Compatibility Planning with Military Installations

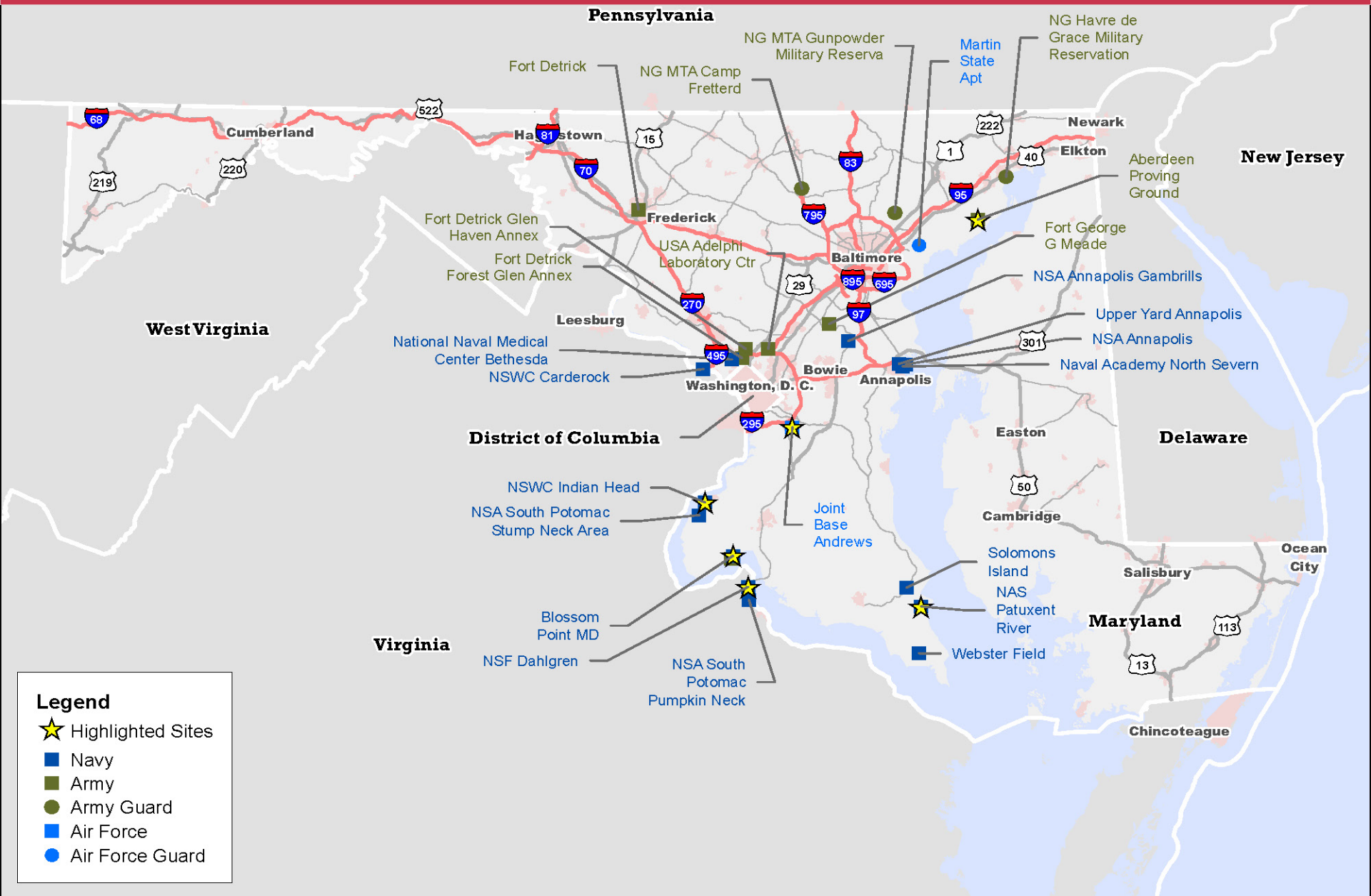
Maryland's Statewide JLUS Response Implementation Strategy **(SJRIS)**

3 November, 2017





Maryland Military Installations



What is a JLUS?

