



Youngstown ARS

Joint Land Use Study



Youngstown Air Reserve Station

Joint Land Use Study

October 2019

Prepared for
Trumbull County



Prepared by
 **Matrix**

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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 Policy Committee and Technical Committee.

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The Policy Committee (PC) 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 Policy Committee comprised the following individuals:

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Introduction

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Military installations are critical to local economies, generating thousands of jobs and millions of dollars in economic activity and tax revenue annually. In the past, incompatible development has been a factor in the loss of training operations and the restructuring of mission-critical components at installations across the country. To protect the missions of military installations and the health of the local economies that rely on them, current encroachment issues and the possibility of future issues must be addressed through collaboration and joint planning between installations, local jurisdictions, state agencies, and other stakeholders. This Joint Land Use Study (JLUS) attempts to mitigate current compatibility issues and prevent future compatibility issues and strengthen coordination between Youngstown Air Reserve Station (ARS) and local communities.

Formalized communication efforts between military installations, local community leaders, the general public, and other stakeholder entities that own or manage land or resources in the region is needed to ensure that future growth around installations is coordinated and compatible with military operations and training activities while still meeting the needs and goals of local jurisdictions.

Air Reserve Station (ARS) and local communities. Several jurisdictions participated in the JLUS effort: Trumbull County, Vienna Township, Fowler Township, and Howland Township.

What Is a Joint Land Use Study?

A JLUS is a planning tool that is developed through the collaborative efforts of a comprehensive set of stakeholders in a defined study area in order to help identify compatibility issues and mitigation strategies within and adjacent to active military installations. These stakeholders include local jurisdictions, state and federal agencies and organizations, tribal governments, property owners, businesses and business organizations, non-governmental organizations, the general public and the military.

JLUS Goal

The goal of the Youngstown ARS JLUS is to protect the viability of current and future training operations at Youngstown ARS, while simultaneously guiding community growth, sustaining the environmental and economic vitality of the region, and protecting public health, safety, and welfare.

JLUS Objectives

To achieve this goal, three objectives were identified for the JLUS process:

- **Understanding.** Convene community and military representatives to identify, confirm, and understand compatibility issues in an open forum, taking into consideration both community and military perspectives and needs. Understanding hinges on public awareness, education, and engagement organized in a cohesive outreach program.



- **Collaboration.** Encourage cooperative land use and resource planning among the military and surrounding communities so that future community growth and development are compatible / recommended with the training and operational missions at Youngstown ARS, while seeking ways to reduce operational impacts on adjacent land in the Study Area.
- **Actions.** Provide a set of mutually supported tools, activities, and procedures from which local jurisdictions, agencies, Youngstown ARS, and other stakeholders can select, prepare, approve, and use to implement appropriate recommendations developed during the JLUS process. The recommendations include measures the military can take to mitigate installation impacts on surrounding communities and approaches local governments can take to reduce community impacts on military operations. These tools will help decision makers resolve existing potential compatibility issues and prioritize projects within the annual budgeting process.

Why Prepare a Joint Land Use Study?

Collaboration and joint planning among military installations, local communities, and agencies should occur to protect the long-term viability of existing and future military missions. Working together also enhances the health of economies and industry of the communities before incompatibility becomes an issue. Recognizing the close relationship that should exist between installations and adjacent communities, the Department of Defense (DOD), Office of Economic Adjustment (OEA) implemented the JLUS program in an effort to mitigate existing and future conflicts and to enhance communication and coordination among all stakeholders. This program aims to protect property rights and control within the JLUS Study Area and at the same time protect current and future operational and training missions at Youngstown ARS.

Economic Benefit to the Region

Youngstown ARS provides a significant economic impact of over \$93 million annually to the region. People working at Youngstown ARS are part of the local communities and support local businesses and organizations through spending and volunteer activities. The station has more than 1,800 people assigned to the facility, with roughly 300 to 400 onsite daily.

JLUS Study Area

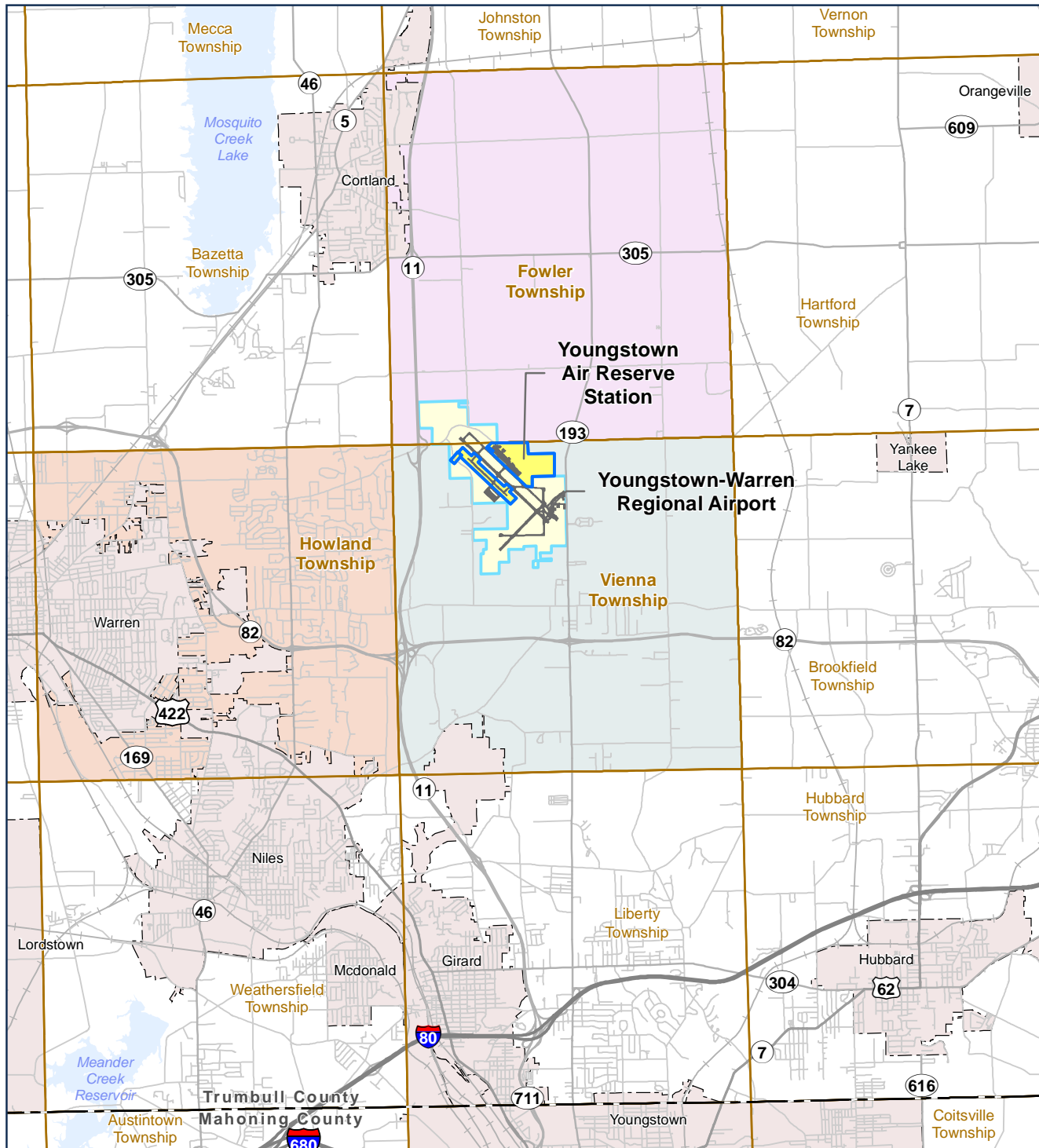
The Youngstown ARS JLUS Study Area includes all lands near the installation that may impact or be impacted by current or future military operations. Located within Trumbull County, the surrounding communities' land uses include a variety of residential, commercial, industrial, and agricultural uses. Figure 1 shows the JLUS Study Area.

Public and Stakeholder Outreach

The JLUS process is designed to create a locally relevant document that builds consensus and obtains support from the various stakeholders involved. To achieve the JLUS goal and objectives, the process included a public outreach program with a variety of participation opportunities for interested and affected parties.

Stakeholders

An early step in any planning process is to identify stakeholders and involve them early in the JLUS process to identify compatibility issues and develop integrated strategies. Stakeholders include individuals, groups, organizations, and governmental entities interested in, affected by, or affecting the outcome of the JLUS project.



Legend

- Youngstown Air Reserve Station
- Youngstown-Warren Regional Airport

- County
- Township
- Fowler Township
- Howland Township
- Vienna Township
- City

- Interstate
- US Route
- State Route
- Local Roads
- Railroad

- Waterbody
- Airfield Surface/Runway



Matrix

0 1 2 Miles

Source: Youngstown ARS, 2018. Ohio DOT, 2017. USGS, 2017. US Census TIGER, 2015. Eastgate Regional COG, 2018.

Stakeholders identified for the Youngstown ARS JLUS included, but were not limited to:

- Local jurisdictions: Trumbull County, Vienna Township, Fowler Township and Howland Township
- DOD officials and Youngstown ARS personnel
- Local, regional, state, and federal planning, regulatory, and resource management agencies
- The public (including property owners, residents, and farmers)
- Other special interest groups

Policy Committee and Technical Committee

The development of the Youngstown ARS JLUS was guided by two committees, comprising staff from local governments, Youngstown ARS, federal and state agencies, resource agencies, and other stakeholders. The two committees were the Policy Committee (PC) and the Technical Committee (TC).

JLUS Policy Committee

The PC consisted of elected officials and decision makers from participating jurisdictions, leaders from the military installation, and representatives from other interested and affected agencies and organizations. The PC was responsible for preparing and approving the study design, guiding the project as it developed, approving policy recommendations, and approving draft and final copies of JLUS documents.

JLUS Technical Committee

TC membership included representatives from local jurisdictions, agencies, property owners, and Youngstown ARS with technical expertise in one or more of the compatibility factors discussed in Chapter 5, the Compatibility Assessment. The TC identified and studied technical issues, provided feedback on report development, and assisted in the

development and evaluation of implementation strategies and tools.

The PC and TC served as representatives and liaisons for their respective stakeholder groups. The PC and TC members were charged with conveying committee activities and information to their organizations and constituencies and relaying their organization's comments and suggestions to both committees for consideration. Members of the PC were encouraged to set up meetings with their organizations and / or constituencies to facilitate this input. The responsibilities and list of participants for the JLUS sponsors, the PC, and the TC are identified in Tables 1, 2, and 3, respectively.

Table 1 JLUS Sponsor Responsibilities and Participants

Responsibilities	Participants
■ Coordination	■ Office of Economic Adjustment, DoD
■ Accountability	■ Trumbull County
■ Grant management	
■ Financial contribution	

Table 2 JLUS PC Responsibilities and Participants

Responsibilities	Participants
■ Policy direction	■ Trumbull County
■ Study oversight	■ Vienna Township
■ Monitoring	■ Fowler Township
■ Report adoption	■ Youngstown ARS
	■ Youngstown-Warren Chamber of Commerce
	■ Eastern Ohio Military Affairs Commission

Table 3 JLUS TC Responsibilities and Participants

Responsibilities	Participants
■ Identify issues	■ Trumbull County
■ Provide expertise to address technical issues	■ Vienna Township
	■ Fowler Township
	■ Howland Township
■ Evaluate and recommend implementation options to the PC	■ Mahoning County
	■ Eastgate Regional Council of Governments
■ Provide draft and final report recommendations to the PC	■ Western Reserve Port Authority
	■ Youngstown-Warren Regional Airport
	■ Eastern Ohio Military Affairs Commission
	■ Youngstown Air Reserve Base Community Council
	■ Kent State University – Trumbull Campus
	■ Youngstown State University
	■ Northeast Ohio Medical University
	■ Mercy Health
	■ Farmers Trust
	■ Youngstown ARS
	■ Camp Garfield
	■ Congressman Bill Johnson’s Office
	■ Congressman Tim Ryan’s Office
	■ Senator Brown’s Office
	■ Senator Portman’s Office
	■ Office of Economic Adjustment, DoD

Public Workshops

In addition to the PC and TC meetings, three public workshops were held during 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 received input on the identified issues and proposed strategies. Each workshop included an exercise providing a “hands on,” interactive opportunity for the public to participate in the development of the study.

Public Outreach Materials

JLUS Overview Fact Sheet

At the beginning of the JLUS project, a JLUS Overview Fact Sheet was developed to describe the JLUS program, project objectives, and overview of the 25 compatibility factors that were analyzed throughout the project, and the proposed Youngstown ARS JLUS Study Area.

Strategy Tools Brochure

The Strategy Tools Brochure was prepared for the second public workshop. JLUS strategies provide a variety of actions that local governments, military installations, agencies, and other stakeholders can take to promote compatible land use planning. The brochure also provides an overview of the strategy types that could be applied to address compatibility issues around Youngstown ARS.

Project Webpage

A project webpage was developed and maintained during the project to provide stakeholders, the public, and media representatives with access to project information. Information on the website included points of contact, project schedules, a link to sign-up for email updates, project documents / maps, public meeting information, and a link to submit comments. The project webpage address is www.yarsjlus.com.



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Community Profiles

This chapter provides information about the surrounding communities that participated in the Youngstown ARS Joint Land Use Study (JLUS). Capturing and describing certain demographic characteristics of these communities provides a baseline context from which informed decisions can be made when assessing compatibility strategies. The goal is to provide information that enables stakeholders to understand population and development trends that have the potential to affect Youngstown ARS's future. This information is intended to be considered with other factors to help decision-makers generate coherent, informed planning policies and decisions about future development and economic growth of the communities they represent before compatibility issues arise.

Study Area Growth Trends

The following section provides data on population growth, housing, median home values, and economic growth trends in the JLUS Study Area. This information helps establish the context for the JLUS and the potential for compatibility issues. The data show the rates and types of growth that have occurred and that are anticipated in the region over the next several decades. The information also points to specific locations where compatibility issues between Youngstown ARS and surrounding communities are most likely to occur.

Population Trends and Projections

Comparisons of population values through time in a given geographical area are used to identify growth or decline in an area. Population ultimately drives employment and housing growth. Table 4 shows the 2010 Census and 2017 American Community Survey (ACS) totals and percent change in populations of jurisdictions within the JLUS Study Area over time. The population changes between 2010 and 2017 indicate that the population is decreasing slightly in the JLUS Study Area while the state population is basically stable. Howland Township, Vienna Township and Trumbull County all have a three percent decrease in population from 2010 to 2017. Fowler Township has experienced a seven percent decrease in population from 2010 to 2017. Ohio had a slight increase in population growth of one percent from 2010 to 2017.

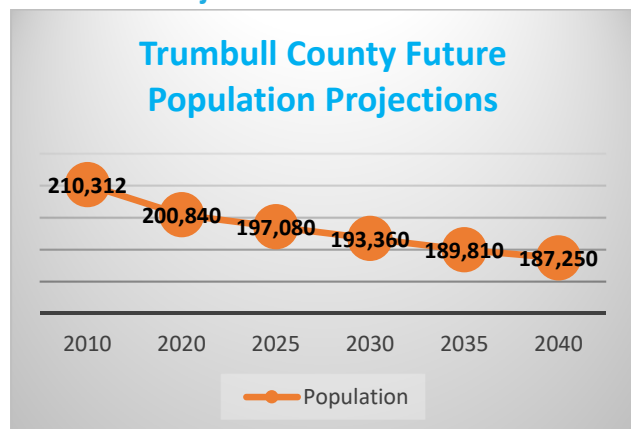
Table 4 Population Change

Jurisdiction	Population 2010	Population 2017	Percent Change 2010 – 2017
Howland Township	19,106	18,529	-3%
Fowler Township	2,595	2,403	-7%
Vienna Township	3,997	3,884	-3%
Trumbull County	210,312	203,341	-3%
Ohio	11,536,504	11,609,756	1%

Source: 2010 US Census and American Community Survey 5-year Estimates, 2017

Population projections are based on historical growth trends and anticipated changes in a given area and are used to determine future planning and infrastructure investments. Figure 2 provides the population projections for Trumbull County.

Figure 2 Trumbull County Population Projections



Source: Ohio Development Service Agency,
<https://development.ohio.gov/>

From the baseline 2010 census year out through 2040, the population of Trumbull County is projected to fall by approximately 11 percent. While data is not shown for the individual townships, it is reasonable to project similar population decreases based on current trends. Future changes in employment opportunities, other economic criteria and / or quality of life could impact the projections as presented in this Chapter.

Economic Growth Trends

The primary economic activities in the JLUS Study Area today include manufacturing, services support, and government with some agriculture.

One way to note economic growth is through changes in median household income. Table 5 shows the median household income from 2010 to 2016 for the jurisdictions in the Study Area. All jurisdictions show a positive income growth with Howland Township and Vienna Township exceeding the other jurisdictions at approximately 12 percent.

Table 5 Median Household Income: 2010-2016

Jurisdiction	Median Income 2010	Estimated Median Income 2016	Percent Change 2010 – 2016
Howland Township	\$49,651	\$55,726	12%
Fowler Township	\$47,891	\$48,623	2%
Vienna Township	\$45,595	\$50,985	12%
Trumbull County	\$42,296	\$43,811	4%
Ohio	\$47,358	\$50,674	7%

Source: American Community Survey 5-year Estimates, 2016

Table 6 shows the labor force for the JLUS Study Area jurisdictions, using U.S. Census Bureau estimates. The Bureau of Labor and Statistics derives these numbers from people who are 16 years or older in the civilian non-institutional population who worked within the sampling period. Howland Township and Fowler Township had unemployment rates of 2.1 and 3.5 percent respectively, which is less than the state average at 4.6 percent. Vienna Township had the highest unemployment rate of 9 percent while Trumbull County had a 6.9 percent unemployment rate. The county numbers indicate overall employment in the Study Area is slightly weaker than the state.

Table 6 Labor Force by Jurisdiction 2016

Jurisdiction	Labor Force	Armed Forces	Employed	Unemployed
Howland Township	57.9%	0.0%	55.8%	2.1%
Fowler Township	59.1%	0.0%	55.6%	3.5%
Vienna Township	57.5%	0.0%	52.3%	9.0%
Trumbull County	56.6%	0.1%	52.7%	6.9%
Ohio	63.3%	0.1%	58.6%	4.6%

Source: American Community Survey 5-year Estimates, 2016

Current Development Overview in the JLUS Study Area

Land uses throughout the JLUS Study Area range from dense areas in Howland Township to open areas of Fowler Township. This section discusses the setting in the immediate vicinity of Youngstown ARS.

Youngstown ARS Area

Youngstown ARS is surrounded by the Fowler Township immediately on the north and further north the City of Cortland. The Township area is rural with light residential development and with a fair amount of open / farm land use. Cortland is to the northeast on Mosquito Creek Lake. The city has more development but is primarily suburban with residential and supporting commercial services.

To the east is Brookfield Township which is rural and lightly developed with residences. There is a fair amount of open / farm lands.

The Vienna Township located immediately to the south and around the installation on the east / west sides, is also rural in nature with light residential development and open / farm lands. There are a couple mobile home parks in Vienna Township to the southeast of Youngstown ARS and the Youngstown-Warren Regional Airport.

To the west of Youngstown ARS is Howland Township which is more heavily developed with residential areas, but has open spaces such as a golf course on the southeast. Immediately to the west of Howland Township is the City of Warren, which is more heavily developed with a downtown, residential areas, commercial sectors and light industrial uses.

Youngstown-Warren Regional Airport

The Western Reserve Port Authority owns and operates the Youngstown-Warren Regional Airport. The airport is co-located with Youngstown ARS and shares its main runways with the military. Trumbull and Mahoning Counties oversee administration of the airport via an eight-member board. There are two runways at the facility, runway 14 / 32 that is a 9,003-foot long asphalt runway that is CAT I ILS capable for precision instrument landings. The other 5 / 23 runway is a 5,002-foot long asphalt runway that has less capabilities for aircraft operations. The airport has multiple taxiways and aprons to support aircraft operations. The airport also has a 24,000 square foot cargo facility designed to support a cargo hub operation. A third runway is used exclusively by Youngstown ARS for military operations. This assault runway is leased to the military and not available for airport operations.

The FAA provides all Air Traffic Control services at the airport. The airfield complies with FAA runway protection zones to ensure safe aircraft operations. Noise contours for the airport operations have been developed. Airspace around the facility is shared by the airport and Youngstown ARS.

Currently there are no commercial flights operating out of the airport. There are general aviation and charter flight activities. In addition, the T & G Flying Club operates out of the airport, offering flight instruction.

Chapter 3, Military Profile, provides additional details on the airfield and runway operations.

There are other activities located on and around the airport property, including operations associated with hydraulic fracturing for the recovery of shale oil / gas resources and injection wells for the disposal of production byproducts.

Military Profile

This chapter provides an overview of Youngstown Air Reserve Station (ARS), including the installation's history, its location within the JLUS Study Area, the economic and strategic importance of the base and an overview of the current operations conducted at Youngstown ARS and in the region.

Identifying and describing the various activities performed on the installation and in the surrounding airspace provides valuable insight into the importance of Youngstown ARS as a national strategic asset and as a part of the fabric of the surrounding communities. The purpose of providing this information is to enable stakeholders to make informed decisions about future development and economic growth within communities and institutions near Youngstown ARS that could potentially impact the viability and future role of the installation or be impacted by current or future activities at the base.

Installation Setting

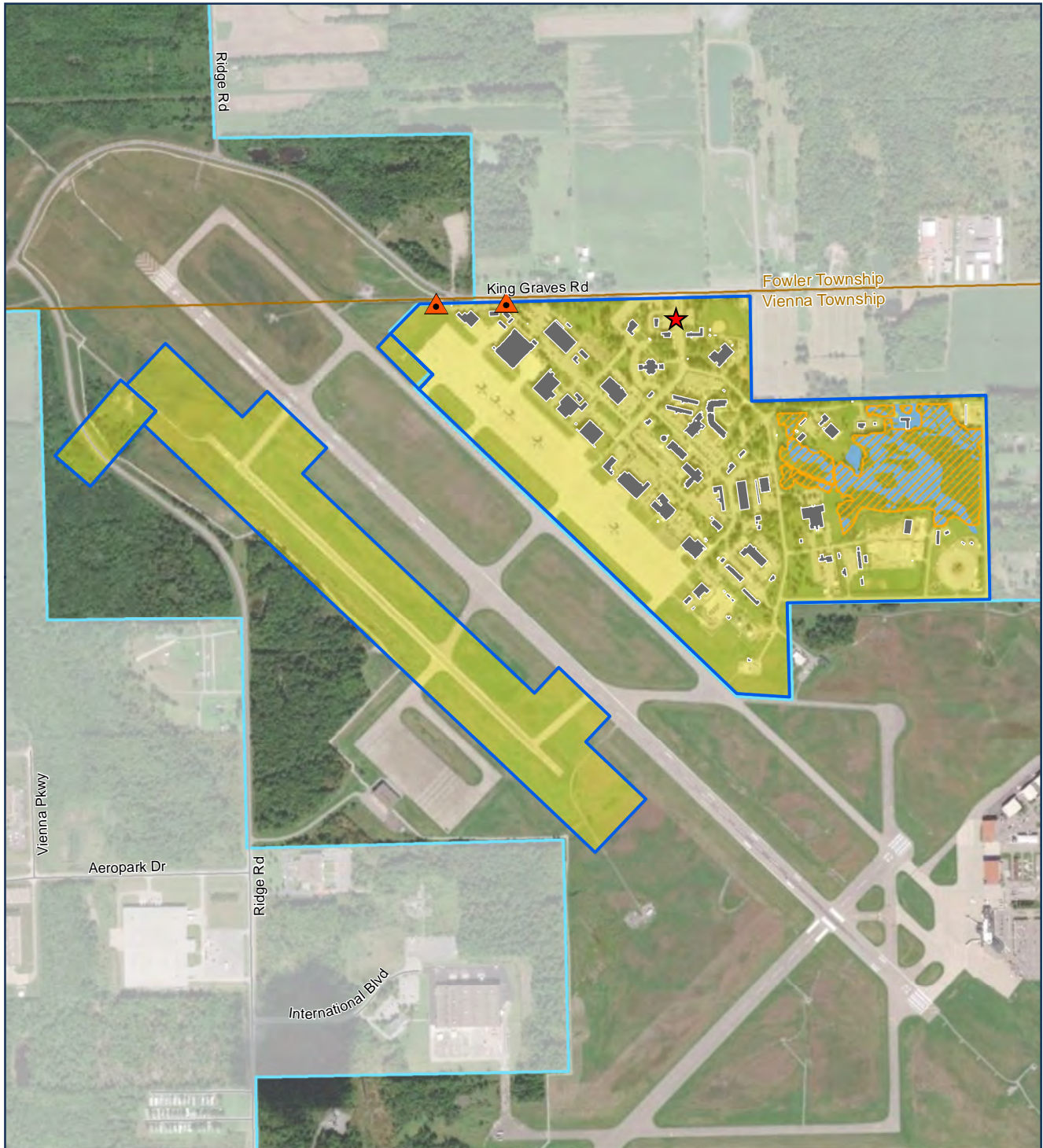
Youngstown ARS is located in Vienna Township in Trumbull County Ohio. It is nearly equidistant from the major cities of Cleveland, Ohio and Pittsburgh, Pennsylvania. Youngstown ARS is situated in a rural setting and is 11 miles north of the City of Youngstown and 10 miles east of the City of Warren. The installation includes approximately 320 acres. The cantonment area consists of 230 acres while 90 acres surround the assault landing runway (LZ). Figure 3 provides a map of the Youngstown ARS setting. For the most part the installation grounds are maintained as grass. There is a forest management area and wetlands located on the east side of the base.

Mission Operations

The 910th AW is the host command at Youngstown ARS and is supported by multiple organizations under the Wing's direct command authority. The 910th AW mission is to "provide a current, qualified mission-ready force" with a supporting vision to "provide unrivaled tactical airlift, aerial spray and agile combat support - always ready to answer our nation's call!" In wartime, the 910th AW mission is to employ the C-130 Hercules aircraft in combat tactical airlift operations. These operations include low-level infiltration into a combat environment, where aircrews can deliver personnel and materials by airdrop and air-land techniques.

Specific operations Youngstown ARS carries out in support of their mission include:

- **Tactical airlift** – airdrop delivery of personnel, equipment, and supplies to combat environments, or for humanitarian support.
- **Aerial spray** – DoD unique capability to control disease-carrying insects, pest insects, undesirable vegetation and to disperse oil spills in large bodies of water. Missions may be executed in combat areas, on DoD installations or in response to disasters / emergencies.
- **Aerial port** – prepares and recovers the airdrop loads flown by the 910th AW aircrews for training.



- ★ Main Gate
- ▲ Limited Access Gate
- Building
- ▨ Forest Management Area
- Wetlands
- Youngstown ARS
- Youngstown-Warren Regional Airport
- Township Boundary
- Local Roads



0 1,000 2,000
Feet

Source: Youngstown ARS, 2018. Ohio DOT, 2017. USGS, 2017.
US Census TIGER, 2015. Eastgate Regional COG, 2018.

- **Aeromedical training** – support the AFRC aeromedical mission through annual, joint training exercises out of Youngstown ARS and Westover ARB.
- **Air assault** – fly air assault landing training on the Youngstown ARS LZ. Training is necessary for combat delivery of supplies and services to ground-based personnel in theater.
- **Arms training** – conduct arms training in support of the installation’s readiness mission.
- **Installation ops, aircraft maintenance and wing mobility** – aircraft maintenance, personnel training, logistics, supply, and deployment processing in support of other mission areas.

The priorities of the 910th Wing are:

- Recruit, Train, Retain vested Airmen;
- Foster a culture of unrivaled excellence through empowerment, engagement, innovation, and accountability;
- Develop professional, resilient, and ready Airmen;
- Care for Airmen and their families; and
- Modernize and maintain facilities and equipment.

The 910th AW has three reporting groups and one reporting squadron.

Youngstown ARS Mission Footprint

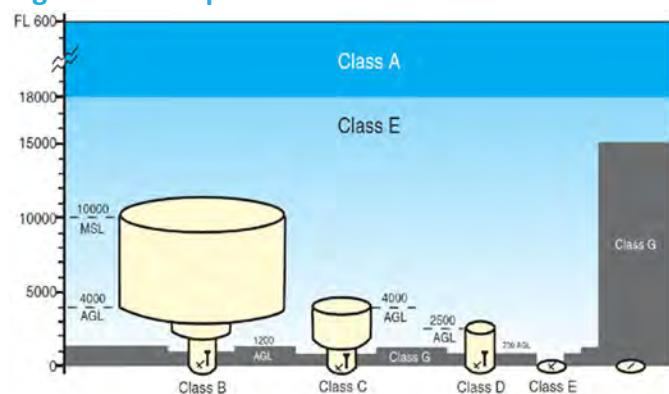
The Military Influence Area (MIA) is a planning tool to help maintain operational capability, promote awareness of military activities in surrounding communities, and establish requirements for designated areas. The MIA is generally a combination of effects from different operations or activities that when looked at in total provide a complete view of the impacted area. When combined, the individual “footprints” from specific mission operations make up the MIA. Examples of factors accounted for in developing the MIA may include noise, land development, and use of airspace.

