Maryland Statewide Joint Land Use Study

Response Implementation Strategy

Maryland Military Installations

National Guard Facilities

1	Cumberland	**17**	Baltimore City 1
2	Hagerstown	**18**	Towson
3	Frederick	**19**	Baltimore City 2
4	Westminster	**20**	Glen Arm
5	Sykesville	**21**	Parkville
6	Ellicott City	**22**	Dundalk
7	Olney	**23**	Glen Burnie
8	White Oak	**24**	Annapolis
9	Adelphi	**25**	Edgewood
10	Laurel	**26**	Havre de Grace
11	Greenbelt	**27**	Elkton
12	Cheltenham	**28**	Queen Anne
13	La Plata	**29**	Easton
14	Reisterstown	**30**	Pax River NAS
15	Pikesville	**31**	Salisbury
16	Catonsville		

Reserve Facilities

A	Cumberland
B	Fort Detrick
C	Gaithersburg
D	Rockville
E	Riverdale
F	Fort Meade
G	Joint Base Andrews
H	Upper Marlboro
I	Owings Mill
J	Sheridan, Baltimore
K	NOSC Baltimore
L	Jeceline, Baltimore
M	Curtis, Baltimore
N	Brandt, Baltimore
O	MCR Center Baltimore
P	Annapolis
Q	Abingdon

Maryland Statewide Joint Land Use Study Response Implementation Strategy

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Table of Contents

Tables

Figures

This guide provides an overview of how to navigate the Maryland Statewide Joint Land Use Study Response Implementation Strategy.

Joint Land Use Study Overview

A Joint Land Use Study (JLUS) is a planning process accomplished to support compatibility between military installations and their surrounding communities through the collaborative efforts of a comprehensive list of stakeholders in a defined study area. Collaboration and joint planning among military installations, local communities, and agencies should occur to protect the long-term viability of existing and future military missions. Working together also enhances the health of local economies and industries before incompatibility becomes an issue. Recognizing the close relationship that should exist between installations and adjacent communities, the Department of Defense (DoD), Office of Economic Adjustment (OEA) implemented the Compatible Use program to help mitigate existing and future conflicts and to enhance coordination/communication among all stakeholders.

The Maryland SJRIS is not a legally binding document. It is an advisory document aimed at improving compatibility between Maryland military installations and their surrounding communities. The primary goal of this document is to protect the viability of all current and future military operations at a military installation, while simultaneously guiding community growth, sustaining the environmental and economic vitality of the region, and protecting public health, safety, and welfare.

Chapter Overview

Chapter 1, Introduction
Chapter 1 provides a background on the Maryland Military Installation Council (MMIC), the JLUS process, and the 25 Compatibility Factors associated with each installation JLUS or the Statewide JLUS project.

Chapter 2, Compatibility Planning and Issue Assessment
Chapter 2 provides compatibility assessments for Maryland installations using data from previously completed JLUS reports. At Maryland installations where a JLUS has not been completed, extrapolated data was used to conceptualize compatibility assessments. The intent of compatibility site assessments is to identify potential compatibility factors and/or issues applicable at the regional or statewide level.

Chapter 3, Legislative Review and Gap Analysis
Chapter 3 examines the existing statewide policies and legislation that impact compatibility planning. The intent behind this analysis is to identify where there are gaps in legislation that could support compatible land use or prevent incompatible land use.

Chapter 4, Compatibility Communication Analysis

Chapter 4 provides a compatibility communication assessment to identify communication strategies between the state, local communities, and the military that can address community/military compatibility. The key to preventing encroachment is establishing a conduit that helps to demonstrate the value of enhanced coordination between the state, local communities, and military installations. Additionally, it is important to define a standardized repeatable process for communicating issues and best practices that have potential statewide application.

Chapter 5, Maryland Statewide JLUS RIS Recommendations

Chapter 5 is the result of the compatibility communication assessment presented in Chapter 4. The recommendations presented in Chapter 5 are the result of the information analyzed and the assessments completed in Chapters 1 through 4.

The strategic intent of this report is to develop a unified approach to managing common community/military compatibility issues across the State of Maryland.

Based upon the collected data and subsequent analysis, seven recommendations (R) were developed. Each recommendation under the proposed theme is arranged by On-going (O); Short term (S); Mid-term (M) or Long term (L) timeframe to implement the corresponding recommendations as defined by the following timeframes:

- On-going: An on-going recommendation that has been implemented and should be consistently monitored.

- Short-term: Recommendation proposed for initiation in 2018-2019 (within a year of SJRIS completion).

- Mid-term: Recommendation proposed to be initiated in 2020-2021 (within 2-3 years of SJRIS completion).

- Long term: Strategy proposed to be initiated in 2022-2024 (within 4-6 years from SJRIS completion).

Where timeframes may overlap (for example providing time for outreach to all jurisdictions), the timeframe designation is shown with an "(/)" dividing the timeframe. For example, Short-term and Mid-term would be (S/M).

This introduction provides an overview of the Maryland Statewide Joint Land Use Study (JLUS) Response Implementation Strategy (RIS). Chapter 1.1 is a short discussion on the strategic intent of the SJRIS is included along with information on the JLUS process, a review of military installations, and the military influence area of those installations in the State of Maryland. Chapter 1 also summarizes the rest of the document.

1.1 Strategic Intent of Maryland Statewide Joint Land Use Study Response Implementation Strategy (SJLUS RIS)

A Joint Land Use Study (JLUS) is a cooperative land use planning effort conducted as a joint venture between an active military installation, surrounding cities and counties, state and federal agencies, and other affected stakeholders. A JLUS is typically funded by a grant from the Department of Defense (DoD) Office of Economic Adjustment (OEA) and requires the military installation to initiate the request in order for a community to receive funds. A number of installations within Maryland have already completed a JLUS. They are:

- Aberdeen Proving Ground
- Blossom Point Research Facility
- Joint Base Andrews
- Naval Air Station Patuxent River
- Naval Support Facility Indian Head

The objective of the SJRIS is to identify where there are potential compatibility issues that may have statewide and/or regional impacts and determine where there are opportunities for the State of Maryland to take policy actions or assist local jurisdictions with compatibility planning to address the identified concerns.

Office of Military and Federal Affairs

As directed by the Maryland Department of Commerce, Office of Military and Federal Affairs (OMFA), the strategic intent of the Maryland Statewide Joint Land Use Study Response Implementation Strategy (SJRIS) is to develop a unified approach to managing common community/military compatibility challenges across the State of Maryland. This maximizes completed JLUS efforts by informing the approach to addressing encroachment issues at installations without a JLUS. As stated previously, several Maryland communities have completed JLUS reports that identify compatibility issues and strategies to address them.

As the state's primary economic development agency, the Maryland Department of Commerce promotes the state's many economic advantages and markets local products and services at home and abroad to spur

economic development and international investment, trade, and tourism. The agency's Office of Military and Federal Affairs (OMFA) develops business relationships among U.S. military bases, federal laboratories, federal agencies, and private companies in Maryland to implement strategies for creating and retaining jobs and redeveloping closed military sites. To minimize the adverse impact of closures of military bases or federal facilities, OMFA helps businesses diversify to reduce their dependence on the federal government.

Maryland Military Installation Council

The Maryland Military Installation Strategic Planning Council was originally established in August 2003 to ensure that Maryland was prepared for the Efficient Facilities Initiative of the U.S. Department of Defense, scheduled for 2005. The Initiative was a review process which resulted in the closure of military bases across the U.S. In 2006, the Council was restructured as the Maryland Military Installation Council (MMIC) as it is known today. The MMIC is an appropriate forum in which to discuss encroachment issues and compatible land use.

The Maryland Department of Commerce staffs and facilitates the MMIC through OMFA. The MMIC focuses on supporting military installations in Maryland, serves as a critical link to inform the Governor's Executive Council and state agencies of issues faced by the installations, and provides a forum to in which to address the issues. The MMIC identifies the necessary infrastructure and support needed by Maryland military installations for development and expansion and examines how that activity could affect surrounding communities. The MMIC reviews state policies to support military installations and maximize economic benefits to local communities.

The Maryland Department of Commerce has recognized the need to balance the missions of the military commands in Maryland with the economic viability of the communities that support those installations. That balance seeks to address the compatibility of economic growth with the long-term sustainability and operability of military operations statewide. The intent of the Maryland SJRIS is to further explore the opportunities and gaps in current known data, policies, and communication to enhance the balance between the state's economic development and military operations.

From the military perspective, areas of critical importance in sustaining the military mission in the State through compatible land uses includes areas around installations and supporting ranges, special use airspace, military operation areas, and military training routes. The goal of this report is to promote a more effective and efficient process to carry out statewide compatibility planning initiatives and implementation of Maryland JLUS recommendations. In addition, this report seeks to identify the existence of enterprise issues that may impact installations that have not completed a JLUS. The report should help all stakeholders increase collaboration at the local level between Maryland military installations and the surrounding communities.

For the State of Maryland, local communities, and the military to continue successfully supporting and conducting military missions across the state, all parties need to work in partnership to address current and future encroachment issues that emanate from incompatible land use planning. In some instances, the process to solve current encroachment issues or prevent future incompatible development can be enhanced by actions at the state level. Primary examples of where the state can be a key partner include, but are not limited to:

- promoting intergovernmental coordination, communication, and collaboration between the military, state, and local communities;

- identifying where statewide polices and/or legislation is needed;

- identifying where additional financial and technical resources are required; and

- providing political leadership to support ongoing negotiations or address an impasse between stakeholders.

JLUS Reports

Although several Maryland military communities have completed a JLUS study, there are other communities and installations where JLUS reports have not been completed. Many of the issues and recommended strategies are common across the jurisdictions and installations where studies have been completed The Maryland JLUS reports – along with reports completed in nearby states such as Virginia and North Carolina and across the country – have identified similar community/military compatibility issues that may be applicable to other locations in Maryland where Joint Land Use Studies have not been accomplished. (See Chapter 3 for legislative initiatives from other states.). Evaluating this information and leveraging it to support Maryland community/military planning will assist the state in taking appropriate action to help ensure that continued community development remains compatible with the current and future missions of Maryland military installations.

1.2 JLUS Process Overview

The Compatible Use grant program, administered by the Office of Economic Adjustment (OEA), enables local jurisdictions to complete Joint Land Use Studies that aim to:

- protect property rights and control in the JLUS Study Area;

- protect current and future operational and training missions at military installations; and

- create a locally-relevant document that builds consensus and obtains support from stakeholders, including local community, state, and federal officials; residents; and the military.

To achieve the JLUS goals and objectives, the process includes a public outreach program with a variety of participation opportunities for interested and affected parties. Through the public outreach process, stakeholders come together to identify compatible land uses and growth management recommendations in and adjacent to active military installations. The intent of the process is to establish and foster a relationship between the local communities, agencies, and military installations.

The primary goal of any JLUS is to protect the viability of all current and future military operations at an installation, while simultaneously guiding community growth, sustaining the environmental and economic vitality of the region, and protecting public health, safety, and welfare. To help meet this goal, there are three overarching JLUS objectives:

- **Understanding.** Convene community and military representatives to identify, confirm, and understand the compatibility issues in an open forum, taking into consideration the perspectives and needs

of both community and military. This includes public awareness, education, and input as part of a cohesive outreach program.

- **Collaboration.** Encourage cooperative land use and resource planning by military installations and surrounding communities so that future community growth and development are compatible with the training and operational missions and military operational impacts on adjacent and nearby lands in the JLUS Study Area.

- **Actions.** Provide a set of mutually-supported tools, activities, and strategies that local jurisdictions, agencies, and installations can implement to avoid or minimize compatibility issues. The actions proposed include civic measures to reduce community impacts on military operations as well as operational measures to mitigate installation impacts on surrounding communities. These actions will help decision makers resolve compatibility issues and prioritize projects within the annual budgeting process of their respective jurisdictions.

This SJRIS will not supplant the need to conduct a JLUS at specific locations where local actions are necessary to ensure successful community/installation compatibility planning. It is recommended that all locations in Maryland where military installations and local jurisdictions co-exist establish a collaborative approach to compatibility planning through a JLUS, in coordination with the Maryland Department of Commerce. This will enable the State of Maryland to establish a consistent baseline and allow for enterprise planning that incorporates both community and military needs. The baseline is derived from a set of mutually-applicable compatibility factors that can normalize issues and provide assistance with common response requirements to state level focus areas. A state-level synthesis can have predictive value for areas without a JLUS by evaluating the results and strategies developed in other communities. Additionally, by

identifying a common set of "baseline" or average of current conditions across the state relative to each compatibility issue, the state can provide a focused response from a resourcing, policy, legislative, or organizing perspective to help integrate the needs of the community and military.

1.3 Compatibility Factors

In preparing any JLUS, various compatibility planning factors are used in determining whether community and military plans, programs, and activities are compatible or in conflict with joint land uses such as community activities and military operations. The compatibility factors may vary slightly depending on the location of a given study, but Figure 1-1 shows the most typical factors. Each is summarized below.

Stakeholders and the public use the compatibility factors to help identify and organize issues that currently exist or could occur in the future. Once the issues are identified, the underlying root causes and associated aspects defined as links between issues and their root causes, or things associated with individual issues and their causes, or both, are analyzed and evaluated. The goal may be multiple strategies that address a collection of issues or multiple strategies for each singular issue. This supports the development of multiple strategies and recommendations that can be implemented to adequately address or resolve any issues that may arise.

Figure 1-1. **JLUS Compatibility Factors**

Air Quality (AQ)

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 the potential failure or inability to meet air quality standards that could limit future operations at an installation or in nearby areas.

Anti-Terrorism/Force Protection (AT)

Anti-Terrorism/Force Protection 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.

Biological Resources (BIO)

Biological resources include threatened and endangered species and the habitats they live in or use. For example, these resources can include wetlands and migratory corridors that support vulnerable species. The presence of sensitive biological resources may require special consideration for sustainable development and should be addressed early in the planning process.

Climate Adaptation (CA)

Climate adaptation is the effort to prepare for future climate changes resulting from natural factors and human activities that influence long-term atmospheric conditions. The effects may include fluctuations in sea levels, storm and tidal surges, and changes in flood potential that can present operational and planning challenges for the military installations and communities.

Communication/Coordination (COM)

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

Cultural Resources (CR)

Cultural resources are prehistoric and historic objects, documents, buildings, places, and sacred sites that are listed or eligible to be listed on the National Register of Historic Places or the Maryland Historical Trust registry. These resources are found across the American landscape, including on military installations, and can embody the history of JLUS communities and military missions. Preserving and allowing access to cultural resources can impact development on and off installations and should be integrated into planning efforts early on.

Dust / Smoke / Steam (DSS)

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, and other similar processes. Dust, smoke, and steam are compatibility issues when they are of such a sufficient quantity that they cause equipment damage or greatly reduce visibility to impact overall flight operations.

Energy Development (ED)

Development of energy sources, including alternative energy sources, such as solar, wind, or biofuels, may create compatibility issues related to glare (solar panels), vertical obstruction (windmills), or water quality/quantity.

Frequency Spectrum Capacity (FSC)

Frequency spectrum is the bandwidth that supports electronic communication and is of limited capacity. Population increases, business development, technological advances, and changes in military missions can place demands on spectrum capacity that result in incompatible usage.

Frequency Spectrum Impedance / Interference (FSI)

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

Housing Availability (HA)

Housing availability refers to 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 or the supply of military family housing provided by an installation.

Infrastructure Extensions (IE)

This factor covers the extension or provisioning of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the military operations by providing needed services (e.g., sewage treatment) and structural support (e.g., transportation systems and corridors). However, enhanced or expanded infrastructure could also encourage growth into areas near an installation that may be incompatible with current or future missions.

Land / Air Space Competition (LAS)

The military manages or uses land and air space for 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.

Land Use (LU)

In this context, land use planning relates to the government's role in protecting the public's health, safety, and welfare through the strategic management of activities on and changes to the landscape. County and local jurisdictions' growth policy / general 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 or that have severe impacts on other properties. For instance, residential uses are often separated from installation runway clear zones and accident potential zones, as well as flight path imaginary surfaces to avoid impacts related to safety, noise, vertical obstruction, or quality of life.

Legislative Initiatives (LEG)

Legislative initiatives are federal, state, or local laws and regulations that may have a direct or indirect effect on a military installation's ability to conduct current or future missions. Laws and regulations may also constrain the potential to develop areas surrounding an installation.

Light and Glare (LG)

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 can cause excessive glare and illumination that impact 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 adjacent communities.

Marine Environments (MAR)

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

Noise (NOI)

Sound that reaches unwanted levels is considered noise. Exposure to high noise levels can have a significant impact on activity levels, health, and safety. Compatibility planning must consider the potential impacts, or perceived impacts, of noise on people and animals (wild and domestic). Exposure to high noise levels can have a significant impact on human activity, health, and safety.

Public Trespassing (PT)

This factor identifies both intentional and unintentional trespassing on military installations as a potential threat to public welfare and the safe execution of military operations.

Roadway Capacity (RC)

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

Safety Zones (SA)

Safety zones are areas in which development should be more restricted due to the higher risks to public safety. Areas of particular concern include Accident Potential Zones, Weapons Firing Range Safety Zones, and Explosive Safety Zones.

Scarce Natural Resources (SNR)

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

Vertical Obstructions (VO)

Vertical obstructions are created by buildings, trees, structures, or other features that may encroach into navigable airspace used for military operations. Areas that may be incompatible with vertical improvements and features include aircraft approach areas, transitional, inner horizontal, outer horizontal, and conical areas, as well as military training routes. Vertical obstructions can present a safety hazard to both the public and military personnel.

Vibration (V)

Vibration is an oscillation or motion that alternates between two opposing directions and may occur because of an impact, explosion, noise, mechanical operation, or other change in the environment. Vibrations are frequently caused by military and civilian activities and can cause structural damage to buildings.

Water Quality / Quantity (WQQ)

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

1.4 Maryland Military Installation Overview

Maryland has 20 military facilities and 12 major installations. The 12 major installations included in this report were identified based on:

- Geographic size of facility (large installation versus site or office park / building setting)
- Standalone facility or annex to another installation
- Complexity of mission / installation and to what extent the planning compatibility factors could be applied with useful analysis

These facilities host branches of the United States Armed Forces and provide a wide array of mission support for the nation's defense. While located in Maryland, many of these military installations are national defense assets that are integral to missions, operations, and training across the country. Table 1-1 identifies the primary active military installations in Maryland, while Figure 1-2 maps their respective locations. Figure 1-3 shows the locations of all National Guard and Reserve facilities in the state.

According to the 2015 Maryland Economic Impact Study of Military Facilities, conducted by the Maryland Department of Commerce, the economic impact of military activities in the state was more than $57 billion in 2012, making the military a significant industry for local communities and the state.

Table 1-1. **Primary Active Duty Military Installations in Maryland**

Installation / Service	Location (County / City / Jurisdiction)	Primary Mission	JLUS Complete
Aberdeen Proving Ground / USA	Harford County	Army Material, Communications & ChemBio Research Development, Test & Evaluation (RDT&E)	Yes
Adelphi Laboratory Center / USA	Montgomery & Prince George's Counties	Army's corporate Research Lab. Science and Technology	No
Blossom Point Research Facility / USA	Charles County	Ordnance Testing & Evaluation (T&E)	Yes
Fort Detrick / USA	City of Frederick	Biomedical Research & Development (R&D)	No
Fort George G Meade / USA	Anne Arundel County	Information, Intelligence & Cyber Operations	No
Joint Base Andrews / USAF	Prince George's County	Worldwide Airlift & Regional Air Security Support	Yes
Naval Air Station (NAS) Patuxent River / USN	St. Mary's County	Aircraft Research Development, Test & Evaluation (RDT&E)	Yes
Naval Research Lab (NRL) Chesapeake Bay / USN	Calvert County	Electronics / Materials Research & Development (R&D)	No
NSA Bethesda / Walter Reed / National Naval Medical Center / USN	City of Bethesda	Hospital Services, Medical Research & Education	No
Naval Support Activity (NSA) Annapolis and US Naval Academy / USN	Anne Arundel County and City of Annapolis	Base Operating Support and Naval Education and Training	No
Naval Surface Warfare Center (NSWC) Carderock / USN	City of Bethesda	Naval Ships and Submarine Research Development, Test & Evaluation (RDT&E)	No
Naval Support Facility (NSF) Indian Head / USN	Charles County	Naval Weapons & Energetics Research Development, Test & Evaluation (RDT&E)	Yes

Please see the next page.

Figure 1-2 Active Duty Military Installations across the State of Maryland
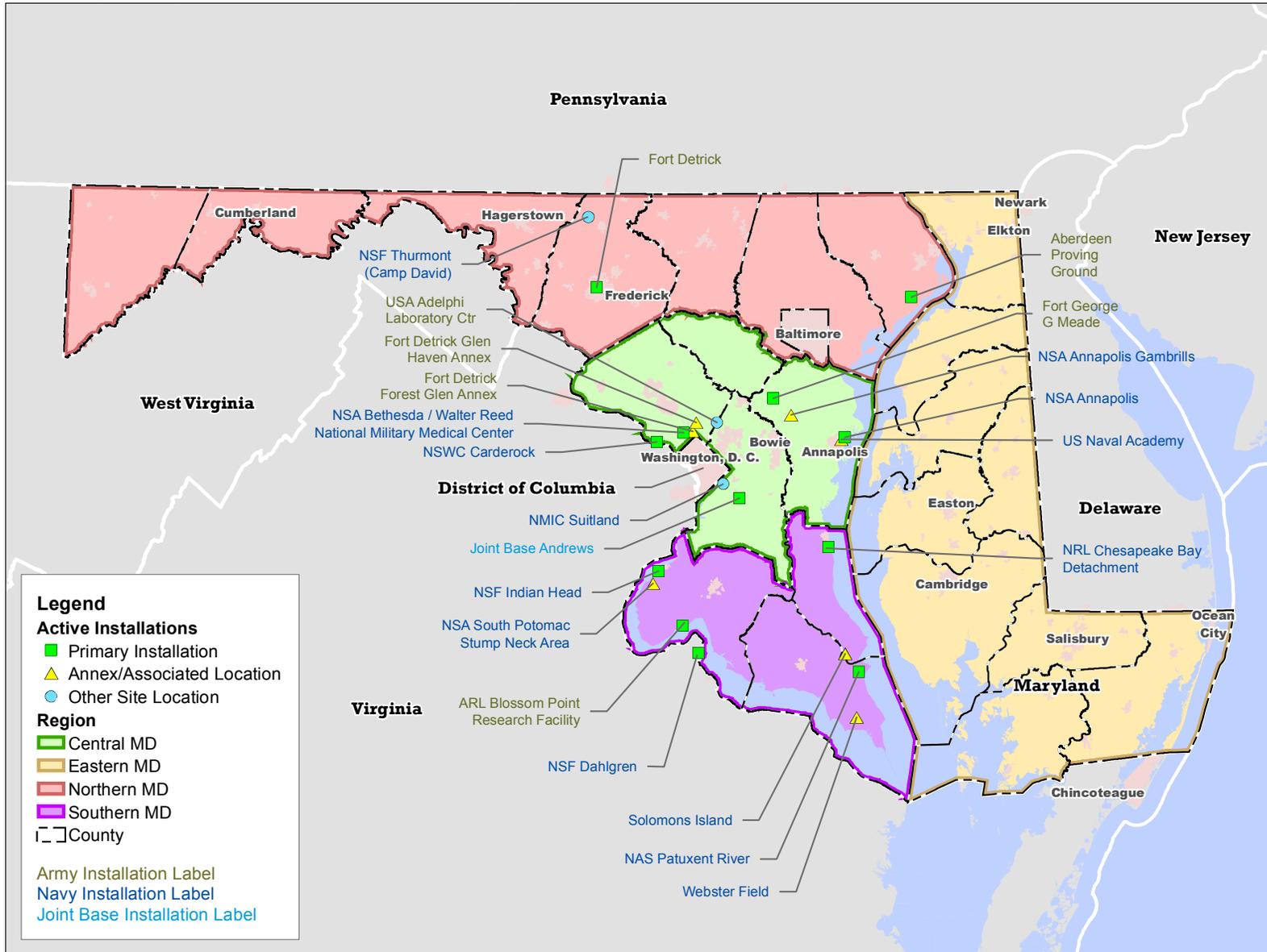
Figure 1-3 National Guard and Reserve Facilities across the State of Maryland

Legend
- 🔺 Maryland National Guard Facilities
- 🔺 Maryland Reserve Facilities

Region
- Central MD
- Eastern MD
- Northern MD
- Southern MD
- County

National Guard Facilities				Reserve Facilities	
1 Cumberland	11 Greenbelt	22 Dundalk		A Cumberland	K NOSC Baltimore
2 Hagerstown	12 Cheltenham	23 Glen Burnie		B Ft Detrick	L Jeceline, Baltimore
3 Frederick	13 La Plata	24 Annapolis		C Gaithersburg	M Curtis, Baltimore
4 Westminster	14 Reisterstown	25 Edgewood		D Rockville	N Brandt, Baltimore
5 Sykesville	15 Pikesville	26 Havre de Grace		E Riverdale	O MCR Center Baltimore
6 Ellicott City	16 Catonsville	27 Elkton		F Ft Meade	P Annapolis
7 Olney	17 Baltimore City 1	28 Queen Anne		G Joint Base Andrews	Q Abingdon
8 White Oak	18 Towson	29 Easton		H Upper Marlboro	
9 Adelphi	19 Baltimore City 2	30 Pax River NAS		I Owings Mill	
10 Laurel	20 Glen Arm	31 Salisbury		J Sheridan, Baltimore	
	21 Parkville				

The intent of Base Realignment and Closure (BRAC) is to ensure continued effective U.S. national defense, including global interests. The BRAC process identifies installations that are no longer aligned to the most efficient military use and proposes the realignment or closure of those installations. These BRAC actions could potentially impact existing installations by expanding the missions of installations that are realigned or closing an installation. Maryland has fared well in previous BRAC processes, gaining additional missions and expanding the military presence in the state.

Since the last BRAC in 2005, the DoD and the military services have identified excess capacity in installations across the U.S., due primarily to changes in military missions. However, it is also based on a realization that future military requirements and budgets mandate a more efficient use of military assets, as well as the implementation of an asset management approach as a fundamental component of installation management. Base closures result in a reduced footprint and thus, require an increase in efficiency. While there is no BRAC currently scheduled, it is possible there will be future BRAC rounds that will reduce installation footprints and realign missions. Community encroachment can impede military missions and drive closure independent of excess capacity. Because encroachment on military installations and supporting missions is a major challenge facing the military, states and communities should engage in collaborative community/military compatibility planning to minimize encroachment concerns.

Of the 12 primary military installations in Maryland, only five have participated in Joint Land Use Studies. Due to the size and scope of some locations, a full JLUS report may not be required. Table 1-1 indicates which of the primary active duty installations in Maryland have and have not completed JLUS reports.

1.5 Military Influence Area / Mission Footprint

Defining, understanding, and managing an installations' Military Influence Area (MIA) is necessary for successful compatibility planning. The MIA is used to identify encroachment and to create and implement effective planning strategies.

As defined in the DoD Joint Publication 3-31: Command and Control for Joint Land Operations (2010), a Military Influence Area (MIA) is:

> *A geographic area in which a commander can directly influence operations by maneuver or fire support systems normally under the commander's command or control. The area of influence normally surrounds and includes the assigned operational area. (p. III-14)*

From a compatibility planning perspective, MIA is defined as a geographic planning or regulatory area where military operations impact local communities and conversely, where local activities may affect the military mission. The MIA is a planning tool used to maintain operational capability, promote awareness of military activities to surrounding communities, and establish regulatory or other restrictions on certain uses or types of development requirements (e.g., when not restricted for designated areas). Each military installation in Maryland has an MIA that includes:

- the installation-supported military missions;

- the specific military operations and training activities conducted at and around the installation; and

- the preservation of the nature and the environment surrounding the installation area.

Examples of underlying mission footprints (MF) that make up the MIA include airspace use, noise areas, safety areas or zones, and frequency spectrum. The compatibility of the MIA/MF is evaluated using underlying characteristics of the land use or activities that are captured in the compatibility factors discussed in the previous section.

The MIA associated with an installation and related military operations can vary greatly in size and scope. In a few instances, the MIA corresponds with the physical borders of the installation; however, more typically, an MIA extends beyond an installation boundary and into the surrounding communities. At installations such as Joint Base Andrews and NAS Patuxent River where most missions are based on flying aircraft, the MIA can reach across regional areas due to the airspace used for operations and training. At an installation such as Aberdeen Proving Ground, ground operations can generate noise that extends beyond the facility boundaries. At the Blossom Point Research Facility, frequency spectrum is a component of the MIA and can impact both installation operations and nearby community activities. In some cases, such as NSF Dahlgren in Virginia, installations that are in other states can have an MIA that extends into Maryland. Conversely, NSF Indian Head has an MIA that extends beyond Maryland into Virginia. A key takeaway is that MIAs are not confined by jurisdictional boundaries; there must be effective coordination and communication among states, local jurisdictions, and installations regarding community and military compatibility planning. Figure 1-4 shows the MIA for the five Maryland bases with a completed JLUS, along with NSF Dahlgren (January 2015). The map shows most MIAs extending well beyond the local jurisdiction where the installation is situated and often across state boundaries.

Figure 1-5 represents areas and regions impacted by military operations, specifically as related to airspace. The map provides a view of special use airspace (SUA) and low-level military training routes (MTR) across the state.

SUA is airspace of defined dimensions where certain kinds of activities are confined because of their nature and/or where non-designated operations may be restricted. Low-level military training routes are specific routes for training military pilots to gain and maintain proficiency in tactical "low-level" flying. Low-level airspace, specifically SUA and MTR below 1,000 feet, is important to the military training mission and poses unique hazards to both non-military airspace activities as well as underlying land uses. In the case of MTR, an aircraft can fly very low and even relatively modest structures like cell towers or shorter skyscrapers can impact flight operations. At altitudes between 250 and 499 feet, military aircraft in this range can be impacted by other aircraft, large antennas, large buildings, or wind turbines. Figure 1-6 represents an approximation of low-level flight operations and restrictions in Maryland. The color-coded map shows all SUA and MTR altitude allowances and restrictions, with airspace that is restricted between ground level and 249 feet colored red. Figure 1-7 provides a composite view of the MIAs for the five Maryland installations and NSF Dahlgren where Joint Land Use Studies have been completed, along with airspace MF in terms of the SUA and MTR. This map is useful to see the entire installation MIA and airspace MF across Maryland and into other states. Together, the figures clearly illustrate that airspace MF in Maryland covers much of the state.

Figure 1-4

Military Influence Areas in Maryland

Legend

Military Influence Area Identified in a JLUS	Navy	Army Guard	County	Interstate	Waterbody
	Army	Air Force	State	US Route	
		Air Force Guard			

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017. Department of Defense, 2017.

Please see the next page.

Figure 1-5

Airspace Mission Footprint Below 1,000 ft in Maryland
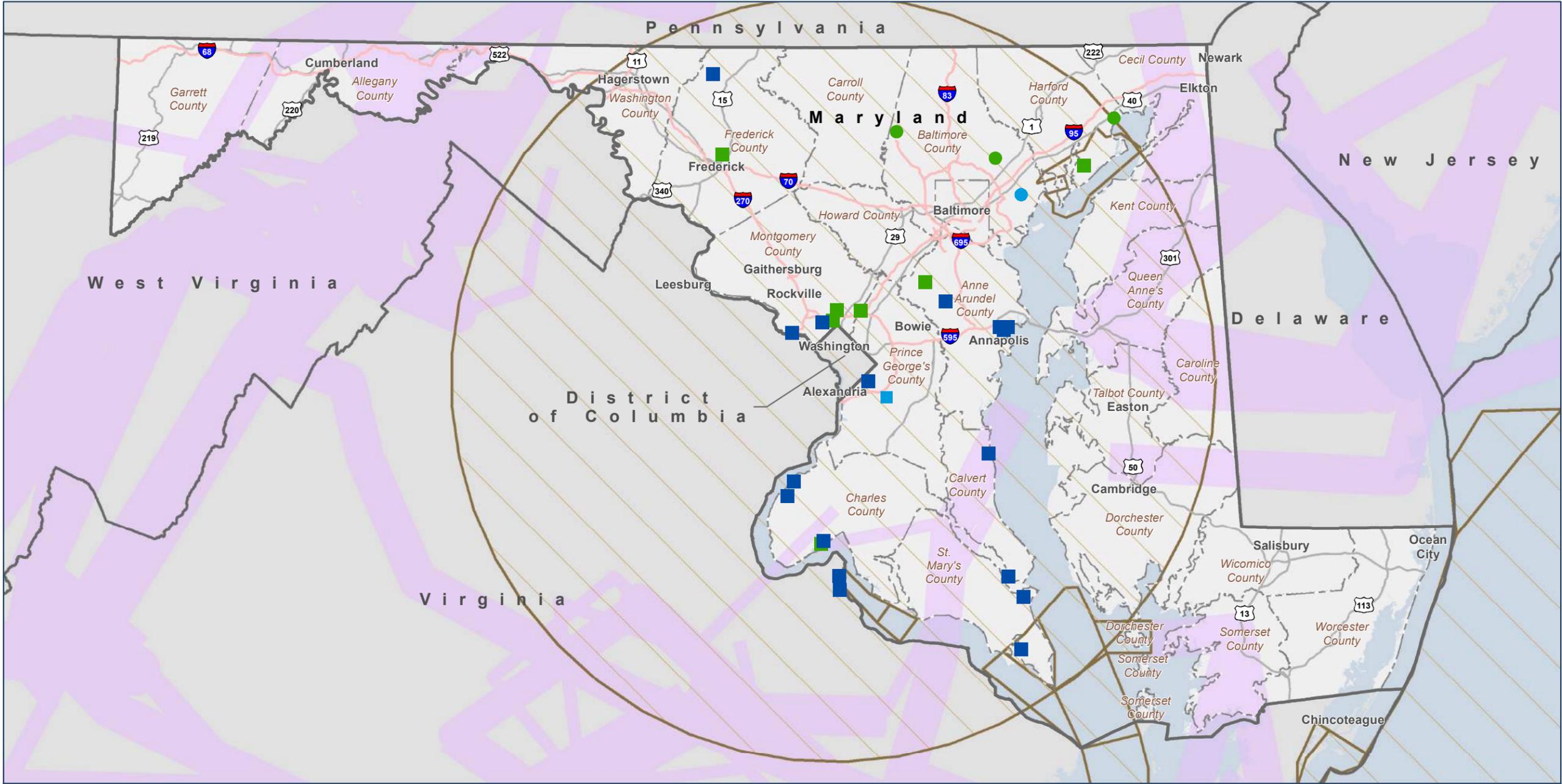
Legend

- ■ Navy
- ■ Army
- ● Army Guard
- ■ Air Force
- ● Air Force Guard
- Military Training Routes With <1,000ft Minimum Altitude
- Special Use Airspace With <1,000ft Minimum Altitude
- County
- State
- Interstate
- US Route
- Waterbody
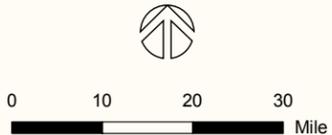
0   10   20   30 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017. Department of Defense, 2017.

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Please see the next page.

Legend

Military Training Route & Special Use Air Space Low Altitude

Red - Surface-249 ft	Orange - 250-499 ft	Yellow - 500-999 ft
Green - 1000+ ft		

Navy
Army

Air Force
Air Force Guard

Army Guard

County
State

Interstate
US Route

Waterbody

0   10   20   30 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and
National Transportation Atlas Databases (NTAD) 2015.
Matrix Design Group, 2017. Maryland IMAP, 2017. Department of Defense, 2017.

Figure 1-6
Maryland Low Level Flight Compatibility

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Please see the next page.

Figure 1-7
Military Influence Areas and Airspace Mission Footprint Below 1,000 ft in Maryland

Please see the next page.

1.6 Summary of Work Approach and Report Structure

The approach used in preparing the SJRIS and the format of the document are designed to support the recommendations provided in Chapter 5. The methodology used to develop the Maryland Statewide Joint Land Use Study RIS included:

- collecting new data through conducting stakeholder interviews and surveys;

- compiling existing data from JLUS reports completed at Maryland installations and other installations in nearby states, and assessing any identified compatibility issues for their applicability to Maryland at large;

- developing compatibility site assessments for each primary military installation based on compatibility factors and identified issues (completed JLUS reports) or extrapolated issues (no JLUS report);

- assessing Maryland policies and laws related to community/military compatibility planning;

- evaluating community/military compatibility planning policies and laws from other states that may be applicable to Maryland; and

- developing goals and recommendations for Maryland, based on intersect/gap analysis of issues, strategies, policies, and laws.

The following outlines the structure of the SJRIS and provides a brief description of each chapter in the report.

Compatibility Planning and Issue Assessment – Chapter 2

Data from the JLUS reports completed at five Maryland installations was compiled and evaluated, looking for issues that could be applicable to other installations and have policy or legislative potential for statewide resolution. Data from installations outside of Maryland but with the potential impact and/or similar compatibility concerns were also included. Relevant issues that were identified or extrapolated for each compatibility factor were then used to develop compatibility site assessments for the primary military installations in the state. Finally, the compatibility factors and issues were organized by topic and aligned with the Maryland state agency with oversight responsibility for each topic.

Legislative Review and Gap Analysis – Chapter 3

A review of existing state legislation was conducted to identify policies and programs that impact community and military compatibility. State legislation directly and indirectly related to military compatibility was evaluated, to identify policies that impact the compatibility factors identified in the five completed JLUS studies and to assess where there are gaps in addressing the compatibility factors. Recommendations were developed to assist the state with identifying new policies to promote compatible land use and resource planning in Maryland.

Compatibility Communication Analysis – Chapter 4

Chapter 4 provides an analysis of the communication structures and strategies between state, local communities, and the military for addressing community/military compatibility. As part of the communication plan, interviews were conducted and surveys were developed to obtain input from state, regional, and local stakeholders. The findings were analyzed to create a set of recommendations for communication methods.

In addition, strategies and policy recommendations were aligned with state agency missions to help identify lines of communication for addressing compatibility factors.

Recommendations – Chapter 5

Chapter 5 provides a set of goals with analysis and findings to support a series of recommendations that are derived from the assessment of the data and information presented in Chapters 2 through 4. In Chapter 5, the compatibility site assessments and installation MIA (both from Chapter 2) are analyzed and summarized, along with the legislative review information (Chapter 3). The recommendations identify opportunities for the state to take policy/planning actions that facilitate the desired compatibility planning outcomes. The communication plan (Chapter 4) acts as a guide to work with the affected stakeholders as the potential recommended actions are developed and implemented.

In summary, the objective of the SJRIS is to identify potential compatibility issues that may have statewide and/or regional impacts and to determine opportunities for the State of Maryland to take policy actions or assist local jurisdictions with compatibility planning in order to address identified concerns.

Compatibility Planning and Issue Assessment [2]

Chapter 2 provides information in the form of compatibility site assessments and military influence area maps for Maryland installations where a JLUS has been completed. In addition, at installations where a JLUS Report has not been completed, extrapolated data was used to provide notional compatibility site assessments. The intent is to identify compatibility factors and/or issues that may have statewide or regional applicability and where there is a potential to address them through state level policy actions (Chapter 3 provides an assessment of applicable Maryland policy).

2.1 Methodology

The methodology used to develop the information presented in Chapter 2 included:

- Compiling existing data from JLUS Reports completed at five Maryland installations and Naval Support Facility (NSF) Dahlgren located just over the southern Maryland border in Virginia, specifically where the issues had potential impacts to Maryland locations. As mentioned in Chapter 1 of this report, the five military installations with existing JLUS Reports are:

  - o Aberdeen Proving Ground

  - o Blossom Point Research Facility

  - o Joint Base Andrews

  - o NAS Patuxent River

  - o NSF Indian Head

- Evaluating existing data from completed Statewide JLUS Report/Studies in Virginia and North Carolina to look for issues that were highlighted in those reports as having statewide/regional applicability and that would likely have similar applicability in Maryland.

- Identifying instances where issues identified in JLUS Reports may have applicability across Maryland, or in specific regions of the state, to evaluate potential strategies that could be implemented at the state level and identify specific state agencies that could assist regional and local jurisdictions with implementation.

- Developing a "Compatibility Site Assessment" for each location with a completed JLUS based on compatibility factors and issues. Each compatibility factor was rated "orange," "yellow," or "green" using a qualitative assessment of the issues identified at each installation. All of the Compatibility Site Assessment Ratings are qualitative in nature and developed on the following general criteria:

  Green Rating indicates no issues were identified in the completed JLUS Report and/or no issues were extrapolated to locations with no completed JLUS Report.

Yellow Rating indicates relatively minor issues identified in the completed JLUS Report and/or minor issues were extrapolated to locations with no completed JLUS Report.

Orange Rating indicates relatively major issues identified in the completed JLUS and/or relatively major issues were extrapolated to the locations with no completed JLUS Report.

- Developing a "Notional Compatibility Site Assessment" based on compatibility factors and extrapolation of potential issues that may be present at each preliminary military installation where a JLUS has not been completed.

- Organizing compatibility factors by specific topics and aligning them to Maryland state agencies. In the Compatibility Site Assessments, the compatibility factors are organized by topic (e.g. all environmentally related factors) and then aligned to the Maryland Executive Council/state agency that would likely have a responsibility in overseeing the coordination with other regional/local jurisdictions.

The Maryland Executive Council is chaired by the Governor and members include the Lt. Governor and state agency secretaries that make up the Governor's Cabinet. The Council meets weekly, providing leadership and management for the state government. A subcabinet that operates under the Executive Council is the Maryland Smart Growth Subcabinet that is charged with advising the Governor on state law, regulations, and procedures needed to support the Smart Growth Policy. The Smart Growth Subcabinet impacts land use in Maryland by supporting land use related policy and resources within each member's area of influence.

2.2 Maryland Installations with Completed JLUS Report

Compatibility Site Assessments

The Compatibility Site Assessment Reports for Aberdeen Proving Ground, Blossom Point Research Facility, Joint Base Andrews, NAS Patuxent River, and NSF Indian Head are provided in Tables 2-1 through 2-5, respectively. Each table provides a(n):

- Compatibility factor title;

- Installation rating for that compatibility factor (Green/Yellow/Orange);

- Whether the compatibility factor may have any statewide/regional implications; or, if a compatibility factor was not indicated as a state or regional concern, it is designated by "None identified";

- Functional group the compatibility factor was grouped into; and

- Organization within the Maryland Executive Council in which the functional group/compatibility factor most closely aligns.

Table 2-1.   Aberdeen Proving Ground Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Subcabinet
Coordination/Communication	🟠	Statewide		
Air Quality	🟢	None identified	Environment	Secretary of the Environment
Water Quality/Quantity	🟡	Regional		
Climate Adaptation	🟡	Regional		
Dust/Smoke/Steam	🟢	None identified		
Noise/Vibration	🟠	Regional		
Biological Resources	🟢	None identified	Natural Resources	Secretary of Natural Resources
Marine Environments	🟠	None identified		
Scarce Natural Resources	🟢	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	🟢	None identified	Security	Office of the Superintendent of the Maryland State Police
Public Trespassing	🟢	None identified		
Roadway Capacity	🟠	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	🟡	None identified		
Housing Availability	🟢	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟠	Statewide	Planning	Secretary of Planning
Cultural Resources	🟢	None identified		
Land/Air/Sea Spaces	🟢	None identified		
Light and Glare	🟢	Regional		
Safety Zones	🟠	Regional		
Vertical Obstructions	🟡	Regional		
Frequency Spectrum Capacity/Interference	🟠	Regional	Frequency Management	Secretary of Information Technology

Table 2-2.   Blossom Point Research Facility Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Subcabinet
Coordination/Communication	🟡	Statewide		
Air Quality	🟢	None identified		
Water Quality/Quantity	🟢	Regional		
Climate Adaptation	🟡	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	🟢	None identified		
Noise/Vibration	🟠	Regional		
Biological Resources	🟢	None identified	Natural Resources	Secretary of Natural Resources
Marine Environments	🟢	None identified		
Scarce Natural Resources	🟢	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	🟢	None identified	Security	Office of the Superintendent of the Maryland State Police
Public Trespassing	🟢	None identified		
Roadway Capacity	🟢	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	🟢	None identified		
Housing Availability	🟢	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟠	Statewide		
Cultural Resources	🟢	None identified		
Land/Air/Sea Spaces	🟢	None identified	Planning	Secretary of Planning
Light and Glare	🟢	Regional		
Safety Zones	🟢	Regional		
Vertical Obstructions	🟡	Regional		
Frequency Spectrum Capacity/Interference	🟠	Regional	Frequency Management	Secretary of Information Technology

Table 2-3.   Joint Base Andrews Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Subcabinet
Coordination/Communication	🟡	Statewide		
Air Quality	🟢	None identified		
Water Quality/Quantity	🟡	Regional		
Climate Adaptation	🟢	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	🟢	None identified		
Noise/Vibration	🟠	Regional		
Biological Resources	🟢	None identified		
Marine Environments	🟢	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	🟢	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	🟢	None identified	Security	Office of the Superintendent of the Maryland State Police
Public Trespassing	🟢	None identified		
Roadway Capacity	🟠	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	🟢	None identified		
Housing Availability	🟢	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟠	Statewide		
Cultural Resources	🟡	None identified		
Land/Air/Sea Spaces	🟢	None identified	Planning	Secretary of Planning
Light and Glare	🟢	Regional		
Safety Zones	🟠	Regional		
Vertical Obstructions	🟠	Regional		
Frequency Spectrum Capacity/Interference	🟢	Regional	Frequency Management	Secretary of Information Technology

Table 2-4. NAS Patuxent River Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Subcabinet
Coordination/Communication	🟠	Statewide		
Air Quality	🟢	None identified		
Water Quality/Quantity	🟡	Regional		
Climate Adaptation	🟡	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	🟢	None identified		
Noise/Vibration	🟠	Regional		
Biological Resources	🟡	None identified		
Marine Environments	🟢	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	🟢	None identified		
Energy Development	🟠	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	🟡	None identified	Security	Office of the Superintendent of the Maryland State Police
Public Trespassing	🟢	None identified		
Roadway Capacity	🟠	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	🟢	None identified		
Housing Availability	🟢	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟠	Statewide		
Cultural Resources	🟢	None identified		
Land/Air/Sea Spaces	🟡	None identified	Planning	Secretary of Planning
Light and Glare	🟡	Regional		
Safety Zones	🟠	Regional		
Vertical Obstructions	🟡	Regional		
Frequency Spectrum Capacity/Interference	🟠	Regional	Frequency Management	Secretary of Information Technology

Table 2-5.   NSF Indian Head Compatibility Site Assessment

Compatibility Factor	Rating O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Subcabinet
Coordination/Communication	🟠	Statewide		
Air Quality	🟢	None identified		
Water Quality/Quantity	🟢	Regional		
Climate Adaptation	🟡	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	🟢	None identified		
Noise/Vibration	🟡	Regional		
Biological Resources	🟢	None identified		
Marine Environments	🟢	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	🟢	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	🟢	None identified	Security	Office of the Superintendent of the Maryland State Police
Public Trespassing	🟢	None identified		
Roadway Capacity	🟢	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	🟢	None identified		
Housing Availability	🟢	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟠	Statewide		
Cultural Resources	🟢	None identified		
Land/Air/Sea Spaces	🟢	None identified	Planning	Secretary of Planning
Light and Glare	🟢	Regional		
Safety Zones	🟡	Regional		
Vertical Obstructions	🟢	Regional		
Frequency Spectrum Capacity/Interference	🟡	Regional	Frequency Management	Secretary of Information Technology

Military Influence Areas

As discussed in Chapter 1, defining and understanding the Military Influence Area (MIA) and Military Footprint (MF) for military installations is a critical piece of successful compatibility planning. The MIA and MF will assist in developing policies that address compatibility. Maps are provided in Figures 2-1 through 2-5, that show each installation's MIA. In addition, Figure 2-6 shows the map for NSWC Dahlgren which, although located in Virginia, has an MIA that extends into Maryland. Land uses that underlie airspace that are close to military installations, or are within the installation MIA such as airports, schools, libraries, hospitals, community centers and natural resource areas, may, in certain situations, be incompatible depending on the MFs that are present.

The MIA for Aberdeen Proving Ground, shown in Figure 2-1, extends across much of Harford County, portions of Baltimore County, as well portions of Kent County and Cecil County on the eastern shore. In addition, the MIA covers the entire portion of the northern Chesapeake Bay.

Figure 2-2 shows the MIA for Blossom Point Research Facility. The identified MIA is relatively small, covering portions of Charles County and the Potomac River.

Joint Base Andrews has a fairly extensive MIA as shown in Figure 2-3 due to its flying mission. The MIA covers much of Prince George's County, touching Anne Arundel County and Charles County. In addition, Washington DC underlies a portion of the installation MIA.

The largest MIA for Maryland installations is at NAS Patuxent River including Webster Field. This is not surprising considering the mission at the installation which includes extensive aircraft flight activities. The MIA affects multiple jurisdictions including St. Mary's, Charles and Calvert Counties on the western shore along with Dorchester, Somerset, Wicomico, Talbot, and

Caroline Counties on the eastern shore. In addition, Virginia and large portions of the Chesapeake Bay are covered by the MIA. Figure 2-4 shows the extent of the NAS Patuxent River MIA.

NSF Indian Head has a MIA that covers a portion of Charles County, areas on the Potomac River, and extends into Virginia. Figure 2-5 provides a view of the MIA.

Finally, Figure 2-6 provides a view of the NSF Dahlgren MIA which extends beyond Virginia into Maryland along the Potomac River and into St. Mary's and Charles Counties.

As discussed previously, being aware of and understanding the MIA for Maryland installations is a key element in compatibility planning between communities and military installations. The MIA can also indicate where the State of Maryland may need to work with Virginia or Washington DC to prevent incompatible activities from encroaching on the military missions in Maryland. Understanding an installation's MIA can help determine what types of compatibility issues may currently exist or could exist in the future. For example, the MIA can affect how widespread communication/coordination between bases and communities needs to be to ensure concerns and issues are identified before encroachment occurs. Land use is another factor where the MIA can play a major role as larger MIAs can affect larger areas of land thereby impacting where development may be a greater concern.

Figure 2-1
Aberdeen Proving Ground Military Influence Area / Adelphi Laboratory Center

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Legend:
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body
- Airport/Airfield

0   2   4 Mile

Figure 2-2
ARL Blossom Point Military Influence Area

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and
National Transportation Atlas Databases (NTAD) 2015.
Matrix Design Group, 2017. Maryland IMAP, 2017.

Legend:
- Military Influence Area Identified in a JLUS
- Municipality
- State Boundary
- Military Installation
- US Route
- Other Major Road
- Local Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

Figure 2-3
Joint Base Andrews Military Influence Area
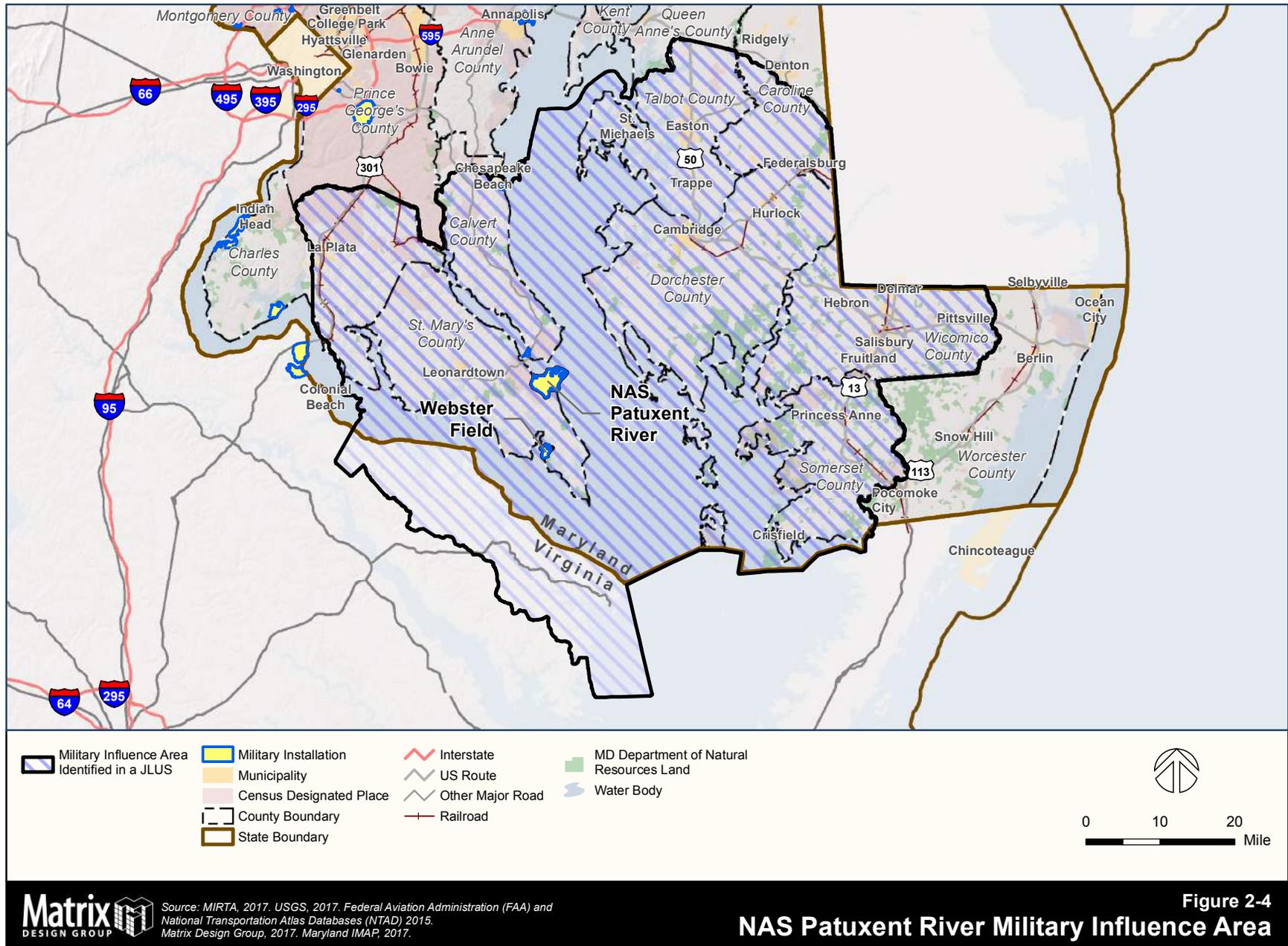
Figure 2-4
NAS Patuxent River Military Influence Area

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and
National Transportation Atlas Databases (NTAD) 2015.
Matrix Design Group, 2017. Maryland IMAP, 2017.

Legend

Military Influence Area Identified in a JLUS	Military Installation
Municipality	Interstate
Census Designated Place	US Route
County Boundary	Other Major Road
State Boundary	Railroad
	MD Department of Natural Resources Land
	Water Body

Figure 2-5
NSF Indian Head Military Influence Area

Legend:
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- US Route
- Other Major Road
- Local Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0 2 4 Mile

Matrix DESIGN GROUP

Legend:

- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- US Route
- Other Major Road
- Local Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0   2   4 Mile

Figure 2-6
NSF Dahlgren Military Influence Area
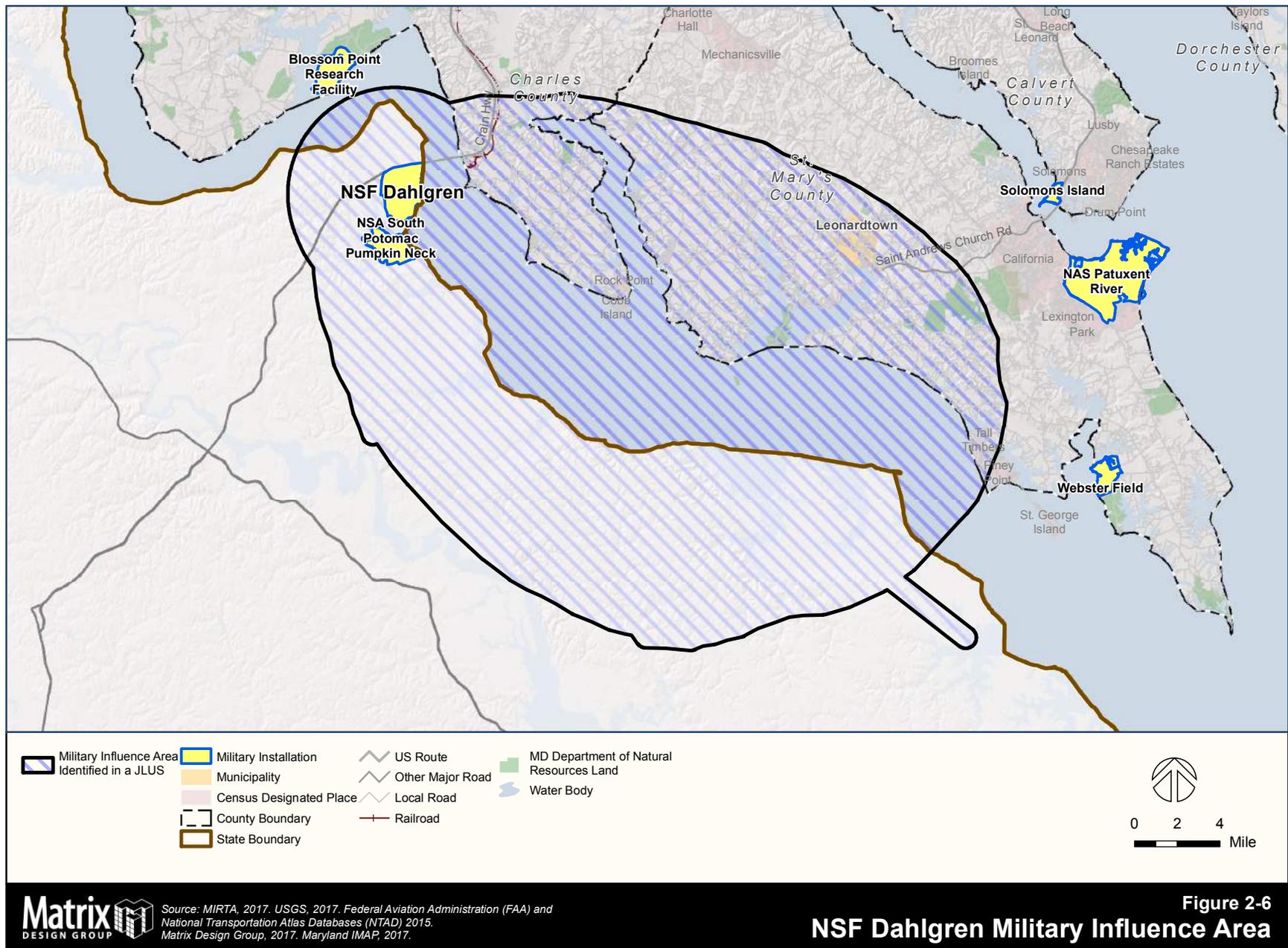
2.3 Maryland Installations without a Completed JLUS Report

The Notional Compatibility Site Assessments were prepared for Maryland military installations that have not completed a JLUS. These sites include:

- Fort Detrick
- Fort Meade
- NSA Bethesda/Walter Reed National Naval Medical Center
- NSA Annapolis/Naval Academy
- NRL Chesapeake Bay
- NSWC Carderock

These Notional Compatibility Site Assessments are provided in Appendix 4. As discussed previously, the notional assessments for installations where no JLUS Report has been completed were developed by extrapolating potential issues from other installations where JLUS Reports have been completed (other readily available information was also consulted) and consideration of the installation mission. It is recommended that these sites plan to complete a JLUS in order to establish a baseline that is compatible with those that are already complete in order to provide an accurate quantitative site picture for the State of Maryland to view their military installations from an enterprise perspective.

