

The following Appendix is provided as supplemental materials to support the JLUS process, JLUS Recommendations, and final JLUS products. The Appendix contains:

- A Background Report on potential development impacts affecting NSA Crane and the LGTF resulting from I-69 development.
- A summary of each Public Forum including Sign-In Sheets, presentations, handouts and a compilation of comments received during the NSA Crane Public Forums conducted in August 2015, February 2016, and November 2016 which were considered and reflected in the final JLUS documents.



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Appendix A -

Background Report on Potential Development
Impacts affecting Naval Support Activity Crane and
the Lake Glendora Test Facility Resulting from
Interstate-69



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Introduction and Overview

In order to understand the potential development pressures that could impact military activities in the region, the areas in proximity Naval Supply Activity Crane and the Lake Glendora Test Facility were visited. The primary goal of these site visits was to identify areas which are more likely to face future real estate development pressures, specifically areas where additional new development could affect existing military operations at these sites.

A multi-pronged approach was used to identify areas which could face development pressure at the Naval Supply Activity (NSA) Crane and the Lake Glendora Test Facility (LGTF). Master plans and other published studies were evaluated, to provide a baseline of data particularly regarding economic development activities and expected housing development. In addition, information related to the expansion of Interstate 69 in the areas to the north and west of NSA Crane was also reviewed, particularly as it relates to additional development pressures created by the improved access provided by the new highway.

Economic development literature was also reviewed to provide contextual information on factors which are related to site selection and the desirability of sites for development. In addition, published information related to residential development factors and site selection was also reviewed.

Finally, the majority of roads surrounding each facility were driven, to provide context to the level and type of existing development, and to gain a better understanding of site factors such as slopes, grades, access and other development considerations.

The remainder of this Technical Memorandum provides more detailed information on the approach and specific research findings of this analysis.

Methodology and Data Resources

The primary focus of this analysis is the Coordination Military Compatibility Areas (MDA) for NSA Crane and LGTF. As discussed elsewhere in the JLUS study, the Coordination MCA addresses the areas directly surrounding a military installation that could be potentially impacted by the installation's operations. Specifically, the Coordination MCA is a three mile buffer surrounding the military installation in which there are stricter land development regulations supported by IC §36-7-30.1-2 of the State of Indiana's General Assembly.

The Coordination MCA for NSA Crane is depicted on Figure 1, while the Coordination MCA for LGTF is shown in Figure 2.

Figure 1. Coordination MCA for NSA Crane

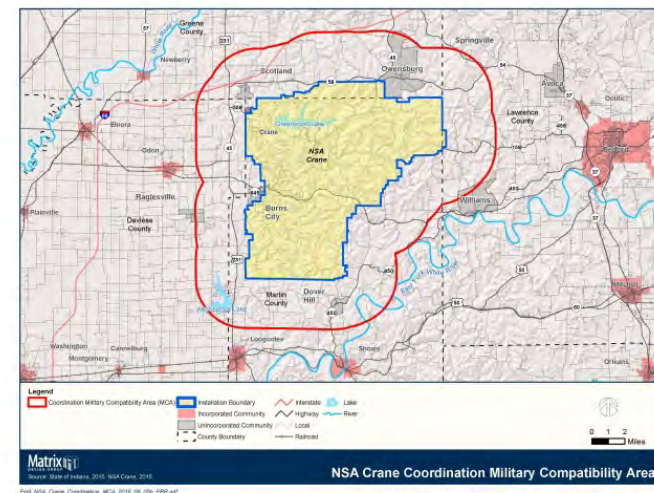
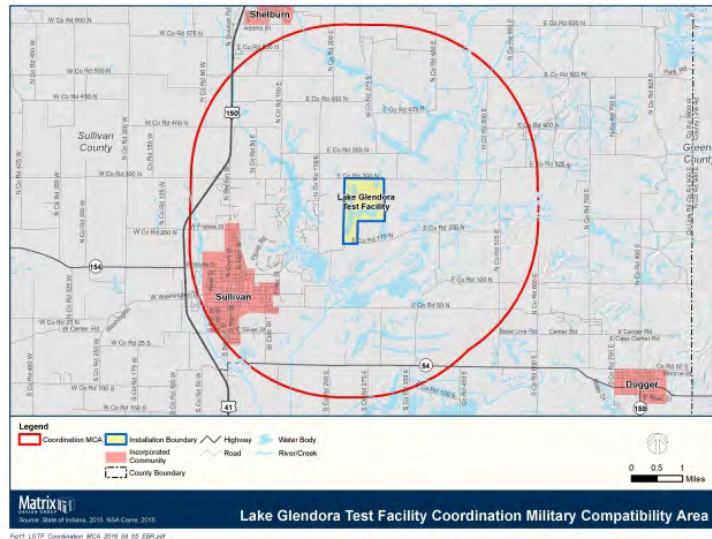


Figure 2. Coordination MCA for LGTF



While the Coordination MCA for NSA Crane includes only a limited amount of developed area (Dover Hill, Owensburg and Scotland Townships), the Coordination MCA for LGTF includes the majority of the City of Sullivan.

As part of this analysis, several published documents were reviewed to provide context to the analysis of real estate in proximity to NSA Crane and LGTF. Reports reviewed include:

- City of Bedford Comprehensive Plan;
- City of Jasonville Strategic Plan 2003;
- Bedford/Lawrence County 2020 Plan;
- City of Loogootee Comprehensive Plan, Update 2014;
- City of Linton Comprehensive Plan 2014 Update;
- Martin County Comprehensive Plan;
- Greene County Comprehensive Plan;
- Davies County Zoning Map and Ordinance;

- Southwest Regional Logistics Council's Plan for Growing Southwest Indiana's Logistics Sector;
- West Central Indiana Economic Development Business Development brochure; and
- West Gate @ Crane Technology Park's Gateway to the Future presentation.

These documents information on key community efforts to plan for their future development, and address issues such as housing, economic development, infrastructure, historic character, social and demographics characteristics, natural environment, land use, community facilities, infrastructure, transportation and utilities, among other topics.

These reports provide valuable information on key topics which affect the ability to develop land within their boundaries, and provide a context for how these municipal entities view future development in the communities.

As part of this analysis, individual exits along I-69 were visited, beginning at Exit 104 (Route 445) and continuing south to Exit 76 (Route 58). Subsequently, the majority of roadways in proximity to both the NSA Crane and LGTF facilities were driven over the course of several days.

Locational Overviews

NSA Crane and LGTF are generally located in rural areas in southwestern Indiana. Some of their locational characteristics are described in the sections below.

NSA Crane

The NSA Crane property is located primarily in southwestern Indiana. The majority of the facility is located in Martin County, with smaller portions of the site extending into both Greene and Lawrence counties.

From an access perspective, Interstate 69 serves as the major regional arterial, passing within a few miles of the site's northwest corner. This portion of I-69 was opened in late 2015, enhancing travel between Evansville and Bloomington. From I-69, access can be gained to US Route 231, which runs to the west of the site, or to Route 58, which runs along the northern edge of the site. From the eastern side of the site, the primary approach is along Route 158, which connects NSA Crane with the City of Bedford. Route 450 also provides limited access to the areas along the east side of NSA Crane, in a generally southwesterly direction from Bedford.

From a topographic perspective, the areas surrounding the facility are quite different. The areas to the east and southeast of the facility are more heavily wooded and have significant slopes. Areas to the north, west and southwest are more gently rolling topography, and not as densely wooded, due to more significant agricultural uses in this area.

Lake Glendora Test Facility

The LGTF facility is located in a rural part of southwestern Indiana, approximately 40 miles south of Terre Haute. The facility is located entirely within Sullivan County, and the City of Sullivan is located to the southwest of LGTF.

From an access perspective, LGTF is more difficult to access than NSA Crane. The primary access to LGTF is via county roads, with the nearest highways almost three miles away. From a regional perspective, Route 54 offers east-west access from the City of Sullivan towards the east. US Route 150 provides north-south access from Sullivan towards Terre Haute (north) and Vincennes (south).

The land areas in proximity to the LGTF have a significant number of streams, ponds and lakes which have influenced roadway development in the area. These wet areas have also served to inhibit development close to the facility. The majority of properties in proximity to LGTF are single family homes and farmsteads. There are a limited number of multi-unit residences within the

Coordination MCA. The City of Sullivan is the only substantial developed area within the Coordination MCA, other than limited commercial and industrial development along US Route 150.

Site Selection/Development Factors

The growth of the Internet and on-line site information has, in some regards, made the job of site selection consultants easier. While it may have taken weeks or months to identify available sites that met specific criteria for a new corporate manufacturing or office facility, those sites can now be identified in hours or days. In essence, the availability of site selection data on-line has made it easier for many communities to be eliminated from consideration much more rapidly, while also making it easier to gather necessary data on the locations that survive "the first cut".

Groups such as Area Development magazine and Site Selection magazine routinely survey both corporate real estate executives and site selection consultants. The goal of these surveys is to understand which location factors are most critical in developing new sites/facilities.

According to the most recent survey from Area Development, the following factors were considered as the highest priorities in selecting a new location:

- Availability of Skilled Labor – 92.9%;
- Highway Accessibility – 88.0%;
- Quality of Life – 87.6%;
- Occupancy/Construction Costs – 85.4%;
- Available Buildings – 83.7%;
- Labor Costs – 80.8%;
- Corporate Tax Rate – 78.5%;
- Proximity to Major Markets – 76.3%;
- State and Local Incentives – 75.8%; and
- Energy Availability and Costs – 75.3%.

It should be noted that the percentages for each factor reflect the number of survey respondents that rated each factor as either “very important” or “important”.

Looking at some of these factors over a longer period identifies some changes in “what matters” in recent years. The importance of the availability of skilled labor has increased, while the importance of labor costs has decreased. It is believed that the need to attract skilled labor has also increased the importance of quality of life as a site selection consideration.

It is also important to understand which factors are considered to be less relevant in selecting new business locations. The availability of unskilled labor (47.8%), railroad service (32.4%) and waterway or port access (24.0%) were the factors which ranked the lowest in the 2016 survey.

Although the survey considers some infrastructure categories, such as highway accessibility, telecommunications services, airport access and the availability of water, the survey does not consider the availability of wastewater treatment services. The availability of wastewater treatment capability is considered a critical factor in developing new non-residential facilities, and will ultimately affect the ability to develop facilities with any significant density in proximity to NSA Crane and LGTF.

Indiana’s business climate is ranked among the top ten in the United States by both corporate real estate executives and site selection consultants, according to Site Selection’s 2016 State of the States report. More than \$2.3 billion in major corporate facility projects were under development at the end of 2015, including a combined \$1.8 billion in spending by General Motors and Rolls Royce. According to Site Selection, Indiana also ranks in the top ten for ACT Career Readiness Certificates; Business tax Climate; and Lowest Electric Power Costs.

Additional Development Pressures Associated with I-69 Expansion

The expansion of Interstate 69 has enhanced access between Evansville and the area just south of Bloomington. The project reduces travel times, while providing the ability to handle higher traffic volumes due to the roadway’s higher capacity.

As discussed elsewhere, transportation access, particularly highway accessibility, is a key variable in site selection for developing new employment generating uses. In order to understand how the development of improved highway access might affect real estate development in proximity to NSA Crane, each exit in from Exit 104

Looking at some of these factors over a longer period identifies some changes in “what matters” in recent years. The importance of the availability of skilled labor has increased, while the importance of labor costs has decreased. It is believed that the need to attract skilled labor has also increased the importance of quality of life as a site selection consideration.

Exit 104 - Route 445 is a connector which connects I-69 with route 45 to the west. From the Exit 104 off-ramp, there is no ability to travel towards the east.

Route 45 to the north has some limited commercial activity, gas station/convenience stores, service businesses, and restaurants. To the south, Route 45 is predominantly residential, and has some larger available sites that could be developed, possibly for multi-family homes.

The continuation of 445 to the west has significant topographic challenges, and is considered less developable.

There is no evidence of water and/or sewer infrastructure being available to support any significant level of commercial or residential development in this area.

Exit 98 – Route 45 southeast and northwest of I-69 is predominantly residential, with some larger undeveloped parcels. Properties to the northwest are heavily wooded, with only limited

amounts of cleared land supporting existing residential and limited commercial uses.

To the southeast of I-69, the situation is similar, with a number of large parcels which could support development, though many of these parcels are heavily wooded. There is a higher amount of cleared agricultural land in this area, but the majority of the acreage is wooded.

There is no evidence of water and/or sewer infrastructure being available to support any significant level of commercial or residential development in this area.

Exit 87 – This exit provides access to Route 231, a primary north-south route which runs along the west side of NSA Crane. Route 45/58 runs east-west to the north of NSA Crane. North of I-69 on Route 231, the area is dominated by larger agricultural parcels. To the south of I-69, there are also a significant number of agricultural parcels. However, there are also a significant number of wooded parcels, principally in proximity to the northern end of NSA Crane.

Just south of I-69 and east of 231 is the West Gate at Crane business park. As will be discussed later in this section, West Gate at Crane has a significant existing tenant base, as well as the ability to support the development of significant new square footage for commercial uses. Among the existing tenants are Alcon, AECOM, BAE Systems and SAIC.

The existing water and wastewater infrastructure at the West Gate at Crane business park can support buildout of the existing park. Infrastructure systems could also be used to support development of nearby agricultural properties for commercial, industrial and/or multi-family uses.

Exit 76 - This exit has more of an agricultural focus than the other exits reviewed for this analysis. The vast majority of the acreage to both the east and to the west of I-69 in this area is in agricultural use. There is limited commercial and institutional use along Route 58, which connects I-69 to Route 231. Route 58 passes through the Town of Odon, which has a concentration of single family homes and a very limited commercial base.

There is no evidence of water and/or sewer infrastructure being available to support any significant level of commercial or residential development in this area.

Potential Development Areas Surrounding NSA Crane

While the areas surrounding NSA Crane are primarily rural and agricultural in nature, there are limited areas which could see additional development pressure over time. The availability of water and sewer infrastructure, as well as highway accessibility, is considered to be the primary drivers of potential future development.

The area in proximity to NSA Crane that is expected to see the most significant development pressure is the West Gate at Crane Technology Park. Portions of West Gate are located in Daviess, Greene and Martin counties. West Gate includes almost 300,000 square feet of existing buildings, and is home to 35 tenants with more than 800 employees.

The West Gate at Crane Technology Park is a primary focus for development activity for the host counties. The Greene County Comprehensive Plan *notes “The WestGate at Crane Technology Park presents a unique opportunity for the residents of Greene, Daviess and Martin County. The proximity of the Tech Park to the I-69/US 231 interchange and the Crane Naval Surface Warfare Center coupled with the significant potential for partnering with a number of outstanding colleges and universities in the State of Indiana make this location one of the most attractive development areas in the entire Midwest. If the residents of Greene County hope to reap the benefits from this venture, it is essential they strive for a regional economic development approach. Any development within the Tech Park will be beneficial to the residents of each county.”*¹

The West Gate at Crane Technology Park includes 500+ acres. At an average of 6,000 square feet per acre, the property could support as much as three million square feet of development. This

¹ Greene County Comprehensive Plan, 2009, Page 97

represents a substantial increase over West Gate's current square footage, reported to be approximately 275,000 square feet.

The ability to support additional development activity at West Gate is affected by water and sewer capacity at the site. According to the West Gate at Crane Executive Director, the existing infrastructure systems are expected have limited capacity to support additional development. Additional expansion beyond this level will require an expansion of water and sewer capacity. Greene County reportedly has available capacity, and is working with West Gate at Crane to establish necessary connections to support development. Depending on the route for this sewer line, and any restrictions imposed by Greene County, additional agricultural parcels along the route could benefit, from a development perspective, through the additional sewer service. This could create an area of concern for NSA Crane, especially if agricultural parcels are developed for single- or multi-family residential uses.

Another area of potential concern relative to the West Boggs Park, located southwest of NSA Crane, but within the MCA. West Boggs Park is a 1,500 acre facility, which includes mobile home rentals, cabins, shelters and more than 250 camping sites. The property also includes an on-site restaurant and a nine hole golf course.

While camping in and of itself does not raise a concern, many of the camp sites at West Boggs Park have a "permanent" feel to them, with campers adding decks, sheds and landscaping to their sites. In addition, some camp sites are moving towards year-round occupancy. This could create a situation of a new unplanned residential community, which could result in an unanticipated "population base" which opposes the activities at NSA Crane.

Potential Development Areas Surrounding LGTF

Almost the entire City of Sullivan is located within the MCA for LGTF. While much of the city's primary "urban core" is built-out, there are areas on the periphery of the City which could see development pressure as the city grows. Specific areas of concern include portions of US 150 north of Sullivan, and portions of Route

54 east of Sullivan. These two roadways are primary regional transportation corridors, and are more likely to see development pressure in the future due to their highway accessibility and proximity to Sullivan.

In general, the land surrounding LGTF is predominantly residential in nature. Virtually all of the surrounding roadways were driven as part of the research for this analysis. The area is dominated by low density residential uses. The area has a substantial number of lakes, ponds, rivers and streams. The presence of these wetland areas limits development capability in areas surrounding LGTF.

The City of Sullivan is located to the southwest of LGTF. The City has its own wastewater treatment plant, while water is provided by Indiana American Water. According to the City's 2013 Comprehensive Plan, there is sufficient capacity in both the water and wastewater systems to support anticipated growth. However, the Comprehensive Plan indicates that during wet weather events, the capacity of the system is "significantly limited".

The water and wastewater utilities do not extend beyond the City limits, such that the areas in proximity to US 150 and Route 54 are not presently served by these utilities. While the City of Sullivan has tried for many years to annex the properties north and west of the City in proximity to US 150 for many years, the most recent attempt to annex the properties failed in 2014.

Nevertheless, these areas are considered more likely to see development pressure over the coming years. In particular, the area along US 150, north of Sullivan, has several existing commercial uses given its high traffic volumes.

Similar to NSA Crane, LGTF also has a large public park located to the southwest of the LGTF facility. The Sullivan County Park, which abuts Sullivan Lake, includes log cabins, fishing cabins, and other facilities available for rent by the day or week. The Park includes more than 400 campsites, which support both tent and RV camping. The sites have water and electric service available.

The Park includes approximately 400 acres, and has a nine hole golf course. The adjacent Sullivan Lake is more than 450 acres in

size, and supports fishing, swimming and boating, including motorized and non-motorized boats.

Much like the West Boggs Park, many of the campsites at Sullivan County Park and Lake have a “permanent” feel to them, with campers adding decks, sheds and landscaping to their sites. In addition, some camp sites are moving towards year-round occupancy. This could create a situation of a new unplanned residential community, which could result in an unanticipated “population base” which opposes the activities at LGTF.

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Appendix B -

Public Meeting Materials



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PUBLIC MEETING SIGN-IN SHEET

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PUBLIC MEETING SIGN-IN SHEET

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PUBLIC MEETING 1
Sullivan County

Matrix
DESIGN GROUP

August 10, 2015




Agenda

- Welcome / Introductions
- JLUS Overview
- NSA Crane Overview
- Compatibility Factors Overview
- Compatibility Factor Workshop
- Next Steps
- Adjourn


2

Matrix
DESIGN GROUP



Welcome / Introductions

3





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4



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- Martin County
- Greene County
- Lawrence County
- Daviess County
- Sullivan County
- NSA Crane

- Indiana Office of Community and Rural Affairs (OCRA)
- Radius Indiana
- Indiana Office of Defense Development (IODD)
- NSA Crane

- Policy Committee
- Technical Working Group(s)

- Matrix Design Group

5



NSA
CRANE
JOINT
LAND USE
STUDY

The map displays the locations of 30 Joint Logistics Units (JLUs) across the United States. Each location is marked with a yellow dot and connected to a text box. The locations are as follows:

- Camp Rilea JLU
- Kingsley Field JLU
- NAS Fallon JLU
- Beale AFB JLU
- Camp Roberts JLU
- Naval Base Ventura County JLU
- Andersen AFB Guam JLU
- Fairchild AFB JLU
- Malmstrom AFB JLU & Implementation
- Fort Harrison & Limestone Hills JLU
- Camp Williams JLU & Implementation
- Offutt AFB JLU
- Greenleaf Training Site JLU
- Sheppard AFB JLU
- JBSA-Randolph JLU
- NAS Corpus Christi JLU
- Camp Swift JLU
- NAS Kingsville JLU & Implementation
- JBSA-Lackland JLU Implementation
- Camp Bullis JLU & Implementation
- Del Rio - Laughlin AFB JLU
- NAF El Centro JLU
- R-2508 Complex JLU
 - Edwards AFB
 - NAW's China Lake
 - Fort Irwin NTC
- Columbus AFB JLU & Implementation
- Dobbins ARB JLU
- NSA Panama City Bay County JLU
- Eglin AFB JLU Implementation
- NAS Patuxent River JLU
- Hampton-Langley AFB JLU
- NSF Dahlgren JLU
- Aberdeen Proving Ground JLU
- Fort Indiantown Gap JLU
- Stones Ranch & Camp Niantic JLU


6





JLUS Overview

7

What is a JLUS?


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


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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally

8





JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory


A JLUS is NOT:


- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9





JLUS Objectives


Community


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

Military

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

10






JLUS Approach


Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:


- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern

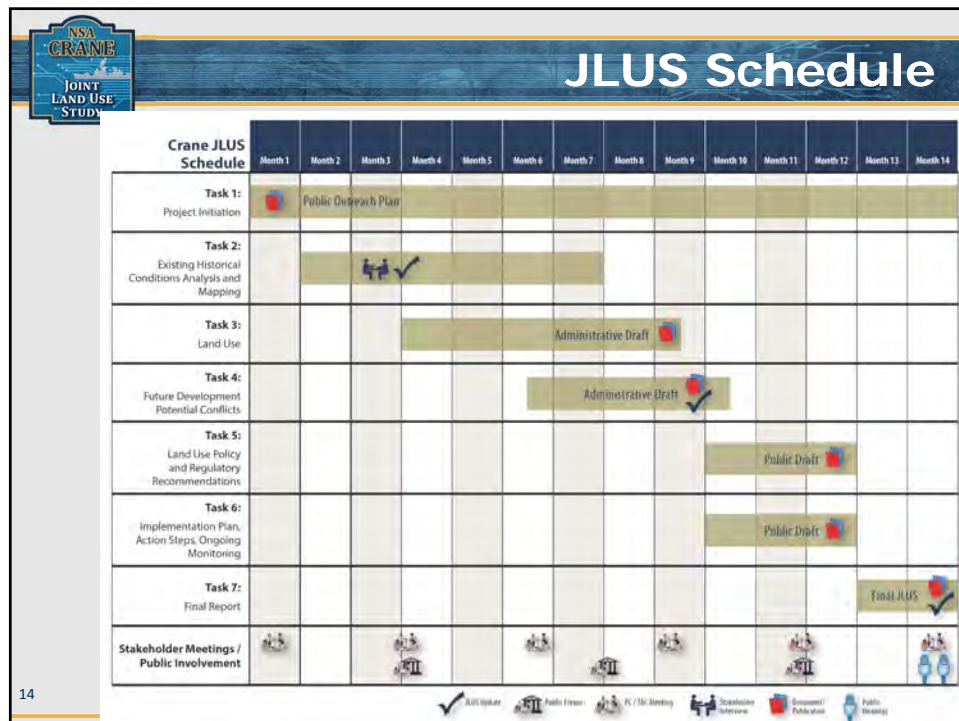
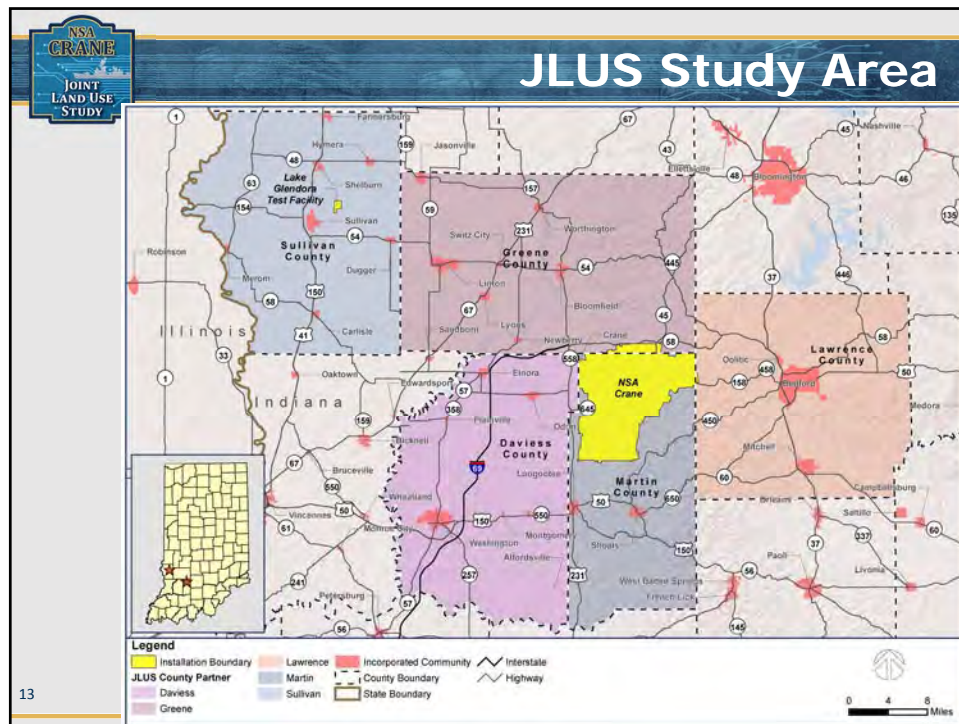
11




Who is Engaged in the JLUS?

Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IOOD NSA Crane
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests
Public	All interested persons

12




Public Involvement

15

Public Involvement Plan

Public input is essential to the success of the JLUS

- Project Website
www.cranejlus.com
- Informational Brochures
- Committee Meetings
- Public Flyers / Post Cards
- Group E-mail Blast Notification
- Public Meetings
- Comment Cards
- Public Review Period

16



Public Involvement

3 Public Forums

Forum #1 Project overview / Compatibility Factors / Issue identification


Forum #2 Preliminary compatibility assessment

Forum #3 Draft JLUS

3 Meetings per Forum

- Daviess, Greene, Martin Counties
- Sullivan County
- Lawrence County

17


Technical Process/Deliverables

Background Report

- Introduction
- Community Profile
- Military Profile
- Existing Compatibility Tools
- Compatibility Assessment

JLUS



- Background Report Summary
- **Implementation Plan**

18





Naval Support Activity Crane

19



Compatibility Factors Overview / Group Exercise

20





NSA Crane Joint Land Use Study

Compatibility Factors

NSA Crane Joint Land Use Study

What is Compatibility?
Compatibility, in relationship to military readiness, can be defined as the balance and/or comparison between community and military needs and interests. The goal of compatibility planning is to provide an environment where both entities can coexist successfully. Study area data on existing conditions, obtained from the FC, TUE, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and consider existing and projected development trends within the study area. The JLU will study the following set of 20 potential compatibility factors to determine all pertinent issues.

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

ED Energy Development
Development of energy sources, including alternative energy sources (such as solar, wind, or biofuel) could pose compatibility issues related to glare (solar energy), vertical obstructions (wind generators), or water quality / quantity.

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

FSI Frequency Spectrum Interference
Frequency spectrum interference and interference refers to the misoperation of electronic signals by a situation or object (impedance) or the inability to distribute / receive a particular frequency because of similar frequency competition (interference).

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

IE Infrastructure Extensions
This factor covers the extension or provision of infrastructure (roads, water, sewer, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.

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

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

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

Fact Sheet #1: Overview / Factors

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

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

SA Safety Zones
Safety zones are areas in which development should be kept to a minimum due to the higher risks to public safety. Issues to consider include accident potential zones, emissions from major safety zones, and explosive safety zones.

NOI Noise
From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unattended levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

PT Public Trespassing
The factor addresses public trespassing, either purposeful or unintentional, onto a military installation. The potential for trespassing where public use areas are in close proximity to the installation.

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


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

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

VO Vertical Obstructions
Vertical obstructions are created by buildings, trees, structures, or other features that may encroach into the navigable airspace used for military operations (aircraft approach, transitional, enroute, enroute, enroute, and enroute). These can present a safety hazard to both the public and military personnel.

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


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



NSA Crane Joint Land Use Study

How To Respond To Survey Questions

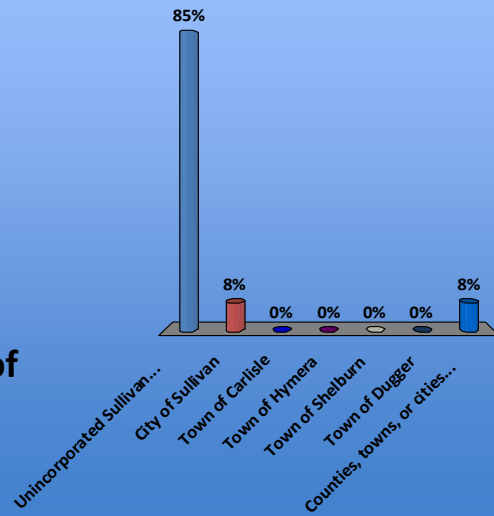
1. **Presenter will announce polling is open**
2. **Press the number / letter that corresponds with the answer you wish to select.**
3. **Change your mind? Just click the right one. Your last push will count.**
4. **You will see results as responders select their answer.**



www.TurningTechnologies.com

1. Where do you live?

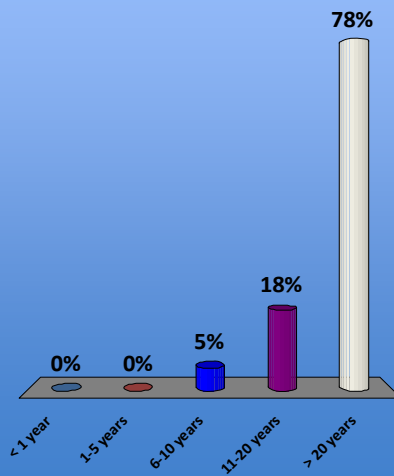
- A. Unincorporated Sullivan County
- B. City of Sullivan
- C. Town of Carlisle
- D. Town of Hymera
- E. Town of Shelburn
- F. Town of Dugger
- G. Counties, towns, or cities outside of the aforementioned locales



23

2. How long have you lived in the area?

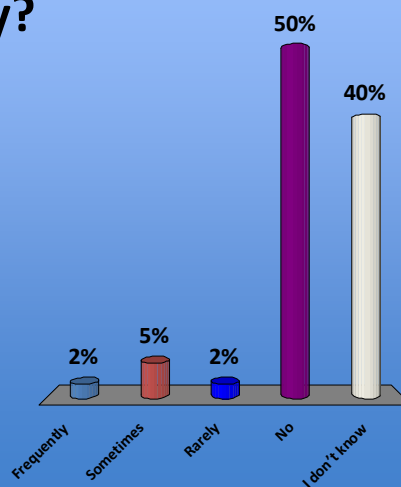
- A. < 1 year
- B. 1-5 years
- C. 6-10 years
- D. 11-20 years
- E. > 20 years



24

3. Do you feel that Lake Glendora Testing Facility impacts the air quality in your community?

- A. Frequently
- B. Sometimes
- C. Rarely
- D. No
- E. I don't know



25



Air Quality

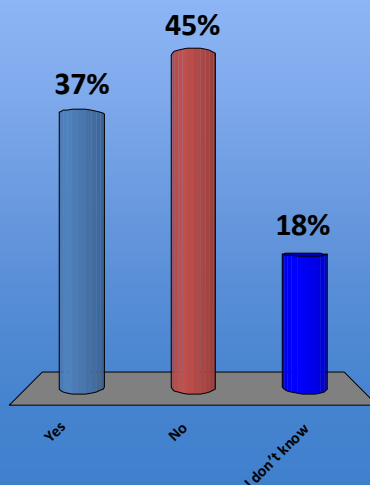
Air quality is defined by numerous components that are regulated at the federal and state level. For compatibility, the primary concerns are pollutants that limit visibility (such as particulates, ozone, etc.) and potential non-attainment of air quality standards that may limit future changes in operations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



26

4. Does proximity to Lake Glendora Test Facility generate security or safety concerns for your community?

- A. Yes
- B. No
- C. I don't know



27



Anti-Terrorism / Force Protection

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

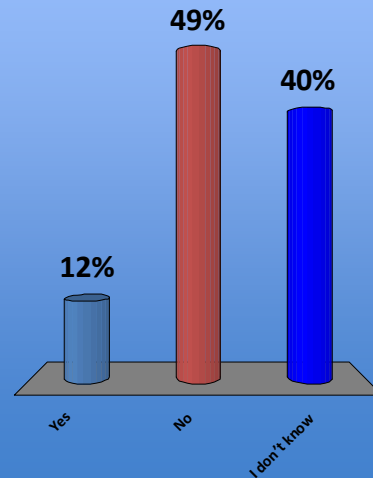


28

Matrix
DESIGN GROUP

5. Are the biological resources in your community impacted by Lake Glendora Test Facility?

- A. Yes
- B. No
- C. I don't know



29



Biological Resources

Sensitive biological resources include federal and state listed species (threatened and endangered species) and the habitats they exist in or utilize. These resources may also include areas such as wetlands and migratory corridors that are critical to the overall ecosystem.

The presence of sensitive biological resources may require special development considerations and should be included early in the planning process.



30

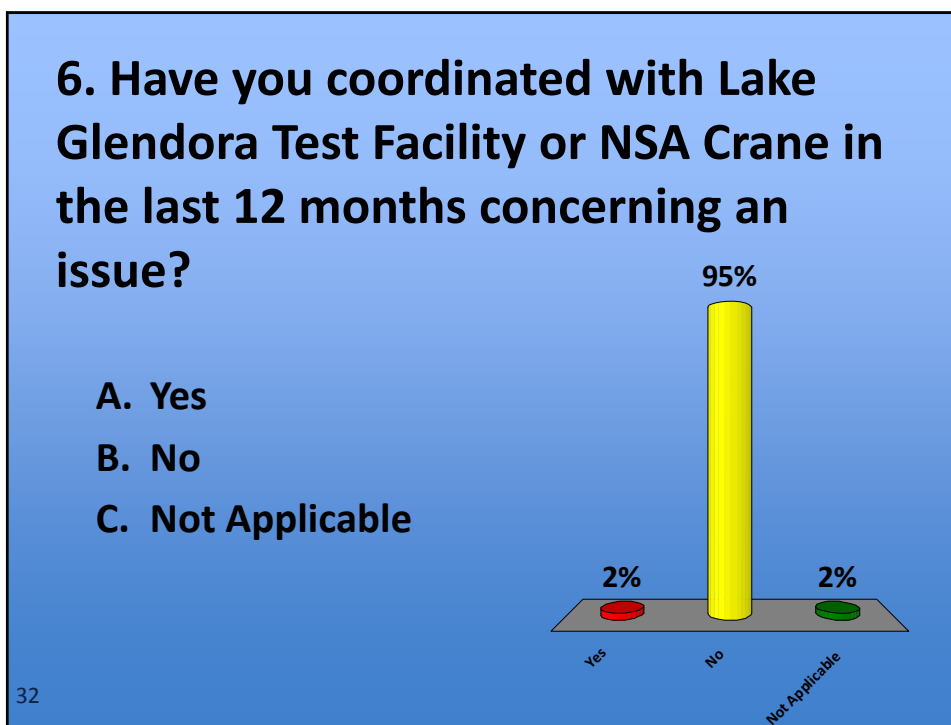
Matrix
DESIGN GROUP

Climate Adaptation

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

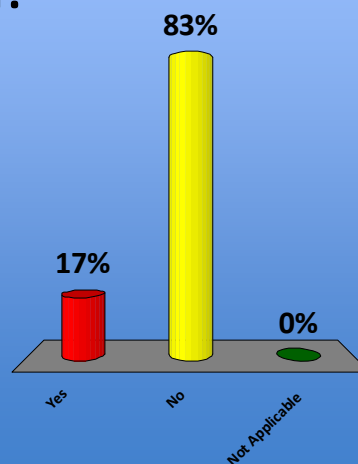
31

Matrix
DESIGN GROUP



7. If you have a question or concern about Lake Glendora Test Facility, do you know who to call?

- A. Yes
- B. No
- C. Not Applicable



33



Interagency Coordination / Communication

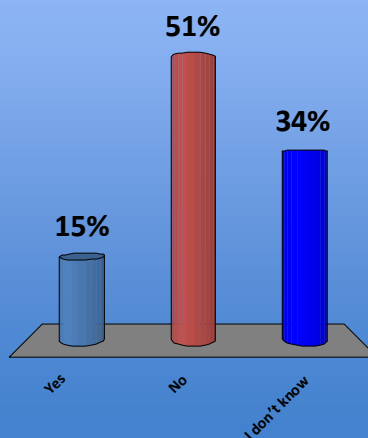
Interagency coordination relates to the level of interaction on compatibility issues among military installations, jurisdictions, land and resource management agencies, and conservation authorities.



34

8. Are there any cultural resources in your community affected by Lake Glendora Test Facility?

- A. Yes
- B. No
- C. I don't know



35



Cultural Resources

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

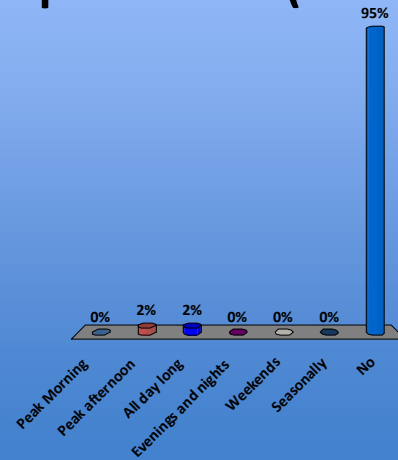


36

Matrix
DESIGN GROUP

9. Does your community experience dust or smoke impacts due to Lake Glendora Test Facility operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. Seasonally
- G. No



37



Dust / Smoke / Steam

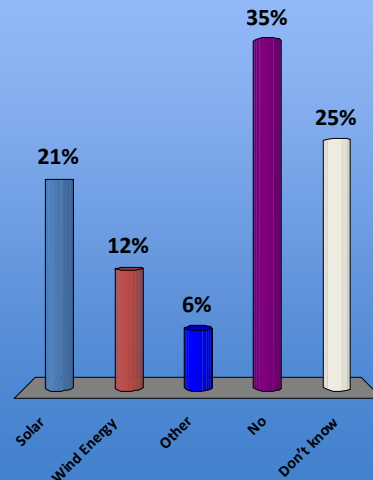
Dust is the common term used to describe the suspension of particulate matter in the air. Dust (and smoke) can be created by fire (controlled burns, agricultural burning), ground disturbance (agricultural operations, grading), industrial activities, or other similar processes. Dust, smoke and steam becomes a compatibility issue if sufficient in quantity to impact flight operations (such as reduced visibility or equipment damage).



38

10. Are alternative energy initiatives occurring in your community? (click all that apply)

- A. Solar
- B. Wind Energy
- C. Other
- D. No
- E. Don't know



39



Energy Development

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



40

Matrix
DESIGN GROUP



Frequency Spectrum Capacity

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

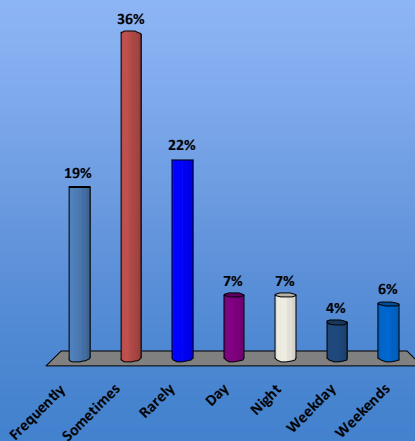


41

Matrix
DESIGN GROUP

11. Have you experienced electrical signal interference in your community? (click all that apply)

- A. Frequently
- B. Sometimes
- C. Rarely
- D. Day
- E. Night
- F. Weekday
- G. Weekends



42



Frequency Spectrum Impedance / Interference

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



43



Housing Availability

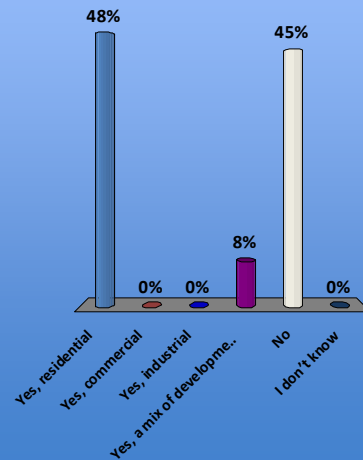
Local housing availability addresses the supply and demand for housing in the region, the competition for shelter that may result from changes in the number of military personnel, and the supply of military family housing provided by the installation.



44

12. Is your community experiencing growth proximate to Lake Glendora Test Facility?

- A. Yes, residential
- B. Yes, commercial
- C. Yes, industrial
- D. Yes, a mix of development types
- E. No
- F. I don't know



45



Infrastructure Extensions

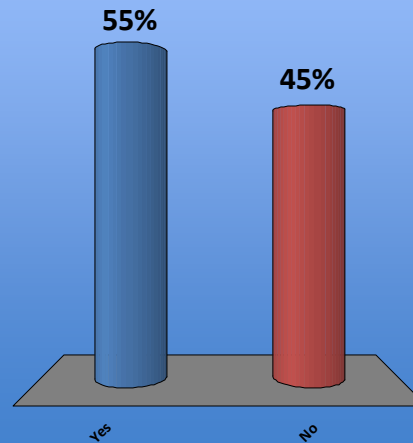
This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



46

13. Are you aware of airspace restrictions over Lake Glendora Test Facility?

- A. Yes
- B. No



47



Land / Air Space

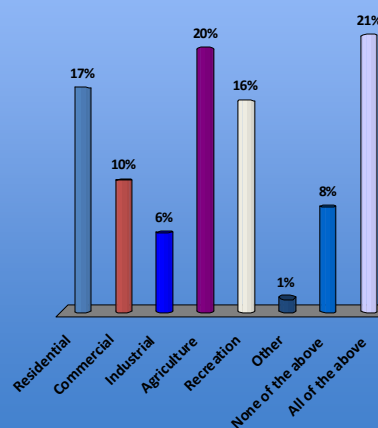
The military manages or uses land and air space to accomplish testing, training, and operational missions. These resources must be available and of a sufficient size, cohesiveness, and quality to accommodate effective training and testing. Use of these shared resources can impact future growth in operations for all users.



48

14. Which land use type is your biggest concern relative to incompatibility with Lake Glendora Test Facility? (click all that apply)

- A. Residential
- B. Commercial
- C. Industrial
- D. Agriculture
- E. Recreation
- F. Other
- G. None of the above
- H. All of the above

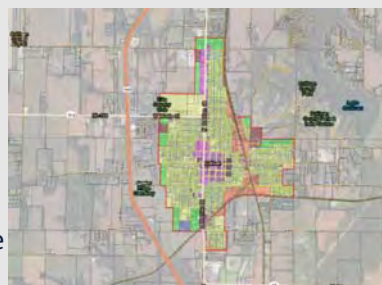


49



Land Use

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



50



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.



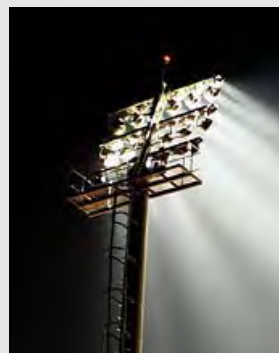
51



Light and Glare

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

Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination. Conversely, high intensity light sources generated from a military area may have a negative impact on the adjacent community.



52

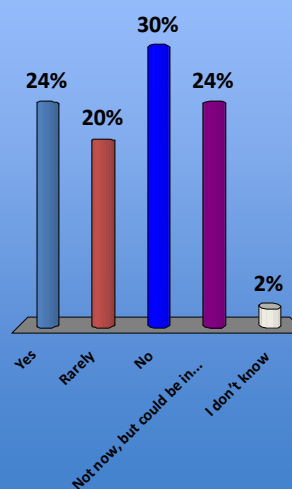
Marine Environments

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

53

15. Is noise from operations at Lake Glendora Test Facility an issue?

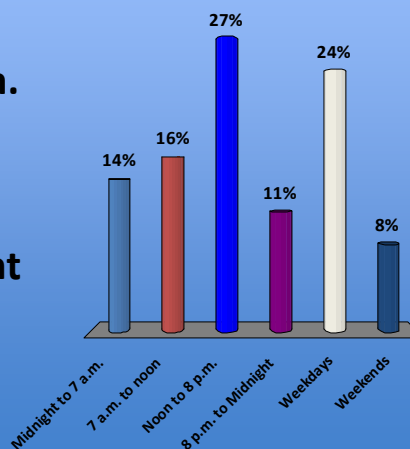
- A. Yes
- B. Rarely
- C. No
- D. Not now, but could be in the future
- E. I don't know



54

16. If “Yes” or “Rarely”, at what times do you experience this noise? (click all that apply)

- A. Midnight to 7 a.m.
- B. 7 a.m. to noon
- C. Noon to 8 p.m.
- D. 8 p.m. to Midnight
- E. Weekdays
- F. Weekends



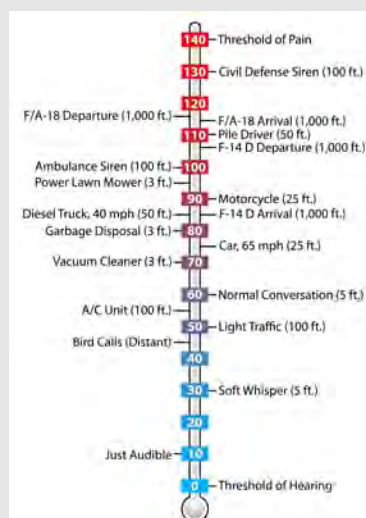
55



Noise

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

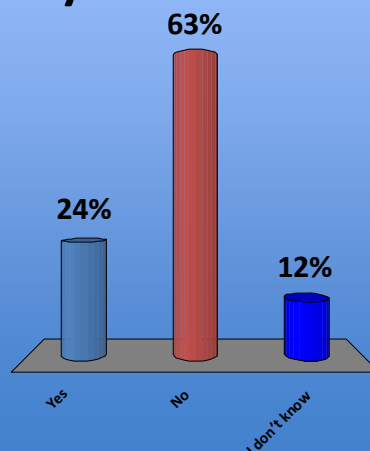
The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.



56

17. Are you aware of any events where public trespassing has taken place at Lake Glendora Test Facility?

- A. Yes
- B. No
- C. I don't know



57



Public Trespassing

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



58

Matrix



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.



59



Safety Zones

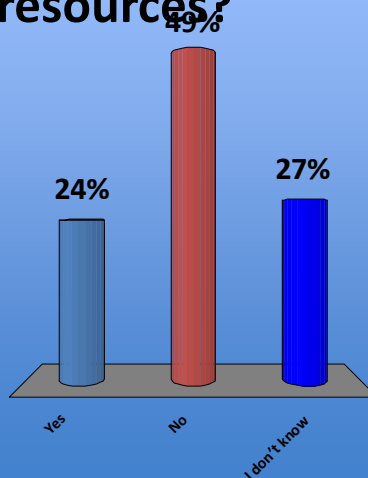
Safety zones are areas in which development should be more restrictive, in terms of use and concentrations of people, due to the higher risks to public safety. Issues to consider include aircraft accident potential zones, weapons firing range safety zones, and explosive safety zones.



