

71
City of Las Cruces[®]
 PEOPLE HELPING PEOPLE

Council Action and Executive Summary

Item # 6 Ordinance/Resolution# 15-160

For Meeting of _____
 (Ordinance First Reading Date)

For Meeting of **March 16, 2015**
 (Adoption Date)

Please check box that applies to this item:

QUASI JUDICIAL LEGISLATIVE ADMINISTRATIVE

TITLE: A RESOLUTION ENDORSING THE SOUTHERN NEW MEXICO – EL PASO, TEXAS, JOINT LAND USE STUDY REPORT AND APPROVING CONTINUED REGIONAL LAND USE PLANNING PARTICIPATION.

PURPOSE(S) OF ACTION:

Endorse land use study and continued regional land use planning coordination.

COUNCIL DISTRICT: ALL		
<u>Drafter/Staff Contact:</u> David Weir	<u>Department/Section:</u> Community Development/ Planning & Neighborhood Services	<u>Phone:</u> 528-3067
<u>City Manager Signature:</u> 		

BACKGROUND / KEY ISSUES / CONTRIBUTING FACTORS:

The City of Las Cruces has participated in a collaborative regional planning process known as the Southern New Mexico – El Paso Texas Joint Land Use Study (JLUS) to assure compatibility between regional community development, growth, military base training and testing activities. The JLUS was drafted and approved by the JLUS Regional Planning Organization (JLUS – RPO). The JLUS – RPO included representatives from the military installations of Fort Bliss, White Sands Missile Range, Holloman Air Force Base; from the cities of Las Cruces, NM, Alamogordo, NM, El Paso, TX; from the counties of Dona Ana, NM, Lincoln, NM, Sierra, NM, Socorro, NM, Otero, NM, El Paso, TX; and federal and state agencies including the Bureau of Land Management, New Mexico State Land Office, Spaceport America, USDA/Forest Service, and National Park Service. The City’s involvement involved representation and participation on the JLUS – RPO’s Policy Committee and Technical Committee.

This effort produced a document titled the *Southern New Mexico – El Paso Joint Land Use Study and Compatibility Strategies* and was approved by the JLUS – RPO on November 18, 2014. The *JLUS Compatibility Strategies* include a series of recommendations based on public input and the JLUS Report that promote compatibility between the land uses of the regional

communities and the military installations and their activities. These recommendations are comprised of potential land use and land development policies, environmental studies, and zoning and development regulations that may be adopted, as appropriate, by the regional units of government and the military installations.

One of the first JLUS implementation recommendations is the creation of a JLUS Implementation Committee (JLUSIC). The JLUS – RPO has drafted a Memorandum of Agreement (MOA) formalizing the JLUSIC. The JLUSIC will provide general oversight, coordination and available resources related to JLUS implementation efforts. The MOA states the purpose and mission of the JLUSIC includes:

- Advancing clear and consistent communication between all regional stakeholders;
- Promoting inter-jurisdictional and inter-agency cooperation on critical planning issues related to military and community compatibility;
- Designating the responsibilities of the JLUSIC related to representation, fiscal agency and contribution, public input and participation, and general committee structure and organization; and
- Committing a cash or in-kind financial contribution to JLUSIC operation budget by participating communities (the City's initial contribution is estimated to be \$10,000).

The Resolution authorizes the endorsement of the Final *JLUS Report and Compatibility Strategies*, continued regional community and military installation land use planning participation through the proposed JLUSIC, and the delegation of signature authority to the Assistant City Manager - Chief Operating Officer to all matters and documents relating to the JLUS and JLUSIC.

SUPPORT INFORMATION:

1. Resolution.
2. Exhibit "A", Final JLUS Report and Compatibility Strategies.
3. Exhibit "B", Memorandum of Agreement Southern New Mexico/El Paso Joint Land Use Study Implementation Committee.

SOURCE OF FUNDING:

Is this action already budgeted?	Yes	<input checked="" type="checkbox"/>	See fund summary below
	No	<input type="checkbox"/>	If No, then check one below:
	<i>Budget Adjustment Attached</i>	<input type="checkbox"/>	Expense reallocated from: _____
		<input type="checkbox"/>	Proposed funding is from a new revenue source (i.e. grant; see details below)
	<input type="checkbox"/>	Proposed funding is from balance in the Fund.	
Does this action create any revenue?	Yes	<input type="checkbox"/>	Funds will be deposited into this fund: in the amount of \$_____ for FY__.
	No	<input checked="" type="checkbox"/>	There is no new revenue generated by this action.

BUDGET NARRATIVE

Dona Ana County will be designated as the fiscal agent for the JLUSIC. It is anticipated that a grant of \$500,000 with a 10% match from participating local governments will be requested from the US Department of Defense for initial funding of the JLUSIC. Of the \$50,000 local match, Las Cruces is proposed to contribute 20% (\$10,000). The City's match will be in-kind services that will constitute staff time devoted to participation on the JLUSIC and implementation activities.

FUND EXPENDITURE SUMMARY:

Fund Name(s)	Account Number(s)	Expenditure Proposed	Available Budgeted Funds in Current FY	Remaining Funds	Purpose for Remaining Funds
N/A	N/A	N/A	N/A	N/A	N/A

OPTIONS / ALTERNATIVES:

1. Vote "Yes"; this will endorse the Final *JLUS Report*, commit the City to continued regional land use and military compatibility planning and approve the MOA for the JLUSIC creation and JLUS implementation.
2. Vote "No"; this will not endorse the Final JLUS Report, not commit the City to regional land use and military compatibility planning and not approve the MOA for the creation of the JLUSIC and implementation of the JLUS.
3. Vote to "Amend"; further direction would come from City Council.
4. Vote to "Table"; further direction would come from City Council.

REFERENCE INFORMATION:

The resolution(s) and/or ordinance(s) listed below are only for reference and are not included as attachments or exhibits.

1. Resolution No. 12-216.

RESOLUTION NO. 15-160**A RESOLUTION ENDORSING THE SOUTHERN NEW MEXICO – EL PASO, TEXAS, JOINT LAND USE STUDY REPORT AND APPROVING CONTINUED REGIONAL LAND USE PLANNING PARTICIPATION.**

The City Council is informed that:

WHEREAS, the City of Las Cruces is a member of the Southern New Mexico – El Paso, Texas, Joint Land Use Study Regional Planning Organization (JLUS – RPO); and

WHEREAS, the JLUS - RPO has prepared a Joint Land Use Study Report and Compatibility Strategies (JLUS); and

WHEREAS, the purpose of a JLUS is to promote community growth that is compatible with the training and operational mission of local military installations; and

WHEREAS, the JLUS – RPO has requested the City of Las Cruces endorse the JLUS; and

WHEREAS, the JLUS – RPO has recommended the formation of an implementation committee (JLUSIC); and

WHEREAS, the purpose of a JLUSIC is to provide general oversight of the implementation efforts related to the JLUS.

NOW, THEREFORE, be it resolved by the governing body of the City of Las Cruces:

(I)

THAT the City Council endorses the final Southern New Mexico - El Paso, Texas, Joint Land Use Study Report and Compatibility Strategies, attached hereto as Exhibit "A," and made part of this Resolution.

(II)

THAT the Memorandum of Agreement, attached hereto as Exhibit "B," and made part of this Resolution, is hereby approved.

(III)

THAT the Assistant City Manager – Chief Operating Officer is granted signature authority for matters related to the Southern New Mexico - El Paso, Texas, Joint Land Use Study and Compatibility Strategies and the Southern New Mexico - El Paso, Texas, Joint Land Use Study Implementation Committee.

(IV)

THAT City staff is hereby authorized to do all deeds necessary in the accomplishment of the herein above.

DONE AND APPROVED this _____ day of _____ 20__.

APPROVED:

Mayor

ATTEST:

City Clerk

(SEAL)

Moved by: _____

Seconded by: _____

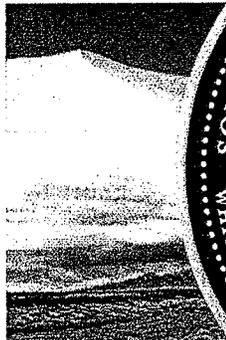
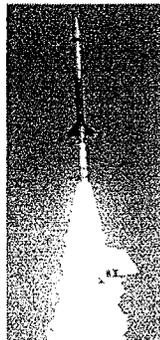
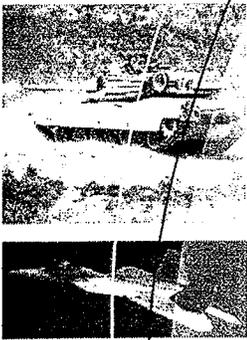
APPROVED AS TO FORM:



City Attorney

VOTE:

Mayor Miyagishima: _____
Councillor Silva: _____
Councillor Smith: _____
Councillor Pedroza: _____
Councillor Small: _____
Councillor Sorg: _____
Councillor Levatino: _____



This study was prepared under contract with Doña Ana County, New Mexico, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of study partners and does not necessarily reflect the views of the Office of Economic Adjustment.

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This document has been prepared by AECOM on behalf of the Southern New Mexico | El Paso, Texas Joint Land Use Study.

Project No. 60282914

Client SNMELJLUS

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ACKNOWLEDGEMENTS

This study was prepared under contract with Doña Ana County, New Mexico, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of study partners and does not necessarily reflect the views of the Office of Economic Adjustment.

Joint Land Use Study Policy Committee

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 Co-Chair Commissioner Susan Flores, Otero County
 Mayor Susie Galea, City of Alamogordo
 Mayor Pro-Tem Greg Smith, City of Las Cruces
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 City of El Paso
 Mayor Tom Battin, Village of Ruidoso
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 Bill Childress, Bureau of Land Management, District
 Manager, Las Cruces District
 Bill Connor, New Mexico Military Base Planning
 Commission
 Ed Brabson, New Mexico Military Base Planning
 Commission
 Travis Moseley, Forest Supervisor, Lincoln National Forest,
 U.S. Forest Service
 Ex-Officio Member Hanson Scott, Director, Office of
 Military Base Planning and Support
 Ex-Officio Member Wayne Julius, Fort Bliss
 Ex-Officio Member Paul Mann, Executive Director, White
 Sands Missile Range
 Ex-Officio Member Col. James Thompson, vice
 commander of the 49th Wing, Holloman Air Force Base

Joint Land Use Study Technical Committee

Co-Chair Dan Hicks, Chief of Staff, White Sands Missile
 Range
 Co-Chair Pamela Heltner, County Manager, Otero
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 David Weir, Community Development Director, City of Las
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 Craig J. Johnson, Acting Director, Commercial Resources
 Division, New Mexico State Land Office
 Eddie Guerrero, New Mexico Bureau of Land Management
 International Border Advisor
 Brian Knight, Chief, Conservation Branch, Environmental
 Division, Directorate of Public Works, Fort Bliss
 Daniel Cass, Chief, Portfolio Optimization Element
 Holloman Air Force Base
 Bill Gutman, Technical Operations Manager, Spaceport
 America
 Hanson Scott, Director, Office of Military Base Planning and
 Support
 Sabrina Flores, Natural Resource Planner, Forest Service
 Lincoln National Forest, Supervisor's Office
 Office of United States Senator Tom Udall (NM)
 Office of U.S. Senator Martin Heinrich (NM)

TABLE of CONTENTS

O1	Introduction	9
	1.1 Study Area	
	1.2 Purpose of Study	
O2	Partners and Process	12
	2.1 Formal Study Partners	
	2.2 JLUS Committees	
	2.3 Community Engagement	
	- Round #1 Public and Community Meetings	
	- Round #2 Public and Community Meetings	
O3	Regional Profile	17
	3.1 Regional Description	
	- Community Land Use and Growth Opportunities	
	3.2 Economic Impacts of Military Installations	
	3.3 Description of Installations	
	- Fort Bliss	
	- White Sands Missile Range	
	- Holloman Air Force Base	
O4	Compatibility Factors	36
	4.1 Air Quality	
	4.2 Airspace Use	
	4.3 Aviation/Testing Safety	
	4.4 Frequency and Spectrum Interference	
	4.5 Light Pollution	
	4.6 Noise – Aviation	
	4.7 Noise – Range	
	4.8 Public Trespass/Access	
	4.9 Transportation	
	4.10 Water	
	4.11 Wildfires	
O5	Recommended Strategies	42
	5.1 Compatibility Menu	
	5.2 Ongoing and Immediate Actions	
	- Form a JLUS Implementation Body	
	- Conduct Add. and Regular Community and Agency Outreach	
	- Establish Clear Points of Contact	
	- Improve Notification Methods	

TABLE *of* CONTENTS

5.3 Other Foundational Actions

- Build Institutional Capacity to Manage Regional Airspace
- Integrate Compatibility into Local Government Plans
- Encourage Partner Participation in Local Government Planning
- Collaborate on Planning for Energy Development Opportunities
- Map Regional Energy Development Opportunities
- Promote Interagency Consultation on Land Use
- Promote Compatibility of State Trust Land
- Support Conservation Partnerships
- Increase Land Use Authority in El Paso County
- Increase Information about Regional Noise Impacts
- Establish a Notification Process for Vertical Structures
- Promote an Integrated Regional Water Planning Process

5.4 Summary of Menu Category Areas

- Airspace Safety and Management
- Communication and Coordination
- Energy Infrastructure Management
- Local Government Plans
- Land Use
- Noise Management/Avoidance
- Economic Development
- Fire Management
- Frequency and Spectrum Management
- Land Conservation
- Military Plans
- Outdoor Lighting
- Physical Security
- Real Estate
- State-Wide Policy/Legislative Actions
- Transportation
- Water Resources

06 Conclusion

56

LIST of ACRONYMS

1AD – 1st Armored Division	ETZ – Extra-Territorial Zoning
AAF – Army Airfield	FAA – Federal Aviation Administration
AAMDC – Army Air & Missile Defense Command	FBTC – Fort Bliss Training Complex
ABQ – Albuquerque International Sunport	FCC – Federal Communications Commission
ACUB – Army Compatible Use Buffer	FLPMA – Federal Land Policy and Management Act
ACEC – Area of Critical Environmental Concern	FORSCOM – Forces Command
AETC – Air Education Training Command	FTU – 2 – Second Formal Training Unit
AFRL – Air Force Resource Laboratory	FTX – Discrete field training site
ARFORGEN – Army Force Generation	GAF – German Air Force
AGL – Above Ground Level	GAF TTC – German Air Force Tactical Training Center
AICUZ – Air Installation Compatible Use Zone	GEODSS – Ground-based Electro-Optical Deep Space Surveillance
APOE – Aerial Port of Embarkation	GLO – Texas General Land Office
APZ – Accident Potential Zone	HAFB – Holloman Air Force Base
AR – Aerial Refueling	HAMET – High Altitude Mountain Environment Training
ARC – Acoustic Research Complex	HBCT – Heavy Brigade
ARL – Army Research Laboratory	HE – High Explosive
ARMS – Alliance for Regional Military Support	HELSTF – High Energy Laser Systems Test Facility
ARTCC – Air Route Traffic Control Center	HPM – High Powered Microwave
ATC – Air Traffic Control	HSTT – High Speed Test Track
ATEC – Army Test and Evaluation Center	IBCT – Infantry Brigade
BASH – Bird Aircraft Strike Hazards	ICRMP – Integrated Cultural Resources Management Plan
BEAR – Basic Expeditionary Airfield Resources	ICEMAP – Installation Complex Encroachment Management Action Plan
BLM – Bureau of Land Management	IFDS – Integrated Frequency Deconfliction System
BMC – Brigade Modernization Command	INRMP – Integrated Natural Resources Management Plan
BRAC – Base Realignment and Closure	IONMP – Installation Operational Noise Management Plan
CAB – Combat Aviation Brigade	JEF – Jornada Experimental Range
CACTF – Combined Arms Collective Training Facility	JLENS – Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System
CCM – Center for Countermeasures	JLUS – Joint Land Use Study
CCS – Counter Communication System	JPA – Joint Planning Agreement
CDN – C-weighted Noise	JTX – Joint Training Exercise
CDNL – Day-Night Average Sound Level for C-weighted noise	LUASP – Land Use and Airspace Strategy Plan
CIGTF – Central Inertial and GPS Test Facility	LUPZ – Land Use Planning Zone
CLI – Cultural Landscapes Inventory	MOA – Memorandum of Agreement
CoA – Certificate of Authorization	MPO – Metropolitan Planning Organization
CRC – CONUS Replacement Center	MRTFB – Major Range and Test Facility Base
CRRUA – Camino Real Regional Utility Authority	MRU – Military Radar Unit
CSP – Concentrated Solar Power	MTRs – Military Training Routes
DAGIR – Digital Air-to-Ground Integration Range	NAS – National Airspace System
dB – Decibels	NASA – National Aeronautics and Space Administration
DMPTC – Digital Multi-Purpose Training Complex	NEPA – National Environmental Policy Act
DNL – Day-Night Average Sound Level	NGA – National Geospatial Intelligence Agency
DoD – Department of Defense	NHPA – National Historic Preservation Act
DOI – Department of the Interior	NIA – Network Integration Exercise
DTRA – Defense Threat Reduction Agency	NIE – Network Integration Evaluation
EBID – Elephant Butte Irrigation District	
EIS – Environmental Impact Statement	
EMRE – Electromagnetic Radiation Effects	
EMR – Energy Electromagnetic Radiation	
EPIA – El Paso International Airport	

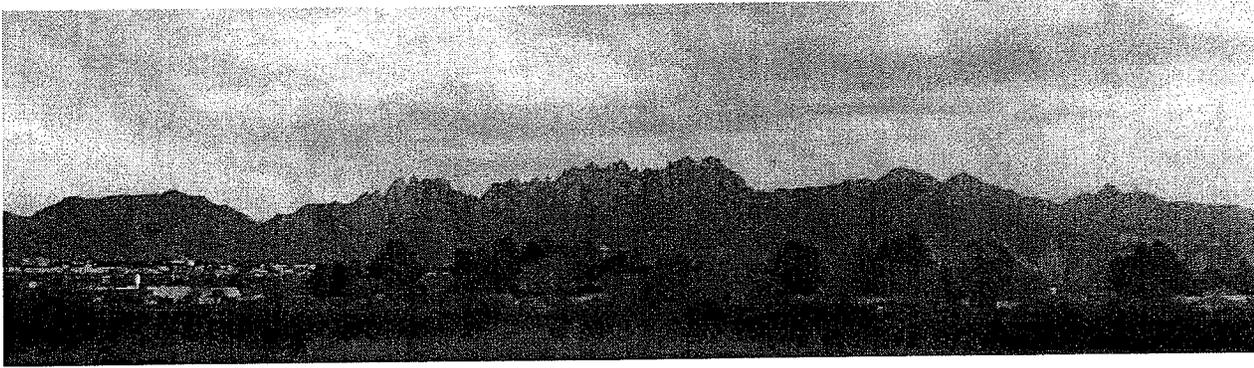
LIST of ACRONYMS

NMSA – New Mexico Spaceport Authority	VHF – Very High Frequency
NMSLO – New Mexico State Land Office	WRP – Western Regional Partnership
NOTAMs - Notices to Airmen	WSA – Wilderness Study Area
NPS – National Park Service	WSEP – Weapons System Evaluation Program
NRAO – National Radio Astronomy Observatory	WNSA – White Sands National Monument
NRO – National Reconnaissance Office	WSMR – White Sands Missile Range
NRTF – National Radar Cross Section Test Facility	WSPG – White Sands Proving Ground
NTIA – National Telecommunications and Information Administration	WSSH – White Sands Space Harbor
NVD – Night Vision Training Devices	WSTC – White Sands Test Center
OEA – Office of Economic Adjustment	WSTF – White Sands Test Facility
OE/AAA – Obstruction Evaluation/Airport Airspace Analysis	
PA – Programmatic Agreement	
PC – Policy Committee	
PV – Photovoltaic	
RAMS – RATSCAT Advanced Measurements	
RANM – Realtors Association of New Mexico	
RATSCAT – Radar Target Scatter	
REPI – Readiness and Environmental Protection Initiative	
RMP – Resource Management Plan	
RMPA – Resource Management Plan Amendment	
RPA – Remotely Piloted Aircraft	
RPO – Regional Planning Organization	
R&PP – Recreation and Public Purposes Act	
SBCT – Stryker Brigade	
SLVs – Suborbital Launch Vehicles	
SNM-EP – Southern New Mexico/El Paso Texas	
SOSI – System of System Integration	
SPOE – Sea Port of Embarkation	
STA – South Training Areas	
SVAD – Survivability, Vulnerability, and Assessment Directorate	
TAR – Texas Association of Realtors	
TC – Technical Committee	
TDRSS – Tracking and Data Relay Satellite System	
TDS – Total Dissolved Solids	
TG – Test Group	
TRADOC – Training and Doctrine Command	
TREC – Texas Real Estate Commission	
TRIAD - Partnership between HAFB, WSMR, and Fort Bliss	
UAS – Unmanned Aircraft System	
UAS FTC – Unmanned Aircraft System Flight Test Center	
UAV – Unmanned Air Vehicle	
USAADASCH – United States Army Air Defense Artillery School and Center	
USDA – U.S. Department of Agriculture	
USFS – United States Forest Service	
USFWS – United States Fish and Wildlife Service	

LIST of FIGURES

- Figure 1.1 - Base Map
- Figure 2.1 - Regional Land Ownership
- Figure 2.2 - Fort Bliss Training Complex and Surrounding Areas
- Figure 2.3 - Fort Bliss Training Complex Land Uses
- Figure 2.4 - White Sands Missile Range and Surrounding Areas
- Figure 2.5 - Holloman Air Force Base and Surrounding Areas
- Figure 2.6 - Regional Airspace

01 INTRODUCTION



I.1 Study Area

The Southern New Mexico-El Paso Texas Joint Land Use Study (JLUS) area encompasses six counties; two states; and the three military installations of Fort Bliss (FTB), White Sands Missile Range (WSMR), and Holloman Air Force Base (HAFB). As illustrated in *Figure 1.1*, Doña Ana, Sierra, Lincoln, Otero, and Socorro Counties in New Mexico and El Paso County in Texas surround the installations. The land area of interest is approximately 27,000 square miles—one of the largest JLUS areas. Within its geographic span, the region's natural, cultural, recreational, and renewable energy resources; weather; terrain; growth opportunities; and diversity of military training and testing missions create one of the most distinctive and valuable defense communities in the United States.

More than one million residents currently live in the Southern New Mexico-El Paso Texas (SNMEP) region, with communities ranging in size from the sixth-largest city in Texas and New Mexico's second-largest city to small resort towns and sparsely populated ranch lands. On the military side, the special use airspace and land assets of the three installations support one of the premier testing and training environments in the U.S. with capabilities that include the research, development, and testing of military systems; fighter pilot and unmanned aerial vehicle (UAV) training; state-of-the-art live-fire ranges; and wheeled and mechanized maneuver training.

The complexity and fluidity of landownership patterns, diversity of economic and resource interests, and the presence of multiple operational and mission needs, reinforce the value of a coordinated planning process that highlights the common interests of the region.

Several physical characteristics of the SNMEP region are critical to the effective performance of missions at FTB, WSMR, and HAFB, including expansive, contiguous areas of special use airspace to support aerospace activity; rugged, uninterrupted land areas to accommodate maneuver training and hazardous test events; a clear electronic spectrum; and a wide range of geologic features, including the Tularosa Basin. The basin covers about 6,500 square miles between the Sacramento Mountains to the east and the San Andres, Organ, and Franklin Mountains to the west. It stretches approximately 150 miles north-south and 60 miles east-west. The ability to deploy and support operational forces, perform realistic aerospace and live-fire training, and conduct weapons system testing in this environment is vital to maintaining the mission effectiveness of the three installations and the overall readiness of military forces.

I.2 Purpose of Study

Although FTB, WSMR, and HAFB are located in the SNMEP region because of its relatively undeveloped surroundings, some adjacent cities and communities within the study area have experienced steady population increases in recent years, particularly in and around the urban centers of El Paso, Texas, and Las Cruces, New Mexico, as well as colonias such as Chaparral, New Mexico. Population increases and related development can expose more people to noise, safety risks or other impacts associated with military activities and affect safety and quality of life in surrounding communities. Similarly, land that has remained in a traditional low intensity use such as ranching may respond to emerging economic opportunities such as wind and solar energy projects by developing infrastructure that could conflict with military operations. The JLUS uses the concept of

compatibility to describe and analyze these civilian-military interactions. When compatible, community development and military training and testing activities can exist near one another without producing significant impacts that affect public health and safety or quality of life, limit growth opportunities, or reduce the safety and effectiveness of military operations.

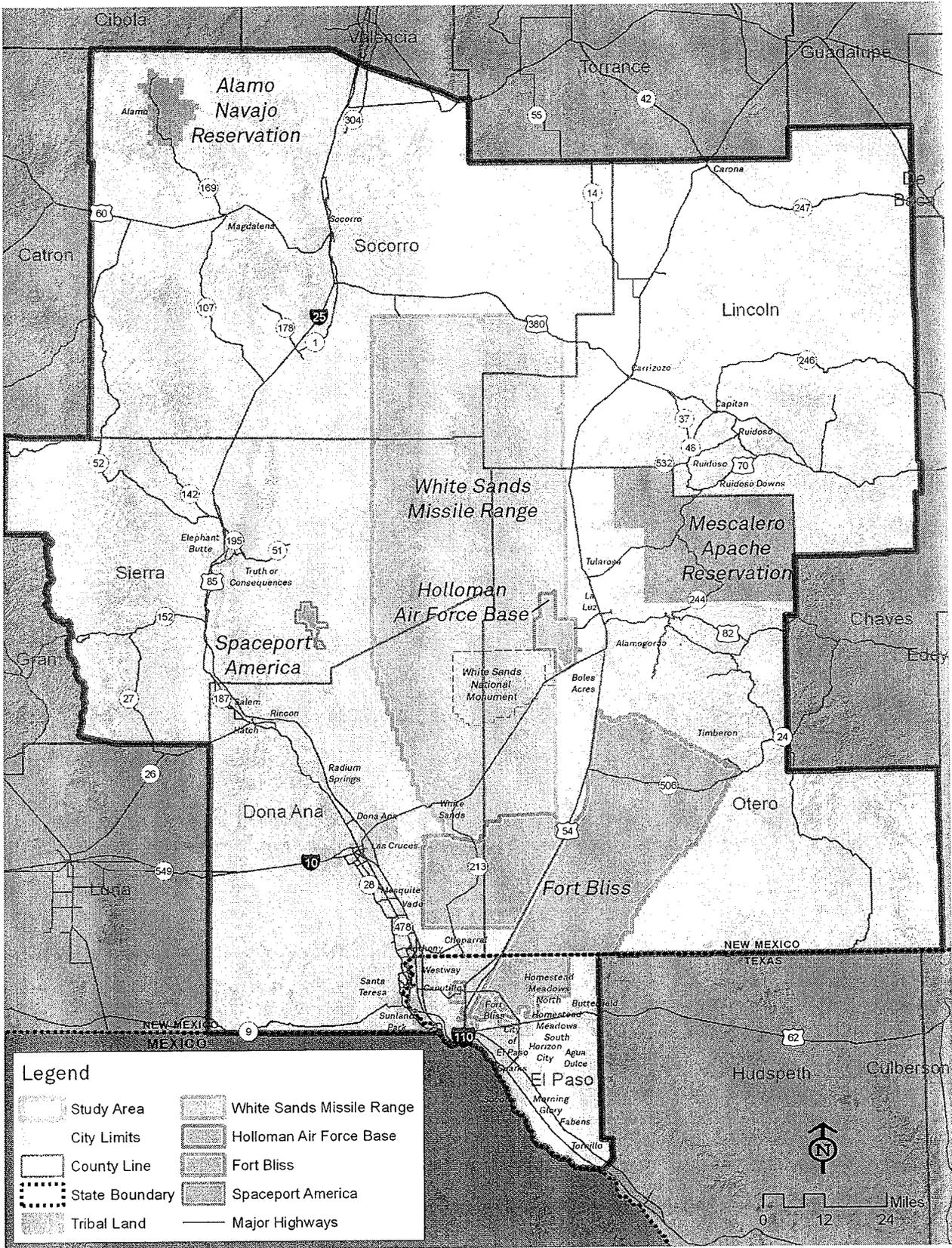
The JLUS is a collaborative process among city and county governments; the public; state and federal agencies; tribal governments; and military installations within the SNMEP region. The study creates dialogue around complex issues such as land use, economic development, infrastructure, environmental sustainability, and the operational demands and mission changes of both civilian and military entities. The intent of the study is to highlight common interests, such as stable economic growth, more efficient infrastructure, healthier environments, improved quality of life, rural lifestyles, and the protection of Department of Defense (DoD) and civilian investments and missions.

The DoD Office of Economic Adjustment (OEA) awarded a grant to local sponsor Doña Ana County to undertake the JLUS with participating jurisdictions contributing a local match. This document is strictly advisory, offering a menu of tools and processes available to each study partner. All partner entities, including the military installations, cities, counties, and state and federal agencies, have the discretion to adopt those recommendations that they feel are appropriate for their local contexts. The JLUS emphasizes coordination and communication as a way to strengthen the relationship among the study area partners and to build a framework for successful implementation and monitoring of progress toward shared goals.

The overall goals of the JLUS are to:

- Provide opportunities for input by stakeholders including landowners; federal; state; county and municipal government agencies; educational institutions; tribal governments; and other interested parties in all stages of the planning process;
- Protect the public health and safety of the civilian and military communities;
- Jointly analyze the factors that can restrict range and training missions as a result of incompatible land use development adjacent to FTB, WSMR, and HAFB;
- Cooperatively develop a set of recommendations for use by federal, state, and local governments; community groups; developers; and the military to preserve, protect and enhance DoD and civilian missions;
- Identify uses that are compatible and feasible for land in the vicinity of military installations, airports, and ranges, including the noise and accident potential zones;
- Develop an implementation plan to address compatibility challenges by development and its resulting impact on military missions and sustainability by establishing compatibility criteria and strong policies that can be implemented by federal, state, and local governments;
- Support local communities in sustaining safe, compatible growth;
- Develop and/or identify cooperative land and airspace use planning, strategies, and techniques that fairly allocate impacts of the program with respect to federal, state, and local governments; private landowners; and the military community;
- Improve regional cooperation as it relates to military community compatibility and encourage cooperative land use planning between military installations and the surrounding communities and counties; and
- Establish an enduring forum for cooperation, communication, and implementation.

FIGURE 1.1 - BASE MAP



02 PARTNERS AND PROCESS



2.1 Formal Study Partners

As part of the SNMEP JLUS process, the study partners entered into a Memorandum of Agreement (MOA) establishing a Regional Planning Organization (RPO) to direct the effort. To reflect the complexity of the study area, a diverse range of partners throughout the region formally joined the study process:

- Doña Ana County
- El Paso County
- Lincoln County
- Otero County
- Sierra County
- Socorro County
- The City of Alamogordo
- The City of El Paso
- The City of Las Cruces
- Fort Bliss
- Holloman Air Force Base
- White Sands Missile Range
- New Mexico State Land Office
- New Mexico Office of Military Base Planning and Support
- Military Base Planning Commission
- New Mexico Spaceport Authority
- Bureau of Land Management

The RPO provided representation to the JLUS Policy and Technical Committees. The JLUS also seeks to engage residents, landowners, state and local governments, and others beyond the list of formal MOA participants. In addition to the above signatories to the MOA, the United States Forest Service (USFS) is a member of both committees.

The Policy Committee added the USFS through a formal motion.

2.2 JLUS Committees

As part of the MOA, the study partners formed a Policy Committee and Technical Committee to guide the planning effort, assist in developing technical content, and build support for the implementation of recommendations.

Policy Committee

The Policy Committee (PC) consisted of local elected officials from cities and counties participating in the MOA, as well as senior Air Force and Army leadership and representatives from federal and state entities. Consistent with the community focus of the JLUS process, military representatives acted in an advisory capacity and served as non-voting ex officio members of this committee. The PC oversaw the JLUS process, reviewed draft and final written reports, and evaluated policy recommendations. Policy Committee sessions were open to the public.

Technical Committee

This working group consisted of area planners, city and county officials, technical and professional staff, and military planners. Members were responsible for assisting in data collection, identifying, and studying technical issues, and developing recommendations for evaluation by the PC. Technical Committee (TC) meetings coincided with key milestones in the study process, including existing conditions findings and compatibility assessment results, draft strategy

assessment, and recommendations development (See Table 1.1).

Project Management Team

The Project Management Team (PMT) directly supervised JLUS planning activities and provided support and guidance for ongoing meeting and public outreach events, data collection and review, and the delivery of study products.

Planning Team

The planning team consists of consultant team members, who assisted the committees in facilitating the JLUS process, conducting analysis and outreach, and developing plan content.

2.3 Community Engagement

The JLUS is very much a broad and community-driven process that encourages all stakeholders to define their own issues of interest and to collaborate on potential compatibility solutions. The Public Relations and Public Participation Plan is the overarching framework that establishes goals for the engagement process and outlines public input activities (See the *Public Relations and Public Participation Plan in the Existing Conditions Report Appendix*). Major outreach mechanisms include large format meetings, targeted listening sessions that focus on specific geographic areas or stakeholder interests, and a project website: www.SNMEPJointLandUse.com.

Table 1.1 Policy and Technical Committee Meetings

Committee	Study Milestone	Date
Policy and Technical Committee 1	Kick-Off	December 17, 2012
Technical Committee 2	Review of Preliminary Compatibility Challenges, Stakeholder Themes, and Public Involvement Plan	March 20, 2013
Policy Committee 2	Review of Key Compatibility Findings and Input on Public Involvement Plan	May 1, 2013
Technical Committee 3	Review of Existing Conditions and Initial Compatibility Assessment Report	August 5, 2013
Technical Committee 4	Review of Existing Conditions and Initial Compatibility Assessment Report	October 23, 2013
Policy Committee 3	Review of Existing Conditions Findings	December 11, 2013
Technical Committee 5	Draft Strategy Workshop	February 27 and 28, 2014
Technical Committee 6	Draft Strategy Workshop	April 2, 2014
Technical Committee 7	Strategy Prioritization Workshop	May 7, 2014
Technical Committee 8	Draft Plan Review	June 11, 2014
Policy Committee 4	Review of Priority Strategies	June 11, 2014
Technical Committee 9	Revised Draft Plan Review	July 30, 2014
Technical Committee 10	Revised Draft Plan Review	September 4, 2014
Policy Committee 5	Final JLUS Report Review	November 18, 2014

Round #1 Public and Community Meetings

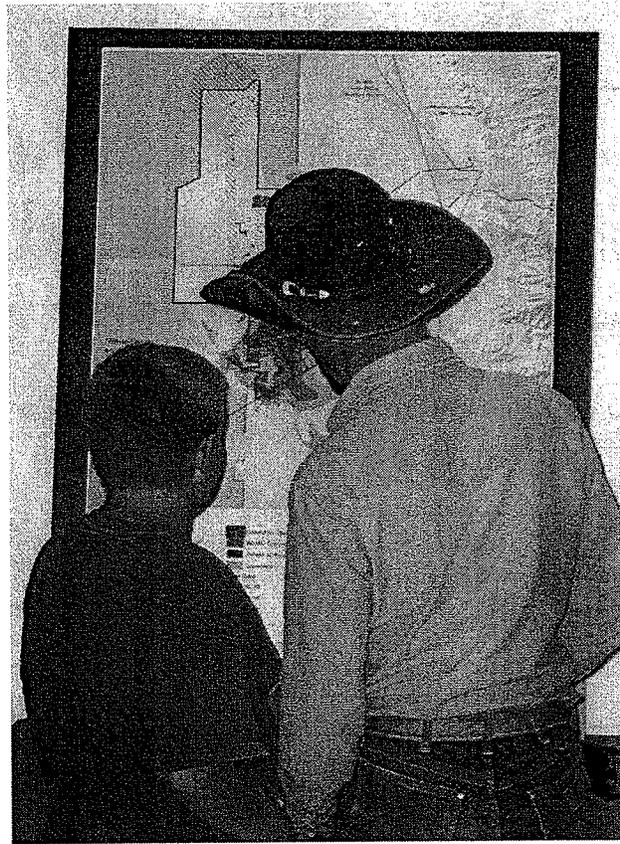
The planning team held six public meetings for the JLUS from June 3 through June 13, 2013 (See Table 1.2). As part of the initial phase of community outreach, these meetings assisted in describing existing conditions in the region (see *Existing Conditions Technical Appendix for full summary of meeting input*). 130 people, including members of the PC and TC and representatives of study partner entities attended the June sessions. The general purpose of the meetings was to introduce the JLUS process; give an overview of study partners, including the local governments and FTB, HAFB, and WSMR; present preliminary compatibility themes; and invite feedback to confirm and refine the initial list of potential study issues.

