Session: JLUS

FORT DRUM JOINT LAND USE STUDY

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Matrix DESIGNGROUP.COM

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What is a JLUS?

A federally funded program to promote cooperation administered by DOD/OEA

A *proactive approach* to achieve a *balance* to sustaining missions at Fort Drum and the economic development viability of communities

A *preventative measure* to encourage compatible development

Initiated in 1985 by the Department of Defense (DOD) Office of Economic Adjustment (OEA)

Over 145 JLUSs have been completed nationally

JLUS Facts

- **A JLUS IS:**
  - a study that recommends appropriate actions for further consideration
  - a collaborative document
  - a body of information that assists in making more informed decisions
  - Tailored for each jurisdiction / agency
- **A JLUS IS NOT:**
  - a regulatory document
  - an enforceable action
- **To successfully implement, the JLUS will require follow-on actions by all stakeholders, including appropriate public involvement**

Goal: BALANCE

- The goal of the Fort Drum JLUS is to promote compatible growth, sustain environmental and economic health, and protect public health / safety / welfare, while protecting the viability of current and future missions at Fort Drum.

Objectives of the JLUS Program

- **Understanding.** Increase communication between the military, local jurisdictions, stakeholders, and the public to promote an understanding of the strong economic and physical relationship between the installation and its neighbors.
- **Collaboration.** Promote collaborative planning between the military, local jurisdictions, and stakeholders to ensure a consistent approach in addressing compatibility.
- **Actions.** Develop and implement strategies for reducing the impacts of existing and future incompatible activities on the community and military operations.

Objectives of the JLUS Program

Community

- Protect the ***health, safety, and welfare*** of residents / maintain ***quality of life***
- Manage development in the vicinity of military installations that would interfere with the continued operations of these facilities
- Protect opportunities for new growth in an economically, environmentally, and socially sustainable manner
- Maintain the ***economic vitality of the community / region***

Military

- Protect the ***health, safety, and welfare*** of the military and civilian personnel living and working at or near the military installation
- Safeguard the ability of the installation to achieve its mission, ***maintain military readiness***, and support national defense objectives

Committee Roles and Process

JLUS Participants

	Participants	Responsibilities
Sponsor	Development Authority of the North Country	Coordination Accountability Grant management Financial contribution
JLUS Steering Committee	Public officials Military representatives	Policy direction Study oversight Monitoring Report adoption
JLUS Working Group	Planning staff Engineering staff Technical specialists Special interests	Technical issues Alternatives Report development Recommendations

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Public Involvement

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Community Engagement - Workshops

- Charrettes
- Interactive Exercises
- Survey Polling Devices = REAL TIME RESULTS

Public Involvement Methods

Public input is essential to the success of the JLUS process and implementation

- **3 Public Outreach Meetings**
- **3 Informational Brochures → (Fact Sheets)**
- **Project Website**

FORT DRUM
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Approach

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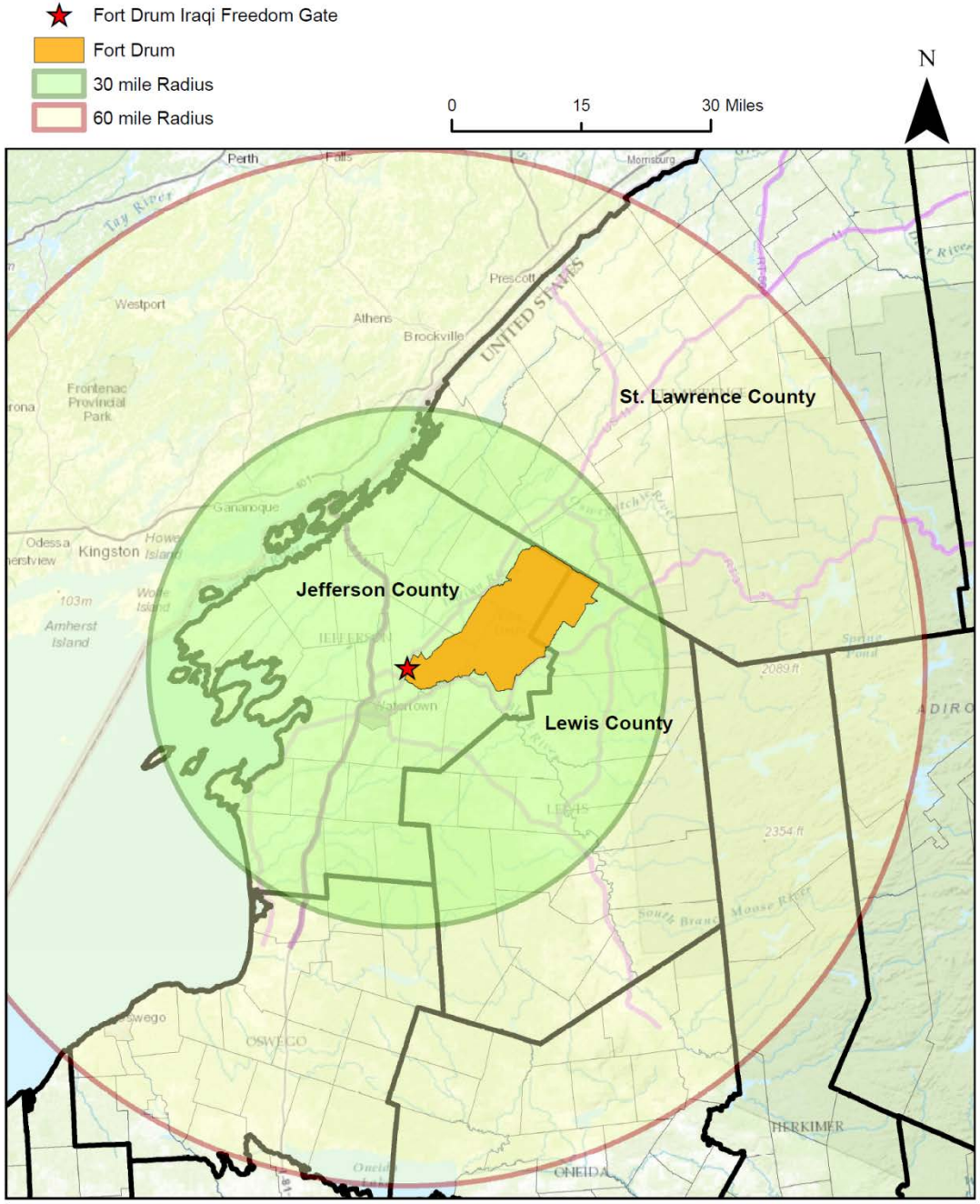
FORT DRUM JOINT LAND USE STUDY

Study Area

Ft. Drum 30 & 60 Mile Radius Map



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Fort Drum's Economic Importance

- **Economic Impact of $1.18 billion in fiscal year 2016**
- **Fort Drum supports a population of:**
  - 15,000 Soldiers
  - 19,000 associated family members
  - 4,000 civilian workers

Fort Drum's National Importance

- **Fort Drum is designated a Regional Collective Training Center**
- **Provides training to an additional 25,000 Reserve, National Guard, and other state and federal personnel every year**

- Connecticut
- Delaware
- Maine
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Ohio
- Pennsylvania
- Rhode Island
- Vermont

Initial Data Collection

Information is requested and identified in the Request for Information (RFI) lists that has been developed.

Matrix will conduct a field data collection effort that will consist of:

- Interview with key leaders and organizations
- Tour of the installation
- Follow-up discussions and / or requests for additional information

JLUS Approach

- Characterize and understand military operations
- Develop the overlay of military operations outside of the installations / ranges
- Determine military influence areas
- Assess existing and future development and land use in the influence areas
- Assess environmental resource areas
- Highlight areas of concern

Compatibility Factors

What is Compatibility?