A federally funded program to promote regional 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 Office of Economic Adjustment (OEA)

Over 140 JLUSs have been completed nationally

JLUS Facts

- **A JLUS IS NOT:**
  - a regulatory document
  - an enforceable action
- **A JLUS IS:**
  - a collaborative process
  - a body of information that assists in making informed decisions
  - a set of recommended strategies / actions to mitigate or prevent incompatible development - tailored to each jurisdiction / agency
- The JLUS will require follow on actions by all stakeholders, including appropriate public involvement, to successfully implement the recommendations.

Compatibility Factors

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 on the following pages.

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 SC, TWG, 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.

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.

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.

PS Public Services

Public services concerns include the assurance that adequate services such as police, fire, emergency services, parks and recreation, and water / wastewater / stormwater infrastructure are of good quality and available for use by the installation and surrounding communities as the area develops. The supply and demand of these public services in the event of emergency situations is also considered.

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.

Maryland's State Approach

Statewide JLUS Response Implementation Strategy (SJRIS)

Sponsor: Maryland Department of Commerce, Office of Military and Federal Affairs (OMFA)

The SJRIS project will assist the State in reviewing proposed strategies from the existing JLUS studies and coordinating the State's response to those strategies.

Goals:

- Promote a more effective and efficient process to carry out statewide initiatives and JLUS recommendations.
- Increase compatibility between Maryland military installations and their surrounding communities through a statewide approach.
- Provide the state with suggestions for policy changes and legislation that prevent or resolve incompatible land use.

Gap Analysis

APPROACH

- Comprehensive Report inclusive of all JLUS Reports
  - Data research of JLUS Reports
- Search for:
  - Commonalities in reports and data
  - Look for trends and root issues
  - Determine regional vs statewide adaptability
  - Consider information and coordination solutions
  - Reassess root issues and causes
- Characterize the Military Influence across the State

Outreach

APPROACH

- Stakeholder and Leadership Interviews
  - Determine number of interviewees
- Identify common issues and recommendations that relate to Non – JLUS installations & communities
- Conduct Survey of Non – JLUS stakeholders and leaders
- Desired outcomes:
  - Assess potential for policy or regulatory solutions
  - Consider options for potential legislative initiatives

