking a study for interconnection to the ERCOT system must submit a declaration certifying that it has notified the DoD Siting Clearinghouse of the proposed generation resource and requested an informal or formal review or demonstrate that the proposed source is not required to provide notice.

Figure 4. Wind Energy in Proximity to Airspace Training, 2013



Source: NAS Fort Worth, JRB

2.4 Regional Environmental Resources

The diverse array of natural, cultural, open space and recreational resources in North Texas forms part of the unique identity and high quality of life that defines the region. These assets also pose challenges and opportunities for nearby active military operations. The presence of sensitive resources, such as threatened and endangered species or cultural and archaeological sites, can require military installations to implement management and protection measures that restrict the use of land for training purposes. As described in detail later in this section, the proximity of lakes and rivers can produce issues such as flooding that directly interfere with operations. Nearby open space, working lands, parks, and critical habitat, however, can also