Compatibility, in relation to military readiness, can be defined as the balance and / or compromise between community and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully. Study Area data on existing conditions obtained from the PC, TAC, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and will consider existing and projected development trends within the Study Area. The JLUS will assess a set of 25 compatibility factors to identify all pertinent issues. A description and acronym for each of the 25 compatibility factors can be found below.

AQ Air Quality

Air quality is defined by numerous components that are regulated at the federal and state level. For compatibility, the primary concerns are pollutants that limit visibility (such as particulates, ozone, etc.) and potential non-attainment of air quality standards that may limit future changes in operations at the installation or in the area.

AT Anti-Terrorism / Force Protection

Anti-Terrorism / Force Protection (AT / FP) relates to the safety of personnel, facilities, and information on an installation from outside threats. Methods to protect the installation and its supportive facilities can impact off-installation uses.

BIO Biological Resources

Biological resources include federal and state listed species (threatened and endangered species) and the habitats they live in or utilize. These resources may also include areas such as wetlands and migratory corridors that support these species. The presence of sensitive biological resources may require special development considerations and should be included early in the planning process.

CA Climate Adaptation

Climate adaptation is the gradual shift of global weather patterns and temperature resulting from natural factors and human activities (e.g., burning of fossil fuels) that produce long-term impacts on atmospheric conditions. The effects of climate adaptation vary and may include fluctuations in sea levels, alterations of ecosystems, variations in weather patterns, and natural resource availability issues. The results of climate adaptation (e.g., ozone depletion and inefficiencies in land use) can present operational and planning challenges for the military and communities as resources are depleted and environments altered.

COM Communication / Coordination

Communication / coordination relates to the level of interaction on compatibility issues among military installations, jurisdictions, land and resource management agencies, and conservation authorities.

CR Cultural Resources

Cultural resources may prevent development, apply development constraints, or require special access by Native American tribes, other groups, or governmental regulatory authorities.

DSS Dust / Smoke / Steam

Dust results from the suspension of particulate matter in the air. Dust (and smoke) can be created by fire (controlled burns, agricultural burning, and artillery exercises), ground disturbance (agricultural activities, military operations, grading), industrial activities, or other similar processes. Dust, smoke, and steam are compatibility issues if sufficient in quantity to impact flight operations (such as reduced visibility or cause equipment damage).

ED Energy Development

Development of energy sources, including alternative energy sources (such as solar, wind, or biofuels) could pose compatibility issues related to glare (solar energy), vertical obstruction (wind generation), or water quality / quantity.

FSC Frequency Spectrum Capacity

In a defined area, the frequency spectrum is limited. Frequency spectrum capacity is critical for maintaining existing and future missions and communications on installations. This is also addressed from the standpoint of consumer electronics.

FSI Frequency Impedance / Interference

Frequency spectrum impedance and interference refers to the interruption of electronic signals by a structure or object (impedance) or the inability to distribute / receive a particular frequency because of similar frequency competition (interference).

HA Housing Availability

Housing availability addresses the supply and demand for housing in the region. It also identifies the competition for shelter that may result from changes in the number of military personnel and the supply of military family housing provided by the installation.

IE Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, expanded infrastructure could encourage incompatible growth near the installation.

LAS Land / Air Space Competition

The military manages or uses land and air space to accomplish testing, training, and operational missions. These resources must be available and of a sufficient size, cohesiveness, and quality to accommodate effective training and testing. Military and civilian air operations can compete for limited air space, especially when the airfields are in close proximity to each other. Use of this shared resource can impact future growth in operations for all users.

LU Land Use

The basis of land use planning relates to the government's role in protecting the public's health, safety, and welfare. County and local jurisdictions' comprehensive plans and zoning ordinances can be the most effective tools for avoiding, or resolving, land use compatibility issues. These tools ensure the separation of land uses that differ significantly in character. Land use separation also applies to properties where the use of one property may impact the use of another. For instance, industrial uses are often separated from residential uses to avoid impacts related to noise, odors, lighting, etc.

LEG Legislative Initiatives

Legislative initiatives are federal, state, or local laws and regulations that may have a direct or indirect effect on a military installation to conduct its current or future mission. They can also constrain development potential in areas surrounding the installation.

LG Light and Glare

This factor refers to man-made lighting (street lights, airfield lighting, building lights) and glare (direct or reflected light) that disrupts vision.

Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination, impacting the use of military night vision devices and air operations. Conversely, high intensity light sources generated from a military area (such as ramp lighting) may have a negative impact on the adjacent community.

MAR Marine Environments

Regulatory or permit requirements protecting marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in a water-based environment.

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unwanted levels, this is referred to as noise.

The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

PT Public Trespassing

This factor addresses public trespassing, either purposeful or unintentional, onto a military installation. The potential for trespassing increases when public use areas are in close proximity to an installation.

RC Roadway Capacity

Roadway capacity relates to the ability of existing freeways, highways, arterials, and other local roads to provide adequate mobility and access between military installations and their surrounding communities.

SA Safety Zones

Safety zones are areas in which development should be more restrictive due to the higher risks to public safety. Issues to consider include accident potential zones, weapons firing range safety zones, and explosive safety zones.

SNR Scarce Natural Resources

Pressure to gain access to valuable natural resources (such as oil, natural gas, minerals, and water resources) located on military installations, within military training areas, or on public lands historically used for military operations can impact land utilization and military operations.

VO Vertical Obstructions

Vertical obstructions are created by buildings, trees, structures, or other features that may encroach into the navigable airspace used for military operations (aircraft approach, transitional, inner horizontal, outer horizontal, and conical areas, as well as military training routes). These can present safety hazards to both the public and military personnel.