60

18. Are you aware of any impacts Lake Glendora Test Facility may have on access to local natural resources?

- A. Yes
- B. No
- C. I don't know



61



Scarce Natural Resources

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



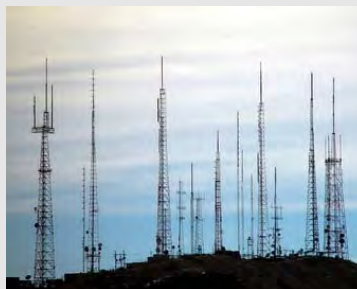
62

Matrix
DESIGN GROUP



Vertical Obstructions

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

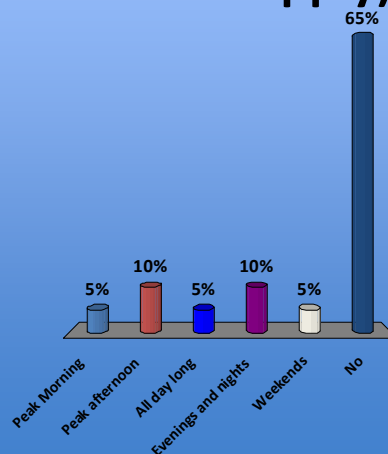


63

Matrix
DESIGN GROUP

19. Does your community experience vibration due to Lake Glendora Test Facility operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. No



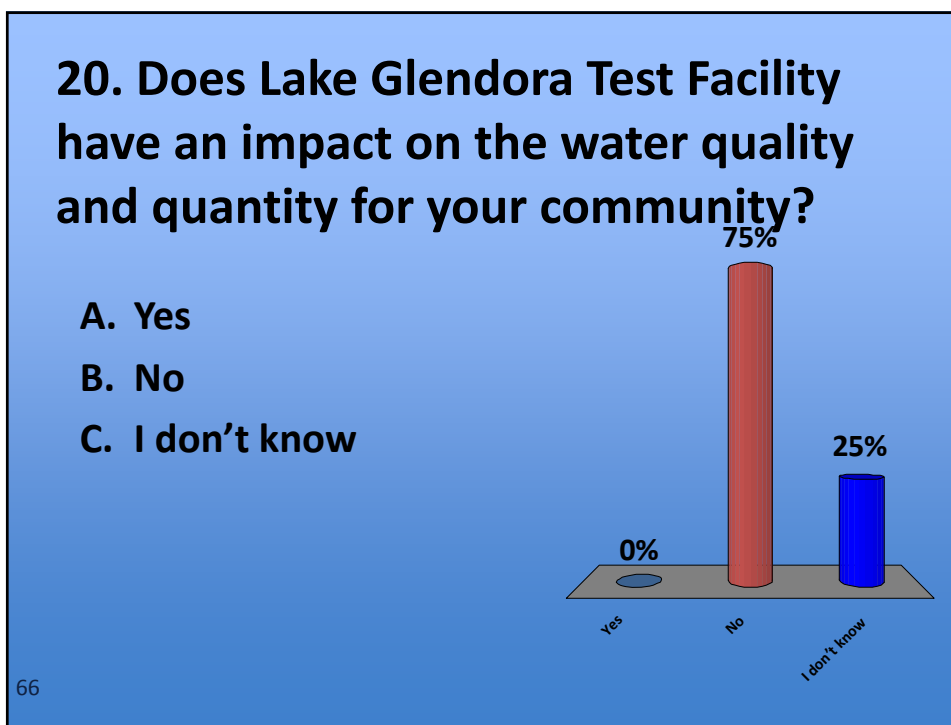
64

Vibration


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

65

Matrix DESIGN GROUP




66





Water Quality / Quantity

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




67





Next Steps

68






For Questions Contact:

Indiana Office of Community and Rural Affairs
Matt Crouch, EDFP, Project Manager
One North Capitol, Suite 600
Indianapolis, IN 46204

Email: MCrouch@ocra.IN.gov
Phone: 317.750.7670

www.cranejplus.com


69



Questions

Q & A

70





PUBLIC MEETING SIGN-IN SHEET

DATE / TIME:	8/12/15 @ 6pm
GROUP:	
LOCATION:	Westgate

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Lynn Gee	Martin Co Council	812-295-4296	lgee45@hotmail.com
TODD Woods	NSA CRANE	812 854-6997	Todd.woods@navy.mil
E.B. Rawles	Regional Manager Ind. Farm Bureau	812-890-2182	erawles@infb.org
Mr & Mrs Wm S. Strange	Burns City President	812-854-7378	
Natalie Smith	WestGATE Davies Co. & Authority	812-254-4435	nsmith@wdeedc.net
Tim Kinder	Martin County	812 295 4800	tkinder@martinalliance.org
Jeff Schenck	Greene County	317-840-8904	buyer@jwjonescompany.com
Chris Daugh	Martin County	812 709 0850	
Bosie Winger	Martin County	812-247-3231	rwinger@martincounty.in.gov
JOHN MENSCH	BLOOMFIELD, TN	812-364-5167	JOHN.MENSCH@IST SECURITYINSURANCE.COM

NAME/TITLE	COMMUNITY	TELEPHONE #	E-MAIL
RyDeb Hutto	Martin Co	812-388-6313	
TROY ARNOLD	WEST GATE	812-322-7089	TROY.ARNOLD@JRCISI.COM
Amy Lore	Greene County	812-847-5223	amy.lore@mygogh.org
Ed Michael	Greene County Comm	812-876-1012	Ed.Michael@co.greene.in.us
Phil Smith		812 709 0546	—
Tom Peter	Daviess Co	812-636-4909	chris.tom.peter@gmail.com
Mary Cornwell	Greene Co.	812-384-5044	mtcornwell1@gmail.com
David Lee	Martin Co.	812 285 3647	
HARRY CHRISTLEY	CRANE Vill.	812 884-7696	
Rebecca Sparks	Martin County	812-614-0121	rebe/3035@yahoo.com
Brandt Pouden	DAVIESS County	812-678-1056	brandt19@hotmail.com
Kristi Price	Martin Co	812-863-2756	

Westgate 8/12/15 @ 6pm

NAME/TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Don Duggins / Industrial Eng	Westgate	812-863-7251	don.c.duggins@saic.com
Gordon Brinkman ^{THO} TOWN OF PRIDE		887-854-7660	—————→
Bob Jackson	Net to Westgate	812-863-4407	bjackson9@yahoo.com
Larry Ordner + wife	Congressman Bensch	812-465-6484	Larry.Ordner@mail.house.gov
Greg Jones	SIDC		
STEVEN WAGGONER	Burns City		
OSCAR STRIEBY	BURNS CITY	812-854-7320	oscar.strieb@navy.mil




PUBLIC MEETING SIGN-IN SHEET

DATE / TIME:	8/12/15 @ 6pm
GROUP:	
LOCATION:	Westgate

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Briz Blackwell	NSAC Crane	812-854-3766	briz.blackwell@nauy.mil
Dale Walker		765-516-3057	
Sam Sarvis	INDOT	812-890-6300	ssarvis@indot.in.gov
Duane Embree	INDIANA OFFICE OF Defense Defense ^{Department}	812-583-2482	DEmbree@10DD.IN.GOV
Gregory A. Smith	Washington, IN	812-254-4435	GASmith213@gmail.com
Pepper Mulhern	ATT / JLVIS working group	812-204-8519	pm3873@att.com
Dennis Marczak		812-854-7604	
Don Schulte	WestGate	812-699-8324	schulte@westgatecrane.com
January Roush Auditor	Martin County	812-247-3731	jroush@martincounty.in.gov
MATT KARGIAN	Westgate	315-560-3786	matt.kargian@jrcisi.com

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PUBLIC MEETING 1
Daviess, Greene, Martin Counties

Matrix
DESIGN GROUP

August 12, 2015




Agenda

- Welcome / Introductions
- JLUS Overview
- NSA Crane Overview
- Compatibility Factors Overview
- Compatibility Factor Workshop
- Next Steps
- Adjourn


2

Matrix
DESIGN GROUP



Welcome / Introductions

3





Project Team



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Matrix Design Group
Mike Hrapla
Project Manager

Celeste Werner, AICP
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4



Partners

- ## Sponsor Committee

- ## Committees

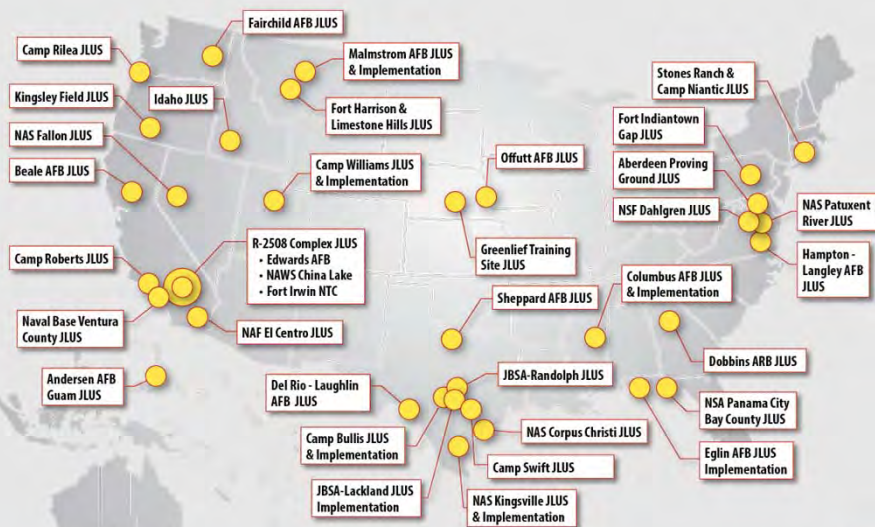
- ## Consultant Team

- Matrix Design Group

5



NSA
CRANE
JOINT
LAND USE
STUDY




6





JLUS Overview

7



What is a JLUS?


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

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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally

8





JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory


A JLUS is NOT:

- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9


JLUS Objectives


Community

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

Military

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

10





JLUS Approach


Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:


- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern

11




Who is Engaged in the JLUS?

Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IOOD NSA Crane
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests
Public	All interested persons

12


Public Involvement

15

Public Involvement Plan

Public input is essential to the success of the JLUS

- Project Website
www.cranejlus.com
- Informational Brochures
- Committee Meetings
- Public Flyers / Post Cards
- Group E-mail Blast Notification
- Public Meetings
- Comment Cards
- Public Review Period

16



Public Involvement

3 Public Forums


Forum #1 Project overview / Compatibility Factors / Issue identification


Forum #2 Preliminary compatibility assessment

Forum #3 Draft JLUS

3 Meetings per Forum

- Daviess, Greene, Martin Counties
- Sullivan County
- Lawrence County

17





Technical Process/Deliverables

Background Report

- Introduction
- Community Profile
- Military Profile
- Existing Compatibility Tools
- Compatibility Assessment

JLUS



- Background Report Summary
- **Implementation Plan**

18





Naval Support Activity Crane

19



Compatibility Factors Overview / Group Exercise

20





NSA Crane Joint Land Use Study

Compatibility Factors

NSA Crane Joint Land Use Study

What is Compatibility?

Compatibility, in relationship to military readiness, can be defined as the balance and/or comparison between community and military needs and interests. The goal of compatibility planning is to provide an environment where both entities can coexist successfully. Study area data on existing conditions, obtained from the FC, TUG, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and consider existing and projected development trends within the study area. The JLU will study the following set of 20 potential compatibility factors to determine all pertinent issues.

CA Climate Adaptation

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

ED Energy Development

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

FSC Frequency Spectrum Capacity

In a defined area, the frequency spectrum is limited. Frequency spectrum capacity is a critical factor in ensuring existing and future missions and communications are uninterrupted. This is also affected from the standpoint of consumer electronics.

FSI Frequency Spectrum Interference

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

COM Communication / Coordination

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

CR Cultural Resources

Cultural resources may present development, apply development constraints, or require special access by federal, state, tribal, other groups, or governmental regulatory authorities.

HA Housing Availability

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

IE Infrastructure Extensions

This factor covers the extension or improvement of infrastructure (roads, water, sewer, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.

DSS Dust/Smoke/Steam

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

AQ Air Quality

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

AT Anti Terrorism / Force Protection

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

BIO Biological Resources

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

Fact Sheet #1: Overview / Factors

LAS Land/Air Spaces

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

MAR Marine Environments

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

SA Safety Zones

Safety zones are areas in which development should be kept to a minimum due to the higher risks to public safety. Issues to consider include accident potential zones, emissions from major safety zones, and explosive safety zones.

SNR Scarce Natural Resources

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

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches untrained levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

PT Public Trespassing

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

LEG Legislative Initiatives

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

RC Roadway Capacity

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

LC Light and Glare

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

VO Vertical Obstructions

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

V Vibration

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

WQQ Water Quality/Quantity

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



NSA Crane Joint Land Use Study

How To Respond To Survey Questions

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



www.TurningTechnologies.com

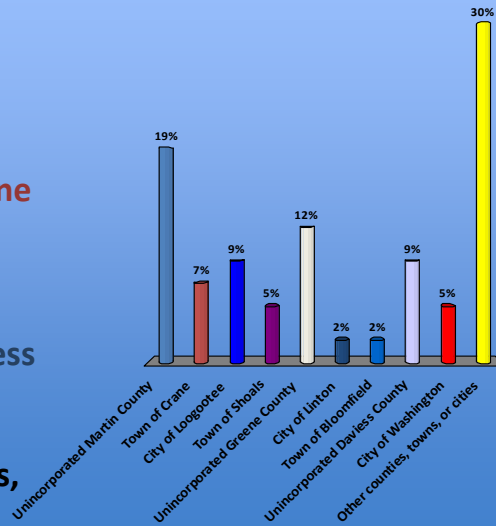


22

11

1. Where do you live?

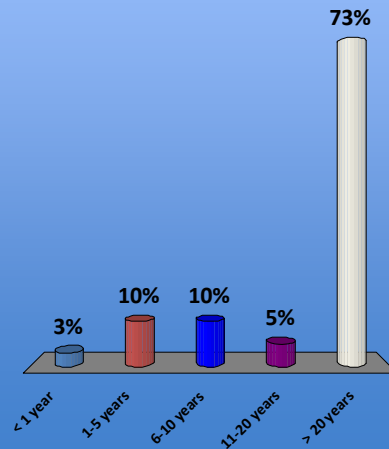
- A. Unincorporated Martin County
- B. Town of Crane
- C. City of Loogootee
- D. Town of Shoals
- E. **Unincorporated Greene County**
- F. **City of Linton**
- G. **Town of Bloomfield**
- H. Unincorporated Daviess County
- I. City of Washington
- J. **Other counties, towns, or cities**



23

2. How long have you lived in the area?

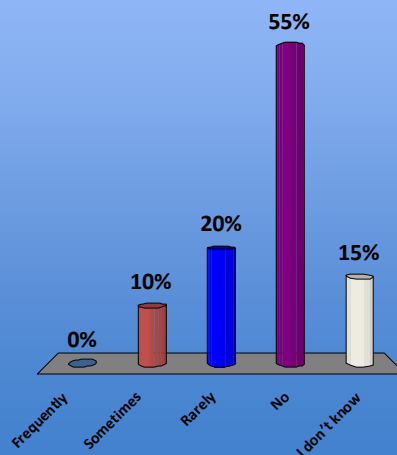
- A. < 1 year
- B. 1-5 years
- C. 6-10 years
- D. 11-20 years
- E. > 20 years



24

3. Do you feel that NSA Crane impacts the air quality in your community?

- A. Frequently
- B. Sometimes
- C. Rarely
- D. No
- E. I don't know



25



Air Quality

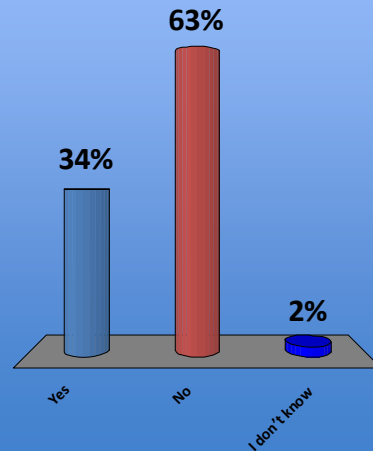
Air quality is defined by numerous components that are regulated at the federal and state level. For compatibility, the primary concerns are pollutants that limit visibility (such as particulates, ozone, etc.) and potential non-attainment of air quality standards that may limit future changes in operations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



26

4. Does proximity to NSA Crane generate security or safety concerns for your community?

- A. Yes
- B. No
- C. I don't know



27



Anti-Terrorism / Force Protection

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

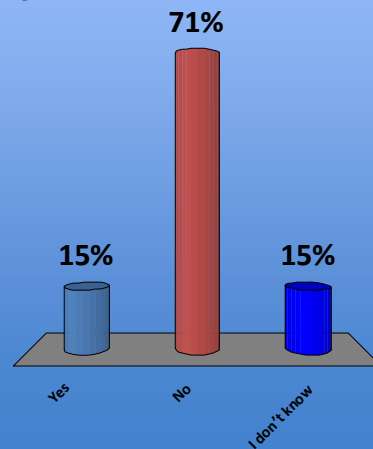


28

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5. Are the biological resources (vegetation, wildlife) in your community impacted by NSA Crane?

- A. Yes
- B. No
- C. I don't know



29



Biological Resources

Sensitive biological resources include federal and state listed species (threatened and endangered species) and the habitats they exist in or utilize. These resources may also include areas such as wetlands and migratory corridors that are critical to the overall ecosystem.

The presence of sensitive biological resources may require special development considerations and should be included early in the planning process.




30

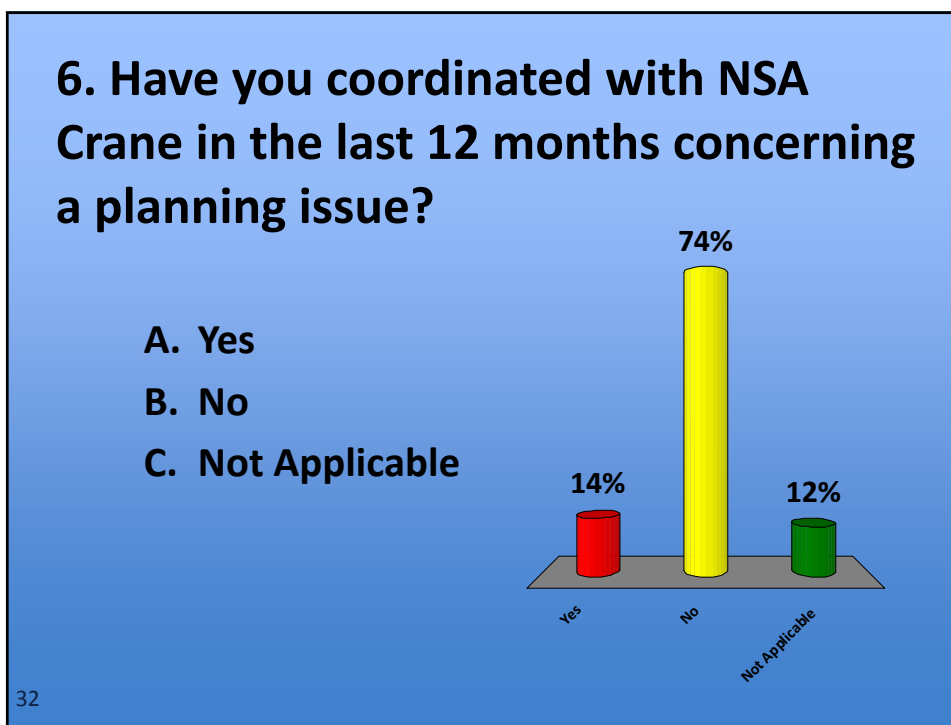

Matrix
DESIGN GROUP

Climate Adaptation

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

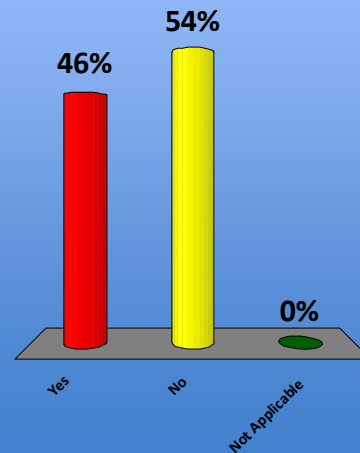


31



7. If you have a question or concern about NSA Crane, do you know who to call?

- A. Yes
- B. No
- C. Not Applicable



33



Interagency Coordination / Communication

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

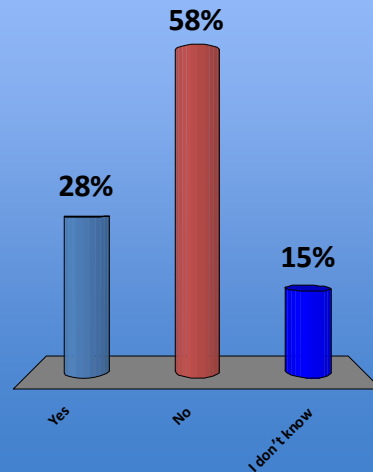


34

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8. Are there any cultural resources in your community affected by NSA Crane?

- A. Yes
- B. No
- C. I don't know



35



Cultural Resources

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

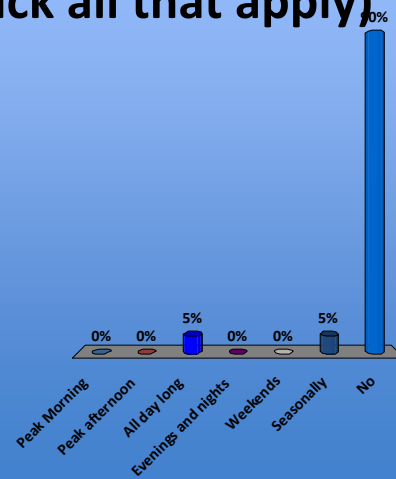


36

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9. Does your community experience dust or smoke impacts due to NSA Crane operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. Seasonally
- G. No



37



Dust / Smoke / Steam

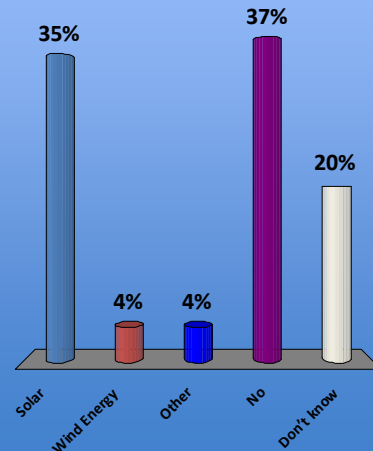
Dust is the common term used to describe the suspension of particulate matter in the air. Dust (and smoke) can be created by fire (controlled burns, agricultural burning), ground disturbance (agricultural operations, grading), industrial activities, or other similar processes. Dust, smoke and steam becomes a compatibility issue if sufficient in quantity to impact flight operations (such as reduced visibility or equipment damage).



38

10. Are alternative energy initiatives occurring in your community? (click all that apply)

- A. Solar
- B. Wind Energy
- C. Other
- D. No
- E. Don't know



39



Energy Development

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



40

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Frequency Spectrum Capacity

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

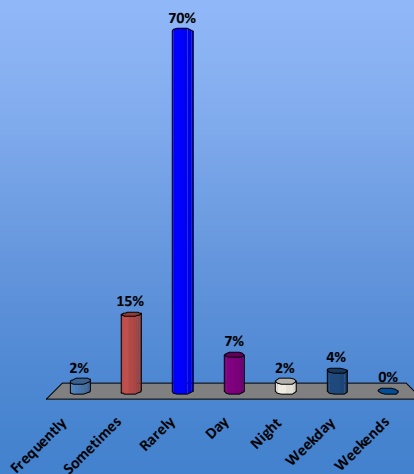


41

Matrix
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11. Have you experienced electrical signal interference in your community? (click all that apply)

- A. Frequently
- B. Sometimes
- C. Rarely
- D. Day
- E. Night
- F. Weekday
- G. Weekends



42



Frequency Spectrum Impedance / Interference

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



43



Housing Availability

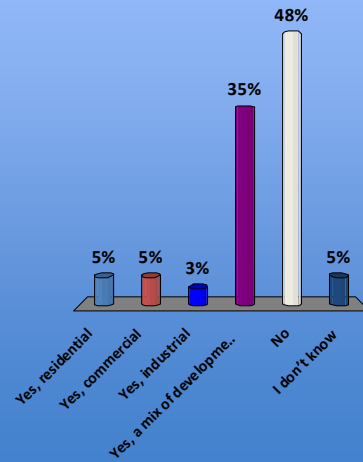
Local housing availability addresses the supply and demand for housing in the region, the competition for shelter that may result from changes in the number of military personnel, and the supply of military family housing provided by the installation.



44

12. Is your community experiencing growth?

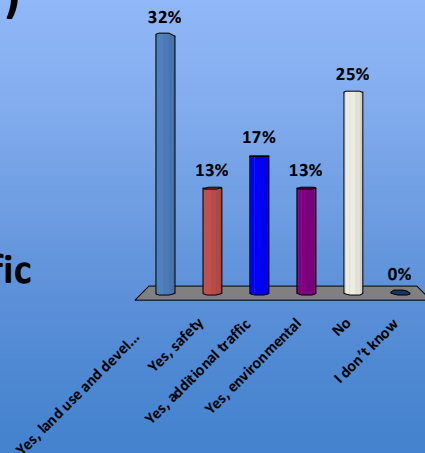
- A. Yes, residential
- B. Yes, commercial
- C. Yes, industrial
- D. Yes, a mix of development types
- E. No
- F. I don't know




45

13. Are you concerned about the future impacts of I-69 in your community? (click all that apply)

- A. Yes, land use and development
- B. Yes, safety
- C. Yes, additional traffic
- D. Yes, environmental
- E. No
- F. I don't know




46




Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



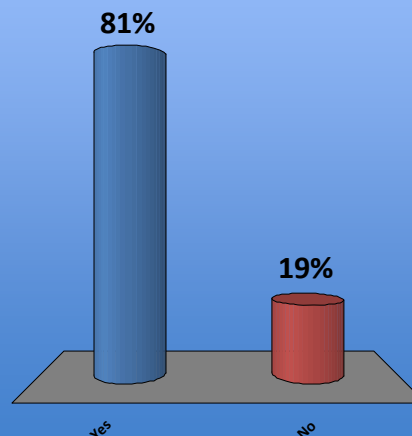
47



14. Are you aware of airspace restrictions over NSA Crane?

A. Yes

B. No



48



Land / Air Space

The military manages or uses land and air space to accomplish testing, training, and operational missions. These resources must be available and of a sufficient size, cohesiveness, and quality to accommodate effective training and testing. Use of these shared resources can impact future growth in operations for all users.

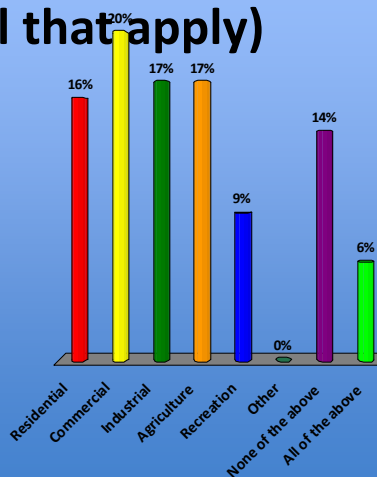


49

Matrix

15. Which land use type is your biggest concern relative to incompatibility with NSA Crane? (click all that apply)

- A. Residential**
- B. Commercial**
- C. Industrial**
- D. Agriculture**
- E. Recreation**
- F. Other**
- G. None of the above**
- H. All of the above**



50

Land Use

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

51

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.

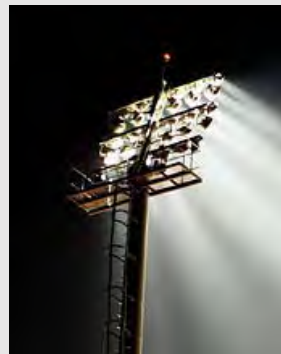
52



Light and Glare

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

Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination. Conversely, high intensity light sources generated from a military area may have a negative impact on the adjacent community.



53



Marine Environments

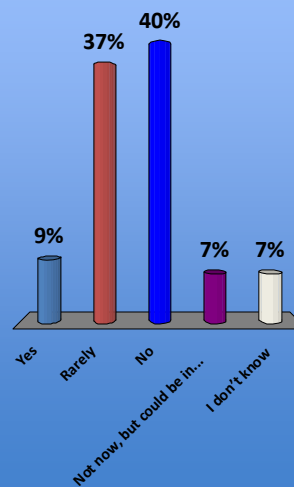
Regulatory or permit requirements protecting Marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in a water-based environment.



54

16. Is noise from operations at NSA Crane an issue?

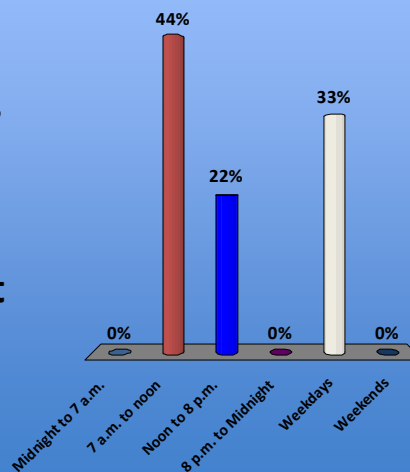
- A. Yes
- B. Rarely
- C. No
- D. Not now, but could be in the future
- E. I don't know



55

17. If "Yes" or "Rarely", at what times do you experience this noise? (click all that apply)

- A. Midnight to 7 a.m.
- B. 7 a.m. to noon
- C. Noon to 8 p.m.
- D. 8 p.m. to Midnight
- E. Weekdays
- F. Weekends



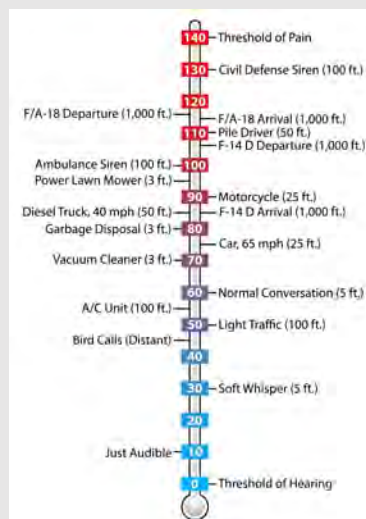
56



Noise

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

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



57

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Public Trespassing

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

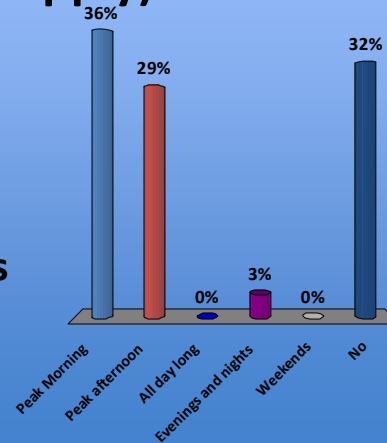


58

Matrix
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18. Does your community experience traffic congestion associated with NSA Crane? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. No



59



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.



60



Safety Zones

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



61

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Scarce Natural Resources

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



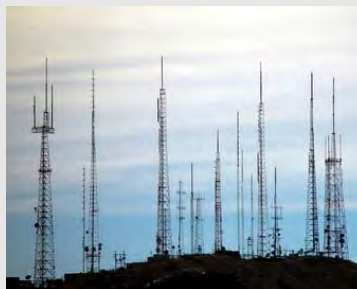
62

Matrix
DESIGN GROUP



Vertical Obstructions

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

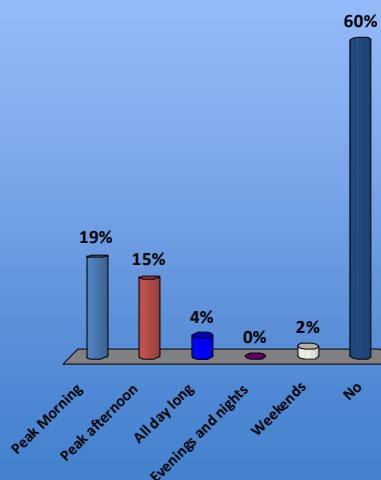


63


Matrix
DESIGN GROUP

19. Does your community experience vibration due to NSA Crane operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. No




64




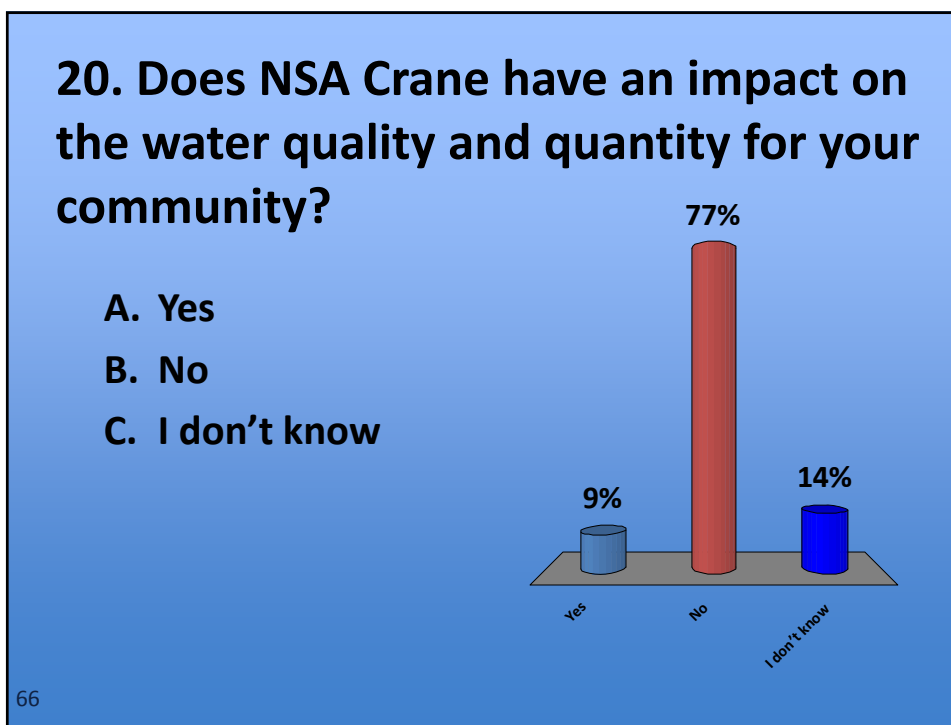
Vibration


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



65









NSA
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STUDY


Water Quality / Quantity

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



67






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STUDY

Next Steps

68






For Questions Contact:

Indiana Office of Community and Rural Affairs
Matt Crouch, EDFP, Project Manager
One North Capitol, Suite 600
Indianapolis, IN 46204

Email: MCrouch@ocra.IN.gov
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www.cranejplus.com


69



Questions

Q & A

70





PUBLIC MEETING SIGN-IN SHEET

DATE / TIME:	AUGUST 11, 2015 5:00 PM
GROUP:	PUBLIC FORUM #1 - LAY/RINDS COUNTY
LOCATION:	THE STELLAR PLAZA, BEDFORD, IN

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Becky Skillman	Radis		
Aletha Donston (female)	OCRA		adonston@ocra.in.gov



PUBLIC MEETING 1
Lawrence County

Matrix
DESIGN GROUP

August 11, 2015




Agenda

- Welcome / Introductions
- JLUS Overview
- NSA Crane Overview
- Compatibility Factors Overview
- Compatibility Factor Workshop
- Next Steps
- Adjourn


2

Matrix
DESIGN GROUP



Welcome / Introductions

3





Project Team



Project Manager
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Indiana Office of
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Affairs

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Matrix Design Group
Mike Hrapla
Project Manager

Celeste Werner, AICP
Deputy Project Manager

4



Partners

- Martin County
- Greene County
- Lawrence County
- Daviess County
- Sullivan County
- NSA Crane

- Indiana Office of Community and Rural Affairs (OCRA)
- Radius Indiana
- Indiana Office of Defense Development (IODD)
- NSA Crane

- Policy Committee
- Technical Working Group(s)

- Matrix Design Group

5



NSA
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JOINT
LAND USE
STUDY

The map displays the locations of 30 Joint Logistics Units (JLUs) and their parent organizations across the United States. The units are distributed across various states, including California, Texas, Florida, Georgia, South Carolina, North Carolina, Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. The units are represented by yellow dots, and their names are listed in red boxes. The map also shows state boundaries and major cities.

- Camp Rilea JLU
- Kingsley Field JLU
- NAS Fallon JLU
- Beale AFB JLU
- Camp Roberts JLU
- Naval Base Ventura County JLU
- Andersen AFB Guam JLU
- Fairchild AFB JLU
- Malmstrom AFB JLU & Implementation
- Fort Harrison & Limestone Hills JLU
- Camp Williams JLU & Implementation
- Offutt AFB JLU
- Greenleaf Training Site JLU
- Sheppard AFB JLU
- JBSA-Randolph JLU
- NAS Corpus Christi JLU
- Camp Swift JLU
- NAS Kingsville JLU & Implementation
- JBSA-Lackland JLU Implementation
- Camp Bullis JLU & Implementation
- Del Rio - Laughlin AFB JLU
- Dobbins ARB JLU
- NSA Panama City Bay County JLU
- Eglin AFB JLU Implementation
- Columbus AFB JLU & Implementation
- NSF Dahlgren JLU
- Aberdeen Proving Ground JLU
- Fort Indiantown Gap JLU
- Stones Ranch & Camp Nantico JLU
- NAS Patuxent River JLU
- Hampton-Langley AFB JLU
- R-2508 Complex JLU
 - Edwards AFB
 - NAWS China Lake
 - Fort Irwin NTC
- NAF El Centro JLU
- Idaho JLU


6





JLUS Overview

7



What is a JLUS?


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

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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally

8





JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory

A JLUS is NOT:


- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9





JLUS Objectives


Community


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

Military

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

10






JLUS Approach


Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:


- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern

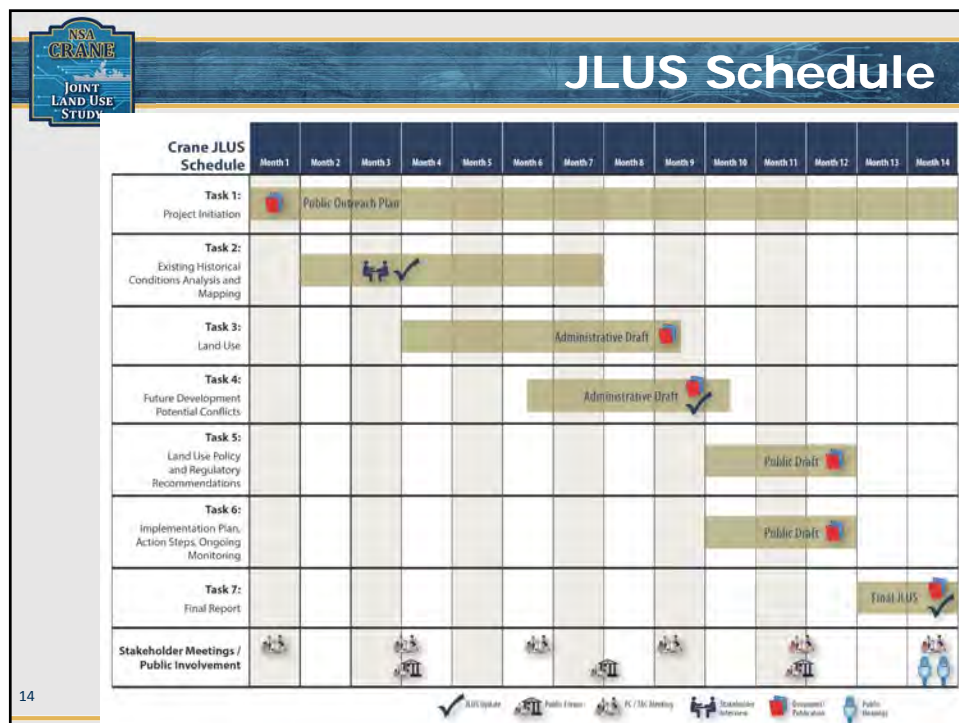
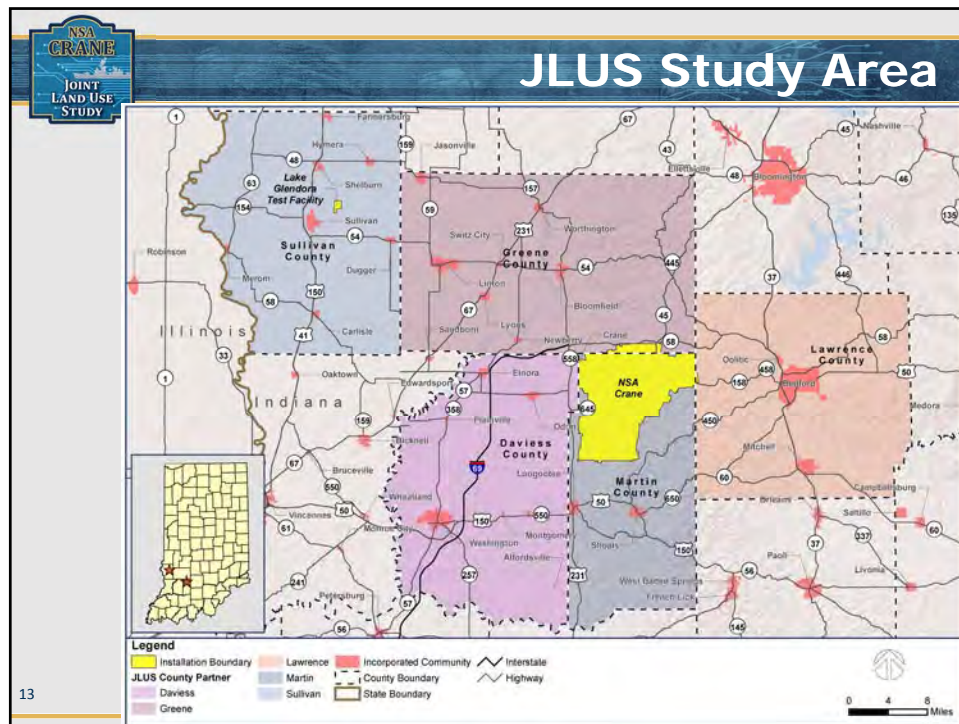
11




Who is Engaged in the JLUS?

Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IOOD NSA Crane
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests
Public	All interested persons

12




Public Involvement

15

Public Involvement Plan

Public input is essential to the success of the JLUS

- Project Website
www.cranejlus.com
- Informational Brochures
- Committee Meetings
- Public Flyers / Post Cards
- Group E-mail Blast Notification
- Public Meetings
- Comment Cards
- Public Review Period

16



Public Involvement

3 Public Forums

Forum #1 Project overview / Compatibility Factors / Issue identification


Forum #2 Preliminary compatibility assessment

Forum #3 Draft JLUS

3 Meetings per Forum

- Daviess, Greene, Martin Counties
- Sullivan County
- Lawrence County

17


Technical Process/Deliverables

Background Report

- Introduction
- Community Profile
- Military Profile
- Existing Compatibility Tools
- Compatibility Assessment

JLUS



- Background Report Summary
- **Implementation Plan**

18





Naval Support Activity Crane

19



Compatibility Factors Overview / Group Exercise

20





NSA Crane Joint Land Use Study

Compatibility Factors

NSA Crane Joint Land Use Study

What is Compatibility?

Compatibility, in relationship to military readiness, can be defined as the balance and/or comparison between community and military needs and interests. The goal of compatibility planning is to provide an environment where both entities can coexist successfully. Study area data on existing conditions, obtained from the FC, TUE, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and consider existing and projected development trends within the study area. The JLU will study the following set of 20 potential compatibility factors to determine all pertinent issues.

CA Climate Adaptation

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

ED Energy Development

Development of energy sources, including alternative energy sources (such as solar, wind, or biofuel) could present compatibility issues related to glare (solar energy), vertical obstructions (wind generators), or water quality / quantity.

FSC Frequency Spectrum Capacity

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

FSI Frequency Spectrum Interference

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

HA Housing Availability

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

IE Infrastructure Extensions

This factor covers the extension or improvement of infrastructure (roads, water, sewer, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.

DSS Dust/Smoke/Steam

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

COM Communication / Coordination

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

CR Cultural Resources

Cultural resources may present development, apply development constraints, or require special actions by federal, state, tribal, other groups, or governmental regulatory authorities.

AT Anti Terrorism / Force Protection

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

BIO Biological Resources

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

Fact Sheet #1: Overview / Factors

LAS Land/Air Spaces

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

MAR Marine Environments

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

SA Safety Zones

Safety zones are areas in which development should be kept to a minimum due to the higher risks to public safety. Issues to consider include accident potential zones, emissions from major safety zones, and explosive safety zones.

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unattended levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

PT Public Trespassing

Public trespassing refers to unauthorized entry onto a military installation. The potential for trespassing increases when public use areas are in close proximity to the installation.

VO Vertical Obstructions

Vertical obstructions are created by buildings, trees, structures, or other features that may encroach into the navigable airspace used for military operations (aircraft approach, transitional, enroute, enroute, enroute, and enroute). These can present a safety hazard to both the public and military personnel.

V Vibration

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

WQQ Water Quality/Quantity

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

LEG Legislative Initiatives

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

RC Roadway Capacity

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

LC Light and Glare

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



NSA Crane Joint Land Use Study

How To Respond To Survey Questions

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



www.TurningTechnologies.com

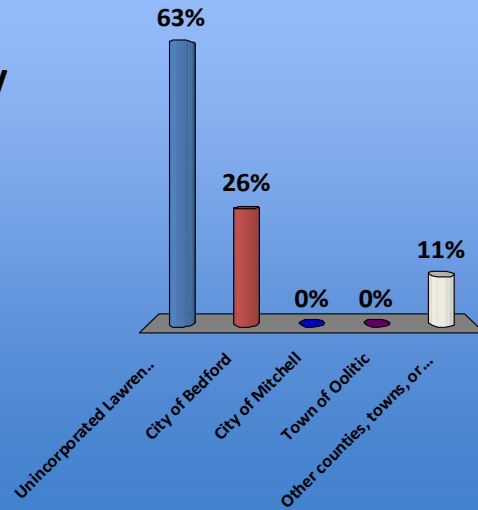


22

11

1. Where do you live?

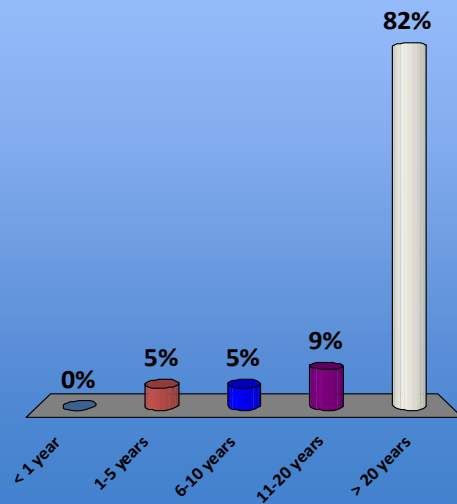
- A. Unincorporated Lawrence County
- B. City of Bedford
- C. City of Mitchell
- D. Town of Oolitic
- E. Other counties, towns, or cities



23

2. How long have you lived in the area?

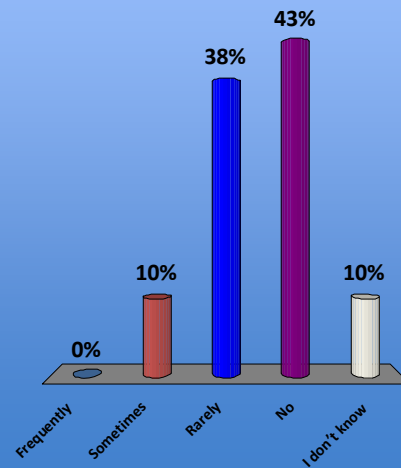
- A. < 1 year
- B. 1-5 years
- C. 6-10 years
- D. 11-20 years
- E. > 20 years



24

3. Do you feel that NSA Crane impacts the air quality in your community?

- A. Frequently
- B. Sometimes
- C. Rarely
- D. No
- E. I don't know



25



Air Quality

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

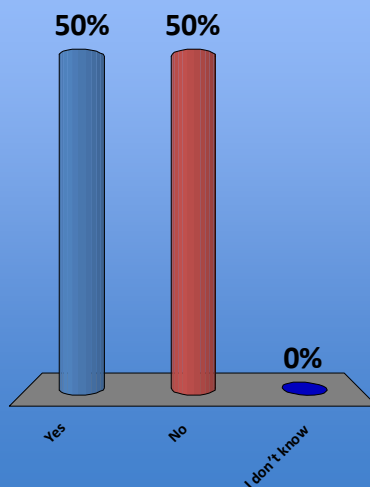


26

Matrix
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4. Does proximity to NSA Crane generate security or safety concerns for your community?

- A. Yes
- B. No
- C. I don't know



27



Anti-Terrorism / Force Protection

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

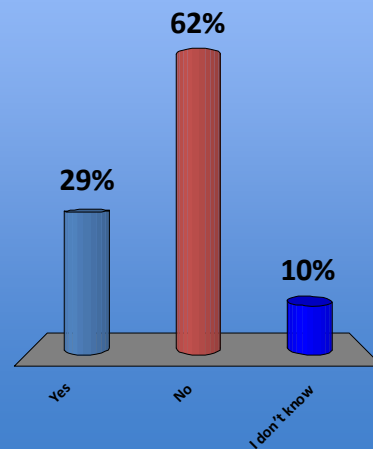


28

Matrix
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5. Are the biological resources in your community impacted by NSA Crane?

- A. Yes
- B. No
- C. I don't know



29



Biological Resources

Sensitive biological resources include federal and state listed species (threatened and endangered species) and the habitats they exist in or utilize. These resources may also include areas such as wetlands and migratory corridors that are critical to the overall ecosystem.

The presence of sensitive biological resources may require special development considerations and should be included early in the planning process.

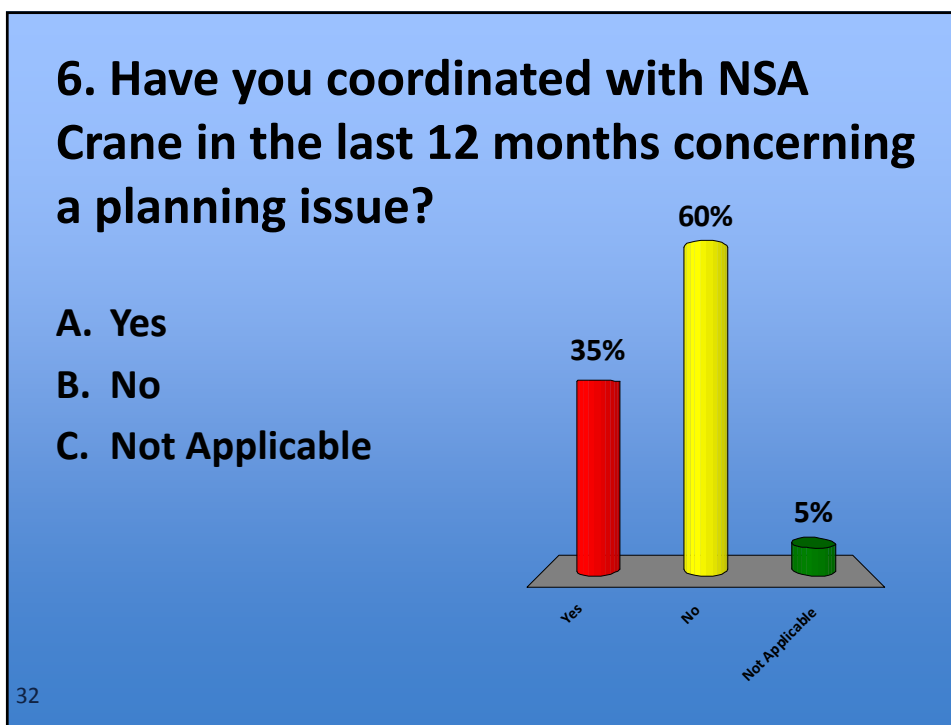


30

Climate Adaptation

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

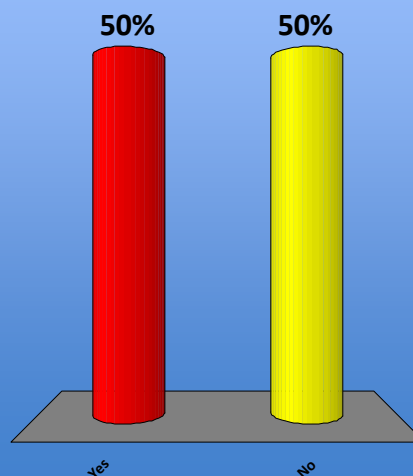
31



7. If you have a question or concern about NSA Crane, do you know who to call?

A. Yes

B. No



33



Interagency Coordination / Communication

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

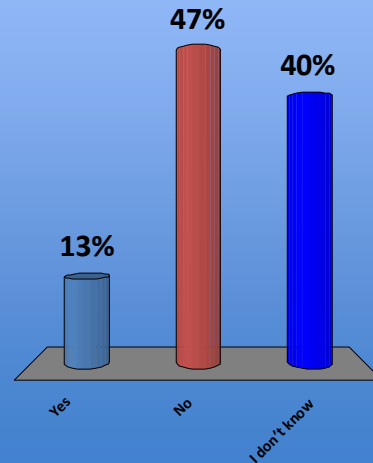


34

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8. Are there any cultural resources in your community affected by NSA Crane?