2.4 Statewide and Regional Compatibility Issues

The compatibility site assessment information, when looked at across all locations, provides some insight regarding which compatibility issues are more likely to have statewide or regional applicability. Compatibility factors were identified as being potential statewide issues either through the completed JLUS Reports or extrapolated to locations without a JLUS Report (e.g. coordination/communication) or based on the potential that a compatibility factor lends itself to statewide compatibility planning (e.g. energy development). Compatibility factors that were identified as being potentially regionally-based issues were identified as such either through the completed JLUS Reports or extrapolated to locations without a JLUS Report, but where regional influences were involved (e.g. climate adaptation, safety zones).

Five compatibility factors/issues were identified as having potential for statewide applicability:

Coordination/Communication: Communication/coordination relates to the level of interaction on compatibility issues among military installations, jurisdictions, land and resource management agencies, and conservation authorities. A lack of coordination could lead to incompatible development, encroachment on the installation and/or the community, and impacts to mission readiness.

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.

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' growth policy/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 or lighting. They can also constrain development potential in "priority funding areas and designated growth" areas surrounding an installation.

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.

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. Capacity can hinder a community through traffic congestion, delays in emergency first response, and overall roadway safety.

Seven compatibility factors/issues were identified as having potential for regional applicability:

Climate Adaptation: Changes in climate can affect sea levels, alter ecosystems, and create weather variations that can impact long-term operations and the viability of land, air, and sea training.

Frequency Spectrum Capacity/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 specific frequency because of similar frequency competition (interference).

Light/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.

Noise/Vibration: 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. 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.

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.

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 a safety hazard to both the public and military personnel.

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. Groundwater contamination was also evaluated for this factor.

Compatibility factors/issues are identified as having potential statewide/regional application to assist in the analysis of what direct policy/legislative actions the state might take to address the underlying concerns or where the state may be able to assist local jurisdictions in resolving the concerns. Additional information and analysis on compatibility planning as it relates to Maryland policies and legislation is provided in Chapter 3 and recommendations related to strategies to potentially address statewide compatibility factors/issues are included in Chapter 5.

Please see the next page.

State Policy Review

Chapter 3 reviews existing Maryland policies and legislation related to compatibility planning. The intent of the State of Maryland policy assessment is to identify existing state policies that address community/military compatibility and to identify where there are gaps in the available policies concerning community/military compatibility. Compatibility factors were assessed in the five JLUS Reports previously completed in Maryland (see Chapters 1 and 2) to determine whether community and military plans, programs, and activities are compatible or in conflict. Addressing policy gaps may enhance community/military compatibility planning and resolve existing encroachment issues while preventing future incompatibility.

3.1 Methodology

The methodology used to assess the State of Maryland compatibility policies involved data collection and analysis is summarized below:

- A review of existing state legislation was conducted to identify policies and programs that impact community and military compatibility. The sources used for this research were the State of Maryland legislative website and the Readiness and Environmental Protection Integration (REPI) Program website.

- State legislation that directly or indirectly relates to military compatibility was evaluated to identify policies that impact the compatibility factors isolated in the completed JLUS studies and to

assess where there are gaps in policy that address these compatibility factors.

- Relevant policies were compiled in a spreadsheet and organized by compatibility factor. The policy assessment spreadsheet was also sent to the Maryland Department of Commerce to validate the information collected during the discovery phase.

- Regulations that relate to compatibility factors were identified, as were compatibility factors that are not addressed by existing policy, using the policy assessment spreadsheet. Results from the gap analysis were then used to develop policy recommendations.

3.2 Existing Maryland State Policy Review

State of Maryland policies were reviewed to identify regulations/legislation that directly and indirectly address one or more of the 25 compatibility factors. The 25 compatibility factors were used in the completed Maryland JLUS Reports to identify, determine, and establish a set of key JLUS compatibility issues. See Chapter 2 for information on the compatibility factors/issues.

Identification of Existing Maryland State Policy Directly Related to Encroachment

This section provides an overview of state legislation/policy that currently addresses compatibility planning related to the military. Table 3-1 lists and summarizes each policy that directly impacts military compatibility planning. They are organized by compatibility factor.

Identification of Existing Maryland State Policy Indirectly Related to Encroachment

While there are various state policies that directly impact military compatibility, there are also policies that can indirectly aid compatibility planning for the community or military. Such policies were reviewed against compatibility factors to determine if they had the potential to influence compatibility. Table 3-2 lists and summarizes Maryland State policies that indirectly impact military compatibility planning. The table is organized by compatibility factor.

Table 3-1.   Maryland State Policies Directly Impacting Military Compatibility Planning

State Policy/Legislation	Description
Noise/Vibration	
Environmental Noise Standards. Maryland Environment Code Annotated 26.02.03.02	Sets noise standards in A-weighted sound levels. According to the regulation, a person may not cause or permit noise levels which exceed those specified in this table: Table 1. Maximum Allowable Noise Levels (dBA) for Receiving Land Use Categories | Day/Night	Industrial	Commercial	Residential
---	---	---	---
Day	75	67	65
Night	75	62	55	 Exceptions to the allowable noise levels are that a person may not cause or permit noise levels emanating from construction or demolition site activities to exceed 90 dBA during daytime hours or exceed the levels specified in the table during nighttime hours. Additionally, a person may not cause or permit the emission of prominent discrete tones and periodic noises that exceed a level 5 dBA lower than the applicable level listed in Table 1. Further exemptions to these allowable noise limits are not relevant to military operations.
Noise Pollution. Maryland Environment Code Annotated § 3-102	Provides that the people of the state have a right to an environment that is free from any noise that: may jeopardize their health, general welfare, or property; or degrades the quality of their lives. The statute provides for the Department of the Environment to seek appropriate resources to ensure enforcement of the sound level limits and noise control rules and regulations adopted under this title and establishes the Environmental Noise Advisory Council. The statute also does not limit the power of a county or local government to adopt noise control ordinances, rules, or regulations unless they are less stringent than the environmental noise standards, sound level limits, and noise control rules and regulations adopted under this title.
Real Estate Disclosure Requirements. Maryland Real Property Code Annotated § 14-117	Requires that a contract for the sale of residential real property shall contain the following statement: "Buyer is advised that the property may be located near a military installation that conducts flight operations, munitions testing, or military operations that may result in high noise levels." This law does not apply in Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington counties.

State Policy/Legislation	Description
Biological Resources	
Deer Hunting Season on Military Bases, National Wildlife Refuges, and Units of the National Park System. Maryland Code 08.03.04.14	Asserts that deer hunting seasons and bag limits at all military bases, National Wildlife Refuges, and units of the National Park System shall conform to statewide seasons and bag limits. The commanding officer of the base, manager of the National Wildlife Refuge, or superintendent of the National Park unit may submit a written request to the Director by August 1st of each year to extend the season or to increase bag limits. The Director shall review the request and advise the commanding officer of the base, manager of the National Wildlife Refuge, or superintendent of the National Park unit of the Director's decision, in writing, within 30 days of the receipt of the formal request.
Permit Requirements for Aberdeen Proving Ground. Maryland Code 08.03.04.08	Declares that an individual shall obtain a special Aberdeen Proving Ground Hunting Permit before hunting is authorized on this military installation.
Patuxent River Naval Air Station Deer Hunting Seasons. Maryland Code 08.03.04.12	Declares that deer hunting season dates must conform to statewide season dates. The commanding officer of the station may extend the length of the firearm season one week if necessary to meet the harvest quota for that season. This code further states that bag limits for the Station will be two deer of either sex for each of the three deer hunting seasons.
Energy Development	
Maryland House Bill 142 (Adjourned Sine Die)	Removes an exemption granted by the Public Service Commission that allowed wind farms not exceeding 70 megawatts within a certain range of the station, up to a maximum of 46 miles. This was done to address Navy concerns relating to the potential for large wind turbines to interfere with the Naval Air Station Patuxent River's radar systems.
Land Use	
Areas of Critical State Concern Element. Maryland Land Use Code Annotated §3-109	Asserts that jurisdictions must include an "Areas of Critical State Concern" element as part of a comprehensive plan. Within this element, military bases and operating areas can be recognized as critical areas and the legislature can require that lands near boundaries of these areas be set aside for compatible uses. The Areas of Critical State Concern element shall include the planning commission's recommendations for the determination, identification, and designation of critical concern areas within the local jurisdiction.

State Policy/Legislation	Description

Base Realignment and Closure (BRAC) Revitalization and Incentive Zone Program. Maryland Economic Development Code Annotated §5-1301 et seq.	Declares that the objective of the BRAC Revitalization and Incentive Zone Program is to manage growth in the state related to the federal BRAC Commission recommendations. By managing growth, the Program will:
	
	(1) Enhance the state's ability to preserve natural resources;
	(2) Enhance the vitality of older neighborhoods; and
	(3) Increase the state's return on infrastructure investment by:
	    (a) Encouraging new development within designated growth areas;
	    (b) Directing growth related to BRAC in areas that are served by public infrastructure and mass transit facilities; and
	    (c) Providing financial incentives to local governments to provide the infrastructure necessary to encourage BRAC households to locate in those designated growth areas.

Federal Facilities Advisory Board and Strategic Business Plan for Supporting Maryland's Federal Facilities	The Federal Facilities Advisory Board was created by Governor Martin O'Malley. The Board prepared a comprehensive plan, *Strategic Business Plan for Supporting Maryland's Federal Facilities,* that includes six priorities and supporting recommendations to build on and enhance Maryland's reputation as a leader in federal contracting, research and development, and technological innovations.
Maryland Environment. Code Annotated § 1-401	Establishes the Maryland Department of the Environment (MDE). As a member of the Maryland Military Installation Council, MDE maintains a strong working relationship with the DoD/Joint Services regarding environmental matters of concern to the state and to military communities. MDE works closely with installations under specific agreements that foster Joint Service contributions to top state environmental priorities. One example is the Chesapeake Bay Restoration in which the Services are playing an important role along with their local 'host' jurisdictions. At the federal level, strong support for these activities stems from the Chesapeake Bay Presidential Executive Order #13508. Installations are playing a key role in helping the state reach its Bay Watershed Implementation Plan goals. MDE also regulates Maryland installations under an array of existing laws, rules, and policies that address potential environmental impacts associated with military activity. To help Maryland installations understand and keep pace with state regulatory requirements, as well as to encourage voluntary pollution prevention efforts, MDE meets regularly with environmental managers from DoD/Joint Services under an intergovernmental partnership agreement that was executed in 2002.
Military Installation Council. Maryland Code 1957, Article 83A, §5-1710.1	Authorizes the Maryland Military Installation Council to continue the work of the former Maryland Military Installation Strategic Planning Council, which submitted an interim report to the Governor and General Assembly in December 2003. The Maryland Military Installation Council is to identify what public infrastructure and community support is needed for the development and expansion of the state's military installations and what the potential impact of that development and expansion will be on local communities. The Council also will research how other jurisdictions are coping with increased development around military installations and review state policies in order to best support the mission of the military installations and to maximize economic benefits to local communities.

State Policy/Legislation	Description
Safety Zones	
Aircraft Rules. Maryland Code 11.03.01.02	Asserts that operators of private, itinerant, nonscheduled, or military aircraft may use the terminal apron only for enplaning and deplaning passengers and cargo. Operators desiring to use the terminal apron for any other purpose are required to obtain the prior authorization of the Airport Director. An operator of a private, itinerant, nonscheduled, or military aircraft permitted to use an aircraft gate position assigned for scheduled air carrier use.
Location of Comprehensive Care Facilities and Extended Care Facilities. Maryland Code 10.07.02.25	Declares that the following criteria shall control the location of a facility that is proposed to be located near an airport: A. Class I, Military Airports Handling Heavy Aircraft: medical facilities may not be located beneath the approach/departure corridors. The corridor shall be defined as 2 miles wide and 5 miles long beginning at the end of the runway. Medical facilities may not be located beneath the airport traffic pattern, defined as a 1-mile wide track centered on the nominal traffic pattern. B. Class II, Commercial Airports Handling Heavy Commercial Aircraft: medical facilities may not be located beneath the approach/departure corridor. The corridor shall be defined as 2 miles wide and 5 miles long beginning at the end of the runway. C. Class III, Military and Commercial Airports Handling Light Aircraft and General Aviation: medical facilities may not be located beneath the approach/departure corridor or traffic pattern. The corridor shall be 1 mile wide and 3 miles long beginning at the end of the runway, the traffic pattern restriction being defined as a 1-mile wide track centered on the nominal pattern. D. Applicant's Responsibility to Supply Traffic Pattern Data: it shall be the responsibility of the applicant to furnish all data on corridors and patterns as described above for the purpose of site approval. This data shall be submitted at the same time the facility submits information to Comprehensive Health Planning. The Department's response to the facility shall be made within the same time frame required for Comprehensive Health Planning. E. New Facilities: in new construction the noise level may not exceed 40dB(A). F. Class IV, Heliports: no restrictions when used exclusively for health care purposes. Facilities located near heliports used for purposes other than health care shall meet sound transmission limitations in accordance with Standard No. E 90 of the American Society for Testing and Materials (ASTM), as revised from time to time. G. All existing facilities and those facilities approved by the Department before the adoption of these regulations shall be exempt from the location requirements of these regulations.
Resident Canada Geese at Airports and Military Airfields. Maryland Code 08.03.07.10	Authorizes managers at commercial, public, and private airports, as well as their employees or agents, and military air operation facilities and their employees or their agents, to establish and implement a control and management program if necessary to resolve or prevent threats to public safety from resident Canadian geese; and specifies terms and conditions under which this action may be taken.

Table 3-2. Maryland State Policies Indirectly Impacting Military Compatibility Planning

State Policy/Legislation	Description
Legislative Initiatives	
Maryland Governor's Executive Council (Cabinet)	The Governor's Executive Council originated as the Governor's Advisory Council. It was reorganized as the Governor's Executive Council and today the Council is known as the Governor's Cabinet. The Cabinet meets weekly to coordinate, direct, and supervise state government. There are twenty-five ex-officio members that constitute the Cabinet. They include the Governor, who chairs the Council; the Lieutenant Governor; the Secretary of State; the Secretary of each principal department of the Executive Branch of State government; the State Superintendent of Schools; the Secretary of Higher Education, and the Adjutant General. (Code State Government Article, secs. 8-101 through 8-105; Public Safety Article, sec. 13-301).
Smart Growth Subcabinet: Code of Maryland, State Government Article, Section 9-1406	The Smart Growth Subcabinet began as the Smart Growth and Neighborhood Conservation Subcabinet established by the Governor under Executive Order 01.01.1998.04. The Subcabinet helps implement Smart Growth Policy, recommending to the governor changes in state law, regulations, and procedures needed to support the Policy (Chapter 759, Acts of 1997). Since 2003, the Subcabinet also oversees the Priority Places Strategy (Executive Order 01.01.2003.33). Further, the Subcabinet works to create, enhance, support, and revitalize sustainable communities across Maryland (Chapter 487, Acts of 2010).
Smart Growth Coordinating Committee. Executive Order 01.01.1998.04	The Committee helps administer programs, projects, and activities in Priority Funding Areas and targeted communities in those areas. In Maryland, areas where local and state governments want to encourage development and growth and which meet certain criteria for water and sewage systems, population density, and land use capabilities may qualify as Priority Funding Areas. Such places include existing municipalities, land within the Washington, D.C. Beltway (I-495) and the Baltimore Beltway (I-695), and areas already designated as enterprise zones, neighborhood revitalization areas, heritage areas, or industrial land.
Biological Resources	
Maryland Wildlife Diversity Conservation Plan	The Maryland Wildlife Diversity Conservation Plan is an action plan for guiding the conservation of the state's wide diversity of fish and wildlife. It summarizes current wildlife conservation efforts. The Natural Heritage Program, part of the Wildlife and Heritage Service, leads plan development with significant input from the Maryland Biological Stream Survey (MBSS) and other public and private stakeholders. Planning efforts and goals coincide with the Military Installation Natural Resource Plans and Conservation Targets.
Energy Development	
The Renewable Portfolio Standard (RPS) House Bill 1106	The Renewable Portfolio Standard (RPS) is a policy goal that specifies 25% of the electricity sold in Maryland must come from renewable resources by the year 2020. At least 2.5% of the electricity must come from solar resource systems in Maryland. The remaining 22.5% can come from other renewable technologies such as wind, biomass, landfill gas, anaerobic digestion, and other approved technologies. Annual RPS requirements increase each year until the 25% requirement is reached.

State Policy/Legislation	Description
Roadway Capacity	
2035 Maryland Transportation Plan. Transportation Article, sec. 2-103.1	The Maryland Transportation Plan identifies needs and challenges for its transportation system. Implementing principles and priorities are established through the Plan, which are used for decisions made in the Consolidated Transportation Program and transportation investments. Identifies BRAC improvements.
Infrastructure Extensions	
Public-Private Partnerships Maryland House Bill 560	Encourages the use of public-private partnerships to address growing infrastructure needs.
Land Use	
Zoning Regulations. Maryland Land Use Code 4-202	Zoning regulations shall be designed to: control street congestion; promote health, public safety, and general welfare; provide adequate light and air; promote the conservation of natural resources; prevent environmental pollution; properly manage growth and development; and promote or facilitate adequate transportation, water, sewerage, schools, recreation, parks, and other public facilities.
Comprehensive plans	The Maryland Department of Planning (MDP) promotes growth that fosters vibrant, livable communities, preserves and protects the environment, and makes efficient use of state resources. The MDP works closely with Maryland's counties and municipalities in visioning and guiding where and how future development, revitalization and preservation will occur. Each jurisdiction must review and, if necessary, update its comprehensive plan every ten years. The planning commission must consult with entities about protecting or executing the Plan (§3.05.d.2.ii.). Although not listed as a requirement, public interest and understanding of the plan helps to establish public trust and support for the plan, and ultimately makes implementation of the plan easier. Therefore, the planning commission has the power to promote public interest in and understanding of the plan (§3.05.d.1). Content Requirements Land Use Article establishes a framework for the content of the plan by requiring that it address certain components of the jurisdiction's vision.
	The Department, on behalf of the state, reviews comprehensive plans for consistency with the state's Smart Growth and growth management laws, specifically, the Land Use Article including the requirements for Municipal Growth, Water Resources and Priority Preservation Area Elements, The State Economic Growth, Resource Protection, and Planning Policy found in Subtitle 5-7A, commonly known as the 12 Visions, and the Priority Funding Areas Act found in Subtitle 5-7B of the State Finance and Procurement Article. Some of the specific provisions that local comprehensive plans should address are based on these Maryland Planning legislative initiatives: • Land Use Article • Economic Growth Resource Protection and Planning Act of 1992 • The 1997 Priority Funding Areas Act

State Policy/Legislation	Description
	• Requirements of the 2006 Planning Legislation: HB 1141, Land Use-Local Government Planning, and HB2, the Agricultural Stewardship Act
Comprehensive Water and Sewer Master Plans	The Maryland Department of the Environment (MDE) requires the Counties to prepare a comprehensive update of the Water and Sewer Plan every three years. Between comprehensive updates, the County approves amendments to the plan (such as service area categories, new or revised policies, and technical information) through procedures described in Chapter 1 of the plan. Under state law, the County Council is responsible for approving the plan and its amendments.
Conservation Easements. Maryland Real Property Code §2-118 et seq.	Conservation easements in the state are authorized by Maryland Real Property Code §2-118 et seq. et seq.
Forest Conservation Act. Natural Resources Article Section 5-1601 through 5-1613	The Maryland Forest Conservation Act was enacted to minimize the loss of Maryland's forest resources during land development. Minimization is accomplished by identifying and protecting sensitive areas as part of the planning process. Primary interest areas include areas adjacent to streams or wetlands, steep or erodible soils, and large contiguous blocks of forest or wildlife corridors.
Forest Legacy Program	The Maryland Department of Natural Resources' Forest Service serves as the lead agency overseeing the state's Forest Legacy Program. The program is designed to identify and protect environmentally important forest lands through the use of perpetual conservation easements between willing sellers and willing buyers.
Heritage Conservation Fund. Maryland Natural Resources Code §5-150	The Heritage Conservation Fund is utilized to protect rare and endangered species habitat, as well as to provide financial support to administer programs geared towards achieving those goals. The Fund is used by the Department of Natural Resources to acquire conservation easements, a fee simple, or other interests in forestlands, unique ecological areas of the state, any area characterized by significant natural scenic beauty, tidal or non-tidal wetlands, lands in the Chesapeake Bay Critical Area, any land designated as a unique ecological area under the Department's Natural Heritage Program, any wilderness area that remains relatively undisturbed by human encroachment, lands supporting rare, threatened or endangered plants or animals, lands that support diverse ecological communities of plants or animals, any land whose conversion to development would significantly affect water quality or unique natural habitat, and natural areas that have been designated as areas of critical state concern.

State Policy/Legislation	Description
Maryland Agricultural Land Preservation Foundation. Maryland Agriculture Code §2-501 et seq.	The Maryland Agricultural Land Preservation Foundation was created by the Maryland General Assembly under Maryland Agriculture Code §2-501 et seq. and placed under the jurisdiction of the Department of Agriculture. Its work is to "preserve agricultural land and woodland in order to: provide sources of agricultural products within the state for the citizens of the state; control the urban expansion which is consuming the agricultural land and woodland of the state; curb the spread of urban blight and deterioration; and protect agricultural land and woodland as open-space land." The 2009 H.B. 1418 updated code regarding the Land Preservation Foundation and provides that the program does not prohibit a governmental agency from condemning land that is subject to an agricultural land preservation easement for use as economic or residential development or for parkland, subject to approval by the Board of Public Works and a recommendation by the Maryland Agricultural Land Preservation Foundation. S.B. 95 of 2010 further updated the program, authorizing the Maryland Agricultural Land Preservation Foundation to establish a Farmland Preservation Partnership Program to preserve productive agricultural and forested land.
Maryland Environmental Trust. Maryland Natural Resources Code §3-201	The Maryland Environmental Trust (MET) was established to protect the state's natural environment and is the state's primary recipient of donated conservation easements. The goal of MET is to protect farms and forestlands, wildlife habitats, waterfront acreage, natural areas, historic sites, and valuable scenic features. This is achieved through various tax deductions and credits, and through estate tax savings for donations of conservation easements. Four main programs are administered by MET: Conservation Easements, Keep Maryland Beautiful, Local Land Trust Grant Fund, and Rural Historic Village Protection.
Program Open Space	Program Open Space acquires state and local parks and conservation areas, including the purchase of easements on land to protect unique historic properties (battlefields or historic structures and landscapes) or scenic vistas. The Program administers funds made available to local communities for open and recreational space through the state real estate transfer tax and from the Land and Water Conservation Fund of the National Park Service, U.S. Department of the Interior (DOI). The Program coordinates the acquisition of DOI lands for the use of all departmental agencies.
Rural Legacy Program. Maryland Natural Resources Code §5-9A-01 et seq.	Established the Rural Legacy Program to, "enhance natural resource, agricultural, forestry, and environmental protection while maintaining the viability of resource-based land usage and proper management of tillable and wooded areas through accepted agricultural and silvicultural practices for farm production and timber harvests." The Program is funded through a combination of Maryland Program Open Space dollars and general obligation bonds from the state's capital budget.
Sustainable Growth and Agricultural Preservation Act of 2012 Maryland Senate Bill 236	Established four growth tiers of land use categories which identify where major and minor residential subdivisions may be located and what type of sewage system will serve the subdivisions. This is done to limit the impacts of individual septic systems on agricultural land, as well as forest land and bodies of water.

3.3 Gap Analysis of Maryland Policies

The state has policies that directly or indirectly affect various factors of military compatibility; however, there are some factors that are not being addressed by existing policy. As growth continues to occur around military installations, compatibility issues will only increase, making it necessary to identify potential policies and programs that the state can implement.

Each of the issues identified in the five completed Maryland JLUS Reports were examined to determine if existing state policies could apply. Determinations were based on strategies from existing Maryland JLUS Reports and military compatibility planning resources, such as Readiness and Environmental Protection Integration (REPI), were researched.

Table 3-3 lists the compatibility factors with associated issues that were identified in the five completed Maryland JLUS Reports, but that are not mitigated by current state policies. There are currently 57 compatibility issues that remain unregulated.

There are also compatibility factors that are not in conflict in JLUS Study Areas but have no legislative tools to mitigate conflicts that may arise. These are:

- Air Quality
- Climate Adaptation
- Frequency Spectrum Capacity

Table 3-3.   Maryland Policy – Gap Analysis

Compatibility Factor	# of Issues Identified	Summary of Issues Identified
Coordination/Communication (COM)	19	COM issues pertain to APG, NSF Indian Head, and NAS Patuxent River. Conflicts were generally about needing communication and coordination between agencies to improve partnerships for various efforts, including increasing awareness of military operations and establishing military methods for input during development review processes and infrastructure improvements.
Frequency Spectrum Impedance/Interference (FSI)	14	APG, Blossom Point, and NAS Patuxent River identified FSI issues including the installations' operations impacting nearby communities, as well as the communities impacting military operations. Such examples are radio frequencies from the installations impacting devices in NAS Patuxent River and Blossom Point areas, civilian impact on radio frequencies that Blossom Point relies on, and radio frequency interference that affects emergency services surrounding APG and NAS Patuxent River.
Water Quality/Quantity (WQQ)	6	Both APG and NAS Patuxent River had issues with water supply for the surrounding community. Most of the problems were related to specific water supplies in the APG Study Area and include aquifer recharge and production shortage issues.
Vertical Obstructions (VO)	5	VO issues were identified for NAS Patuxent River, APG, JB Andrews, and Blossom Point. All four installations have concerns about development, such as wind turbines, cell towers, vegetation, and other tall structures, interfering with military operations.
Land/Air/Sea Spaces (LAS)	2	LAS issues were identified for the NAS Patuxent River and APG study areas. The LAS issue for NAS Patuxent River arises from competition for sea space for recreational purposes and for operations at Webster Field. At APG, there is concern over the public perception of the JLENS Program.
Vibration (V)	2	The Blossom Point and APG JLUS Reports identified vibration issues. Blossom Point has identified potential incompatible vibrations from trucks and construction activities that could interfere with military operations. APG is also concerned with vibrations from military operations impacting the community.
Anti-Terrorism (AT)	2	AT issues for NAS Patuxent River include security concerns regarding leased office space off-base and uncontrolled waterfront access to the base.
Scarce Natural Resources (SNR)	2	APG is concerned about Harford County's temporary water supply to Edgewood, while JB Andrews is concerned about incompatible land uses and development affecting environmental resources.
Dust/Smoke/Steam (DSS)	1	Dust generated by testing activities at APG is being dispersed outside the installation.

Compatibility Factor	# of Issues Identified	Summary of Issues Identified
Housing Availability (HA)	1	At Aberdeen Proving Ground, NAS Patuxent River and Indian Head, the lack of urban amenities that attract young professionals is a concern.
Cultural Resources (CR)	1	At JB Andrews, historical and cultural resources need protection from incompatible uses and development on and around the base.
Light and Glare (LG)	1	The NAS Patuxent River JLUS identified light and glare that is derived from the surrounding community and impacting military operations that require dark skies at night.

The tools used to assess gaps in Maryland policy were also used to identify policies in other states that may be adopted to improve community and military compatibility planning locally. Table 3-4 provides a summary of this analysis.

Table 3-4.   Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Coordination/Communication		
General	Planning Notification Areas	Sixteen states have established planning areas where bases are to be notified of upcoming actions. The planning areas establish buffer zones that require coordination in advance of development to prevent incompatible development. The 16 states are: Arizona; California; Colorado; Florida; Georgia; Kansas; Louisiana; Massachusetts; Nebraska; New Jersey; North Carolina; South Carolina; Texas; Virginia; Washington; and Wisconsin.
Arizona	Coordination of Military and Civilian Airports Arizona Revised Statutes §9-461, 9-462.04, 9-500.28, 11-812, 11-829, 28-8461, and 28-8481	Procedures were established that allow for communication and open lines between civilian and military airports. The State Department of Transportation, Aeronautics Division requires airport sponsors to include a military representative on the Planning Advisory Committee (PAC). Arizona Military Airspace Group includes a member of the Arizona Airports Association, and vice versa. The legislature enacted a measure requiring local governments within the vicinity of a military airport to consult with, advise, and provide the military airports the opportunity to comment on land use surrounding the installation. (Ariz. Rev. Stat. Ann. §28-8481.)
Colorado	Colorado Revised Statutes §29-1-207 30-28-106, 31-23-206 (Acts 2005, Chapter 59, S.B. 05-080) (H.B. 1205 of 2010)	The General Assembly declared that local governments should cooperate with military installations, "in order to encourage compatible land use, help prevent incompatible urban encroachment upon military installations, and facilitate the continued presence of major military installations within the state." Local governments with a military installation in excess of 500 acres located within two miles of a territorial boundary of the locality shall provide "timely" notification of certain actions to the military installation commander or to his or her designee. Information shall include changes in the comprehensive plan, its amendments, or land use regulations that, if approved, would, "significantly affect the intensity, density or use of any area within the territorial boundaries of the local government that is within two miles of the military installation." This requirement does not require information related to site-specific development applications under consideration by the local government.

Table 3-4.   Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Coordination/Communication *continued*		
Colorado	Colorado Revised Statutes §29-1-207 30-28-106, 31-23-206 (Acts 2005, Chapter 59, S.B. 05-080) (H.B. 1205 of 2010)	Continued: • After providing the prescribed information to the military, the local government must also provide the commanding officer of the military installation (or his or her designee) an opportunity to review and comment on the military mission impact of the proposed change. Comments may include: ° Impact on the airfield's safety and noise impact set forth in their Air Installation Compatible Use Zone (AICUZ); ° Incompatibility with the Installation Environmental Noise Management Program (IENMP) of the military installation; ° Incompatibility with the area's Joint Land Use Study (JLUS) findings; and ° If the mission will be adversely affected by the proposed actions. The local government, when considering approval of the comprehensive plan, its amendments or its land use regulations, shall review the comments and forward a copy to the Office of Smart Growth.
Florida	Fla. Stat. Ann. §163.3175; 2012 House Bill 7075.	In 2012, the Florida legislature clarified its community planning statute to specify that a Commanding Officer's comments must be based on appropriate data and analyses, and that the local government must consider those comments and accompanying data as they relate to the strategic mission of the base, public safety, and the economic vitality associated with the base's operations. Further, the bill created the Florida Defense Reinvestment Grant Program in part to work with defense-dependent communities on strategies to help communities support the missions of military installations.
Illinois	Issued Executive Order Number 4 of 2005	Directs all state land-use planning agencies to coordinate with Illinois military installations to maintain and improve the bases' military value.
Indiana	Enhanced Planning Communication and Notification Military Base Protection Act, Indiana Code §36-7-30.1 et seq.	Requires a unit of local government to notify the commander of a military base located in the unit before the unit takes action concerning planning or zoning within three miles of the perimeter of a military base. The Act requires the commander to respond within 15 days of receiving notice. Furthermore, a local government unit is prohibited from taking action that: (1) concerns planning or zoning, and (2) is averse to a military base.

Table 3-4. Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Coordination/Communication *continued*		
Louisiana	Act 787 of 2004 (Louisiana Revised Statutes §33.4734)	Requires a local governing authority considering taking any action on an application for a zoning request or variance affecting property within 3,000 feet of a military installation to notify the commander of the installation 30 days in advance of taking the zoning action.
New Jersey	New Jersey Revised Statutes §40:55D-12.4 (S.B. 2207 of 2005)	Requires parties seeking approval for development plans under the "Municipal Land Use Law" to provide notice to any military facility commander registered with the municipality if the proposed development is within 3,000 feet in all directions of a military facility.
New Jersey	New Jersey Revised Statutes §40:55D-62.1 (S.B. 2207 of 2005)	Requires that the notice of a hearing for an amendment to a zoning ordinance be provided to any military facility commander who has registered with the municipality if the military facility is situated within the zoning district or is within 3,000 feet in all directions of the boundaries of the district. In the case of a boundary change, the commander must be notified if the amendment is located within the state and within 3,000 feet in all directions of the proposed new boundaries.
North Carolina	North Carolina General Statutes §153A-323 and §160A-364 (S.B. 1161 of 2004)	Requires cities and counties to provide military installation commanders written notice at least ten days (but not more than 25 days) prior to a public hearing to consider any ordinance that would change zoning or affect the permitted uses of land within five miles of a military base. Prior to making a final decision, the governing body shall consider any comments or analysis received from the military regarding the compatibility of the proposed ordinance or amendment. Both statutes were amended. The amendments provide requirements related to the notice of land use planning and zoning changes to be given to a military base by counties or cities near the military base. The new requirements for notice are: (1) changes to the zoning map, (2) changes that affect the permitted uses of land, (3) changes relating to telecommunications towers or windmills, (4) changes to proposed new major subdivision preliminary plats, and (5) a more than 50% increase in the size of an approved subdivision relative to the subdivision's total land area.
Texas	Texas Local Government Code §397.001 through §397.005, amended by 2011 House Bill 1665.	In Texas, a community near a military installation must seek comments and analysis from defense base authorities if the community determines that a proposed ordinance, rule or plan may impact a military base or the military exercise or training activities. If a community includes a municipality with a population of more than 110,000, is located in a county with a population of less than 135,000 and has not adopted airport zoning regulations, the community must notify the defense base authorities of any proposed ordinance change and its compatibility with base operations within eight miles of a base.

Table 3-4.   Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Water Quality/Quantity		
Kansas	Kansas Water Quality Buffer Initiative	Enacted by the 1998 Legislature by amending K.S.A. 2-1915, the initiative is an incentive program complementing the federal Conservation Reserve Program (CRP). State incentives supplement federal incentives to encourage the establishment of riparian forest buffers and vegetative filter strips. The Kansas Department of Conservation will enter into 10- to 15-year contracts, subject to annual appropriation, to compensate landowners for acres enrolled in the initiative. Supplemental payments offered under the initiative will match 30 to 50 percent of the federal payment, based on the type of vegetation planted. The initiative also provides property tax incentives for landowners statewide that enroll buffers adjacent to streams in the program. The state buffer eligible area now includes all high-priority TMDL (total maximum daily load) and federal drinking water reservoir watersheds in the state.
New Hampshire	Water Supply Land Conservation Grant Program	The Water Supply Land Conservation Grant Program allows the New Hampshire Department of Environmental Services to make 25% matching grants to municipal water suppliers for the purchase of land or conservation easements critical to their water quality. These water supply lands must be currently unprotected and within the wellhead protection area for a groundwater source or within the source water protection area and within five miles of the intake of a surface water source. As part of the voluntary agreements for acquisitions made through the program, land must remain undeveloped, with passive dispersed recreation, agriculture, and forestry allowed.
New Hampshire	New Hampshire H.B. 1581 of 2008	Permits the governing body of municipalities to construct and maintain storm water systems. Whenever it is necessary to construct such main drains or common sewers, storm water treatment, conveyance, and discharge systems, sewage and/or waste treatment facilities across or on the land of any person and the municipality cannot obtain any land or easement in land required by it for a reasonable price, the governing body may lay out a sufficient quantity of such land for the purpose and assess the owner's damages in the same manner as with eminent domain.
New York	New York S.B. 4324 of 2007 Great Lakes - Saint Lawrence River Basin Water Resources Compact	The law creates a water resources council and prohibits new and increased diversions from the Great Lakes - Saint Lawrence River Basin, except under certain conditions. The Great Lakes-St. Lawrence River Basin Water Resources Council (Compact Council) was established on December 8, 2008, when the Compact became state and federal law. Each of the eight Great Lakes State legislatures ratified the Compact, and Congress provided its consent.
Scarce Natural Resources		
Hawaii	Watershed Partnerships Program	Cooperative projects that benefit on-the-ground activities protecting land for watershed conservation and implementing existing management plans negotiated under the Partnerships Program. To be eligible, a landowner must enter into an agreement adopting the scope of the existing management plan.

Table 3-4. Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Scarce Natural Resources *continued*		
Maine	Maine Outdoor Heritage Fund	Receives revenues from the sales of lottery tickets (approximately $700,000 annually). The funds are distributed to conservation projects that directly benefit the state's outdoor heritage, including fisheries and wildlife enhancement, public land acquisition, endangered species protection, and natural resources law enforcement.
Minnesota	Natural and Scenic Area Grant Program Minnesota Statutes §85.019	The Natural and Scenic Area Grant Program, administered by the Department of Natural Resources, assists local governments and school districts in acquiring natural and scenic areas such as blufflands, prairies, shorelands, wetlands, and wooded areas. The program is intended to protect and provide access to high quality natural and/or scenic areas. The Department finances projects using state dollars authorized by the Minnesota State Legislature. Grant awards are typically for 50% of the total eligible project costs, up to the maximum grant amount of $500,000.
Land/Air/Sea Spaces		
North Carolina	North Carolina General Statutes §63-90 through §63-92 (S.B. 260 of 1987)	Requires the Division of Aviation of the Department of Transportation to provide to the General Assembly or the Joint Legislative Commission on Government Operations, "all applications to the Federal Aviation Administration and all proposed rule changes by the Federal Aviation Administration for the creation of or changes in special use airspaces, including military operation areas and restricted areas for aircraft operation over North Carolina during the period for public comment." The General Assembly or the Joint Legislative Commission on Government Operations shall notify the Federal Aviation Administration of the state's official position on the pending application or rule change.
Light and Glare		
Arizona	Light Pollution/Dark Night Skies Arizona Revised Statutes §49-1102, 49-1103, 49-1106	Requires all outdoor light fixtures to be fully or partially shielded, except incandescent fixtures of one hundred fifty watts or less and other sources of seventy watts or less. A.R.S. §49-1103 requires outdoor light fixtures that are not exempt from this article be extinguished between the hours of midnight and sunrise by an automatic shutoff device. A.R.S. §49-1106 exempts any county, city, or town that has adopted provisions restricting light pollution which are equal to, or more stringent than, provisions in this statute.

Table 3-4. Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Light and Glare		
Arkansas	Shielded Outdoor Lighting Act § 8-14-101	Provides for the regulation of outdoor lighting: no public funds shall be used to install an outdoor lighting fixture unless it is shielded. This law does not apply to acquisitions of: (1) incandescent outdoor lighting fixtures of one hundred fifty watts (150W) or less or other light sources of seventy watts (70W) or less; (2) outdoor lighting fixtures on advertisement signs on interstate or federal primary highways; (3) outdoor lighting fixtures existing and legally installed before August 12, 2005; (4) navigational lighting systems at airports or other lighting necessary for aircraft safety; and (5) outdoor lighting fixtures that are necessary for worker safety at farms, ranches, dairies, or feedlots or industrial, mining, or oil and gas facilities. In addition, the law does not apply to: (1) public school districts, (2) correctional facilities, (3) juvenile detention facilities, (4) adult detention facilities, (5) mental health facilities, or (6) state-supported institutions of higher education. The provisions of this law do not apply within a town, city, or county of this state that, by ordinance, has adopted provisions restricting light pollution that are equal to, or more stringent than, the provisions of this law.
Delaware	Regulation of Outdoor Lighting The Regulation of Outdoor Lighting (§ 7-71A)	Allows outdoor lighting fixtures to be designed, installed, or replaced using state funds only if: (1) the new or replacement outdoor lighting is a cutoff luminaire or if the rated output is greater than 1,800 lumens, (2) the minimum illuminance adequate for the intended purpose is used with consideration to nationally recognized standards, (3) for lighting of a designated highway of the state highway system, the Department of Transportation determines that the purpose of the outdoor lighting fixture cannot be achieved by the installation of reflective road markers, lines, warning or information signs, or other effective passive methods, and (4) full consideration has been given to the Department of Transportation's Traffic Lighting Policy, energy conservation, reducing glare, minimizing light pollution, and preserving the natural night environment. This law is exempted if: (1) a federal law, rule, or regulation preempts state law; (2) the outdoor lighting fixture is used on a temporary basis because emergency personnel require additional illumination for emergency procedures; (3) the outdoor lighting fixture is used on a temporary basis for nighttime work; (4) special events or situations require additional illumination; (5) the outdoor lighting fixture is used solely to enhance the aesthetic beauty of an object; or (6) there is a compelling safety interest that cannot be addressed by another method.

Table 3-4. Best Practice Policies from Other States related to Military Compatibility Planning

State	State Policy/Legislation	Description
Light and Glare *continued*		
Maine	LD 11 – Resolve, To Encourage the Preservation of Dark Skies. (Sponsored by Rep. Schatz of Blue Hill.) Resolves 2009, c. 22	Maine's resolve to, "Encourage the Preservation of Dark Skies", directs the Executive Department, State Planning Office to review existing commercial outdoor lighting standards and make recommendations on standard language that will limit light pollution and encourage the preservation of the area's natural state. The resolve also directs the Office to identify policy options for promoting outdoor lighting standards for commercial development. It required the State Planning Office to present its findings in a report to the Joint Standing Committee on Business, Research, and Economic Development. The report outlines guidelines for effective lighting and includes sample ordinances.
Minnesota	Outdoor Lighting and Fixtures Model Ordinance Minnesota Statutes § 16B.328	Provides for the Commissioner of the Department of Administration, in consultation with the Commissioner of Commerce, associations for local governments, and any other interested person, to develop a model ordinance that can be adapted for use by cities, counties, and towns, to reduce light pollution.
New Hampshire	New Hampshire H.B. 585 of 2009	Encourages municipalities to enact local ordinances and regulations to conserve energy consumed by outdoor lighting, to minimize light pollution and glare, and to preserve dark skies as a feature of rural character wherever practicable.
New Mexico	Night Sky Protection Act (§74-12-1 et seq)	Regulates outdoor night lighting fixtures to preserve and enhance the state's dark sky while promoting safety, conserving energy, and preserving the environment for astronomy. The Act requires all outdoor lighting fixtures installed after January 1, 2000 to be shielded, except incandescent fixtures of one hundred fifty watts or less and other sources of seventy watts or less. The Act exempts outdoor light fixtures on advertisement signs on interstates and federal primary highways and outdoor lighting fixtures that were legally installed prior to the effective date of the Night Sky Protection Act. However, when existing lighting fixtures become unrepairable, their replacements are subject to all the provisions of the Night Sky Protection Act. Further exemptions include navigational lighting systems at airports and other lighting necessary for aircraft safety, as well as outdoor lighting fixtures that are necessary for worker safety at farms, ranches, dairies, feedlots or industrial, mining or oil and gas facilities.

3.4 Policy Review Summary

The review of existing Maryland State policies related to community/military compatibility planning and an assessment of other states' policies is important for determining what potential policy gaps may exist. The value in addressing potential compatibility policy gaps is to identify actions that can address community/military encroachment issues that currently exist and to help prevent future instances of incompatibility.

In this chapter, the following compatibility factors were identified as occurring in more than one instance, as documented in previously completed Maryland JLUS Reports, and as needing legislative tools that support community/military compatibility planning:

- Coordination/Communication
- Frequency Spectrum Capacity/Interference
- Water Quality/Quantity
- Vertical Obstructions
- Vibration
- Scarce Natural Resources
- Anti-Terrorism/Force Protection
- Land/Air/Sea spaces

In addition, when assessing potential policy gaps, particularly at the state or regional level, it is important to consider the compatibility factors and associated issues identified in Chapter 2 that may have statewide and/or regional application. Chapter 5 focuses on recommendations for addressing both policy gaps in Maryland community/military compatibility planning and compatibility factors/issues that potentially have statewide/regional applications.

Please see the next page.

Compatibility Communication Analysis 4

Chapter 4 provides a compatibility communication assessment to identify communication strategies between State of Maryland, local communities, and the military that can address community/military compatibility. The resulting recommendations (that are presented in Chapter 5) can serve as a framework for an interagency communication strategy and plan centered on addressing encroachment issues where military operations and civilian jurisdictions intersect. The key to preventing encroachment is establishing a conduit that helps demonstrate the value of enhanced coordination between the state, local communities, and military installations and defines a standardized repeatable process for communicating issues and best practices that have potential statewide application.

4.1 Approach/Methodology

As part of the communication analysis, interviews were conducted, and surveys were developed to ensure that strategies capture input from stakeholders. The findings were assessed to create a set of recommendations to address communication gaps, enhanced issue visibility, and highlight best practices related to military/community compatibility. The last component of the compatibility communication analysis was to group issues/strategies and policy recommendations by compatibility factor type and align them with the appropriate government organizations in order to easily identify lines of communication for addressing compatibility factors. This would result in a framework the State of Maryland can adopt to streamline communications related to encroachment issues, military missions, and community concerns to both provide an opportunity for cross pollination of best practices and align recommendations to state resources and/or legislation. The following considerations were applied to the development of the communication analysis:

■ leveraging stakeholder interviews and survey results to support a communication strategy;

■ developing communication strategies that help demonstrate military strategic mission importance and value to state, local communities, and military in a balanced manner that also emphasizes economic growth; and

■ grouping issues/strategies and policy recommendations by compatibility factor type to assist in aligning with government organizations for compatibility oversight.

The recommended compatibility communication framework consists of five components correlating to the sub-sections of Chapter 4:

- Component 1 – Development of Communication Framework Approach/Methodology

- Component 2 – Stakeholder Outreach

- Component 3 – Assessment of Compatibility Factor/Issue Feedback from Survey Participants

- Component 4 – Communication Matrix

- Component 5 – Initiatives/Tools/Best Practices

4.2 Stakeholder Outreach

Stakeholder outreach involved interviews and surveys. In order to capture input throughout the state, geographical areas were defined to manage the JLUS outreach process and to define the interview groups. These geographical areas range vary from the traditionally defined regions in Maryland and do not reflect the communication / coordination that occurs at the regional level. Figure 4.1 illustrates the geographical areas in the State of Maryland where stakeholders were identified.

Table 4-1 shows the counties in the geographic areas in Maryland. Identified Stakeholders were first approached for an in-person interview, and if unable to do so, were reached by phone. In-person and phone interviews were followed up with a survey while those who were unable to be contacted through in-person meetings and by phone, were emailed the survey.

Table 4-1. Stakeholder Outreach Regions and Counties in Maryland

Northern MD Region		
■ Allegany County	■ Carroll County	■ Harford County
■ Baltimore City	■ Frederick County	■ Washington County
■ Baltimore County	■ Garrett County	

Central MD Region		
■ Anne Arundel County	■ Montgomery County	■ Prince George's County
■ Howard County		

Southern MD Region		
■ Calvert County	■ Charles County	■ St. Mary's County

Eastern Shore MD Region		
■ Caroline County	■ Kent County	■ Talbot County
■ Cecil County	■ Queen Anne's County	■ Wicomico County
■ Dorchester County	■ Somerset County	■ Worcester County

Figure 4.1 Map of State of Maryland and Four Outreach Regions
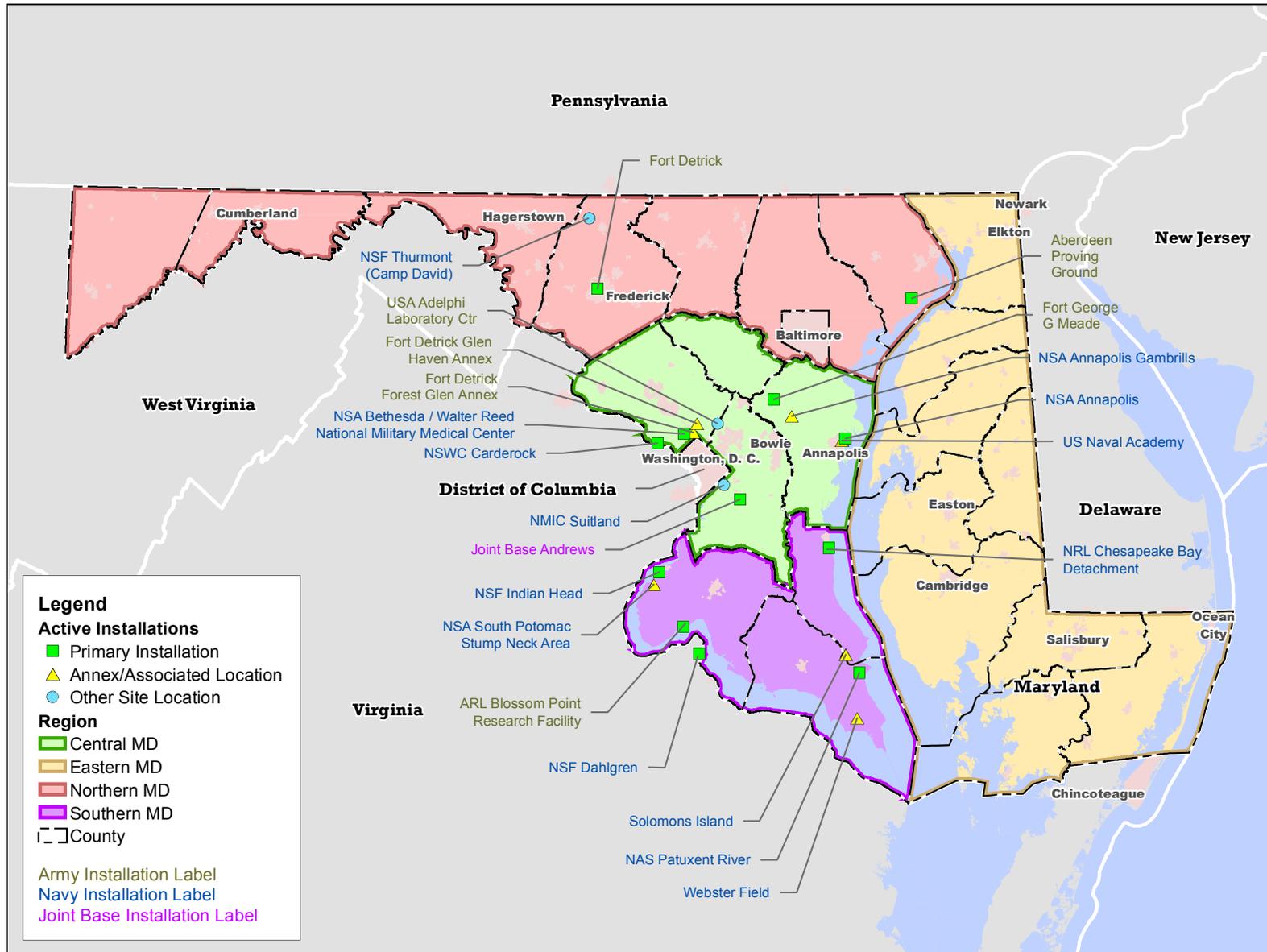
Stakeholders were identified by the SJLUS Advisory Board, which was established through the Maryland Department of Commerce. Identified stakeholders in the Central region and state representatives achieved 100% targeted participation, while the Southern and Northern regions achieved close to full participation at 90% and 76% participation respectively. In the Eastern region, 15 stakeholders were initially identified; however, more stakeholders were identified and became involved throughout the outreach process, putting them at over 130% participation.

Stakeholder Interviews

Conducting one-on-one interviews was the first method of outreach. Interviews included in-person and telephone discussions to garner input on the compatibility issues that communities face and assess interest in State intervention and avenues for State involvement in mitigating practices.

The following are the preliminary themes that manifested themselves during the course of the majority of interviews with stakeholders:

■ issues regarding wind energy and radar interference;

■ support for some land use controls to protect the economic viability of an airport/installation;

■ support for local jurisdictions to determine and enforce their own zoning; and

■ support for technical assistance and/or frameworks for compatibility development.

During the interviews, the following questions were used as a baseline to guide discussion:

1. How compatible is your local military installation and its ongoing operations with the surrounding community?

2. What do you feel should be prioritized around your local military installation for land use planning and zoning?

3. To what degree do you think existing or proposed zoning in the vicinity of your local installation is restricted?

4. What form of state-level support are you most interested in this Study analyzing and possibly adopting as best practices?

5. What compatibility related processes would you like to see the State of Maryland strengthen?

6. Prior to proposing any changes to the State Code, would you support a more robust agency-based inclusionary process that would incorporate all stakeholders for such action?

The discussion centered on the Joint Land Use Study (JLUS) process and the baseline data collected from the five installations that had already completed JLUS studies. Figure 4-2 shows all the compatibility factors that were discussed and used to characterize the groups of interest areas and issues, however not all the compatibility factors were identified by the groups as being a concern.

In addition, there was a common theme identified among multiple stakeholders interviewed that indicated a desire for the State of Maryland to identify and address encroachment issues from an enterprise perspective and to normalize common issues identified in different JLUS reports to aid in communication. In the five studies completed in Maryland, interest in a statewide and/or regional method to standardize and address concerns as an enterprise included, but were not limited to:

1. economic development/partnerships focus areas

2. land use/safety related to airfield operations focus areas

3. land use buffer areas/focus areas

4. noise focus areas

5. vertical obstructions focus areas

6. water focus areas

Other issues not mentioned in previous MD JLUS studies, but, in Matrix's experience, has potential applicability in the state, include:

1. alternative energy development

2. central repository for key GIS data and information

3. mandatory planning notification areas around military installations

Using the Compatibility Factors as an organizing framework to "bin" feedback from the interviews, the categories outlined below illustrate the results of stakeholder engagement:

Figure 4.2 Compatibility Factors

COMPATIBILITY FACTORS			
AQ	Air Quality	LAS	Land / Air / Sea Spaces
AT	Anti-Terrorism / Force Protection	LU	Land Use
BIO	Biological Resources	LEG	Legislative Initiatives
CA	Climate Adaptation	LG	Light and Glare
COM	Coordination / Communication	MAR	Marine Environments
CR	Cultural Resources	NOI	Noise
DSS	Dust / Smoke / Steam	PT	Public Trespassing
ED	Energy Development	RC	Roadway Capacity
FSC	Frequency Spectrum Capacity	SA	Safety Zones
FSI	Frequency Spectrum Impedance / Interference	SNR	Scarce Natural Resources
		VO	Vertical Obstructions
HA	Housing Availability	V	Vibration
IE	Infrastructure Extensions	WQQ	Water Quality / Quantity

Climate Adaptation (CA)

■ JLUS Implementation efforts at APG address sea level rise concerns and may be leveraged as a best practice for addressing environmental issues and proposed ordinances.

Coordination/Communication (COM)

■ There are opportunities to educate the public and address "no local perceived benefit" of military presence by developing educational brochures, pamphlets, and other media about military missions and the benefits of military investment in the state.

■ There is an opportunity to educate the public by showing mission/economic impact for every region – this could be included with more explicit real estate disclosures (include noise and account for electromagnetic interference).

■ The Dahlgren website notification process was heralded as a best practice for notifying the community of activities, which could be leveraged/adopted in Maryland.

■ There is interest in codifying formal coordination process(es)/procedures to coordinate technical reviews with the military.

■ There is concern over the lack of effective communication and benchmarking among counties regarding military encroachment.

■ There is a need for local and state-level forums to address and resolve issues, building support for actions.

■ There needs to be community relations support for military staff to accommodate education outreach demands.

■ There is an interest in a centralized coordination/communication or media office to support outreach and education activities.

Energy Development (ED)

- Statewide concerns regarding alternative energy development/wind farming, including uncoordinated development, siting processes, and cumulative impacts on weather radar and military missions

- Statewide concerns regarding alternative energy development/solar farming, including glint and glare.

Frequency Spectrum Capacity (FSC) and Impedance/Interference (FSI)

- At Blossom Point, frequency issues persist.

- There is a need for JLUS implementation efforts at APG to address proposed frequency spectrum ordinances.

Land Use (LU)

- There is a desire for JLUS efforts for larger installations and standardized outputs (e.g. a Ft. Meade-driven, regional JLUS that includes the Naval Academy was suggested); outcome of these reports should be relatable to the five Maryland installations with JLUS reports.

- There is a desire for a statewide strategy to address the acquisition of the property that lies underneath installation Air Installation Compatible Use Zone (AICUZ) areas and Clear Zones areas.

- There is interest in leveraging the Readiness and Environmental Protection Integration (REPI) program for range encroachment mitigation by preserving open land. This has been demonstrated at NSF Indian Head, Dahlgren and Pax River where the Navy is working with private land owners to reduce land development rights and preserve open spaces.

- Many of the stakeholders interviewed were supportive of a planning notification boundary for codifying coordination/communications related to communication processes and procedures.

Legislation (LEG) related to State of Maryland Government Support

- There is a lack of support for over-regulation.

- There is minimal interest in state-funded defense of government properties.

- There is support for planning notification legislation that is non-binding, but not in a way that overrides local decision-making process.

- There is support for an alternative energy siting process for permitting process.

- There is interest in reviewing the state comprehensive plan requirements and developing a Standard Operating Procedure (SOP) for notification and collaboration when rezoning major subdivisions.

- There is interest in the state providing zoning guidance (zoning clause) to make all counties equal.

- There is support for legislating vertical construction limits and codifying coordination procedures.

Noise (NOI)

- There is support for adopting AICUZ recommendations.

Roadway Capacity (RC)

- There is significant interest in state recognition and support for transportation issues (including bridge infrastructure to support increased traffic demands) for project prioritization.

- MDOT needs to address traffic problems related to state-funded, mass transit installations; there is a need for assessing impacts of military correlated transportation volume.

Vertical Obstruction (VO)

- There are concerns relating to cell tower siting and frequency competition.

In addition, specific recommendations related to how the State of Maryland is organized at the state, regional, and local level, as well as resourcing were discussed.

State Organization

- Support Department of Commerce Maryland Military Installation Council (MMIC) meetings and the BRAC Advisory Group, which is a subset of the MMIC. There was a desire for counties to be better represented in these groups.

- Support MMIC quarterly meetings, which may be leveraged to be used more effectively for military compatibility planning.

- Educate new commanders to get them up to speed with local politicians regarding economic development plans, how installations can support communities, opportunities for partnerships between bases and communities, etc. (state-run program through MMIC)

- There is an interest in leveraging a governor-appointed military affairs council as a liaison with the state/governor to cross-pollinate jurisdictions' best practices.

- There is an interest in the state dedicating resources to encroachment mitigation, e.g.: developing a database for encroachment topics, best practices to facilitate community benchmarking, and provide guidance for local policy makers.

- There is support for a state-level Geographic Information System (GIS) and geospatial data repository.

- There is support for state-level digital repository providing internet access to compatibility studies and related data.

- There is interest in leveraging an existing statewide commission or establishing a new commission with a dedicated state-military liaison.

- There is interest in a state/Department of Agriculture partnership to leverage the Readiness and Environmental Protection Integration (REPI) Program.