V Vibration

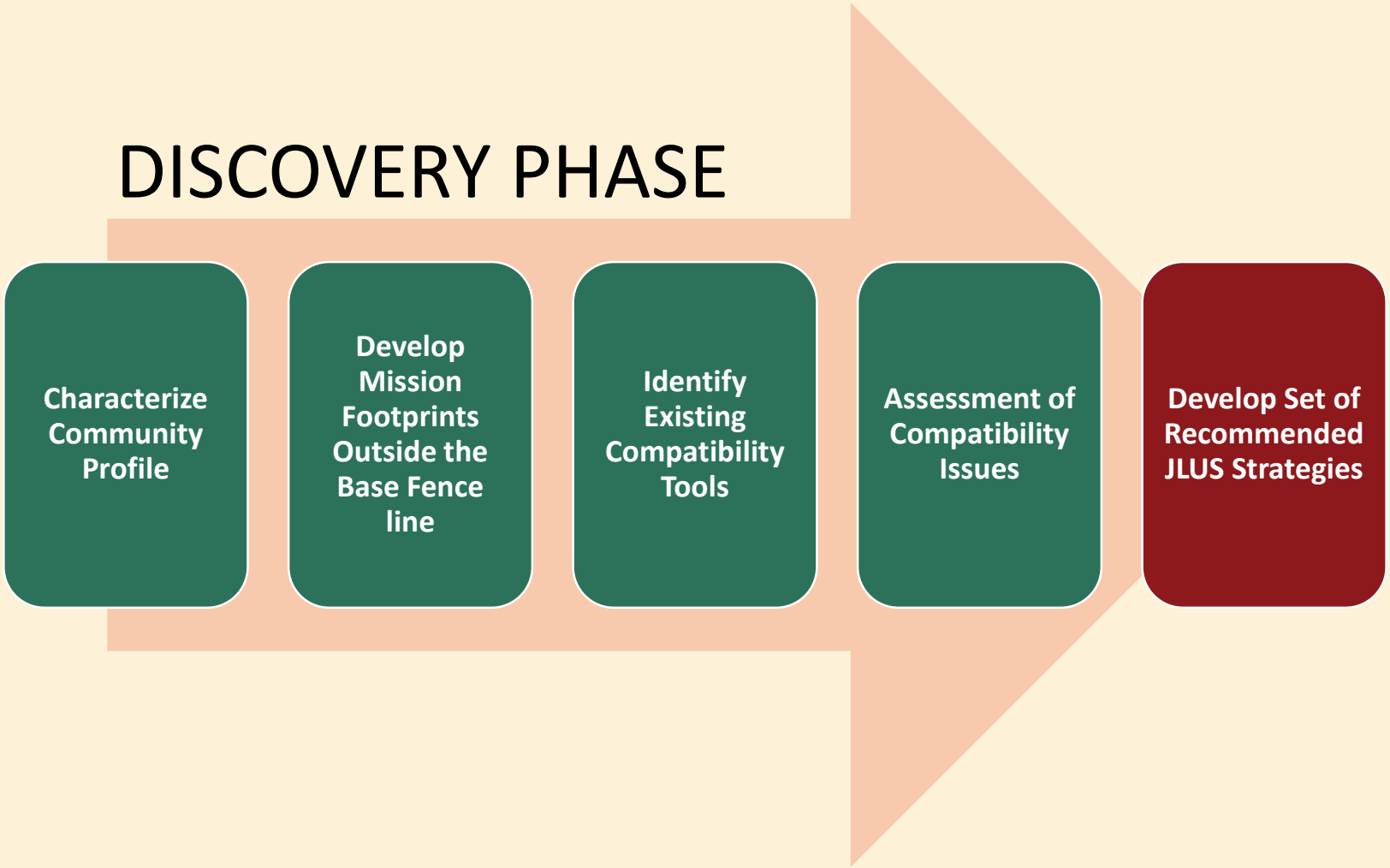
Vibration is an oscillation or motion that alternates in opposite directions and may occur as a result of an impact, explosion, noise, mechanical operation, or other change in the environment. Vibration may be caused by military and/or civilian activities.

WQQ Water Quality / Quantity

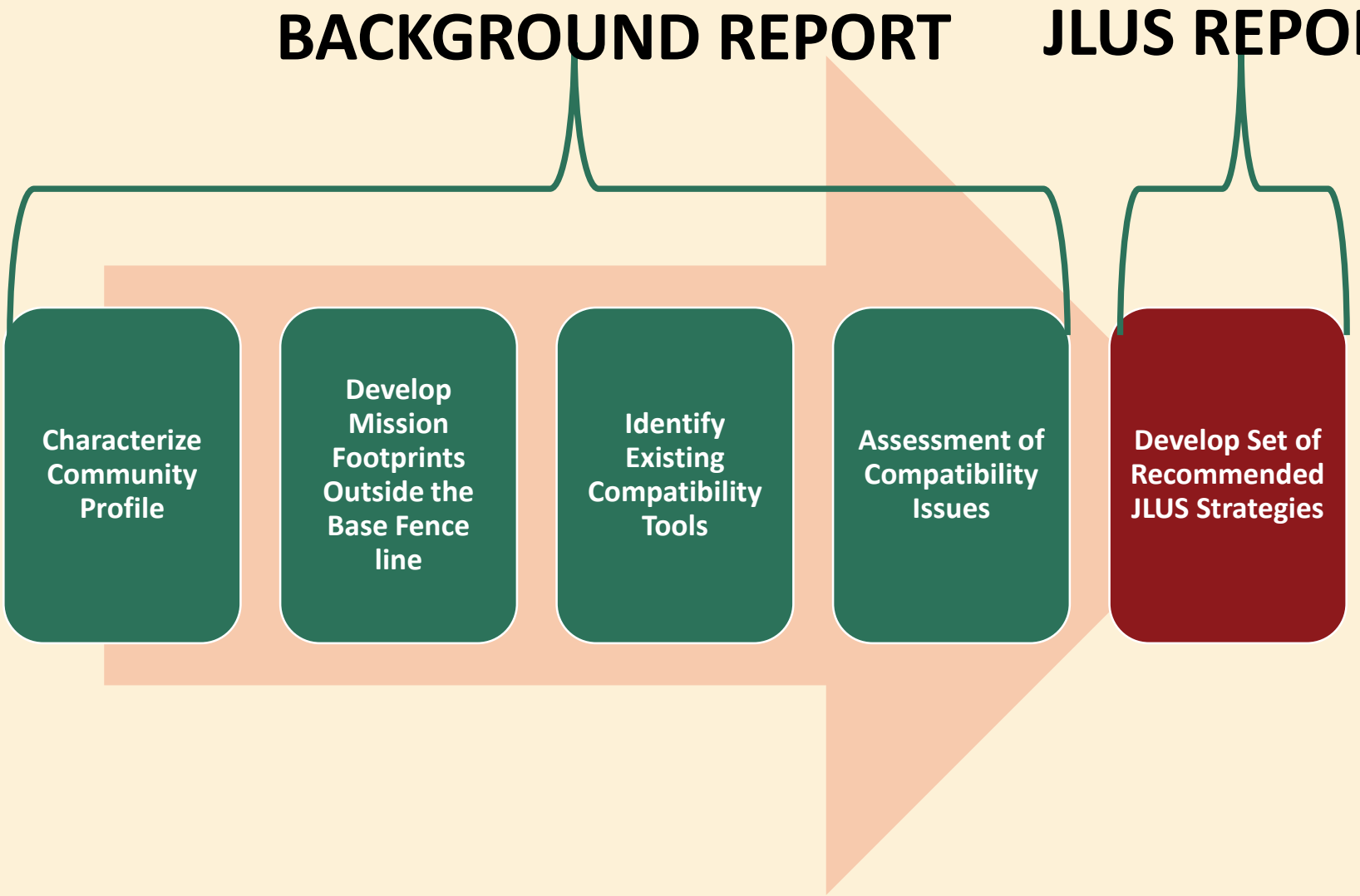
Water quality / quantity concerns include the assurance that adequate water supplies of good quality are available for use by the installation and surrounding communities as the area develops. Water supply for agricultural and industrial use is also considered.

JLUS Approach

DISCOVERY PHASE



JLUS Approach



JLUS Approach

Major Strategies to Achieve Compatibility:

- Information
- Communication
- Coordination
- Policy
- Regulatory

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JLUS Example

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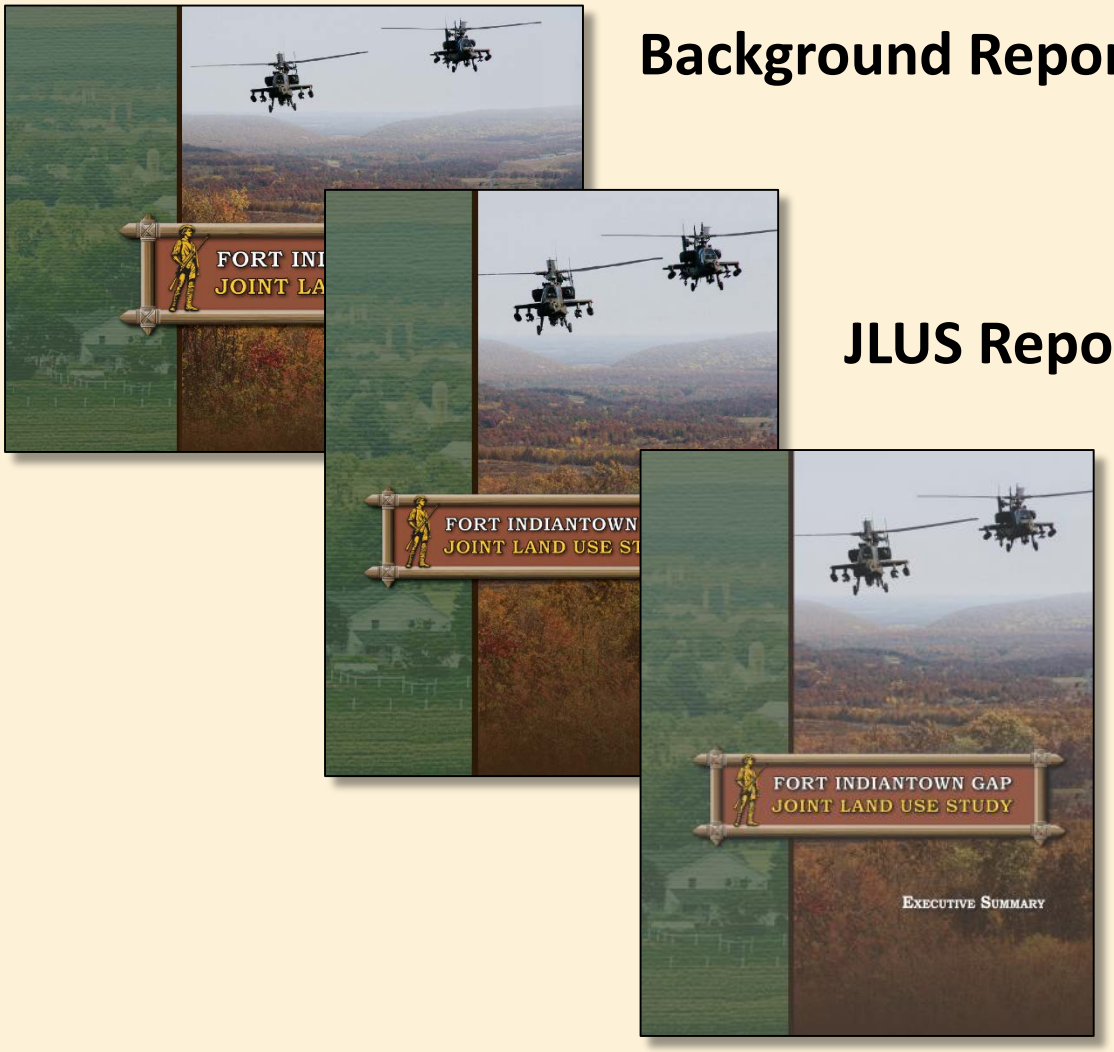
The Final Products



Background Report

JLUS Report

Executive Summary (Project Overview)

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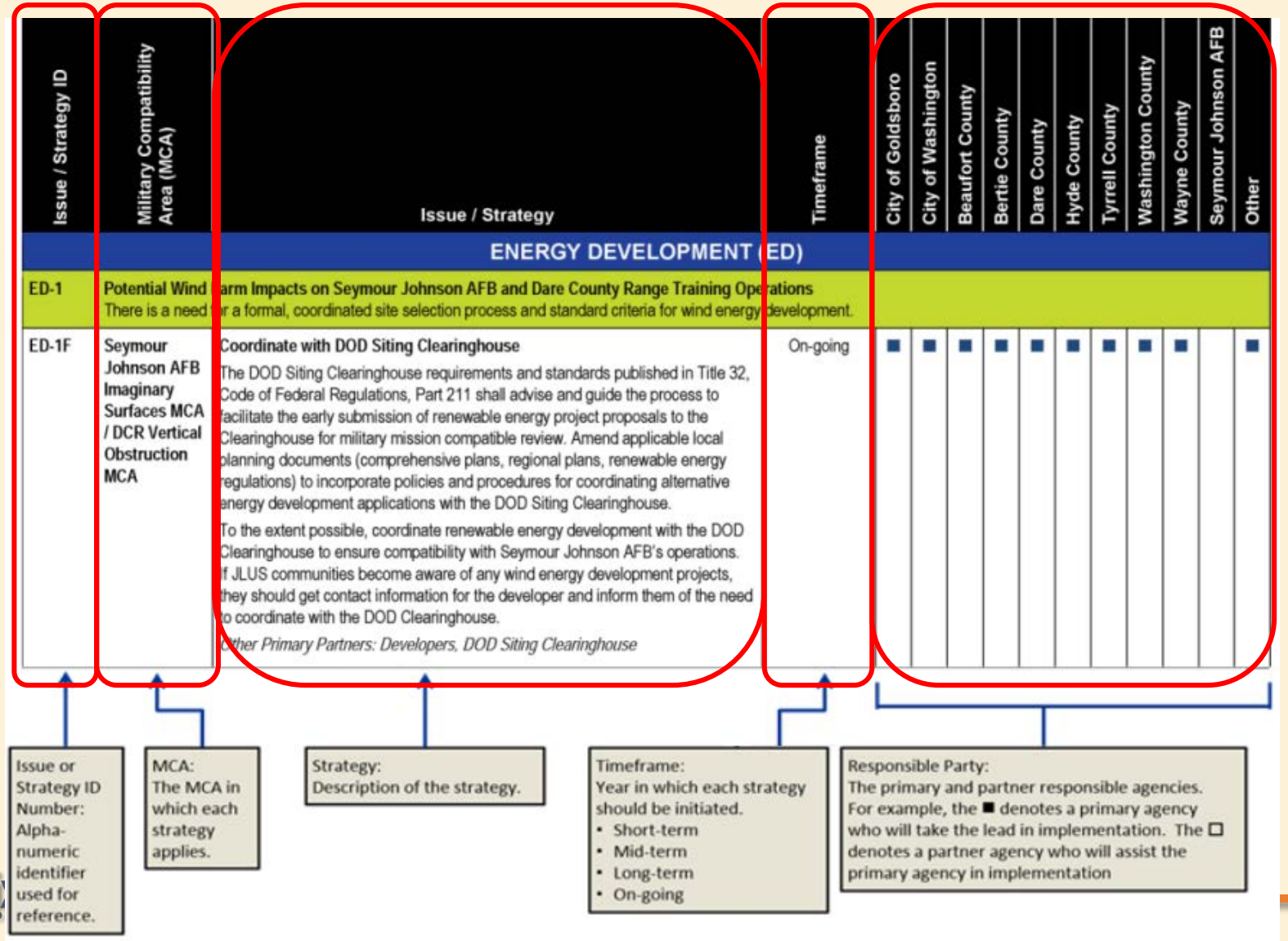
Implementation Plan



Issue / Strategy ID	Military Compatibility Area (MCA)	Issue / Strategy	Timeframe	City of Goldsboro	City of Washington	Beaufort County	Bertie County	Dare County	Hyde County	Tyrrell County	Washington County	Wayne County	Seymour Johnson AFB	Other
ENERGY DEVELOPMENT (ED)														
ED-1	**Potential Wind Farm Impacts on Seymour Johnson AFB and Dare County Range Training Operations** There is a need for a formal, coordinated site selection process and standard criteria for wind energy development.													
ED-1F	Seymour Johnson AFB Imaginary Surfaces MCA / DCR Vertical Obstruction MCA	**Coordinate with DOD Siting Clearinghouse** The DOD Siting Clearinghouse requirements and standards published in Title 32, Code of Federal Regulations, Part 211 shall advise and guide the process to facilitate the early submission of renewable energy project proposals to the Clearinghouse for military mission compatible review. Amend applicable local planning documents (comprehensive plans, regional plans, renewable energy regulations) to incorporate policies and procedures for coordinating alternative energy development applications with the DOD Siting Clearinghouse. To the extent possible, coordinate renewable energy development with the DOD Clearinghouse to ensure compatibility with Seymour Johnson AFB's operations. If JLUS communities become aware of any wind energy development projects, they should get contact information for the developer and inform them of the need to coordinate with the DOD Clearinghouse. *Other Primary Partners: Developers, DOD Siting Clearinghouse*	On-going	■	■	■	■	■	■	■	■	■		■

Issue or Strategy ID Number: Alpha-numeric identifier used for reference.