- A. Yes
- B. No
- C. I don't know



35



Cultural Resources

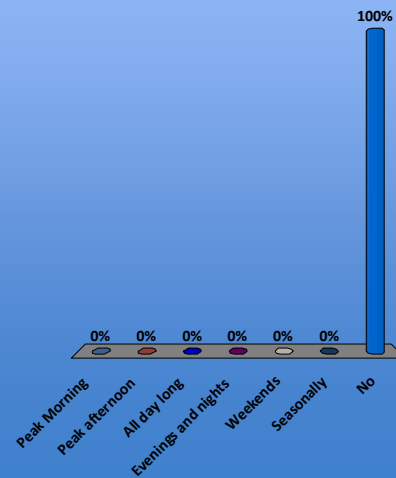
Cultural resources may prevent development, apply development constraints, or require special access by Native American tribes, other groups, or governmental regulatory authorities.



36

9. Does your community experience dust or smoke impacts due to NSA Crane operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. Seasonally
- G. No



37



Dust / Smoke / Steam

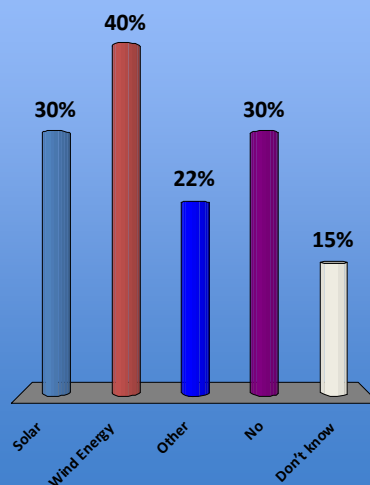
Dust is the common term used to describe the suspension of particulate matter in the air. Dust (and smoke) can be created by fire (controlled burns, agricultural burning), ground disturbance (agricultural operations, grading), industrial activities, or other similar processes. Dust, smoke and steam becomes a compatibility issue if sufficient in quantity to impact flight operations (such as reduced visibility or equipment damage).



38

10. Are alternative energy initiatives occurring in your community? (click all that apply)

- A. Solar
- B. Wind Energy
- C. Other
- D. No
- E. Don't know



39



Energy Development

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



40



Frequency Spectrum Capacity

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

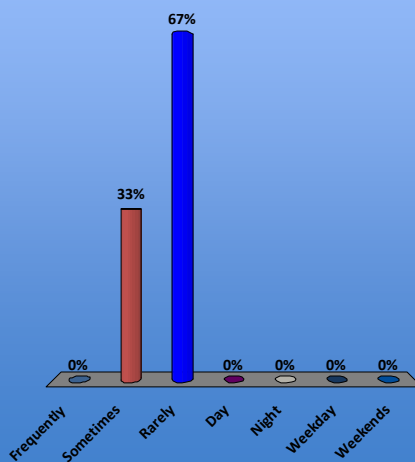


41

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11. Have you experienced electrical signal interference in your community? (click all that apply)

- A. Frequently
- B. Sometimes
- C. Rarely
- D. Day
- E. Night
- F. Weekday
- G. Weekends



42



Frequency Spectrum Impedance / Interference

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



43

Matrix
DESIGN GROUP

Housing Availability

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

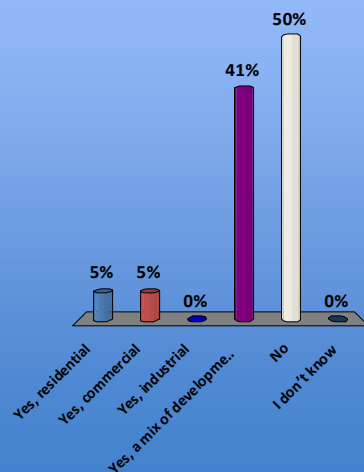


44

Matrix
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12. Is your community experiencing growth?

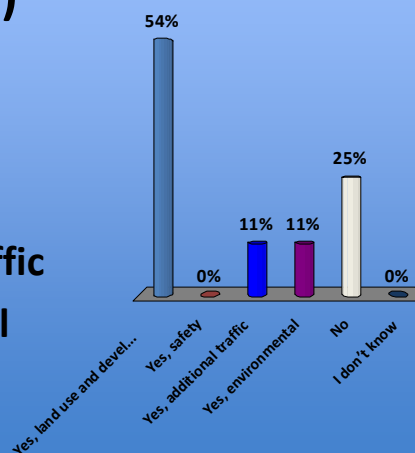
- A. Yes, residential
- B. Yes, commercial
- C. Yes, industrial
- D. Yes, a mix of development types
- E. No
- F. I don't know




45

13. Are you concerned about the future impacts of I-69 in your community? (click all that apply)

- A. Yes, land use and development
- B. Yes, safety
- C. Yes, additional traffic
- D. Yes, environmental
- E. No
- F. I don't know




46




Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



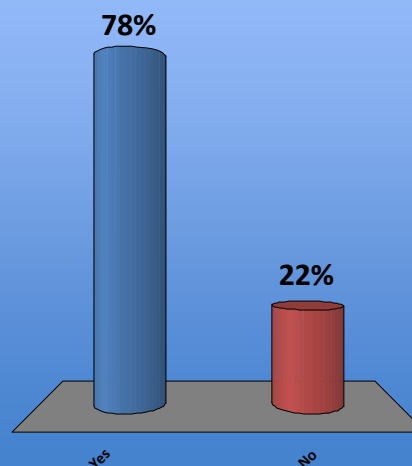
47



14. Are you aware of airspace restrictions over NSA Crane?

A. Yes

B. No



48



Land / Air Space

The military manages or uses land and air space to accomplish testing, training, and operational missions. These resources must be available and of a sufficient size, cohesiveness, and quality to accommodate effective training and testing. Use of these shared resources can impact future growth in operations for all users.

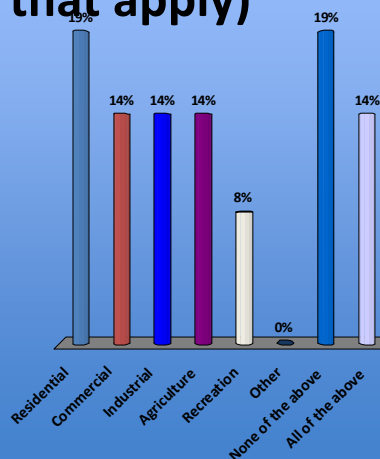


49

Matrix

15. Which land use type is your biggest concern relative to incompatibility with NSA Crane? (click all that apply)

- A. Residential
- B. Commercial
- C. Industrial
- D. Agriculture
- E. Recreation
- F. Other
- G. None of the above
- H. All of the above



50

Land Use

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

51

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.

52



Light and Glare

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

Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination. Conversely, high intensity light sources generated from a military area may have a negative impact on the adjacent community.



53



Marine Environments

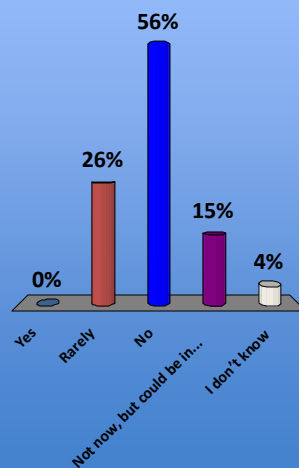
Regulatory or permit requirements protecting Marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in a water-based environment.



54

16. Is noise from operations at NSA Crane an issue?

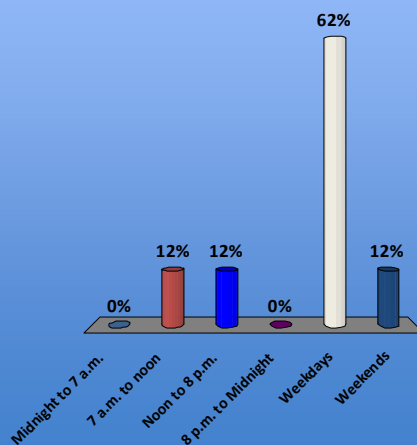
- A. Yes
- B. Rarely
- C. No
- D. Not now, but could be in the future
- E. I don't know



55

17. If "Yes" or "Rarely", at what times do you experience this noise? (click all that apply)

- A. Midnight to 7 a.m.
- B. 7 a.m. to noon
- C. Noon to 8 p.m.
- D. 8 p.m. to Midnight
- E. Weekdays
- F. Weekends



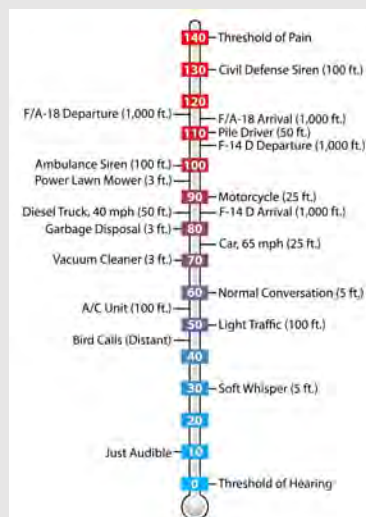
56



Noise

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

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



57

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Public Trespassing

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

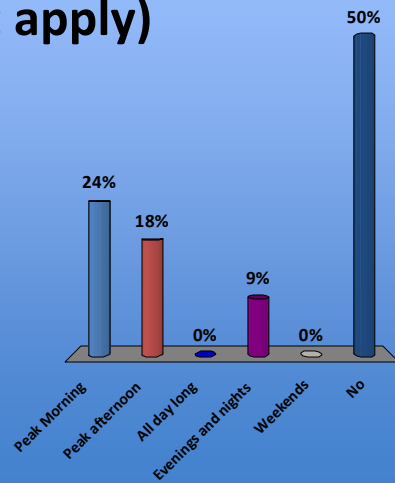


58

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18. Does your community experience traffic congestion associated with NSA Crane? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. No



59



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.



60



Safety Zones

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



61

Matrix



Scarce Natural Resources

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



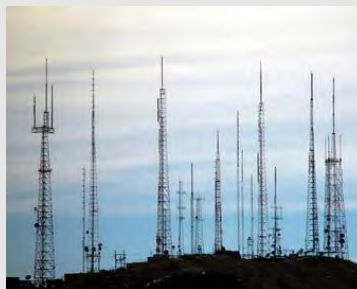
62

Matrix



Vertical Obstructions

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

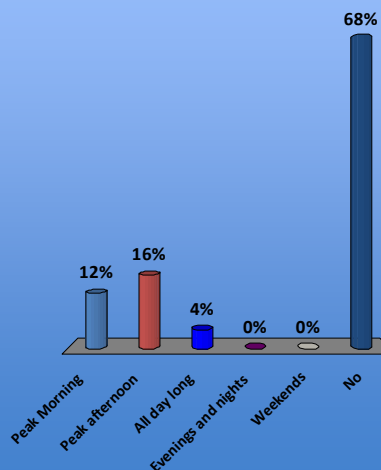


63


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19. Does your community experience vibration due to NSA Crane operations? (click all that apply)

- A. Peak Morning
- B. Peak afternoon
- C. All day long
- D. Evenings and nights
- E. Weekends
- F. No




64




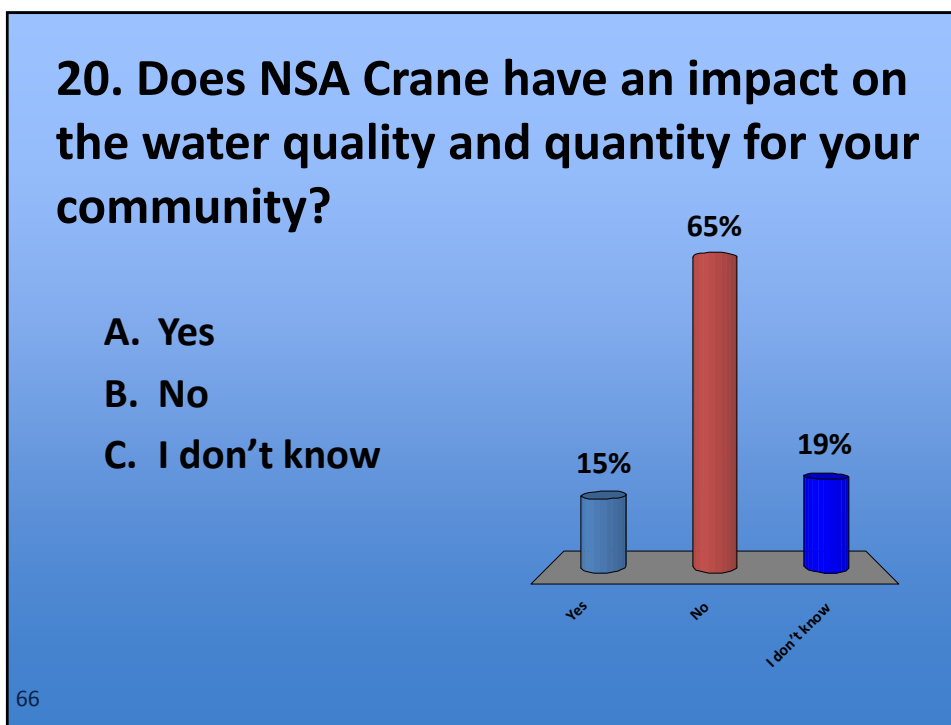
Vibration


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



65









Water Quality / Quantity

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



67





Next Steps

68






For Questions Contact:

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www.cranejplus.com


69



Questions

Q & A

70





Naval Support Activity Crane JLUS Public Forum #1 Public Comments and Responses

Comment #	Public Comment	JLUS Team Response
Sullivan County Forum (August 10, 2015)		
1	Explosions- 6 different times, heard/felt explosions- Around noon-4	This concern has been incorporated as a Noise and Vibration issue in the JLUS compatibility analysis.
2	Very educational, informative	Thank you. The JLUS Development Team aims to provide thoughtful information that benefits all stakeholders in the JLUS process.
3	Access to ability to hunt and operate firearms is a concern in the vicinity of Glendora Lake.	The purpose of the Joint Land Use Study is not to preclude the use of property but rather to foster an open dialog between the community and military that results in mutually beneficial outcomes. This concern is incorporated as a Land Use issue in the JLUS compatibility analysis.
4	Limitations on residential development on land that we purchased for recreation and residential development are our primary concerns for the land use process.	The purpose of the Joint Land Use Study is not to preclude the use of property but rather to foster an open dialog between the community and military that results in mutually beneficial outcomes. This concern is incorporated as a Land Use issue in the JLUS compatibility analysis.
5	Cell phone interference- I live 2 miles north of Lake Glendora and often have static and lack signals	This concern has been incorporated as a Frequency Spectrum Interference / Impedance issue in the JLUS compatibility analysis.

NSA Crane Joint Land Use Study
Naval Support Activity Crane JLUS Public Forum #1 Public Comments and Responses

Comment #	Public Comment	JLUS Team Response
Sullivan County Forum (August 10, 2015) continued		
6	Development - Restricting development will heavily impact the park and lake, City of Sullivan, and residential building	The purpose of the Joint Land Use Study is not to preclude the use of property but rather to foster an open dialog between the community and military that results in mutually beneficial outcomes. This concern is incorporated as a Noise issue in JLUS analysis.
7	<ul style="list-style-type: none"> - Please have enough material for the group - I know you were surprised by turnout but you should have been prepared - Please use microphone - Please do not pass out material that needs explanation while speakers are talking - Slides were hard to see/read, should have previewed these before showing to a group - In this community you are dealing with mostly farmers/Ag- please get to the point. No need to read slides/explain after every question. - Information is the key - but too much time to explain little 	These comments will be incorporated as lessons learned in the preparation for forthcoming Public Forums and how they are conducted. This feedback is always appreciated.
Lawrence County Forum (August 11, 2015)		
8	From a collaborative perspective, I see the need for our county to develop a comprehensive plan that would protect both entities.	This recommendation will be explored as a strategy to address the identified compatibility issues.
9	The County needs to get coordinated with Crane and develop a land use jointly to protect our rural areas that have high density population with more restrictions on set-backs for Confined Animal Feeding Operations (CAFOs) or other industry start-ups in the rural setting.	Improved coordination and communication between stakeholders is an element critical to the success of the JLUS. How to protect the military mission and the economic viability of surrounding communities is the purpose of the JLUS. Balancing the protection of rural areas compatible with the military mission and economic growth is a consideration in the JLUS and will be explored in the development of recommended strategies for implementation.

NSA Crane Joint Land Use Study

Naval Support Activity Crane JLUS Public Forum #1 Public Comments and Responses

Comment #	Public Comment	JLUS Team Response
Daviess-Greene-Martin County Forum (August 12,2015)		
10	Burns City Gate: Prefer that it not be used for additional traffic and guidance for lost truckers turning around last road before gate	<p>The concern for additional traffic through Burns City will be taken into consideration in the development of recommended strategies for implementation.</p> <p>The concern for better commercial vehicle access is incorporated as a Roadway Capacity issue in the JLUS compatibility analysis.</p>
11	Contact and communication - Impossible to identify responsible parties to discuss issues and concerns. Seems purposely vague.	Improved coordination and communication between stakeholders is an element critical to the success of the JLUS. This concern is incorporated as a Communication and Coordination issue in the JLUS compatibility analysis.
12	Military Administration has never approached Martin County government to provide access to information or contact persons.	Improved coordination and communication between stakeholders is an element critical to the success of the JLUS. This concern is incorporated as a Communication and Coordination issue in the JLUS compatibility analysis.
13	Concern that some workers won't take security precautions seriously.	More information is needed to identify whether this is a community compatibility issue or an issue internal to NSA Crane.
14	Put a phone number out for public use	Improved coordination and communication between stakeholders is an element critical to the success of the JLUS. This concern is incorporated as a Communication and Coordination issue in the JLUS compatibility analysis.
15	Rarely cell phone disturbances	Thank you for providing information on the frequency of wireless communication disturbances you experience.

NSA Crane Joint Land Use Study

Naval Support Activity Crane JLUS Public Forum #1 Public Comments and Responses

Comment #	Public Comment	JLUS Team Response
Davies-Greene-Martin County Forum (August 12,2015) continued		
16	I-69 semi-trucks are already missing turns into Crane and use 645 which has no entrance to Crane - therefore causing damage to road and live on as a result.	The concern for better commercial vehicle access is incorporated as a Roadway Capacity issue in the JLUS compatibility analysis.
17	Traffic leaving base speed out above speed limit squealing tires and very loud motorcycles (3-5pm)	This information will be conveyed to NSA Crane as part of the JLUS process.
18	Loud "God Bless America" played over loud speaker at 8 am every weekday.	This information will be conveyed to NSA Crane as part of the JLUS process.



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 22, 2016

GROUP: Public Meeting

LOCATION: WestGate - Daviess, Greene, and Martin Counties

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
MC Chamber Of Commerce Carolyn Tarsas Dawney	Loogootee	812-295-4093	martin county chamber of commerce @gmail.com
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Jerry Parkinson (Senator Joe Donnelly)		812-480-7900	Jerry-Parkinson@Donnelly.Senate.gov
Cont Thomas	Loogootee	812-295-1022	mccf@cfpartners.org
Jerry Barber	Washington	812 254 1648	
Duane Embree	Indiana office of Defense Development	812-583-2482	DEmbree@IODD.IN.Gov
E.B. Rawles	Indiana Farm Bureau	812-890-2182	erawles@infb.org
Rays Jenny Crawford	Edon	812-636-1727	
John Meyer	Edon	812 636-7370	Open Journal
COR STEW DALTON	NSA CRANE	812-854-1389	



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 22, 2016

GROUP: Public Meeting #2

LOCATION: West Gate - Daviess, Greene, and Martin Counties

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Dennis Rutch	DAVISS	812 636 7853	
Karen Rutch	"	"	
NOEL HARTY	CITY OF LOOGOOTEE MARTIN	812-215-4770	
Roger Downey	Loogootee City Council	812-639-8106	
Timothy Lawrence	Loogootee City Council	812 630 2352	
Liberta Williams	103 Queen St. Loogootee, IN	812-295-4542	
Brian Esch	Loogootee	812-295-4595	
Ed Michael	Greene County	812-345-1006	
Linda + Miles Olson	Daviess County	812-295-3548	linda3548@hotmail.com
Paul Flint	Daviess County	812-254-7021	

[illegible]

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
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Brian Blalock	NSWC	812-854-3766	
Robert Kiser	Bloomfield	812-863-2422	kiser@bluemarble.net
Larry Ordner		812-455-5521	larry.ordner@mail.house.gov
Jeramey Osborn	Burn City	812-295-6005	OSBORN-JR@yahoo.com
Sam Sarris	INDOT.-Tech Com	812-890-6300	ssarris@indot.in.gov
Sue Waggoner	Burns City	812-854-7605	sswag@ burns ntccom.net
Tom Peske	CAAA	812-854-4825	thomas.m.peske.civ@mail.mil
Matt Sward	Southern Indiana Development Commission	812-295-3707	Matt@sidc.cc

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
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CDR TIM CRADDOCK	NSA CRANE	812-854-8989	timothy.craddock@navy.mil
Tim Kinder	Martin County	812-295-4800	tkinder@martinalliance.org
Jill Curry	OCRA	317-451-5078	jcurry@ocra.in.gov
Steven Crow	Bloomfield	(812)384-6894	croweege@yahoo.com
Phil Cornelius	DAVLESS COUNTY	812-444-5758	dcornelius@supervisors@gmail.com
JOHN MENSCH	BLOOMFIELD	812-384-3575	JOHNMENSCH@1ST SECURITYINSURANCE.COM
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MALEA HUFFMAN /PURDUE EXTENSION	BLOOMFIELD	812-345-5628	huffmann@purdue.edu



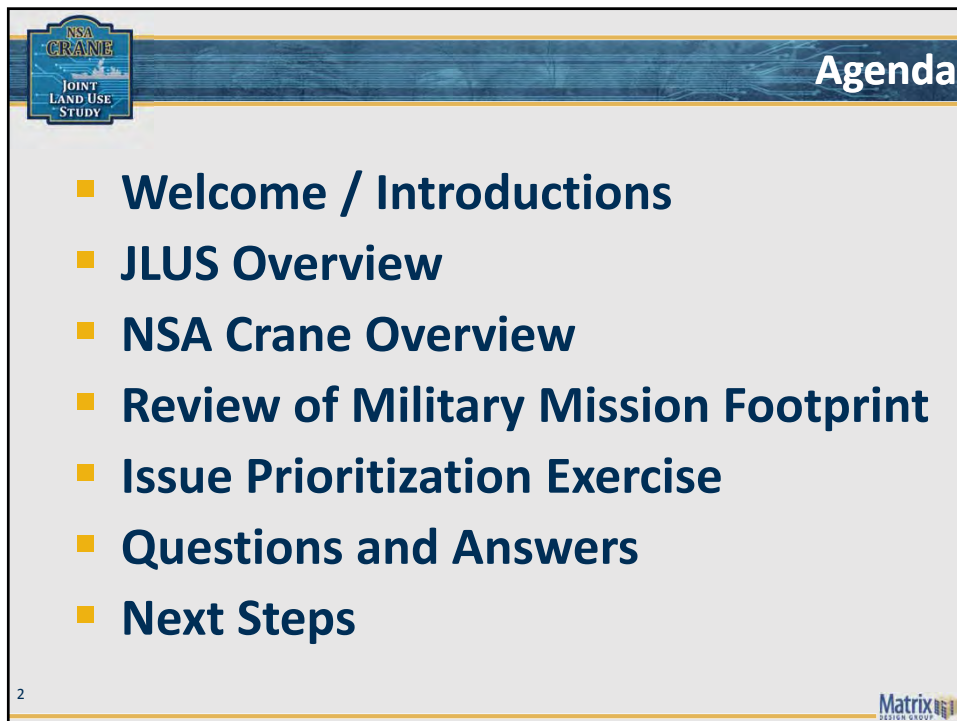
The poster features a dark blue background with a subtle grid pattern. On the left, there is a logo for the NSA Crane Joint Land Use Study, which includes a stylized crane and the text "NSA CRANE JOINT LAND USE STUDY". To the right of the logo, there is a horizontal band with a landscape image and circuit-like lines. Below this, the text "PUBLIC FORUM 2" is prominently displayed in white, followed by "Davies, Greene, and Martin Counties" in yellow. At the bottom left is the Matrix Design Group logo, and at the bottom right is the date "February 22, 2016".

NSA CRANE
JOINT LAND USE STUDY

PUBLIC FORUM 2
Davies, Greene, and Martin Counties

Matrix
DESIGN GROUP

February 22, 2016



The slide has a light gray background. In the top left corner is the NSA Crane Joint Land Use Study logo. In the top right corner, the word "Agenda" is written in a bold, dark blue font. Below this, a list of seven agenda items is presented, each preceded by a yellow square bullet point. At the bottom left is a small number "2", and at the bottom right is the Matrix Design Group logo.

NSA CRANE
JOINT LAND USE STUDY

Agenda

- **Welcome / Introductions**
- **JLUS Overview**
- **NSA Crane Overview**
- **Review of Military Mission Footprint**
- **Issue Prioritization Exercise**
- **Questions and Answers**
- **Next Steps**


2

Matrix
DESIGN GROUP



Welcome / Introductions

3





Project Team



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Matrix Design Group
Patrick Small, AICP
Project Manager

Celeste Werner, AICP
Deputy Project Manager

Abbie Woodruff
Planner

4






Partners / Participants


Partners <ul style="list-style-type: none">■ Martin County■ Greene County■ Lawrence County■ Daviess County■ Sullivan County■ NSA Crane	Sponsor Committee <ul style="list-style-type: none">■ Indiana Office of Community and Rural Affairs (OCRA)■ Radius Indiana■ Indiana Office of Defense Development (IODD)■ NSA Crane
Committees <ul style="list-style-type: none">■ Policy Committee■ Technical Working Group	Consultant Team <ul style="list-style-type: none">■ Matrix Design Group

5



JLUS Overview

6



What is a JLUS?

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

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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally


7

JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory

8




JLUS Facts

A JLUS is NOT:

- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9




JLUS Objectives


Community

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

Military

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

10


JLUS Approach

Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:

- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern

11




Public Involvement

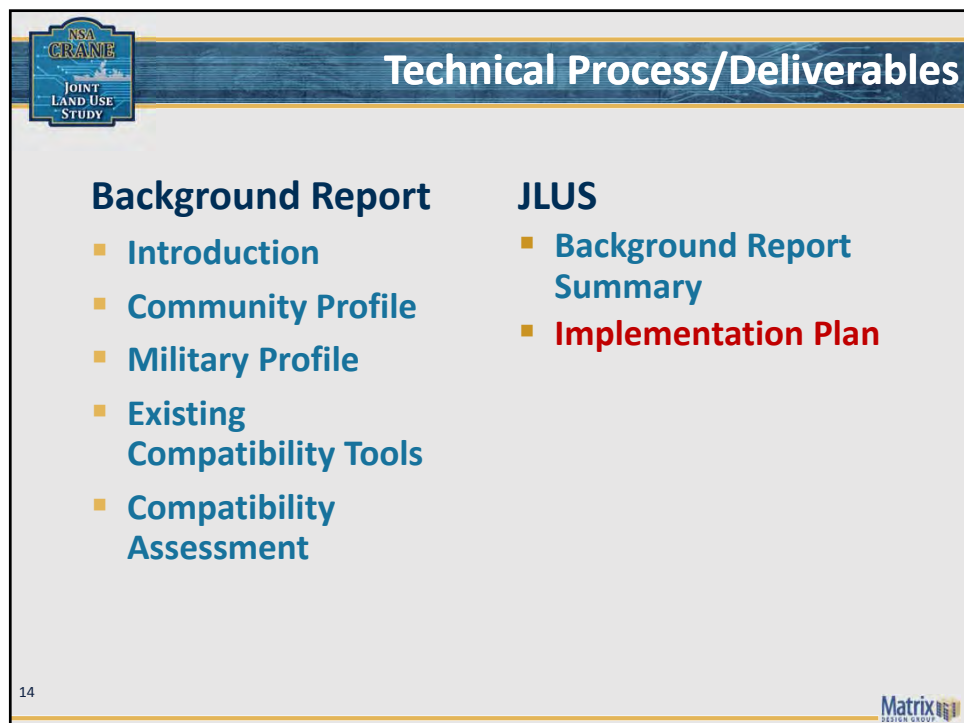
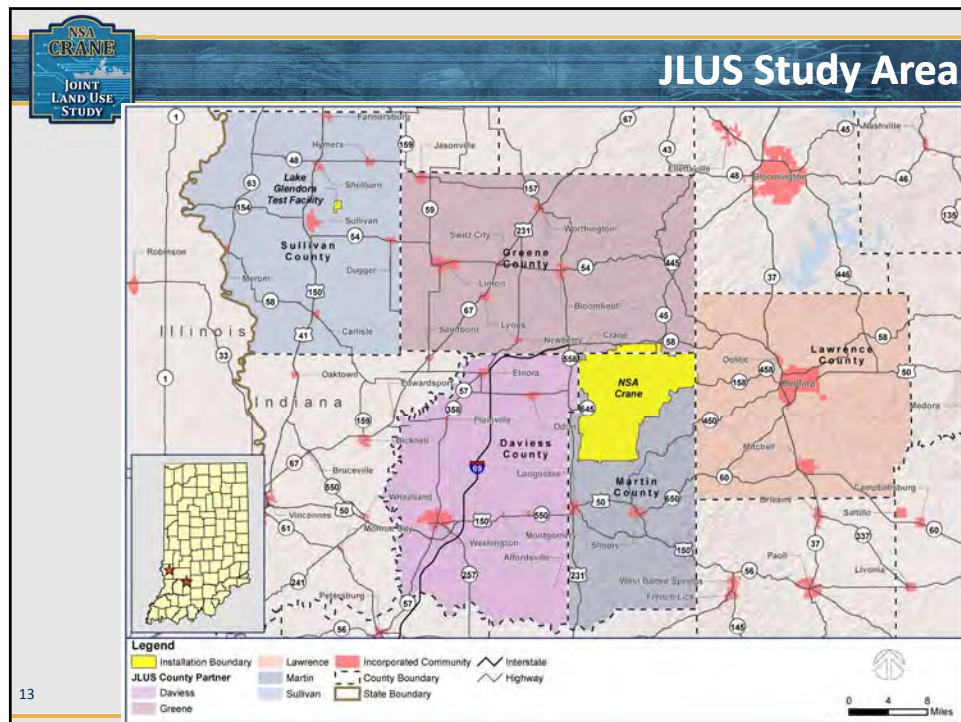
Public input is essential to the success of the JLUS

Project Website
www.cranejlus.com

Informational Brochures
 Public Flyers / Post Cards
 Group E-mail Blast Notification
 Public Forums
 Public Input / Comment Cards
 Public Review



12



Naval Support Activity Crane

15

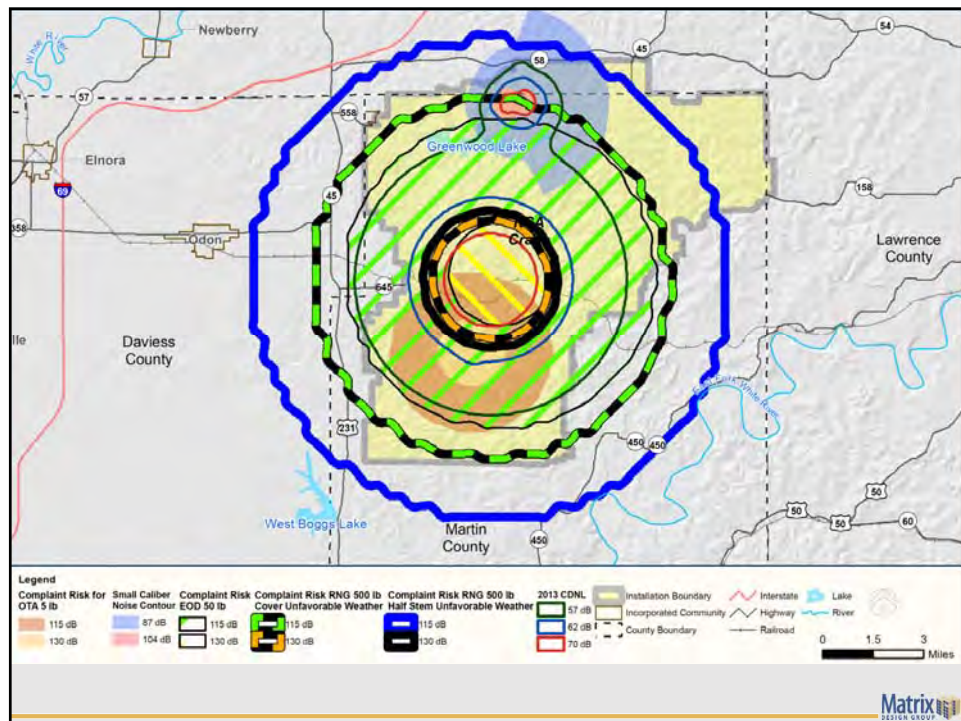
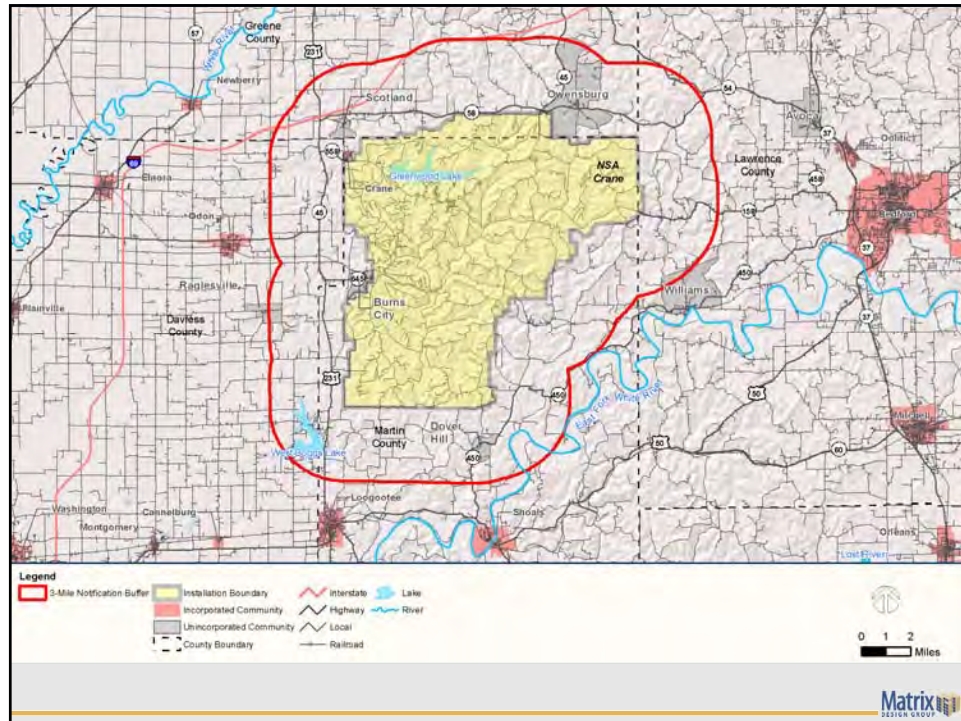


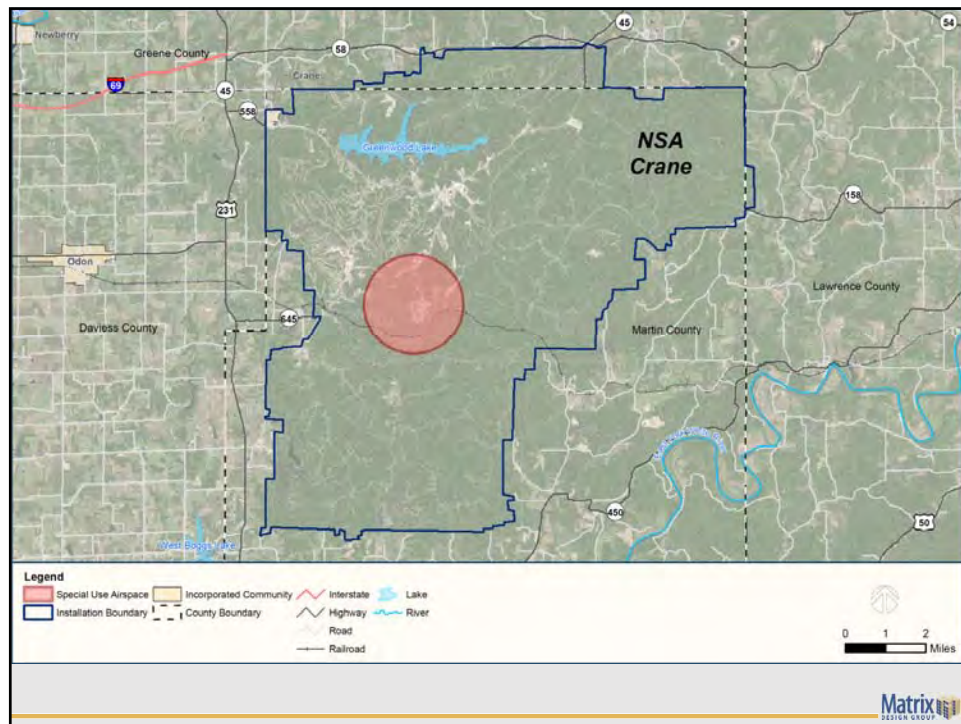
Naval Support Activity Crane

Military Mission Footprint

16







Issue Prioritization Group Exercise



NSA Crane Joint Land Use Study

Areas of Compatibility

NSA Crane Joint Land Use Study

What is Compatibility?
Compatibility is a relationship between military and civilian activities that can co-exist in the same area. It is a relationship between military and civilian activities that can co-exist in the same area. It is a relationship between military and civilian activities that can co-exist in the same area.

AQ Air Quality
Air quality is a measure of the cleanliness of the air. It is a measure of the cleanliness of the air. It is a measure of the cleanliness of the air.

AT Anti-Terrorism / Force Protection
Anti-terrorism and force protection are measures taken to protect against terrorism and other threats. It is a measure of the cleanliness of the air.

BIO Biological Resources
Biological resources are natural resources that are important to the environment. It is a measure of the cleanliness of the air.

CA Climate Adaptation
Climate adaptation is a process of adjusting to the effects of climate change. It is a measure of the cleanliness of the air.

COM Communication / Coordination
Communication and coordination are essential for the success of any project. It is a measure of the cleanliness of the air.

CR Cultural Resources
Cultural resources are those that are important to the community. It is a measure of the cleanliness of the air.

DSS Data Systems / Information
Data systems and information are essential for the success of any project. It is a measure of the cleanliness of the air.

ED Energy Development
Energy development is a process of developing new energy sources. It is a measure of the cleanliness of the air.

FSC Frequency Spectrum Capacity
Frequency spectrum capacity is a measure of the ability to use the frequency spectrum. It is a measure of the cleanliness of the air.

FSI Frequency Spectrum Interference / Interference
Frequency spectrum interference is a measure of the ability to use the frequency spectrum. It is a measure of the cleanliness of the air.

HA Housing Availability
Housing availability is a measure of the ability to provide housing. It is a measure of the cleanliness of the air.

IE Infrastructure Extensions
Infrastructure extensions are those that are important to the community. It is a measure of the cleanliness of the air.

Fact Sheet #1: Overview / Factors

LAS Land/Air Space
Land/air space is a measure of the ability to use the land/air space. It is a measure of the cleanliness of the air.

LU Land Use
Land use is a measure of the ability to use the land. It is a measure of the cleanliness of the air.

LEG Legislation / Regulations
Legislation and regulations are those that are important to the community. It is a measure of the cleanliness of the air.

LG Light and Glare
Light and glare are those that are important to the community. It is a measure of the cleanliness of the air.

MAR Marine Environment
Marine environment is a measure of the ability to use the marine environment. It is a measure of the cleanliness of the air.

NOI Noise
Noise is a measure of the ability to use the noise. It is a measure of the cleanliness of the air.

PT Public Trespassing
Public trespassing is a measure of the ability to use the public trespassing. It is a measure of the cleanliness of the air.

RC Roadway Capacity
Roadway capacity is a measure of the ability to use the roadway capacity. It is a measure of the cleanliness of the air.

SA Safety Issues
Safety issues are those that are important to the community. It is a measure of the cleanliness of the air.

SNR Scenic Natural Resources
Scenic natural resources are those that are important to the community. It is a measure of the cleanliness of the air.

VO Visual Obstructions
Visual obstructions are those that are important to the community. It is a measure of the cleanliness of the air.

V Vibration
Vibration is a measure of the ability to use the vibration. It is a measure of the cleanliness of the air.

WQ Water Quality / Quantity
Water quality and quantity are those that are important to the community. It is a measure of the cleanliness of the air.



NSA Crane Joint Land Use Study

Issue Identification

Issues were identified through:

- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Committee inputs
- Public inputs



Issue Identification				
Issue Priority				Ref ID #
High	Medium	Low	Awareness	
Land Use (LU) continued				
				Adequate Commercial Truck Rest Facilities and Staging Areas The lack of adequate rest facilities and staging areas outside of NSA Crane has resulted in trucks overnighing in a gravel strip of land opposite of the Town of Crane which creates a safety concern and community nuisance.
				Development Surrounding NSA Crane Most jurisdictions surrounding NSA Crane do not employ land use controls which has the potential to introduce incompatible development with the military mission.
Legislative Initiatives (LEG)				
				Legislative Tools for the Military Base Protection Act Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.
				LEG-1
Light and Glare				
				Solar Farm at NSA Crane Potential for the future solar farm at the NSA Crane Eagle View Golf Club to create glare impacting adjacent residences in Burns City.
				LG-1


**44 total issues identified:
31 specific to this area**

Page 6 of 8



Issue Prioritization	
ISSUE PRIORITIES	
High Priority	
These issues are critical to address within 1-2 years following completion of the JLUS.	
Medium Priority	
These issues are important and should be addressed in the 3-4 years following completion of the JLUS.	
Low Priority	
These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.	
Awareness	
These issues do not need to be addressed in the short-term but should be monitored for the potential to become compatibility issues in the future.	






Exercise Example

Issue Priority					Ref ID #	Issue Statement
High	Medium	Low	On-Going	Awareness		
Interagency Coordination / Communication (COM)						
•	•				COM-4	Enhanced Economic Benefit What procedures or initiatives could be implemented to assist local jurisdictions and businesses enhance the economic benefit associated with the installation.
•						Natural Resource Management When aircraft crash on the range, the collision has the potential to degrade the natural environment. All affected land management agencies are not currently involved in the appropriate and adequate clean-up and restoration of the lands, and better communication on events is needed.
Land Use (LU)						
•	•		•		LU-1	Transfer of Development Rights (TDR) Program Updates Churchill County's TDR program sets provisions for acquiring development rights (conservation easements), however the program does not identify receiving sites in light of military compatibility planning concerns. Review program and refine to enhance as compatibility tool.
	•	•	•	•		Cluster Zoning Ordinance Updates The Churchill County ordinance currently allows for higher densities near military installations and environmentally sensitive areas (and protection through conservation easements), but does not fully account for military compatibility issues.

for working model

cluster zoning ordinance can be updated to include military compatibility issues

Matrix DESIGN GROUP





Exercise

OTHER ISSUES:


DATE: 07-08-2016 09:04:00 AM

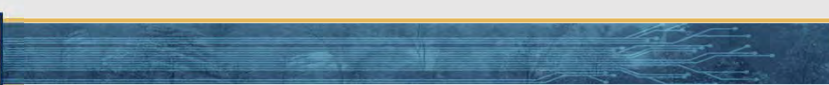

Matrix DESIGN GROUP



QUESTIONS


Questions & Answers






Next Steps



28






Next Steps

- **Public Forum 2:**
 - Tomorrow night in Sullivan County
 - Wednesday night in Lawrence County
- **Update project website:**
 - Prioritization results from Public Forum 2
 - Comments and responses from Public Forum 2
 - Frequently Asked Questions (FAQ)
- **Spring 2016 (Public review / comment) Draft JLUS**



Thank you for your attendance!!!

30





For Questions Contact:

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www.cranejlus.com

69



NSA CRANE

JOINT LAND USE STUDY

*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Compatibility Issues for Prioritization

The following pages contain a list of the preliminary compatibility issues identified to date. The issues listed are a work in progress that will be further refined and developed as additional input is obtained and the project progresses. This list was developed based on Policy Committee and Technical Working Group inputs, stakeholder interviews, Public Forum #1, and input from Matrix staff. Each issue is categorized by Compatibility Factor (the list below identifies the 25 compatibility factors initially presented for issue identification). Please assign a priority based on the implementation timeframe described below. Input received will be used to assist in the development of compatibility recommendations and strategies to address each issue.

COMPATIBILITY FACTORS

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

ISSUE PRIORITIES

High Priority

These issues are critical to address within 1-2 years following completion of the JLUS.

Medium Priority

These issues are important and should be addressed in the 3-4 years following completion of the JLUS.

Low Priority

These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.

Awareness

No issues were addressed for these factors; however, the potential for compatibility issues to arise in the future should be monitored.

Issue Priority

High

Medium

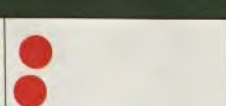
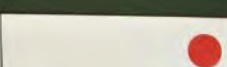
Low

Awareness

Ref
ID
#

Issue Statement

Air Quality (AQ)

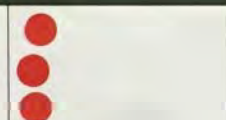
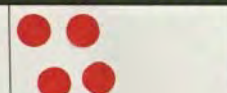
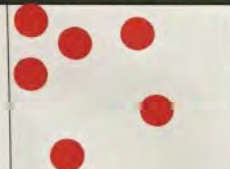
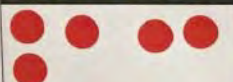


AQ-1

Regional Air Quality

Though Martin County is in attainment for six air quality criteria pollutants and NSA Crane is in compliance with its Part 70 Title V Air Quality operating Permit, future development has the potential to affect regional air quality.

Anti-Terrorism / Force Protection (AT)

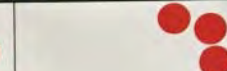


AT-2

Naval Support Activity Crane Visitor's Center

The NSA Crane Visitor's Center is located in the Town of Crane separated by approximately one mile from the NSA Crane Gate which affects access to protection-level resources.

Biological Resources (BIO)

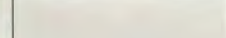


BIO-1

Threatened or Endangered Species

Areas at NSA Crane critical to threatened or endangered species such as the Bald Eagle, the Indiana Bat and the Northern Long-Eared Bat have the potential to impact mission operations and capability.

Coordination / Communication (COM)



COM-1

Public Awareness and Knowledge of NSA Crane

Need for increased public education of NSA Crane amongst the local community.

Issue Priority

High

Medium


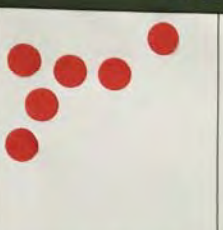

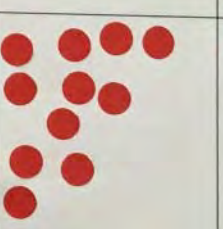

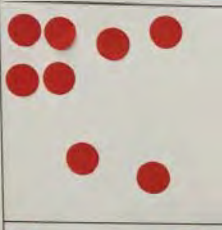
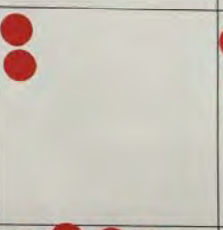

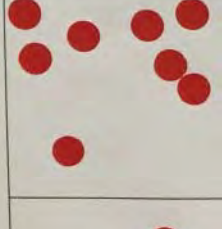
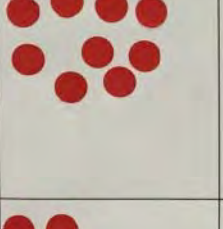
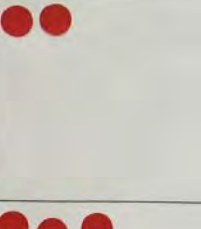

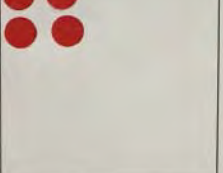


Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM) continued

				COM-2	Contact and Coordination between NSA Crane and Surrounding Jurisdictions Need for enhanced and formal communication between surrounding jurisdictions and NSA Crane personnel / leadership.
				COM-3	Local Jurisdiction Planning Resources Need for improved awareness of local jurisdiction planning department structure, resources, and knowledge to facilitate coordination and communication from NSA Crane.
				COM-4	Coordination of Public Safety Resources NSA Crane physical security forces are not authorized to assist jurisdictions with public safety and there is perception that NSA Crane does not want local law enforcement participation on the installation.
				COM-5	NSA Crane Public Outreach Need for NSA Crane public outreach with surrounding jurisdictions.
				COM-6	Public Notification of Range Activities There is a need for increased public notification of NSA Crane range activities to surrounding local jurisdictions.

Issue Priority

High

Medium









Low

Awareness





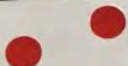



Ref
ID
#

Issue Statement

Coordination / Communication (COM) continued

 				COM-7	Coordinated Noise Complaint Process Concern that not all noise complaints generated by public and reported to jurisdiction authorities are conveyed to NSA Crane, creating a gap in the communication of complaints.
 				COM-8	Development Notification to NSA Crane Lack of coordination to notify NSA Crane of development within 3-mile radius around NSA Crane despite the state legislative mandate.

Dust / Smoke / Steam

				DSS-1	Dust from Demolition Area Detonations at the NSA Crane Demolition Range can generate fugitive dust impacts outside the installation.
				DSS-2	Smoke from Prescribed Burns Smoke from prescribed burns at NSA Crane can migrate outside the installation.

Issue Priority

Ref
ID
#

Issue Statement

High

Medium

Low

Awareness

Housing Availability (HA)

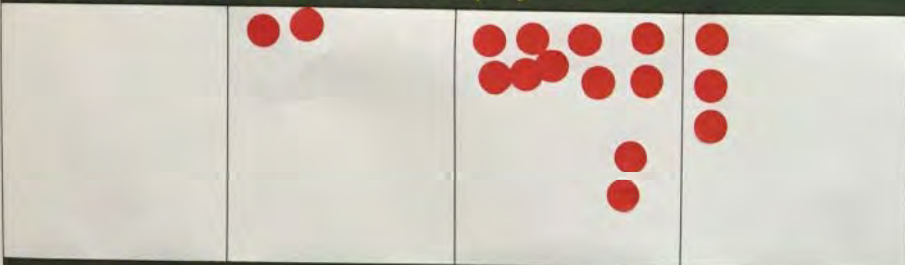


HA-1

Lack of Housing Availability Proximate to NSA Crane

Need for high quality housing accommodations proximate to NSA Crane to attract and retain personnel in the local area.