Mission activities conducted on and around Youngstown ARS may negatively impact surrounding community areas if incompatible land uses are developed. Examples of potential mission impacts on surrounding communities include noise and vibration from overhead flights and the risk of an aircraft accident. Conversely, the military mission is susceptible to hazards and other incompatibilities created by certain types of civilian development and / or activities. These incompatibilities can include obstructions to air space or the location of noise sensitive uses in high noise zones. Understanding the overlapping spatial patterns of compatibility zones as defined by the mission footprint is essential to promote compatible and informed land use decisions.

Controlled Airspace

To help air traffic controllers and pilots work with varying traffic conditions in the sky, US airspace has been separated into five different classes of controlled airspace (A, B, C, D, and E), and one class of uncontrolled airspace (G). These are illustrated on Figure 4. The different classes have different requirements for entry, for pilot qualifications, and for radio and transponder equipment, as well as different minimum weather standards under Visual Flight Rules (VFR) weather minimums.

Figure 4 Airspace Classification



Source: *Interagency Airspace Coordination Guide, 2003, Interagency Aviation Management Council*

The airspace above the Youngstown-Warren Regional Airport and Youngstown ARS is designated by the FAA as Class D. Class D airspace is generally airspace from the surface to 2,500 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower. The configuration of each Class D airspace area is individually tailored.

In the case of Youngstown ARS, the Class D airspace is surface to 3,700 feet. Beyond the Class D airspace, the airspace surrounding the airport and Youngstown ARS is Class E airspace. This is the controlled airspace not classified as Class A, B, C, or D airspace. A large amount of the airspace over the United States is designated as Class E airspace. This provides sufficient airspace for the safe control and separation of aircraft during Instrument Flight Rules (IFR) operations. Figure 5 shows the controlled airspace classification surrounding Youngstown ARS.

Airfield Approach and Departure Flight Tracks

Flight tracks are developed to show the range of standard operations that are associated with the airfield. Flight tracks are created using information gathered from air traffic controllers, pilots, and other sources. Flight tracks are designed to avoid urban development as much as possible in order to reduce impacts and risk to the general public and commercial or general aviation activities. Safety of operations is paramount in the design of these flight tracks.

Youngstown ARS uses two runways owned by the Youngstown-Warren Regional Airport:

- Runway 14 / 32 is 9,003 feet long with an asphalt surface and is equipped with CAT I ILS capability for all weather operations.
- Runway 5 / 23 is 5,002 feet long with an asphalt surface.

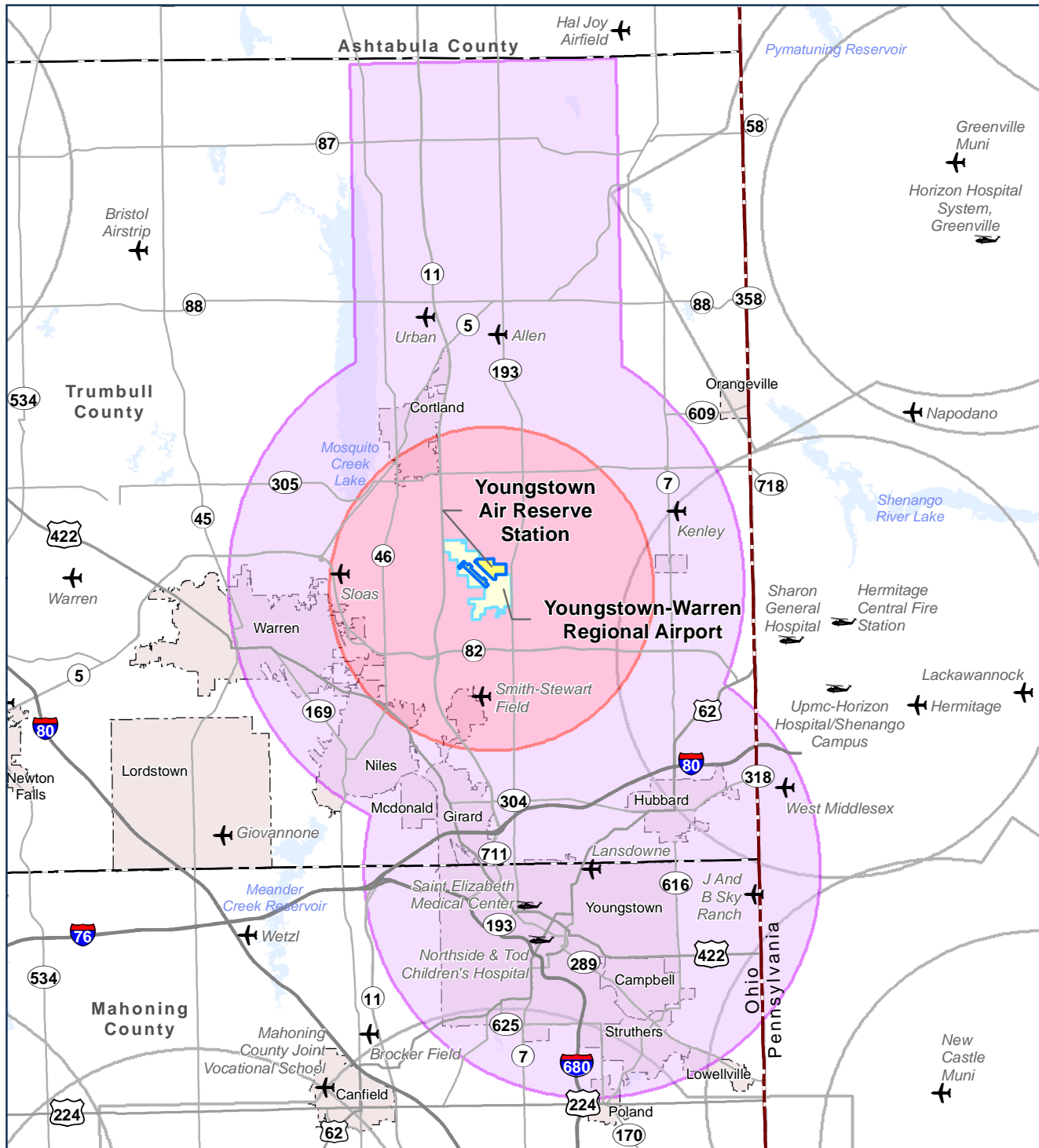
The Youngstown ARS also operates one assault landing zone runway:

- The LZ Runway 143 / 323 is 3,500 feet long with an asphalt surface and is capable of both daytime and nighttime operations.

Figure 6 illustrates the primary approach, departure and closed pattern flight tracks used by Youngstown ARS aircraft.

As outlined in the Youngstown-Warren Regional Airport 2008 Master Plan Update, the airfield has multiple flight tracks for arrivals and departures:

- Runway 14 – ten arrival tracks and eight departure tracks.
- Runway 32 – ten arrival tracks and eight departure tracks.
- Runway 5 – four arrival tracks and three departure tracks.
- Runway 23 – four arrival tracks and three departure tracks.
- Runway 143 / 322 LZ has four arrival / departure tracks.



Legend

Youngstown-Warren Regional Airport Airspace Class

- Class D, Surface to 3700ft
- Class E, 700ft to 17,999ft Airspace
- Airport/Airfield
- Helipoint

- Other Controller Class E Airspace, 700ft to 17,999ft Airspace
- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- State Border

- City
- Interstate
- US Route
- State Route

- Waterbody



Matrix

0 2 4 Miles

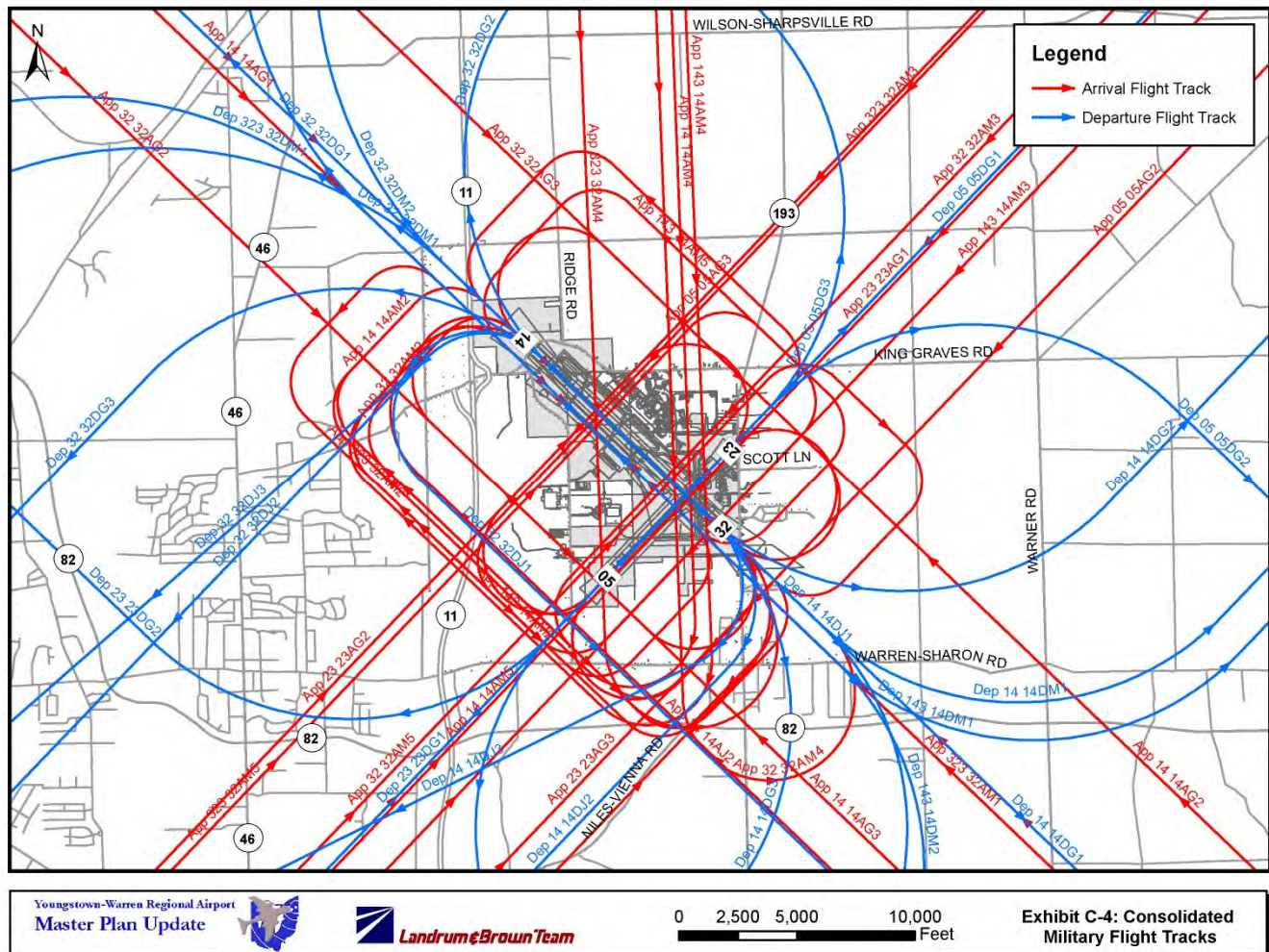
Source: Federal Aviation Administration, Aeronautical Information Services, Class Airspace, March 2018. USDOT, 2015.



Controlled Airspace Surrounding Youngstown ARS

Figure 5

Figure 6 - Youngstown ARS Flight Tracks



Source: Youngstown-Warren Regional Airport Master Plan Update, 2008

Use of the flight tracks is separated by the type of aviation operations; air carrier, commuter, general aviation and military. Youngstown ARS uses specific flight tracks for their operations that are not used by the other aviation types.

Low Altitude Tactical Navigation (LATN)

Airspace defined as Low Altitude Tactical Navigation (LATN) areas are training areas outside of Military Operating Areas (MOA) used by aircraft such as the C-130 flying at low levels (below 1,500 feet AGL) with speeds of 250 knots or less. By operating at lower airspeeds, aircraft flying in LATN areas can safely communicate with other aircraft and avoid incidents.

Youngstown ARS operates in LATN areas over five states (Ohio, Michigan, West Virginia, Maryland and New York) and Lake Erie covering more than 43 million acres of land. These training areas are important to ensure Youngstown ARS C-130 pilots maintain required proficiency for real world flight operations.

Youngstown ARS assigned LATN areas are:

- **YAK WEST** – 13,233,262 acres covering most of central and western Ohio, a small portion of southeast Michigan and a portion of Lake Erie;
- **YAK EAST** – 30,012,853 acres covering the eastern portion of Ohio, much of the western half of Pennsylvania, a portion of southeastern New York, a northern section of West Virginia, the panhandle of Maryland, and a portion of Lake Erie;
- **STAR CAMP** – 6,987,684 acres, located within YAK EAST, covering portions of southeast Ohio and northwest West Virginia; and
- **SWORDFISH** – 5,283,503 acres, located within YAK EAST, covering a portion of west central Pennsylvania.

Figure 7 shows the Youngstown ARS LATN areas.

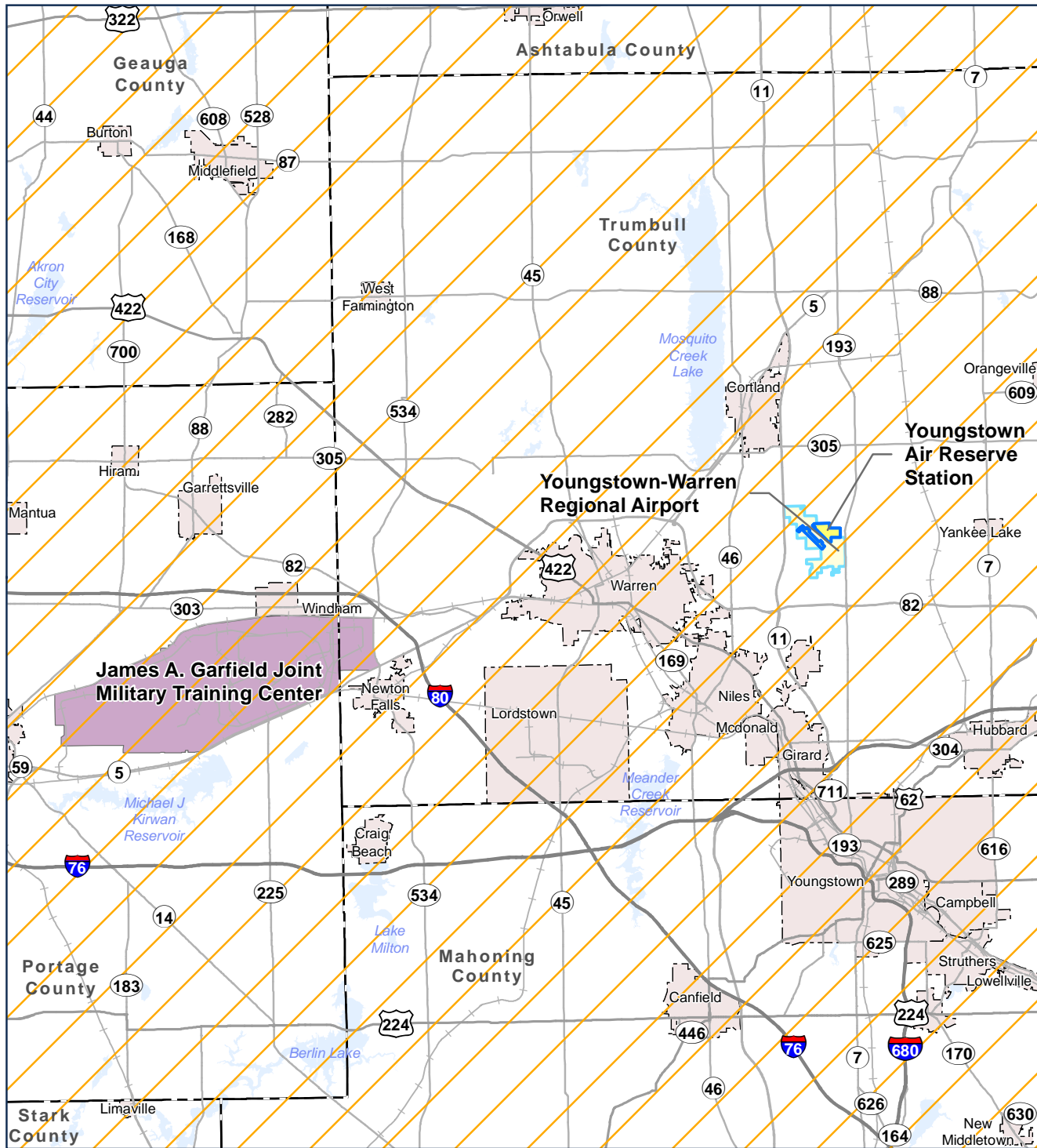
Aircraft Local Flying Routes

The 910th AW flies a number of local routes, including tactical (TAC) and station keeping equipment (SKE) routes, IFR, and visual flight routes (VFR). These routes are coordinated along reference points and are altered as mission needs require. Each route originates and terminates at Youngstown ARS and crosses over Camp Garfield to southwest of Youngstown ARS, west of the City of Warren. The Kooter SKE route is the 910th AW's most used local route and is flown approximately four times per week. Figure 8 shows the Youngstown ARS local flying routes.

Imaginary Surfaces

Federal Aviation Regulations, Part 77, specifies a series of imaginary height restriction surfaces surrounding an airfield. The imaginary surfaces of an active runway are used to define the airspace that must remain free of vertical obstructions in the vicinity of aviation operations to optimize safe flight operations. Structures should not exceed these heights in order to protect the navigable airspace associated with the airfield, the safety of pilots and people, and the land uses on the ground. This is especially important in the clear zone and approach-departure surfaces.

The extent or size of an imaginary surface depends on the type of runway. Military runways are categorized as either Class A or Class B based on the type of aircraft that use them and other factors such as runway length and percentage usage by aircraft type. Class A runways are for smaller or lighter aircraft, while Class B runways are the category for the majority of military aircraft. Runway 14 / 32 is an equivalent Class B runway and Runway 5 / 32 is an equivalent Class A runway. The Department of Defense Unified Facilities Criteria 3-260-01, Airfield and Heliport Planning and Design, establishes airspace imaginary surfaces associated with the LZ Runway 143 / 323. The imaginary surfaces for the three runways are shown on Figure 9.



Legend

Low Altitude Tactical Navigation (LATN) Areas

Youngstown ARS

Youngstown-Warren Regional Airport

James A. Garfield
Joint Military Training Center

County

City

Interstate

US Route

State Route

Railroad

Waterbody

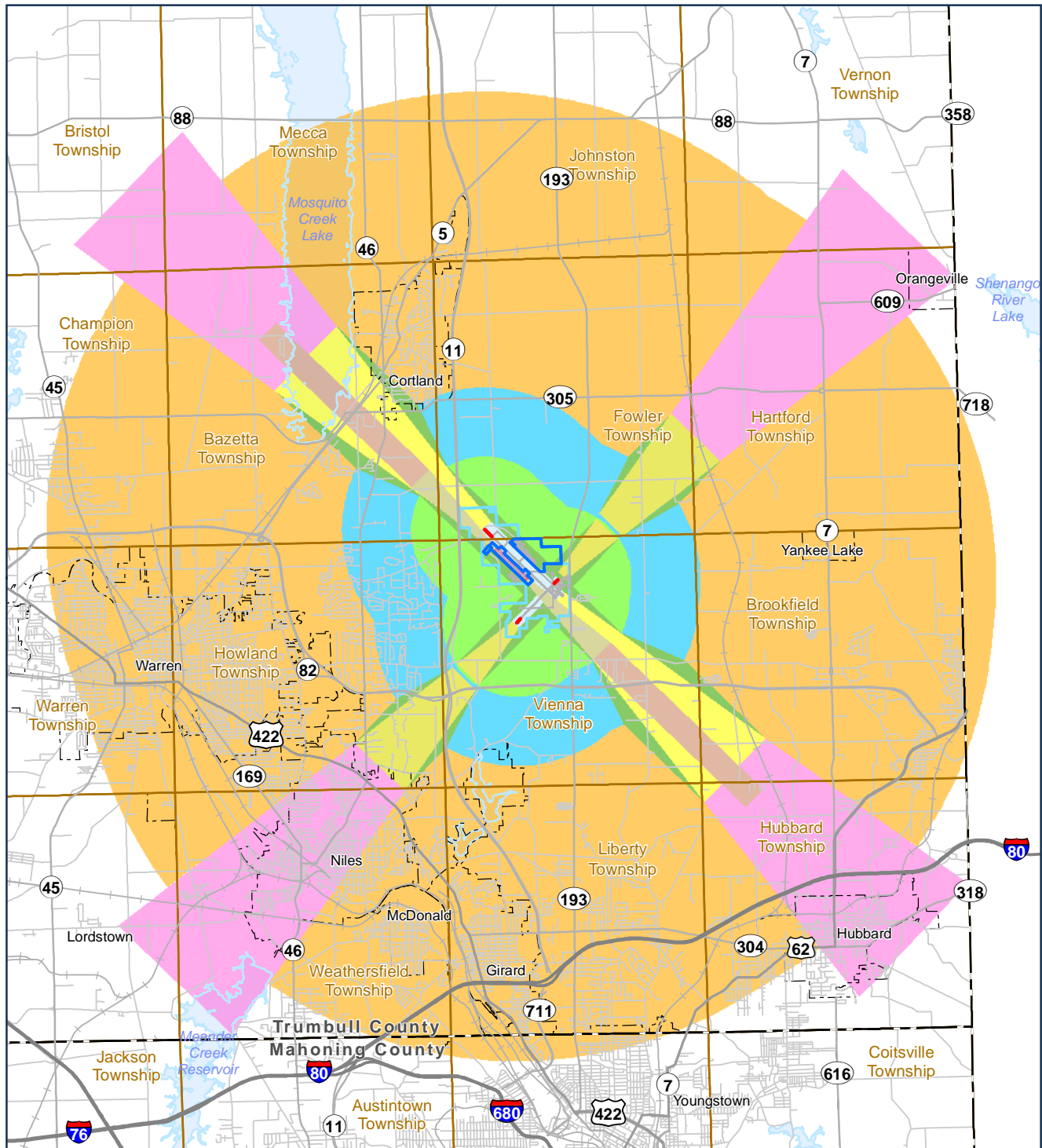


Matrix

0 5 Miles

Source: Youngstown Air Reserve
Station Installation Complex Encroachment
Management Action Plan, 2012.





- Proposed Runway Extensions**
- Imaginary Surfaces**
- Primary Surface
 - Approach/Departure Zone (50:1)
 - Approach/Departure Zone (40:1)
 - Approach/Departure (Horizontal)
 - Approach/Departure (AS-Outer 35:1)
 - Approach/Departure (AS-Inner 35:1)

- Inner Horizontal Surface (150 ft)
- Conical Surface (20:1)
- Outer Horizontal Surface (500 ft)
- Transitional Surface (7:1)
- Exclusion Area (AS)
- Runway End Clear Zone (AS)

- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City

- Interstate
- US Route
- State Route
- Local Roads
- Railroad
- Airfield Surface / Runway
- Waterbody



Matrix

0 1 2 Miles

Source: Youngstown ARS, 2017.
Matrix Design Group, 2018.

Part 77 Vertical Obstruction Compliance

The 500-foot rule, promulgated by the FAA, states that every citizen of the U.S. has “a public right of freedom of transit in air commerce through the navigable air space of the United States.” The rule was formally announced in the 1963 Court of Claims ruling in *Aaron v. United States* and declares that flights 500 feet or more Above Ground Level (AGL) do not represent a compensable taking because they enjoy a free right-of-passage without liability to the owners below.

Another important outcome of the Act is Federal Aviation Regulation Title 14, Part 77, which provides the basis for the evaluation of vertical obstruction compatibility. This regulation provides information to assess the potential for a vertical obstruction based on the elevation of the airfield, the height and resulting elevation of the proposed structure or facility, and the location of the structure or facility relative to the airfield in question. This regulation determines compatibility based on the height of proposed structures or natural features, relative to their distance from the ends of a runway. Using a distance formula for this regulation, local jurisdictions can easily assess the height restrictions near airfields.

Figure 10 provides an illustration of this measure of vertical obstruction around Youngstown ARS. Note that this is in addition to, not a replacement of, the imaginary surface discussed in this Chapter.

Airfield / Runway Safety Zones

The two runways (14 / 32 and 5 / 23) at the Youngstown-Warren Regional Airport used by Youngstown ARS along with the assault landing zone 143 / 323 LZ are governed by FAA requirements. The FAA requires runway protection zones (RPZ) versus military required accident potential zones (APZ).

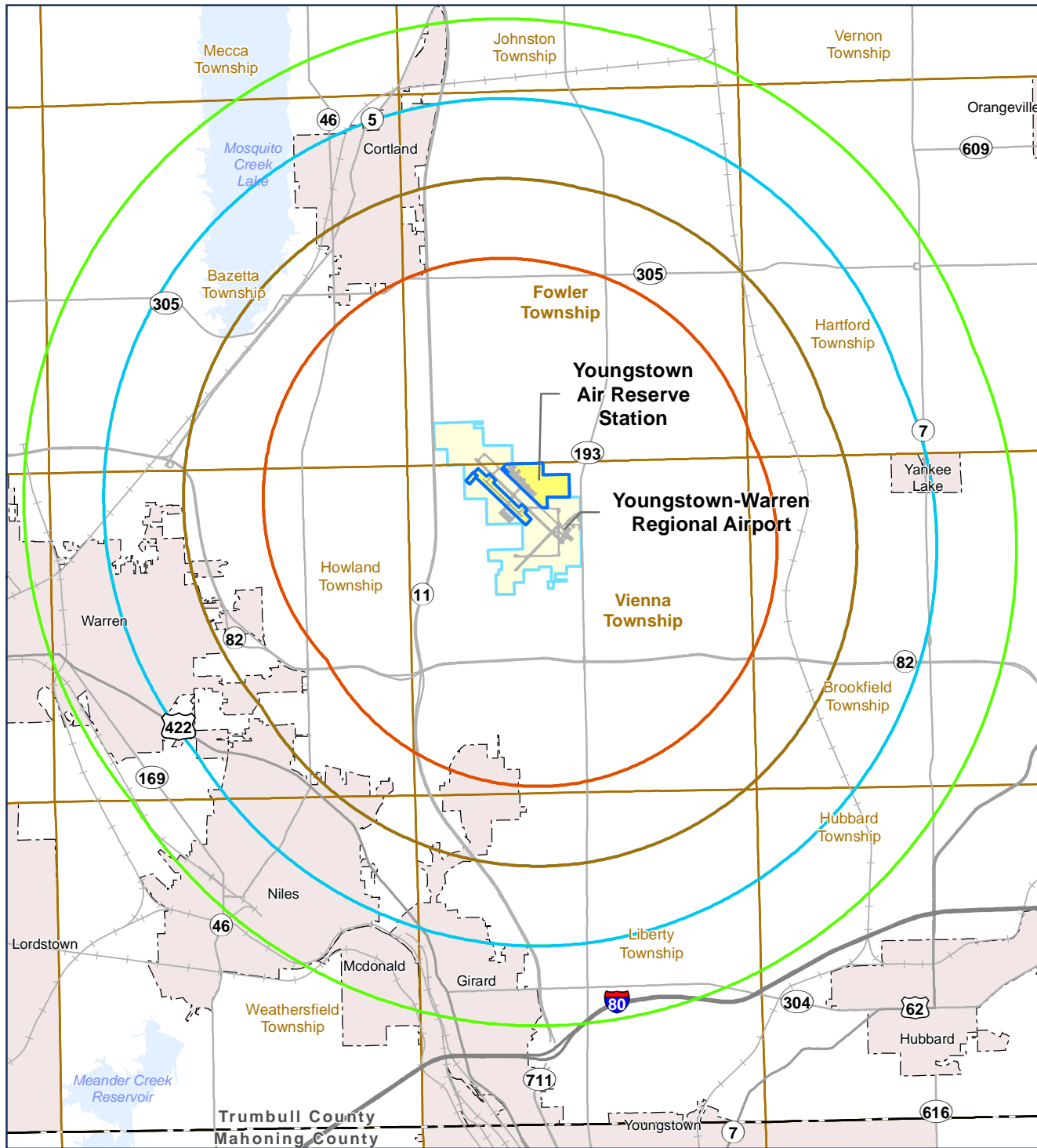
FAA Runway Protection Zones

Runway Protection Zones are trapezoidal areas at the end of a runway end used to enhance the protection of people and property on the ground in the unlikely event an aircraft lands or crashes beyond the runway end.