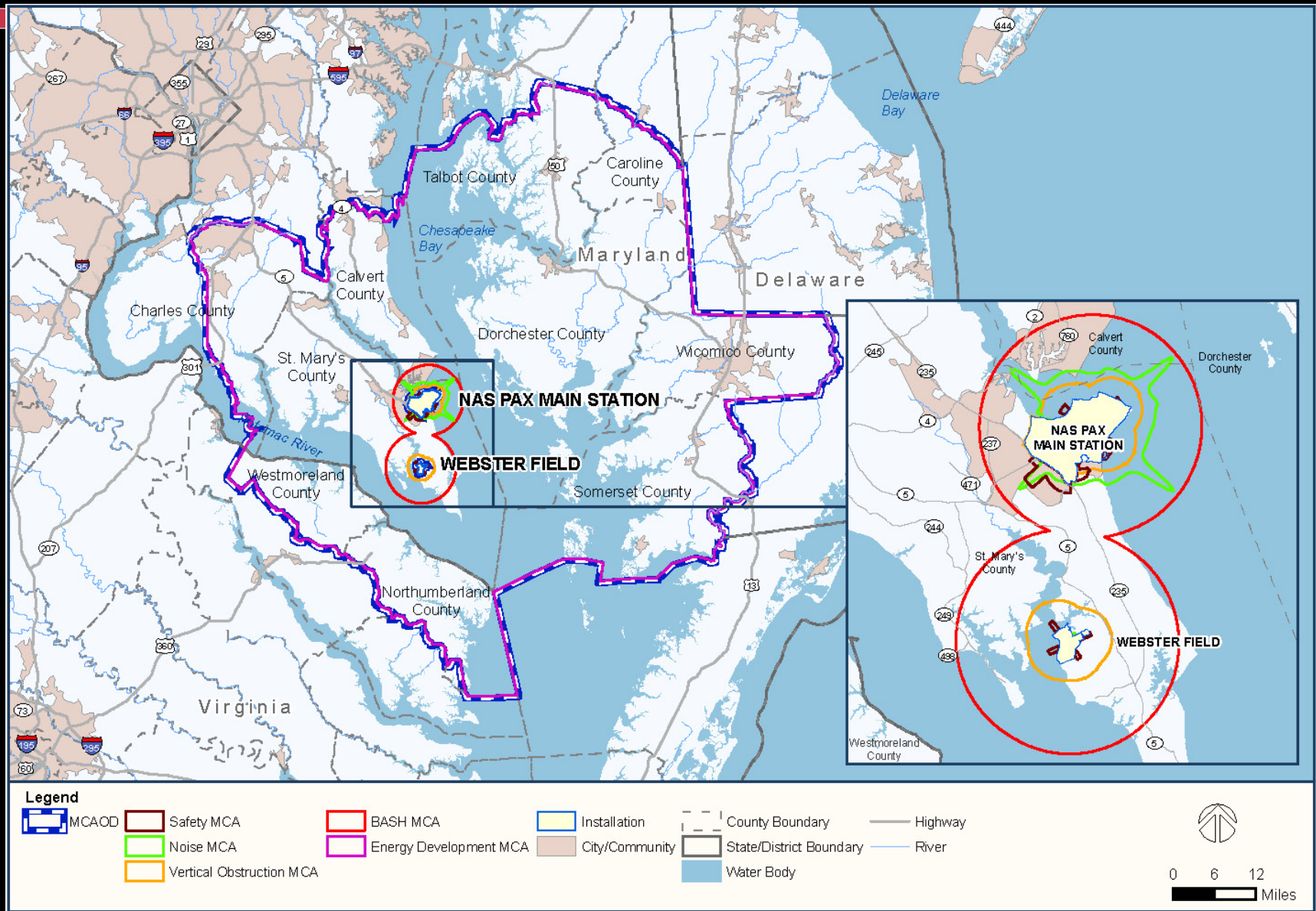
Policy and Strategy Development

- Where practical bundle recommendations
- Develop common criteria - standardize policy & regulations
- Where appropriate develop new recommendations
- Consider the range of compatible solutions
  - Information
  - Communication
  - Coordination
  - Policy
  - Regulatory

Implementation Plan

- Identify the geographic area associated with the strategy
- Determine who the advocates & partners are for each strategy
- Assess approaches for specific initiatives
  - Policy or Regulatory / Legislative
  - Information sharing or coordination processes
- Prioritize initiatives
  - Timing based on mission impact and available resources
- Obtain feedback from stakeholder groups on initiatives
  - Desire Buy-in from all levels
- Develop individual plan for each group of initiatives
  - Develop coordination actions
  - Develop preliminary timeline

