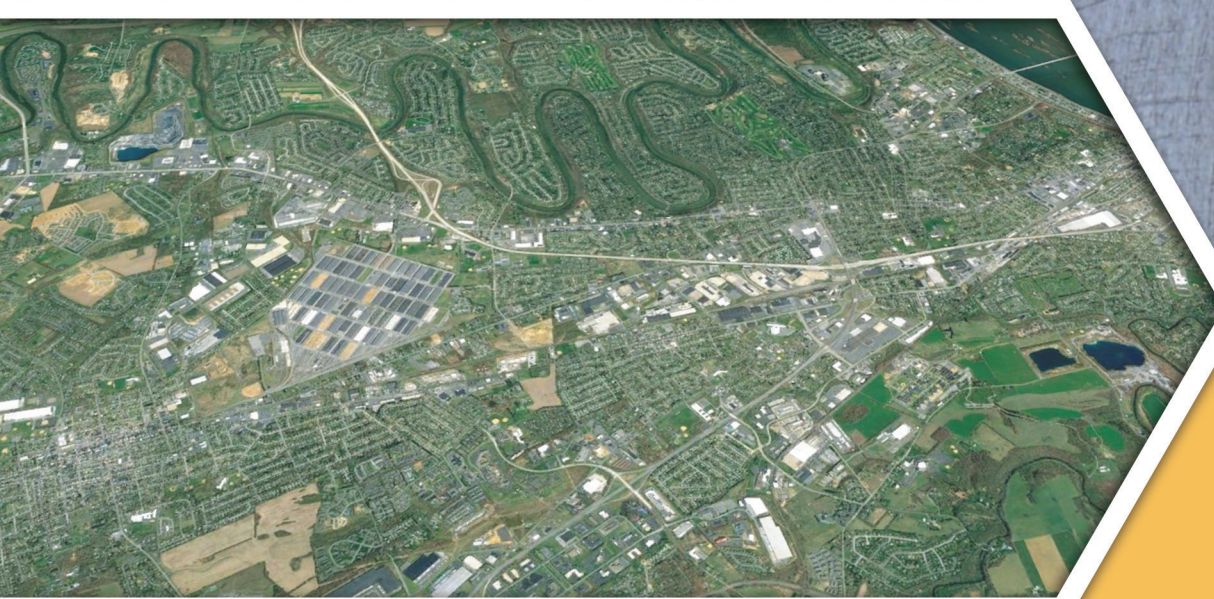


# JOINT LAND USE STUDY



HAMPDEN-NSA MECHANICSBURG





HAMPDEN-NSA MECHANICSBURG

JOINT LAND USE STUDY

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# Hampden-NSA Mechanicsburg Joint Land Use Study

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## JLUS Report

*Prepared for:*



Hampden Township  
230 South Sporting Hill Road  
Mechanicsburg, PA 17050

*Submitted by:*



Matrix Design Group  
2138 Priest Bridge Court, Suite  
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February 2019

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The Joint Land Use Study was completed with the involvement of a number of individuals and agencies in the community. Two committees guided the JLUS process and developed the Joint Land Use Study – the Management Committee and Technical Committee.

### Management Committee

---

The Management Committee (MC) served an active and important role in providing insights into the local and regional issues and in helping to refine all recommendations to fit local needs and capabilities. The Management Committee was comprised of the following individuals:

**Al Bienstock**, *Board of Commissioners President*

Hampden Township

**Keith Metts**, *Manager*

Hampden Township

**John Thomas**, *Sewer Authority Chairman*

Hampden Township

**Ron Stevens**, *Planning Commission*

Hampden Township

**Kyle Bryan**, *Commanding Officer*

NSA Mechanicsburg

**Marian Sumner**, *Community Plans & Liaison Officer, NAVFAC Midlant, Asset Management*

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Mechanicsburg Borough

**Jay Sweat**, *Project Manager*

Office of Economic Adjustment



## Technical Committee

---

The Technical Committee (TC) provided guidance and recommendations on technical issues. The TC comprised the following individuals:

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**Matt Todaro**, *Sewer Authority Vice Chairman*

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**Kyle Miller**, *Councilman*

Mechanicsburg Borough

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Cumberland County

**George Book, Jr.**, *President & CEO*

Local Chamber of Commerce

**Jay Sweat**, *Project Manager*

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## ACKNOWLEDGEMENTS

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*Lead Planner*





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## A

ADA	American's with Disability Act
AICUZ	Air Installation Compatible Use Zone
AO	Apartment Office
AQ	Air Quality
AQI	Air Quality Indices
AT	Anti-Terrorism / Force Protection

## B

BASH	Bird Air Strike Hazard
BLM	Bureau of Land Management
BMP	Best Management Practices

## C

C	Commercial
CC	Climate Consideration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLASH	Camp Hill Lower Allen Shiremanstown Hampden Transportation Study
CO	Carbon Monoxide
COMM	Communication / Coordination
CNO	Chief of Naval Operations
CR	Cultural Resources
CZ	Clear Zone

## D

dB	Decibel
DEP	Department of Environmental Protection
DNL	Day Night Average A-weighted Sound Level
DoD	Department of Defense
DOE	Department of Energy
DR	Decision Record
DSS	Dust / Smoke / Steam

## E

EA	Environmental Assessment
EAP	Encroachment Action Plan
ED	Energy Development
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EPA	Environmental Protection Agency

## F

FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FLMPA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
FS	Frequency Spectrum Capacity / Interference
FY	Fiscal Year



## G

## H

HA	Housing Availability
HATS	Harrisburg Area Transportation Study
HCDC	Harrison County Development Commission

## I

ICRMP	Installation Cultural Resource Management Plan
IE	Infrastructure Extension

## J

JLUS	Joint Land Use Study
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## L

LAS	Land / Air Spaces
LDO	Land Development Ordinance
LG	Light and Glare
LOS	Level of Service
LU	Land Use

## M

MAR	Marine Environments
MPO	Metropolitan Planning Organization
MS	Mississippi
MS4	Municipal Separate Storm Sewer System
MUTCD	Manual on Uniform Traffic Control Devices

## N

NACo	National Association of Counties
NAAQS	National Ambient Air Quality Standards
NGO	Non-governmental Organization
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO2	Nitrogen Oxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Noise
NTIA	National Telecommunication Industry Association

## O

O3	Ozone
OEA	Office of Economic Adjustment
OPNAVISNT	Naval Operations Instruction
OSM	Office of Spectrum Management

**P**

PC	Policy Committee
PENNDOT	Pennsylvania Department of Transportation
PM	Particulate Matter
PS	Public Services
PT	Public Trespassing

**R**

RC	Roadway Capacity
REPI	Readiness Environmental Protection Integration
ROD	Record of Decision
RTP	Regional Transportation Plan

**S**

SA	Safety Zones
SALDO	Subdivision and Land Development Ordinance
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SNR	Scare Natural Resources
SO <sub>2</sub>	Sulfur Dioxide
STRACNET	Strategic Rail Corridor Network

**T**

TOD	Transit oriented development
TTR	Travel Time Ratio

**U**

UFC	Unified Facilities Criteria
URM	Urban Mixed Use
U.S.	United States
USAHAS	United States Avian Hazard Advisory System

**V**

V	Vibration
VO	Vertical Obstruction

**W**

WF	Waterfront
WQQ	Water Quantity / Quality





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*Military installations are critical to local, regional, and state economies, generating thousands of jobs and millions of dollars in annual economic activity and tax revenue. In the past, incompatible development has influenced the capabilities of the base and resulted in the movement of certain operations to other military installations. The loss of military missions and associated closure of military installations has been detrimental to their host communities. To protect the missions of military installations and health of local economies and industries that rely on them, encroachment must be addressed through collaboration and joint planning between installations and local communities. This Joint Land Use Study (JLUS) attempts to mitigate existing compatibility issues, facilitate the prevention of future issues, and improve coordination between the local communities and Naval Support Activity (NSA) Mechanicsburg.*

*NSA Mechanicsburg is an 806-acre site situated in Hampden Township at the eastern boundary of Mechanicsburg, Pennsylvania. It is midway between Harrisburg, the state capital of Pennsylvania, and the City of Carlisle. NSA Mechanicsburg is close to two interstate highways, I-81 and I 76. Figure 1 shows the installation within the larger region.*

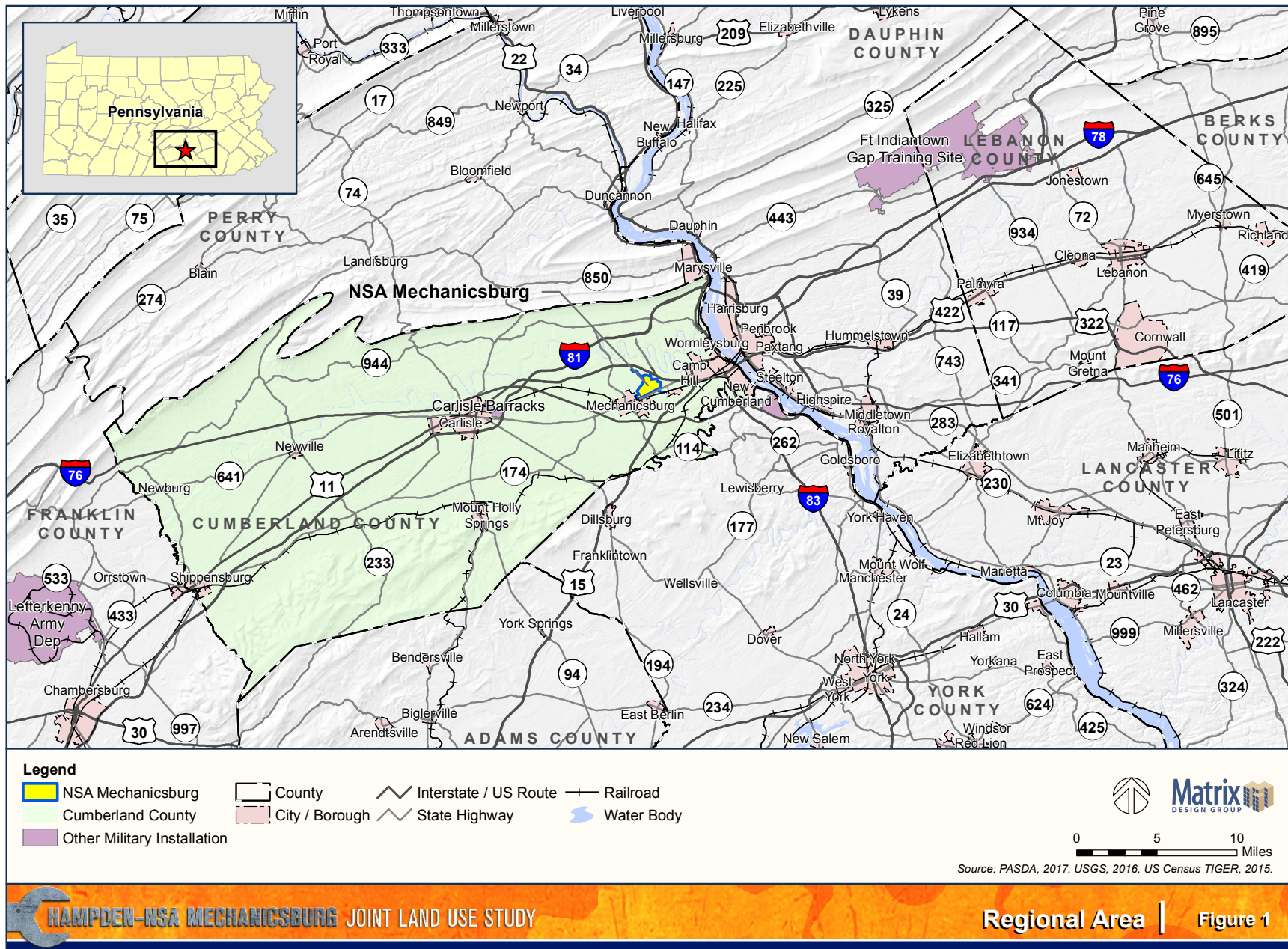
*The location of NSA Mechanicsburg is crucial to the activities conducted there in providing access for the movement of materials that support the installation's mission.*

*The mission of NSA Mechanicsburg is to provide secure shore infrastructure and has evolved over time to reflect the needs of the changing culture of naval operations. Instead of expansive warehousing operations for the storage of munitions, the base now receives, stores, and distributes goods long-term (approximately seven years).*

*NSA Mechanicsburg is also responsible for coordinating and providing base support services for naval activities at NSA Philadelphia and Philadelphia Naval Yard (PNY) Annex. The naval activities at NSA Philadelphia and PNY Annex are not part of this Joint Land Use Study.*



# HAMPDEN-NSA MECHANICSBURG JOINT LAND USE STUDY



## 1.1. What Is a Joint Land Use Study?

A JLUS is a planning process that identifies compatible land uses and manages growth within and adjacent to an active military installation. These goals are accomplished through the collaborative efforts of stakeholders in a defined study area. Stakeholders can include municipal, state, federal, and tribal officials, residents, business owners, nongovernmental organizations, and the military. Through the JLUS process, these parties convene to identify existing and potential future issues. The process is designed to establish and promote a formal, permanent working relationship between local jurisdictions, agencies, and military installations, such as NSA Mechanicsburg.

## 1.2. JLUS Goal and Objectives

The goal of the Hampden-NSA Mechanicsburg JLUS is to protect the viability of current and future military mission and operations, while simultaneously encouraging compatible community growth, sustaining the environmental and economic health of the region, and protecting public health, safety, and welfare. To achieve these goals, three primary JLUS objectives were identified:

- **Understanding.** Identify, confirm, and understand compatibility issues and concerns in an open forum that considers both community and military perspectives and needs. This includes increasing public awareness, education, and opportunities for input through a cohesive outreach program.
- **Collaboration.** Encourage cooperative land use and resource planning among NSA Mechanicsburg and surrounding communities. Collaboration promotes compatible community growth and development with limited impacts on military missions and

operations, while also highlighting ways to reduce current operational impacts on land within the Study Area.

- **Actions.** Provide a set of mutually supported tools, activities, and procedures that local jurisdictions, agencies, and NSA Mechanicsburg can employ as needed. The actions include operational measures to mitigate installation impacts on surrounding communities, as well as local government and agency actions to reduce community impacts on military operations. These tools help decision makers resolve compatibility issues and prioritize projects for funding within their annual budgeting cycles, relative to compatibility concerns.

## 1.3. Why Prepare a Joint Land Use Study?

Although military installations and nearby communities are separated by well-defined property boundaries, they often share natural and manmade resources, such as land, airspace, water, and infrastructure. Despite the many positive interactions among local jurisdictions, agencies, and the military, the activities or actions of one entity can unintentionally impact another and create conflicts. As communities develop and expand in response to resource and market demands, land use approvals can result in development closer to military installations and operational areas that generates new compatibility issues or exacerbates existing issues. Incompatible development is often referred to as encroachment, which can negatively affect community safety, economic development, and the viability of military activities and readiness.

Recognizing the close relationship that exists between installations and adjacent communities, the Department of Defense (DoD) Office of Economic Adjustment (OEA) implemented the JLUS program to mitigate existing and future conflicts and to enhance communication and coordination among all

affected stakeholders. The program aims to preserve the sustainability of local communities, while protecting the current and future missions at NSA Mechanicsburg.

#### 1.4. Public Outreach & Involvement Strategy

The JLUS document is aimed at building consensus within the community and stakeholders. To achieve the JLUS goals and objectives, the Hampden-NSA Mechanicsburg JLUS process included a Public Involvement Strategy that provided a variety of opportunities through which interested parties could participate.