As identified in the FAA Advisory Circular (AC) 150 / 5300, the approach RPZ dimensions for a runway end are a function of the aircraft approach category and approach visibility minimum associated with the approach runway end. The runway departure RPZ dimensions are a function of the aircraft approach category and departure procedures associated with the runway. The RPZ dimensions for runway 14 / 23 are 1,000 feet wide at the runway edge extending out 2,500 feet to a width of 1,750 feet. The RPZ dimensions for runway 5 / 23 are 500 feet wide at the runway edge extending out 1,700 feet to a width of 1,010 feet. The RPZ for the 143 / 323 LZ are 500 feet wide at the runway edge extending out 1,700 feet to a width of 1,010 feet.

DoD Runway Safety Zones

Per Air Force regulations, APZs are developed to assist planners in developing land uses that are compatible with airfield operations, thereby protecting health and safety. Within these zones, there are recommended types, densities, and intensities of land uses. While the likelihood of an aircraft mishap occurring is remote, the identified APZs provide the best practical solution for fostering public safety.



Legend

- | | | |
|------------------|------------------------------------|-------------------------|
| Up to 200' @ 3NM | Youngstown ARS | Interstate |
| Up to 300' @ 4NM | Youngstown-Warren Regional Airport | US Route |
| Up to 400' @ 5NM | County | State Route |
| Up to 500' @ 6NM | Township | Railroad |
| | City | Waterbody |
| | | Airfield Surface/Runway |



Matrix

0 1 2 Miles

Source: Matrix Design Group, 2018.
FAA 14 CFR 77.17.a.2, 2012.

There are typically three safety zones that extend from each end of a runway: Clear Zone (CZ), APZ I, and APZ II. These three zones occur on each end of Runways 14 / 32 and 5 / 23. The CZ begins at each end of the runway. The CZ for the runway measures 3,000 feet wide by 3,000 feet long. This is the area that has the highest potential of an aircraft incident. It is recommended that no development occur in the CZ unless it is a use that is needed for safe operations of aircraft. The APZ I area begins at the end of each CZ at a width of 3,000 feet extending a length of 5,000 feet. The APZ II area begins at the end of APZ I at a width of 3,000 feet extending a length of 7,000 feet.

This area has a lower potential for accidents and therefore has less restrictive development restrictions recommended. The APZ II is an area that begins at the end of each APZ I and is 3,000 feet wide by 7,000 feet long. The accident potential in this area reduces further, and some additional development types are allowed.

The DoD Unified Facilities Criteria 3-260-01, Airfield and Heliport Planning and Design, establishes APZ criteria associated with the assault landing zone 143 / 323 LZ located at Youngstown ARS. The APZ for the LZ is different than typical runways as it has one overall APZ area. The dimensions of the APZ for the LZ are 500 feet wide by 2500 feet long.

The FAA required RPZ areas and AF required APZ areas are shown in Figure 11 for all three runways used by Youngstown ARS.

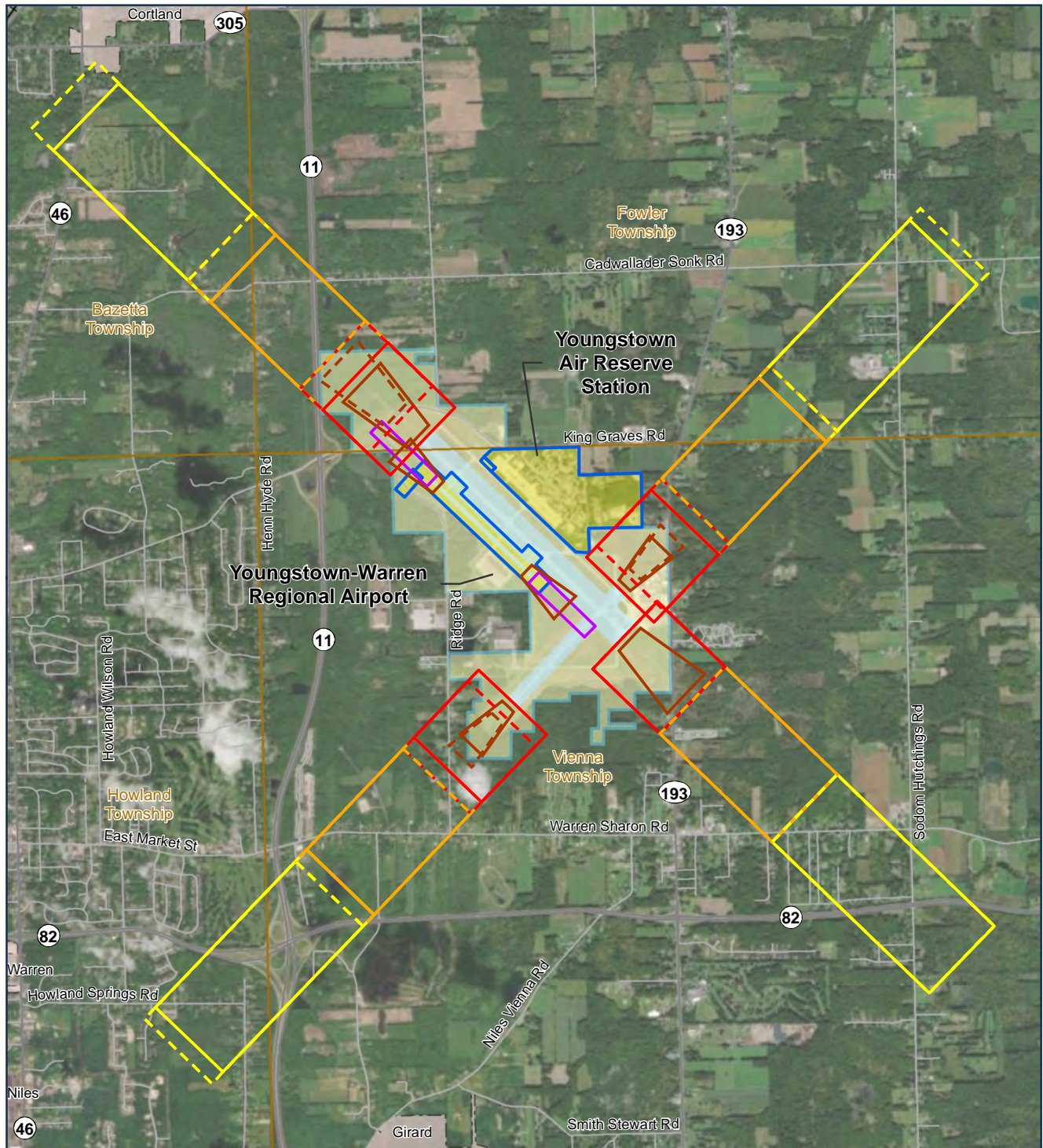
Aircraft Noise Contours

Aircraft noise is produced from flight operations (overflight, take-offs, landings, touch-and-go operations) and engine maintenance run-ups. An engine run-up is a maintenance procedure performed on the airfield to test for proper engine performance.

Federal Aviation Regulation Part 150 is the primary federal regulation that governs airport noise compatibility at civilian airports. FAA AC 150 / 5020-1 provides guidance for noise control and compatibility planning at civilian airports. These regulations recommend that airports develop airport noise exposure maps (NEM) and noise compatibility plans (NCP).

The Youngstown-Warren Regional Airport produced a NEM in 1994 and projected the noise contours out to 2025 based on projected future airport operations. The 1994 noise contours include 65, 70 and 75 dB contours, while the 2025 noise contours include 60, 65, 70, and 75 dB DNL noise contours. Figure 12 shows the 1994 noise contours and projected 2025 noise contours overlaid on the airport, installation and surrounding area.

Although the AF uses the AF Air Installation Compatibility Use Zone (AICUZ) program to establish noise levels at installation airfields, an AICUZ report has not been prepared for Youngstown ARS.



Current Airfield Safety Zones

- Existing Runway Protection Zone
- LZ Accident Potential Zone
- Clear Zone
- Accident Potential Zone I
- Accident Potential Zone II

Future Airfield Safety Zones

- Future Runway Protection Zone
- Future LZ Accident Potential Zone
- Clear Zone
- Accident Potential Zone I
- Accident Potential Zone II

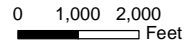
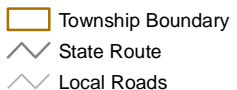
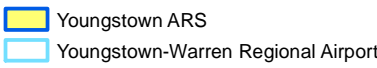
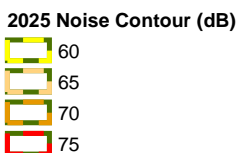
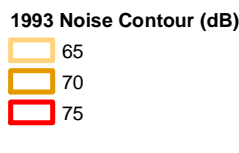
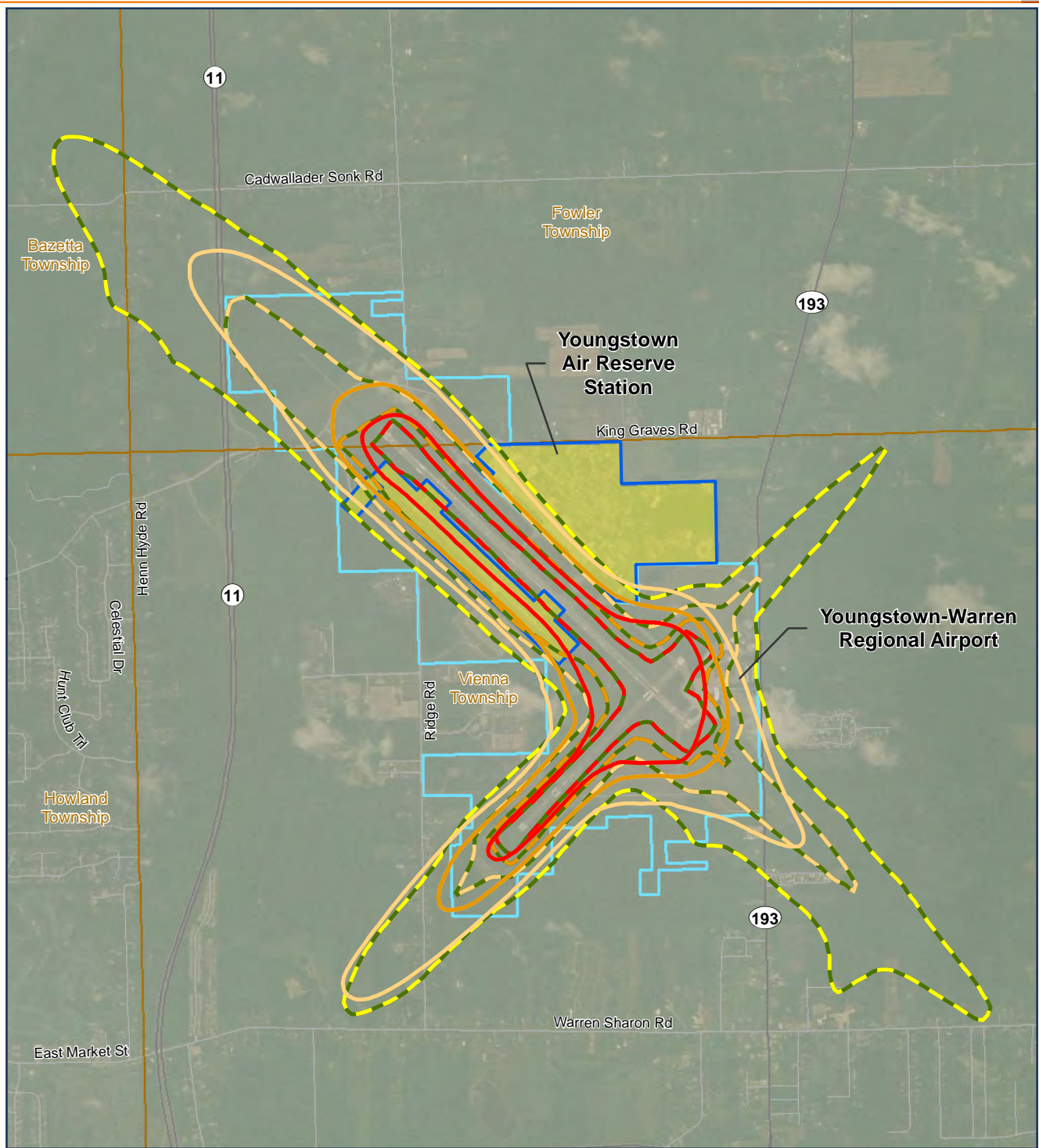
- Primary Surface
- Youngstown ARS
- Youngstown-Warren Regional Airport
- City
- Township Boundary

- State Route
- Local Roads
- Railroad



0 1/2 1 Miles

Source: Youngstown ARS, 2018.
Matrix Design Group, 2018.



Source: C&S Engineers, Inc., 2017.
Youngstown ARS, 1993.

Bird / Wildlife Aircraft Strike Hazard (BASH) Relevancy Area

Travel paths of birds and animals can present a significant hazard to military flight operations.

While fatal accidents resulting from bird or wildlife strikes have been limited, impacts can be a safety concern. Youngstown ARS prepared the most recent 910th AW Bird Aircraft Strike Hazard Reduction Plan 91-212 (910th AW BASH Plan) in 2017.

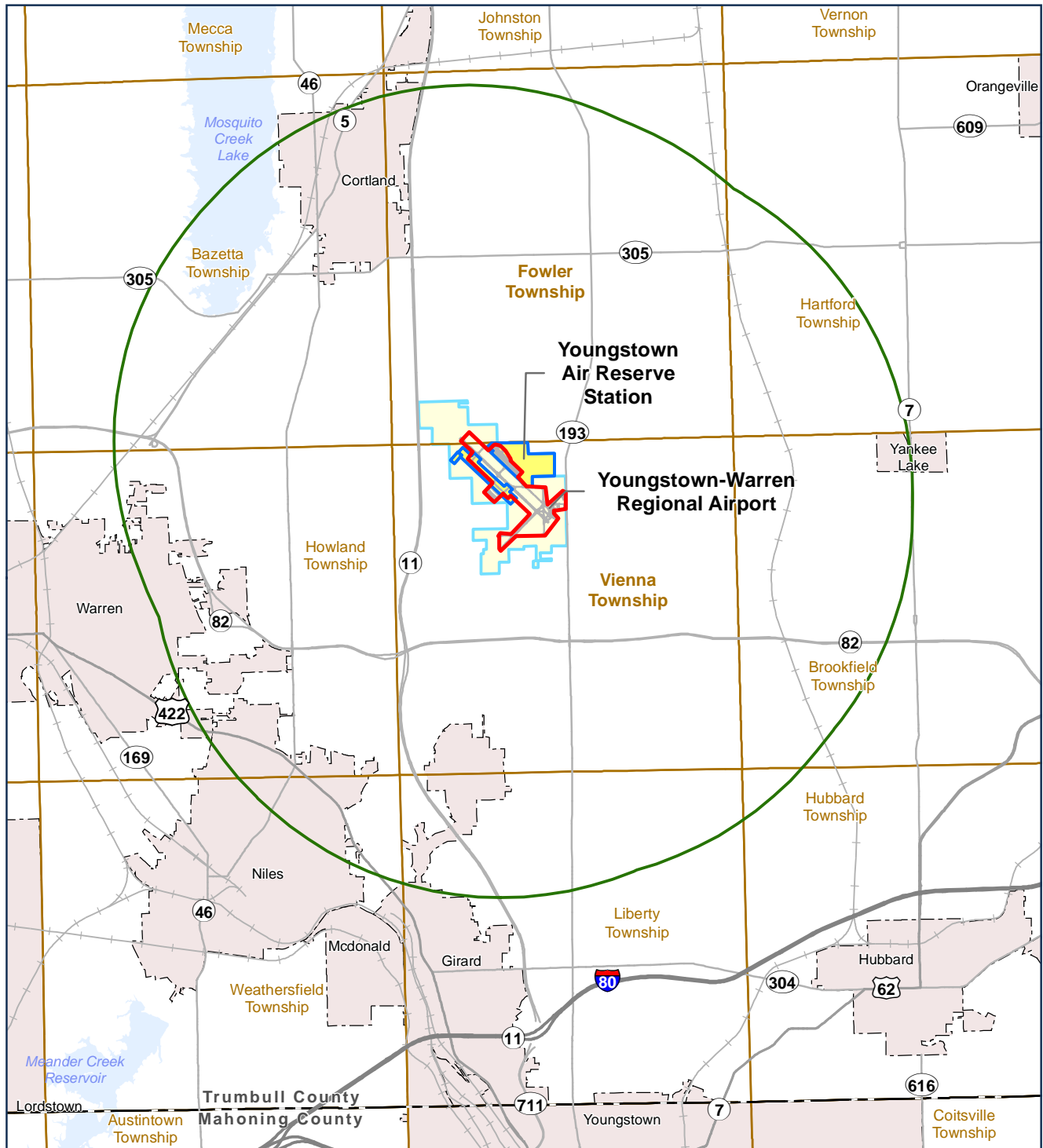
The plan documents that there is a bird strike hazard at the Youngstown-Warren Regional Airport and in its vicinity due to resident and migratory bird species. Daily and seasonal bird movements create various hazardous conditions for military flying operations.

Figure 13 provides a map of the BASH relevancy area around the Youngstown ARS.

Range Training Areas

Camp Garfield Joint Military Training Center

The 910th AW combat mission includes the tactical airlift and airdrop in support of theatre operations. To maintain proficiency in this critical wartime capability, the AW conducts airdrop training at a drop zone on Camp Garfield. Camp Garfield is located approximately 25 miles southwest of Youngstown ARS and encompasses over 21,600 acres in Portage and Trumbull Counties. Aircraft are flown from Youngstown ARS to Camp Garfield to conduct the airdrop training and return to the base once the operations are complete. Figure 14 provides a map of the Camp Garfield location.



Legend

- 5-mile BASH Relevancy Area
- Airfield Operations Area
- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City

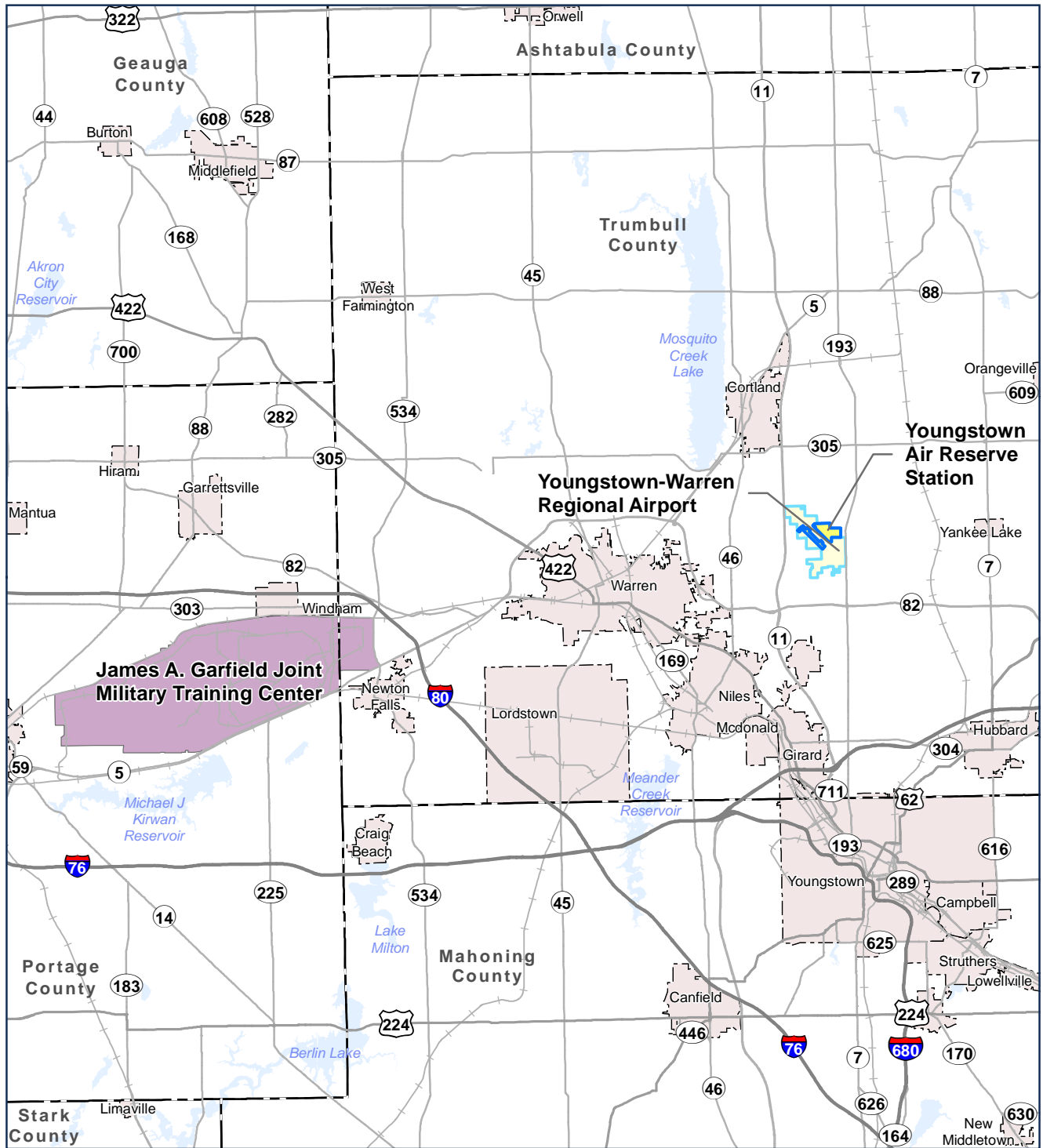
- Interstate
- US Route
- State Route
- Railroad
- Waterbody
- Airfield Surface/Runway



Matrix

0 1 2 Miles

Source: Matrix Design Group, 2018.



Legend

- | | | |
|--------------------------------------------------|----------------|-------------|
| James A. Garfield Joint Military Training Center | Youngstown ARS | Interstate |
| Youngstown-Warren Regional Airport | US Route | State Route |
| County | Railroad | Waterbody |
| City | | |



Matrix

0 5 Miles

Source: Matrix Design Group, 2018.
Small UAS Rule (14 CFR 107).
Federal Aviation Administration, 2017.

Compatibility Tools

This section provides an overview of governmental plans and programs (tools) that are currently used or may be applied either directly or indirectly to address compatibility planning and issues identified within the Youngstown ARS Joint Land Use Study (JLUS) area. There are three types of planning tools that 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 such as zoning or adopted legislation.
- Conditional tools include comprehensive plans, memorandums of understanding, intergovernmental agreements, and other policy documents that can be modified.

Organized by level of government (federal, state, local), key plans and programs that have been prepared and/or adopted at all levels of government are identified and discussed in this chapter.

This is not meant as an exhaustive list of plans and programs that influence planning, but rather a highlight of the plans and programs for the Youngstown ARS JLUS. For additional plans and programs, refer to Chapter 4 of the JLUS Background Report document.

Federal Programs and Policies

The federal programs and policies are provided by various agencies of the federal government. These tools authorize other federal, state, and local agencies to implement regulatory measures and policies to protect the multiple resources that are involved in land use and military planning. The intent of these measures and policies include the protection and preservation of the quality of life and general welfare of the public and natural resources, including land, water, and airspace.

The following federal programs and policies were evaluated in the Youngstown ARS JLUS to assist in determining where areas of improvement could enable enhanced, compatible land use planning. This list is not an exhaustive accounting of all relevant federal laws or programs, but rather identifies those resources considered most relevant for assessing compatibility issues and the potential strategies stakeholders might employ to avoid or mitigate conflicts.

Air Force Community Partnership Program

An initiative led by the Air Force's installations, environment and energy office to cultivate partnerships between installations and their host communities primarily focused on enhancing military readiness and saving money. Other objectives include fostering installation-community relationships and promoting innovation. The Air Force currently is emphasizing initiatives with greater returns on investment that can be applied across a variety of installations, such as having a public entity provide municipal services (solid waste collection, etc.).

Youngstown ARS and its host communities already are participating in the program. In 2018 Youngstown ARS and its civilian law enforcement partners celebrated the opening of a newly constructed, state-of-the-art firing range, which will be shared with civilian law enforcement agencies.

Air Force Instruction 32-7063 Air Installations Compatible Use Zones Program

Air Force Instruction 32-7063 was updated in 2015 to implement the Air Installations Compatible Use Zones (AICUZ) and the Air Force Directive (AFPD) 90-20, Encroachment Management. The Instruction applies to all Air Force installations with active runways. The Instruction identifies the requirements for implementing and maintaining the AICUZ program, as well as implements AFPD 90-20 by identifying the requirements for compatible land use and development to preserve operational capability. The Instruction provides land use tables, which sets land use compatibility guidelines within the Clear Zones, Accident Potential Zones, and Noise Zones. The procedures were created to develop, implement, and maintain compatible land uses that are in compliance with all federal, state, and local requirements.

Air Force Instruction 90-2001 Encroachment Management

Air Force Instruction 90-2001 was published in September 2014 to implement the Encroachment Management Program. The Instruction applies to all Air Force installations and addresses encroachment issues and strategies to prevent or reduce encroachment impacts. The Instruction includes the Encroachment Management Framework, which has four elements: organize, assess, act, and monitor. Organization encompasses leadership involvement, cross-functional management structures, issue evaluation structures, designated executive directors at the installation level, and geographic scope. Assessment includes studying internal and external relationships and developing encroachment studies,

such as an Installation Complex Encroachment Management Action Plan (ICEMAP). Acting involves program implementation. Lastly, monitoring involves maintaining awareness of mission needs and encroachment issues.

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. Youngstown ARS, local governments, and community service districts must all comply with the CWA.

Department of Defense Conservation Partnering Initiative

In 2003, the National Defense Authorization Act (NDAA) gave the DoD authority to enter into agreements with eligible entities to address incompatible development or habitat protection. Eligible entities may be a state, a political subdivision of a state (e.g., counties, cities, or soil and water conservation districts), or a private entity with a main purpose or goal to conserve, restore, or preserve land and natural resources. This authorization has been codified as 10 United States Code (USC) § 2684a (as amended in 2012), “Agreements to limit encroachment and other constraints on military training, testing, and operations”. This authority allows DoD services to use their Operation and Maintenance funds and/or Office of the Secretary of Defense (OSD) Readiness and Environmental Protection Integration (REPI) program funds to acquire real property interests, such as conservation easements or development rights in order to address current and potential encroachment or compatibility threats to an installation’s mission.

This law further provides an additional tool to support smart planning, conservation, and environmental stewardship on and off military installations. The purpose of the program is to acquire real property interests, such as conservation easements or development rights, to address current and potential encroachment or compatibility threats to an installation's mission.

Department of Defense Energy Siting Clearinghouse

Section 358 of the 2011 National Defense Authorization Act sanctioned the study of the effects of new construction and obstructions on military installations and operations. The Energy Siting Clearinghouse serves to coordinate the DoD review of existing applications for energy projects. Several key elements of Section 358 include designation of a senior official and lead organization to conduct the review of energy project applications, a specific timeframe for completion of a hazard assessment associated with an application (30 days), specific criteria for DoD objections to projects, and a requirement to provide an annual status report to Congress. This legislation facilitates procedural certainty and a predictable process that promotes compatibility between energy independence and military capability.

On December 12, 2017, the 2018 National Defense Authorization Act was signed into law, which, among other things, includes changes to the DOD Siting Clearinghouse, which will be transitioned to the Military Aviation and Installation Assurance Siting Clearinghouse. This new Clearinghouse must provide procedures for energy project developers to consult with affected military installations in order to facilitate better coordination and communication from when projects are first initiated through completion. Part of enhanced coordination and communication requires the Clearinghouse to develop procedures for energy project developers to submit the project area and preliminary layout at least one year before the developer plans to begin construction. This one year timeframe allows the DoD to assess if the proposed

energy project is within any DoD-operated surveillance radar areas or military training routes. These procedures will help set a more clearly defined trigger for coordination and outreach between affected military installations and energy project developers. Also, the review period upon receiving an energy project application from the Secretary of Transportation is extended from 30 to 60 days, allowing more time for the Clearinghouse and affected military installations to assess the proposed development of any potential adverse impacts.

Department of Defense Readiness and Environmental Protection Initiative

The REPI program enables DoD to work with state and local governments, non-government organizations, and willing landowners to limit encroachment and incompatible land use through land acquisition, conservation easements or land trusts. The REPI program provides funding to support these land acquisition efforts in order to preserve the land around military installations, wildlife habitats, and local communities.

The REPI program grants the military the ability to enter into agreements with eligible entities, such as local governments, non-governmental organizations, and willing land owners to secure conservation easements on property in the vicinity of, or ecologically related to, a military installation or military airspace. Also available is the REPI Program Guide for Buffer Partnerships, which establishes policy, assigns responsibilities, and prescribes procedures for executing REPI program buffer partnerships.

Department of Defense Industry Resilience Assistance

Administered by the DOD Office of Economic Adjustment (OEA), the Department of Defense Industry Resilience Assistance program helps communities impacted by events such as the cancellation of a defense contract, the failure to proceed with an approved major weapon system program or a publicly announced planned major reduction in defense spending that would directly affect a community. Grants can fund projects focused on entrepreneurship and small business development, industry cluster development, manufacturing and supply chain mapping, export promotion and workforce development.