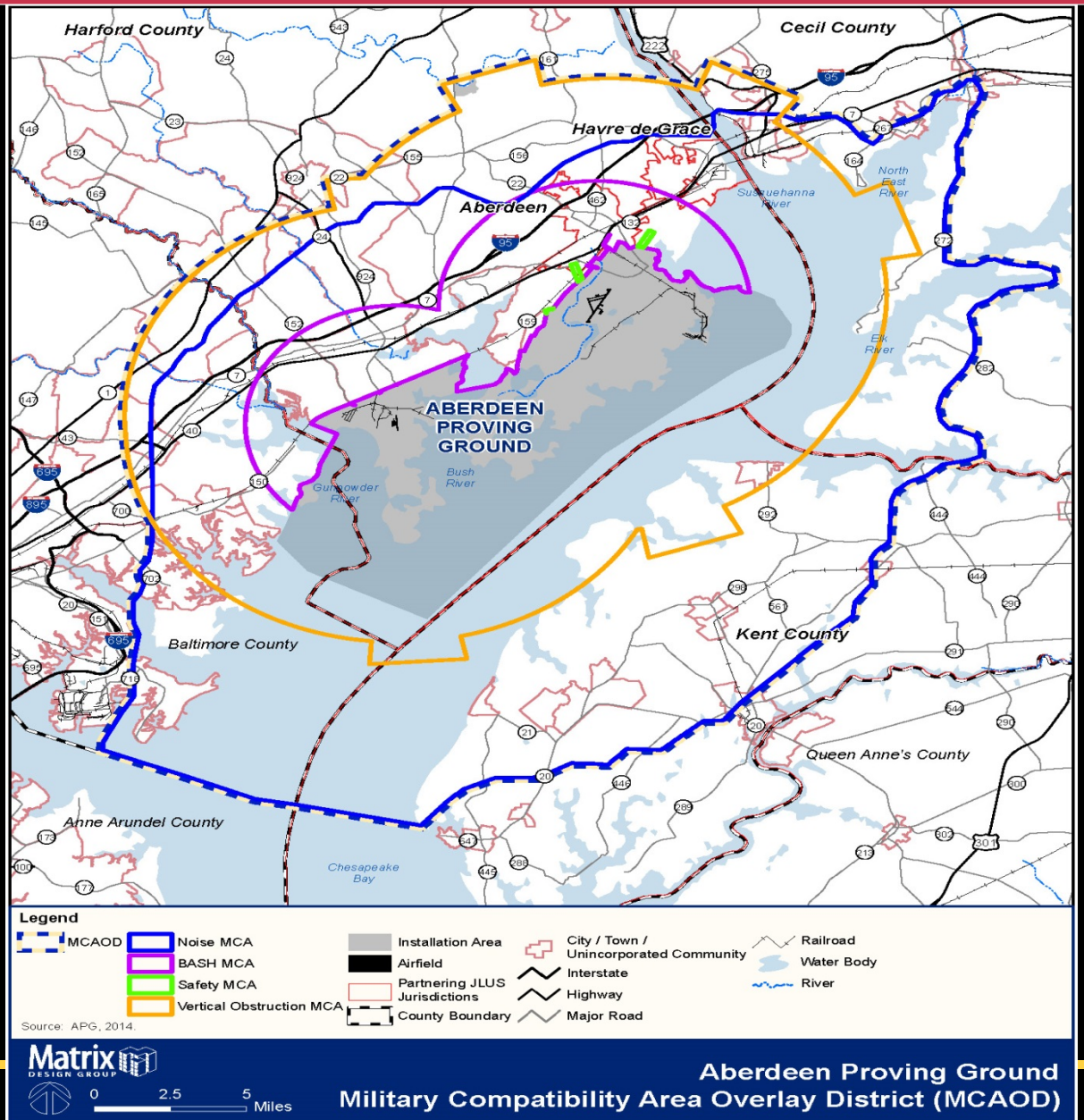
NAS PAX River - Influence



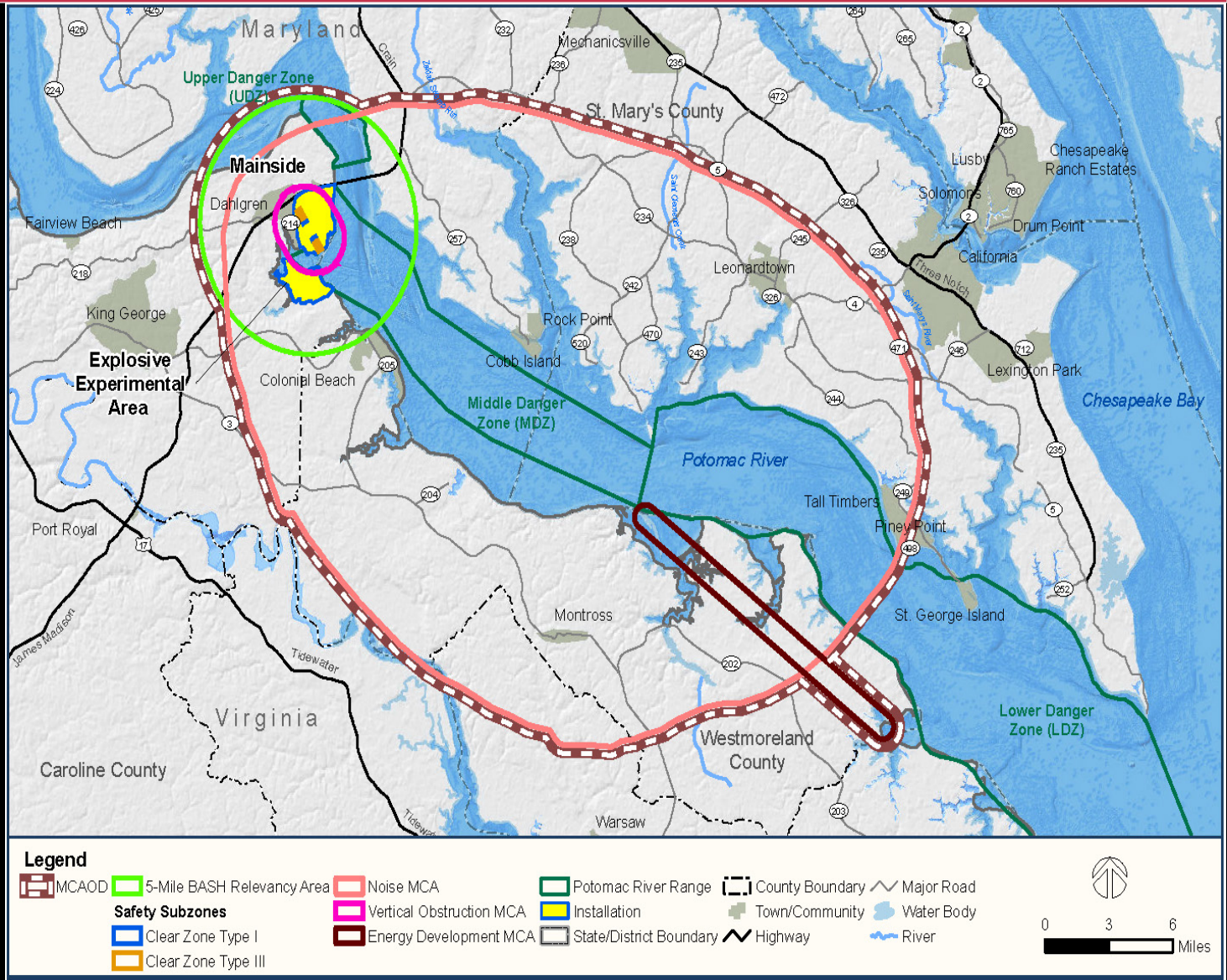
Sources: ESRI, 2010; NAS Pax, 2010

NAS Patuxent River
Military Compatibility Area Overlay District (MCAOD)