The planning team also conducted three community events in September 2013 at Weed and Chaparral, New Mexico, and at Ranchers Day on WSMR. Community events are more targeted outreach activities that focus on specific geographic areas or stakeholder groups with distinct interests. Approximately 100 people participated in the September events. Attendees at the Weed and Chaparral meetings offered input to prioritize compatibility issues as described below, while residents attending Ranchers Day completed a questionnaire. Committee members also met with the Mescalero Apache Tribe to review initial compatibility strategies and identify any compatibility issues.

Attendees participated in an exercise to prioritize 17 initial compatibility factors, highlighting those items that they thought were most critical to address in the study. Compatibility factors are specific types of issues or impacts, such as noise or airspace obstructions that can cause potentially negative interactions between military and civilian uses. The 17 initial factors were:

- Airspace
- Aviation Noise
- Call-up Areas
- Coordination/Communication
- Cultural/Natural/Recreation Resources
- Energy/Renewable Energy
- GPS Jamming and Frequency Spectrum Interference
- Light Pollution
- Mining
- Multiple Use Areas
- Quality of Life/Accommodating Military-Related Growth
- Range Noise
- Road Closures
- Towers
- Trespass/Access
- Water
- Wildfires (related to military exercises)

The planning team displayed the 17 initial themes on a board at the meeting venue. Participants received four "dot" stickers to place next to a factor that they had either experienced and/or thought was important for the JLUS to address. Respondents could place four stickers next to one factor or allocate them among multiple items.



Public Meeting participants

Across all meetings, water received the highest number of priority stickers followed by energy/renewable energy development, aviation noise, and quality of life/accommodating military related growth. Input also varied geographically, with respondents in Otero County/City of Alamogordo emphasizing the accommodation of military-related growth; and energy/renewable energy emerging as the most prominent

factor in Socorro County. Participants in Weed expressed concern about sonic booms from aircraft activity, while Chaparral residents cited issues related to the use of local roadways by wheeled military vehicle convoys. Sonic booms were the result of the former F-22 mission, which has departed HAFB, but concern remains in the community about aircraft noise.

To identify common elements among the feedback received, the planning team analyzed and grouped related individual comments under the series of broader themes:

- Recognition of the strong economic linkages between the military installations and the surrounding communities;
- Recognition of the complexity of the SunZia transmission corridor planning process and the potential impacts for the study area;

- Concern for private property rights;
- Concern for the environmental and physical resources of the study area, particularly related to water resources, and a desire for a regional, integrated carrying capacity analysis; and
- Opportunities for increased coordination around specific facilities, particularly airports and roadways.

The planning team and committees drew from comments received to refine the Existing Conditions and Compatibility Analysis and inform study recommendations.

2.3.2 Round #2 Public and Community Meetings

The planning team also conducted a series of general public and targeted community meetings during the Draft Report phase to gather input on draft compatibility strategies (See Table 1.3). 167 attendees participated in these sessions.

Table 1.2 Round #1 Public Meetings

Meeting	Date	Participants
Lincoln County	June 3, 2013	14
El Paso County	June 5, 2013	11
Doña Ana County	June 6, 2013	21
Socorro County	June 11, 2013	33
Otero County	June 12, 2013	33
Sierra County	June 13, 2013	18
Weed NM	September 23, 2013	60
Chaparral NM	September 24, 2013	15
WSMR Ranchers Day	September 27, 2013	25

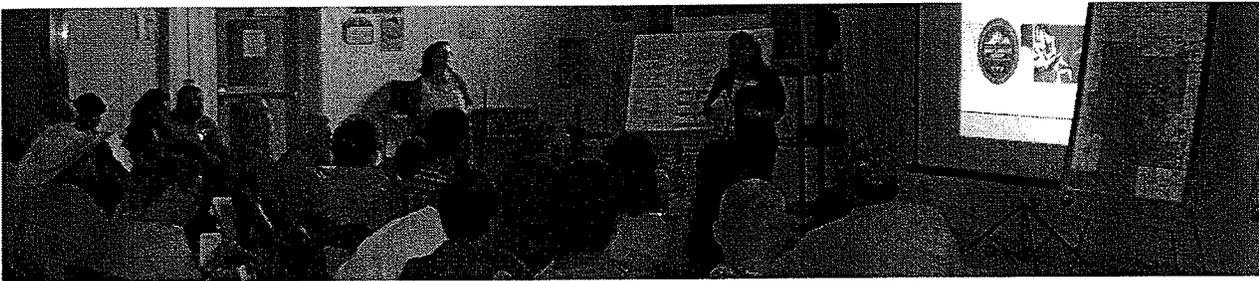
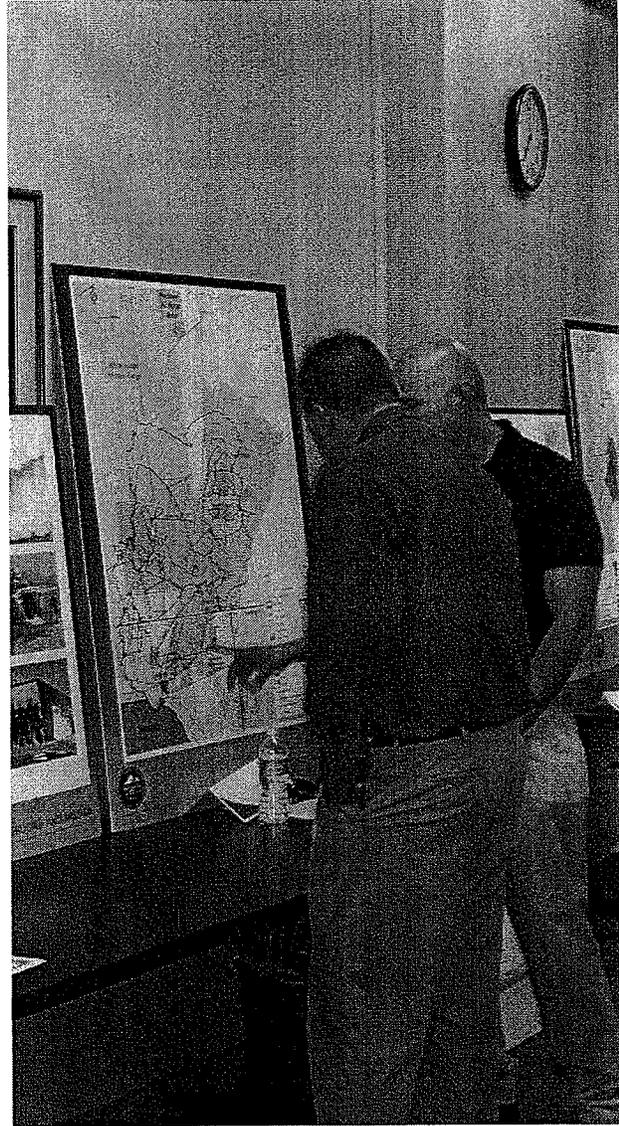
Table 1.3 Round #2 Public Meetings

Meeting	Date	Participants
Doña Ana County	October 6, 2014	17
Otero County	October 7, 2014	26
Socorro County	October 8, 2014	31
El Paso County	October 14, 2014	32
Lincoln County	October 15, 2014	8
Sierra County	October 16, 2014	10
Weed, NM	October 21, 2014	33
Chaparral, NM	October 23, 2014	10

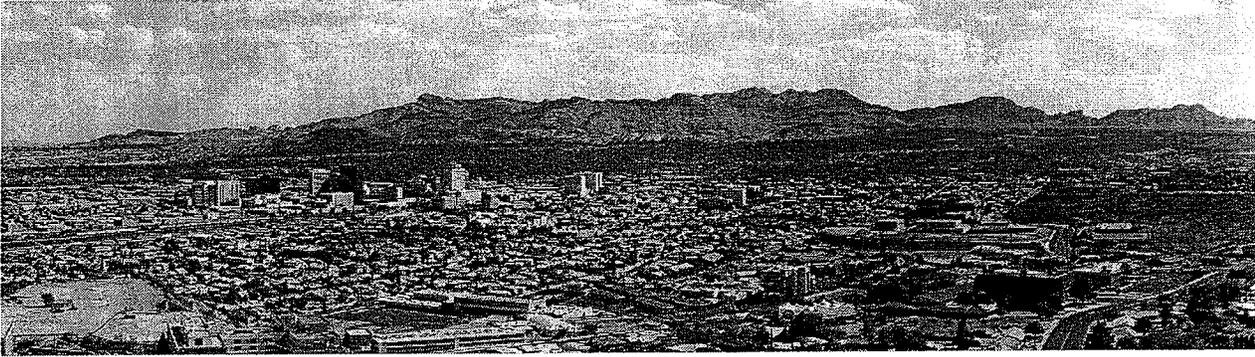
In response to a specific request for additional representation, Otero County formed the Otero County JLUS Advisory Group, consisting of stakeholders from smaller communities across the county. The intent of this group is to focus on issues of particular concern to rural areas and to establish an advisory body to guide county decision-making on JLUS implementation. The planning team met with the Advisory Group on April 3 and May 6, 2014. Critical issues raised by members, as well as attendees at the public meeting in Weed on October 21, 2014 were:

- The effects of noise (and specifically sonic booms) on residents, livestock, and recreation users; residents of the mountain areas believe they experience severe, harmful effects to their health and safety when exposed to sonic booms and low flying aircraft;
- Seasonal population fluctuations due to tourism, which result in a positive economic impact but higher numbers of people exposed to noise impacts; noise may harm economic development in rural communities, particularly for those activities, such as recreation that rely on solitude;
- Concern over restrictions on private property rights and local economic development initiatives, including any potential limitations on renewable energy/telecommunications infrastructure;
- GPS jamming in the community;
- Protection of night-sky conditions for regional observatories;
- Privacy concerns related to UAVs; and
- Positive economic benefits of the military missions on local businesses.

Otero County will be responsible for periodically convening the Advisory Group following JLUS completion and soliciting input on implementation activities. Other counties participating in the study have the option of forming citizen advisory bodies.



03. REGIONAL PROFILE



3.1 Regional Description

Community Land Use and Growth Opportunities

Land ownership patterns throughout the JLUS region are a complex mix of private, state, federal, and tribal lands (See *Figure 2.1*). Along with local and tribal governments, the Bureau of Land Management (BLM), DoD, U.S. Bureau of Reclamation (USBR), U.S. Department of Agriculture (USDA), USFWS, National Park Service (NPS), U.S. Forest Service (USFS), New Mexico State Land Office (NMSLO), and the New Mexico Department of Game and Fish (NMDGF) manage lands. In May 2014, President Obama designated roughly 500,000 acres in Doña Ana and Luna Counties as the Organ Mountains-Desert Peaks National Monument to protect significant prehistoric, historic, geologic, and biologic resources for future generations. The BLM will continue to manage the federal land included in the monument, but has no authority over state or private land within the boundaries. The BLM will undertake a National Environmental Policy Act (NEPA) analysis for a management plan to determine the land use and resource management activities that are appropriate for the monument. The region also includes the Spaceport, the first purpose-built facility in the world designed to accommodate commercial space flight. (See *Existing Conditions Report* for a detailed description of the study area)



Mesilla Valley

Much of the study area falls into the broad category of open space, which is typically a very compatible use with military operations. Open space in this context, however, may include ranching or residential uses, which have the potential of more intensive development in the future, along with the large, undeveloped stretches prevalent in remote parts of the study area. Given the rugged terrain and large inventory of state and federal lands, growth closely parallels the major interstate and highway corridors of the region and residential, commercial, industrial, and institutional uses naturally cluster in incorporated areas.

One of the challenges of land use planning in the SNMEP region is that any current classification of land ownership or existing use does not fully represent the development potential or the range of actual activities associated with a particular piece of land. While some tenure designations, such as the NPS, USFS, and state parks firmly establish protection for lands and indicate long-term stability in status, other designations, including BLM and NMSLO lands, may be subject to transfer or lease to other public or private entities for different management or development purposes.

Population projections indicate that growth is likely to continue throughout the region in the decades ahead, particularly within El Paso and Doña Ana Counties. According to projections, the region will approach 1.5 million residents by 2040, an increase of over 30 percent from the 2010 population base. The primary growth area of interest in the JLUS study area begins east of the City of Las Cruces, both north and south of U.S. 70 in Doña Ana County, and then sweeps south along the I-10 corridor into El Paso and east toward Chaparral. Growth in other parts of the region is more scattered and forms a less distinct pattern of future compatibility risk.

Local growth opportunities include increased residential and commercial activity; the provision of infrastructure and public services to support continued development and enhance quality of life; and specific economic development initiatives intended to diversify the local economy, create jobs, and increase tax revenue.

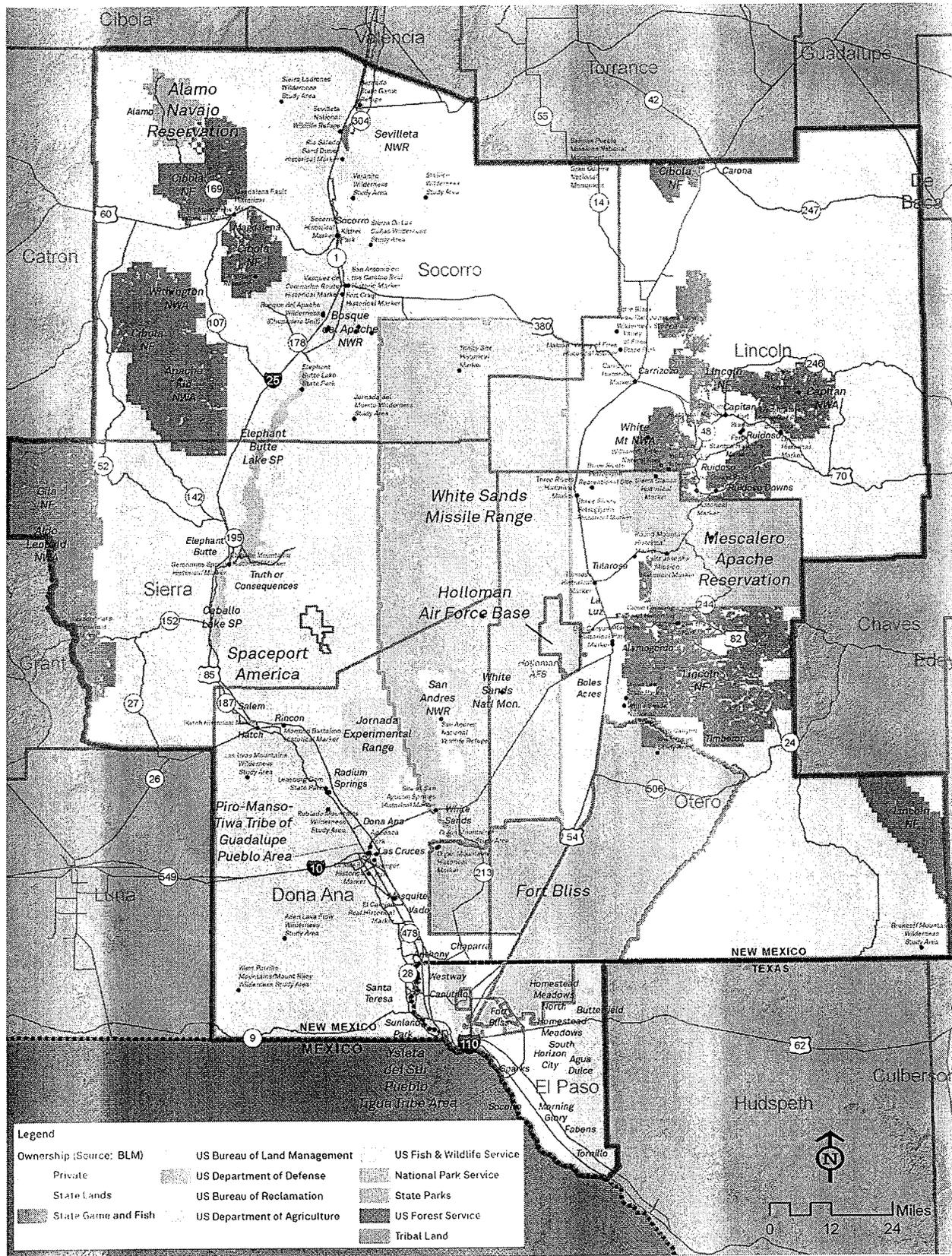
Among the economic development initiatives in the region:

- Tourism-based activities such as: hunting, skiing, horse racing, historic areas, bird-watching, camping, hiking, hot spring- and lake-based recreation;
- Spaceport America, which could become an anchor for commercial, industrial, residential, and recreational development in the region;
- Renewable energy development, including wind and solar energy production and distribution;
- Promotion of filming (motion pictures, music videos, still photography);
- Agriculture and ranching;
- STEM-based (science, technology, engineering and math) research partnerships that include the local communities; military installations and other federal agencies; universities, such as New Mexico State University, New Mexico Tech, and The University of Texas at El Paso; New Mexico public school districts; and the private sector; and
- Recruitment of new companies along with the growth of local businesses.

Federal agencies, including the Department of the Interior (DOI) and the Department of Agriculture (USFS) manage the majority of land in the region. The percentage of federal land in each county varies from a high of 83 percent in Otero County to a low of just over 19 percent in El Paso County (Otero - 83.7 percent; Doña Ana - 76.9 percent; Socorro - 60.6 percent; Sierra - 53.8 percent; Lincoln - 42.7 percent; El Paso - 19.3 percent)

Much like local governments, the federal agencies in the region manage lands for the public benefit. Their mandates result in overlapping uses ranging from energy production, forestry, cattle grazing, and extractive uses (mining) to landscape and wildlife management, recreation, and nature viewing. The NMSLO operates under a constitutional mandate to optimize revenue for its trust beneficiaries, including public schools, universities, hospitals, and other public institutions through the highest and best use of state trust land.

FIGURE 2.1 - REGIONAL LAND OWNERSHIP



Lincoln National Forest, White Sands

3.2 Economic Impacts of Military Installations

This section summarizes the full economic impact report, which characterizes the region's economic performance and estimates the impacts of FTB, WSMR, and HAFB on local jobs, incomes, and industry output. In total, economic impacts from employment and spending at the region's three military installations represent 17.9 percent of all regional employment, or one in every five to six jobs. Wages and salaries account for 24.9 percent of all earned income in the six-county region, or one in every four dollars in the region's total payrolls. In terms of industry output, military employment and spending account for 18.9 percent of the regional total, or one in every five to six dollars of all industry sector activity. The JLUS region hosts no known institutions or employers that could readily replace the beneficial economic impacts if any one of the three military installations were to close or experience a significant cutback. Because of the size of these impacts, local land use planning that sustains each installation's mission and preserves the capacity of each installation to adopt new missions serves a significant economic role.

Socioeconomic conditions

The Census Bureau places the six-county JLUS population at 1,157,691 with the urban centers of El Paso and Las Cruces anchoring much of the regional total. Average annual growth has been 1.61 percent for the past two decades, exceeding the U.S. average of 1.09 percent for the same years. The effects of the military on regional populations are evident in the City of Alamogordo, which experienced a marked decline in population from 2000 to 2010 at the same time HAFB experienced a downturn in military personnel during an exchange of aircraft (See Table 3.1).

*1 Anthony, NM, was incorporated July 2010.

*2 Elephant Butte was incorporated July 1998.

*3 No estimates were provided for 2010 and 2012.

Table 3.1 Population Trends in Southern New Mexico-El Paso Region, 1990-2012

Community	1990	2000	2010	Population Estimates (as of July 1)		Estimated Change (1990- 2012)	% Avg. Annual Growth	
				2010	2012		1990-2010	2010-2012
New Mexico	1,515,069	1,819,046	2,059,179	2,064,767	2,085,538	570,469	1.55	0.50
Texas	16,986,510	20,851,820	25,145,561	25,242,683	26,059,203	9,072,693	1.98	1.60
Doña Ana County	135,510	174,682	209,233	210,325	214,445	78,935	2.20	0.97
Anthony *1				9,537	9,542			0.03
Hatch	1,318	1,673	1,648	1,630	1,639	321	1.12	0.28
Las Cruces	62,648	74,267	97,618	98,230	101,047	38,399	2.24	1.42
Mesilla	1,976	2,180	2,196	1,899	1,913	-63	0.53	0.37
Sunland Park	8,357	13,309	14,106	14,298	14,776	6,419	2.65	1.66
Balance of County	61,211	83,253	93,665	84,731	85,528	24,317	2.15	0.47
Lincoln County	12,219	19,411	20,497	20,473	20,309	8,090	2.62	-0.40
Capitan	840	1,443	1,489	1,486	1,470	630	2.90	-0.54
Carrizozo	1,075	1,036	996	994	984	-91	-0.38	-0.50
Corona	215	165	172	172	170	-45	-1.11	-0.58
Ruidoso (village)	4,636	7,698	8,029	8,028	8,005	3,369	2.78	-0.14
Ruidoso Downs	917	1,824	2,815	2,787	2,739	1,822	5.77	-0.86
Balance of County	4,536	7,245	6,996	7,006	6,941	2,405	2.19	-0.46
Otero County	51,928	62,298	63,797	64,319	66,041	14,113	1.03	1.33
Alamogordo	27,986	35,582	30,403	30,655	31,500	3,514	0.42	1.37
Cloudcroft	612	749	674	679	697	85	0.48	1.32
Tularosa	2,753	2,864	2,842	2,866	2,943	190	0.16	1.33
Balance of County	20,577	23,103	29,878	30,119	30,901	10,324	1.88	1.29
Sierra County	9,912	13,270	11,988	12,018	11,895	1,983	0.96	-0.51
Elephant Butte*2		1,390	1,431	1,434	1,424	1,424		-0.35
Truth or Conseq	6,224	7,289	6,475	6,491	6,411	187	0.20	-0.62
Williamsburg	463	527	449	451	447	-16	-0.15	-0.44
Balance of County	3,225	4,064	3,633	3,646	3,613	388	0.60	-0.45
Socorro County	14,764	18,078	17,866	17,846	17,603	2,839	0.96	-0.68
Magdalena	844	913	938	938	926	82	0.53	-0.64
Socorro	8,207	8,877	9,051	9,042	8,906	699	0.49	-0.75
Balance of County	5,713	8,288	7,877	7,866	7,771	2,058	1.62	-0.61
NM JLUS Region	224,333	287,739	323,381	324,981	330,293	105,960	1.85	0.81
El Paso County	591,610	679,622	800,647	803,506	827,398	235,788	1.52	1.48
Anthony	3,326	3,850	5,011	5,027	5,157	1,831	2.07	1.28
Clint	1,033	980	926	927	924	-109	-0.55	-0.16
El Paso	515,652	563,662	649,152	651,562	672,538	156,886	1.16	1.60
Horizon City	2,308	5,233	16,730	16,917	18,769	16,461	10.41	5.33
San Elizario*3	4,205	11,046	13,603			-4,205	6.05	
Socorro	23,043	27,152	32,013	32,106	32,693	9,650	1.66	0.91
Vinton	597	1,892	1,971	1,977	1,995	1,398	6.15	0.45
Balance of County	41,446	65,807	88,621	94,990	95,322	53,876	3.87	0.17
Texas JLUS Region	591,610	679,622	800,647	803,506	827,398	235,788	1.52	1.48
JLUS REGION TOTALS	815,943	967,361	1,124,028	1,128,487	1,157,691	341,748	1.61	1.29

Table 3.2 Population Trends in Otero County and Alamogordo, 1990-2010

	1990	2000	2010	% Change	
				1990-2000	2000-2010
Otero County	51,928	62,298	63,797	19.97	2.41
Alamogordo (city)	27,986	35,582	30,403	27.14	-14.56

Source: 1990-2010 Population Counts by Decennial Census, U.S. Census Bureau. Found at www.census.gov

Table 3.3 shows population estimates for the unincorporated community of Chaparral, NM, which straddles the New Mexico Counties of Doña Ana and Otero. By most accounts, the community's rapid 8.3 percent average annual growth rate reflects a historic under-counting of residents in this mostly Spanish-speaking community.

Table 3.3 Population Trends for Unincorporated Community of Chaparral, 1990-2010

Community	1990	2000	2010	Population Estimates (as of July 1)		Estimated Change (1990-2012)	% Avg. Annual Growth	
				2010	2012		1990-2010	2010-2012
Chaparral, NM	2,962	6,117	14,631	No data provided	No data provided	11,669	8.3	--

Source: 1990-2010 Population Counts by Decennial Census, U.S. Census Bureau. Found at www.census.gov

From 1990 to 2010, the number of households in the JLUS region increased 47.9 percent, while the average number of persons per household fell from 3.20 to 2.98. In age range, the JLUS population reflects a nationwide trend toward an aging population. The region also demonstrates parallel growth in the number of individuals under the age of 25. A comparison of the median age (see Table 3.4) for the U.S. and JLUS region for years 1990, 2000, and 2010 confirms this observation.

Employment in the JLUS region remains heavily reliant on government. Public sector employment by local,

state, and federal governments accounts for one in every four direct jobs. Within the private sector, retail trade contributes significantly to employment, particularly in El Paso County where 35,768 jobs (12.9 percent of total county employment) are in this sector. Recent changes that allow Mexican shoppers greater entry into the border region of New Mexico hold promise that this sector will continue to grow. As is the case throughout the region, public spending on healthcare and social assistance contributes significantly to the employment base.

Table 3.4 Median Age for the U.S. and Southern New Mexico-El Paso Region, 1990-2010

	1990	2000	2010
U.S.	32.9	35.3	37.2
JLUS Region	25.2	27.3	32.3

Source: 1990-2010 Population Counts by Decennial Census, U.S. Census Bureau. Found at www.census.gov

Economic performance

For the past 10 years, the JLUS region has outpaced the U.S. and New Mexico in average annual growth in employment. Nevertheless, per capita income, a traditional measure of economic well-being, has yet to reach the averages for New Mexico or Texas and lags the nation significantly. A notable feature of the regional data is the low level of educational achievement. Individuals 25 years and older without a high school education constitute 26.3 percent of the population.

This compares to 16.9 percent for New Mexico, 18.9 percent for Texas, and 14.1 percent for the nation. Low levels of education achievement are associated across the U.S. with lower than average per capita income and serve generally as a negative economic indicator. The performance data suggest that education and training are key factors in improving economic performance throughout the region.

Table 3.5 Median Age for the U.S. and Southern New Mexico-El Paso Region, 1990-2010

Measure	U.S.	New Mexico	Texas	JLUS Region
Employment Growth (Annualized rate, 2003-2012)	0.88	0.78	2.23	1.06
Personal Income Growth in Real Wages (Adjusted for Inflation, Annualized rate, 2003-2013)	0.1	0.5 (Las Cruces)	0.1 (El Paso)	n/a
Per Capita Income (Percent of U.S. Average, 2012)	100	81.6	97.5	69.8
Education Rate (% of population 25 and over who have less than a high school diploma)*	14.1	16.9	18.9	26.3

Source: Employment and income data derived from Regional Economic Accounts, Bureau of Economic Analysis, U.S. Department of Commerce. Found at www.bea.gov
Data on population and education obtain from the Census Bureau, U.S. Department of Commerce. Found at www.census.gov.

Impact analysis

Impact analysis involves the use of multipliers to estimate the direct, indirect, and induced impacts of a change in spending on the regional economy. The basic premise underlying the multiplier approach is that one individual's spending is another person's income. Not all of the initial injection of funds stays in the local economy. Some money will be saved, some will be paid in taxes, and some will be spent on goods and services outside of the local area. The size of a community's multiplier is a function of the local economy's propensity to import from outside the area, the propensity of individuals to save, and the amount of taxes paid. For this analysis, hundreds of multipliers are calculated specific to the military and to operations conducting research, development, and testing.

Findings in *Tables 3.6 through 3.8* show estimated impacts of employment and spending at each of the region's three military installations. Fort Bliss, easily the largest of the three installations in employment and spending, accounts for the greatest share of the military's impact on the region. WSMR and HAFB rank second and third, respectively. *Table 3.9* summarizes the overall impacts of military employment and spending on the six-county region.

Table 3.6 Impacts of Military Employment and Spending at Fort Bliss on the Six-County JLUS Region, 2013

	Military & Civilian Appropriated	Contractor, Construction & Local Procurement	Totals	% Regional Total
Employment (job number)				
Direct	34,180	13,670	47,850	
Indirect	0	4,270	4,270	
Induced	17,470	4,290	21,760	
Total	51,650	22,230	73,880	13.7
Labor Income (thousands of \$)				
Direct	3,201,056	620,754	3,821,810	
Indirect	0	153,807	153,807	
Induced	640,997	155,333	796,330	
Total	3,842,052	929,895	4,771,947	19.4
Output (thousands of \$)				
Direct	5,389,136	1,885,795	7,274,931	
Indirect	0	440,974	440,974	
Induced	2,053,888	498,678	2,552,566	
Total	7,443,024	2,825,447	10,268,471	14.3

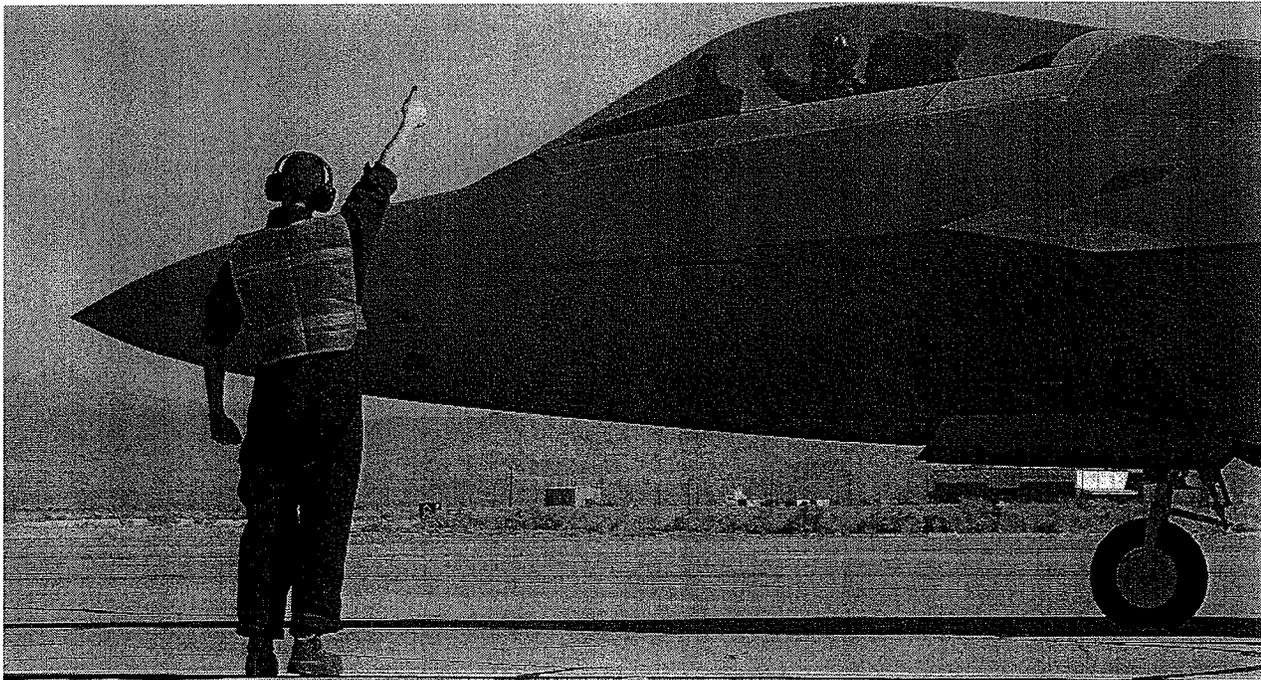
Source: Impacts modeled in IMPLAN v. 3.1.1001. Author's calculations.

Note: Numbers may not add up due to rounding.

Table 3.7 Impacts of Military Employment and Spending at Holloman AFB on the Six-County JLUS Region, 2013

	Military & Civilian Appropriated	Contractor, Construction & Local Procurement	Totals	% Regional
Employment (job number)				
Direct	5,440	1,170	6,610	
Indirect	0	230	230	
Induced	1,710	310	2,020	
Total	7,150	1,720	8,870	1.7
Labor Income (thousands of \$)				
Direct	476,927	59,078	536,005	
Indirect	0	8,254	8,254	
Induced	55,039	10,617	65,655	
Total	531,966	77,949	609,915	2.5
Output (thousands of \$)				
Direct	1,220,892	140,098	1,360,990	
Indirect	0	26,364	26,364	
Induced	187,725	34,660	222,385	
Total	1,408,617	201,121	1,609,738	2.2

Source: Impacts modeled in IMPLAN v. 3.1.1001. Author's calculations.
 Note: Numbers may not add up due to rounding.



F-22 Raptor prepares to take off

Table 3.8 Impacts of Military Employment and Spending at White Sands Missile Range on the Six-County JLUS Region, 2013

	Military & Civilian Appropriated	Contractor, Construction & Local Procurement	Totals	% Regional
Employment (job number)				
Direct	2,920	5,940	8,860	
Indirect	0	1,500	1,500	
Induced	1,310	1,850	3,150	
Total	4,230	9,290	13,510	2.5
Labor Income (thousands of \$)				
Direct	284,486	305,420	589,906	
Indirect	0	53,061	53,061	
Induced	46,394	66,122	112,516	
Total	330,880	424,603	755,483	3.1
Output (thousands of \$)				
Direct	537,489	671,038	1,208,527	
Indirect	0	153,837	153,837	
Induced	144,922	210,003	354,925	
Total	682,411	1,034,878	1,717,289	2.4

Source: Impacts modeled in IMPLAN v. 3.1.1001. Author's calculations.

Note: Numbers may not add up due to rounding.

3.3 Description of Installations

The missions of FTB, WSMR, and HAFB are distinct and separate, yet they provide an unequalled contiguous footprint of DoD-controlled surface area (composed of over 3.3 million acres), and over 8.8 million acres underlying associated restricted airspace over DoD and non-military land. Each of the installations manages its own land and air assets, but also leverages each other's resources for particular missions.