Department of Defense 2019 National Defense Authorization Act

The following programs were authorized under the 2019 National Defense Authorization Act (NDAA):

- The NDAA Resilience Grants is an OEA program offering grants to states and local governments for assistance to address threats to military installation resilience.
- Defense Community Infrastructure Pilot Program is a program allowing DoD to provide funding to state and local governments for off-base infrastructure projects. It awards grants to address deficiencies in community infrastructure if the assistance will enhance the military value, resilience or military family quality of life at an installation.
- Defense Manufacturing Community Support Program was established to offer financial and technical assistance to communities striving to cultivate defense manufacturing, either to offset a decline in their local manufacturing base or to improve their capacity for advanced technologies considered critical to national security.

Department of Housing and Urban Development Noise Regulation

The United States Department of Housing and Urban Development (HUD) has instituted policies through section 24 Code of Federal Regulations (CFR) Part 51 that are designed to promote the creation of controls and standards by state and local governments for community noise abatement. The focus of these regulations is to reduce noise levels within residential developments that are funded by HUD. Included among the various policies are:

- A requirement that noise exposure and sources of noise be given adequate consideration as an integral part of urban environments in connection with all HUD programs, which provide financial support to planning;
- A withholding of HUD assistance for the construction of new dwelling units on sites which have, or are projected to have, unacceptable noise exposure, are in runway Clear Zones, or constitute incompatible uses in Accident Potential Zones;
- Encouragement of modernization efforts for existing buildings in noise environments; and
- Grants and allowances to state and local governments to provide acoustical privacy in multifamily dwellings through building design and acoustical treatment. “

Generally, external noise exposure within Noise Zone 3 (as identified in an installation’s Airfield Installation Compatible Use Zone (AICUZ) Study) is considered unacceptable, without exception, and exposure within Noise Zone 2 is normally unacceptable, with respect to new construction. Department of Housing and Urban Development funds may also be available for noise abatement planning and acoustical treatments for proposed and existing incompatible land uses within the AICUZ.

Residential construction may be permitted within certain noise contours, provided appropriate sound attenuation is accomplished. The added construction expense of sound attenuation, however, may make siting in these noise exposure areas financially less attractive. Because the HUD policy is discretionary, variances may also be permitted, depending on regional interpretation and local conditions. The Department also has a policy (24 CFR 51D) that prohibits funding for projects in runway Clear Zones and Accident Potential Zones, unless the project is compatible with any applicable AICUZ recommendations.

Federal Aviation Act

The Federal Aviation Act was enacted in 1958 to provide methods for overseeing and regulating civilian and military use of airspace over the U.S. The Act requires the Secretary of Transportation to make long-range plans that formulate policy for the orderly development and use of navigable airspace. The intent is to serve the needs of both civilian aeronautics and national defense, but the Act does not specifically address the needs of military agencies. Military planning efforts strive to work alongside local, state, and federal aviation laws and policies. However, such approaches may be superseded to protect national security interests. The Act was created for a variety of purposes, including the management of national airspace.

The 500-foot rule, promulgated by the FAA, states that every citizen of the U.S. has “a public right of freedom of transit in air commerce through the navigable air space of the United States.” The rule was formally announced in the 1963 Court of Claims ruling in *Aaron v. United States*. It states that flights 500 feet or more above ground level (AGL) do not represent a compensable taking because flights 500 feet AGL enjoy a right of free passage without liability to property owners within its parameters.

Another important outcome of the Act is FAA Regulation Title 14 Part 77, commonly known as

Part 77, which provides the basis for evaluating vertical obstruction compatibility. This regulation determines compatibility based on the height of proposed structures or natural features, relative to their distance from the ends of a runway. Using a distance formula that is provided in the regulation, local jurisdictions can easily assess the height restrictions near airfields. Additional information on Part 77 is located on the FAA Internet site at www.faa.gov. Standards to determine obstructions within navigable airspace established by Part 77 can be found in Section 3.7 of this Study.

The FAA has identified certain imaginary surfaces around runways to determine how structures and facilities are evaluated and identify if they pose a vertical obstruction relative to the airspace around a runway. The levels of imaginary surfaces build upon one another and are designed to eliminate obstructions to air navigation and operations, either natural or man-made. The dimensions or size of an imaginary surface depends on the runway classification.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 is a federal regulation that established as U.S. policy the protection and enhancement of the environment and requires federal agencies to analyze and consider the potential environmental impacts 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. The National Environmental Policy Act is applicable to all federal entities, including the military. However, not all federal actions require a full Environmental Impact Statement (EIS). Actions that are considered unlikely to cause a significant impact can meet NEPA obligations through an Environmental Assessment (EA). An EIS is a

report that describes and assesses the potential environmental effects of a particular action or project in which the federal government is involved. An EIS for a proposed project outlines, in detail, the proposed actions, alternative actions, and their probable environmental ramifications. An EA is similar to an EIS but is less comprehensive.

A NEPA document can serve as a valuable planning tool for local planning officials. An EA or EIS identifies the potential effects of changing military actions or operations. Public hearings are required for NEPA assessments. Draft reports and findings of potential effects must be published and subject to a 30-day public comment period. Assessments can result in either a Finding of No Significant Impact (FONSI) or a Record of Decision (ROD). The latter records a determination that a project will have a significant impact. The information obtained by the EIS or EA is valuable in planning coordination and policy formation at the local government level.

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. The EIS is a public process that encourages participation by the community and all stakeholders.

Noise Control Act of 1972

The Noise Control Act of 1972 determined that noise that is not adequately controlled has the potential of endangering the health and welfare of people. 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, military installations were being impacted by encroaching urban development located adjacent to their boundaries and the resulting complaints from military flight operation noise. The

DoD responded by establishing the AICUZ program, which was subsequently adopted by the Air Force as AFI 32-7063.

The Noise Control Act, as well as the AICUZ program, are important because encroaching development and larger populations near military installations often create compatibility concerns. 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 strategies to coexist.

Partners in Flight Program

The DoD has implemented a program entitled Partners in Flight that sustains and enhances the military testing, training, and safety mission through habitat-based management strategies. The program assists natural resource managers in the monitoring, inventory, research, and management of birds and their habitats. As part of the Partners in Flight program, a strategic plan is created that can be incorporated into a Bird/Wildlife Aircraft Strike Hazard (BASH) plan. This program reaches beyond the boundaries of the installation to facilitate community partnerships and determine the current status of bird populations in order to prevent the further endangerment of birds.

The Sikes Act

The Sikes Act requires the DoD to develop and implement Integrated Natural Resources Management Plans (INRMPs) for military installations. The INRMPs are prepared in cooperation with the U.S. Fish and Wildlife Service and state fish and wildlife agencies to ensure proper consideration of fish, wildlife, and habitat resource needs. The Sikes Act requires INRMPs to be reviewed at least every five years by the military and states. Air Force Instruction 32-7064, Integrated Natural Resources Management guidebook, directs Air Force implementation of the Sikes Act.

Telecommunications Act of 1996 and the Federal Communications Commission

The Telecommunications Act of 1996 was the first comprehensive update to a federal telecommunication law in over 60 years and was, in large part, intended to open up the marketplace to greater competition. Changes in the means through which information is provided, accessed, stored, and shared made the federal government response imperative. The increasing use and development of personal mobile phones, satellite transmission, high speed fiber optics, and other related factors are often pushing demand beyond system capacity.

New telecommunication tower siting requires compliance with the Federal Communications Commission's (FCC) environmental review standards and procedures, including NEPA and ESA compliance, NHPA compliance, adherence to any applicable FAA requirements, and structure registration with the FCC. The actual approval of physical installations is subject to state and local permits and approvals; however, state and local authority is limited by FCC law. For instance, states and local jurisdictions cannot base their decisions on any purported environmental effects of radio frequency transmissions.

Youngstown ARS Plans and Programs

The Youngstown ARS tools provide guidance for land uses and development activities on and adjacent to the installation. These tools govern land use decisions that occur inside the fence line or within the boundary of the military mission footprint in relation to the military mission or proposed military mission.

These tools also provide guidance and establish measures for standard operating procedures during certain events, such as heightened bird air strike hazard conditions, and / or the parameters for conducting missions within the range of the military complex.

BASH Plan 91-2

Youngstown ARS last updated its Bird Aircraft Strike Hazard (BASH) Plan in March of 2017. The purpose of the plan is to provide guidance for reducing wildlife strike hazards where flying operations are conducted. The plan acknowledges that there is no one single solution to mitigate BASH problems, but the following are steps that the plan was designed to do:

- Establish a Bird Hazard Working Group and designate responsibilities among its members.
- Establish procedures to identify high hazard situations and to aid supervisors and aircrews in altering / discontinuing flying operations when required.
- Establish aircraft and airfield operating procedures to avoid high-hazard situations.
- Provide for disseminating information to all aircrews on wildlife hazards and procedures for wildlife avoidance.
- Establish guidelines to decrease airfield attractiveness to wildlife.
- Provide guidelines for dispersing wildlife on the airfield.

Installation Complex Encroachment Management Action Plan

The Installation Complex Encroachment Management Action Plan (ICEMAP) is an internal Air Force plan that evaluates mission sustainment through a series of mission sustainment hazards identified in Air Force Instruction (AFI) 90-2001. The plan addresses hazards through the use of controls to reduce risk and risk impacts that are identified during the evaluation. The 2012 Youngstown ARS ICEMAP provides the installation commander, decision makers, and stakeholders with strategies to address current mission sustainment hazards and minimize the likelihood of future hazards.

The ICEMAP consists of two volumes. Volume I is the action plan for mitigating or preventing mission sustainment hazards. Volume II is a reference book, which provides background data and analysis.

Installation Development Plan

The 2016 Youngstown ARS Installation Development Plan (IDP) serves as a guiding document for facility programming decisions over the next 20 to 30 years.

As part of the IDP, planning constraints were identified. Major planning constraints are installation compatibility use zones and airfield and airspace clearance. Minor constraints are environmental restoration quality and munitions response programs, force protection siting criteria, and Explosive Safety Quantity Distance (ESQD) arcs. The IDP established six goals, each with its own objectives for accomplishing those goals. The goals are:

- Fund and update ADPs for each of the Districts identified in the IDP,
- Develop projects using all available funding sources to support the ongoing training mission,
- Develop a consolidated community center for community services,

- Modernize flight line facilities to support enhanced mission capabilities and growth,
- Protect the natural and human environments through pursuit of sustainable development, and
- Continue to foster the Youngstown/Trumbull relationship through the AF Community Partnership.

Integrated Natural Resources Management Plan

The Integrated Natural Resources Management Plan (INRMP) was created to ensure that long range habitat protection and natural resource management occurs at Youngstown ARS. Due to the primarily urban setting on the base, Youngstown ARS is classified as a Category II installation for purposes of natural resources. As a Category II installation it is not required to have a full INRMP. The 2017 Youngstown ARS INRMP outlines various natural resources, including wetlands, woodlands, and soils, as well as the overall management plan for natural resources at Youngstown ARS that ensures no loss of capability for operations. The INRMP serves as a planning tool for future activities at Youngstown ARS and as a road map for the stewardship of natural resources found on the base.

State of Ohio Plans and Programs

The State of Ohio authorizes mandates to counties and cities to provide for the protection of the state's valuable industries, including the DoD and agriculture. Through such plans and programs, the state further requires communities and developers to protect and preserve the state's natural resources, including land and water.

Ohio Statutes

Ohio has a somewhat unique governance structure regarding land use. In most states the county is responsible for planning and land use management in the unincorporated areas, however in Ohio this responsibility falls to one of the 1,309 townships with the assistance of counties.

Ohio Revised Code (ORC) Chapter 519 Township Zoning

Provides townships, including Vienna, Fowler and Howland Townships with the responsibility for planning and land use management, including zoning, with support from Trumbull County, for all property in the townships, including lands surrounding Youngstown Air Reserve Station (YARS). ORC 519.02(A) states, *"in the interest of the public health and safety, the board of township trustees may regulate by resolution, in accordance with a comprehensive plan, the location, height, bulk, number of stories, and size of buildings and other structures, including...other open spaces, the density of population, the uses of buildings and other structures, including...the uses of land for trade, industry, residence, recreation, or other purposes in the unincorporated territory of the township."*

However, Ohio has an "agricultural exemption", which states that townships may not use zoning to prohibit agriculture in unincorporated areas, if the exempted activity meets the definition of agriculture as set forth in ORC 519.01. Pursuant to ORC 519.21, with specific exceptions as identified in the code, Township zoning authority cannot:

- Prohibit the use of land for agricultural purposes; or
- Prohibit construction or use of buildings incident to the use for agricultural purposes, including buildings or structures that are used primarily for vinting and selling wine and that are located on land any part of which is used for viticulture; and
- No zoning certificate shall be required for any such building or structure.

ORC Chapter 303, County Rural Zoning; Renewal of Slums and Blight Areas

County commissioners may regulate building and land use in unincorporated areas not part of townships. ORC 303-02 states *"Except as otherwise provided in this section, in the interest of the public health and safety, the board of county commissioners may regulate by resolution, in accordance with a comprehensive plan, the location, height, bulk, number of stories, and size of buildings and other structures... the density of population, the uses of buildings and other structures... and the uses of land for trade, industry, residence, recreation, or other purposes in the unincorporated territory of the county."*

ORC Chapter 122 Developmental Services Agency

Created by House Bill 292, which was passed by the Ohio General Assembly and signed by Governor Kasich on June 17, 2014, ORC 122.98 codified the Aerospace and Aviation Technology Committee which brings together members of the aerospace and aviation community from industry leaders, military representatives, academic experts, and state government officials. The goal of the Committee is to develop a singular, focused, statewide strategy that will unite often disparate segments of the aerospace and aviation community, and ensure that Ohio's already rich aerospace and aviation legacy will lead the nation for years to come.

Ohio Military Facilities Commission

Established in the Ohio Adjutant General's Department, the purpose of the Ohio Military Facilities Commission is to develop and implement a program to finance or assist in the financing of infrastructure capital improvements on military and defense installations in the state. The program is codified in the ORC 5913.12, *Ohio Military Facilities Commission*.

Regional Organizations, Plans, and Programs

Eastgate Regional Council of Governments

Eastgate Regional Council of Governments (COG) is a voluntary association of multiple local governments in Northeast Ohio, including Trumbull County and townships, cities and villages in the county. Eastgate Regional COG brings communities together to create a unified voice in matters such as transportation, water and air quality, land use planning, and local infrastructure projects.

As a metropolitan planning organization (MPO), Eastgate Regional COG is also directly responsible for a variety of federal, state, and local planning and project implementation programs. The COG also provides jurisdictions the following support:

- The Eastgate Appalachian Regional Commission program is funded by the Appalachian Regional Commission and the Ohio Governor's Office of Appalachia to provide matching grant funds to fill a gap for eligible applicants in support of projects that meet federal and state program goals.
- As an Economic Development District (EDD) under the U.S. Department of Commerce's Economic Development Administration. The COG coordinates regional economic development priorities for projects and investments.
- Eastgate Regional COG serves as the administrative home for the District 6 Public Works Integrating Committee. There are 19 District Integrating Committees covering all 88 Ohio Counties.
- Eastgate supports area water quality management through watershed planning, regional wastewater planning, and Mahoning River restoration.

Comprehensive Economic Development Strategy

The Comprehensive Economic Development Strategy (CEDS) serves as the guiding document for coordinating economic development activities in the region, including Trumbull County. The CEDS is required by the U.S. Department of Commerce Economic Development Administration. The purpose of the CEDS is to bring the public and private sector together for regional collaboration to evaluate the demographic and socioeconomic trends and weaknesses in the region. Such collaboration is intended to develop goals and actions that encourage economic growth. The six goals for the Eastgate Regional COG 2018 CEDS are:

- Strengthen human capital for business growth and quality job creation.
- Cultivate an environment where individuals learn and advance.
- Provide a network of services and capital for all.
- Support the underpinning systems and programs that sustain competitiveness.
- Assist existing and new businesses to encourage investment and increase wealth.
- Generate a higher standard of living that is attractive to people of all ages.

Metropolitan Transportation Plan Update

The 2040 Metropolitan Transportation Plan Update was developed over several years to acknowledge completed projects and changes in the transportation network that transpire during the metropolitan planning process. This plan was created by Eastgate Regional (COG) with the assistance of public and private stakeholders and transportation representatives at the local, state, and federal levels. This update includes an overview of regional trends, goals, planning components, a funding forecast, projects, performance measures, and implementation strategies. This update provides an important base for building a resilient, forward-looking infrastructure, with the ability to adjust and adapt to future challenges.

Transportation Improvement Program

Eastgate Regional COG is the MPO for the Youngstown Metropolitan Area including Trumbull and Mahoning Counties as noted previously. The MPO has authority to plan, prioritize, and select transportation projects that use federal funding and to coordinate any major transportation initiative that has regional significance.

The 2018-2021 Transportation Improvement Plan (TIP) prepared by Eastgate Regional COG provides a comprehensive list of transportation improvements for the region's highway, bridge, nonmotorized, and transit systems. These improvements are developed to promote and safeguard the environment and overall public health and safety by maintaining clean air standards and providing transportation improvements and enhancements geared to improve the quality of life throughout our area. The TIP is consistent with the Eastgate Regional COG 2040 Metropolitan Transportation Plan (MTP).

Local Jurisdiction Plans and Programs

Howland Township

Comprehensive Plan

The Howland Township Comprehensive Community Plan was adopted in 2010 to outline a course of action for future growth. The goal of the comprehensive plan is to create a set of goals, objectives, and strategies that will assist in the future growth of the county. Main factors that the comprehensive plan overviews are community services and facilities, public health, demographics and housing, economic development, land use, transportation, and natural resources. Below are the roles the comprehensive plan serves:

- Promoting the quality of life of Township residents and business owners.
- Evaluate land use changes and to make capital improvement decisions.
- Promote planning and development initiatives and to continue to protect and preserve the Township's natural resources.
- Promoting a more green and sustainable community.

Howland Zoning Resolution

The 2017 Howland Zoning Resolution provides zoning through the regulation of size and use of buildings and structures the area and dimensions of lots and yards and the use of lands, and for such purposes, dividing the Township into zones and districts of such number, sizes and shapes as are deemed best suited to carry out said purposes. The resolution further provides a method of administration and enforcement of such regulations.

The following are some of the key sections included in the Zoning Resolution:

- Establishment of Zoning Districts
- General Development Standards
- Residential Zoning Districts
- Business Zoning Districts

The Zoning Resolution provides requirements related to telecommunication towers including compliance with FAA criteria, however there are no specific height limits or mention of compatibility with military / airport operations.

Fowler Township

Fowler Zoning Resolution

The 2010 Fowler Zoning Resolution provides zoning by regulating size and use of buildings and structures, the area and dimensions of lots and yards and the use of lands, and for such purposes, dividing the township into zones and districts best suited to carry out said purposes, with a method of administration and enforcement. The Zoning Resolution establishes five primary zoning districts, provides classification of land uses, and outlines conditional zoning requirements.

Provisions require telecommunication tower compliance with FAA criteria although there is no mention of height limits or compatibility with military / airport operations.

Provisions further regulate wind turbines including a 125-foot height limit and requiring construction permits. There are no specific requirements related to military / airport operations.

Vienna Township

Comprehensive Plan

The 2009 Vienna Township Comprehensive Plan serves as a guide to assist the Township in shaping its future and offer direction for improving the local quality of life and steering the future growth and development of the community.

The future land use in the plan for the Township addressed four main areas:

- Location and type of future commercial development;
- Optimal location of industrial development;
- Locations to encourage residential development; and
- Development policy concerning open spaces, existing farmland and environmentally sensitive areas

Vienna Zoning Resolution

The Vienna Township Zoning Resolution, as updated in 2015, provides regulation of the location, size and use of building and structures, the area and dimensions of lots and yards and the use of lands, and for such purposes dividing the township into zones and districts best suited to carry out said purposes, with a method of administration and enforcement.

Key elements in the Zoning Resolution include:

- Establishment of Zoning Districts
- Classification of Uses
- Minimum Lot Sizes

The Resolution also regulates telecommunications towers including a maximum height limit of 200 feet. Additionally, wind turbines are authorized to a maximum height of 125 feet and require a construction permit.

Compatibility Assessment

Identification of Compatibility Issues

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 to achieve their respective objectives. A number of factors can be evaluated to determine whether community and military plans, programs, and activities are compatible or in conflict. For this Joint Land Use Study (JLUS), 25 compatibility factors were used to identify, determine, and establish a set of key JLUS compatibility issues for discussion.

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

Methodology and Evaluation

The methodology for the Youngstown ARS JLUS consisted of a comprehensive and inclusive discovery process to identify stakeholder issues associated with the compatibility factors. At the initial Policy Committee (PC) and Technical Committee (TC) meetings and public workshop, stakeholders were asked to identify the location and type of issue in conjunction with compatibility factors they thought existed today or could occur in the future. As a part of the evaluation phase, the PC, TC, and the public examined and prioritized the compatibility issues identified. Other factors and associated issues were analyzed based on available information and similarity with other community JLUS experiences around the country.

Of the 25 standard compatibility factors, 11 factors were determined not to be applicable in the Youngstown ARS Study Area. They are:

- Air Quality
- Biological Resources
- Changing Climate
- Cultural Resources
- Dust / Smoke / Steam
- Frequency Spectrum Capacity
- Frequency Spectrum Impedance / Interference
- Housing Availability
- Public Trespassing
- Scarce Natural Resources
- Vibration



Anti-Terrorism / Force Protection

Anti-Terrorism / Force Protection (AT) relates to the security of personnel, facilities, and information on an installation from outside threats. Security issues and trespassing can present immediate compatibility concerns for installations. Due to current world conditions, military installations are required to meet more restrictive standards to address AT issues. These standards include increased security checks at installation gates and physical changes, such as new gates and entries that better control access. The following Anti-Terrorism / Force Protection issues were identified:

- **Additional Land to Protect Installation Assets.** The location of utilities at Youngstown ARS need to be more centralized on the installation. Additional land at the installation could help buffer these assets from the installation periphery.
- **Land Constraints Affect Capability for Gate Improvements.** Land at Youngstown ARS is constrained by existing development and wetlands. The current installation footprint does not provide sufficient land to support improvements to the existing gate configuration and lacks the land to accommodate a new gate.
- **Enhanced Coordination for Airport Safety and Security.** There is a need for enhanced security protocols and procedures between Youngstown ARS, Trumbull County and Vienna Township to ensure a comprehensive and coordinated security and safety response across all airport areas, i.e. commercial terminal, surrounding airport grounds and runways, which are under the separate safety and security authority of the three parties.
- **Enhanced Airport Perimeter Monitoring.** Certain areas outside the airport perimeter are heavily vegetated and lack direct access,

presenting a concern for law enforcement monitoring. While Youngstown ARS has the capacity to monitor the perimeter in these areas from inside the airport property, there is no agreement that allows them to do so.

- **Security Impact of Non-Aviation Use of Air Cargo Facility.** The use of the vacant air cargo facility by a non-aviation tenant presents a potential security issue for the existing Youngstown ARS mission since it would provide proximity to restricted airport areas by non-credentialed tenants, provide unobstructed views of military activities along the flight line, provide access to controlled airfield area used by Youngstown ARS, and create potential safety concerns.



Communication / Coordination

This discussion 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 mutually beneficial policies for both communities and the military to include in local planning documents, such as comprehensive plans. The following Coordination / Communication issues were identified:

- **Emergency Service Radio Communications.** Need for use of the same radio frequency for emergency services coordination between emergency management in surrounding communities and Youngstown ARS. The use of multiple frequencies can reduce the effectiveness of communications, delay the transmission of critical information, and affect response times.

- **Emergency Management Coordination.** Need for enhanced communication between emergency management in surrounding communities and the Youngstown ARS Fire Chief so that they can provide the optimum level of mutual support for cross-training opportunities and to maintain an ongoing dialog. Though the communities and Youngstown ARS have Mutual Aid Agreements, they address only coordination for fire suppression and in the event of emergency incidents.
- **Access for Public Safety Officers Training at Youngstown ARS.** Indicative of the strong relationship between Youngstown ARS and the surrounding community police departments, civilian public safety officers attend classes and training at Youngstown ARS. These officers can experience issues accessing the installation since there are no formalized protocols for this.
- **Coordinating Public Support.** Though the public is very motivated to proactively demonstrate support for Youngstown ARS, there is no formal process for establishing how and when to best seek their support.
- **Development Review Coordination.** Need for formal communication procedures between community planning and zoning departments and Youngstown ARS for notification and comment on reviews for development applications that could impact the mission at Youngstown ARS.
- **Coordination on Planning Issues with Local Jurisdictions.** Need for formalized coordination and communication between local jurisdictions and Youngstown ARS on planning issues. Though initiatives such as the Community Partnership Program are successful for implementing creative ways to leverage resources, opportunities to discuss localized and broad planning issues can be effective for identifying new opportunities.
- **Coordination between Port Authority and Youngstown ARS.** Need for enhanced communication and coordination between Western Reserve Port Authority and Youngstown ARS on planning issues, proposed projects and long-term plans at the Youngstown-Warren Regional Airport so that Youngstown ARS has an opportunity to evaluate any implications on their mission.
- **Need for Public Education on Youngstown ARS Mission.** Need for enhanced public awareness and education on the Youngstown ARS flight mission including low-level flight, use of Camp Garfield, and use of night vision equipment. Though there is broad community support for Youngstown ARS, additional awareness and education can help reinforce the value of the installation within the community.
- **State Agency Awareness of Youngstown ARS Mission for Permitting.** Need for awareness and education of Youngstown ARS mission with state agencies. Having and understanding of the mission will help agencies, particularly those with permitting authority such as the Department of Natural Resources and Department of Transportation, consider what types of actions may have an impact on Youngstown ARS.
- **Federal / State Agency Awareness of Youngstown ARS Mission for Partnering.** Need for awareness and education of Youngstown ARS missions with federal and state agencies to help identify partnering opportunities with agencies that have complementary missions and functions that could relocate to the installation.
- **Formal Coordination between FAA and Youngstown ARS.** Need for formalized coordination process between FAA and Youngstown ARS on planning actions at Youngstown-Warren Regional Airport that could impact the Youngstown ARS mission.



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 Youngstown ARS.** Energy supply availability and resiliency at Youngstown ARS are critical for maintaining operations in all conditions. Partnering on alternative energy sources, such as onsite renewables, can position the installation to be more resilient and reduce dependence on the grid.



Infrastructure Extensions

Infrastructure refers to public facilities and services such as sewers, water, electric, and roadways that are required to support existing and proposed development. Public facilities and services should be appropriate for the type of urban or rural development they serve, but also limited to the existing and planned needs and requirements of the area. For example, the provision of a safe transportation system, including all modes of transportation (automobile, mass transit, railway, highway, bicycle, pedestrian, air, water, etc.), is an important infrastructure component. Adequate transportation infrastructure contributes to local, regional, and state accessibility. The following Infrastructure Extensions issue was identified:

- **Sewer Expansion Surrounding Youngstown ARS.** The extension of central sewer along Youngstown Kingsville Road (State Route 193) will provide infrastructure to support additional development and at greater intensities within the area near to Youngstown ARS. This development will need to be coordinated with Youngstown ARS to ensure it is compatible with the installation mission.



Land / Air Spaces Competition

The military manages or uses land, air, and sea space to accomplish testing, training, and operational missions. These resources must be available and of sufficient size, cohesiveness, and quality to accommodate effective training and testing. Military and civilian air and sea operations can compete for limited air and sea space, especially when the usage areas are in close proximity to each other. Use of this shared resource can impact future growth for all users. The following Competition for Land / Air Spaces issues were identified:

- **Potential for Drone Impacts on Youngstown ARS Mission.** Concern for future civilian drone activity to impact the Youngstown ARS flight mission including surrounding airspace extending to Camp Garfield. The proliferation of recreational drone usage and the potential for commercial use of drones will need to be coordinated with the installation to deconflict the use of airspace required for the Youngstown ARS flight mission.
- **Utilization Impact of Non-Aviation Use of Air Cargo Facility.** The use of the vacant air cargo facility for non-aviation related businesses minimizes or eliminates the potential for future military capability including utilization of the collocated aviation apron and nearby taxiways.



Land Use

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 Impacts of Shale Gas Extraction Practices Near Youngstown ARS.** Concern that injection wells proximate to Youngstown ARS have the potential to pose a safety hazard for Youngstown ARS operations. Potential impacts from groundwater contamination, truck traffic, airborne gas releases and earthquakes are potential hazards that could affect Youngstown ARS.
- **Long-Term Impacts on Youngstown ARS from Relocation of King Graves Road.** Concern for impacts on Youngstown ARS associated with the relocation of King Graves Road. While the realignment will create additional clearance between buildings at the installation and King Graves Road, the realignment will affect the safety standoff for facilities at Youngstown ARS.
- **King Graves Road Construction Impacts on Youngstown ARS.** Concern that construction for realignment of King Grave Road will have impact on Youngstown ARS. Construction of the new roadway will reduce access to the installation main gate and introduce heavy construction trucks and traffic on this rural road.