Infrastructure Extensions (IE)



IE-1

Visitor Center Utilities

The NSA Crane Visitor Center utilities are within the Town of Crane and not part of the NSA Crane infrastructure network making them subject to forces outside military control.

Land Use (LU)



LU-1

Future Development Associated with Interstate 69

Potential for incompatible development associated with the development of Interstate 69.

LU-2

Development of Westgate Technology Park

Need for coordinated development at WestGate Technology Park to ensure future development is compatible with NSA Crane mission.

Issue Priority

High

Medium








Low

Awareness

Ref
ID
#

Issue Statement




Land Use (LU) continued

				LU-3	Adequate Commercial Truck Rest Facilities and Staging Areas The lack of adequate rest facilities and staging areas outside of NSA Crane has resulted in trucks overnighiting in a gravel strip of land opposite of the Town of Crane which creates a safety concern and community nuisance.
				LU-5	Development Surrounding NSA Crane Most jurisdictions surrounding NSA Crane do not employ land use controls which has the potential to introduce incompatible development with the military mission.

Legislative Initiatives (LEG)

				LEG-1	Legislative Tools for the Military Base Protection Act Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.
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Light and Glare

				LG-1	Solar Farm at NSA Crane Potential for the future solar farm at the NSA Crane Eagle View Golf Club to create glare impacting adjacent residences in Burns City.
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Issue Priority

High

Medium









Low

Awareness

Ref
ID
#

Issue Statement

Noise (NOI)

				NOI-1	Noise from NSA Crane Ranges Noise from the NSA Crane Ranges extends off installation and has the potential to affect noise sensitive land uses.
				NOI-3	Regional Ground Noise Sources There are other regional sources of noise which can be misattributed to activities at NSA Crane.
				NOI-4	Regional Aircraft Noise Sources The Indiana Air National Guard flyways in the airspace surrounding NSA Crane are sometimes mistakenly attributed to NSA Crane.

Issue Priority

High

Medium































Low

Awareness

Ref
ID
#

Issue Statement

Roadway Capacity (RC)

RC-2

Commercial Truck Access




































Commercial truck traffic accessing NSA Crane shares the same entry gate as all other vehicles. The lack of a dedicated commercial truck access / gate for screening inspections can delay access for other vehicles and potentially create a security risk. The lack of commercial truck signage along US Route 231 has resulted in trucks missing the turn onto State Road 558 to the Crane Gate and traveling down State Road 645 to use local roads in Burns City for turning around.

RC-3

Traffic from Newly Completed Interstate 69

Potential traffic impacts on local roadways associated with the completion of Interstate 69. Concern that additional uses could generate traffic congestion in the area surrounding the installation.

Safety Zones (SA)

SA-1

Explosive Safety Quantity Distance Arcs

Concern that Explosive Safety Quantity Distance Arcs (ESQD) arcs have potential to extend outside of NSA Crane with mission changes. Safety arcs over private property could expose property and property owners to risk of harm.

SA-3

Hazardous Materials Transportation Routes

There are no designated Hazardous Materials Transportation Routes in association with daily shipments to NSA Crane. Because the same route is never used in sequence, many local roads are used for transport of hazardous materials.

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Vibration (V)

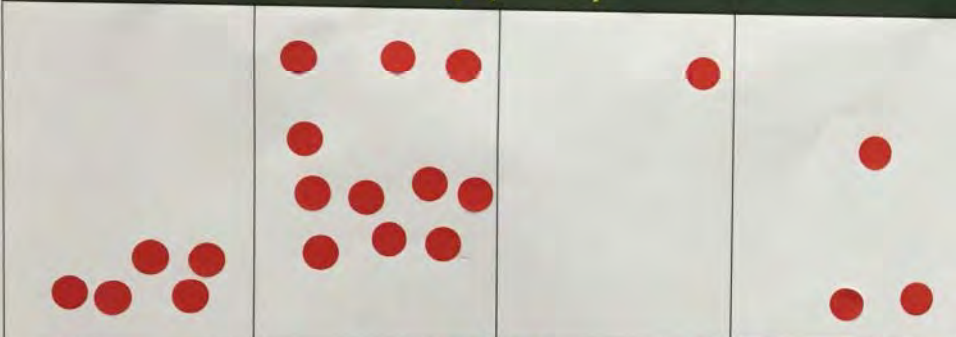


V-1

Vibration from NSA Crane Demolition Range

Concern that vibration from the Demolition Range activities at NSA Crane cause physical property damage to buildings and infrastructure outside the installation.

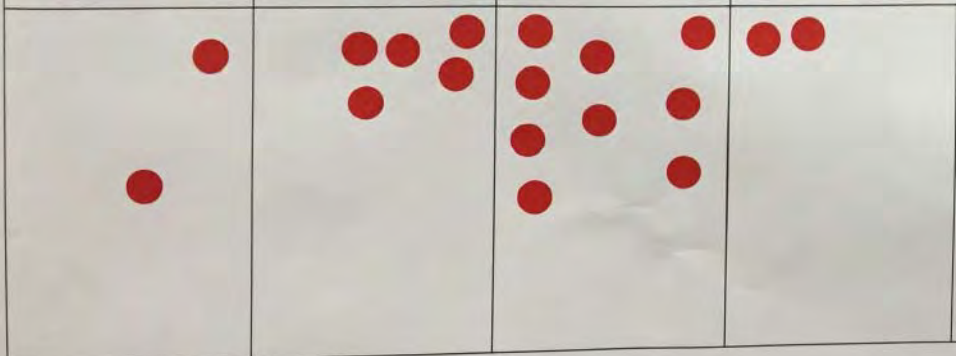
Water Quality / Quantity (WQQ)



WQQ-1

Shared Use of the NSA Crane Wastewater Treatment Plant

Concern for capacity of NSA Crane wastewater treatment plan to continue serving the Town of Crane. There are limited options for the small community to provide wastewater treatment service for its residents.



WQQ-2

Stormwater Runoff at Northern Boundary of NSA Crane

Concern for the quality of stormwater runoff flowing into NSA Crane from adjacent land uses along the northern boundary.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

- 1) WHAT IS THE FREQUENCY & NOISE CONTOURS GENERATED FROM PRIVATE SECTOR COMPANIES IN THE VICINITY OF NSA CR & THE LGTF? AND WHAT MIGHT THE IMPACT BE ON MISSION
- 2) ~~THE~~ THE NSA CRANE OPERATIONAL NOISE CONSULTATION MAPS RECOMMENDATION & RE; LAND USE WITHIN VARIOUS NSA CRANE NOISE CONTOURS
- 3) IN THE PRESENTATION THE EXAMPLE OF COMPATIBILITY ^{ISSUES} ARE ALL NSA LOGISTIC; WOULDN'T IT BENEFIT THE AUDIENCE TO HEAR SOME OF THE EXAMPLES OF COMMUNITY INCOMPATIBILITY, E.G. NSA NOT SURTHER AREAS WHERE CRANE MAY BE INCOMPATIBLE W/COMMUNITY

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Re-open Dover Hill Gate

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Will the 3mi notification area matter for small projects if virtually noone gets building permits?

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

I'm glad you've had these meetings. After the JLUS is done I have a meeting once in a while just to talk. Thank you.
and answer questions. [Redacted]

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Thanks for the info.

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

1. KEEP THE DEER INSIDE CRANE'S FENCE.
2. REPLACE THE ARMY'S STREET LIGHTS IN THE AREAS NEAR BURNS CITY WITH NEW LIGHTS THAT DIRECT ALL LIGHT DOWNWARD.
3. MOST OF CRANE'S FENCE IS 4 FOOT HIGH FARM FENCE THAT'S VERY VULNERABLE TO TERRORISTS AND POACHERS.

Please return this comment form to the registration table or to a project representative.

4. I WANT TO KNOW WHAT IS FLOWING THROUGH THE GROUNDWATER WEST OF THE BASE. I KNOW THE BASE HAS DRILLED TEST WELLS IN THE PAST AND I WANT TO KNOW WHAT'S IN THE WATER AT WHAT DEPTH, FLOW RATE, AND CONCENTRATION,

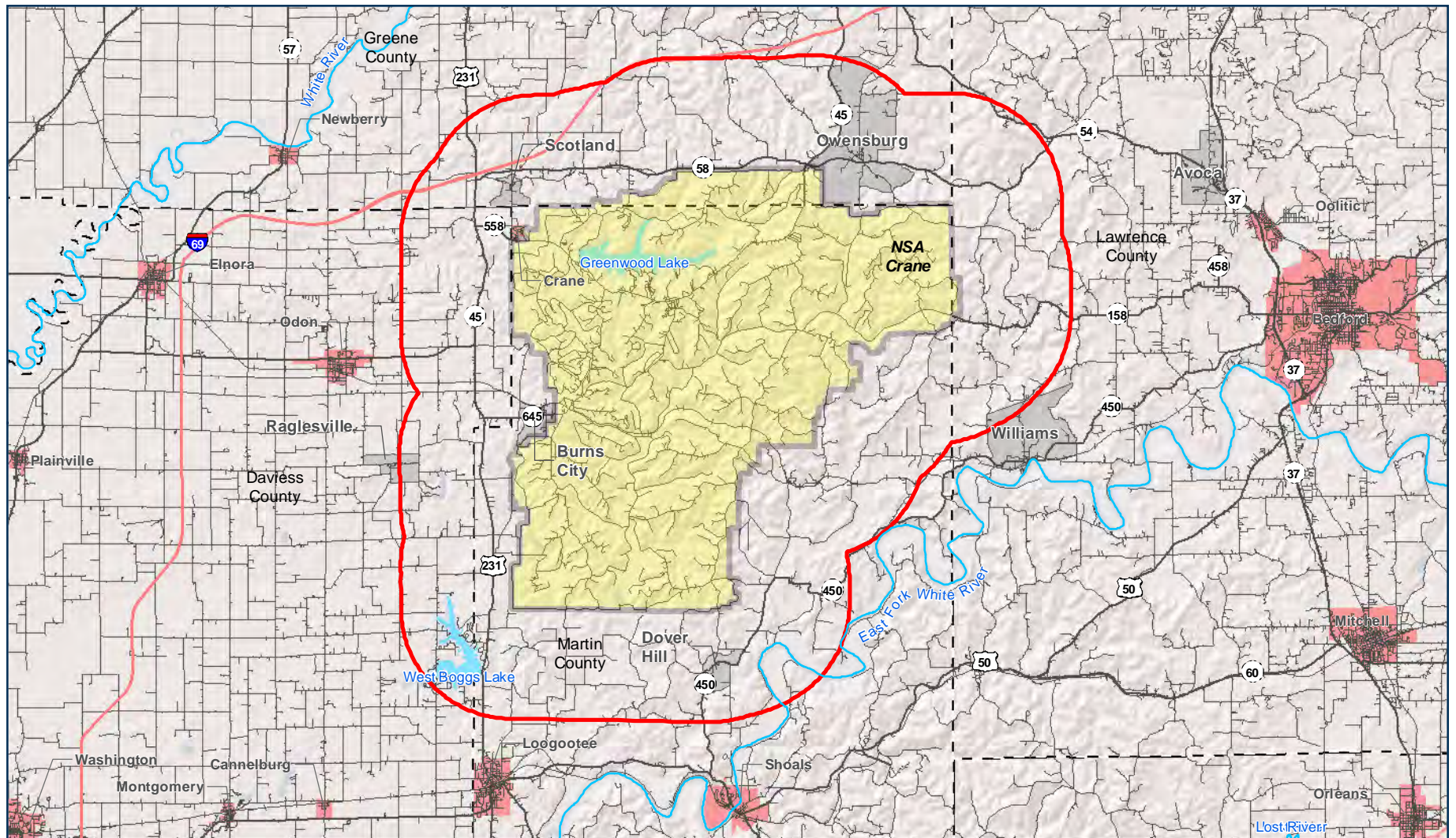


A cooperative land use planning effort between
NSA Crane and surrounding communities

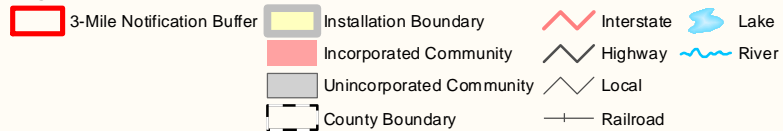
Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Appreciate the information and the chance to help prioritize issues. We live just outside the noise boundary- hear lots of booms.



Legend

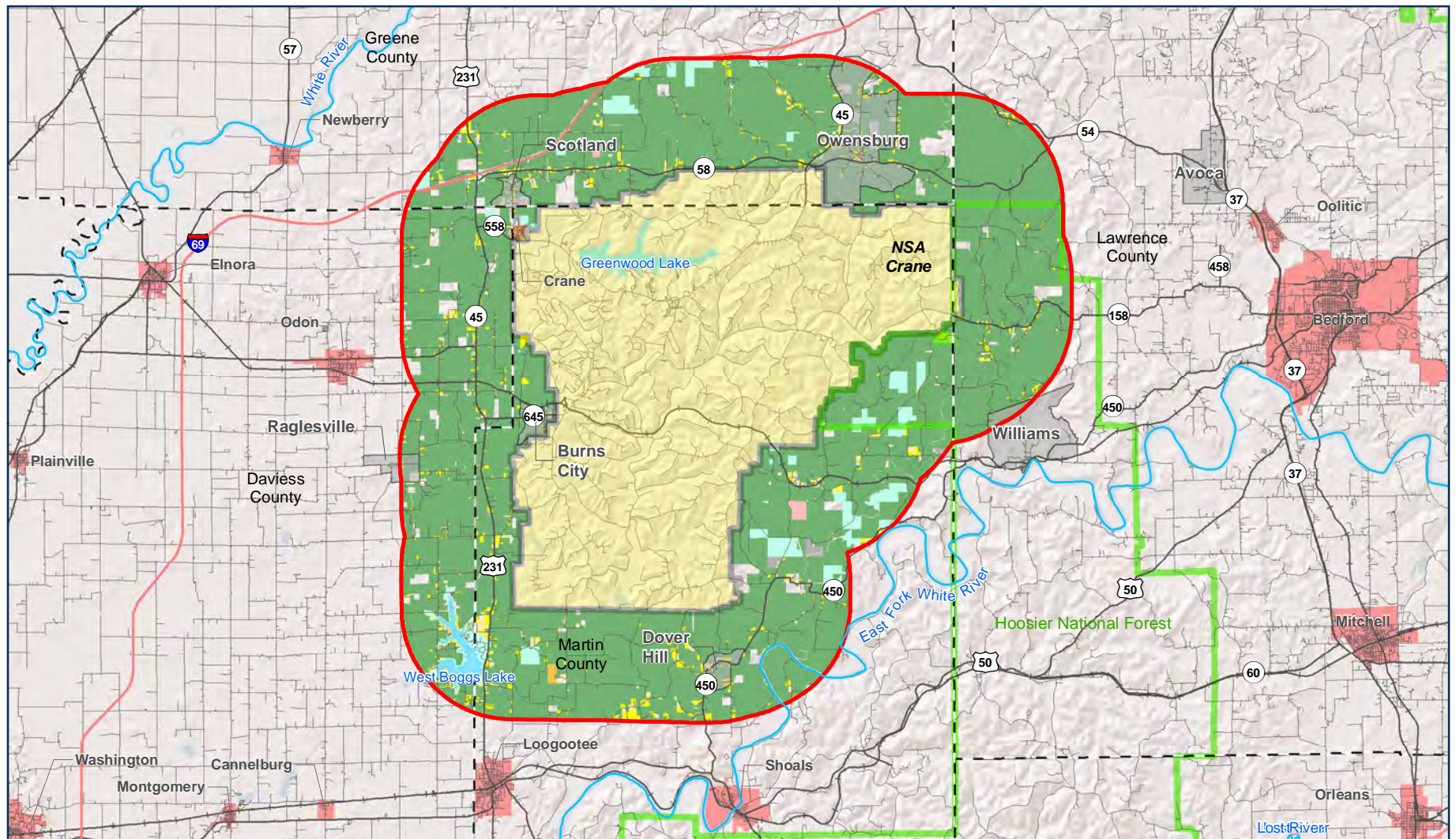


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

3-Mile Notification Area NSA Crane



Legend

Land Use

 Residential: Unspecified	 Residential: Three Families	 Conservation/Park	 3-Mile Notification Buffer
 Residential: Single Family	 Commercial	 Agricultural	 Hoosier National Forest
 Residential: Two Families	 Industrial	 Institutional	

Installation Boundary

Incorporated Community

Unincorporated Community

County Boundary

Interstate

Highway

Local

Railroad

Lake

River

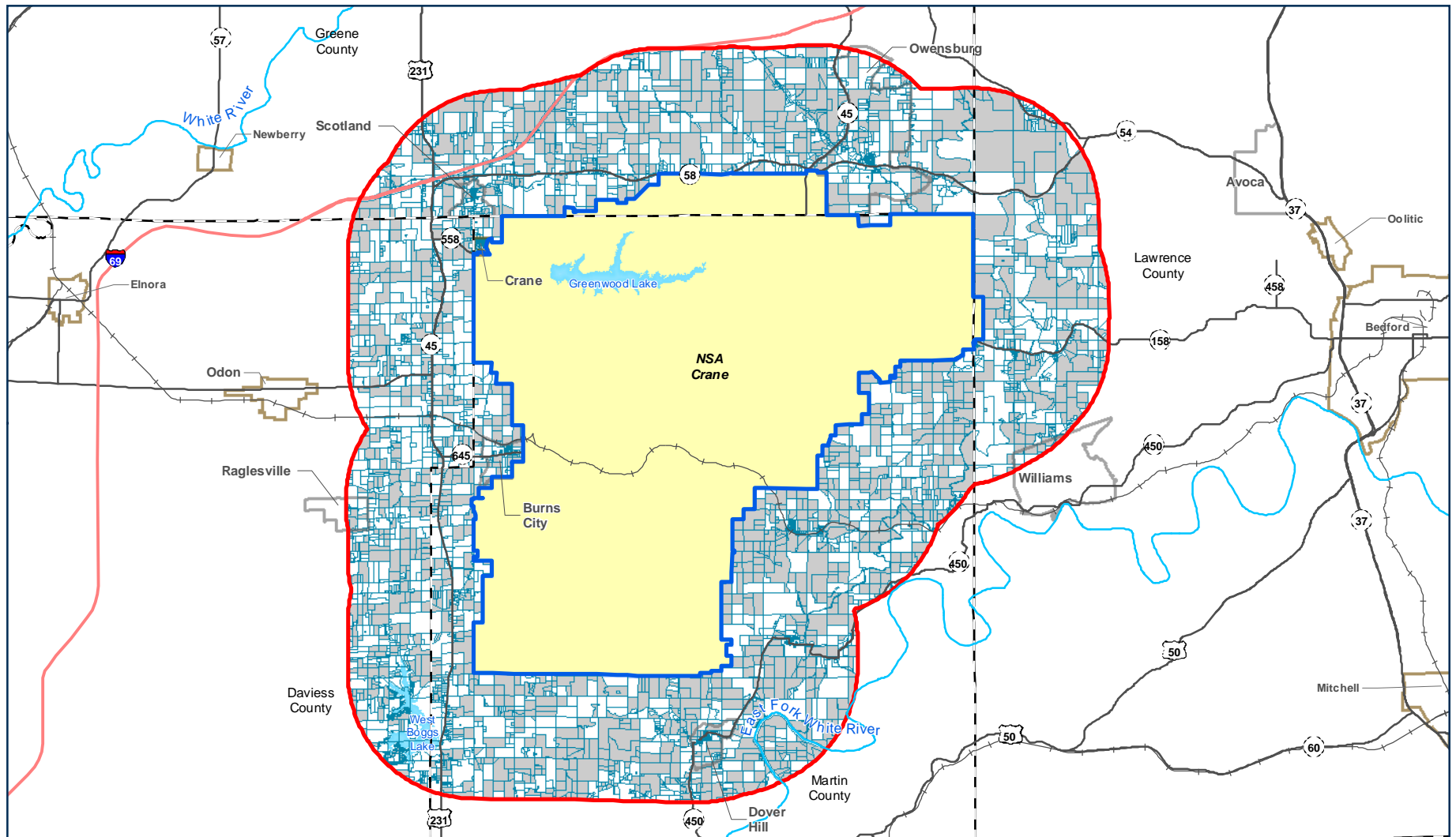


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

NSA Crane and Existing Land Use



Legend

- | | | | | |
|----------------|----------------------------|--------------------------|------------|----------|
| Vacant Parcels | 3-Mile Notification Buffer | Installation Boundary | Interstate | Lake |
| All Parcels | Incorporated Community | Unincorporated Community | Highway | River |
| | County Boundary | | Local | Railroad |

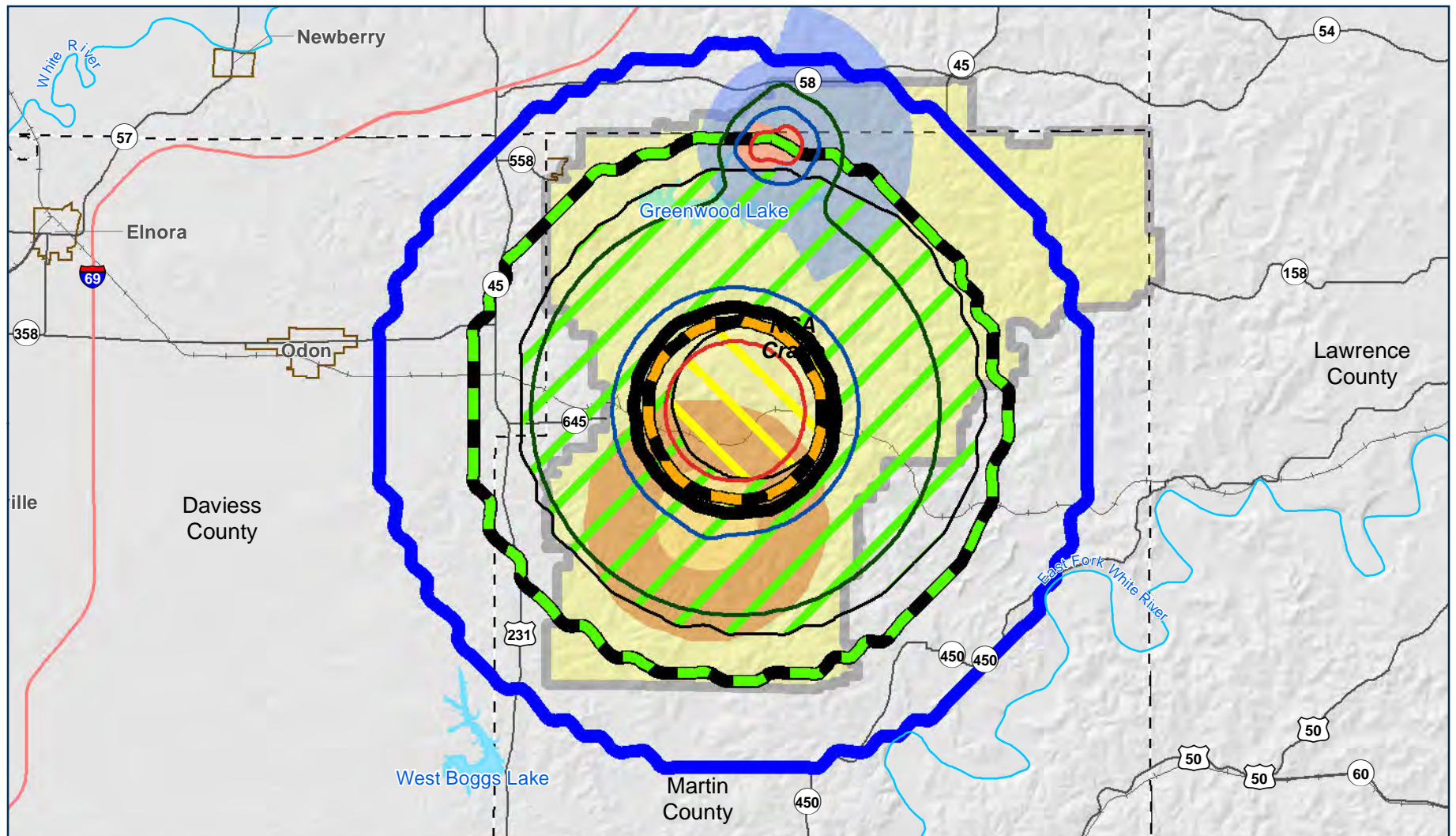


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

Vacant Parcels in NSA Crane Notification Area



Legend

Complaint Risk for OTA 5 lb

115 dB
130 dB

Small Caliber Noise Contour

87 dB
104 dB

Complaint Risk EOD 50 lb

115 dB
130 dB

Complaint Risk RNG 500 lb Cover Unfavorable Weather

115 dB
130 dB

Complaint Risk RNG 500 lb Half Stem Unfavorable Weather

115 dB
130 dB

2013 CDNL

57 dB
62 dB
70 dB

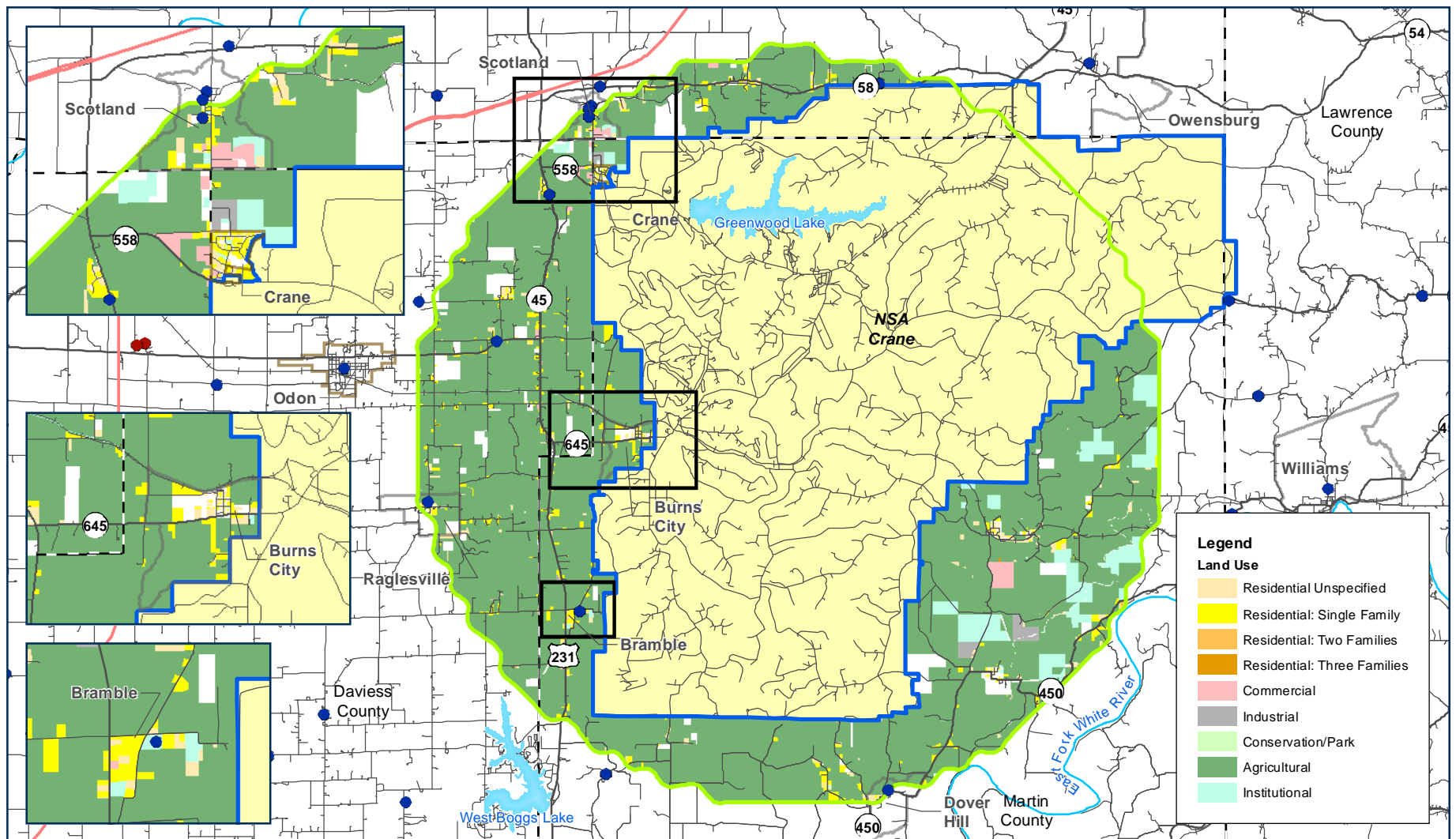
Installation Boundary
Incorporated Community
County Boundary

Interstate
Highway
Railroad

Lake
River



0 1.5 3
Miles



Legend

- Schools
- Religious Facilities

Worst Case Noise Contour
Complaint Risk RNG 500 lb
Half Stem Unfavorable Weather

115 dB

- Installation Boundary
- Incorporated Community
- Unincorporated Community
- County Boundary

- Interstate
- Highway
- Local
- Railroad
- Lake
- River

White space within the Worst Case Noise Contour
 represents areas with no land use described in the data.

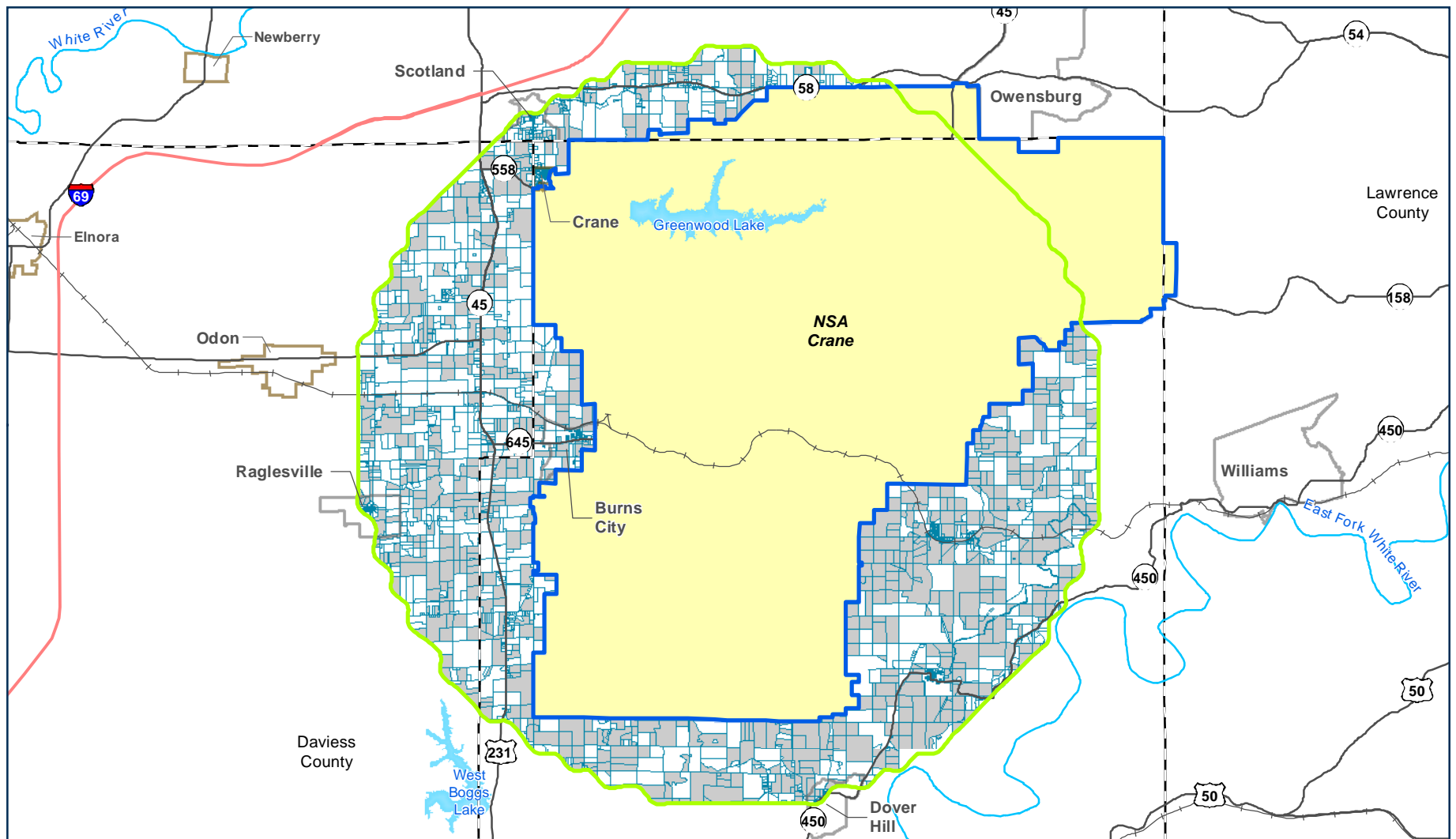


0 1 2
 Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

NSA Crane - Existing Land Use and Worst Case Noise



Legend

- | | | | |
|--|--------------------------|------------|-------|
| Vacant Parcels | Installation Boundary | Interstate | Lake |
| All Parcels | Incorporated Community | Highway | River |
| Worst Case Noise Contour
Complaint Risk RNG 500 lb
Half Stem Unfavorable Weather | Unincorporated Community | Local | |
| 115 dB | County Boundary | Railroad | |

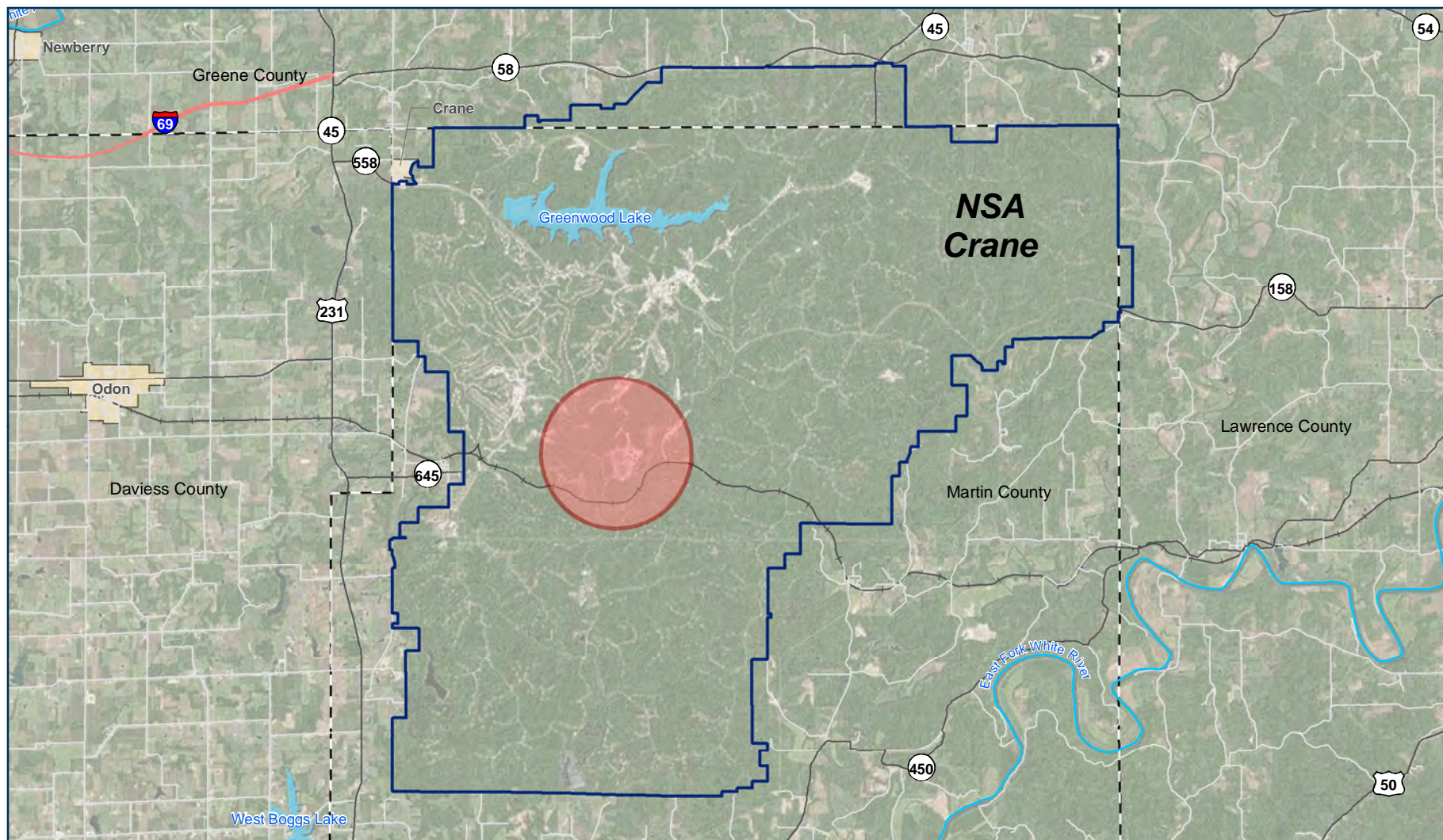


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

Vacant Parcels in NSA Crane Worst Case Noise Contour



Legend

- | | | | |
|---|---|---|---|
| R-3404 | Incorporated Community | — Interstate | ~ Lake |
| Restricted From surface to 4,100 feet MSL | County Boundary | — Highway | ~ River |
| Installation Boundary | | — Road | |
| | | —+— Railroad | |



0 1 2 Miles



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 23, 2016 / 7:00pm

GROUP: Public Forum #2

LOCATION: Sullivan Middle School - Sullivan County

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Roberta Crickfield	Sullivan	812-230-8748	
Ronald Crickfield	Sullivan	812-230-8748	
Mark Cox	Sullivan	812-201-5827	
Lucie Auband	SULLIVAN	812-268-9171	
Brian K. Everhart	Sullivan	812-249-0705	
John Scarborough	SULLIVAN	812-236-3331	
Bob Hagemeyer	SULL	812-243-0691	
Beth Patterson	Sullivan	317 413 4252	
David L. Unger	Sullivan	812-240-6901	ungerworks@gmail.com
Wendy Hollingsworth	Sullivan	812-850-3170	



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 23, 2016 / 7:00pm

GROUP: Public Forum #2

LOCATION: Sullivan Middle School - Sullivan County

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
BJ Nowacki	Property Owner Hamilton Township	(312) 888-7437	elizabethnowacki@yahoo.com
Jim Nowacki	Property Owner Hamilton Township	(812) 229-9797	elizabethnowacki@yahoo.com
Genie Bowers	Property Owner	812 847-9757	
Sam Deekard	Property Owner Haddon		
Sherry Napier	Property Owner Turman	812-382-4146	
Wayne JACKSON	Property owner Hamilton Township	812-268-3098	
Rick Chastain	Property owner	812-564-0625	
Lisa Chastain	Property owner	812-564-0748	
Steve MARTINDALE	CITY COUNCILMAN	812-236-1143	
Dale & Betty Phillips	Sullivan	812-268-6022	DPHILLIPS@CUSTOM,NET

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Tony Figg	Sullivan	(812) 236-9262	
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Betty Dunford	Sullivan	812-249-9437	—
Dave + Heather Fidler	Sullivan	812-249-8015	
Doc Followell	Sullivan	812-564-1584	FollowellAW@Joinc.com
Eric Glan	Ligo-Sullivan	812-249-6541	cabbage1967@aol.com
Scott Hoeber	Sullivan	812-243-4276	
Manuel Robinson	Sullivan	270-832-9540	
Jimmy Wang	SULLIVAN	812-249-0517	
Mike Glan	Sullivan	812-564-2300	
Marty Glan	"	812-392-4617	
Chester Kennamar	Sullivan	812-249-3245	cjkinnel@yahoo.com
Ron Ronk	Sullivan	812 648 3211	

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Harry and Pat Krinett	Sullivan	812-397-5938	
GARY NABIE	SULLIVAN	812-249-2085	
TIMOTHY ABRAHAM	FAIRBANKS	812 249-7324	
Jerry Woodman	Sullivan	812-648-2295	
Bill / Donna Cox	Sullivan	812-268-4592	
Rusty DECKARD	SULLIVAN	812 243-4541	rustydeckard@hotmail.com
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Sam Mahan	Hymera	812-397-4369	
John Everhart	Hymera	812-383-4233	
Mary Jo Block	Sullivan	812-629-4209	block.mj6@gmail.com
Clara Worsley			
LT Wills	SHELBURN		
Brent Voigtschild	Bedford, IN	812854-3667	
Robin Wilkes	Sullivan, In	812-243-1334	rwflowers2012@gmail.com

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Carla Johnson	Merom, Dr	812-356-4046	
Bruce Morheine	Sullivan	812-397-5156	
Bruce Walkup	Sullivan	812-268-0500	
DON HATFIELD	SULLIVAN		
Dave Patterson	Sullivan	801-682-6725	dave.patterson@aes.com
Tom Deen	"	812-268-3531	
James J. Fuser	Sullivan	812-240-3273	
David Willis	Sullivan	812-239-1564	
Mike Wampler	Sullivan		
Tim Leonard	NSWC CRANE	812 296-1980	
Ron Shake	Sullivan Co. Comm. Hospital	812 268-4311	ron.shake@schosp.com
DUANE WAMPLER	sullivan county council		
Mike Dugan	Sullivan	812-268-5266	
BRIAN, CARA PHEGLEY	SULLIVAN	812-268-4747	

[illegible]

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
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Sandy Wilson		812-268-5534	
Dennis Wilson		812-268-5534	
Jennifer & Jarrod Lett		812-564-1233	
Robert Davis	Sullivan County Commissioner	812-564-2312	
Travis McKinney		812-564-0444	mckfarms@frontier.com
Ron Walker	Sullivan County Airport Manager	812-268-6959	sivairport@gmail.com
LT Murray	Airport Board	812 564 0896	
CDR SEAN DALTON	NSA CLW	812 295-8229	
Op & Judi Hale		812-268-3009	
Ken Kneal		812 268 6618	
CDR TIM CRADDOCK	NSA CRANE	812-854-8989	

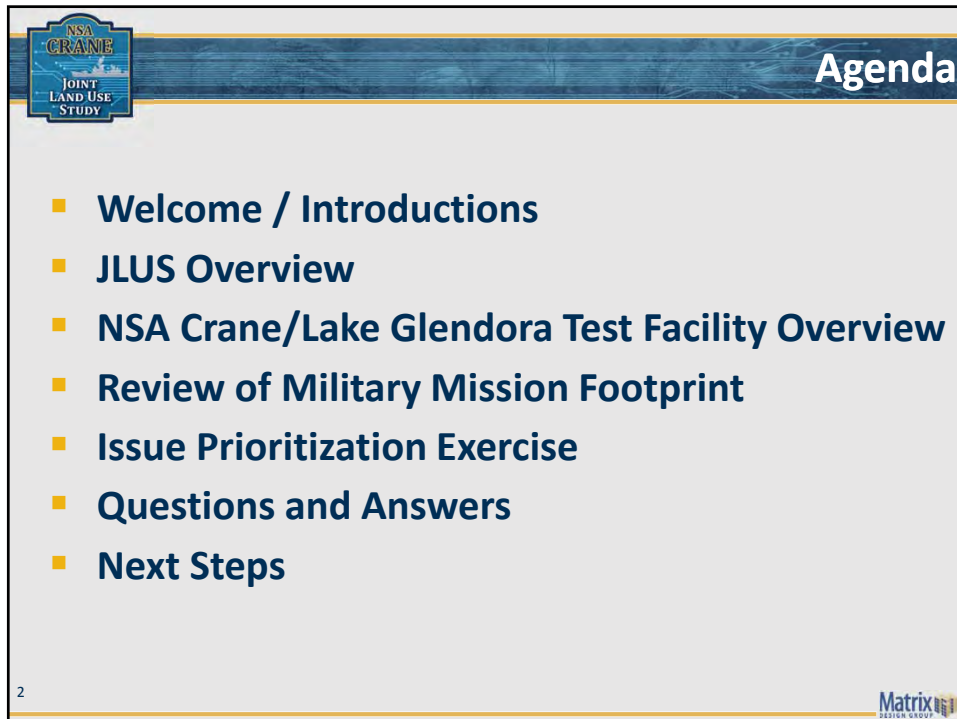


The slide features a dark blue background with a grid pattern. In the top left, there is a logo for the NSA Crane Joint Land Use Study, which includes a stylized crane and the text "NSA CRANE" and "JOINT LAND USE STUDY". To the right of the logo, there is a horizontal band with a landscape image and circuit-like lines. Below this, the text "PUBLIC FORUM 2" is prominently displayed in white, with "Sullivan County" in orange below it. At the bottom left is the Matrix Design Group logo, and at the bottom right is the date "February 23, 2015".

NSA CRANE
JOINT LAND USE STUDY

PUBLIC FORUM 2
Sullivan County

Matrix DESIGN GROUP
February 23, 2015



The slide has a light gray background. In the top left corner is the NSA Crane Joint Land Use Study logo. In the top right corner, the word "Agenda" is written in white. Below this, a list of seven agenda items is presented, each preceded by a yellow square bullet point. At the bottom left is a small number "2", and at the bottom right is the Matrix Design Group logo.

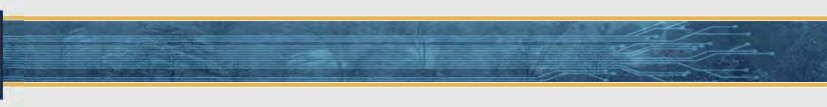

NSA CRANE
JOINT LAND USE STUDY

Agenda

- **Welcome / Introductions**
- **JLUS Overview**
- **NSA Crane/Lake Glendora Test Facility Overview**
- **Review of Military Mission Footprint**
- **Issue Prioritization Exercise**
- **Questions and Answers**
- **Next Steps**


2

Matrix DESIGN GROUP



Welcome / Introductions

3





Project Team



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Project Manager

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Deputy Project Manager

Abbie Woodruff
Planner



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4






Partners / Participants

Partners <ul style="list-style-type: none">■ Martin County■ Greene County■ Lawrence County■ Daviess County■ Sullivan County■ NSA Crane	Sponsor Committee <ul style="list-style-type: none">■ Indiana Office of Community and Rural Affairs (OCRA)■ Radius Indiana■ Indiana Office of Defense Development (IODD)■ NSA Crane
Committees <ul style="list-style-type: none">■ Policy Committee■ Technical Working Group	Consultant Team <ul style="list-style-type: none">■ Matrix Design Group


5





JLUS Overview

6



What is a JLUS?

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

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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally


7

JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory

8




JLUS Facts


A JLUS is NOT:

- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9





JLUS Objectives


Community

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

Military

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

10





JLUS Approach


Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:

- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern


11 



Public Involvement

Public input is essential to the success of the JLUS

Public Input / Comment Cards




A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Please return this comment form to the registration table or to a project representative.

12 



Public Involvement

Public input is essential to the success of the JLUS

Project Website
www.cranejlus.com

Public Forums

Informational Brochures

Public Review

Public Flyers / Post Cards

Group E-mail Blast Notification



13




Public Involvement

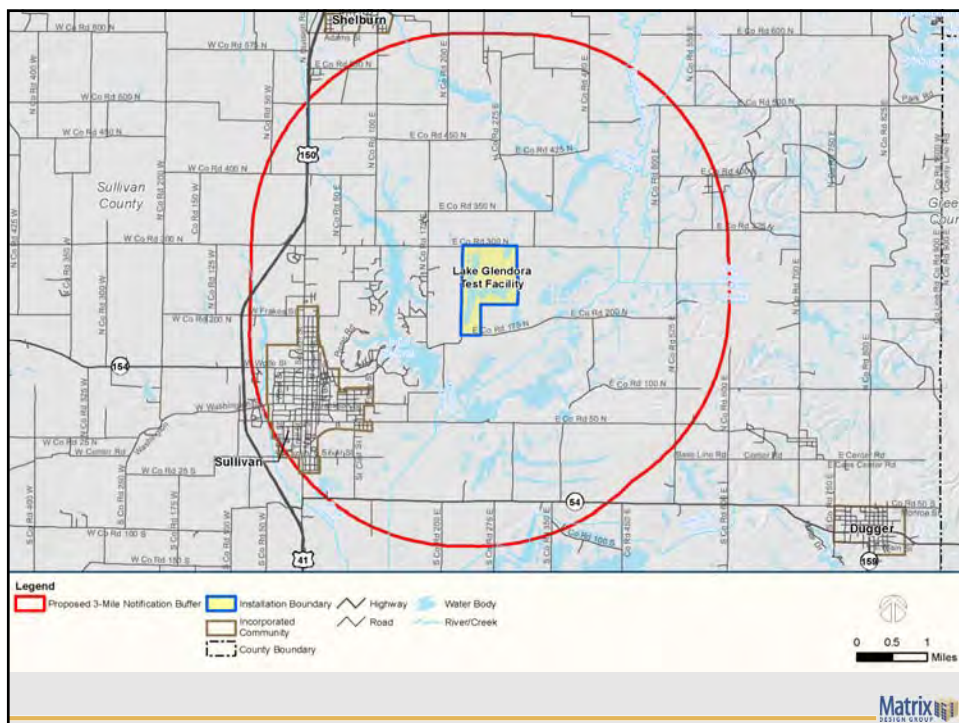
Naval Support Activity Crane

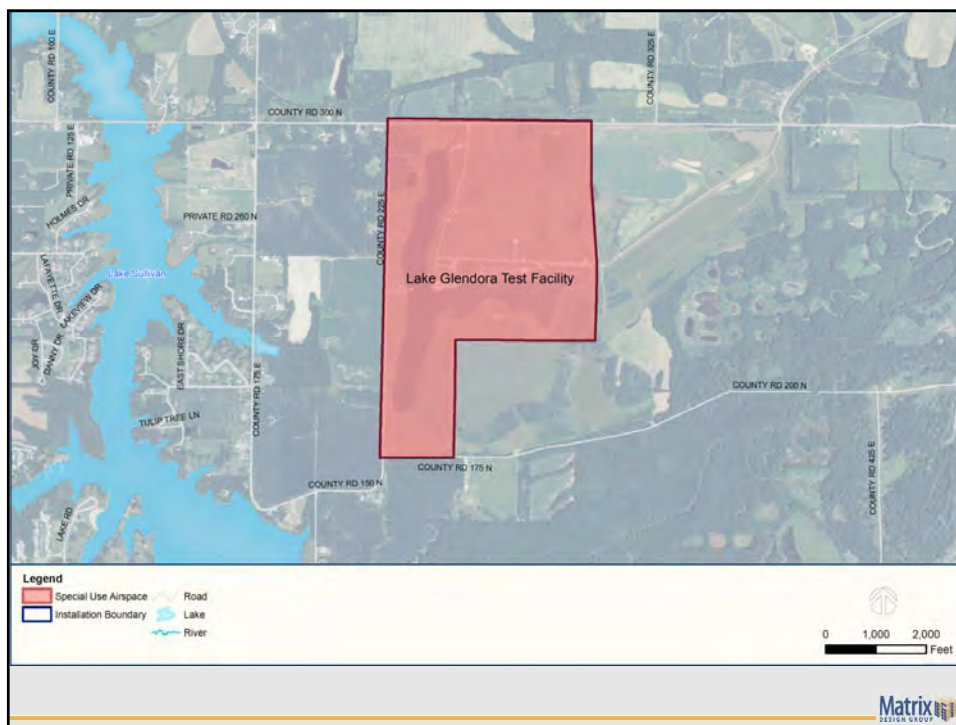
14


Naval Support Activity Crane

Military Mission Footprint

15





Matrix



NSA
CRANE
JOINT
LAND USE
STUDY

Fact Sheet #1: Overview / Factors

SA Safety Zones

SNR Scarcely Katalini Renaissance

Pressure to give upper to valuable natural resources (such as oil, natural gas, minerals and water resources) located for military installations, within military training areas, or within some historically used for military operations (such as coastal and cultivation and military operations).