Regional Organization

- There is support for regional or county ownership of encroachment issues and incentive packages for residents who comply with encroachment mitigation.

- There is a need for staffing resources to monitor the implementation of Coordination/Communication recommendations.

Military Organization

- There is an interest in utilizing service-specific community-liaison officers to address encroachment with all branches of the military (benchmark program: Navy Community Plans Liaison Officer (CPLO).

- There is a desire for the standardization of reporting with respect to encroachment concerns in order to paint an enterprise picture for the State of Maryland.

Resources:

- Identify funding to acquire clear zone property or look at alternatives like providing a tax incentive for properties asked to not develop incompatibly.

- Identify funding in the form of grant match and/or prioritization of encroachment related projects through the existing state allocation processes (and tie requirement to mission to give issues visibility at the state level) to highlight need for infrastructure funds.

4.3 Assessment of Compatibility Factor/Issue Feedback from Survey Participants

Stakeholder Surveys

Two surveys were created for the purpose of integrating stakeholder initiatives and any remaining issues into a statewide response. One was created for stakeholders who had previously been involved in a JLUS process and another for those who had not. While the general theme of the surveys was the same (i.e. military/community compatibility), the questions vary between the two surveys.

Survey Analysis

An analysis was conducted to identify where strategies from the survey affect the compatibility issues identified in Chapter 2 and the policy gaps identified in Chapter 3. The results from participants who had participated in a JLUS and those who had not were analyzed separately and then compared to identify common themes related to the compatibility issues and policy gaps. The analysis of the results is organized by the compatibility factor that best relates to the survey question. The results from the online survey are provided in Appendix 2: Maryland Survey Responses.

A total of 32 respondents had previously participated in a JLUS survey prior to this one. The majority of those who participated in this survey work in the Central Maryland Region in Prince George's County and in the Southern Maryland Region in Charles County and St. Mary's County. A high percentage of participants work closest to Joint Base Andrews, NSF Indian Head, and NAS Patuxent River.

A total of 33 respondents had not participated in a JLUS previously. The majority of these participants work in the Northern Maryland, Central Region, and Eastern Shore. Those who work in the Northern Maryland

Region mainly worked in Frederick County and those who work in the Central Region mainly worked in Prince George's County. Only five participants worked in the Eastern Shore Region in various counties and none of the respondents worked in the Southern Region. The participants worked closest to Fort Detrick, APG, and Joint Base Andrews.

The tables on the following pages include key highlights and excerpts from the online survey organized by the compatibility factors identified in Chapter 2 and grouped by whether the compatibility factor has statewide or regional applicability. Table 4-2 contains the results of survey responses with statewide applicability grouped by applicable compatibility factor. Table 4-3 contains the results of survey responses with regional applicability grouped by applicable compatibility factor.

Table 4-2. Survey Responses with Statewide Applicability Grouped by Applicable Compatibility Factor

	Statewide Applicability	
Related Compatibility Factor	**Key JLUS Responses**	**Key Non-JLUS Responses**

Coordination/Communication (COM)	89% stated that their community and local military installation was either on schedule (41%) or partially on schedule (48%) with the JLUS implementation plan
	
	69% stated that communication between local military installation and community is good
	
	66% were very satisfied with local military installation
	
	65% stated that they would like to receive more information on types of training and/or military operations conducted by the local military installation
	
	Most important topics to communities adjacent to local military installation:
	
	   o 69% - Economic development and job creation
	
	   o 47% - Land use and development
	
	   o 38% - National defense/sustaining military operations
		78% knew who to contact for issues with military installation
		
		37% were very satisfied and 30% were somewhat satisfied with their local military installation
		
		78% stated that the local military installation was either very significant (56%) or moderately significant (22%) to the local economy
		
		70% stated that they strongly support the presence of the military in the region
		
		70% did not support the state defining military installation specific planning notification distances
		
		59% stated that military operations at local military installations do not have negative effects
		
		60% stated that the nearest military installation does not have an impact on quality of life, while 28% stated that they have a positive impact
		
		When asked if aware of factors that are a compatibility concern with local military installation's training or military operations, the following factors were chosen the most:
		
		   o 41% - Biological Resources
		
		   o 41% - Noise
		
		   o 41% - Roadway Capacity

Energy Development (ED)	50% indicated that the state should consider strengthening actions for all installation alternative energy encroachment concerns, such as wind farm radar clutter or general EMI interference concerns.	32% supported considering all installation alternative energy encroachment concerns beyond use of airspace, such as wind farm radar clutter, or general EMI interference concerns 48% supported and 37% stated that it is worth exploring the state assisting local governments with the expertise to assess impacts of alternative energy development
Land Use (LU)	69% supported defining military installation influence areas to ensure that the military has	76% stated that policies that protect the interests of residential zones should be prioritized around local military installations

	Statewide Applicability	
Related Compatibility Factor	**Key JLUS Responses**	**Key Non-JLUS Responses**
	sufficient opportunity to react to land use proposals that could affect military operations without delaying the development review process 90% were supportive of military installations being involved in developing and updating comprehensive plans and zoning ordinances 67% identified Land Development around installations, including airfield safety zones, as current issues with community and local military installation	73% supported including military installations during the development and update of Comprehensive Plans
Legislative Initiatives (LEG)	77% felt that policies and ordinances that protect the interests of the local military installation should be prioritized When asked what form of state level support is of most interest, the following were the most selected: ο 78% - support for funding for increased collaboration ο 59% - support for guidance ο 0% - support for idea that jurisdictional limitations should develop own solutions 63% were supportive of establishing a state level committee	When asked what form of state level support is of most interest, the following were the most selected: ο 60% - Guidance ο 56% - Technical Support ο 64% - Funding for increased collaboration ο 56% - Avoid situations on one-size-fits-all legislation that places requirements of requirements

Table 4-3. **Survey Responses with Regional Applicability Grouped by applicable Compatibility Factor**

	Regional Applicability	
Related Compatibility Factor	**Key JLUS Responses**	**Key Non-JLUS Responses**
Light/Glare (LG)	There were no responses related to light/glare in this survey	6% of the participants stated that light/glare is a concern with local military installation
Noise/Vibration (NOI/V)	53% stated that noise from military operations is a current compatibility issue 39% supported requiring real estate disclosures to include noise generated by range and aircraft operations, while 35% supported disclosures that are based on specific locations using a specific study for a specific impact, such as noise When asked to list 3 issues that are most important from a past JLUS, one third of the responses included noise	74% stated that both noise from military aircraft operations, gunfire and/or artillery is not an issue 24% of the participants stated that vibration is a concern with local military installation 41% stated that noise is a concern with local military installation 64% stated that statewide GIS efforts should include FAA Part 77 surfaces and AICUZ noise contours surrounding major military installations 56% were supportive of state recommended real estate disclosures to include noise generated by range activities 48% supported disclosures that are based on specific study for a specific impact, such as noise
Safety (SA)	67% stated that land development around installations including airfield safety zones, was a compatibility concern 50% stated that they would like the State to protect safety areas of airports	12% stated that safety zones are a factor that is currently a compatibility concern 63% stated that they would like the state to consider military installations in drawing and applying zoning ordinances and for the protection of safety areas of airports
Vertical Obstructions (VO)	68% stated statewide GIS efforts should include FAA Part 77 surfaces. 17% stated that the height of towers or buildings around installation airfields are a current issue with the community and local military installation	
Water Quality/Quantity (WQQ)	There were no responses related to water	35% stated that Water Quality/Quantity is concern with military installations

4.4 Communication Matrix

To assist with communication efforts throughout the state, specific state agencies, represented on the Maryland Executive Council were assigned as points of contact for compatibly factors related to their council's mission. The compatibility factors shown in Table 4-4 were organized by functional grouping to identify which best fit the mission of the agency. This communication structure wld be a large component of the Communication Matrix.

Table 4-4.   **Maryland Executive Councils Related to Compatibility Factors**

Maryland Executive Council	Functional Grouping	Compatibility Factors	
Smart Growth Subcabinet	Cross-Functional	Legislative Initiatives	Coordination/Communication
Secretary of Environment	Environment	Air Quality	Climate Adaptation
		Water Quality/Quantity	Dust/Smoke/Steam
		Noise/Vibration	Climate Adaptation
Secretary of Natural Resources	Natural Resources	Biological Resources	Scarce Natural Resources
		Marine Environments	
Secretary of General Services/Deputy Secretary of Energy	Energy	Energy Development	
Office of the Superintendent of the Maryland State Police	Security	Anti-Terrorism/Force Protection	Public Trespassing
Secretary of Transportation	Transportation/Infrastructure	Roadway Capacity	Infrastructure Extensions
Secretary of Housing & Community Development	Housing	Housing Availability	
Secretary of Planning	Planning	Land Use	Light and Glare
		Cultural Resources	Safety Zones
		Land/Air/Sea Spaces	Vertical Obstructions
Secretary of Information Technology	Frequency Management	Frequency Spectrum Capacity	Frequency Spectrum Interference

4.5 Initiatives/Tools/Best Practices

Throughout the course of engagement, interviews, and survey suggestions, the following bullets are feedback "best practices" that are either in existence in the State of Maryland and could be leveraged to reinforce good compatibility planning practices, or are successful elsewhere and may assist Maryland in strengthening the balance between the military's need and economic growth.

- The MARC station at Aberdeen and APG Discovery Center – part of statewide capital spending bill that was approved by the Maryland General Assembly in spring 2018.

- The Kresge Foundation is a private organization that provides placemaking grants (i.e. funds for improving communities) for low income communities to invest in culture, education, environment, health, human services, and community development programs.

- Transportation for America provides placemaking grants for communities.

- Focus on place identity/economic development/transportation/capacity building.

- Military assistance through the Maryland Homefront: The Veterans and Military Family Mortgage Program, for active duty military and retirees to buy homes in the community (mortgage assistance, walk-to-work, etc.), or other financial assistance programs for civilian contractors.

- Could potentially use the Transfer of Development Rights (TDR) program to add an open space buffer around a military base (i.e. "green" encroachment zone around base). These buffers could be developed/preserved as stormwater management/habitat restoration, or other type of functional or restorative land uses.

- Communities adjacent to bases may be eligible, with certain conditions, for Maryland Department of Housing and Community Development (DHCD) Sustainable Communities designation. If the designation is approved, there is funding available for strategically identified goals or projects; e.g. the Town of Indian Head which has this designation.

- Identify types of shared services (educational, recreational, service-oriented, service contracts, etc.) across military, local, and state.

- Establish a collaborative workgroup where community and military stakeholders address educational opportunities, new developments, shared interests/concerns and available resources in an ongoing dialogue.

- Use the benchmark Virginia Beach incentive program as best practice to buy land in neighboring states.

- A Better Maryland is the state's development plan, which is built off of community outreach. A total of 24 public listening sessions were completed and an online survey was open for responses until May 2018.

  o Throughout the listening sessions, there was one comment related to a military installation in Maryland. In a session on November 28, 2017 in St. Mary's County, there was a comment regarding traffic generated by PAX.

- Kent County 500' setback from military installations provides a codified buffer.

Many interviewees identified a communication gap between the good working relationships at various levels and the ability to "telegraph" issues needing resolution between the various levels. These levels can be described as strata of coordination/communication and detailed in the following breakout areas:

- Military installations and local jurisdictions

- Local communities and the State of Maryland

- State of Maryland and federal agencies

- Military installations and federal agencies

Military Installations and Local Jurisdictions

Most of those interviewed expressed satisfaction with the local relationship between the local jurisdictions and military installations. Coordination and communication was a common theme as well as both entities developing outreach materials to better explain the mission of the local installation and the economic impact.

Local Communities and the State of Maryland

Most of those interviewed expressed satisfaction with the relationship between the communities and the state agencies. Coordination and communication was a common theme with respect to how to communicate the need to address encroachment concerns and ability for the state to recognize concerns into existing processes and procedures in order to advocate and secure resources.

State of Maryland and Military Installations

Most of those interviewed expressed satisfaction with the relationship between the state and federal agencies related to addressing encroachment, and preservation of the State of Maryland military missions. There was a general lack of familiarity with the requirements, issues and mission impacts of encroachment and correlated opportunities to harness federal programs of assistance to address those needs.

Military Installations and Federal Agencies

The military relies on its respective higher headquarters to engage the other federal agencies and provide an enterprise approach with respect to addressing encroachment matters and resolving policy related issues.

The Office of Military and Federal Affairs (OMFA) in the Maryland Department of Commerce fulfills the state level role for communications with the local jurisdictions and military installations. Survey participants described existing communications as being disconnected between different issues, which may be due to lack of coordination between other Maryland agencies that are involved with community/military encroachment issues and the OMFA.

Maryland Statewide JLUS RIS Recommendations 5

Chapter 5 of the Maryland Statewide Joint Land Use Study Response Implementation Strategy Recommendations (SJRIS) identifies the opportunities and actions to implement the suggested strategies. The recommendations draw upon information and assessments provided in Chapters 1-4, looking for synergies across all the topic areas, including the benefits of joint land use planning (Chapter 1), community/military compatibility planning factors and issues (Chapter 2), policy assessment and gaps (Chapter 3), and a communications analysis and plan approach (Chapter 4) to provide a roadmap of steps to take to improve community and military compatibility planning in the State of Maryland.

5.1 Overview

As discussed in Chapter 1, the strategic intent of the Maryland SJRIS is to develop a unified approach to managing common community/military compatibility challenges across the State of Maryland.

12 active duty military installations were considered when developing the recommendations. While there are additional military bases in Maryland, the following installations were part of the SJRIS. In addition, Adelphi Army Laboratory and Martin State Airport were included only for purposes of

planning notification areas, due to the potential for a military influence area beyond the installation/site boundaries:

- Aberdeen Proving Ground (APG) *
- Adelphi Army Laboratory (planning notification only)
- Blossom Point Research Facility *
- Fort Detrick
- Fort George G Meade
- Joint Base (JOINT BASE) Andrews *
- Martin State Airport Air National Guard (planning notification only)
- Naval Air Station (NAS) Patuxent River *
- Naval Research Lab (NRL) Chesapeake Bay
- NSA Bethesda/Walter Reed National Military Medical Center
- NSA Annapolis and United States (US) Naval Academy
- Naval Surface Warfare Center (NSWC) Carderock
- NSF Indian Head *

  *JLUS has been completed

Drawing upon information and analysis from the five locations where JLUS Reports have been completed, goals were created to identify where the

State of Maryland can take or support specific actions or recommendations. These recommendations have the potential to enhance regional or statewide community/military compatibility planning.

It is important to note that for locations where a JLUS Report has not been completed, recommendations were based on the extrapolation of information from locations where JLUS studies and some mitigation strategies have been completed. In most cases, this approach will provide reasonable condition assessments and appropriate recommendations for installations across the state. However, consideration should be given to the fact that the on-site assessments and analysis provided in a JLUS have not been completed at all 12 locations.

The following overarching considerations were included during the development of the goals and recommendations:

- state assistance can enhance Maryland compatibility planning;

- Maryland policies and regulations have the potential to greatly affect compatibility planning; and

- Maryland's interagency communication and coordination process can be leveraged to assist collaborative compatibility planning.

Based upon the collected data and subsequent analysis, seven goals/themes and 33 recommendations (R) were developed. Each recommendation under the proposed theme is arranged by Ongoing (O), Short-term (S), Mid-term (M), or Long-term (L) timeframe to implement the corresponding recommendations as defined by the following:

- Ongoing: An ongoing recommendation that has been implemented and should be consistently monitored.

- Short-term: A recommendation proposed for initiation in 2018-2019 (within a year of SJRIS completion).

- Mid-term: A recommendation proposed to be initiated in 2020-2021 (within 2-3 years of SJRIS completion).

- Long-term: Strategy proposed to be initiated in 2022-2024 (within 4-6 years from SJRIS completion).

Where timeframes may overlap (for example providing time for outreach to all jurisdictions), the timeframe designation is shown with an "(/)" dividing the timeframe. For example, Short-term and Mid-term would be (S/M).

A recommendation (R) from the first goal/theme labeled "R 1.1 (S)" would be the first recommendation from the first goal/theme that can be implemented in the short term. This designation makes it easier to read and reference the recommendation table at the end of this chapter.

5.2 JLUS RIS Recommendations

Recommendation R1 Goal/Theme	*Enhance Ongoing Communication and Coordination between the State of Maryland, local communities and Military Installations*

Analysis

A review of the data from the five completed JLUS Reports shows that all the locations had compatibility issues related to communication and coordination between jurisdictions and installations. In the case of APG, NAS Patuxent River, and NSF Indian Head, problems were recognized as coordination/communication compatibility issues, while in the case of Joint Base Andrews and Blossom Point Research Facility communication and coordination issues were identified as a component of another compatibility factor. The communication/coordination issues ranged from lack of community awareness of the installation's mission to lack of formal process for coordination with the installation regarding proposed development in the community. These types of communication/coordination concerns are typically found at most locations where JLUS Reports have been completed and tend to be a root cause for many of the identified concerns across several compatibility factors. Establishing formal processes for regular communication and coordination between the jurisdictions and the installations is key to mitigating compatibility issues and preventing encroachment of mission sustainment and resiliency.

State-level policies that address communication/coordination between military installations and surrounding communities are necessary to maintain compatibility. New policies could provide mechanisms for communities to notify military installations of development or changes in land uses surrounding military bases as well as lines of communication between state agencies and the installations. Because the composite MIA/MF from Maryland installations extends into Virginia, there should also be policy that facilitates communications between the two states.

Communication/coordination between jurisdiction and installations was also a common theme identified in the communication plan (Chapter 4). Many participants felt that communication could be enhanced between military installations and the community, making it necessary to implement formalized strategies to coordinate ongoing communication efforts. The Maryland Military Installation Council (MMIC) could develop these formal communication/coordination strategies with the involvement of the Smart Growth Subcabinet to enable robust and long-term decision-making.

Findings

- All locations with a completed JLUS Report identified communication/coordination issues between jurisdictions and installations.

- Lack of adequate communication/coordination can be a direct cause of compatibility issues and can also affect other identified compatibility factors.

- There is a need for enhanced communication efforts between jurisdictions and military installation.

- There are no existing state policies for communication/coordination between the state, local jurisdictions, and installations.

- Establishing formal processes to enhance communication/coordination is a key element in compatibility planning.

- MMIC represents an integral stakeholder forum that could improve its current level of communication/coordination at the state level.

Recommendations & OPR/OCR

- **R1.1 (S)** Develop an MOU template that can be used by local communities and/or military installations to promote and establish processes and procedures to improve communication and coordination.

    - **Implementation Responsibility:** Smart Growth Subcabinet, Department of Information Technology, Maryland Commerce Office of Military and Federal Affairs, Maryland Military Installation Council (MMIC)

    - **Implementation Support:** Department of Planning; local jurisdictions including county, city, towns; military

- **R 1.2 (S)** Establish compatibility site assessment protocols for tracking and reporting the status of the implementation of the JLUS strategies.

    - **Implementation Responsibility:** Smart Growth Subcabinet, Maryland Commerce Office of Military and Federal Affairs

    - **Implementation Support:** Department of Planning; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 1.3 (S)** Consolidate issues from an Enterprise Planning Perspective under the direction of the MMIC.

    - **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

    - **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 1.4 (S)** Establish coordination between the MMIC and the Smart Growth Subcabinet for facilitating communications between local jurisdictions and state executive councils.

    - **Implementation Responsibility:** Smart Growth Subcabinet, Department of Planning

    - **Implementation Support:** Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 1.5 (M)** Leverage the Maryland Smart Growth Subcabinet to elevate issues regarding resources and/or policy.

    - **Implementation Responsibility:** Smart Growth Subcabinet, Department of Planning, Maryland Commerce Office of Military and Federal Affairs, Maryland Military Installation Council (MMIC)

o **Implementation Support:** Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; local jurisdictions including county, city, towns; military

- **R 1.6 (L)** With consideration to existing policy at the local jurisdiction level, adopt a Notification/Planning Area "Buffer" to enhance communication and collaboration between jurisdictions and installations.

  o **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

  o **Implementation Support:** Smart Growth Subcabinet, Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 1.7 (L)** With consideration to existing policy at the local jurisdiction level, develop legislation to address compatibility factors that are prevalent in the Study Area and that currently do not have existing legislation for mitigation.

  o **Implementation Responsibility:** Department of Planning

  o **Implementation Support:** Smart Growth Subcabinet, Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation

Council (MMIC); local jurisdictions including county, city, towns; military

Recommendation R2 Goal/Theme	*Continue Joint Land Use Planning Activities Across Maryland Locations Where Military Installations are Located*

Analysis

Data from the five Joint Land Use Studies that have been completed in Maryland can be appropriately extrapolated and applied to other installations, based on assumptions and Matrix's prior experience with JLUS projects. However, only on-site assessments can provide the accurate and detailed information necessary to identify compatibility issues at specific military installations.

Because all Maryland military installations and surrounding communities are unequal in size and mission complexity, approaches to the JLUS assessment could vary. For example, locations that are larger and more complex could use the traditional approach of working with the U.S. Department of Defense (DoD) Office of Economic Adjustment (OEA) and obtaining the services of a consultant to develop the study. A smaller, less complex location may use in-house resources to complete a JLUS or a similar assessment. In-house resources could consist of knowledgeable Maryland agency personnel, local jurisdiction staff and military installation personnel. In all joint land use planning activities, regardless of mission complexity, local

communities should be encouraged to work hand-in-hand with their local military.

Another critical element related to ongoing JLUS planning in Maryland is ensuring that strategies identified in current and future JLUS Reports are actually implemented and resolve compatibility issues. Therefore, an important component of conducting a JLUS assessment is follow-up action, including tracking and reporting on implementation efforts and outcomes using standardized procedures. This process of tracking and reporting on strategy implementation can establish baseline data at specific locations and point to areas where progress has been made or where additional help may be needed, ensuring continued progress and resolution. Having a formal, standardized, and repeatable approach to identifying and collecting both military and local jurisdiction encroachment concerns is a valuable tool that supports establishing a compatibility information baseline and helps understand where progress is being made in resolving issues or where additional assistance may be required.

While a JLUS is not a regulatory document, it can serve as a guide for land use decisions in the areas surrounding a military installation. For example, in most states, the framework for how local governments conduct land use planning is set by the state legislature. By notifying and giving military installations the opportunity to participate in the planning process, state legislatures can promote compatible development and ensure the sustainability of their state's military installations. A number of states have established avenues for military representatives to serve in an *ex officio* capacity on state or local zoning or planning boards. Seventeen states have enacted legislation, including:

- California, which requires local governments to refer the proposed action to the appropriate branches of the U.S. Armed Forces before adopting or substantially amending a general plan.

- Kentucky, which requires local planning entities to consult with the military commander to determine land use planning needs.

- Virginia, which requires local governments to notify a military installation commander when considering a proposed change to the comprehensive plan or a zoning ordinance, if it involves any parcel of land located within 3,000 feet of an installation's boundary.

Furthermore, 46 percent of survey participants in the communications analysis supported legislative assurances that JLUS or similar studies would be completed at all military installations. When asked which stakeholders should be involved in changing State Code, 73 percent supported including current JLUS Policy Committees. This suggests that JLUS committees are instrumental in understanding compatibility issues as well as in affecting change to address such issues. The Maryland Department of Planning and the Smart Growth Commission should establish a state-level JLUS Policy committee.

Findings

- Five of the 12 locations with active duty military installations have completed a JLUS.

- Extrapolating known issues from one or more locations with completed studies to an installation location with no completed JLUS only provides a notional perspective of what encroachment issues might actually exist.

- On-site JLUS assessments are necessary to identify existing encroachment issues.

■ There may be opportunities to conduct JLUS assessments at Maryland military installations using a different approach based on the size and complexity of locations.

■ Defining an enterprise process to track and report JLUS strategy implementation is key to ensuring compatibility issue resolution.

■ Creating a JLUS Policy Committee at the state level may facilitate communications between the state and local communities regarding the establishment and/or implementation of a JLUS and assist in tracking/reporting strategy implementation. The state could provide collaboration assistance, where relevant, with local jurisdiction planners and military planners to jointly execute required actions.

Recommendations & OPR/OCR

■ **R 2.1 (S)** Develop fact sheets to assist communities and installations without a JLUS to pursue OEA funding. Fact sheets should include information explaining a JLUS and how a community can start the process to obtain a JLUS.

   o **Implementation Responsibility:** Maryland Commerce Office of Military and Federal Affairs

   o **Implementation Support:** Smart Growth Subcabinet; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

■ **R 2.2 (S)** Adopt a compatibility site assessment format for reporting the status and tracking implementation of JLUS strategies. Criteria should include the following. (For further explanation see Chapter 2)

   o Compatibility factor ratings (green, yellow, orange).

   o Geographical scope of each compatibility factor; i.e. state or regional concern?

   o Functional group the compatibility factor was grouped into.

   o Organization within the Maryland Executive Council in which the functional group/compatibility factor most closely aligns.

   o **Implementation Responsibility:** Maryland Commerce Office of Military and Federal Affairs

   o **Implementation Support:** Smart Growth Subcabinet; Department of Planning; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

■ **R 2.3 (S)** Create and lead a state-level JLUS Policy Committee led by the Maryland Department of Planning with guidance from and working level actions conducted by the MMIC.

   o **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

   o **Implementation Support:** Smart Growth Subcabinet, Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Maryland Commerce Office of Military and Federal Affairs

■ **R 2.4 (M)** Develop a formal, standardized, and repeatable approach for collecting both military and local jurisdiction encroachment concerns in order to monitor the Maryland military enterprise and identify constraints and opportunities.

   o **Implementation Responsibility:** Maryland Military Installation Council (MMIC)

- o **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Planning; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military Local Jurisdictions including county, city, towns; military

- ■ **R 2.5 (M)** Consider leveraging knowledgeable resources in the state, local communities and military installations to conduct in-house JLUS assessment for less complex installations.

  - o **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

  - o **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- ■ **R 2.6 (M/L)** Conduct a JLUS at the following locations after establishing the appropriate priority order:

  - o Fort Meade

  - o NSA Bethesda/Walter Reed National Naval Medical Center

  - o Fort Detrick

- o NSWC Carderock

- o NSA Annapolis/US Naval Academy (combine for efficiency)

- o NRL Chesapeake Bay

- o **Implementation Responsibility:** military; local jurisdictions including county, city, towns

- o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Department of Planning, Maryland Military Installation Council (MMIC)

Recommendation R3 Goal/Theme	*Adopt Statewide Community/Military Compatible Land Use Policies and Planning Guidelines for Implementation at the Local and Regional Levels*

Analysis

The basis of land use planning and regulation stems from the government's obligation to protect public health, safety, and welfare. While local jurisdictions' comprehensive plans and zoning ordinances can be the most effective implementation tools for preventing or resolving land use compatibility issues, there are also potential benefits to standardizing land use requirements across the state to ensure community/military compatibility planning is addressed.

As discussed in Chapter 1 and 2, military installations have a Military Influence Area (MIA) and Military Footprints (MF) associated with ongoing operations. The MIA is defined as a geographic planning or regulatory area where military operations impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. Mission footprints make up the MIA and can impact communities in a number of ways such as noise, safety zones, and frequency spectrum use. The value of establishing planning areas around military installations is to ensure that development in local communities includes a military perspective to avoid potential mission impacts. Incompatible development can include locating residential areas in locations where noise impacts from military operations exceed recommended levels. Another example is the siting of communication towers or alternative energy wind turbines in locations where they have the potential to become vertical obstructions to safe aircraft operations. Wind turbine farms or large commercial solar arrays can also cause radar interference and glare impacts to pilots.

Planning notification areas are a tool for communication surrounding an installation and extending into the community. They can be standardized or can vary in size (e.g., overall acreage and/or extent beyond installation boundaries) and shape (e.g., circular or other shape to correspond to the MIA) depending on the installation's mission, its MIA, as well as community needs. As noted in Chapter 3, 17 states (OR, CA, AZ, CO, TX, LA, MA, VA, FL, GA, SC, NC, KY, IN, KS, NB, DE) currently require communication with or notification to installations concerning land use changes similar to planning notification areas or a similar policy to assist with compatible land use. Planning notification areas can be based on state or local policy. The preferred approach to establishing a planning notification area is to use information developed in a JLUS (e.g. MIA and MF areas) to establish the framework.

Figures 5-1 through 5-5 provide maps of the five military installations in Maryland with completed JLUS Reports overlain with a notional planning notification area. Notional planning notification area maps are included in Appendix 5 for the other seven military installations without a JLUS, along with the Adelphi Army Laboratory and Martin State Airport Air National Guard. As discussed in Chapter 2, installations with a flying mission tend to have larger MIA due to airfield and airspace footprints and may require larger planning notification areas. In addition, larger notification areas may be most suitable for installations with significant noise mission footprints. Other installations in Maryland with smaller MIAs would typically not require extensive planning notification areas. It is not required that a MIA and the planning notification area match exactly. Where installations have large MIAs, it may not be practical for them to align. Conversely, while typically not the case, there may be reasons for an installation with a smaller MIA to have a larger planning notification area. For the purposes of this report, notional planning areas were established equidistant outward from installation MIAs as follows:

- **Notional 5-Mile Planning Notification Area** – installations with an MIA that extends five miles or more (known or suspected) beyond the installation boundary, such as those with flying missions with large footprints.

    These installations include:

    o   Aberdeen Proving Ground
    o   Joint Base Andrews
   o   NAS Patuxent River
    o   NSF Indian Head

- **Notional 1-Mile Planning Notification Area** – installations with a MIA (known or suspected) that extends one mile or less beyond the installation boundary.

  These installations include:

 - Blossom Point Research Facility

The distances in the notional planning notification area are provided as a starting point. If it is determined that planning notification areas should be established for all or some Maryland installations, another approach may be to create unique planning notification areas for each location.

Legend:

- Notional Planning Notification Area Around Installation
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body
- Airport/Airfield

0 2 4 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure 5-1

Aberdeen Proving Ground/Adelphi Laboratory Center Notional Planning Notification Areas

Legend:

- Notional 5-mile Planning Notification Area Around Installation
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body
- Airport/Airfield

0 2 4 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure 5-2
Joint Base Andrews Notional Planning Notification Area

Legend:

- Notional 5-mile Planning Notification Area Around Installation
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0   10   20 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure 5-3
NAS Patuxent River Notional Planning Notification Area

Legend:
- Notional 5-mile Planning Notification Area Around Installation
- Military Influence Area Identified in a JLUS
- County Boundary
- State Boundary
- Military Installation
- Municipality
- Census Designated Place
- US Route
- Other Major Road
- Local Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0   2   4 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure 5-4
NSF Indian Head Notional Planning Notification Area

Figure 5-5

ARL Blossom Point Research Facility Notional Planning Notification Area

Figure 5-6, Military Influence Areas and Notional Planning Areas in Maryland, provides a statewide perspective of installation MIAs for the five locations with a completed JLUS, along with the notional planning notification area for each of the 12 military installations. The map includes three insets to provide a better view of locations where the MIA and notional planning notification area are smaller. This view shows the extent of the known MIAs in the state and how notional planning notification areas, if implemented, could align across the state.

All five locations with completed JLUS Reports identified compatibility issues related to land use. In some cases, the land use issue was identified under the land use compatibility factor; in other reports, the issue was identified under another compatibility factor (e.g. Safety Zones), but the underlying issue was land-use related. For example, in the case of APG, Joint Base Andrews and NAS Patuxent River, land use issues were identified related to airfield accident potential zones (APZ). In all three instances, there is incompatible land use in the APZs. In the case of NAS Patuxent River and Joint Base Andrews, there are also issues with airfield clear zone (CZ) areas extending beyond the installation boundary. APZs are developed to assist military and community planners with developing land uses that are compatible with airfield operations, thereby protecting health and safety of nearby community residents. APZs have recommended guidelines on limiting development, thereby reducing the impact risks of any aircraft incidents near the airfield runways. The APZ consists of three components: the CZ, APZ I and APZ II. Within these three zones, there are suggested types, densities, and intensities of land uses that are recommended. While the likelihood of an aircraft mishap occurring is remote, the identified APZs provide the best practical solution for fostering communication and public safety. It is desirable for CZ land areas to be owned by the installation or have enforceable easements that prevent incompatible development. At a minimum, development in APZs should be controlled by zoning ordinances

that mandate compatible land use. Both the NAS Patuxent River and Joint Base Andrews JLUS Reports suggest pursuing procurement of land located in CZ areas that are currently not owned by the installation. The CZ has the strictest guidelines for land use/development due to higher risk of aircraft incidents and having the military control land use in the CZ helps reduce risk by preventing incompatible development in the areas.

While Maryland has set zoning regulations for land use code, the regulations do not set specific guidelines for addressing military compatibility. This tool can be updated to include such policy related to notification areas that incorporate MIAs. Although notification areas may differ in size depending on the MIA, the notification procedures should be consistent throughout the notification areas. Additionally, the procedures should include timely notifications to the military installation commander regarding changes in the comprehensive plan, zoning ordinance, or land use regulations that would change land use intensity or density, height, or use. In turn, the military commander should be given a specific period of time to comment on the changes in the land use documents prior to the local government proceeding with changes.
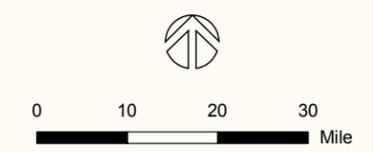
Figure 5-6
Military Influence Areas and Notional Planning Notification Areas in Maryland

Please see the next page.

For military installations that have not established an MIA through a completed JLUS, a general MIA could be created based on the existing mission footprint at each installation. A notional planning notification area could then be implemented until a JLUS occurs for the individual installation. The general MIA would be established by the military installation planners and local jurisdiction planners working to identify areas off base where military operations impacts land use. These impacts can be from noise, aircraft overflights, Explosive Safety Quantity Distance (ESQD) arcs and similar activities. As noted in Chapter 4, the concept of a planning notification area was supported by participants during the outreach portion of the communication plan, although participants did not support the establishment of a one-size notification area for all Maryland installations. This feedback resulted in the recommendation to establish a planning notification area based on each installation's MIA/MF.

Facilitation of land compatibility policy development and communication requirements between local jurisdictions and military installations should be coordinated between the Department of Planning and the Smart Growth Subcabinet at the state level.

Findings

- Effective land use policy and guidelines can be developed at the state level for implementation at the local jurisdiction level.

- The installation MIA and underlying MF are important considerations to ensure successful compatibility planning.

- Planning notification areas have potential statewide benefits by ensuring coordination of community development with nearby military installations.

- All five locations with completed JLUS Reports indicated issues with land use compatibility.

- At three installations, land use issues involved incompatible land use in airfield APZs and at two locations there were issues with CZs being located off the installation.

- Maryland does not have policy that requires a planning notification area for land use decisions that could affect military compatibility.

- Planning notification areas were supported by survey participants using the installation MIA/MF as a guideline.

Recommendations & OPR/OCR

- **R 3.1 (S/M)** Assist local jurisdictions in resolving instances in which military installation APZs and similar Safety Zones are located off base and do not have adequate land use controls in place to ensure public health and safety.

  - o **Implementation Responsibility:** Smart Growth Subcabinet, Department of Planning, Maryland Military Installation Council (MMIC)

  - o **Implementation Support:** Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 3.2 (M)** Develop legislation for installation communities that have not completed a JLUS, to define a general MIA with the goal of incorporating a planning notification area.

  - o **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

- o **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Department of Information Technology; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 3.3 (M)** Develop legislation to address compatibility factors that are prevalent in the Study Area and that currently do not have existing legislation for mitigation.

  - o **Implementation Responsibility:** Department of Planning, Maryland Military Installation Council (MMIC)

  - o **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Maryland Energy Administration; Maryland State Police; Department of Transportation; Department of Housing & Community Development; Maryland Commerce Office of Military and Federal Affairs

- **R 3.4 (M)** With consideration to existing policy at the local jurisdiction level, create a policy to develop a notional planning area for military installations and communities that have not undergone a JLUS, based on a general MIA.

  - o **Implementation Responsibility:** Department of Planning, Military Installation Council (MMIC)

  - o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 3.5 (M/L)** With consideration to existing policy at the local jurisdiction level, the Maryland Department of Planning and the Smart Growth Subcabinet should determine updates to zoning regulations in the Maryland Land Use Code, including land use regulations for military compatibility.

  - o **Implementation Responsibility:** Smart Growth Subcabinet, Department of Planning

  - o **Implementation Support:** Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 3.6 (M/L)** With consideration to existing policy at the local jurisdiction level, the Maryland Department of Planning and the Maryland Smart Growth Subcabinet should develop and codify planning notification areas surrounding military installations that are determined by each installation's MIA/MF.

  - o **Implementation Responsibility:** Smart Growth Subcabinet, Department of Planning

  - o **Implementation Support:** Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

Recommendation R4 Goal/Theme	*Assist in the Development and Application of Community/Military Compatibility Planning Tools*

Analysis

One of the objectives of this goal is to have a current geodatabase of military influence areas that state, regional and local governmental agencies, the development community, and any special interest groups can access and utilize for long-range planning. A single repository of updated and current Geographic Information Systems (GIS) mapping layers and consolidated information can help integrate the military into local planning, while simultaneously providing enhanced information to key groups engaged in long-range planning.

There is specific GIS data that represents each military installation's area of influence, or MIA, as it extends beyond facility boundaries. The MIA is comprised of a mission's operational footprints where military activity impacts on the local community can be expected. For example:

- airfield imaginary surfaces
- explosive quantity distance (ESQD) arcs
- special use airspace (SUA)
- military operating areas (MOAs)
- military training routes (MTRs)
- surface danger zones (SDZs), weapons danger zones (WDZs)

- impact areas, and accident potential zones (APZs) including clear zones, and noise zones

Having this data readily available for state and local planners is critical for ensuring compatible planning around military installations and within the MIA. Military installations have this MF data and can share with the state and local communities as long as it does not pose any security risks.

Comprehensive plans and zoning ordinances are key tools that developers and community planners use to guide development and make land use decisions. Future land use maps from comprehensive plans and zoning maps from zoning ordinances can be displayed digitally to agencies and stakeholders, providing awareness of areas influenced by military operations. This information helps shape compatible land use and development policy by addressing the needs of the communities and the military installations. Most of the communities surrounding the military installations assessed for this report do not identify military installations or their influence areas in their future land use or zoning maps. Maryland policy does not require the inclusion of military operations and associated MIA in community comprehensive plans, zoning ordinances or notification procedures. By not identifying military influence areas, decision makers may not consider the military installation as a planning factor during the decision-making process. This can lead to uncoordinated, incompatible development that may adversely impact military installation missions and ultimately its long-term sustainability.

Many jurisdictions have an interactive online GIS portal accessible through their website that is available to developers and community planners. Although these jurisdictions do not provide military installation data, it may be easily added to the GIS library as communities obtain and recognize

military influence areas. This system can help provide up-to-date information and bridge the gap between comprehensive plan updates.

Maryland does not have policy related to the incorporation of a geodatabase for communities that have a military installation. Future policy should include requirements for incorporating maps for existing land use, future land use (derived from comprehensive plans), zoning, and the MIA for the local military installation. Additionally, Maryland should keep a repository of all military MIAs in the state.

The Maryland Department of Commerce manages the Maryland Military Installation Council (MMIC), which identifies the public infrastructure, potential impact on local communities, and support needed for state military installation development and expansion. The council reviews state policies to support military installations and maximize economic benefits to local communities. The MMIC serves as a critical link to inform the governor and state agencies of issues faced by Maryland military installations and defense communities. While Maryland Commerce may not currently have the resources to host a GIS database, but the department is the natural nexus between the military, local communities, and state agencies to address encroachment issues. The MMIC was identified during the outreach phase for this project as the appropriate organization for consolidating compatibility issues as it is a natural connector for establishing processes to view Maryland's existing and future military missions and encroachment impacts.

Findings

- There is no repository for data on Maryland military installation mission footprints that extend beyond the installation boundaries.

- Mission footprints are typically public information; however, in some cases they are considered For Official Use Only (FOUO). In these cases where access is limited, appropriate controls can be established.

- Having MIA and MF data available to local jurisdictions is key to ensuring compatible planning and guiding the development of comprehensive plans and zoning ordinances.

- There is no Maryland legislation or authority that would require local jurisdictions within a military installation MIA to have a GIS database that includes zoning, land use, and applicable MFs.

- The Maryland Department of Commerce has processes for engaging the military and communities through the MMIC and is best positioned to consolidate requirements and to present to state agencies any encroachment issues impacting the military from an enterprise perspective.

Recommendations & OPR/OCR

- **R 4.1 (S)** Develop a statewide repository for GIS mapping of the military installation mission footprint for all affected jurisdictions, similar to those developed by Arizona, Utah, and New Mexico.

  o **Implementation Responsibility:** Department of Planning, Department of Information Technology

  o **Implementation Support:** Smart Growth Subcabinet; Department of the Environment; Department of Natural Resources; Department of Transportation; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 4.2 (S)** Provide military mission footprint repository access to Maryland regional and local planners.

  - o **Implementation Responsibility:** Department of Planning

  - o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 4.3 (M)** With consideration to existing policy at the local jurisdiction level, the Maryland Smart Growth Subcabinet should develop policy to implement an integrated GIS database that includes data for existing land use, future land use (derived from comprehensive plans), zoning, and the MIA for the local military installation, for communities within an MIA.

  - o **Implementation Responsibility:** Smart Growth Subcabinet, Department of Information Technology

  - o **Implementation Support:** Department of the Environment; Department of Natural Resources; Department of Planning; Maryland Commerce Office of Military and Federal Affairs (Maryland); Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

Recommendation R5 Goal/Theme	*Establish Procedures for Permitting Renewable Energy Development that facilitates Military Compatibility and Community Economic Development*

Analysis

As the U.S. continues to strive for the use of renewable energy sources, more alternative renewable energy sources are being developed across the nation, including offshore energy, solar energy, and geothermal energy.

Maryland has a Renewable Portfolio Standard (RPS), a policy goal specifying that 25percent of the electricity sold in the state must come from renewable sources by 2020. At least 2.5 percent must come from solar resources in Maryland; the remaining can come from other renewable technologies such as wind, biomass, and landfill gas. The annual RPS requirements will increase annually until the 25 percent goal is reached in 2020.

These renewable energy projects – specifically wind energy projects -- can create numerous benefits and economic development opportunities for many stakeholders. Technology has allowed the manufacture of wind turbines to increase in height and take advantage of differing wind resources at higher elevations. Without careful planning and thorough coordination, wind energy projects can result in impacts on aviation operations and radar and satellite communications systems by creating a halo effect and/or a shadow flicker. The halo effect creates communications issues and the shadow flicker creates noise and vibration issues for nearby land uses. Such impacts can have detrimental effects on military activities, such as aviation operations between pilot and ground control landing facilities and communication issues between radar and satellite operations.

Renewable energy projects can create numerous benefits and economic development opportunities for stakeholders, including reducing costs associated with fossil fuel consumption. Nevertheless, the development of alternative energy sources, particularly wind energy, can impact military operations and quality of life in local communities. Renewable energy should be promoted in a way that is compatible and sustainable for all users and consumers of various airspaces and geographies.

The U.S. Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) have developed wind resource maps for Maryland to determine the potential for wind energy development. A set of three maps were developed by the NREL to identify the wind resource potential using different heights of wind turbines. For the purposes of the map, most of Maryland was broken up into 400 square kilometer (sq. KM) sections. Each section shows land area with a gross capacity factor of 35 percent and higher that may be suitable for wind energy development. Each section is identified by the amount of sq. KM it has with the potential to produce viable wind energy, measured in ranges of 100 sq. KM. For example, excluding a measurement of 0 for areas with no potential, the smallest increment of wind potential is a section identified as 1 to 100, meaning that between 1 and 100 sq. KM of that land is viable for wind energy development. The highest potential is 301 to 400. The wind potential models are estimates and may differ from the actual wind resources at any given area, which may vary from estimates based on factors such as terrain, buildings, vegetation, and atmosphere effects.

Areas with annual average wind speeds of roughly 6.5 meters per second and faster at 80 meters above the ground are typically considered to be suitable for wind energy development. The 2014 industry standard for wind tower heights generally ranges from 80 to 110 meters; however, new technology options are estimated to increase the heights of wind turbines to

140 meters. For these purposes, the NREL mapped wind potential for 80 meters in height (262.5 feet), 110 meters in height (360.9 feet), and 140 meters in height (459.3 feet). Generally, the higher the area where wind is captured, the greater the potential for wind energy development. As shown on Figure 5-7, at 80 meters, the areas that provide lower levels of potential wind energy resources (indicated by light red or pink shading) are located across the state. There are small areas (indicated in white) in central Maryland and on the Eastern Shore with little or no wind energy potential at this height. At 110 meters, shown in Figure 5-8, wind potential is again located across much of the state, however most of it is lower potential with the exception of some areas in Western Maryland (indicated by the dark red shading). Figure 5-9 shows the wind energy potential for Maryland at 140 meters. At this height there is greater wind energy potential, particularly on the Eastern Shore and in Western Maryland (as indicated by the darkest red shaded areas). There are also some areas in north central Maryland and in Southern Maryland with some wind energy potential (as shown by the lighter red shading). Again, these maps are intended to provide estimates of wind energy potential and may not always reflect true conditions.

Even though the NREL has mapped locations of viable wind energy development, any proposed development of wind turbines or wind farms should coordinate with the appropriate authorities to ensure potential impacts are minimized including, but not limited to, impacts on aviation, radar, safety, wildlife, viewsheds, visual resources, local resources, and adjacent lands. The siting and permitting of wind farms is subject to review and approval by various federal agencies, depending on their location and what impacts they may have on resources. The Federal Aviation Administration (FAA) and the DoD Siting Clearinghouse, through the FAA's airspace obstruction evaluation process, are important reviews of wind farm siting when impacts to air traffic and military missions are a concern. Figure

5-10 shows the wind potential at 140 meters overlaid with military flight routes below 1,000 feet. This map provides a good perspective of where wind energy potential at 140 meters and military airspace mission footprint overlap, resulting in greater potential for conflicts. The airspace mission footprint is outlined in blue and as with the previous wind maps, darker shades of red indicate a greater potential for wind energy.   The areas of greater potential concern are on the Eastern shore, in Western Maryland and in smaller areas in Southern Maryland. A more in-depth wind energy study would be required to gain a better understanding of potential impacts of wind energy development and military mission footprints.

Legend

Potential Wind Capacity At 80 Meters Using Current Technology

35% Or Higher Gross Capacity

- 0 sq. KM (Very poor wind capacity)
- 1 - 100 sq. KM (<25% of a square)
- 101 - 200 sq. KM (25-50% of a square)

- ■ Navy
- ■ Army
- ● Army Guard
- ■ Air Force
- ● Air Force Guard

- County
- State
- Interstate
- US Route
- Waterbody

0   10   20   30
Mile

Source: National Renewable Energy Laboratory, 2014.

Figure 5-7
Wind Energy Potential at 80 Meter Hub Height

Legend

Potential Wind Capacity At 110 Meters Using Current Technology

35% Or Higher Gross Capacity

0 sq. KM (Very poor wind capacity)

1 - 100 sq. KM (<25% of a square)

101 - 200 sq. KM (25-50% of a square)

201 - 300 sq. KM (50-75% of a square)

■ Navy
■ Army
● Army Guard

■ Air Force
● Air Force Guard

County
State

Interstate
US Route

Waterbody

0 10 20 30 Mile

Figure 5-8
Wind Energy Potential at 110 Meter Hub Height

Source: National Renewable Energy Laboratory, 2014.

Legend

Potential Wind Capacity At 140 Meters Using Current Technology

35% Or Higher Gross Capacity

	1 - 100 sq. KM (<25% of a square)
	101 - 200 sq. KM (25-50% of a square)
	201 - 300 sq. KM (50-75% of a square)
	301 - 400sq. KM (>75% of a square)
	0 sq. KM (Very poor wind capacity)

- Navy
- Army
- Army Guard
- Air Force
- Air Force Guard

County
State

Interstate
US Route

Waterbody

0 10 20 30 Mile

Source: National Renewable Energy Laboratory, 2014.

Matrix DESIGN GROUP

Figure 5-9
Wind Energy Potential at 140 Meter Hub Height

Legend

Potential Wind Capacity At 140 Meters Using Current Technology

35% Or Higher Gross Capacity

▨ 101 - 200 sq. KM (25-50% of a square)	◻ Airspace Mission Footprint in Maryland	■ Navy
▨ 201 - 300 sq. KM (50-75% of a square)		■ Army
▨ 301 - 400sq. KM (>75% of a square)		● Army Guard
▨ 1 - 100 sq. KM (<25% of a square)		

■ Air Force
● Air Force Guard

◻ County
◻ State

╱ Interstate
╱ US Route

≈ Waterbody

0   10   20   30 Mile

Source: National Renewable Energy Laboratory, 2014.
Department of Defense, 2017.

Figure 5-10
Wind Energy Potential at 140m Within Airspace Mission Footprint Below 1,000 ft in Maryland

To minimize the impacts of wind energy on military installations, coordination and communication regarding the siting of wind turbines should take place with military installations. North Carolina lists "changes in windmills" as a specific requirement for notices to military installation commanders. N.C. Gen. Stat. § 143-215.116 requires a permit pre-application site evaluation meeting, and notice to interested parties, and includes specific pre-application package requirements No less than 180 days prior to filing an application for a permit to construct, operate, or expand a wind energy facility, a pre-application site evaluation meeting must to be held between the applicant and the Department of Environmental Quality (NCDEQ). The pre-application site evaluation meeting must be held no less than 120 days prior to filing an application for a permit to construct, operate, or expand a wind energy facility and may be used by the participants to:

(1) Conduct a preliminary evaluation of the site or sites for the proposed wind energy facility or wind energy facility expansion. The preliminary evaluation shall determine if the site or sites pose serious risk to civil air navigation or military air navigation routes, air traffic control areas, military training routes, special-use air space, radar, or other potentially affected military operations.

(2) Identify areas where proposed construction or expansion activities pose minimal risk of interference with civil air navigation or military air navigation routes, air traffic control areas, military training routes, special-use air space, radar, or other potentially affected military operations.

In addition to notifying the military of proposed actions, the Department of Environmental Quality (NCDEQ) conducts an annual review of military presence by consulting with representatives of the major military installations to review information regarding military air navigation routes, air traffic control areas, military training routes, special-use air space, radar, or other potentially affected military operations at least once per year. The NCDEQ shall provide relevant information on civil air navigation or military air navigation routes, air traffic control areas, military training routes, special-use air space, radar, or other potentially affected military operations to permit applicants as requested.

This could be included in the policy related to planning notification area requirements discussed in Goal 3. Changes to policy related to alternative energy should be coordinated with the Maryland Department of General Services.

Certain alternative energy technologies such as solar panels incorporate reflective materials in their construction that assist in the generation of energy for distribution and power, but also produce unintended glare. The location and direction of glare can impair the vision of military and civilian pilots who may be training or performing activities in the vicinity of the airport or within designated flight routes. Visual impairment can decrease pilot and aircraft safety and ultimately, that of the general public if an accident occurs. For this unintended reason, many jurisdictions near Offutt AFB in North Dakota restrict the use of solar arrays, for example.

Though solar energy technology and use has been evolving as a mainstream form of renewable energy generation, the expansion in the industry and corresponding decrease in cost has only recently made it a practical consideration for airports. Solar energy presents itself as an opportunity for airports to produce on-site electricity and to reduce long-term electricity use and energy costs. While solar energy has many benefits, it does introduce some new and unforeseen issues, like possible glare (also referred to as reflectivity) and communication systems interference, which have complicated FAA review and approval of the technology.

Because solar panels in the form of a photovoltaic system (PV) is a technology that can readily be designed into an existing landscape and can be placed in locations that are not used for aviation activities, they have little value to the airport or for alternative developments. Relative to other renewable energy systems, industry studies have determined that solar PV is more compatible with airport land use for the following reasons:

- solar PV is the most cost-effective when serving a smaller on-site electricity demand as opposed to large-scale generation for the electricity grid;

- it has a low profile and modular design, which is compatible with low-demand airport property such as rooftops and airfields;

- it is designed to absorb sunlight (rather than reflect it), minimizing potential impacts of glare; and

- it does not attract wildlife, which is a critical aviation hazard.

The siting of solar arrays is particularly well-suited to airports because of the available space at airports, unobstructed terrain, and energy demand. Airport managers have recognized the business advantages of solar power as an alternative revenue source and in providing long-term cost savings. In addition, public policy benefits to municipal, county, and state government agencies that manage airports and have set greenhouse gas reduction goals offer a real and purposeful basis for these projects.

Despite these benefits, the potential glare from solar facilities and any other facilities with reflective surfaces pose a concern to military pilots. The military has expressed concerns regarding the possible effects of solar facilities on its training mission; however, the FAA has developed guidelines for siting such solar arrays. The FAA, with support from the U.S. Department of Energy (DOE), has developed a protocol to analyze the potential impacts of glare. When a project is proposed on airport property, the FAA has broad authority. As recipient of FAA funds for infrastructure improvements, the airport is responsible for presenting information so that the FAA can assess a project's compliance with airspace protection laws (referred to as Part 77) and environmental laws (e.g., the National Environmental Policy Act).

Concerns about glare are specific to on-airport activities; however, certain factors such as optimal proximity (i.e., the distance away from airfield facilities and flight paths) require evaluation on a case-by-case basis, in consultation with the airport manager who may defer to FAA guidance. While the restrictions placed on solar arrays are understandable, this can be avoided by using the right technologies in an efficient manner.

Another potential threat to military training mission is steam generated by cooling towers, a common byproduct of geothermal energy production. Depending on whether geothermal plants use water cooling towers for the geothermal development and the time of day and season, steam plumes can be produced as a byproduct of geothermal plant operations. During winter months or high humidity seasons, when the air is denser, this steam plume can be problematic because the steam plume can linger in the atmosphere longer. The steam can extend into navigable airspace and when combined with elevation at the site of the geothermal plant, can cause conflicts with aviation operations.

Plumes from geothermal plants that rise to meet or exceed the height of the military's MOAs or MTRs floor altitude could create a problem for military aviation operations, including visual impairment for pilots that could result in aircraft accidents. The steam can also interfere with infrared communications between the aircraft and targets. Such interference can impede military readiness by blocking communications systems during training and operations, which can lead to lost training hours and inefficiencies in military skills.

Findings

- Wind energy is an important resource that is being developed across the US to assist in meeting renewable energy goals.

- Maryland has enacted a Renewable Portfolio Standard to further the state's renewable energy development.

- Development of wind energy in Maryland may have impacts on military missions such as aviation operations and radar/communication activities.

- The NREL has developed wind resource maps to identify areas of greater wind energy potential.

- Wind energy potential in Maryland is located primarily on the Eastern Shore and in Western Maryland.

- An in-depth study is required in order to   understand the potential impacts of statewide wind energy development and incompatibility with military mission footprints.

- Maryland should consider possible policy changes to improve coordination on wind energy development with military installations in the state.

- The siting of solar arrays is particularly well-suited to airports because of the available space at airports, unobstructed terrain, and energy demand.

- Plumes from geothermal plants that rise to meet or exceed the height of the military's MOAs or MTRs floor altitude could create a problem for military aviation operations including visual impairment for pilots that could result in potential aircraft accidents.

Recommendations & OPR/OCR

- **R 5.1 (S)** Conduct a more in-depth study of potential of wind energy development and military mission footprints.

  o **Implementation Responsibility:** Maryland Energy Administration in concert with Maryland Department of Planning

  o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; local jurisdictions including county, city, towns; military

- **R 5.2 (S)** Develop process and procedures for siting large wind and solar farms.

  o **Implementation Responsibility:** Maryland Energy Administration in concert with Maryland Department of Planning

  o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

- **R 5.3 (S/M)** Develop statewide Red/Yellow/Green mapping for siting alternative energy projects.

  o **Implementation Responsibility:** Maryland Energy Administration, in concert with Maryland Department of Planning

  o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

■ **R 5.4 (S/M)** With consideration to existing policy at the local jurisdiction level, the Maryland Energy Administration should include wind energy siting as part of the planning area notification requirements.

    o **Implementation Responsibility:** Maryland Energy Administration, in concert with Maryland Department of Planning

    o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC); local jurisdictions including county, city, towns; military

Recommendation R6 Goal/Theme	*Leverage Funding Opportunities to Support State and Local Compatibility Planning and Implementation Programs/Projects*

Analysis

The OEA has a Compatible Use Program. which works collaboratively with communities and all branches of the military to ensure that civilian regions can grow and develop while protecting the military's mission. The OEA provides technical and financial assistance directly to state or local governments to undertake planning programs that support the development needs of both the community and the military. The program addresses present and future civilian development activity, and sustains the military training and readiness missions. The purpose of the Compatible Use Program is to protect and preserve military readiness and defense

capabilities, support continued community growth and economic development, and enhance civilian and military communication and collaboration.

The focus of this recommendation is to leverage existing federal funding and investment programs to increase federal monies for Maryland and its communities through better awareness and understanding of funding opportunities. Such examples of federal investment and programs that are available to local communities include, but are not limited to, the OEA Federal Funding Opportunities (FFO) and the Defense Access Roads (DAR) Program, Army Compatible Use Buffer Program, Forest Legacy Program, Sustainable Range Program, Army Operational Noise Management Program, Sentinel Landscapes, and Readiness and Environmental Protection Integration (REPI). These initiatives provide direct financial and technical assistance to state and local governmental agencies.

OEA awards and administers grants to assist communities in organizing and planning for compatible land use in areas where community growth may interfere with the ongoing missions of an active military installation. A local match, usually 10 percent of the approved project budget, is required.

OEA uses the Catalog of Federal Domestic Assistance (CFDA) for determining eligibility. OEA offers two programs of assistance under the same CFDA (12.610) that could be leveraged by Maryland to address multiple aspects of the goals in this report.

■ CFDA number 12.610 Community Economic Adjustment Assistance for Compatible Use and Joint Land Use Studies includes funding to help implement recommendations from those studies.

- CFDA number 12.610 Community Economic Adjustment Assistance for Compatible Use assists states in siting energy projects so they do not impair the continued operational utility of a DoD installation.

The DAR program is administered by the Federal Highway Administration (FHWA). The purpose of DAR federal funds is to assist local communities with maintaining roadways that are significantly impacted by military use. The military installation must identify the roadway that would benefit from DAR program funds and present the mobility and access issues to the Military Surface Deployment and Distribution Command (SDDC). The SDDC will determine if the roadway improvements are eligible for DAR program funds. If determined to be eligible, then the military service must request funding through its normal budgeting process. Once the funds are programmed by the military service, Congress must authorize and appropriate the funding. Upon Congressional approval through the Defense Authorization Act, the funds are transferred to the FHWA and passed through to the agency administering the work or project.

Another approach to help fund community/military compatibility planning is to establish state funding mechanisms for jurisdictions with an identified need. This approach has proven beneficial and several states have enacted and budgeted for various funding vehicles to assist jurisdictions that have been impacted by military installations. These funding mechanisms include assistance for planning where military compatibility is a concern, while maintaining the viability of military missions. For example:

- Arizona established a military installation fund in 2004 for military installation preservation and enhancement projects.