- **Future Land Use Impacts on Youngstown ARS Night Flying Mission.** Though not a current concern, there is a need to protect long-term viability of the Youngstown ARS flight mission using night vision equipment.



Legislative Initiatives

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

- **State Agency Notification to Youngstown ARS.** Need for state agencies with permitting approval to coordinate planning and permitting actions with Youngstown ARS. Notification to Youngstown ARS will provide an opportunity for the installation to provide important input on actions that may impact the Youngstown ARS mission which could help deconflict potential issues resulting from approval actions.
- **State Law Authority Exemption to Zone Agricultural Structures.** State law precludes local government zoning authority over agricultural structures. This is critical in Clear Zones where federal land use guidance recommends no development.



Light and Glare

This factor refers to man-made lighting (street lights, airfield lighting, building lights) and glare (direct or reflected light) that disrupts vision. Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination, impacting the use of military night vision devices and air operations. Conversely, high intensity light sources generated from a military area (such as ramp lighting) may have a negative impact on the adjacent community. The following Light and Glare issues were identified:

- **Potential Light and Glare Impacts on Pilot Visibility from Solar Projects.** Concern for impact of solar energy development projects on the Youngstown ARS flight mission. Solar arrays can disrupt pilot visibility during approaches and low-level flight maneuvers.



Noise

Sound is defined as the mechanical energy transmitted by pressure waves in a compressible medium, such as air. More simply stated, sound is what we hear. As sounds reach unwanted levels, this is referred to as noise. The following Noise issues were identified:

- **Incompatible Development within Noise Zones.** Noise from activities at the Youngstown-Warren Regional Airport has the potential to affect noise sensitive land uses in the surrounding area. Noise sensitive land uses and greater intensities in development within the noise contours have the potential to impact the flying mission at the Youngstown ARS.



Public Services

Public services include that adequate services, such as police, fire, emergency services, parks and recreation, as well as potable water, wastewater, and stormwater infrastructure, are of good quality and available for use by the installation and surrounding communities as the area develops. The following Public Services issues were identified:

- **Operational Impacts at Youngstown-Warren Regional Airport.** Concern for potential impacts on Youngstown ARS due to loss of commercial carrier at Youngstown-Warren Regional Airport. Because the airport receives funding both for operations and improvements from the Federal Aviation Administration, any reduction in funding that could impact airport operations could have a potential impact on Youngstown ARS.



Roadway Capacity

Roadway capacity relates to the ability of existing freeways, highways, arterials, and other local roads to provide adequate mobility and access between military installations and their surrounding communities. The following Roadway Capacity issues were identified:

- **Safety Conditions from Traffic Stacking Outside Youngstown ARS Main Gate.** Safety concern from traffic stacking outside the Youngstown ARS main gate on to King Graves Road during Unit Training Assembly periods for reservists. Traffic stacking can reduce the flow of traffic on the road creating an unsafe travel environment.
- **Emergency Management Response Impact from Traffic Stacking at Youngstown ARS Main Gate.** Traffic stacking at the Youngstown ARS main gate during Unit Training Assembly periods for Reservists limits Youngstown ARS firefighters' capability to respond to surrounding community emergencies and from community firefighters to respond to emergencies at Youngstown ARS.

- **Single Gate Access at Youngstown ARS.** Combined truck and privately-owned vehicle traffic entering the single main gate at Youngstown ARS creates traffic stacking and congestion on King Graves Rd. which can present a safety hazard.



Safety Zones

Safety zones are areas in which development should be more restricted regarding the use and concentrations of people, due to the higher risks to public safety. Issues to consider include aircraft accident potential zones. The following Safety Zones issues were identified:

- **Incompatible Uses in Clear Zones and Accident Potential Zones.** Incompatible land uses in the Clear Zones and Accident Potential Zones create a safety concern.
- **Single Gate Affects Emergency Response.** The single gate at Youngstown ARS can restrict ingress and egress during emergencies and events at the installation open to the public. Since Youngstown ARS provides critical mutual aid to surrounding communities and the communities to Youngstown ARS, ingress and egress must be clear to provide a timely response both inside and outside the installation.
- **Bird Attractants near Runway.** Bird attractants, such as wetlands tree canopies, and agriculture are located on and around Youngstown ARS and along with the Mississippi migratory bird flyway, create the potential for bird aircraft strikes.



Vertical Obstructions

Vertical obstructions are created by buildings, trees, structures, and other features that encroach into the navigable airspace or line-of-sight of radar signal transmission pathways used by the military. These obstructions can be a safety hazard to both the public and military personnel and potentially impact military readiness. The following Vertical Obstructions issues were identified:

- **Incompatible Structures within Imaginary Surfaces.** County and township zoning codes do not regulate the height of structures within airfield imaginary surfaces for Youngstown-Warren Regional Airport which could lead to potential vertical obstructions to pilot navigation.



Water Quality and Quantity

Water quality/quantity concerns include the assurance that adequate water supplies of good quality are available for use by the installation and surrounding communities as the area develops. Water supply for agricultural and industrial use is also a consideration. The following Water Quality and Quantity issues were identified:

- **Winter Flooding Along King Graves Road.** Potential for flooding and downed trees in winter when ground freezes and heavy rains cannot percolate.

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Implementation Plan

This chapter identifies the recommended courses of action (strategies) for responding to the compatibility issues identified in Chapter 5. The strategies were developed through a collaborative effort among representatives of local jurisdictions, Youngstown ARS, state and federal agencies, local organizations, the public, and other stakeholders that own or manage land and resources in the region.

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 civilian / military interactions can be avoided, significantly mitigated, or removed. These strategies are the heart of the JLUS Study and are the culmination of the entire planning process.

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

Each strategy presented in this chapter addresses a specific compatibility issue that is detailed in Chapter 5 of the Youngstown ARS Background Report and summarized in Chapter 5 of this JLUS Report.

A critical variable for the implementation of strategies is the establishment of the JLUS Implementation Coordination Committee (see Strategy COM-6A) to oversee the execution of the JLUS. It is through this committee that local jurisdictions, the installation, and other stakeholders can enhance their collaboration and

adjust actions over time to ensure resolution of the key issues is achieved well into the future through the implementation of realistic and applicable strategies.

Implementation Plan Guidelines

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

- 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.
- To minimize regulation, many of the strategies are only recommended for within a specific geographic area where a compatibility issue has been identified (e.g. within noise contours) instead of for the whole JLUS Study Area.
- To meet the needs of all parties, it was determined that strategies without 100% buy-in from all stakeholders may be expanded and tailored to individual circumstances. These strategies ultimately constitute multiple strategies that address one issue in different ways.

- Since state and federal regulations are subject to change, the party responsible for implementation should ensure there are no conflicts between the strategy and existing state or federal laws before executing any of the suggested strategies.

In addition to the primary guidelines listed above, consideration was given to the 2018 National Defense Strategy (NDS) when developing recommendations. The NDS is used to establish objectives for military planning regarding force structure, force modernization, business processes, supporting infrastructure, and required resources. While the NDS is a high-level strategy document and broad in nature, it provides important information for the JLUS process. Three important considerations taken from the NDS are:

- **Values Training**—the principle of achieving peace through strength requires the Joint Force to deter conflict through preparedness for war;
- **Supports Investment**—the NDS requires a competitive approach to force development and a consistent, multi-year investment to restore warfighting readiness and field a lethal force; and
- **Leverage Asset Management**—the DoD will also work to reduce excess property and infrastructure, providing Congress with options for a future Base Realignment and Closure.

Where compatibility issues were related to one of the NDS considerations, an effort was made to identify a strategy consistent with the NDS considerations. For example, if an issue were identified related to installation built and natural assets, a supporting strategy would consider how to best reduce any excess capacity.

Military Compatibility Areas

In compatibility planning, the term “Military Compatibility Area” (MCA) is used to formally designate a geographic area where military operations may impact local communities and, conversely, where local activities may affect the military’s ability to conduct its mission. An MCA is designated to accomplish the following:

1. Promote coordination and communication between the military and communities regarding shared land uses.
2. Promote an awareness of the size and scope of military training areas to protect areas that are separate from the military installation and used for training purposes (e.g., critical air space).
3. Promote the protection of public health, safety, and welfare by using the compatibility areas as a framework to guide discussions regarding proposed developments, proposed land use actions that could impact the military, and for permit applications.
4. Encourage the maintenance of operational capabilities of military installations and areas.

An MCA delineates a geographic area for which strategies are recommended to support compatible planning and are applied with a focus on communication and coordination. The MCAs are where most of the recommended strategies apply within the JLUS Study Area. There are five MCAs that comprise a Military Compatibility Area Overlay District (MCAOD) for the Youngstown ARS, which are:

- Safety MCA
- BASH MCA
- Unmanned Aerial Systems MCA
- Noise MCA
- Noise Awareness Area
- Vertical Obstruction Awareness MCA

Safety MCA (Figure 15)

The proposed Safety MCA addresses compatible land use types and densities / intensities within the Clear Zones (CZs) and Accident Potential Zones (APZs) I and II of the runways at the Youngstown-Warren Regional Airport. Each of these safety zones is a subzone of the Safety MCA. The location of each safety subzone is based on the airfield layout and current air operations.

The Safety MCA is designed to prevent the development of incompatible land uses in areas with the greatest potential for an aircraft mishap. These safety zones were identified through Air Force guidance that defines safety zones as areas where an aircraft accident is statistically most likely to occur (in the unlikely event that one was to occur at all). The safety zones follow departure and arrival flight tracks and are based on the analysis of historical data. For criteria on compatible development within the Safety MCA, see Table 5.21-1 in the Background Report.

BASH MCA (Figure 16)

The proposed Bird / Wildlife Aircraft Strike Hazard (BASH) MCA extends 5 miles in all directions from the air operations areas at the Youngstown-Warren Regional Airport. This MCA is meant to include areas near the airfield with the highest concentrations of birds, wildlife, or attractants. Bird strikes with aircraft can pose serious safety concerns, including the potential for loss of life or aircraft. Even minor bird strikes can cause costly repairs to aircraft and interfere with training missions. The five-mile distance associated with the BASH MCA is a Federal Aviation Administration (FAA) recommended standard for managing bird attractants around airports.

Drone MCA (Figure 17)

The Drone MCA includes the drone-restricted airspace surrounding the Youngstown-Warren Regional Airport, as indicated by FAA guidelines. It is important to keep these areas clear of unauthorized drones to ensure a safe operating environment. Additionally, the area surrounding a runway will feature low-flying aircraft as part of departure, takeoff, and touch-and-go operations. In this context, drones are a safety hazard for both commercial and military aircraft.

Noise MCA (Figure 18)

Noise is often a concern for members of the public in areas surrounding military installations with flying missions. The Noise MCA includes all land located off-installation within the 2025 Youngstown-Warren Regional Airport noise contours associated with military aircraft activities. Residential developments and other noise-sensitive land uses within this MCA may be subject to sound attenuation measures to reduce interior noise impacts.

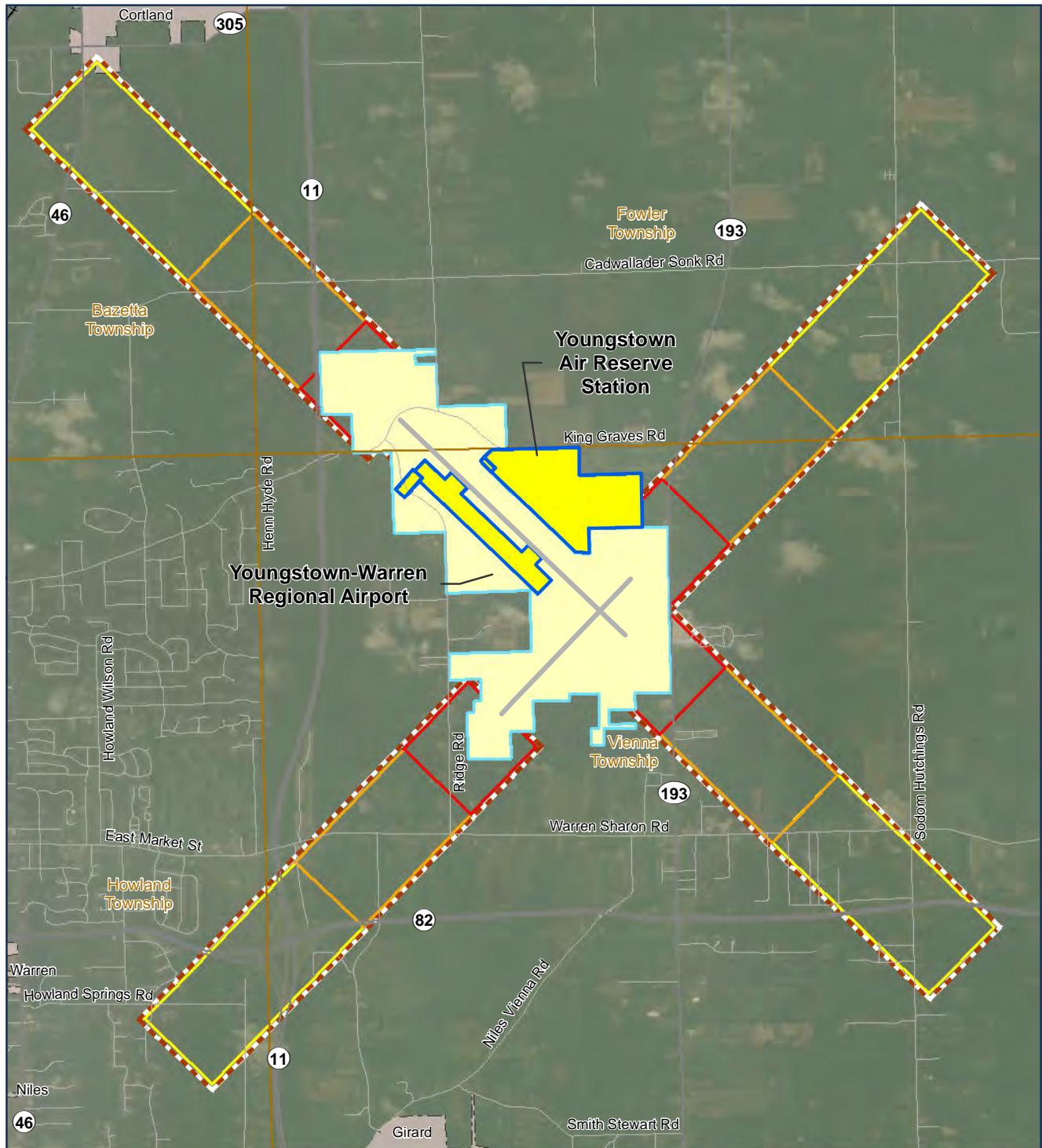
Noise level reduction requirements in planning documents are key to ensuring noise sensitive uses such as residential, healthcare, education, and government facilities are compatible in areas that experience noise levels of 65 dB DNL or greater. Local building codes can also be used to ensure that noise-attenuation measures are incorporated in all new development within the Noise MCA.

Noise Awareness Area (Figure 18)

Areas near the Youngstown-Warren Regional Airport that are outside the noise contours but are in a location where there are reasonable expectations of some amount of aircraft noise impacts, are included in the Noise Awareness Area (NAA). The NAA promotes awareness and understanding of potential noise impacts. In lieu of the implementation of formal regulations, the NAA delineates a geographic area where strategies are recommended to support compatible planning and are applied with a focus in communication and coordination.

The NAA is contained within the Inner Horizontal imaginary surface where aircraft operate at lower altitudes around the airfield. The Inner Horizontal surface extends out to 7,500 feet, or approximately 1.5 miles from the airfield runways in all directions.

Although there is no documented information that establishes specific noise levels in the NAA, the proximity to the airfield and the fact that aircraft operations will generate some levels of noise, may make certain land uses incompatible. An example of a potentially incompatible land use is where sensitive receptors may be located such as schools, churches, and medical facilities. The NAA is not intended to dictate any regulatory requirements such as sound attenuation for buildings, but instead promote actions such as notification of potential aircraft noise impacts to those located or planning to locate in the area.



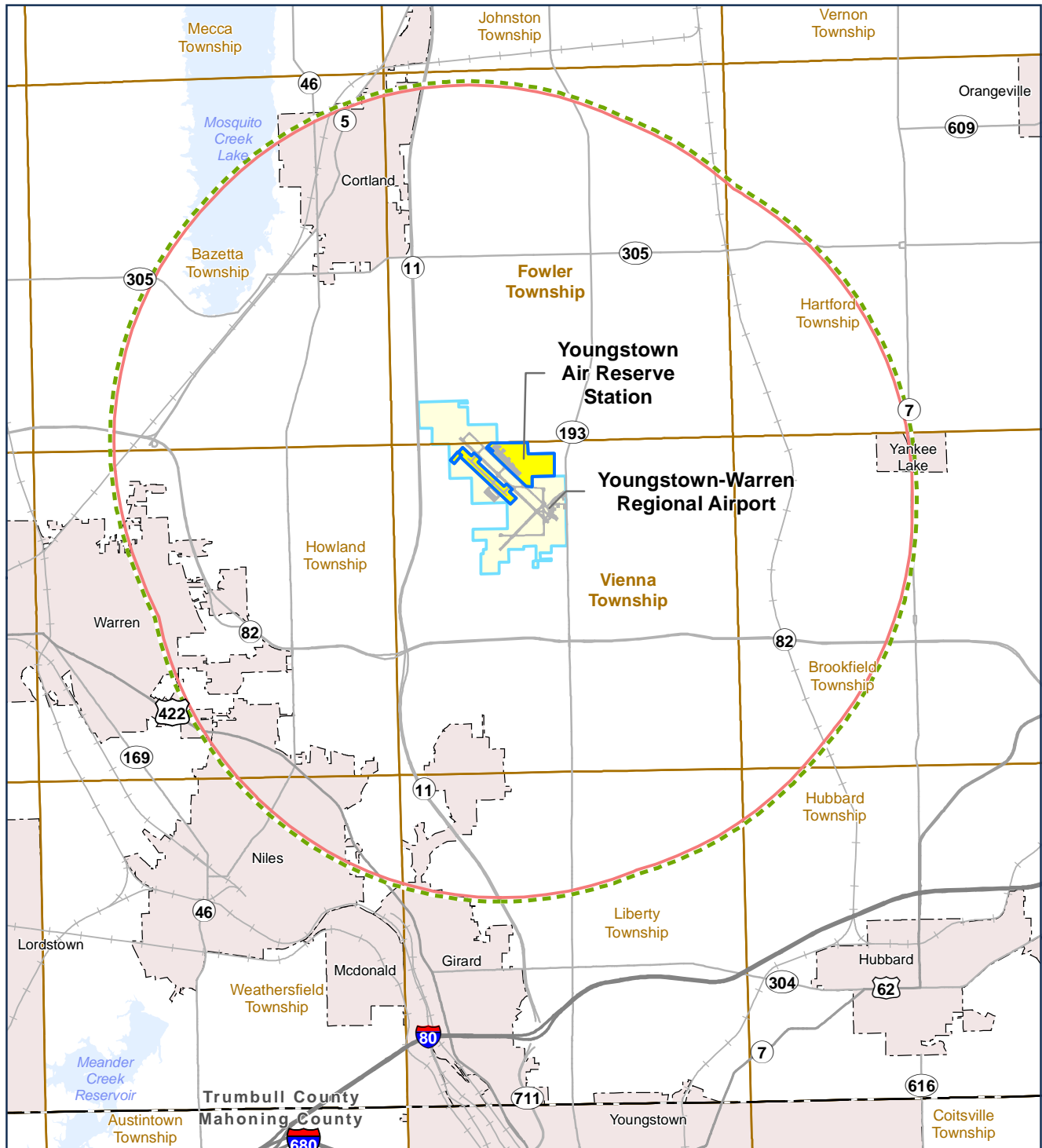
- | | | |
|----------------------------|------------------------------------|-------------|
| Airfield Safety MCA | Youngstown ARS | State Route |
| Clear Zone | Youngstown-Warren Regional Airport | Local Roads |
| Accident Potential Zone I | City | Railroad |
| Accident Potential Zone II | Township Boundary | |



Matrix

0 1/2 1 Miles

Source: Youngstown ARS, 2018.
Matrix Design Group, 2018.



Legend

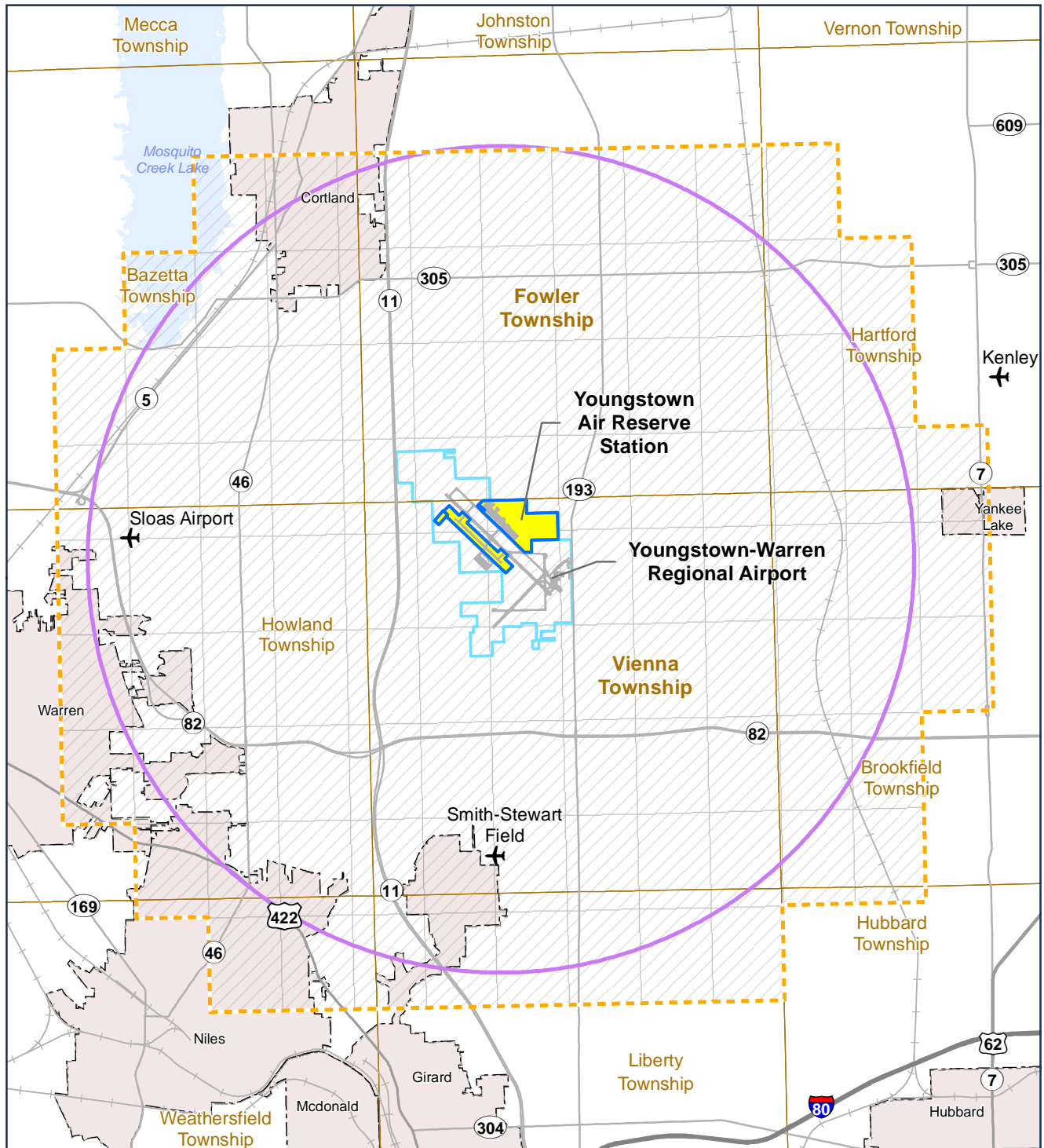
- BASH MCA
- 5-mile BASH Relevancy Area
- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City
- Interstate
- US Route
- State Route
- Railroad
- Waterbody
- Airfield Surface/Runway



Matrix

0 1 2 Miles

Source: Matrix Design Group, 2018.



Legend

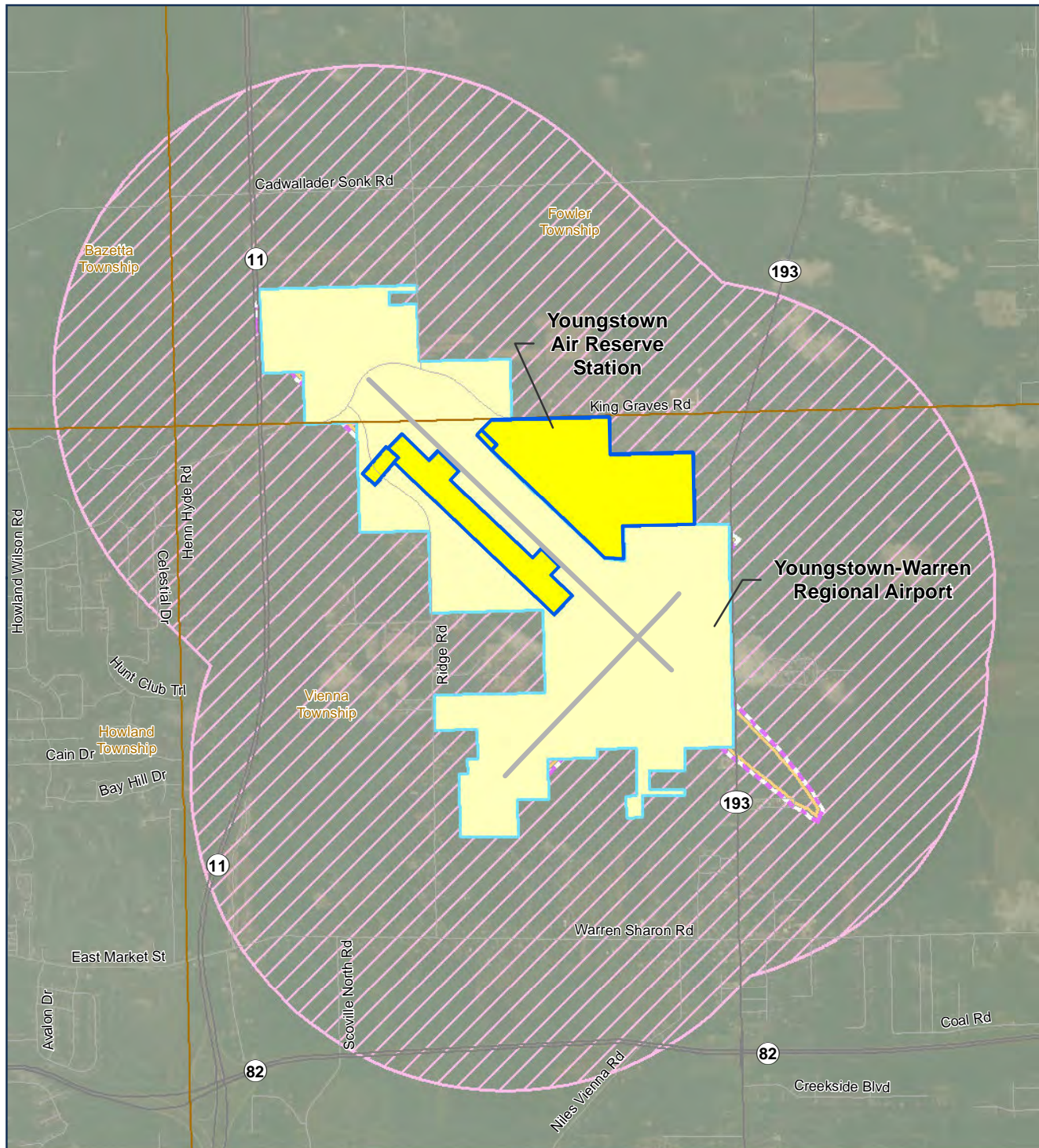
- Drone MCA
- 5 Mile FAA Drone Notification Area
- FAA Drone Flight Restriction Area
- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City
- Interstate
- US Route
- State Route
- Railroad
- Waterbody
- Airfield Surface/Runway



Matrix

0 1 2 Miles

Source: Matrix Design Group, 2018.
Small UAS Rule (14 CFR 107).
Federal Aviation Administration, 2017.



- Noise Military Compatibility Area
- Youngstown ARS
- Township Boundary
- Youngstown-Warren Regional Airport
- Noise Awareness Area
- 65 dB Noise Subzone
- Runway
- State Route
- Local Roads



0 1,000 2,000
Feet

Source: C&S Engineers, Inc., 2017.