VO Vertical Construction

Vertical construction projects include buildings, trees, structures, and other structures that may be used in the construction of a building. Vertical construction is used for military operations (such as construction of a building) and for other construction projects.

Vibration is an oscillation or motion that phenomena in discrete directions and is caused as a result of an impact, explosion, or mechanical operation, or other change of environment. Vibration may be caused by military or other civilian activities.

quality and systems for use by the institution and surrounding communities as the park develops. Water supply for agriculture and industrial use is also considered.




Issue Identification

Issues were identified through:

- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Committee inputs
- Public inputs







Issue Identification

Issue Priority				Ref ID #	Issue Statement
High	Medium	Low	Awareness		
Land Use (LU) continued					
					Adequate Commercial Truck Rest Facilities and Staging Areas Rest facilities and staging areas outside of NSA Crane which creates a safety concern and trucks overnighing in a gravel strip of land.
					Surrounding NSA Crane Surrounding NSA Crane do not employ land use potential to introduce incompatible military mission.
Legislative Initiatives (LEG)					
				LEG-1	Legislative Tools for the Military Base Protection Act Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.
Light and Glare					
				LG-1	Solar Farm at NSA Crane Potential for the future solar farm at the NSA Crane Eagle View Golf Club to create glare impacting adjacent residences in Burns City.

44 total issues identified:
 17 specific to Sullivan County

Page 6 of 8




Issue Prioritization

ISSUE PRIORITIES

High Priority

These issues are critical to address within 1-2 years following completion of the JLUS.

Medium Priority


These issues are important and should be addressed in the 3-4 years following completion of the JLUS.


Low Priority

These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.

Awareness


These issues do not need to be addressed in the short-term but should be monitored for the potential to become compatibility issues in the future.







Exercise Example

Issue Priority					Ref ID #	Issue Statement
High	Medium	Low	On-Going	Awareness		
Interagency Coordination / Communication (COM)						
•	•				COM-4	Enhanced Economic Benefit What procedures or initiatives could be implemented to assist local jurisdictions and businesses enhance the economic benefit associated with the installation.
		•	•	•	COM-5	Natural Resource Management When aircraft crash on the range, the collision has the potential to degrade the natural environment. All affected land management agencies are not currently involved in the appropriate and adequate clean-up and restoration of the lands, and better communication on events is needed.
Land Use (LU)						
•	•		•		LU-1	Transfer of Development Rights (TDR) Program Updates Churchill County's TDR program sets provisions for acquiring development rights (conservation easements), however the program does not identify receiving sites in light of military compatibility planning concerns. Review program and refine to enhance as compatibility tool.
	•	•	•	•	LU-2	Cluster Zoning Ordinance Updates The Churchill County ordinance currently allows for higher densities near military installations and environmentally sensitive areas (and protection through conservation easements), but does not fully account for military compatibility issues.




[illegible]

Questions & Answers



Next Steps



27



Next Steps


- **Public Forum 2:**
 - Last night in Daviess, Greene, Martin Counties
 - Tomorrow night in Lawrence County
- **Update project website:**
 - Prioritization results from Public Forum 2
 - Comments and responses from Public Forum 2
 - Frequently Asked Questions (FAQ)
- **Spring 2016 (Public review / comment) Draft JLUS**





Thank you for your attendance!!!

29



For Questions Contact:

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www.cranejlus.com

69



NSA CRANE

JOINT LAND USE STUDY

*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Compatibility Issues for Prioritization

The following pages contain a list of the preliminary compatibility issues identified to date. The issues listed are a work in progress that will be further refined and developed as additional input is obtained and the project progresses. This list was developed based on Policy Committee and Technical Working Group inputs, stakeholder interviews, Public Forum #1, and input from Matrix staff. Each issue is categorized by Compatibility Factor (the list below identifies the 25 compatibility factors initially presented for issue identification). Please assign a priority based on the implementation timeframe described below. Input received will be used to assist in the development of compatibility recommendations and strategies to address each issue.

COMPATIBILITY FACTORS

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

ISSUE PRIORITIES

High Priority

These issues are critical to address within 1-2 years following completion of the JLUS.

Medium Priority

These issues are important and should be addressed in the 3-4 years following completion of the JLUS.

Low Priority

These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.

Awareness

No issues were addressed for these factors; however, the potential for compatibility issues to arise in the future should be monitored.

Issue Priority

High

Medium







Low

Awareness

Ref
ID
#

Issue Statement

Anti-Terrorism / Force Protection (AT)

				<p>AT-1</p>	<p>Line-of-Sight at Lake Glendora Testing Facility</p> <p>Higher terrain elevations outside the Lake Glendora Test Facility have potential for outside observation of operations creating a security concern.</p>
				<p>AT-3</p>	<p>Controlled Perimeter at Lake Glendora Test Facility</p> <p>The controlled perimeter at the Lake Glendora Test Facility is on the property line at points along the southern and eastern boundaries creating a line-of-sight security concern.</p>

Issue Priority

High

Medium





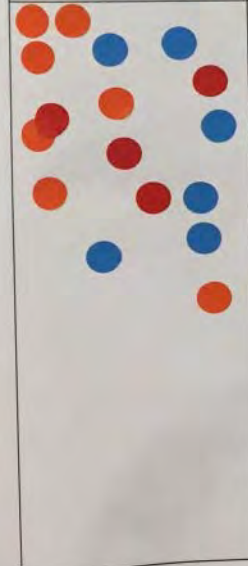


Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM)

				<p>COM-1</p>	<p>Public Awareness and Knowledge of Lake Glendora Test Facility Need for increased public education of Lake Glendora Test Facility amongst the local community.</p>
				<p>COM-2</p>	<p>Contact and Coordination between Lake Glendora Test Facility and Surrounding Jurisdictions Need for enhanced and formal communication between surrounding jurisdictions and Lake Glendora Test Facility personnel / leadership.</p>

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM)

				COM-3	<p>Local Jurisdiction Planning Resources</p> <p>Need for improved awareness of local jurisdiction planning department structure, resources, and knowledge to facilitate coordination and communication from Lake Glendora Test Facility.</p>
				COM-5	<p>Lake Glendora Test Facility Public Outreach</p> <p>Need for Lake Glendora Test Facility public outreach with surrounding jurisdictions.</p>

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM) continued

				COM-7	<p>Coordinated Noise Complaint Process</p> <p>Concern that not all noise complaints generated by public and reported to jurisdiction authorities are conveyed to NSA Crane, creating a gap in the communication of complaints.</p>
				COM-8	<p>Development Notification to Lake Glendora Test Facility</p> <p>Lack of coordination to notify NSA Crane of development within 3-mile radius around Lake Glendora Test Facility despite the state legislative mandate.</p>

Issue Priority

High

Medium

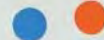
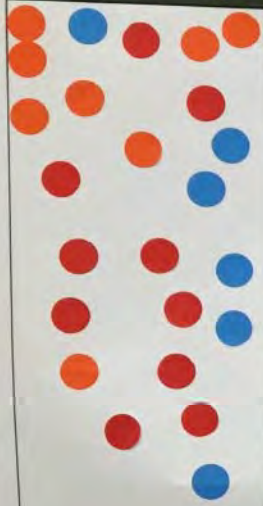
Low

Awareness

Ref
ID
#

Issue Statement

Frequency Spectrum Impedance / Interference (FSI)

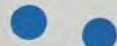


FSI-1

Frequency Interference on Wireless Devices

Frequency interference issues have increased as wireless demands and technology use skyrockets. Residents near Lake Glendora Test Facility have experienced cellular signal loss.

Land / Air/ Sea Spaces (LAS)



LAS-1

Potential for Seaplane Base on Kayak Lake Near the Lake Glendora Test Facility

Concern that the approval of private seaplane base on Kayak Lake located near Lake Glendora Test Facility could potentially interfere with the restricted airspace.

Issue Priority

High

Medium



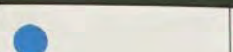
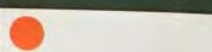
Low

Awareness

Ref
ID
#

Issue Statement





Land Use (LU)

				LU-4
--	---	---	--	------

Development Surrounding Lake Glendora Test Facility

Potential for incompatible land uses surrounding the Lake Glendora Test Facility or interference from incompatible uses with mission capabilities.

Legislative Initiatives (LEG)

				LEG-1
--	--	--	---	-------

Legislative Tools for Indiana's Military Base Protection Act

Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.

Issue Priority

Ref
ID
#

Issue Statement

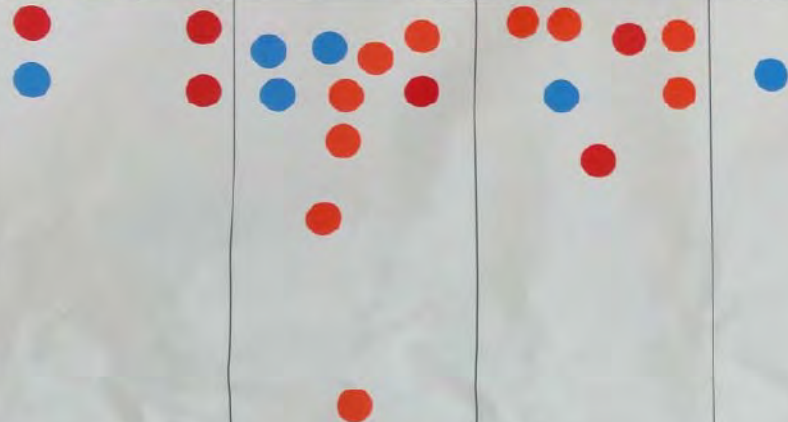
High

Medium

Low

Awareness

Noise (NOI)

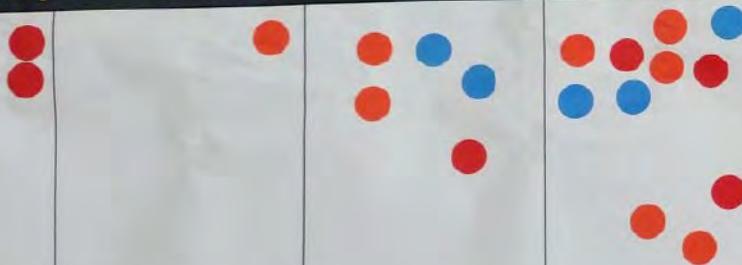


NOI-2

Noise from Lake Glendora Test Facility

Noise from Lake Glendora Test Facility operations extends outside the property and has the potential to affect noise sensitive land uses.

Public Trespassing (PT)



PT-5

Public Recreational Fishing at Lake Glendora Test Facility

Public trespassing to recreational fish at Little Lake Glendora on the Lake Glendora Test Facility property is a security and safety concern.

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Safety Zones (SA)

--	--	--	--	--

SA-2

Methane Gas Wells and Mine Shafts located near Lake Glendora Test Facility

There are various methane gas wells and underground mine shafts located near Lake Glendora Test Facility, including a pipeline that connects the gas wells which run along Sullivan County Road 300N. Location of several of these wells and mine shafts are unknown creating a concern for risk of explosion.

Safety Zones (SA) continued





--	--	--	--	--

SA-3

Hazardous Materials Transportation Routes

There are no designated Hazardous Materials Transportation Routes in association with daily shipments to NSA Crane. Because the same route is never used in sequence, many local roads are used for transport of hazardous materials.

Vibration (V)

		 		V-2	Vibration from Activities at the Lake Glendora Test Facility Concern that vibration from testing activities at the Lake Glendora Test Facility causes vibration outside the property. Vibration may also be misattributed to other regional sources such as CSX railroad traffic.
--	---	--	---	-----	---



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

The noise chart for LGTF are completely inaccurate. The charts were not even provided to LGTF for review. There is only a 10lb NEW for surface (noise producing) charges. The 100lb NEW (surface) would never be approved. The info is damaging.

Please return this comment form to the registration table or to a project representative.



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Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

- Internet is sometimes patchy

- I farm across road from Lake Glendora - My GPS in tractor + combine quits while I am in that field. When GPS quits, the planter quits planting. please contact me directly. Thanks

Please return this comment form to the registration table or to a project representative.

NSA
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Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Is there a plan to expand the Chandra facility or change what they do there to create an incompatibility issue with Sullivan on the surrounding area

Please return this comment form to the registration table or to a project representative.

NSA
CRANE

JOINT
LAND USE
STUDY

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Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Thank you for your presentation tonight
The Advancement for the protection of America is mandatory and deserves co-operation

I'm highly concerned about the vertical atmospheric impact of any explosions in the area that might affect airspace and require a higher ceiling in a temporary Flight Restriction area. SIV airport uses a left hand pattern on both runways 18 and 36. Twin engine aircraft and the larger planes that use SIV on Rwy 18 need notice from Flight Service when the TFR is in effect.

Please return this comment form to the registration table or to a project representative.

Sullivan County Board of Aviation Commissioners Paul W. Wilkey, Secretary & Private Pilot over

SIV and its users need a notification system when the TFR is in effect.

Most flights in & out of SIV are Local, recreational and VFR.

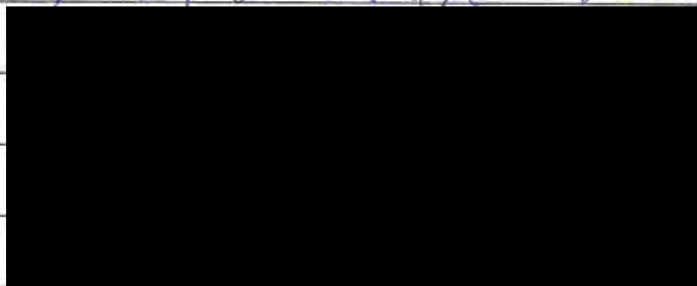


A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

We lose wireless routers frequently. I live approximately 3/4 of a mile away



Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

UM IS NOT A WORD!

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

I WANT TO ASK QUESTION ABOUT HOW THIS ^{GOT} STARTED
ON THE STATE ~~MEETING~~ PART.

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

- ELECTRICAL PWR FLUCTUATION

Evening

- DISH TV

- CELL PHONE

- ~~RECENT~~ MY FI

- BLASTING

3 WKS AGO REMOVED
REFERRING
TO A
GAS STATION

WI THIN SUBSTATION INSTALLATION
ANTENNAS

LIVE ON ~~ADJACENT~~ LAND
(PARK LAND)

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

WIFI

DIGITAL TV

INTERFERENCE

W/IN LAST 8 mo & PARTICULARLY
W/IN LAST 2 mo

RANGE 1-2 mile NW

CO RD 175 / 300 TO CO 450 & 175E

Please return this comment form to the registration table or to a project representative.

NSA
CRANE

JOINT
LAND USE
STUDY

A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

What is the noise Db from your testing?
Do you have any seismographs for vibration readings?
If so what are they for the past 3 years?
Are you buying any land within 1 mile of Lake
Glendora Test Fae? Lights, Internet, and TV problems
Foundation problems and
no knowledge of meetings.

Please return this comment form to the registration table or to a project representative.

Would like to speak
about cell phone & WIFI
reception.

NSA
CRANE

JOINT
LAND USE
STUDY

A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

If any compatibility issues arise between NSA Crane and
adjoining landowners that affect "the mission" how will this be
handled if the compatibility issue is associated with the landowner.
If the compatibility issue addressed would result in restriction to
land use, how will landowner be compensated for loss of land use?

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

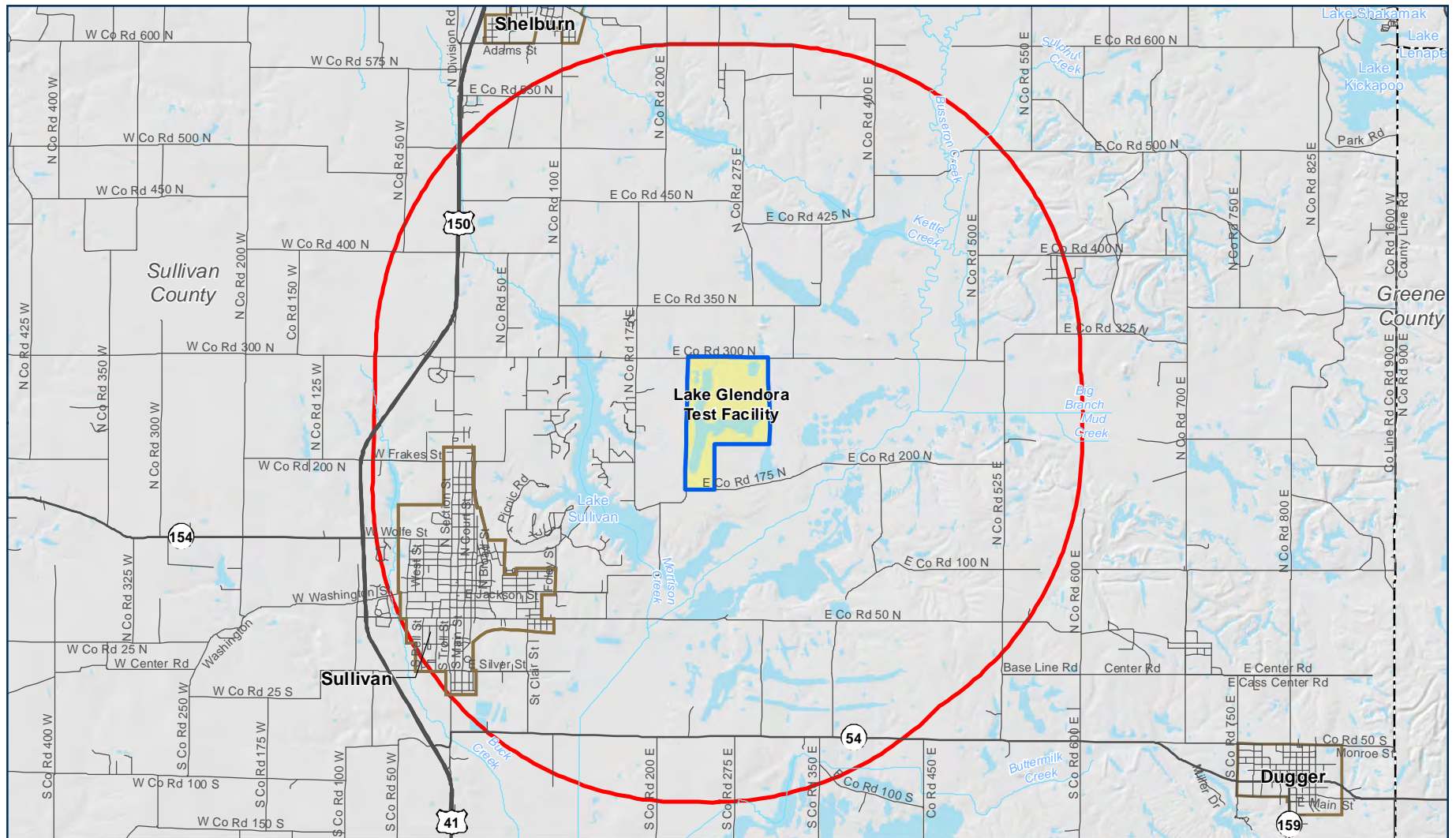
Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

The issues of internet, cell phone AND all frequency spectrum
issues ARE NOT BEING ANSWERED. Will you interrupt GPS, 900 mhz
AND 2.4 spectrums? With no zoning in effect, how does
CONSTRUCTION OCCUR?

How will we be notified

When things will happen?

Please return this comment form to the registration table or to a project representative.



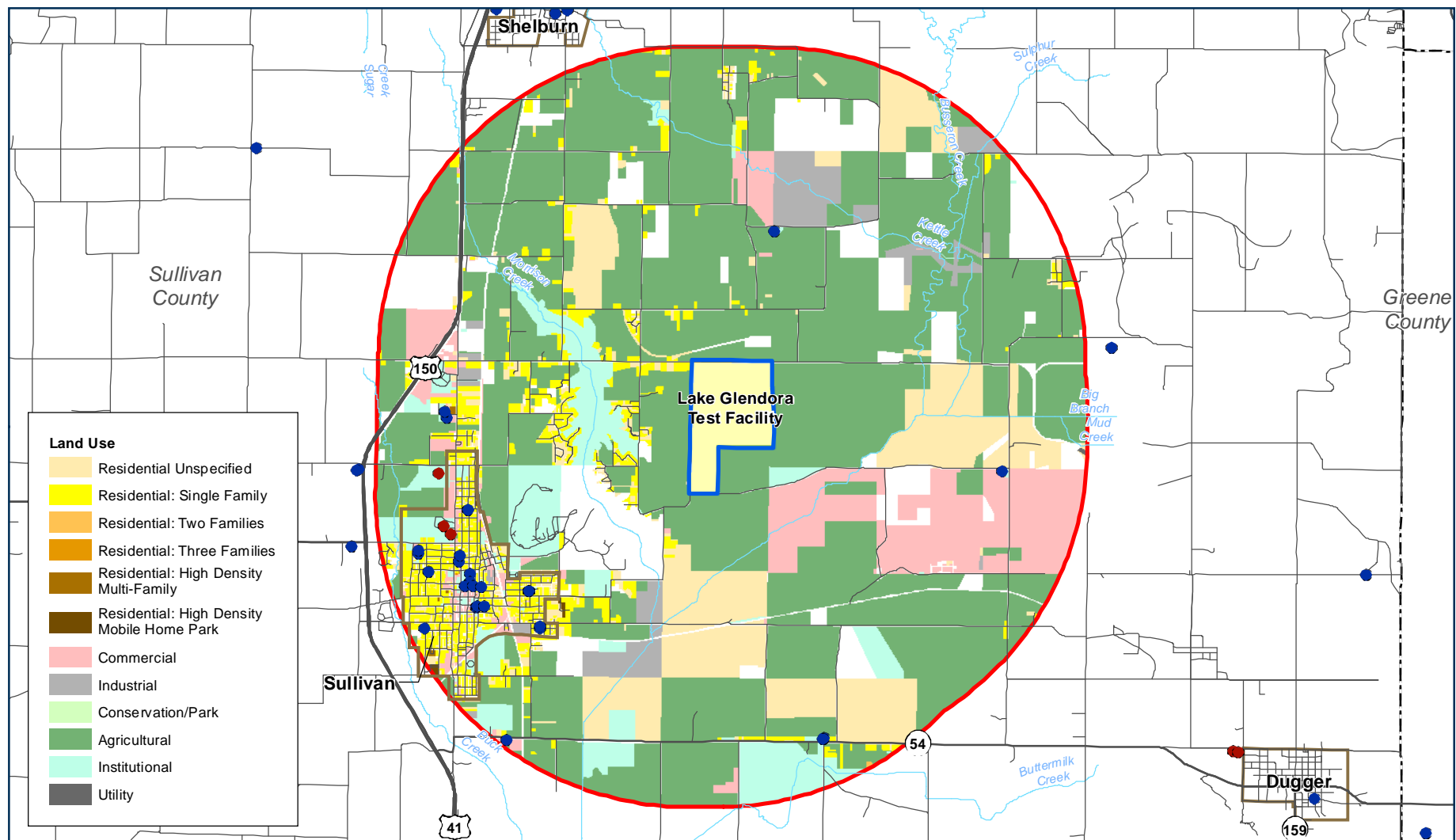
Legend

- Proposed 3-Mile Notification Buffer
- Installation Boundary
- Highway
- Water Body
- Incorporated Community
- Road
- River/Creek
- County Boundary



Source: State of Indiana, 2015. NSA Crane, 2015.

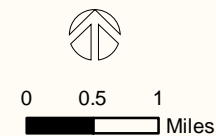
3-Mile Notification Area Lake Glendora Test Facility



Legend

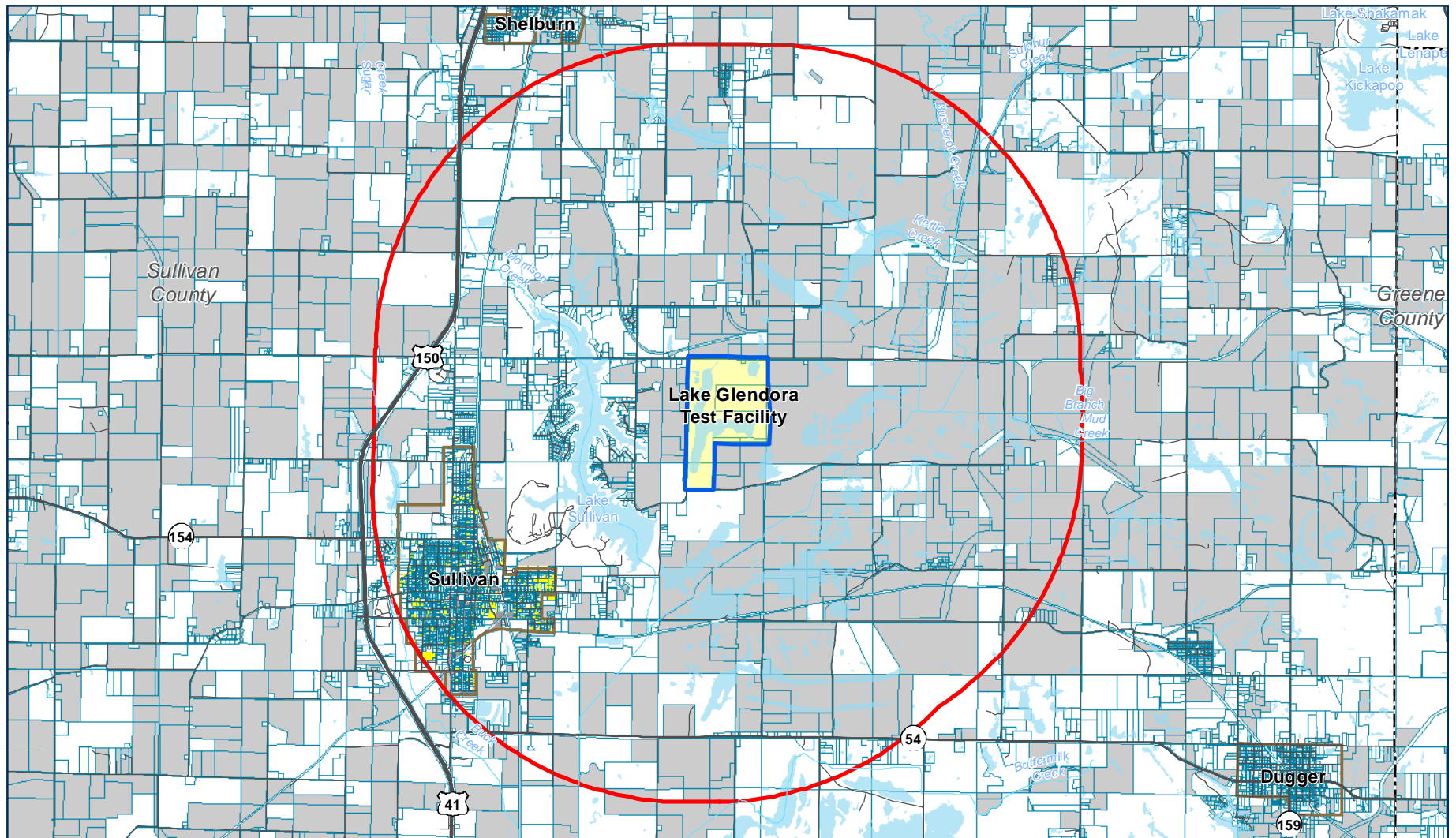
- Schools
- Religious Facilities
- Proposed 3-Mile Notification Buffer
- Installation Boundary
- Incorporated Community
- County Boundary
- Road
- River/Creek

White space within the 3-mile notification buffer represents areas with no land use described in the data.



Source: State of Indiana, 2015. NSA Crane, 2015.

Lake Glendora Test Facility and Existing Land Use within 3-Mile Notification Area



Legend

City of Sullivan Zoning For Vacant Parcels

GB - General Business
I - Industrial

R1 - Residence
R2 - Residence
R3 - Residence

Vacant Parcels
Outside of City
of Sullivan

Parcel

Proposed 3-Mile Notification Buffer

Installation Boundary

Incorporated
Community

County Boundary

Road

Water Body

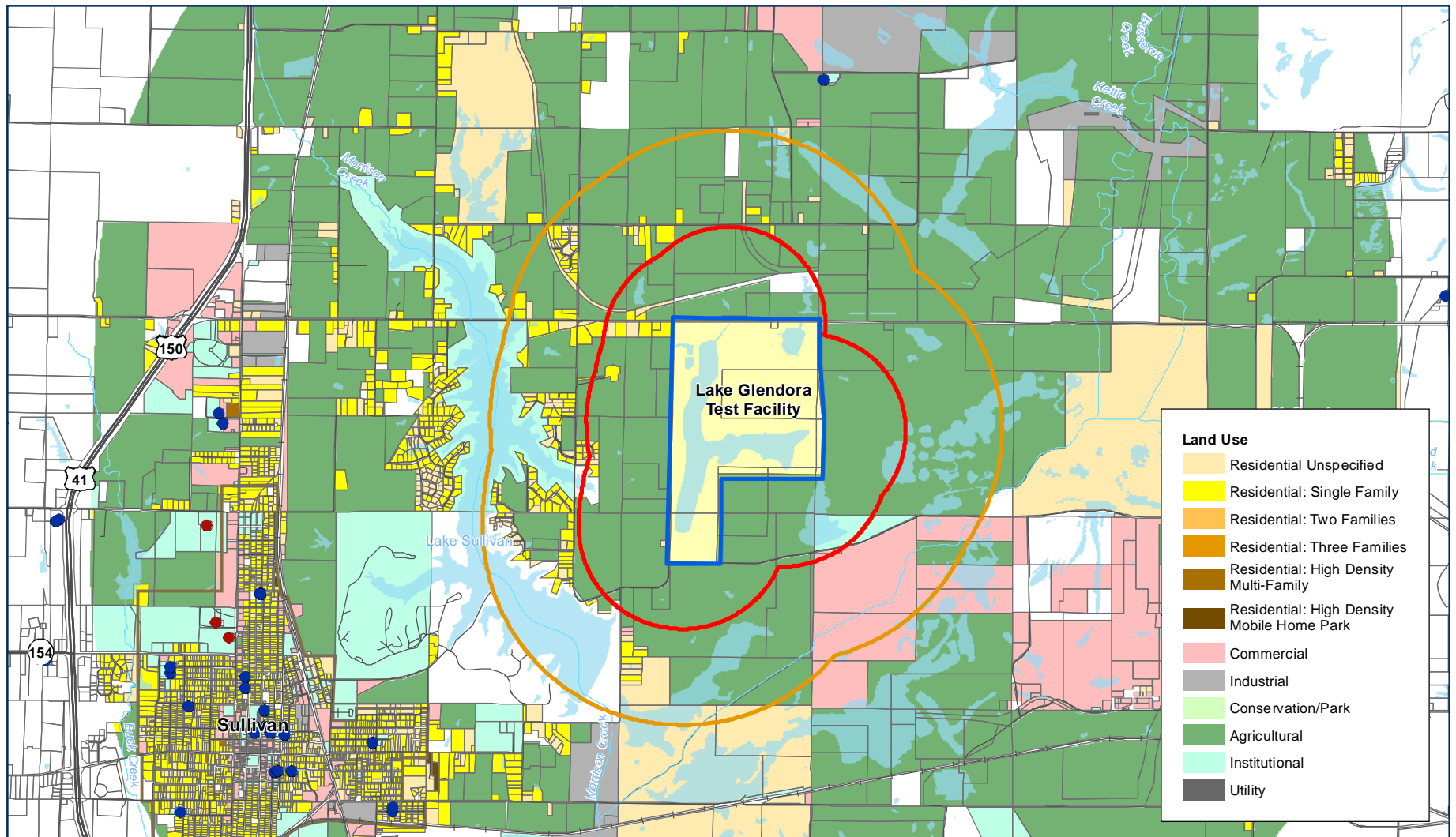
River/Creek

0 0.5 1
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

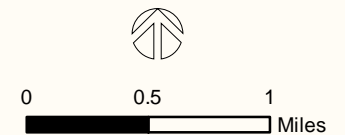
Lake Glendora Test Facility and Vacant Parcels



Legend

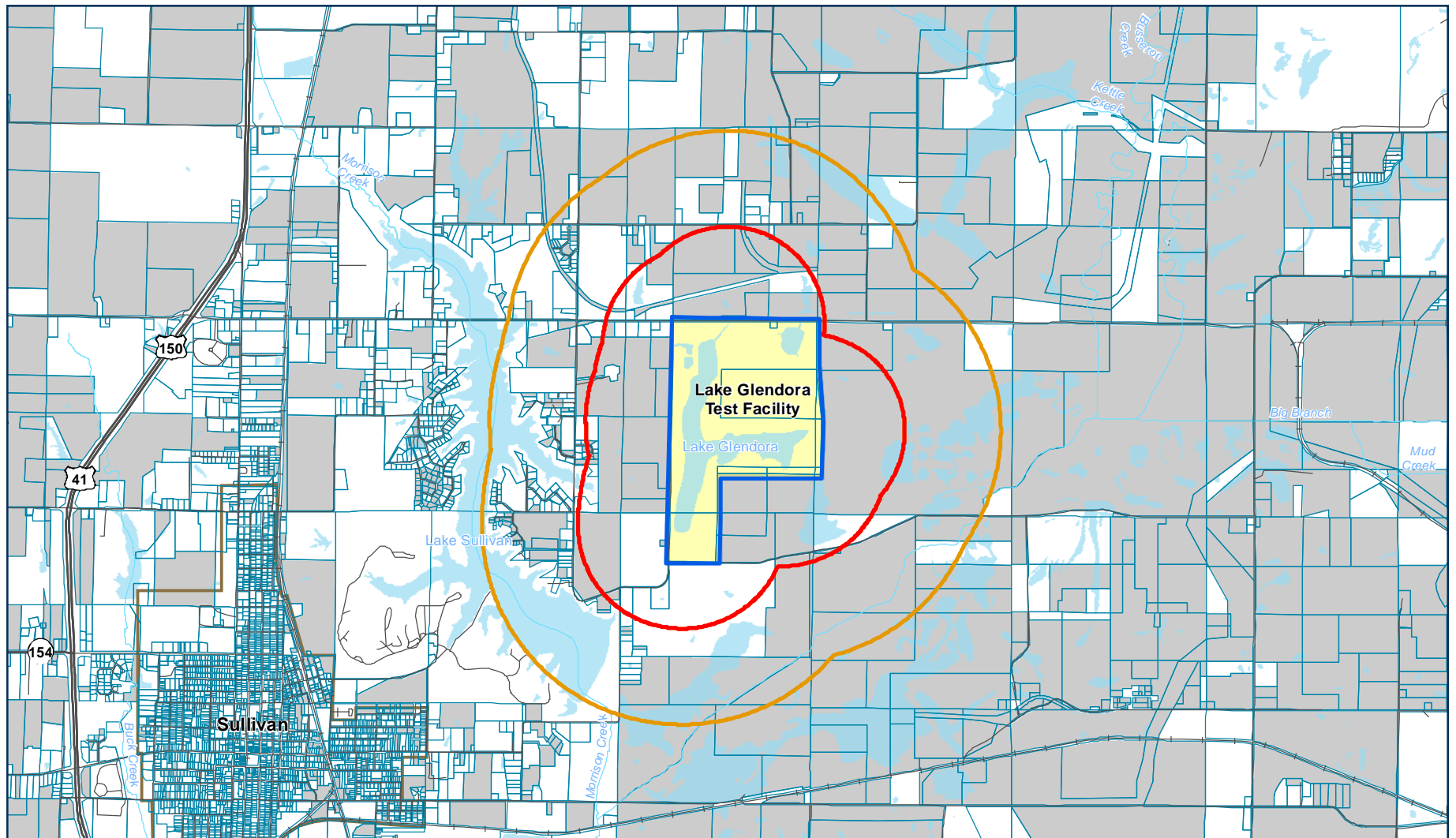
- Predicted 123 dB Noise Contour with 100 lb. Explosive Charge
- Predicted 117 dB Noise Contour with 100 lb. Explosive Charge
- Schools
- Religious Facilities
- Parcel
- Installation Boundary
- Incorporated Community
- Road
- Railroad
- Water Body
- River/Creek

White space represents areas with no land use described in the data.













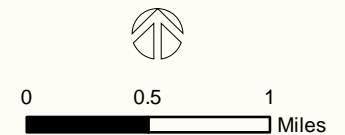
Source: State of Indiana, 2015. NSA Crane, 2015.

Existing Land Use and Noise Contours Lake Glendora Test Facility



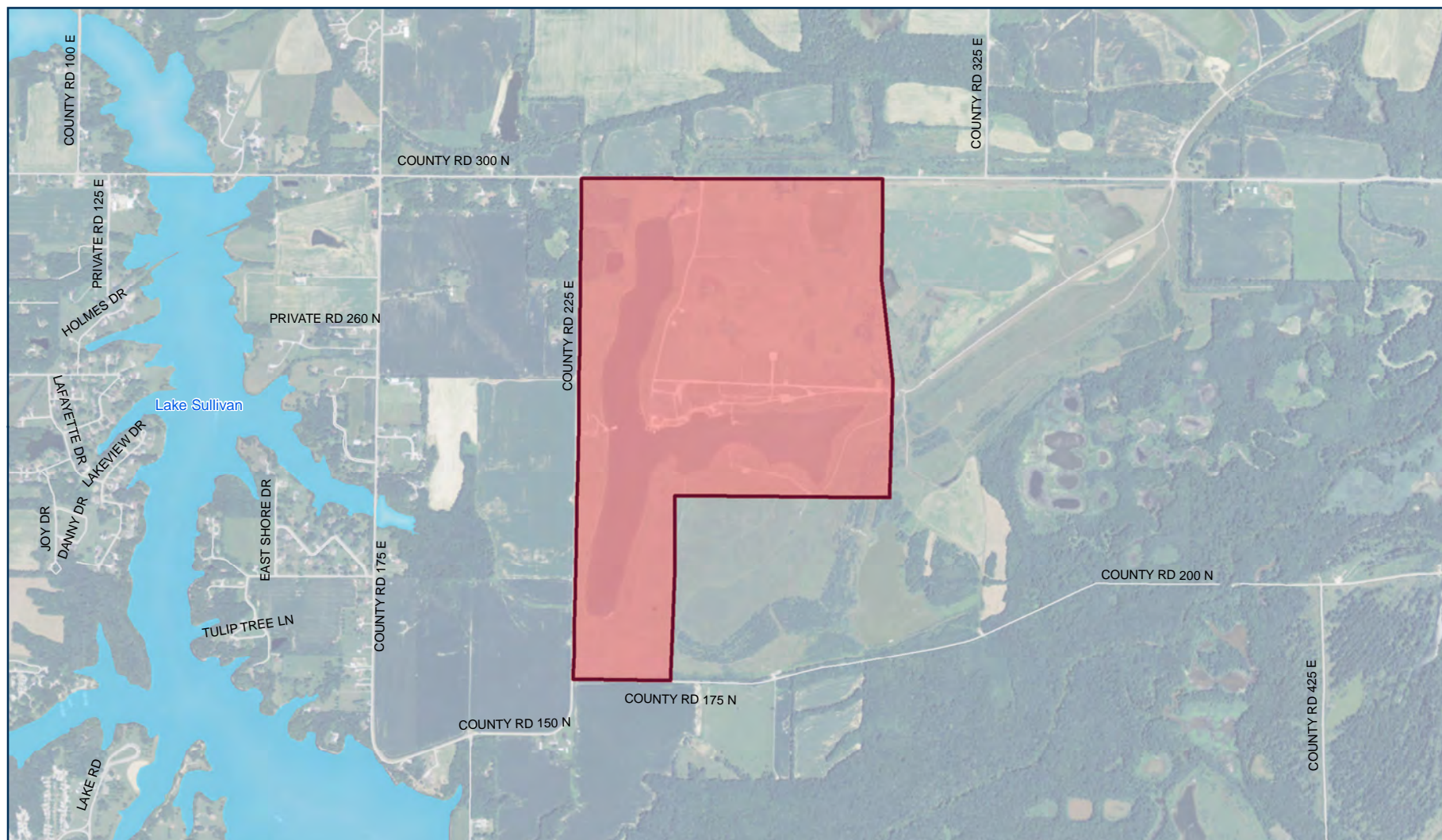
Legend

- | | | | | |
|--|--|--|--|---|
|  Predicted 123 dB Noise Contour with 100 lb. Explosive Charge |  Vacant Parcels |  Installation Boundary |  Road |  Water Body |
|  Predicted 117 dB Noise Contour with 100 lb. Explosive Charge |  All Parcels |  Incorporated Community |  Railroad |  River/Creek |



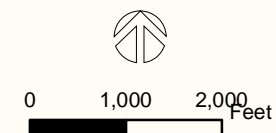
Source: State of Indiana, 2015. NSA Crane, 2015.

Vacant Parcels and Noise Contours Lake Glendora Test Facility



Legend

- R-3405
- Restricted rom surface to 1,500 feet MSL
- Installation Boundary
- Road
- Lake
- River



Source: State of Indiana, 2015. NSA Crane, 2015.

Lake Glendora Test Facility Restricted Airspace



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 24, 2016 / 6:00pm

GROUP: Public Forum #2

LOCATION: Lawrence County

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Reyn Griffith	Bryantsville	812-583-5669	rggriffth16@gmail.com
Greg Edwards	BRYANTSVILLE	812-298-6142	gregedwards2463@gmail.com
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JUSTIN MATHEWS	Bedford	812-583-5059	justin Mathews 812@gmail.com
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Robin Branch	Bloomington IN	812-326-0480	rbranch@vinu.edu

[illegible]



PUBLIC MEETING SIGN-IN SHEET

DATE / TIME: February 24, 2016 / 6:00pm

GROUP: Public Forum #2

LOCATION: Lawrence County

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Bob Cline	Helltownville	812 583-2606	robert.russell.cline@gmail.com
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CDR TIM CRADDOCK	NSA CRANE	812-854-8989	
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CDR SEAN DALTON	NSA CRANE		
Bill Spren	L. Piedemore Co		

[illegible]

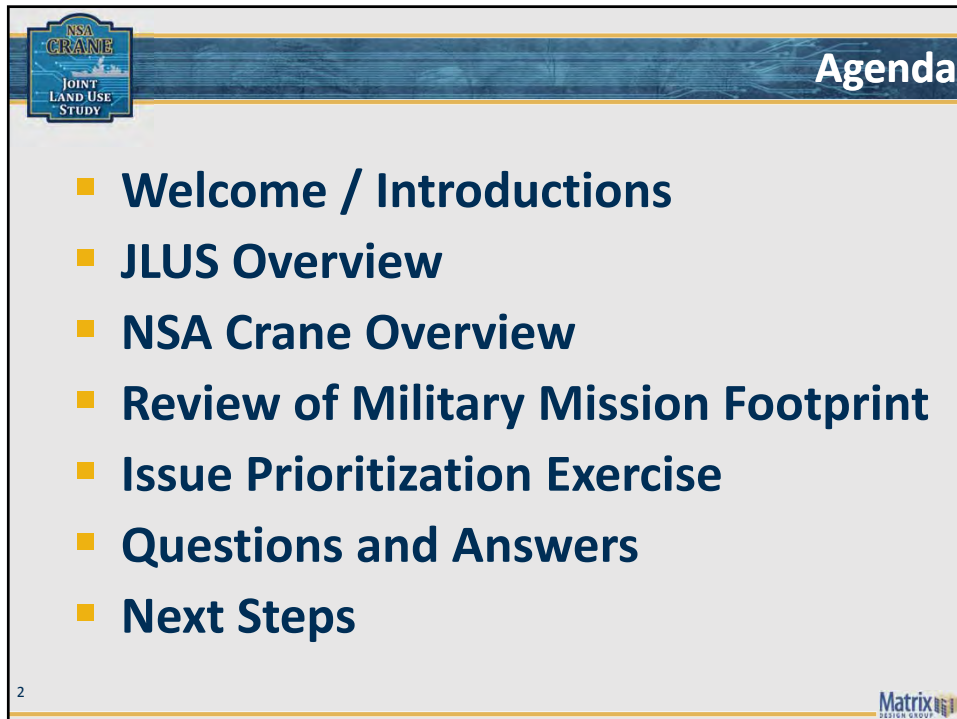


The slide features a dark blue background with a subtle grid pattern. In the upper left, there is a logo for the NSA Crane Joint Land Use Study, which includes a stylized crane and the text "NSA CRANE JOINT LAND USE STUDY". To the right of this logo is a horizontal band with a light blue background and a pattern of circuit lines. Below this band, the text "PUBLIC FORUM 2" is written in large, white, bold letters, followed by "Lawrence County" in a smaller, yellow, bold font. At the bottom left is the Matrix Design Group logo, and at the bottom right is the date "February 24, 2016".

NSA CRANE
JOINT LAND USE STUDY

PUBLIC FORUM 2
Lawrence County

Matrix DESIGN GROUP
February 24, 2016



The slide has a light gray background. In the top left corner is the NSA Crane Joint Land Use Study logo. In the top right corner, the word "Agenda" is written in a bold, black font. Below the header, there is a list of seven items, each preceded by a yellow square bullet point. The items are: "Welcome / Introductions", "JLUS Overview", "NSA Crane Overview", "Review of Military Mission Footprint", "Issue Prioritization Exercise", "Questions and Answers", and "Next Steps". At the bottom left is a small number "2", and at the bottom right is the Matrix Design Group logo.

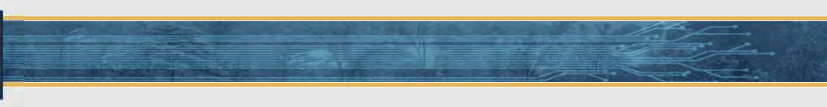
NSA CRANE
JOINT LAND USE STUDY

Agenda

- Welcome / Introductions
- JLUS Overview
- NSA Crane Overview
- Review of Military Mission Footprint
- Issue Prioritization Exercise
- Questions and Answers
- Next Steps


2

Matrix DESIGN GROUP



Welcome / Introductions

3





Project Team



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4






Partners / Participants

Partners <ul style="list-style-type: none">■ Martin County■ Greene County■ Lawrence County■ Daviess County■ Sullivan County■ NSA Crane	Sponsor Committee <ul style="list-style-type: none">■ Indiana Office of Community and Rural Affairs (OCRA)■ RADIUS Indiana■ Indiana Office of Defense Development (IODD)■ NSA Crane
Committees <ul style="list-style-type: none">■ Policy Committee■ Technical Working Group	Consultant Team <ul style="list-style-type: none">■ Matrix Design Group


5





JLUS Overview

6



What is a JLUS?

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

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

Initiated in 1985 by the Office of Economic Adjustment (DoD)

Over 120 JLUSs have been completed nationally


7

JLUS Facts

A JLUS is:

- a collaborative process between stakeholder partners
- Set of recommendations to mitigate or prevent incompatible development associated with the military mission:
 - Information
 - Communication
 - Coordination
 - Policy
 - Regulatory

8




JLUS Facts

A JLUS is NOT:

- a regulatory document
- an enforceable action

A JLUS is a body of information for decision makers of all levels to assist in making informed decisions

A JLUS requires follow-on support by all stakeholders, including the public, to implement the recommendations

9




JLUS Objectives


Community

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

Military

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

10


JLUS Approach


Goal is to link to geographic areas to the issues

- Identify areas by specific compatibility issues and concerns
- Narrow focus to areas where the issues exist
- Minimize areas that require controls or policies
- Link solution types and tools to specific areas

Develop an implementation strategy for preventing and mitigating encroachment:

- Recommendations will involve local jurisdictions, state and federal agencies, private organizations, and the military
- Tie recommendations to specific military areas of concern


11 



Public Involvement

Public input is essential to the success of the JLUS

Public Input / Comment Cards





A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Please return this comment form to the registration table or to a project representative.