- In 2003, Texas voters approved Proposition 20, authorizing state agencies to appropriate up to $250 million in general obligation bonds or notes to provide loans to defense-related communities for economic development projects, including those that enhance the military value of military installations.

Findings

- OEA administers grants for land use planning related to compatibility with military installations.

- Some states have established grant programs to support compatibility with military installations.

Recommendations & OPR/OCR

- **R 6.1 (S)** Consider seeking additional grant resources through OEA to implement findings from previous Joint Land Use Studies.

  - **Implementation Responsibility:** Maryland Military Installation Council (MMIC)

  - **Implementation Support:** local jurisdictions including county, city, towns; military

- **R 6.2 (S)** Standardize the results from future Joint Land Use Studies to ensure they can be compared allowing for the identification of both regional and statewide issues and opportunities to correct those issues.

  - **Implementation Responsibility:** Smart Growth Subcabinet

  - **Implementation Support:** military

- **R 6.3 (S)** Pursue OEA funding for an Alternative Energy Siting grant for statewide GIS mapping.

  - **Implementation Responsibility:** Maryland Energy Administration

o **Implementation Support:** Smart Growth Subcabinet; Maryland Commerce Office of Military and Federal Affairs; Maryland Military Installation Council (MMIC)

- **R 6.4 (S)** Leverage an OEA grant for an Alternative Energy Siting project to acquire staff to augment Maryland Commerce staff for outreach regarding compatibility planning.

  o **Implementation Responsibility:** Maryland Commerce Office of Military and Federal Affairs, Maryland Military Installation Council (MMIC)

  o **Implementation Support:** Smart Growth Subcabinet; Maryland Energy Administration, Department of Planning

Recommendation R7 Goal/Theme	*Improve Outreach and Awareness for Community/Military Compatibility Planning Across the State*

Analysis

Based on the results of the survey and interviews and how they relate to the issues, the following subjects were recommended for the development of fact sheets to standardize communication and coordination statewide:

- Coordination/Communication

- Energy Development

- Land Use

- Legislative Initiatives

- Roadway Capacity

Findings

- Maryland does not have a standardized repeatable process to address encroachment issues across all its military installations.

- Maryland does not have effective resources that communicate military mission impacts, which can be used for prioritizing funding for local community projects.

Recommendations & OPR/OCR

- **R7.1 (O)** Develop fact sheets with economic impact and military mission for the twelve Maryland active duty military installations.

  o **Implementation Responsibility:** Maryland Commerce Office of Military and Federal Affairs

  o **Implementation Support:** Smart Growth Subcabinet; Maryland Military Installation Council (MMIC); military

- **R7.2 (O)** Develop individual fact sheets and associated planning tools for key compatibility factors to mitigate planning issues that apply in Maryland:

  o Coordination / Communication
  o Energy Development
  o Land Use
  o Legislative Initiatives
  o Roadway Capacity

  o **Implementation Responsibility:** Smart Growth Subcabinet, Maryland Energy Administration, Department of

Transportation, Department of Planning, Maryland Commerce
Office of Military and Federal Affairs (Maryland)

   o   **Implementation Support:** Maryland Military Installation Council
      (MMIC)

■ **R7.3 (S)** Implement a communications matrix to identify points of
contact related to certain compatibility factors.

      o   **Implementation Responsibility:** Department of Information
         Technology, Maryland Commerce Office of Military and
         Federal Affairs

      o   **Implementation Support:** Smart Growth Subcabinet;
         Department of the Environment; Department of Natural
         Resources; Maryland Energy Administration, Maryland
         State Police; Department of Transportation; Department of
         Housing & Community Development; Department of
         Planning; Maryland Military Installation Council (MMIC);
         local jurisdictions including county, city, towns; military

5.3 Guidance on Interpreting Recommendations Table

Responsible Party. At the right end of the Recommendation table are a series of columns, one for each cabinet, jurisdiction, and military entity, with responsibility for implementing the recommendations. If an entity has responsibility relative to implementing a strategy, a mark is shown under their name. This mark is one of two symbols that represent their role. A solid square (■) designates that the entity identified is responsible for implementing the strategy. A hollow square (□) designates that the entity plays a key supporting role, but is not directly responsible for implementation. The responsible parties are identified in the heading at the top of each page.

Timeframe. In parentheses after each recommendation number, the timeframe for initiation of the recommendation is provided. The timeframe provided is a guide and is intended to be flexible based on the needs of the State, local jurisdictions and military installations. Short-term initiation is indicated by (S), mid-term initiation is indicated by (M) and long-term initiation is indicated by (L).

Short-Term (S): Recommendation proposed for initiation in 2018-2019 (within a year of JLUS RIS completion)

Mid-Term (M): Recommendation proposed to be initiated in 2020/2023 (within 2-5 years of JLUS RIS completion)

Long-Term (L): Recommendation proposed to be initiated in 2024 or beyond (6 or more years from JLUS RIS completion)

Example of Recommendations Table

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR / OCR											Other OPR / OCR	
	Smart Growth Sub-Cabinet	Secretary of the Environment	Secretary of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Secretary of Transportation	Secretary of Housing & Community Development	Secretary of Planning	Secretary of Information Technology	Office of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation #: Correlating to the recommendations outlined in Chapter 5													
X.1 Example Recommendation (S, M, L) With description, associated timeframe and responsible party and supporting organizations.	■	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 1: Enhance Ongoing Communication and Coordination between the State of Maryland, Local Communities and Military Installations													
R1.1 (S) Develop an MOU template that can be used by local communities and/or military installations to promote and establish processes and procedures to improve communication and coordination.	■							□	■	■	■	□	□
R 1.2 (S) Establish compatibility site assessment protocol for tracking and reporting the status of JLUS strategies.	■							□		■	□	□	□

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 1.3 (S) Consolidate issues from an Enterprise Planning Perspective under the direction of the MMIC.	□	□	□	□	□	□	□	■	□	□	■	□	□
R 1.4 (M) Establish coordination between the MMIC and the Smart Growth Subcabinet for facilitating communications between local jurisdictions and state executive councils.	■	□	□	□	□	□	□	■	□	■	■	□	
R 1.5 (M) Leverage the Maryland Smart Growth Subcabinet to elevate issues regarding resources and/or policy.	■	□	□	□	□	□	□	■	□	□	□	□	□

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 1.6 (L) With consideration to existing policy at the local jurisdiction level, adopt a Notification/Planning Area "Buffer" to enhance communication and collaboration between jurisdictions and installations.	☐							■		☐	■	☐	☐
R 1.7 (L) With consideration to existing policy at the local jurisdiction level, develop legislation to address compatibility factors that are prevalent in the Study Area and that currently do not have existing legislation for mitigation.	☐	☐	☐	☐	☐	☐	☐	■	☐	☐	☐	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 2: Continue Joint Land Use Planning Activities Across all Maryland Locations Where Military Installations are Located													
R 2.1 (S) Develop fact sheets to assist communities and installations without a JLUS to pursue OEA funding. Fact sheets should include information explaining a JLUS and how a community can start the process to obtain a JLUS.	□									■	□	□	□
R 2.2 (S) Adopt a compatibility site assessment format for reporting the status and tracking implementation of JLUS strategies.	□							□		■	□	□	□

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 2.3 (S) Create and lead a state-level JLUS Policy Committee led by the Maryland Department of Planning with guidance from and working level actions conducted by the MMIC.	☐	☐	☐	☐	☐	☐	☐	■		☐	■		
R 2.4 (M) Develop a formal, standardized – repeatable approach for collecting both military and local jurisdiction encroachment concerns in order to monitor the Maryland military enterprise and identify constraints and opportunities.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	■	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/ OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 2.5 (M) Consider leveraging knowledgeable resources within the state, local communities and military installations to conduct "in-house" JLUS assessment for less complex installations.	☐	☐	☐	☐	☐	☐	☐	■	☐	☐	■	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 2.6 (M/L) Conduct a JLUS at the following locations after establishing the appropriate priority order: ■ Fort Meade ■ NSA Bethesda/Walter Reed National Naval Medical Center ■ Fort Detrick ■ NSWC Carderock ■ NSA Annapolis/US Naval Academy (combine for efficiency) ■ NRL Chesapeake Bay	☐							☐		☐	☐	■	■

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 3: Adopt Statewide Community/Military Compatible Land Use Policies and Planning Guidelines for Implementation at the Local and Regional Levels													
R 3.1 (S/M) Assist local jurisdictions in resolving instances in which military installation APZs and similar Safety Zones are located off base and do not have adequate land use controls in place to ensure public health and safety.	■							■		□	■	□	□
R 3.2 (M) Develop legislation, for installations that have not completed a JLUS, to define a general MIA with the goal of incorporating a planning notification area.	□							■		□	■	□	□

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/ OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 3.3 (M) Develop legislation to address compatibility factors that are prevalent in the Study Area and that currently do not have existing legislation for mitigation.	☐	☐	☐	☐	☐	☐	☐	■		☐	■		
R 3.4 (M) With consideration to existing policy at the local jurisdiction level, create a policy to develop a notional planning area for military installations and communities that have not undergone a JLUS, based on a general MIA.	☐							■		☐	■	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 3.5 (M/L) With consideration to existing policy at the local jurisdiction level, the Maryland Department of Planning and the Smart Growth Subcabinet should determine updates to zoning regulations in the Maryland Land Use Code, including land use regulations for military compatibility.	■							■		☐	☐	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 3.6 (M/L) With consideration to existing policy at the local jurisdiction level, the Maryland Department of Planning and the Maryland Smart Growth Subcabinet should develop and codify planning notification areas surrounding military installations that are determined by each installation's MIA/MF.	■							■		☐	☐	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 4: Assist in the Development and Application of Community/Military Compatibility Planning Tools													
R 4.1 (S) Develop a statewide repository for GIS mapping of the military installation mission footprint for all affected jurisdictions, similar to the mapping initiatives created by Arizona, Utah, and New Mexico.	☐	☐	☐			☐		■	■	☐	☐	☐	☐
R 4.2 (S) Provide military mission footprint repository access to Maryland regional and local planners.	☐							■		☐	☐	☐	

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 4.3 (M) With consideration to existing policy at the local jurisdiction level, the Maryland Smart Growth Subcabinet should develop policy to implement an integrated GIS database that includes data for existing land use, future land use (derived from comprehensive plans), zoning, and the MIA for the local military installation, for communities within an MIA.	■	☐	☐					☐		☐	☐	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 5: Establish Procedures for Permitting Renewable Energy Development that Enables Military Compatibility and Community Economic Development													
R 5.1 (S) Conduct a more in-depth study of potential of wind energy development and military mission footprints.	□			■				□		□	□	□	□
R 5.2 (S) Develop process and procedures for siting large wind and solar farms.	□			■				□		□	□	□	
R 5.3 (S/M) Develop statewide Red/Yellow/Green mapping for siting alternative energy projects.	□			■				□		□	□	□	□

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/ OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 5.4 With consideration to existing policy at the local jurisdiction level, the Maryland Energy Administration should include wind energy siting as part of the planning area notification requirements.	☐			■				☐		☐	☐	☐	☐
Recommendation 6: Leverage Funding Opportunities to Support State and Local Compatibility Planning and Implementation Programs/Projects													
R 6.1 (S) Consider seeking additional grant resources through OEA to implement findings from previous Joint Land Use Studies.											■	☐	☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R 6.2 (S) Standardize the results from future Joint Land Use Studies to ensure they can be compared allowing for the identification of both regional and statewide issues and opportunities to correct those issues.	■												☐
R 6.3 (S) Pursue OEA funding for an Alternative Energy Siting grant for statewide GIS mapping.	☐			■						☐	☐		
R 6.4 (S) Leverage an OEA grant for an Alternative Energy Siting project to acquire staff to augment Maryland Commerce staff for outreach regarding compatibility planning.	☐			☐				☐		■	■		

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/ OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
Recommendation 7: Improve Outreach and Awareness for Community/Military Compatibility Planning Across the State													
R7.1 (O) Develop fact sheets with economic impact and military mission for the twelve Maryland active duty military installations.	☐									■	☐		☐

Recommendation	Maryland Governor's Executive Council (Cabinet) OPR/OCR											Other OPR/ OCR	
	Smart Growth Sub-Cabinet	Department of the Environment	Department of Natural Resources	Maryland Energy Administration	Office of the Superintendent of the Maryland State Police	Department of Transportation	Department of Housing & Community Development	Department of Planning	Department of Information Technology	Department of Military and Federal Affairs (Maryland)	Maryland Military Installation Council (MMIC)	Local Jurisdictions Including County, City, Towns	Military
R7.2 (O) Develop individual fact sheets and associated planning tools for key compatibility factors to mitigate planning issues that apply in Maryland: ■ Coordination/Communication ■ Energy Development ■ Land Use ■ Legislative Initiatives ■ Roadway Capacity	□			□		□		□		□	■		
R7.3 (S) Implement a communications matrix to identify points of contact related to certain compatibility factors.	□	□	□	□	□	□	□	□	■	■	□	□	□

Appendix 1

Stakeholder Engagement

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
South Maryland (29-30 November 2017)										
Y	Interview	EC/WC	Karen	Mierow	C	Southern Maryland Regional Planner	State	Maryland Department of Planning (MDP)	N/A	
Y	Interview	WC	Amy	Blessing	C	Charles County Planner III	Charles County	Charles County Government Department of Planning & Growth Management	NSF Indian Head	Lynne M. Keenan
Y	Interview	WC	George	Clark	C	Transportation Specialist	Charles County	Tri-County Council of Southern Maryland	NSF Indian Head	
Y	Interview	WC	Marcia	Keeth	C	Deputy Director, Charles County Economic Development	Charles County	Charles County	NSF Indian Head	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Interview	WC	Todd	Morgan	C	St. Mary's County Commissioner	St. Mary's County	Board of County Commissioners, St. Mary's County	NAS Pax River	
Y	Interview	WC	Chris	Kaselemis	C	Director, St. Mary's County Economic Development	St. Mary's County	St. Mary's County	NAS Pax River	
Y	Interview/ Call	EO	John	Kaiser Jr.	C	BPRF Manager	Charles County	Blossom Point	Blossom Point	
Y	Interview	EO	Joseph	Barbour	M	N32 Region Air Operations	St. Mary's County, Calvert County	NAS Patuxent River, Maryland	NAS Pax River	
Y	Interview	EO	Jeron	Hayes	M	Public Affairs Officer Naval Support Activity South Potomac	Charles County	NSF Indian Head, Dahlgren	NSA Potomac	
Y	Interview	EO	Lynne	Keenan	M	Asset Management Branch Head/Acting CPLO	Charles County	NSF Indian Head	NSA Potomac	
Y	Interview	EO	Gail	Kenson	M	Regional Community Planning Liaison Officer, Naval District Washington	St. Mary's County, Calvert County	NAS Patuxent River	Pax River	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Interview	EO	Sabrina	Hecht	M	Public Works Department - Community Planning Liaison Officer (CPLO)	St. Mary's County, Calvert County	NAS Patuxent River	Pax River	
Y	Interview	EO	Chris	Jarboe	M	Atlantic Test Range - Sustainability Office	St. Mary's County, Calvert County	NAS Patuxent River, Maryland	NSF Indian Head	
Y	Interview		Ryan	Hicks	C	Town of Indian Head - Town Manager	Charles County	Town of Indian Head	NSF Indian Head	Lynne M. Keenan
Y	Call		Steve	Hundley	C	Quantico Community Plans and Liaison Officer	Charles County, and VA	Quantico	Quantico	Lynne M. Keenan
Y	Call		Brandon	Paulin	C	Mayor - Town of Indian Head	Charles County	Town of Indian Head	NSF Indian Head	Lynne M. Keenan
Y	Survey		Brian	Klass	C	Military Alliance Council (MAC) Committee Chair	Charles County	Charles County	NSF Indian Head	George Clark
Y	Survey		Taylor	Yewell	C	Economic Development Specialist	Charles County	Charles County	NSF Indian Head	Karen Mierow, Regional Planner Maryland

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Department of Planning
Y	Interview		Steve	Ball	C	Planning Director	Charles County	Charles County	NSF Indian Head	
Y	Interview		Steve	Kaii-Ziegler	C	Planning and Growth Management Director	Charles County	Charles County	NSF Indian Head	
Y	Survey		Kathleen	Easley	C	Senior Planner	St. Mary's County	St. Mary's County	NAS Pax River	
Y	Interview		Bill	Hunt	C	Planning Director	St. Mary's County	St. Mary's County	NAS Pax River	
Y	Interview		Daniel	Burris	C	Mayor - Town of Leonardtown	St. Mary's County	St. Mary's County	NAS Pax River	
Y	Survey		Christina	Adams	M	Executive Director, Corporate Operations and Total Force at Naval Sea Systems Command (NAVSEA)	Charles County	Charles County	NSF Indian Head	
Y	Call		Peter	Murphy	C	President-Board of Charles County Commissioners	Charles County	Charles County	NSF Indian Head	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
N	Survey		Tuajuanda	Jordan	C	President-St. Mary's College of Maryland	St. Mary's County	St. Mary's County	NAS Pax River	
North Maryland (20-21 December 2017)										
Y	Interview	EC/WC	David	Dahlstrom	C	Upper Shore Regional Planner	State	Maryland Department of Planning (MDP)	N/A	
Y	Interview	WC	Tucker	McNulty	C	Senior Economic Development Associate	Harford County	Harford County Economic Development	Aberdeen Proving Ground	
Y	Call	EO	Robert	Mercado	M		Harford County	Aberdeen Proving Ground	Aberdeen Proving Ground	
Y	Call	EO	Nathan	Osborne	M	Chief, DWP – Master Planning	Harford County	Aberdeen Proving Ground	Aberdeen Proving Ground	
Y	Call	EO	Rick	Scavetta	M	Public Affairs Office	Harford County	Aberdeen Proving Ground	Aberdeen Proving Ground	
Y	Interview		Bill	Atkinson	C	Western Maryland Regional Office	Maryland Department of Planning	Western MD	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Interview		Dave	Cotton	C	Western Maryland Regional Office	Maryland Department of Planning	Western MD	N/A	David Dahlstrom - MDP Upper Shore

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Regional Planner
Y	Interview		Phyllis	Grover	C	Director, Planning & Community Development	Harford County	Aberdeen (City)	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Kevin	Small	C	Director of Planning	Harford County	Bel Air (City)	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Ben	Martarana	C	Director of Planning	Harford County	Havre de Grace (City)	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Call		Jenny	King	C	Deputy Director, Planning and Zoning	Harford County	Harford County	Aberdeen Proving Ground	
Y	Call		Steve	Overbay	C	Deputy Director, Harford County Office of Economic Development	Harford County	Harford County Office of Economic Development	Aberdeen Proving Ground	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Interview		Brad	Killian	C	Director, Planning, Housing and Zoning	Harford County	Harford County MD	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		David	Dorsey	C	Planning Coordinator	Allegany County	Northern MD Region	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Thomas J.	Stosur	C	Director, Department of Planning	Baltimore City	Northern MD Region	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Stephen	Goodrich	C	Director, Department of Planning and Zoning	Washington County	Northern MD Region	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Interview		Lynda	Eisenberg	C	Acting Director, Carroll County Department of Planning	Carroll County	Northern MD Region	N/A	David Dahlstrom - MDP Upper Shore

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Regional Planner
Y	Survey		Bill	Mackie	C	Westminster Planning Director	Carroll County	Northern MD Region	N/A	
Y	Survey		Captain Matt	Lake	M	Commanding Officer, USCG	Anne Arundel County	Anne Arundel County	U.S. Coast Guard Yard	
Y	Survey		Deborah	Carpenter	C	Director, Department of Planning and Land Management	Garrett County	Northern MD Region	N/A	David Dahlstrom - MDP Upper Shore Regional Planner

Central Maryland (24-25 January 2018)

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Interview	WC	John	Wooden	C	Senior Planner Prince George's County Planning Department, PGC Planning Dept / M-NCPP	Prince George's County	Maryland National Capital Park & Planning Commission Community Planning South Division, Prince George's County Planning Department - M-NCPP Personnel	Joint Base Andrews	
Y	Interview	EO	Brad	Johnson	M	11 MSG/CC	Prince George's County	Joint Base Andrews	Joint Base Andrews	
Y	Interview	EO	Gail	Kenson	M	Regional Community Planning Liaison	Anne Arundel County	Annapolis Area	Annapolis	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
						Officer, Naval District Washington				
Y	Interview	EO	Lisa	Mabbutt	M	Civil Engineer Squadron Commander	Prince George's County	Joint Base Andrews	Joint Base Andrews	
Y	Survey	EO	David	Humphreys	M	Community Planner 11th Civil Engineering Squadron	Prince George's County	JBA-NAF Personnel	Joint Base Andrews	
Y	Survey	EO	Phil	Hager		Planning and Zoning director	Anne Arundel County			
Y	Interview	EO	Christopher	Kuester	M	11 MSG/CD (Primary)	Prince George's County	Joint Base Andrews	Joint Base Andrews	
Y	Interview	EO	Krist	Zimmerman	M	Encroachment/ Community Relations POC, 11th Mission Support Group	Prince George's County	Joint Base Andrews	Joint Base Andrews	
Y	Interview		Steve	Allan	C	Central Maryland Regional Planner	Maryland Department of Planning State	Central Maryland	N/A	David Dahlstrom - MDP Upper Shore Regional Planner

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Call		Paul	Holland	M	Previous Community Planning Liaison 11th Mission Support Group	Prince George's County	JBA-NAF Personnel	Joint Base Andrews	
Y	Survey		Derrick	Davis	C	Prince George's County District 6 Councilman	Prince George's County	Prince George's County Planning Department - M-NCPP Personnel	Joint Base Andrews	
Y	Survey		David	Iannucci	C	PGC Asst Deputy Chief Administrative Officer, Economic Development	Prince George's County	Prince George's County Planning Department - M-NCPP Personnel	Joint Base Andrews	
Y	Interview		Brandon (Scott)	Rowe	C	Acting Division Chief for the Community Planning Division, MNCPPC, Participated on the JLUS Committee	Prince George's County	Prince George's County Planning Department - M-NCPP Personnel	Joint Base Andrews	John C. Wooden, Planner Coordinator, Prince George's County Planning Department, Maryland National Capital Park & Planning Commission, Community

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Planning South Division
Y	Survey		Howard	Stone	C	Chairman JBA-NAFW JLUS Implementation Committee, Former Chair of the JLUS Committee	Prince George's County	Prince George's County Planning Department - M-NCPP Personnel	Joint Base Andrews	John C. Wooden, Planner Coordinator, Prince George's County Planning Department, Maryland National Capital Park & Planning Commission, Community Planning South Division
Y	Survey		Aletha	Frost	M	Public Affairs 11th Wing	Prince George's County	JBA-NAF Personnel	Joint Base Andrews	
Y	Survey		Gwen	Wright	C	Montgomery County Planning Director	Montgomery County	Central Region	NSA Bethesda/ Walter Reed National Military Medical Center	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
									NSWC Carderock	
Y	Survey		Capt. Mark	Vandroff	M	Commanding Officer, NSWC Carderock	Montgomery County	NSWC Carderock	NSWC Carderock	
Y			Ken	Noppenberger	M	Adelphi Laboratory Center, Acting Garrison Manager	Montgomery County	Adelphi Laboratory Center	Adelphi Laboratory Center	
Y	Survey		Val	Lazdins	C	Howard County Planning Director	Howard County	Central MD Region	Ft. Meade	
Y	Survey		Helen	Propheter	C	Director, Frederick County Office of Economic Development	Frederick County	Central MD Region	Ft. Detrick	Chuck Boyd, Maryland Department of Planning
Y	Survey		Heather	Gramm	C	Assistant Director, Frederick County Office of Economic Development	Frederick County	Central MD Region	Ft. Detrick	Chuck Boyd, Maryland Department of Planning
Y	Survey		Richard	Griffin	c	Director of Economic Development	Frederick City	Central MD Region	Ft. Detrick	Chuck Boyd, Maryland Department of Planning

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Survey		Steven	Horn	C	Division Director Frederick County Planning	Frederick County	Central MD Region	Ft. Detrick	Chuck Boyd, Maryland Department of Planning
Y	Survey		Jim	Gugel	C	Planning Director Frederick County Planning	Frederick County	Central MD Region	Ft. Detrick	Chuck Boyd, Maryland Department of Planning
Y	Survey		Peter	Conrad	C	Deputy Director Howard County Government	Howard County	Ft George G. Meade	Ft. Meade	
Y	Survey		Joe	Adkins	C	Deputy Director of Planning	Frederick City	Frederick City	Ft. Detrick	Chuck Boyd, Maryland Department of Planning
State of Maryland (10-11 January 2018)										
Y	Interview	EC	Christine	Conn	C	Office of Science and Stewardship	State	Chesapeake and Coastal Service Unit	State	Maryland Department of Commerce
Y	Interview	EC	Devon	Dodson	C	Senior Advisor	State	Maryland Department of the Environment (MDE)	State	Maryland Department of Commerce
Y	Interview	EC	Earl	Lewis	C	Deputy Secretary for Policy, Planning	State	Maryland Department of Transportation (MDOT)	State	Maryland Department

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
						and Enterprise Services				of Commerce
Y	Interview	WC	Mark	Crampton	C	Assistant Secretary of Operations	State	Maryland Department of Transportation (MDOT)	State	Maryland Department of Commerce
Y	Interview	WC	Gerrit-Jan	Knaap	C	Executive Director and Professor	State	National Center for Smart Growth Research & Education University of Maryland	State	Maryland Department of Commerce
Y	Interview		Chuck	Boyd	C	Director, Planning Coordination	State	Maryland Department of Planning	State	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Interview		Joe	Griffiths	C	Manager, Local Assistance and Training	State	Maryland Department of Planning	State	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Holly	Arnold	C	Director of Planning for MDOT MTA	State	Maryland Department of Transportation (MDOT)	State	Mark Crampton
Y	Survey		Erin	Goodnough	C	Director of Planning Data and Research	State	Maryland Department of Planning	State	Karen Mierow, Regional

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Planner Maryland Department of Planning
Y	Survey		Heather	Murphy	C	Director of Planning for MDOT Headquarters	State	Maryland Department of Transportation (MDOT)	State	Mark Crampton, Assistant Secretary of Operations
Y	Survey		Pat	Keller	C	Deputy Secretary for Planning Services	State	Maryland Department of Planning	State	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Survey		Scott	Pomento	C	Director of Planning for MDOT SHA	State	Maryland Department of Transportation (MDOT	State	Mark Crampton
Y		SL	Jennifer	White	C	*State Lead (SL) Grant Program Manager*	State	Maryland Department of Commerce	State	Maryland Department of Commerce
Eastern Maryland										
Y	Call		Tracey	Gordy	C	Lower Shore Regional Office	State	Maryland Department of Planning	N/A	David Dahlstrom - MDP Upper Shore

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Regional Planner
Y	Call		Keith	Lackie	C	Lower Shore Regional Office	State	Maryland Department of Planning	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Call		Amy	Moredock	C	Director, Planning, Housing and Zoning	Kent County	Kent County MD	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Call		Kathleen	Freeman	C	Caroline County Planning Director	Caroline County	Caroline County	NAS Pax River	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Call		Eric	Sennstrom	C	Cecil County Planning Director	Cecil County	Cecil County	Aberdeen Proving Ground	David Dahlstrom - MDP Upper Shore Regional Planner

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Call		Steve	Dodd	C	Dorchester County Planning Director	Dorchester County	Dorchester County	NAS Pax River	Tracey Gordy - MDP Lower Eastern Shore Senior Regional Planner
Y	Call		Paige	Tilghman	C	Queen Anne's County Economic Development	Queen Anne's County	Queen Anne's County	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Interview		Helen	Spinelli	C	Queen Anne's County Planner	Queen Anne's County	Queen Anne's County	N/A	David Dahlstrom - MDP Upper Shore Regional Planner
Y	Call		Gary	Pusey	C	Somerset County Planning Director	Somerset County	Eastern Shore MD Region	NAS Pax River	Tracey Gordy - MDP Lower Eastern Shore Senior Regional Planner
Y	Call		Mary Kay	Verdery	C	Talbot County Planning Director	Talbot County	Eastern Shore MD Region	NAS Pax River	Tracey Gordy - MDP Lower

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
										Eastern Shore Senior Regional Planner
Y	Call		Jack	Lenox	C	Wicomico County Planning Director	Wicomico County	Eastern Shore MD Region	NAS Pax River	Tracey Gordy - MDP Lower Eastern Shore Senior Regional Planner
Y	Interview		Ed	Tudor	C	Worcester County Planning Director	Worcester County	Eastern Shore MD Region	N/A	Tracey Gordy - MDP Lower Eastern Shore Senior Regional Planner
Y	Interview		Michael	Wisnosky	C	Queen Anne's County Director, Department of Planning & Zoning	Queen Anne's County	Eastern Shore MD Region	N/A	
Y	Interview		Martin	Sokolich	C	Talbot County	Talbot County	Talbot County	NAS Pax River	
Y	Interview		Mike	Henry	C	Talbot County Airport Director	Talbot County	Talbot County	NAS Pax River	

Sent Survey?	Method	Committee Members	First Name	Last Name	Military (M) / Community (C)	Role	County/ State	Location	Installation	Source
Y	Interview		Mike	Pennington	C	Tri County Council of Lower Eastern Shore	Talbot County	Talbot County	NAS Pax River	

	Total	Answered	Skipped / NA
JLUS Participant Surveys	32	21	11
JLUS Non-Participant Surveys	35	21	14
Total	**67**		

Please see the next page.

Survey Results from JLUS Installations

Results collected during the open survey period start on the next page

Q1 You were identified to participate in this Survey:

Answered: 32   Skipped: 0
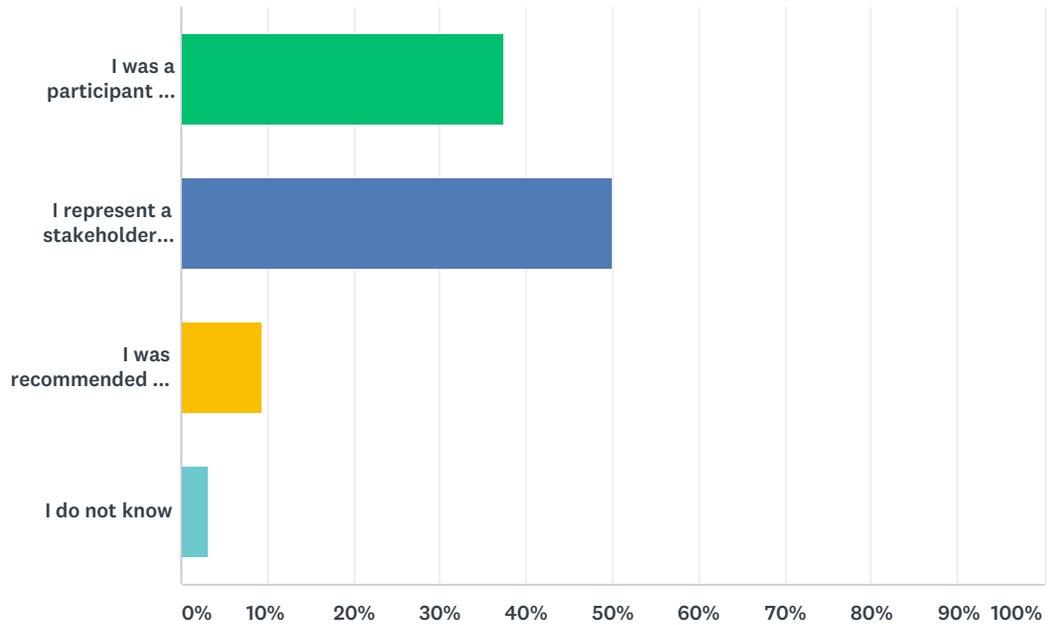
ANSWER CHOICES	RESPONSES	
I was a participant in a JLUS	37.50%	12
I represent a stakeholder organization in the JLUS	50.00%	16
I was recommended by someone	9.38%	3
I do not know	3.13%	1
TOTAL		32

Q2 I actively participated in the following JLUS:

Answered: 29   Skipped: 3
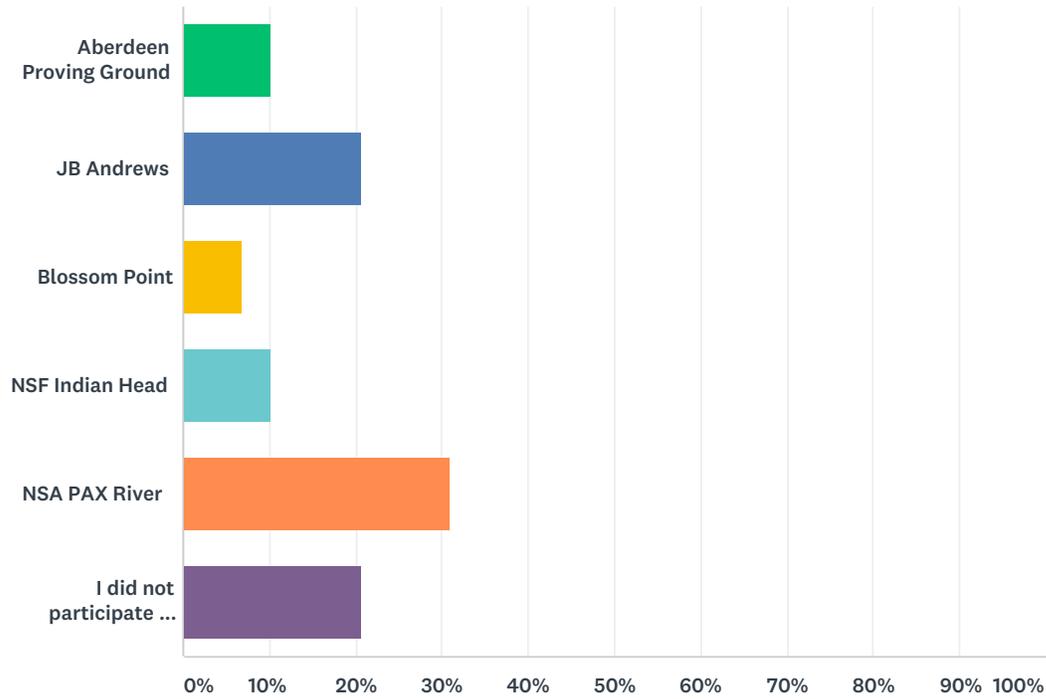
ANSWER CHOICES	RESPONSES	
Aberdeen Proving Ground	10.34%	3
JB Andrews	20.69%	6
Blossom Point	6.90%	2
NSF Indian Head	10.34%	3
NSA PAX River	31.03%	9
I did not participate but my organization did	20.69%	6
TOTAL		29

Q3 I represent:

Answered: 32   Skipped: 0
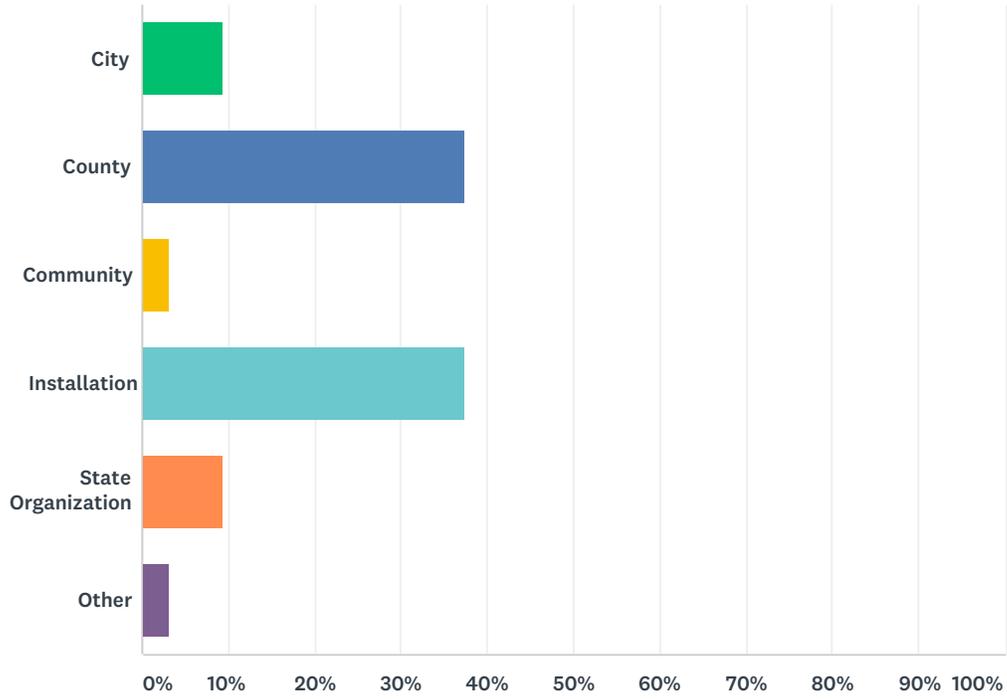
ANSWER CHOICES	RESPONSES	
City	9.38%	3
County	37.50%	12
Community	3.13%	1
Installation	37.50%	12
State Organization	9.38%	3
Other	3.13%	1
TOTAL		32

Q4 Please indicate which community you work in:

Answered: 30   Skipped: 2
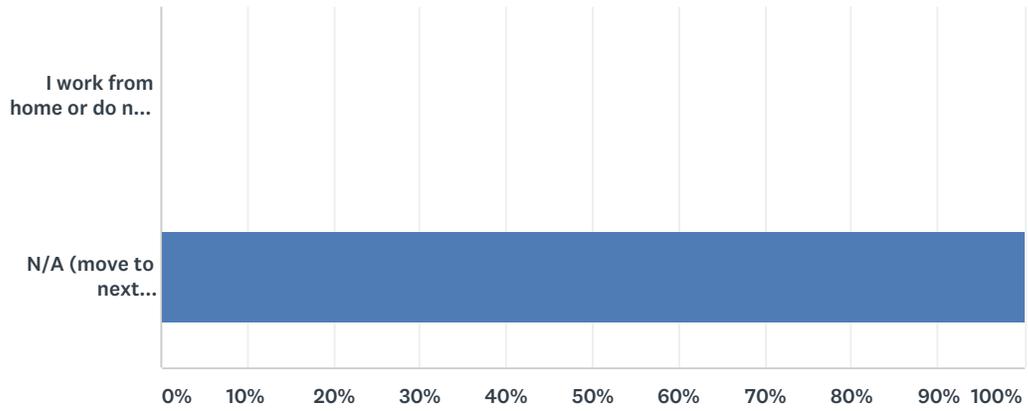
ANSWER CHOICES	RESPONSES	
I work from home or do not work	0.00%	0
N/A (move to next demographic question)	100.00%	30
TOTAL		30

Q5 Please indicate which community you work Northern MD Region:

Answered: 32   Skipped: 0
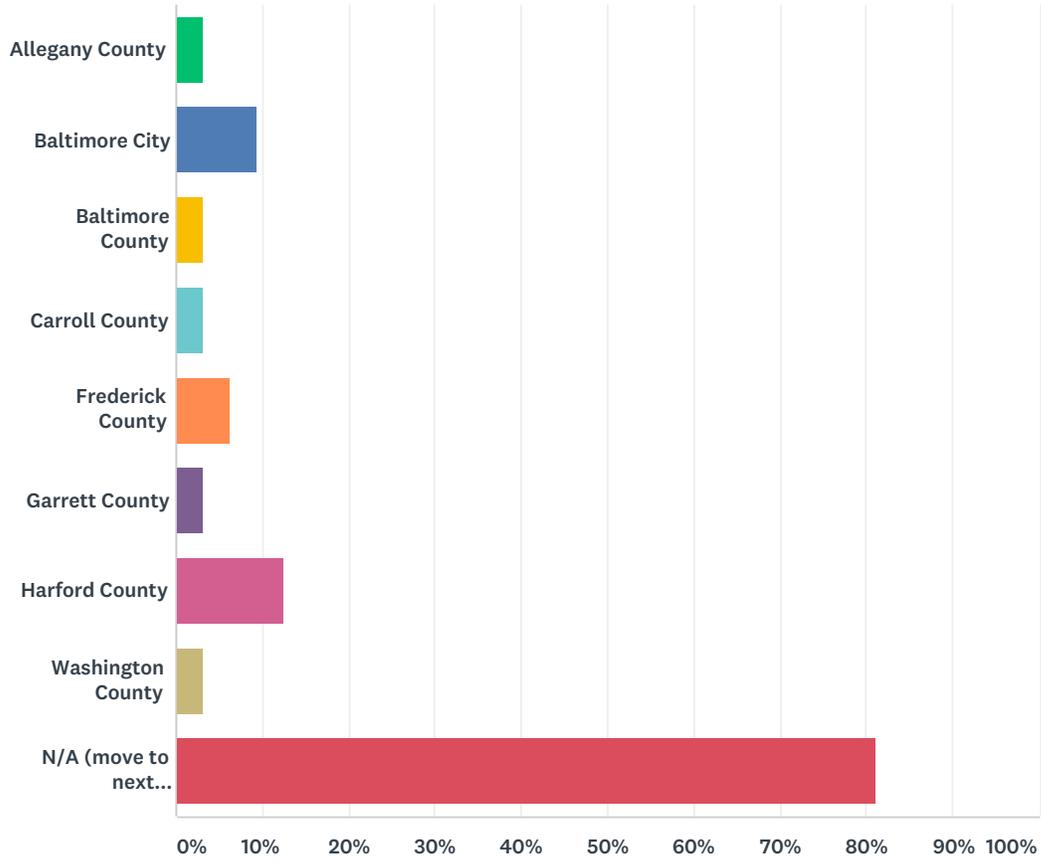
ANSWER CHOICES	RESPONSES	
Allegany County	3.13%	1
Baltimore City	9.38%	3
Baltimore County	3.13%	1
Carroll County	3.13%	1
Frederick County	6.25%	2
Garrett County	3.13%	1
Harford County	12.50%	4
Washington County	3.13%	1
N/A (move to next demographic question)	81.25%	26
Total Respondents: 32		

Q6 Please indicate which community you work Central MD Region:

Answered: 32   Skipped: 0
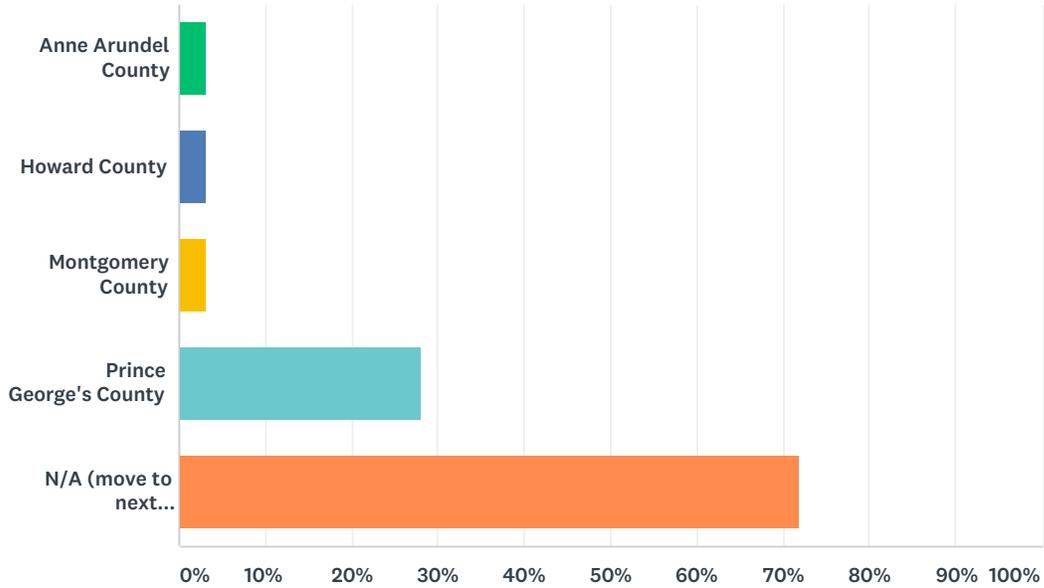
ANSWER CHOICES	RESPONSES	
Anne Arundel County	3.13%	1
Howard County	3.13%	1
Montgomery County	3.13%	1
Prince George's County	28.13%	9
N/A (move to next demographic question)	71.88%	23
Total Respondents: 32		

Q7 Please indicate which community you work Southern MD Region:

Answered: 32   Skipped: 0
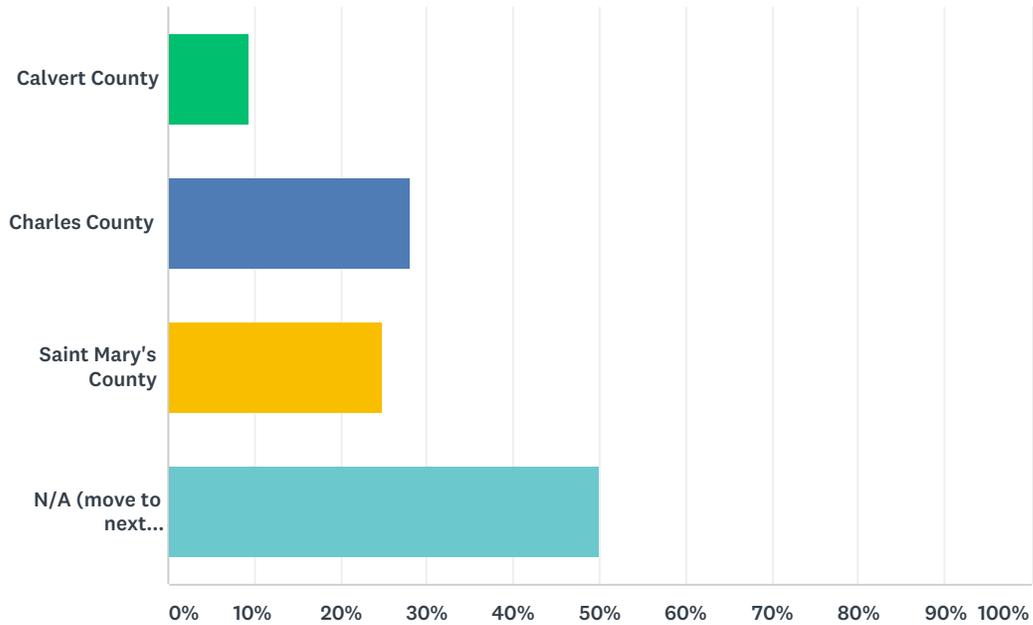
ANSWER CHOICES	RESPONSES	
Calvert County	9.38%	3
Charles County	28.13%	9
Saint Mary's County	25.00%	8
N/A (move to next demographic question)	50.00%	16
Total Respondents: 32		

Q8 Please indicate which community you work Eastern Shore MD Region:

Answered: 32   Skipped: 0
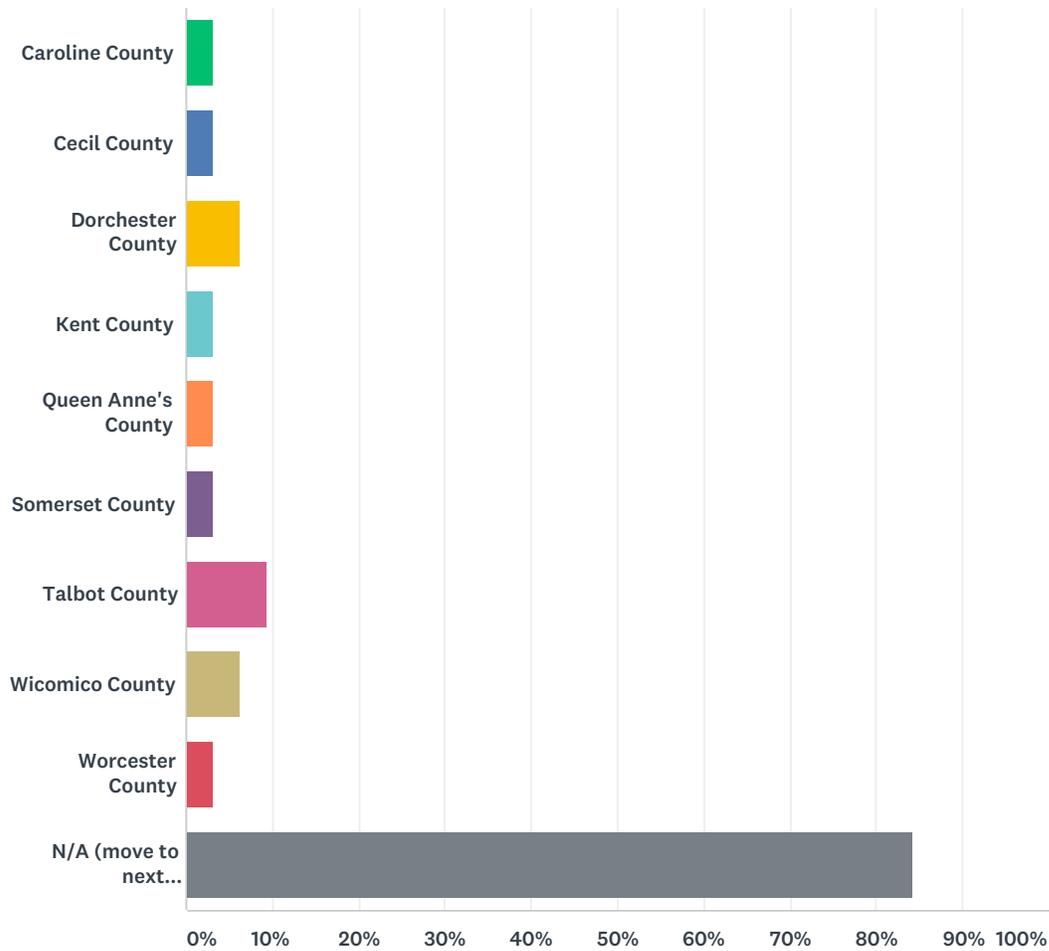
ANSWER CHOICES	RESPONSES	
Caroline County	3.13%	1
Cecil County	3.13%	1
Dorchester County	6.25%	2
Kent County	3.13%	1
Queen Anne's County	3.13%	1
Somerset County	3.13%	1
Talbot County	9.38%	3
Wicomico County	6.25%	2
Worcester County	3.13%	1
N/A (move to next demographic question)	84.38%	27

Total Respondents: 32

Q9 The military installation I work nearest to in the Northern MD Region: Allegany County, Baltimore City, Baltimore County, Carroll County, Frederick County, Garrett County, Harford County, Washington County

Answered: 31   Skipped: 1
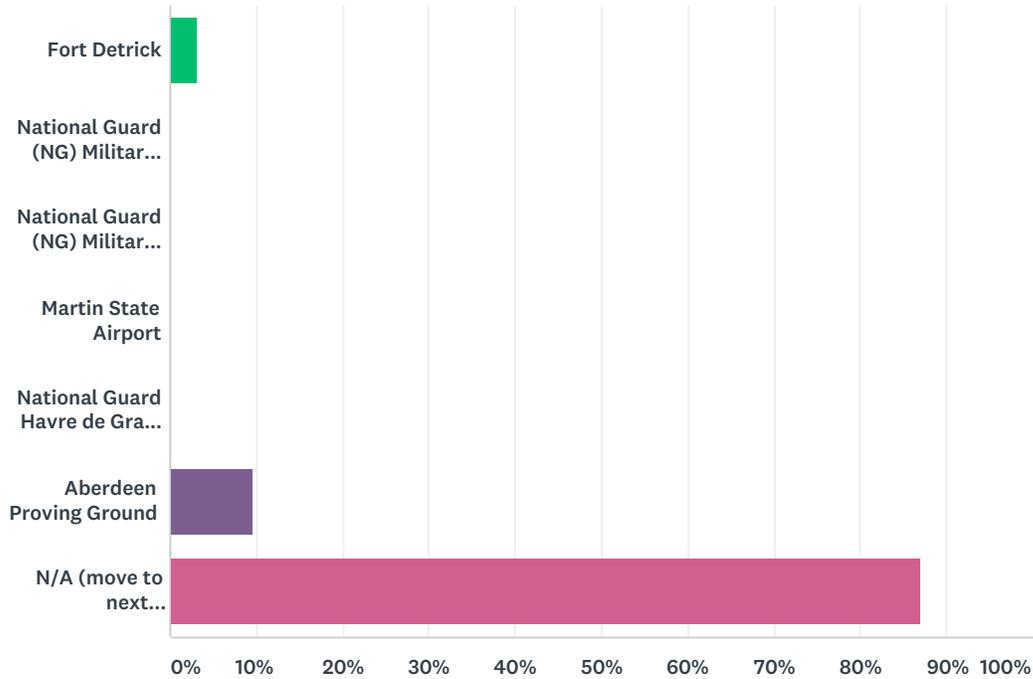
ANSWER CHOICES	RESPONSES	
Fort Detrick	3.23%	1
National Guard (NG) Military Training Area (MTA) Camp Fretterd	0.00%	0
National Guard (NG) Military Training Area (MTA) Gunpowder Military Reservation	0.00%	0
Martin State Airport	0.00%	0
National Guard Havre de Grace Military Reservation	0.00%	0
Aberdeen Proving Ground	9.68%	3
N/A (move to next demographic question)	87.10%	27
Total Respondents: 31		

Q10 The military installation I work nearest to in the Central MD Region: Anne Arundel County, Howard County, Montgomery County, Prince George's County

Answered: 31   Skipped: 1
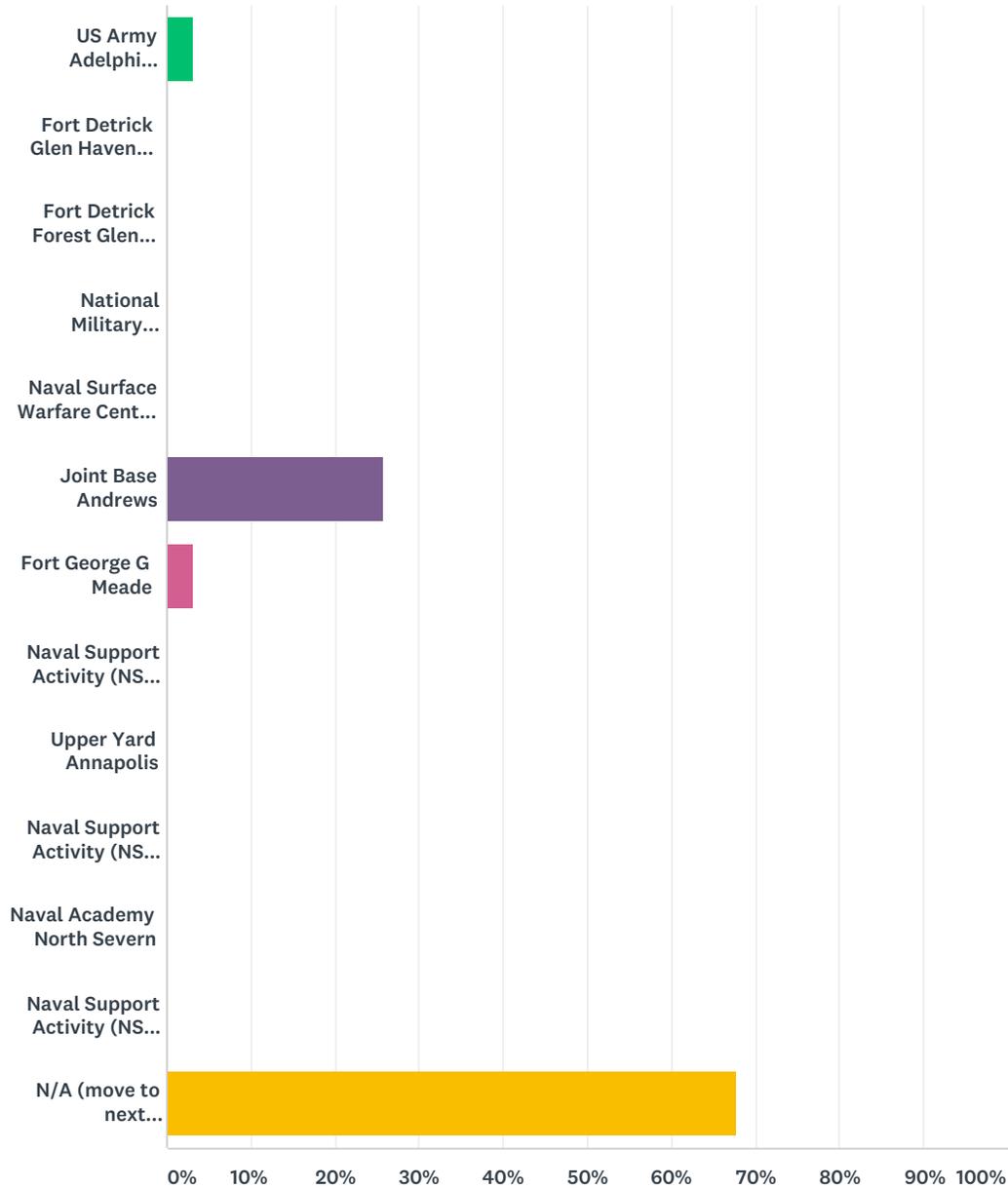
ANSWER CHOICES	RESPONSES	
US Army Adelphi Laboratory Center	3.23%	1
Fort Detrick Glen Haven Annex	0.00%	0
Fort Detrick Forest Glen Annex	0.00%	0
National Military Medical Center (NMMC) Bethesda	0.00%	0

Naval Surface Warfare Center (NSWC) Carderock	0.00%	0
Joint Base Andrews	25.81%	8
Fort George G Meade	3.23%	1
Naval Support Activity (NSA) Annapolis Gambrills	0.00%	0
Upper Yard Annapolis	0.00%	0
Naval Support Activity (NSA) Annapolis	0.00%	0
Naval Academy North Severn	0.00%	0
Naval Support Activity (NSA) Annapolis Chesapeake Bay Detachment	0.00%	0
N/A (move to next demographic question)	67.74%	21
Total Respondents: 31		

Q11 The military installation I work nearest to in the Southern MD Region: Calvert County, Charles County, Saint Mary's County

Answered: 31   Skipped: 1
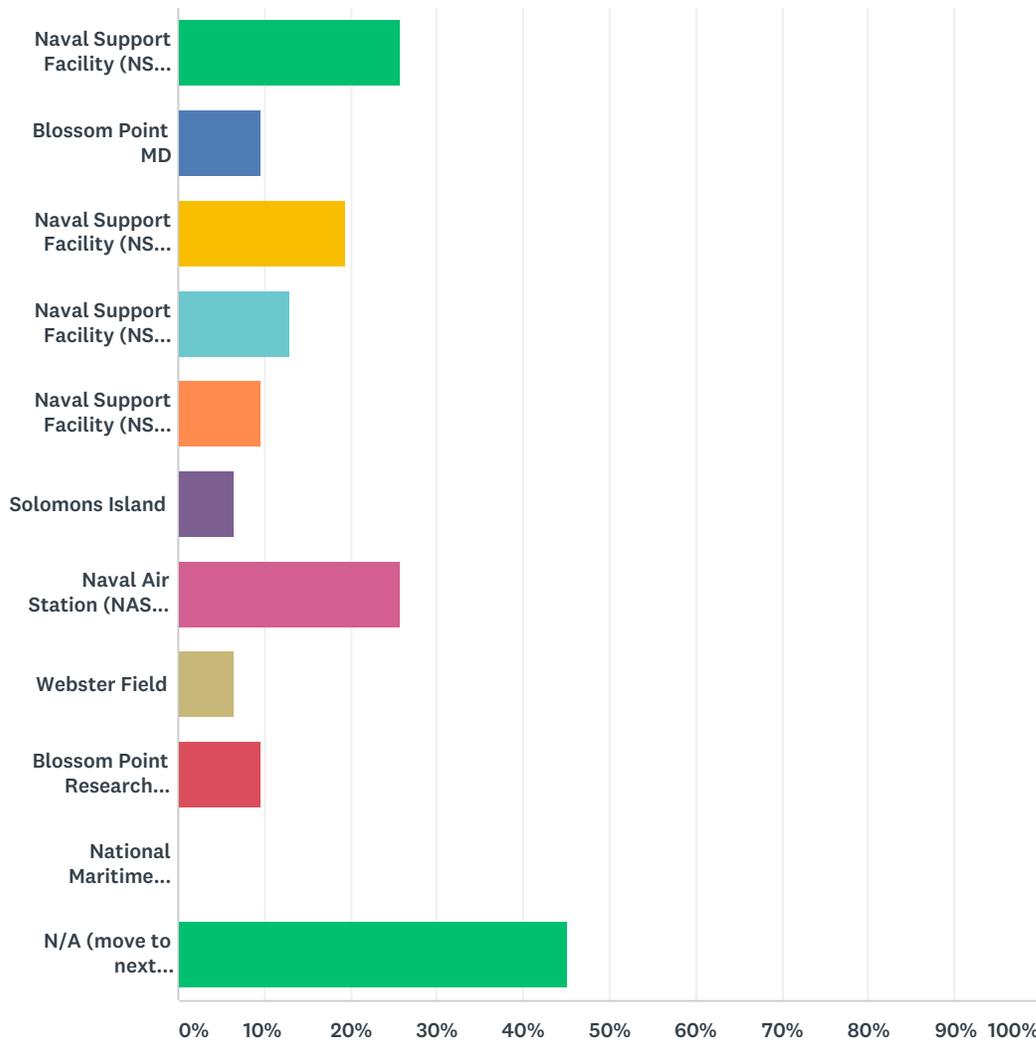
ANSWER CHOICES	RESPONSES	
Naval Support Facility (NSF) Indian Head	25.81%	8
Blossom Point MD	9.68%	3
Naval Support Facility (NSF) Indian Head Stump Neck Annex	19.35%	6
Naval Support Facility (NSF) Dahlgren	12.90%	4
Naval Support Facility (NSF) Dahlgren Pumpkin Neck Annex	9.68%	3
Solomons Island	6.45%	2
Naval Air Station (NAS) Patuxent River	25.81%	8
Webster Field	6.45%	2
Blossom Point Research Facility	9.68%	3

National Maritime Intelligence Center Suitland	0.00%	0
N/A (move to next demographic question)	45.16%	14
Total Respondents: 31		

Q12 The military installation I work nearest to in the Eastern Shore MD Region: Caroline County, Cecil County, Dorchester County, Kent County, Queen Anne's County, Somerset County, Talbot County, Wicomico County, Worcester County

Answered: 32   Skipped: 0

ANSWER CHOICES	RESPONSES	
Note: Although no military installations are located in the Eastern Shore Counties, these locations may receive impacts from military operations (e.g. noise, traffic congestion, etc.) and feedback from the survey is requested	15.63%	5
N/A (move to next question)	84.38%	27
TOTAL		32

Q13 Is your commute affected by military operations?