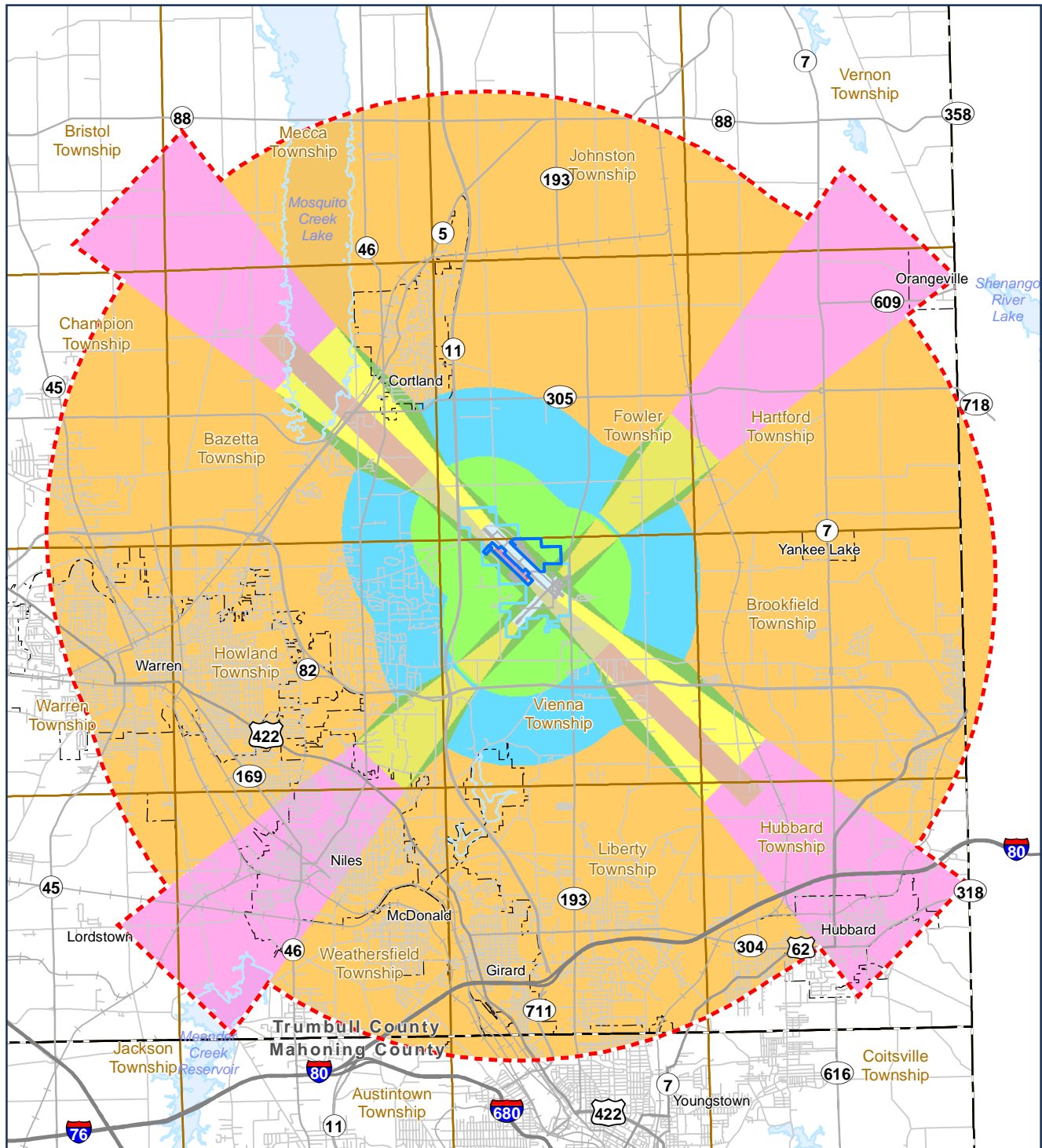
Vertical Obstruction Awareness MCA (Figure 19)

The purpose of the Vertical Obstruction MCA is to regulate the height of all structures within the area that is defined by FAA guidance and Air Force instruction using criteria known as “imaginary surfaces.”

The imaginary surfaces are 3-dimensional geospatial areas comprising approach and departure airspace corridors and surrounding navigable airspace. Vertical obstruction heights are a major concern for flight operations and training due to the potential for a structure to extend into navigable airspace, which could impede safe flight operations and put both pilots and citizens on the ground at risk of an aircraft mishap.

MCAOD (Figure 20)

The MCAOD is a comprehensive overlay district combining all five MCAs for Youngstown-Warren Regional Airport. The MCAOD is defined by the outermost MCA boundary when all MCAs are combined. Figure 20 provides a mapped view of the influence the Youngstown ARS has on the region, and the various compatibility areas that should be considered when planning future growth and development in the region.



- Vertical Obstruction Awareness MCA Imaginary Surface Subzones**
- Primary Surface
 - Approach/Departure Zone (50:1)
 - Approach/Departure Zone (40:1)
 - Approach/Departure (Horizontal)
 - Approach/Departure (AS-Outer 35:1)
 - Approach/Departure (AS-Inner 35:1)

- Inner Horizontal Surface (150 ft)
- Conical Surface (20:1)
- Outer Horizontal Surface (500 ft)
- Transitional Surface (7:1)
- Exclusion Area (AS)
- Runway End Clear Zone (AS)

- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City

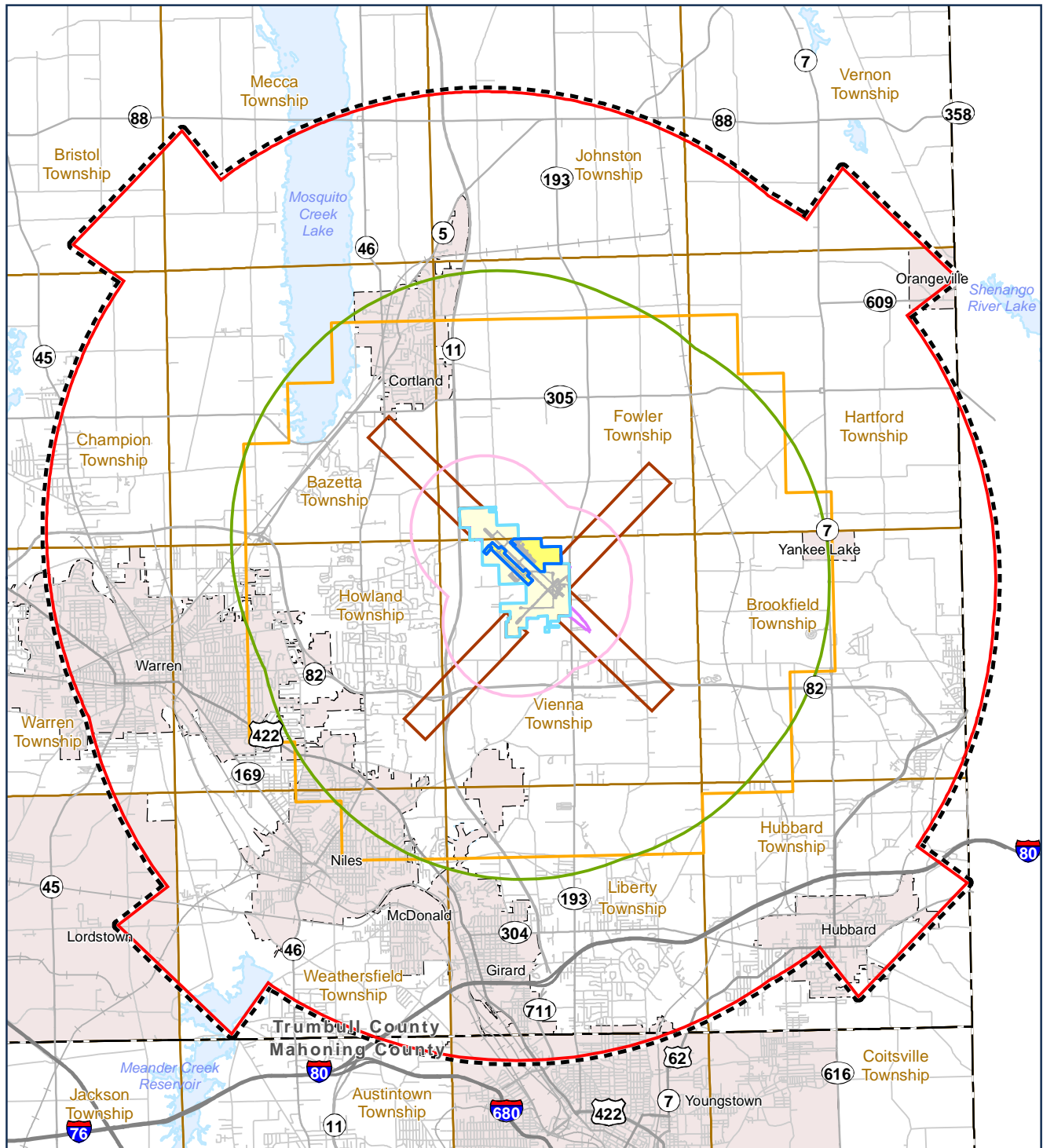
- Interstate
- US Route
- State Route
- Local Roads
- Railroad
- Airfield Surface / Runway
- Waterbody



Matrix

0 1 2 Miles

Source: Youngstown ARS, 2017.
Matrix Design Group, 2018.



- MCAOD
- Vertical Obstruction MCA
- Noise MCA
- Airfield Safety MCA
- BASH MCA
- Drone MCA
- Noise Awareness Area
- Youngstown ARS
- Youngstown-Warren Regional Airport
- County
- Township
- City
- Interstate
- US Route
- State Route
- Local Roads
- Railroad
- Airfield Surface / Runway
- Waterbody



Matrix

0 1 2 Miles

Source: Youngstown ARS, 2017.
Matrix Design Group, 2018.




Figure 20
Military Compatibility Area Overlay District

How to Read the Implementation Plan

The strategies presented in the following tables address the compatibility issues that were identified during the JLUS. A master table of all strategies is provided in Table 7, followed by a table for strategies specific to each jurisdiction or organization – Vienna Township (Table 8), Fowler Township (Table 9), Howland Township (Table 10), Trumbull County (Table 11), the Western Reserve Port Authority (Table 12) and Youngstown ARS (Table 13). 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 / or
- Provide for enhanced and ongoing communications and collaboration.

To make the strategies easier to use, they are presented in a table format with the issues they are intended to resolve or minimize and information on when and how each strategy should be implemented. The strategies and corresponding issues are grouped by compatibility factor which are depicted with an icon and spelled out. Compatibility factors are discussed in Chapter 5. Figure 21 provides a snapshot of the implementation strategy table. The following paragraphs provide additional guidance on how to read the strategies table.

Issue and Strategy ID. The issue ID and strategy ID 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 identification number and this ID. For example, the first communication / coordination compatibility issue is identified as COM-1 and the associated strategies are identified as COM-1A, COM-1B, etc. Strategies that involve economic development initiatives or funding sources for projects are delineated with the  icon.

Geographic Area. This column indicates the MCOAD or MCA area where the strategy should be applied or that it should be applied throughout the JLUS Study Area as a whole.

Strategy. In bold type is a title that describes the strategy. This is followed by the complete strategy statement that describes the recommended action. Each strategy is given a descriptive title presented in bold typeface, followed by a summary of the recommended action.

Timeframe to Initiate. This column indicates the projected timeframe that each strategy is intended to begin. The timeframes describe the year in which a strategy will be initiated or if it is an ongoing action.

Short-Term. Strategy to be initiated within 1-2 years following JLUS completion.

Mid-Term. Strategy to be initiated within 3-4 years following JLUS completion.

Long-Term. Strategy to be initiated in 5 or more years following JLUS completion.

Ongoing. Strategy will be needed on a continuous, intermittent or as needed basis.

Implementation Phase. This column indicates the potential phasing of a strategy relative to seeking additional federal funding through the Department of Defense Office of Economic Adjustment (OEA) for implementation assistance. There are two (2) phases for implementation denoted with either:

- **P I.** Phase I activities are intended to be initiated within the first year after completion of the JLUS
- **P II.** Phase II activities are intended to be initiated once Phase I activities have been closed out.
- **N/A.** Strategies that do not apply to phasing.

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 the JLUS strategies. If an entity has responsibility relative to implementing a strategy, a mark is shown under their name. This mark is one of two symbols that represent their role. A solid square (■) designates that the entity identified is responsible for implementing the strategy. A hollow square (□) designates that the entity plays a key supporting role but is not directly responsible for implementation. The responsible parties are identified by their name or assigned acronym in the heading at the top of each page.

Figure 21 Implementation Strategy Key






Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
 Communication / Coordination												
COM-4	Coordinating Public Support Though the public is very motivated to proactively demonstrate support for Youngstown ARS, there is no formal process for establishing how and when to best seek their support.											
COM-4A	Study Area	Utilize existing organizations such as EOMAC and the Youngstown Air Reserve Station Community Council (YARBCC) to coordinate community outreach efforts for consistent and regular messaging. Other Partner: YARBCC	Short-Term	N/A	□	□	□	□		□	■	■
<div> <div> Issue / Strategy Number: Alpha-numeric identifier that corresponds to the issue numbers in Chapter 5 of the JLUS Background Report. </div> <div> Geographic Area: Area in which each strategy applies. </div> <div> Strategy: Description of the Strategy. </div> <div> Timeframe: Short-Term: Initiate 1-2 years following JLUS Completion Mid-Term: Initiate 3-4 years following JLUS completion Long-Term: Initiate 5+ years following JLUS Completion Ongoing: Continuous </div> <div> Implementation Phase: Potential phasing for additional implementation funding through OEA. </div> <div> Responsible Party: The solid box (■) denotes the primary party who will take the lead in implementation. The hollow box (□) denotes the partner agency for assisting the primary agency in implementation. </div> </div>												

Table 7 JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy										Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
<div> Anti-Terrorism / Force Protection</div>																					
AT-1	Additional Land to Protect Installation Assets The utilities at Youngstown ARS need to be more centrally located on the installation. Additional land at the installation could help buffer these assets from the installation periphery.																				
AT-1A	Study Area	Evaluate Land Acquisition Options Consider land acquisition with adjacent willing landowners to create buffers around existing locations where utilities enter the installation. The land buffers would reduce accessibility by unauthorized personnel and reduce line of sight from off-installation locations. <i>Other Partner: Local Land Owners</i>	Mid-Term	N/A																	
<div>IN PROCESS</div>																					
AT-1B	YARS	Shield Utilities from Off-Installation Line of Sight Provide better shielding to limit off-installation visibility of existing utility locations. Shielding can be accomplished via built infrastructure such as walls, fencing or landscaping. Natural infrastructure such as trees, shrubs or ground contouring can block the line of sight for installation utility access locations. Consider improved lighting of these locations to reduce likelihood of unauthorized access. <i>Other Partner: Local Utility Providers</i>	Short-Term	N/A																	
AT-1C	YARS	Establish Redundant Utility Access Nodes Work with local utility providers to determine feasibility of establishing redundant utility access points. Providing additional locations where utilities enter the installations and connecting to the on-installation utility grid (e.g. power, natural gas, water) eliminates a single point of failure scenario and allows Youngstown ARS to continue operations when one utility access node is down. <i>Other Partner: Local Utility Providers</i>	Mid-Term	N/A																	
AT-1D	YARS	Coordinate with the Ohio Military Facilities Commission for Infrastructure Capital Improvements Request from the Ohio Military Facilities Commission when the next round of funding appropriations for infrastructure capital improvements will be authorized. This funding source could be used for infrastructure improvement projects in Strategies AT-1B and AT-1C. Additionally these funds could be used for security monitoring technologies in Strategy AT-4B, and energy resilience projects in Strategies ED-1A and ED-1B. <i>Other Partner: Ohio Military Facilities Commission</i>	Short-Term	N/A																	

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-1E 	YARS	National Defense Authorization Act Resilience Grants <i>(Note: Though funds have been appropriated for this program, it is not clear when the grant program will begin.)</i> Preposition to pursue funding through the 2019 National Defense Authorization Act Resilience Grants program for installation resiliency projects. This new program under the DoD Office of Economic Adjustment was established to offer grants to states and local governments for assistance to address threats to military installation resilience which could hinder base operations. The provision defines installation resilience as the capability of an installation to adapt to and recover from extreme weather events, or unanticipated changes in environmental conditions which could affect the installation or community resources such as transportation needed to "maintain, improve or rapidly reestablish installation mission assurance and mission essential functions."	Ongoing	N/A	■			■	■	□	□	
AT-2 Land Constraints Affect Capability for Gate Improvements Youngstown ARS is operationally constrained by existing development and wetlands. The current installation footprint does not include enough space for improvements to the existing gate configuration and lacks the land to accommodate a new gate.												
AT-2A 	Study Area	Evaluate Land Acquisition Options Consider land acquisition with adjacent willing landowners that could be used to construct a gate that meets DoD AT / FP requirements. There are 40 acres of undeveloped agricultural land east of Youngstown ARS along King Graves Road that would enable a proposed new gate for the installation. <i>Other Partners: Parcel Land Owners</i>	Short-Term	N/A					□	■	□	□
AT-3 Enhanced Coordination for Airport Safety and Security There is a need for enhanced security protocols and procedures to ensure Youngstown ARS, Trumbull County, and Vienna Township provide comprehensive and coordinated security and safety responses across all airport areas (i.e. the commercial terminal, surrounding airport grounds, and runways) that are currently under the separate safety and security authority of each party.												
AT-3A 	Study Area	Memorandum of Agreement for Law Enforcement Establish a Memorandum of Agreement (MOA) between Youngstown ARS and local law enforcement agencies to coordinate necessary security requirements, protocols and procedures for operations in and around the airport property.	Short-Term	N/A	□	□		□	□	■		
AT-3B	Study Area	Conduct Joint Exercises Youngstown ARS and local Fire / EMS and police should continue to partner on conducting accident response and recovery exercises from simulated incidences at the airport property. The exercises should be used to refine incident management coordination and protocols between agencies, and to identify and implement best courses of action for response and recovery.	Ongoing	N/A	□	□	□	□	□	■		

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-4 Enhanced Airport Perimeter Monitoring Certain areas outside the airport are heavily vegetated and lack direct access, presenting a challenge for law enforcement tasked with monitoring the perimeter. While it is possible to monitor the perimeter in these areas from inside the airport boundary, there is no agreement that allows Youngstown ARS to do so.												
AT-4A	Study Area	Establish a Memorandum of Agreement Develop a MOA between Western Reserve Port Authority and Youngstown ARS to support interior perimeter patrols of the airport property. The MOA would establish policy / procedures allowing Youngstown ARS to patrol / monitor areas inside the entire airport property that provide line of sight from off-installation locations that are otherwise difficult to monitor from outside the installation.	Short-Term	N/A					■	□		
COMPLETED DURING JLUS												
AT-4B	Study Area	Consider Use of Security Monitoring Technology Determine feasibility of using cameras and other sensors (e.g. motion, infrared, etc.) to monitor the interior airport perimeter.	Mid-Term	N/A					■	■		
AT-5 Security Impact of Non-Aviation Use of Mid-Field Air Cargo Facility The use of the vacant air cargo facility by a non-aviation tenant presents a potential security issue for the existing Youngstown ARS mission since it would result in non-credentialed tenants being near to restricted airport areas and provide those same tenants unobstructed views of military activities along the flight line and access to controlled airfield areas used by Youngstown ARS.												
AT-5A	Study Area	Restrict the Lease or Sale of Facility and Apron for Non-Aviation Uses The Western Reserve Port Authority should consider forgoing any actions to lease or sell the cargo facility or apron for uses that limit or prohibit full utilization of the apron, taxiways, and / or area for aviation or potential use by Youngstown ARS.	Short-Term	N/A					■			
IN PROCESS												
AT-5B	Study Area	Restrict Actions that Reduce Utilization of Apron and Taxiways for Aviation Purposes The Western Reserve Port Authority should consider forgoing any actions that reduce or eliminate the ability to utilize the apron and taxiways adjacent to the cargo facility for aviation purposes.	Long-Term	N/A					■			
IN PROCESS												

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other



Communication / Coordination

COM-1 Emergency Service Radio Communications

There is a need for emergency responders in surrounding communities and at Youngstown ARS to use the same radio frequency to improve the coordination of emergency services. The use of multiple frequencies can reduce the effectiveness of communications, delay the transmission of critical information, and affect response times.

COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network Surrounding law enforcement agencies and Youngstown ARS should invest in a digital radio system capable of communicating through the Ohio MARCS (Multi-Agency Radio Communication System) network that would allow for the use of a single radio frequency for emergency services within the region and statewide. Consider applying for the MARCS Grant through the Ohio Department of Commerce Division of State Fire Marshal to offset the cost of radios and monthly service agreements.	Mid-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COM-1B	Study Area	Intergovernmental Agreement for Single-Use Frequency Youngstown ARS and surrounding law enforcement agencies should establish an Intergovernmental Agreement (IGA) regarding the use of a single radio frequency for emergency services.	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

COM-2 Emergency Management Coordination

There is a need for enhanced communication between emergency management in surrounding communities and the Youngstown ARS Fire Chief to facilitate cross-training opportunities and maintain an open dialog. Though the communities and Youngstown ARS have mutual aid agreements, the agreements only address coordination for fire suppression and for emergency incidents.

COM-2A	Study Area	Memorandum of Agreement for Planning and Cross-Training Establish a Memorandum of Agreement (MOA) between Youngstown ARS and local Fire, EMS and law enforcement agencies for enhanced communications and coordination of emergency management planning and cross-training opportunities.	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COM-2B	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources The local law enforcement agencies should consider collaborating with Youngstown ARS security forces to execute a mutual aid agreement that will provide for the coordination of law enforcement resources and identify opportunities for resource sharing.	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COM-2C	Study Area	Emergency Management Forums Conduct regular emergency management forums dedicated to sharing information between Youngstown ARS and local Fire, EMS and law enforcement agencies.	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other

For other strategies that address this issue see Strategies AT-3A and AT-3B.

Access for Public Safety Officers Training at Youngstown ARS COM-3 There is a need for protocols to facilitate public safety officers' access to the installation. Civilian police officers attend classes and training sessions at Youngstown ARS—an indication of the strong relationship between the military and surrounding communities—but can experience problems and delays entering the installation.											
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COM-3A	Study Area	Formalize Protocols for Officer Access Establish formalized protocols for public safety officer access to Youngstown ARS including procedures for notification of officers to Youngstown ARS in advance of classes and training. Protocols should be deployed to local law enforcement agencies for compliance.	Short-Term	N/A						■	
COM-3B	Study Area	Roster of Training Officers Maintain a roster of all training public safety officers through the Youngstown ARS Security Forces Squadron. The roster should be on record at the Youngstown ARS gate to expedite officer access.	Short-Term	N/A	■	■	■	■		■	

Coordinating Public Support COM-4 Although the public proactively demonstrates its support for Youngstown ARS, there is no formal process for establishing how and when to best seek their support.											
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COM-4A	Study Area	Coordinate Enhanced Community Outreach Communication Utilize existing organizations such as EOMAC and the Youngstown Air Reserve Base Community Council (YARBCC) to coordinate community outreach efforts for consistent and regular public messaging. <i>Other Partner: YARBCC</i>	Ongoing	N/A	■	■	■	■		■	■
COM-4B	Study Area	Develop an Outreach Campaign Plan Develop an Outreach Campaign Plan that identifies public outreach goals and action items, metrics and milestones for activities, and responsible parties for conducting outreach activities. Goals should support a range of activities including public appearances, speaking engagements, educational seminars, open houses, media engagements, exhibits, press and news release and publication development / distribution that reinforces the community understanding of the Youngstown ARS missions, enhance its strategic value within the community, and strengthens the community support base. The Public Outreach Campaign Plan should address current issues, concerns, and potential changes at Youngstown ARS. Consideration should be given to a broad mix of outreach channels including in-person, print, video, and digital tools such as websites, social media, and podcasts and support from area jurisdictions and organizations. <i>Other Partner: YARBCC</i>	Ongoing	N/A	■	■	■	■		■	■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
Development Review Coordination												
COM-5	There is a need for formal communication procedures between community planning and zoning departments and Youngstown ARS to ensure notification and review of development applications that could impact the mission at Youngstown ARS.											
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS Trumbull County and Vienna, Fowler and Howland townships should consider working with Youngstown ARS to develop a formal Memorandum of Agreement (MOA) that delineates the roles and responsibilities for each community to collaborate on proposed development and land use planning matters. By resolution, each jurisdiction should appoint a military liaison. At a minimum, the MOA should include: <ul style="list-style-type: none">Point of contact and information for each agency including phone numbers and email addresses,Role in communicating with the installation on compatibility concerns,Responsibility in coordinating on the resolution of compatibility concerns,Community and military response times,Checklist of triggers for coordination and communication, e.g. safety zones, noise zones, height, and distance, andProcedures for early development review. <i>Other Primary Partners: Ohio Department of Transportation, Local Utility Providers</i>	Short-Term	PI	■	■	■	■	■	■	■	■
COM-5B	MCAOD	Adopt Development Notification Checklist Jurisdictions should work with Youngstown ARS to develop, adopt and implement a development notification checklist that will assist jurisdictions, developers, residents and the military with identifying development types that could potentially be incompatible with the installation missions. The checklist should define applicable development types that warrant Youngstown ARS review and include a map indicating the notification area. The checklist should be standardized for all jurisdictions to ensure consistency and eliminate interpretation in how, when and where the checklist is applied. The checklist could be used as a tool for a continuing dialog between local economic development organizations and the military and assist with early notification to developers. The checklist should not be regarded as a mechanism to approve or deny development but should be formally adopted by Trumbull County and townships to acknowledge and endorse its use. <i>Other Partners: Youngstown Warren Regional Chamber, NEO Development and Finance Authority</i>	Short-Term	PI	■	■	■	■	□	□		□


Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-5C	MCAOD	Coordination with DoD Siting Clearinghouse The DoD Siting Clearinghouse requirements and standards published in Title 32, Code of Federal Regulations, Part 211, advise and guide the process to facilitate the early submission of renewable energy project proposals to the Clearinghouse for military mission compatible review. Consider amending applicable local planning codes to incorporate policies and procedures for ensuring coordination of alternative energy development applications with the DOD Siting Clearinghouse. If JLUS communities become aware of any renewable energy development projects, they should contact the developer and inform them of the need to coordinate with the DOD Clearinghouse.	Short-Term	PI	■	■	■	■			
COM-5D	MCAOD	Adopt Military Notification Procedures for Development Projects through Tax Abatement Process Jurisdictions should adopt formal requirements for notification and review of development by Youngstown ARS per the Checklist identified Strategy COM-5B. As part of the tax abatement application process require transmittal of a copy of the application to Youngstown ARS at the time of application to ensure adequate review prior to the public hearing.	Mid-Term	PI	□	□	□	■			
COM-6	Coordination with Local Jurisdictions on Planning Issues There is a need for formal coordination and communication between local jurisdictions and Youngstown ARS regarding planning issues. Though initiatives such as the Community Partnership Program are successful in creatively leveraging and maximizing resources, frequent discussion about local and regional planning issues can be an effective tool identifying new opportunities for compatible development.										
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations Formalize through a resolution that the Youngstown ARS JLUS Policy and Technical Committees will transition to a JLUS Coordination Committee and be responsible for monitoring the achievement of the recommended JLUS strategies and act as a forum for continued communication and sharing of information and current events associated with military compatibility. Jurisdictions should appoint a military liaison to be the point of contact to be on the committee who would be present at jurisdiction meetings. The resolution should outline such assigned responsibilities. <i>Other Partners: As Needed</i>	Short-Term	N/A	■	■	■	■	■	■	■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-6B	Study Area	Provide Mutual Briefings To enhance ongoing support and cooperation and reinforce the partnership between Youngstown ARS and Study Area jurisdictions, installation leadership should annually present a “state of the installation” briefing including strategic goals, operational changes, and proposed construction projects that may impact the jurisdictions to the Trumbull County Board of Commissioners and township trustees. Trumbull County and the townships should provide annual briefings to Youngstown ARS leadership of changes within the communities that may impact the installation including comprehensive plans, master plans, transportation plans, zoning, development projects, and capital improvement plans. <i>Other Partners: Youngstown Warren Regional Chamber, NEO Development and Finance Authority</i>	Ongoing	N/A	■	■	■	■	■	■	□	□
COM-6C	MCAOD	Foster Enhanced Public Awareness Through Accurate Mapping Provide all of the surrounding local, county, regional, and state governments with an accurate geographic information system (GIS) data layer or geodatabase of the installation boundaries and military footprints that extend outside the installation for inclusion in planning documents.	Short-Term	N/A						■		
COM-6D	Study Area	Invitation to Trumbull County Zoning Inspectors Association Meetings Invite leadership / representatives from Youngstown ARS to attend Trumbull County Zoning Inspectors Association meetings for sharing of information regarding development within the region.	Short-Term	N/A				■				
For other strategies that addresses this issue see Strategies COM-5A, COM-5B and COM-5C.												
Coordination between Port Authority and Youngstown ARS												
COM-7	There is a need for enhanced communication and coordination between Western Reserve Port Authority and Youngstown ARS on planning issues, proposed projects, and long-term plans at the Youngstown-Warren Regional Airport so that Youngstown ARS can evaluate any implications for their mission.											
COM-7A	Study Area	Establish Working Committee Establish a Working Committee for the Western Reserve Port Authority and Youngstown ARS to regularly share information. <i>Other Partners: YARBCC</i>	Ongoing	N/A				□	■	■	□	□