##### Stakeholder Interviews

The stakeholder component was designed to engage all agencies, landowners, and special interest groups that could assist in the development of the JLUS report and / or that may be affected by the JLUS. A transparent JLUS process ensures collaboration and so the development of a feasible set of recommendations for agencies to accept and implement with minimal struggle. Collaboration and consensus among agencies was achieved through various methods of involvement, including committee meetings and stakeholder interviews.

Informing stakeholders and keeping them apprised of project information through consultation was key to developing and maintaining positive and cooperative relationships. Interviews provided an additional opportunity to define and explain project objectives and to receive feedback, comments, and suggestions directly from stakeholders in an informal setting. The goals of stakeholder engagement were:

- Broaden representation of all jurisdictions and special interest groups relative to all compatibility topics and issues that pertain to the study area;
- Enhance stakeholder understanding of key issues;
- Increase the efficiency and effectiveness of the JLUS process;
- Enhance collaboration to achieve a shared approach and vision;
- Enhance the iterative communication process between the JLUS Team, key community leaders, and key stakeholders; and
- Increase the understanding of issues and potential solutions in order to develop a feasible approach and plan of action.

The collaborative interview sessions served two important objectives: making sure findings and recommendations were cohesive and ensuring solution strategies were broad enough to be effective, yet specific enough to be implemented. These interviews served to bring together a diverse set of stakeholders to achieve greater understanding of potentially disparate interests and needs across the communities involved in the JLUS.

##### Management Committee and Technical Committee

The development of the Hampden-NSA Mechanicsburg JLUS was guided by two committees comprising community leaders, NSA Mechanicsburg personnel, federal and state agencies, resource agencies, local governments, and other stakeholders.

Membership on the JLUS Management Committee (MC) and JLUS Technical Committee (TC) was comprised of a diverse group of interested stakeholders and agency representatives in the Study Area. The purpose of these committees was to provide feedback, suggestions and guidance to the JLUS



Team and to serve as communications liaisons to their respective groups. These committees were important in developing and maintaining relationships between key stakeholders, interested community members, and the JLUS Team.

### Public Involvement / Public Meetings

In addition to the MC and TC meetings, a series of public workshops were held throughout the development of the JLUS. These workshops provided an opportunity for the exchange of information with the greater community, assisted in identifying the issues to be addressed in the JLUS, and provided input on the proposed strategies. Each workshop included a traditional presentation and a facilitated exercise providing a “hands on,” interactive opportunity for the public to participate in the development of the plan.

### Methods of Communication

#### *JLUS Project Website*

Matrix created and hosted a project website to provide public and media access to project information, informational materials, and documents at [www.hampdennsajlus.com](http://www.hampdennsajlus.com). In addition, a link to the project website was provided to all governing entities / agencies engaged in the JLUS for use on their respective websites. The website address was made available with all public information and media outreach materials produced. Meeting notices, presentations, maps, and other project materials were posted for easy download and access to the public.

#### *JLUS Informational Brochures*

Three informational brochures / fact sheets, called “JLUS Updates”, were developed and distributed to the MC, TC and the public during the JLUS process. These informational JLUS Updates were also made available via e-mail, the project website, and at the public meetings. The first Update

described the purpose, goals, and objectives of the JLUS program and the methods used to provide input into the process. The second Update provided an overview of the strategy types that may be considered when addressing compatibility issues. The final Update was developed after the Final JLUS Report was approved in order to provide a summary of the Hampden-NSA Mechanicsburg JLUS process.

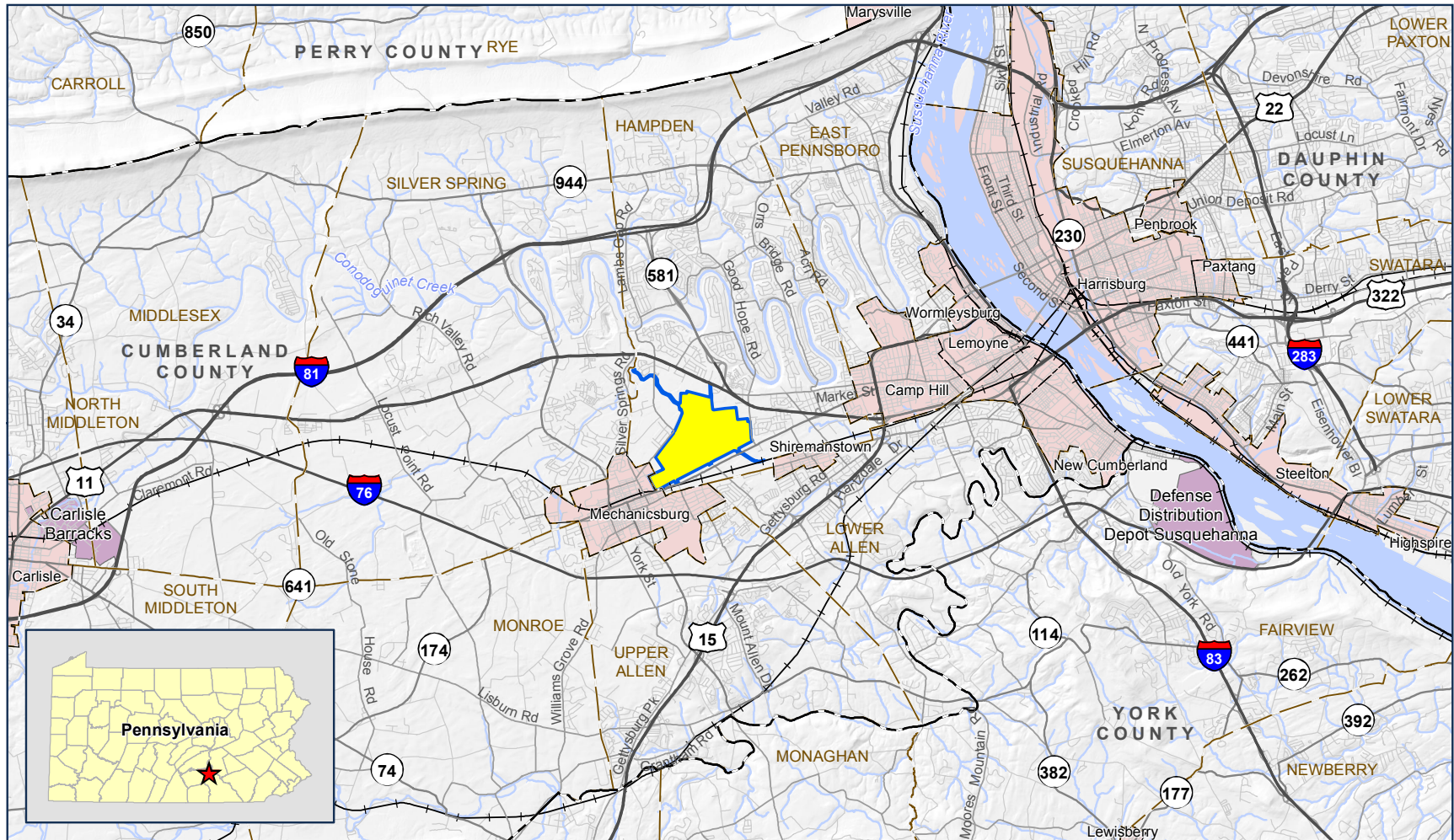
#### *Media Outreach*

Press releases and public service announcements were provided to enable timely and accurate dissemination of JLUS-related information from the JLUS Project Manager to the general public. This increased awareness of the project as well as helped with attendance and participation at public meetings.

## 1.5. JLUS Study Area

The Hampden-NSA Mechanicsburg JLUS Study Area was specifically designed to include all land near the installation where land uses may impact military operations or the surrounding communities. The municipalities that fall within the Study Area are Cumberland County, Hampden Township, and the Borough of Mechanicsburg. Figure 2 shows the Study Area.

# HAMPDEN-NSA MECHANICSBURG JOINT LAND USE STUDY



## Legend

<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> NSA Mechanicsburg	<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> County	<span style="border-bottom: 2px solid black; display: inline-block; width: 15px;"></span> Interstate / US Route	<span style="border-bottom: 1px solid black; display: inline-block; width: 15px;"></span> Railroad
<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Other Military Installation	<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Township	<span style="border-bottom: 1px solid black; display: inline-block; width: 15px;"></span> State Highway	<span style="color: blue;">~~~~~</span> Stream / River
	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> City / Borough	<span style="border-bottom: 1px solid black; display: inline-block; width: 15px;"></span> Major Road	<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Water Body
		<span style="border-bottom: 1px dashed black; display: inline-block; width: 15px;"></span> Local Road	



0 1/2 1 2 Miles

Source: PASDA, 2017. USGS, 2016. US Census TIGER, 2015.

## HAMPDEN-NSA MECHANICSBURG JOINT LAND USE STUDY Hampden – NSA Mechanicsburg JLUS Study Area | Figure 2



## 2.1. Introduction

This section provides information about the partner communities surrounding Naval Support Activity (NSA) Mechanicsburg and the relationship between these civilian and military areas within the Joint Land Use Study (JLUS) Study Area. Capturing and describing certain characteristics of the participating JLUS communities helps define a baseline context from which informed decisions can be made when assessing compatibility strategies. The goal is to provide information that enables stakeholders to gain an understanding of population and development trends that have the potential to affect operations and the future of NSA Mechanicsburg. These insights, along with other factors, will foster coherent, informed planning policies about future development and economic growth goals before compatibility issues arise.

## 2.2. Study Area Growth Trends

The following section profiles population growth, housing, median home values, and economic growth trends in study area jurisdictions. These trends reflect the type of growth that has occurred in the region and indicates the type of development that is likely to occur in the future. This data thus provides valuable insight into potential incompatibilities between NSA Mechanicsburg and the surrounding communities.

### Population Trends and Projections

The population data presented is based on information obtained from the U.S. Census Bureau. Population projections show the overall population

trends in specific areas. This trend information assists policymakers in making informed decisions about future planning and infrastructure investments. Table 1 shows population counts in study area jurisdictions and the percentage of population increase or decrease from 2000 to 2010.

**Table 1 Study Area Population from 2000 to 2010 and 2015**

Jurisdiction	2000	2010	2015 (Estimate)	2000- 2010 Change
<b>Pennsylvania</b>	<b>12,281,054</b>	<b>12,702,379</b>	<b>12,779,559</b>	<b>4%</b>
Cumberland County	213,674	235,406	241,427	13%
Hampden Township	24,135	28,044	28,619	19%
Borough Mechanicsburg	9,042	8,981	8,984	<-1%

Source: US Census Bureau,  
[https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml#](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#).

The population is growing rapidly in the JLUS study area, with double digit growth in Cumberland County and the Hampden Township. The area is one of the fastest growing regions in the Commonwealth of Pennsylvania, although the population of the Borough of Mechanicsburg has declined slightly since 2010.

The JLUS study area population growth projections are shown in Table 2-2. The projections indicate the growth rate in the region will increase through



2040, with the population in Hampden Township expected to increase by 24%. Both Cumberland County (19%) and Hampden Township (24%) are projected to grow faster than the Commonwealth of Pennsylvania (11%), while the Borough of Mechanicsburg is projected to grow at a lower rate (8%) during the same period.

The rapid population growth in the region brings many potential economic benefits, but also challenges for transportation and land development.

**Table 2 Area Population Projections for 2020 to 2040**

Jurisdiction	2010 Population	2020 Projection	2030 Projection	2040 Projection	Percent- age of Change from 2010 to 2040
<b>Pennsylvania</b>	<b>12,702,379</b>	<b>13,230,170</b>	<b>13,759,594</b>	<b>14,132,588</b>	<b>11%</b>
Cumberland County	235,406	251,836	268,063	280,505	19%
Hampden Township	28,044	30,478	32,908	34,793	24%
Borough of Mechanicsburg	8,981	9,235	9,485	9,677	8%

Sources: TCRPC Regional Planning Commission, <http://www.tcrpc-pa.org/censustools/>; Center for Rural Pennsylvania, [http://www.rural.palegislature.us/demographics\\_population\\_projections.html](http://www.rural.palegislature.us/demographics_population_projections.html).

## Economic Growth Trends

The JLUS study area is within a three-hour drive of Washington DC, Baltimore, New York City, Philadelphia, and Pittsburgh. This proximity to major East Coast markets and regional seaports, along with access to

multiple air, rail, and highway systems provides easy access to essential resources and transportation networks.

The economy in the JLUS study area is diverse and robust:

- Approximately 43% of Cumberland County is zoned for agricultural use and supports approximately 1,400 working farms that cover more than 150,000 acres.
- The County is in the top 10 of Pennsylvania counties for the value of its agriculture products, with around \$210 Million in agricultural sales in 2014.
- Healthcare is a strong employer in the region and the second largest employer in the study area, accounting for about 10% of total employment.
- There are approximately 100 mid to large manufacturers located in Cumberland County that employ 6% of the total workforce.
- The immediate region includes three military installations (NSA Mechanicsburg, Carlisle Barracks & U.S. Army War College and DLA Distribution Susquehanna) with over 7,000 federal employees. NSA Mechanicsburg alone provides jobs for 4,323 employees. The federal government is a major employer in the JLUS study area.
- The economic benefit of the military presence in the region can be measured in terms of direct payrolls as well as indirect and induced effects from NSA Mechanicsburg activities. NSA Mechanicsburg generates over \$667 million annually in direct / indirect labor income and nearly \$1.21 in economic output for Pennsylvania. Chapter 3 provides additional information on the economic role of NSA Mechanicsburg.

## Economic Growth and Future Land Use

The future economic vision and supporting land use in the JLUS study area are critical components for evaluating future compatibility between communities and NSA Mechanicsburg. Looking for opportunities to leverage communities' economic needs and the military mission needs may provide benefits over the long term. At a minimum, it is important to identify instances where future economic development plans and the military mission may be incompatible so that positive steps can be taken to minimize any resulting encroachment. The Economic Impact Report developed as an appendix to this JLUS Report provides information on and an analysis of economic goals and plans for the region. This is a critical component in assessing the future relationship with NSA Mechanicsburg and how the community envisions the installation as it moves forward.

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3.1. Introduction

This chapter provides an overview of the military profile, including a brief summary of the history and current operations at NSA Mechanicsburg.

Describing the various activities performed on the military installation provides valuable insight into the importance of the base as a strategic national defense asset. This information enables the military to make informed decisions about future development on the installation. Operations also impact the development and economic growth of the communities proximate to the installation, which could potentially impact the role of the facility.

NSA Mechanicsburg has command responsibility for detachments at Northeast Philadelphia and Naval Shipyard in Philadelphia. The analysis and strategies in this JLUS pertain only to NSA Mechanicsburg.

3.2. Naval Support Activity Mechanicsburg Economic Benefit

Located in south central Pennsylvania, NSA Mechanicsburg occupies 806 acres in Hampden Township. In addition to its strategic military value, NSA Mechanicsburg contributes to both the local and regional economies as the largest employer in Cumberland County.

Installation assets are valued in excess of \$1 billion. The economic impact of NSA Mechanicsburg in the Commonwealth of Pennsylvania includes:

- Annual direct labor income of approximately \$476 million.
- Annual indirect and induced labor income of approximately \$240 million.
- Total economic output of approximately \$1.21 billion.

Table 3 provides an additional breakdown of direct, indirect and induced economic impacts. Direct impacts are the employment and spending associated with tenants at NSA Mechanicsburg, while indirect impacts are generated by the supply chain requirements and linkages of the activity being analyzed. Induced economic impacts derive from the spending patterns of NSA Mechanicsburg employees and service members.