Answered: 32   Skipped: 0
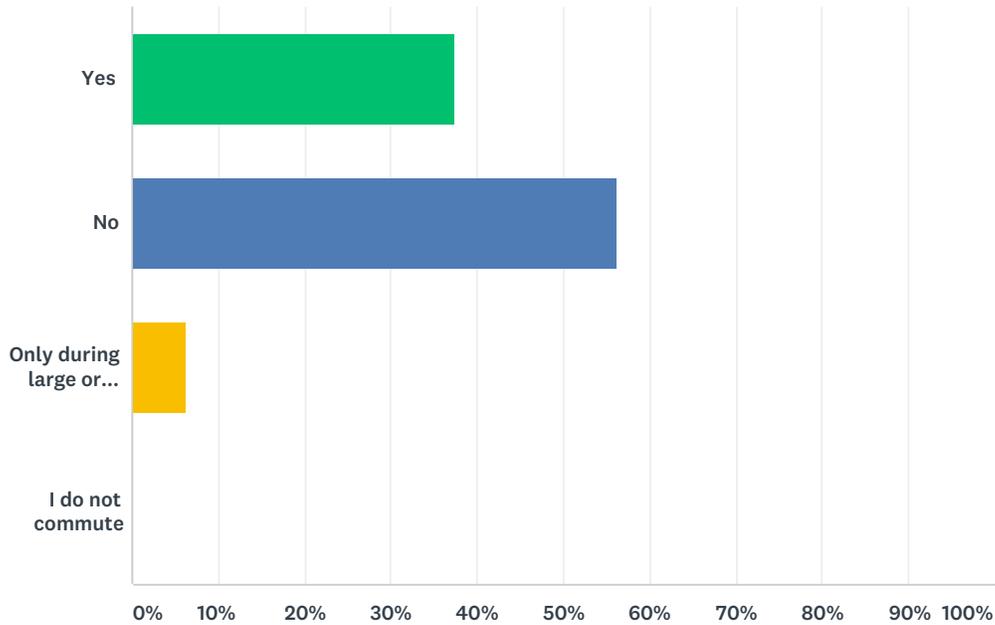
ANSWER CHOICES	RESPONSES	
Yes	37.50%	12
No	56.25%	18
Only during large or special events	6.25%	2
I do not commute	0.00%	0
TOTAL		32

Q14 If you had a question or concern about the local military installation you selected from questions 9-12, do you know who to contact?

Answered: 32   Skipped: 0
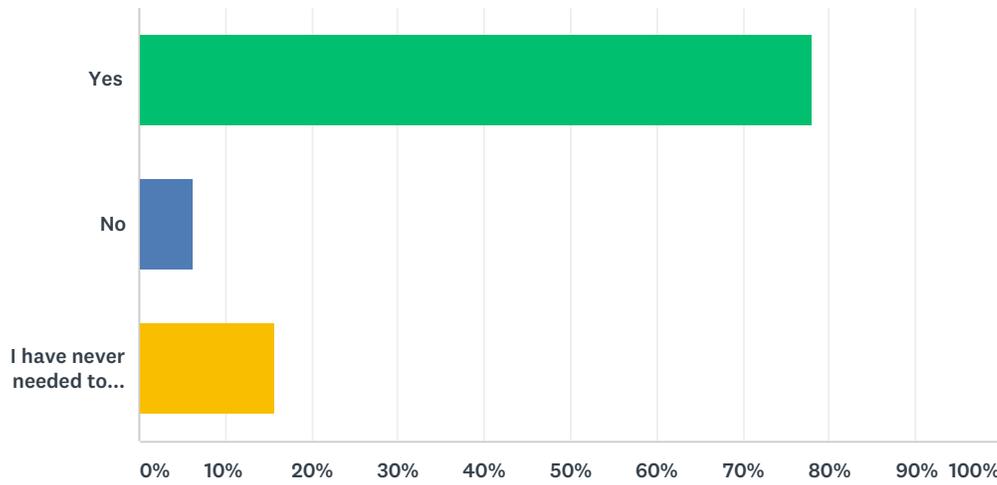
ANSWER CHOICES	RESPONSES	
Yes	78.13%	25
No	6.25%	2
I have never needed to contact my local military installation	15.63%	5
TOTAL		32

Q15 How satisfied are you with your local military installation you selected from questions 9-12 as a community partner? 1 = Very satisfied, 2 = Somewhat satisfied, 3 = Neutral, 4 = Somewhat unsatisfied, 5 = Very unsatisfied

Answered: 32   Skipped: 0
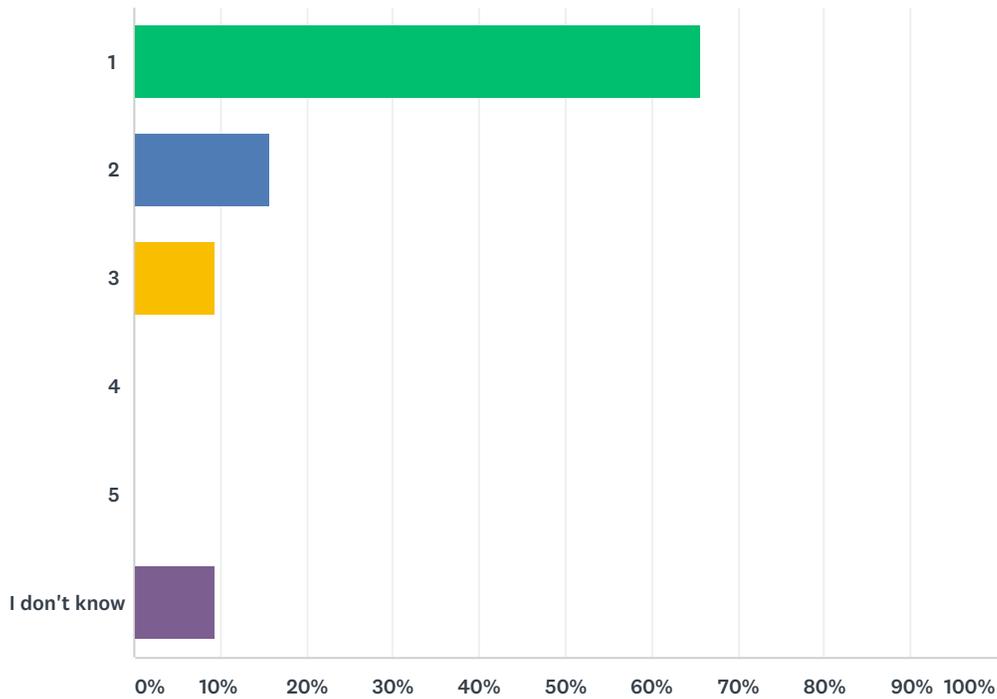
ANSWER CHOICES	RESPONSES	
1	65.63%	21
2	15.63%	5
3	9.38%	3
4	0.00%	0
5	0.00%	0
I don't know	9.38%	3
TOTAL		32

Q16 How would you characterize communication between your local military installation you selected from questions 9-12 and the community?

Answered: 32   Skipped: 0
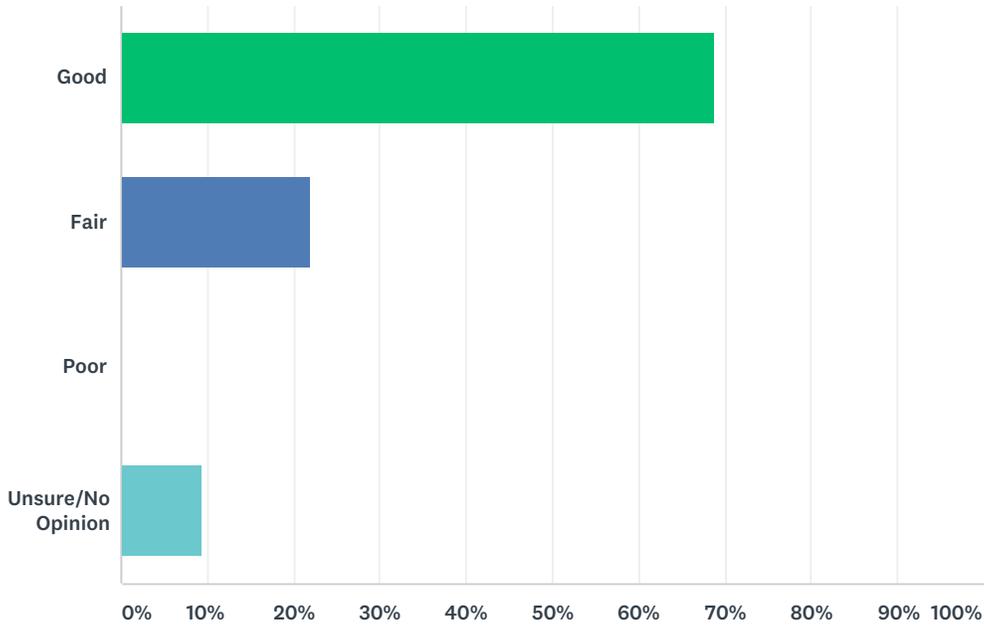
ANSWER CHOICES	RESPONSES	
Good	68.75%	22
Fair	21.88%	7
Poor	0.00%	0
Unsure/No Opinion	9.38%	3
TOTAL		32

Q17 To help us identify where issues are occurring, please tell us the which issue you feel needs to be addressed.

Answered: 26   Skipped: 6

Q18 How significant is your local military installation you selected from questions 9-12 and its operations to your community's local / regional economy?

Answered: 32   Skipped: 0
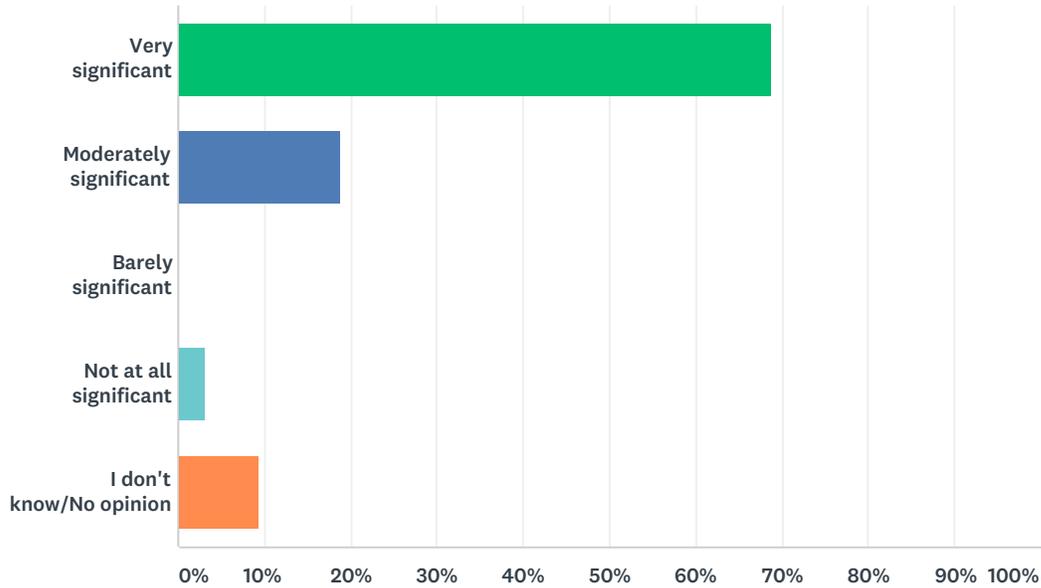
ANSWER CHOICES	RESPONSES	
Very significant	68.75%	22
Moderately significant	18.75%	6
Barely significant	0.00%	0
Not at all significant	3.13%	1
I don't know/No opinion	9.38%	3
TOTAL		32

Q19 Are you and your community familiar with the types of training and / or military operations conducted at your local military installation you selected from questions 9-12?

Answered: 31   Skipped: 1
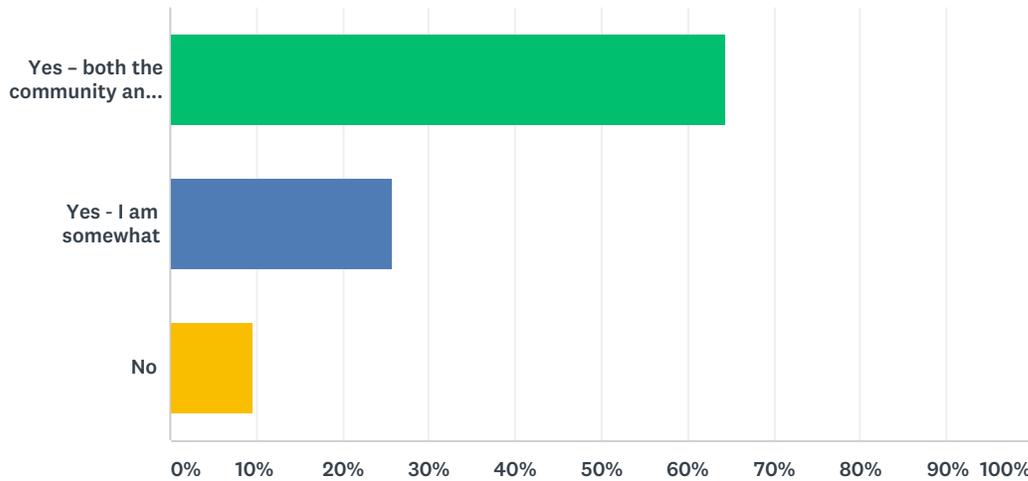
ANSWER CHOICES	RESPONSES	
Yes – both the community and I are	64.52%	20
Yes - I am somewhat	25.81%	8
No	9.68%	3
TOTAL		31

Q20 How important do you / does your community think the training that occurs at your local military installation you selected from questions 9-12 is?

Answered: 32   Skipped: 0
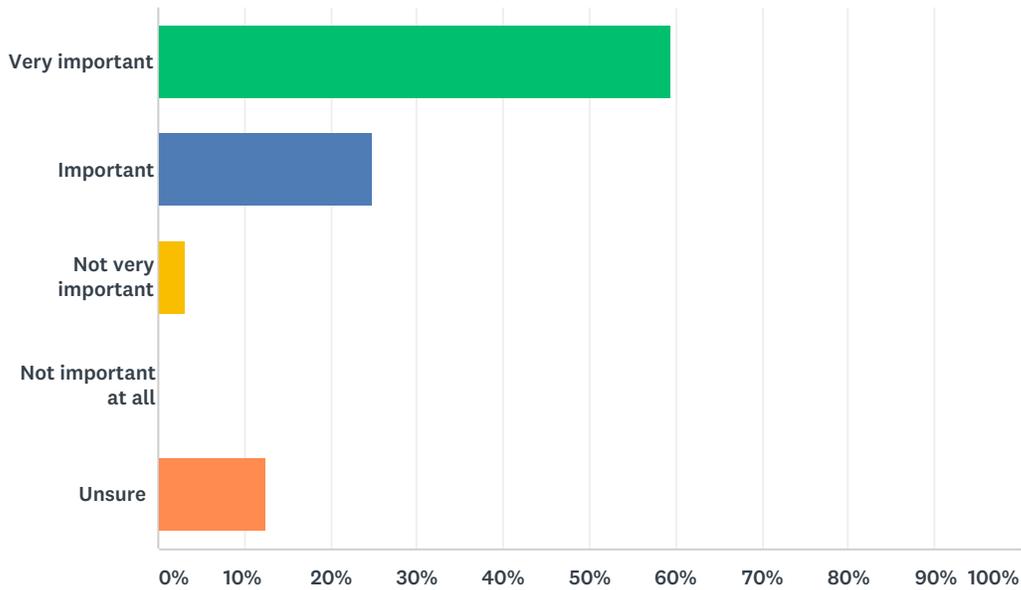
ANSWER CHOICES	RESPONSES	
Very important	59.38%	19
Important	25.00%	8
Not very important	3.13%	1
Not important at all	0.00%	0
Unsure	12.50%	4
TOTAL		32

Q21 Would you / your community like to receive additional information about the types of training and/or military operations conducted by your local military installation you selected from questions 9-12?

Answered: 32   Skipped: 0
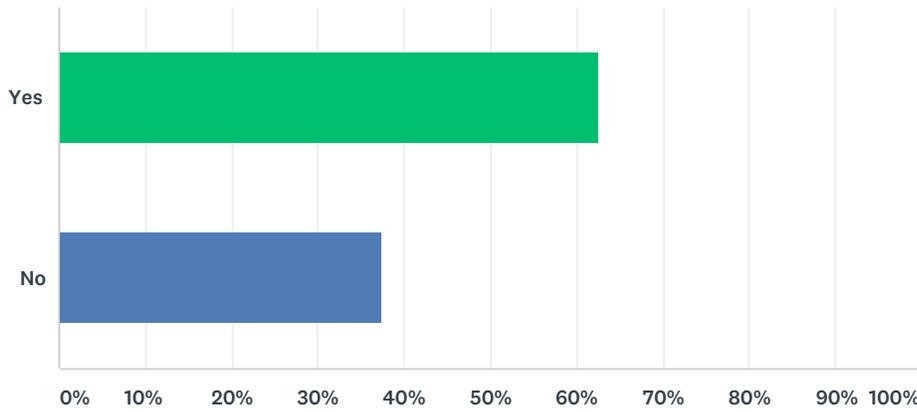
ANSWER CHOICES	RESPONSES	
Yes	62.50%	20
No	37.50%	12
TOTAL		32

Q22 Which of the following do you see as the most important topics to communities adjacent to your local military installation you selected from questions 9-12? Please select top 3:

Answered: 32　　Skipped: 0
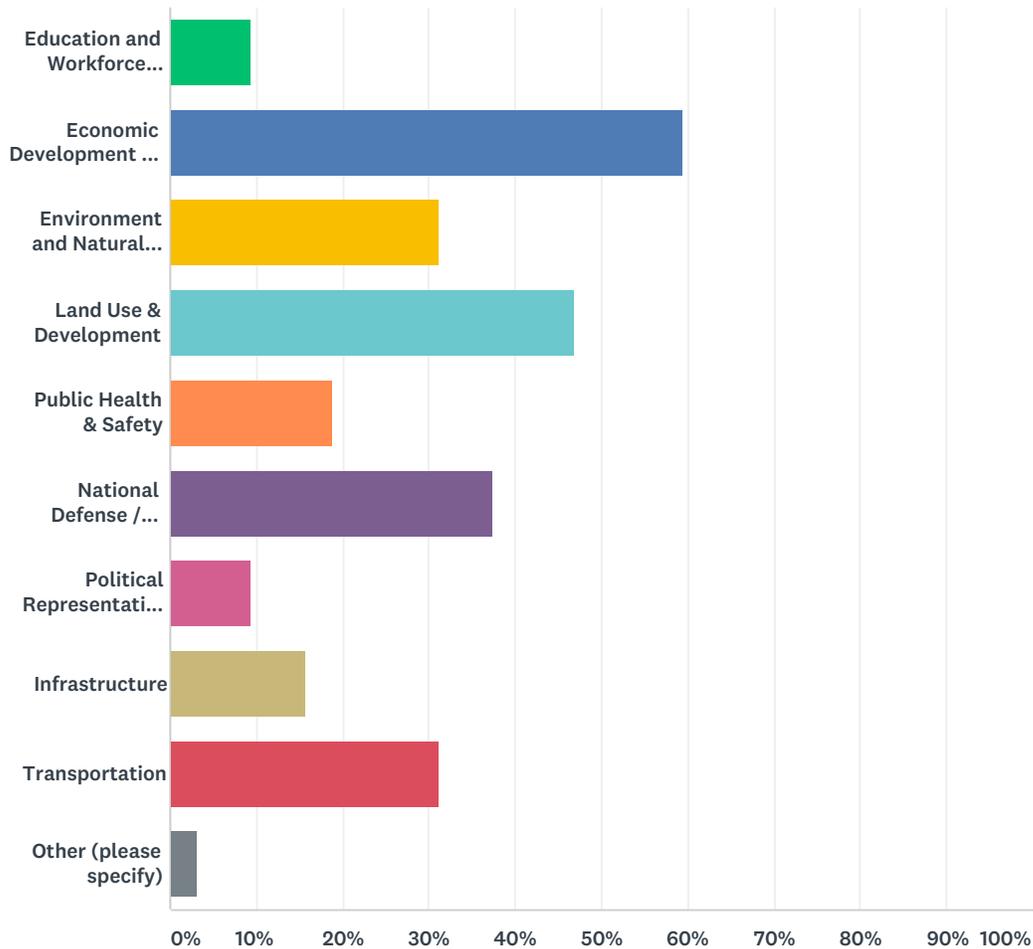
ANSWER CHOICES	RESPONSES	
Education and Workforce Training	9.38%	3
Economic Development and Job Creation	59.38%	19
Environment and Natural Resources Management	31.25%	10
Land Use & Development	46.88%	15
Public Health & Safety	18.75%	6
National Defense / Sustaining Military Operations	37.50%	12
Political Representation / Support	9.38%	3
Infrastructure	15.63%	5
Transportation	31.25%	10
Other (please specify)	3.13%	1

Total Respondents: 32

Q23 Which of the specific items are currently issues with your community and local military installation you selected from questions 9-12? Select all that apply.

Answered: 30   Skipped: 2
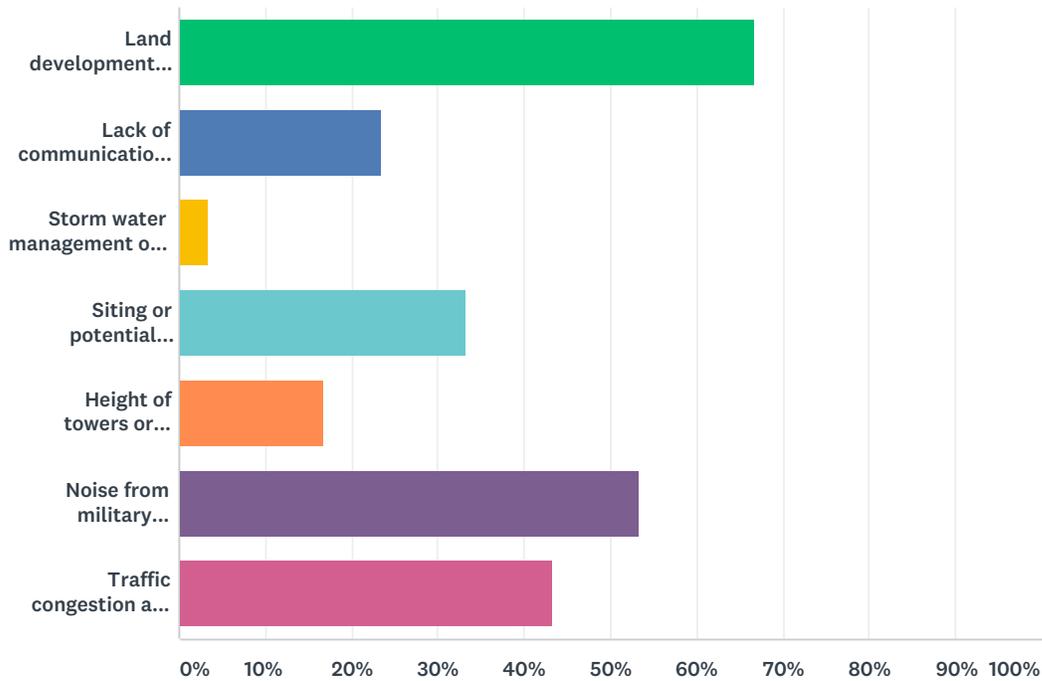
ANSWER CHOICES	RESPONSES	
Land development around installations including airfield safety zones	66.67%	20
Lack of communication / coordination on items of joint interest	23.33%	7
Storm water management on / off base	3.33%	1
Siting or potential siting of alternative energy projects	33.33%	10
Height of towers or buildings around installation airfields	16.67%	5
Noise from military operations	53.33%	16
Traffic congestion at installation gates or nearby	43.33%	13
Total Respondents: 30		

Q24 Does your jurisdiction currently collaborate with your local military installation you selected from questions 9-12 on any of the community topics / issues you identified in the previous two questions?

Answered: 32   Skipped: 0
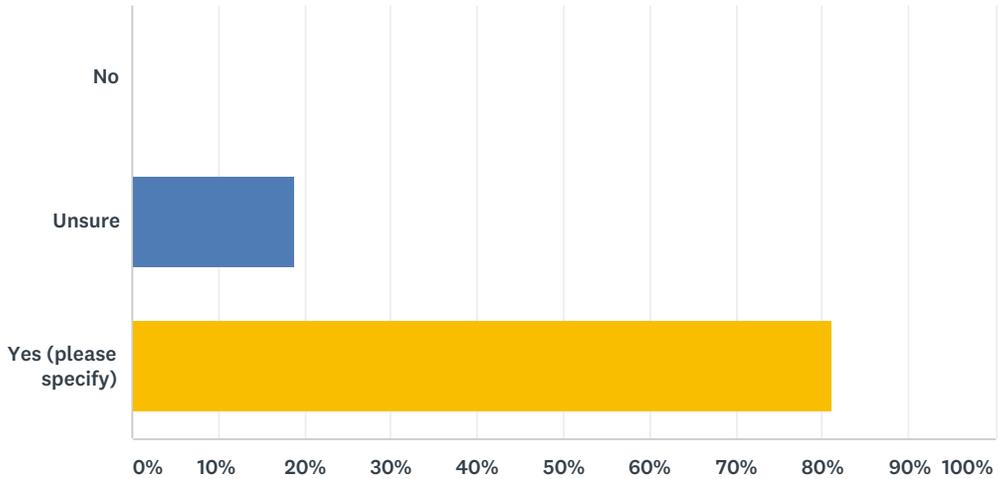
ANSWER CHOICES	RESPONSES	
No	0.00%	0
Unsure	18.75%	6
Yes (please specify)	81.25%	26
TOTAL		32

Q25 What do you feel should be prioritized around your local military installation you selected from questions 9-12 for land use planning and zoning? Please select all that apply:

Answered: 31   Skipped: 1
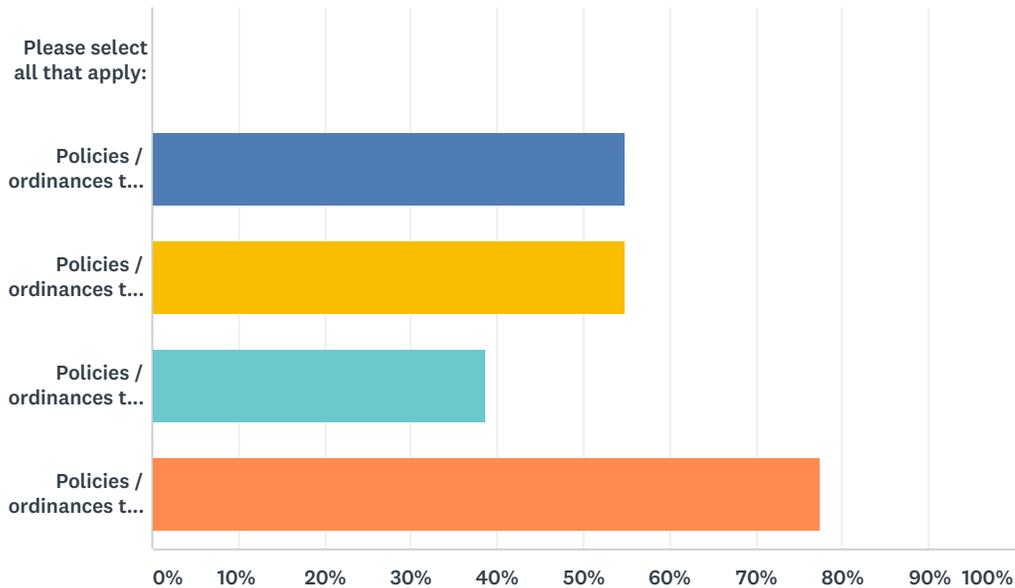
ANSWER CHOICES	RESPONSES	
Please select all that apply:	0.00%	0
Policies / ordinances that protect the interests of residential zones	54.84%	17
Policies / ordinances that protect the interests of open space	54.84%	17
Policies / ordinances that protect the interests of your local businesses	38.71%	12
Policies / ordinances that protect the interests of your local military installation	77.42%	24
Total Respondents: 31		

Q26 How would you describe your local / regional land use zoning around the military installation you selected from questions 9-12?

Answered: 32   Skipped: 0
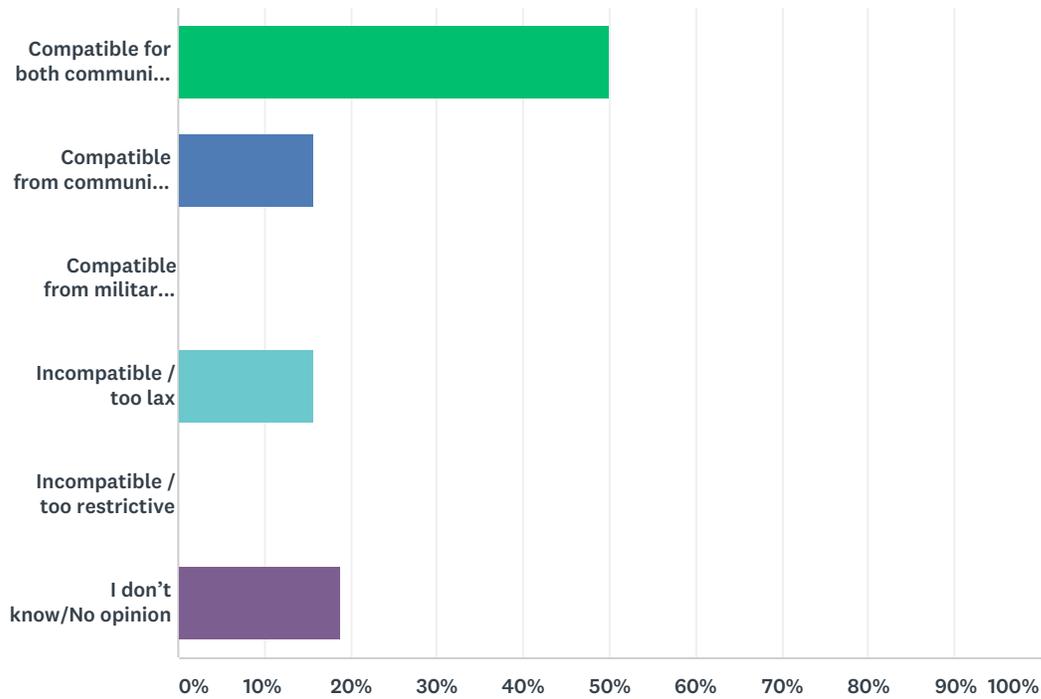
ANSWER CHOICES	RESPONSES	
Compatible for both community and military	50.00%	16
Compatible from community perspective	15.63%	5
Compatible from military perspective	0.00%	0
Incompatible / too lax	15.63%	5
Incompatible / too restrictive	0.00%	0
I don't know/No opinion	18.75%	6
TOTAL		32

Q27 From your perspective, what are the most important aspects of this statewide study effort? Please select all that apply:

Answered: 32   Skipped: 0
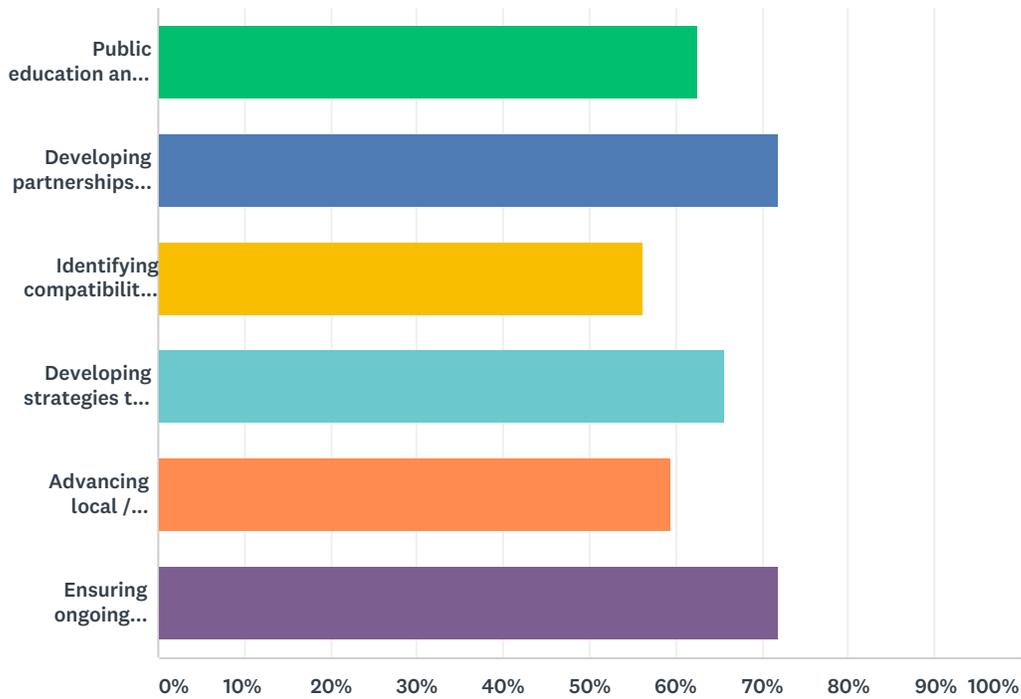
ANSWER CHOICES	RESPONSES	
Public education and information	62.50%	20
Developing partnerships with local / regional stakeholders	71.88%	23
Identifying compatibility concerns with community and military	56.25%	18
Developing strategies to mitigate compatibility concerns	65.63%	21
Advancing local / regional economic development efforts	59.38%	19
Ensuring ongoing military operations at your local military installation	71.88%	23
Total Respondents: 32		

Q28 What form of State level support are you most interested in this Study analyzing when looking to adopt best practices? Please select all that apply:

Answered: 32   Skipped: 0
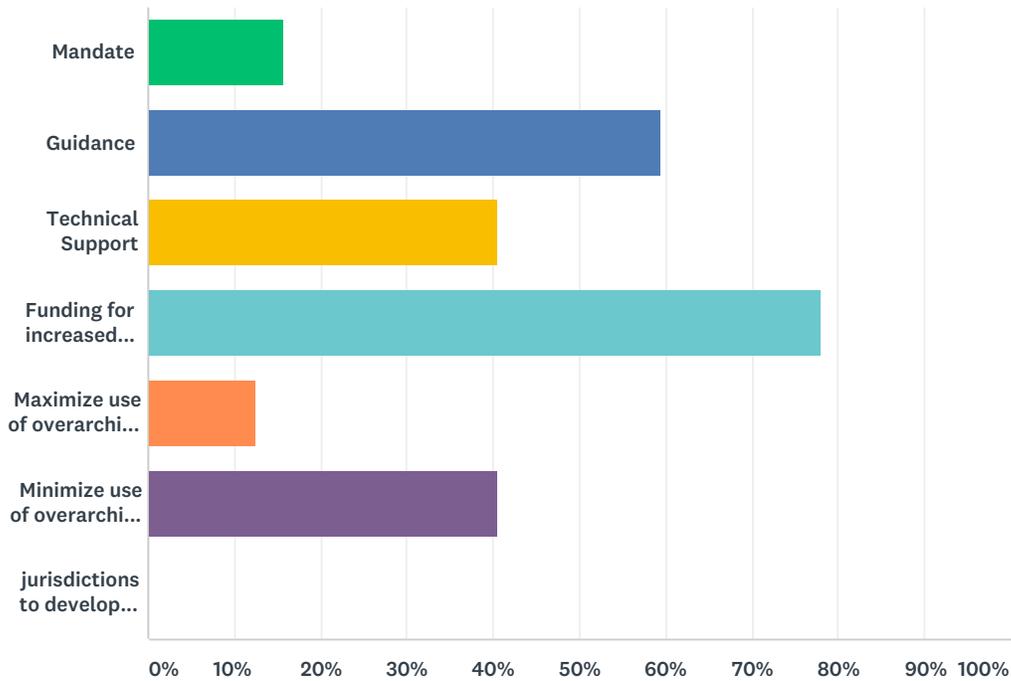
ANSWER CHOICES	RESPONSES	
Mandate	15.63%	5
Guidance	59.38%	19
Technical Support	40.63%	13
Funding for increased collaboration	78.13%	25
Maximize use of overarching legislation that places requirements on jurisdictions	12.50%	4
Minimize use of overarching legislation that places requirements on jurisdictions, allowing jurisdictions to develop individual solutions	40.63%	13
jurisdictions to develop individual solutions	0.00%	0
Total Respondents: 32		

Q29 Would you like the State of Maryland to strengthen any of the following? Please select all that apply:

Answered: 32   Skipped: 0
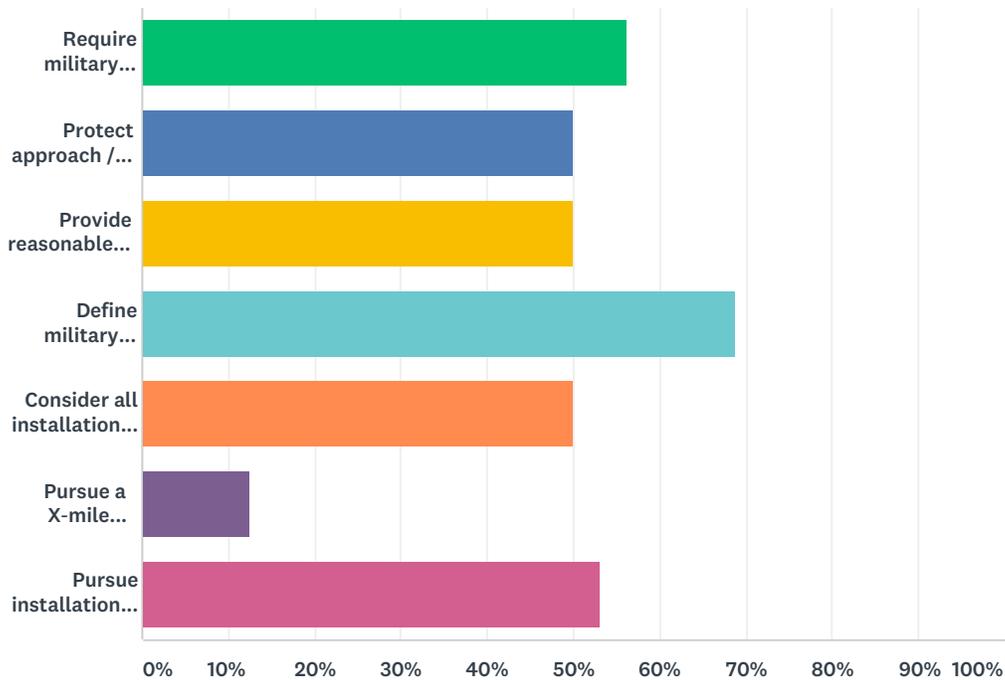
ANSWER CHOICES	RESPONSES	
Require military installations to be considered in developing and applying zoning ordinances and districts	56.25%	18
Protect approach / departure slopes (imaginary surfaces) and other safety areas (accident prevention zones) of licensed airports, including United States government and military air facilities	50.00%	16
Provide reasonable protection against encroachment upon military bases, military installations, and military airports and their adjacent safety areas, excluding armories operated by the Maryland National Guard	50.00%	16
Define military installation influence areas to ensure that the military has sufficient opportunity to react to land use proposals that could truly affect military operations without needlessly delaying the development review process	68.75%	22
Consider all installation alternative energy encroachment concerns (beyond just use of airspace), such as wind farm radar clutter or general EMI (solar) interference concerns	50.00%	16
Pursue a X-mile (specific) buffer around all military installations	12.50%	4
Pursue installation specific buffer dependent on the mission operations of the installation	53.13%	17
Total Respondents: 32		

Q30 Prior to proposing any changes to the State Code, would you support a more robust agency inclusionary process that would incorporate all stakeholders for such action? Potential stakeholders could include: (Select all that apply)

Answered: 32   Skipped: 0
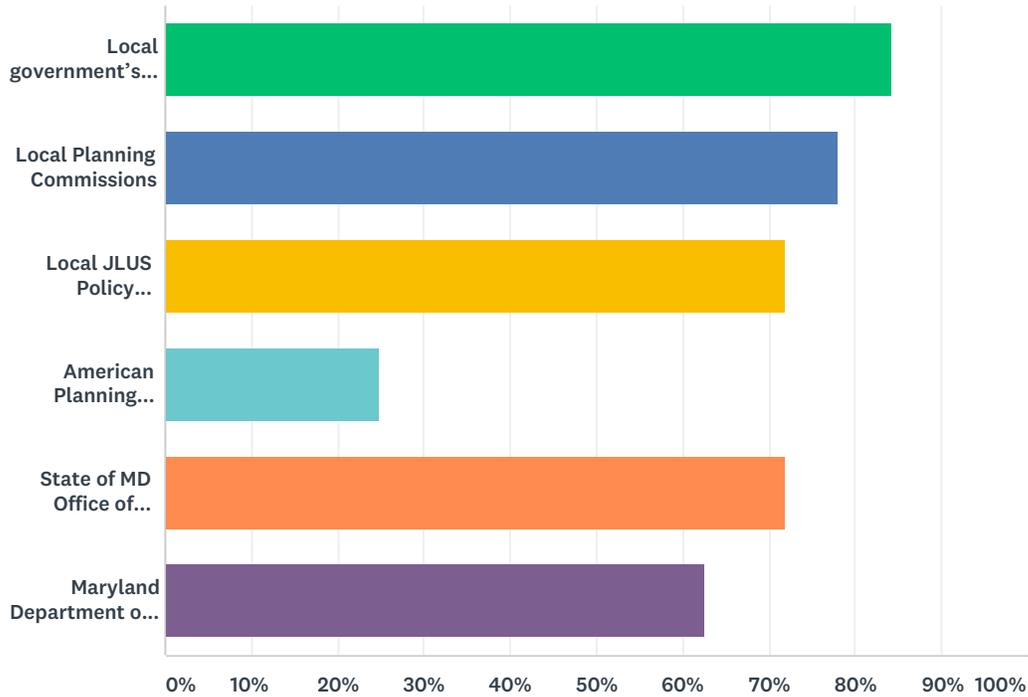
ANSWER CHOICES	RESPONSES	
Local government's legislative reps	84.38%	27
Local Planning Commissions	78.13%	25
Local JLUS Policy Committees (or equivalent)	71.88%	23
American Planning Association (APA) PA MD	25.00%	8
State of MD Office of Military and Federal Affairs	71.88%	23
Maryland Department of Planning	62.50%	20
Total Respondents: 32		

Q31 Would you support the State defining military installation specific notification distances?

Answered: 32　　Skipped: 0
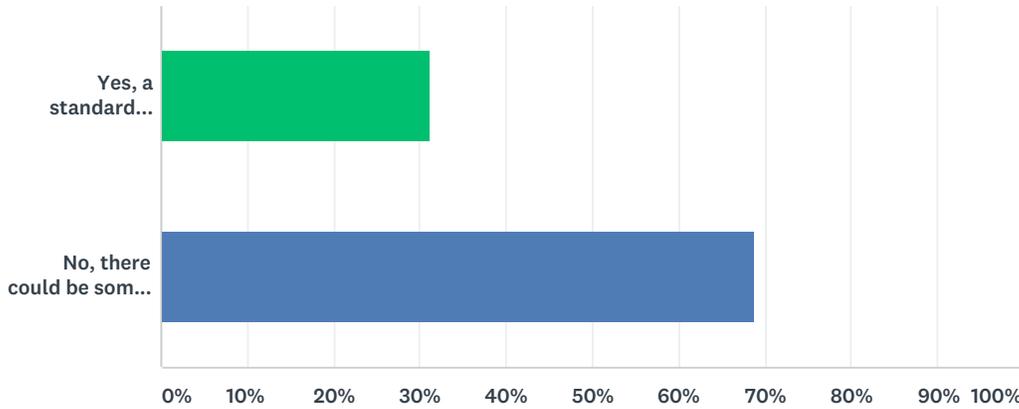
ANSWER CHOICES	RESPONSES	
Yes, a standard approach would benefit local jurisdictions in updating local planning document	31.25%	10
No, there could be some installations that require distances greater while some that require less, and in most cases the distances are not uniform around the installation	68.75%	22
TOTAL		32

Q32 Do you agree with the following statement? "As Comprehensive Plan and Zoning Ordinances are developed and updated, it is appropriate and necessary that military installations be invited to participate and that their needs and concerns be given serious consideration. Likewise, land use and density can also be affected by re-zonings and Special Use Permits, so it is important that comments from military bases on applications that could potentially affect their operations be solicited."

Answered: 32   Skipped: 0
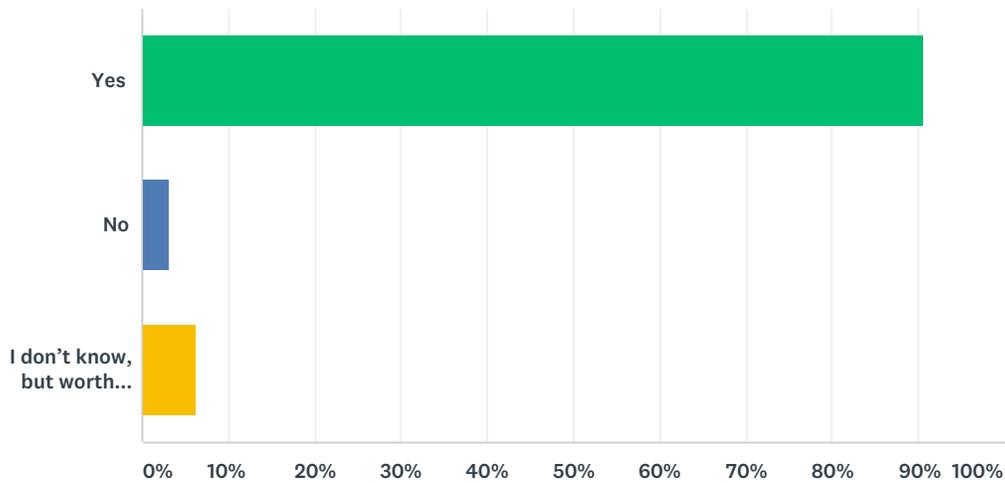
ANSWER CHOICES	RESPONSES	
Yes	90.63%	29
No	3.13%	1
I don't know, but worth exploring	6.25%	2
TOTAL		32

Q33 Do you support establishing a state level committee to support and complement the existing local JLUS Policy Committee?

Answered: 32   Skipped: 0
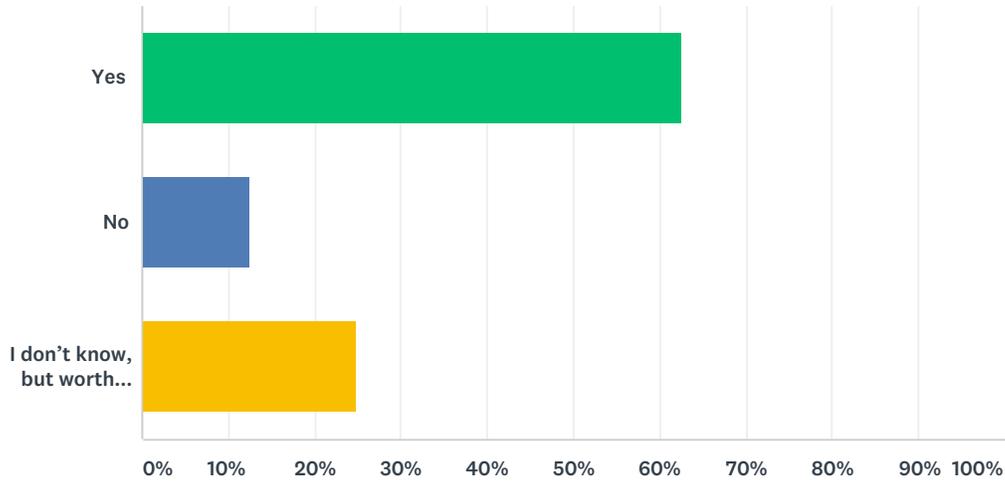
ANSWER CHOICES	RESPONSES	
Yes	62.50%	20
No	12.50%	4
I don't know, but worth exploring	25.00%	8
TOTAL		32

Q34 What elements would you like to see for you to support contributing to a statewide GIS database / mapping effort? Please choose all that apply

Answered: 31   Skipped: 1

ANSWER CHOICES	RESPONSES	
A database should be developed that includes all the military installations and training areas in Maryland and the corresponding localities that are affected by implementation strategies It should include items such as what office to contact for questions, general layout of the base and significant mission impacts, etc, within the limits prescribed in national security policies.	80.65%	25
Efforts should include FAA Part 77 surfaces – including height restrictions – and AICUZ noise contours surrounding major military installations	67.74%	21
It would be beneficial for localities in military influence areas to have someone on staff who understands the needs and concerns of the military installation with regard to land use	67.74%	21
Total Respondents: 31		

Q35 Would designation of specific functions/positions in both local government and the military be beneficial to pursue to offset frequent leadership rotations?

Answered: 31   Skipped: 1
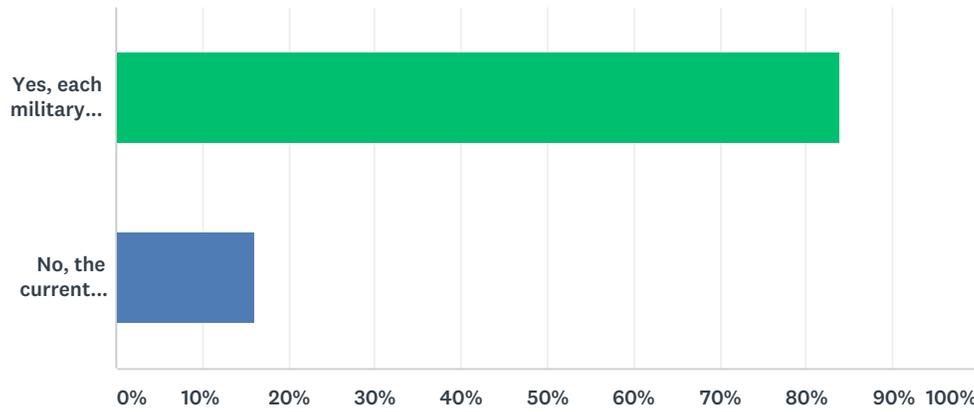
ANSWER CHOICES	RESPONSES	
Yes, each military installation to appoint someone to serve as a liaison with all the localities within the installation's influence area, similar to the Community Plans & Liaison Officers (CPLO) at Navy bases as a best practice	83.87%	26
No, the current structures in place serve that purpose	16.13%	5
TOTAL		31

Q36 Would you support the State assisting local governments with the expertise to assess impacts of alternative energy development? This might include a statewide permitting process and analysis support from state agencies and the affected military installation.

Answered: 32   Skipped: 0
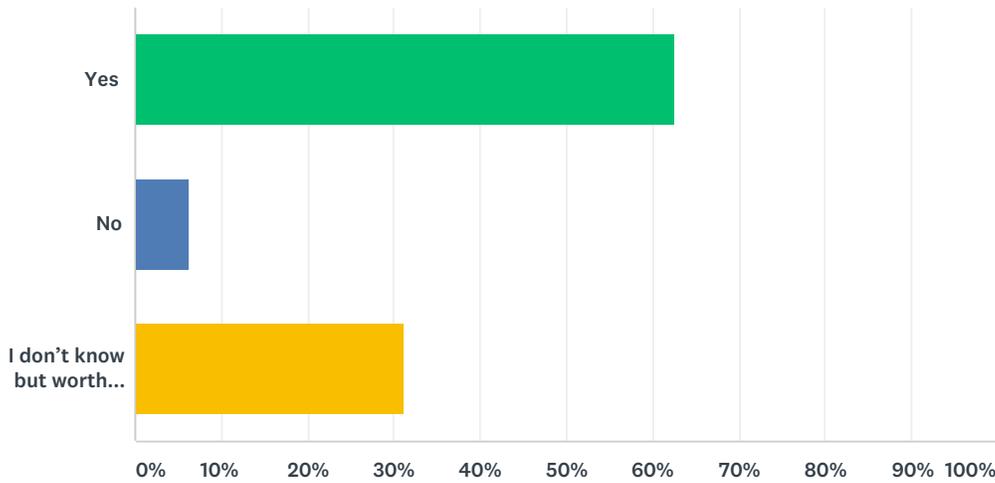
ANSWER CHOICES	RESPONSES	
Yes	62.50%	20
No	6.25%	2
I don't know but worth exploring further	31.25%	10
TOTAL		32

Q37 Are you supportive of State recommended disclosures?

Answered: 31   Skipped: 1

ANSWER CHOICES	RESPONSES	
No	3.23%	1
Yes, require Real Estate Disclosure to include noise generated by range activities and aircraft flight operations.	38.71%	12
Yes, consideration should be given to having a general disclosure covering a wide range of potential impacts from military operations (e.g. military operations disclosure in the State of or for a range.	22.58%	7
Yes, any disclosure should be based on specific locations using a specific study for a specific impact (e.g. noise) vs an arbitrary area covering general impacts that may or may not affect adjacent properties.	35.48%	11
TOTAL		31

Q38 Would you support a more robust effort from the State of Maryland regarding agency coordination of state-owned properties and state agency operations with DOD for military mission compatibility?

Answered: 32   Skipped: 0
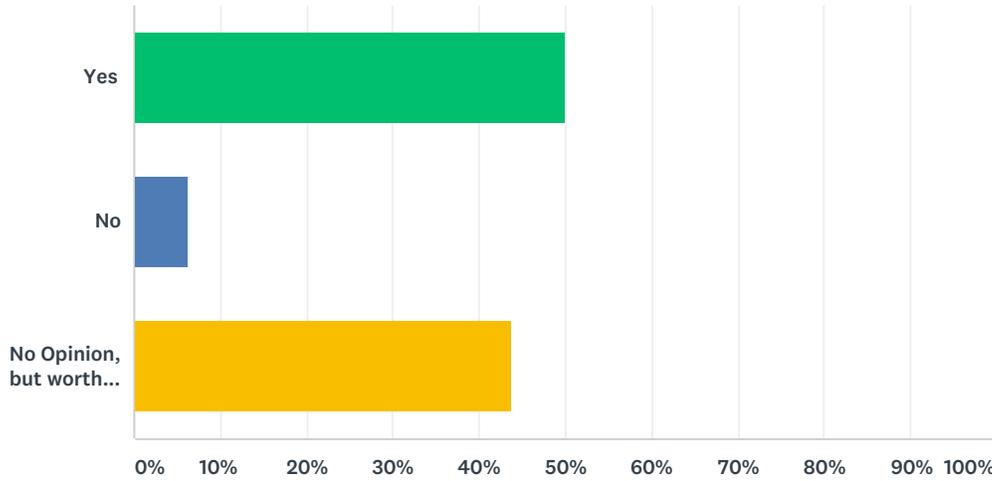
ANSWER CHOICES	RESPONSES	
Yes	50.00%	16
No	6.25%	2
No Opinion, but worth pursuing further	43.75%	14
TOTAL		32

Q39 Do you agree with the following statement? "The State's effort should be aligned with community and military interests and built upon successes already realized by the stakeholders. Nothing within the State's efforts should do harm to existing agreements, procedures and tools."