Aberdeen Proving Ground - Influence



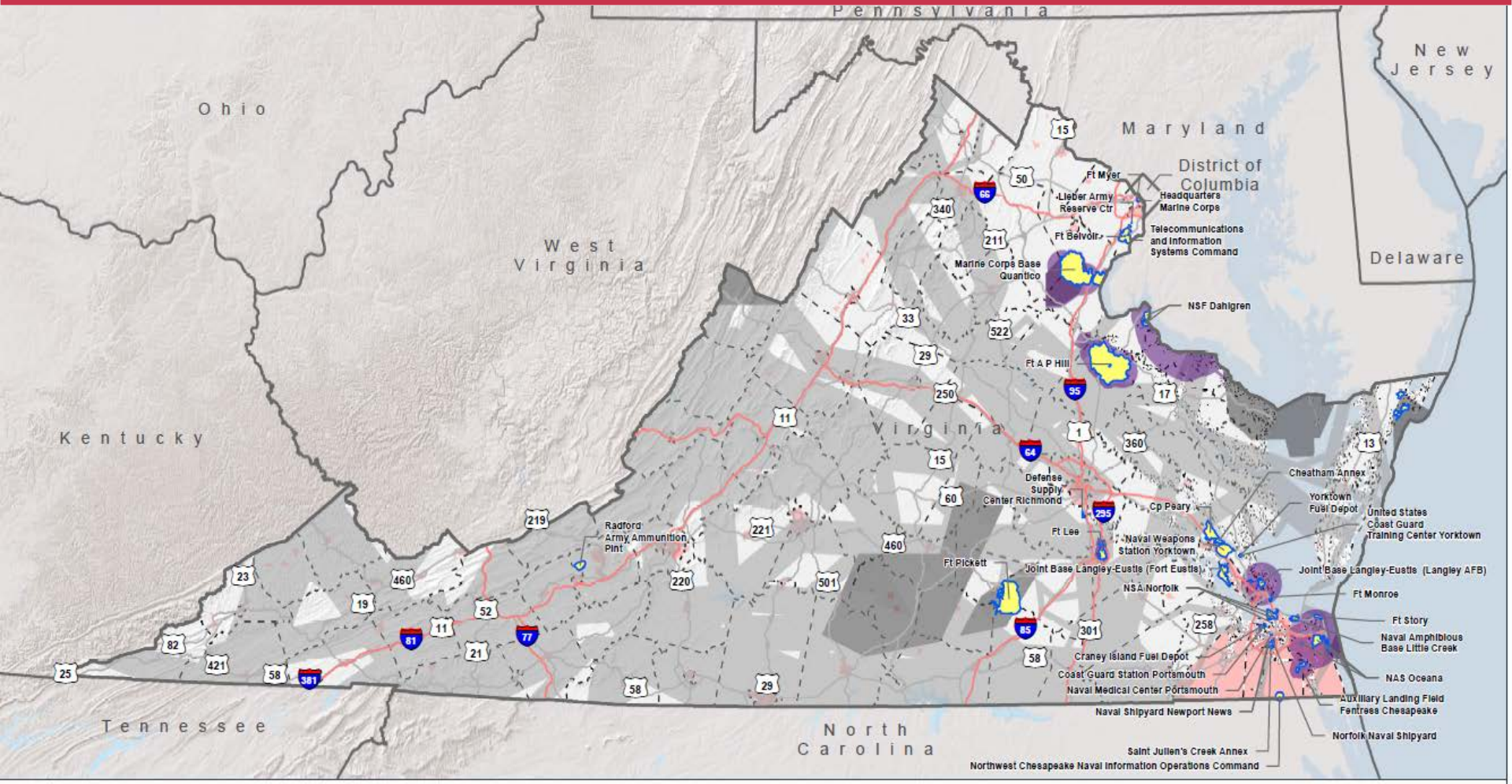
NSF Dahlgren - Influence



Source: Dahlgren NSF, 2013

NSF Dahlgren: Military Compatibility Area Overlay District

Virginia – Military Influence



Legend

- Major Installation Military Influence Area Identified by a JLUS
- Military Installation
- Municipality
- Interstate
- Waterbody
- Military Training Routes
- County
- US Highway
- Special Use Airspace
- State

0 25 50 Mile

Matrix Design Group

Sources: US Census TIGER, 2015. Virginia Geographic Information Network, 2016. USGS, 2016.