Table 3 NSA Mechanicsburg Economic Impact Details

Activity	Labor	Output
Direct Impacts to Pennsylvania	\$467.0M	\$647.6M
Indirect Impacts to Pennsylvania	\$60.1M	\$157.8M
Induced Impacts to Pennsylvania	\$140.0M	\$401.7M
Totals	\$667.3M	\$1.21B

Source: Pennsylvania Military Impacts, NSAM, University of Pittsburgh Center for Social and Urban Research, June 2018



### 3.3. Naval Support Activity Mechanicsburg Installation and Setting

The installation is comprised of 150 buildings with approximately 7.9 million square feet of occupied space. Approximately 33% of the base is impervious surface, including developed storage facilities and paved areas. The storage facilities are for the long-term warehousing of equipment and materials that are received and later distributed in accordance with Navy mission requirements.

There is a small family community on the east edge of the base that includes 31 privatized housing units for officers and enlisted families. In addition, the base has basic services such as shopping, health services, banking, etc. A green space area for recreational activities is adjacent to the housing area. The installation land use consists of six primary activities:

- Warehousing
- Administrative
- Housing
- Morale, Welfare, and Recreation
- Fire/Emergency Services
- Public Works

NSA Mechanicsburg has two operational gates – the East Gate and the North Gate (serves as the Main Gate). Figure 3 provides a map of the NSA Mechanicsburg installation setting.

### 3.4. Naval Support Activity Mechanicsburg Mission Footprint / Military Influence Area

Logistics activities conducted at NSA Mechanicsburg can impact the overall quality of life in surrounding communities. Conversely, the military mission is susceptible to hazards created by certain nearby civilian activities and land use development. These hazards can impact installation activities.

A military mission footprint, also referred to as the Military Influence Area (MIA), is described as the area outside the installation boundaries in which military activities can have an impact on, or be impacted by, civilian uses. Mission profiles define the mission footprint that extends outside NSA Mechanicsburg's boundaries. The NSA Mechanicsburg Encroachment Action Plan that was prepared in 2013, identifies the NSA Mechanicsburg MIA as a 5.5-mile radius that extends outward from the Main Gate area. Figure 4 shows the NSA Mechanicsburg MIA relative to the installation and the surrounding communities. An important aspect of the MIA is its role as a guide for establishing close coordination and communication with local jurisdictions and planning organizations that fall within it.

An example of how NSA Mechanicsburg affects areas off base largely pertains to traffic congestion. Traffic congestion is a regional issue in the JLUS study area, and installation activities and mission operations can exacerbate this problem.



## Legend

- |                              |                   |                |                       |          |
|------------------------------|-------------------|----------------|-----------------------|----------|
| ★ Gate                       | NSA Mechanicsburg | County         | Interstate / US Route | Railroad |
| Orange Polygon Housing       |                   | Township       | State Highway         |          |
| White Polygon Other Building |                   | City / Borough | Major Road            |          |
|                              |                   |                | Local Road            |          |

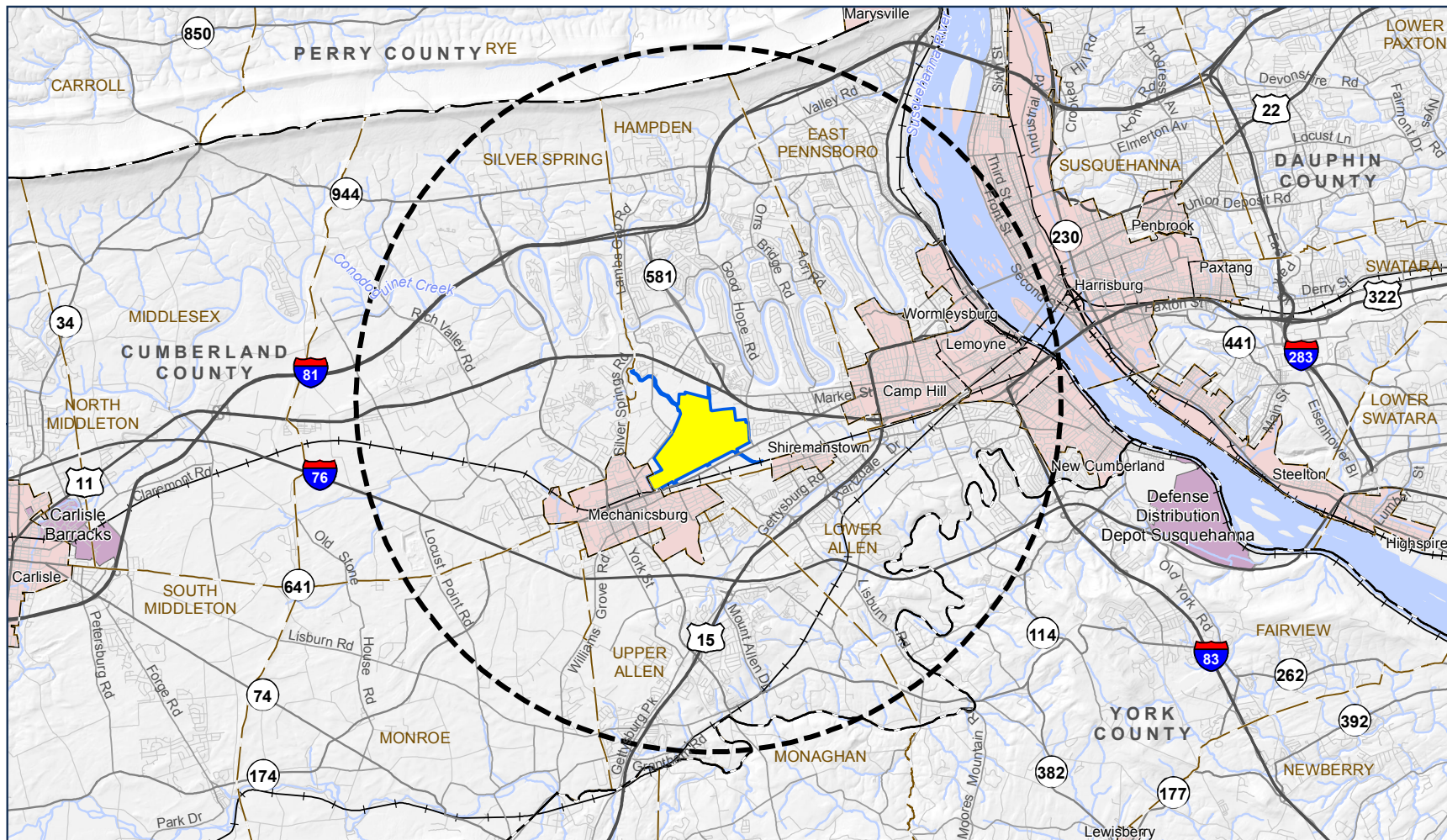


0 1/4 1/2 Miles

Source: NSA Mechanicsburg, 2017. PASDA, 2017. USGS, 2016. US Census TIGER, 2015.



# HAMPDEN-NSA MECHANICSBURG JOINT LAND USE STUDY



## Legend

- |                             |                   |                |                       |                |
|-----------------------------|-------------------|----------------|-----------------------|----------------|
| Mechanicsburg MIA           | NSA Mechanicsburg | County         | Interstate / US Route | Railroad       |
| Other Military Installation |                   | Township       | State Highway         | Stream / River |
|                             |                   | City / Borough | Major Road            | Water Body     |
|                             |                   |                | Local Road            |                |



0 1/2 1 2 Miles

Source: PASDA, 2017. USGS, 2016. US Census TIGER, 2015.

*There are a number of existing compatibility tools available to jurisdictions and the military that are either designed to address compatibility directly or indirectly through the topics they cover.*

*This chapter provides an overview of existing compatibility tools (plans and programs) that are currently utilized to evaluate and address compatibility issues in the Hampden-NSA Mechanicsburg Joint Land Use Study (JLUS) Area. Three types of planning tools are evaluated; permanent, semi-permanent, and conditional.*

*Permanent planning tools include acquisition programs, either fee simple purchase of property or the purchase of development rights. Semi-permanent tools include regulations and policies such as zoning ordinances, comprehensive plans, or adopted legislation. Conditional tools include memorandums of agreement (MOA), inter-governmental agreements (IGA), and other policy documents that can be modified.*

*Tools are organized by topics (e.g. water resources, transportation, etc.) and then level of government (Federal, State, Local). Key regulations, plans and programs that have been prepared and or adopted at all levels of government are identified and discussed in this chapter.*

## 4.1. Water Resources

Water resources include potable water, wastewater and stormwater. Management of these items is crucial to maintain adequate water supplies to communities and the base for potable water, ensure proper discharge of wastewater and manage storm water runoff into other water resources such as rivers and streams in the JLUS Study Area. The Environmental Protection Agency (EPA), Pennsylvania Department of Environmental Protection (PADEP), and Hampden Township have all implemented laws and established regulations associated with water resource management.

### Clean Water Act

The Federal Clean Water Act (CWA) governs the management of water resources and addresses the control and monitoring of water pollution in the U.S. The CWA establishes the goals of eliminating the release of toxic substances and other sources of water pollution to ensure that surface waters meet high quality standards. In doing so, the CWA authorizes local governments to prevent the contamination of nearshore, underground, and surface water sources. All the agencies are required to comply with the CWA including NSA Mechanicsburg, local governments and community service districts.

### Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the primary federal law that ensures the quality of drinking water in the United States. SDWA authorizes the EPA to establish national health-based drinking water standards to protect against both naturally-occurring and man-made water contaminants. SDWA



applies to every public water system in the U.S. and requires all operators to comply with the primary standards.

### **National Pollutant Discharge Elimination System**

Per the CWA, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into U.S. waters. Point sources are discrete conveyances such as pipes or man-made ditches. According to the law, individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

- NSA Mechanicsburg has a NPDES Permit for the installation stormwater system (MS4),
- The installation also has NPDES permit for industrial facilities,
- Hampden Township has an Individual NPDES Permit for the Township stormwater system (MS4), and
- Borough of Mechanicsburg has an individual NPDES Permit for the Borough stormwater system (MS4).

### **Pennsylvania Stormwater Management Act**

The Act requires each county to prepare and adopt a storm water management plan for each watershed located in the county as designated by the department, in consultation with the municipalities located within each watershed, and shall periodically review and revise such plan at least every five years. The purpose of the Act is to:

- Encourage planning and management of storm water runoff in each watershed;
- Authorize a comprehensive program of storm water management designated to preserve and restore the flood carrying capacity of Commonwealth streams; and
- Encourage local administration and management of storm water consistent with the Commonwealth's duty as trustee of natural resources.

### **Hampden Township Stormwater Management Ordinance**

The Hampden Township Stormwater Management Ordinance is codified in Chapter 22, Appendix A of the Township Code. The purpose of this Ordinance is to promote health, safety, and welfare within Hampden Township and its watershed by minimizing the harms and maximizing the benefits of a comprehensive stormwater management program:

- Meet legal water quality requirements under state law;
- Preserve the natural drainage systems as much as possible;
- Manage stormwater runoff close to the source;
- Provide procedures and performance standards for stormwater planning and management;
- Maintain groundwater recharge to prevent degradation of surface and groundwater quality;
- Prevent scour and erosion of stream banks and streambeds;
- Provide proper operation and maintenance of all permanent Stormwater Management (SWM) Best Management Practices (BMPs) that are implemented within the Municipality;

- Provide standards to meet NPDES permit requirements; and
- Meet general water quality and soil disturbance goals.

### **Borough of Mechanicsburg Stormwater Ordinance**

The Borough of Mechanicsburg Stormwater Ordinance is codified in Chapter 26, Part 1 of the Borough Code. The purpose of this Ordinance is to promote health, safety, and welfare within Borough of Mechanicsburg and its watershed by minimizing the harms and maximizing the benefits of a comprehensive stormwater management program.

### **Cumberland County Stormwater Management Plan**

The 2010 Cumberland County Stormwater Management Plan was developed in compliance with the Pennsylvania Stormwater Management Act of 1978 (Act 167) and in accordance with Pennsylvania DEP guidance. The Plan requires each municipality in Cumberland County to develop and implement ordinances necessary to regulate development within the County consistent with the County Stormwater Management Plan.

### **NSA Mechanicsburg Stormwater Management Plan**

The 2014 Stormwater Management Plan, was developed in compliance with the Pennsylvania Stormwater Management Act of 1978 and EPA Clean Water Act. The plan follows 6 established protective stormwater control measures required by EPA for MS4 permit holders. These are:

- Public education and outreach for stormwater protection awareness;
- Public participation and involvement;
- Illicit discharge detection and elimination;
- Construction site runoff control;

- Post construction runoff control; and
- Pollution prevention/good housekeeping.

Also included in this plan is management and inspection of Best Management Practices (BMPs) for stormwater. The Navy has invested over \$4 million to construct bio retention areas, rain gardens, infiltration trenches, vegetated swales, detention ponds and roof disconnect- planter boxes across the installation.

### **NSA Mechanicsburg Stormwater Pollution Prevention Plan**

The Navy's 2014 Stormwater Pollution Prevention Plan (SWPPP), establishes housekeeping and policy for various operational organizations on the installation. Pollution prevention examples include street sweeping, minimizing outdoor storage, and operational assurance to eliminate potential pollution opportunities. The Navy inspects 100% of its outfalls annually.

### **NSA Mechanicsburg Best Management Opportunity Assessment**

The Navy's BMP Opportunity Assessment plan studied the installation for best places to install BMPs that could be constructed to filter and infiltrate stormwater runoff prior to discharge. The opportunity assessment helped the Navy to be protective and meet stormwater total maximum daily load goals established by the Chesapeake Bay Executive Order.

### **NSA Mechanicsburg Chesapeake Bay Pollution Reduction Plan**

The 2014 Chesapeake Bay Pollutant Reduction plan presented planned projects and goals to improve and promote stormwater quality to Pennsylvania Dept of Environmental Protection.

## 4.2. Transportation

### PA On Track Long Range Transportation Plan

The 2016 Long Range Transportation Plan is a collection of smaller projects collectively titled PA On Track. These individual plans were developed with the cooperation of multiple, state, regional and local government agencies, including input from stakeholders and the general public. Through the plan development process, the following vision for the future of transportation in the state was developed: *“Deliver a quality transportation system to support the economy and lifestyles of current and future Pennsylvanians.”*.

PA On Track is organized around four goal areas that are supported by smaller objectives and metrics. The four goal areas are:

- System Preservation
- Safety
- Personal & Freight Mobility
- Stewardship

### PA On Track Comprehensive Freight Movement Plan

The 2016 Comprehensive Freight Movement Plan was developed alongside the Long Range Transportation Plan. The Plan identifies trends and issues concerning the transportation of freight through trucking, rail, aviation, ports and waterways. Specifically, the CFMP is intended to:

- Identify strategies, policies, and locations to improve freight access, interconnectivity, and mobility on Pennsylvania’s multimodal transportation system, with the goal of improving its competitive position by attracting, retaining, and expanding industries and jobs.

- Help guide the state’s investment decisions regarding the infrastructure that supports freight movements.

### Harrisburg Area Transportation Study

The 2013 study focused on congestion management processes and is an ongoing effort that identifies congested locations, determines the causes of congestion, prioritizes the most congested segments, and develops transportation strategies to reduce traffic congestion and increase regional mobility. The following are the objectives for dealing with traffic congestion:

- Maintain all transportation facilities so they operate safely at acceptable levels of service.
- Reduce single occupancy vehicle (SOV) commutes.
- Expand timely and reliable access to employment centers, educational opportunities, services and other basic needs.
- Provide physical and operational improvements to enhance goods movement.