Answered: 32   Skipped: 0
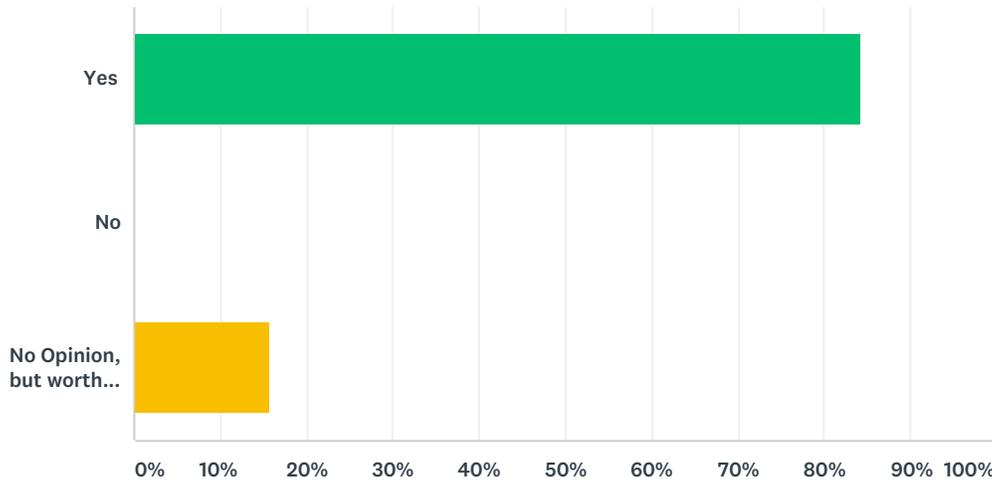
ANSWER CHOICES	RESPONSES	
Yes	84.38%	27
No	0.00%	0
No Opinion, but worth pursuing further	15.63%	5
TOTAL		32

Q40 Which areas do you believe are key areas for State involvement and implementation of JLUS activities? Please choose all that apply

Answered: 32   Skipped: 0
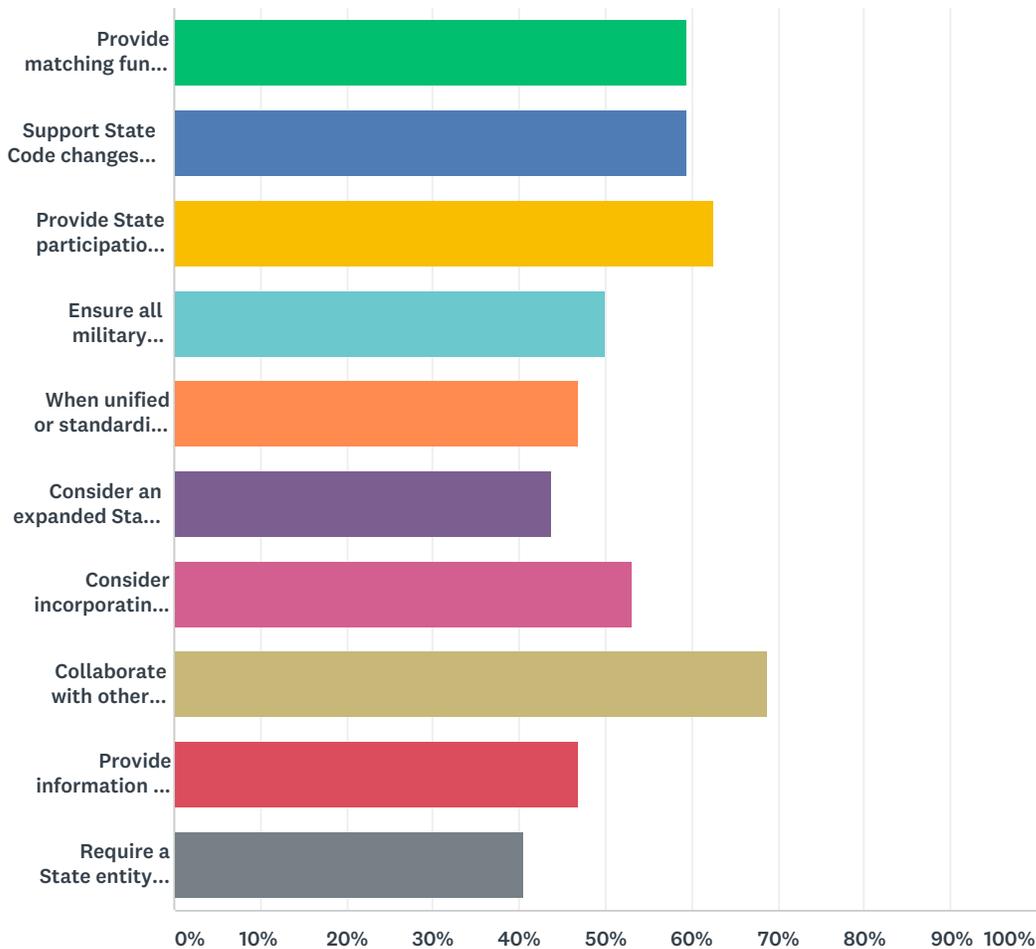
ANSWER CHOICES	RESPONSES	
Provide matching funds for property acquisition	59.38%	19
Support State Code changes to give localities more options to support military installations	59.38%	19
Provide State participation on the policy and/or technical committees that are formed to oversee the development or amendment of Joint Land Use Studies (JLUS)	62.50%	20
Ensure all military installations have a JLUS or similar baseline study	50.00%	16
When unified or standardized Statewide approaches to JLUS implementation are being contemplated, consider working initially through an existing regional framework such as local Planning District Commissions.	46.88%	15
Consider an expanded State role to support the development and implementation of strategies to combat the impacts of sea level rise on the mission of military installations.	43.75%	14
Consider incorporating an annual update to this Statewide JLUS at a State level meeting with installation commanders.	53.13%	17
Collaborate with other State agencies to ensure cross flow of information pertaining to Statewide activities associated with local communities and installations regarding JLUS implementation / execution.	68.75%	22

Provide information on OEA grant opportunities in support of local, regional or Statewide efforts regarding JLUS updates and implementation.	46.88%	15
Require a State entity to be responsible for collection of local, regional, state and military plans that affect community / installation compatibility.	40.63%	13
Total Respondents: 32		

Q41 Where are your community and local military installation you selected from questions 9-12 efforts regarding implementation of JLUS strategies included in your JLUS Report?

Answered: 29   Skipped: 3
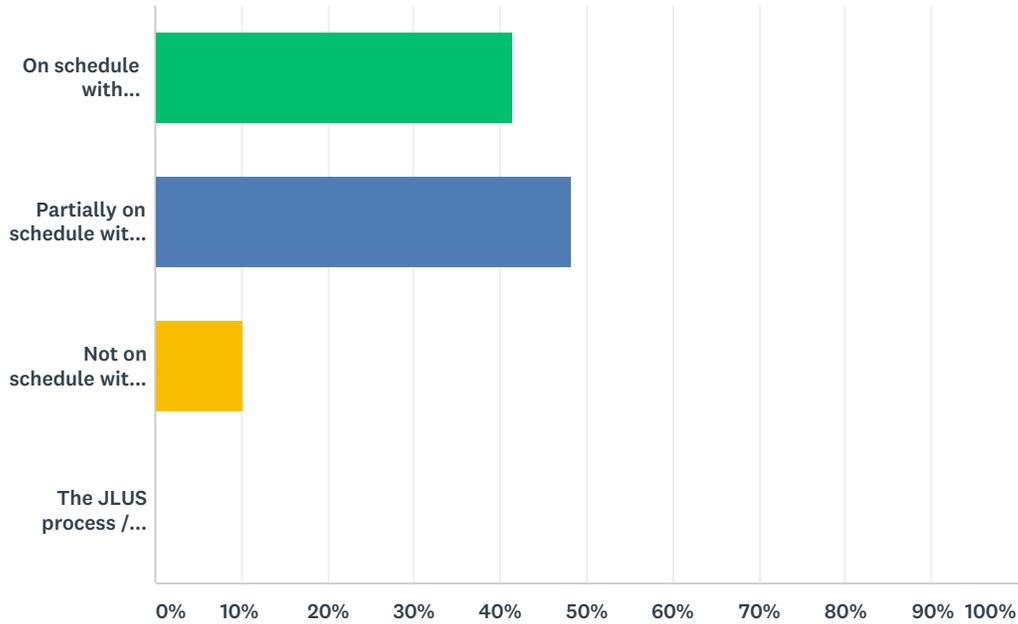
ANSWER CHOICES	RESPONSES	
On schedule with implementation plan	41.38%	12
Partially on schedule with implementation plan	48.28%	14
Not on schedule with implementation plan	10.34%	3
The JLUS process / report did not meet our ultimate needs and is no longer used as our roadmap	0.00%	0
TOTAL		29

Q42 In your own words, please list the 3 issues that you consider to be most important from your JLUS

Answered: 27   Skipped: 5

Q43 Please provide your name so that the survey team can reach out to you

Answered: 23   Skipped: 9

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Survey Results from Non JLUS Installations

Results from the open survey period start on the next page

Q1 I represent (Please choose one):

Answered: 33   Skipped: 0
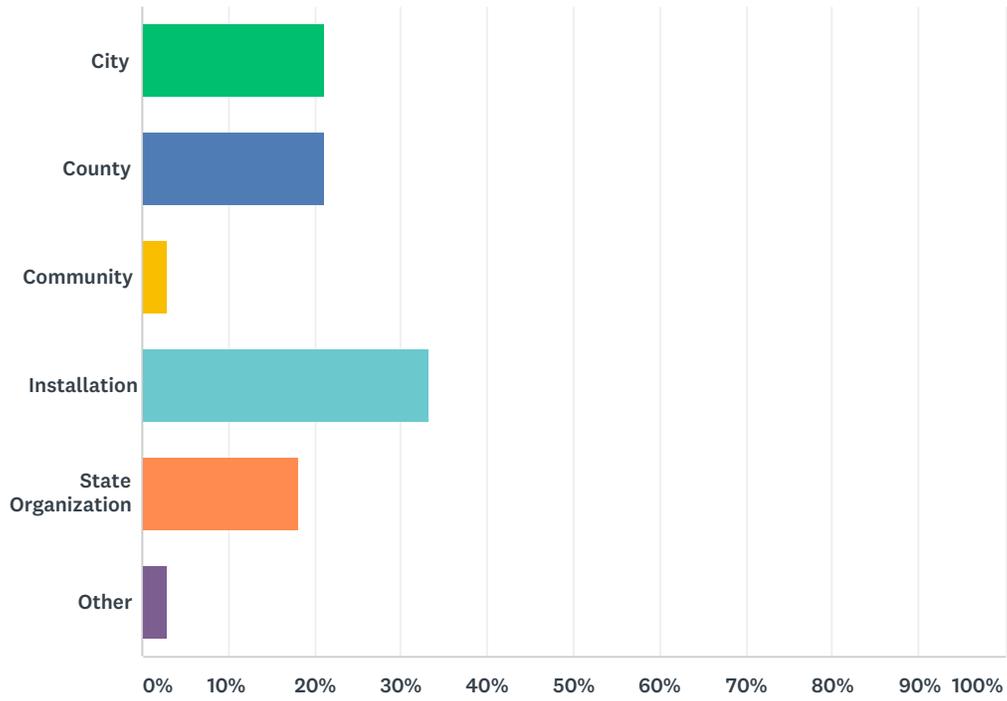
ANSWER CHOICES	RESPONSES	
City	21.21%	7
County	21.21%	7
Community	3.03%	1
Installation	33.33%	11
State Organization	18.18%	6
Other	3.03%	1
TOTAL		33

Q2 Please indicate which community you work: Northern MD Region:

Answered: 29   Skipped: 4
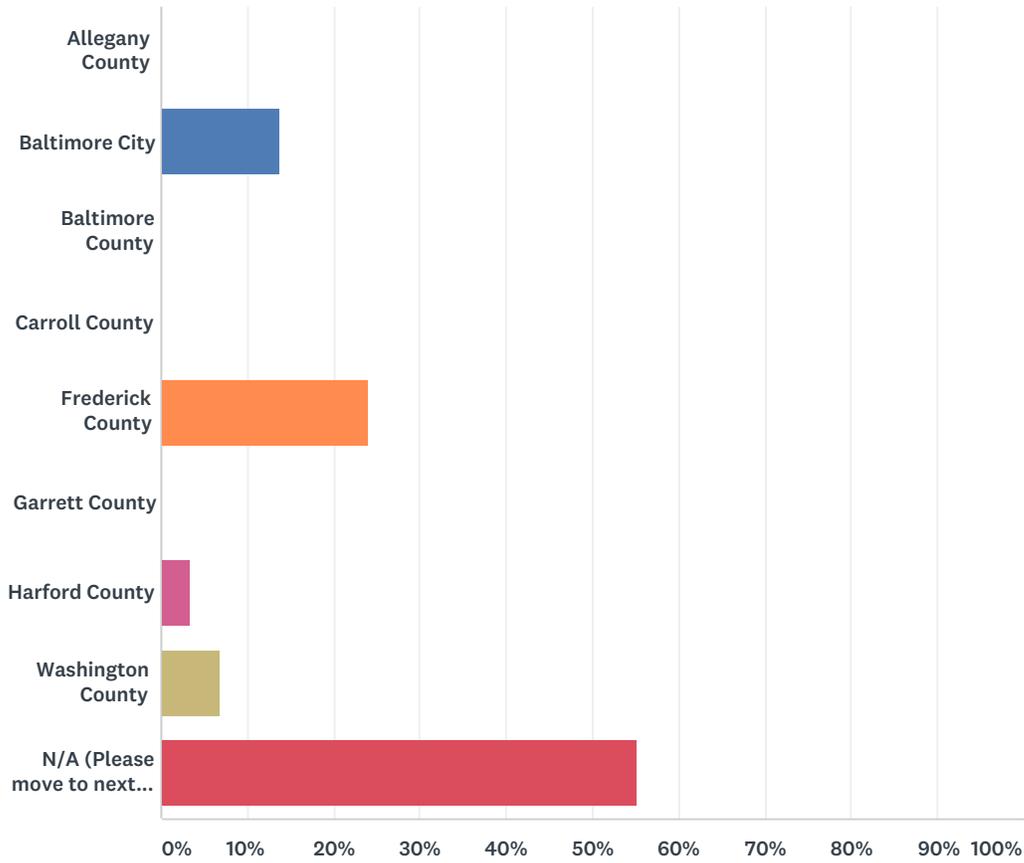
ANSWER CHOICES	RESPONSES	
Allegany County	0.00%	0
Baltimore City	13.79%	4
Baltimore County	0.00%	0
Carroll County	0.00%	0
Frederick County	24.14%	7
Garrett County	0.00%	0
Harford County	3.45%	1
Washington County	6.90%	2
N/A (Please move to next demographic question)	55.17%	16
Total Respondents: 29		

Q3 Please indicate which community you work: Central MD Region:

Answered: 28   Skipped: 5
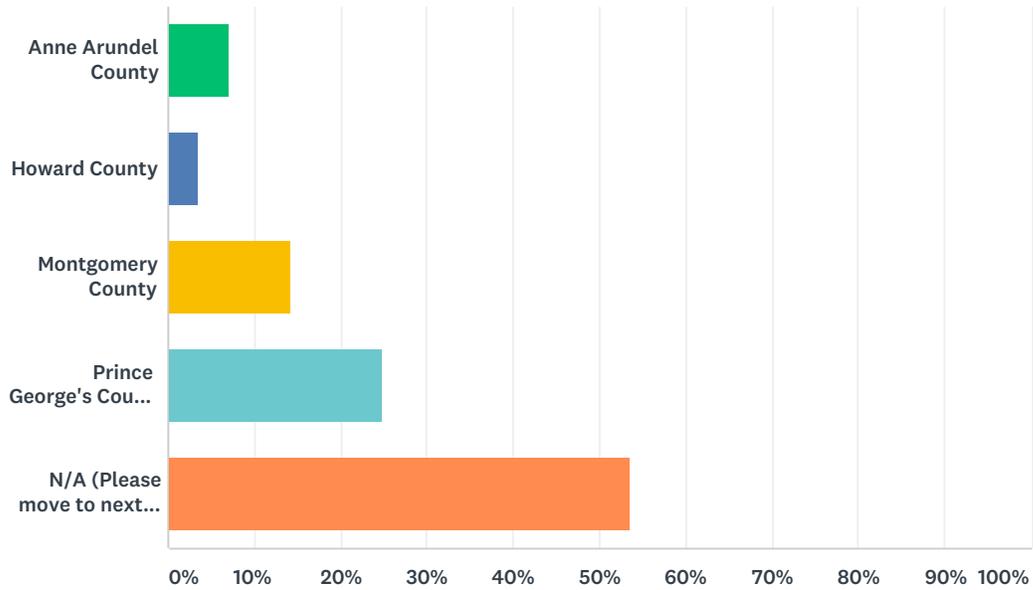
ANSWER CHOICES	RESPONSES	
Anne Arundel County	7.14%	2
Howard County	3.57%	1
Montgomery County	14.29%	4
Prince George's County	25.00%	7
N/A (Please move to next demographic question)	53.57%	15
Total Respondents: 28		

Q4 Please indicate which community you work: Southern MD Region:

Answered: 27   Skipped: 6
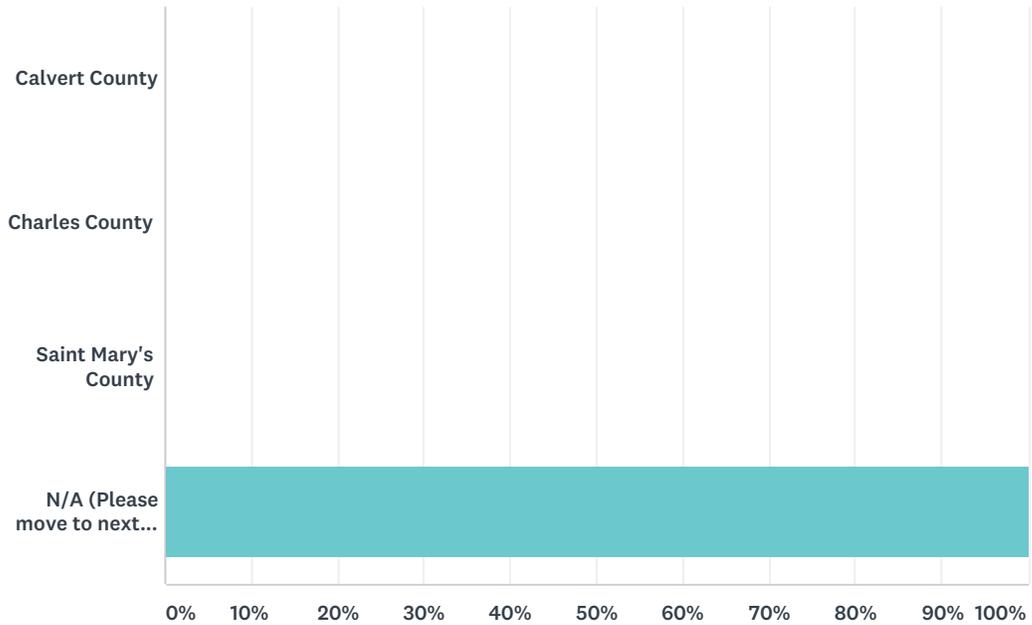
ANSWER CHOICES	RESPONSES	
Calvert County	0.00%	0
Charles County	0.00%	0
Saint Mary's County	0.00%	0
N/A (Please move to next demographic question)	100.00%	27
Total Respondents: 27		

Q5 Please indicate which community you work: Eastern Shore MD Region:

Answered: 26   Skipped: 7
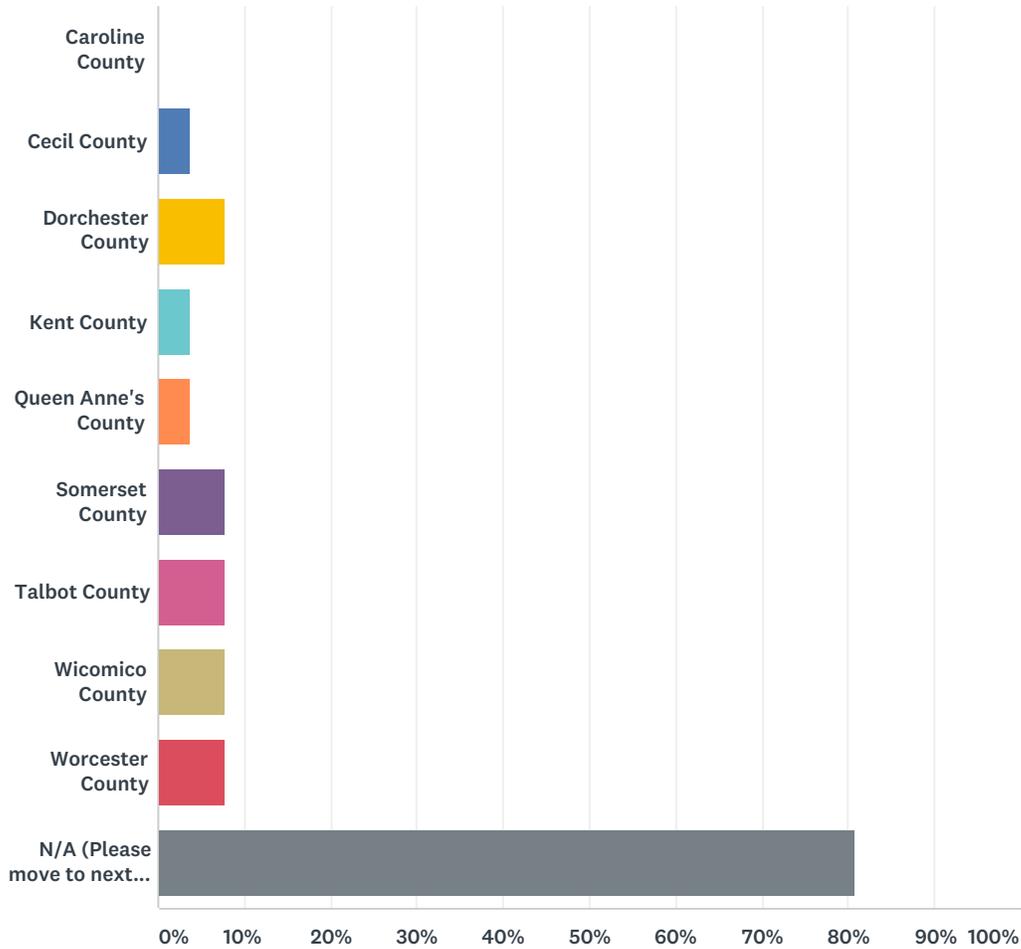
ANSWER CHOICES	RESPONSES	
Caroline County	0.00%	0
Cecil County	3.85%	1
Dorchester County	7.69%	2
Kent County	3.85%	1
Queen Anne's County	3.85%	1
Somerset County	7.69%	2
Talbot County	7.69%	2
Wicomico County	7.69%	2
Worcester County	7.69%	2
N/A (Please move to next demographic question)	80.77%	21

Total Respondents: 26

Q6 I work closest to: Northern MD Region: Allegany County, Baltimore City, Baltimore County, Carroll County, Frederick County, Garrett County, Harford County, Washington County

Answered: 28   Skipped: 5
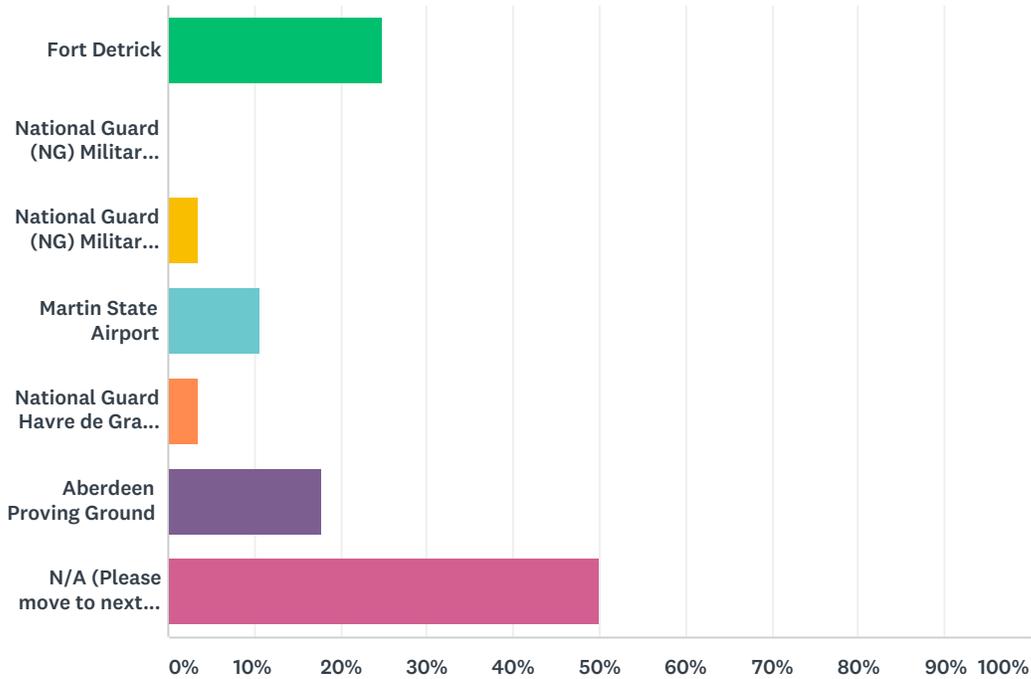
ANSWER CHOICES	RESPONSES	
Fort Detrick	25.00%	7
National Guard (NG) Military Training Area (MTA) Camp Fretterd	0.00%	0
National Guard (NG) Military Training Area (MTA) Gunpowder Military Reservation	3.57%	1
Martin State Airport	10.71%	3
National Guard Havre de Grace Military Reservation	3.57%	1
Aberdeen Proving Ground	17.86%	5
N/A (Please move to next demographic question)	50.00%	14
Total Respondents: 28		

Q7 I work closest to: Central MD Region: Anne Arundel County, Howard County, Montgomery County, Prince George's County

Answered: 27   Skipped: 6
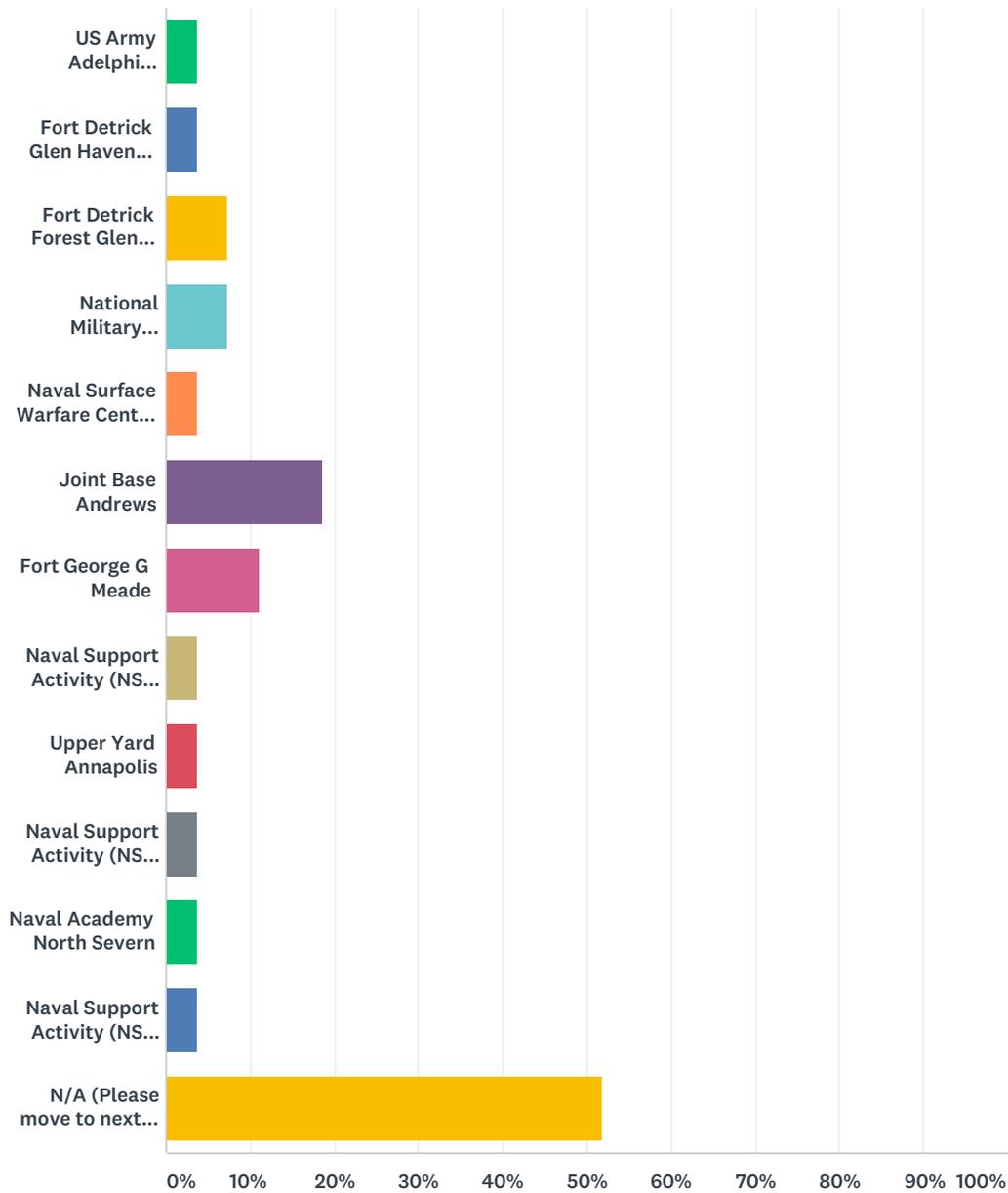
ANSWER CHOICES	RESPONSES	
US Army Adelphi Laboratory Center	3.70%	1
Fort Detrick Glen Haven Annex	3.70%	1
Fort Detrick Forest Glen Annex	7.41%	2
National Military Medical Center (NMMC) Bethesda	7.41%	2
Naval Surface Warfare Center (NSWC) Carderock	3.70%	1

Joint Base Andrews	18.52%	5
Fort George G Meade	11.11%	3
Naval Support Activity (NSA) Annapolis Gambrills	3.70%	1
Upper Yard Annapolis	3.70%	1
Naval Support Activity (NSA) Annapolis	3.70%	1
Naval Academy North Severn	3.70%	1
Naval Support Activity (NSA) Annapolis Chesapeake Bay Detachment	3.70%	1
N/A (Please move to next demographic question)	51.85%	14
Total Respondents: 27		

Q8 I work closest to: Southern MD Region: Calvert County, Charles County, Saint Mary's County

Answered: 27   Skipped: 6
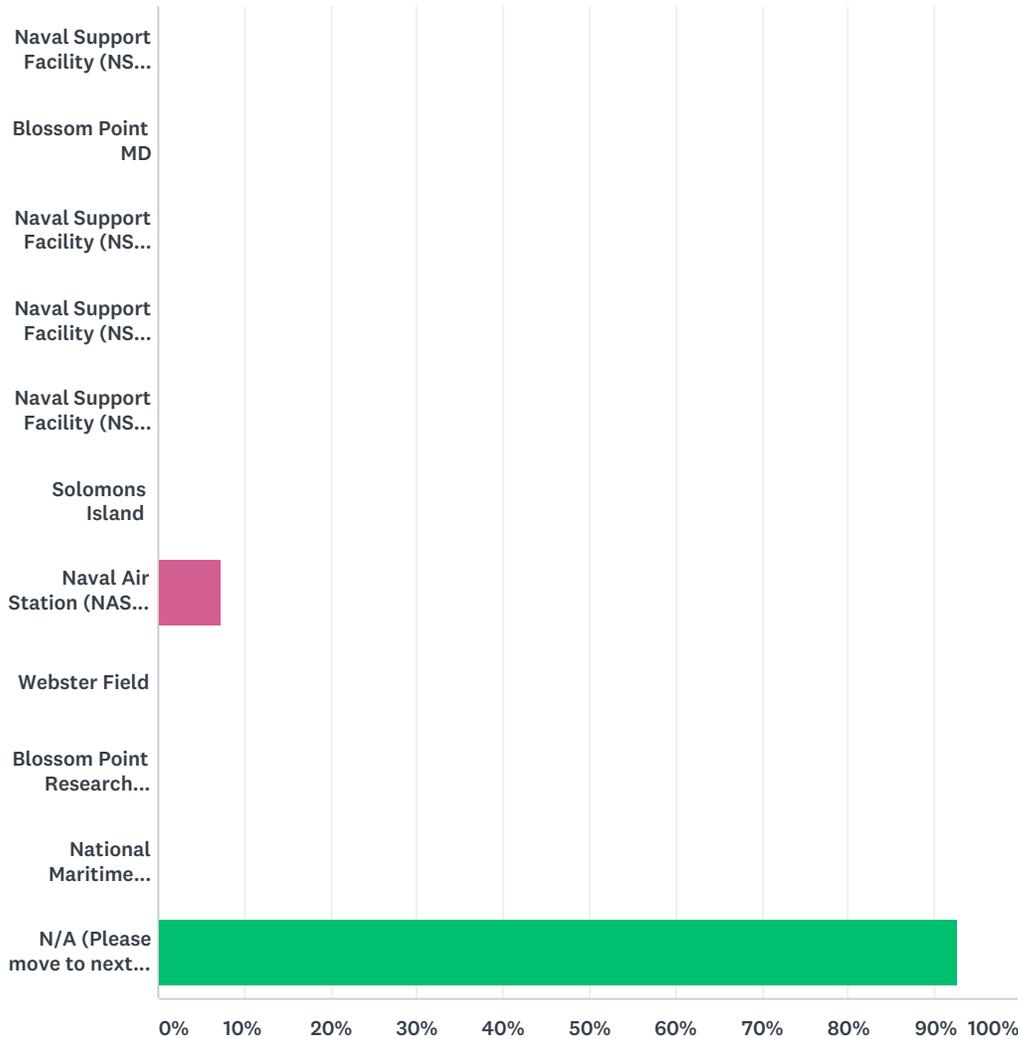
ANSWER CHOICES	RESPONSES	
Naval Support Facility (NSF) Indian Head	0.00%	0
Blossom Point MD	0.00%	0
Naval Support Facility (NSF) Indian Head Stump Neck Annex	0.00%	0
Naval Support Facility (NSF) Dahlgren	0.00%	0
Naval Support Facility (NSF) Dahlgren Pumpkin Neck Annex	0.00%	0
Solomons Island	0.00%	0
Naval Air Station (NAS) Patuxent River	7.41%	2
Webster Field	0.00%	0
Blossom Point Research Facility	0.00%	0

National Maritime Intelligence Center Suitland	0.00%	0
N/A (Please move to next demographic question)	92.59%	25
Total Respondents: 27		

Q9 I work closest to: Eastern Shore MD Region: Caroline County, Cecil County, Dorchester County, Kent County, Queen Anne's County, Somerset County, Talbot County, Wicomico County, Worcester County

Answered: 26   Skipped: 7

ANSWER CHOICES	RESPONSES	
Note: Although no military installations are located in the Eastern Shore Counties, these locations may receive impacts from military operations (e.g. noise, traffic congestion, etc.) and feedback from the survey is requested	19.23%	5
N/A (Please move to next question)	80.77%	21
Total Respondents: 26		

Q10 Is your commute affected by military operations?

Answered: 27   Skipped: 6
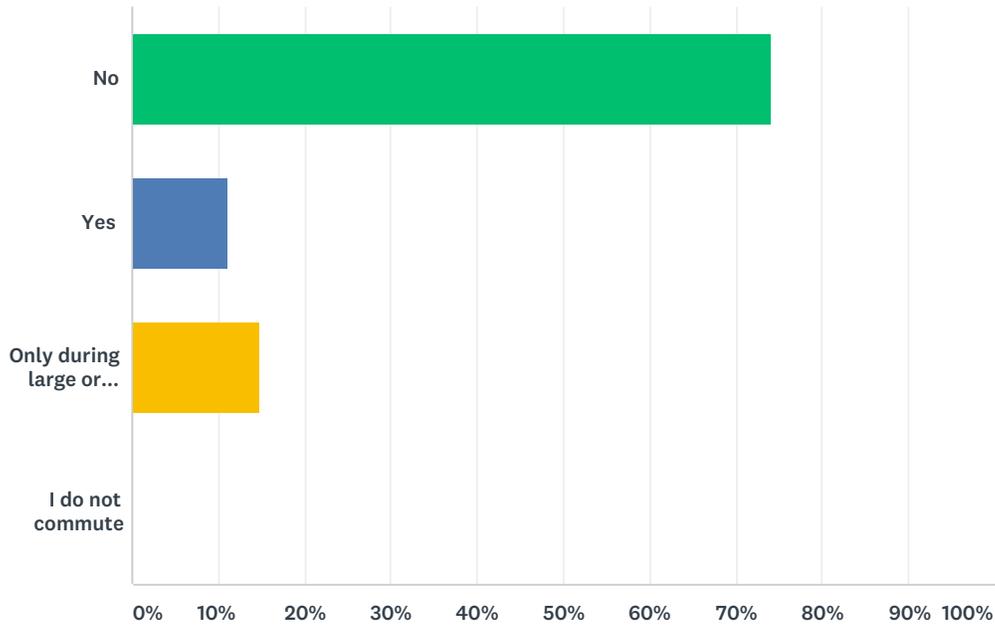
ANSWER CHOICES	RESPONSES	
No	74.07%	20
Yes	11.11%	3
Only during large or special events	14.81%	4
I do not commute	0.00%	0
TOTAL		27

Q11 If you had a question or concern about your local military installation, do you know who to contact?

Answered: 27   Skipped: 6
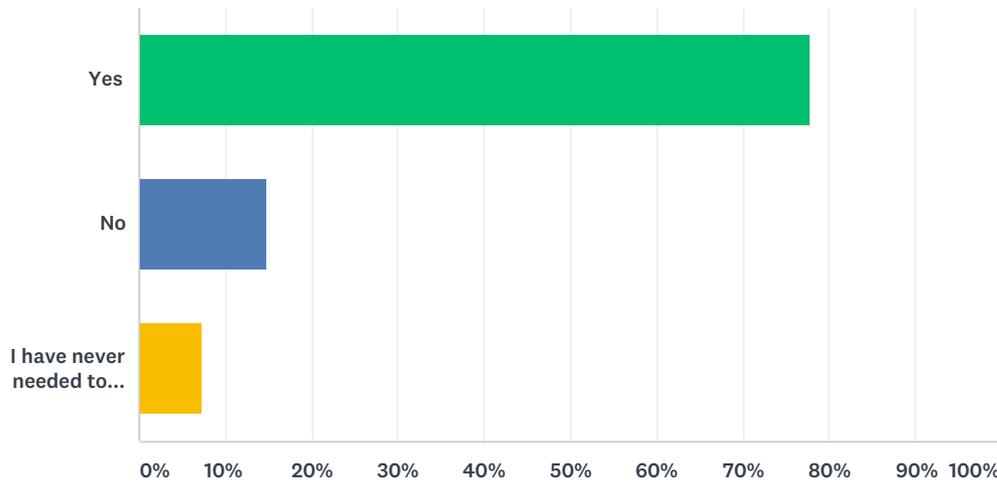
ANSWER CHOICES	RESPONSES	
Yes	77.78%	21
No	14.81%	4
I have never needed to contact my local military installation	7.41%	2
TOTAL		27

Q12 How satisfied are you with your nearest military installation to where you live as a community partner? 1 = Very satisfied, 2 = Somewhat satisfied, 3 = Neutral, 4 = Somewhat unsatisfied, 5 = Very unsatisfied

Answered: 27   Skipped: 6
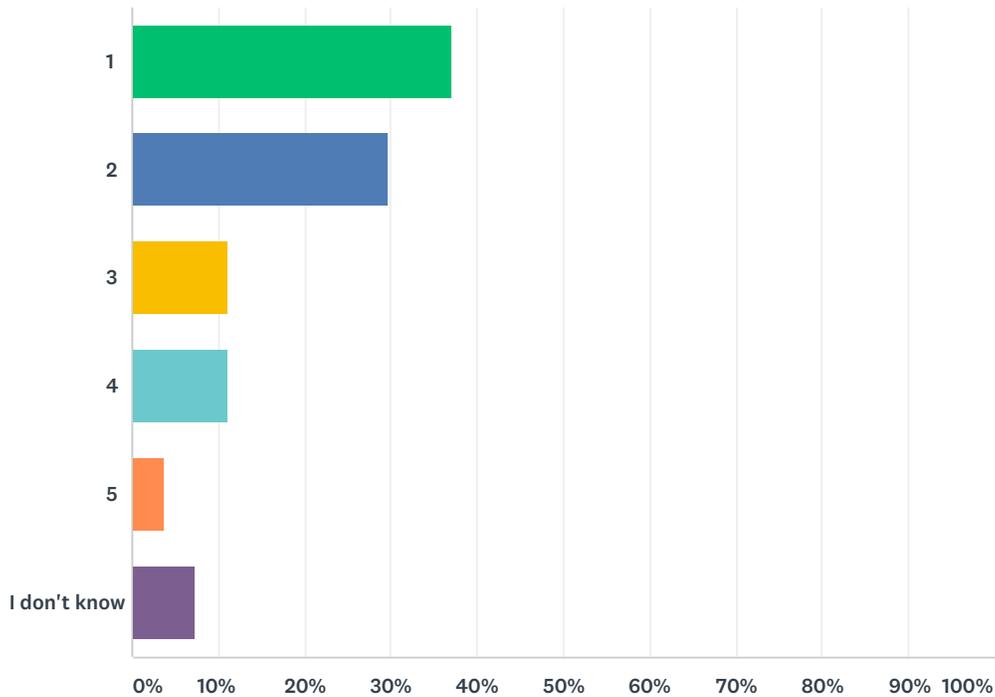
ANSWER CHOICES	RESPONSES	
1	37.04%	10
2	29.63%	8
3	11.11%	3
4	11.11%	3
5	3.70%	1
I don't know	7.41%	2
TOTAL		27

Q13 How would you characterize communication between your nearest military installation and the community?

Answered: 27   Skipped: 6
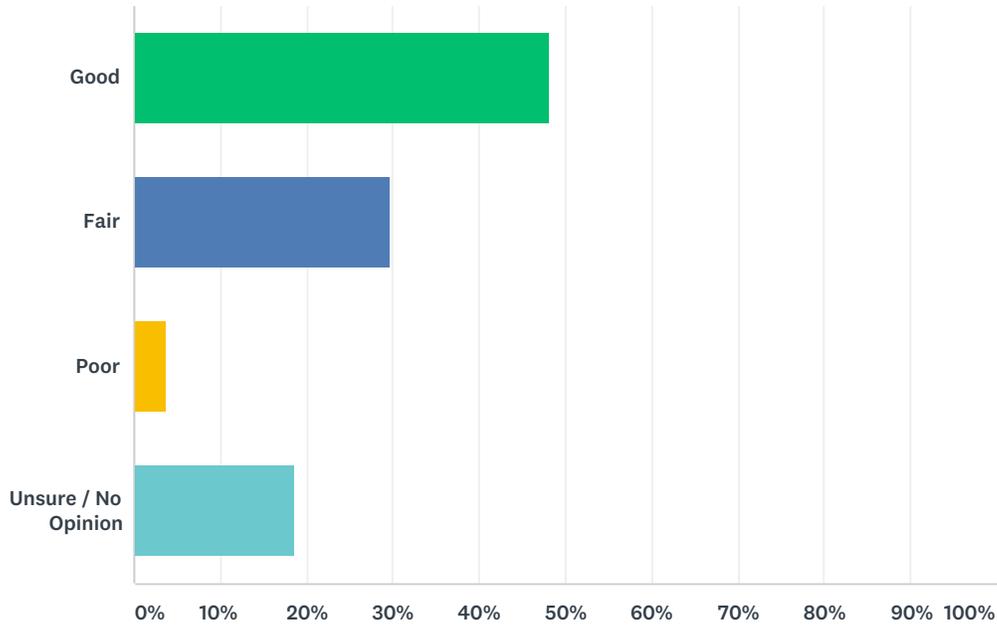
ANSWER CHOICES	RESPONSES	
Good	48.15%	13
Fair	29.63%	8
Poor	3.70%	1
Unsure / No Opinion	18.52%	5
TOTAL		27

Q14 To help us identify where issues are occurring, please tell us the nearest intersection to your home or business, whichever you feel is most affected.

Answered: 22   Skipped: 11

Q15 How informed are you of the activities at your local military installation?

Answered: 27   Skipped: 6
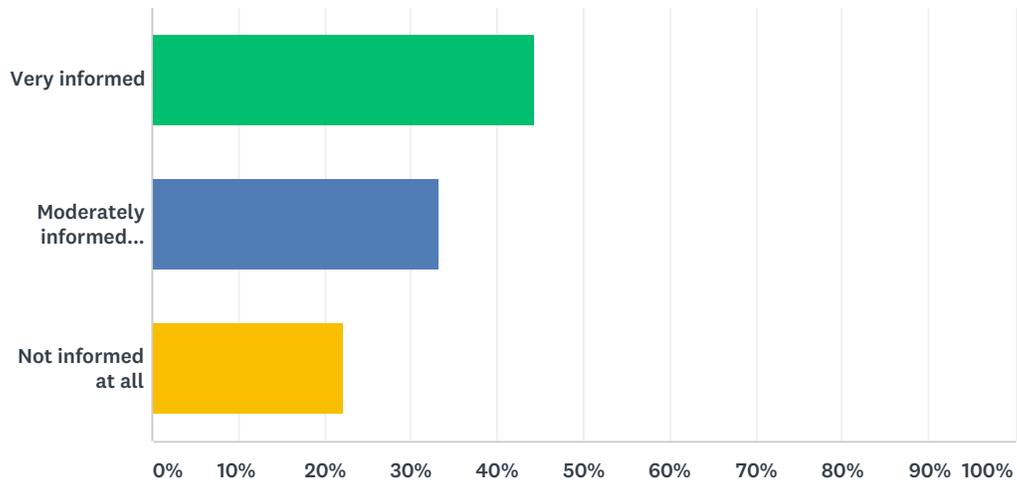
ANSWER CHOICES	RESPONSES	
Very informed	44.44%	12
Moderately informed Barely informed	33.33%	9
Not informed at all	22.22%	6
TOTAL		27

Q16 What are your sources of information about your local military installation? Please pick your top 3:

Answered: 26   Skipped: 7
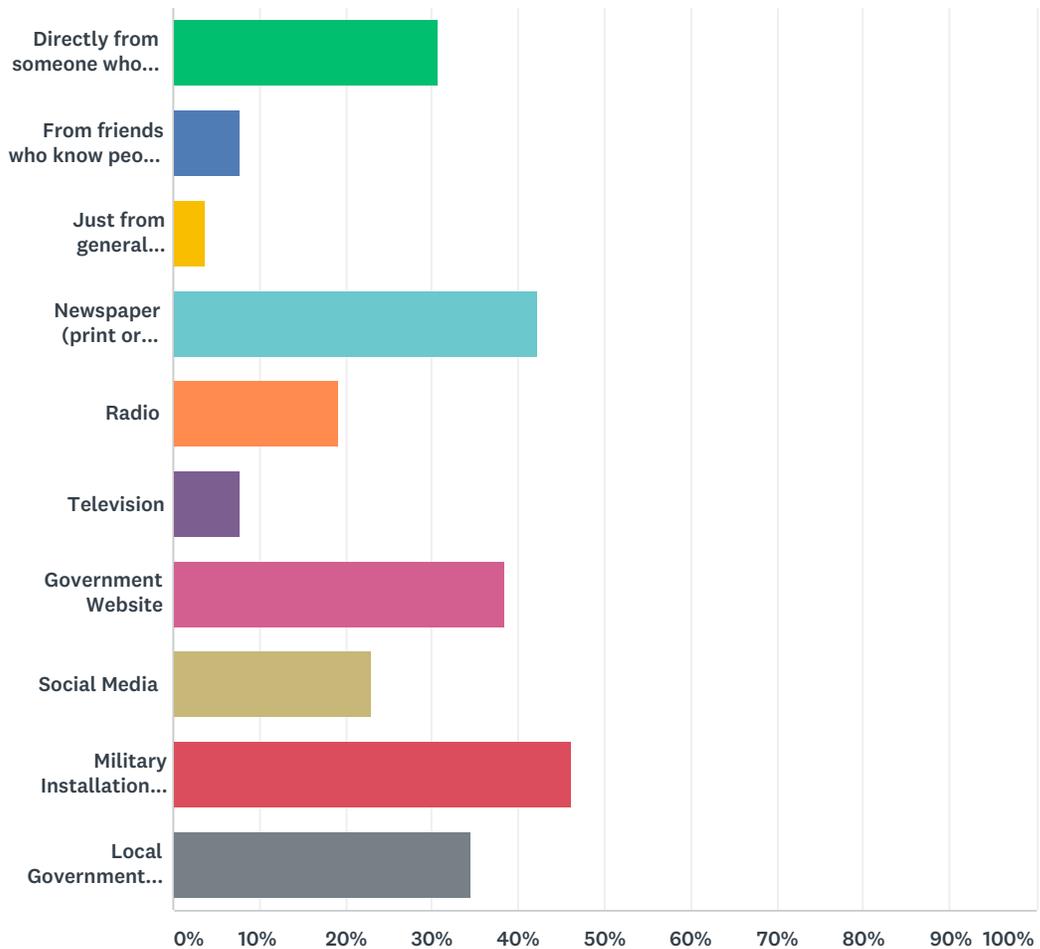
ANSWER CHOICES	RESPONSES	
Directly from someone who works/trains there	30.77%	8
From friends who know people who work/train there	7.69%	2
Just from general discussion in the community	3.85%	1
Newspaper (print or online)	42.31%	11
Radio	19.23%	5
Television	7.69%	2
Government Website	38.46%	10
Social Media	23.08%	6
Military Installation staff	46.15%	12
Local Government Staff	34.62%	9

Q17 Other, please specify

Answered: 11   Skipped: 24

#	RESPONSES	DATE
1	Quarterly Economic Indicator Breakfast Meetings	5/31/2018 2:08 PM
2	N/A	5/29/2018 6:45 AM
3	I mostly hear news through area news outlets.	4/10/2018 9:05 AM
4	APG staff does engage in the County TMDL Committee.	3/19/2018 8:05 AM
5	??	3/12/2018 10:21 AM
6	NA	2/14/2018 8:43 AM
7	Messages e-mailed directly to work and home e-mail addresses for the installation I work on.	1/31/2018 9:31 AM
8	N/A	1/31/2018 5:20 AM
9	In my duties as a staff member of the Office of Military and Federal Affairs.	1/19/2018 1:33 PM
10	none	1/11/2018 1:40 PM
11	N/A	1/4/2018 10:52 AM

Q18 How significant is your local military installation and its operations to the local economy?

Answered: 27   Skipped: 6
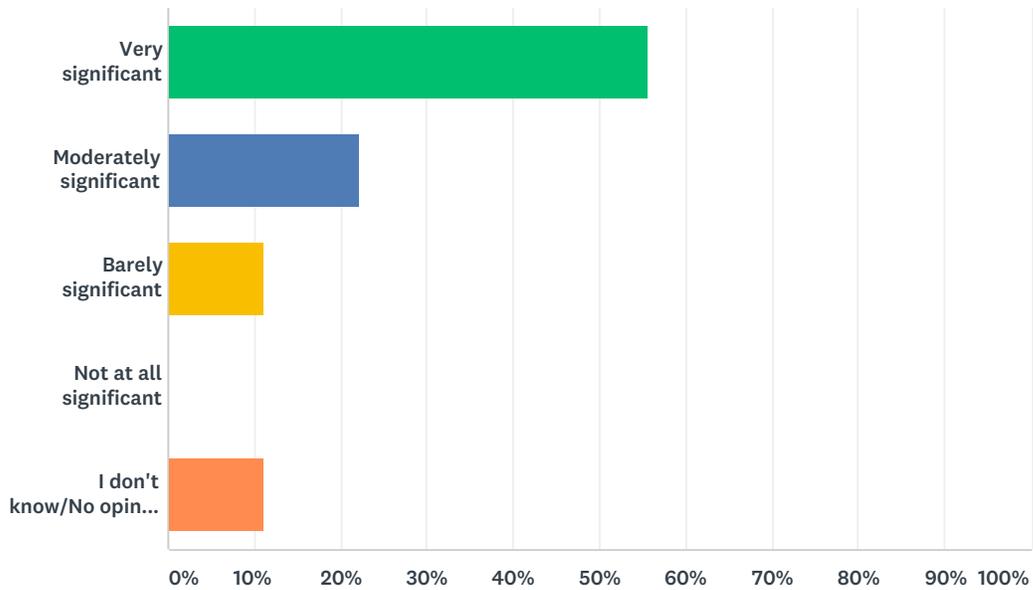
ANSWER CHOICES	RESPONSES	
Very significant	55.56%	15
Moderately significant	22.22%	6
Barely significant	11.11%	3
Not at all significant	0.00%	0
I don't know/No opinion	11.11%	3
TOTAL		27

Q19 How significant is your local military installation and its operations to the regional economy?

Answered: 27   Skipped: 6
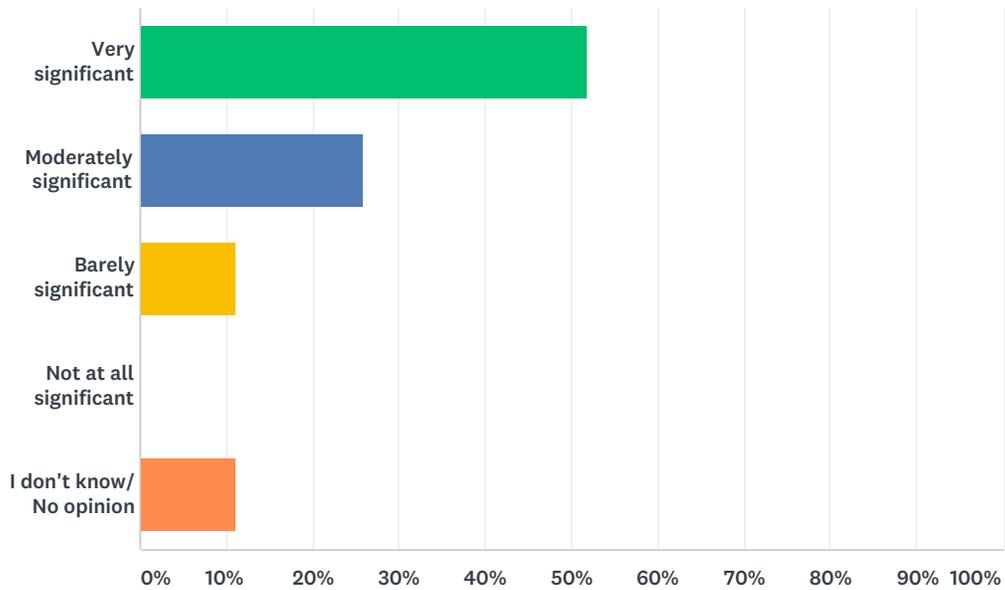
ANSWER CHOICES	RESPONSES	
Very significant	51.85%	14
Moderately significant	25.93%	7
Barely significant	11.11%	3
Not at all significant	0.00%	0
I don't know/ No opinion	11.11%	3
TOTAL		27

Q20 Do you support the military presence in the region?

Answered: 27   Skipped: 6
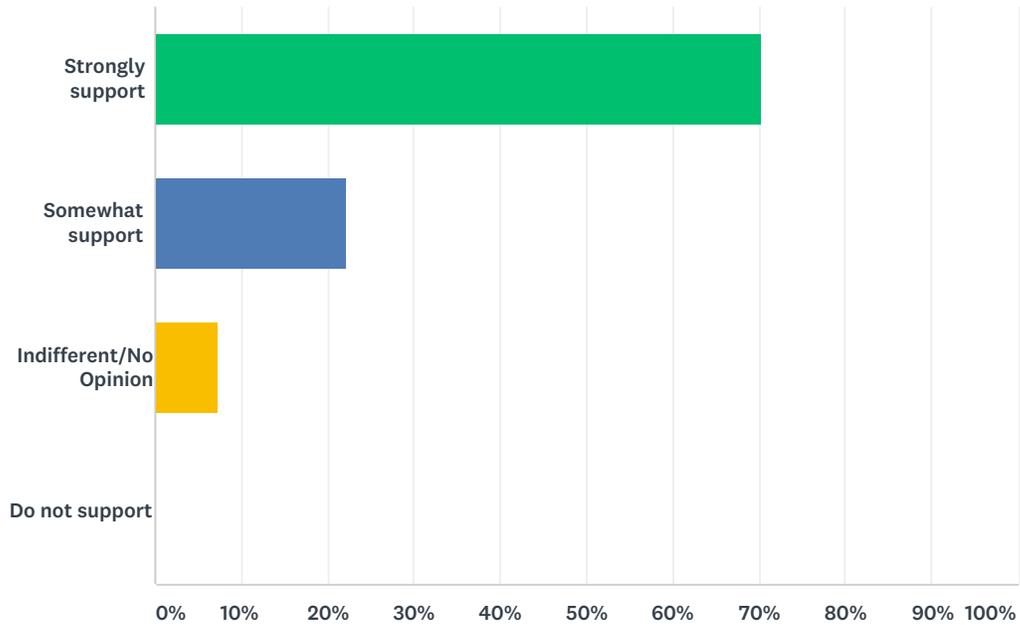
ANSWER CHOICES	RESPONSES	
Strongly support	70.37%	19
Somewhat support	22.22%	6
Indifferent/No Opinion	7.41%	2
Do not support	0.00%	0
TOTAL		27

Q21 How informed are you of the activities at your local military installation?

Answered: 27   Skipped: 6
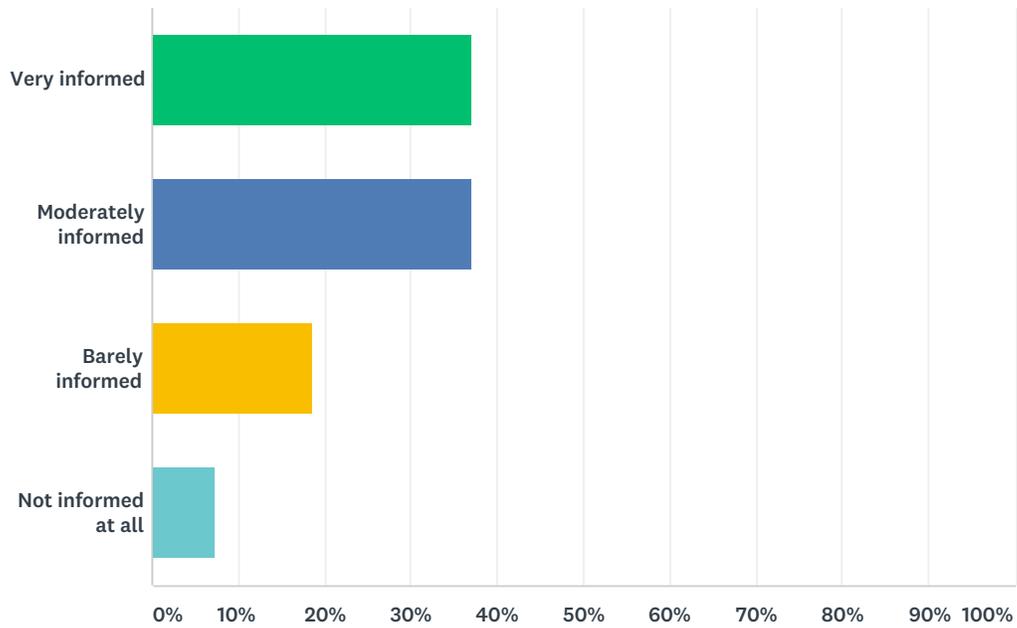
ANSWER CHOICES	RESPONSES	
Very informed	37.04%	10
Moderately informed	37.04%	10
Barely informed	18.52%	5
Not informed at all	7.41%	2
TOTAL		27

Q22 How significant is your local military installation and its operations to the local economy?