MCA: The MCA in which each strategy applies.

Strategy: Description of the strategy.

Timeframe: Year in which each strategy should be initiated.
- Short-term
- Mid-term
- Long-term
- On-going

Responsible Party: The primary and partner responsible agencies. For example, the ■ denotes a primary agency who will take the lead in implementation. The □ denotes a partner agency who will assist the primary agency in implementation

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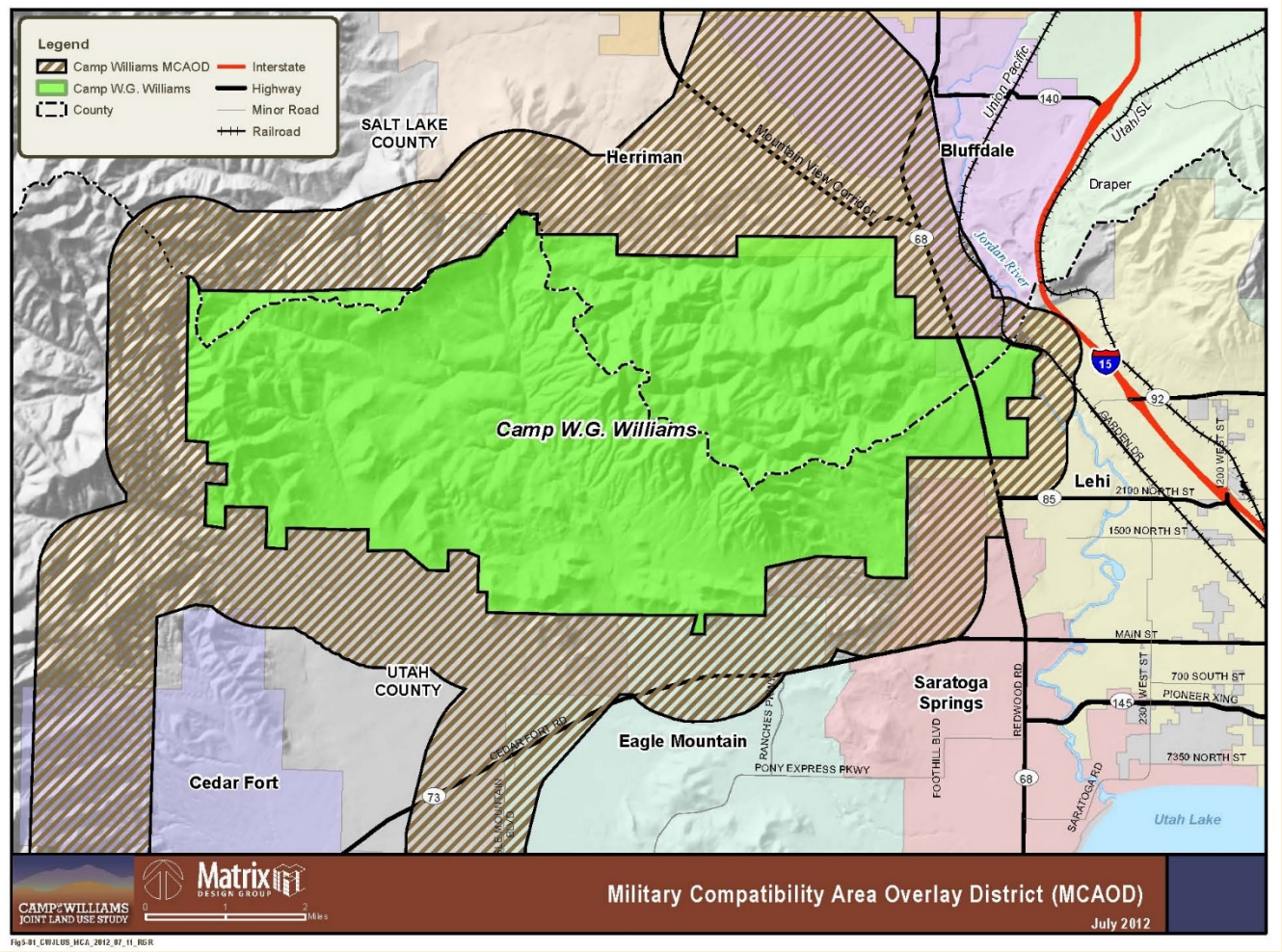
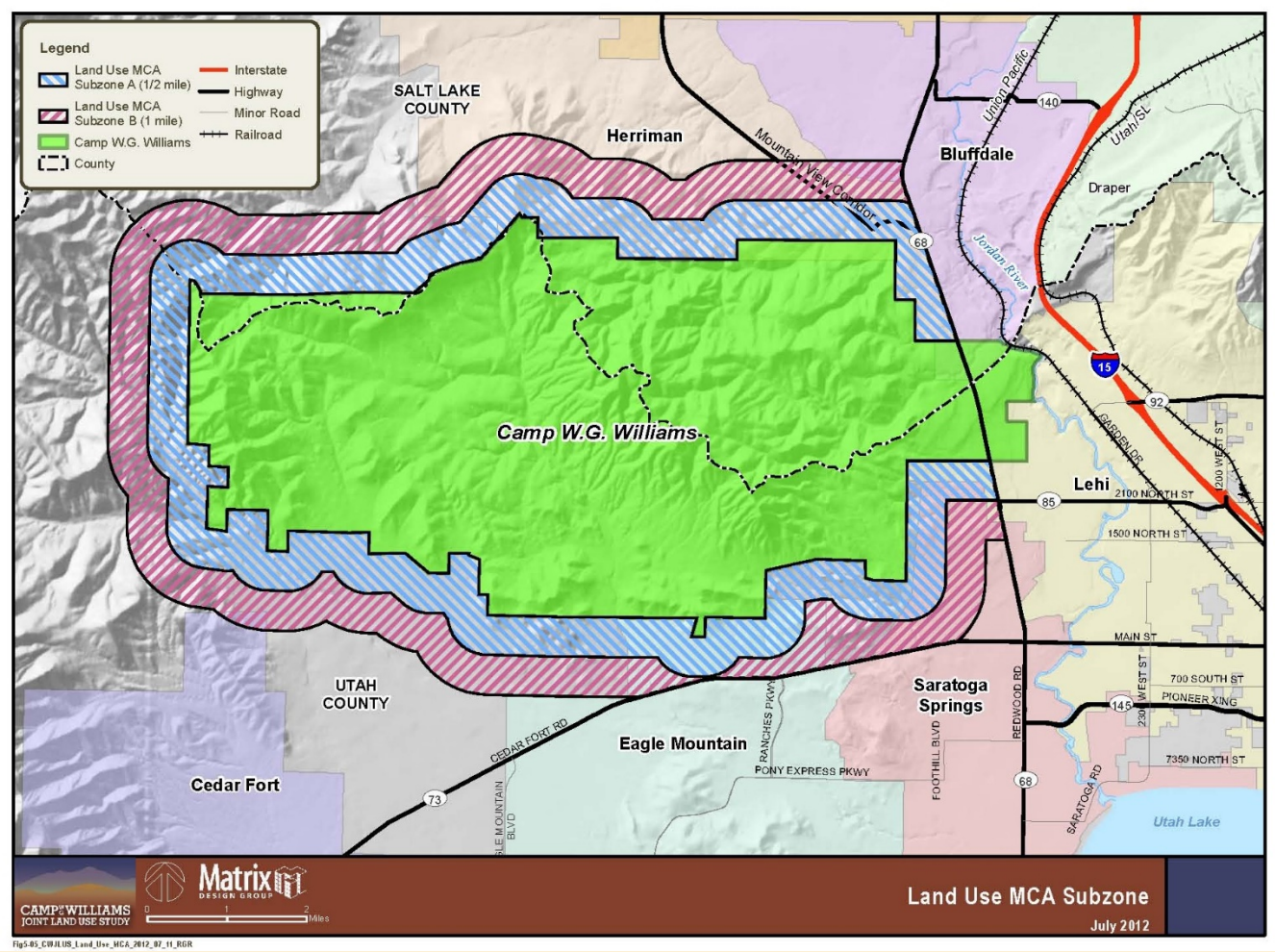
Military Compatibility Area Overlay District (MCAOD)