Fort Bliss

Fort Bliss, home to the 1st Armor Division (1AD), has the primary mission to train, mobilize, and deploy members of joint and combined combat teams. Fort Bliss is a "force projection platform" for rapidly deploying troops to worldwide combat zones by rail (to ship) or aircraft.

The Army uses a training model that enables troops to train as they fight, with opportunities for multiple diverse

brigades to train together. The composition of the 1AD reflects this philosophy with a Stryker vehicle brigade combat team, multiple heavy armored vehicle brigade combat teams, a combat aviation brigade, sustainment brigade, fires brigade, and brigade modernization command (BMC). The Army also seeks to create realistic training situations, using specifically constructed training ranges (including mock villages) and the natural desert and mountainous terrain, which is similar to many combat zones.

The Fort Bliss Training Complex (FBTC) has over 1.1 million acres of training lands and associated restricted airspace (See Figure 2.2). The FBTC is composed of three major areas: the South Training Areas (STA) in El Paso County, Texas, and the Doña Ana Training Areas (a.k.a. Northern Training Areas), and McGregor Range in New Mexico. The training land consists of 33 training areas

Table 3.9 Summary Impacts of Military Employment and Spending on Six-County JLUS Region, 2013

	Military & Civilian Appropriated	Contractor, Construction & Local Procurement	Totals	% Regional
Employment (job number)				
Direct	42,540	20,780	63,320	
Indirect	0	6,010	6,010	
Induced	20,480	6,440	26,440	
Total	63,020	33,230	96,250	17.9
Labor Income (000s \$)				
Direct	3,962,468	985,252	4,947,720	
Indirect	0	215,123	215,123	
Induced	742,430	232,072	974,502	
Total	4,704,898	1,432,447	6,137,345	24.9
Industry Output (000s \$)				
Direct	7,147,517	2,696,931	9,844,448	
Indirect	0	621,174	621,174	
Induced	2,386,535	743,341	3,129,876	
Total	9,534,052	4,061,446	13,595,498	18.9

Source: Impacts modeled in IMPLAN v. 3.1.1001. Author's calculations.
Note: Numbers may not add up due to rounding.

that support a unique mix of heavy and light maneuver, making use of varied environments ranging from flat, arid land to mountainous terrain. A portion of McGregor Range is publicly accessible and supports co-use with the BLM for cattle ranching, recreation, and other dispersed passive uses (See Figure 2.3).

Biggs Army Airfield (AAF), adjacent to the cantonment areas and El Paso International Airport (EPIA), is the largest airfield in the Army and is home to the 1AD Combat Aviation Brigade (CAB), which operates 114 helicopters, 9 Grey Eagle UAVs, and about 100 small (hand-launched) UAVs.

Fort Bliss will continue its current mission in the future and anticipates the following operations:

- The training tempo for the current training mission will increase as troops return from combat zones and do not quickly redeploy. This situation is referred to as a "full nest."
- This increased tempo may increase the level of military activity in the northern part of McGregor Range.
- The trend for more use of UAVs will continue, using both restricted airspace and the national airspace system (NAS) with appropriate approvals from the Federal Aviation Administration (FAA).
- The FAA, which controls the airspace around EPIA and Biggs AAF, will not allow military UAVs to operate at Biggs AAF because of proximity to commercial arrival and departure tracks. FTB is moving forward with a concept for a new UAV airfield in southern Doña Ana Training Areas (known as the Grey Eagle

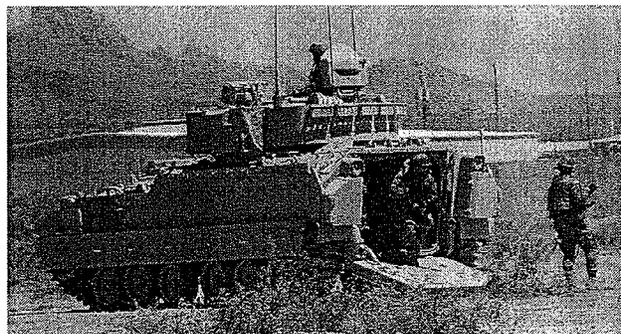


Abrams Tank training on Fort Bliss

- project) within restricted airspace R-5107 A/K.
- Fort Bliss may support visiting units returning to FBTC to perform specific skills for the air defense mission because of its unique capabilities to support longer-range weaponry.
- In the future with more troops at home, it is likely that more soldiers will use the Orogrande, McGregor, and Doña Ana Training Areas camps and the live-fire and qualification ranges associated with each of those camps (particularly visiting units).
- Biggs AAF will see some increase in operations when the Air Force F-16s use this location as an auxiliary airfield for pattern work (projected for 2014). This is will not expand noise exposure zones appreciably, but will add to the overall mix of aircraft in the environs of EPIA.
- The Air Force has announced plans to move its newly configured Security Forces Regional Training Center to FTB.

A primary compatibility concern from the FTB mission revolves around noise from weapons firing in specific

locations on the installation training areas. As shown in *Figure 2.2*, the highest noise impacts fall within installation boundaries. However, noise contours that depict potential noise impacts on surrounding areas extend to the south and west, affecting the communities of Chaparral and Anthony. Noise also travels off the installation toward the community of Orogrande and the Hueco Tanks State Park area (*See the Existing Conditions Report for a more detailed description of noise impacts*).



Bradley Security, Fort Bliss

FIGURE 2.2 - FORT BLISS TRAINING COMPLEX AND SURROUNDING AREAS

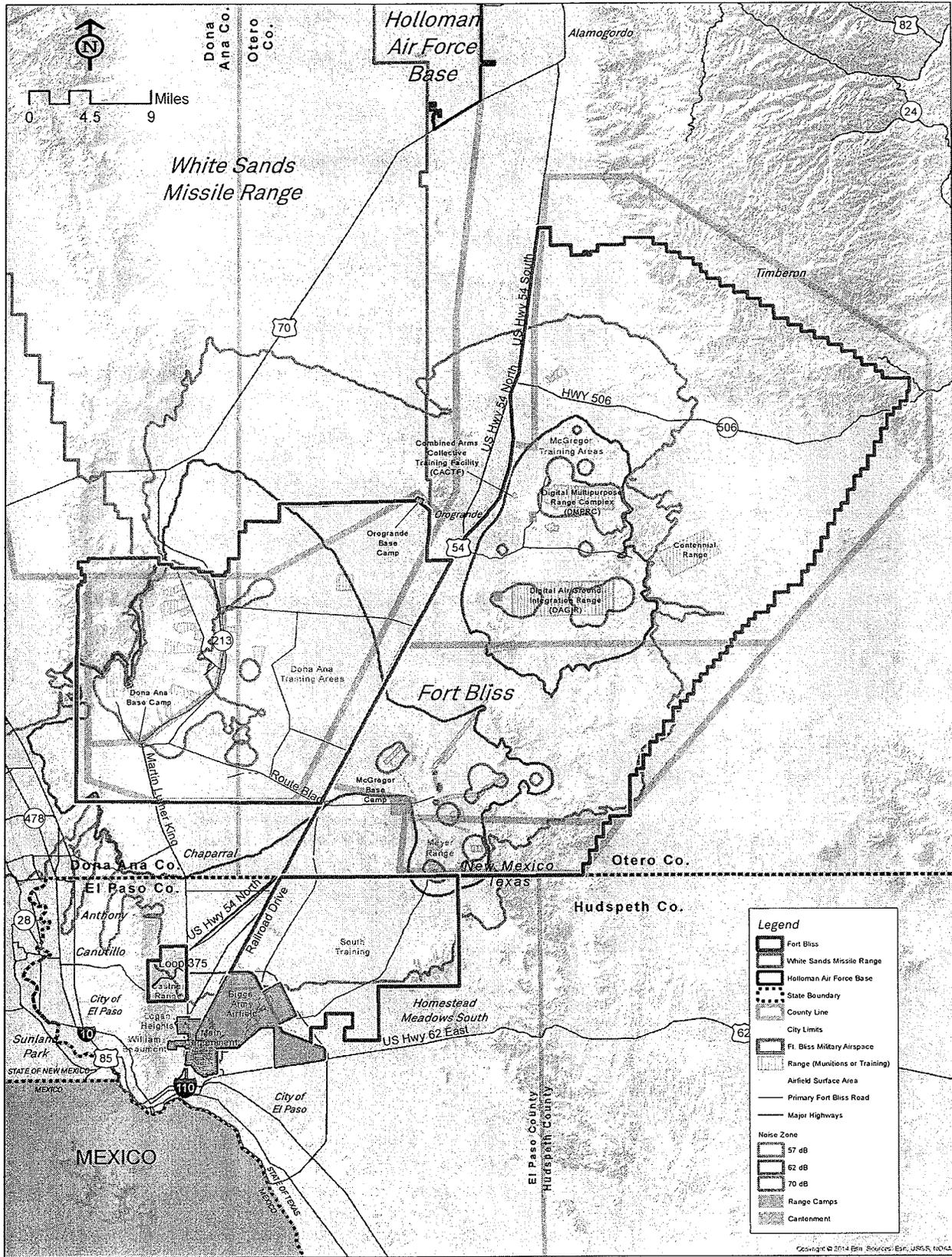
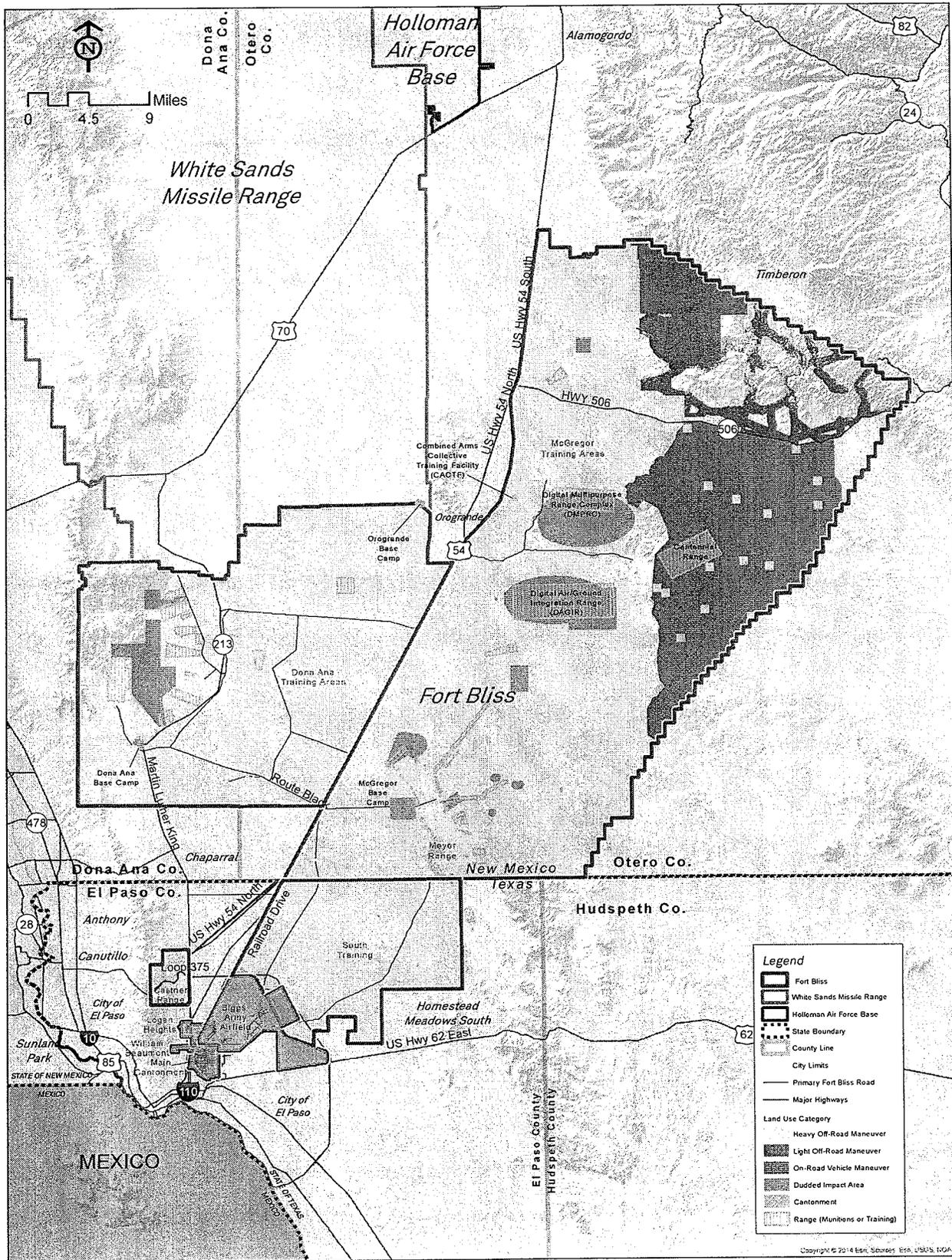


FIGURE 2.3 - FORT BLISS TRAINING COMPLEX LAND USES



White Sands Missile Range

White Sands Missile Range supports developmental and operational testing for the Army, Air Force, Navy, Department of Homeland Security, allied foreign governments, universities, and commercial and private entities. As the largest terrestrial test range in the U.S., WSMR provides unique infrastructure and test facilities, including a nuclear survivability test reactor, radar test facilities, a high energy laser systems test facility, and a state-of-the-art range control center. WSMR's mission is to provide testing and development of weapons and equipment (both hardware and software) for military use in combat zones and for national security considerations. WSMR has historically supported test programs requiring large land areas with controlled access and restricted airspace due to hazards associated with the test objects. In addition to its test mission, WSMR has taken on a new role in Army Transformation; it will now house and host limited training activities and field exercises for uniformed personnel (Network Integration Exercise and Bold Quest).

WSMR, consisting of almost 2.2 million acres of land (including White Sands National Monument, San Andres National Wildlife Refuge, and Department of Agriculture Jornada Experimental Range) has associated restricted airspace overlying 5 million acres (See Figure 2.4). WSMR can further expand its surface area to include land within the Northern Extension Area (NEA) and Western call-up areas for use as surface danger zones. Contracts with individual landowners in the call-up areas allow for a certain number of annual evacuations with accompanying per diem.

The main cantonment area contains facilities used for specific controlled test programs and research. The range has an infrastructure network for monitoring, tracking, communicating, and relaying data in support of test programs. The Navy, Air Force, and Army all run key test programs at WSMR. Many of these tenants operate from their own facilities on WSMR; some function completely within enclosed environments and some utilize restricted airspace and land for hazardous operations, instrumentation, and tracking assets.

Historically, WSMR's primary mission supported weapon systems programs. Ground-based launch sites are concentrated in the south end of WSMR with others at mid-range and the northern end of WSMR. These locations give flexibility to conduct anything from short, medium, to long-range launches of both test missiles and targets. Occasional use of the NEA and a missile flight corridor from Fort Wingate in western New Mexico provides extended range.

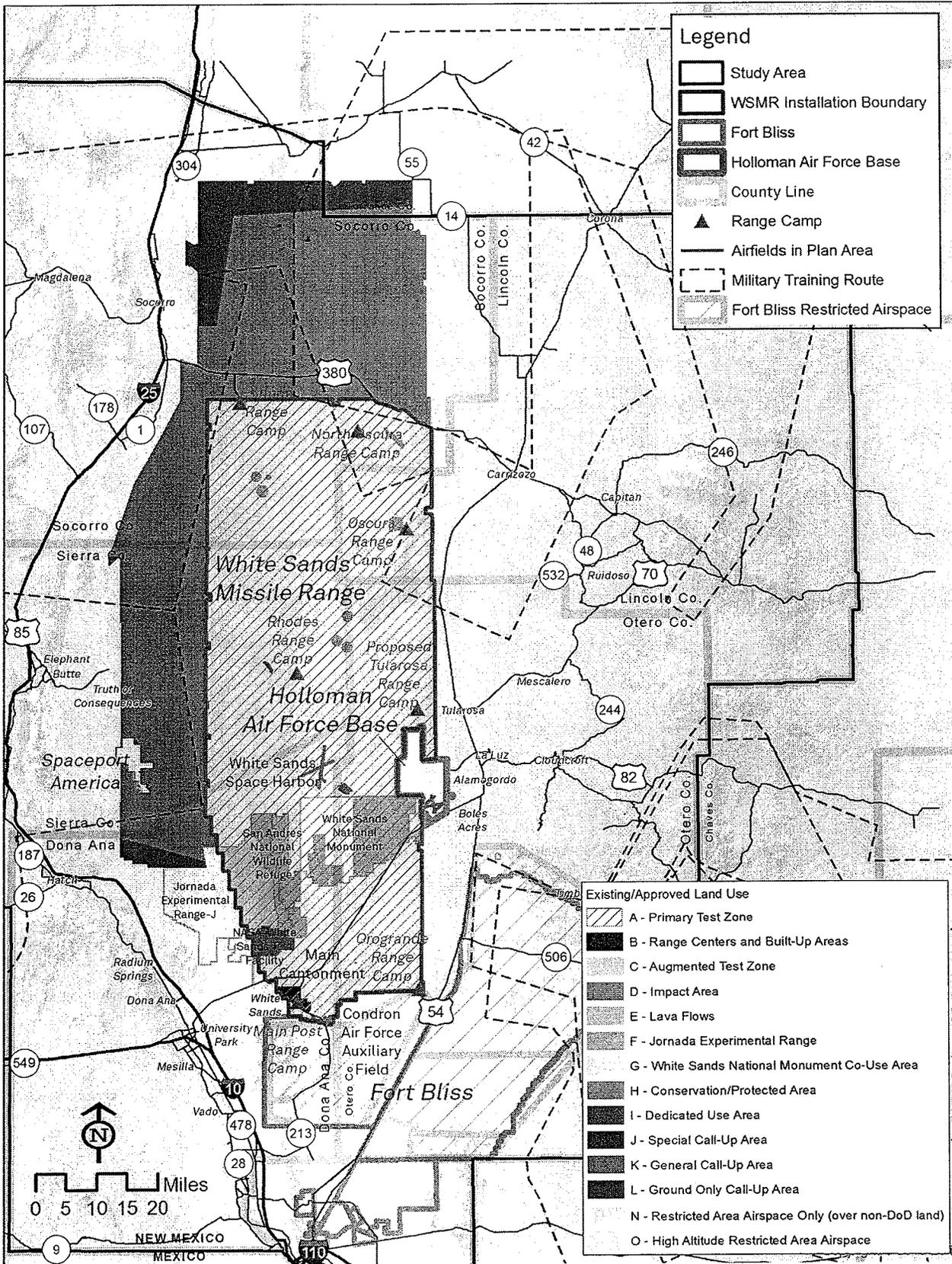
WSMR also provides services and facilities that are available to multiple users on a fee basis, including coordinated range control and a spectrum of test support capabilities for all aspects of test planning, support logistics, and data capture and analysis. Additionally, the Air Force manages and uses two bombing ranges, Red Rio and Oscura, on WSMR. The Air Force also uses the YONDER Impact Area in the San Andres Mountains for air-to-air training.

WSMR will continue its current mission, while recognizing that the future will bring changes that respond to research and development needs that are unknown. In general, the following trends will drive the future mission at WSMR:

- More operational testing, training, live-fire, and maneuver;
- Increased UAV activity by HAFB;
- Transition of F-22 to F-16 training by HAFB, with accompanying changes in airspace needs and increased use of the bombing ranges on WSMR;
- More diverse simultaneous operations using air, ground and radio frequency band width;
- Expansion of electromagnetic testing capabilities;
- Weapons System Evaluation Program (WSEP), which will dramatically increase the use of the range for live fire purposes;
- Development of a dynamic airspace management capability combining FTB, HAFB, and WSMR management in a centralized system;
- Deployment of meteorological sensor tower arrays on WSMR and the adjacent JER for evaluation of meteorological research models; such arrays will be wirelessly linked, will cover significant land areas, but will have low tower density and tower height;
- Support of Spaceport America;
- EIS-approved capability to support training of heavy armored vehicle units; and
- Increase in testing of systems across greater distances, within high clutter and controlled clutter frequency environments.

The primary compatibility issues between WSMR and surrounding areas include radio frequency and spectrum issues; changes in land use and development or new infrastructure in call-up areas or near sensitive military instrumentation sites; the noise and safety issues affecting surrounding development and wildlife; and the ability of regional airspace to accommodate the needs of both civilian and military users.

FIGURE 2.4 | WHITE SANDS MISSILE RANGE AND SURROUNDING AREAS



Holloman Air Force Base

Holloman Air Force Base, comprising about 60,000 acres of DoD owned and withdrawn land, has supported the Air Combat Command (formerly Tactical Air Command) for several decades. Currently, HAFB is home to the 96th Test Group (TG), 49th Wing. In the past three decades, HAFB has hosted the F-4, F-15, T-38, F-117, and F-22 aircraft in association with the 49th Wing and various airframes related to the test mission (QF-4, AT-38, etc...). In 2008, the F-117 aircraft were retired and the Wing converted to the F-22 Raptor. The F-22 Raptor trained mostly at higher altitudes and at supersonic speeds. In 2009, HAFB began training pilots and sensor operators for the MQ-1 Predator and MQ-9 Reaper UAVs.

Most of the facilities on HAFB are in the south part of the installation. A three-runway airfield has extensive ramp space for various units. Farther north, most of the land on HAFB is undeveloped with isolated facilities serving specific functions (See Figure 2.5). HAFB has had a long relationship with WSMR, using both facilities on the range and the extensive restricted airspace. Aviation units operate beyond the immediate environs of the base in this regional special use airspace, including Military Training Routes (MTRs), Military Operations Areas (MOAs), restricted airspace, and aerial refueling tracks (ARs). Figure 2.6 shows airspace used by HAFB units. The F-22 mission utilized WSMR's R-5107 complex, particularly the blocks of higher altitude airspace, approved for supersonic operations. The pilot training mission transitioned from F-22 to F-16 aircraft in 2014. The anticipated F-16 mission will use MTRs daily.

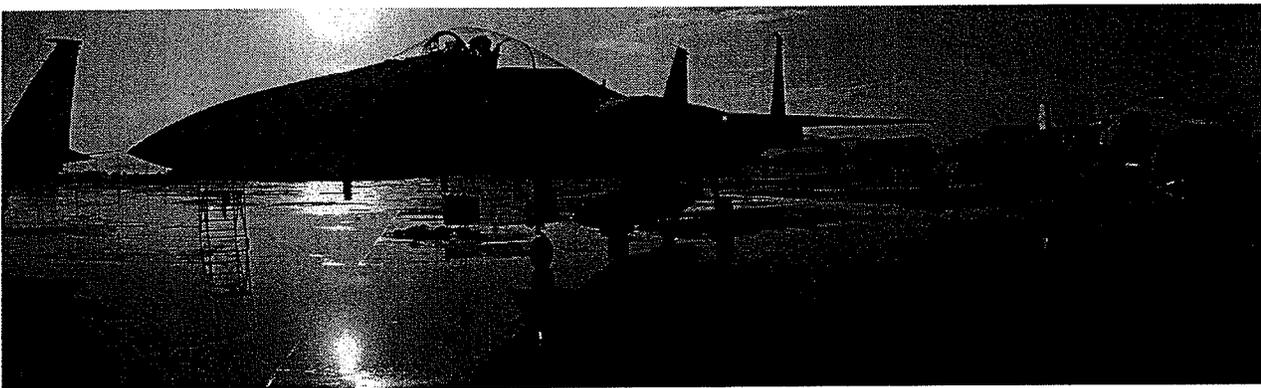
The German Air Force (GAF) has based and trained aircrews in the Tornado aircraft since the late 1990s. The GAF training uses HAFB's MTRs, MOAs, and air-to-ground bombing ranges and can train as low as 100 feet Above Ground Level (AGL) in MTRs. The 49th Wing and GAF are the primary users of MTRs and MOAs in the region and Oscura and Red Rio Bombing Ranges on WSMR and Centennial Bombing Range on FTB.

The 96th Test Group (TG) provides test and evaluation support to several resident units and Army and Navy test programs, many using facilities and performing tests on neighboring WSMR. The 846th Test Squadron maintains HAFB's High Speed Test Track (HSTT) that is used for research on ejection seats, rockets, parachutes, and bomb penetration. The 586th Flight Test Squadron supports advanced avionics and weapons flight tests.

Current test and training is expected to continue at HAFB in the future. Foreseeable changes include:

- The new F-16 mission will focus on basic pilot training under the Air Education Training Command (AETC). Given the air-to-ground combat role, F-16 aircrews will spend more of their flying hours at lower altitudes in regional MTRs with less use of high altitude restricted airspace and at bombing ranges on WSMR and McGregor Range on FTB. The F-16 mission will increase the training levels at HAFB to about 60 operations per day. The departure of the F-22 aircraft has reduced the frequency of sonic booms; however, the F-16 trains low and fast in MTRs, shifting the location of aircraft noise and the type of impact.
- Expansion of the UAV mission, with beddown of another formal training unit for the MQ-1 Predator and MQ-9 Reaper. UAV missions use approved airspace; usually restricted airspace or a MOA through a Certificate of Authorization (CoA) issued by FAA.

The primary compatibility issue for HAFB is noise associated with aircraft operations in the local area of Alamogordo and regional special use airspace. For the former F-22A training mission, some residents in the Sacramento Mountains and eastern Las Cruces communities reported disturbance from sonic booms. However, even subsonic noise from low-level, high-speed aircraft operations in MTRs and MOAs can startle people and animals on the ground.



Holloman Air Force Base

FIGURE 2.5 - HOLLOMAN AIR FORCE BASE AND SURROUNDING AREAS

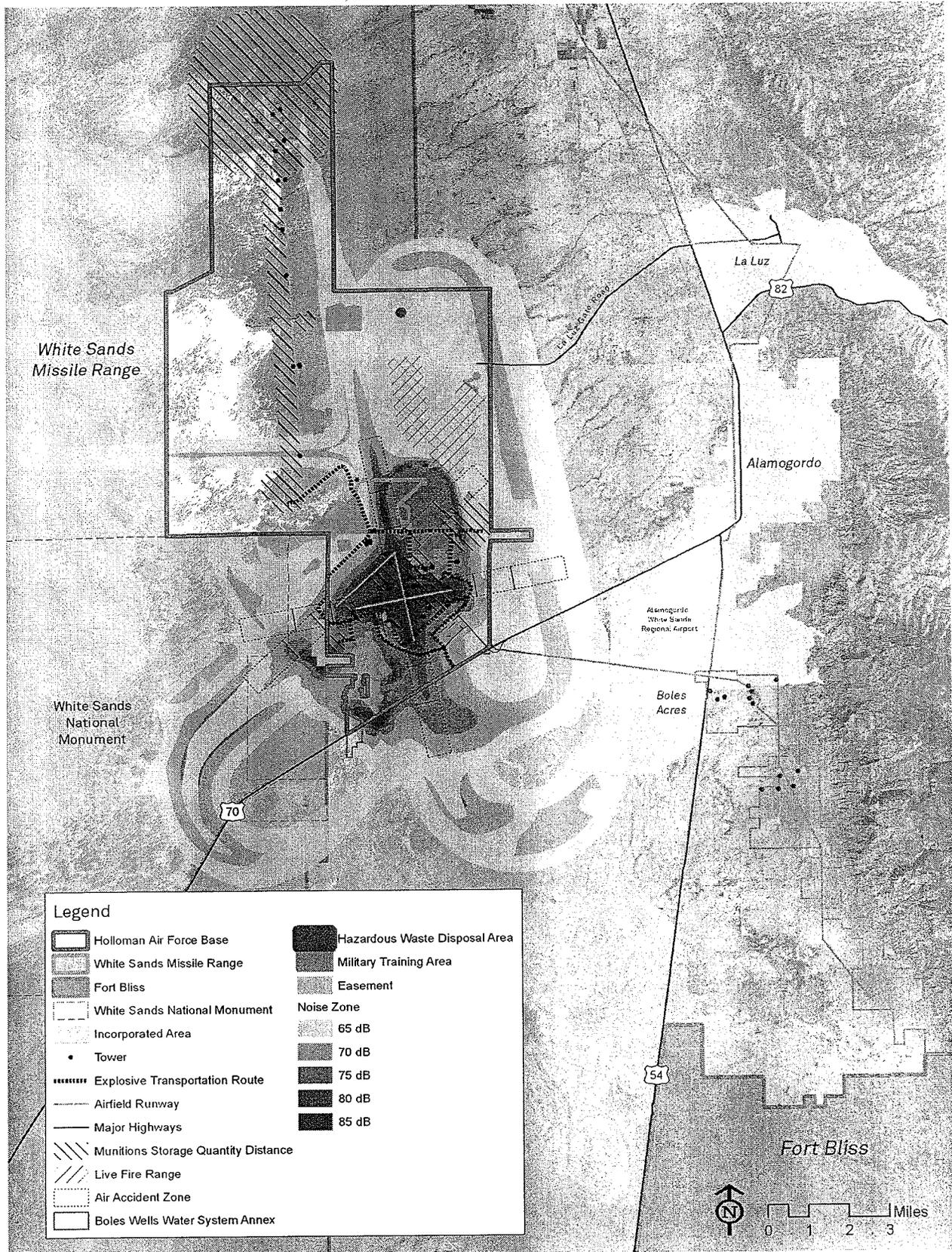
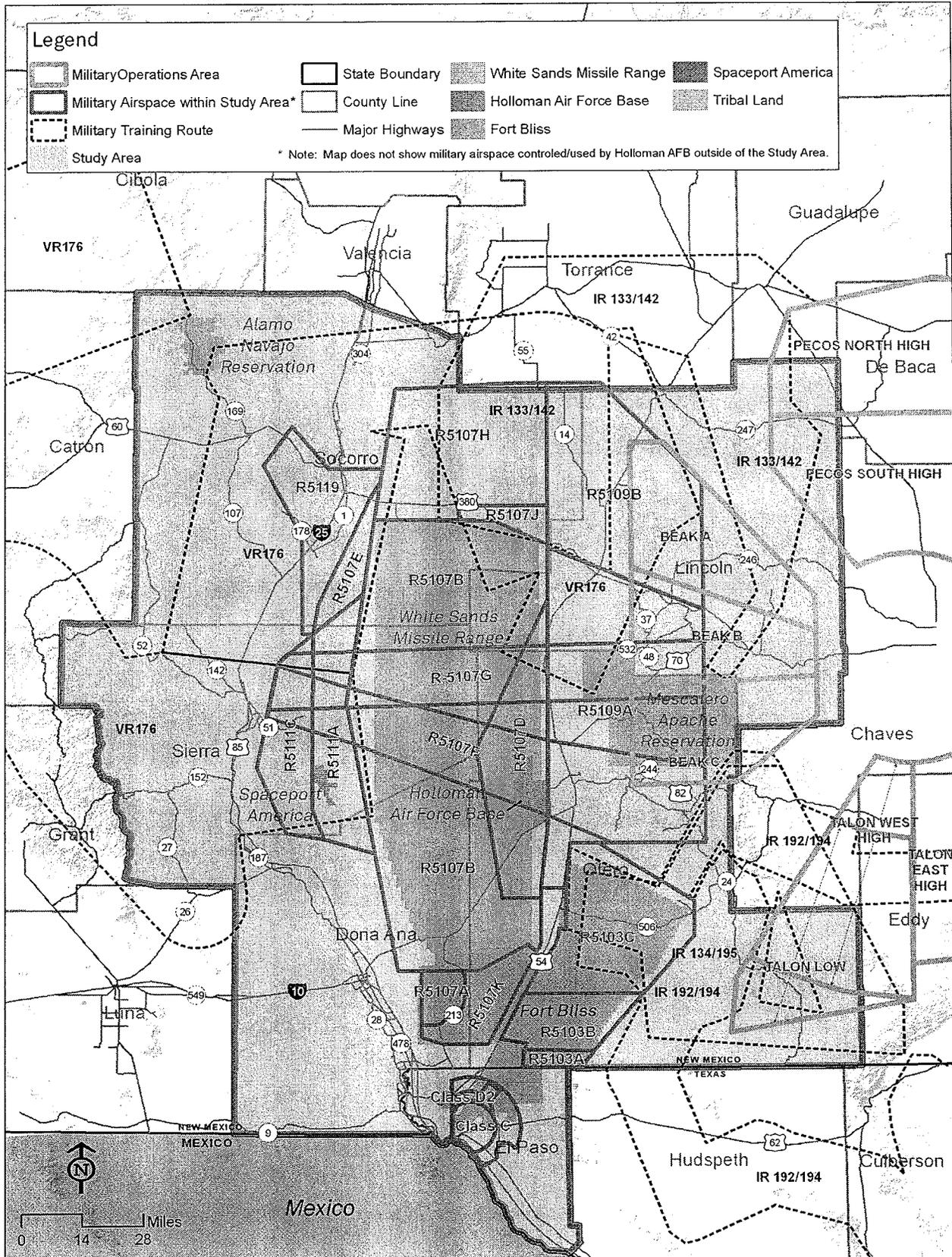
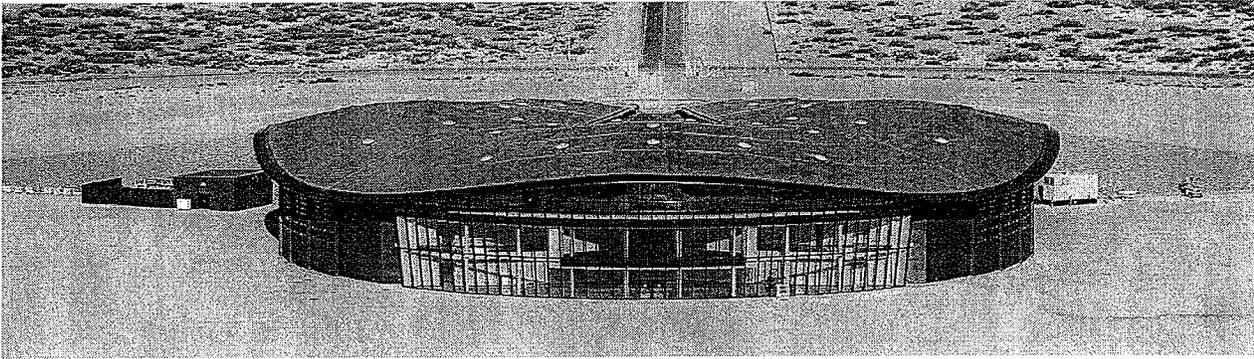


FIGURE 2.6 - REGIONAL AIRSPACE



04 COMPATIBILITY FACTORS



The central purpose of the JLUS is to minimize or, when feasible, eliminate compatibility issues between the military and surrounding civilian land uses. Compatibility challenges occur when:

- Communities experience higher than normal levels of impacts from military activities, such as noise or safety risks, which can then affect quality of life or uses of land; or
- Certain types of development limit the ability of the military to perform its missions or cause changes in training or testing operations that reduce mission effectiveness.

This section highlights areas of the SNMEP region in which current and foreseeable military operations and surrounding community activities may overlap and create compatibility challenges. These factors form the basis of the strategies found in the compatibility menu described in Section 5. The factors are in alphabetical order.