Answered: 26   Skipped: 7
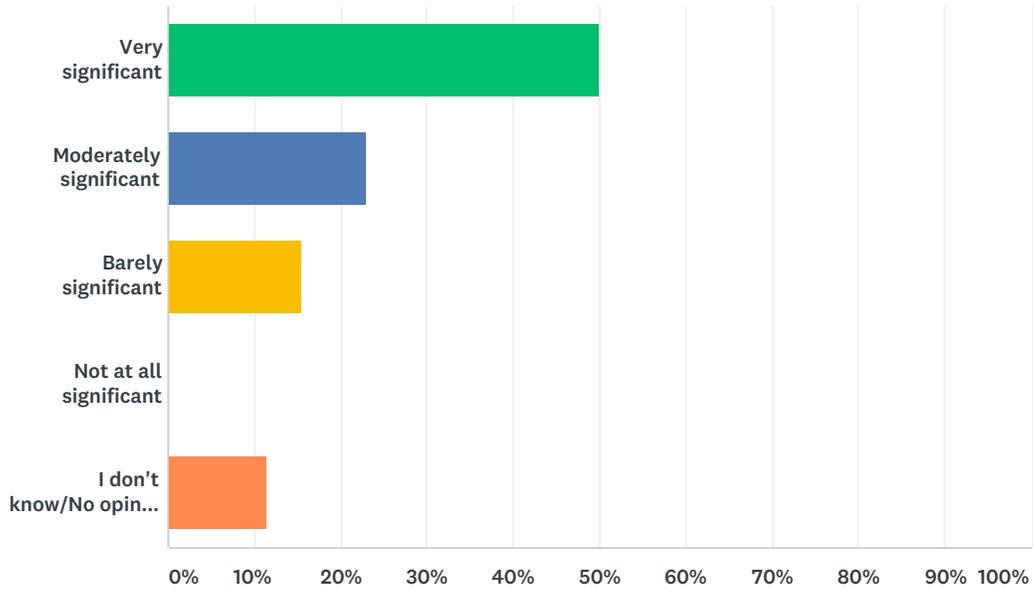
ANSWER CHOICES	RESPONSES	
Very significant	50.00%	13
Moderately significant	23.08%	6
Barely significant	15.38%	4
Not at all significant	0.00%	0
I don't know/No opinion	11.54%	3
TOTAL		26

Q23 How significant is your local military installation and its operations to the regional economy?

Answered: 27   Skipped: 6
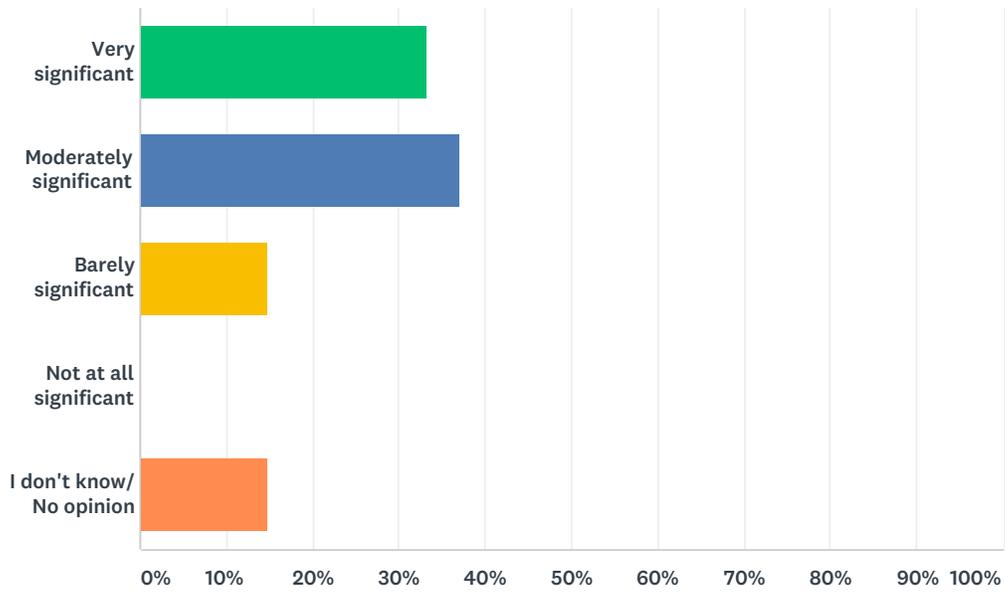
ANSWER CHOICES	RESPONSES	
Very significant	33.33%	9
Moderately significant	37.04%	10
Barely significant	14.81%	4
Not at all significant	0.00%	0
I don't know/ No opinion	14.81%	4
TOTAL		27

Q24 Are you familiar with the types of training and/or military operations conducted your local military installation?

Answered: 27   Skipped: 6
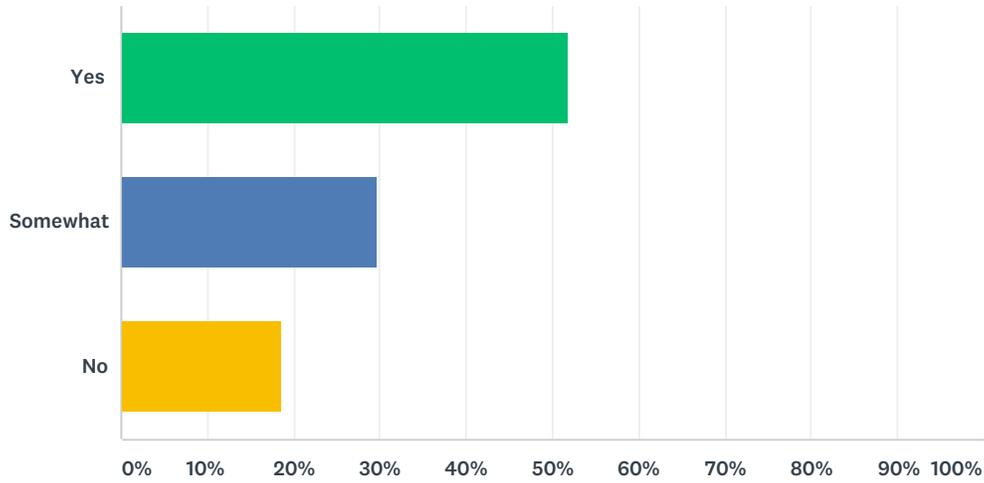
ANSWER CHOICES	RESPONSES	
Yes	51.85%	14
Somewhat	29.63%	8
No	18.52%	5
TOTAL		27

Q25 How important do you think the training that occurs at your local military installation:

Answered: 27   Skipped: 6
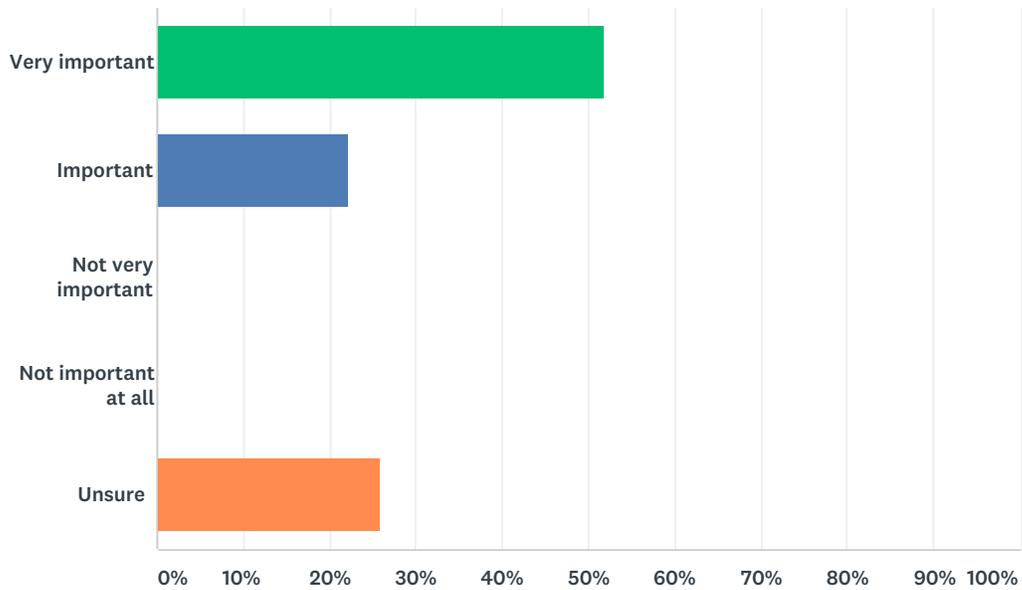
ANSWER CHOICES	RESPONSES	
Very important	51.85%	14
Important	22.22%	6
Not very important	0.00%	0
Not important at all	0.00%	0
Unsure	25.93%	7
TOTAL		27

Q26 Would you like to receive information about the types of training and/or military operations conducted your local military installation?

Answered: 27   Skipped: 6
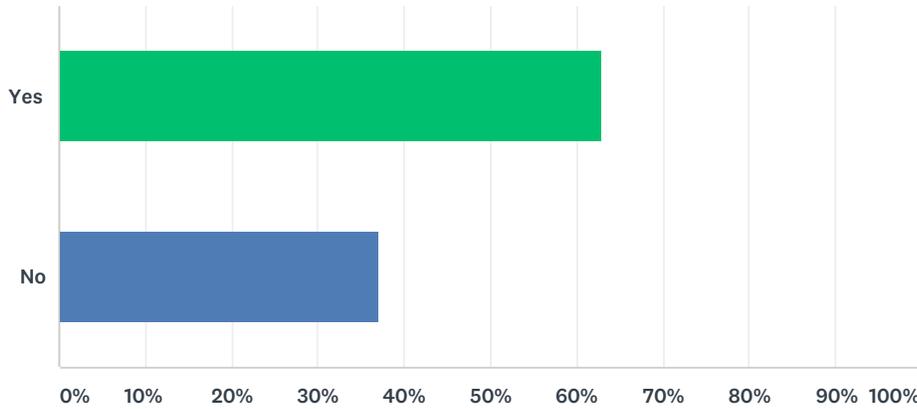
ANSWER CHOICES	RESPONSES	
Yes	62.96%	17
No	37.04%	10
TOTAL		27

Q27 Is noise from military aircraft operations an issue? (choose all that apply):

Answered: 27   Skipped: 6
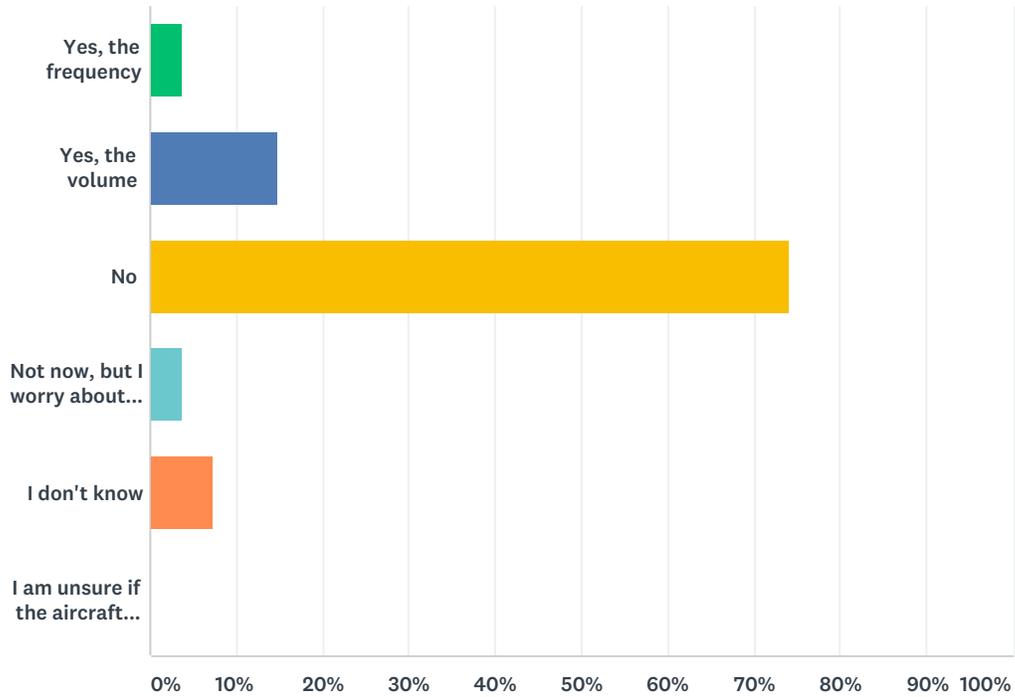
ANSWER CHOICES	RESPONSES	
Yes, the frequency	3.70%	1
Yes, the volume	14.81%	4
No	74.07%	20
Not now, but I worry about future noise	3.70%	1
I don't know	7.41%	2
I am unsure if the aircraft is military	0.00%	0
Total Respondents: 27		

Q28 Is noise from military gunfire and/or artillery an issue (choose all that apply)?

Answered: 27   Skipped: 6
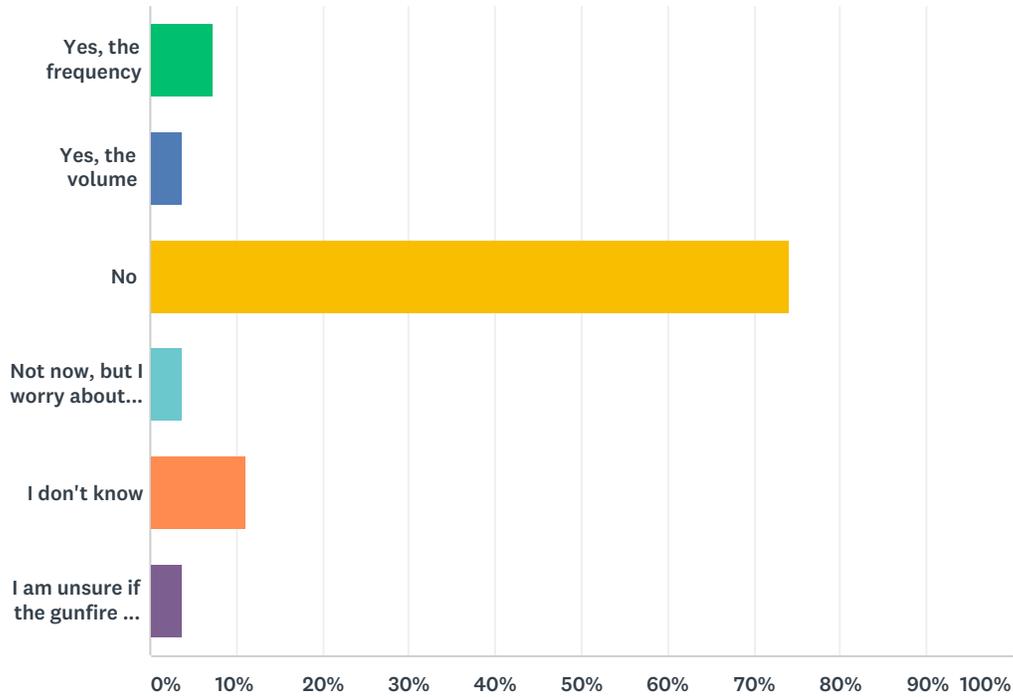
ANSWER CHOICES	RESPONSES	
Yes, the frequency	7.41%	2
Yes, the volume	3.70%	1
No	74.07%	20
Not now, but I worry about future noise	3.70%	1
I don't know	11.11%	3
I am unsure if the gunfire is military	3.70%	1
Total Respondents: 27		

Q29 Do you consider military operations at your local military installation to have negative effects?

Answered: 27   Skipped: 6
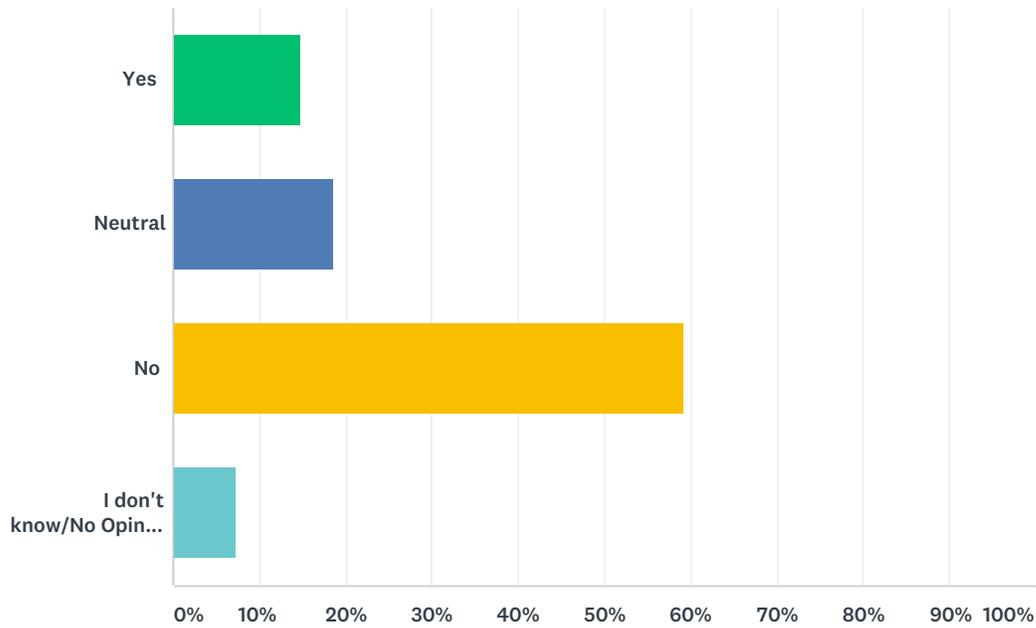
ANSWER CHOICES	RESPONSES	
Yes	14.81%	4
Neutral	18.52%	5
No	59.26%	16
I don't know/No Opinion	7.41%	2
TOTAL		27

Q30 If yes, how negative do you consider the effects of military operations to be?

Answered: 17   Skipped: 16
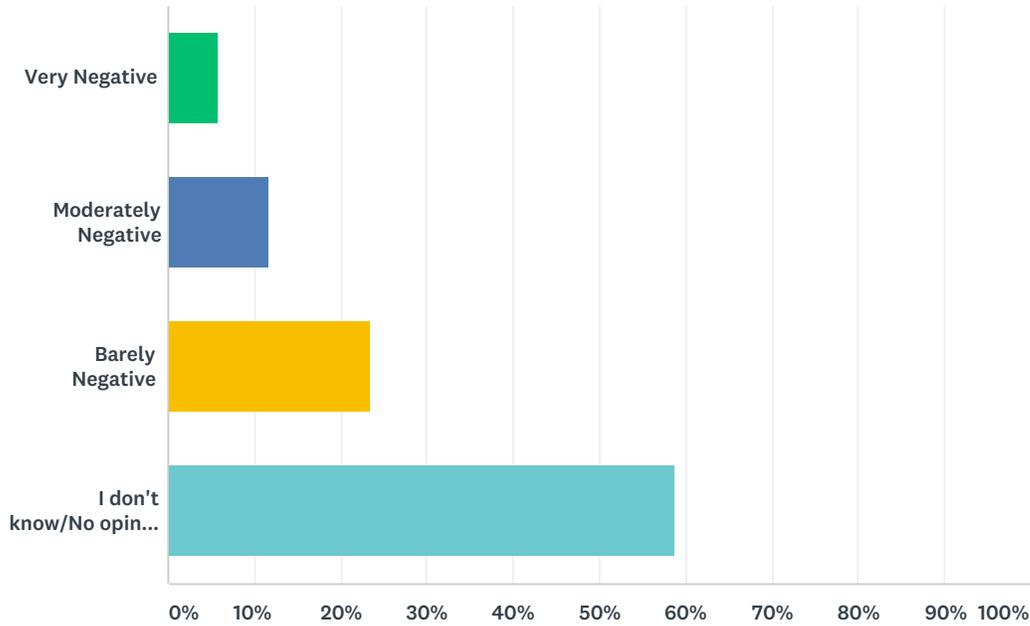
ANSWER CHOICES	RESPONSES	
Very Negative	5.88%	1
Moderately Negative	11.76%	2
Barely Negative	23.53%	4
I don't know/No opinion	58.82%	10
TOTAL		17

Q31 If you perceive positive effects from operations at your local military installation, please list them:

Answered: 15   Skipped: 18

Q32 What is your impression of the relationship between your local military installation and surrounding Landowners

Answered: 27   Skipped: 6
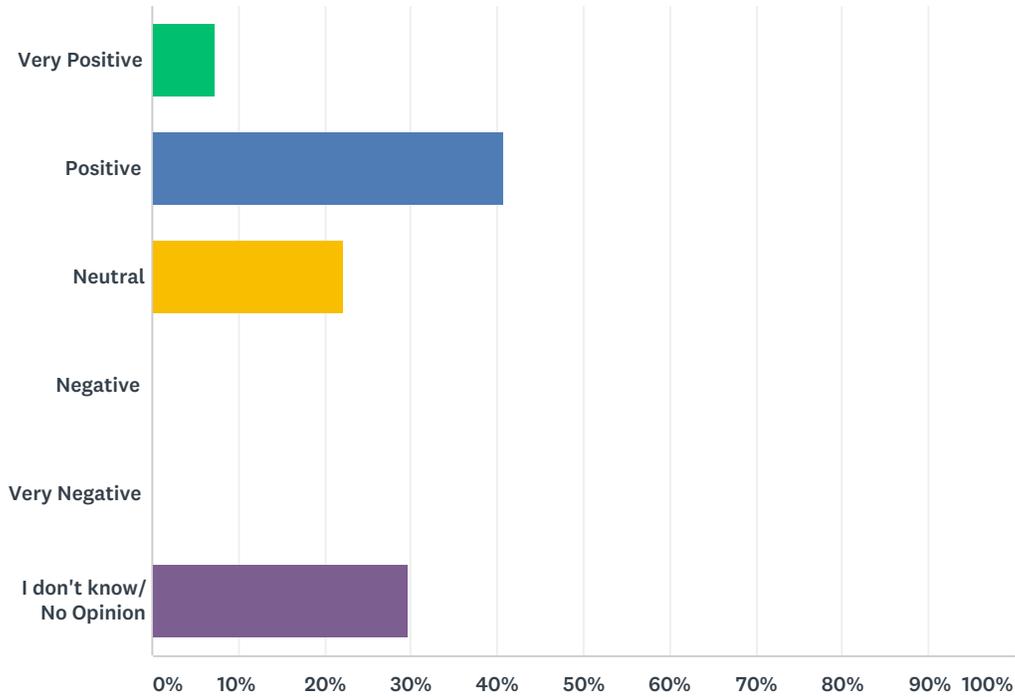
ANSWER CHOICES	RESPONSES	
Very Positive	7.41%	2
Positive	40.74%	11
Neutral	22.22%	6
Negative	0.00%	0
Very Negative	0.00%	0
I don't know/ No Opinion	29.63%	8
TOTAL		27

Q33 What is your impression of the relationship between your local military installation and surrounding Businesses

Answered: 27   Skipped: 6
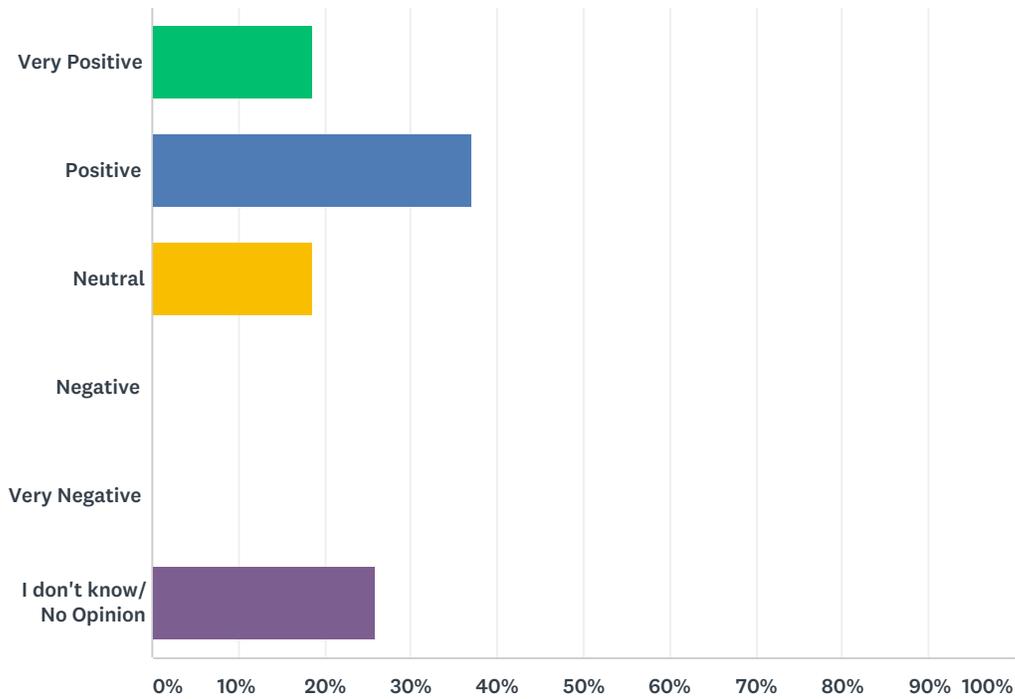
ANSWER CHOICES	RESPONSES	
Very Positive	18.52%	5
Positive	37.04%	10
Neutral	18.52%	5
Negative	0.00%	0
Very Negative	0.00%	0
I don't know/ No Opinion	25.93%	7
TOTAL		27

Q34 What is your impression of the relationship between your local military installation and surrounding Residential Neighborhoods

Answered: 27   Skipped: 6
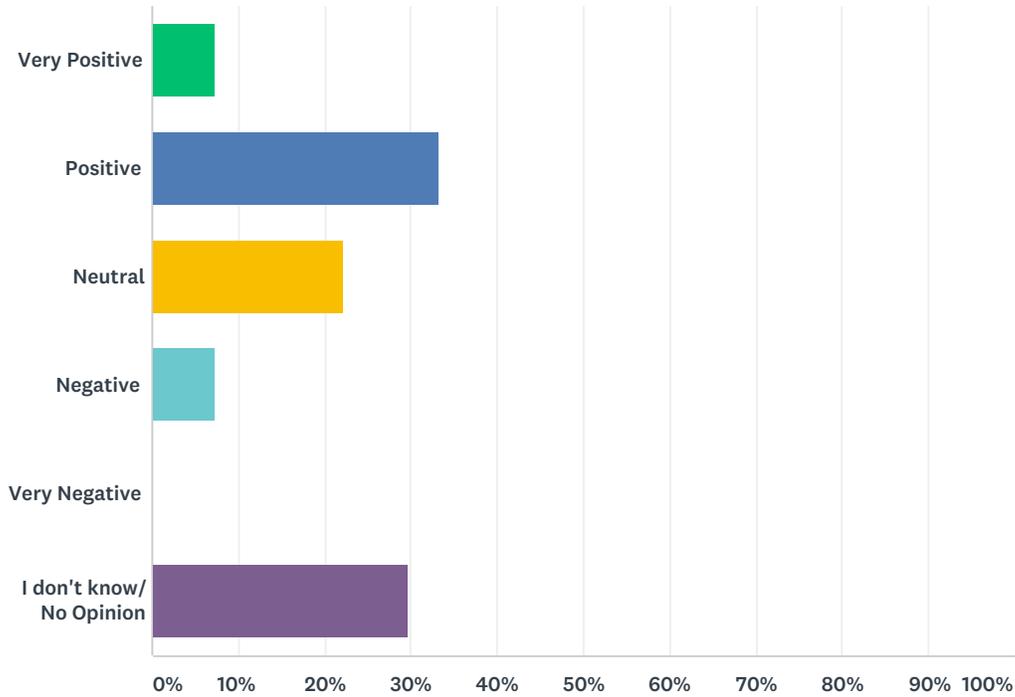
ANSWER CHOICES	RESPONSES	
Very Positive	7.41%	2
Positive	33.33%	9
Neutral	22.22%	6
Negative	7.41%	2
Very Negative	0.00%	0
I don't know/ No Opinion	29.63%	8
TOTAL		27

Q35 What is your impression of the relationship between your local military installation and surrounding Local Governments

Answered: 27   Skipped: 6
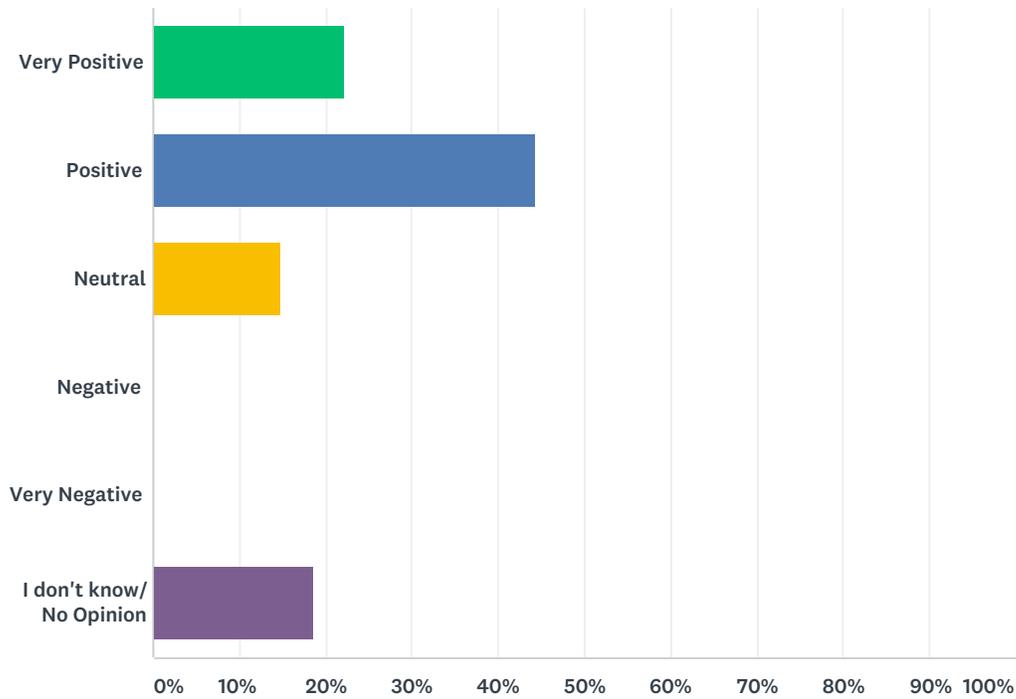
ANSWER CHOICES	RESPONSES	
Very Positive	22.22%	6
Positive	44.44%	12
Neutral	14.81%	4
Negative	0.00%	0
Very Negative	0.00%	0
I don't know/ No Opinion	18.52%	5
TOTAL		27

Q36 What is your impression of the impact of your local military installation on local real estate values?

Answered: 27   Skipped: 6
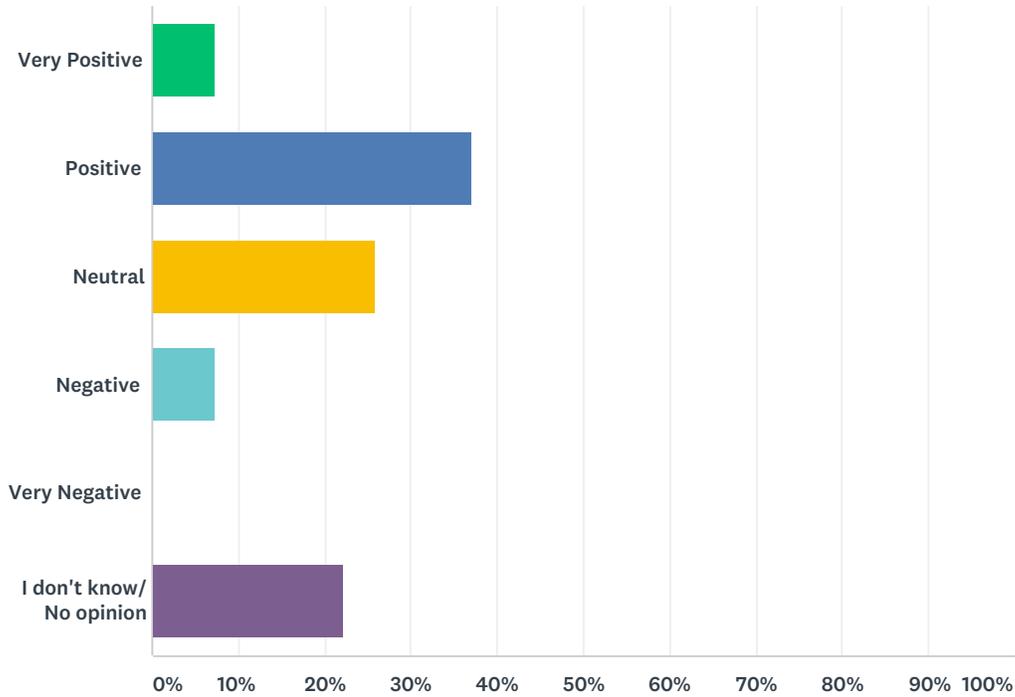
ANSWER CHOICES	RESPONSES	
Very Positive	7.41%	2
Positive	37.04%	10
Neutral	25.93%	7
Negative	7.41%	2
Very Negative	0.00%	0
I don't know/ No opinion	22.22%	6
TOTAL		27

Q37 Does your local military installation have an impact on local zoning regulations?

Answered: 27   Skipped: 6
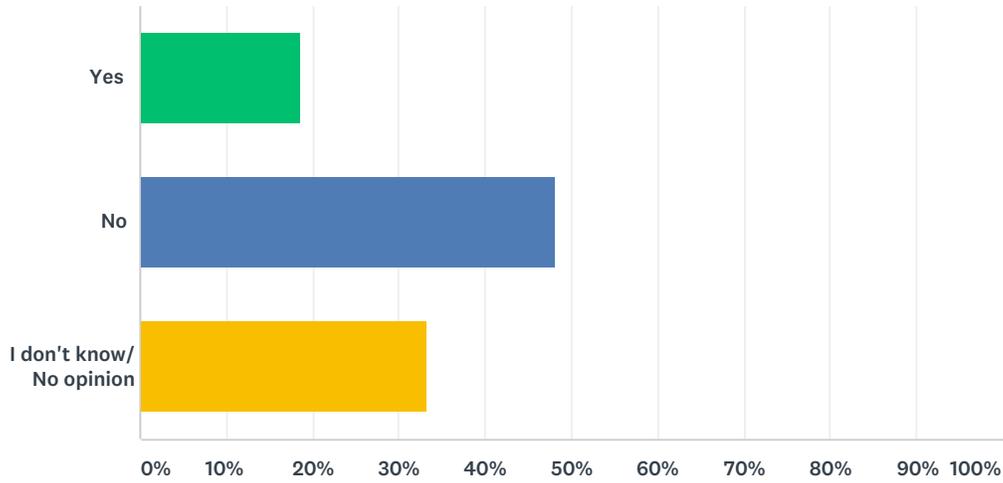
ANSWER CHOICES	RESPONSES	
Yes	18.52%	5
No	48.15%	13
I don't know/ No opinion	33.33%	9
TOTAL		27

Q38 If yes, what do you believe these impacts to be?

Answered: 7   Skipped: 26

Q39 What do you feel should be prioritized around your local military installation for land use zoning? Check all that apply:

Answered: 25   Skipped: 8
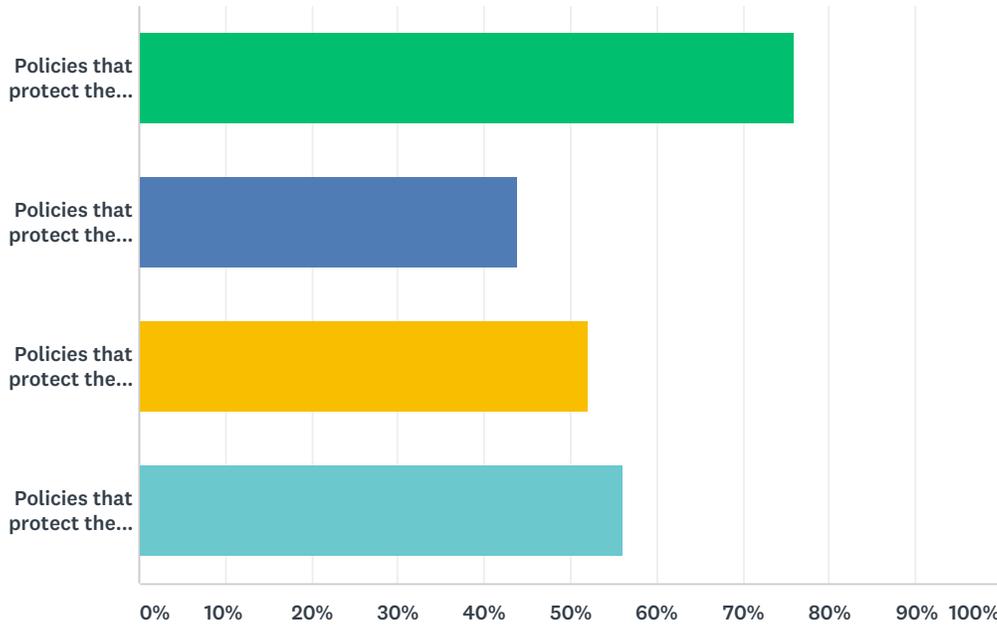
ANSWER CHOICES	RESPONSES	
Policies that protect the interests of residential zones	76.00%	19
Policies that protect the interests of open space	44.00%	11
Policies that protect the interests of local businesses	52.00%	13
Policies that protect the interests of my local military installation	56.00%	14
Total Respondents: 25		

Q40 If you are a landowner or developer, to what degree do you think zoning in the vicinity of your local military installation is restricted:

Answered: 26   Skipped: 7
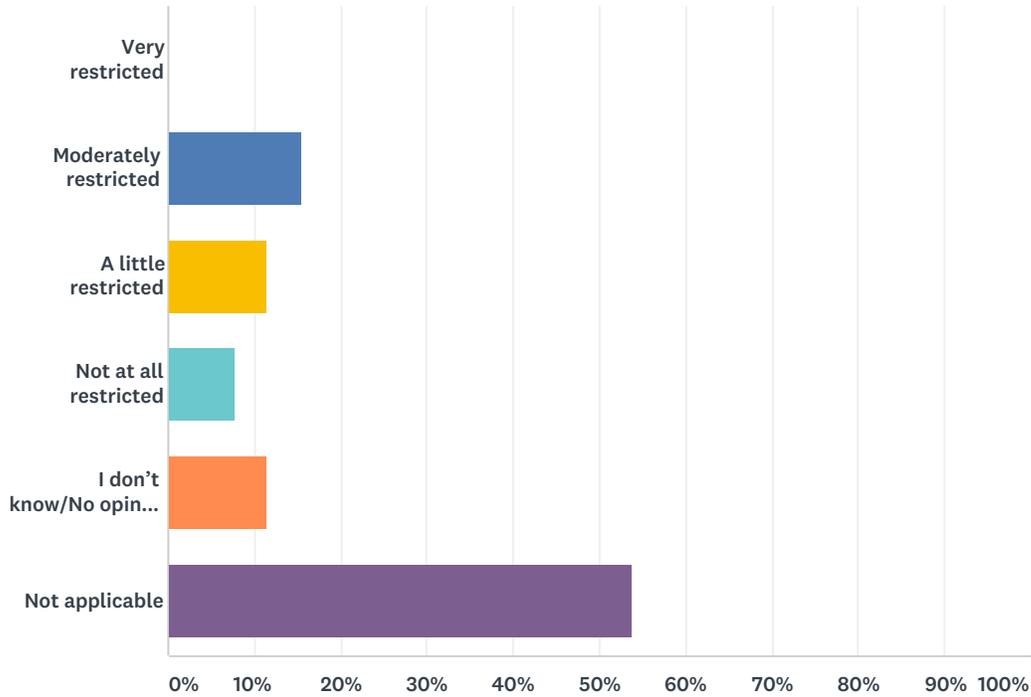
ANSWER CHOICES	RESPONSES	
Very restricted	0.00%	0
Moderately restricted	15.38%	4
A little restricted	11.54%	3
Not at all restricted	7.69%	2
I don't know/No opinion	11.54%	3
Not applicable	53.85%	14
TOTAL		26

Q41 How compatible is your local military installation and its ongoing operations with the surrounding community?

Answered: 24   Skipped: 9
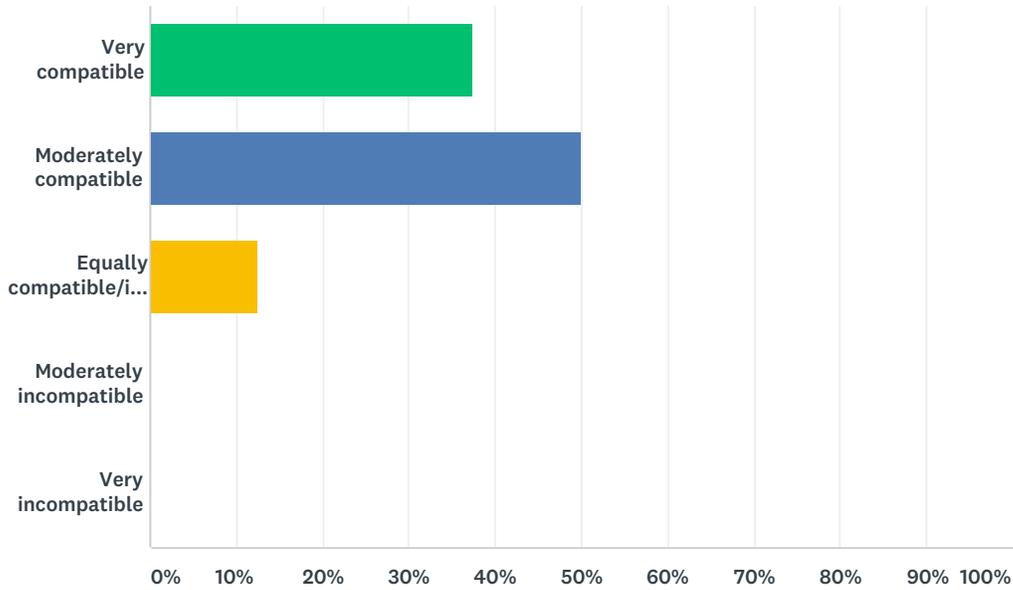
ANSWER CHOICES	RESPONSES	
Very compatible	37.50%	9
Moderately compatible	50.00%	12
Equally compatible/incompatible	12.50%	3
Moderately incompatible	0.00%	0
Very incompatible	0.00%	0
TOTAL		24

Q42 From your perspective, what are the most important aspects of this study effort process? Select All That Apply:

Answered: 27   Skipped: 6
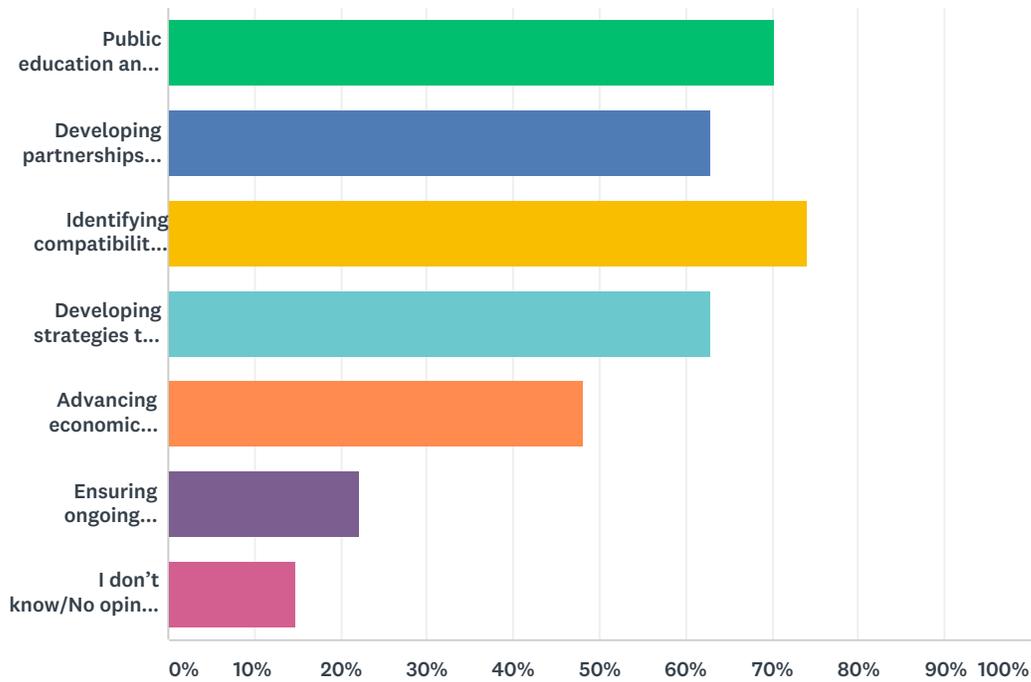
ANSWER CHOICES	RESPONSES	
Public education and information	70.37%	19
Developing partnerships with local stakeholders	62.96%	17
Identifying compatibility concerns	74.07%	20
Developing strategies to mitigate compatibility concerns	62.96%	17
Advancing economic development efforts	48.15%	13
Ensuring ongoing military operations at WARB	22.22%	6
I don't know/No opinion	14.81%	4
Total Respondents: 27		

Q43 How strongly do you agree with this statement: "The local community must take action to ensure my local military installation's contributions to our economy are sustained and enhanced"?

Answered: 26   Skipped: 7
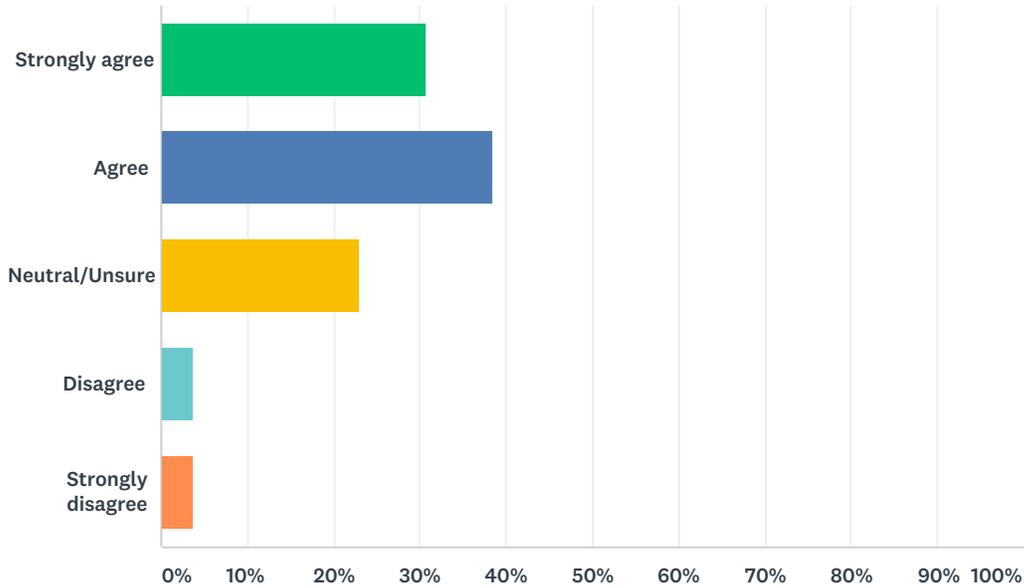
ANSWER CHOICES	RESPONSES	
Strongly agree	30.77%	8
Agree	38.46%	10
Neutral/Unsure	23.08%	6
Disagree	3.85%	1
Strongly disagree	3.85%	1
TOTAL		26

Q44 Do you ever feel unsafe due to your proximity to your military installation?

Answered: 26   Skipped: 7
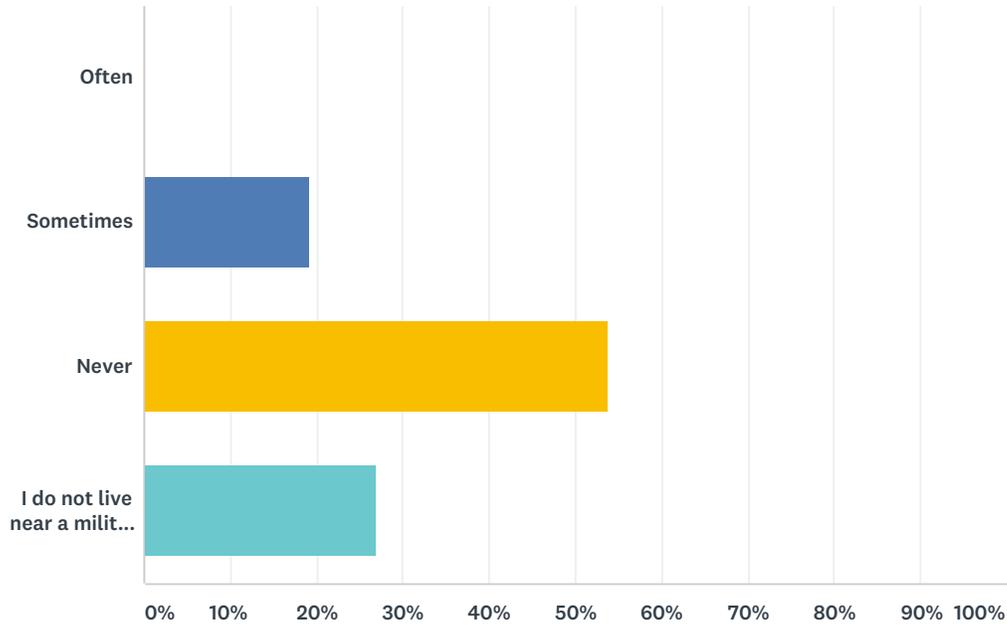
ANSWER CHOICES	RESPONSES	
Often	0.00%	0
Sometimes	19.23%	5
Never	53.85%	14
I do not live near a military installation	26.92%	7
TOTAL		26

Q45 Does your nearest military installation have an impact on your quality of life?

Answered: 25   Skipped: 8
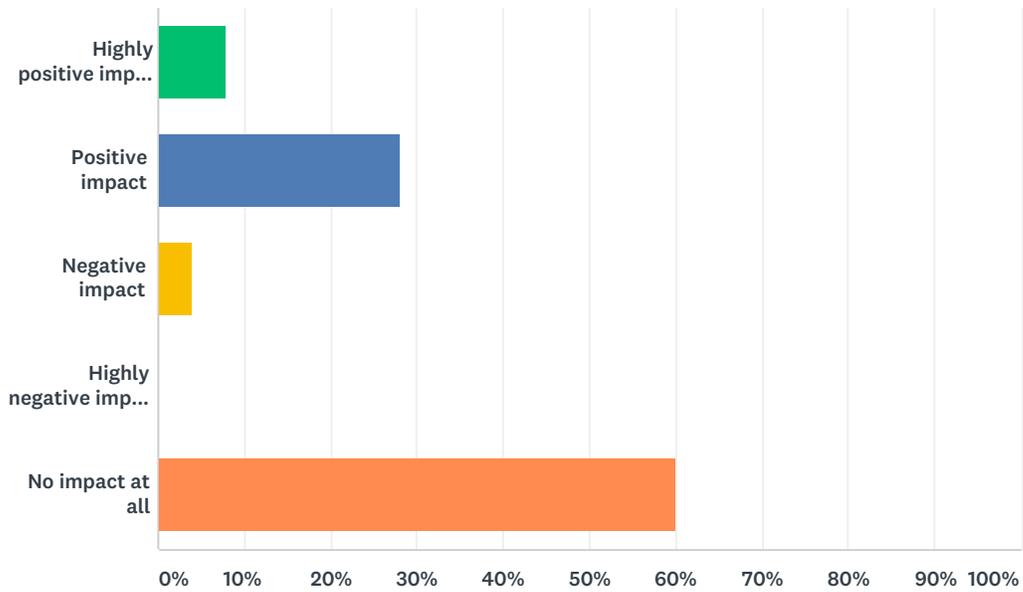
ANSWER CHOICES	RESPONSES	
Highly positive impact	8.00%	2
Positive impact	28.00%	7
Negative impact	4.00%	1
Highly negative impact	0.00%	0
No impact at all	60.00%	15
TOTAL		25

Q46 Please explain

Answered: 13   Skipped: 20

Q47 Does your nearest military installation have an impact on your property values?

Answered: 27   Skipped: 6
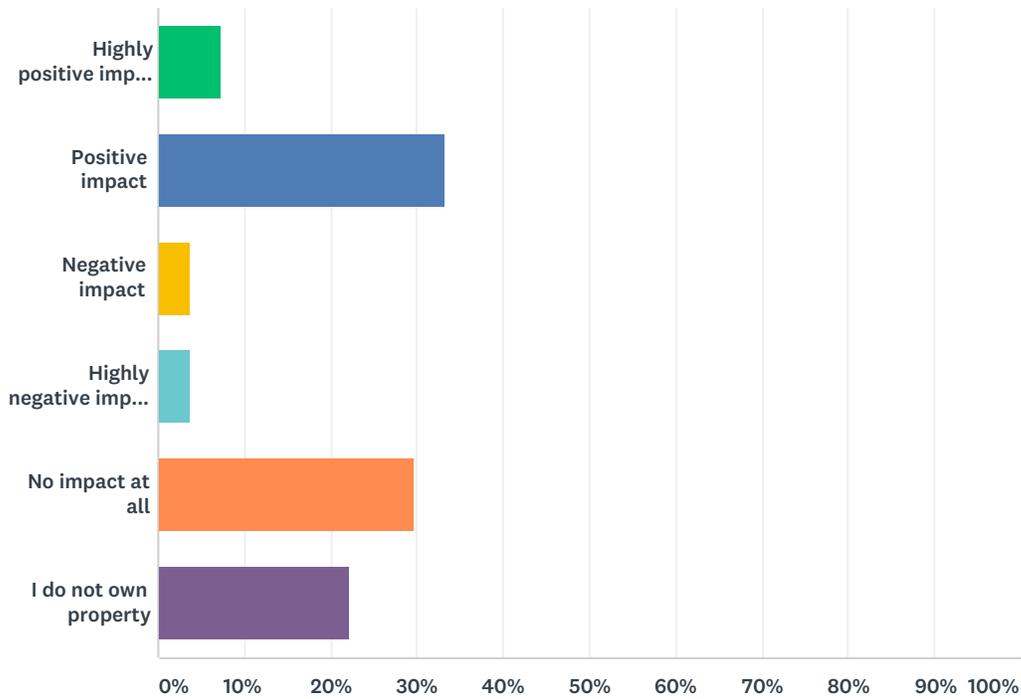
ANSWER CHOICES	RESPONSES	
Highly positive impact	7.41%	2
Positive impact	33.33%	9
Negative impact	3.70%	1
Highly negative impact	3.70%	1
No impact at all	29.63%	8
I do not own property	22.22%	6
TOTAL		27

Q48 Are you aware of the land use regulations (e.g., zoning overlay district) surrounding your nearest military installation and supporting studies (e.g., JLUS, AICUZ)?