Land Use MCA



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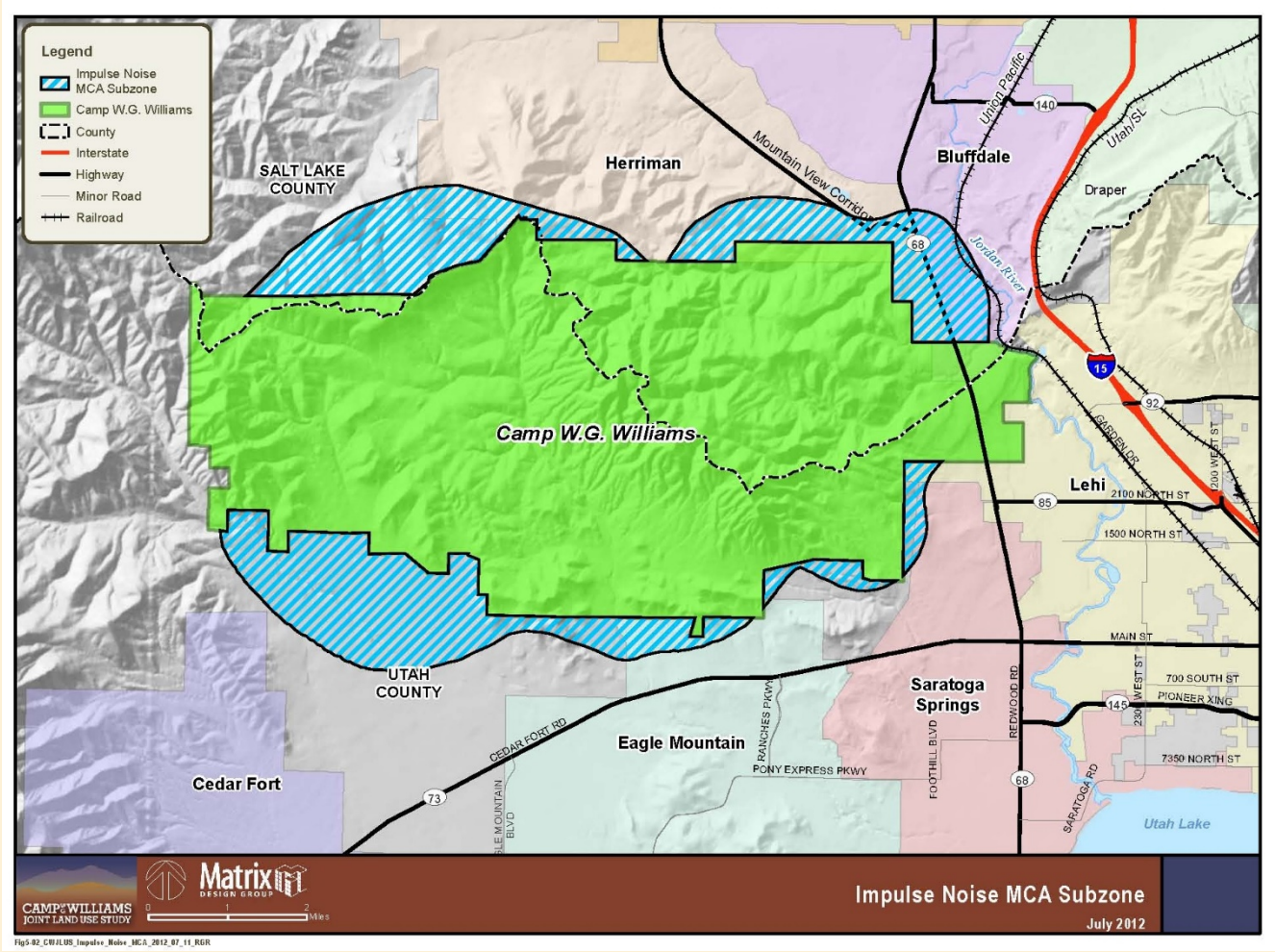
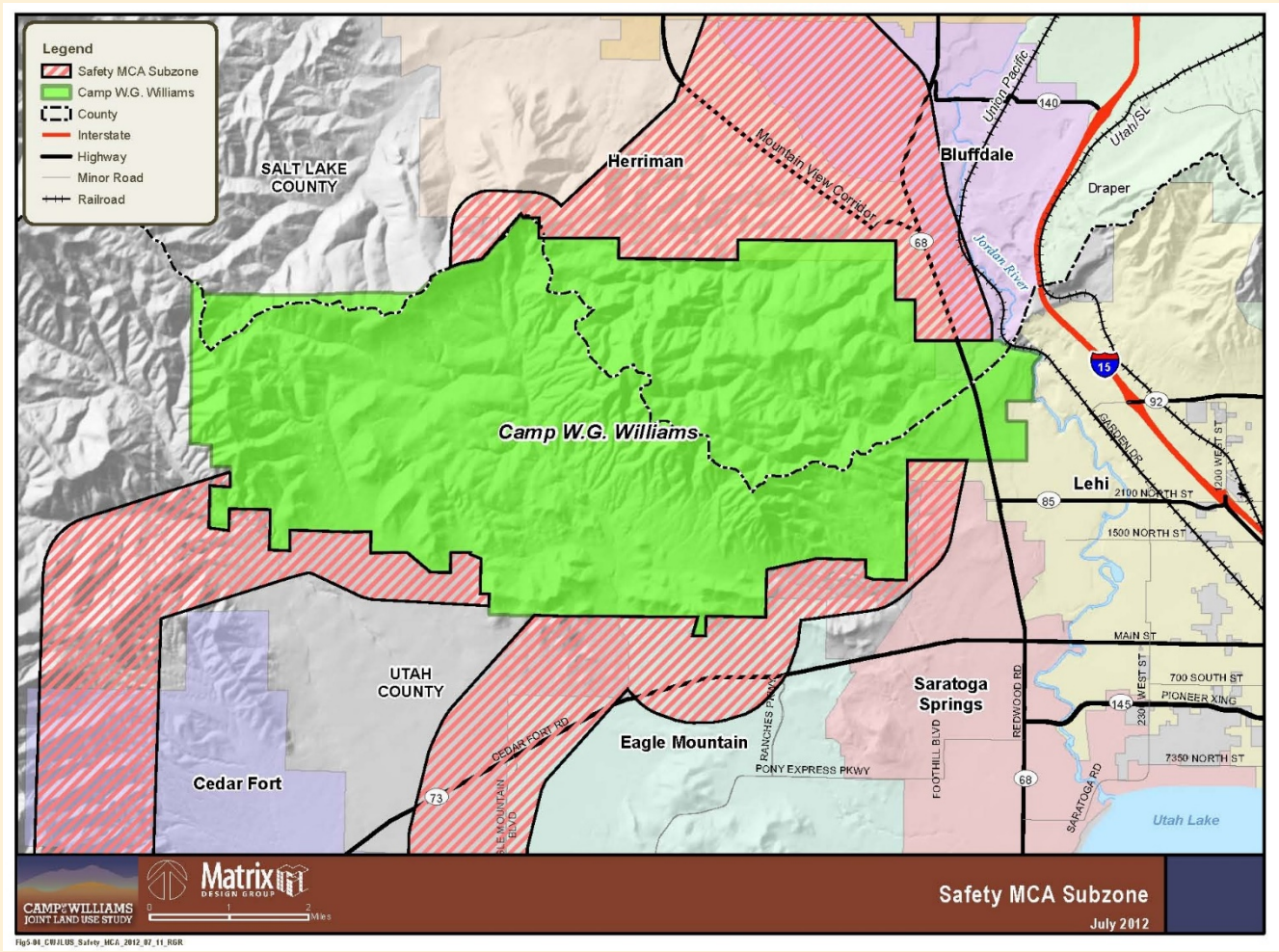
Impulse Noise MCA