### 2040 HATS Regional Transportation Plan

The 2040 HATS Regional Transportation Plan documents the status of transportation projects and programs, identify long-term needs and recommend transportation programs and projects to meet those needs. This long-range plan sets a framework and priorities for the distribution of federal transportation funds within the region, including Cumberland County, based on regional transportation goals and objectives developed as part of the plan. The goals of the Plan are:



- Provide an efficient, seamless and reliable transportation system.
- Improve the performance and operation of our transportation system for all modes.
- Expand transportation choices.
- Improve quality of life, promote human health and provide a safe experience for all users.
- Reduce environmental impacts.
- Encourage livable communities and efficient land use.
- Efficiently utilize existing transportation funds and pursue other funding opportunities for transportation system improvements.

### 4.3. Air Quality

#### Federal Clean Air Act

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources to control air pollution. Under the CAA, the U.S. Environmental Protection Agency (EPA) established limits on six criteria pollutants through the National Ambient Air Quality Standards (NAAQS). To protect public health and public welfare, the CAA also gives EPA the authority to limit emissions of air pollutants from sources like chemical plants, utilities, and steel mills. Individual states or tribes may have stronger air pollution laws, but they may not have weaker pollution limits than those set by EPA. Under the law, states are required to develop State Implementation Plans (SIPs) that outline how each state will control air pollution under the CAA.

#### Pennsylvania Air Quality Control Act

The Pennsylvania Department of Environmental Protection administers the policies established by the CAA and the EPA relative to air quality in the JLUS Study Area. Authority for the Pennsylvania air quality program is codified in the Pennsylvania Air Quality Control Act. The Commonwealth of Pennsylvania submits a state implementation plan (SIP) that documents how attainment and / or maintenance of the NAAQS will be achieved. Cumberland County is part of the Harrisburg / Lebanon / Carlisle air quality area. Regions that are non-attainment for primary pollutants may have to enact certain measures to bring the area back into attainment with air quality standards. Currently Cumberland County is attainment for all NAAQS with the exception of a maintenance designation for Particulate Matter 2.5. If the attainment status of the region were to change this could restrict the level with which NSA Mechanicsburg and other businesses in the County could perform certain operations.

The operations at the NSA Mechanicsburg do not generate large quantities of emissions. The Navy has converted nearly all boilers and heat sources to dual fuel operations which has reduced emissions by half in the last 10 years.

### 4.4. Biological and Cultural Resources

#### Endangered Species Act

The Endangered Species Act (ESA) established a program for the conservation of threatened and endangered (T&E) plants and animals and their habitats. The US Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) are the lead implementing agencies of the ESA. The ESA requires federal agencies, in consultation with the USFWS and / or the NOAA Fisheries Service, to ensure that actions they

“authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species.” The law also prohibits any action that causes a taking of any listed species of endangered plant, fish, or wildlife. ESA provides a platform for the protection of critical habitat and species that may be at risk of extinction. There are presently no endangered or threatened species in the JLUS Study Area.

### **National Historic Preservation Act**

The National Historic Preservation Act (NHPA) of 1966 requires federal agencies to consider the effects of a proposed project on properties listed in, or eligible for listing in, the National Register of Historic Places. Because no specific action is being proposed as part of this planning process, the review of cultural resources is focused on the identification of existing resources and not potential effects that would result from a specific proposed action.

### **Pennsylvania Historical and Museum Commission**

The Pennsylvania Historical and Museum Commission (PHMC) oversees cultural resources in the state. The commission was created in 1945 and is responsible for the collection, conservation, and interpretation of Pennsylvania’s historic heritage. They achieve this through the Pennsylvania State Archives, State Museum of Pennsylvania, the Pennsylvania Trails of History, Pennsylvania State Historic Preservation Office, and the Bureau of Management Services.

### **Mechanicsburg Historic Preservation Codified Ordinance**

Chapter 10A of the Borough of Mechanicsburg Codified Ordinance addresses historical and cultural preservation of community assets. The ordinance creates a Historic District within the Borough and establishes the

Historical Architectural Review Board. Among others, the Historic District is intended to:

- To promote, protect, enhance, perpetuate, and preserve the Historic District for the educational, cultural, economic and general welfare of the public through the preservation, protection and regulation of buildings and structures, of historic and/or architectural interest or importance within the Borough of Mechanicsburg.
- To preserve and protect the cultural, historical and architectural assets and resources of Mechanicsburg for which the citizens and officials have determined to be of local, state or national, historical and/or architectural significance.

The Historical Architectural Review Board is responsible for giving recommendations to the Council regarding the advisability of issuing any certificate of appropriateness as it relates to historic or cultural resources.

### **NSA Mechanicsburg Integrated Cultural Resource Management Plan**

The installation’s Integrated Cultural Resource Management Plan (ICRMP) was last updated in 2016. In 2000, the Navy engaged in a comprehensive base wide consultation with the State Historic Preservation Office. The outcome of this consultation was NSA Mechanicsburg is not considered a historic property.

## 4.5. Noise

### Noise Control Act of 1972

The Noise Control Act of 1972 determined that noise not adequately controlled has the potential of endangering the public health and welfare. It states that all Americans are entitled to an environment free from noise that can jeopardize their general health and quality of life. Along with state, local, and territorial governments, actions from the federal government were needed to ensure that the objectives of the Act were met.

Concurrently, many military installations were experiencing the impacts from encroaching urban development locating adjacent to their boundaries and the resulting complaints regarding noise from military flight operations. The DOD responded by establishing the Installation Compatible Use Zone program (now AICUZ program).

The Noise Control Act and AICUZ program are important because encroaching development and increased population near military installations often creates compatibility issues. As communities grow, it is important that the military installation, developers, and the affected communities work together to mitigate the issue of noise and develop ways to coexist compatibly.

## 4.6. Land Use

### Federal Land Policy and Management Act of 1976

The Federal Land Policy and Management Act (FLPMA) established the authority for public agencies that possess public lands to be managed and planned according to national and local interests. The law prescribes that public lands that have been identified for development shall uphold and protect scientific, scenic, historical, ecological, environmental, and other

values that are unique to specific geographies. This law provides the impetus for the various resource management plans that have been developed and prepared for public agencies (e.g., Bureau of Land Management).

### Readiness and Environmental Protection Integration

To implement the authority provided by the DOD Conservation Partnering Initiative, the DOD established the Readiness Environmental Protection Integration (REPI). This initiative enables DOD to work with state and local governments, NGOs, and willing landowners to limit encroachment and incompatible land use.

REPI funds are used to support a variety of DOD partnerships that promote compatible land use. By relieving encroachment pressures, the military can test and train in a more effective and efficient manner. By preserving the land surrounding military installations, habitats for plant and animal species are conserved and protected.

The REPI website, [www.repi.mil](http://www.repi.mil), has a wide variety of additional resources that can be used by military installations, local governments, and other entities to collaborate on potential REPI partnerships. These include:

- Collaborative Land Use Planning: A Guide for Military Installations and Local Governments
- Commander's Guide to Community Involvement
- Commander's Guide to Renewable Energy
- Commander's Guide to Understanding and Supporting Working Forests



- Working to Preserve Farm, Forest and Ranch Lands: A Guide for Military Installations
- Working with Conservation Districts: A Guide for Military Installations
- Working with Land Trusts: A Guide for Military Installations and Land Trusts
- Working with Local Governments: A Practical Guide for Installations
- Working with Regional Councils: A Guide for Installations
- Working with State Legislators: A Guide for Military Installations and State Legislators
- Collaborative Land Use Planning: A Guide for Military Installations and Local Governments

### **Department of Defense Conservation Partnering Initiative**

In 2003, Congress amended Title 10 U.S.C. Sections 2684a and 2692a (P.L. 107-314), the National Defense Authorization Act, to add authority for DOD to partner with other federal agencies, states, local governments, and conservation based non-governmental organizations (NGOs) to set aside lands near military bases for conservation purposes and to prevent incompatible development from encroaching on, and interfering with, military missions. This law provides an additional tool to support smart growth, conservation, and environmental stewardship for on and off military installations.

### **NSA Mechanicsburg Master Plan**

Department of Defense (DoD) Instruction 4165.70 (Real Property Management) establishes the requirement for installation master plans and that master plans be updated every five years. Installation Master Planning,

Unified Facilities Criteria (UFC 2-100-01, 15 May 2012) provides the minimum DoD requirements for master planning efforts and products.

The 2014 NSA Mechanicsburg Master Plan addresses regional land and facility requirements from a functional point-of-view and provides land use recommendations. The Master Plan is the framework for physical development which integrates mission, environment, history and quality of life” at the installation for the next 5 – 25 years. The Master Plan identifies and provides guidance on infrastructure, resources, and installation goals and objectives including:

- Establish a cycle of facility restoration, replacement, consolidation and removal to continually improve the installation’s condition while also reducing ongoing sustainment and energy costs.
- Provide opportunities to support organic growth and any potential new mission requirements within the installation, focusing on redevelopment.
- Develop the sense of a campus-like environment with complementary open spaces.
- Provide the necessary truck and rail access to facilities requiring them, while removing traffic conflicts and unnecessary infrastructure.
- Develop the installation in a sustainable manner.

### **NSA Mechanicsburg Encroachment Action Plan**

The 2013 NSA Mechanicsburg Encroachment Action Plan (EAP) was prepared in accordance of Naval Operations Instruction (OPNAVINST) 11010.40 to implement the Chief of Naval Operations (CNO) Encroachment Management Program. As defined in OPNAVINST 11010.40, encroachment

is “any non-Navy action planned or executed that inhibits, curtails, or possesses the potential to impede the performance of Navy activities.” The NSA Mechanicsburg Encroachment Action Plan (EAP) identifies encroachment issues internal to the installation. Encroachment issues that are due to community activities outside the installation are also identified in this report. A total of 14 factors were assessed in the EAP and a total of 24 issues were identified for both NSA Mechanicsburg and the Philadelphia sites, 8 of which applied specifically to NSA Mechanicsburg.

## 4.7. Local Jurisdictions – Land Use

### Hampden Township Comprehensive Plan

The 2015 Hampden Township Comprehensive Plan was developed under the authority of the Pennsylvania Municipalities Planning Code and is the policy guide that is used in determining the appropriate physical development and character of the city. The Comprehensive Plan includes the following goals:

- To promote the coordinated distribution of land uses throughout the Township;
- To promote the protection and conservation of environmentally sensitive areas;
- To promote high quality residential development of sufficient supply and mix of housing types to meet needs of current and future residents;
- To provide and community transportation system which allows unhindered circulation from the region and throughout the community, meeting the needs of people, business and industry;

- Continue to provide adequate public facilities, services and utilities to meet the needs of all current and future residents; and
- Encourage and promote energy conservation measures such as van pools and park and rides.

The Hampden Township Comprehensive Plan does not substantially address compatibility with the military at NSA Mechanicsburg.

### Borough of Mechanicsburg Comprehensive Plan

Mechanicsburg’s 2007 Comprehensive Plan, developed under the authority of the Pennsylvania Municipalities Planning Code, is a planning and policy guide for implementing future community decisions and projects. The goals of the Plan include:

- Foster the provision of diverse housing opportunities that complement and/or enhance existing neighborhood character as well as encourage home ownership and long-term residency.
- Leverage the Borough's location in the region, changing socio-economics and demographics, architectural character and established historic Downtown to strengthen, expand and create sustainable business and community activities.
- Promote revitalization efforts, new growth and educational opportunities that encourage collaboration and respect the Borough's cultural, historical and social integrity.
- Provide an efficient, informative and interconnected multi-modal network for pedestrians, cyclists, vehicles and mass transit to maximize safety and minimize congestion.

- Optimize and coordinate planning and fiscal resources to continue the delivery of high-quality and cost-effective Borough services.
- Embrace and enhance the community's natural resources as ecological, recreational and civic amenities for local and regional users.
- Pursue short-term planning and policy opportunities in context of their long-term potential.
- Foster opportunities for pursuing additional multi-municipal cooperative efforts.

The Borough of Mechanicsburg Comprehensive Plan does not substantially address compatibility with the military at NSA Mechanicsburg.

### **Cumberland County Comprehensive Plan**

The 2017 Cumberland County Comprehensive Plan, developed under the authority of the Pennsylvania Municipalities Planning Code, is the official policy guide for influencing the location, type, and extent of future development. It establishes the basis for the County's decision-making and review process on zoning matters, subdivision and land development, land uses, public facilities, and housing needs. The Comprehensive Plan includes the following goals:

- Establish compatible land use patterns responsive to the needs of residents;
- Preserve and enhance the natural, scenic and environmentally sensitive features of the community;
- Provide and sufficient supply of mixed housing types within the financial reach of all citizens;

- Establish a stable, healthy and balanced economic base compatible with population growth;
- Establish a safe, convenient and balanced transportation network that adequately addresses existing and future land uses; and
- Provide a complete and adequate system of community facilities and services that meets the needs of the residents and establishments.

## **4.8. Local Jurisdictions – Zoning & Subdivision**

The zoning ordinance (also referred to as a zoning or development code) is used to regulate the types of land use within a jurisdiction. The zoning ordinance is the principal tool used to implement the comprehensive plan. While the comprehensive plan provides broad policy direction on land use, the zoning ordinance provides the specific rules under which land can be developed and used. This includes standards for building setbacks, height restrictions, lot coverage, and design requirements. Adoption of the zoning ordinance, zoning changes, or amendments requires review at a public hearing.

The subdivision ordinance is used to guide the division of a tract of land into two or more lots, building sites, or other divisions for the purposes of development. The ordinance sets standards for the division of a tract including provisions for rights-of-way widths, lot sizes, stormwater, sanitary sewage disposal, and water supply.

### **Zoning Ordinance**

The Hampden Township Zoning Ordinance is in Chapter 27 of the Township Code and provides a legal basis and framework for the future land use plan and development goals established in the Comprehensive Plan and includes



the objectives guiding future growth and improvement of existing development within the Township.

The township's Zoning Code establishes twelve zoning districts and one overlay for mixed use. A key item relative to this JLUS includes:

- The Zoning Ordinance addresses floodplain and flood prone area topics in Chapter 27 Part 4.

The Hampden Township Zoning Ordinance does not substantially address compatibility with the military at NSA Mechanicsburg.

### Subdivision Ordinance

In Pennsylvania, the subdivision of land is the authority of the County or incorporated jurisdiction. As such, Cumberland County has subdivision authority over Hampden Township and the township itself has no adopted subdivision ordinance. However, Hampden Township does still require an application for the subdivision of land.

## **Borough of Mechanicsburg**

### Zoning Ordinance

The Borough of Mechanicsburg Zoning Ordinance is in Chapter 27 of the Borough Code and provides the regulations that implement the policies and guidance established in the Borough's Comprehensive Plan. The borough's Zoning Code establishes eight zoning districts and one overlay for floodplains. Some key items relative to this JLUS include:

- Stormwater topics are addressed in several locations in the Ordinance.

- Traffic congestion is addressed in the context of being a nuisance condition.

The Borough of Mechanicsburg Zoning Ordinance does not substantially address compatibility with the military at NSA Mechanicsburg.

### Subdivision and Land Development Ordinance

The Borough of Mechanicsburg Subdivision and Land Development Ordinance (SALDO) is its own standalone ordinance, separate from the Borough Code. Once a developer completes the application process, Borough Officials review the application and plan and provide comments and recommendations to the Borough Council and Planning Commission.