IN PROCESS

IN PROCESS

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
Need for Public Education Regarding the Youngstown Mission												
COM-8		There is a need for increased public education about Youngstown ARS flight operations, including low-level flight, the use of Camp Garfield, and the use of night vision equipment. Although there is broad community support for Youngstown ARS, additional educational efforts could enhance public awareness and appreciation of installation's value to local communities.										
COM-8A	Study Area	Create and distribute educational / informational brochures Develop educational / informational brochures that highlight community and military compatibility and economic incentives for development and redevelopment including programs and grants. Brochures can be used to educate property owners, real estate industry and development community on compatibility issues and opportunities to promote community development while supporting the military mission. <i>Other Primary Partners: Youngstown Warren Regional Chamber, NEO Development and Finance Authority</i> <i>Other Partner: YARBCC</i>	Mid-Term	PI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COM-8B	Study Area	Promote Social Media Outlets for General Public Youngstown ARS should promote and market the existing Youngstown ARS social media outlets as methods to provide important activity information to the general public. Promotion could also include providing links to jurisdictions for inclusion on county and city websites. <i>Other Partner: YARBCC</i>	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
COM-8C	Study Area	Continue to Host Public Events Youngstown ARS should continue to generate public support and provide public education through events such as the Thunder Over the Valley airshow, reinstitute Public Open Houses at the installation and continue to host installation tours and visits.	Ongoing	N/A						<input checked="" type="checkbox"/>		
COM-8D	Study Area	Seek Funding to Support Public Outreach Seek funding, annually, to conduct public outreach activities that focus on information about and advocacy for the mission.	Ongoing	N/A						<input checked="" type="checkbox"/>		
COM-8E	Study Area	Educate the Real Estate Industry and Development Community Conduct an annual training forum for the real estate industry and development community to educate them about military compatibility and economic incentives for development and redevelopment. Economic incentives should include existing programs and grants. <i>Other Primary Partners: Youngstown Warren Regional Chamber, NEO Development and Finance Authority</i>	Mid-Term	PI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
State Agency Awareness of Youngstown ARS Mission for Permitting There is a need to increase state agencies' awareness of the mission at Youngstown ARS, particularly the awareness of agencies with permitting authority such as the Department of Natural Resources and the Department of Transportation (ODOT). A better understanding of the mission will help these agencies anticipate what types of actions may have an impact on, or be impacted by, military operations and ultimately supports compatible development.												
COM-9A	Study Area	Establish Working Committee with State Agencies Establish a Working Committee with the Western Reserve Port Authority, Youngstown ARS and state agencies with permitting authority to educate on compatibility issues at Youngstown ARS and regularly share information. <i>Other Partners: Department of Natural Resources, ODOT</i>	Mid-Term	N/A					■	■		□
COM-9B	Study Area	Establish State-Level GIS Clearinghouse Work collaboratively with the proposed Statewide Military Affairs Office in Strategy COM-10A to develop a GIS clearinghouse or web-based portal to share geographic information system (GIS) data for Youngstown ARS and other military installations in the state, including boundaries and footprints that extend outside the installation to assist with making informed decisions at all levels of government. <i>Other Primary Partner: Statewide Military Affairs Office</i>	Mid-Term	P I						□		■
For another strategy that addresses this issue see Strategy LU-1A.												
Federal / State Agency Awareness of Youngstown ARS Mission for Partnering There is a need to increase federal and state agencies' awareness of the missions at Youngstown ARS to help identify partnering opportunities with agencies that have complementary missions and functions that could relocate to the installation.												
COM-10A	Study Area	 Create a Statewide Military Affairs Office The Governor should fund and establish an Ohio Military Affairs Office with a charter and mission to support all military activities throughout the state, reinforce the statewide value of the military and seek out partnering opportunities with organizations, businesses and agencies that have complementary missions that could relocate to the Youngstown ARS. The statewide office would help coordinate local military affairs commissions and committees to better communicate a single message of protecting, enhancing and growing military assets throughout Ohio. Consider a mission for the Office that includes developing strategy for growing the state's defense presence, assessing the strengths and weaknesses Ohio installations, pursuing new missions, assisting communities dealing with a closure or downsizing, and overseeing a revolving loan fund to finance infrastructure projects linked to military installation health.	Short-Term	N/A							□	■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase								
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other	
COM-10A cont'd		<p>The Office should provide military preparedness information to local, state, and federal officials and agencies, and prepare an Annual Report to the Governor.</p> <p><i>Other Partners: Ohio Legislature, Governor of Ohio, Ohio Cabinet Military Liaison</i></p>										
COM-10B	Study Area	<p>Continue to Leverage Opportunities through the AF Community Partnership Program</p> <p>The Air Force Community Partnership Program helps Air Force installations and the surrounding communities identify and implement mutually beneficial initiatives including public-public and public-private partnerships. Youngstown ARS JLUS Study Area jurisdictions should continue to explore and pursue new partnership opportunities through the program.</p> <p><i>Other Primary Partner: AF Community Partnerships Program Management Office</i></p>	Ongoing	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
COM-10C	Study Area	<p>Pursue Partnering Opportunities</p> <p>Pursue partnering opportunities with educational institutions that have complementary and synergistic programs such as the Kent State University College of Aeronautics and others.</p> <p><i>Other Partners: Kent State University College of Aeronautics, Youngstown State University and Northeast Ohio Medical University.</i></p>	Ongoing	N/A					<div></div>		<div></div>	
COM-10D	Study Area	<p>Pursue Defense Industry Resilience Assistance</p> <p>Pursue grant assistance through the DoD Office of Economic Adjustment Defense Industry Resilience Assistance program. This federal grant program assists communities in response to the cancellation of a defense contract, failure to proceed with an approved major weapon system program, or by a publicly announced planned major reduction in defense spending that would directly affect a community. Grants can fund projects focused on entrepreneurship and small business development, industry cluster development, manufacturing and supply chain mapping, export promotion and workforce development. While not a major reduction in spending, the Youngstown ARS mission has decreased, and a case could be made that Vienna Township is eligible for this assistance.</p>	Ongoing	PI	<div></div>			<div></div>				

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-10E  Study Area		Pursue Defense Community Infrastructure Pilot Program <i>(Note: This program has been authorized under the 2019 National Defense Authorization Act; however, funds have not yet been appropriated)</i> Preposition to pursue funding for community infrastructure projects through the DoD Defense Community Infrastructure Pilot Program. This program allows the DoD to provide funding to state and local governments for off-base infrastructure projects – awarding grants to address deficiencies in community infrastructure if the assistance will enhance the military value, resilience or military family quality of life at an installation. Eligible projects include transportation projects, schools, hospitals, police, fire, emergency response or other community support facility, or a waste, wastewater, telecommunications, electric, gas or other utility infrastructure project. The program requires a state or local contribution for 30 percent of the total project cost and sunsets after 10 years.	Ongoing	N/A	■	■	■	■				
COM-10F  Study Area		Pursue Defense Manufacturing Community Support Program <i>(Note: This program has been authorized under the 2019 National Defense Authorization Act; however, funds have not yet been appropriated)</i> Preposition to pursue funding for cultivating defense manufacturing through the Defense Manufacturing Community Support Program. This program is intended to improve the capacity for advanced technologies considered critical to national security. Under the new program, partners in a consortium designated a defense manufacturing community could apply for funding for investments in equipment and facility upgrades; workforce training, recruitment and retention; business incubators; advanced research and commercialization; supply chain development; and small business assistance. Investments, though, they need to complement support provided by the eight DOD-led Manufacturing USA Institutes. The program requires DoD to use a competitive process to designate eligible consortiums as defense manufacturing communities for a five-year period, with the option for renewing the designation for up to two additional two-year periods. Eligible consortiums include partners from academia, industry, and state and local government, and support “efforts in geographical regions that have capabilities in key technologies or industrial base supply chains that are determined critical to national security.” Applicants need to demonstrate how investments intended to address gaps in the defense industrial base complement efforts of the defense manufacturing institutes.	Ongoing	N/A	■	■	■	■			■	

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-10G	Study Area	Host an Ohio Joint JLUS Communities Task Force Request the Eastern Ohio Military Affairs Commission coordinate with the Ohio Cabinet Military Liaison to provide a forum for Ohio communities participating in JLUS activities to identify common issues, concerns and solutions. <i>Other Primary Partners: Ohio Cabinet Military Liaison, Miami Valley Military Affairs Association, other Ohio military installations and jurisdictions within military influence areas</i>	Mid-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IN PROCESS												
COM-11	Formal Coordination between FAA and Youngstown ARS There is a need to formalize coordination between the FAA and Youngstown ARS on planning actions at Youngstown-Warren Regional Airport that could impact the Youngstown ARS mission.											
COM-11A	Study Area	Establish FAA Working Committee Establish a working committee with representatives from Youngstown ARS, Western Reserve Port Authority, and the FAA Field Office to discuss airspace and other operational capabilities to reduce conflicts. <i>Other Primary Partner: FAA</i>	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Energy Development												
ED-1	Energy Resiliency at Youngstown ARS Energy supply availability and resiliency at Youngstown ARS are critical for maintaining operations in all conditions. Partnering in the development of alternative energy sources, such as onsite renewables, can reduce the installation's dependency on the grid and increase its energy resiliency.											
ED-1A	Study Area	Youngstown ARS Coordinate with Western Reserve Port Authority Youngstown ARS and Western Reserve Port Authority should coordinate on facility energy needs and partner for onsite renewable energy opportunities. By working together conflicts be avoided and opportunities for economy of scale can be leveraged. <i>Other Partners: Local Utility Providers</i>	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IN PROCESS												
ED-1B	Study Area	Work with Air Force Civil Engineering Center Youngstown ARS and Air Force Reserve Command should work with local energy providers to develop onsite renewable energy options that further Youngstown ARS energy supply and resilience. <i>Other Partners: AFRC, Local Utility Providers</i>	Mid-Term	N/A						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

For other strategies that addresses this issue see Strategies AT-1E and COM-10D.

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other



Infrastructure Extensions

Sewer Expansion Surrounding Youngstown ARS

IE-1 The extension of the central sewer along Youngstown Kingsville Road (State Route 193) will support additional development and at greater intensities than currently supported in the area near to Youngstown ARS. This development will need to be coordinated with Youngstown ARS to ensure it is compatible with the installation mission.

IN PROCESS	IE-1A	Study Area	Incorporate Compatibility Planning in Master Plans Local jurisdictions should Incorporate military compatibility planning concepts into their Capital Improvement Plans / Infrastructure Master Plans for infrastructure extensions and improvements. Avoid extension of infrastructure service within Youngstown ARS mission footprint areas for rezoning applications, except to serve approved community / area plans or commercial and industrial development which provides a compatible land use pattern.	Mid-Term	PI	■	■	■	■	■	□	□
	IE-1B	Study Area	Coordinate Infrastructure Expansion Plans Local jurisdictions should notify, and coordinate infrastructure expansion plans with the Youngstown ARS Public Works Department and the Western Reserve Port Authority. Notifications should be made in a timely manner to allow adequate time for review and comment.	Short-Term	N/A	■	■	■	■	■	□	

For other strategies that address this issue see Strategies COM-5A, COM-6B and COM-6C.



Land / Air Space Competition

Potential for Drone Impacts on Youngstown ARS Mission

LAS-1 Future civilian drone activity could impact Youngstown ARS flight capabilities, including in airspace extending to Camp Garfield. The proliferation of recreational drone use and the potential for commercial use in the area will need to be monitored and activities coordinated with the installation to avoid conflicts in airspace required for the Youngstown ARS flight mission.

IN PROCESS	LAS-1A	Drone MCA	Education Regarding the Use of Drones Local jurisdictions should develop a public awareness campaign to educate members of the community about the FAA regulations and tools for the use of drones and the potential consequences that could occur if a drone is operated in the restricted areas. <i>Other Partners: FAA</i>	Ongoing	PI	■	■	■	■	□	□	□

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LAS-1B	Drone MCA	Conduct Drone Operator Training / Events The Mahoning County Career & Technical Center (MCCTC) has conducted drone training as part of offered sessions. The training sessions provided clear information regarding rules for safe and legal drone operation. In addition, a demonstration event was sponsored by the Center. <i>Primary Partner: MCCTC</i> <i>Other Partners: FAA</i>	Ongoing	N/A					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		IN PROCESS										
LAS-1C	Drone MCA	Consider an Ordinance for Drone Use Consider adopting a drone ordinance that regulates drone use based on: land use and zoning powers; nuisance and trespass; reasonable time, manner and place restrictions; proper notification; and provisions for violations and penalties.	Mid-Term	PI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
LAS-1D	Drone MCA	Employ New Communication Link Jamming Technology Youngstown ARS and Youngstown-Warren Regional Airport should consider employing new technology to prevent unauthorized operation of drones on or around the airfield. One example is the use of equipment to jam the communication link between drones and operator controls.	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LAS-1E	Drone MCA	Consider Ordinances for Aiming Laser Pointers as Harassment Consider adopting an ordinance that establishes pointing lasers under certain conditions as harassment and prescribes violations and penalties.	Mid-Term	PI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Utilization Impact of Non-Aviation Uses of Mid-Field Air Cargo Facility LAS-2 The use of the vacant air cargo facility for non-aviation related activity could minimize or eliminate future military capability, including use of the collocated aviation apron and nearby taxiways.												

For strategies that address this issue see Strategies AT-5A and AT-5B.

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other




Land Use

Impacts of Shale Gas Extraction Practices Near Youngstown ARS.

LU-1		Injection wells near Youngstown ARS are a potential safety hazard for Youngstown ARS operations. Impacts from groundwater contamination, truck traffic, airborne gas, and earthquakes are all potential hazards associated with shale gas extraction that could affect Youngstown ARS.									
LU-1A	Study Area	Educate Public and Government Officials Youngstown ARS and the EOMAC should ensure the public and Ohio government officials understand the military concerns regarding potential mission impacts from shale gas extraction operations near the installation. It should be made clear that impacts may constrain current and future operations at the Youngstown ARS. <i>Other Partners: Ohio Department of Natural Resources</i>	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LU-1B	Study Area	Establish Regional Response Capabilities Youngstown ARS and local jurisdictions should collaborate to develop response plans that enable a regional response capability for emergencies resulting from shale gas operations. Response procedures should focus on health and safety as priority one, along with provisions to protect property, equipment and minimize impacts to ongoing military operations.	Mid-Term	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LU-1C	Study Area	Establish a Road Use and Maintenance Agreement Local jurisdictions should cooperatively develop a Road Use and Maintenance Agreement to minimize impacts from shale gas operations truck traffic on local roadways. The agreement should also ensure the shale gas operations are responsible for any road maintenance needs resulting from their activities. <i>Other Partner: Eastgate Regional COG</i>	Short-Term	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LU-1D	Study Area	Establish an Interlocal Agreement Youngstown ARS and local jurisdictions should develop an interlocal agreement for communications and coordination of emergency management activities in the event of an emergency resulting from shale gas operations.	Short-Term	P II	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For another strategy that addresses this issue see Strategy AT-3B.

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LU-2 Long-Term Impacts on Youngstown ARS from Relocation of King Graves Road The relocation of King Graves Road may have long-term impacts on Youngstown ARS. While the realignment will create additional clearance between buildings at the installation and King Graves Road, it will affect the safety standoff for facilities at Youngstown ARS.												
LU-2A	Study Area	Coordinate Any Future Realignment of King Graved Rd. Youngstown ARS, Western Reserve Port Authority and Trumbull County Engineer should continue to coordinate on any future realignment of King Graves Road to ensure there are no detrimental impacts on the mission, operations or facilities at Youngstown ARS.	Long-Term	N/A				■	■	■		
For another strategy that addresses this issue see Strategy COM-7A.												
LU-3 King Graves Road Construction Impacts on Youngstown ARS Construction of the King Graves Road realignment will negatively impact Youngstown ARS. Construction activities will reduce access to the installation's main gate and increase the number of heavy trucks and other traffic on this rural road.												
LU-3A	Study Area	Coordination in Planning for King Graves Road Realignment The Ohio Department of Transportation (ODOT) and Trumbull County should coordinate with Youngstown ARS to ensure installation access is <i>planned for</i> during construction of a King Graves Road realignment. Coordination should include consultation and review of any detour planning that will guide Youngstown ARS traffic during construction. <i>Primary Partner: ODOT</i>	Long-Term	N/A				■		□		■
LU-3B	Study Area	Coordination During Construction of King Graves Road Realignment The Ohio Department of Transportation (ODOT) and Trumbull County should coordinate with Youngstown ARS to ensure installation access is <i>maintained</i> during construction of a King Graves Road realignment. The only access to Youngstown ARS is from King Graves Road and the impacts for installation traffic to safely enter and exit the installation will need to be minimized during construction, particularly since the roadway is not configured for heavy truck operations. <i>Primary Partner: ODOT</i>	Long-Term	N/A				■		□		■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LU-4 Future Land Use Impacts on Youngstown ARS Night Flying Mission Though not a current concern, there is a need to protect the long-term viability of the Youngstown ARS flight training mission that uses night vision equipment as development in the area increases light pollution.												
LU-4A		Assess Future Ambient Lighting Impacts on Night Flying Operations Conduct an assessment of ambient lighting impacts under different future development scenarios on the Youngstown ARS night flying training mission and nighttime operations at the Youngstown-Warren Regional Airport.	Long-Term	PI				■				
LU-4B		Implement Best Lighting Practices in Zoning Ordinances Identify and implement best practices for lighting through zoning regulations based on the findings and conclusions gathered in Strategy LU-4A to protect the favorable lighting conditions currently experienced around Youngstown ARS and the Youngstown-Warren Regional Airport.	Long-Term	PI	■	■	■	■				
 Legislative Initiatives												
State Agency Notification to Youngstown ARS There is a need for state agencies with permitting authority to coordinate planning and permitting actions with Youngstown ARS. Coordinated planning would give the installation an opportunity to provide important feedback on actions that may impact the Youngstown ARS mission and thereby help avoid potential issues resulting from approval actions.												
LEG-1A	Study Area	Advocate for State Permitting Process Legislative Changes The EOMAC and YARBCC should advocate, with support from Youngstown ARS and the Air Force Reserve Command (AFRC), for the Ohio State Legislature to implement laws requiring state agencies / departments to notify military installations of state permitting activities as part of their evaluation process and prior to approval. Notification should be based on potential impacts within mission footprint areas or a defined geographic boundary from a military installation and detail notification requirements and procedures. <i>Other Partners: AFRC</i>	Mid-Term	N/A						□	■	□
State Law Authority Exemption to Zone Agricultural Structures State law precludes local government zoning authority over agricultural structures. This authority is critical in Clear Zones where federal land use guidance recommends no development.												
LEG-2A		Legislation for Local Regulation of Agricultural Structures within Clear Zones Pursue legislation to allow local governments the zoning authority to regulate agricultural structures in Clear Zones surrounding DoD military air facilities. <i>Other Partners: AFRC</i>	Short-Term	PI						□	■	□

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other



Light and Glare

Potential Light and Glare Impacts on Pilot Visibility from Solar Projects

LG-1 Solar arrays can disrupt pilots' vision during approaches and low-level flight maneuvers, such that solar energy development projects can threaten the Youngstown ARS flight mission.

LG-1A	Study Area	Coordination of Mutually Beneficial Projects at Youngstown ARS and Youngstown-Warren Regional Airport	Short-Term	N/A							
		IN PROCESS Youngstown ARS, the Western Reserve Port Authority and FAA should coordinate on all projects having the potential to impact each other's operations. This includes the planning and construction of any renewable energy projects such as solar array projects on the installation / airport property. Coordination should include advance notification with adequate time for review and comments.									
LG-1B	Study Area	Implement DoD Siting Clearinghouse Coordination Procedures Local jurisdictions should consider requiring applicants of renewable energy projects to coordinate with the DoD Siting Clearinghouse and demonstrate that coordination occurred at the time application submittal to a local government for approval.	Short-Term	PI							
LG-1C	Study Area	Require Use of Solar Project Siting Tools Developers proposing large solar energy projects should be required to demonstrate as part of their development application for local government approval that the siting of proposed facilities will not produce adverse impacts on military and other aircraft operations such as glare using tools such as the Sandia National Laboratories Solar Glare and Flux Mapping Tools and Solar Glare Hazard Analysis Tool.	Short-Term	PI							



Noise

Incompatible Development within Noise Zones

NOI-1 Noise from activities at the Youngstown-Warren Regional Airport has the potential to affect noise sensitive land uses in the surrounding area. Noise sensitive land uses and greater land use intensities within noise contours have the potential to impact the flying mission at the Youngstown ARS.

NOI-1A	MCAOD	Create a Military Compatibility Area Overlay District (MCAOD) Create a Military Compatibility Area Overlay District (MCAOD) containing Military Compatibility Areas that reflect the types and intensity of compatible uses and map them for the public on an online platform. The MCAOD is the collective geographic area of all of the MCAs combined. The MCAs established should be used by local jurisdictions to identify areas where specific compatibility issues are more likely to occur and	Mid-Term	PI							
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Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
NOI-1A cont'd		<p>address ways to avoid compatibility issues. The MCA's should include:</p> <ul style="list-style-type: none">• Safety MCA. All AF safety zones including the Clear Zone, and Accident Potential Zones (APZs) I and II.• Noise MCA. Includes areas within the peak noise contours.• Noise Awareness Area. Includes a boundary beyond the Noise MCA comprising the Inner Horizontal Imaginary Surface, approximately 1.5 miles from the runways where aircraft flight is lowest surrounding the Youngstown-Warren Regional Airport.• Vertical Obstructions MCA. Includes the estimated Inner Horizontal Surfaces and Approach-Departure Clearance Surfaces for the runways at Youngstown-Warren Regional Airport and Youngstown ARS.• Drone MCA. Includes the drone-restricted airspace surrounding Youngstown ARS, Camp Garfield, and Youngstown-Warren Regional Airport as indicated by FAA guidelines.• BASH MCA. Includes areas within a five-mile radius around the airfield with the highest concentrations of wildlife or wildlife-attractant uses. <p>Where appropriate, the jurisdictions should incorporate the MCAOD and MCA boundaries on their zoning map and future land use maps and include the zones on their official maps (hardcopy, electronic and web-based as applicable) for easy access and understanding by the public.</p>										
NOI-1B	Noise MCA	<p>Sound Attenuation in New Construction of Noise Sensitive Land Uses</p> <p>Amend the applicable Building Code to require sound attenuation measures for all new construction of noise sensitive land uses located within the 65 dB noise contour of the Noise MCA. These structures should be designed and constructed so as to limit their interior noise level to no greater than 45 dB Ldn certified by an accredited acoustical engineer.</p>	Mid-Term	PI	■	■	■	■				
NOI-1C	Noise MCA and NAA	<p>Include Noise Awareness in Real Estate Disclosures</p> <p>Amend the Section 1301:6-6-10 of the Ohio Administrative Code to add proximity to a military installation and noise impacts from aircraft overflight to the Residential Property Disclosure Form to ensure property buyers are aware that they are within an area impacted by military operations.</p> <p><i>Other Primary Partners: State of Ohio Department of Commerce</i></p>	Mid-Term	PI							□	■
NOI-1D	Noise MCA and NAA	<p>Feasibility Study for Relocation of Mathews High School</p> <p>Conduct a Feasibility Study for the relocation of the Mathews High School. Consider locations outside noise and safety zones and potential land swap arrangements that would reduce the land cost associated with relocation.</p> <p><i>Other Primary Partner: Mathews Local School District</i></p>	Ongoing	PI	■							■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
Public Process for Noise Concerns and Complaints												
NOI-2		There is a need for an improved process for the public to contact the installation regarding noise concerns and complaints. A simple and clear process for the public to raise noise concerns can provide an opportunity to engage and educate concerned citizens and contribute positively to public perception of the installation.										
NOI-2A	Noise MCA and NAA	Leverage Youngstown ARS Website for Noise Complaints Provide a prominent location on Youngstown ARS website for noise concerns including clear information on the process for filing a complaint that includes a Point of Contact (POC), how to contact the POC and what to expect regarding a follow-up.	Short-Term	N/A						■		
NOI-2B	Noise MCA and NAA	Increase Public Understanding of Noise Sources Increase community awareness of flight schedules and military operations throughout the entire Youngstown ARS area of influence via local media sources, newsletters, brochures, and annual outreach functions hosted by Youngstown ARS in cooperation with each jurisdiction.	Short-Term	N/A	■	■	■	■	■	■		
NOI-2C	Noise MCA and NAA	Coordination between Youngstown ARS and Mathews Local School District Youngstown ARS should work with area education officials to restrict military overflight of schools to the maximum extent practicable. Consider overflight only during specific hours when students are not present at school and exceptions if flights are critical and agreeable to school officials. <i>Primary Partner: Matthews Local School District</i>	Short-Term	N/A					■	■		■
NOI-2D	Noise MCA and NAA	Leverage Youngstown ARS Public Affairs for Education on Noise Complaint Process Include information on noise generated by military aircraft along with the process for submitting noise complaints to the installation as part of routine public outreach activities conducted by the Youngstown Public Affairs.	Ongoing	N/A						■		
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement Develop an MOU with local law enforcement agencies including 911 operations, that establishes a POC at Youngstown ARS and notification procedures to the installation when noise complaints are received by law enforcement sources. The military POC should be the same representative that receives noise complaints when Youngstown ARS is contacted directly by the public. The MOU should outline procedures on noise complaint information to be collected by local police and the process to be followed to pass on to the Youngstown POC.	Ongoing	P I	■	■	■	■		■		
IN PROCESS												

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
NOI-2F	Noise MCA and NAA	Avoid Overflight During Key Community Events Youngstown ARS and Youngstown-Warren Regional Airport should work with the Youngstown-Warren Regional Chamber to avoid overflights during key community activities such as festivals, to the maximum extent practicable. <i>Other Partners: Youngstown-Warren Regional Chamber, YARBCC</i>	Short-Term	N/A				■	■		□



Public Services

PS-1 Operational Impacts at Youngstown-Warren Regional Airport		A loss of commercial aviation activity at Youngstown-Warren Regional Airport could prompt a reduction in funding from the FAA for operations and improvements, potentially impacting Youngstown ARS capabilities and readiness.									
PS-1A	Study Area	Continue to Pursue Attracting Long-Term Commercial Aviation Tenants The Western Reserve Authority should continue to actively market and seek out a commercial carrier at the Youngstown-Warren Regional Airport.	Ongoing	N/A				■			



IN PROCESS



Roadway Capacity

RC-1 Safety Conditions from Traffic Stacking Outside Youngstown ARS Main Gate		Traffic stacking outside the Youngstown ARS main gate on King Graves Road during Unit Training Assembly periods is a safety hazard. Traffic stacking can reduce the flow of traffic and create an unsafe travel environment.									
RC-1A	Study Area	Plan for Traffic Queuing in King Graves Road Realignment Youngstown ARS should work closely with ODOT and the Trumbull County Engineer to ensure the King Graves Road design accommodates improved queuing for inbound traffic and enhanced exit lanes for outbound traffic at the Youngstown ARS main gate and secondary gates. <i>Other Partner: ODOT</i>	Short-Term	N/A			□		■		□

For another strategy that addresses this issue see Strategy AT-2A.

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other

RC-2 Emergency Management Response Impact from Traffic Stacking at Youngstown ARS Main Gate
 Traffic stacking at the Youngstown ARS main gate during Unit Training Assembly periods for Reservists limits military firefighters' ability to respond to emergencies in surrounding communities. The stacking also limits local firefighters' ability to respond to emergencies at Youngstown ARS.

RC-2A	Study Area	Plan for Emergency Access at New Main Gate Youngstown ARS should work closely with the ODOT and the Trumbull County Engineer to ensure a new main gate and / or a realignment of King Graves Road accommodates priority emergency vehicle inbound and outbound access to Youngstown ARS. Consideration should be given to provide sufficient ingress and egress roadway to accommodate emergency vehicles as well a priority traffic signal for emergency vehicles that could be activated during an emergency response. <i>Other Partner: ODOT</i>	Short-Term	N/A							

For another strategy that addresses this issue see Strategy AT-2A.

RC-3 Single Gate Access at Youngstown ARS
 Combined truck and privately-owned vehicle traffic entering the single main gate at Youngstown ARS creates traffic stacking and congestion on King Graves Road which can present a safety hazard.

For a strategy that addresses this issue see Strategy AT-2A.




Safety Zones

SA-1 Incompatible Uses in Clear Zones and Accident Potential Zones
 Incompatible land uses in the Clear Zones and Accident Potential Zones create a safety concern.