Safety MCA


Legend
Safety MCA Subzone
Camp W.G. Williams
County
Interstate
Highway
Minor Road
Railroad
SALT LAKE COUNTY
Herriman
Mountain View Corridor
Bluffdale
Union Pacific
Utah/SL
Draper
Jordan River
Camp W.G. Williams
Lehi
2100 NORTH ST
1500 NORTH ST
MAIN ST
700 SOUTH ST
PIONEER XING
7350 NORTH ST
UTAH COUNTY
Saratoga Springs
Eagle Mountain
Cedar Fort
CEDAR FORT RD
PONY EXPRESS PKWY
REDWOOD RD
FOOTHILL BLVD
SARATOGA RD
Utah Lake
CAMP W.G. WILLIAMS JOINT LAND USE STUDY
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Safety MCA Subzone
July 2012

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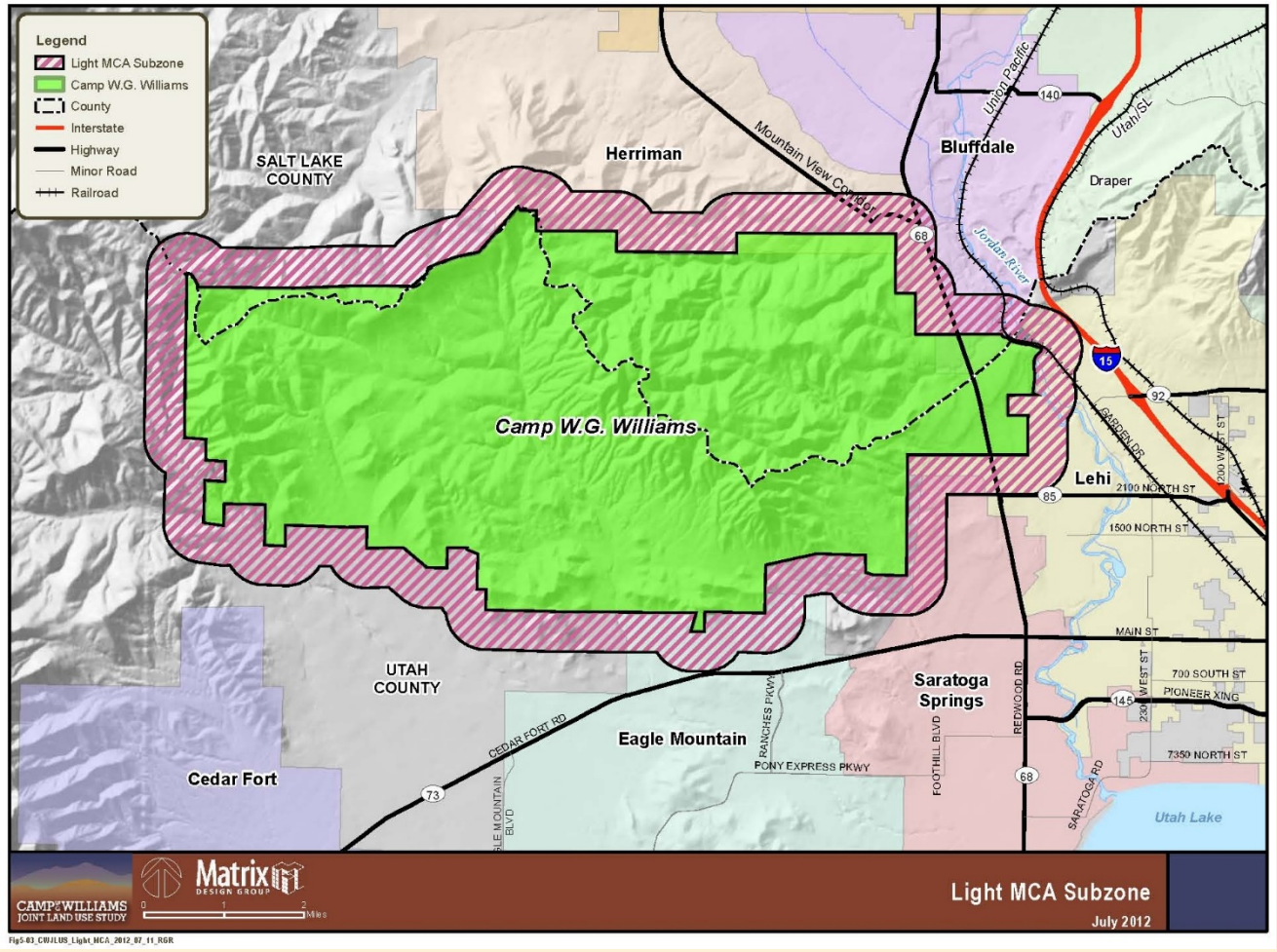
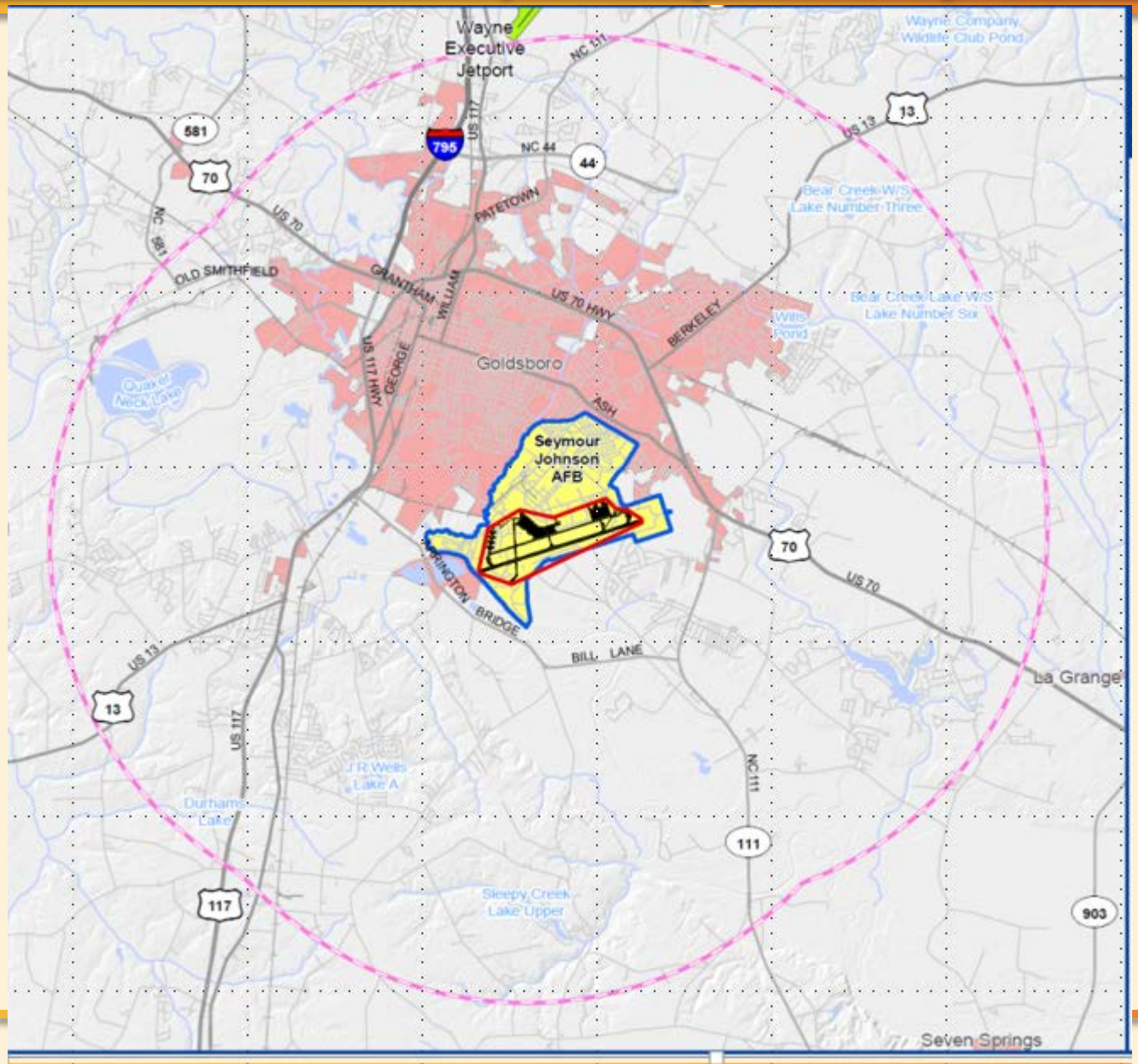
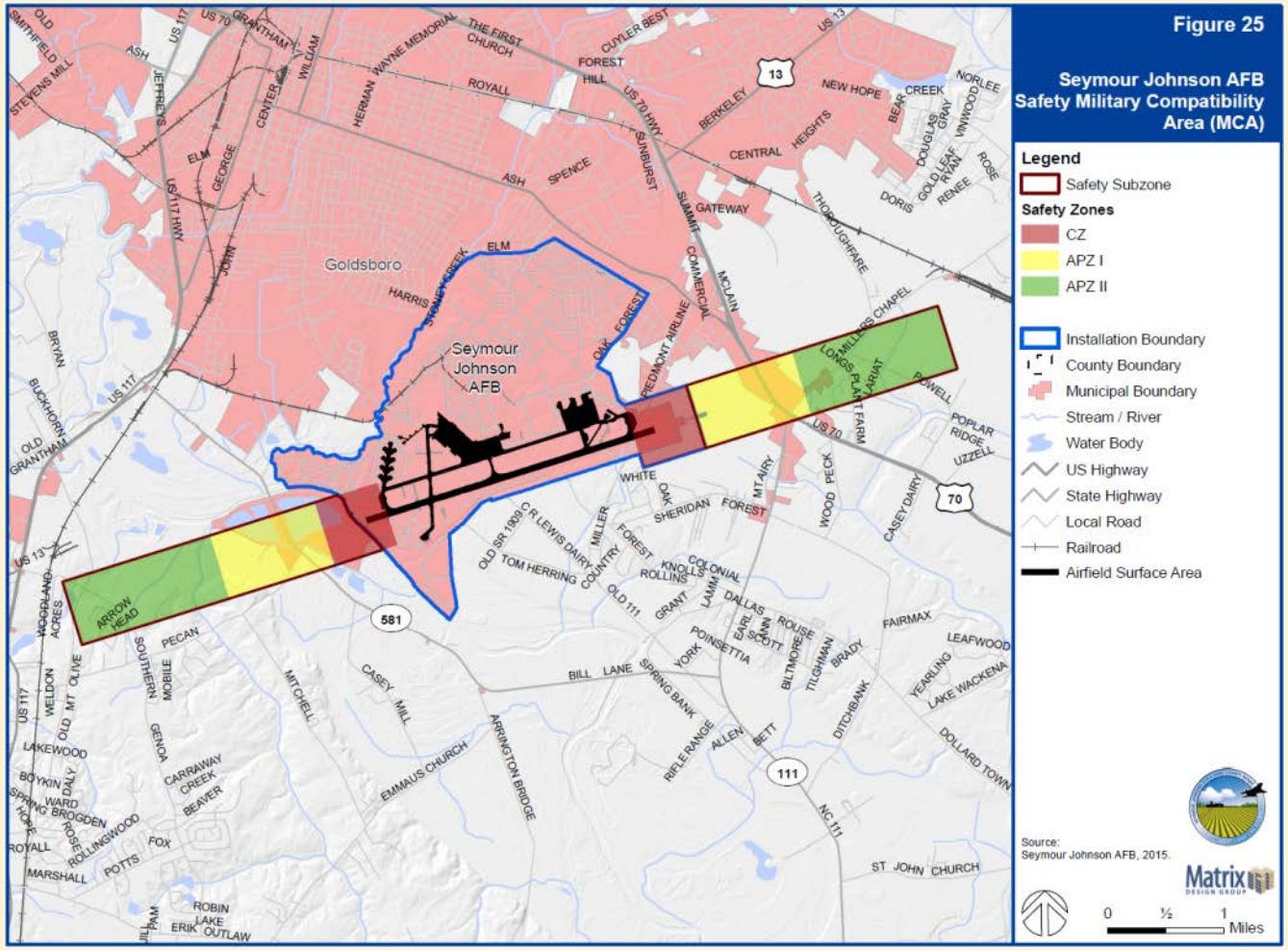
Light MCA



Wind Energy
Military Compatibility Area (MCA)



Safety
Military Compatibility Area (MCA)



Questions?

For Questions . . .

Development Authority of the North Country

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JLUS Program

Lessons Learned

- Committees need to be inclusive
- Need communication and information exchange to occur between SC members and TWG members
- Time is required for information review and policy development
- Process needs to be collaborative
- Need to assess and measure willingness to implement actions early
- Ongoing communications need to be developed throughout the process

Committee Responsibilities

Responsibilities and Roles

- Use knowledge and expertise to inform JLUS development
- Identify and provide insight on community and military issues
- Provide outreach to constituencies
- Encourage participation
- Share information and ideas

Time Commitment

- Assist in data collection phase by providing key information
- Review JLUS materials and be prepared for Committee Meetings
- Provide required written comments in a timely manner
- Present draft implementation strategies to agency leadership for discussion and buy-in

Public Workshop Ideas

- Ideas for good locations to hold public workshops?
- What is the best way to get the word out?
- Are there community organizations that can help spread the word?

How To Respond To Survey Questions?

1. Presenter will announce polling is open
2. Press the number / letter that corresponds with the answer you wish to select.
3. Change your mind? Just click the right one. Your last push will count.
4. You will see results as responders select their answer.