## **Cumberland County**

### Zoning Ordinance

In Pennsylvania, all land is considered to be within a county and a municipal jurisdiction (township, borough, or city). According to the Pennsylvania Municipalities Planning Code, county's themselves may enact, amend, and repeal zoning only when those municipalities, wholly or partly within the county, have no zoning ordinance in effect. In the event a municipality with no zoning ordinance should adopt one, the county zoning would no longer apply to the municipality.

All of the municipalities within Cumberland County have adopted a zoning ordinance into their code. As such, Cumberland County does not have a zoning ordinance.

#### **4.9. Local Jurisdictions – Building Codes**

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Building codes are ordinances / regulations controlling the design, construction process, materials, alteration, and occupancy of any structure to ensure human safety and welfare. They include both technical and functional standards for the variety of structures.

##### **Hampden Township**

The Building Code of Hampden Township is Part 1 of Chapter 5 of the Township Code. For their building code, Hampden has elected to administer and enforce the provisions of the Pennsylvania Construction Code Act, Act 45 of 1999, 35 P.S. §§7210.101-7210-1103, and its regulations. They have also adopted and incorporated by reference the Uniform Construction Code contained in 34 Pa. Code Chapters 401-405.

##### **Borough of Mechanicsburg**

The Building Code of the Borough of Mechanicsburg is Part 1 of Chapter 5 of the Borough Code. The Borough of Mechanicsburg has elected to adopt and incorporate by reference the Pennsylvania Construction Code, 35 P.S. § 7210.101, et seq., as their building code.

##### **Cumberland County**

Cumberland County does not administer a building code.

#### **4.10. Environmental Planning and Cleanup**

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##### **National Environmental Policy Act**

The National Environmental Policy Act (NEPA) of 1969 is a federal regulation that established a U.S. national policy promoting the protection and enhancement of the environment and requires federal agencies to analyze and consider the potential environmental impact of their actions. The

purpose of NEPA is to promote informed decision-making by federal agencies by making detailed information concerning significant environmental impacts available to both agency leaders and the public. All projects receiving federal funding require NEPA compliance and documentation. NEPA is applicable to all federal agencies, including the military. NEPA mandates that the military analyze the impact of its actions and operations on the environment, including surrounding civilian communities. Inherent in this analysis is an exploration of methods to reduce any adverse environmental impact.

A NEPA document can serve as a valuable planning tool for local planning officials. An Environmental Assessment (EA) or Environmental Impact Statement (EIS) can assist in the determination of potential impacts that may result from changing military actions or operations and their effect on municipal policies, plans, and programs and the surrounding community. An EA is used to determine if impacts are significant, in which case an EIS is required and a subsequent Record of Decision (ROD) is rendered. If impacts are determined to be insignificant, then a Finding of No Significant Impact (FONSI) is prepared and a subsequent Decision Record (DR) is issued. The information obtained by the EA / EIS is valuable in planning coordination and policy formation at the local government level.

The Navy reviews all projects for work on the installation in consideration of NEPA. Construction contracts cannot be awarded without a NEPA review and documentation from the Environmental Department.

## Comprehensive Environmental Response, Compensation, and Liability Act

This law was designed to assist in the clean-up of sites with hazardous contaminants in order to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

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# **COMPATIBILITY ASSESSMENT 5**

*Compatibility, in relation to military readiness, can be defined as the balance or compromise between community needs and interests and military needs and interests. The goal of compatibility planning is to promote an environment where both community and military entities communicate, coordinate, and implement mutually supportive actions that allow both to achieve their respective objectives.*

*A number of factors assist 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 installations. For this Joint Land Use Study (JLUS), 25 compatibility factors were used to identify, organize, and assess a set of key compatibility issues in the Hampden-NSA Mechanicsburg JLUS study area. These compatibility factors and issues are defined on the following pages.*

## **5.1. Compatibility Assessment**

An action undertaken by either the military or a community that minimizes, hinders, or presents an obstacle to the action of the other is characterized as a compatibility issue. Issues that arise from military and / or community actions are grouped according to the relevant compatibility factor in the list below and are discussed in subsequent sections of the chapter. For each identified issue, a compatibility assessment is provided. The assessments detail the nature and cause, or source, of the issues, as well as any

applicable tools that are currently used, or that may be used, to mitigate encroachment or to prevent future encroachment. The effectiveness of these tools is also addressed.

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

## 5.2. Methodology and Evaluation

The methodology for the Hampden-NSA Mechanicsburg JLUS consisted of a comprehensive and inclusive discovery process to identify key stakeholder issues associated with the compatibility factors. At the initial Management Committee (MC) and Technical Committee (TC) workshops and public meetings, stakeholders were asked to identify the locations and types of compatibility factors and associated issues that they thought already existed or could exist in the future. As a part of the evaluation phase, the MC, TC, and the public examined and prioritized the extent of existing and potential future compatibility issues that could impact land within or near the JLUS Study Area. Other factors and associated issues were analyzed based on available information and on the study area's similarity with other JLUS communities and their experiences.

The selection and inclusion of mitigation and avoidance strategies is directly and indirectly affected by the evaluation of issues. Issues were prioritized into four different categories with an associated timeframe to determine the timeframe for initiating strategies by the primary and partner agencies. These strategies are provided in the Chapter 6 Implementation Plan.

This chapter provides a technical background on the factors and issues discussed based on available information. The intent is to provide an adequate context for awareness, education, and development of JLUS recommendations. It is not designed, nor intended to be used as an exhaustive technical evaluation of existing or future conditions within the Study Area.

Of the 25 compatibility factors considered, 13 were determined inapplicable to this JLUS and were defined but not assessed in this chapter. Those factors include:

- Biological Resources
- Climate Consideration
- Cultural Resources
- Dust, Smoke, and Steam
- Housing Availability
- Infrastructure Extensions
- Land / Air / Sea Spaces
- Light and Glare
- Marine Environments
- Noise
- Public Trespassing
- Scarce Natural Resources
- Vibration

### Roadway Capacity (RC)

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.

As urban development expands into rural areas, roads once used primarily to provide access for agricultural uses and limited local traffic begin to function as urban major arterial roadways. These once rural roads often become the main transportation corridors for all types of traffic – from residential to commercial trucking – and can assist or impede access to military installations. As transportation systems grow and provide more

capacity, these facilities induce and encourage growth as rural areas become more accessible. The following Roadway Capacity issues were identified:

- **Roadway infrastructure concerns related to carrying capacity to meet current and future capacity and configuration demands**  
Current traffic loads from the installation and community are causing congestion.
- **Trindle Rd flooding by stormwater has caused safety concerns and traffic impediments**  
Standing water from adjacent runoff further impedes traffic.
- **Trindle Road flooding and RR bridge underpass flooding by stormwater have caused safety concerns and traffic impediments**  
Standing water from adjacent runoff further impedes traffic.
- **Trindle Road gate closure seen as source of traffic issues**  
Lack of prior coordination or justification with local communities prior to decision resulted in increased traffic and constituency complaints.
- **Traffic access pattern from Van Patten Dr. and Gateway Dr. is confusing for civilian, NSA Mechanicsburg, and commercial traffic**  
Configuration compounds feeder roads and overall traffic pattern.
- **Interchange configuration at Gateway Drive, Capital Beltway (Hwy 581), and Carlisle Pike (Route 11) is not configured for current volume of traffic servicing NSA Mechanicsburg and Hampden Township**  
Designated speeds, volume and capacity may exceed designed loads.

- **NSA Mechanicsburg commercial truck queuing / parking and waiting in Gateway Square parking lot a concern for local businesses**  
Parking maintenance, disruption to traffic patterns and safety are issues.
- **Intersection of Sporting Hill Rd and Carlisle Pike congested due to existing traffic patterns, exacerbated by NSA Mechanicsburg traffic at peak travel times (start and end of workday)**  
Issue exacerbated by NSA Mechanicsburg traffic at peak travel times (start and end of workday).

### Water Resources – Water Quality / Quantity (WQQ)

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. The effects of Stormwater drainage due to military operations and the neighboring communities is also considered.

- **There is no stormwater master plan or master planning process that incorporates NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and other areas of the immediate watershed that impact these areas**  
A tailored master plan and integrated master planning process that captures stormwater infrastructure condition, capacity, deficiencies, and needs in the immediate vicinity of the installation and nearby communities would improve overall stormwater planning in the region, eliminate gaps that exist between individual installation and jurisdiction stormwater conveyance and compliance, identify capital improvement needs and enhance communication and collaboration on this key topic.



- **Stormwater runoff from adjacent properties discharges onto NSA Mechanicsburg property**

The installation receives storm water runoff from adjacent properties, including commercial development. These discharges have the potential to impact the installation and may also result in regulatory concerns.

- **Discharges from NSA Mechanicsburg property onto adjacent off base properties**

Storm water leaving NSA Mechanicsburg has the potential to affect flooding problems in nearby jurisdictions.

- **Concern regarding installation / jurisdiction boundaries of drainage ditch also known as the “Navy Ditch”**

Current installation and jurisdiction boundaries associated with the stormwater drainage ditch on the west side of NSA Mechanicsburg may be unclear to all stakeholders.

- **Stormwater / flooding issue along East Trindle Road**

Localized flooding occurs along East Trindle Road causing traffic congestion and safety concerns.

- **Stormwater / flooding issues along Salem Church Road**

Flooding occurs along Salem Church Rd. causing traffic congestion and safety concerns.

- **Hampden Township and NSA Mechanicsburg independently manage MS-4 Permits**

Hampden and NSA Mechanicsburg have individual MS-4 permits. Both permits establish regulatory requirements for discharges into specific waterways.

- **Accurate stormwater on-flow and off-flow data for NSA Mechanicsburg and Hampden Township may be lacking**

Currently there is concern that accurate data that captures stormwater flow coming onto NSA Mechanicsburg from Hampden Township and stormwater flow discharging to Hampden Township from NSA Mechanicsburg may not be available or understood. Efforts are underway to collect this data.

- **There is no joint stormwater workgroup to work stormwater issues within the JLUS Study Area**

There is no stormwater workgroup to address specific issues and concerns related to NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and affected agencies.

### **Air Quality (AQ)**

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

- **Air Quality in Cumberland County has improved over the decades and the Counties in the region surrounding Hampden Township / NSA Mechanicsburg have also experienced positive changes. Previously “Nonattainment” for PM 2.5, Cumberland County and the surrounding counties have been re-designated to “maintenance”**

As a maintenance county, Cumberland and the others have demonstrated attainment of the standard for 2 consecutive ten-year periods. While the level of concern for AQ may be lessened as the region is improving, it will take continued diligence by Hampden

Township, NSA Mechanicsburg and other business and entities to continue making strides toward healthy AQ choices and working through site operational decisions, on vehicle handling options and its mission to maintain air quality success in the future.

### Anti-Terrorism / Force Protection (AT)

Anti-Terrorism Force Protection (AT / FP) relates to the safety of personnel, facilities, and information on an installation from outside threats. Security concerns and trespassing can present immediate compatibility concerns for installations. Due to current global conditions and recent events, military installations are required to implement more restrictive standards to address AT / FP concerns. These measures include increased security checks at installation gates and physical changes (such as new gate / entry designs). The following Anti-Terrorism / Force Protection issues were identified:

- **Lengthy access procedures at NSA Mechanicsburg entrance for Hampden Township first responders**  
Access by non-installation responders could be improved for critical response (queuing).
- **Critical Incident Response coordination / procedures could be improved for Hampden Township first responders**  
Response from the Hampden Township police and emergency services can be improved with increased communication and education on the mission of NSA Mechanicsburg , installation facilities, and configuration of the road network.
- **Potential ATFP concerns at NSA Mechanicsburg with Navy rail line**  
Configuration where rail meets boundary is a concern.

### Coordination / Communication (COM)

Communication / coordination refers to the programs and plans that promote interagency communication and coordination. Interagency communication serves the general welfare by promoting a more comprehensive planning process inclusive of all affected stakeholders. Interagency coordination also seeks to develop and include mutually beneficial policies for both communities and the military in local planning documents, such as comprehensive plans. The following Coordination / Communication issues were identified:

- **Opportunity for NSA Mechanicsburg to engage and improve mission related public relations**  
There is an opportunity for the Navy to proactively communicate to the community the positive work being accomplished on NSA Mechanicsburg.
- **NSA Mechanicsburg / tenants could participate more actively in off-base regional transportation planning**  
Current PENNDOT programs and opportunities for Federal and State funding exist for military related infrastructure construction. STRAHNET does connect NSA Mechanicsburg.
- **Local and regional planning authority's coordination with NSA Mechanicsburg is not codified by formalized agreement**  
Coordination with NSA Mechanicsburg by local and regional planning authorities is not codified by formalized agreement.
- **Need for improved coordination with NSA Mechanicsburg and local police and fire response partners**  
Limited contact / engagement with NSA Mechanicsburg and Hampden Township Police, Fire and EMS.

- **NSA Mechanicsburg and community leadership and functional area managers turnover can lead to decreased communication and coordination**

Changes in administration officials in the community government and personnel turnover in leadership / key positions on NSA Mechanicsburg can impact communication and coordination potentially leading to incompatible planning or actions.

- **Lack of clarity regarding roles and responsibilities for response and related procedures in certain instances where jurisdiction is a concern**

Response to certain off base incidents (accidents, detaining personnel, arrests, etc.) that are on Federal property but outside the fence can raise questions regarding jurisdictional issues.

- **Potential assistance for NSA Mechanicsburg current and future mission not clearly identified at State level**

Beyond importance as a national asset and local economic engine, state level advocacy does not have visibility of specific issues impacting either the mission or community development. This creates a problem for State level prioritization of needs and funding of resources (e.g. transportation issues) to mitigate incompatibility and subsequent encroachment.

- **NSA Mechanicsburg – Communication Fiber / Infrastructure Integrity**

Any on base and off base ground excavation activities (e.g. utility work, road construction, etc.) that may impact base communication fiber and integrity of other mission critical infrastructure is a major concern for NSA Mechanicsburg.

- **Stormwater issues / concerns are not being coordinated between NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and Cumberland County**

Currently stormwater run-off is impacting both NSA Mechanicsburg and local communities.

## Energy Development

Development of energy sources, including alternative energy sources (such as solar, wind, geothermal, or biofuels) could pose compatibility issues related to glare (solar energy), or vertical obstruction (wind generation). The following Energy Development issues were identified:

- **Energy Resiliency at NSA Mechanicsburg**

Energy supply availability and resiliency at NSA Mechanicsburg are critical to maintain operations in all conditions. Partnering on alternative energy sources, such as onsite renewables, can position the installation to be more resilient and reduce dependence for off-base sources. NSA Mechanicsburg has been impacted by natural gas suppliers to meet installation needs during winter months.

## Frequency Spectrum Capacity / Interference (FSC)

Frequency spectrum refers to the range of electromagnetic waves capable of carrying signals for point-to-point wireless communications. In a defined area, the frequency spectrum is limited and increasing demand for frequency bandwidth from commercial applications such as cellular phones, computer networking, GPS units, and mobile radios, is in direct competition with the capacity necessary for maintaining existing and future missions and communications on installations. The following Frequency Capacity / Interference issue was identified:



- **Police radio frequency coordination related to response between Hampden Township and NSA Mechanicsburg**

Shared frequency by first responders is essential for coordination.

## Land Use (LU)

The basis of land use planning and regulation relates to the government's role in protecting the public's health, safety, and welfare. Local jurisdictions' comprehensive plans and zoning ordinances can be the most effective tools for preventing 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 adversely impact the use of another. For instance, industrial uses are often separated from residential uses to avoid impacts from noise, odors, and lighting. The following Land Use issues were identified.