4.1 Air Quality

Military convoys traveling on local dirt roadways and maneuver training activities on the ranges can produce fugitive dust. Compatibility issues arise when the dust affects the surrounding communities by diminishing air quality and reducing visibility. Smoke from controlled burns can also affect air quality. For example, maneuvers on the Doña Ana Training Areas can create dust that affects portions of the U.S. 54 corridor. Conversely, dust

or smoke generated from burning on publicly managed and private lands can obscure visibility for military testing operations that require clear skies.

4.2 Airspace Use

Competition exists between HAFB and WSMR (and to a lesser extent, FTB) to schedule restricted airspace. A partnership between HAFB, WSMR, and FTB, called the TRIAD, is examining options for maximizing airspace capacity for the three installations and, indirectly, for commercial and general aviation traffic.

Primary concerns regarding airspace revolve around access to and through special use airspace. Restricted airspace above and adjacent to the three military installations forms a large, contiguous block (comprised of R-5103, R-5107, and R-5111) that commercial traffic must circumnavigate, increasing travel time and cost. To alleviate issues, special corridors for commercial aircraft exist (e.g., following U.S. 54 underneath restricted airspace and in two high altitude corridors through R-5107).

Currently, management of restricted airspace for the three installations is part of a military radar unit (MRU). The MRU deactivates and releases control of WSMR's restricted airspace back to the FAA's Albuquerque Air Route Traffic Control Center (ARTCC), on weekends and weekdays between midnight and 6 AM when not subject to military use. There are times when military users do not schedule specific blocks of restricted

airspace; however, procedures only allow civilian traffic to transit restricted airspace when it is not active and under control of the ARTCC. Due to lead times involved in releasing airspace back to the FAA, it is impractical for the Albuquerque ARTCC to accept airspace for a period shorter than two hours. Consequently, it is not feasible to utilize ad hoc or short blocks of time under the current management system.

Another concern is that increased military use for test, training, and commercial space operations will diminish availability for any civilian transit. One concept under consideration would replace the MRU with a certified air traffic control (ATC) facility. In this capacity, the ATC could allow short-notice transit through restricted airspace by non-military operators. Additionally, the mix of military and civilian traffic outside of special use airspace is likely to intensify.

Use of UAVs is increasing in both the military and commercial realms. HAFB routinely flies UAVs in and out of its airfield, using WSMR restricted airspace. Fort Bliss flies UAVs mostly over the Doña Ana Training Areas. The Army recently defined an Alert Area to the east of the FTB cantonment areas in El Paso. This designation does not trigger formal rule-making with the FAA, but the area is charted, alerting pilots of the high level of military traffic that may be encountered. Fort Bliss is considering this status for other areas with elevated helicopter use.

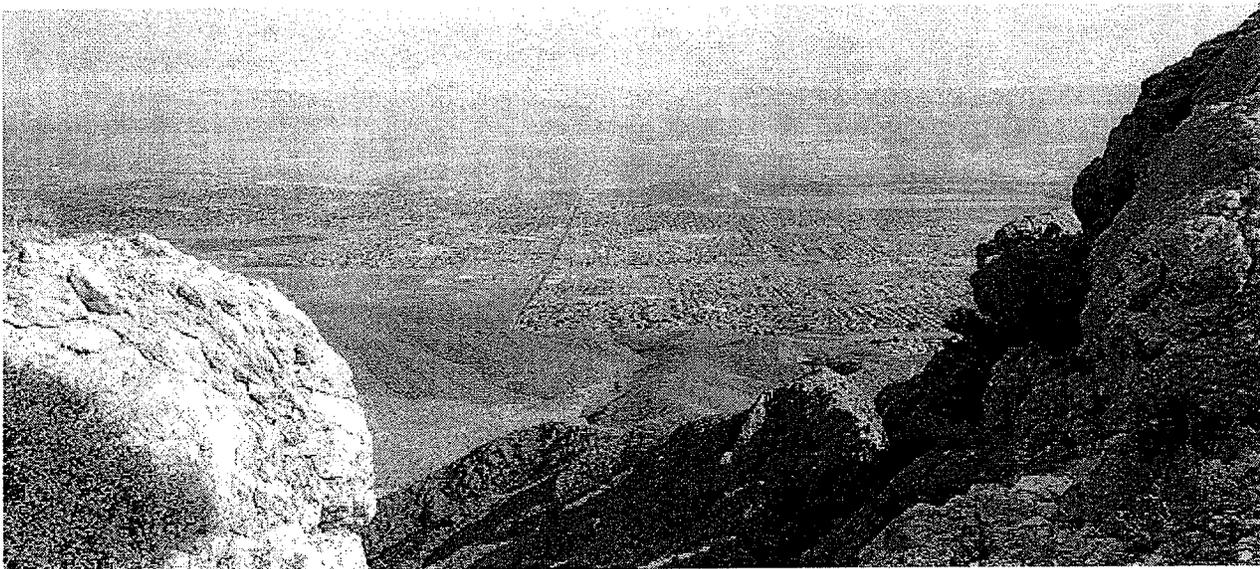
Along with general airspace issues, several users create specific demands on regional airspace. The BLM

periodically uses airspace to perform its landscape restoration and fire suppression responsibilities. The restoration projects, which include the aerial spraying of herbicides, often require a very specific window of operation due to seasonal or weather-related conditions. The use of airspace by higher-priority military operations can reduce the availability of airspace for BLM activities.

4.3 Aviation/Testing Safety

Safety challenges to aviation and testing include the development of physical infrastructure in areas that accommodate hazardous testing activities conducted by WSMR and low-level flight operations associated with HAFB. The safety envelopes for WSMR encompass a 4,459,850-acre area that falls to the north and west of the main range within Doña Ana, Otero, Lincoln, Sierra, Socorro, and Torrance Counties. This land underlies portions of WSMR restricted airspace and includes the call-up areas. WSMR has contracts with certain landowners in the call-up areas to evacuate when a test may cause unsafe conditions, giving flexibility to maintain the availability of these extension areas for critical WSMR mission capabilities.

One of the emerging compatibility issues is the region's potential for solar and wind energy production and the accompanying transmission lines. Compatibility issues relate to the higher risk of potential damage to transmission lines should a launched missile malfunction and require remote detonation within the fallout zone. The fallout zone is an estimated area where debris



Castner Range, Fort Bliss

could land based on factors such as the height and the location of the missile at the point of detonation.

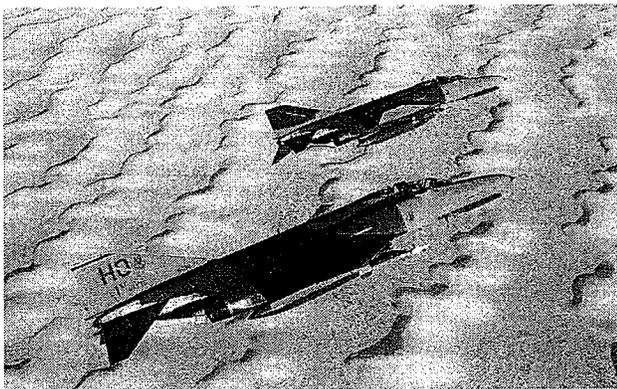
The transmission and renewable energy structures also pose a risk to aircraft due to physical intrusion into low-level flight corridors. The FAA evaluates the obstruction hazard of any proposed structure that is more than 200 feet AGL. While this process safeguards against potential hazards in excess of 200 feet, structures that fall below that threshold are not subject to FAA review and thus may not be charted or properly lit. Lincoln County has permitting, but some counties in the JLUS study area lack a permitting or notification process that could assist in identifying structure locations. The proliferation of structures with unmarked locations can pose a collision risk, particularly in low-level military training routes with a minimum floor of 100 feet AGL.

Aviation-related hazards also exist in proximity to military airfields. The DoD establishes Clear Zones (CZs) and Accident Potential Zones (APZs) around military airfields based on analysis of military aircraft accident history and a determination of where an accident is likely to take place and the physical extent of the impact area resulting from any single accident.

4.4 Frequency and Spectrum Interference

Issues of frequency spectrum use and deconfliction are a growing regional concern. The last few decades have seen a dramatic rise in commercial and private wireless communication and commercial broadcasting. Similarly, there is a need for more testing as the modern battlefield depends on linked electronic devices and systems that communicate wirelessly over varying distances.

Radio spectrum is a finite resource with only certain usable portions. Both federal and non-federal agencies



and the commercial sector compete for this finite spectrum. Due to competition, government and non-government sectors share the spectrum. The Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) manage spectrum allocation. NTIA manages allocations among the DoD users and, to maximize use, it may allocate a frequency to several uses/users, which can result in conflicts. WSMR has a regional DoD Frequency Manager who carefully tracks and deconflicts spectrum use for regional military users through the Integrated Frequency Deconfliction System (IFDS).

Specific regional frequency issues include:

- The lack of management and coordination with frequency use in Mexico.
- Some frequencies have capacity; but others, especially in the Very High Frequency (VHF) range, are saturated.
- In general, military uses stay out of the public/commercial spectrum domain; however, some commercial users are moving into the spectrum bands used by the military driven by consumer demand. The trend to “sell off” government bandwidth depletes availability for military needs in the region.
- GPS jamming tests on HAFB and WSMR can affect commercial and private GPS and communication devices. The primary concerns for the effects of this testing are on non-participating flight operations in the vicinity and local emergency response capabilities.
- Although the military does have a common integrated platform for managing its spectrum use, the region lacks a single platform for viewing, assigning, and deconflicting military, other federal, commercial, and private spectrum uses.
- Some renewable energy infrastructure can also interfere with communication systems, including radar, navigation aids, and infrared instruments.

4.5 Light Pollution

Light pollution is the effect of stray or excessive light from artificial lighting sources, such as building exteriors, advertising, streetlights, or outdoor facilities or venues. Pollution occurs when light travels beyond its intended target of illumination into otherwise darkened areas. The adverse impacts of light pollution include glare from overly bright sources or night sky brightness in which upward-bound light creates a background glow.

Light pollution can interfere with the use of night-vision training devices (NVDs) during military training operations. Night vision goggles, other types of NVD worn by personnel, or NVD systems integral to aircraft and vehicles capture and amplify any illumination in the surrounding landscape, displaying an extreme sensitivity to a broad spectrum of light sources. Exposure to stray light can cause the vision screen to white-out, temporarily robbing the wearer of vision. In addition to training, other facilities such as the Ground-Based Electro-Optical Deep Space Surveillance (GEOSS) facility at the northern end of WSMR are also highly sensitive to stray light exposure.

Light pollution can also affect the region's observatories. The geographically remote Apache Point Observatory in Sunspot, New Mexico, has noted compatibility issues related to ramp lights at HAFB. The sky brightness from base lighting reduces the star magnitudes by nearly 1 magnitude (factor of 2.5) versus other parts of the sky, limiting the depth of space into which the observatory can see and the types of objects on which data can be collected. Though less of an issue, the growth of El Paso combined with FTB contributes to an expanding sky glow visible at the observatory.

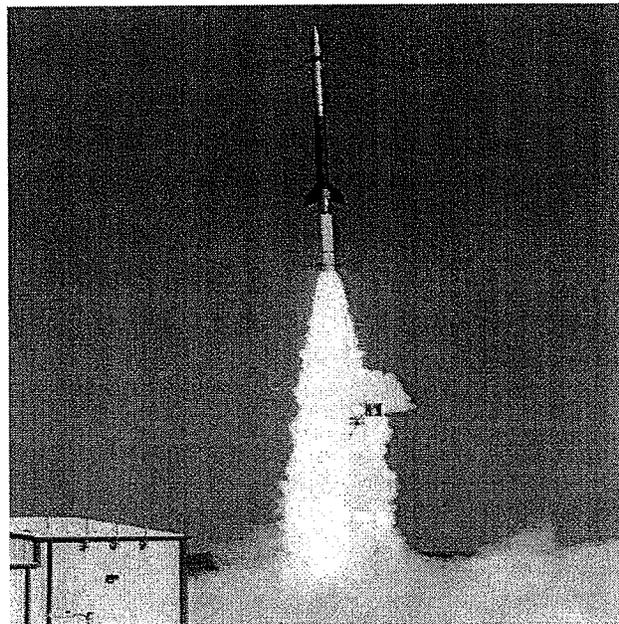
4.6 Noise – Aviation

Historically, training missions at HAFB have generated aviation noise and caused compatibility issues within the surrounding region. Noise and startle effects from low-level high-speed aircraft operations, primarily along MTRs, can affect local activities, including ranching, children's camps and recreational uses. The startle effect on livestock can result in property damage or injury to the animals. A large bibliography of studies on the impacts of aircraft noise on livestock has found varied effects.

Supersonic operations (by military aircraft using airspace

approved for these operations) with the F-22 aircraft caused sonic booms in the region. Most of the affected areas involved residential locations, particularly in the Sacramento Mountain communities, national parks, refuges, and wilderness areas. Other communities throughout the Tularosa Basin and surrounding mountain valleys, including Alamogordo, all of Lincoln County including historic areas, and neighborhoods east of the City of Las Cruces heard intermittent sonic booms. The departure of the F-22 aircraft has reduced the frequency of sonic booms; however, the F-16 trains low and fast in MTRs, shifting the location of aircraft noise and the type of impact.

Army helicopter operations are also a source of noise, but with less specific locations since they currently operate in restricted areas over military land and in FAA-controlled airspace over non-military land. Areas exposed to helicopter noise are around the Alamogordo Airport, Orogrande and the Keyhole, the Sacramento foothills in northern McGregor Range, and south and east of the FTB South Training Areas in areas of El Paso County. Occasional helicopter activities have taken place in the Lincoln National Forest as well and could occur again in the future. As shown in the noise contours extending beyond the base boundary, some areas close to the HAFB airfield also experience higher average noise levels as aircraft arrive and depart.





The SNMEP area has an aviation noise profile that is distinct from many other defense communities. While proximity to an airfield is generally the best indicator of noise exposure, aviation-related impacts in the region spread more widely due to the prevalence of MTRs. Noise in the region, therefore, is not necessarily associated with specific, easily defined locations. The military has established local noise avoidance procedures for known sensitive areas. While avoidance provides some noise reduction for underlying locations, exposure can continue to create ongoing compatibility challenges for residential areas.

4.7 Noise – Range

Most noise associated with FTB comes from large-caliber weapons training on a variety of weapons systems, including mortars, artillery (e.g., 105- and 155-mm Howitzer), and M1 tanks firing on gunnery and qualification ranges. These sources generate sounds with high levels of acoustic energy similar to a clap of thunder, gunshot, or explosion. Residents in nearby communities can both feel and hear this type of sound.

The Army uses both peak noise and day-night average sound levels to assess potential noise impacts on surrounding areas from impulsive sound. Army guidance establishes three zones based on various decibel levels for both peak and average noise. The zones estimate the likelihood that people exposed to the noise source will be disturbed. In addition to the three noise zones, the Army uses the Land Use Planning Zone (LUPZ) as a planning tool to promote compatibility in surrounding communities. During periods of sustained training and operations, residential areas in the LUPZ may experience annoyance.

Fort Bliss has three major live-fire range complexes that generate impulsive noise: Doña Ana, McGregor, and Meyer. While the highest peak noise levels are on the installation, noise affects the communities of Chaparral and Anthony, New Mexico, which are areas of active, continued growth. Additionally, some noise extends beyond the boundary to the south and west into El Paso. Tank and helicopter live-fire and qualification ranges on the McGregor Range Complex produce noise near the community of Orogrande, New Mexico. Noise from the Meyer demolition range travels toward the Hueco Tanks State Park.

4.8 Public Trespass/Access

Public trespass on military land is a concern, especially in areas where military activities could place the trespasser at risk of physical harm (e.g., such as in active firing and bombing ranges or areas previously used for the delivery of ordnance). In addition, unauthorized access can pose security concerns considering the high value of some assets on the three installations and the performance of classified military activities in outdoor environments.

One area of concern is McGregor Range, which consists of withdrawn lands jointly managed by the BLM and the U.S. Army. The co-use areas of McGregor Range are available to the public when authorized by the Army through a Recreational Access Permit and subject to training schedules (which take priority). Controlling access to McGregor Range is difficult due to its size and lack of fencing. Recent mission changes have brought increased training, such as infantry training and Stryker wheeled vehicle operations into the co-use areas of McGregor Range. Coupled with a rise in population in the surrounding Sacramento Mountains, more hunters

and other recreational users are using McGregor Range. Other areas of concern due to recreational activity include the western boundary of Doña Ana Training Areas and Aguirre Springs in the Organ Mountains, where a campground and trails overlook the Tularosa Basin into WSMR. Trespass occurs in the Fillmore Canyon area as hikers in the BLM recreation areas travel onto FTB. The NMSLO also holds game/fish easements in the WSMR call-up areas.

While trespass on the main installation area of HAFB is not an issue, approximately 90 percent of the perimeter around HAFB and WSMR is three-strand barbed wire. Issues have occurred in the past with civilians cutting the wire to hunt oryx and cattle have broken through perimeter fences to graze.

In a number of instances, military activities, mainly vehicle-related exercises, have resulted in undue and unexpected impacts to resources on public lands. Impacts to cultural resources occurred when military vehicles drove off existing roads and trails. Due to these events and related impacts, the Las Cruces District BLM requested that organized military training activities remain on withdrawn lands. Under the Federal Lands Policy and Management Act (FLPMA), the BLM cannot authorize organized military training activities on public land.

4.9 Transportation

Transportation-related impacts from the military mission include periodic road closures due to testing and training activities, military vehicle use of local roadways, and localized traffic impacts resulting from ingress and egress at installation gates. WSMR uses local radio, social media, and a public telephone line with a recorded daily message to communicate about upcoming roadblocks on U.S. 70 and U.S. 380. Some training activities on FTB result in the brief closure of NM Highway 506, a primary access road for the town of Timberon. Fort Bliss safety procedures prioritize emergency response and road access over any scheduled military training and closures are less frequent.

Local highways also support mission-related traffic, such as convoys traveling from cantonment areas up into the training areas. Wheeled military vehicles can produce additional wear and tear on roads, contributing to increased infrastructure maintenance costs for communities. Such convoys can also generate fugitive

dust on adjacent areas. Residents have cited safety concerns when military vehicles travel along community roads, such as Lisa Drive in Chaparral.

4.10 Water

Multiple, overlapping factors affect the region's water supply, including the current exceptional drought, climate change, water quality issues, damage or overuse of specific water sources, and increased demands from military and civilian growth in parts of the study area. Specific areas of concern include:

- The Mesilla Aquifer level has continued to drop due to the drought, population growth in Las Cruces and Doña Ana County, and growth of water intensive crops.
- Low recharge and high pumping rates in the Hueco Bolson Aquifer have caused significant water-level declines and decreased groundwater availability in the El Paso area. The City of El Paso, El Paso Water Utilities, and FTB have been aggressive in implementing water conservation measures, as well as reuse and desalination strategies to alleviate groundwater demands.
- Damage to Bonito Lake from the 2012 Little Bear Fire has interrupted surface water supplies to communities, including Carrizozo, Alamogordo, and to a lesser degree HAFB.

4.11 Wildfires

Based on fire history at FTB, the primary risk of wildfire from the military comes from weapons firing and ordnance use. In 2011, a training exercise at FTB caused a fire on the eastern side of the Organ Mountains that burned about 7,000 remote acres. The majority of military-caused fires have been in the Surface Danger Zones for missile firings on McGregor Range.

The risk of wildfire caused by military activity is not anticipated to change significantly. Live-fire ranges are concentrated in discrete areas that are continuously manned and have the infrastructure and fire suppression capability to respond rapidly to fire outbreak. Currently, FTB is preparing a Wildland Fire Management Plan working in close coordination with the BLM. The BLM is assisting FTB in preparation of the plan, as well as constructing firebreaks and conducting controlled burns to reduce fuel loads. In 2014, WSMR also began a project to update and revise its Wildland Fire Management Plan.

05 RECOMMENDED STRATEGIES



5.1 Compatibility Menu

As noted earlier, the JLUS is strictly an advisory document that contains a menu of tools and processes available to each study partner. All partner entities, including the military installations, cities, counties, and state and federal agencies, have the discretion to adopt those recommendations that are appropriate for their local contexts. The menu, therefore, is not “one-size-fits-all.” One of the unique aspects of the SNMEP study area is its diversity—in terms of its rural, suburban, and urban landscapes; the varying levels of land use and development regulation currently used by its local governments; and the differing patterns of military impacts experienced by communities across the region.

To recognize this diversity, the JLUS compatibility menu (See *Technical Appendix for the full table*) offers a wide range of strategies that can be adapted to reflect the resources, needs, and interests of the region’s many communities. As always, the applicable local processes for adopting ordinances or codes will govern any implementation of regulatory policies by city and county governments.

Similarly, no single strategy in the JLUS will eliminate all of the current or anticipated issues identified. Instead, the tools work in concert to address as many compatibility factors as possible. The compatibility menu contains approximately 180 separate action steps, some of which build on each other to establish longer-term tools or processes that promote partnerships and enhance communication and collaboration.

In developing the menu, the JLUS TC, in collaboration with the planning team, identified a set of compatibility factors based on analysis of existing and foreseeable conditions and public input. These factors represent a general clustering of related issues, challenges, or needs that could affect public health and safety, quality of life, community growth opportunities or the safety and effectiveness of military operations in the region. These factors build on the initial set of study issues that the TC and members of the public evaluated and prioritized in the initial outreach phase as described in the previous section. The menu lists the top six categories as determined by the TC in alphabetical order. The remainder of the menu categories are also in alphabetical order. High priority public priorities, such as water resources that fall outside of the core purpose of the JLUS are not listed among the top menu categories, but are featured as part of the foundational actions described in the following sections.

Top six compatibility menu categories:

- Airspace Safety and Management
- Communication and Coordination
- Energy Infrastructure Management
- Local Government Plans
- Land Use
- Noise Management/Avoidance

Other compatibility menu categories:

- Economic Development
- Fire Management
- Frequency and Spectrum Management
- Land Conservation
- Military Plans
- Outdoor Lighting
- Physical Security
- Real Estate
- State-Wide Policy/Legislative Actions
- Transportation
- Water Resources

The JLUS compatibility menu contains a set of goals, strategies, specific actions, examples, and other implementation details for each of these categories.

Given the number of strategies and study partners and the complexity of compatibility issues in the SNMEP area, implementation requires a phased approach that first emphasizes foundational, near-term actions. To assist in organizing the region's implementation efforts, Sections 5.2 and 5.3 highlight key, early action steps. The list of foundational actions includes 16 items, ranging from simple and immediate steps to more complex but critical organizational measures. The full compatibility menu remains as a comprehensive tool kit that all partners can revisit and adapt as appropriate to meet changing conditions, needs, and goals (See *Technical Appendix*).

These foundational actions meet one or more of the following criteria. The prioritized action step:

- Can be put into place quickly and requires relatively few organizational resources ("low-hanging fruit");
- Establishes a broader and longer-term coordination and communication process among stakeholders;
- Addresses a known or anticipated compatibility factor;
- Reflects a priority concern identified during public input; and/or
- Is likely to have an early, positive impact on compatibility in the region overall.

Consistent with public input, for example, the top actions include tools related to noise management, water resources, and energy infrastructure management. Narrowing the full menu to a set of foundational items does not diminish the importance or potential value of other tools identified by the JLUS. Some items that did

not rise to the short list of key steps may still be a priority action for some study partners. The highlighted actions, however, prioritize the region's initial implementation efforts and set a basic organizational structure for continued collaboration and communication among all stakeholders.

5.2 Ongoing and Immediate Actions

The installations, federal and state agencies, and local communities have existing processes in place, ranging from NEPA consultation to periodic outreach events and informal discussions that promote coordination about mission-related activities, impacts, and potential compatibility issues. These four immediate actions further highlight the role of FTB, HAFB, and WSMR in collaborating with communities and other agencies to build on ongoing efforts. The actions are not in order of priority.

Form a JLUS Implementation Body

While some existing organizations advocate for coordination between the military and communities, no overarching entity with representation from all stakeholders currently exists. The complexity and diversity of missions in the region require careful, ongoing collaboration across the DoD, federal and state agencies, local governments, and private interests. Multi-jurisdictional and multi-sector partnerships are essential to achieve long-term compatibility in SNMEP.

The purpose of this strategy is to create an umbrella organization that promotes continued dialogue and engagement on compatibility and strengthens existing relationships among regional stakeholders. Under this strategy, the study partners would charter, empower, and fund a JLUS implementation body to support regional planning and coordination efforts and track progress on compatibility actions (See CC-8.1).

The entity should consist of the formal JLUS partners, representing the six counties, the Cities of Alamogordo, El Paso, and Las Cruces, the three installations, federal and state agencies, and the Spaceport Authority. To build further support, however, the entity should broaden beyond the reach of the existing committees to include private sector developers and landowners, educational institutions, non-profit groups, water planning or irrigation districts, major utility providers and energy developers, and other stakeholders who can contribute technical expertise to the implementation process on an

as-needed basis. Where possible, the JLUS body should also leverage the resources of existing compatibility partnerships, such as the multi-state Western Regional Partnership. Members should include senior planners, administrators, and agency managers who can bring some decision-making authority but can also directly advance recommended implementation steps.

Initial steps in organizing the entity include establishing:

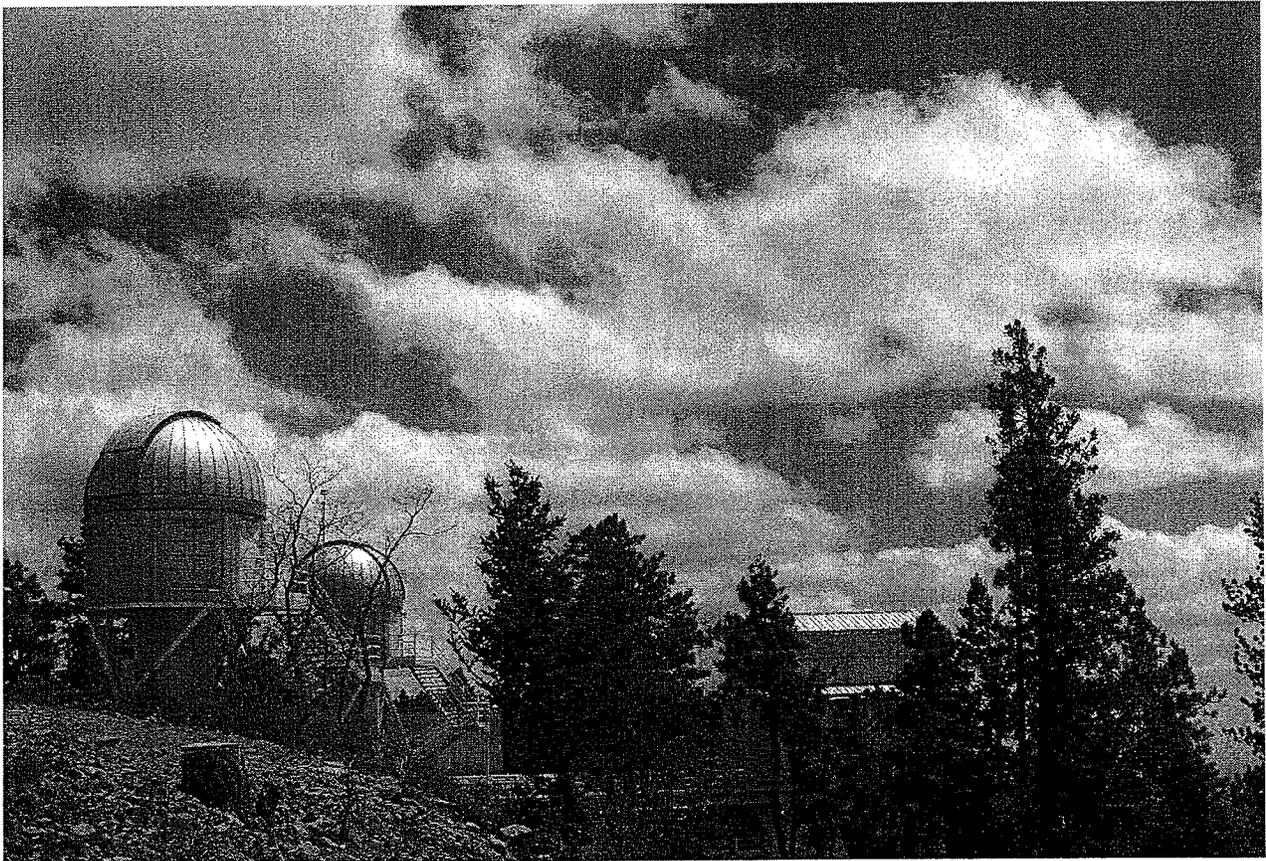
- The overall management structure, staffing, and responsibilities;
- A legal framework that can range from a state charter or enabling legislation to an MOA among local parties;
- Funding mechanisms, such as member dues, state appropriations, or federal grants; and
- Outreach efforts to engage elected officials and the public on a consistent basis and build support for successful implementation.

Structural models can vary from ad hoc groups of

local interests that agree to cooperate to stand-alone organizations with dedicated staff and specific legislative authority. In one of the most basic organizational approaches, one of the local governments takes the lead to coordinate across other jurisdictions and agencies and establishes an advisory group of local, state, federal, DoD, and private sector stakeholders. The advisory group then guides the local government's in-house staff in performing regional coordination and JLUS implementation functions. An MOA would typically establish the organization's roles, responsibilities, and resource sharing needs. The Technical Appendix includes examples of collaborative partnerships in defense communities across the U.S.

Implementation entities can perform many compatibility-related functions, including:

- Update all partners on upcoming activities, planning and study initiatives, project proposals, and mission changes that could affect compatibility in the region;



Apache Point Observatory, New Mexico

- Track progress on the application of compatibility tools identified in the JLUS menu and exploring best practices for implementation;
- Conduct regular outreach to the broader community on compatibility issues, including briefings and taking the lead in developing informational materials and updates, such as newsletters or annual reports;
- Serve as a visible and primary point of contact for information and inquiries about compatibility issues and military-related activities in the region;
- Advocate at the state level for the resources, legislative authority, and tools to promote compatibility and sustain quality of life and mission excellence;
- Promote data sharing among partners through tools such as a web-based platform or data repository; and
- Review and advise on individual development and land use proposals that could affect compatibility, such as major subdivisions, energy projects, or land transfers.

Conduct Additional and Regular Community and Agency Outreach

JLUS stakeholders, including residents and agency representatives cited an interest in improved communication about DoD and non-DoD missions. Currently, communities lack familiarity with military operations and activities and have limited awareness of the positive impacts of the military on the region, as well as services and events offered by the installations. Similarly, residents and DoD stakeholders may not fully understand other federal or state missions, such as the management activities of the NPS, USFS, and BLM or the NMSLO's mandate to lease trust land for "highest and best use" to benefit the state's public schools, universities, and hospitals.

The purpose of this strategy is to raise overall awareness about the region's DoD and non-DoD entities and reinforce common opportunities to support compatibility, while achieving multiple state and federal agency mandates, including conservation, recreation, resource management, economic development, renewable energy production, and revenue generation. Under this strategy, the installations would conduct additional and regular meetings with community and business groups (e.g., chambers of commerce and community associations) and schedule regular briefings with state and federal agencies, particularly in advance of new missions and operations that could have an effect on

surrounding communities or agency mandates (See CC-1.2). Outreach can vary from participation in organized, standing meetings (such as a County Commission meeting) to attendance at informal community gatherings or special events. Briefings should consist of updates of mission activities and operations, dialogue about ongoing community concerns, and coordination on major DoD and civilian planning and development initiatives. Briefings with the region's communities should take place yearly or more frequently based upon a specific initiative or proposal that could affect overall compatibility. The military should also continue to participate in ongoing agency planning efforts, such as the BLM's Tri-County Plan.

Establish Clear Points of Contact

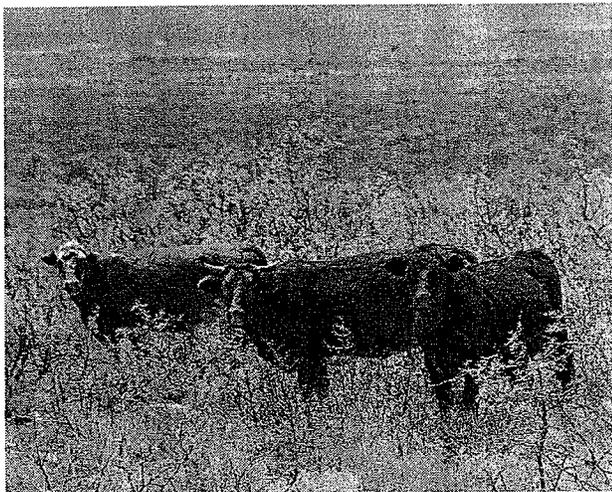
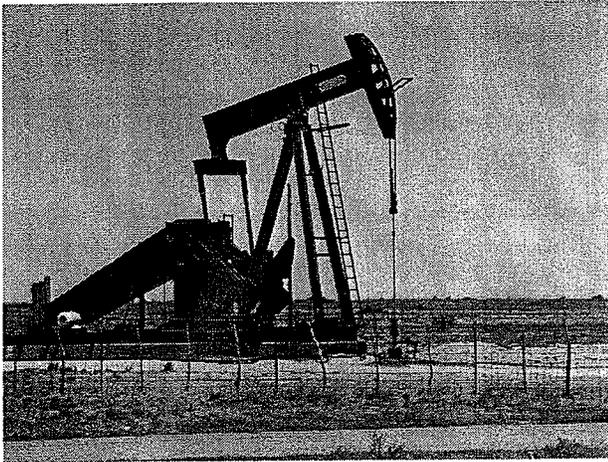
The presence of multiple DoD entities conducting training and testing in the region can add a layer of complexity to the communication process among installations and surrounding communities. The purpose of this strategy is to establish clear and consistent channels for communication across all stakeholder groups and to promote transparency and follow through on community concerns about impacts or other compatibility concerns. As part of this strategy, FTB, HAFB and WSMR would designate clear points of contact for community-related issues, such as noise complaints, and coordinate with local government Public Affairs Officers on the release of notices and announcements about mission-related activities (See CC-1.7). This action also relates to the strategy of creating an internally coordinated noise complaint management process across DoD services in the region (See NMA-3.6).

Improve Notification Methods

In some cases, a lack of knowledge about scheduled training and testing activities and resulting impacts such as noise can contribute to higher levels of nuisance and disruption in surrounding communities. Often, when members of the public know ahead of time about military activity, the noise it creates is less annoying, and members of the community can plan their activities around the event. Some communication methods are in place. However, the size and diversity of the region can create a challenge for delivering easily accessible information about military operations.

The purpose of this strategy is to broaden the range of community interests and stakeholders that receive advanced notice of mission-related events and activities. Under this strategy, FTB, HAFB and WSMR would compile

comprehensive notification lists and use enhanced techniques to reach a wider range of affected parties about noise or other possible training and testing impacts (See CC-1.6). Proposed methods include traditional outreach such as fliers, newspaper ads, and opt-in



newsletters for interested residents; announcements through utilities, such as the Otero County Electric Cooperative, Inc.; or the use of social media and text messaging to push out information. Given the impacts experienced by some of the smaller communities in the region, outreach efforts should emphasize the use of newspaper and radio outlets that cover rural areas, such as the Mountain Times in the Southern Sacramento Mountains. The installations should also explore the most effective means to communicate with surrounding communities about impacts. For example, identifying days with no scheduled noise-producing training or testing activities (as opposed to days with expected noise) enables residents to plan accordingly for outdoor activities such as ranching or recreation. The menu also

includes a recommendation to increase outreach to areas surrounding Spaceport America operations and develop an enhanced and coordinated notification process with nearby residents affected by launch noises.