Figure 1

Comprehensive Influence Areas

North Carolina - Military Influence

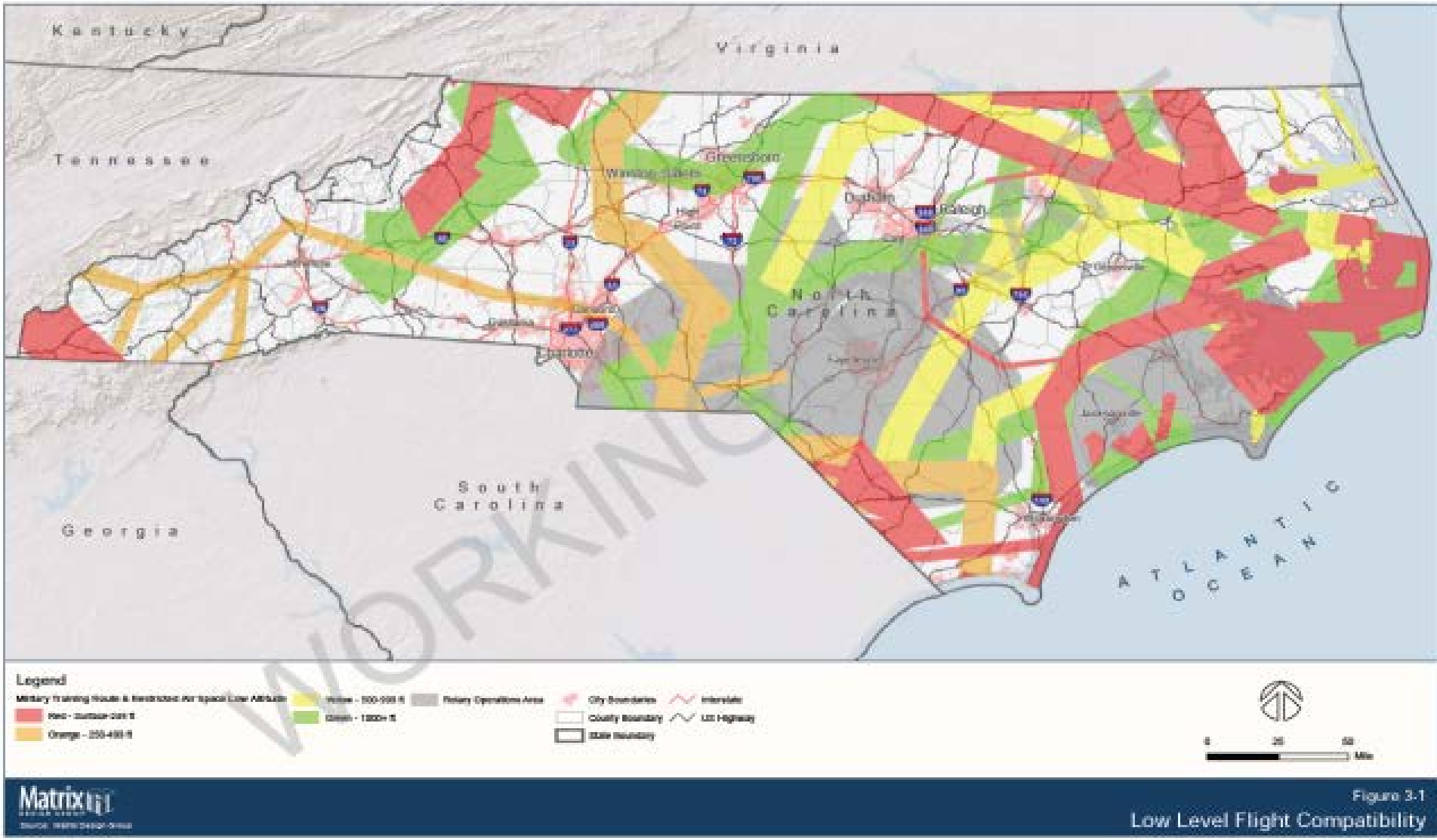


Figure 3-1
Low Level Flight Compatibility

Next Steps

Q&A