- **Concern for increased development density in the vicinity of NSA Mechanicsburg to impact military mission**

Need for consideration of military mission on development surrounding NSA Mechanicsburg, such as Admiral's Quay, and future development along South Sporting Hill Road, to facilitate compatible development.

- **Concern for increased development density in the vicinity of NSA Mechanicsburg to impact military mission**

Need for coordination of new development and development strategies to reduce potential impacts on the current and future NSA Mechanicsburg mission.

## Legislative Initiatives (LEG)

Legislative initiatives are proposed changes in relevant policies, laws, regulations or programs which could potentially have a significant impact on one or more substantive areas of concern to both the facility and to the stakeholder communities. The focus of this compatibility issue is on initiatives with general and broad implications. The following Legislative Initiative issue was identified:

- **Pennsylvania is currently establishing new limits and reporting procedures for stormwater, impacts not defined**

There is a potential that contribution from "others" may impact future permits and cause regulatory concerns for both Hampden Township, NSA Mechanicsburg and Borough of Mechanicsburg. Pollution reduction limits will be established based on the boundary of the municipality and facility. Contributions from others will not impact discharge limits but could impact facility capacities.

## Public Services (PS)

Public services concerns include the assurance that adequate services such as police, fire, emergency services, parks and recreation, and water / wastewater / stormwater infrastructure are of good quality and available for use by the installation and surrounding communities as they develop. The supply and demand of these public services in the event of emergency situations is also a concern. The following Public Services issues were identified:

- **Not all First Responders have formal Mutual Aid or other agreements**  
Hampden Township, Borough of Mechanicsburg and NSA Mechanicsburg do not all have Mutual Aid Agreements to codify relationships between Fire, Police, EMS.
- **Hampden Township Police, Fire and EMS find NSA Mechanicsburg access difficult**  
Access by First Responders could be improved during normal business hours (pass and ID process).

### **Safety Zones (SA)**

Safety zones are areas in which development should be more restrictive regarding use and concentrations of people due to the higher risks to public safety. Issues to consider include aircraft accident potential zones.

Military installations often engage in activities or contain facilities that, due to public safety concerns, require special consideration by local jurisdictions when evaluating compatibility. It is important to regulate land use near military installations to minimize risk from potential mishaps and to reduce hazards. The following Safety issues were identified:

- **Access to NSA Mechanicsburg North Gate has congestion that delays entrance to the installation and causes congestion in Hampden Township can cause emergency response delay**  
Personnel access, visitor, and Truck queuing and access from Carlisle Pike (11) and Capital Beltway (Hwy 581).
- **There is a public perception safety concern with the Railroad Bridge that passes over East Trindle Road**  
There are concerns regarding the safety and maintenance of the bridge that crosses over East Trindle Road, south of the installation.

### **Vertical Obstructions (VO)**

Vertical obstructions are created by buildings, trees, structures, or other features that may encroach into the navigable airspace or impede line-of-sight radar signals used by the military. These obstructions can be a safety hazard to both the public and military personnel and potentially impact military readiness.

Vertical obstructions can compromise the value of low-level flight training by limiting the areas where such training can occur. These obstructions can include a range of items from man-made, such as telephone poles, utility transmission towers, and radio antennas, to natural, such as tall trees and land features. Vertical obstructions can also interfere with radar transmissions, compromising the integrity of data transmission between the transmitter and receiver. Though most critical near the transmitter, the geographic area impacting the transmissions, or radar viewshed, can be broad depending on the distance between the transmitter and receivers. The following Vertical Obstructions issue was identified:

- **Existing Helipad on NSA Mechanicsburg criteria not mapped with respect to local planning documents**  
Helipad, operational criteria, imaginary surfaces and safety requirements need to be mapped to see if off base development impedes future use.

## 6.1. Implementation Plan

This chapter identifies and organizes the recommended courses of action (strategies) that have been developed through a collaborative effort between representatives of local jurisdictions, NSA Mechanicsburg, state and federal agencies, local organizations, the general public and other stakeholders that own or manage land or resources in the region. Because the Hampden-NSA Mechanicsburg JLUS is the result of a collaborative planning process, the strategies represent a true consensus plan; a realistic and coordinated approach to compatibility planning developed with the support of stakeholders who were involved throughout the process.

The JLUS strategies incorporate a variety of actions that promote compatible land use and resource planning. Upon implementation, existing and potential compatibility issues arising from the civilian / military interface can be removed or significantly mitigated. The recommended strategies function as the heart of the JLUS document and are the culmination of the planning process.

Each of the JLUS strategies that are included in this chapter is meant to address specific compatibility issues that are described in greater detail in Chapter 5 of the Hampden-NSA Mechanicsburg JLUS Background Report. The issues are included before each set of strategies as a point of reference to what the strategies are addressing. They correspond to the issue numbers in the Chapter 5 of the Background Report for easy reference and can be used to read additional information on the specifics of the issues themselves.

The key to the implementation of strategies is the establishment of the JLUS Implementation Coordination Committee (see Strategy COM-1A) to oversee the execution of the JLUS. Through this committee, local jurisdictions, NSA Mechanicsburg, and other stakeholders can continue their collaboration and make adjustments to strategies over time to ensure the JLUS continues to resolve key compatibility issues into the future through realistic strategies and implementation.

*It is important to note that the JLUS is not an adopted plan, but rather a recommended set of strategies which should be implemented by the JLUS participants in order to address current and potential future compatibility issues.*



## 6.2. Implementation Plan Guidelines

The key to a successful plan is balancing the different needs of all involved stakeholders. To produce a balanced plan, several guidelines were used as the basis for strategy development. These guidelines included:

- Recommended strategies must not result in a taking of property value as defined by state law.
- In some cases, the recommended strategies can only be implemented with new enabling legislation.
- In order to minimize regulation, many of the strategies are only recommended within the certain geographic area for which the issue they address occurs (e.g. within the noise contours), instead of recommended for the whole JLUS Study Area.
- Similar to other planning processes that include numerous stakeholders, the challenge is to create solutions or strategies that meet the needs of all parties. In lieu of eliminating strategies that do not have 100 percent buy-in from all stakeholders, it was determined that the solution / strategy may prompt the creation of multiple strategies that address the same issue but tailored to individual circumstances.
- Since this JLUS is meant to be a “living document” and state and federal regulations are subject to change, jurisdictions or parties should ensure there is no conflict between the strategy and any existing state or federal laws before implementing any of the suggested strategies included in the Plan.

## 6.3. How to Read the Implementation Plan

The strategies presented in Table 4 are designed to address the issues identified during preparation of the JLUS. The purpose of each strategy is to:

- Avoid future actions, operations, or approvals that would cause a compatibility issue;
- Eliminate or reduce the adversity of existing compatibility issues where possible, and
- Provide for enhanced and on-going communications and collaboration.

To make the strategies easier to use, each one is presented in a table format that lists the strategy and information on when and how that strategy will be implemented. The strategies are arranged in a table to correspond with their respective compatibility factors. The issue within each factor is presented to provide a linkage between the strategy and the condition it is intended to resolve or minimize. The following paragraphs provide an overview of how to read the information presented for each strategy.

**Issue or Strategy #.** The issue # and strategy # are unique alpha-numeric numbers that provide a reference for each specific issue and strategy. A strategy’s reference number is composed of the Compatibility Issue number and this ID (e.g., COM-1, COM-1B, etc.).

**Strategy Type.** This column indicates the type of strategy that is recommended to address the compatibility issue. The strategy types are categorized by their abbreviation:

<b>Comm</b>	Coordination / Communication
<b>Map</b>	Maps or Data
<b>MOU</b>	Memorandums of Understanding or Agreement
<b>Plans</b>	Comprehensive Plans / Neighborhood Plans / Agency Plans
<b>Prog</b>	Programs

<b>Proj</b>	Projects
<b>Stud</b>	Studies or Assessment Actions
<b>Zon</b>	Land Development Ordinance or Zoning Ordinance

**Geographic Area.** This column indicates the area where the strategy should be applied or that the strategy relates to the JLUS study area as a whole.

**Strategy.** The title that describes the strategy is in bold font. The title is followed by the complete strategy statement that describes the recommended action.

**Timeframe to Initiate.** This column describes the projected timeframe of each strategy. The timeframes indicate the year in which a strategy will be initiated or if it is an on-going action.

<b>Short Term</b>	Strategy proposed for initiation in 2019 / 2020 (within year of JLUS completion)
<b>Mid Term</b>	Strategy proposed to be initiated in 2020 / 2021 (within 1-2 years of JLUS completion)
<b>Long Term</b>	Strategy proposed to be initiated in 2022 / 2024 (3 to 5 years from JLUS completion)
<b>On-going</b>	An on-going implementation action

**Responsible Party.** At the right end of the strategy table are a series of columns, one for each jurisdiction, military entity, agency, and organization with responsibility for implementing JLUS strategies. If an entity has responsibility relative to implementing the strategy being defined, a mark is shown under their name. This mark is one of two symbols that represent participant roles. A solid square (■) indicates the identified entity is responsible for implementing the strategy. A hollow square (□) indicates that entity plays a key supporting role, but is not directly responsible for implementation. The responsible parties are identified by their name or assigned acronym in the heading at the top of each page.

**Table 4 Hampden-NSA Mechanicsburg JLUS Strategies**

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>ROADWAY CAPACITY</b>											
<b>RC-1</b>	<b>Roadway infrastructure concerns related to carrying capacity to meet current and future capacity and configuration demands.</b> <b>Current traffic loads from the installation and community are causing congestion.</b> Linked are interesting delay and congestion maps that identify the most significant issue areas. The links below illustrate detailed mapping of the GPS travel time and delay data that were compiled during some of the planning activities being undertaken at the PennDOT Central Office. (These links should be viewed using Google Chrome as some of the maps utilize functions that may not work properly in Internet Explorer.) <ul style="list-style-type: none"> <li>■ See Congestion around Hampden NSA Mech - Travel Time Ratio (locations of traffic congestion) <a href="http://s3.amazonaws.com/tmp-map/tom-tom/ttr-peak.html">http://s3.amazonaws.com/tmp-map/tom-tom/ttr-peak.html</a>.</li> <li>■ See vehicle delay locations around Hampden NSA Mech on the Travel Delay per Mile (integrates number of vehicles experiencing congestion) <a href="http://s3.amazonaws.com/tmp-map/tom-tom/ttr-delay.html">http://s3.amazonaws.com/tmp-map/tom-tom/ttr-delay.html</a>.</li> </ul> See TRUCK delay in and around Hampden NSA Mech on Truck Delay per Mile (Based on number of trucks experiencing weekday peak period congestion) <a href="http://s3.amazonaws.com/tmp-map/tom-tom/truck-delay.html">http://s3.amazonaws.com/tmp-map/tom-tom/truck-delay.html</a> .										
<b>RC-1A</b>	<b>Stud</b>	<b>Study Area</b>	<b>Commission a traffic study</b> Coordinate with MPO and State, explore Defense Access Roads (DAR) funding if mission changes (i.e. DLA regional receiving concept). Regional Projects have a higher priority for transportation (strategy), County and the HATS (Related to Strategy SA-1A).	<b>Mid Term</b>	■	□	□	□	□		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
RC-2	<b>Trindle Road flooding by stormwater has caused safety concerns and traffic impediments</b> Standing water from adjacent runoff further impedes traffic.										
RC-2A	Stud	Study Area	<b>Explore solutions for localized flooding along Trindle Road</b> Coordinate with State, who maintains Trindle Road, about solutions to recurring localized flooding and explore shared maintenance responsibilities.	Mid Term	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
RC-3	<b>Trindle Road flooding and RR bridge underpass flooding by stormwater have caused safety concerns and traffic impediments</b> Standing water from adjacent runoff further impedes traffic.										
RC-3A	Stud	Study Area	<b>Explore solutions for localized flooding along Trindle Road</b> Coordinate with State, who maintains Trindle Road, about solutions to recurring localized flooding and explore shared maintenance responsibilities.	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
RC-4	<b>Trindle Road gate closure seen as source of traffic issues</b> Lack of prior coordination or justification with local communities prior to decision resulted in increased traffic and constituency complaints.										
RC-4A	Stud	Study Area	<b>Explore P4 opportunities for gate improvements</b> EUL and shared manning of gate should be investigated.	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>RC-5</b>	<b>Traffic access pattern from Van Patton Dr. and Gateway Dr. is confusing for civilian, NSA Mechanicsburg, and commercial traffic</b> Configuration compounds feeder roads and overall traffic pattern.										
RC-5A	Stud	Study Area	<b>Explore solutions for improving traffic operations and signage to provide proper advance guidance to trucks and to secure funding for implementation</b> More advanced guidance to truckers along Carlisle Pike (Route 11), particularly at the intersection with Van Patton Drive combined with operational improvements to the interchange discussed in RC-6A will allow trucks to more easily enter NSA along Van Patton Drive. Additionally, lane configurations, queueing distances and transition distances along both Van Patton Drive and Gateway Drive should be studied for improvements.	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
<b>RC-6</b>	<b>Interchange configuration at Gateway Drive, Capital Beltway (Hwy 581), and Carlisle Pike (Route 11) is not configured for current volume of traffic servicing NSA Mechanicsburg and Hampden Township</b> Designated speeds, volume and capacity may exceed designed loads.										
RC-6A	Stud	Study Area	<b>Explore funding for solutions proposed in the CLASH study for implementation</b> Short-term solutions offered in CLASH study would allow intersection to have a LOS of B during both the AM and PM peak hours in 2020. Long-term solutions offered in CLASH study would allow intersection to operate at LOS B during both AM and PM peak hours in 2030.	Mid Term/ Long Term	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
RC-7	NSA Mechanicsburg commercial truck queuing / parking and waiting in Gateway Square parking lot a concern for local businesses Parking maintenance, disruption to traffic patterns and safety are issues.										
RC-7A	Stud	Study Area	<p>Explore funding for intersection improvements to make truck maneuver from PA-581 off-ramp to Van Patton Drive an easier maneuver</p> <p>If trucks that need to make the left-turn onto Van Patton Drive could come to the signalized intersection at PA-581/Route 11, they could find a gap in traffic easier and then enter the left-most lane, so they can more easily make the left-turn at Van Patton Drive. Currently, the weave maneuver they must make from the channelized right-turn off of PA-581 is extremely difficult in a short-distance and makes it easier for trucks to use Gateway Drive and the Gateway Square parking lot to access Van Patton Drive.</p>	Mid Term	■	■			□		
RC-8	Intersection of Sporting Hill Road and Carlisle Pike congested due to existing traffic patterns, exacerbated by NSA Mechanicsburg traffic at peak travel times (start and end of workday) Issue exacerbated by NSA Mechanicsburg traffic at peak travel times (start and end of workday).										
RC-8A	Stud	Study Area	<p>Explore funding implementation of improvements offered in the CLASH study as well as what was included in the HATS 2040 RTP</p> <p>Improvements proposed in previous studies will improve operations to the intersection as well as along Sporting Hill Road. Investigation should also be made to adding points to regional scoring criteria if they make the military mission at NSA easier to deliver which could raise the scores of the already identified projects to get implemented sooner.</p>	Mid Term	■	□			■		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
RC-8B	Prog	NSA Mechanicsburg	<b>Consider staggering work times</b> NSA Mechanicsburg should evaluate the potential of employing staggered work hours to reduce the impact of traffic entering and exiting the installation during peak travel times.	Mid Term		■					
<b>WATER RESOURCES - WATER QUALITY / QUANTITY</b>											
WQQ-1	<b>There is no stormwater master plan or master planning process that incorporates NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and other areas of the immediate watershed that impact these areas</b> A tailored master plan and integrated master planning process that captures stormwater infrastructure condition, capacity, deficiencies, and needs in the immediate vicinity of the installation and nearby communities would improve overall stormwater planning in the region, eliminate gaps that exist between individual installation and jurisdiction stormwater conveyance and compliance, identify capital improvement needs and enhance communication and collaboration on this key topic.										
WQQ-1A	Proj	Study Area	<b>Implement stormwater capital projects</b> Use the existing Stormwater Management Workgroup to guide efforts. <i>Other Partners: OEA, PA DEP</i>	Long Term	■	■	■	■			■