5.3 Other Foundational Actions

The following foundational actions are strategies that establish critical tools or processes to promote collaboration and coordination among stakeholders throughout the region. The actions are not in order of priority.

Build Institutional Capacity to Manage Regional Airspace

Military testing and training, emerging commercial space operations, increasing commercial aviation needs, the rise in private use of unregulated airspace, increasing non-hazardous helicopter activity in unrestricted airspace, and the greater use of UAVs in both the military and commercial sectors can all create scheduling and safety challenges for regional airspace.

The purpose of this strategy is to ensure that an enduring and effective organizational infrastructure and capacity is in place to coordinate these critical airspace issues, maximize current airspace, and address any future special airspace needs for the SNMEP JLUS region. Given mission interdependency across the installations, WSMR, HAFB, and FTB currently coordinate airspace, range usage, and frequency spectrum for multiple users through a regional partnership called the TRIAD. Under this action, the installations would institutionalize the TRIAD military airspace coordination group to create a unified vision and action plan for regional airspace management (See ASM-1.1). The group would include representation from all regional airspace users and managers, such as the military installations, New Mexico State University's Physical Science Lab, the FAA, Drug Enforcement Agency, Border Patrol, fire/emergency responders, Spaceport America, and the commercial and general aviation sectors.

Though TRIAD already exists, the intent of the action is to broaden dialogue to address emerging issues such as UAVs and frequency/spectrum management and to engage additional stakeholders, including local entities and other military users of the regional airspace complex, such as Cannon and Kirtland Air Force Bases. A member of TRIAD should also be able to participate directly on the JLUS Implementation Body to ensure coordination on critical implementation issues related to airspace.

Integrate Compatibility into Local Government Plans

Some local government comprehensive planning studies in the region, particularly older documents, lack specific language on compatibility with the military installations. Comprehensive Plans are especially critical as a policy tool for local governments because they can provide the legal basis for specific policies, promote compatible development patterns around military installations, designate suitable areas for intensive growth, and establish consultation procedures. For those jurisdictions exercising land use authority, the Comprehensive Plan also sets a firm and clear basis for the implementation of any specific regulatory tools, such as a Military Influence Area.

Land use strategies that increase compatibility with the installations, such as guiding growth to already developed areas, supports complementary development outcomes at the local level, including more efficient public infrastructure delivery, open space preservation and the protection of sensitive environmental resources, and the creation of organized centers of housing and retail. The purpose of this strategy is to create an overall, strategic policy framework that supports quality, economically beneficial community growth, while maintaining compatibility with the military missions. Under this strategy, the region's cities and counties would incorporate compatibility in updates of local Comprehensive Plans and other policy documents, including references to compatibility with installations, military operations, maps, and recommendations identified in the JLUS (See LGP-1.1).

At a minimum, plan updates should emphasize general compatibility with the installations and can expand as necessary to reflect additional policies based on the specific compatibility tools selected by the jurisdiction (See the *Technical Appendix for recommended policy language*).

Recommended minimum elements to be included in all Comprehensive Plans are:

- Reference to the JLUS document and process;
- General Compatibility Goal and Policies (See *Technical Appendix*);
- Communication/Coordination Goal and Policies (See *Technical Appendix*);
- Map of the applicable installation and surrounding area (See *Figures 2.2 through 2.6*)

Encourage Partner Participation in Local Government Planning

In a related action, the cities and counties of the region would encourage military and other JLUS partners, such as state and federal agencies to participate in local planning and development advisory bodies and major plan updates and amendments, including Comprehensive Plans; neighborhood or sector plans; regulatory land use codes; and transportation, infrastructure, and natural resource plans (See LGP-1.2).

Military and other state and federal agency stakeholders, for example, could advise as Steering Committee members for community planning initiatives, such as Comprehensive Plans. Local governments could also invite military representatives to sit as non-voting members of city and county advisory bodies, including the Planning and Zoning Commission, Planning Commission, Land Use Commission, Development Review Committee, or City Plan Commission active within the region. Invited representatives would receive meeting materials in advance and have the opportunity as appropriate, to comment in a strictly advisory capacity on the potential interaction between proposed projects and initiatives and DoD or other state and federal agency missions.

Collaborate on Planning for Energy Development Opportunities

New Mexico possesses some of the best wind and solar resources in the country, and renewable energy projects offer significant promise for local economic development and the ability to meet DoD and national energy policy, reduce reliance on conventional energy sources, and increase energy independence.

Compatibility issues, however, can exist between energy infrastructure and military operations. Energy projects can cause glare, vertical obstruction, and interruption to communication signals, such as "shadowing" effects from spinning turbine blades that limit radar's ability to detect aircraft, or damage to infrastructure caused by debris from mid-air missile test targeting. There is no consistent, regional process to assess and refine energy proposals to address these compatibility issues. The DoD Siting Clearinghouse seeks to establish a "one-stop-shop" to evaluate the compatibility of proposed wind, solar, transmission, and other projects for their effects on military activities. Despite the existence of the DoD Siting Clearinghouse, no clear design (scale, type, height, markings) and siting guidelines yet exist to assist in developing projects that are compatible with military operations. This gap in national guidance further reinforces the value of a strong local process for collaboration on energy issues.

The purpose of this strategy is to develop a process to support energy development that benefits the communities, region, state, and nation, while maintaining compatibility with military missions and recognizing private property rights and state and federal agency mandates to generate revenue through energy-related projects. As part of this strategy, regional partners would promote a proactive and collaborative planning process among military, state, and federal agencies and other stakeholders to review and plan new energy proposals and support the compatible siting of new energy infrastructure that maximizes opportunities and mission compatibility (See *EIM-1*).

In many cases, the siting or design of energy infrastructure can be established or modified accordingly in planning stages to reduce compatibility conflicts without diminishing the viability of the project. To ensure adequate, timely consultation, this action stresses active engagement with renewable energy developers; major property owners such as the NMSLO; industry associations/cooperatives and authorities, such as the New Mexico Renewable Energy Transmission Authority (RETA), along with outreach to the energy development community regarding military compatibility issues. It is also critical that the DoD, including the local installation commanders, participate as a partner early in the siting process for large-scale energy projects. The Technical Appendix contains an example of an informational guide on wind energy developed by the State of Virginia's Department of Environmental Quality Renewable Energy Local Government Outreach Stakeholder Group.

Map Regional Energy Development Opportunities

The purpose of this related strategy is to promote improved pre-planning of energy projects by identifying areas of opportunity for military-compatible energy development within the region. Under this action, partners, including the installations, federal and state agencies, local governments, and energy industry associations/cooperatives and authorities would collaborate to produce a red/yellow/green map of wind and solar energy development in the region (See *EIM-1.5*). Red denotes areas where mitigation is not likely to reduce or eliminate conflicts between energy infrastructure and military operations. Yellow highlights areas where energy development may be conditionally compatible with the application of specific design or siting practices for proposed infrastructure or notification of the military. Green illustrates areas with no anticipated compatibility challenges.

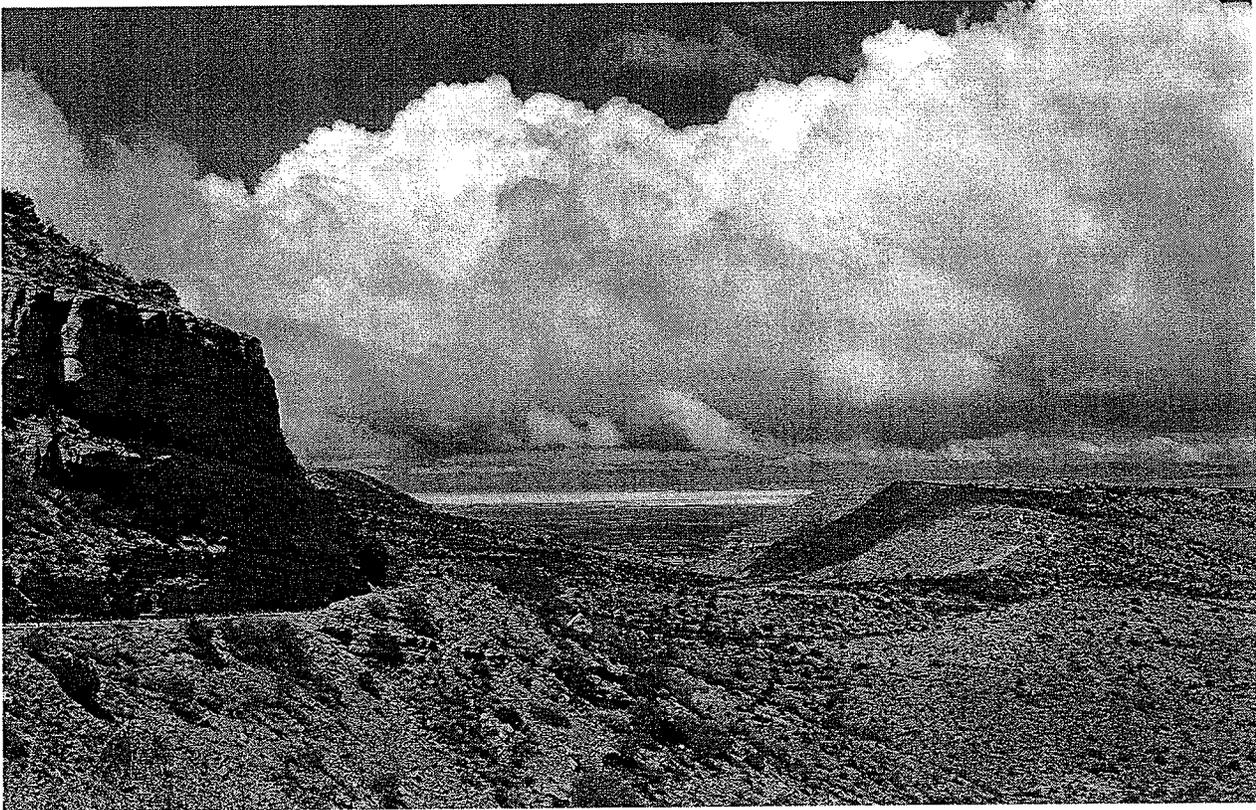
Mapping should overlay Geographic Information System (GIS) data layers that reflect the following conditions in the region:

- A hierarchy of potential (high, medium, low) for wind and solar energy production;
- Rights-of-way for renewable energy based on BLM, USFS, and industry plans;
- Landownership, including state trust lands;
- Areas of environmental sensitivity, including Native American religious and cultural sites, parks, wildlife refuges, Wilderness Areas, Areas of Critical Environmental Concern, National Monuments, and Protected Activity Centers;
- Designated avoidance or exclusion areas identified through planning efforts, such as the BLM's Resource Management Plans; and
- Areas of sensitivity to testing and training impacts, including MTRs, debris fallout zones, Surface Danger Zones, and airspaces near military airfields.

Where possible, this mapping effort should leverage existing partnerships and tools. The Natural Resources Defense Council, for example, created the Renewable Energy and Defense Database or READ-Database along with the DoD that enables developers to identify sites less likely to interfere with military activities and environmentally sensitive areas. The mapping tool captures essential DoD activities, including military base, testing and training range locations; low-altitude high-speed military flight training routes and special use airspace; and an extensive inventory of weather and air surveillance radars all in the U.S. The Energy Committee of the Western Regional Partnership also gathers resources to promote coordinated planning on energy issues, including an Energy Contact database and associated GIS data layer to assist in identifying key state and federal personnel for the siting of energy infrastructure.

Promote Interagency Consultation on Land Use

The purpose of this strategy is to promote changes in land uses that support mutually beneficial outcomes for communities, state, and federal agencies; trust beneficiaries; property owners; lessees; and the installations. As part of the NEPA process, federal agencies already consult with each other as cooperating partners on the impacts of proposed projects and initiatives on federal lands. The intent of this strategy is to create broader, routine opportunities for agency consultation outside of formal NEPA channels. Under



this action, federal and state agencies would continue to consider impacts to the military before disposing of or selling land, and the military would continue to consider the impacts of expanded missions and operations on local economic development opportunities and state and federal agency missions.

Land uses in areas surrounding the installations may evolve toward development opportunities for a “higher and better use,” such as wind and solar energy projects, and these emerging uses may become more intensive or produce vertical infrastructure that creates compatibility issues with military training and testing operations. Given limited DoD resources and increasingly higher land values, consultation in the planning and siting of major economic development projects becomes critical.

The Technical Appendix contains an example of an MOU between the NMSLO and Kirtland Air Force Base that lays out procedures for recognizing existing plans, continuing the use of state trust lands to support DoD mission, consultation, and organizational points of

contact. As described in the next strategy, the NMSLO also has a variety of instruments at its disposal to promote compatibility on state trust land.

Promote Compatibility of State Trust Land

The NMSLO has land holdings and leases throughout the JLUS study area, including approximately 1.6 million surface acres and 2.46 million subsurface acres within Doña Ana, Otero, Lincoln, Socorro, and Sierra Counties. The NMSLO operates under a constitutional mandate to optimize revenue for its trust beneficiaries, including public schools, universities, hospitals, and other public institutions through the highest and best use of state trust land. As part of the Community Partnership Program, the NMSLO collaborates with local governments to make trust lands available for business and industrial parks, recreational facilities, open space, and housing. Though NMSLO is not subject to local zoning and land development codes, the agency works cooperatively with local governments to plan and zone trust land for purposes consistent with community and citizen goals.

The purpose of this strategy is to promote greater compatibility as the DoD and the NMSLO fulfill their respective missions and maximize opportunities to generate revenue for the state's trust beneficiaries, while promoting military compatibility (See CC-6.3). Under this strategy, the NMSLO, local governments and installations would collaboratively explore various instruments and agreements to facilitate compatible development outcomes on state trust land, including:

- Land exchanges;
- Long-term leases of trust land;
- Land Use Restriction or Condition (LURCs);
- MOUs; and
- Joint Planning Agreements (JPAs)

A JPA, for example, provides a strategic framework to promote coordinated, long-term planning between the NMSLO and local entities. A LURC, for example, can provide compensation to the NMSLO in return for the NMSLO's acceptance of various land use restrictions that would otherwise impede the ability to generate revenue for trust beneficiaries. The Technical Appendix contains an example of a LURC in which the NMSLO agreed to certain land use restrictions in an area of importance to FTB in exchange for fair compensation.

Support Conservation Partnerships

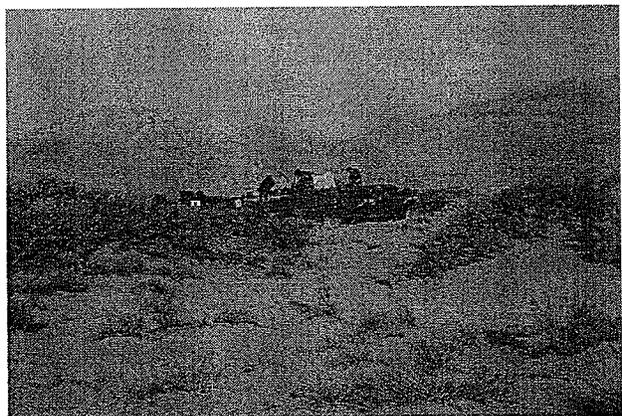
Currently, undeveloped land in areas affected by military operations is subject to future transitions to more intensive uses that could increase the risk of incompatibility. With accelerating development of wind and solar resources, some land that previously supported grazing now has a "higher and better use" for energy development and associated economic growth. The challenge is to acknowledge the rights of private property-owners and state and federal agencies to develop land for these purposes, while supporting military missions.

The purpose of this strategy is to form partnerships among federal, state, regional, and local entities and willing landowners to promote open space, ranching, and rural land conservation in areas of mutual benefit to landowners, communities, state and federal agencies, and installations. Under this strategy, local governments would collaborate with land conservation entities, such as land trusts to connect interested landowners with available programs, including easements (e.g., conservation, agricultural), tax incentives, beginning farmer and rancher grant and loans, local food systems,

and habitat management. These partnerships seek to strengthen the economic viability and sustainability of productive lands in the region, while preserving open space (See LC-1.1). The programs do not have to support the explicit goal of preserving military missions, but instead provide financial or technical assistance for land stewardship and conservation practices that complement lower intensity and thus more compatible uses of land.

The DoD also has conservation tools specifically designed to create natural buffers around military operations. The Readiness and Environmental Protection Initiative (REPI) provides the military the ability to enter into agreements with eligible entities, such as local governments and non-governmental organizations, to purchase property or secure easements on property from willing landowners near a military installation or military airspace. The agreements enable conservation or not-for-profit organizations to acquire, on a cost-shared basis, development interests in the properties of voluntary sellers. The property owner may sell the property at fair market value or continue to hold the title for the land with monetary compensation and tax credits or deductions to maintain the property in a limited use that preserves habitat and/or avoids interference with nearby military operations.

The Army implements REPI projects through its Army Compatible Use Buffer (ACUB) program. Fort Bliss has successfully used ACUB to enter into a 75-year agreement with the NMSLO to create a buffer zone of approximately 5,200 acres on lands south of Doña Ana Training Areas near the community of Chaparral. The agreement restricts the development of noise sensitive uses (i.e. residential, educational, and medical care) in



the buffer zone. Fort Bliss is pursuing similar conservation efforts for land south and east of the installation's South Training Area.

The U.S. Department of Agriculture, DoI and DoD have also recently announced a new federal, local, and private collaboration to preserve agricultural lands, assist with military readiness, and restore and protect wildlife habitat. Through the Sentinel Landscapes partnership, the agencies will work together in overlapping priority areas near military installations to help farmers and ranchers make improvements to the land that benefit their operation, enhance wildlife habitat, and enable DoD's training missions to continue.

A critical step in this strategy is to analyze and identify land that has an overlap of military impact (e.g., noise or safety risks) and higher natural/working lands/cultural value and thus may be a candidate for easements purchases from willing landowners or other forms of conservation assistance.

Increase Land Use Authority in El Paso County

Some of the land vulnerable to development and at future risk of incompatibility falls within unincorporated El Paso County. State law in Texas does not allow counties to regulate land use through zoning, though municipalities can adopt and implement more robust land use and development controls. As a result, El Paso County lacks the capacity to shape land use patterns and development outcomes in areas near FTB.

This action would pursue legislation in the Texas State legislature to enable El Paso County to exercise land use authority in specified buffers around FTB, such as those areas exposed to noise or safety issues from range or airfield operations (See SPL-5.1). The intent of the legislation is to establish specific authority to protect public health, safety, and welfare. Regulatory measures could include requiring sound attenuation for new noise sensitive construction, such as housing or land use restriction on certain land uses that could trigger safety conflicts with nearby training. The county can pursue this strategy in conjunction with use of state-enabled authority to establish a Joint Airport Zone Board around Biggs AAF to coordinate compatibility concerns with airfield uses and development proposals on surrounding land.

Increase Information about Regional Noise Impacts

The region experiences noise and vibration from various

military operations, including supersonic aircraft, low-level high-speed aircraft, impulsive noise from ordnance explosions, and aircraft arrival and departure at airfields. The purpose of this strategy is to reduce the nuisance associated with noise exposure by communicating more effectively with the surrounding communities.

Under this strategy, local governments and the installations would collaborate to strengthen communication and community outreach procedures regarding noise events, including enhancing notification techniques for residents in affected areas or making information on potential noise impacts available to the public (See NMA-3). As described earlier under immediate actions, notification can entail the use of simple outreach methods such as fliers, newspaper ads, and opt-in newsletters for interested residents or the use of texting and social media.

More proactive notification techniques could include developing and distributing a brochure or map that depicts the region and notes its proximity to military operations or real estate disclosure. Real estate disclosure requires the release of information on possible impacts (e.g., noise/vibration, air safety zones) as part of real estate transactions for properties close to military installations. Typically, disclosure can be mandatory under state law or voluntarily adopted through the participation of the real estate community. The intent of this communication strategy is to ensure that prospective buyers or renters understand the relationship between proximity to testing and training activities and to promote fully informed decisions about property investments.

As noted earlier, one of the distinctive characteristics of the SNMEP region is that aviation training disperses noise across wide areas, and noise impacts do not necessarily correspond with a clearly defined footprint. As a result, the communities of the region should select and tailor noise notification strategies that best fit their local context. Specific disclosure, for example, may be appropriate for areas with known and predictable exposure, such as noise contours associated with range operations or noise contours in the immediate vicinity of the airfields, but not in counties where the noise is more widespread. In rural communities that do not have access to a daily paper, reliable radio, or internet, the local governments and installations should collaborate with residents to determine the best way to communicate information.

The Technical Appendix contains an example of a notification map from the City of Surprise/Luke Air Force Base in Arizona and sample disclosure language.

Establish a Notification Process for Vertical Structures

Vertical structures, such as energy and telecommunications infrastructure, pose a risk to aircraft due to physical intrusion into low-level flight corridors. Towers less than 200 feet AGL are not subject to FAA review and most counties in the region lack a process to track structure locations. This gap increases the risk of physical interference with aircraft.

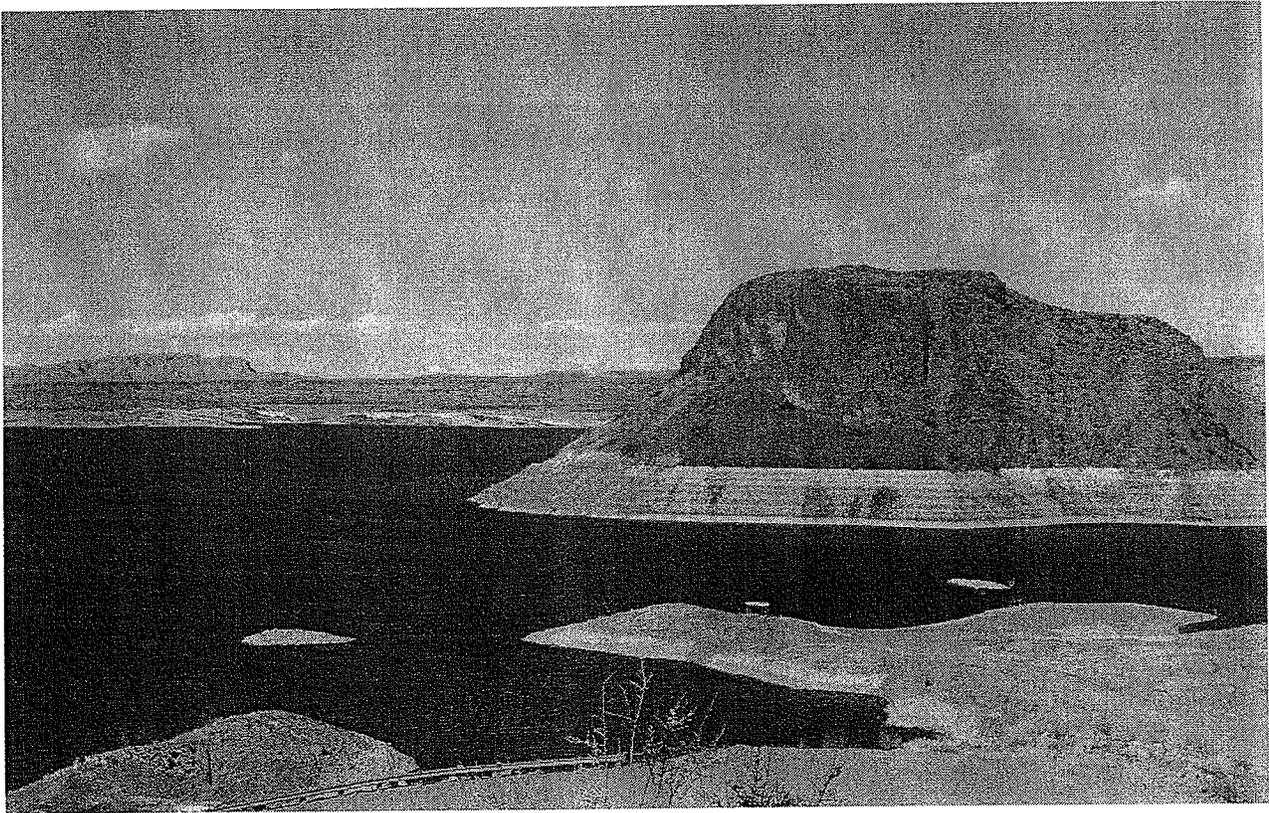
The purpose of this strategy is to establish a clear and voluntary process of coordination to minimize the aviation risks associated with vertical structures. As part of this action, cities, counties, state, and federal agencies would create an early process to notify the installations of the location of all existing and proposed structures between 75 and 200 feet AGL in MTRs or other areas vulnerable to aviation hazard (See LU-5.1). This strategy does not require the permitting or regulation of structures, but instead emphasizes basic coordination on

the location of vertical infrastructure to maintain aircraft and civilian safety. The goal of this strategy is not to limit the installation of structures in local communities, but to encourage early communication about associated safety risks.

Promote an Integrated Regional Water Planning Process

Complex and overlapping factors affect the region's water supply, including but not limited to, the current exceptional drought, climate change, water quality issues, damage or overuse of specific water sources, and increased demands from military and civilian growth in specific parts of the study area.

Many entities manage and plan for water resources within the JLUS region, including four planning districts in the State of New Mexico and the Far West Texas Planning Area, including El Paso County. In New Mexico, water rights are based on a water development plan that identifies supply and conservation measures to meet reasonably projected additional water needs over a 40-year period. Similarly, the State of Texas, as overseen by the Texas Water Development Board, mandates



regional water planning. The purpose of this strategy is to promote a fully integrated regional water planning process that addresses the long-term needs of major water users, including the military, and form partnerships across local, regional, state, and DoD sectors to address the challenges of water quality and supply. Under this action, local governments would integrate the military into the regular regional water planning process to ensure that demand projections reflect foreseeable mission needs and that conservation and supply and diversification strategies incorporate ongoing military water planning initiatives (See *WR-1*).

The installations implement aggressive water conservation measures as part of a DoD-wide mandate to reduce water consumption. Local governments should collaborate with FTB, HAFB, and WSMR to educate the public about current water planning efforts and leverage best practices for water conservation, including strategies such as water reuse, the installation of efficient water fixtures, developing desalination facilities, and the maintenance of water and wastewater infrastructure assets.

5.4 Summary of Menu Category Areas

This section summarizes all JLUS menu categories, including those categories not discussed in the previous section, and describes examples of additional tools or processes that were not included in the list of foundational actions.

Airspace Safety and Management

Strategies in this category focus on maximizing current airspace and addressing the region's future special airspace needs. Examples of additional actions include increasing awareness of the multiple uses of regional airspace and strengthening collaboration among private, public, and military airspace users; improving air traffic control capabilities; and coordinating on time-sensitive and critical management activities that require airspace access by other federal or state entities.

Communication and Coordination

These tools seek to increase the overall awareness of DoD and non-DoD missions and activities in the region, establish clear and consistent channels for communication, and promote inter-jurisdictional and inter-agency cooperation on critical planning issues. Other strategies in this category include:

- Create online information sources that are convenient for the public to use;
- Establish an internal process for JLUS stakeholders, including DoD, local, state, and federal entities to pre-plan and review major new proposals;
- Conduct briefings of military units or procedures to reduce noise impacts on surrounding communities; and
- Enhance notification procedures for public land users and property owners in call-up areas.

Energy Infrastructure Management

Energy management strategies are designed to support energy development opportunities in a way that benefits the communities, region, state, and nation, while maintaining compatibility with military missions. Other strategies featured in this category are developing performance-based guidelines to assist in designing and siting projects that are compatible with military operations and developing/updating a regional data clearinghouse with information on energy projects.

Local Government Plans

The purpose of local government plans is to create an overall, strategic policy framework to support quality and economically beneficial local development outcomes, while maintaining compatibility with military missions. An additional strategy in this category is to conduct detailed land use and compatibility planning for rapidly growing areas that experience operational impacts such as noise.

Land Use

The goal of these strategies is to promote changes in land uses that balance attractive, efficient, and economically productive local development with the protection of public safety and military missions. Additional land use tools in this category include promoting infill development in already built out areas to guide denser growth away from land with higher exposure to the impacts of military operations and the incorporation of land use compatibility and communication requirements into existing local zoning codes and ordinances. The menu specifically recommends additional development regulations for those local jurisdictions with adopted land use regulatory authority (currently this includes Doña Ana County, City of Las Cruces, City of Alamogordo, and City of El Paso only) and for property within clearly defined zones of impact, such as noise contours, land use planning zones, or airport accident potential zones.

For jurisdictions currently without zoning, the menu identifies the adoption of land use regulatory authority as a long-term option that local jurisdictions can explore with input from the community.

Noise Management/Avoidance

Noise-related strategies seek to limit off-installation noise impacts when feasible and to reduce the nuisance associated with continued noise exposure in the surrounding community. Other strategies from this category include:

- Encourage sound attenuation building standards and/or related energy efficiency practices as a means to achieve indoor sound reduction in noise-sensitive uses, such as housing;
- Coordinate with state and federal resource management agencies on training activities during noise-sensitive times and locations;
- Analyze current data on noise complaints to create more accurate footprints for noise exposure;
- Advocate for additional Air Force modeling methodologies and compatibility guidance and strategies, such as the expanded use of the Department of Defense's voluntary Readiness and Environmental Protection Integration to identify and address dispersed noise issues associated with low-level aviation operations in rural areas;
- When feasible, continue to manage off-installation aviation noise impacts through operational adjustments; and
- Develop an informational repository of current, reliable, and valid information to include international research and independent, peer reviewed studies to assist in assessing health impacts.

Economic Development

The purpose of the economic development strategies is to increase local participation in military-related economic opportunities; improve access to adequate, quality public services and amenities for both local residents and military personnel; and strengthen and diversify local economies. Specific actions in this category include forming and strengthening existing civilian/military partnerships to identify and develop additional economic development opportunities in communities, increasing local contractor awareness of upcoming installation proposal opportunities, and strengthening coordination on the delivery of community services needed to accommodate mission change.

Fire Management

Fire management strategies are intended to build on ongoing partnerships to implement coordinated fire prevention, management, and suppression activities in the region. An example includes continuing joint efforts between the DoD, BLM, USFS, USFWS, and the NMSLO to implement management activities, such as establishing black lines, developing fire management plans, and encouraging better integration of fire management plans in the region.

Frequency and Spectrum Management

Frequency and spectrum management tools focus on creating an integrated regional frequency/spectrum management system that de-conflicts military and private commercial users and service providers through coordination and state-of-the-art technology. Strategies emphasize increased coordination through a Frequency/Spectrum Management Working Group consisting of the Area Frequency Coordinator Regional DoD Frequency Coordinator and internal and external stakeholders, including emergency response organizations, and the use of educational materials, outreach, and technical assistance to local governments and planners to improve the overall understanding of frequency spectrum issues and potential solutions.

Land Conservation

The emphasis of land conservation strategies is to form partnerships among federal, state, regional, and local entities and willing landowners to promote open space, ranching, and rural land conservation in areas of mutual benefit to residents, communities, and installations. Tools explore existing conservation and stewardship programs for productive lands, local and regional open space and recreation planning, and the use of DoD open space/buffer programs, such as REPI/ACUB. As always, the menu stresses that landowner participation in easement purchase or land sales programs is strictly voluntary.

Military Plans

The purpose of this category is to ensure that military plans and studies are current and shared with appropriate community stakeholders to aid in improved planning and management for mutual compatibility. Examples of studies include the Army Installation Compatible Use Zone (ICUZ), the Air Installation Compatible Use Zone (AICUZ), and HAFB's Installation Complex Encroachment Management Action Plan (ICEMAP).

Outdoor Lighting

Outdoor lighting strategies seek to protect the dark sky environment as a training, testing research, and tourism asset for the region. Tools include adoption of city or county dark-sky ordinances that require 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) and the use of dark-sky lighting for on-installations areas, including ramp lights.

Physical Security

Physical security strategies revolve around protecting high-value infrastructure and public safety against acts of terrorism and vandalism, and maintaining national security. Specific actions include:

- Securing selective areas along installation boundaries, training areas, and critical infrastructure;
- Providing installation security planning information and guidance for local emergency preparedness plans, such as all-hazard emergency plans;
- Adding signage to warn of the dangers and consequences of trespass;
- Communicating with local law enforcement agencies about emergency response, GPS jamming, and related issues; and
- Coordinating on livestock trespassing issues to encourage compliance with grazing unit/allotment boundaries.

Real Estate

Real estate refers to a specific set of tools that formally recognize the impacts of military operations on surrounding property. As described earlier, the main strategy in this category is real estate disclosure. In its most robust form, disclosure occurs through a written release describing potential impacts from military operations prior to the transfer of property in the affected area. Though not all jurisdictions may opt to require a written release of impacts, all communities should increase communication with the real estate community about potential exposure from military operations on surrounding areas.

State-Wide Policy/Legislative Actions

These policy and legislative actions propose using the state's authority to facilitate several of the communication, planning, coordination, and data sharing mechanisms

described earlier in the report. Examples include state legislation to:

- Promote joint consultation procedures for developments or land use changes in specific areas around military installations;
- Promote real estate disclosure for initial and subsequent transactions in noise-exposed areas, such as noise contours or accident potential zones;
- Provide model comprehensive plan policies and language regarding military compatibility for use in local Comprehensive Plans;
- Promote inclusion of cost-benefit analysis of military impacts in state-wide planning processes; and
- Coordinate new energy development and recognize the importance of military missions and the economic development potential to the state and local economies from the development of wind and solar energy and energy infrastructure.

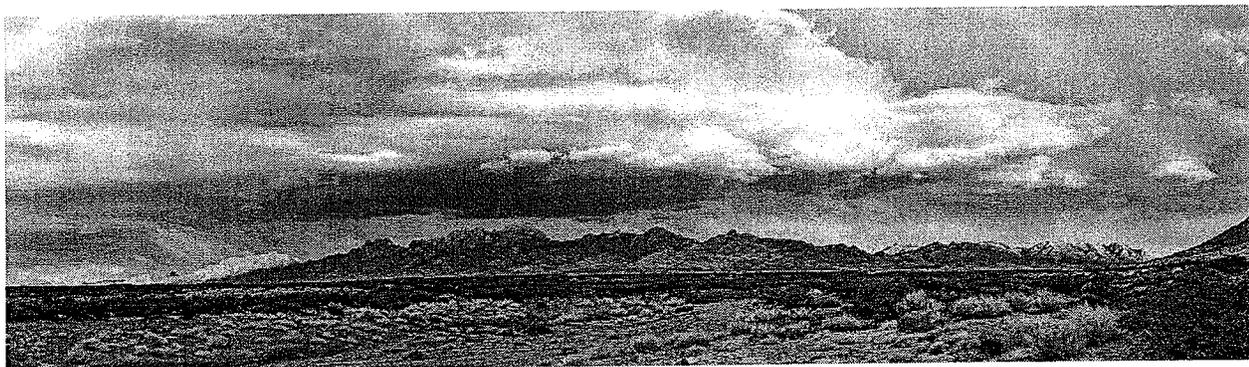
Transportation

The purpose of this strategy is to address impacts from military operations on roadway infrastructure in the region. Examples include strengthening notification of road closures for periodic military training and testing activities and evaluating and designating military vehicle routes to minimize traffic and safety issues in local communities.