12 



Public Involvement

Public input is essential to the success of the JLUS

Project Website
www.cranejlus.com


Public Forums


Informational Brochures


Public Review

Public Flyers / Post Cards

Group E-mail Blast Notification



13





Technical Process/Deliverables

Background Report

- Introduction
- Community Profile
- Military Profile
- Existing Compatibility Tools
- Compatibility Assessment

JLUS

- Background Report Summary
- **Implementation Plan**

14




Naval Support Activity Crane

15

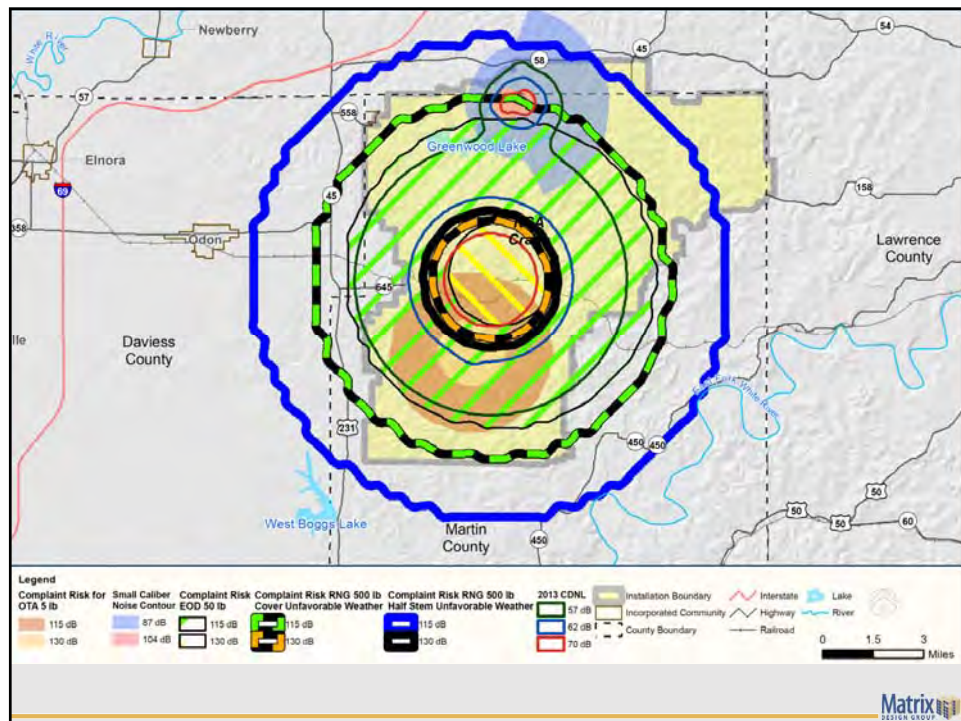
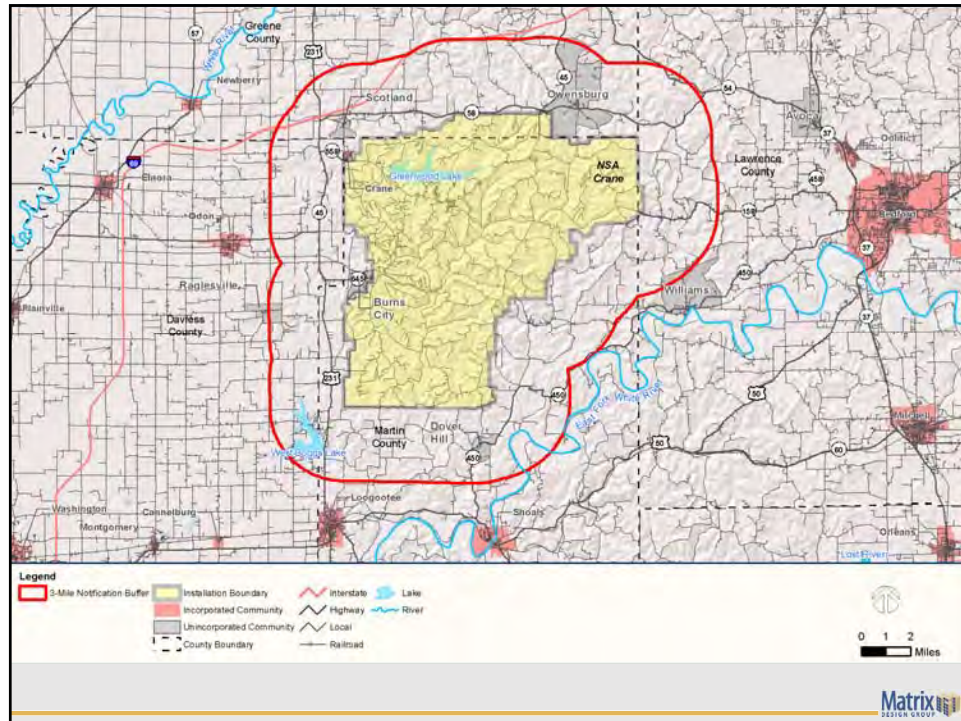


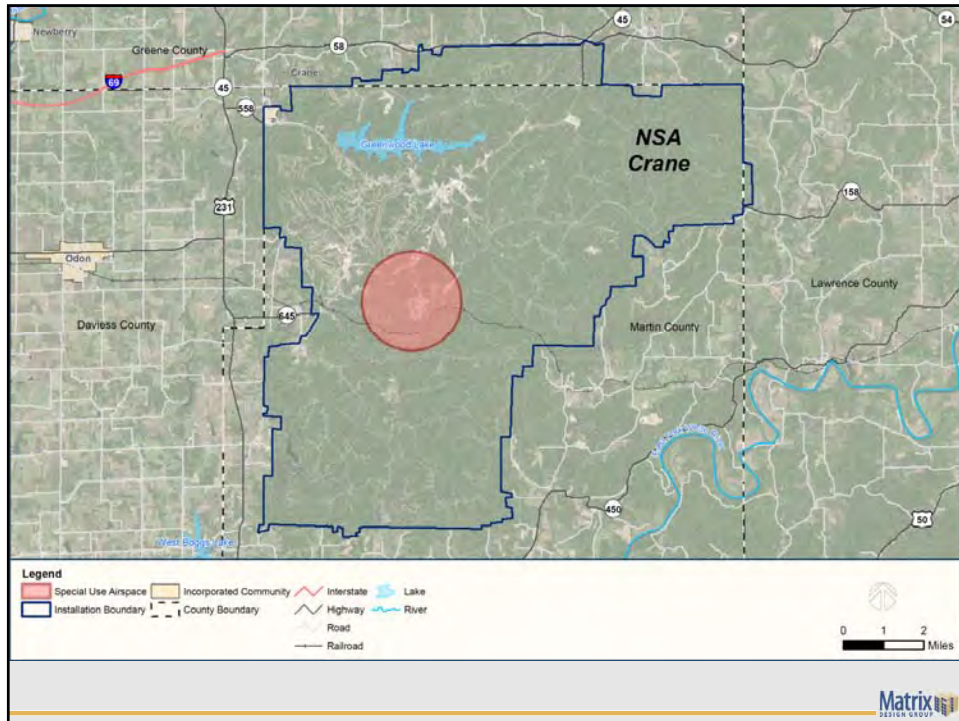
Naval Support Activity Crane

Military Mission Footprint


16







Issue Prioritization Group Exercise



NSA Crane Joint Land Use Study

Areas of Compatibility

NSA Crane Joint Land Use Study

What is Compatibility?

Compatibility is a relationship between military and civilian activities that can co-exist in the same area. It is the ability of military and civilian activities to co-exist in the same area without causing harm to each other. The goal of this study is to identify areas of compatibility between military and civilian activities in the NSA Crane area.

CA Climate Adaptation

Climate adaptation is the process of adjusting to the actual or expected climate and its effects. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community adapt to climate change.

ED Energy Development

Energy development is the process of developing and using energy resources. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community develop and use energy resources.

FSC Frequency Spectrum Capacity

Frequency spectrum capacity is the ability of a frequency spectrum to support multiple users. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community use the frequency spectrum.

FSI Frequency Spectrum Interference / Disturbance

Frequency spectrum interference or disturbance is the process of interfering with the use of a frequency spectrum. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community avoid interference or disturbance.

HA Housing Availability

Housing availability is the process of providing housing for people. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community provide housing.

IE Infrastructure Extensions

Infrastructure extensions are the process of extending infrastructure. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community extend infrastructure.

DSS Data/Security/Status

Data, security, and status are important factors in the NSA Crane area. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage data, security, and status.

BIO Biological Resources

Biological resources are the process of managing biological resources. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage biological resources.

AT Air Traffic / Airports

Air traffic and airports are important factors in the NSA Crane area. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage air traffic and airports.

AQ Air Quality

Air quality is the process of managing air quality. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage air quality.

COM Communication / Coordination

Communication and coordination are important factors in the NSA Crane area. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage communication and coordination.

CR Cultural Resources

Cultural resources are the process of managing cultural resources. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage cultural resources.

Fact Sheet #1: Overview / Factors

LAS Land/Air Space

Land and air space are important factors in the NSA Crane area. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage land and air space.

MAR Marine Environment

Marine environment is the process of managing the marine environment. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage the marine environment.

SA Safety Zones

Safety zones are the process of managing safety zones. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage safety zones.

NOI Noise

Noise is the process of managing noise. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage noise.

SNR Scenic Natural Resources

Scenic natural resources are the process of managing scenic natural resources. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage scenic natural resources.

PT Public Trespassing

Public trespassing is the process of managing public trespassing. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage public trespassing.

VO Vertical Obstructions

Vertical obstructions are the process of managing vertical obstructions. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage vertical obstructions.

V Vibration

Vibration is the process of managing vibration. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage vibration.

RC Roadway Capacity

Roadway capacity is the process of managing roadway capacity. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage roadway capacity.

LG Light and Glare

Light and glare are the process of managing light and glare. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage light and glare.

WQ Water Quality / Quantity

Water quality and quantity are the process of managing water quality and quantity. This study will identify areas of compatibility between military and civilian activities in the NSA Crane area that can help the community manage water quality and quantity.




NSA Crane Joint Land Use Study

Issue Identification

Issues were identified through:

- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Committee inputs
- Public inputs






Issue Identification


44 total issues identified:

22 specific to this area

Issue Priority				Ref ID #	Issue Statement
High	Medium	Low	Awareness		
Land Use (LU) continued					
					Adequate Commercial Truck Rest Facilities and Staging Areas The lack of adequate rest facilities and staging areas outside of NSA Crane has resulted in trucks overnighing in a gravel strip of land opposite of the Town of Crane which creates a safety concern and community nuisance.
					Development Surrounding NSA Crane Most jurisdictions surrounding NSA Crane do not employ land use controls which has the potential to introduce incompatible development with the military mission.
Legislative Initiatives (LEG)					
				LEG-1	Legislative Tools for the Military Base Protection Act Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.
Light and Glare					
				LG-1	Solar Farm at NSA Crane Potential for the future solar farm at the NSA Crane Eagle View Golf Club to create glare impacting adjacent residences in Burns City.


Page 6 of 8






Issue Prioritization

ISSUE PRIORITIES	
High Priority	
These issues are critical to address within 1-2 years following completion of the JLUS.	
Medium Priority	
These issues are important and should be addressed in the 3-4 years following completion of the JLUS.	
Low Priority	
These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.	
Awareness	
These issues do not need to be addressed in the short-term but should be monitored for the potential to become compatibility issues in the future.	






Exercise Example

Issue Priority					Ref ID #	Issue Statement
High	Medium	Low	On-Going	Awareness		
Interagency Coordination / Communication (COM)						
•	•				COM-4	Enhanced Economic Benefit What procedures or initiatives could be implemented to assist local jurisdictions and businesses enhance the economic benefit associated with the installation.
•						Natural Resource Management When aircraft crash on the range, the collision has the potential to degrade the natural environment. All affected land management agencies are not currently involved in the appropriate and adequate clean-up and restoration of the lands, and better communication on events is needed.
Land Use (LU)						
•	•		•		LU-1	Transfer of Development Rights (TDR) Program Updates Churchill County's TDR program sets provisions for acquiring development rights (conservation easements), however the program does not identify receiving sites in light of military compatibility planning concerns. Review program and refine to enhance as compatibility tool.
	•	•	•	•		Cluster Zoning Ordinance Updates The Churchill County ordinance currently allows for higher densities near military installations and environmentally sensitive areas (and protection through conservation easements), but does not fully account for military compatibility issues.

for working model

cluster zoning ordinance can be updated to include military compatibility issues

Matrix DESIGN GROUP




Exercise

OTHER ISSUES:


DATE: 07-28-2016 09:04:00 AM


Matrix DESIGN GROUP



Issue Prioritization


ISSUE PRIORITIES
High Priority
These issues are critical to address within 1-2 years following completion of the JLUS.
Medium Priority
These issues are important and should be addressed in the 3-4 years following completion of the JLUS.
Low Priority
These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.
Awareness
These issues do not need to be addressed in the short-term but should be monitored for the potential to become compatibility issues in the future.






QUESTIONS



Questions & Answers






Next Steps


29



Next Steps


- **Public Forum 2:**
 - Monday night for Daviess, Greene and Martin Counties
 - Last night in Sullivan County
- **Update project website:**
 - Presentation from Public Forum 2
 - Prioritization results from Public Forum 2
 - Comments and responses from Public Forum 2
 - Frequently Asked Questions (FAQ)
- **Spring 2016 (Public review / comment) Draft JLUS**





Thank you for your attendance!!!

31




For Questions Contact:



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www.cranejlus.com

69



NSA CRANE

JOINT LAND USE STUDY

*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Compatibility Issues for Prioritization

The following pages contain a list of the preliminary compatibility issues identified to date. The issues listed are a work in progress that will be further refined and developed as additional input is obtained and the project progresses. This list was developed based on Policy Committee and Technical Working Group inputs, stakeholder interviews, Public Forum #1, and input from Matrix staff. Each issue is categorized by Compatibility Factor (the list below identifies the 25 compatibility factors initially presented for issue identification). Please assign a priority based on the implementation timeframe described below. Input received will be used to assist in the development of compatibility recommendations and strategies to address each issue.

COMPATIBILITY FACTORS

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

ISSUE PRIORITIES

High Priority

These issues are critical to address within 1-2 years following completion of the JLUS.

Medium Priority

These issues are important and should be addressed in the 3-4 years following completion of the JLUS.

Low Priority

These issues are a concern and need to be addressed in 5 or more years following completion of the JLUS.

Awareness

No issues were addressed for these factors; however, the potential for compatibility issues to arise in the future should be monitored.

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Biological Resources (BIO)

Threatened or Endangered Species

Areas at NSA Crane critical to threatened or endangered species such as the Bald Eagle, the Indiana Bat and the Northern Long-Eared Bat have the potential to impact mission operations and capability.

BIO-1

Coordination / Communication (COM)

Public Awareness and Knowledge of NSA Crane / Lake Glendora Test Facility

Need for increased public education of NSA Crane and Lake Glendora Test Facility amongst the local community.

COM-1

Contact and Coordination between NSA Crane and Surrounding Jurisdictions

Need for enhanced and formal communication between surrounding jurisdictions and NSA Crane personnel / leadership.

COM-2

Issue Priority

High

Medium


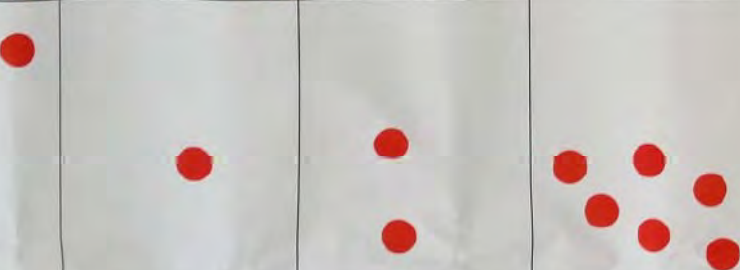


Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM) continued

				COM-3	Local Jurisdiction Planning Resources Need for improved awareness of local jurisdiction planning department structure, resources, and knowledge to facilitate coordination and communication from NSA Crane.
				COM-4	Coordination of Public Safety Resources NSA Crane physical security forces are not authorized to assist jurisdictions with public safety and there is perception that NSA Crane does not want local law enforcement participation on the installation.
				COM-5	NSA Crane Public Outreach Need for NSA Crane public outreach with surrounding jurisdictions.
				COM-6	Public Notification of Range Activities There is a need for increased public notification of NSA Crane range activities to surrounding local jurisdictions.

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Coordination / Communication (COM) continued

Coordinated Noise Complaint Process

Concern that not all noise complaints generated by public and reported to jurisdiction authorities are conveyed to NSA Crane, creating a gap in the communication of complaints.

COM-7

Development Notification to NSA Crane

Lack of coordination to notify NSA Crane of development within 3-mile radius around NSA Crane despite the state legislative mandate.

COM-8

Dust / Smoke / Steam

Dust from Demolition Area

Detonations at the NSA Crane Demolition Range can generate fugitive dust impacts outside the installation.

DSS-1

Smoke from Prescribed Burns

Smoke from prescribed burns at NSA Crane can migrate outside the installation.

DSS-2

Issue Priority

Ref
ID
#

Issue Statement

High

Medium

Low

Awareness

Housing Availability (HA)



HA-1

Lack of Housing Availability Proximate to NSA Crane

Need for high quality housing accommodations proximate to NSA Crane to attract and retain personnel in the local area.

Land Use (LU)



LU-5

Development Surrounding NSA Crane

Most jurisdictions surrounding NSA Crane do not employ land use controls which has the potential to introduce incompatible development with the military mission.

Legislative Initiatives (LEG)



LEG-1

Legislative Tools for the Military Base Protection Act

Need for implementation tools and enforcement procedures in Indiana Code intended to protect military installations in the state.

Issue Priority

High

Medium

Low

Awareness

Ref
ID
#

Issue Statement

Noise (NOI)

NOI-1

Noise from NSA Crane Ranges

Noise from the NSA Crane Ranges extends off installation and has the potential to affect noise sensitive land uses.

NOI-3

Regional Ground Noise Sources

There are other regional sources of noise which can be misattributed to activities at NSA Crane.

NOI-4

Regional Aircraft Noise Sources

The Indiana Air National Guard flyways in the airspace surrounding NSA Crane are sometimes mistakenly attributed to NSA Crane.

Issue Priority

High

Medium

Low

Awareness

Public Trespassing (PT)

Ref
ID
#

Issue Statement

PT-1

Potential for Trespassing Related to Future Milwaukee Road Transportation Trailway

Future Phase 4 of the Milwaukee Road Transportation Trailway will terminate at Indian Springs, Indiana adjacent to the eastern border of NSA Crane raising a concern for trespassing into the installation.

PT-2

Cattle Migrations onto NSA Crane

Cattle from adjacent farms have the potential to migrate on the installation. Area farmers who enter the property to retrieve their cattle can become a safety risk.

Build better fences

11 15 1998 PH 1200

PT-3

Padanaram Settlement

Safety concern for Padanaram Settlement residents trespassing on the eastern side of NSA Crane.

Issue Priority

Ref
ID
#

Issue Statement

High

Medium

Low

Awareness

Safety Zones (SA)

SA-3

Hazardous Materials Transportation Routes

There are no designated Hazardous Materials Transportation Routes in association with daily shipments to NSA Crane. Because the same route is never used in sequence, many local roads are used for transport of hazardous materials.

Vibration (V)

V-1

Vibration from NSA Crane Demolition Range

Concern that vibration from the Demolition Range activities at NSA Crane cause physical property damage to buildings and infrastructure outside the installation.

OTHER ISSUES:

Zoning is bad.



NSA
CRANE

JOINT
LAND USE
STUDY

A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

I would like to see the whole county with a land use plan so our county could attract businesses to make products for NSA Crane without destroying our underground water (KARST AREAS) and have the businesses a safe distance from current housing.

Please return this comment form to the registration table or to a project representative.

NSA
CRANE

JOINT
LAND USE
STUDY

A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

If the General Assembly does not create a process to deal with compatibility issues, I would encourage and support county action to ~~create regulate~~ establish such a process.

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

A county-wide comprehensive plan is overdue. Protect & support Crane.
Protect property values. Make county attractive to Crane employees.
Support business & infrastructure that supports Crane. Eliminate
incompatible land use potential near Crane. Expand Iden countywide.
Don't fail Bedford, Mitchell, and Lawrence County Comprehensive Plan
at creation.

Please return this comment form to the registration table or to a project representative.



A cooperative land use planning effort between
NSA Crane and surrounding communities

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Citizens of Lawrence County appreciate
the efforts of Crane and its
employees in supporting the American
Warfighter and our way of life.

Please return this comment form to the registration table or to a project representative.



*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

*Need to cover differences between Crane and
installations in urban settings.*

Please return this comment form to the registration table or to a project representative.



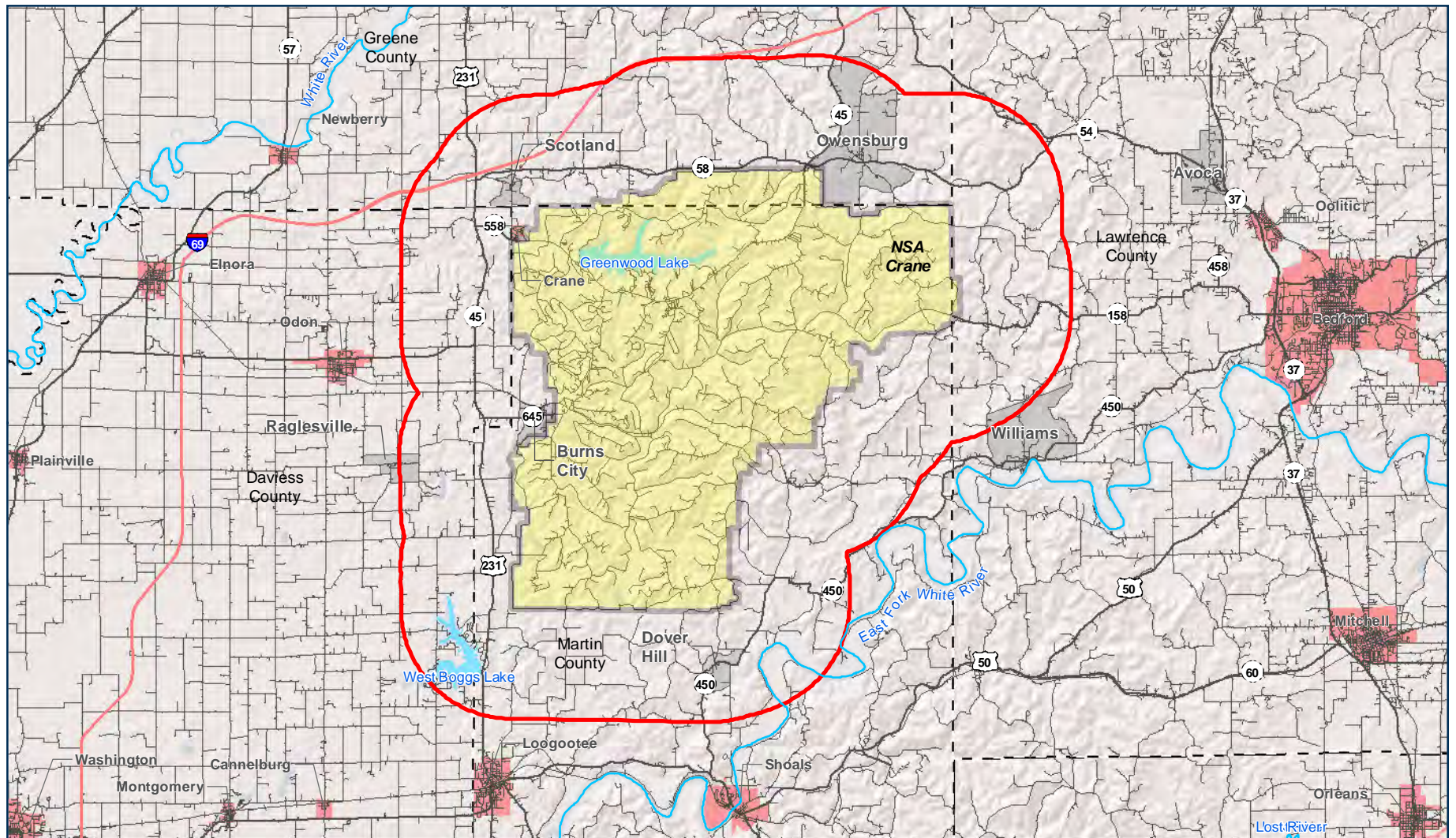
*A cooperative land use planning effort between
NSA Crane and surrounding communities*

Comments

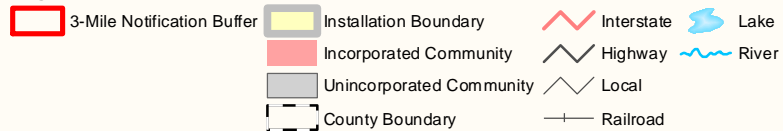
Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

*Great Job!
Thanks for asking for our input.*

Please return this comment form to the registration table or to a project representative.



Legend

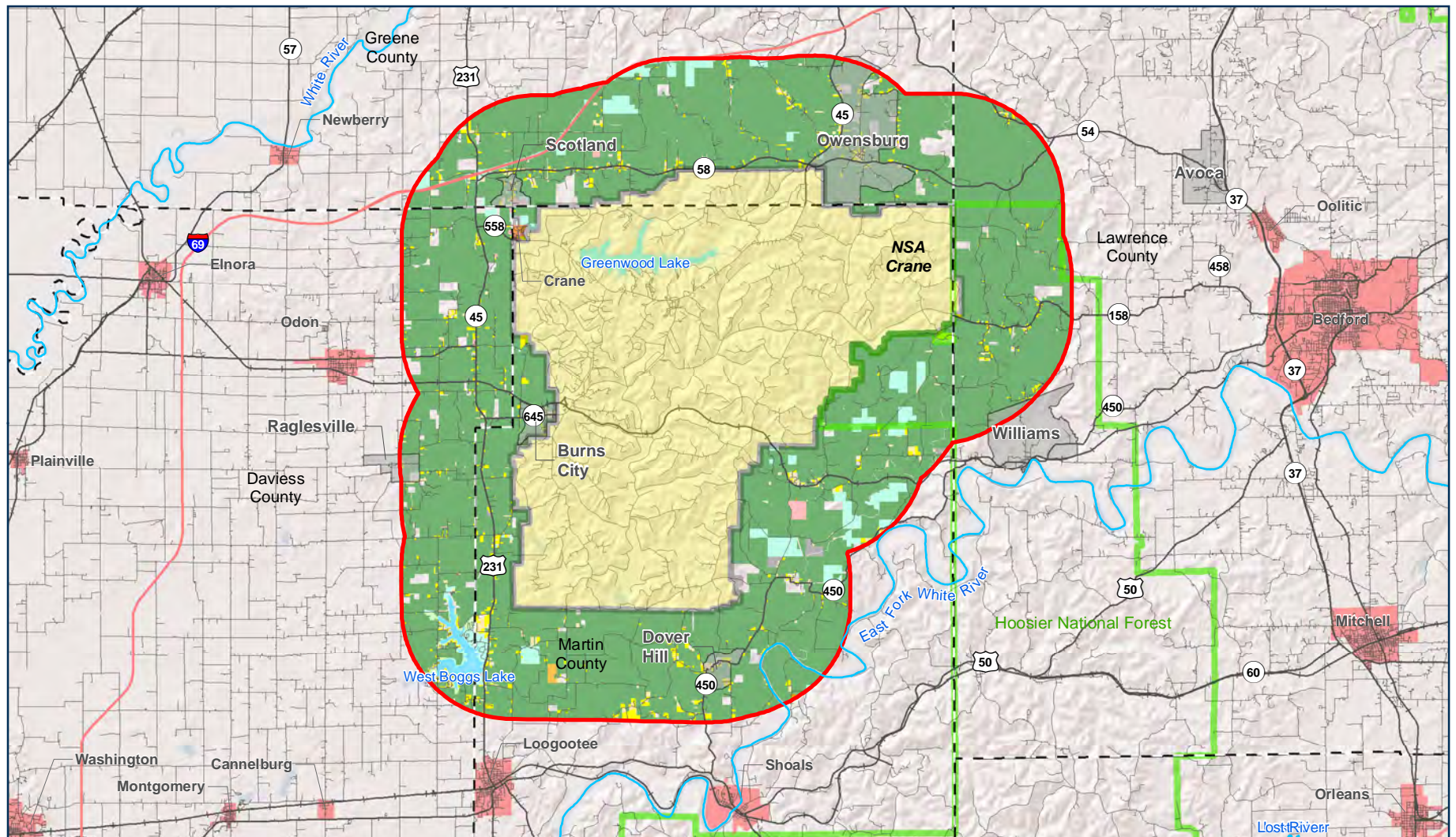


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

3-Mile Notification Area NSA Crane



Legend

Land Use

- Residential Unspecified
- Residential: Single Family
- Residential: Two Families
- Residential: Three Families
- Commercial
- Industrial

Residential: Three Families

Commercial

Industrial

Conservation/Park

Agricultural

Institutional

3-Mile Notification Buffer

Hoosier National Forest

Installation Boundary

Incorporated Community

Unincorporated Community

County Boundary

Interstate

Highway

Local

Railroad

Lake

River

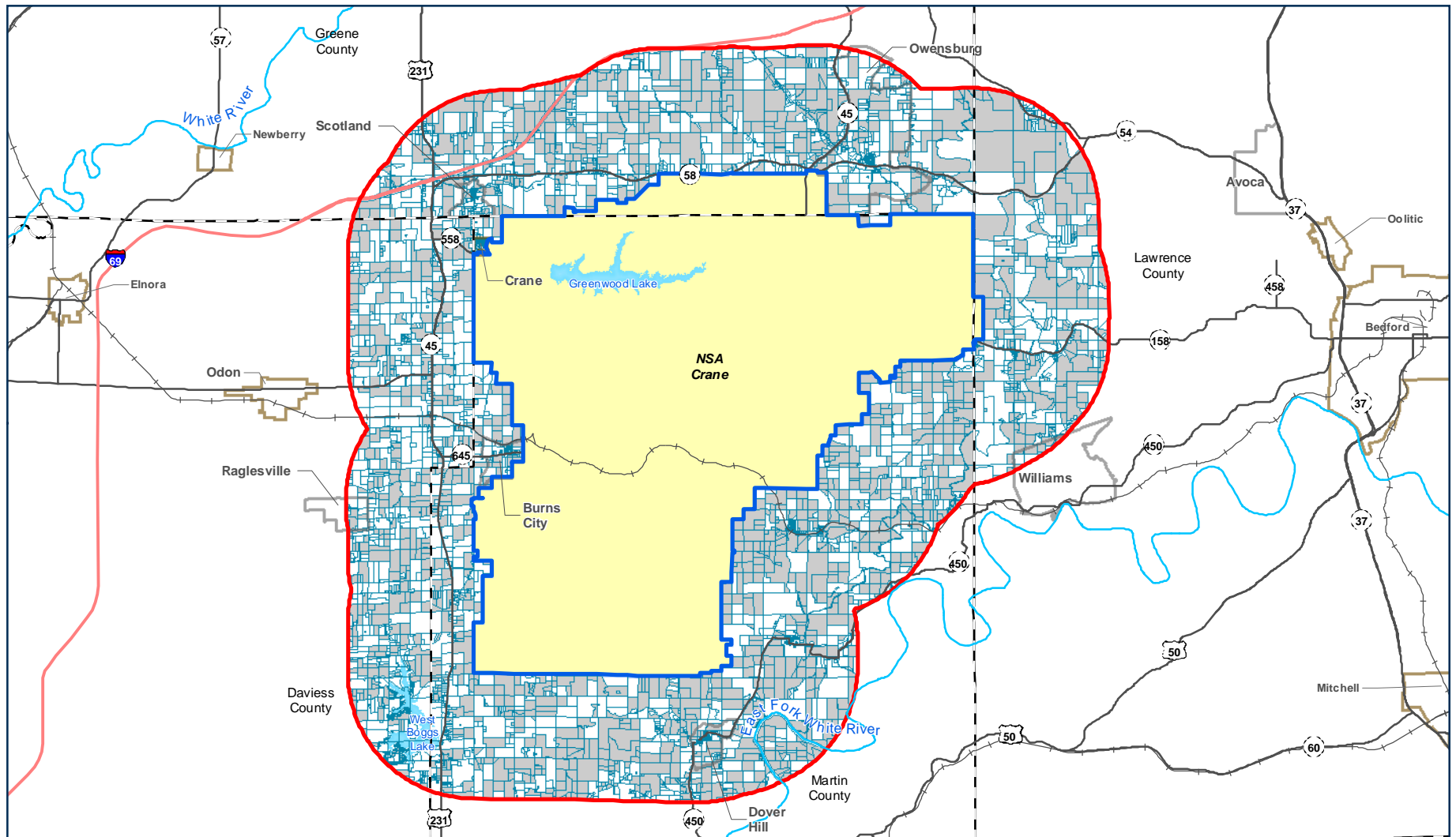


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

NSA Crane and Existing Land Use



Legend

- | | | | | |
|----------------|----------------------------|-----------------------|------------|-------|
| Vacant Parcels | 3-Mile Notification Buffer | Installation Boundary | Interstate | Lake |
| All Parcels | Incorporated Community | County Boundary | Highway | River |
| | Unincorporated Community | Railroad | Local | |

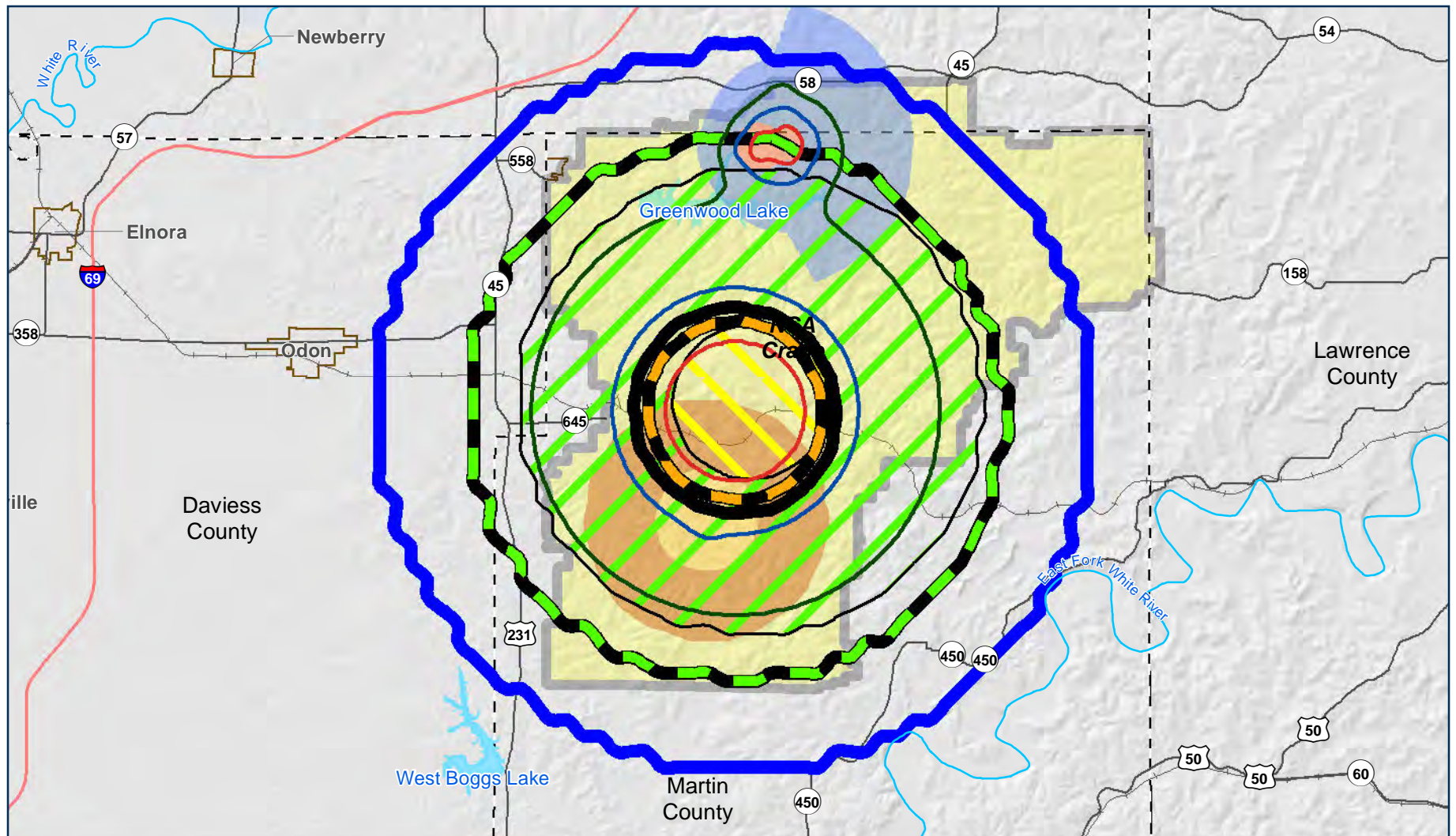


0 1 2
Miles



Source: State of Indiana, 2015. NSA Crane, 2015.

Vacant Parcels in NSA Crane Notification Area



Legend

Complaint Risk for OTA 5 lb

115 dB
130 dB

Small Caliber Noise Contour

87 dB
104 dB

Complaint Risk EOD 50 lb

115 dB
130 dB

Complaint Risk RNG 500 lb Cover Unfavorable Weather

115 dB
130 dB

Complaint Risk RNG 500 lb Half Stem Unfavorable Weather

115 dB
130 dB

2013 CDNL

57 dB
62 dB
70 dB

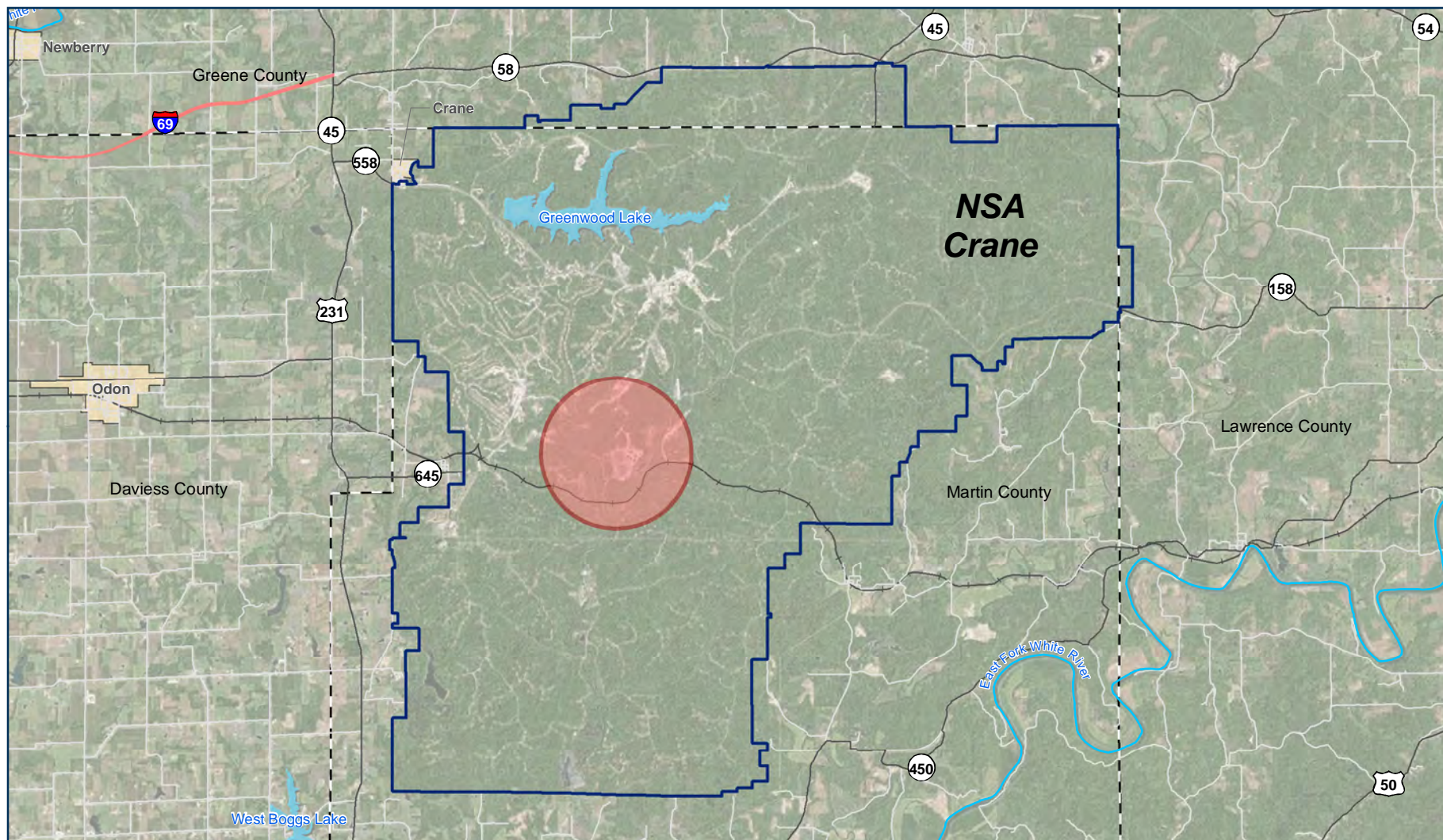
Installation Boundary
Incorporated Community
County Boundary

Interstate
Highway
Railroad

Lake
River



0 1.5 3
Miles



Legend

- | | | | |
|---|---|---|---|
| R-3404 | Incorporated Community | — Interstate | ~ Lake |
| Restricted From surface to 4,100 feet MSL | County Boundary | — Highway | ~ River |
| Installation Boundary | | — Road | |
| | | —+— Railroad | |



0 1 2 Miles



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☒ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN ☐ WESTGATE ACADEMY, ODOM, IN ☐ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME:

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
TUG BEAL	LAW CO.		
SHIRLEY BEAL	" "		
Alma Hamilton	Law Co	812 278 6125	AKH@Hamiltonsystem.us
TS/11 SPREEN	LAW CO	812-276-8406	
Winston Gabbert	Law Co.	812-276-1429	DGabbert@yahoo.com
CDR TIM CRADDOCK	NSA CRANE		
TODD WOODS	NSA CRANE	812-854-6997	Todd.woods@navy.mil



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☒ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN

☐ WESTGATE ACADEMY, ODOM, IN

☐ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME: 11/15/16

NAME / TITLE	COMMUNITY	TELEPHONE #	E-MAIL
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Phillip Field		812-2789213	
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Keith Dillman	Williams	812-276-1903	kddillman@hotmail.com
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Clette Childress	OCRA	317-383-1112	CChildress@ocra.in.gov
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Toby & Marilyn Fields	THE LAWRENCE	812-276-3145	
Shanee Sizemore	Lawrence County Economic Development	812.275.4493	shanee@bedfordchamber.com



PUBLIC FORUM 3

Lawrence County



November 15, 2016



Today's Meeting

Agenda

- Welcome / Introductions
- JLUS Overview / Update
- Areas of Compatibility & Influence
- Public Draft JLUS Review and Comments

Meeting Objectives

- Provide an update on the JLUS process
- Provide overview of the DRAFT JLUS report
- Receive input on Draft compatibility issues



Project Team



Project Manager

Matt Crouch, EDFP

Indiana Office of
Community and Rural
Affairs

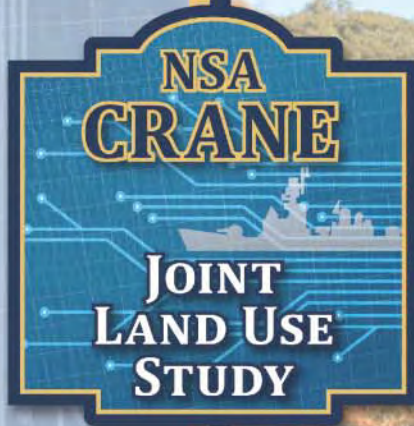
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Project Manager

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Deputy Project Manager

Abbie Woodruff
Planner

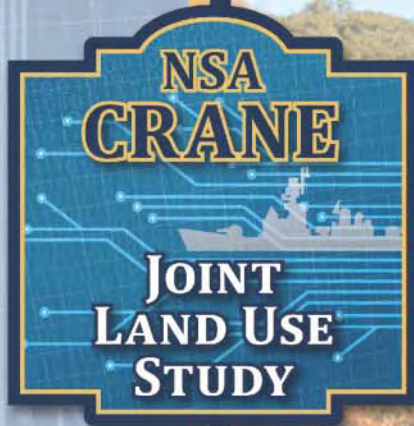


Welcome / Introductions



Who is Engaged in the JLUS?

	Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IODD NSA Crane	Coordination Accountability Grant Management Financial Contribution
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana	Policy Direction Study Oversight Monitoring Report Adoption
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests	Technical Issues Alternatives Report Development Recommendations
Public	All interested persons	Public Input Public Comments



JLUS Overview / Update



Overview of JLUS

Goal: **BALANCE**

The goal of the NSA Crane JLUS is to promote compatible growth, sustain environmental and economic health, and protect public health / safety / welfare, while protecting the viability of current and future missions at NSA Crane and its Lake Glendora Test Facility.



Overview of JLUS

A JLUS IS NOT:

- a regulatory document
- an enforceable action

A JLUS IS:

- a study that defines appropriate actions for further consideration
- a collaborative document
- a body of information that assists in making more informed decisions
- Tailored to for each jurisdiction / agency

The JLUS will require follow on actions by all stakeholders, including public involvement to implement



JLUS Update

- ✓ Data collection
- ✓ Stakeholder interviews
- ✓ Identification of compatibility issues
- ✓ Assessment of compatibility issues
- ✓ Identification of areas of concern
- ✓ Review and assessment of current processes and tools
- ✓ Develop appropriate strategies and tools
- ✓ Develop Draft JLUS document



- **Public Review**
- **Develop Final JLUS document**



Public Involvement Opportunities

Public input is essential to the success of the JLUS

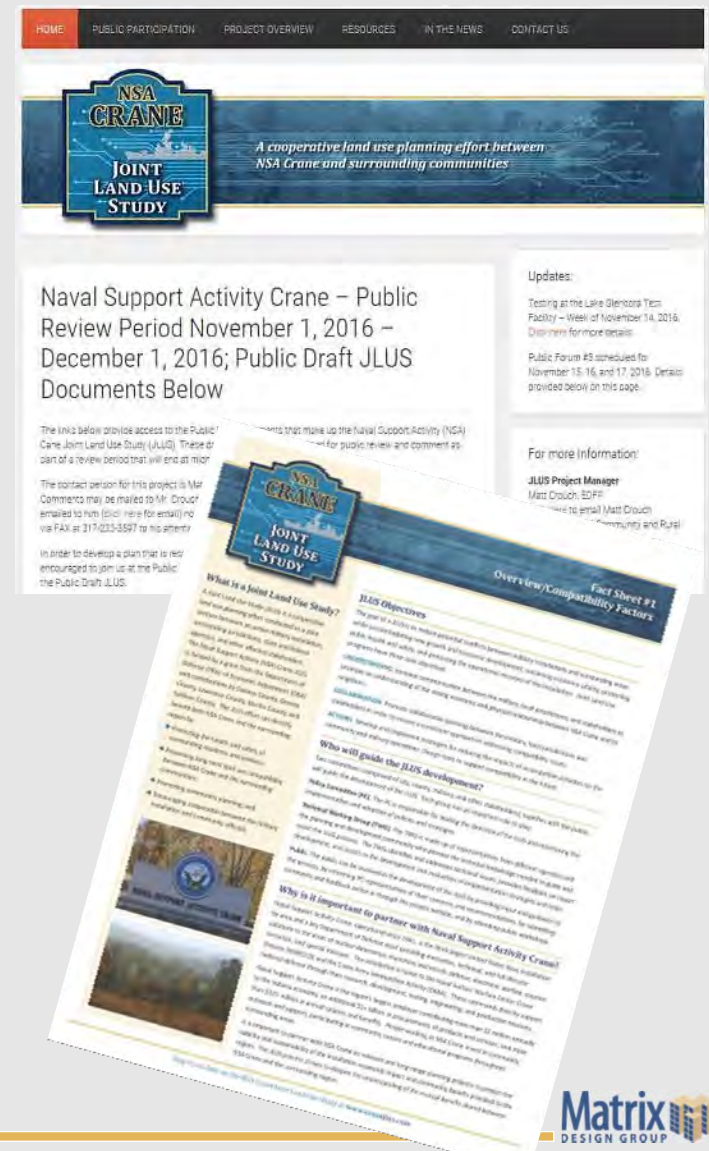
Public Forums – 3 sets

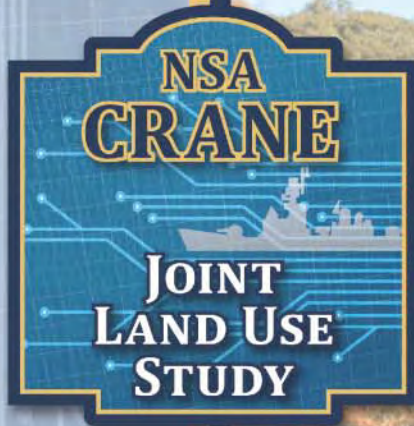
- Lawrence County
- Daviess, Greene, and Martin Counties
- Sullivan County

Project Website

www.cranejlus.com

Public Review Period





Areas of Compatibility and Influence

Compatibility Factors

NSA Crane Joint Land Use Study

What Is Compatibility?

Compatibility, in relationship to military readiness, can be defined as the balance and / or compromise between community and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully. Study area data on existing conditions obtained from the PC, TWG, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and will consider existing and projected development trends within the study area. The JLUS will study the following set of 25 potential compatibility factors to determine all pertinent issues.