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>WQQ-2</b>	<b>Stormwater runoff from adjacent properties discharges onto NSA Mechanicsburg property</b> The installation receives storm water runoff from adjacent properties, including commercial development. These discharges have the potential to impact the installation and may also result in regulatory concerns.										
<b>WQQ-2A</b>	Stud	Hampden Township; Borough of Mechanicsburg	<b>Prepare stormwater study to identify sources of stormwater from off-base locations that flow onto NSA Mechanicsburg</b> Includes data on stormwater quantities, flow rates, identification of contaminants and other pertinent data. Study should capture assessments of related impacts such as significant erosion or structural damage caused by stormwater flows. Study implementation should be coordinated with study identified in WQQ-3A. <i>Other Partners: OEA</i>	Short Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>
<b>WQQ-3</b>	<b>Discharges from NSA Mechanicsburg property onto adjacent off-base properties</b> Stormwater leaving NSA Mechanicsburg has the potential to impact nearby jurisdictions and affect flooding.										
<b>WQQ-3A</b>	Stud	NSA Mechanicsburg	<b>Prepare stormwater study</b> Prepare stormwater study to identify sources of stormwater from on-base locations that flow off NSA Mechanicsburg into the surrounding jurisdictions. Includes data on stormwater quantities, flow rates, identification of contaminants and other pertinent data. Study should capture assessments of related impacts such as significant erosion or structural damage caused by stormwater flows. Study implementation should be coordinated with study identified in WQQ-2A. <i>Other Partner: OEA</i>	Short Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
WQQ-3B	Comm	NSA Mechanicsburg	<b>Share stormwater outfall sampling data</b> NSA Mechanicsburg should share data from periodic stormwater outfall sampling with Hampden Township and Borough of Mechanicsburg to ensure any changes or irregularities are known to the jurisdictions.	Short Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
WQQ-4	<b>Concern regarding installation / jurisdiction boundaries of drainage ditch also known as the “Navy Ditch”</b> Current installation and jurisdiction boundaries associated with the stormwater ditch may be unclear to all stakeholders.										
WQQ-4A	Comm	NSA Mechanicsburg; Hampden Township	<b>Navy Ditch boundaries and stormwater discharge expectations</b> Research and communicate to all off-base stakeholders all pertinent information regarding Navy Ditch real property boundaries and Navy expectations regarding any non-Navy stormwater discharges into the drainage ditch.	Short Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
WQQ-4B	Proj	NSA Mechanicsburg; Hampden Township	<p><b>Define exact boundaries of the Navy Ditch</b></p> <p>If Navy determines additional data or effort required, plan and execute real estate / property project to establish exact boundaries of the drainage ditch (Navy Ditch). Identify all current real estate instruments (e.g. easements, deeds, etc.) in place and determine validity of same (i.e. ensure any instrument in place is valid and enforceable). Determine any addition required real estate / property actions required to meet regulatory requirements (Navy, jurisdiction, environmental, other) or required changes to existing real estate instruments. This is particularly important as it relates to CERCLA requirements for identifying the point of compliance for Site 9 and associated environmental cleanup of Site 9 on NSA Mechanicsburg. In addition, assess opportunities to improve area stormwater management by enhancing / leveraging real estate / property instruments in place or required to be put in place.</p> <p><i>Other Partner: OEA</i></p>	Mid Term		■					□

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>WQQ-5</b>	<b>Stormwater / flooding issues along East Trindle Road</b> Localized flooding occurs along East Trindle Road causing traffic congestion and safety concerns.										
WQQ-5A	Stud	NSA Mechanicsburg; near Hampden Township; near NSA Mechanicsburg South Gate	<b>Conduct stormwater technical evaluation that focuses on East Trindle Road, specifically near the NSA Mechanicsburg South Gate</b> Evaluation should include alternatives to remedy flooding on Hampden Township property including potential stormwater retention / infiltration pond on NSA Mechanicsburg property. Technical evaluation should be prepared to integrate with stormwater master plan identified in WQQ-1A. The evaluation should also include real estate / real property opportunities and consultation identified in WQQ-4B. <i>Other Partner: OEA</i>	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
WQQ-5B	Proj	NSA Mechanicsburg; near Hampden Township; near NSA Mechanicsburg South Gate	<b>Implement stormwater project alternative</b> Implement selected project alternative from WQQ-5A for mitigating stormwater flooding on East Trindle Road. <i>Other Partner: OEA</i>	Long Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
WQQ-5C	Stud	NSA Mechanicsburg; Hampden Township; near Southeast Corner of Installation	<b>Conduct Trindle Road stormwater evaluation</b> Conduct stormwater technical evaluation that focuses on East Trindle Road, specifically near where the railroad bridge passes over the roadway. Evaluation should include alternatives to remedy flooding on Hampden Township property.	Mid Term	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		
WQQ-6	<b>Stormwater / flooding issues along Salem Church Road</b> Flooding occurs along Salem Church Road causing traffic congestion and safety concerns.										
WQQ-6A	Stud	NSA Mechanicsburg; Hampden Township	<b>Conduct stormwater technical evaluation</b> Conduct stormwater technical evaluation that focuses on Salem Church Road, specifically near where the road passes over the Navy drainage ditch identified in WQQ-4. Evaluation should include alternatives to remedy flooding on Hampden Township property. Technical evaluation should be prepared to integrate with stormwater master plan identified in WQQ-1A. The evaluation should also include real estate / real property opportunities and consultation identified in WQQ-4B. <i>Other Partner: OEA</i>	Mid Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
WQQ-6B	Proj	NSA Mechanicsburg; Hampden Township	<b>Implement stormwater project alternative</b> Implement selected project alternative from WQQ-6A for mitigating stormwater flooding on Salem Church Road. <i>Other Partner: OEA</i>	Long Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
WQQ-7	<b>Hampden Township and NSA Mechanicsburg independently manage separate MS-4 Permits</b> Hampden Township and NSA Mechanicsburg have individual MS-4 permits. Both permits establish regulatory requirements including discharges into specific waterways.										
WQQ-7A	Comm	NSA Mechanicsburg; Hampden Township	NSA Mechanicsburg and Hampden Township should work with PA DEP to identify potential for separate but coordinated MS-4 permits. If feasible, the approach may provide benefits and opportunities that would not be available otherwise. Examples include: <ul style="list-style-type: none"> <li>■ Development of joint / coordinated stormwater management planning and PRPs;</li> <li>■ Sharing of stormwater pollution reduction credits where both entities benefit from an operational and / or fiscal basis;</li> <li>■ Joint assessment of stormwater problem areas where causes and impacts overlap both entities; and</li> <li>■ Implementation of joint / coordinated BMPs that reduce stormwater discharges and pollutants to impacted watersheds.</li> </ul> <i>Other Partner: PA DEP</i>	Mid Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
WQQ-8	<b>Accurate stormwater on-flow and off-flow data for NSA Mechanicsburg and Hampden Township may be lacking</b> Currently there is concern that accurate data that captures stormwater flow coming onto NSA Mechanicsburg from Hampden Township and stormwater flow discharging to Hampden Township from NSA Mechanicsburg may not be available or understood.										
WQQ-8A			For a strategy that addresses this issue see Strategy WQQ-3A.								
WQQ-9	<b>There is no joint stormwater workgroup to work stormwater issues within the JLUS Study Area</b> There is no stormwater workgroup to address specific issues and concerns related to NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and affected agencies.										
WQQ-9A	Comm	Study Area	<b>Share stormwater BMPs with nearby jurisdictions</b> NSA Mechanicsburg has taken a proactive approach to implementing stormwater BMPs on the installation. The Navy has plans for additional projects going forward. Sharing information related to the BMPs with nearby jurisdictions would be beneficial both in communicating ideas but also in helping to reduce stormwater impacts in the study area. The existing stormwater workgroup would be an appropriate forum for sharing stormwater plans, ideas and resources and allow the Navy to communicate and coordinate its efforts.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>AIR QUALITY</b>											
<b>AQ-1</b>	<b>Air Quality in Cumberland County has improved over the decades and the Counties in the region surrounding Hampden NSA Mechanicsburg have also experienced positive changes. Previously “Nonattainment” for PM 2.5, Cumberland County and the surrounding counties have been re-designated to “maintenance.”</b> As a maintenance county, Cumberland and the others have demonstrated attainment of the standard for 2 consecutive ten-year periods. While the level of concern for AQ may be lessened as the region is improving, it will take continued diligence by Hampden NSA Mechanicsburg and other business and entities to continue making strides toward healthy AQ choices and working through site operational decisions, on vehicle handling options and its mission to maintain air quality success in the future.										
<b>AQ-1A</b>	<b>Proj</b>	<b>Study Area</b>	<b>Air Quality Monitoring</b> Air quality needs should be assessed on a continual basis to prevent air quality from becoming an issue in the future. Long-term preventive measures should be identified by maintaining awareness of the different categories of pollutants.	<b>Mid Term</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>ANTI-TERRORISM / FORCE PROTECTION</b>											
<b>AT-1</b>	<b>Lengthy access procedures at NSA Mechanicsburg entrance for Hampden Township first responders</b> Access for first responders could be improved for critical response (queuing).										
<b>AT-1A</b>	<b>MOU</b>	<b>NSA Mechanicsburg</b>	<b>First Responders Access</b> Access by First Responders beyond initial response could be improved (potential for cross-installation transit).	<b>Short Term</b>	■	■	□	□			
<b>AT-2</b>	<b>Critical Incident Response coordination / procedures could be improved for Hampden Township first responders</b> Response from the Hampden Township police and emergency services can be improved with increased communication and education on the mission of NSA Mechanicsburg , installation facilities, and configuration of the road network.										
<b>AT-2A</b>	<b>Prog</b>	<b>NSA Mechanicsburg</b>	<b>Hampden Township Emergency Services are likely to be the first responders from off base in the event of any critical incident due to 911 radio monitoring and proximity</b> NSA Mechanicsburg Site Layout/mission and response plans should be shared with local emergency response personnel (fire, EMS, police) along with regularly scheduled engagement and exercises to better assist with mutual aid and critical incident responses and improve integrated response capability. <i>Other Partners: Hampden Township Fire, EMS and Police; Mechanicsburg Borough Fire, EMS and Police; Cumberland County 911 Dispatch</i>	<b>Short Term</b>	■	■	□	□			□



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
AT-3	<b>Potential ATRP concerns with Navy rail line at NSA Mechanicsburg</b> <b>The configuration of the rail line-installation boundary intersection is a concern.</b>										
AT-3A	Comm	NSA Mechanicsburg	<b>Establish a Coordinated Response Protocol</b> NSA Mechanicsburg should work with federal and state agencies, local governments and Norfolk Southern to develop standard operating procedures for recovery and response incorporating best courses of action in the event of a rail mishap or accident occurring in the vicinity of the installation. At minimum, the procedures should include: <ul style="list-style-type: none"> <li>■ Reporting protocol mishaps near the installation,</li> <li>■ Contact information for relevant stakeholders including local jurisdictions,</li> <li>■ Installation management procedures and remediation measures, and</li> <li>■ Safety measures for all relevant agencies and the public, in the event impacts extend outside the installation.</li> </ul>	Short Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>COMMUNICATION / COORDINATION</b>											
<b>COM-1</b>	<b>Opportunity for NSA Mechanicsburg to engage and improve mission related public relations</b> There is an opportunity for the Navy to proactively communicate to the community the positive work being accomplished on NSA Mechanicsburg.										
<b>COM-1A</b>	<b>Comm</b>	<b>Study Area</b>	<b>Establish a JLUS Coordination Committee to maintain efficient and effective coordination among the JLUS partners and to oversee the implementation of JLUS recommendations</b> The JLUS Coordination Committee should meet on a regular basis as agreed upon by the Committee and be responsible for establishing effective and timely means of communication for the purpose of coordinating and addressing compatibility concerns and issues. Consider committee membership from the JLUS Management Committee as well as other community partners as deemed appropriate to maintain continuity and institutional project knowledge. Consider the formation of a technical subcommittee comprising Technical Committee members to address technical aspects of the JLUS implementation.	<b>Short Term</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>COM-1B</b>	<b>Comm</b>	<b>NSA Mechanicsburg</b>	<b>Educate the public about the award-winning work remediating previous environmental issues at NSA Mechanicsburg</b> The opportunity to raise public awareness on the number, frequency, and type of recognition related to being good stewards of the environment will enlighten the general public, especially with the work to remove the installation from categorization as an EPA NPL site. (related to strategy RC-1A).	<b>Short Term</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

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<b>COM-2</b>	<b>NSA Mechanicsburg / tenants could participate more actively in off-base regional transportation planning</b> Current PENNDOT programs and opportunities for Federal and State funding exist for military related infrastructure construction. STRAHNET does connect NSA Mechanicsburg.										
<b>COM-2A</b> 	Comm	Study Area	<b>NSA Mechanicsburg engineers and tenants should participate in local transportation planning and represent their military mission needs</b> NSA Mechanicsburg engineers and tenants can assume "Ex Officio" status and formally attend Cumberland County HATS meeting to represent mission-related freight needs /issues (and tenant long range plans, like DLA Regional Recovery Center).	Short Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>COM-2B</b> 	Comm	Study Area	<b>NSA Mechanicsburg engineers and tenants should participate in regional transportation planning and represent their military mission needs</b> PENNDOT has an engagement strategy called "PENN CONNECT" which ties needs to regional traffic, repair and long term freight plans. NSA Mechanicsburg can participate in annual meetings and Freight study effort.	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>COM-3</b>	<b>Local and regional planning authority's coordination with NSA Mechanicsburg is not codified by formalized agreement</b> Coordination with NSA Mechanicsburg with local and regional planning authorities not codified by formalized agreement.										
<b>COM-3A</b>	<b>MOU</b>	<b>Study Area</b>	<b>Formalize process of coordination for NSA Mechanicsburg to participate in regional planning</b> Cumberland County should execute a Memorandum of Agreement (MOA) with NSA Mechanicsburg to provide notification of planning actions that have the potential to impact the military mission and procedures for the military to comment on any potential adverse impacts early enough in the process for any potential mitigation actions to be considered.	<b>Mid Term</b>		■	□				
<b>COM-3B</b>	<b>MOU</b>	<b>Study Area</b>	<b>Hampden Township Sewer Authority is a separate entity of local government and needs to be addressed as separate entity for NSA Mechanicsburg partnering engagement</b> NSA Mechanicsburg engineers and tenants should participate in regional Hampden Township Sewer Authority meetings and represent their military mission needs as appropriate. NSA Mechanicsburg engineers and tenants can attend meetings and take note on current developments and represent mission related incompatibility by formalizing the process describing roles and responsibilities related to coordinating on reviews and attending meetings. The Hampden Township Sewer Authority should provide proposed meeting agendas and minutes to NSA Mechanicsburg to allow the installation to determine when their attendance is required.	<b>Mid Term</b>		■				□	