Water Resources

The purpose of this category is to promote a fully integrated regional water planning process that addresses the long-term needs of major water users. Other strategies featured in this category include participating in a regional water resources management study to address the challenges of water quality and supply and exploring joint DoD and civilian initiatives and projects to diversify and extend the water supply.

06 CONCLUSION

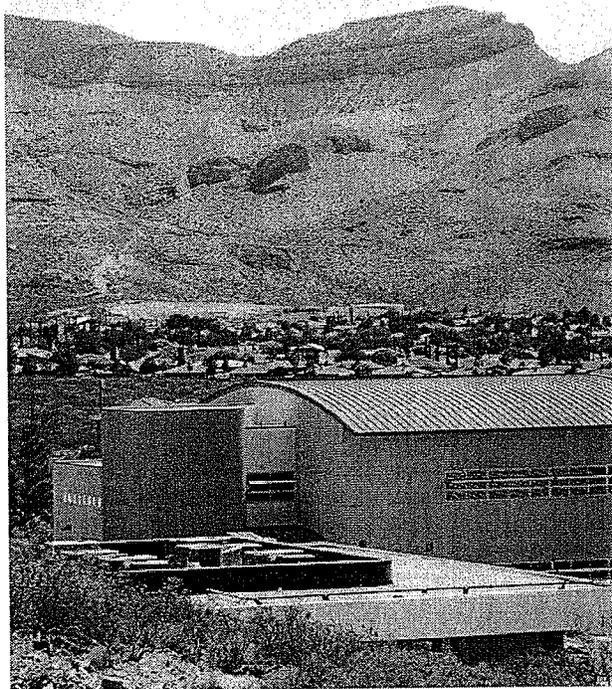


The SNMEP area is large, complex, and dynamic. Along with one of the premier testing and training military environments in the U.S., the region features opportunities for energy production, forestry, cattle grazing, extractive uses, wildlife management, recreation, tourism, research, and local economic development. The diversity of local, state, and federal mandates; mission needs; and community interests reinforces the value of a coordinated planning process to promote economic competitiveness and protect quality of life.

Given the complexity of the region, no single stakeholder can take all of the steps necessary to balance community growth and resource management with military mission compatibility. All study partners play a critical role in enhancing communication. This JLUS process embodies a partnership among residents, communities, agencies, and the military. This report includes a list of foundational actions to continue the spirit of collaboration.

Similarly, no single strategy in the JLUS will eliminate all of the current or anticipated compatibility issues. Instead, the tools identified work in concert to address as many compatibility factors as possible. The JLUS compatibility menu (See *Technical Appendix for the full table*) offers a wide range of strategies to reflect the resources, needs, and interests of the region's many communities. As always, the applicable local processes for adopting ordinances or codes will govern any implementation of regulatory policies by city and county governments.

As the JLUS transitions from planning to implementation, all stakeholders are encouraged to revisit the compatibility menu and adapt tools as appropriate to meet changing conditions and sustain progress toward the shared goal of a stronger, healthier, prosperous region.



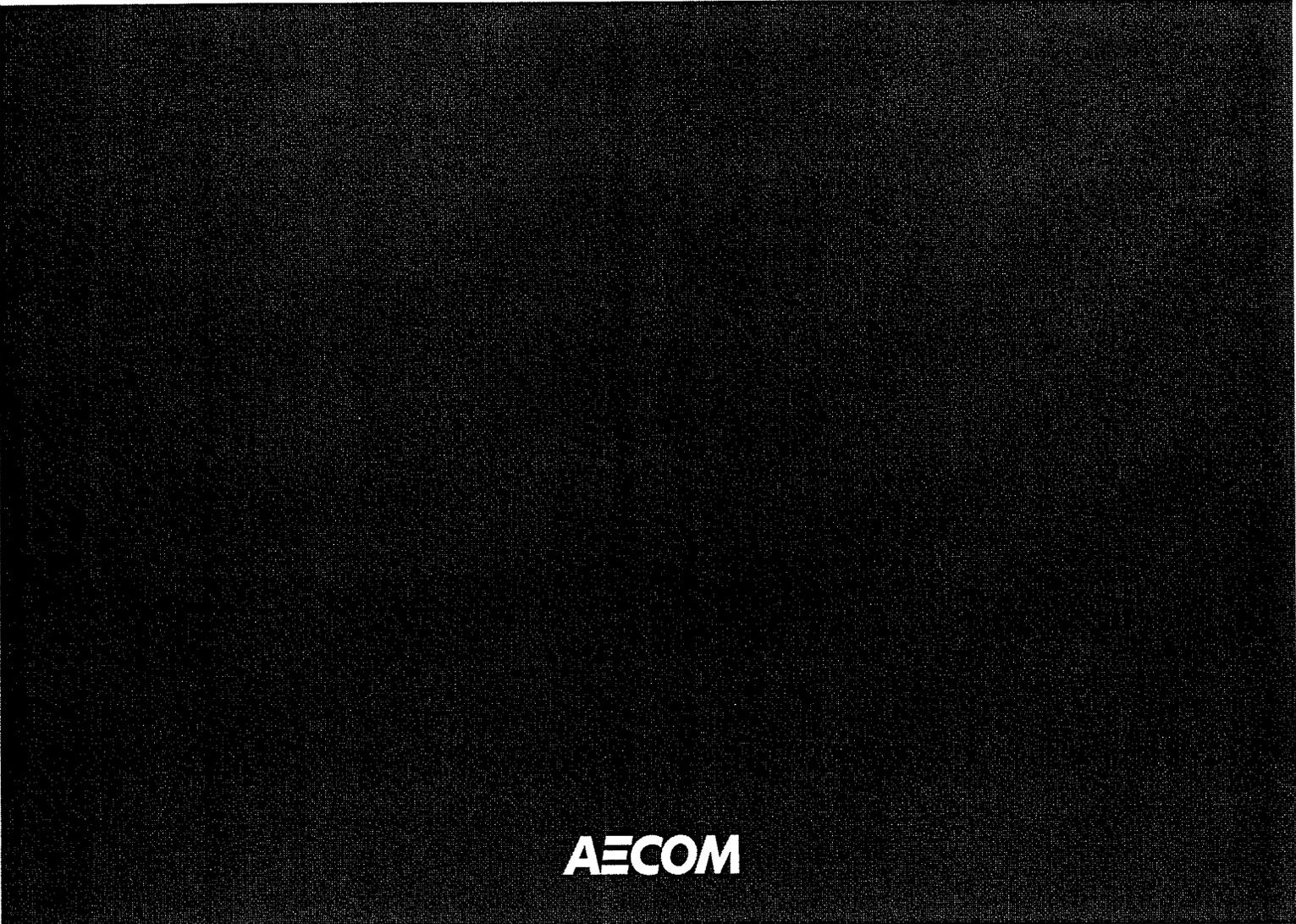
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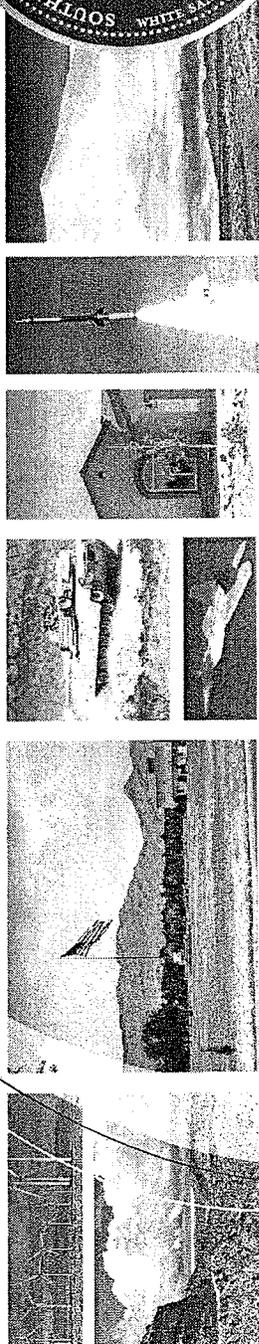
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AECOM