Answered: 27   Skipped: 6
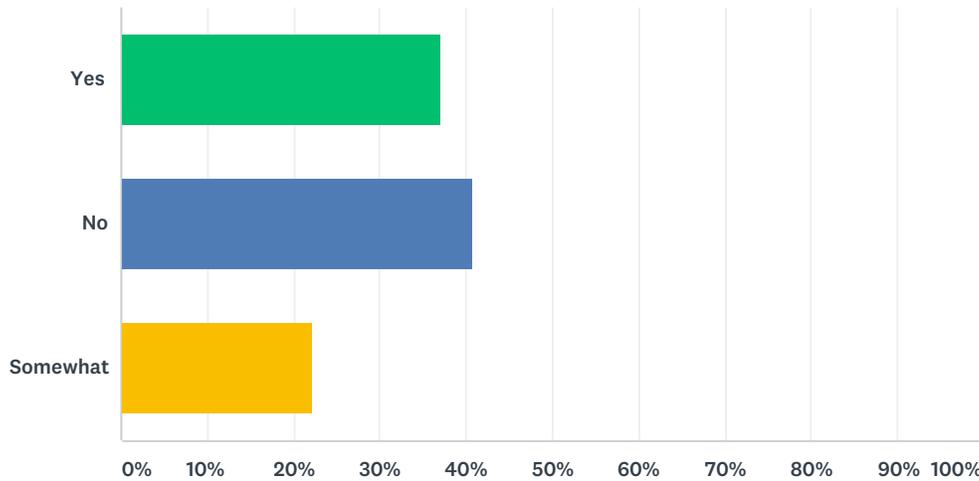
ANSWER CHOICES	RESPONSES	
Yes	37.04%	10
No	40.74%	11
Somewhat	22.22%	6
TOTAL		27

Q49 Are you aware of any of these factors currently being a compatibility a concern with your local military installation's training or military operations? Select all that apply:

Answered: 17   Skipped: 16
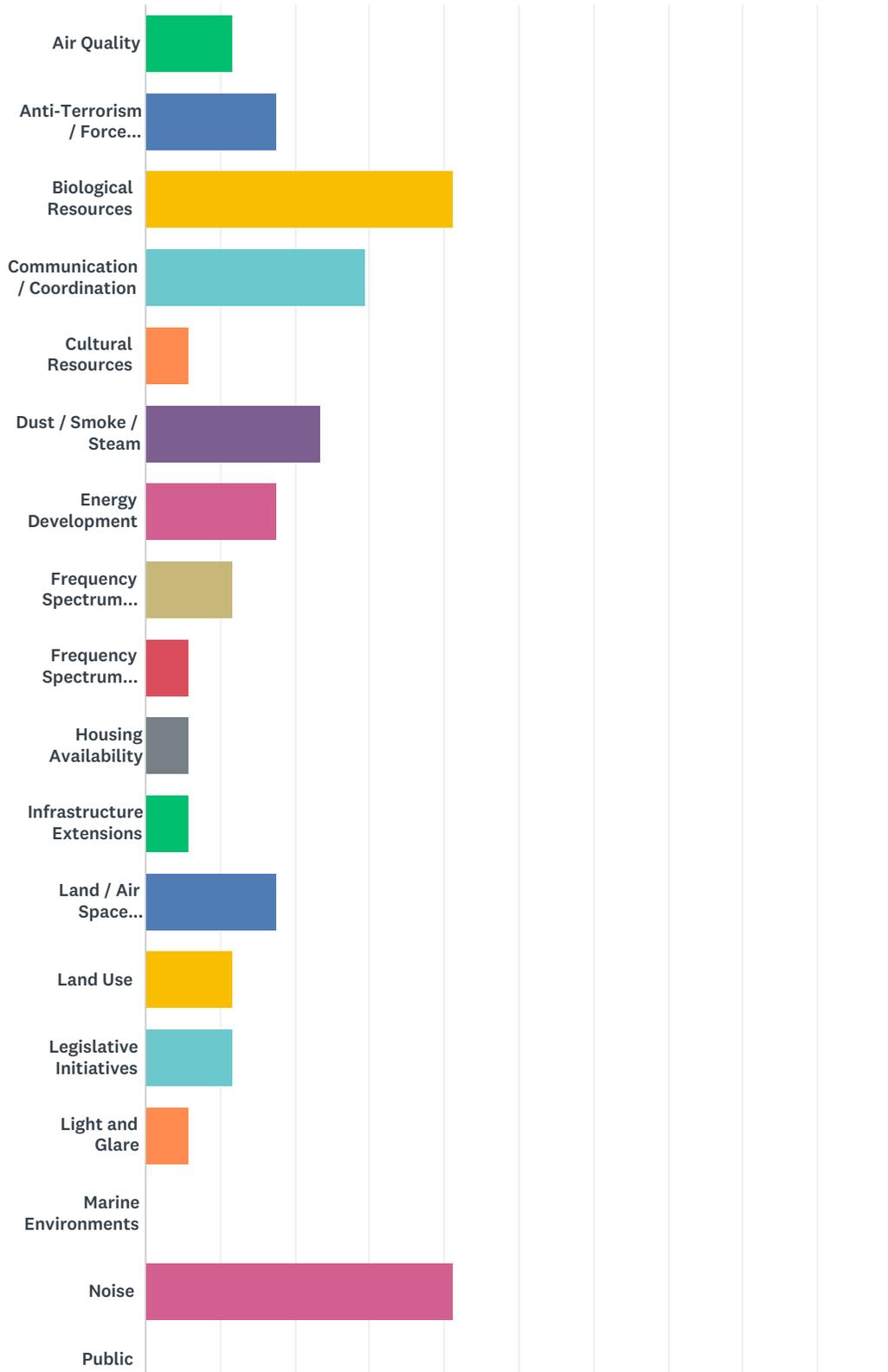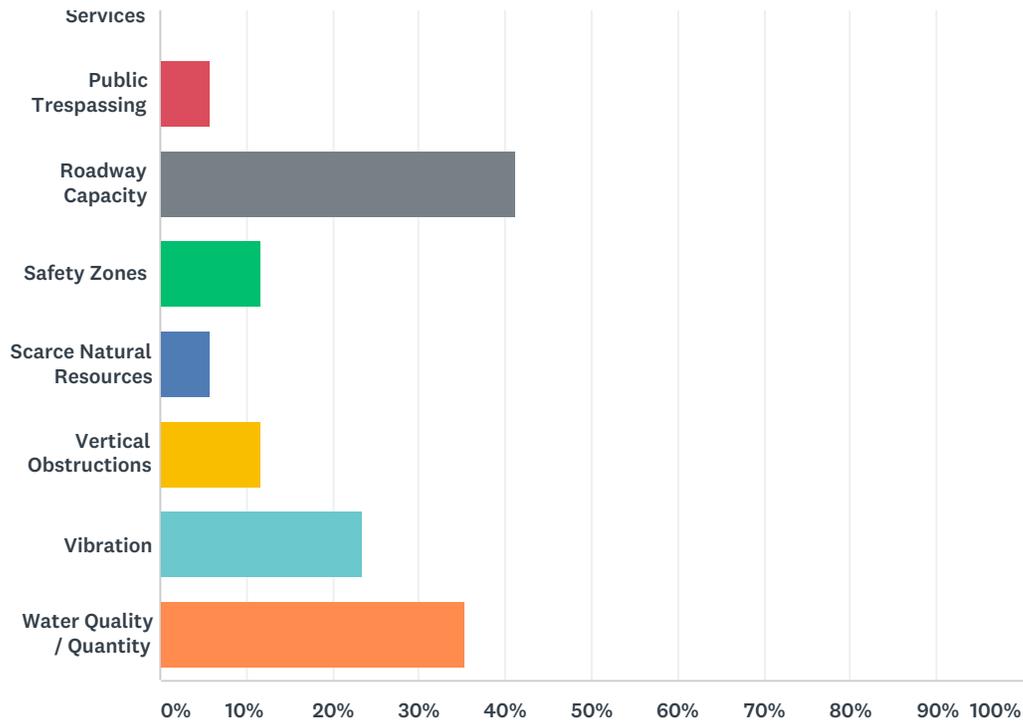
ANSWER CHOICES	RESPONSES	
Air Quality	11.76%	2
Anti-Terrorism / Force Protection	17.65%	3
Biological Resources	41.18%	7
Communication / Coordination	29.41%	5
Cultural Resources	5.88%	1
Dust / Smoke / Steam	23.53%	4
Energy Development	17.65%	3
Frequency Spectrum Capacity	11.76%	2
Frequency Spectrum Impedance/Interference	5.88%	1
Housing Availability	5.88%	1
Infrastructure Extensions	5.88%	1
Land / Air Space Competition	17.65%	3
Land Use	11.76%	2
Legislative Initiatives	11.76%	2
Light and Glare	5.88%	1
Marine Environments	0.00%	0
Noise	41.18%	7
Public Services	0.00%	0
Public Trespassing	5.88%	1

|		
Roadway Capacity	41.18%	7
Safety Zones	11.76%	2
Scarce Natural Resources	5.88%	1
Vertical Obstructions	11.76%	2
Vibration	23.53%	4
Water Quality / Quantity	35.29%	6
Total Respondents: 17		

Q50 What form of State level support are you most interested in this Study analyzing when looking to adopt best practices? Choose all that apply:

Answered: 25   Skipped: 8
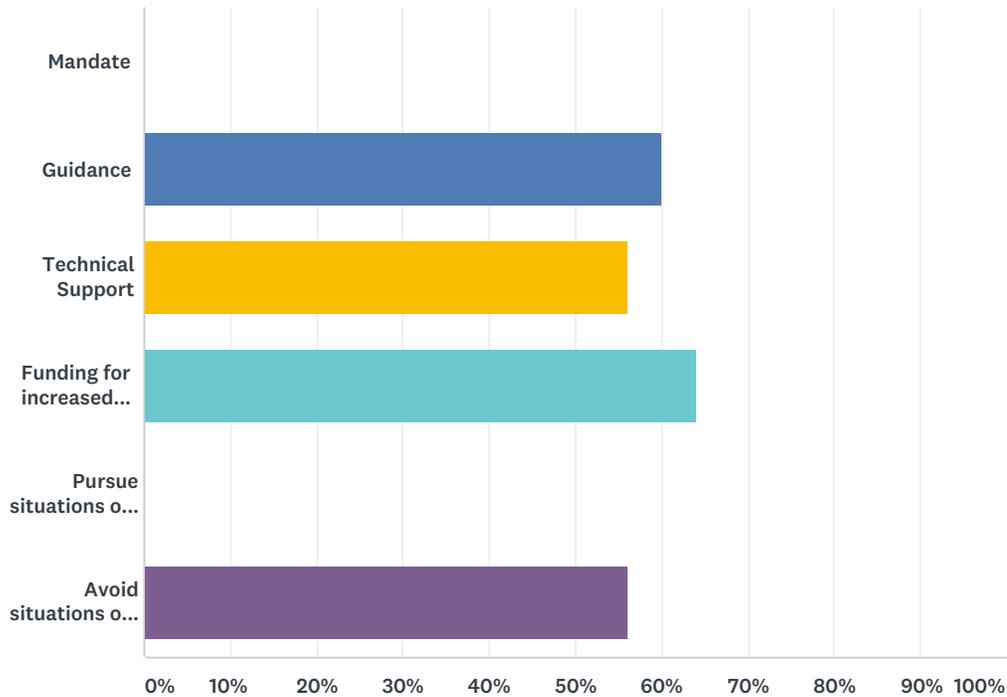
| ANSWER CHOICES	RESPONSES	
Mandate	0.00%	0
Guidance	60.00%	15
Technical Support	56.00%	14
Funding for increased collaboration	64.00%	16
Pursue situations of one-size-fits-all legislation that places requirements on jurisdictions	0.00%	0
Avoid situations of one-size-fits-all legislation that places requirements on jurisdictions	56.00%	14
Total Respondents: 25		

Q51 Would you like the State of Maryland to strengthen any of the following? Select all that apply:

Answered: 19   Skipped: 14

ANSWER CHOICES	RESPONSES	
Consider military installations as a matter to be considered in drawing and applying zoning ordinances and district protect approach slopes and other safety areas of licensed airports, including United States government and military air facilities to provide reasonable protection against encroachment upon military bases, military installations, and military airports and their adjacent safety areas, excluding armories operated by the Maryland National Guard	63.16%	12
Define military installation influence areas, including defining how broadly should the military influence area be defined to ensure that the military has sufficient opportunity to react to land use proposals that could truly affect military operations without needlessly delaying the development review process	52.63%	10
Consider all installation alternative energy encroachment concerns beyond use of airspace, such as wind farm radar clutter or general EMI (solar) interference concerns	31.58%	6
Pursue a X-mile (specific) buffer around all military installations	10.53%	2
Pursue specific buffer to the mission operations of the installation	26.32%	5
Total Respondents: 19		

Q52 Prior to proposing any changes to the State Code, would you support a more robust agency inclusionary process that would incorporate all stakeholders for such action. Potential stakeholders could include: (Select all that apply)

Answered: 24   Skipped: 9
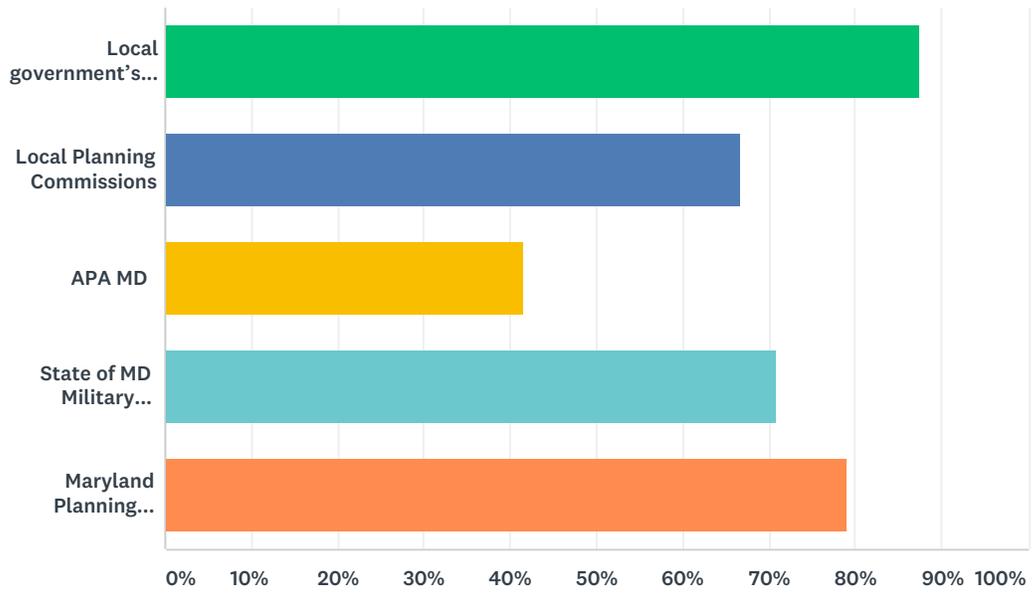
| ANSWER CHOICES	RESPONSES	
Local government's legislative reps	87.50%	21
Local Planning Commissions	66.67%	16
APA MD	41.67%	10
State of MD Military Affairs	70.83%	17
Maryland Planning Department	79.17%	19
Total Respondents: 24		

Q53 Would you support the State defining installation specific notification distances?

Answered: 27   Skipped: 6
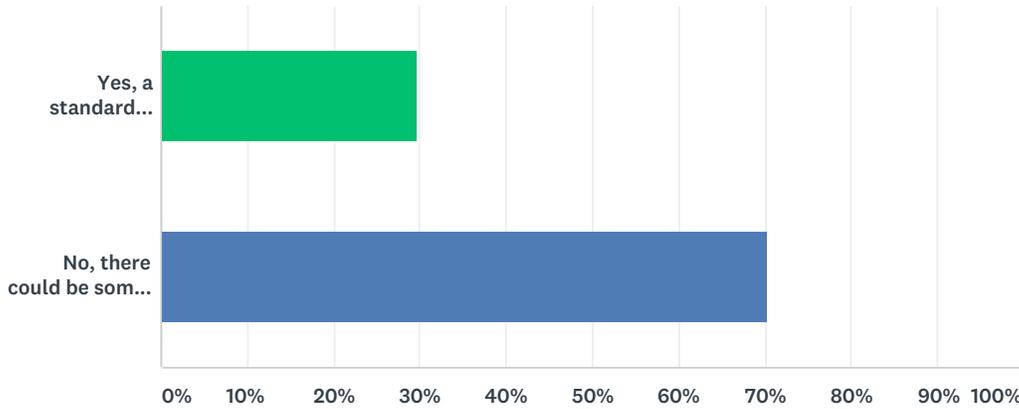
| ANSWER CHOICES	RESPONSES	
Yes, a standard approach would benefit local jurisdictions in updating local planning document	29.63%	8
No, there could be some installations that require distances greater while some that require less, and in most cases the distances are not uniform around the installation	70.37%	19
TOTAL		27

Q54 Would you support the State defining installation specific notification update by developing a requirement the distance and notification process be revisited on a regular basis and/or when significant changes arise (ie new mission or base realignment or closure) to ensure effective implementation by all parties?

Answered: 26   Skipped: 7
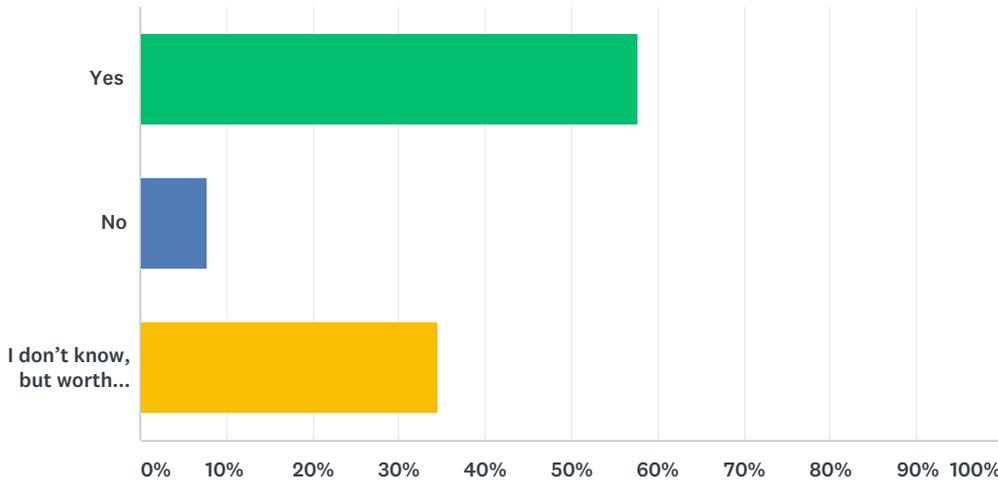
| ANSWER CHOICES	RESPONSES	
Yes	57.69%	15
No	7.69%	2
I don't know, but worth exploring	34.62%	9
TOTAL		26

Q55 Do you feel that military representation is present when defining allowable land uses and densities are established through your local Comprehensive Plan and Zoning Ordinance?

Answered: 26   Skipped: 7
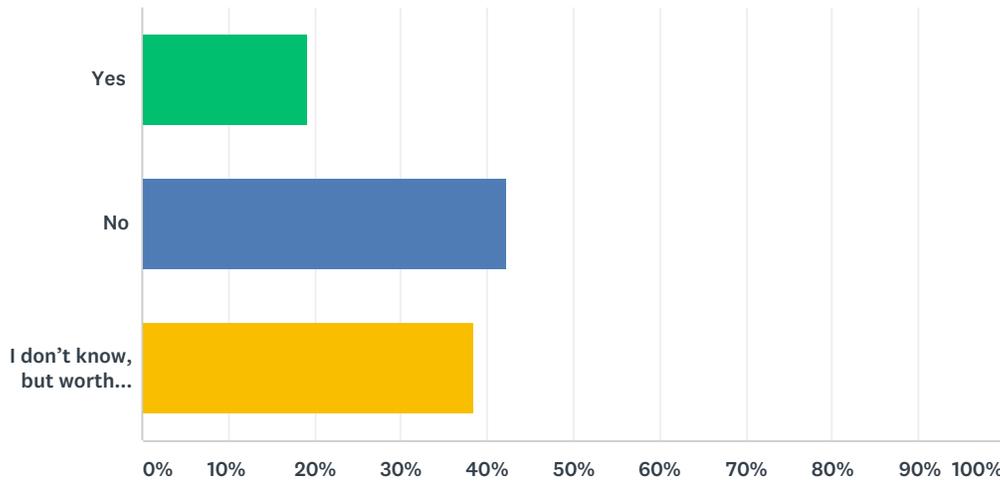
| ANSWER CHOICES	RESPONSES	
Yes	19.23%	5
No	42.31%	11
I don't know, but worth exploring	38.46%	10
TOTAL		26

Q56 Do you agree with the following statement? "As Comprehensive Plan and Zoning Ordinances are developed and updated, it is appropriate and necessary that military installations be invited to participate and that their needs and concerns be given serious consideration. Likewise, land use and density can also be affected by rezonings and Special Use Permits, so it is important that comments from military bases on applications that could potentially affect their operations be solicited."

Answered: 26   Skipped: 7
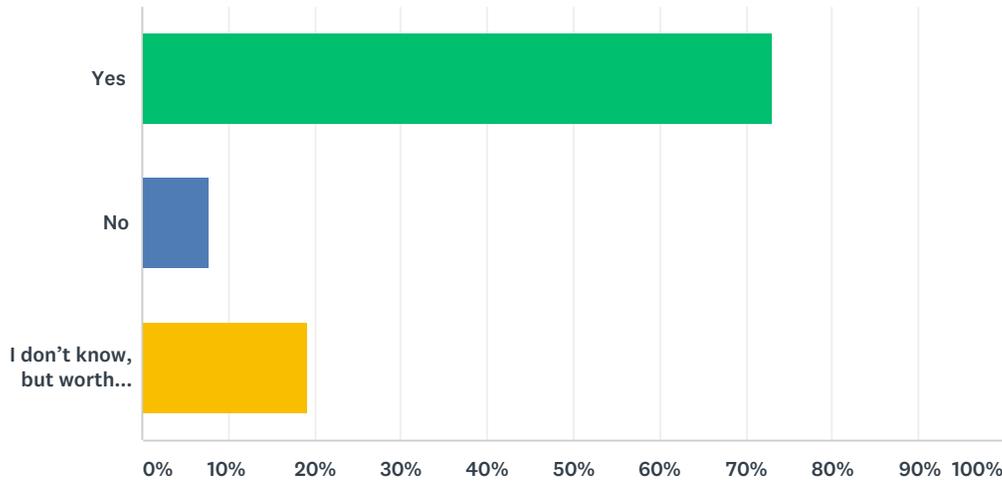
ANSWER CHOICES	RESPONSES	
Yes	73.08%	19
No	7.69%	2
I don't know, but worth exploring	19.23%	5
TOTAL		26

Q57 What elements would you like to see prioritized in order for you to support contributing to a statewide GIS database / mapping effort? Choose all that apply:

Answered: 22   Skipped: 11
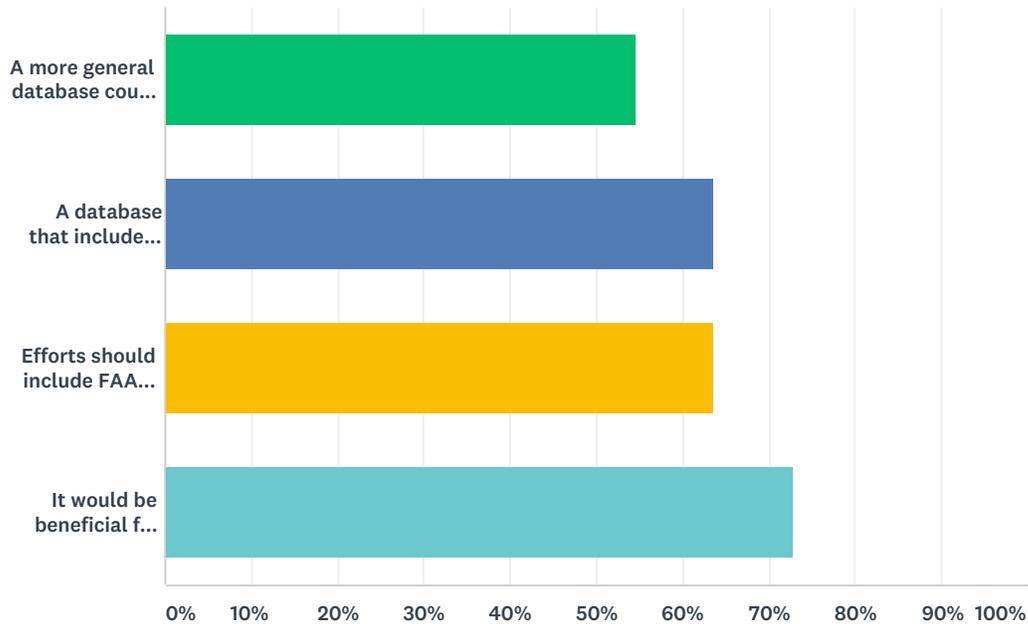
ANSWER CHOICES	RESPONSES	
A more general database could be developed that may include all the military installations and training areas in Maryland and the corresponding localities that are affected by implementation strategies	54.55%	12
A database that includes items such as what office to contact for questions, general layout of the base and significant mission impacts, etc.	63.64%	14
Efforts should include FAA Part 77 surfaces – including height restrictions – and AICUZ noise contours surrounding major military installations	63.64%	14
It would be beneficial for localities in military influence areas to have someone on staff who understands the needs and concerns of the military installation with regard to land use	72.73%	16
Total Respondents: 22		

Q58 Would designation of specific functions/positions in both local government and the military would be beneficial to pursue to offset frequent leadership rotations?

Answered: 27   Skipped: 6
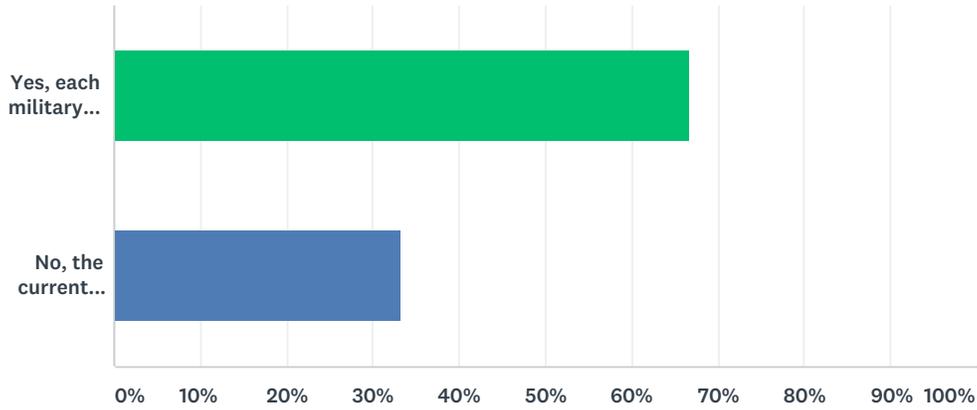
| ANSWER CHOICES	RESPONSES	
Yes, each military installation should appoint someone to serve as a liaison with all the localities within the installation's influence area, similar to the Community Plans & Liaison Officers (CPLO) at Navy bases as a best practice	66.67%	18
No, the current structures in place serve that purpose	33.33%	9
TOTAL		27

Q59 Would you support the State assisting local governments with the expertise to assess impacts of alternative energy development?

Answered: 27   Skipped: 6
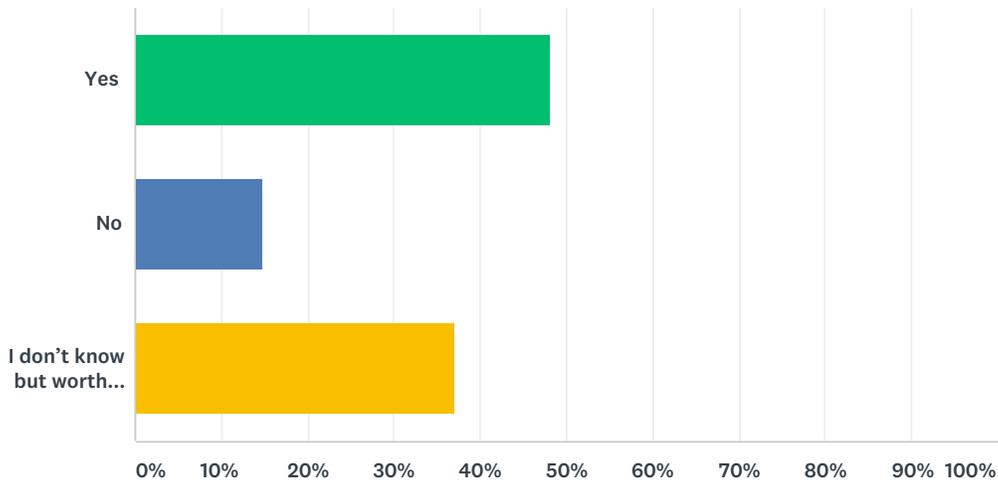
| ANSWER CHOICES	RESPONSES	
Yes	48.15%	13
No	14.81%	4
I don't know but worth exploring further	37.04%	10
TOTAL		27

Q60 Would you support the State establishing a statewide permit process and including the locality in the process but suggest that the State or the affected military installation be required to perform the analysis on these elements and provide the local jurisdiction as part of the review?

Answered: 25   Skipped: 8
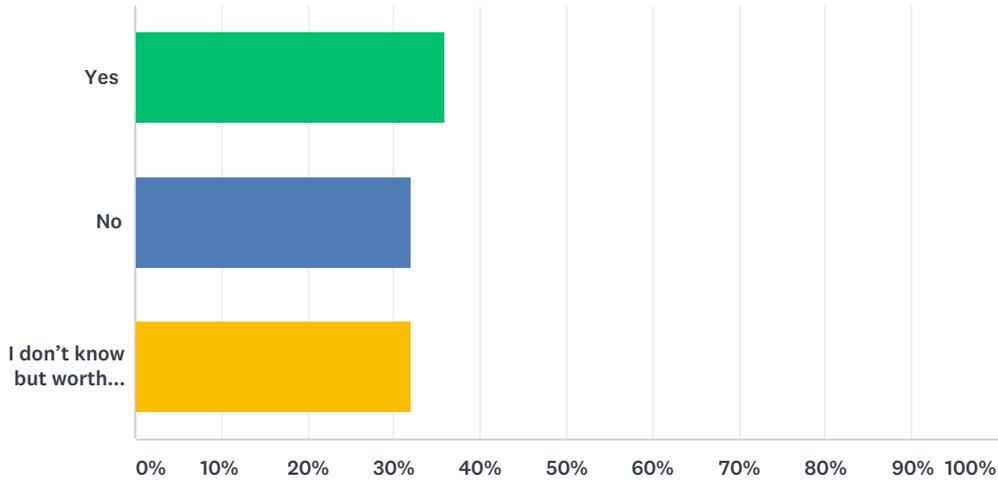
ANSWER CHOICES	RESPONSES	
Yes	36.00%	9
No	32.00%	8
I don't know but worth exploring further	32.00%	8
TOTAL		25

# Q61 Are you supportive of State recommended disclosures? Select all that apply

Answered: 25   Skipped: 8
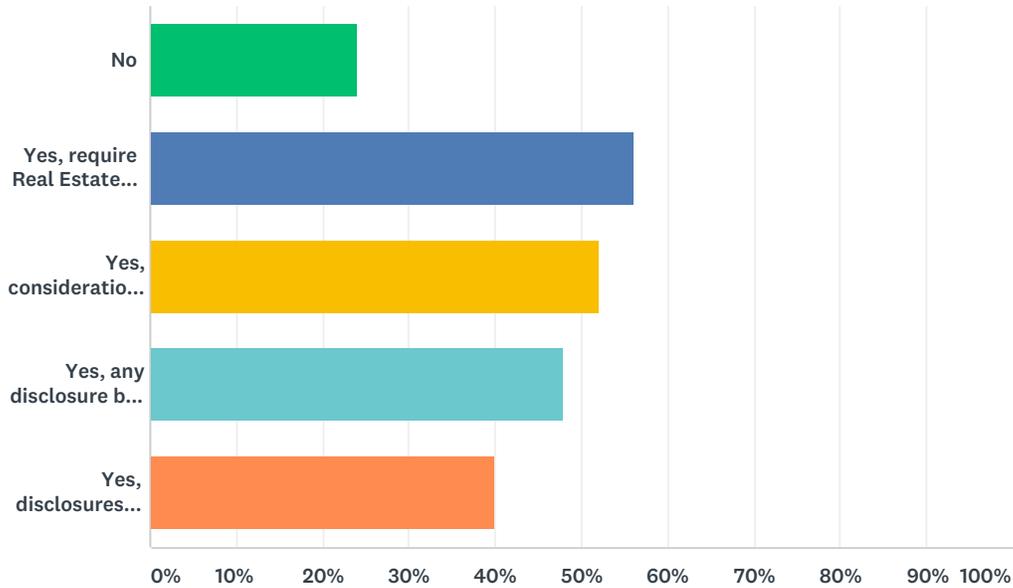
ANSWER CHOICES	RESPONSES	
No	24.00%	6
Yes, require Real Estate Disclosure to include Noise Generated by Range Activities	56.00%	14
Yes, consideration should be given to having a general disclosure covering a wide range of potential impacts from military operations (e.g. Military operations disclosure in the State of Maryland) or for a range.	52.00%	13
Yes, any disclosure be based on a specific study for a specific impact (e.g. noise) vs an arbitrary area covering general impacts that may or may not affect adjacent properties.	48.00%	12
Yes, disclosures should include military operations that occur on other Federal facilities	40.00%	10
Total Respondents: 25		

Q62 Would you support a more robust effort from the State of Maryland regarding agency coordination of state-owned properties and state agency operations with DOD for military mission compatibility?

Answered: 26   Skipped: 7
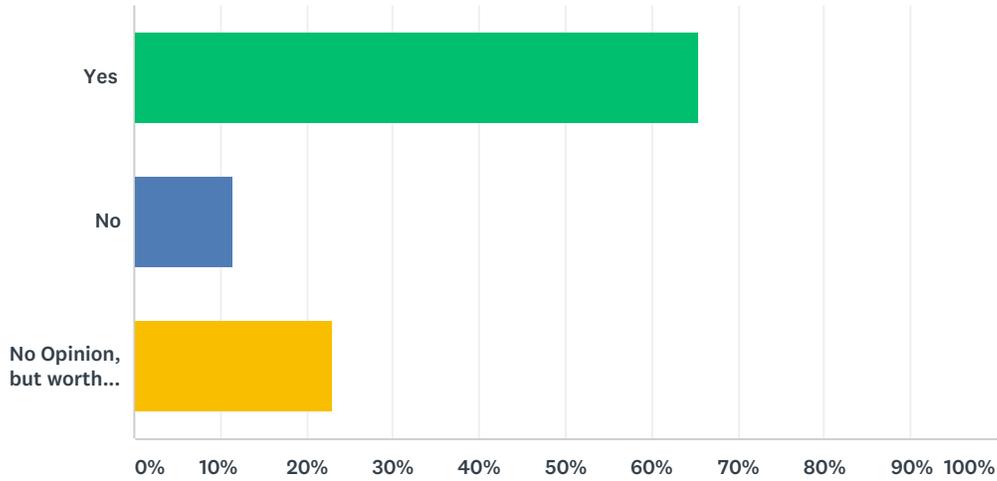
| ANSWER CHOICES	RESPONSES	
Yes	65.38%	17
No	11.54%	3
No Opinion, but worth pursuing further	23.08%	6
TOTAL		26

Q63 Do you agree with the following statement? "The State's effort should be aligned with community and military interests and built upon successes already realized by the stakeholders. Nothing within the State's efforts should do harm to existing agreements, procedures and tools."

Answered: 26   Skipped: 7
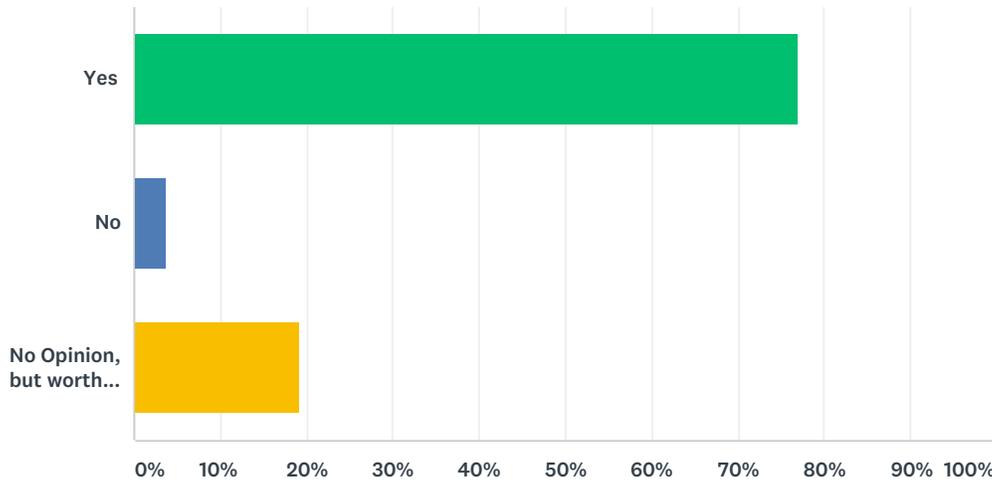
ANSWER CHOICES	RESPONSES	
Yes	76.92%	20
No	3.85%	1
No Opinion, but worth pursuing further	19.23%	5
TOTAL		26

Q64 Do you believe the State of Maryland should consider having an entity with some overall responsibility for collecting and collating local, regional and state agency plans as well as related military plans? This entity could be located within a number of existing state agencies or be a separate office.

Answered: 27   Skipped: 6
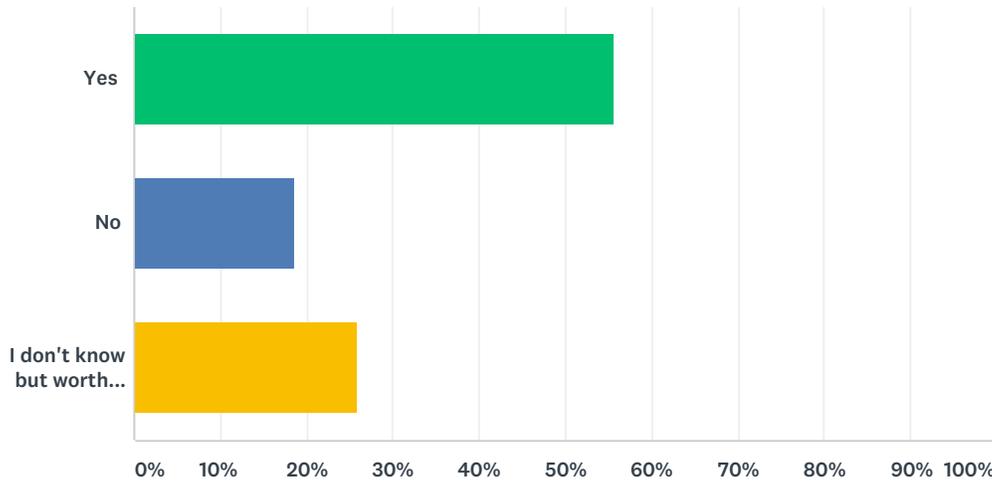
ANSWER CHOICES	RESPONSES	
Yes	55.56%	15
No	18.52%	5
I don't know but worth pursuing	25.93%	7
TOTAL		27

Q65 Which areas do you believe are Key areas for State involvement related to compatibility planning issues: Choose all that apply

Answered: 19   Skipped: 14
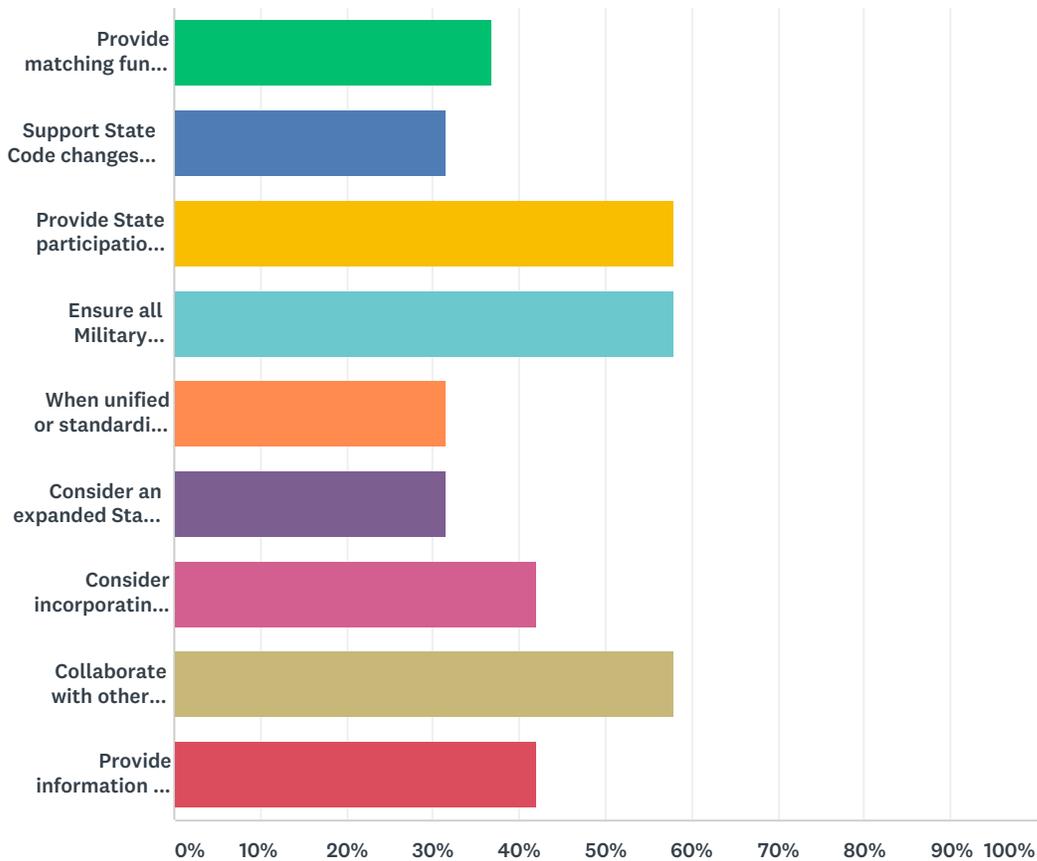
ANSWER CHOICES	RESPONSES	
Provide matching funds for property acquisition	36.84%	7
Support State Code changes to give localities more options to support military installations	31.58%	6
Provide State participation on the policy and/or technical committees that are formed to oversee the development or amendment of Joint Land Use Studies (JLUS)	57.89%	11
Ensure all Military Installations have a JLUS or similar baseline study	57.89%	11
When unified or standardized State-wide approaches to JLUS implementation are being contemplated, consider working initially through an existing regional framework such as local Planning District Commissions.	31.58%	6
Consider an expanded State role to support the development and implementation of strategies to combat the impacts of sea level rise on the mission of military installations.	31.58%	6
Consider incorporating an annual update to this State-wide JLUS at the Maryland Military Advisory Board Meeting with installation commanders.	42.11%	8
Collaborate with other State agencies to ensure cross flow of information pertaining to State-wide activities associated with local communities and installations regarding JLUS implementation / execution.	57.89%	11
Provide information on OEA grant opportunities in support of local, regional or State-wide efforts regarding JLUS updates and implementation.	42.11%	8

Total Respondents: 19

Q66 Please add any other comments that you wish to share with the planning team:

Answered: 10   Skipped: 23

Q67 Please provide your name so that the survey team can reach out to you

Answered: 13   Skipped: 20

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Health Assessment Cards for Non-JLUS Installations

The potential issues identified may or may not exist at these locations as only some type of on-site survey or assessment (such as a JLUS) can confirm what compatibility factor issues really exist at each installation/jurisdiction. In addition, there may be compatibility issues at these locations that have not been identified through the extrapolation process. The notional compatibility factor information and ratings provided should be considered as informational. For the five compatibility factors identified as potentially having statewide applicability a green/yellow/orange notional rating was used (similar to Section 2.2 assessments), while for the other compatibility factors a Low/Medium/High notional rating is provided. The Low/Medium/High notional rating is intended to provide the *potential* for issues to exist based on a limited review.

Each notional report consists of a table that provides the:

- compatibility factor title;

- installation notional rating for the five statewide compatibility factors (Green/Yellow/Orange/ None identified based on assessment of completed JLUS);

- installation notional rating for the other compatibility factors (Low Likelihood, Medium Likelihood, High Likelihood);

- whether the compatibility factor may have any statewide/regional implications;

- functional group the compatibility factors was grouped into; and

- organization within the Maryland Executive Council the functional group/compatibility factor most closely aligns to.

Table A4-1. Fort Detrick Notional Compatibility Site Assessment

Compatibility Factor	O/Y/ G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟢	Statewide		
Air Quality	Low	None identified	Environment	Secretary of the Environment
Water Quality/Quantity	Medium	Regional		
Climate Adaptation	Low	Regional		
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Medium	Regional		
Biological Resources	Low	None identified	Natural Resources	Secretary of Natural Resources
Marine Environments	Low	None identified		
Scarce Natural Resources	Low	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Medium	None identified	Security	Secretary of State Police
Public Trespassing	Medium	None identified		
Roadway Capacity	🟡	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Medium	None identified		
Housing Availability	Low	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide	Planning	Secretary of Planning
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified		
Light and Glare	Medium	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Medium	Regional	Frequency Management	Secretary of Information Technology

Table A4-2. Fort Meade Notional Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢 -	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟢 -	Statewide		
Air Quality	Low	None identified	Environment	Secretary of the Environment
Water Quality/Quantity	Medium	Regional		
Climate Adaptation	Low	Regional		
Dust/Smoke/Steam	Low	None		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified	Natural Resources	Secretary of Natural Resources
Marine Environments	Low	None identified		
Scarce Natural Resources	Low	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Medium	None identified	Security	Secretary of State Police
Public Trespassing	Medium	None identified		
Roadway Capacity	🟡	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Medium	None identified		
Housing Availability	Low	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide	Planning	Secretary of Planning
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified		
Light and Glare	Medium	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Medium	Regional		
Frequency Spectrum Capacity/Interference	Medium	Regional	Frequency Management	Secretary of Information Technology

Table A4-3. Walter Reed/National Naval Medical Center Notional Compatibility Site Assessment

Compatibility Factor	O/Y/ G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟠	Statewide		
Air Quality	Low	None identified		
Water Quality/Quantity	Low	Regional		
Climate Adaptation	Low	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified		
Marine Environments	Low	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	Low	None identified		
Energy Development	🟢	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Medium	None identified	Security	Secretary of State Police
Public Trespassing	Low	None identified		
Roadway Capacity	🟠	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Low	None identified		
Housing Availability	Low	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide		
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified	Planning	Secretary of Planning
Light and Glare	Low	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Low	Regional	Frequency Management	Secretary of Information Technology

Table A4-4. NSA Annapolis Notional Compatibility Site Assessment

Compatibility Factor	O/Y/G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟢	Statewide		
Air Quality	Low	None identified	Environment	Secretary of the Environment
Water Quality/Quantity	Low	Regional		
Climate Adaptation	Medium	Regional		
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified	Natural Resources	Secretary of Natural Resources
Marine Environments	Medium	None identified		
Scarce Natural Resources	Low	None identified		
Energy Development	🟢	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Low	None identified	Security	Secretary of State Police
Public Trespassing	Low	None identified		
Roadway Capacity	🟡	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Low	None identified		
Housing Availability	Medium	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide	Planning	Secretary of Planning
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified		
Light and Glare	Low	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Low	Regional	Frequency Management	Secretary of Information Technology

Table A4-5.   NRL Chesapeake Bay Notional Compatibility Site Assessment

Compatibility Factor	O/Y/ G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟠	Statewide		
Air Quality	Low	None identified		
Water Quality/Quantity	Low	Regional		
Climate Adaptation	Medium	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified		
Marine Environments	High	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	Low	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Medium	None identified	Security	Secretary of State Police
Public Trespassing	Medium	None identified		
Roadway Capacity	Low	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Low	None identified		
Housing Availability	Low	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide		
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified	Planning	Secretary of Planning
Light and Glare	Low	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Medium	Regional	Frequency Management	Secretary of Information Technology

Table A4-6.   NSWC Carderock Notional Compatibility Site Assessment

Compatibility Factor	O/Y/ G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟠	Statewide		
Air Quality	Low	None identified		
Water Quality/Quantity	Low	Regional		
Climate Adaptation	Medium	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified		
Marine Environments	Medium	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	Low	None identified		
Energy Development	🟡	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Low	None identified	Security	Secretary of State Police
Public Trespassing	Low	None identified		
Roadway Capacity	🟡	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Medium	None identified		
Housing Availability	Low	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide		
Cultural Resources	Low	None identified		
Land/Air/Sea Spaces	Low	None identified	Planning	Secretary of Planning
Light and Glare	Low	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Medium	Regional	Frequency Management	Secretary of Information Technology

Table A4-7. US Naval Academy Notional Compatibility Site Assessment

Compatibility Factor	O/Y/ G	State/Regional Concern?	Functional Group	Maryland Executive Council
Legislative Initiatives	🟢	Statewide	Cross-Functional	Smart Growth Sub-Cabinet
Coordination/Communication	🟠	Statewide		
Air Quality	Low	None identified		
Water Quality/Quantity	Low	Regional		
Climate Adaptation	Medium	Regional	Environment	Secretary of the Environment
Dust/Smoke/Steam	Low	None identified		
Noise/Vibration	Low	Regional		
Biological Resources	Low	None identified		
Marine Environments	Medium	None identified	Natural Resources	Secretary of Natural Resources
Scarce Natural Resources	Low	None identified		
Energy Development	🟢	Statewide	Energy	Secretary of General Services/Deputy Secretary of Energy
Anti-Terrorism/Force Protection	Medium	None identified	Security	Secretary of State Police
Public Trespassing	Low	None identified		
Roadway Capacity	🟡	Statewide	Transportation	Secretary of Transportation
Infrastructure Extensions	Low	None identified		
Housing Availability	Medium	None identified	Housing	Secretary of Housing & Community Development
Land Use	🟡	Statewide		
Cultural Resources	Medium	None identified		
Land/Air/Sea Spaces	Low	None identified	Planning	Secretary of Planning
Light and Glare	Low	Regional		
Safety Zones	Low	Regional		
Vertical Obstructions	Low	Regional		
Frequency Spectrum Capacity/Interference	Low	Regional	Frequency Management	Secretary of Information Technology

Notional Planning Areas for Non- JLUS Installations

- **Notional 5-Mile Planning Notification Area** – installations with an Military Influence Area (MIA) that extends five miles or more (known or suspected) beyond the installation boundary, such as those with flying missions with large footprints. These installations include:

  o   Martin State Airport Air National Guard

- **Notional 3-Mile Planning Notification Area** – installations with a MIA (known or suspected) that extends less than three miles but greater than one mile beyond the installation boundary. These installations include:

  o   Fort Detrick

  o   Fort George G Meade

  o   NRL Chesapeake Bay

  o   NSWC Carderock

- **Notional 1-Mile Planning Notification Area** – installations with a MIA (known or suspected) that extends one mile or less beyond the installation boundary. These installations include:

o   NSA Bethesda/Walter Reed National Military Medical Center Notional Planning Notification Area

o   NSA Annapolis/US Naval Academy (combined due to proximity)

o   Adelphi Army Laboratory Center
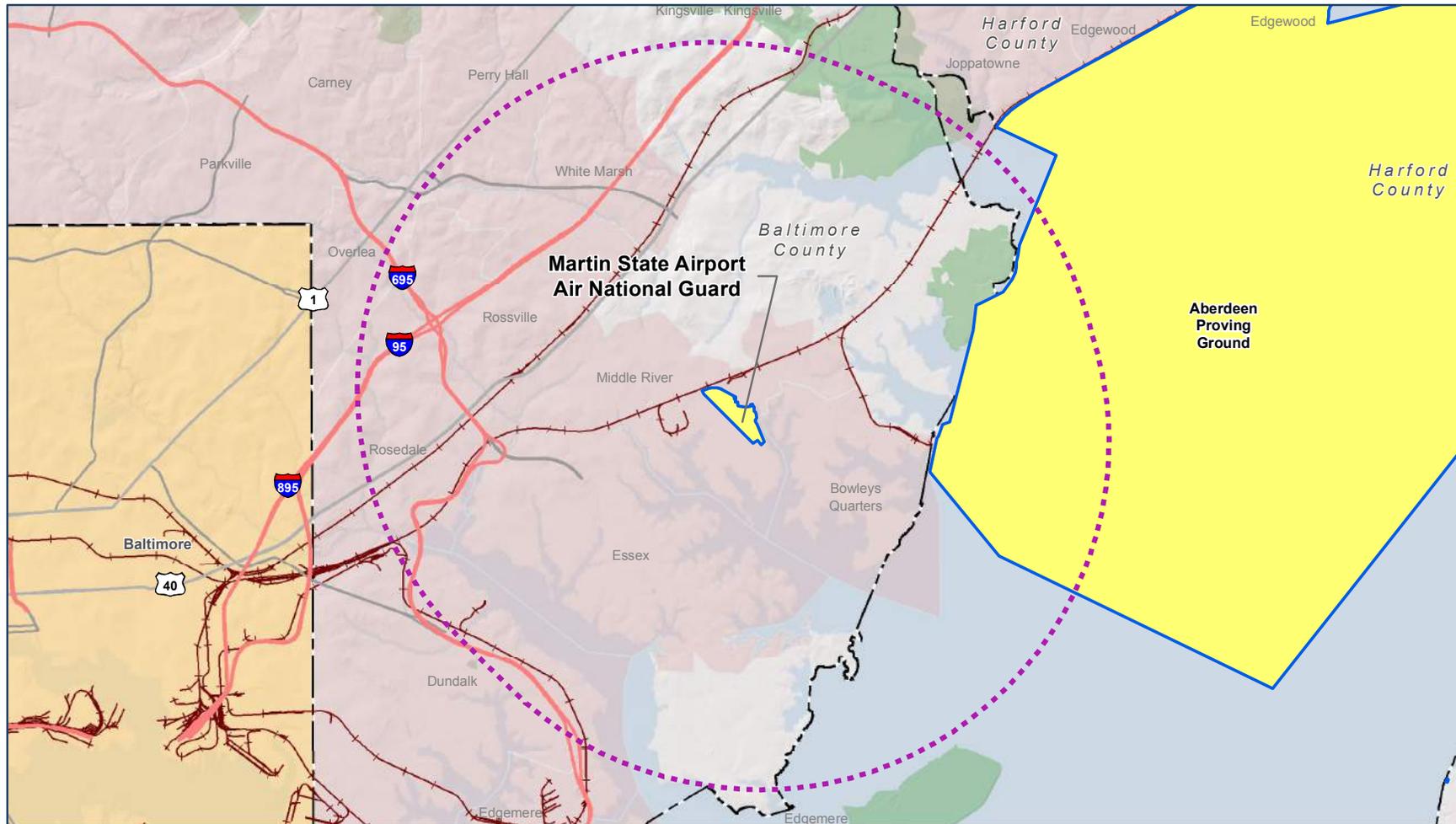
Legend:

- ⋯⋯ Notional 5-mile Planning Notification Area Around Installation
- Military Influence Area Identified in a JLUS
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0 — 2 Mile
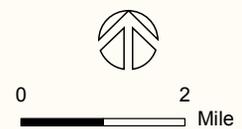
Figure Appendix 5-1
Martin State Airport Notional Planning Notification Area
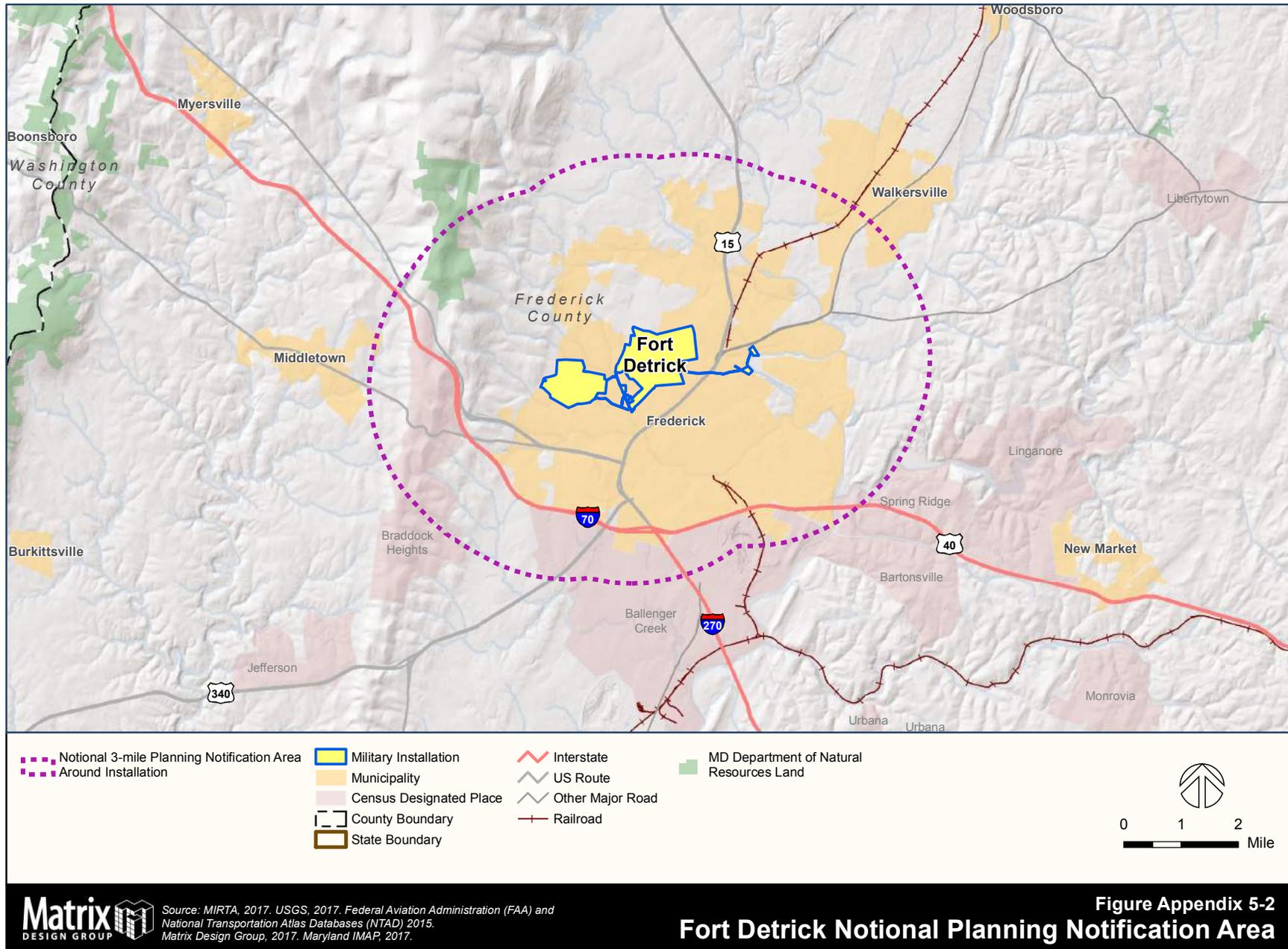
Figure Appendix 5-2
Fort Detrick Notional Planning Notification Area

Legend:
- Notional 3-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land

0 1 2 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure Appendix 5-3
Fort George G Meade Notional Planning Notification Area

Legend:
- Notional 3-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Railroad
- MD Department of Natural Resources Land
- Water Body
- Airport/Airfield

0 1 2 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Legend:

- Notional 3-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Other Major Road
- Local Road
- MD Department of Natural Resources Land
- Water Body

0 1 2 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure Appendix 5-4
NRL Chesapeake Bay Detachment Notional Planning Notification Area

Legend:

- ▪▪▪ Notional 3-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Local Road
- Railroad
- MD Department of Natural Resources Land
- Water Body

0   1   2 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure Appendix 5-5
NSWC Carderock Notional Planning Notification Area

Notional 1-mile Planning Notification Area Around Installation

Military Installation
Municipality
Census Designated Place
State Boundary

Interstate
US Route
Other Major Road
Local Road
Railroad

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

0   1
Mile

Figure Appendix 5-6
NSA Bethesda / Walter Reed National Military Medical Center Notional Planning Notification Area

NSA Annapolis /
US Naval Academy /
Naval Academy
North Severn

Legend:
- ▪▪▪ Notional 1-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- County Boundary
- State Boundary
- Interstate
- US Route
- Other Major Road
- Local Road
- MD Department of Natural Resources Land
- Water Body

0   1 Mile

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015.

Figure Appendix 5-7
NSA Annapolis / US Naval Academy Notional Planning Notification Area

Notional 1-mile Planning Notification Area Around Installation
- Military Installation
- Municipality
- Census Designated Place
- State Boundary
- Interstate
- US Route
- Other Major Road
- Local Road
- Railroad

Source: MIRTA, 2017. USGS, 2017. Federal Aviation Administration (FAA) and National Transportation Atlas Databases (NTAD) 2015. Matrix Design Group, 2017. Maryland IMAP, 2017.

Figure Appendix 5-8
Adelphi Army Laboratory Notional Planning Notification Area

Please see the next page.

Maryland Military Installations

National Guard Facilities

1. Cumberland
2. Hagerstown
3. Frederick
4. Westminster
5. Sykesville
6. Ellicott City
7. Olney
8. White Oak
9. Adelphi
10. Laurel
11. Greenbelt
12. Cheltenham
13. La Plata
14. Reisterstown
15. Pikesville
16. Catonsville
17. Baltimore City 1
18. Towson
19. Baltimore City 2
20. Glen Arm
21. Parkville
22. Dundalk
23. Glen Burnie
24. Annapolis
25. Edgewood
26. Havre de Grace
27. Elkton
28. Queen Anne
29. Easton
30. Pax River NAS
31. Salisbury

Reserve Facilities

A. Cumberland
B. Fort Detrick
C. Gaithersburg
D. Rockville
E. Riverdale
F. Fort Meade
G. Joint Base Andrews
H. Upper Marlboro
I. Owings Mill
J. Sheridan, Baltimore
K. NOSC Baltimore
L. Jeceline, Baltimore
M. Curtis, Baltimore
N. Brandt, Baltimore
O. MCR Center Baltimore
P. Annapolis
Q. Abingdon

Maryland Statewide Joint Land Use Study

Response Implementation Strategy

Matrix
DESIGN GROUP