SA-1A	Safety MCA	Establish Safety MCA Overlay District Local jurisdictions should consider creating a Safety MCA Overlay District in planning documents that would include compatible land uses, residential densities and nonresidential intensities for land within Safety Zones (CZ, APZs I and II) and prohibit incompatible land uses within these areas. Future Land Uses in Comprehensive Plans should be updated for consistency with the Overlay District. (See Strategy NOI-1A).	Short-Term	P I							
SA-1B	Safety MCA	Apply AF Safety Zone Criteria to Airport Property Youngstown ARS should work with the Western Reserve Port Authority to apply the Air Force land use compatibility guidance to future development / facility planning at the Youngstown-Warren Regional Airport property.	Short-Term	N/A							

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
SA-1C	Safety MCA	Easements from Willing Landowners Consider obtaining easements from willing landowners within the Clear Zones that would prohibit future incompatible development. Consider the Air Force Encroachment Management Partnership (EMP) program as a funding source. The EMP program allows the Air Force to partner for the purpose or goal of conserving, restoring or preserving land or natural resources through restrictive-use or conservation easements to protect Air Force missions from encroachment.	Mid-Term	N/A	■	■		■	■	□	
Single Gate Affects Emergency Response The limited access to Youngstown ARS through a single gate off King Graves Road results in restricted ingress and egress during emergencies and events at the installation. Since Youngstown ARS provides critical emergency aid to surrounding communities and vice versa, ingress and egress must be clear to ensure timely response both inside and outside the installation.											
Bird Attractants near Runway Bird attractants, such as wetlands, tree canopies, and agriculture, and the Mississippi migratory bird flyway are located on and around Youngstown ARS, creating the potential for bird aircraft strikes.											
SA-3A	BASH MCA	Establish BASH MCA Overlay District Local jurisdictions should consider creating a BASH MCA Overlay District in planning documents that would preclude future incompatible land uses, as recommended by FAA Advisory Circular 150 / 5200-33B, within five statute miles of the Youngstown-Warren Regional Airport and Youngstown ARS. Future Land Uses in Comprehensive Plans should be updated for consistency with the Overlay District. (See NOI-1A).	Mid-Term	PI	■	■	■	□	□	□	
SA-3B	BASH MCA	Increase Surrounding Landowner Awareness Youngstown ARS and the Western Reserve Port Authority should develop a detailed outreach and educational program to inform surrounding land owners on the impacts, scope, and effects of BASH and outline compatible solutions and techniques to minimize conflicts. <i>Other Partner: Local Land Owners</i>	Short-Term	PI				■	■		□

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
 Vertical Obstructions												
Incompatible Structures within Imaginary Surfaces												
VO-1 County and township zoning codes do not regulate the height of structures within airfield imaginary surfaces at Youngstown-Warren Regional Airport, which could result in vertical obstructions to pilot navigation.												
VO-1A	VO MCA	Establish Vertical Obstruction MCA Overlay District Local jurisdictions should consider creating a VO MCA Overlay District in planning documents to regulate the height of structures within FAA Imaginary Surfaces surrounding the Youngstown ARS and Youngstown-Warren Regional Airport. (See Strategy NOI-1A)	Mid-term	PI	■	■	■	□	□	□		
VO-1B	VO MCA	Ensure Federal Aviation Regulation (FAR) Part 77 Compliance Require a determination Finding of No Significant Impact from the FAA subject to the requirements of Part 77 to be submitted with a development application for local government approval to demonstrate that a proposed structure will not create a vertical obstruction within the navigable airspace.	Short-Term	PI	■	■	■	□				
VO-1C	VO MCA	Develop a 3-Dimensional Imaginary Surfaces Model Trumbull County with the assistance of Youngstown ARS and Trumbull County should develop a digital and printed 3D model of existing height regulations compared to allowable heights for Imaginary Surfaces. This tool will assist the townships in considering amendments to their zoning regulations to further enhance military compatibility and for determining whether heights of proposed structures obstruct the navigable airspace during the review of development applications recommended in Strategy VO-1A.	Short-Term	PI	□	□	□	■		□		

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other



Water Quality and Quantity



Winter Flooding Along King Graves Road

WQQ-1













Lack of stormwater drainage along King Graves Road can lead to flooding and potential for weakened tree root systems resulting in downed trees. This is a concern when the ground freezes and heavy rains cannot percolate into the soil. Weakened trees along the road can topple causing breaches in the Youngstown ARS perimeter fence and settle in the road causing a safety problem.

WQQ-1A	Study Area	Incorporate Green Infrastructure in King Graves Road Redesign Youngstown ARS should work closely with ODOT and the Trumbull County Engineer to incorporate green infrastructure in the redesign of the King Graves Road. The use of bioretention devices and similar infrastructure can reduce stormwater runoff and pooling of standing water. <i>Other Partner: ODOT</i>	Mid-Term	N/A								
WQQ-1B	Study Area	Prepare a Storm Water Assessment and Report The Trumbull County Engineer should conduct an assessment and prepare a stormwater report that identifies current stormwater capacity and flow issues along King Graves Road including any deficiencies based on current and planned development. The Trumbull County Engineer should coordinate with Youngstown ARS to install improvements to the existing stormwater drainage facilities along King Graves Road. <i>Other Partners: OEA</i>	Mid-Term	PI								

Table 8 Vienna Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase							
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-1E 	YARS	National Defense Authorization Act Resilience Grants	Ongoing	N/A	■		■	■	□	□	
COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network	Mid-Term	N/A	■	■	■		■		
COM-2B <div>COMPLETED DURING JLUS</div>	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources	Short-Term	N/A	■	■	■		■		
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	■	■	■	■	■	□	■
COM-5B	MCAOD	Adopt Development Notification Checklist	Short-Term	PI	■	■	■	■	□	□	□
COM-5C	MCAOD	Coordination with DoD Siting Clearinghouse	Short-Term	PI	■	■	■				
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	■	■	■	■	■	■	■
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	■	■	■	■	■	□	□
COM-10D 	Study Area	Pursue Defense Industry Resilience Assistance	Ongoing	PI	■		■				

Vienna Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-10E  Study Area		Pursue Defense Community Infrastructure Pilot Program	Ongoing	N/A	■	■	■	■				
COM-10F  Study Area		Pursue Defense Manufacturing Community Support Program	Ongoing	N/A	■	■	■	■			■	
IE-1A  Study Area		Incorporate Compatibility Planning in Master Plans	Mid-Term	PI	■	■	■	■	■	□	□	
IE-1B  Study Area		Coordinate Infrastructure Expansion Plans	Short-Term	N/A	■	■	■	■	■	□		
LAS-1A  Drone MCA		Education Regarding the Use of Drones	Ongoing	PI	■	■	■	■	□	□		□
LAS-1C  Drone MCA		Consider an Ordinance for Drone Use	Mid-Term	PI	■	■	■	■				
LAS-1E  Drone MCA		Consider Ordinances for Aiming Laser Pointers as Harassment	Mid-Term	PI	■	■	■	■				
LU-1B  Study Area		Establish Regional Response Capabilities	Mid-Term	N/A	■	■	■	■	■	■	□	
LU-1C  Study Area		Establish a Road Use and Maintenance Agreement	Short-Term	N/A	■	■	■	■	■			□
LU-1D  Study Area		Establish an Interlocal Agreement	Short-Term	PI	■	■	■	■	■	■		
LU-4B		Implement Best Lighting Practices in Zoning Ordinances	Long-Term	PI	■	■	■	■				
LG-1B  Study Area		Implement DoD Siting Clearinghouse Coordination Procedures	Short-Term	PI	■	■	■	■				
LG-1C  Study Area		Require Use of Solar Project Siting Tools	Short-Term	PI	■	■	■	■	■	■		

Vienna Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase								
					Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
NOI-1A	MCAOD	Create a Military Compatibility Area Overlay District (MCAOD)	Mid-Term	PI	■	■	■	□	□	□		
NOI-1B	Noise MCA	Sound Attenuation in New Construction of Noise Sensitive Land Uses	Mid-Term	PI	■	■	■	■				
NOI-1D	Noise MCA and NAA	Feasibility Study for Relocation of Mathews High School	Ongoing	PI	■							■
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement	Ongoing	PI	■	■	■	■		■		
		IN PROCESS										
SA-1A	Safety MCA	Establish Safety MCA Overlay District	Short-Term	PI	■	■	■	□	□	□		
SA-1C	Safety MCA	Easements from Willing Landowners	Mid-Term	N/A	■	■			■	■	□	
SA-3A	BASH MCA	Establish BASH MCA Overlay District	Mid-Term	PI	■	■	■	□	□	□		
VO-1A	VO MCA	Establish Vertical Obstruction MCA Overlay District	Mid-term	PI	■	■	■	□	□	□		
VO-1B	VO MCA	Ensure Federal Aviation Regulation (FAR) Part 77 Compliance	Short-Term	PI	■	■	■	□				

Table 9 Fowler Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network	Mid-Term	N/A	■	■	■	■		■		
COM-2B	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources	Short-Term	N/A	■	■	■	■		■		
COMPLETED DURING JLUS												
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	■	■	■	■	■	■	□	■
COM-5B	MCAOD	Adopt Development Notification Checklist	Short-Term	PI	■	■	■	■	□	□		□
COM-5C	MCAOD	Coordination with DoD Siting Clearinghouse	Short-Term	PI	■	■	■	■				
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	■	■	■	■	■	■	■	■
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	■	■	■	■	■	■	□	□
COM-10E	Study Area	Pursue Defense Community Infrastructure Pilot Program	Ongoing	N/A	■	■	■	■				
COM-10F	Study Area	Pursue Defense Manufacturing Community Support Program	Ongoing	N/A	■	■	■	■				■
IE-1A	Study Area	Incorporate Compatibility Planning in Master Plans	Mid-Term	PI	■	■	■	■	■	□	□	
IN PROCESS												
IE-1B	Study Area	Coordinate Infrastructure Expansion Plans	Short-Term	N/A	■	■	■	■	■	□		

Fowler Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LAS-1A	Drone MCA	Education Regarding the Use of Drones	Ongoing	P I	■	■	■	■	□	□		□
		IN PROCESS										
LAS-1C	Drone MCA	Consider an Ordinance for Drone Use	Mid-Term	P I	■	■	■	■				
LAS-1E	Drone MCA	Consider Ordinances for Aiming Laser Pointers as Harassment	Mid-Term	P I	■	■	■	■				
LU-1B	Study Area	Establish Regional Response Capabilities	Mid-Term	N/A	■	■	■	■	■	■	□	
LU-1C	Study Area	Establish a Road Use and Maintenance Agreement	Short-Term	N/A	■	■	■	■	■			□
LU-1D	Study Area	Establish an Interlocal Agreement	Short-Term	P II	■	■	■	■	■	■		
LU-4B		Implement Best Lighting Practices in Zoning Ordinances	Long-Term	P I	■	■	■	■				
LG-1B	Study Area	Implement DoD Siting Clearinghouse Coordination Procedures	Short-Term	P I	■	■	■	■				
LG-1C	Study Area	Require Use of Solar Project Siting Tools	Short-Term	P I	■	■	■	■	■	■		
NOI-1A	MCAOD	Create a Military Compatibility Area Overlay District (MCAOD)	Mid-Term	P I	■	■	■	□	□	□		
NOI-1B	Noise MCA	Sound Attenuation in New Construction of Noise Sensitive Land Uses	Mid-Term	P I	■	■	■	■				
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement	Ongoing	P I	■	■	■	■		■		
		IN PROCESS										
SA-1A	Safety MCA	Establish Safety MCA Overlay District	Short-Term	P I	■	■	■	□	□	□		

Fowler Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
SA-1B	Safety MCA	Apply AF Safety Zone Criteria to Airport Property	Short-Term	N/A					■	□		
SA-1C	Safety MCA	Easements from Willing Landowners	Mid-Term	N/A	■	■			■	■	□	
SA-3A	BASH MCA	Establish BASH MCA Overlay District	Mid-Term	PI	■	■	■	□	□	□		
VO-1A	VO MCA	Establish Vertical Obstruction MCA Overlay District	Mid-term	PI	■	■	■	□	□	□		
VO-1B	VO MCA	Ensure Federal Aviation Regulation (FAR) Part 77 Compliance	Short-Term	PI	■	■	■	□				

Table 10 Howland Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network	Mid-Term	N/A	■	■	■	■		■		
COM-2B	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources	Short-Term	N/A	■	■	■	■		■		
COMPLETED DURING JLUS												
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	■	■	■	■	■	■	□	■
COM-5B	MCAOD	Adopt Development Notification Checklist	Short-Term	PI	■	■	■	■	□	□		□
COM-5C	MCAOD	Coordination with DoD Siting Clearinghouse	Short-Term	PI	■	■	■	■				
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	■	■	■	■	■	■	■	■
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	■	■	■	■	■	■	□	□
COM-10E	Study Area	Pursue Defense Community Infrastructure Pilot Program	Ongoing	N/A	■	■	■	■				
COM-10F	Study Area	Pursue Defense Manufacturing Community Support Program	Ongoing	N/A	■	■	■	■				■
IE-1A	Study Area	Incorporate Compatibility Planning in Master Plans	Mid-Term	PI	■	■	■	■	■	□	□	
IN PROCESS												
IE-1B	Study Area	Coordinate Infrastructure Expansion Plans	Short-Term	N/A	■	■	■	■	■	□		


Howland Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LAS-1A	Drone MCA	Education Regarding the Use of Drones	Ongoing	PI	■	■	■	■	□	□		□
		IN PROCESS										
LAS-1C	Drone MCA	Consider an Ordinance for Drone Use	Mid-Term	PI	■	■	■	■				
LAS-1E	Drone MCA	Consider Ordinances for Aiming Laser Pointers as Harassment	Mid-Term	PI	■	■	■	■				
LU-1B	Study Area	Establish Regional Response Capabilities	Mid-Term	N/A	■	■	■	■	■	■		□
LU-1C	Study Area	Establish a Road Use and Maintenance Agreement	Short-Term	N/A	■	■	■	■	■			□
LU-1D	Study Area	Establish an Interlocal Agreement	Short-Term	PII	■	■	■	■	■	■		
LU-4B		Implement Best Lighting Practices in Zoning Ordinances	Long-Term	PI	■	■	■	■				
LG-1B	Study Area	Implement DoD Siting Clearinghouse Coordination Procedures	Short-Term	PI	■	■	■	■				
LG-1C	Study Area	Require Use of Solar Project Siting Tools	Short-Term	PI	■	■	■	■	■	■		
NOI-1A	MCAOD	Create a Military Compatibility Area Overlay District (MCAOD)	Mid-Term	PI	■	■	■	□	□	□		
NOI-1B	Noise MCA	Sound Attenuation in New Construction of Noise Sensitive Land Uses	Mid-Term	PI	■	■	■	■				
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement	Ongoing	PI	■	■	■	■		■		
		IN PROCESS										
SA-1A	Safety MCA	Establish Safety MCA Overlay District	Short-Term	PI	■	■	■	□	□	□		

Howland Township JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase								
				Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other	
SA-3A	BASH MCA	Establish BASH MCA Overlay District	Mid-Term	PI	■	■	■	□	□	□		
VO-1A	VO MCA	Establish Vertical Obstruction MCA Overlay District	Mid-term	PI	■	■	■	□	□	□		
VO-1B	VO MCA	Ensure Federal Aviation Regulation (FAR) Part 77 Compliance	Short-Term	PI	■	■	■	□				

Table 11 Trumbull County JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-1E 	YARS	National Defense Authorization Act Resilience Grants	Ongoing	N/A	■			■	■	□	□	
COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network	Mid-Term	N/A	■	■	■	■		■		
COM-1B	Study Area	Intergovernmental Agreement for Single-Use Frequency	Short-Term	N/A	□	□	□	■		□		
COM-2A COMPLETED DURING JLUS	Study Area	Memorandum of Agreement for Planning and Cross-Training	Short-Term	N/A	□	□	□	■		□		
COM-2B COMPLETED DURING JLUS	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources	Short-Term	N/A	■	■	■	■		■		
COM-2C	Study Area	Emergency Management Forums	Short-Term	N/A	□	□	□	■		□		
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	■	■	■	■	■	■	□	■
COM-5B	MCAOD	Adopt Development Notification Checklist	Short-Term	PI	■	■	■	■	□	□		□
COM-5C	MCAOD	Coordination with DoD Siting Clearinghouse	Short-Term	PI	■	■	■	■				
COM-5D	MCAOD	Adopt Military Notification Procedures for Development Projects through Tax Abatement Process	Mid-Term	PI	□	□	□	■				
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	■	■	■	■	■	■	■	■

Trumbull County JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	■	■	■	■	■	■	■	■
COM-6D	Study Area	Invitation to Trumbull County Zoning Inspectors Association Meetings	Short-Term	N/A				■				
COM-8A	Study Area	Create and distribute educational / informational brochures	Mid-Term	PI	□	□	□	■	□	□	□	■
COM-8E	Study Area	Educate the Real Estate Industry and Development Community	Mid-Term	PI	□	□	□	■		■		■
COM-10B	Study Area	Continue to Leverage Opportunities through the AF Community Partnership Program	Ongoing	N/A	□	□	□	■	□	■	□	■
COM-10D	Study Area	Pursue Defense Industry Resilience Assistance	Ongoing	PI	■			■				
COM-10E	Study Area	Pursue Defense Community Infrastructure Pilot Program	Ongoing	N/A	■	■	■	■				
COM-10F	Study Area	Pursue Defense Manufacturing Community Support Program	Ongoing	N/A	■	■	■	■				■
COM-10G	Study Area	Host an Ohio Joint JLUS Communities Task Force	Mid-Term	N/A	□	□	□	■	□	□	■	■
IE-1A	Study Area	Incorporate Compatibility Planning in Master Plans	Mid-Term	PI	■	■	■	■	■	□	□	
IE-1B	Study Area	Coordinate Infrastructure Expansion Plans	Short-Term	N/A	■	■	■	■	■	□		






Trumbull County JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Implementation Phase				Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
				OEA	Vienna Township	Fowler Township	Howland Township					
LAS-1A	Drone MCA	Education Regarding the Use of Drones	Ongoing	PI	■	■	■	■	□	□		□
IN PROCESS												
LAS-1C	Drone MCA	Consider an Ordinance for Drone Use	Mid-Term	PI	■	■	■	■				
LAS-1E	Drone MCA	Consider Ordinances for Aiming Laser Pointers as Harassment	Mid-Term	PI	■	■	■	■				
LU-1B	Study Area	Establish Regional Response Capabilities	Mid-Term	N/A	■	■	■	■	■	■		□
LU-1C	Study Area	Establish a Road Use and Maintenance Agreement	Short-Term	N/A	■	■	■	■	■			□
LU-1D	Study Area	Establish an Interlocal Agreement	Short-Term	P II	■	■	■	■	■	■		
LU-2A	Study Area	Coordinate Any Future Realignment of King Graved Rd.	Long-Term	N/A					■	■	■	
LU-3A	Study Area	Coordination in Planning for King Graves Road Realignment	Long-Term	N/A					■	□		■
LU-3B	Study Area	Coordination During Construction of King Graves Road Realignment	Long-Term	N/A					■	□		■
LU-4A	Study Area	Assess Future Ambient Lighting Impacts on Night Flying Operations	Long-Term	PI					■			
LU-4B	Study Area	Implement Best Lighting Practices in Zoning Ordinances	Long-Term	PI	■	■	■	■	■			
LG-1B	Study Area	Implement DoD Siting Clearinghouse Coordination Procedures	Short-Term	PI	■	■	■	■	■			
LG-1C	Study Area	Require Use of Solar Project Siting Tools	Short-Term	PI	■	■	■	■	■	■	■	

Trumbull County JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase				Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
				Vienna Township	Fowler Township	Howland Township						
NOI-1B	Noise MCA	Sound Attenuation in New Construction of Noise Sensitive Land Uses	Mid-Term	PI	■	■	■	■				
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement	Ongoing	PI	■	■	■	■		■		
		IN PROCESS										
VO-1C	VO MCA	Develop a 3-Dimensional Imaginary Surfaces Model	Short-Term	PI	□	□	□	■		□		
WQQ-1B	Study Area	Prepare a Storm Water Assessment and Report	Mid-Term	PI				■		□		□

Table 12 Western Reserve Port Authority JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-1E 	YARS	National Defense Authorization Act Resilience Grants	Ongoing	N/A	■			■	■	□	□	
AT-4A 	Study	Establish a Memorandum of Agreement Develop a MOA between	Short-Term	N/A					■	□		
AT-4B	Study Area	Consider Use of Security Monitoring Technology	Mid-Term	N/A					■	■		
AT-5A 	Study Area	Restrict the Lease or Sale of Facility and Apron for Non-Aviation Uses	Short-Term	N/A					■			
AT-5B 	Study Area	Restrict Actions that Reduce Utilization of Apron and Taxiways for Aviation Purposes	Long-Term	N/A					■			
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	■	■	■	■	■	■	□	■
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	■	■	■	■	■	■	■	■
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	■	■	■	■	■	■	□	□
COM-7A 	Study Area	Establish Working Committee	Ongoing	N/A				□	■	■	□	□
COM-9A	Study Area	Establish Working Committee with State Agencies	Mid-Term	N/A					■	■		□
COM-11A	Study Area	Establish FAA Working Committee	Short-Term	N/A					■	□		□

Western Reserve Port Authority JLUS Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase					Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
				Vienna Township	Fowler Township	Howland Township	Trumbull County					
ED-1A	Study Area	Youngstown ARS Coordinate with Western Reserve Port Authority	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		IN PROCESS										
IE-1A	Study Area	Incorporate Compatibility Planning in Master Plans	Mid-Term	PI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		IN PROCESS										
IE-1B	Study Area	Coordinate Infrastructure Expansion Plans	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
LAS-1D	Drone MCA	Employ New Communication Link Jamming Technology	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LU-1B	Study Area	Establish Regional Response Capabilities	Mid-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
LU-1C	Study Area	Establish a Road Use and Maintenance Agreement	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>
LU-1D	Study Area	Establish an Interlocal Agreement	Short-Term	P II	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LU-2A	Study Area	Coordinate Any Future Realignment of King Graved Rd.	Long-Term	N/A			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LG-1A	Study Area	Coordination of Mutually Beneficial Projects at Youngstown ARS and Youngstown-Warren Regional Airport	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
		IN PROCESS										
LG-1C	Study Area	Require Use of Solar Project Siting Tools	Short-Term	P I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
NOI-2F	Noise MCA and NAA	Avoid Overflight During Key Community Events	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Western Reserve Port Authority JLUS Strategies


Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Implementation Phase					Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
				OEA	Vienna Township	Fowler Township	Howland Township	Trumbull County				
PS-1A  IN PROCESS	Study Area	Continue to Pursue Attracting Long-Term Commercial Aviation Tenants	Ongoing	N/A					■			
SA-1B	Safety MCA	Apply AF Safety Zone Criteria to Airport Property	Short-Term	N/A					■	□		
SA-1C	Safety MCA	Easements from Willing Landowners	Mid-Term	N/A	■	■			■	■	□	
SA-3B	BASH MCA	Increase Surrounding Landowner Awareness	Short-Term	PI					■	■		□






Table 13 Youngstown ARS JLUS Implementation Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
AT-1A	Study Area	Evaluate Land Acquisition Options	Mid-Term	N/A						■	□	□
IN PROCESS												
AT-1B	YARS	Shield Utilities from Off-Installation Line of Sight	Short-Term	N/A						■		□
AT-1C	YARS	Establish Redundant Utility Access Nodes	Mid-Term	N/A						■		□
AT-2A	Study Area	Evaluate Land Acquisition Options	Short-Term	N/A					□	■	□	□
IN PROCESS												
AT-3A	Study Area	Memorandum of Agreement for Law Enforcement	Short-Term	N/A	□	□		□	□	■		
COMPLETED DURING JLUS												
AT-3B	Study Area	Conduct Joint Exercises	Ongoing	N/A	□	□	□	□	□	■		
AT-4B	Study Area	Consider Use of Security Monitoring Technology	Mid-Term	N/A					■	■		
COM-1A	Study Area	Upgrade to Digital Radio Compliant with MARCS Network	Mid-Term	N/A	■	■	■	■		■		
COM-2B	Study Area	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources	Short-Term	N/A	■	■	■	■		■		
COMPLETED DURING JLUS												
COM-3A	Study Area	Formalize Protocols for Officer Access	Short-Term	N/A						■		

Youngstown ARS JLUS Implementation Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Implementation Phase								Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
				OEA	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve	Port Authority				
COM-3B	Study Area	Roster of Training Officers	Short-Term	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input checked="" type="checkbox"/>		
COM-4B	Study Area	Develop an Outreach Campaign Plan	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		IN PROCESS												
COM-5A	MCOAD	Memorandum of Agreement for Notification to Youngstown ARS	Short-Term	PI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COM-6A	MCAOD	Create a JLUS Implementation Coordination Committee to Oversee Implementation of JLUS Strategy Recommendations	Short-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COM-6B	Study Area	Provide Mutual Briefings	Ongoing	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COM-6C	MCAOD	Foster Enhanced Public Awareness Through Accurate Mapping	Short-Term	N/A								<input checked="" type="checkbox"/>		
COM-7A	Study Area	Establish Working Committee	Ongoing	N/A				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		IN PROCESS												
COM-8B	Study Area	Promote Social Media Outlets for General Public	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input checked="" type="checkbox"/>		<input type="checkbox"/>
		IN PROCESS												
COM-8C	Study Area	Continue to Host Public Events	Ongoing	N/A								<input checked="" type="checkbox"/>		
		IN PROCESS												
COM-8D	Study Area	Seek Funding to Support Public Outreach	Ongoing	N/A								<input checked="" type="checkbox"/>		
COM-8E	Study Area	Educate the Real Estate Industry and Development Community	Mid-Term	PI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
COM-9A	Study Area	Establish Working Committee with State Agencies	Mid-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Youngstown ARS JLUS Implementation Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
COM-10B 	Study Area	Continue to Leverage Opportunities through the AF Community Partnership Program	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COM-10C  IN PROCESS	Study Area	Pursue Partnering Opportunities	Ongoing	N/A						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
COM-10F 	Study Area	Pursue Defense Manufacturing Community Support Program	Ongoing	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
ED-1A  IN PROCESS	Study Area	Youngstown ARS Coordinate with Western Reserve Port Authority	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ED-1B Study Area	Study Area	Work with Air Force Civil Engineering Center	Mid-Term	N/A						<input checked="" type="checkbox"/>		<input type="checkbox"/>
LAS-1D Drone MCA	Drone MCA	Employ New Communication Link Jamming Technology	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LU-1A Study Area	Study Area	Educate Public and Government Officials	Ongoing	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LU-1B Study Area	Study Area	Establish Regional Response Capabilities	Mid-Term	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
LU-1D Study Area	Study Area	Establish an Interlocal Agreement	Short-Term	P II	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LU-2A Study Area	Study Area	Coordinate Any Future Realignment of King Graved Rd.	Long-Term	N/A				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
LG-1A  IN PROCESS	Study Area	Coordination of Mutually Beneficial Projects at Youngstown ARS and Youngstown-Warren Regional Airport	Short-Term	N/A					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Youngstown ARS JLUS Implementation Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	OEA Implementation Phase	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station	Eastern Ohio Military Affairs Commission	Other
LG-1C	Study Area	Require Use of Solar Project Siting Tools	Short-Term	PI	■	■	■	■	■	■		
NOI-2A	Noise MCA and NAA	Leverage Youngstown ARS Website for Noise Complaints	Short-Term	N/A						■		
NOI-2B	Noise MCA and NAA	Increase Public Understanding of Noise Sources	Short-Term	N/A	□	□	□	□	□	■		
NOI-2C	Noise MCA and NAA	Coordination between Youngstown ARS and Mathews Local School District	Short-Term	N/A					□	■		■
NOI-2D	Noise MCA and NAA	Leverage Youngstown ARS Public Affairs for Education on Noise Complaint Process	Ongoing	N/A						■		
NOI-2E	Noise MCA and NAA	Develop MOU with Local Law Enforcement	Ongoing	PI	■	■	■	■		■		
IN PROCESS												
NOI-2F	Noise MCA and NAA	Avoid Overflight During Key Community Events	Short-Term	N/A					■	■		□
RC-1A	Study Area	Plan for Traffic Queuing in King Graves Road Realignment	Short-Term	N/A				□		■		□
RC-2A	Study Area	Plan for Emergency Access at New Main Gate	Short-Term	N/A				□		■		□
SA-1C	Safety MCA	Easements from Willing Landowners	Mid-Term	N/A	■	■			■	■		□
SA-3B	BASH MCA	Increase Surrounding Landowner Awareness	Short-Term	PI					■	■		□

Youngstown ARS JLUS Implementation Strategies

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Implementation Phase						
				OEA	Vienna Township	Fowler Township	Howland Township	Trumbull County	Western Reserve Port Authority	Youngstown Air Reserve Station
WQQ-1A	Study Area	Incorporate Green Infrastructure in King Graves Road Redesign	Mid-Term	N/A				<input type="checkbox"/>		<input checked="" type="checkbox"/>
										Eastern Ohio Military Affairs Commission
										Other



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