JLUS Compatibility Menu
AECOM

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
Airspace Safety and Management (ASM)						
<p>Coordination issues exist between military testing and training and emerging commercial space operations for the scheduling of restricted airspace. As military and commercial needs for restricted airspace increase, potential for even limited transit periods through restricted airspace and other Special Use Airspace (SUA) may diminish.</p>	<p>ASM-1 Ensure that an enduring and effective organizational infrastructure and capacity is in place to coordinate airspace issues and management for the Southern New Mexico-El Paso (SNMEP) Joint Land Use Study (JLUS) region</p>	<p>ASM-1.1 Institutionalize the ongoing TRIAD military airspace coordination group to create a unified vision and action plan for regional airspace management with representation from all regional airspace users, such as military installations, Federal Aviation Administration (FAA), Drug Enforcement Agency (DEA), US Forest Service (USFS), Bureau of Land Management (BLM) Border Patrol, fire/emergency responders, Spaceport America, and commercial and general aviation sectors</p>	Near	<p>Lead: TRIAD Support: FAA, Border Patrol, DEA, Spaceport, USFS, BLM, civilian pilot organizations</p>	Six-county area	\$
<p>Commercial and general aviation traffic must circumnavigate large blocks of restricted airspace, adding to length and time for trips. An existing transit corridor, R-5107 F/G, provides for limited through traffic on weekends and between the hours of midnight and 6 AM when R-5107 is not needed for a military purpose. This may lead to pressure on the military to release or restrict its use of airspace, limiting the availability of already constrained schedules.</p>	<p>ASM-2 Implement changes in air traffic control (ATC) and management to provide more frequent and routine access through SUA</p>	<p>ASM-2.1 Provide resources to implement TRIAD recommendations and support ongoing efforts to achieve improved and efficient use of regional airspace (See ASM-5.2)</p> <p>ASM-2.2 Provide real-time transit authorizations for civilian pilots</p> <p>ASM-2.3 Identify and evaluate areas and times of congestion between civilian and military operations in regional airspace and develop a management plan for these areas and/or times</p>	Near/Mid	<p>Lead: TRIAD, military airspace working group</p>	Military special use airspace	\$\$/\$\$\$
			Near	<p>Lead: Cherokee ATC</p>	Military special use airspace	\$
			Near	<p>Lead: TRIAD, military airspace working group Support: FAA</p>	Military special use airspace and NAS in six-county area	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>ASM-2.4 As feasible, develop procedures to establish predictable civilian use of airspace, such as designated hours of use for R-5107 F/G or expanded hours for handing control of R-5107 back to FAA</p> <p>ASM-2.5 Evaluate options for scheduling more concurrent military operations (such as airspace restructuring or improved scheduling tools)</p> <p>ASM-2.6 Establish new corridors through SUA for civilian traffic as needed</p> <p>ASM-2.7 Create a process for early planning for military airspace consolidation and capabilities planning and include input from the institutionalized airspace working group and local governments to identify and manage on-the-ground compatibility concerns and economic priorities</p>	<p>Near</p> <p>Near</p> <p>Near</p> <p>Near</p>	<p>Lead: TRIAD, military airspace working group Support: FAA</p> <p>Lead: TRIAD, military airspace working group Support: FAA</p> <p>Lead: TRIAD, military airspace working group Support: FAA</p> <p>Lead: TRIAD, military airspace working group Support: FAA, Border Patrol, DEA, Spaceport, USFS, BLM, civilian pilot organizations</p>	<p>Military special use airspace and NAS in six-county area</p> <p>Military special use airspace</p> <p>Military special use airspace</p> <p>Six-county area and three installations</p>	<p>\$</p> <p>\$\$</p> <p>137</p> <p>\$\$</p> <p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>ASM-3 The private use of unregulated airspace in the region (e.g. hot air ballooning, unmanned aircraft or remote control aircraft by private individuals) can encroach (generally unintentionally) into airspace that is being used for military operations or is closed due to national security or public safety reasons. Use of airspace to conduct wildlife surveys outside of controlled military airspace also has the potential to conflict with concurrent military use.</p>	<p>ASM-3 Increase awareness of the multiple uses of regional airspace and strengthen coordination among private, public, and military users</p>	<p>ASM-3.1 Establish an outreach and educational process to raise awareness of unintentional encroachment by private airspace users</p>	<p>Near</p>	<p>Lead: TRIAD, military PAOs</p>	<p>Six-county area</p>	<p>\$</p>
<p>ASM-4 Fort Bliss is increasing non-hazardous helicopter operations in uncontrolled airspace in and around El Paso and Fort Bliss training areas. Fort Bliss has designated an Alert Area to the east of El Paso where operations are predictably higher and warrant caution by pilots. As military and civilian operations increase in uncontrolled airspace, conditions become less safe.</p>	<p>ASM-4 Implement changes in airspace designations to provide adequate notice and separation and safety for military and civilian operations in high use airspace</p>	<p>ASM-4.1 Identify high use (congested) areas in regional airspace, users, aircraft types, use patterns (temporal and spatial) and work with the FAA to develop management plans for these areas</p>	<p>Near</p>	<p>Lead: TRIAD, military airspace working group Support: FAA</p>	<p>Military special use airspace and NAS in six-county area</p>	<p>\$\$</p>
		<p>ASM-4.2 Implement management plan including any changes in airspace designations that provide for safe operating areas in congested airspace</p>	<p>Near/Mid</p>	<p>Lead: TRIAD, military airspace working group Support: FAA</p>	<p>Military special use airspace and NAS in six-county area</p>	<p>\$\$ / \$\$\$</p>
		<p>ASM-4.3 Designate additional Alert Areas</p>	<p>Near/Mid</p>	<p>Lead: TRIAD, military airspace working group Support: FAA</p>	<p>Military special use airspace and NAS in six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Current centralized military air traffic management equipment at WSMR (Cherokee) does not cover low altitude areas and therefore is unable to manage low altitude military operations, such as Army helicopters</p>	<p>ASM-5 Improve air traffic control (ATC) capabilities for military operations, especially at lower altitudes</p>	<p>ASM-5.1 Expand military radar coverage for lower altitude operations in regional airspace (military and national airspace)</p>	<p>Near/Mid</p>	<p>Lead: TRIAD, military airspace working group</p>	<p>Military special use airspace</p>	<p>\$\$/\$\$\$</p>
<p>Use of unmanned aerial vehicles (UAVs) is increasing by both the military and commercial sector in the region. There is an increased need to address the safety of the mix of manned and unmanned air traffic. Current high altitude controlled airspace provides linkage between restricted areas but some UAVs do not have the capabilities to operate at higher altitudes.</p>	<p>ASM-6 Coordinate with FAA to define and implement policies and airspace structures to accommodate UASs/RPAs within the National Airspace System (NAS)</p>	<p>ASM-6.1 Request regular, ongoing FAA briefings on status of Certificate of Authorization (COA) proposals under review for UAVs</p>	<p>Near</p>	<p>Lead: FAA Support: TRIAD, local governments, JLUS partners</p>	<p>Six-county area</p>	<p>\$</p>
		<p>ASM-6.2 Track national efforts to regulate UAV operations in the NAS and partner with the FAA to define issues, needs, and strategies for regional UAV operations</p>	<p>Near</p>	<p>Lead: FAA Support: TRIAD (military airspace working group), local governments, JLUS partners</p>	<p>Six-county area</p>	<p>\$</p>
	<p>ASM-6.3 Establish UAV transit routes for military use between airports and controlled operating areas at suitable operating altitudes to separate selected vehicle types from other air traffic (for example, over the US 54 civilian air traffic corridor)</p>		<p>Near</p>	<p>Lead: FAA, TRIAD (military airspace working group) Support: TRIAD (military airspace working group), local governments</p>	<p>Military special use airspace and NAS in six-county area (could be regional)</p>	<p>\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Several state and federal agencies undertake management tasks using aircraft throughout the region. Many of these are time sensitive and critical for public safety and welfare (such as landscape restoration for fire suppression). Access to perform these tasks is constrained by priority for military operations in restricted airspace, or interface with high-speed low-level military operations in Military Training Routes (MTRs)</p>	<p>ASM-7 Coordinate and schedule access and transit through SUA for time-sensitive and critical management activities</p>	<p>ASM-7.1 Create an efficient process for non-military agencies to utilize windows of opportunity to perform time- and weather- sensitive (e.g. humidity, wind, temperature) air operations in restricted airspace and other low altitude SUA</p>	<p>Near</p>	<p>Lead: TRIAD, Military airspace managers, Cherokee ATC Support: BLM State Office, USFS District office NMEDD, local emergency responders</p>	<p>Military special use airspace</p>	<p>\$</p>
		<p>ASM-7.2 Conduct training (live exercises and tabletop) to train Air Traffic Controllers to manage fire response situations</p>	<p>Near</p>	<p>Lead: FAA Support: Military ATC (Cherokee)</p>	<p>Regional military SUA and NAS</p>	<p>\$\$</p>
<p>Alamogordo White Sands Regional Airport (AWSRA) plans to extend its runway and could also host military helicopter missions. As use and capabilities expand at the airport, interface with HAFB operations will increase.</p>	<p>ASM-8 Coordinate future plans and air traffic requirements for AWSRA and HAFB</p>	<p>ASM-8.1 Establish a working group to share information and develop an action plan for future growth at the airport</p>	<p>Near</p>	<p>Lead: AWSRA, City of Alamogordo Support: HAFB airspace manager, HAFB community planner, Otero County, BLM Las Cruces FO, WHSA, FAA</p>	<p>Otero County</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>ASM-8.2 Design and designate flight patterns and operations areas to deconflict arrival and departure traffic at HAFB and AWSRA based on current and future needs</p>	Near	<p>Lead: AWSRA, City of Alamogordo Planning Support: HAFB airspace manager, HAFB community planner, FAA</p>	Otero County	\$
Communication and Coordination (CC)						
<p>Both military and civilian stakeholders have cited an interest in improved communication about DoD and non-DoD missions. There is a lack of familiarity about military operations and activities and limited awareness of the positive impacts of the military on surrounding communities, as well as services and events offered by the installations. Similarly, there is a lack of understanding of the missions of state and federal agencies, such as recreation, conservation, and resource management activities associated with the NPS, USFS, and BLM or the NMSLO's mandate to lease trust land for "highest and best use" to provide revenues for beneficiaries.</p>	<p>CC-1 Conduct additional community outreach about military operations and missions to promote greater visibility of the military and highlight opportunities to interact</p>	<p>CC-1.1 Develop online and printed information to highlight military activities, missions, and economic impacts, drawing from previously developed materials (e.g. the SNMEP sustainability work group)</p> <p>CC-1.2 Conduct additional meetings with community and business groups (e.g. chambers, community associations) and schedule regular briefings with state and federal agencies, particularly in advance of new missions and operations that could have an effect on surrounding communities or agency mandates</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local governments, CoCs, military advocacy groups</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>CC-1.3 Conduct additional on-installation visits and "field trips," including testing and training demonstrations (e.g. WSMR Ranchers Day, HAFB Open House, etc...) for the public, key stakeholders, and representatives of JLUS partner entities</p>	Near	<p>Lead: FB, HAFB, WSMR</p>	Six-county area	\$
		<p>CC-1.4 Conduct periodic press releases or media events about mission activities and economic impacts</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local governments, CoC, military advocacy groups</p>	Six-county area	\$
		<p>CC-1.5 Develop a partnership between installations, military subject matter experts, and local schools to develop educational materials and mentoring opportunities for STEM and other fields</p>	Mid	<p>Lead: School districts Support: FB, HAFB, WSMR</p>	Six-county area	\$
		<p>CC-1.6 Compile comprehensive notification lists and use enhanced techniques to reach a wider range of affected parties about noise or other mission-related events, including fliers and low-tech methods and social media and texting (See NMA-3.3)</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local government PAOs</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>CC-1.7 Designate clear installation points of contact for community-related issues, such as noise complaints and coordinate with local Public Affairs Officers (PAOs) on notices and announcements</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local government PAOs</p>	Six-county area	\$
		<p>CC-1.8 Conduct at least an annual briefing by military representatives and other participating JLUS entities, including the BLM, NPS, USFS, and NMSLO at city or county council/commission meetings in partner communities</p>	Near	<p>Lead: FB, HAFB, WSMR, SNMEP sustainability work group, BLM, NPS, USFS, and NMSLO Support: Local governments</p>	Six-county area	\$
		<p>CC-1.9 Re-scope the current roles of military outreach positions to include more community engagement and coordination on compatibility and coordination issues and ensure that the redefined position is housed in an installation department, such as DPW or PAIO that reflects a technical planning orientation (e.g. Navy's Community Planning Liaison Office position)</p>	Mid	<p>Lead: FB, HAFB, WSMR</p>	Six-county area	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
	<p>CC-1</p> <p>Educate military and civilian stakeholders on the mission of the various state and federal agencies that manage public land in the region, including the unique mandate of the NMSLO to generate revenue for the state's schools, hospitals and universities</p>	<p>CC-1.10</p> <p>Ensure that redefined planner position addresses full range of noise and safety issues outside of installations, including airfields, ranges and areas under test and training airspace</p>	<p>Mid</p>	<p>Lead: FB, HAFB, WSMR</p>	<p>Six-county area</p>	<p>\$</p>
	<p>CC-2</p> <p>Educate military and civilian stakeholders on the mission of the various state and federal agencies that manage public land in the region, including the unique mandate of the NMSLO to generate revenue for the state's schools, hospitals and universities</p>	<p>CC-2.1</p> <p>Establish a working group that includes representatives of military installations, the BLM, USFS, NPS, and the NMSLO to increase understanding of various state and federal missions within the region and explore opportunities for land exchanges, leases, memoranda of understanding, and other agreements (See CC-6.3)</p>	<p>Mid</p>	<p>Lead: NMSLO, BLM, USFS</p> <p>Support: FB, HAFB, WSMR, local governments</p>	<p>Six-county area</p>	<p>\$</p>
<p>Current web sites for the military installations in the region are segmented and difficult for the public to use.</p>	<p>CC-3</p> <p>Enhance existing installation and government web sites in the region to promote easier public use and support access across multiple partner entities</p>	<p>CC-3.1</p> <p>Design existing web sites to be more user friendly, including cross-linking military and city and county government sites with "hot buttons" or adding a page specifically designed for the public on each installation/partner webpage that highlights information of general community interest</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR PAOs</p> <p>Support: Local government PAOs</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Stakeholders noted that points of contact representing regional entities, particularly some local governments are not always known. Rotation of military personnel can also pose a continuity challenge for communication.</p>	<p>CC-4 Build on existing relationships among local, state, federal, and tribal governments</p>	<p>CC-4.1 Develop and maintain an updated database of points of contact (POC) by entity</p>	<p>Near</p>	<p>Lead: SNMEP sustainability work group, local PAOs Support: All JLUS partner entities</p>	<p>Six-county area</p>	<p>\$</p>
<p>There is a lack of a formal and fully established process for joint military and local, state, and federal agency review of major projects in the region.</p>	<p>CC-5 Establish an internal process for JLUS stakeholders, including DoD, local, state and federal entities to pre-plan and review major new proposals</p>	<p>CC-4.2 Establish organizational mailboxes that reflect subset communication lists for specified categories, such as airspace, NEPA, frequency spectrum management, etc...</p> <p>CC-4.3 Conduct regular reviews of POC lists and organizational inboxes to ensure currency</p> <p>CC-5.1 Set criteria such as scale and type of action that automatically triggers a joint local government/military consultation process for city and county projects based on distance from the installation (e.g. major subdivision applications or rezoning by cities and counties; the siting of structures between 75 and 200 feet AGL)</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
		<p>CC-5.2 Establish Memoranda of Agreement on general consultation for federal resource management actions and plans to ensure that final resource management decisions are fully coordinated among local, state, and federal stakeholders</p>	Near	<p>Lead: BLM, USFS, NPS Support: FB, HAFB, WSMR, local and state governments</p>	Six-county area	\$
		<p>CC-5.3 Ensure that federal and state agencies continue to consider impacts to the military before disposing of or selling land and that the military continues to consider the possible impacts of expanded missions and operations on local opportunities for community growth and economic development (See LU-3.1)</p>	Near	<p>Lead: BLM, USFS, NPS, NMSLO, TGLO Support: FB, HAFB, WSMR, local governments</p>	Six-county area	\$
		<p>CC-5.4 Maintain a list of interested parties and/or cooperating agencies and develop a standardized list of sites for National Environmental Policy Act (NEPA) notifications within local communities to promote more inclusive participation in NEPA studies</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs, local government PAOs Support: BLM, USFS, NPS</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>CC-5.5 Develop educational materials. (e.g. NEPA 101 video) to raise awareness about the process and encourage informed public involvement in NEPA studies conducted within the region</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local government PAOs</p>	Six-county area	\$
		<p>CC-5.6 Evaluate opportunities to conduct additional public meetings beyond standard agency practice for all NEPA-related actions, including Environmental Assessments that are of particular interest to the community</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs, local government PAOs Support: BLM, USFS, NPS</p>	Six-county area	\$
		<p>CC-5.7 Invite military representatives to sit as non-voting members of city and county advisory bodies, such as the Planning and Zoning Commission, Planning Commission, Land Use Commission or City Plan Commission</p>	Near	<p>Lead: Local governments Support: FB, HAFB, WSMR,</p>	Six-county area	\$
<p>The NMSLO is engaged in major economic development in the region but state trust land is not subject to local land use and zoning, and trust beneficiaries must be compensated for any land use restrictions that limit the agency's ability to generate revenues for public schools, universities and hospitals.</p>	<p>CC-6 Execute agreements between the DoD installations and the NMSLO that define uses of land and airspace, modes of consultation, and cooperative planning</p>	<p>CC-6.1 Develop a collaborative relationship between the DoD and state agencies such as the NMSLO and TGLO to enhance communication about military operations and promote the coordinated review of proposals to promote the goals of revenue generation and military compatibility</p>	Near	<p>Lead: FB, HAFB, WSMR Support: NMSLO, TGLO</p>	Portions of six-county area with overlap of AOC and higher economic development value	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>CC-6.2 Develop a set criteria such as scale and type of military action that automatically triggers a joint state agency/military consultation process for proposed military projects</p>	Near	<p>Lead: FB, HAFB, WSMR Support: NMSLO, TGLC, BLM, NPS, USFS, local governments</p>	<p>Portions of six-county area with overlap of AOC and higher economic development value</p>	\$
		<p>CC-6.3 Adopt approaches including formal agreements to mitigate compatibility issues between military operations and the NMSLO; land exchanges, long-term leases of trust land, land use restrictions (LURCs) of trust land where military missions place constraints on the revenue potential of trust land; Memorandum of Understanding (MOUs); and Joint Planning Agreements (JPAs) (See LU-3.2)</p>	Near	<p>Lead: FB, HAFB, WSMR, NMSLO Support: Local governments</p>	<p>Portions of six-county area with overlap of AOC and higher economic development value</p>	\$
<p>There is no recognized regional area or boundary that encompasses known or possible interactions between military and community activities. Not all interactions have clear physical boundaries associated with them</p>	<p>CC-7 Establish an official SNM-EP Planning Area</p>	<p>CC-7.1 Define a geographic planning area to identify where military operations may affect surrounding areas or where civilian actions may affect from known areas of military/civilian overlap, including noise, spectrum interference, surface and airspace hazards</p>	Mid	<p>Lead: FB, HAFB, WSMR Support: Local governments, state and federal entities</p>	<p>Six-county area (with sub-zones of AOC based on impact)</p>	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Though organizations advocate for coordination and communication between the civilian and military sectors, there is no overarching entity that includes representation from all stakeholder interests</p>	<p>CC-8 Establish an implementation body to advocate for adoption of recommended compatibility measures and promote continued dialogue</p>	<p>CC-8.1 Charter, empower, and fund a JLUS implementation body to support multi-jurisdictional, regional land use planning and track progress on JLUS actions</p>	<p>Near</p>	<p>Lead: SNMEP sustainability work group Support: All JLUS partner entities</p>	<p>Six-county area</p>	<p>\$</p>
<p>There is no central source of information on possible military and civilian interactions. Local governments in the region also vary in their capabilities to access information and review and coordinate decision-making with the installations.</p>	<p>CC-9 Develop an internal web-based tool to facilitate project/development review among internal stakeholders</p>	<p>CC-9.1 Build and maintain an internal data clearinghouse that enables GIS sharing, data upload, review and comment of posted projects and initiatives for governments, installations, agencies, industries, and other key implementation partners; include information on potential compatibility factors to assist in initial evaluation of actions and spatial data to promote early coordination of project development and siting; leverage an existing data platform, such as the NM RGIS Data Clearinghouse and the Western Regional Partnership (WRP) to store/share data</p>	<p>Long</p>	<p>Lead: JLUS implementation body Support: NM RGIS, WRP, local, state, federal entities with GIS data</p>	<p>Six-county area</p>	<p>\$\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
The region has key points of physical overlap between military training and testing operations and surrounding public/private land uses, including routine activity in call-up and co-use areas and special, large-scale joint service exercises	CC-10 Create an enhanced system of notification and communication for public land users	CC-9.2 Add a separate public component of the data clearinghouse for external stakeholders and establish a protocol for developing and releasing information about compatibility factors and conditions in the region (e.g. static maps of noise environment or MTRs); maps to include disclaimers and explanatory context as appropriate to aid in interpretation; leverage an existing data platform, such as the NM RGIS Data Clearinghouse and the Western Regional Partnership to store/share data	Long	Lead: JLUS implementation body Support: NM RGIS, WRP, local, state, federal entities	Six-county area	\$\$\$
	CC-10 Create an enhanced system of notification and communication for public land users	CC-10.1 Develop a tool to communicate more effectively with public recreational permit holders	Near	Lead: BLM, NMSLO, USFS, NPS, USFWS Support: FB, HAFB, WSMR, local governments, tourism entities	Public recreation lands in six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>CC-10.2 Increase general public awareness of potential trespass risks through better signage, mapping, and community education strategies</p>	Mid	<p><i>Lead:</i> BLM, NMSLO, USFS, NPS, USFWS <i>Support:</i> FB, HAFB, WSMR, local governments, tourism entities</p>	Perimeter areas around installations	\$\$\$
	<p>CC-11 Increase the compliance rate of military units with operating procedures designed to reduce impacts on the surrounding communities</p>	<p>CC-11.1 Conduct briefings of military units, including visiting units to increase the understanding of impacts such as noise or military vehicle convoys on surrounding areas</p>	Near	<p><i>Lead:</i> FB, HAFB, WSMR</p>	Off- and on-installation training and testing areas	\$
		<p>CC-11.2 Develop a system for monitoring field activities, such as use of maneuver damage accounts that are refundable to the unit following a post-activity review or field inspection</p>	Mid	<p><i>Lead:</i> FB, HAFB</p>	Off- and on-installation training areas	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Unauthorized uses of state trust land and use without notification can create risks to NMSLO grazing and other lessees, residents and occasional users who secure recreational permits, right of entry permits or special use agreements (for surveys, minerals assessments, construction and monitoring of meteorological towers, etc).</p>	<p>CC-12 Create agreements in designated call-up areas with private and public land owners that assure the safety of residents and others within those areas during times of military testing or other military operations</p>	<p>CC-12.1 Create agreements in the form of leases or Memoranda of Understanding with the NMSLO and its lessees in proposed call-up areas that maintain safety for residents and other users (such as hunters and recreational users/lessees) and provide adequate compensation to the NMSLO and trust beneficiaries for such uses</p>	<p>Near</p>	<p>Lead: WSMR Support: NMSLO</p>	<p>Call-up areas</p>	<p>\$</p>
		<p>CC-12.2 Re-instate previous call-up agreements between the NMSLO and military installations that have expired, and create new agreements as necessary, to ensure safety of residents and other users of the land</p>	<p>Near-Mid</p>	<p>Lead: WSMR Support: NMSLO</p>	<p>Call-up areas</p>	<p>\$</p>
<p>Property owners in call-up areas around WSMR must evacuate for safety reasons during periodic hazardous testing operations</p>	<p>CC-13 Build on ongoing efforts to notify residents affected by periodic hazardous testing operations</p>	<p>CC-13.1 Develop additional procedures to inform evacuated property owners about the timing and duration of testing operations (e.g. use of texting to notify when testing operations are complete)</p>	<p>Near</p>	<p>Lead: WSMR PAO</p>	<p>Call-up areas</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Energy Infrastructure Management (EIM)</p> <p>New Mexico possesses some of the best wind and solar resources in the country, and renewable energy projects offer significant promise for economic development and the ability to meet DoD and national energy policy, reduce reliance on conventional energy sources and increase energy independence.</p> <p>Compatibility issues, however, can exist between energy infrastructure and military operations. Energy projects can cause glare, vertical obstruction, and interruption to communication signals, such as "shadowing" effects from spinning turbine blades that limit radar's ability to detect aircraft or damage to infrastructure caused by debris from mid-air missile test targeting. There is no consistent, regional process to assist in assessing and refining energy proposals to address these compatibility challenges.</p>	<p>EIM-1 Promote a collaborative planning process among military, state, and federal agencies and other stakeholders to review and plan new energy proposals and support the siting of new energy infrastructure that maximizes opportunities for renewable energy development, while protecting and enhancing military missions and operations</p>	<p>EIM-1.1 Create performance-based guidelines related to the design (scale, type, height, markings) and siting of energy infrastructure to assist in developing projects that are compatible with military operations (See LU-4.2)</p>	<p>Near</p>	<p>Lead: DoD OSD Support: Industry leaders, BLM, DoD Clearinghouse</p>	<p>National, State</p>	<p>\$</p>
		<p>EIM-1.2 Actively engage with renewable energy developers, major property owners such as the NMSLO, industry associations/cooperatives and authorities (e.g. New Mexico Renewable Energy Transmission Authority) and conduct early outreach to the energy development community regarding military compatibility issues</p>	<p>Near</p>	<p>Lead: SNMEP JLUS implementation body Support: Renewable energy developers, New Mexico Renewable Energy Transmission Authority, NMSLO, TGLO, TxNRCC, NMENRD, BLM State Office, USFS Regional office, local governments</p>	<p>State of NM, west Texas</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>EIM-1.3 Engage the DoD as a partner early in the siting process for large-scale energy projects</p>	Near	<p><i>Lead:</i> DoD clearinghouse <i>Support:</i> Installation community planner, operational units, BLM FOS, USFS, NMSLO, offices</p>	SNMEP planning area (CC-4)	\$
		<p>EIM-1.4 Leverage national efforts to develop a registry or other system to track and monitor energy development activity</p>	Near	<p><i>Lead:</i> SNMEP J.LUS implementation body <i>Support:</i> DoD Clearinghouse, NMEDD, BLM</p>	State of NM, west Texas	\$
		<p>EIM-1.5 Develop regional mapping (such as red/yellow/green maps) for wind, solar, and other energy opportunities along with possible future utility corridors and provide maps and data to energy developers to inform project siting decisions</p>	Near	<p><i>Lead:</i> Federal land management agencies <i>Support:</i> NMSLO, BLM State Office, NMENRD, TRIAD, UNM EDAC (for GIS assistance)</p>	SNMEP planning area	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>EIM-1.6 Develop tools and processes for identifying, tracking and recording new energy proposals in local communities and incorporate data into regional mapping (See LU-5.1)</p>	<p>Near</p>	<p>Lead: SNMEP implementation body Support: BLM State office, DoD Clearinghouse, local governments, UNM EDAC</p>	<p>SNMEP JLUS planning area, State-wide</p>	<p>\$</p>
		<p>EIM-1.7 Develop a regional data clearinghouse (ARCGIS platform) where installations, local and state entities and industry stakeholders have access to updatable digital information regarding energy projects (See CC-9.1)</p>	<p>Mid</p>	<p>Lead: SNMEP JLUS implementation body Support: BLM, USFS, NMSLO, NMENRD, UNM EDAC, industry energy developers, local governments</p>	<p>State-wide</p>	<p>\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>EIM-1.8 Continue to engage military installations in review of BLM and USFS resource management plan updates and revisions as part of early input into energy infrastructure management</p>	Near	<p>Lead: BLM, USFS District offices Support: Military installation community planner (and operational units), FOs,</p>	State-wide	\$
		<p>EIM-1.9 Prepare a HRAZ map for the region to identify high risk areas for energy development</p>	Mid	<p>Lead: DoD OSD Support: WSMR, HAFB, FB, combine with Cannon AFB and Kirtland AFB</p>	SNMEP planning area, expand to cover NM	\$\$
	<p>EIM-2 Strengthen DoD existing processes and guidance to assist in developing compatible energy projects</p>	<p>EIM-2.1 Advocate to strengthen the DoD Siting Clearinghouse process by ensuring that projects are sent to major commands and the local installations for early review and that existing local processes are integrated into project evaluation</p>	Near	<p>Lead: NMDMA Support: TRIAD</p>	State and National	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>EIM-2.2 Advocate for establishing DoD policy guidelines for energy development</p>	Near	<p>Lead: DoD OSD Support: TRIAD, NMDMA, Service major commands, DOI</p>	National	\$
Local Government Plans (LGP)						
Some local government comprehensive planning studies, particularly older documents lack specific language on compatibility with military installations	LGP-1 Ensure that advanced policy guidance in local planning documents clearly reflects compatibility considerations	LGP-1.1 Incorporate compatibility in updates of local Comprehensive Plans and other policy documents and include references to compatibility with installations, military operations, maps, and recommendations identified in the JLUS	Near	Lead: Local governments Support: FB, HAFB, WSMR	Six-county area	\$
	LGP-1.2 Encourage military and other JLUS partners, such as state and federal agencies to participate in local planning and development advisory bodies and major plan updates and amendments, including Comprehensive Plans, neighborhood or sector plans in areas of sensitivity, and transportation, infrastructure and natural resource plans (See CC-5.7)		Near	Lead: Local governments Support: FB, HAFB, WSMR	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
Some areas of the region (e.g. east of the City of Las Cruces) are growing rapidly and experience the impacts of military operations but lack a detailed planning framework to promote compatibility	LGP-2 Conduct more detailed land use and compatibility planning for areas of sensitivity in advance of emerging development activity	LGP-1.3 Develop a consistent process for notifying military installations about upcoming advisory body and commission/council agenda items involving land use, frequency management, tall structures, or energy development projects or other compatibility factors (See CC-5.7)	Near	Lead: Local governments Support: FB, HAFB, WSMR	Six-county area	\$
Land Use (LU)	LGP-2 Conduct more detailed land use and compatibility planning for areas of sensitivity in advance of emerging development activity	LGP-2.1 Develop small area plans that establish a more specific land use vision and development framework	Mid	Lead: Local governments	Portions of six-county with overlap of strong development interest and AOC	\$\$
There is increasing residential development in some peripheral areas of counties, which places more residents in proximity to military operations and raises the risk of nuisance and safety impacts	LU-1 Encourage the incorporation of open space as a way to preserve open space, create natural buffers, and increase residential compatibility with nearby military operations	LU-1.1 Establish by-right access to conservation subdivision layouts in areas of known noise exposure so that lots can be condensed and open space can be dedicated on parcels	Mid	Lead: Local governments	Six-county area subject to zoning/land use regulation (especially low density areas)	\$
	LU-2 Promote infill development during comprehensive plan and future land use updates to guide denser growth away from areas with higher exposure to the impacts of military operations	LU-2.1 Create local incentives to make infill development easier, such as special financing, less restrictive zoning regulations (where applicable), and infrastructure improvements	Long	Lead: Local governments	Six-county area (especially developed areas)	\$\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Land uses in areas surrounding the installations may change in response to new opportunities for a "higher and better use", such as wind and solar energy projects, and these emerging uses may become more intensive or produce vertical infrastructure that creates compatibility issues with military operations. The NMSLO is not subject to local zoning and land development codes and ordinances, but the agency works cooperatively with local government through annexation agreements or Joint Planning Agreements or economic development/industrial park leases and other instruments to ensure that trust land is planned and zoned properly and that development on trust lands for housing and economic purposes is consistent with local government and citizen goals for their communities.</p>	<p>LU-3 Promote compatibility on federally-administered or state held lands by siting emerging land uses and economic development opportunities in a way that preserves military missions</p>	<p>LU-2.2 Use capital improvement planning and infrastructure system requirements to promote more compatible development activity in areas exposed to military operational impacts</p>	<p>Long</p>	<p>Lead: Local governments Support: Utility providers, MPO</p>	<p>Six-county area (especially low density areas)</p>	<p>\$</p>
<p>Land uses in areas surrounding the installations may change in response to new opportunities for a "higher and better use", such as wind and solar energy projects, and these emerging uses may become more intensive or produce vertical infrastructure that creates compatibility issues with military operations. The NMSLO is not subject to local zoning and land development codes and ordinances, but the agency works cooperatively with local government through annexation agreements or Joint Planning Agreements or economic development/industrial park leases and other instruments to ensure that trust land is planned and zoned properly and that development on trust lands for housing and economic purposes is consistent with local government and citizen goals for their communities.</p>	<p>LU-3.1 Ensure that federal and state agencies continue to consider impacts to the military before disposing of or selling land and that the military continues to consider the possible impacts of expanded missions and operations on local opportunities for community growth and economic development (See CC-5.3)</p>	<p>LU-3.1 Ensure that federal and state agencies continue to consider impacts to the military before disposing of or selling land and that the military continues to consider the possible impacts of expanded missions and operations on local opportunities for community growth and economic development (See CC-5.3)</p>	<p>Near</p>	<p>Lead: BLM, USFS, NPS, NMSLO, TGLO Support: FB, HAFB, WSMR, local governments</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>LU-3.2 Leverage all available tools, including land exchanges, long-term leases, land use restrictive covenants, joint planning agreements (JPAs) and Memoranda of Understanding to optimize opportunities for compatible development with an understanding that the NMSLO must be compensated for any restrictions on development of trust land agreed to by the Commissioner of Public Lands</p>	<p>Near</p>	<p>Lead: NMSLO, TGLO Support: Local governments, FB, HAFB, WSMR</p>	<p>Portions of six-county area with overlap of AOC and higher economic development value</p>	<p>\$</p>
		<p>LU-3.3 Analyze and inventory areas with potential for land transfer or disposal, and work jointly to develop compatibility plans for identified parcels</p>	<p>Near</p>	<p>Lead: BLM, USFS, NPS, NMSLO, TGLO Support: FB, HAFB, WSMR, local governments</p>	<p>Portions of six-county area with overlap of AOC and higher natural and/or economic development value</p>	<p>\$</p>
		<p>LU-3.4 Support federal or state processes to transfer, sell, or lease land between DoD and other federal or state entities to encourage more intensive resource use or development on lands unaffected by military operations and create an open space buffer or compatible uses on lands subject to military impacts</p>	<p>Mid</p>	<p>Lead: BLM, USFS, NPS, NMSLO, TGLO Support: FB, HAFB, WSMR, local governments</p>	<p>Portions of six-county area with overlap of AOC and higher natural and/or economic development value</p>	<p>\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Unincorporated areas of the counties often lack the authority and/or tools to promote compatible development in proximity to military operations</p>	<p>LU-4 Use extra-territorial zones or jurisdiction to promote development compatibility in unincorporated areas</p>	<p>LU-4.1 Establish additional land use planning measures (e.g. authorized infrastructure or site planning standards) for land that falls within a designated buffer of city boundary (as determined by state enabling legislation) and within specified areas of military operation impact, such as noise contours, land use planning zones, or accident potential zones</p>	<p>Long</p>	<p>Lead: Local governments</p>	<p>Areas within specified distance of municipal boundaries</p>	<p>\$</p>
<p>Vertical structures, such as energy and telecommunications infrastructure pose a risk to aircraft due to physical intrusion into low-level flight corridors. Towers less than 200 feet AGL are not subject to FAA review and some counties in the region lack a local permitting process to identify where structures are installed. This gap increases the risk of interference with aircraft.</p>	<p>LU-5 Establish a clear process of coordination to minimize the aviation risks associated with vertical structures</p>	<p>LU-5.1 Create an early process for notifying the installations of the location of existing and proposed structures between 75 and 200 feet AGL in MTRs or other areas in which such structures may pose an aviation hazard</p> <p>LU-5.2 When certain locations such as mountaintops or land adjacent to interstate highways are critical for telecommunications infrastructure, ensure that facilities and infrastructure are constructed so as not to present a hazard to aviation traffic</p>	<p>Near</p>	<p>Lead: Local governments Support: FB, HAFB, WSMR, commercial and GA airports</p>	<p>MTRs, airfield and airport environs, other land under airspace subject to aviation hazards</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>LU-5.3 Encourage the co-location of new telecommunications towers with existing structures or with other land uses already identified as avoidance areas (e.g. certain residential uses) to reduce the number of structures or the addition of more avoidance areas in MTRs</p>	Near	<p>Lead: Local governments Support: Service providers</p>	Six-county area	\$
Birds can pose a collision risk with aircraft operating in the region	<p>LU-6 Adopt standards to reduce the attraction of birds within airport environs and low-level flight corridors</p>	<p>LU-5.4 Develop local ordinances for utility-scale wind energy projects that establish permitting and regulate location, appearance, and operational characteristics of projects (See SPL-9.2)</p>	Mid/Long	Lead: Local governments	Six-county area (Lincoln County has ordinance)	\$
		<p>LU-6.1 Reduce bird attraction by establishing siting and design standards for uses, such as detention ponds, sanitary landfills, crops etc... in areas subject to low-level flights</p>	Mid	<p>Lead: Local governments Support: Landowners, NPS, USFWS, FB, HAFB, WSMR, commercial and GA airports</p>	Six-county area MTRs, airfield and airport environs, other land under airspace subject to aviation hazards	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
		<p>LU-6.2 Coordinate with state and federal entities on aviation impacts to bird species at wildlife refuges and other natural areas in the region</p>	Mid	<p>Lead: FB, HAFB, WSMR Support: Local governments NPS, USFWS, USFS</p>	<p>Portions of the six-county area with natural, recreational and cultural sites subject to overflight</p>	\$
<p>The region's local governments lack specific land use tools to promote development on private lands that is compatible with military operations.</p>	<p>LU-7 Incorporate land use compatibility and communication requirements into existing local zoning codes and ordinances</p>	<p>LU-7.1 For those local jurisdictions with adopted land use regulatory authority, develop supplementary regulations within current codes that specify development or performance characteristics, such as land use type, density, height etc... as appropriate to promote compatibility on land subject to zoning and within clearly defined planning zones, such as noise contours, land use planning zones, or accident potential zones</p>	Mid	<p>Lead: Local governments</p>	<p>Areas subject to zoning and within AOC</p>	\$
		<p>LU-7.2 For local jurisdictions currently without adopted land use regulatory authority, explore land use/development regulations as a long-term option to promote compatibility within clearly defined planning zones, such as noise contours, land use planning zones, or airport accident potential zones (See SPL-5.1 and 5.2)</p>	Long	<p>Lead: Local governments</p>	<p>AOC</p>	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Noise Management/Avoidance (NMA)</p> <p>The region is exposed to noise and vibration from a variety of military operations, including supersonic aircraft, low-level high-speed aircraft, impulsive noise from ordnance expenditures, and aircraft arrival and departure at airfields</p>	<p>NMA-1 Reduce the sensitivity of structures, particularly housing or schools to noise exposure</p>	<p>NMA-1.1 Adopt sound attenuation building standards and/or energy efficiency practices as a means to achieve complementary indoor sound reduction in new construction of noise sensitive uses (See SPL-11.1)</p>	<p>Near/mid</p>	<p>Lead: Local governments Support: NM CID, building permit entities, development sector</p>	<p>AOC</p>	<p>\$</p>
		<p>NMA-1.2 Identify any additional building design and construction practices to reduce the level of noise that penetrates habitable indoor space</p>	<p>Near</p>	<p>Lead: Local governments Support: US Army NM CID, US Army CHPPM, AF Land Use Compatible Use Guidelines, installation energy performance manager, development sector</p>	<p>AOC</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>NMA-1.3 Connect homeowners and other noise sensitive uses, such as schools and hospitals to available informational resources, including weatherization and energy efficiency programs that can provide guidance and incentives for the retrofitting of structures</p>	Near	<p>Lead: Local governments Support: FAA, Installation PAOs, HUD, state housing programs</p>	AOC	\$
<p>NMA-2 When feasible, reduce the off-installation noise and vibration impacts of testing and training operations</p>		<p>NMA-2.1 When feasible, continue to manage off-installation aviation noise impacts through operational adjustments, such as re-evaluating and adjusting existing military flight patterns and training routes to reduce noise exposure on local communities and sensitive locations</p>	Near to long	<p>Lead: Installation community planner Support: DoD, SNMEP JLUUS implementing body, FAA</p>	AOC	\$
<p>NMA-3 Strengthen communication and community outreach procedures regarding noise events</p>		<p>NMA-3.1 Create a standardized process for informing residents in key locations about the timing of unusual or loud noise events, including the advanced publication of training schedules for firing ranges and for timing of training by the Air Force</p>	Near	<p>Lead: Installation PAOs Support: Range, airspace scheduling, community PAOs</p>	AOC	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>NMA-3.2 Use real estate disclosure as a means to notify regional residents of the potential impacts from military operations, such as noise (See RE-1.1)</p>	Near	<p>Lead: Local governments Support: Real estate sector</p>	AOC	\$
		<p>NMA-3.3 Compile more comprehensive notification lists and use enhanced techniques to reach a wider range of affected parties regarding noise events, including fliers and low-tech methods and social media and texting to push out announcements and notifications (See CC-1.6)</p>	Near	<p>Lead: FB, HAFB, WSMR PAOs Support: Local government PAOs</p>	Six-county area	\$
		<p>NMA-3.4 Conduct briefings of military units, including visiting units to increase the understanding of impacts such as noise or military vehicle convoys on surrounding areas (See CC-11.1)</p>	Near	<p>Lead: FB, HAFB, WSMR</p>	Off- and on-installation training and testing areas	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>NMA-3.5 Coordinate with state and federal resource management agencies on training activities during noise sensitive times and locations for species of concern, such as Mexican Spotted Owls</p>	<p>Near</p>	<p><i>Lead:</i> HAFB community planner and Environmental Flight, FB Environmental Directorate, WSMR Garrison Public Works, WSMR TC/RO</p> <p><i>Support:</i> USFS, USFWS, BLM FOs, military operators, ranger/airspace schedulers</p>	<p>Areas of environmental sensitivity</p>	<p>\$</p>
		<p>NMA-3.6 Create an internally coordinated noise complaint management process across DoD services in the region</p>	<p>Near</p>	<p><i>Lead:</i> FB, HAFB, WSMR PAOs</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
Noise and vibration impacts across the region are highly dispersed, particularly aviation related noise and are not fully identified through existing mapping	<p>NMA-4 Map current noise-affected areas and hotspots by noise source (ordnance/impulsive, supersonic air operations, low-level high-speed air operations, airfield operation)</p>	<p>NMA-4.1 Use current data on noise complaints to identify noise exposed areas</p>	Near	<p>Lead: Installation PAOs, noise complaint logs, (future centralized noise complaint process) Support: Local governments</p>	AOC	\$
		<p>NMA-4.2 Develop a series of maps/graphics or slides that identify areas of overlap between noise exposure and surrounding land use, which can then become basis of more specific land use planning for local, state and federal entities</p>	Near	<p>Lead: Installation community planner or ITAM program Support: Local governments, NMSLO, BLM, FOS, USFS, District offices, POCs, UNM, EDAC</p>	AOC(include military SUA footprint)	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>NMA-4.3 Analyze and identify areas surrounding the installations on which conservation-related strategies, such as REPI and ACUB could assist in reducing noise compatibility issues (See LC-3.1)</p>	Near	<p>Lead: Installation community planners Support: ACUB program lead, BLM/USFS real estate officers, NMSLO, local governments, conservation organizations</p>	Portions of six-county area with overlap of AOC and higher natural values	\$
		<p>NMA-4.4 Develop an informational; repository of studies on the effects of noise on people and animals to assist in assessing health impacts</p>	Near	<p>Lead: FB, HAFB, WSMR</p>	-	\$
Economic Development (ED)						
<p>The region, particularly communities in proximity to the installations are highly dependent on the related or spin-off economic impact of military operations.</p>	<p>ED-1 Form civilian/military partnerships to identify and develop additional economic development opportunities in local communities</p>	<p>ED-1.1 Include military representatives to partner with local economic development organizations such as Chambers of Commerce to identify complementary high tech and other defense-related spin-off private sector industries that can be recruited to the community</p>	Near	<p>Lead: CoC, EDOs Support: FB, HAFB, WSMR</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>ED-1.2 Develop a partnership to apply for Office of Economic Adjustment assistance to prepare a regional defense diversification strategy, particularly for those areas that are heavily dependent on military employment</p>	<p>Mid</p>	<p>Lead: CoC, EDOs, local governments Support: OEA, FB, HAFB, WSMR</p>	<p>Six-county area</p>	<p>\$</p>
		<p>ED-1.3 Include military representatives to partner with local economic development organizations and educational institutions in aligning DoD and private sector workforce skills where possible and promoting the placement of military family members or the transition of military personnel to the local private sector</p>	<p>Mid</p>	<p>Lead: CoC, EDOs, workforce training centers, community colleges Support: FB, HAFB, WSMR</p>	<p>Six-county area</p>	<p>\$</p>
		<p>ED-1.4 Work with the SBA and installation contracting officers during outreach events such as industry days to improve the ability of regional businesses to complete for contracts at all three installations</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: SBA, CoC, EDOs</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>ED-1.5 Without duplicating existing efforts, create a joint consortium of military, educational, and private sector entities to leverage the strong research and development capabilities already in the region and enhance RDT&E, workforce development, technology transfer, and commercialization opportunities</p>	Mid	<p>Lead: CoC, EDOs Support: FB, HAFB, WSMR, universities and community colleges, private sector</p>	Six-county area	\$
Stakeholders have noted that local residents are not fully aware of available military contracting opportunities	<p>ED-2 Increase community awareness of upcoming installation proposal opportunities for local contractors</p>	<p>ED-2.1 Use notices in local newspapers to publicize contracting opportunities and develop other outreach and educational methods to connect local businesses with existing federal clearinghouses that advertise requests for proposals</p>	Near	<p>Lead: CoC, EDOs Support: Local government PAOs</p>	Six-county area	\$
		<p>ED-2.2 Conduct fairs or other community outreach events on topics such as how to find and bid on government work</p>	Near	<p>Lead: CoC, EDOs Support: FB, HAFB, WSMR</p>	Six-county area	\$
		<p>ED-2.3 Continue installation participation in PTAP and SBA conferences in the region</p>	Near	<p>Lead: FB, HAFB, WSMR Support: SBA, PTAP</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Increases in installation populations produce corresponding increases in local community populations and generate higher demands for off-installation services, such as housing, transportation, schools, retail, and recreational facilities. Fluctuations in population and demand can be especially pronounced in some communities, such as Alamogordo.</p>	<p>ED-3 Strengthen coordination on the delivery of community services needed to accommodate military-related growth</p>	<p>ED-3.1 Build on existing efforts to anticipate and meet community growth demands related to military mission change, such as housing, schools, etc.; include specific briefings to local governments and school districts on anticipated population changes (both up and down) to assist in local government/school district planning (See CC-1.10)</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments, school districts</p>	<p>Six-county area</p>	<p>\$</p>
		<p>ED-3.2 Form a current baseline of demographic and socio-economic conditions and related public service delivery needs in the communities to assist in evaluating the effects of changes in the military mission; ensure that baseline data are available to support NEPA analysis in military documents</p>	<p>Near</p>	<p>Lead: Local governments Support: FB, HAFB, WSMR</p>	<p>Six-county area</p>	<p>\$</p>
		<p>ED-3.3 Promote the joint provision of critical services through existing or new joint service agreements between the DoD, other federal, state, and local governments, particularly for public safety and emergency response and the co-use of recreational and educational facilities on installations and in communities</p>	<p>Near</p>	<p>Lead: School districts, FB, HAFB, WSMR, BLM, USFS, NPS Support: Local governments</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>ED-3.4 Enter into public-private partnerships that enable the DoD to collaborate with communities to provide for services in areas such as housing; energy; transportation; municipal services (e.g., water, waste management, recreation); health services; work force; and education</p>	<p>Long</p>	<p>Lead: DoD, private sector Support: EDOs, local governments</p>	<p>Six-county area</p>	<p>\$\$\$</p>
<p>The presence of large areas of federally and state owned constrains the local property tax base (federal land and trust land minus improvements for economic development are tax exempt) and highlights the dependence of the region on successful NMSLO leases of trust land that generate revenue for on-going operations of beneficiaries and create jobs and economic impacts within the five NM counties</p>	<p>ED-4 Continue to access programs such as Payment in Lieu of Taxes (PILT) and Secure Rural Schools to offset lost property tax revenue</p>	<p>ED-4.1 Continue to advocate for PILT and Secure Rural Schools support for counties throughout the region</p>	<p>Near</p>	<p>Lead: State delegations, local governments</p>	<p>Six-county area</p>	<p>\$</p>
	<p>ED-5 Execute agreements between the DoD installations and the NMSLO that define uses of land and airspace, modes of consultation, and cooperative planning</p>	<p>ED-5.1 Develop a collaborative relationship between the DoD and state agencies such as the NMSLO and TGLO to enhance communication about military operations and promote the coordinated review of land use/development proposals to promote the goals of revenue generation and military compatibility (See CC-6.1)</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: NMSLO, TGLO</p>	<p>Portions of six-county area with overlap of AOC and higher economic development value</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Fire Management (FM)</p>	<p>FM-1 Build on ongoing partnerships to implement coordinated fire prevention, management, and suppression activities</p>	<p>FM-1.1 Continue joint efforts between the DoD, BLM, USFS and the NMSLO to implement management activities, such as establishing black lines, developing fire management plans and encouraging better integration of fire management plans in the region</p> <p>FM-1.2 Strengthen inter-agency coordination and consultation when conducting military operations during red flag fire days</p> <p>FM-1.3 Pursue consistent, joint funding strategies to provide for year-round wildfire suppression staffing</p> <p>FM-1.4 Increase coordination on planning and implementing fire prevention and restoration strategies across ownership boundaries and landscapes near installations to increase effectiveness of treatments and share expertise, crews, etc...</p>	<p>Near</p> <p>Near</p> <p>Near</p> <p>Near</p>	<p>Lead: BLM Support: FB, HAFB, WSMR, USFS, NMSLO, local government emergency management</p> <p>Lead: FB, HAFB, WSMR Support: BLM, USFS</p> <p>Lead: BLM Support: FB, HAFB, WSMR</p> <p>Lead: BLM Support: FB, HAFB, WSMR, USFS, local government emergency management</p>	<p>Six-county area</p> <p>Six-county area</p> <p>Six-county area</p> <p>Six-county area</p>	<p>\$</p> <p>\$</p> <p>\$\$\$</p> <p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Frequency and Spectrum Management (FSM)</p>						
<p>Frequency spectrum interference refers to the inability to distribute or receive information by modulation of a radio frequency because of intended or unintended use of the same radio frequency by other users. Current spectrum requirements are driven by the need for higher-speed data transfer, which equate to increased bandwidths. Key technologies affected by spectrum competition are public safety communications, unmanned ground and aerial systems, satellite and space technologies, GPS distribution, remote sensing, radar, and air traffic control. Spectrum saturation and frequency "trespass" is becoming more widespread and complex. As needs intensify, the capacity of management resources, and capabilities of equipment, may not keep pace with user demands and complexity of the environment.</p>	<p>FSM-1 Deconflict frequency/spectrum issues through improved coordination, oversight, and technologies</p>	<p>FSM-1.1 Establish a Frequency/Spectrum Management Working Group with the AFC Regional DoD Frequency Coordinator and internal and external stakeholders, including emergency response organizations</p>	<p>Near/Mid</p>	<p>Lead: AFC Regional DoD Frequency Coordinator</p> <p>Support: Frequency/Spectrum Management Working Group, FCC, FAA, EPIA, DEA, emergency response organizations, CBP</p>	<p>Regional</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		FSM-1.2 Improve the interface between regional military and commercial frequency allocation, scheduling, and tracking	Near/mid	Lead: AFC Regional DoD Frequency Coordinator Support: Frequency and Spectrum Management Working Group, FCC, FAA, Cherokee ATC, WSMR Test Center RO rep	Regional	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		FSM-1.3 Follow standard protocols for identifying interference sources	Near	<i>Lead:</i> AFC Regional DoD Frequency Coordinator <i>Support:</i> Frequency and Spectrum Management Working Group, military installation airspace and frequency management officers, local governments	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Users and programs can introduce specific intermittent or one-time interference, disrupting signals and communications of ongoing users. For example, Air Force Global Positioning System (GPS) testing can knock out GPS systems for large areas of southern New Mexico during brief test windows. Spectrum allocation is managed by different agencies for commercial and military users, making coordination more complex.</p>	<p>FSM-2 Establish procedures and tools for identifying the types of proposed projects that involve frequency interferences and notifying the community about non-regular spectrum events</p>	<p>FSM-2.1 Coordinate with local emergency responders and other critical users prior to any GPS jamming exercises</p>	<p>Near</p>	<p>Lead: AFC Regional DoD Frequency Coordinator</p> <p>Support: Frequency/Spectrum Management Working Group, military operators, local emergency response POCs, existing local government outreach methods</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Frequency use is expanding in SNMEP JLUS area where military and commercial uses are competing for spectrum use and clarity can be compromised. While most people are aware of the impact of interference, not many people understand the science or management of frequency. This impedes regional planning efforts, which must involve people without technical knowledge. Many individuals are available to licensing, or other use requirements that may interfere with military or other use of spectrum.</p>	<p>FSM-3 Undertake regional frequency management studies and develop an action plan to address system deficiencies and interference problems</p>	<p>FSM-2.2 Use a Frequency/Spectrum Management Working Group to assist with outreach about exceptional frequency uses (priority infrequent test events) (See FSM-1.1)</p>	<p>Near</p>	<p>Lead: AFC Regional DoD Frequency Coordinator Support: Frequency and Spectrum Management Working Group, military operators, local PAOs, local governments</p>	<p>Six-county area</p>	<p>\$</p>
<p>Frequency use is expanding in SNMEP JLUS area where military and commercial uses are competing for spectrum use and clarity can be compromised. While most people are aware of the impact of interference, not many people understand the science or management of frequency. This impedes regional planning efforts, which must involve people without technical knowledge. Many individuals are available to licensing, or other use requirements that may interfere with military or other use of spectrum.</p>	<p>FSM-3.1 Conduct a special regional technical study (using Cooperative Research and Development Agreement or similar approach) to address the principles of frequency management and spectrum allocation, current use and allocations, known and emerging issues, equipment and system capabilities and shortfalls, including manpower and management logistics. Develop coordinated approach with NM and TX delegations to ensure that adequate spectrum is available for military use in the region.</p>	<p>FSM-3.1 Conduct a special regional technical study (using Cooperative Research and Development Agreement or similar approach) to address the principles of frequency management and spectrum allocation, current use and allocations, known and emerging issues, equipment and system capabilities and shortfalls, including manpower and management logistics. Develop coordinated approach with NM and TX delegations to ensure that adequate spectrum is available for military use in the region.</p>	<p>Near/mid</p>	<p>Lead: AFC Regional DoD Frequency Coordinator Support: AFC WSMR, TRIAD, FAA, FCC</p>	<p>Regional (may include NM, TX, AZ, Mexico)</p>	<p>\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		FSM-3.2 Conduct educational outreach and provide technical assistance to local governments and planners to understand frequency spectrum issues and to develop potential solutions	Near	Lead: AFC Regional DoD Frequency Coordinator Support: OEA, local governments	SNMEP planning area	\$
		FSM-3.3 Develop easily available educational materials and conduct outreach on installations, as well as in critical areas outside installations to make the public aware of frequency conflict issues, its importance, and to request voluntary non-use of certain kinds of equipment.	Near/mid	Lead: AFC Regional DoD Frequency Coordinator Support: OEA, AFC WSMR, military PAOs	Six-county area	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>FSM-3.4 Develop coordination among the FCC, AFC Regional DoD Frequency Coordinator, and local planners to assist with clearly defining geographic areas of impact, spectrum compatibility issues, and communicating assignments related to notification, review, and mitigation</p>	<p>Near</p>	<p>Lead: AFC Regional DoD Frequency Coordinator Support: FCC, local governments, HAFB/FBWSMR airspace or frequency managers, HAFB/FBWSMR community planner, USFS, BLM, emergency responders</p>	<p>Six-county area</p>	<p>\$</p>
		<p>FSM-3.5 Host a monthly spectrum teleconference with the regional federal spectrum stakeholders. AFC-WSMR can support local meetings and teleconferences that expand the audience to non-Federal regional spectrum stakeholders</p>	<p>Near</p>	<p>Lead: AFC Regional DoD Frequency Coordinator Support: FCC, FAA, communication providers, local governments</p>	<p>Regional</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude	Cost
<p>Land Conservation (LC)</p> <p>Currently undeveloped land in areas affected by military operations is subject to future transitions to more intensive uses that could increase the risk of incompatibility. With accelerating development of wind and solar resources, some land that previously had little economic potential (typically grazing) now has a "higher and better use" for energy development and associated economic growth. The challenge is to acknowledge the rights of property-owners, including state and federal agencies to develop land for these purposes, while supporting military missions. Given limited DoD resources and increasingly higher land values, consultation in the planning and siting of major economic development projects becomes critical.</p>	<p>LC-1 Promote strategies to support the continued operation of productive working lands</p>	<p>LC-1.1 Increase landowner awareness of available programs, such as easements, tax incentives, beginning farmer and rancher grant and loan programs, local food systems, etc... that support the economic viability of existing farms and ranches</p>	<p>Near</p>	<p>Lead: Local governments Support: Land conservation organizations, land trusts</p>	<p>Six-county area</p>	<p>\$</p>	