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COM-3C	MOU	Study Area	<b>Formalize process of coordination for NSA Mechanicsburg to provide input on local planning actions</b> Hampden Township and the Borough of Mechanicsburg should execute Memorandums of Agreement (MOAs) with NSA Mechanicsburg to provide notification of planning actions that have the potential to impact the military mission and procedures for the military to comment on any potential adverse impacts early enough in the process for any potential mitigation actions to be considered. The MOA should cover Comprehensive Plan changes, rezonings, development applications, subdivisions, and capital improvement projects. Roles, responsibilities, points of contact and review times should be defined in the MOAs. Consideration should be given to inviting / including NSA Mechanicsburg in pre-application conferences and providing proposed meeting agendas and staff recommendations to NSA Mechanicsburg to consider whether their attendance is required.	Short Term	■	■		■			
COM-4	<b>NSA Mechanicsburg and local police partners relationship / interoperability could be improved</b> Limited contact / engagement with NSA Mechanicsburg and Hampden Township Police, Fire and EMS.										
COM-4A	MOU	Study Area	<b>NSA Mechanicsburg security forces Fire and EMS personnel and Hampden Township police, Fire and EMS should participate in regular engagements</b> Each entity has different levels of regular engagement. NSA Mechanicsburg and Hampden Township should exercise via regular engagements based on best practices among the three public service organizations to increase familiarity and capacity / capability when real world critical incidents require interagency communication / cooperation.	Short Term	□	■					

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>COM-5</b>	<b>NSA Mechanicsburg and community leadership and functional area managers turnover can lead to decreased communication and coordination</b> Changes in administration officials in the community government and personnel turnover in leadership / key positions on NSA Mechanicsburg can impact communication and coordination potentially leading to incompatible planning or actions.										
<b>COM-5A</b>	<b>MOU</b>	<b>Study Area</b>	<b>Develop a communication list for NSA Mechanicsburg / local communities and update annually</b> Ensure Commanding Officer and CPLO are primary NSA Mechanicsburg POCs for official actions. Identify equivalents for local jurisdictions. Establish key personnel listing for working level coordination for both base and communities to increase “knowledge” of related equivalent personnel on and off the installation. This plan should be coordinated annually to ensure changes in positions are captured.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<b>COM-6</b>	<b>Lack of clarity regarding roles and responsibilities for response and related procedures in certain instances where jurisdiction is a concern</b> Response to certain off base incidents (accidents, detaining personnel, arrests, etc.) that are on Federal property but outside the fence can raise questions regarding jurisdictional issues.										
<b>COM-6A</b>	<b>MOU</b>	<b>NSA Mechanicsburg</b>	<b>Update existing Memoranda of Understanding</b> Investigate and as necessary, update existing agreements to identify the specific role and function of NSA Mechanicsburg, Borough of Mechanicsburg, and Hampden Township and as it pertains to certain situations where there may be a lack of clarity on law enforcement jurisdiction.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>COM-7</b>	<b>Potential assistance for NSA Mechanicsburg current and future mission not clearly identified at State level</b> Beyond importance as a national asset and local economic engine, state level advocacy does not have visibility of specific issues impacting either the mission or community development. This creates a problem for State level prioritization of needs and funding of resources (e.g. transportation issues) to mitigate incompatibility and subsequent encroachment.										
<b>COM-7A</b>	<b>COM</b>	<b>State</b>	<b>Increase public knowledge of NSA Mechanicsburg mission</b> To perpetually enhance support, cooperation, and expansion opportunities, NSA Mechanicsburg should prepare a “state of the installation” briefing that includes strategic goals, operational changes, and proposed projects that may impact the greater community. These briefings should be distributed to Study Area county commissions, local communities, and appropriate state agencies.	<b>Mid Term</b>		■					
<b>COM-8</b>	<b>NSA Mechanicsburg – Communication Fiber / Infrastructure Integrity</b> Any on base and off base ground excavation activities (e.g. utility work, road construction, etc.) that may impact base communication fiber and integrity of other mission critical infrastructure is a major concern for NSA Mechanicsburg.										
<b>COM-8A</b>	<b>COM</b>	<b>NSA Mechanicsburg</b>	<b>Coordinate with the community regarding communication fiber / infrastructure integrity</b> Educate the appropriate party on the location of the communication fiber infrastructure outside of the installation and encourage them to adopt communication protocols prior to implementing projects that could affect the infrastructure integrity.	<b>On-going</b>	□	□	■	■	■	■	

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
COM-9	<b>Stormwater issues / concerns are not being coordinated between NSA Mechanicsburg, Hampden Township, Borough of Mechanicsburg and Cumberland County</b> Currently stormwater run-off is impacting both NSA Mechanicsburg and local communities.										
			For a strategy that addresses this issue see Strategy WQQ-9A.								
ENERGY DEVELOPMENT											
ED-1	<b>Energy Resiliency at NSA Mechanicsburg</b> Energy availability and resiliency of the supply at NSA Mechanicsburg are critical to maintain operations in all conditions. Partnering on alternative energy sources, such as onsite renewables, can position the installation to be more resilient and reduce dependence for off-base sources. NSA Mechanicsburg has been impacted by natural gas suppliers to meet installation needs during winter months.										
ED-1A	Plans	Study Area	<b>Explore alternative energy sources and research opportunities</b> Explore alternative energy sources and research P4 opportunity with Navy and developers to develop energy security on the installation (i.e. geothermal and solar). <i>Other Partners: UGI Utilities, PA Department of Community and Economic Development</i>	Mid Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
ED-1B	Stud	State-wide and Study Area	<b>Explore alternative energy economic development sources</b> Potential to explore alternative energy economic development sources (explore OEA Alternative Energy Siting Federal Funding Opportunity for State-wide GIS tool to promote compatible alternative energy development for State of PA with JLUS Policy Committee serving as a stakeholder to explore renewable opportunities and draw economic development). Research P4 opportunity with Navy and developers. <i>Other Partners: UGI Utilities, PA Department of Community and Economic Development</i>	Mid Term	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>FREQUENCY SPECTRUM CAPACITY / INTERFERENCE</b>											
<b>FSC-1</b>	<b>Police radio frequency coordination related to response between Hampden Township and NSA Mechanicsburg</b> Shared frequency by first responders is essential for coordination.										
<b>FSC-1A</b>	<b>MOU</b>	<b>Study Area</b>	<b>Coordinate radio frequency use for response coordination</b> Hampden Township and NSA Mechanicsburg should coordinate the use of Hampden Township Police frequency for response communication.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
<b>LAND USE</b>											
<b>LU-1</b>	<b>Concern for development adjacent to NSA Mechanicsburg to impact military mission</b> Need for consideration of military mission on development surrounding NSA Mechanicsburg, such as Admiral's Quay, and future development along South Sporting Hill Road, to facilitate compatible development.										
<b>LU-1A</b>	<b>Comm</b>	<b>Hampden Township</b>	<b>Coordinate with NSA Mechanicsburg on Zoning Changes</b> Before finalizing any decision on zoning changes for property adjacent to NSA Mechanicsburg, Hampden Township should request NSA Mechanicsburg input on any actions that may affect AT / FP concerns. Efforts should be made to reach a consensus on what opportunities support desired economic development while minimizing any impacts on the installation.	<b>Short Term</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

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LU-1B	Proj	NSA Mechanicsburg	<b>Install Landscape Buffers</b> If in accordance with AT / FP requirements, consider installing landscaping along the perimeter fence line to prevent line-of-sight views into the installation in areas designated for higher density development.	Mid Term		■					
LU-1C	Comm	Study Area	<b>NSA Mechanicsburg and Hampden Township should communicate on code enforcement concerns</b> NSA Mechanicsburg should communicate their concerns regarding code enforcement near base property. For example, it has been noted that some properties near the NSA Mechanicsburg property, such as the Admiral Quay's development have allowed debris and materials to build up along the base fence line. Hampden Township should take input from base to determine if enforcement or other action is required to eliminate the problem.	Short Term	■	■					
LU-2	<b>Concern for increased development density in the vicinity of NSA Mechanicsburg to impact military mission</b> Need for coordination of new development and development strategies to reduce potential impacts on the current and future NSA Mechanicsburg mission.										
LU-2A	COM	Study Area	<b>NSA Mechanicsburg Representation</b> Consider inviting an NSA Mechanicsburg representative to Planning Commission and Zoning Board meetings, as appropriate, to provide technical input and answer questions relative to development applications, rezoning applications and preparation of long-range plans that may impact NSA Mechanicsburg.	Short Term	■	□	■	■			

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>LEGISLATIVE INITIATIVES</b>											
<b>LEG-1</b>	<b>Pennsylvania is currently establishing new limits and reporting procedures for stormwater, impacts not defined</b> There is a potential that contribution from “others” may impact future permits and cause regulatory concerns for both Hampden Township, NSA Mechanicsburg and Borough of Mechanicsburg. Pollution reduction limits will be established based on the boundary of the municipality and facility. Contributions from others will not impact discharge limits but could impact facility capacities.										
<b>LEG-1A</b>	<b>Proj</b>	<b>Study Area</b>	<b>Jurisdictions and NSA Mechanicsburg to work closely with county and state stormwater management authorities as the Phase III WIP is finalized and required BMPs to reduce stormwater pollutant runoff are developed thru 2019.</b>  By staying abreast of EPA, PADEP and Cumberland County stormwater planning as it relates to WIP III development, the local jurisdictions and installation/Navy may have opportunities to provide input and comments to the final plan and affect the outcome. At a minimum they will be aware of potential WIP requirements/BMPs to reduce pollutant runoff that will be ultimately included in their respective MS4 permits.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<b>PUBLIC SERVICES</b>											
<b>PS-1</b>	<b>Not all First Responders have formal Mutual Aid or other agreements</b> Hampden Township, Borough of Mechanicsburg and NSA Mechanicsburg do not all have Mutual Aid Agreements to codify relationships between Fire, Police, EMS.										
<b>PS-1A</b>	<b>MOU</b>	<b>Study Area</b>	<b>Annually review Mutual Aid Aide agreements between Fire, Police, EMS</b>  Codify relationship to not only address incident response but annual exercises, joint training and recurring engagement.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>			

Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>PS-2</b>	<b>Hampden Township Police, Fire and EMS find NSA Mechanicsburg access difficult</b> Access by First Responders could be improved during normal business hours (pass and ID process).										
<b>PS-2A</b>	<b>MOU</b>	<b>Study Area</b>	<b>Explore formal credentialing processes</b> Explore adopting a formal credentialing process similar to DoD installations that vet non-DoD personnel renewable access (for example DoDEA access at other installations).	<b>Mid Term</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
<b>SAFETY ZONES</b>											
<b>SA-1</b>	<b>Access to NSA Mechanicsburg North Gate has congestion that delays entrance to the installation and causes congestion in Hampden Township can cause emergency response delay</b> Personnel access, visitor, and Truck queuing and access from Carlisle Pike (11) and Capital Beltway (Hwy 581).										
<b>SA-1A</b>	<b>Stud</b>	<b>Study Area</b>	<b>Implement study recommendations</b> Identify traffic studies that have previously been completed regarding congestion at NSA Mechanicsburg's North Gate. Identify funding sources to implement study recommendations.	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>SA-1B</b>	<b>Stud</b>	<b>Study Area</b>	<b>Implement prior study recommendations / commission a new traffic study</b> If no studies have been completed/identified as a result of SA-1A, research light timing/sequencing, potential to add a queuing lane on Sporting Hill Road (related to strategy RC-1A).	<b>Mid Term</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		



Issue / Strategy ID #	Strategy Type	Geographic Area	Strategy	Timeframe to Initiate	Hampden Township	NSA Mechanicsburg	Cumberland County	Borough of Mechanicsburg	PENNDOT	Hampden Township Sewer Authority	Other
<b>SA-2</b>	<b>Access to NSA Mechanicsburg East Gate has congestion that delays entrance to the installation and causes congestion in Hampden Township can cause emergency response delay</b> Access at NSA Mechanicsburg East Gate and Sporting Hill Road has experienced queuing and traffic backs up.										
<b>SA-2A</b>	Comm	Study Area	<b>Communicate maintenance protocol with appropriate parties</b> NSA Mechanicsburg rigorously keeps up with safety certification requirements, take the opportunity to communicate it to the public as safe infrastructure to travel under (related to strategy COM-1B).	Short Term	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
<b>VERTICAL OBSTRUCTIONS</b>											
<b>VO-1</b>	<b>Existing Helipad on NSA Mechanicsburg criteria not mapped with respect to local planning documents</b> Helipad, operational criteria, imaginary surfaces and safety requirements need to be mapped to see if off base development impede future use.										
<b>VO-1A</b>	Proj	NSA Mechanicsburg	<b>Develop 3D vertical obstructions model</b> Develop a 3-dimensional GIS-based model that can accurately portray the height limitations on a given property to preserve the airspace around the NSA Mechanicsburg helipad. This model could be used early in the development review process for evaluating development applications.	Mid Term		<input checked="" type="checkbox"/>					



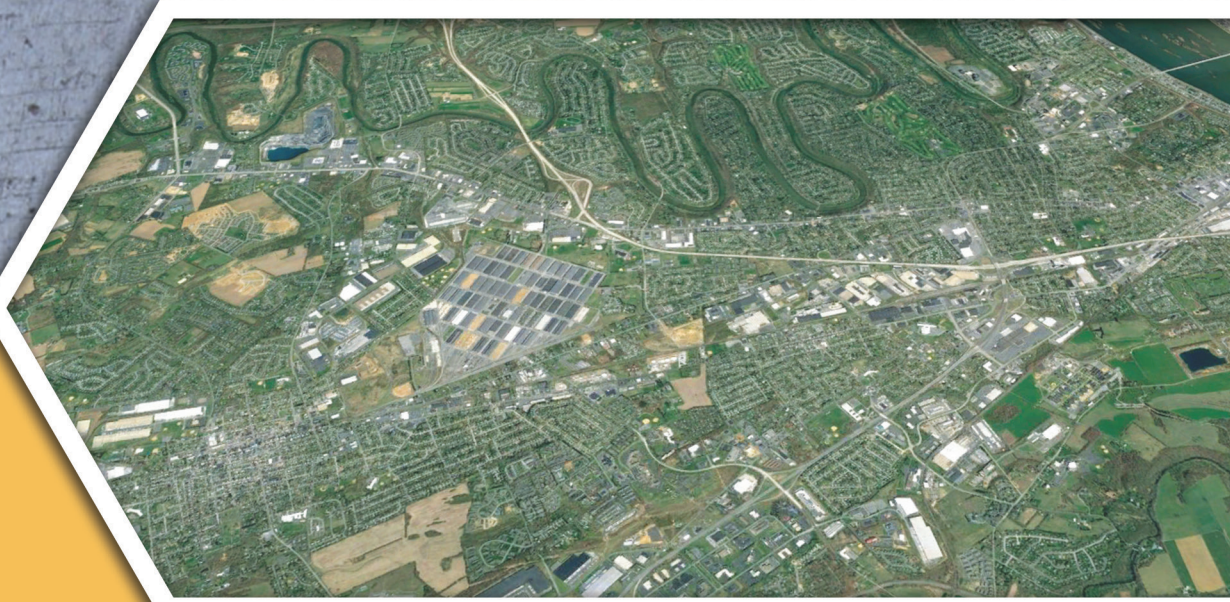


HAMPDEN-NSA MECHANICSBURG

JOINT LAND USE STUDY



# JOINT LAND USE STUDY



**Matrix**  
DESIGN GROUP

HAMPDEN-NSA MECHANICSBURG