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
	<p>LC-2 Identify priority areas for open space management efforts in the region</p>	<p>LC-2.2 Use local or regional planning efforts to assist in identifying priority lands to support ecological management, recreation, grazing, etc...</p>	Near	<p>Lead: Local governments Support: Land conservation and open space organizations, land trusts, BLM, NPS, USFS, FB, HAFB, WSMR</p>	Six-county area	\$
		<p>LC-2.1 Establish a working lands partnership for the region, or partner with existing land trusts to conduct additional analysis of habitat, scenic, and cultural landscapes and working lands and identify appropriate management strategies, including potential management partnerships with willing landowners</p>	Mid	<p>Lead: Local governments Support: Land conservation and open space organizations, land trusts, BLM, NPS, USFS, FB, HAFB, WSMR</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
	<p>LC-3 Form partnerships to purchase, transfer or dedicate incompatible development rights from willing landowners, allowing land to remain in a low intensity use, therefore maintaining the natural/cultural/working value of the landscape and supporting compatibility with military operations</p>	<p>LC-3-1 Analyze and identify surrounding areas that have an overlap of military impact (e.g. noise exposure) and higher natural/working lands/cultural value and thus may be candidates for easement purchases through existing programs, including the Readiness and Environmental Protection Initiative (REPI)/Army Compatible Use Buffer (ACUB), and the Sentinel Landscapes Partnership</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: Land conservation organizations, land trusts, local governments</p>	<p>Portions of six-county area with overlap of AOC and higher landscape values</p>	<p>\$</p>
		<p>LC-3-2 Build on existing ACUB efforts in the region to pursue additional grant opportunities for the voluntary purchase of incompatible development rights from willing landowners</p>	<p>Near to Mid</p>	<p>Lead: FB, HAFB, WSMR Support: Land conservation and open space organizations, land trusts, local governments, landowners</p>	<p>Portions of six-county area with overlap of AOC and higher landscape values</p>	<p>\$\$\$</p>
	<p>LC-4 Make fee simple purchases of land from willing sellers as necessary and appropriate to ensure compatibility</p>	<p>LC-4-1 Establish mechanisms to identify, assess, and fund the acquisition in fee of property from willing sellers within a designated transitional or buffer areas near the installations</p>	<p>Long</p>	<p>Lead: DoD, local governments</p>	<p>Portions of six-county area with overlap of AOC and landowner interest</p>	<p>\$\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Military Plans (MP)</p> <p>The region's military installations prepare many plans and studies that document their operations, analyze effects, and describe procedures and management actions. These programs are only effective if recommendations are current and implemented by the DoD and surrounding jurisdictions.</p>	<p>MP-1</p> <p>Update Army Installation Compatible Use Zone (ICUZ) and Air Installation Compatible Use Zone (AICUZ) studies to reflect current mission and work with local jurisdictions to adopt compatibility measures within their authorities</p>	<p>MP-1.1</p> <p>HAFB to update AICUZ to reflect F-16 mission</p>	<p>Near</p>	<p>Lead: HAFB community planner</p> <p>Support: City of Alamogordo, Otero County, BLM LCFC, WHSA</p>	<p>HAFB, Otero County</p>	<p>\$</p>
		<p>MP-1.2</p> <p>HAFB to share appropriate information from and implement recommendations of the Installation Complex Encroachment Management Action Plan (ICEMAP)</p>	<p>Near/mid</p>	<p>Lead: HAFB community planner</p> <p>Support: WSMR, FB, local governments</p>	<p>HAFB/FB/WSMR and military SUA</p>	<p>\$\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
	<p>MP-1.3 Form partnerships between installations and local governments to implement AICUZ and ICUZ recommendations</p>	<p>MP-1.3 Form partnerships between installations and local governments to implement AICUZ and ICUZ recommendations</p>	Near	<p><i>Lead:</i> HAFB/FBWSMR community planners</p> <p><i>Support:</i> TRIAD, local government (city/county) planning departments and commissioners, BLM LCFO, NMSLO, WHSA</p>	AOC	\$
<p>MP-2 Build on existing AICUZ and ICUZ compatibility guidance to address all areas affected by safety and noise from military operations outside installation boundaries, including areas underlying restricted and special use airspace</p>	<p>MP-2.1 Develop detailed land use compatibility matrix with regionally appropriate guidelines to assist in assessing the interaction between military and non-military activities based on a broad range of factors (for example, noise, safety, glare)</p>	<p>MP-2.1 Develop detailed land use compatibility matrix with regionally appropriate guidelines to assist in assessing the interaction between military and non-military activities based on a broad range of factors (for example, noise, safety, glare)</p>	Near	<p><i>Lead:</i> Installation community planners, ITAM program, and PAOs</p> <p><i>Support:</i> Local governments, state and federal governments</p>	AOC	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Outdoor Lighting (OL)</p> <p>Light emitted from existing and new facilities has localized impacts on the dark night skies in the region, increasing the risk of light pollution. Light pollution can interfere with training and other military and civilian operations (e.g. observatories) that are sensitive to light in the surrounding environment.</p>	<p>OL-1 Adopt policies to reduce light pollution interference with training and research activities</p>	<p>OL-1.1 Adopt city or county dark-sky ordinances that require 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)</p>	<p>Near</p>	<p>Lead: Local governments Support: Dark sky organizations</p>	<p>Six-county area</p>	<p>\$</p>
		<p>OL-1.2 Encourage the retrofitting of existing older lighting applications that produce light pollution through an outreach campaign and use of energy efficiency incentives where appropriate</p>	<p>Near</p>	<p>Lead: Local governments Support: Dark sky groups, utilities providers</p>	<p>Six-county area</p>	<p>\$</p>
		<p>OL-1.3 Adopt on-installation policies to install dark-sky lighting that requires fully shielded, cut-off outdoor lighting applications for on-installations areas, including ramp lights</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR</p>	<p>Installations</p>	<p>\$</p>
		<p>OL-1.4 Assist in marketing and support astronomy-related tourism which derives economic benefit from dark skies; partner with those in the industry to advocate for dark skies</p>	<p>Mid</p>	<p>Lead: CoCs, tourism entities Support: Dark sky groups, observatories</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Physical Security (PS)</p> <p>High-value military, commercial energy, communications, and other critical infrastructure are potential targets due to relatively penetrable perimeters, remoteness, and lack of surveillance. Acts of vandalism and terrorism could pose concern for public safety and security.</p>	<p>PS-1 Continue an outreach program that provides local law enforcement and other government agencies information and guidance regarding coordination and response actions to terrorist threats and vandalism</p>	<p>PS-1.1 Develop regional security guidelines for military and other critical infrastructure, and identify key areas of vulnerability for law enforcement and relevant agency use; provide information on the activities of the installations for inclusion in local emergency preparedness plans, such as All-Hazard Emergency Plans</p>	<p>Near/mid</p>	<p><i>Lead:</i> AFC WSMR, WSMR off-site lease parcels rep, installation range safety officers, McGregor Range coordinator</p> <p><i>Support:</i> Homeland Security, DEA, US Customs and Border, emergency responders, NMSLO, BLM</p>	<p>Six-county area</p>	<p>\$-\$\$</p>
		<p>PS-1.2 Exercise interagency agreements for responding to incidents and conduct regular reviews of existing agreements</p>	<p>Near</p>	<p><i>Lead:</i> TRIAD</p> <p><i>Support:</i> Installation safety offices, real estate, local emergency responders</p>	<p>Six-county area</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		PS-1.3 Develop a prioritized list of security actions based on cost-benefit analysis for each installation and key commercial assets (such as Spaceport America, wind energy sites, major transmission lines)	Near/mid	Lead: Installation safety officers Support: Installation resource management officer, Spaceport, BLM, USFS, utility provides, communications industry	Six-county area	\$\$
		PS-1.4 Coordinate with infrastructure owners on feasible actions for improved security, leveraging capabilities of military installations	Near/mid	Lead: Installation range control and ATC, installation resource management officer Support: Spaceport, BLM, USFS, utility provides, communication industry, emergency responders	SNMEP planning area	\$\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>PS-2 Much of the extensive boundary of the three installations lacks antiterrorism barriers or surveillance. About 90 percent of the perimeter is 3-strand barbed wire fencing and easily penetrated or dismantled. Trespass sometimes occurs after the intentional cutting of boundary fences to allow cattle access to installation lands for forage.</p>	<p>PS-2 Selectively secure physical boundaries of installations, training areas and important infrastructure to minimize trespass, intrusion, or inadvertent access by members of the public</p>	<p>PS-2.1 Add signage to warn of dangers and consequences of trespass (See CC-10.2)</p>	<p>Near</p>	<p>Lead: Installation public works, range management office Support:</p>	<p>WSMR, FB, HAFB</p>	<p>\$\$\$</p>
		<p>PS-2.2 Increase perimeter surveillance</p>	<p>Near/ mid</p>	<p>Lead: Range Safety office (WSMR, FB, HAFB) Support: FB Range Manager</p>	<p>WSMR, FB, HAFB</p>	<p>\$\$\$</p>
		<p>PS-2.3 Develop procedures to coordinate on livestock trespassing issues and leverage the granting of NMSLO or BLM grazing allotments or permits to promote compliance with grazing unit/allotment and boundaries</p>	<p>Near/Mid</p>	<p>Lead: BLM, NMSLO Support: USFS grazing programs, BLM LC grazing manager and McGregor Range grazing manager, FB range manager</p>	<p>Installations (perimeters)</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Real Estate (RE)</p> <p>Residents may not be aware of the impacts of living near military operations</p>	<p>RE-1 Make information on the location of property within a sensitive area available to prospective buyers or renters as away to support more informed choices</p>	<p>RE-1.1 Promote real estate disclosure in areas exposed to the impacts and risks of military operations, such as noise contours or accident potential zones (See SPL-4.1)</p>	<p>Near</p>	<p>Lead: Local governments Support: Real estate sector</p>	<p>AOC</p>	<p>\$</p>
		<p>RE-1.2 Require the recording of a note on title to real property as part of any discretionary development permit, approval, or property transfer</p>	<p>Near</p>	<p>Lead: Local governments</p>	<p>AOC</p>	<p>\$</p>
<p>Noise complaints can produce pressure to modify existing military operations and procedures</p>	<p>RE-2 Establish formal mechanisms in which property owners and developers acknowledge the impacts of nearby military operations in advance of development and real estate actions</p>	<p>RE-2.1 Explore the signing of a hold harmless agreement as a condition for development approval for affected property within the jurisdiction</p>	<p>Long</p>	<p>Lead: State and Local Governments</p>	<p>AOC</p>	<p>\$</p>
		<p>RE-2.2 Encourage the dedication or purchase covenants, easements, and other deed restrictions for affected property within the jurisdiction</p>	<p>Long</p>	<p>Lead: State and Local Governments</p>	<p>AOC</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
State-Wide Policy/Legislative Actions (SPL)						
There is no recognized regional area or boundary that encompasses known or possible interactions between military and community activities. Not all interactions have clear physical boundaries associated with them.	SPL-1 Designate areas of Critical State/Local Concern and Interest (Similar to strategy CC-4)	SPL-1.1 Define a geographic planning area (using GIS) to identify where military operations may affect surrounding areas or where civilian action may interact with missions	Mid	Lead: State governments, local governments Support: FB, HAFB, WSMR, state and federal entities	Six-county area (with sub-zones or areas based on impact)	\$
State-wide planning processes may not fully consider the economic impact of the military on the state and region	SPL-2 Require analysis of military economic impact in state-wide planning processes	SPL-2.1 Require inclusion of cost-benefit analysis of military impacts in state-wide planning processes that establish high level priorities for revenue, jobs, and local community economic health and are used to evaluate project proposals and initiatives	Near	Lead: State governments Support: DoD, state and federal entities	Six-county area (state wide application)	\$
There is a lack of a formal and fully established process for joint military and civilian review of major projects in the region	SPL-3 Establish a consistent process across all local jurisdictions to consult with installations about the compatibility of development and land use change actions	SPL-3.1 Advocate for state legislation to require joint consultation procedures for certain development or land use change actions in specific areas around military installations (Similar to CC-5.1 but mandated at the state level)	Mid	Lead: State governments Support: DoD, local governments	Six-county area (state wide application)	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
Residents may not be aware of the impacts of living near military operations	SPL-4 Make information on the location of property within a sensitive area available to prospective buyers or renters as a way to support more informed choices	SPL-4.1 Advocate for state legislation to require real estate disclosure for initial and all subsequent transactions in noise-exposed areas, such as noise contours or accident potential zones (Similar to RE-1.1 but mandated at the state level)	Mid	Lead: State governments Support: Real estate sector, local governments	Six-county AOC (state wide application)	\$
Unincorporated areas of the counties often lack the authority and/or tools to promote compatible development in proximity to military operations	SPL-5 Increase the ability of unincorporated counties to promote compatible land use patterns near military installations	SPL-5.1 Pursue legislation in Texas State legislature to enable limited land use authority in El Paso County to regulate the characteristics of development in specified buffers around Fort Bliss	Near	Lead: TX state government, El Paso County	El Paso County (AOC around Fort Bliss)	\$
	SPL-5.2 Use State of Texas authority to establish a Joint Airport Zone (JAZ) Board around Biggs Army Airfield to coordinate on compatibility concerns with military, airport uses, and development proposals on surrounding land		Mid	Lead: TX state government, El Paso County, City of El Paso Support: FB, ELP	AOC around ELP and Biggs Army Airfield	\$
Currently undeveloped land in areas of sensitivity to military operations are subject to future transitions to more intensive uses (more people and/or infrastructure) that could increase the risk of nuisance or safety issues due to military operations	SPL-6 Use property tax incentives to encourage preservation of open space and working lands	SPL-6.1 Advocate for state legislation such as the Williamson Act in California that enables local governments to enter into contracts with private landowners to restrict land to agricultural or open space use in return for lower property taxes	Long	Lead: State governments Support: Local governments, landowners	Six-county (state wide application)	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>Limited fiscal resources and increasingly higher land values constrain the ability of regional partners, including the military installations and local governments to implement compatibility measures that rely upon the acquisition of property or development rights or the development of infrastructure</p>	<p>SPL-7 Pursue state-level funding opportunities for certain compatibility actions</p>	<p>SPL-7.1 Establish a Military Installation Fund (MIF) to allocate monies to acquire privately owned property/real estate and development rights from willing sellers or partners; property management; and infrastructure that is vital to military installations</p>	<p>Long</p>	<p>Lead: State of NM (TX has revolving loan fund) Support: DoD, local governments, landowners</p>	<p>Six-county area (state-wide program)</p>	<p>\$\$\$</p>
		<p>SPL-7.2 Create a Military Value Revolving Loan Fund to assist with meeting service and infrastructure needs and keep the installations more competitive in attracting missions</p>	<p>Long</p>	<p>Lead: State of NM Lead: (TX has fund) Support: DoD, local governments, private sector</p>	<p>Six-county area (state-wide program)</p>	<p>\$\$\$</p>
<p>Use of small UAS to record activities on land could become more common and raise national security proprietary intellectual property, and privacy issues</p>	<p>SPL-8 Control or restrict use of small UAS to observe and photograph activities</p>	<p>SPL-8.1 Advocate for state legislation to regulate "drone photography"</p>	<p>Mid</p>	<p>Lead: State governments Support: DoD, private sector</p>	<p>Six-county (state wide application)</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
<p>Major new energy infrastructure can conflict with safety conditions for ongoing or planned military test and training operations. Conversely, some ongoing or new military operations can conflict with new energy infrastructure that may be necessary to meet the nation's goals for energy independence, decreased reliance on fossil fuels, and improved national security.</p>	<p>SPL-9 Promote a collaborative planning process among military, state, and federal agencies and other stakeholders to review and plan new energy proposals for maximum compatibility</p>	<p>SPL-9.1 Advocate for state-level legislation to coordinate new energy development and recognize the importance of military missions and the economic development potential to the state and local economies from the development of wind and solar energy and energy infrastructure. (See SPL-2.1)</p>	<p>Near</p>	<p>Lead: State governments Support: DoD, local energy developers, industry associations, cooperatives and authorities, BLM, NMSLO</p>	<p>Six-county (state wide application)</p>	<p>\$</p>
		<p>SPL-9.2 Advocate for state-level model ordinance language for utility-scale wind energy projects to facilitate easy consideration and adoption by local governments</p>	<p>Near</p>	<p>Lead: State governments Support: DoD, local governments, energy industry, BLM, NMSLO</p>	<p>Six-county (state wide application)</p>	<p>\$</p>
<p>Some local government comprehensive planning studies, particularly older documents lack specific language on compatibility with military installations</p>	<p>SPL-10 Ensure that policy guidance in local planning documents clearly reflects compatibility considerations</p>	<p>SPL-10.1 Advocate for state-level model comprehensive plan policies and language regarding military compatibility to facilitate easy consideration and adoption by local governments</p>	<p>Near</p>	<p>Lead: NM CID Support: Local governments</p>	<p>Six-county (state wide application)</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Magnitude Cost
<p>The region is exposed to noise and vibration from a variety of military operations, including supersonic aircraft, low-level high-speed aircraft, impulsive noise from ordnance expenditures, and aircraft arrival and departure at airfields</p>	<p>SPL-11 Reduce the sensitivity of structures, particularly housing or schools to noise exposure</p>	<p>SPL-11.1 Advocate for state-wide building codes that include sound attenuation building standards and/or energy efficiency practices as a means to achieve complementary indoor sound reduction in new construction of noise sensitive uses</p>	<p>Mid</p>	<p>Lead: State governments Support: Local governments, private sector, real estate development sector</p>	<p>Six-county (state wide application)</p>	<p>\$</p>
<p>Transportation (T)</p>						
<p>Periodic road closures due to testing and training activities affect the surrounding communities. The installations currently have notification procedures in place for closures on Highway 70.</p>	<p>T-1 Continue and strengthen notification of road closures for periodic military training and testing activities</p>	<p>T-1.1 Continue current use of hotline for closures of Highway 70 and identify additional measures such as improved signage and variable message boards in key areas (e.g. along US Route 380 in Lincoln County)</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments</p>	<p>Roadways subject to periodic closure</p>	<p>\$\$</p>
<p>Military vehicles and convoys use local roads, which can cause congestion, safety issues, wear and tear to roadways or localized air quality impacts due to fugitive dust</p>	<p>T-2 Coordinate off-installation military vehicle routes in local communities</p>	<p>T-2.1 Evaluate and designate military vehicle routes to minimize traffic and safety issues in local communities, such as Chaparral</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments</p>	<p>Roadways used for military convoys</p>	<p>\$</p>
	<p>T-3 Reduce localized air quality impacts caused when vehicle convoys generate dust on adjacent areas</p>	<p>T-3.1 Develop dust suppression techniques for local roadways</p>	<p>Near</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments</p>	<p>Roadways used for military convoys</p>	<p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
	<p>T-4 Address physical wear and tear of roadways caused by use of military vehicles</p>	<p>T-4.1 Pursue joint DoD and community funding to assist in maintenance/repair of local roadways used by military vehicles</p>	<p>Mid</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments</p>	<p>Roadways used for military convoys</p>	<p>\$\$\$</p>
<p>The size of DoD land areas closed to public access, including roadways crossing the installations can limit and lengthen travel options in some parts of the region</p>	<p>T-5 Evaluate the feasibility of opening roadways on DoD land to increase travel options for the public</p>	<p>T-5.1 Evaluate options to open specific roadways such as access through WSMR from Spaceport to Alamogordo/Tularosa (Engle and Tularosa through Rhodes Canyon); and road from Tularosa to I-25 in winter when feasible</p>	<p>Mid</p>	<p>Lead: FB, HAFB, WSMR Support: Local governments</p>	<p>Roadways through installations</p>	<p>\$</p>
<p>Water Resources (WR)</p>						
<p>Some current water studies in the region do not fully consider military needs and water assets</p>	<p>WR-1 Integrate the military into the regional water planning process</p>	<p>WR-1.1 Review existing regional water studies and adjust/update for military supply and demand and collaborate on water conservation measures</p> <p>WR-1.2 Include military participation in local and regional water planning process/body</p>	<p>Near</p> <p>Near</p>	<p>Lead: Local governments Support: FB, HAFB, WSMR, utility authorities</p> <p>Lead: Local governments Support: FB, HAFB, WSMR, utility authorities</p>	<p>Six-county area (by watershed)</p> <p>Six-county area</p>	<p>\$\$</p> <p>\$</p>

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
		<p>WR-1.3 Leverage the Western Regional Partnership (WRP) to coordinate water resource planning on a regional and multi-state scale</p>	Mid	<p>Lead: WRP Support: Local governments, DoD, utility authorities</p>	Six-county area	\$
<p>Complex and overlapping factors affect the region's water supply, including the current exceptional drought, climate change, water quality issues, damage or overuse of specific water sources, and increased demands from military and civilian growth in specific parts of the study area.</p>	<p>WR-2 Establish policies and plans to monitor and coordinate activities to protect the groundwaters and surface waters of the JLUS study area</p>	<p>WR-2.1 Participate in a regional water resources management study to address the challenges of water quality and supply</p>	Mid	<p>Lead: Local governments Support: State and federal governments, DoD, utility authorities</p>	Six-county area (by watershed)	\$\$\$
		<p>WR-2.2 Establish a coordination process to address and mitigate proposals that could produce adverse impacts on the groundwater supplies of the Tularosa Basin</p>	Near	<p>Lead: Local governments Support: FB, HAFB, WSMR, utility authorities, state and federal governments</p>	Six-county area	\$
		<p>WR-2.3 Integrate federal watershed management practices (military, USFS, BLM) and coordinate with local government land use regulations</p>	Near	<p>Lead: State and federal governments Support: Local governments</p>	Six-county area	\$

Opportunities/Challenges	Strategy	Examples/Actions	Timeframe	Responsibility	Geographic Area	Order of Mag Cost
	WR-3 Pursue joint DoD and civilian initiatives to diversify and extend the water supply	WR-3.1 Identify feasible joint DoD and civilian water projects (such as the joint Fort Bliss/EI Paso desalination plant)	Long	Lead: DoD Support: Local governments, state and federal governments, utility authorities	Six-county area (by watershed)	\$\$\$
		WR-3.2 Develop new sources of electrical energy and transmission facilities to help pump to the surface abundant underground saline water supplies and make potable for human consumption and for other uses, and to distribute this new water throughout an extended area within southern NM	Long	Lead: Local governments, state and federal governments, utility authorities Support: DoD	Six-county area (by watershed)	\$\$\$

MEMORANDUM OF AGREEMENT

SOUTHERN NEW MEXICO/EL PASO JOINT LAND USE STUDY

IMPLEMENTATION COMMITTEE

This Memorandum of Agreement is entered into on the ____ day of _____, 2014 by and among the following : County of Doña Ana, the County of Otero, the County of Lincoln, the County of Sierra, and the County of Socorro in New Mexico and El Paso County, Texas (collectively, "the Counties"); the City of Alamogordo and the City of Las Cruces in New Mexico, and the City of El Paso in Texas (collectively, "the Cities"); and the State of New Mexico (Spaceport America and the Office of Military Base Planning and Support); the New Mexico State Land Office; the Bureau of Land Management; and the U.S. Forest Service, Fort Bliss, Holloman Air Force Base, and White Sands Missile Range (the Concurring Parties) who will advise and assist.

WHEREAS, the Counties, the Cities, and the Concurring Parties entered into a Memorandum of Agreement in July, 2012 for the purpose of organizing a Regional Planning Organization (RPO) and conducting a Regional Joint Land Use Study; the Southern New Mexico/El Paso Joint Land Use Study(SNM/EP JLUS); and

WHEREAS, Doña Ana County served as the Fiscal Agent and Project Manager for the SNM/EP JLUS; and

WHEREAS, Doña Ana County applied for and received a Department of Defense (DOD), Office of Economic Adjustment (OEA) grant; and

WHEREAS, Doña Ana County issued a Request for Proposals on behalf of the RPO with the purpose of selecting a consultant to guide and support the efforts of the RPO in conducting the SNM/EP JLUS; and

WHEREAS, representatives of the Counties; the Cities, the Concurring Parties, the Bureau of Land Management, the U.S. Forest Service, the New Mexico State Land Office, and the State of New Mexico (Spaceport America and the Office of Military Base Planning and Support) agreed to participate as members of the SNM/EP JLUS Policy Committee and/or Technical Committee; and

WHEREAS, the consultant team facilitated numerous public meetings throughout the study area for the purpose of soliciting public input and comments; and

WHEREAS, the RPO has identified strategies (Compatibility Strategy Menu) which accomplish the objectives of the SNM/EP JLUS and entail further administrative action by the Cities, the Counties, the Concurring Parties, and other participants to further the objectives of Compatible Use among all participating entities; and

WHEREAS, following the completion of the SNM/EP JLUS and issuance of the Final Report it will be necessary to establish a SNM/EP JLUS Implementation Committee (JLUSIC); and

WHEREAS, Doña Ana County has agreed to again serve as the Fiscal Agent and Project Manager for the Implementation Phase of the SNM/EP JLUS

NOW THEREFORE, the parties agree to the following terms and conditions for the purpose of implementing strategies and other recommendations of the SNM/EP JLUS, to wit:

1. The purpose of the JLUSIC is to develop and to further strengthen clear and consistent channels of communication across all stakeholder groups in the region, and also to promote inter-jurisdictional and inter-agency cooperation on critical planning issues related to military-community compatibility.
2. The JLUSIC will be composed of those members who have the most expertise as well as current experience and a strong commitment to addressing all aspects of the JLUS. In most cases, this will include those members who previously participated in the SNM/EP JLUS Technical Committee.
3. Doña Ana County will apply for a DOD, OEA grant for the purpose of organizing the JLUSIC partners and initiating efforts to carry out the recommendations of the JLUS, and serve as Project Manager in a capacity similar to that undertaken during the JLUS. Any funds received from OEA will serve as a catalyst to initiate the committee and are not anticipated to be a source of long-term funding.
4. The Co-Chairs of the JLUSIC will be a representative from Doña Ana County and a representative of Ft. Bliss. The JLUS will include representation from the Counties; the Cities; the Military Installations (Fort Bliss, Holloman Air Force Base, and White Sands Missile Range); the State of New Mexico (Spaceport America and the Office of Military Base Planning and Support); the New Mexico State Land Office; the Bureau of Land Management; and the U.S. Forest Service. It is expected that members of the JLUSIC have appropriate decision-making authority for their position and can also advance recommended implementation steps. In addition, one representative of the TRIAD (an umbrella effort facilitating internal coordination between Fort Bliss, Holloman Air Force Base, and White Sands Missile Range) will participate in the JLUSIC to address issues of airspace management and coordination.
5. The JLUSIC may add new parties to this MOA through consensus of the existing MOA members based on an entity's land use or other decision-making authority if such a need arises.
6. The JLUSIC will solicit comments and input as needed from the public and stakeholders with technical expertise relevant to the implementation process, such as private sector developers; landowners; educational/research and development institutions; non-profit groups; water planning and/or irrigation districts; major utility providers; energy developers; and others as appropriate.
7. Except as specifically set forth herein, the parties retain all budgetary and legislative functions and other authorities, except as specifically delegated to the JLUSIC by this agreement.
8. The JLUSIC will meet quarterly, or as subject to the call of the Co-Chairs. The JLUSIC may establish sub-committees for specific actions and/or issues. The JLUSIC will endeavor to

accomplish the objectives of the MOA with teleconferences to the extent possible; such teleconferences may also be scheduled between quarterly meetings.

9. JLUSIC members will be responsible for coordinating with their respective jurisdictions and agencies to further efforts necessary to carry out recommendations of the JLUS as discussed by the JLUSIC. Members of the JLUSIC are expected to represent the interests of their jurisdictions or agencies and maintain communication with their senior leadership.
10. The JLUSIC will schedule public meetings on a quarterly basis.
11. The JLUSIC shall establish an operational budget which will be approximately \$500,000. The budget(s) must be approved by all parties to this Agreement prior to becoming effective as the parties deem necessary. Each of the parties hereto agrees to pay the following proportions of the required 10% non-Federal contribution, which would be approximately \$50,000, "local match", either through a cash contribution, in-kind staff time dedicated to the project, or a combination thereof.

Doña Ana County: 20%
Otero County: 15%
Lincoln County: 5%
Socorro County: 5%
Sierra County: 5%
El Paso County: 5%
The City of Alamogordo: 15%
The City of Las Cruces: 20%
The City of El Paso: 10%

12. Any changes, modifications, or alterations to the matters addressed by this MOA shall only become effective upon approval by all parties and shall be incorporated as a written amendment to this Agreement.

MEMORANDUM OF AGREEMENT: SOUTHERN NEW MEXICO/EL PASO JOINT LAND USE STUDY

IMPLEMENTATION COMMITTEE

APPROVED

CITY OF ALAMOGORDO

By: _____

Title: _____

CITY OF EL PASO

By: _____

Title: _____

CITY OF LAS CRUCES

By: _____

Title: _____

LINCOLN COUNTY

By: _____

Title: _____

SIERRA COUNTY

By: _____

Title: _____

OTERO COUNTY

By: _____

Title: _____

EL PASO COUNTY

By: _____

Title: _____

DOÑA ANA COUNTY

By: _____

Title: _____

SOCORRO COUNTY

By: _____

Title: _____

MEMORANDUM OF AGREEMENT: SOUTHERN NEW MEXICO/EL PASO JOINT LAND USE STUDY

IMPLEMENTATION COMMITTEE

CONCURRING PARTIES

WHITE SANDS MISSILE RANGE

By: _____

Title: _____

FORT BLISS

By: _____

Title: _____

HOLLOMAN AFB

By: _____

Title: _____

STATE OF NEW MEXICO

By: _____

Title: _____

USDA, REGION 3, LINCOLN NATIONAL FOREST

By: _____

Title: _____

BUREAU OF LAND MANAGEMENT
LAS CRUCES DISTRICT

By: _____

Title: _____

NEW MEXICO STATE LAND OFFICE

By: _____

Title: _____

RESOLUTION NO. 12-216**A RESOLUTION APPROVING A MEMORANDUM OF AGREEMENT FOR PARTICIPATION IN A US DEPARTMENT OF DEFENSE – OFFICE OF ECONOMIC ADJUSTMENT JOINT LAND USE STUDY.**

The City Council is informed that:

WHEREAS, the City of Las Cruces is located near White Sands Missile Range, Fort Bliss Army Base and Holloman Air Force Base; and

WHEREAS, the US Department of Defense – Office of Economic Adjustment funds Military Joint Land Use Studies (JLUS); and

WHEREAS, the purpose of a JLUS is to promote community growth that is compatible with the training and operational mission of local military installations; and

WHEREAS, the New Mexico counties of Dona Ana, Otero, Lincoln, Sierra, and Socorro; the New Mexico cities of Alamogordo and Las Cruces; the Texas County of El Paso; the Texas City of El Paso; and the military installations of White Sands Missile Range, Fort Bliss Army Base and Holloman Air Force Base are jointly proposing to apply for a JLUS; and

WHEREAS, the preparation of a JLUS requires the approval of a Memorandum of Agreement creating a Regional Planning Organization by participating local governments and military installations; and

WHEREAS, the Memorandum of Agreement commits the City to a 20% contribution (maximum of \$12,000) of the local financial match (cash or in-kind or combination) from all participating local governments of the 10% non-federal contribution for the JLUS.

NOW, THEREFORE, be it resolved by the governing body of the City of Las Cruces:

(I)

THAT the Memorandum of Agreement, attached hereto as Exhibit "A," is hereby approved.

(II)

THAT City staff is hereby authorized to do all deeds necessary in the accomplishment of the herein above.

DONE AND APPROVED this 18th day of June 2012.

APPROVED:



Mayor

ATTEST:



City Clerk

(SEAL)

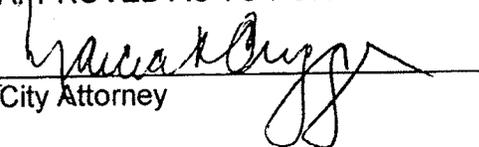
Moved by: Small

Seconded by: Sorg

VOTE:

Mayor Miyagishima:	<u>Aye</u>
Councillor Silva:	<u>Aye</u>
Councillor Smith:	<u>Aye</u>
Councillor Pedroza:	<u>Aye</u>
Councillor Small:	<u>Aye</u>
Councillor Sorg:	<u>Aye</u>
Councillor Thomas:	<u>Aye</u>

APPROVED AS TO FORM:



Asst City Attorney

MEMORANDUM OF AGREEMENT
REGIONAL PLANNING ORGANIZATION
FOR THE PURPOSE OF CONDUCTING A
JOINT LAND USE STUDY

This Memorandum of Agreement is entered into on the ___ day of _____, 2012, by and among the following New Mexico Counties: County of Dona Ana; the County of Otero; the County of Lincoln; the County of Sierra; the County of Socorro; the County of El Paso Texas; collectively "the Counties") the City of Alamogordo New Mexico; the City of Las Cruces, New Mexico; and the City of El Paso, Texas, (collectively "the Cities"); Ft. Bliss, Holloman AFB, and White Sands Missile Range (the concurring parties who will advise and assist).

WHEREAS, White Sands Missile Range has had significant changes to its test and evaluation mission with the addition of the Network and Advance Brigade Combat Team Modernization (ABCTM) testing; and

WHEREAS, adjacent land use may place military testing missions at odds with some development efforts; and

WHEREAS, wind and solar generation of electricity is a rapidly growing industry across New Mexico and Texas, and placement of energy farms and their associated transmission lines may negatively affect training and testing capabilities; and

WHEREAS, Fort Bliss was transformed through the Base Realignment and Closure (BRAC) process and Army Transformation from an installation with an Air Defense mission to a major maneuver and training installation supporting the 1st Armored Division; and

WHEREAS, noise studies done by the Operational Noise Management Program, in association with BRAC and Grow the Army Environmental Impact Statements, indicate that significant noise levels from new tank gunnery ranges will affect several areas in New Mexico and Texas; and

WHEREAS, Holloman AFB has experienced a major restructuring of its mission, losing the F-22 weapon system and gaining F-16, MQ-1 Predator, MQ-9 Reaper and Eurofighter weapons systems; and

WHEREAS, the Air Force is evaluating beddown of a F-35 training mission and expanding MQ-9 activities; and

WHEREAS, Spaceport America is being developed along the western boundary of the WSMR extension area; and

WHEREAS, New Mexico and Texas possess some of the most open land available in the United States, but there is little chance the trend toward economic growth, cultural sprawl, and efforts to harness alternate sources of energy will slow or cease; and

WHEREAS, for several years, Holloman AFB, White Sands Missile Range, Fort Bliss, the Bureau of Land Management, the New Mexico State Land Office, Doña Ana County, the City of Las Cruces, and Otero County have participated in military coordination meetings, the purpose of which is to coordinate "land use planning" efforts; and

WHEREAS, in recent months, White Sands Missile Range, Holloman AFB, and Fort Bliss have engaged in economic sustainability planning sessions; and

WHEREAS, Holloman AFB, White Sands Missile Range, and Fort Bliss have requested a regional Joint Land Use Study (JLUS) aimed at ensuring the long-term viability of the three military installations in southern New Mexico and El Paso County; and

WHEREAS, a JLUS is a collaborative planning process designed to identify existing and potential land use conflicts that have the potential to impair the military's mission and impact the public health and safety confronting both the civilian communities and the military installation; and

WHEREAS, the purpose of the JLUS program is to encourage cooperative land use planning between military installations and the surrounding communities so that future civilian growth and development are compatible with military testing, training, and operational missions; and

WHEREAS, the Counties and the Cities intend to work closely with Holloman AFB, Fort Bliss, and White Sands Missile Range in supporting their military missions while addressing potential land-use planning issues and other encroachment factors by establishing a Regional Planning Organization.

NOW THEREFORE, the parties agree to the following terms and conditions for a Regional Joint Land Use Study, to wit:

1. The parties shall establish a Regional Planning Organization (RPO) for the purpose of conducting the regional Joint Land Use Study.
2. The RPO shall consist of a Policy Committee (RPOPC) and a Technical Committee (RPOTC). The RPOPC will consist of 16 members, with one representative from each of the counties; one representative from each of the cities, one representative each from White Sands Missile Range; Holloman AFB; and Ft. Bliss; the New Mexico State Land Office; the Bureau of Land Management respectively; and two members of the Military Base Planning Commission. The

RPOPC will be co-chaired by the Chairs of the Board of County Commissioners- Dona Ana County and Otero County. Nine (9) members of the RPOPC will constitute a quorum. Each party will select a primary and alternate representative. The Director, Office of Military Base Planning and Support, State of New Mexico will be an ex-officio member of the RPOPC. Membership on the RPOPC will be for the duration of the Joint Land Use Study. The RPOPC will meet quarterly or subject to the call of both Co-Chairs. Meetings will be held at alternate locations as determined by the members and will be open to the public. Meetings can be held electronically, but every effort will be made for members to attend personally.

3. The RPOTC will consist of 16 members, with representation from the following counties: Lincoln, Dona Ana, Otero, Sierra, Socorro, and El Paso; Las Cruces, Alamogordo, and El Paso; White Sands Missile Range (Chief of Staff), Holloman AFB; Ft. Bliss; the Bureau of Land Management; the New Mexico State Land Office; the New Mexico Spaceport Authority; and the Director of New Mexico Office of Military Base Planning and Support. The RPOTC will be co-chaired by the Otero County Manager and the Chief of Staff, White Sands Missile Range. Members of the RPOTC will be those representatives of each party who have the skills and expertise to fulfill the objectives of the Joint Land Use Study. Each party will select a primary and alternate member. Nine members will constitute a quorum. Membership on the RPOTC will be for the duration of the Joint Land Use Study. At a minimum, the RPOTC will meet quarterly, though more frequent meetings might be required during the early phases of the Study. Opportunities for various stakeholders and the general public to contribute to the Study will be provided throughout the planning process.

4. The County of Dona Ana will serve as fiscal agent for the Regional Planning Organization. The duties of the fiscal agent, on behalf of the Regional Planning Organization, are as follows: apply for a Department of Defense Office of Economic Adjustment grant for the purposes of executing a Joint Land Use Study; administer the grant; issue a Requests for Proposals; review Proposals; and interview (if required) and select a professional services team. All purchasing activities performed by the fiscal agent associated with procurement of professional services for the RPO will involve appropriate representation from the parties to this agreement.

5. The RPOPC shall establish and adopt operational and procedural guidelines to govern the execution of the Southern New Mexico & El Paso County Joint Land Use Study.

6. The RPOTC will consider, review, and make recommendations to the RPOPC regarding legislation, resolutions, joint powers agreements, orders, policies, and ordinances which might be required in order to address issues identified during the Joint Land Use Study. The RPOPC shall consider, approve, modify or deny recommendations of the RPOTC.

7. Except as specifically set forth herein, the parties retain all budgetary and legislative functions, except as specifically delegated to the RPOPC or the RPOTC by this agreement.

8. Budget: The RPOPC shall establish a budget for its operation. All budgets must be approved by the parties to this Agreement prior to becoming effective as the parties deem necessary. Each of the parties hereto agrees to pay the following proportions of the required 10% non-Federal contribution ("local match") either through a cash contribution, staff time dedicated to the project, or a combination thereof:

Dona Ana County: 20%

Otero County 15%

Lincoln County 5%

Socorro County 5%

Sierra County 5%

El Paso County 5%

The City of Alamogordo 15%

The City of Las Cruces 20%

The City of El Paso 10%

9. Any changes, modifications, or alterations to the matters addressed by this MOA shall only become effective upon approval by all parties and shall be incorporated as a written amendment to this Agreement.

APPROVED

CITY OF ALAMOGORDO

By: _____

Title: _____

CITY OF EL PASO

By: _____

Title: _____

APPROVED AS TO FORM:
[Signature]
City Attorney

*Scan on all
Signature Pages
Unlikely to get all
Signatures on one
page*

CITY OF LAS CRUCES

By: *[Signature]*

Title.: Mayor

OTERO COUNTY

By: _____

Title.: _____

DONA ANA COUNTY

By: _____

Title: _____

LINCOLN COUNTY

By: _____

Title: _____

APPROVED

SOCORRO COUNTY

By: _____

Title: _____

SIERRA COUNTY

By: _____

Title: _____

EL PASO COUNTY

By: _____

Title: _____