AQ Air Quality

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



AT Anti-Terrorism/Force Protection

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

BIO Biological Resources

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

CA Climate Adaptation

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



COM Communication/Coordination

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

CR Cultural Resources

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



DSS Dust/Smoke/Steam

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

ED Energy Development

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

FSC Frequency Spectrum Capacity

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

FSI Frequency Spectrum Impedance / Interference

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

HA Housing Availability

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

IE Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



LAS Land/Air Spaces

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

LU Land Use

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

LEG Legislative Initiatives

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



LG Light and Glare

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

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

Fact Sheet #1: Overview / Factors

MAR Marine Environments

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

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unwanted levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

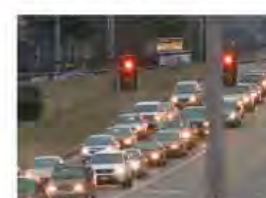
PT Public Trespassing

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



RC Roadway Capacity

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



SA Safety Zones

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

SNR Scarce Natural Resources

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



VO Vertical Obstructions

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

V Vibration

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

WQQ Water Quality/Quantity

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



Issue Identification

Issues were identified through:

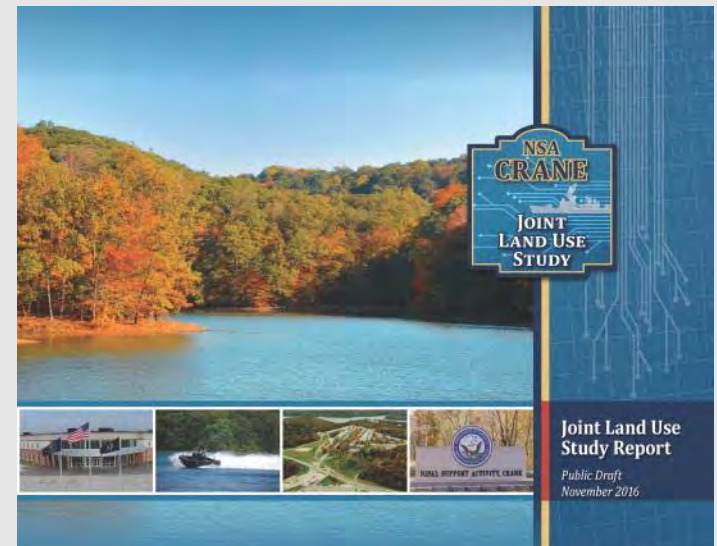
- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Policy Committee / Technical Working Group inputs
- Public inputs



JLUS Report

Six Chapters

1. Introduction
2. Community Profile
3. Military Profile
4. Existing Compatibility Tools
5. Compatibility Assessment
6. Implementation Plan (Recommended Strategies)

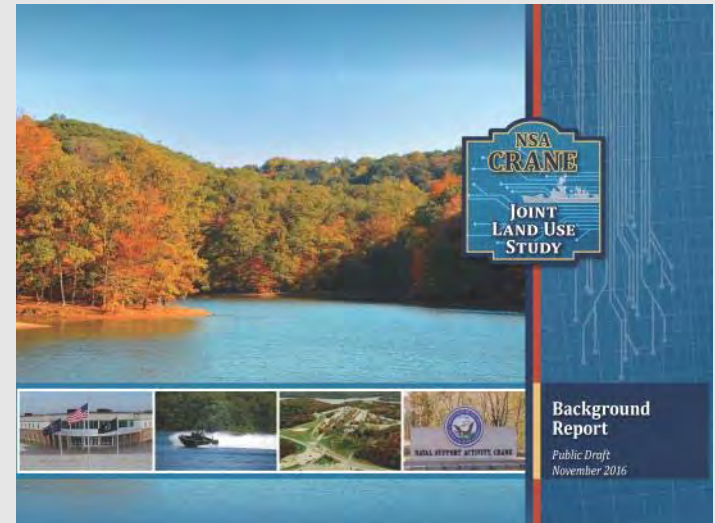


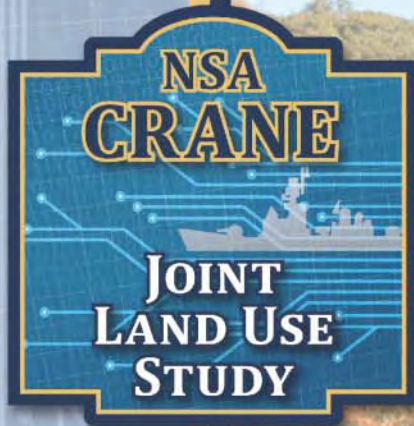


Background Report

Five Chapters

1. Introduction
2. Community Profile
3. Military Profile
4. Existing Compatibility Tools
5. Compatibility Assessment





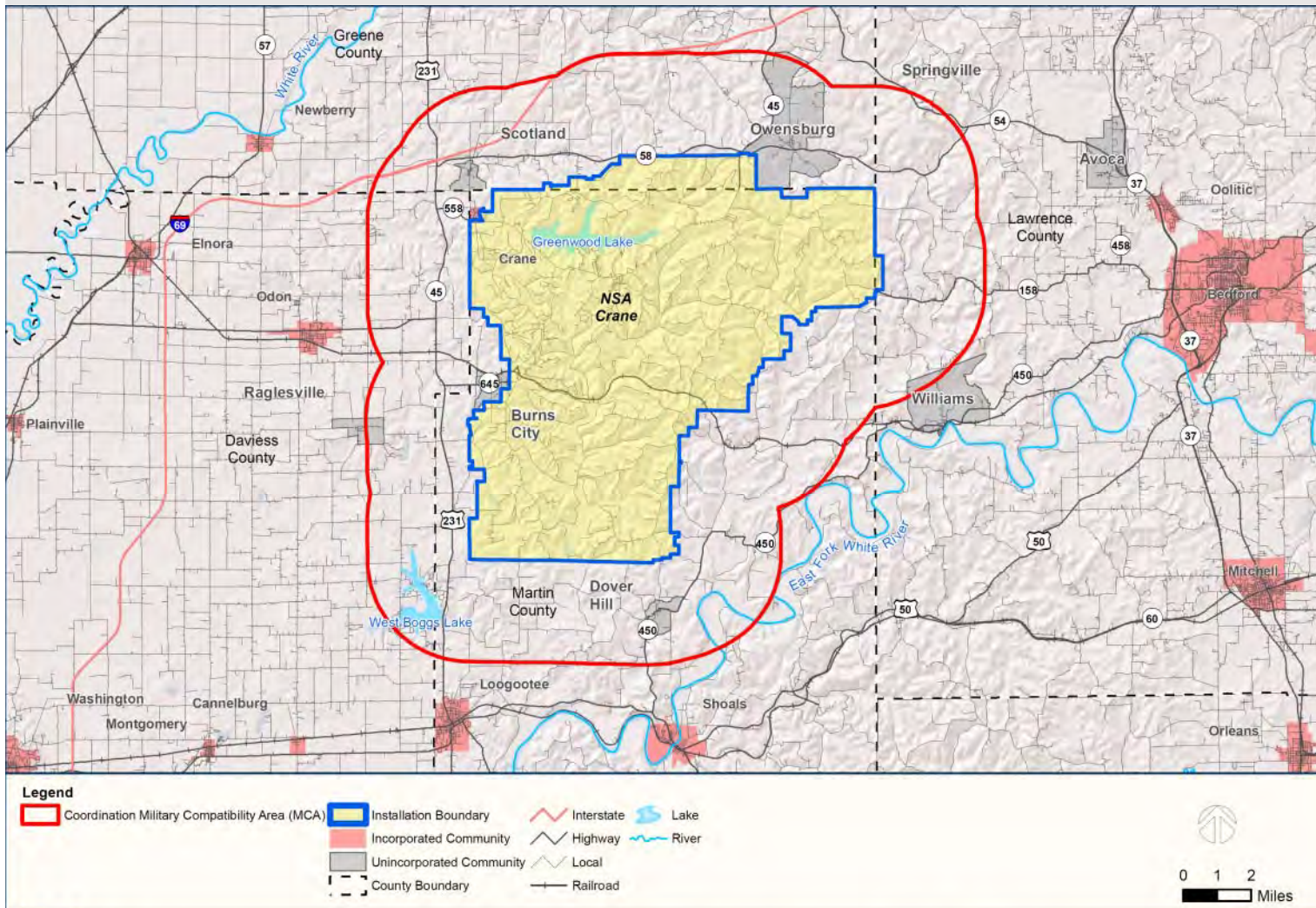
JLUS Public Draft Key Strategies



Key Strategies – Coordination MCA

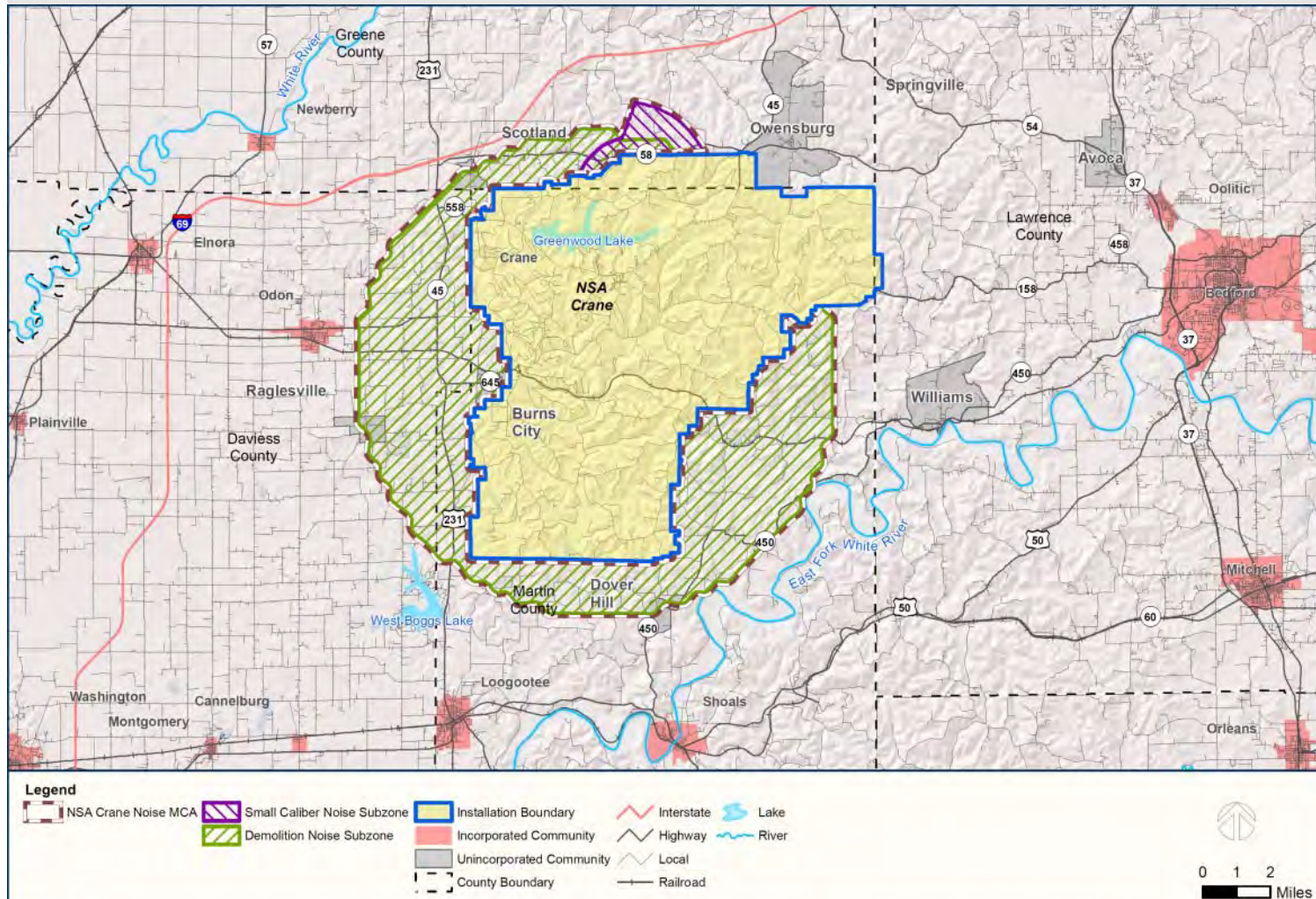
The **Coordination MCA** is a 3-mile buffer surrounding NSA Crane

- Notification requirements per Indiana Code (IC) §36-7-30.1-2





Key Strategies – Noise MCA



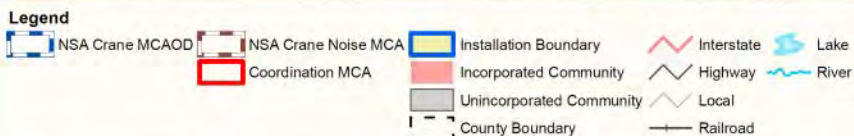
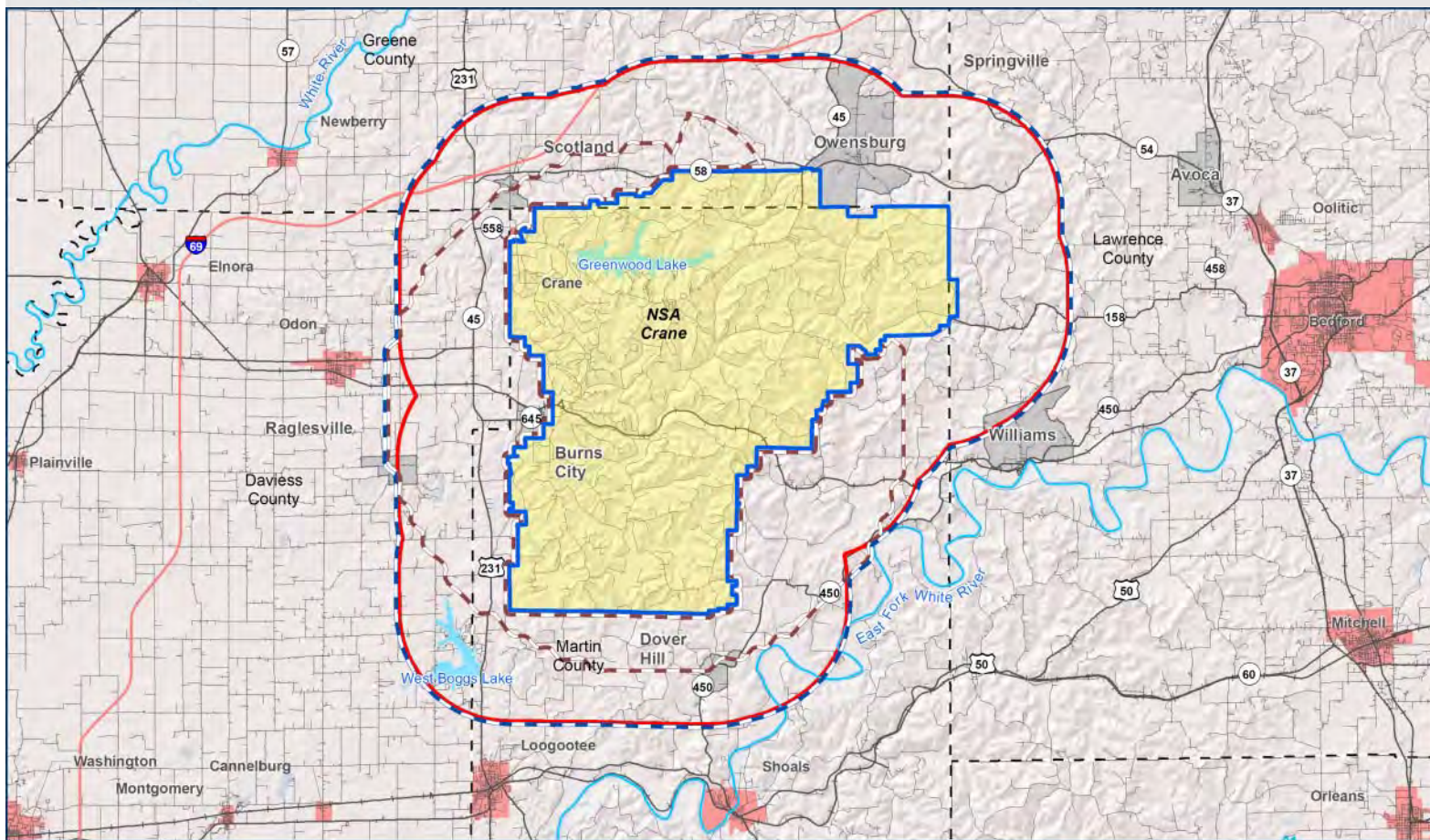
The **Noise MCA** includes all land located within the noise contours for:

- Small Caliber Noise Subzone: 87-104 decibel (dB) PK15(met) range
- Demolition Noise Subzone: 115 dB PK15(met) peak blast



Key Strategies – MCAOD

The proposed NSA Crane **Military Compatibility Area Overlay District (MCAOD)** is an area that incorporates both the Noise and Coordination MCAs





Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COMMUNICATION / COORDINATION (COM)												
COM-1A	Study Area	<p>Establish a NSA Crane / Lake Glendora Test Facility JLUS Implementation Coordination Committee</p> <p>Establish a JLUS Implementation Coordination Committee to maintain efficient and effective coordination among the JLUS partners and to oversee the implementation of JLUS recommendations. The JLUS Implementation Coordination Committee should meet on a regular basis as agreed upon by the Committee and be responsible for establishing effective and timely means of communication for the purpose of coordinating and addressing compatibility concerns and issues.</p> <p>Consider committee membership from the JLUS Policy Committee as well as other community partners as deemed appropriate to maintain continuity and institutional project knowledge. Consider the formation of a technical subcommittee comprising Technical Working Group members to address technical aspects of the JLUS implementation.</p> <p><i>Other Primary Partners: Indiana Office of Community and Rural Affairs, Radius Indiana, City of Sullivan, Town of Shoals, Town of Crane, Indiana Office of Defense Development, Southern Indiana Development Commission</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-2A	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Develop Memorandum of Agreement for Communications</p> <p>NSA Crane and Lake Glendora Test Facility should collaborate with local governments and economic development organizations to implement a Memorandum of Agreement that delineates lines of communication between jurisdictions, agencies and NSA Crane / Lake Glendora Test Facility leadership.</p> <p><i>Other Primary Partners: Indiana Office of Defense Development; Indiana Office of Community and Rural Affairs; Radius Indiana; City of Sullivan; Town of Crane; local economic development corporations, councils and commissions</i></p>	Short-Term	■	■	■	■	■	■			■
COM-2B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Invite a NSA Crane Representative to Serve as a Non-Voting Member of Plan Commissions</p> <p>In an effort to continue a collaborative partnership, include in a Memorandum of Agreement between county and local governments and NSA Crane that allows NSA Crane to participate as a non-voting member on Plan Commissions to attend meetings and provide technical input on military compatibility issues.</p> <p>This strategy applies to any jurisdiction that establishes a Plan Commission in the future as indicated by the ♦ symbol.</p> <p><i>Other Primary Partner: City of Sullivan</i></p>	Short-Term	■	♦	♦	♦	♦	□			■ ♦



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davless County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-2C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Provide Mutual Briefings</p> <p>To perpetually enhance support and cooperation, and reinforce the partnership between NSA Crane / Lake Glendora Test Facility 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 Study Area county commissions and city councils. The counties and cities should provide annual briefings to NSA Crane / Lake Glendora Test Facility 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.</p> <p><i>Other Primary Partners: City of Sullivan, Town of Crane</i></p> <p><i>Other Partners: Indiana Office of Defense Development, Indiana Office of Community and Rural Affairs, Radius Indiana, Crane Army Ammunition Activity</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-3A	NSA Crane Coordination MCA / LGTF Coordination MCA	Designate and Formalize Points of Contact for Planning Consider a Memorandum of Agreement between the JLUS Study Area jurisdictions and NSA Crane / Lake Glendora Test Facility that formally designates and identifies the points of contact for jurisdictions and NSA Crane / Lake Glendora Test Facility. The point of contact should be an individual with knowledge of county and local governments and economic development initiatives, capable of relaying information between the jurisdictions and the military. <i>Other Primary Partners: local economic development corporations, councils and commissions, and area cities and towns</i>	Short-Term	■	■	■	■	■	■			■
COM-3B	NSA Crane Coordination MCA / LGTF Coordination MCA	Formalize Coordination with NSA Crane / Lake Glendora Test Facility in Planning Documents County and local governments should formalize coordination procedures with NSA Crane / Lake Glendora Test Facility in planning documents including comprehensive plans and zoning ordinance to ensure community compliance with military notification procedures outlined in Indiana Code IC 36-7-30.1 and as amended from time to time. <i>Other Primary Partners: Southern Indiana Development Commission, City of Sullivan, Town of Crane, other jurisdictions that may have incorporated area within the notification buffer in the future.</i>	Short-Term	■	■	■	■	■	□			■



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-6D	NSA Crane MCAOD / LGTF MCAOD	Communication on Detonations Testing NSA Crane / Lake Glendora Test Facility should communicate upcoming detonation activities to the public. Communication should take the form of formal media releases, eBlasts, website flash tickers, public service announcements, and radio / TV coverage to ensure the notification is in general circulation.	On-Going						■			□



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Adopt Development Notification Checklist</p> <p>Jurisdictions should work with NSA Crane / Lake Glendora Test Facility 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 NSA Crane / Lake Glendora Test Facility missions.</p> <p>The checklist should define applicable development types and scales that warrant NSA Crane / Lake Glendora Test Facility 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 county commissions and city councils to acknowledge and endorse its use.</p> <p><i>Other Primary Partners: local economic development corporations, councils and commissions; City of Sullivan; Town of Crane</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Formalize NSA Crane / Lake Glendora Test Facility in Development Reviews</p> <p>Revise codes to include NSA Crane / Lake Glendora Test Facility in the review process for development applications per the Checklist established in Strategy COM-8B and Indiana Code Section 36-7-30.1-2. Include procedures for military notification and timeframes for review to support a proactive approach for identifying and mitigating potential military incompatibilities. Code provisions should specify:</p> <ul style="list-style-type: none"> ■ Opportunities for the military to provide technical input and assistance to local jurisdictions to support discussion of projects and potential compatibility issues ■ Defining project types that require military review ■ Identification of the Points of Contact in the development review process ■ Formal procedures for transmitting applications to NSA Crane / Lake Glendora Test Facility ■ Formal procedures for requesting and receiving comments ■ Timeline for military responses considering review timeframes specified by state law and local procedures ■ Notification to NSA Crane / Lake Glendora Test Facility on all public hearings related to development applications <p>This strategy applies to any jurisdiction that establishes a Development Review process in the future as indicated by the ♦ symbol.</p> <p><i>Other Primary Partner: City of Sullivan</i></p>	Mid-Term	■	♦	♦	♦	♦				■ ♦



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8D	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Adopt Military Notification Procedures for Development Projects through Tax Abatement Process</p> <p>Jurisdictions without a planning regulatory framework should adopt formal requirements for notification and review of development by NSA Crane / Lake Glendora Test Facility per the Checklist identified Strategy COM-8B and Indiana Code Section 36-7-30.1-2.</p> <p>As part of the tax abatement application process require transmittal of a copy of the application to NSA Crane / Lake Glendora Test Facility at the time of application to ensure adequate review prior to the public hearing. Incorporate notification and review requirements per Indiana Code Section 36-7-30.1-2.</p> <p><i>Other Primary Partners: local economic development corporations, councils and commissions; Town of Crane</i></p>	Short-Term		■	■	■	■				■



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
HOUSING AVAILABILITY (HA)												
HA-1A	Study Area	Update Comprehensive Plans for Housing Jurisdictions should update their comprehensive plans to incorporate a housing element or housing vision, goals, and objectives that consider providing a variety of housing options to accommodate transient and permanent party military personnel.	Mid-Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
LAND USE (LU)												
LU-1C	NSA Crane Coordination MCA	Adopt Land Use in Three-Mile Military Notification Buffer Jurisdictions without land use planning should adopt land use controls specific to military compatibility within the three-mile military notification buffer in conjunction with Strategy LEG-1D. This guidance is intended to minimize conflicts between military installations and surrounding communities and should consider consultation with the installation command to determine the needs of the military installation with respect to questions of installation expansion and environmental impact; issues of installation safety, noise pollution, air pollution, electrical emissions; and potential for obstructed visibility or surveillance. <i>Other Primary Partner: Town of Crane</i> <i>Other Partner: Crane Army Ammunition Activity</i>	Mid-Term		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input checked="" type="checkbox"/>

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davies County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEGISLATIVE INITIATIVES (LEG)												
LEG-1A	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Amend Indiana Code Annotated Title 36, Article 7, Section 30.1 Planning and Zoning Affecting Military Bases</p> <p>The Indiana Legislature should amend IC 36-7-30.1 to improve on existing legislation for military compatibility. Consider appointing a committee to determine the most effective changes to clarify and enhance the compatibility language. At minimum the legislation should be amended to:</p> <ul style="list-style-type: none"> ■ Clarify that the code applies to permitting, in addition to planning and regulating ■ Specify development types for coordination with the military so that it is focused on relevant plans and developments with the potential to adversely impact military operations ■ Specify the form of notification required to ensure consistent interpretation and application across jurisdictions ■ Specify that plans/ documentation is required that adequately explain the activity and location such that the military can provide informed feedback on any potential impact on their operations ■ Provide for the ability to impose conditions, require modifications to eliminate or mitigate potential adverse impacts, or include a mediation process to resolve compatibility conflicts where other remedies cannot be applied ■ Incorporate compliance enforcement provisions. This will require the identification of an appropriate state authority, procedures to track compliance and a progressive (stepped) framework to attain compliance, perhaps beginning with education and assistance. <p><i>Other Partner: Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council</i></p>	Mid-Term							■		□



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davies County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEG-1B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Amend State Building Permit Review Procedures</p> <p>Amend Indiana Code 4-21.5-3-1 to require the Indiana Department of Homeland Security Division of Fire and Building Safety as the authority for building permits within counties not employing local building inspection program to notify a military installation of construction pursuant to IC 36-7-30.1.</p> <p>Amend Title 675 Indiana Administrative Code 12-10-6: Required Administrative Provisions to include a provision that no building permit would be issued that would cause a violation of IC 36-7-30.1.</p> <p><i>Other Partner: Indiana Department of Homeland Security Division of Fire and Building Safety; Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council</i></p>	Mid-Term							■		□
LEG-1C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Consider State Funding Program Set Asides and Incentives for Rural Military Communities</p> <p>Amend the Rural Economic Development Fund and Indiana Main Street programs to include a set-aside for rural communities who host military installations and are subject to encroachment impacts including development constraints. Consider incentive criteria such as community actions which demonstrate ongoing commitment to military compatibility.</p>	Long-Term							■		



Key Strategies – Lawrence County

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Davless County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEG-1D	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Designate State Areas of Interest</p> <p>Designate a three-mile boundary around military installations as “state areas of interest.” Require jurisdictions to adopt planning guidance specific to compatibility with military installations for land within the three-mile boundary.</p> <p><i>Other Partners: Other Partner: Indiana Office of Defense Development; Indiana Commission on Military and Veteran’s Affairs; Indiana Military Base Council</i></p>	Mid-Term							<input checked="" type="checkbox"/>		<input type="checkbox"/>
NOISE (NOI)												
NOI-3A	NSA Crane MCAOD / LGTF MCAOD	<p>Increase Public Understanding of Noise Sources</p> <p>Increase community awareness of military overflight and operations throughout the entire NSA Crane / Lake Glendora Test Facility area of influence through the use of local media sources, newsletters, brochures, and annual outreach functions hosted by NSA Crane / Lake Glendora Test Facility in cooperation with each Study Area jurisdiction. Include information that there are other noise generating uses such as quarries and mines within the Study Area.</p> <p><i>Other Partners: City of Sullivan, Town of Crane, Indiana Office of Defense Development, Indiana Air National Guard</i></p>	Long-Term	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>



How to Provide Comments

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

Comment Cards:

- Complete and...
 - hand it to us at the end of the Forum

Comment Sheet:

- Complete and...
 - Email, mail or fax to Matt Crouch

Comment Sheet for Public Draft JLUS

NAME AND CONTACT INFORMATION

#	Name	Comments/Concerns	Timing/Location	Response	Follow Up
1					
2					
3					
4					
5					

NSA CRANE JOINT LAND USE STUDY

A cooperative land use planning effort between NSA Crane and surrounding communities.

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Comments

Please return this comment form to the registration table or to a project representative.



How to Provide Comments

Email comments to:
mcrouch@ocra.in.gov

Mail comments to:
Mr. Matt Crouch
One N Capitol Avenue, Suite 600
Indianapolis, IN 46204-2027

Fax comments:
Attn: Matt Crouch, OCRA
317-233-3597

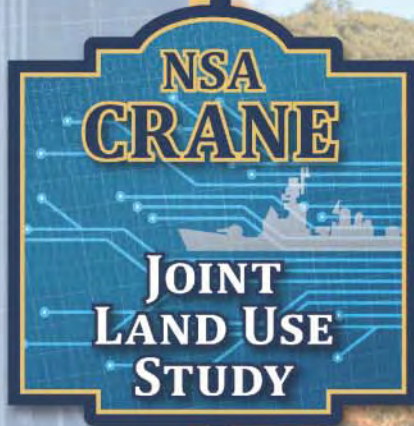
The image shows two forms related to the NSA CRANE JOINT LAND USE STUDY. The top form is a 'Comment Sheet for Public Draft J.L.U.S.' with a table for recording comments. The bottom form is a separate sheet for providing comments, featuring a large text area and a note about the importance of the input.

Comments Number	Name	Comments/Comments	Tracking Location	Response	Action Taken
1					
2					
3					
4					
5					

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

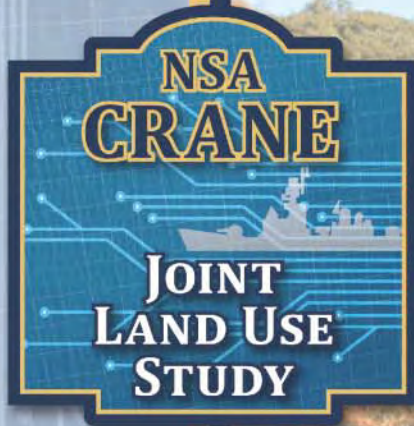
Please return this completed form to the registration table or to a project representative.





Next Steps

1. **Public Draft Documents / Public Review Period is NOW through midnight December 1, 2016**
 - **JLUS Report**
 - **Background Report**
2. **Review and revise JLUS per Public Comments / Committee approval**
3. **Acceptance by JLUS Policy Committee**
4. **Acceptance by JLUS Study Area jurisdictions**
5. **Implementation**



Questions and Answers



**Before leaving today's Forum please return your
completed comment card to a project representative**

Thank you for your attendance!



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☐ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN

☒ WESTGATE ACADEMY, ODOM, IN

☐ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME:

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Todd Woods	NSA CRANE	812-854-6997	Eodd.woods@navy.mil
Brian Blackwell	NSWC	812-854-3766	brian.blackwell@navy.mil
Robert Hoerter	NSWC	812-863-2952	rhoerter@bluemarble.net
Jill Curny	OCRA	317-458-5078	jcurry@ocra.in.gov
Larry Ordner	Rep. Bucshon	812-465-6484	
Jerry Parkinson	Sen. Joe Donnelly	812-425-5862	Jerry-Parkinson@donnelly.senate.gov
Lynn Coyne	Bloomington Economic Development Corp	812-335-7346	lcoyne@bloomingtonede.com



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☐ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN

☒ WESTGATE ACADEMY, ODOM, IN

☐ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME: 11/10

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CARY BLEDSOE	LOGOOTEE / WESTGATE	812-295-6007	cary.bledsoe@stimulusengineering.com
Phil O'Haver	Washington	812-698-7298	phil.ohaver@targetfinancial.net
DAN WILEY	CRANE ARMY	812-296-0500	
Sondra Laughlin	Greene County	812-698-1498	SONDRA.LAUGHLIN@NAVY.MIL
Rebecca Sparks	Martin County	812-863-4407	rebel3035@yahoo.com
Bob Jackson	Martin County	812-863-4407	Bjackson9@yahoo.com
CDR Tim CRADDOCK	NSA CRANE		
Devin Wittmer	ODOM		



PUBLIC FORUM 3

**Daviess, Greene, and Martin
Counties**



November 16, 2016



Today's Meeting

Agenda

- Welcome / Introductions
- JLUS Overview / Update
- Areas of Compatibility & Influence
- Public Draft JLUS Review and Comments

Meeting Objectives

- Provide an update on the JLUS process
- Provide overview of the DRAFT JLUS report
- Receive input on Draft compatibility issues



Project Team



Project Manager

Matt Crouch, EDFP

Indiana Office of
Community and Rural
Affairs

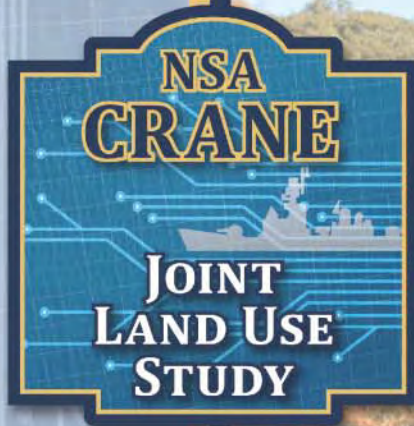
Phone: 317.750.7670
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Matrix Design Group

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Project Manager

Celeste Werner, AICP
Deputy Project Manager

Abbie Woodruff
Planner

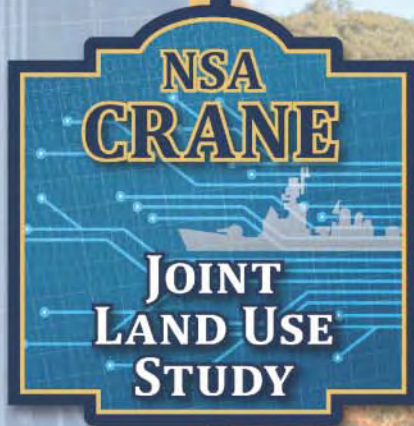


Welcome / Introductions



Who is Engaged in the JLUS?

	Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IOOD NSA Crane	Coordination Accountability Grant Management Financial Contribution
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana	Policy Direction Study Oversight Monitoring Report Adoption
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests	Technical Issues Alternatives Report Development Recommendations
Public	All interested persons	Public Input Public Comments



JLUS Overview / Update



Overview of JLUS

Goal: **BALANCE**

The goal of the NSA Crane JLUS is to promote compatible growth, sustain environmental and economic health, and protect public health / safety / welfare, while protecting the viability of current and future missions at NSA Crane and its Lake Glendora Test Facility.



Overview of JLUS

A JLUS IS NOT:


- a regulatory document
- an enforceable action

A JLUS IS:

- a study that defines appropriate actions for further consideration
- a collaborative document
- a body of information that assists in making more informed decisions
- Tailored to for each jurisdiction / agency

The JLUS will require follow on actions by all stakeholders, including public involvement to implement

JLUS Update

- ✓ Data collection
 - ✓ Stakeholder interviews
 - ✓ Identification of compatibility issues
 - ✓ Assessment and prioritization of compatibility issues
 - ✓ Identification of areas of concern
 - ✓ Review and assessment of current processes and tools
 - ✓ Develop appropriate strategies and tools
 - ✓ Develop Draft JLUS document
- 
- **Public Review**
 - **Develop Final JLUS document**



Public Involvement Opportunities

Public input is essential to the success of the JLUS

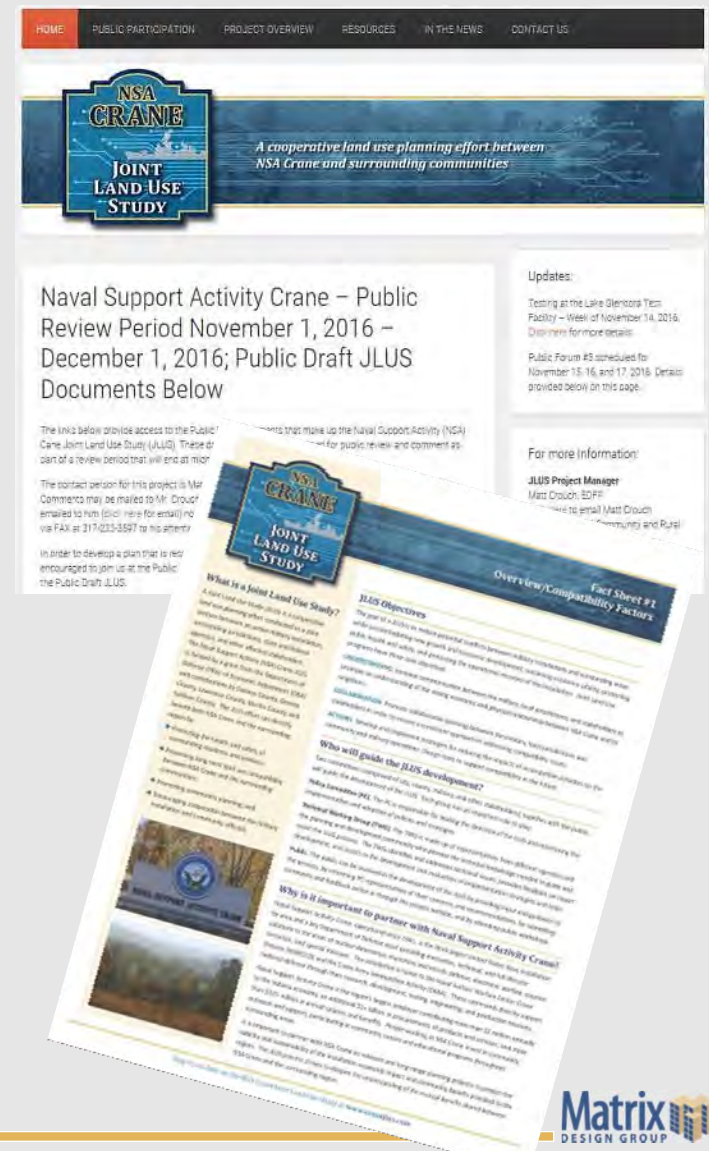
Public Forums – 3 sets

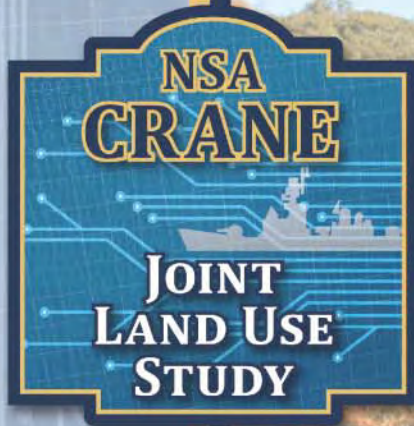
- Lawrence County
- Daviess, Greene, and Martin Counties
- Sullivan County

Project Website

www.cranejlus.com

Public Review Period





Areas of Compatibility and Influence

Compatibility Factors

NSA Crane Joint Land Use Study

What Is Compatibility?

Compatibility, in relationship to military readiness, can be defined as the balance and / or compromise between community and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully. Study area data on existing conditions obtained from the PC, TWG, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and will consider existing and projected development trends within the study area. The JLUS will study the following set of 25 potential compatibility factors to determine all pertinent issues.

AQ Air Quality

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



AT Anti-Terrorism/ Force Protection

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

BIO Biological Resources

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

CA Climate Adaptation

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



COM Communication/ Coordination

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

CR Cultural Resources

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



DSS Dust/Smoke/Steam

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

ED Energy Development

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

FSC Frequency Spectrum Capacity

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

FSI Frequency Spectrum Impedance / Interference

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

HA Housing Availability

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

IE Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



LAS Land/Air Spaces

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

LU Land Use

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

LEG Legislative Initiatives

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



LG Light and Glare

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

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

Fact Sheet #1: Overview / Factors

MAR Marine Environments

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

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unwanted levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

PT Public Trespassing

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



RC Roadway Capacity

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



SA Safety Zones

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

SNR Scarce Natural Resources

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



VO Vertical Obstructions

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

V Vibration

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

WQQ Water Quality/ Quantity

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



Issue Identification

Issues were identified through:

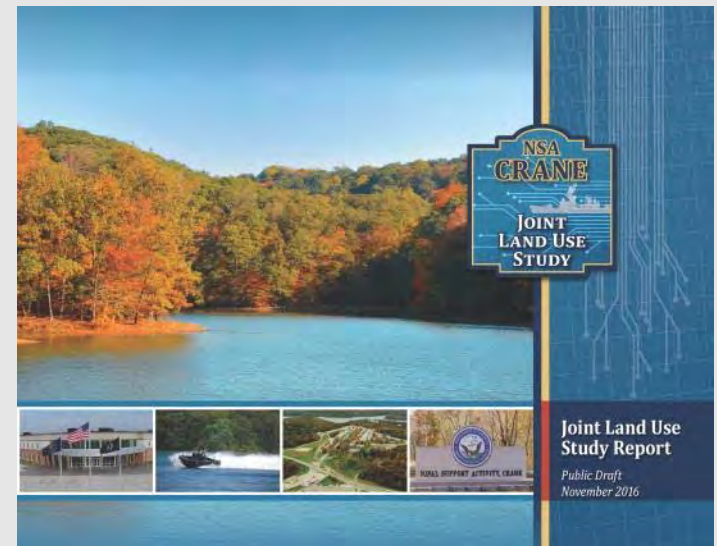
- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Policy Committee / Technical Working Group inputs
- Public inputs



JLUS Report

Six Chapters

1. Introduction
2. Community Profile
3. Military Profile
4. Existing Compatibility Tools
5. Compatibility Assessment
6. Implementation Plan (Recommended Strategies)

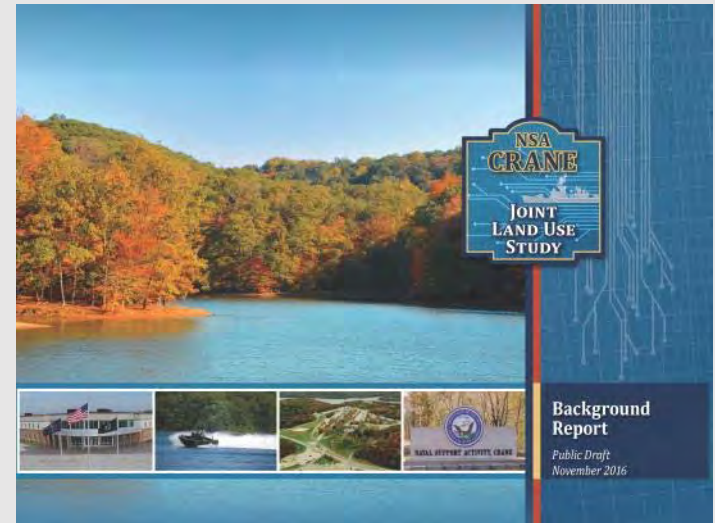


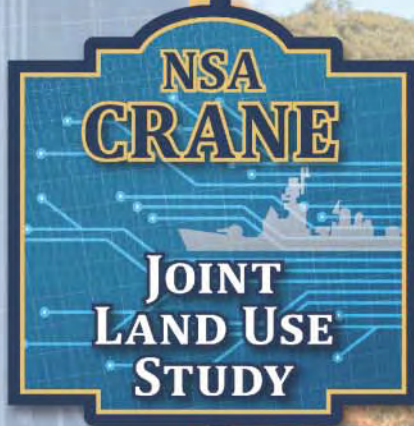


Background Report

Five Chapters

1. Introduction
2. Community Profile
3. Military Profile
4. Existing Compatibility Tools
5. Compatibility Assessment

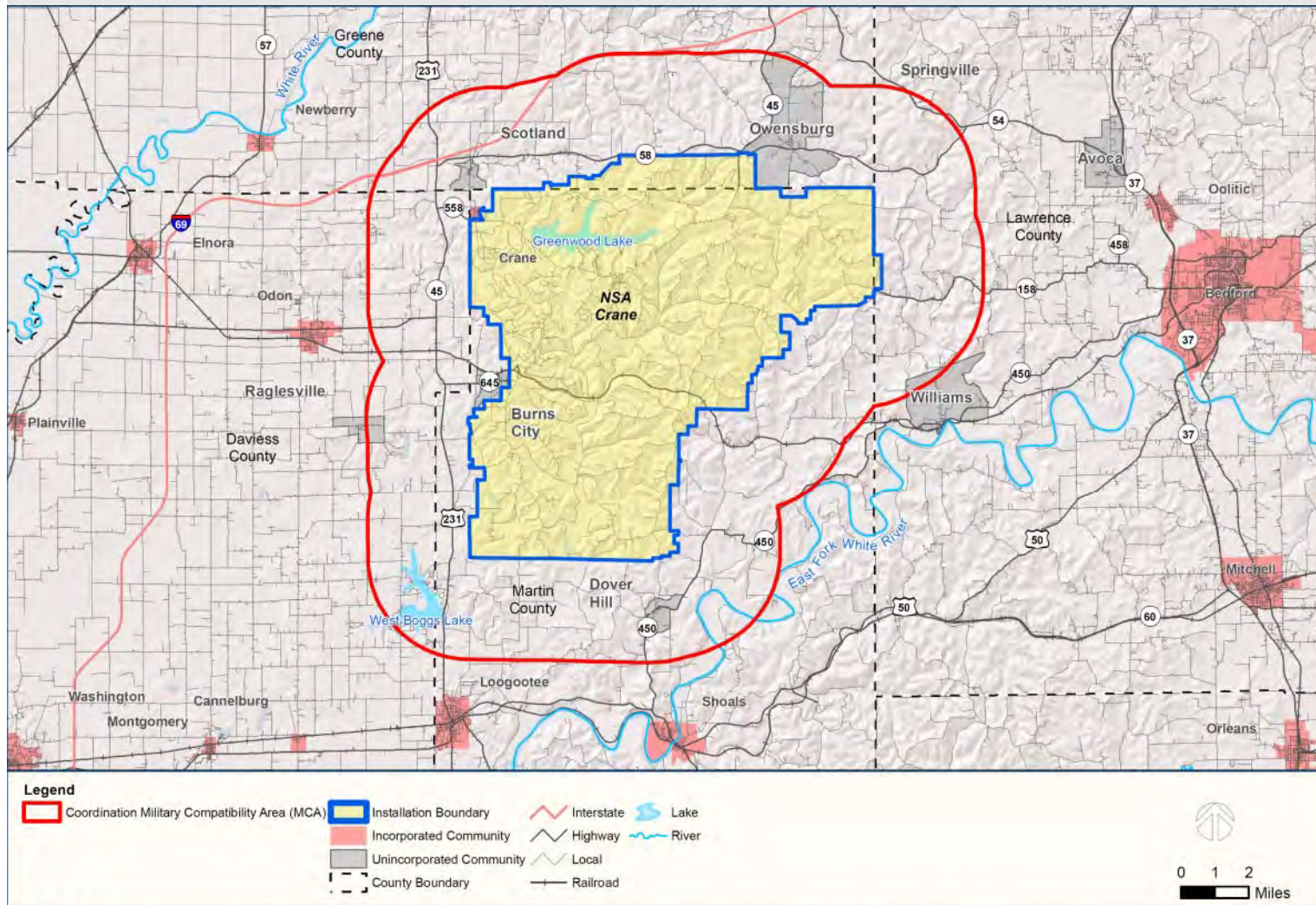




JLUS Public Draft Key Strategies



Key Strategies – Coordination MCA

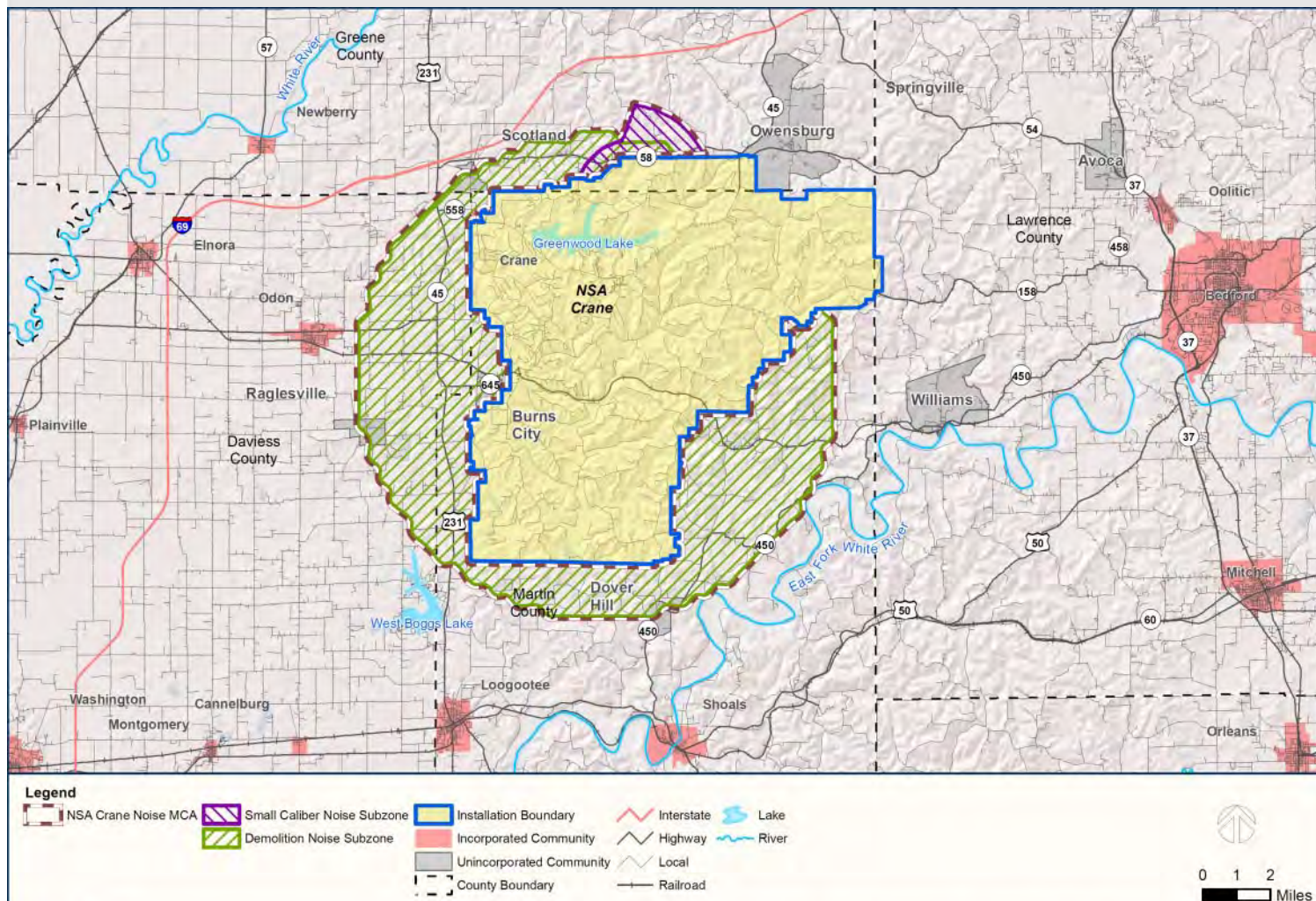


The **Coordination MCA** is a 3-mile buffer surrounding NSA Crane

- Notification requirements per Indiana Code (IC) §36-7-30.1-2



Key Strategies – Noise MCA



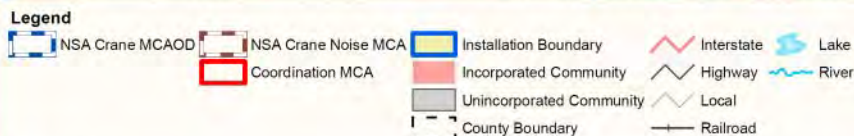
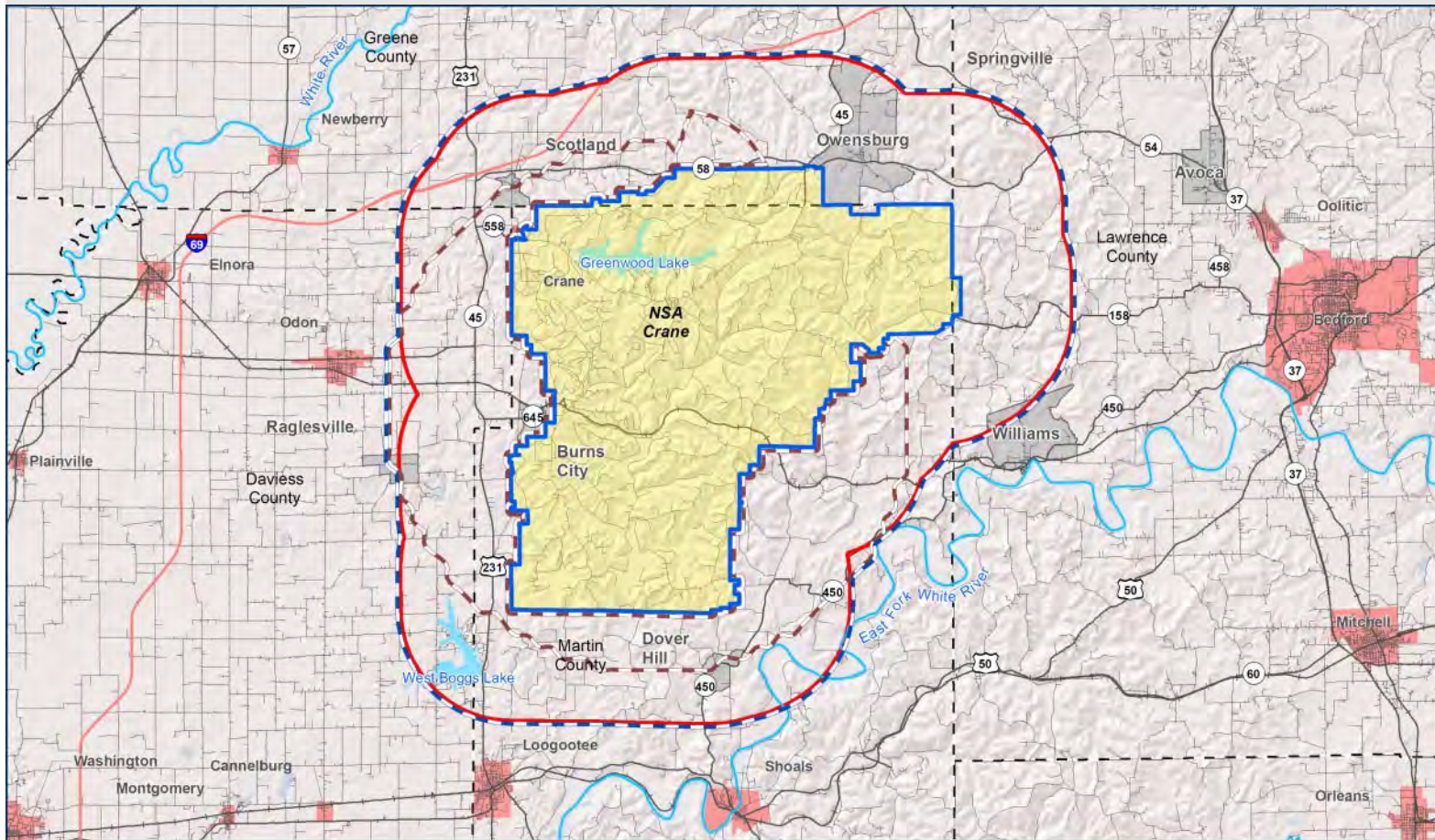
The **Noise MCA** includes all land located within the noise contours for:

- Small Caliber Noise Subzone: 87-104 decibel (dB) PK15(met) range
- Demolition Noise Subzone: 115 dB PK15(met) peak blast



Key Strategies – MCAOD

The proposed NSA Crane **Military Compatibility Area Overlay District (MCAOD)** is an area that incorporates both the Noise and Coordination MCAs





Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COMMUNICATION / COORDINATION (COM)												
COM-1A	Study Area	<p>Establish a NSA Crane / Lake Glendora Test Facility JLUS Implementation Coordination Committee</p> <p>Establish a JLUS Implementation Coordination Committee to maintain efficient and effective coordination among the JLUS partners and to oversee the implementation of JLUS recommendations. The JLUS Implementation Coordination Committee should meet on a regular basis as agreed upon by the Committee and be responsible for establishing effective and timely means of communication for the purpose of coordinating and addressing compatibility concerns and issues.</p> <p>Consider committee membership from the JLUS Policy Committee as well as other community partners as deemed appropriate to maintain continuity and institutional project knowledge. Consider the formation of a technical subcommittee comprising Technical Working Group members to address technical aspects of the JLUS implementation.</p> <p><i>Other Primary Partners: Indiana Office of Community and Rural Affairs, Radius Indiana, City of Sullivan, Town of Shoals, Town of Crane, Indiana Office of Defense Development, Southern Indiana Development Commission</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-2A	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Develop Memorandum of Agreement for Communications</p> <p>NSA Crane and Lake Glendora Test Facility should collaborate with local governments and economic development organizations to implement a Memorandum of Agreement that delineates lines of communication between jurisdictions, agencies and NSA Crane / Lake Glendora Test Facility leadership.</p> <p><i>Other Primary Partners: Indiana Office of Defense Development; Indiana Office of Community and Rural Affairs; Radius Indiana; City of Sullivan; Town of Crane; local economic development corporations, councils and commissions</i></p>	Short-Term	■	■	■	■	■	■			■
COM-2B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Invite a NSA Crane Representative to Serve as a Non-Voting Member of Plan Commissions</p> <p>In an effort to continue a collaborative partnership, include in a Memorandum of Agreement between county and local governments and NSA Crane that allows NSA Crane to participate as a non-voting member on Plan Commissions to attend meetings and provide technical input on military compatibility issues.</p> <p>This strategy applies to any jurisdiction that establishes a Plan Commission in the future as indicated by the ♦ symbol.</p> <p><i>Other Primary Partner: City of Sullivan</i></p>	Short-Term	■	♦	♦	♦	♦	□			■ ♦



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-2C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Provide Mutual Briefings</p> <p>To perpetually enhance support and cooperation, and reinforce the partnership between NSA Crane / Lake Glendora Test Facility 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 Study Area county commissions and city councils. The counties and cities should provide annual briefings to NSA Crane / Lake Glendora Test Facility 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.</p> <p><i>Other Primary Partners: City of Sullivan, Town of Crane</i></p> <p><i>Other Partners: Indiana Office of Defense Development, Indiana Office of Community and Rural Affairs, Radius Indiana, Crane Army Ammunition Activity</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-3A	NSA Crane Coordination MCA / LGTF Coordination MCA	Designate and Formalize Points of Contact for Planning Consider a Memorandum of Agreement between the JLUS Study Area jurisdictions and NSA Crane / Lake Glendora Test Facility that formally designates and identifies the points of contact for jurisdictions and NSA Crane / Lake Glendora Test Facility. The point of contact should be an individual with knowledge of county and local governments and economic development initiatives, capable of relaying information between the jurisdictions and the military. <i>Other Primary Partners: local economic development corporations, councils and commissions, and area cities and towns</i>	Short-Term	■	■	■	■	■	■			■
COM-3B	NSA Crane Coordination MCA / LGTF Coordination MCA	Formalize Coordination with NSA Crane / Lake Glendora Test Facility in Planning Documents County and local governments should formalize coordination procedures with NSA Crane / Lake Glendora Test Facility in planning documents including comprehensive plans and zoning ordinance to ensure community compliance with military notification procedures outlined in Indiana Code IC 36-7-30.1 and as amended from time to time. <i>Other Primary Partners: Southern Indiana Development Commission, City of Sullivan, Town of Crane, other jurisdictions that may have incorporated area within the notification buffer in the future.</i>	Short-Term	■	■	■	■	■	□			■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-4A	NSA Crane Coordination MCA	Identify Need for and Consider Executing a Mutual Aid Agreement for Law Enforcement Resources The local law enforcement agencies should consider collaborating with NSA Crane security forces to execute a mutual aid agreement that will provide for the coordination of law enforcement resources and identify opportunities for resource sharing and training.	Short-Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
COM-6D	NSA Crane MCAOD / LGTF MCAOD	Communication on Detonations Testing NSA Crane / Lake Glendora Test Facility should communicate upcoming detonation activities to the public. Communication should take the form of formal media releases, eBlasts, website flash tickers, public service announcements, and radio / TV coverage to ensure the notification is in general circulation.	On-Going						<input checked="" type="checkbox"/>			<input type="checkbox"/>



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Adopt Development Notification Checklist</p> <p>Jurisdictions should work with NSA Crane / Lake Glendora Test Facility 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 NSA Crane / Lake Glendora Test Facility missions.</p> <p>The checklist should define applicable development types and scales that warrant NSA Crane / Lake Glendora Test Facility 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 county commissions and city councils to acknowledge and endorse its use.</p> <p><i>Other Primary Partners: local economic development corporations, councils and commissions; City of Sullivan; Town of Crane</i></p>	Short-Term	■	■	■	■	■	■			■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Formalize NSA Crane / Lake Glendora Test Facility in Development Reviews</p> <p>Revise codes to include NSA Crane / Lake Glendora Test Facility in the review process for development applications per the Checklist established in Strategy COM-8B and Indiana Code Section 36-7-30.1-2. Include procedures for military notification and timeframes for review to support a proactive approach for identifying and mitigating potential military incompatibilities. Code provisions should specify:</p> <ul style="list-style-type: none"> ■ Opportunities for the military to provide technical input and assistance to local jurisdictions to support discussion of projects and potential compatibility issues ■ Defining project types that require military review ■ Identification of the Points of Contact in the development review process ■ Formal procedures for transmitting applications to NSA Crane / Lake Glendora Test Facility ■ Formal procedures for requesting and receiving comments ■ Timeline for military responses considering review timeframes specified by state law and local procedures ■ Notification to NSA Crane / Lake Glendora Test Facility on all public hearings related to development applications <p>This strategy applies to any jurisdiction that establishes a Development Review process in the future as indicated by the ♦ symbol.</p> <p><i>Other Primary Partner: City of Sullivan</i></p>	Mid-Term	■	♦	♦	♦	♦				■ ♦



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8D	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Adopt Military Notification Procedures for Development Projects through Tax Abatement Process</p> <p>Jurisdictions without a planning regulatory framework should adopt formal requirements for notification and review of development by NSA Crane / Lake Glendora Test Facility per the Checklist identified Strategy COM-8B and Indiana Code Section 36-7-30.1-2.</p> <p>As part of the tax abatement application process require transmittal of a copy of the application to NSA Crane / Lake Glendora Test Facility at the time of application to ensure adequate review prior to the public hearing. Incorporate notification and review requirements per Indiana Code Section 36-7-30.1-2.</p> <p><i>Other Primary Partners: local economic development corporations, councils and commissions; Town of Crane</i></p>	Short-Term		■	■	■	■				■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
COM-8F	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Adopt Development Notification Procedures through State Building Permit Review Process</p> <p>Jurisdictions that employ the Indiana Department of Homeland Security Division of Fire and Building Safety to review and approve building permits should enter into a Memorandum of Agreement with the Division acknowledging that notification and review procedures for NSA Crane / Lake Glendora Test Facility are conducted as part of the Division review and approval of building permits in compliance with Indiana Code Section 36-7-30.1-2.</p> <p>Note: Requires legislative action to modify procedures for the Indiana Department of Homeland Security Division of Fire and Building Safety – see Strategy LEG-1B</p> <p><i>Other Primary Partners: Indiana Department of Homeland Security Division of Fire and Building Safety, Town of Crane</i></p>	Short-Term	■	■	■	■	■		□		■



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
HOUSING AVAILABILITY (HA)												
HA-1A	Study Area	Update Comprehensive Plans for Housing Jurisdictions should update their comprehensive plans to incorporate a housing element or housing vision, goals, and objectives that consider providing a variety of housing options to accommodate transient and permanent party military personnel.	Mid-Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
HA-1B	Study Area	Develop Housing Plan Jurisdictions should develop a regional plan for housing that executes the housing vision, goals, and objectives identified per Strategy HA-1A. <i>Other Partners: Indiana Office of Community and Rural Affairs; Radius Indiana; local economic development corporations, councils and commissions</i>	Mid-Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
HA-1C	Study Area	Evaluate “P4” Partnerships Investigate the feasibility of a local government / Navy / private development venture through public-public and public private partnerships to develop housing option for the military personnel. <i>Other Primary Partners: local developers; Indiana Office of Defense Development; Indiana Office of Community and Rural Affairs; Radius Indiana; local economic development corporations, councils and commissions; WestGate Authority</i>	Mid-Term	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LAND USE (LU)												
LU-1A	NSA Crane Coordination MCA	Update Comprehensive Plans for Military Compatibility Jurisdictions should update their comprehensive plans to incorporate provisions that integrate military compatibility planning with the future growth. Updates should include maps from NSA Crane per Strategy COM-1D and the Military Compatibility maps from the JLUS. <i>Other Primary Partner: Town of Crane</i>	Mid-Term	■	■	■	■					■
LU-1B	NSA Crane Coordination MCA	Amend Zoning Ordinance for Military Compatibility Amend the zoning ordinance to incorporate provisions and regulations that integrate military compatibility planning. Updates should include maps from NSA Crane per Strategy COM-1D and the Military Compatibility maps from the JLUS.	Mid-Term	■								



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LU-1C	NSA Crane Coordination MCA	<p>Adopt Land Use in Three-Mile Military Notification Buffer</p> <p>Jurisdictions without land use planning should adopt land use controls specific to military compatibility within the three-mile military notification buffer in conjunction with Strategy LEG-1D. This guidance is intended to minimize conflicts between military installations and surrounding communities and should consider consultation with the installation command to determine the needs of the military installation with respect to questions of installation expansion and environmental impact; issues of installation safety, noise pollution, air pollution, electrical emissions; and potential for obstructed visibility or surveillance.</p> <p><i>Other Primary Partner: Town of Crane</i></p> <p><i>Other Partner: Crane Army Ammunition Activity</i></p>	Mid-Term		■	■	■		□			■
LU-3A	NSA Crane Coordination MCA	<p>Continue to Pursue Truck Travel Center Development</p> <p>Daviess and Greene counties should continue to pursue the development of a truck travel center near Interstate 69 interchanges to alleviate the uncontrolled overnighting of trucks across from the Town of Crane and provide professional drivers with amenities.</p> <p><i>Other Primary Partners: local developers; Indiana Office of Community and Rural Affairs; Radius Indiana; Daviess County Economic Development Corporation; Greene County Economic Development Corporation</i></p>	On-Going	■	■							■

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEGISLATIVE INITIATIVES (LEG)												
LEG-1A	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Amend Indiana Code Annotated Title 36, Article 7, Section 30.1 Planning and Zoning Affecting Military Bases</p> <p>The Indiana Legislature should amend IC 36-7-30.1 to improve on existing legislation for military compatibility. Consider appointing a committee to determine the most effective changes to clarify and enhance the compatibility language. At minimum the legislation should be amended to:</p> <ul style="list-style-type: none"> ■ Clarify that the code applies to permitting, in addition to planning and regulating ■ Specify development types for coordination with the military so that it is focused on relevant plans and developments with the potential to adversely impact military operations ■ Specify the form of notification required to ensure consistent interpretation and application across jurisdictions ■ Specify that plans/ documentation is required that adequately explain the activity and location such that the military can provide informed feedback on any potential impact on their operations ■ Provide for the ability to impose conditions, require modifications to eliminate or mitigate potential adverse impacts, or include a mediation process to resolve compatibility conflicts where other remedies cannot be applied ■ Incorporate compliance enforcement provisions. This will require the identification of an appropriate state authority, procedures to track compliance and a progressive (stepped) framework to attain compliance, perhaps beginning with education and assistance. <p><i>Other Partner: Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council</i></p>	Mid-Term							■		□



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEG-1B	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Amend State Building Permit Review Procedures</p> <p>Amend Indiana Code 4-21.5-3-1 to require the Indiana Department of Homeland Security Division of Fire and Building Safety as the authority for building permits within counties not employing local building inspection program to notify a military installation of construction pursuant to IC 36-7-30.1.</p> <p>Amend Title 675 Indiana Administrative Code 12-10-6: Required Administrative Provisions to include a provision that no building permit would be issued that would cause a violation of IC 36-7-30.1.</p> <p><i>Other Partner: Indiana Department of Homeland Security Division of Fire and Building Safety; Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council</i></p>	Mid-Term							■		□
LEG-1C	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Consider State Funding Program Set Asides and Incentives for Rural Military Communities</p> <p>Amend the Rural Economic Development Fund and Indiana Main Street programs to include a set-aside for rural communities who host military installations and are subject to encroachment impacts including development constraints. Consider incentive criteria such as community actions which demonstrate ongoing commitment to military compatibility.</p>	Long-Term							■		



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
LEG-1D	NSA Crane Coordination MCA / LGTF Coordination MCA	<p>Designate State Areas of Interest</p> <p>Designate a three-mile boundary around military installations as “state areas of interest.” Require jurisdictions to adopt planning guidance specific to compatibility with military installations for land within the three-mile boundary.</p> <p><i>Other Partners: Other Partner: Indiana Office of Defense Development; Indiana Commission on Military and Veteran’s Affairs; Indiana Military Base Council</i></p>	Mid-Term							<input checked="" type="checkbox"/>		<input type="checkbox"/>
NOISE (NOI)												
NOI-3A	NSA Crane MCAOD / LGTF MCAOD	<p>Increase Public Understanding of Noise Sources</p> <p>Increase community awareness of military overflight and operations throughout the entire NSA Crane / Lake Glendora Test Facility area of influence through the use of local media sources, newsletters, brochures, and annual outreach functions hosted by NSA Crane / Lake Glendora Test Facility in cooperation with each Study Area jurisdiction. Include information that there are other noise generating uses such as quarries and mines within the Study Area.</p> <p><i>Other Partners: City of Sullivan, Town of Crane, Indiana Office of Defense Development, Indiana Air National Guard</i></p>	Long-Term	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>



Key Strategies – Daviess, Greene, and Martin Counties

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	Indiana Legislature	Indiana DOT	Other
WATER QUALITY / QUANTITY (WQQ)												
WQQ-2B	NSA Crane Coordination MCA	Consider Adopting Low Intensity Land Uses In conjunction with Strategies LEG-1D and LU-1C, consider adopting land use controls that stipulate low intensity land uses within the limited area of the Lake Greenwood Watershed to agriculture and residential uses. Consider adopting minimum lot sizes that conform to requirements for septic systems. Grandfather existing uses. <i>Other Partners: Indiana Farm Bureau</i>	Long-Term		■							□



How to Provide Comments

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

Comment Cards:

- Complete and...
 - hand it to us at the end of the Forum

Comment Sheet:

- Complete and...
 - Email, mail or fax to Matt Crouch

Comment Sheet for Public Draft JLUS

NAME AND CONTACT INFORMATION

#	Name	Comments/Concerns	Timing/Location	Response	Follow Up
1					
2					
3					
4					
5					

NSA CRANE JOINT LAND USE STUDY

A cooperative land use planning effort between NSA Crane and surrounding communities.

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Comments

Please return this comment form to the registration table or to a project representative.



How to Provide Comments

Email comments to:
mcrouch@ocra.in.gov

Mail comments to:
Mr. Matt Crouch
One N Capitol Avenue, Suite 600
Indianapolis, IN 46204-2027

Fax comments:
Attn: Matt Crouch, OCRA
317-233-3597

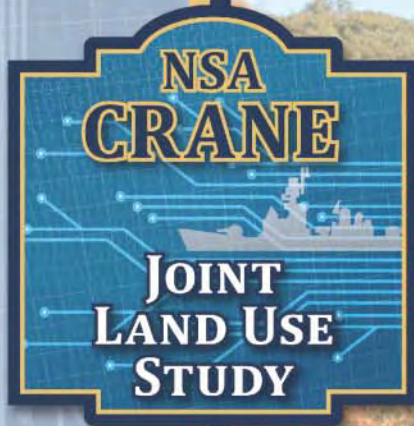
The image shows two forms related to the NSA CRANE JOINT LAND USE STUDY. The top form is a 'Comment Sheet for Public Draft J.L.U.S.' with a table for recording comments. The bottom form is a 'Comments' sheet with a large area for writing comments.

Comments Number	Name	Comments/Comments	Comments/Comments	Comments/Comments	Comments/Comments	Comments/Comments
1						
2						
3						
4						
5						

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

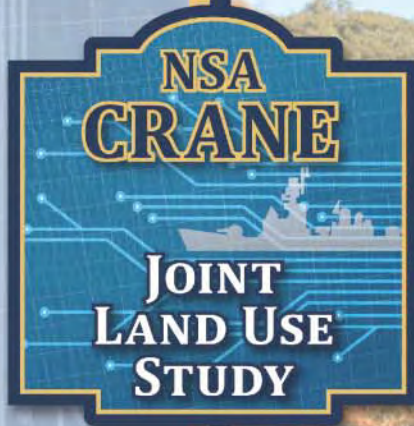
Please return this completed form to the registration table or to a project representative.





Next Steps

1. **Public Draft Documents / Public Review Period is NOW through midnight December 1, 2016**
 - **JLUS Report**
 - **Background Report**
2. **Review and revise JLUS per Public Comments / Committee approval**
3. **Acceptance by JLUS Policy Committee**
4. **Acceptance by JLUS Study Area jurisdictions**
5. **Implementation**



Questions and Answers



**Before leaving today's Forum please return your
completed comment card to a project representative**

Thank you for your attendance!



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☐ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN

☐ WESTGATE ACADEMY, ODON, IN

☒ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME:

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Robert Erickfield	Sullivan	812-230-8748	
Don Hoffeld	1		
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Wayne Jackson	Sullivan		
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Roy E. McCombs	SULLIVAN	812-249-3518	
DAN Wilky	CRANE Army	812-296-0880	
Joe Audinick	Sullivan	812-268-3009	
Bruce Walling	Sullivan	812-268-0500	brucewalling@gmail.com



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☐ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN

☐ WESTGATE ACADEMY, ODOM, IN

☒ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME:

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
Tim Leonard	NSWC CRANE	296-1980	
CDR Tim CRADDOCK	NSA CRANE		
TODD WOODS	NSA CRANE	812 854-6997	
MATT CRAIG	RADCLIFF	812-534-2375 6448	
Jim Pirtle	NSA Sullivan County	812-268-6257	
Candace Hood	Sullivan	812-564-1934	
Blake Blann	Sullivan	812-241-9017	
JAMES R ANDERSON	SULLIVAN	812-268-3667	
Rusty DECKARD	SULLIVAN	812 243-4541	
Larry Ordner	Congressman Buchanan		
JP Hill	Sullivan	714-345-0255	
Luther Galtner	Sullivan	812-268-5777	



PUBLIC FORUM SIGN-IN SHEET

LOCATION: ☐ LIFE TABERNACLE CHURCH, SPRINGVILLE, IN ☐ WESTGATE ACADEMY, ODOM, IN ☒ SULLIVAN MIDDLE SCHOOL, SULLIVAN, IN

DATE / TIME:

NAME /TITLE	COMMUNITY	TELEPHONE #	E-MAIL
<i>Alone Wamp</i>	<i>SULL. COUNTY COUNCIL</i>	<i>812-382-4461</i>	



PUBLIC FORUM 3

Sullivan County



November 17, 2016



Today's Meeting

Agenda

- Welcome / Introductions
- JLUS Overview / Update
- Areas of Compatibility & Influence
- Public Draft JLUS Review and Comments

Meeting Objectives

- Provide an update on the JLUS process
- Provide overview of the DRAFT JLUS report
- Receive input on Draft compatibility issues



Project Team



Project Manager

Matt Crouch, EDFP

Indiana Office of
Community and Rural
Affairs

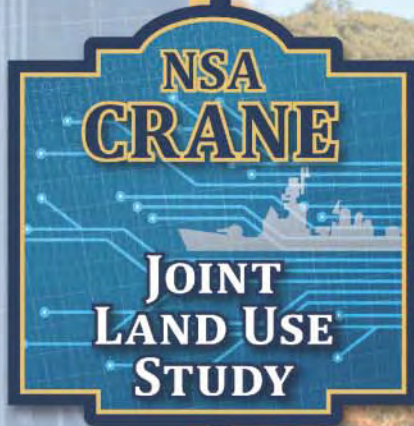
Phone: 317.750.7670
mcrouch@ocra.in.gov

Matrix Design Group

Patrick Small, AICP
Project Manager

Celeste Werner, AICP
Deputy Project Manager

Abbie Woodruff
Planner

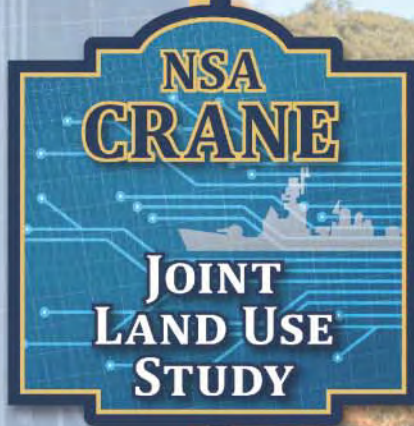


Welcome / Introductions



Who is Engaged in the JLUS?

	Participants	Responsibilities
Sponsor (Committee)	OCRA Radius Indiana IOOD NSA Crane	Coordination Accountability Grant Management Financial Contribution
Policy Committee	Elected & Appointed Officials NSA Crane Radius Indiana	Policy Direction Study Oversight Monitoring Report Adoption
Technical Working Group	Planning Staff Engineering Staff Technical Specialists Special Interests	Technical Issues Alternatives Report Development Recommendations
Public	All interested persons	Public Input Public Comments



JLUS Overview / Update



Overview of JLUS

Goal: **BALANCE**

The goal of the NSA Crane JLUS is to promote compatible growth, sustain environmental and economic health, and protect public health / safety / welfare, while protecting the viability of current and future missions at NSA Crane and its Lake Glendora Test Facility.



Overview of JLUS

A JLUS IS NOT:


- a regulatory document
- an enforceable action

A JLUS IS:

- a study that defines appropriate actions for further consideration
- a collaborative document
- a body of information that assists in making more informed decisions
- Tailored to for each jurisdiction / agency

The JLUS will require follow on actions by all stakeholders, including public involvement to implement

JLUS Update

- ✓ Data collection
 - ✓ Stakeholder interviews
 - ✓ Identification of compatibility issues
 - ✓ Assessment and prioritization of compatibility issues
 - ✓ Identification of areas of concern
 - ✓ Review and assessment of current processes and tools
 - ✓ Develop appropriate strategies and tools
 - ✓ Develop Draft JLUS document
- 
- **Public Review**
 - **Develop Final JLUS document**



Public Involvement Opportunities

Public input is essential to the success of the JLUS

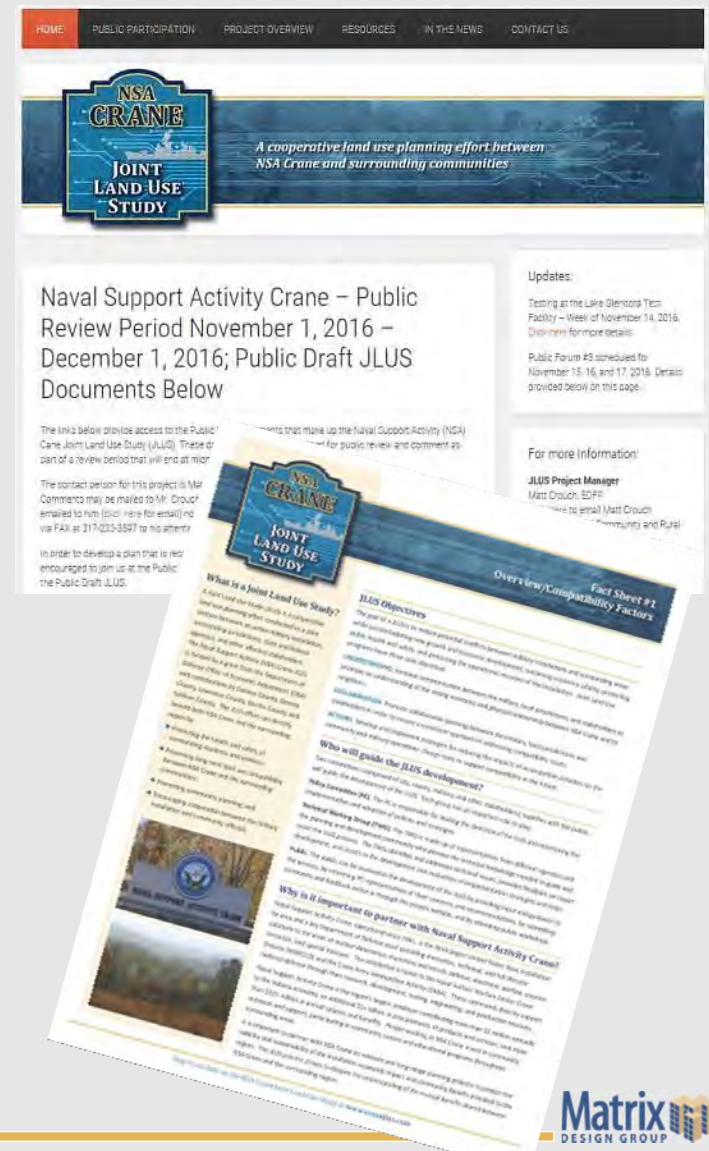
Public Forums – 3 sets

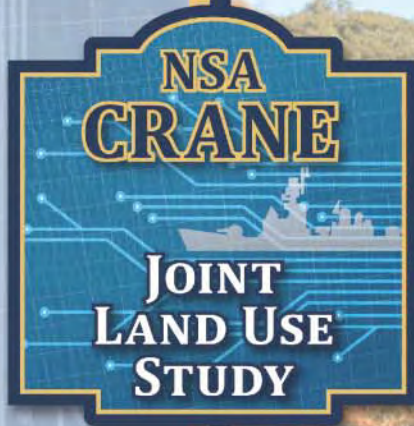
- Lawrence County
- Daviess, Greene, and Martin Counties
- Sullivan County

Project Website

www.cranejlus.com

Public Review Period





Areas of Compatibility and Influence

Compatibility Factors

NSA Crane Joint Land Use Study

What Is Compatibility?

Compatibility, in relationship to military readiness, can be defined as the balance and / or compromise between community and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully. Study area data on existing conditions obtained from the PC, TWG, and public workshops will be analyzed to identify current and future compatibility issues. This analysis will also identify the influence of regulatory measures on land use decisions and will consider existing and projected development trends within the study area. The JLUS will study the following set of 25 potential compatibility factors to determine all pertinent issues.

AQ Air Quality

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



AT Anti-Terrorism/ Force Protection

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

BIO Biological Resources

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

CA Climate Adaptation

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



COM Communication/ Coordination

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

CR Cultural Resources

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



DSS Dust/Smoke/Steam

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

ED Energy Development

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

FSC Frequency Spectrum Capacity

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

FSI Frequency Spectrum Impedance / Interference

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

HA Housing Availability

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

IE Infrastructure Extensions

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of the installation. Infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. However, enhanced or expanded infrastructure could also encourage growth into areas near the installation that might not be compatible with current or future missions.



LAS Land/Air Spaces

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

LU Land Use

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

LEG Legislative Initiatives

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



LG Light and Glare

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

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

Fact Sheet #1: Overview / Factors

MAR Marine Environments

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

NOI Noise

From a technical perspective, sound is the mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sound reaches unwanted levels, this is referred to as noise. The central issue of noise is the impact, or perceived impact, on people, animals (wild and domestic), and general land use compatibility. Exposure to high noise levels can have a significant impact on human activity, health, and safety.

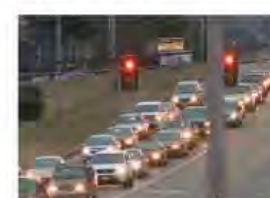
PT Public Trespassing

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



RC Roadway Capacity

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



SA Safety Zones

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

SNR Scarce Natural Resources

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



VO Vertical Obstructions

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

V Vibration

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

WQQ Water Quality/ Quantity

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



Issue Identification

Issues were identified through:

- Technical expertise / experience
- Data research
- Interviews with local stakeholders
 - Jurisdictions
 - Military
 - Agencies
 - Organizations
- Policy Committee / Technical Working Group inputs
- Public inputs



JLUS Report

Six Chapters

1. Introduction
2. Community Profile
3. Military Profile
4. Existing Compatibility Tools
5. Compatibility Assessment
6. Implementation Plan (Recommended Strategies)

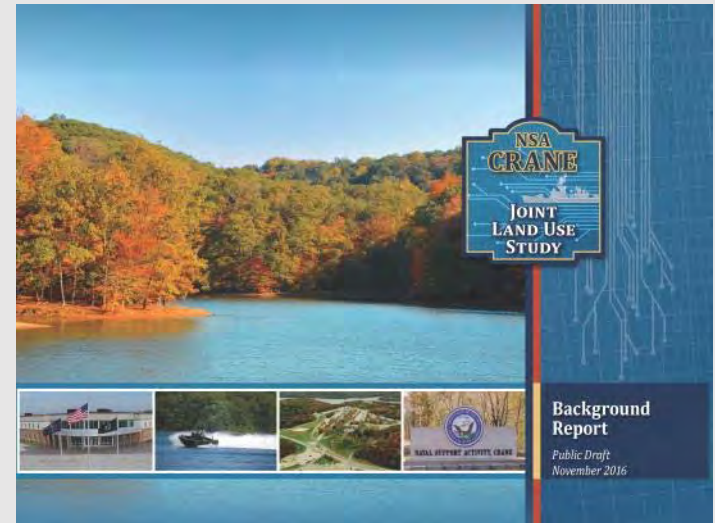


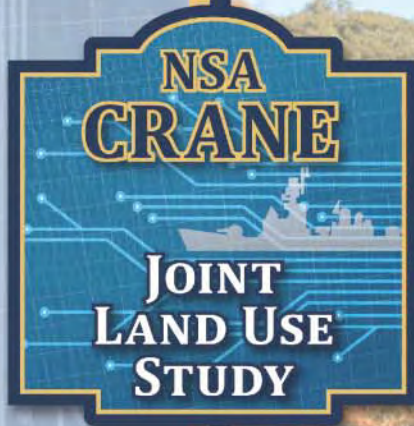


Background Report

Five Chapters

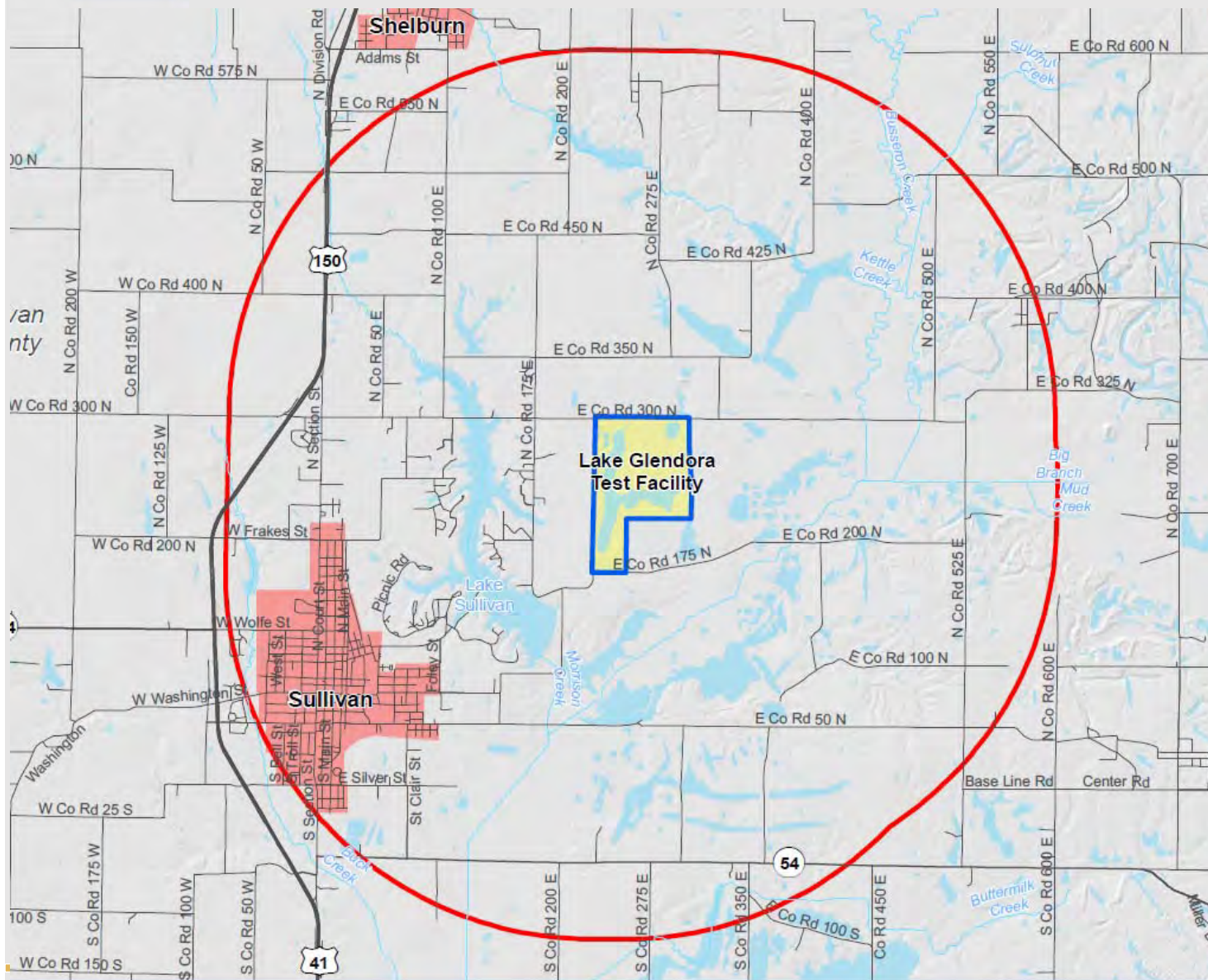
1. Introduction
2. Community Profile
3. Military Profile
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5. Compatibility Assessment





JLUS Public Draft Key Strategies

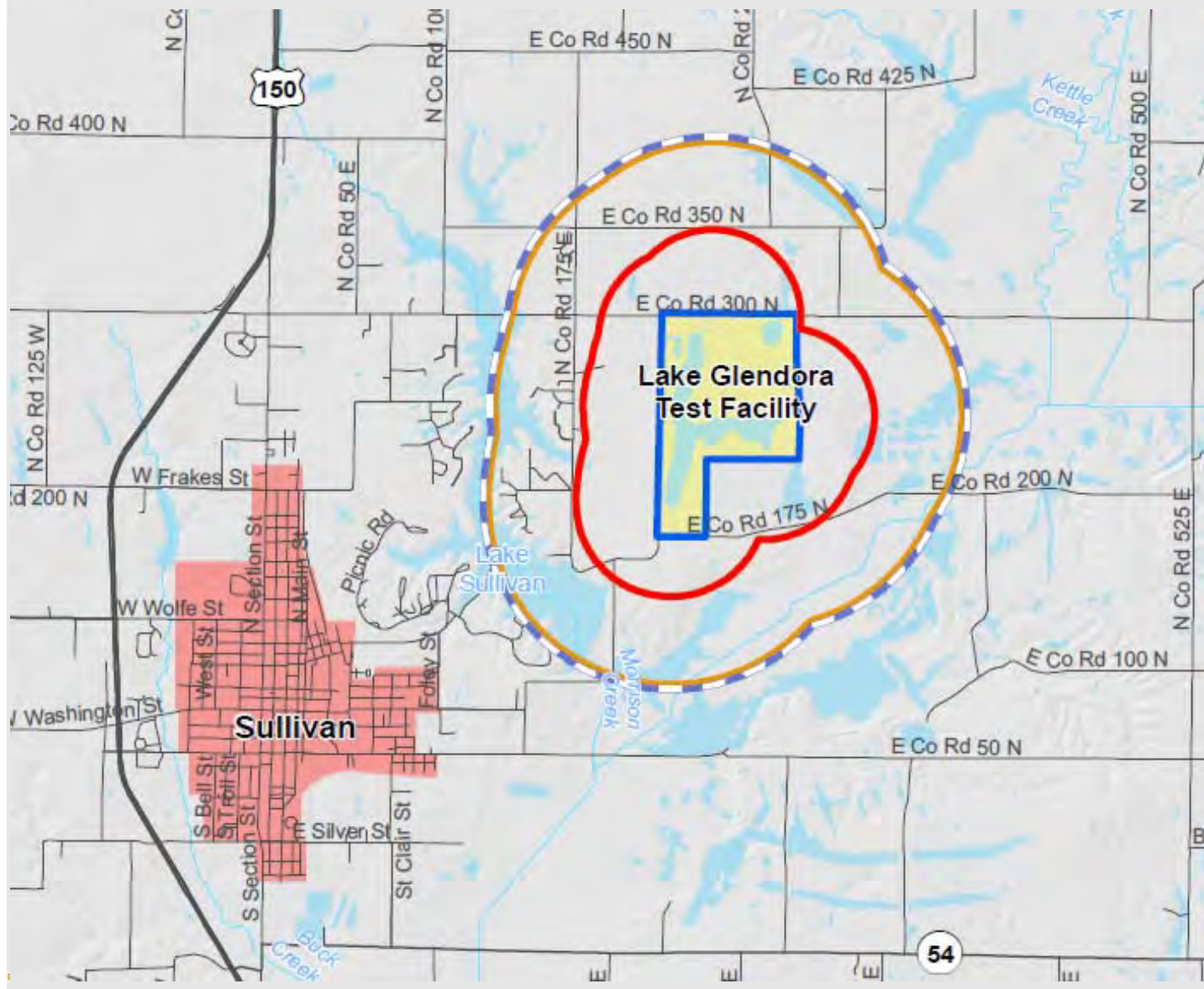
Key Strategies – Coordination MCA



The **Coordination MCA** is a 3-mile buffer surrounding LGTF

- Notification requirements of Indiana Code (IC) §36-7-30.1-2

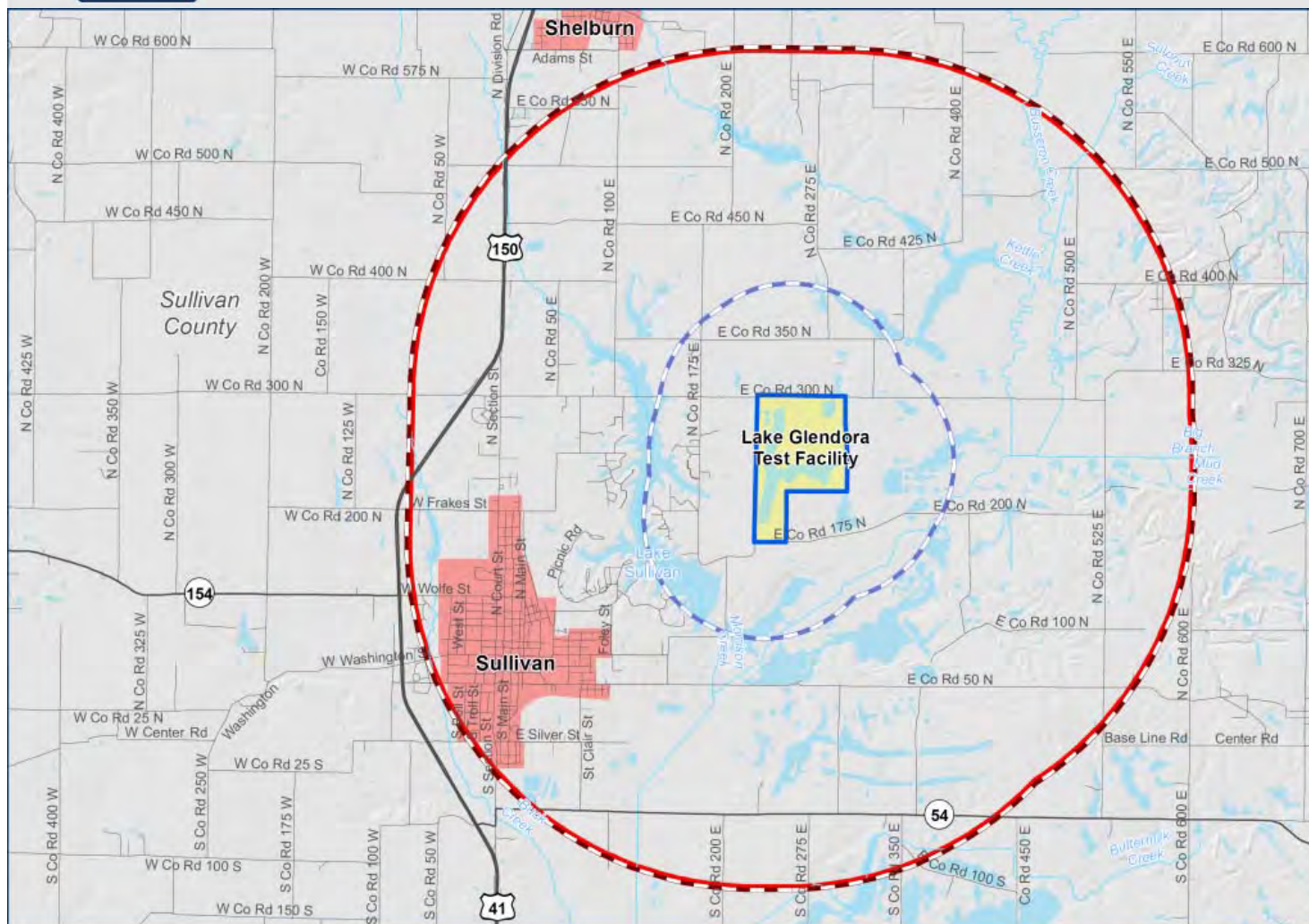
Key Strategies – Noise MCA



The **Noise MCA** includes all lands located within the noise contours for:

- ½ mile radius Noise Contour
- 1 Mile radius Noise Contour

Key Strategies – MCAOD



Legend

- MCAOD
- LGTF Noise MCA
- Installation Boundary
- Coordination MCA
- Incorporated Community
- County Boundary
- Highway
- Road
- Water Body
- River/Creek

The proposed LGTF **Military Compatibility Area Overlay District (MCAOD)** is an area that incorporates both the Noise and Coordination MCAs

Issue / Strategy ID #	Geographic Area	Strategy	Timeframe	Daviess County	Greene County	Lawrence County	Martin County	Sullivan County	NSA Crane / LGTF	CAAA	Indiana Legislature	Indiana DOT	Other
COMMUNICATION / COORDINATION (COM)													
COM-1	Public Awareness and Knowledge of NSA Crane / Lake Glendora Test Facility												
	Need for increased public education of NSA Crane and the Lake Glendora Test Facility amongst the local community.												
COM-1A	Study Area	<p>Establish a NSA Crane / LGTF JLUS Coordination Committee</p> <p>Establish a JLUS Coordination Committee to maintain efficient and effective coordination among the JLUS partners and to oversee the implementation of JLUS recommendations. The JLUS Coordination Committee should meet on a regular basis as agreed upon by the Committee and be responsible for establishing effective and timely means of communication for the purpose of coordinating and addressing compatibility concerns and issues.</p> <p>Consider committee membership from the JLUS Policy Committee as well as other community partners as deemed appropriate to maintain continuity and institutional project knowledge. Consider the formation of a technical subcommittee comprising Technical Working Group members to address technical aspects of the JLUS implementation.</p> <p>Other Primary Partners: Indiana Office of Community and Rural Affairs, Radius Indiana</p>	Short-term	■	■	■	■	■	■				■

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

Geographic Area: Geographic area where each strategy applies.

Strategy: Description of the strategy.

Timeframe: The expected initiation date for option

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



Key Strategies – Sullivan County

Strategy

COMMUNICATION / COORDINATION (COM)

Establish a NSA Crane / Lake Glendora Test Facility JLUS Implementation Coordination Committee

Establish a JLUS Implementation Coordination Committee to maintain efficient and effective coordination among the JLUS partners and to oversee the implementation of JLUS recommendations. The JLUS Implementation Coordination Committee should meet on a regular basis as agreed upon by the Committee and be responsible for establishing effective and timely means of communication for the purpose of coordinating and addressing compatibility concerns and issues.

Consider committee membership from the JLUS Policy Committee as well as other community partners as deemed appropriate to maintain continuity and institutional project knowledge. Consider the formation of a technical subcommittee comprising Technical Working Group members to address technical aspects of the JLUS implementation.

Other Primary Partners: Indiana Office of Community and Rural Affairs, Radius Indiana, City of Sullivan, Town of Shoals, Town of Crane, Indiana Office of Defense Development, Southern Indiana Development Commission



Key Strategies – Sullivan County

Strategy

Develop Memorandum of Agreement for Communications

NSA Crane and Lake Glendora Test Facility should collaborate with local governments and economic development organizations to implement a Memorandum of Agreement that delineates lines of communication between jurisdictions, agencies and NSA Crane / Lake Glendora Test Facility leadership.

Other Primary Partners: Indiana Office of Defense Development; Indiana Office of Community and Rural Affairs; Radius Indiana; City of Sullivan; Town of Crane; local economic development corporations, councils and commissions

Invite a NSA Crane Representative to Serve as a Non-Voting Member of Plan Commissions

In an effort to continue a collaborative partnership, include in a Memorandum of Agreement between county and local governments and NSA Crane that allows NSA Crane to participate as a non-voting member on Plan Commissions to attend meetings and provide technical input on military compatibility issues.

This strategy applies to any jurisdiction that establishes a Plan Commission in the future as indicated by the ♦ symbol.

Other Primary Partner: City of Sullivan



Key Strategies – Sullivan County

Strategy

Provide Mutual Briefings

To perpetually enhance support and cooperation, and reinforce the partnership between NSA Crane / Lake Glendora Test Facility 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 Study Area county commissions and city councils. The counties and cities should provide annual briefings to NSA Crane / Lake Glendora Test Facility 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.

Other Primary Partners: City of Sullivan, Town of Crane

Other Partners: Indiana Office of Defense Development, Indiana Office of Community and Rural Affairs, Radius Indiana, Crane Army Ammunition Activity



Key Strategies – Sullivan County

Strategy

Designate and Formalize Points of Contact for Planning

Consider a Memorandum of Agreement between the JLUS Study Area jurisdictions and NSA Crane / Lake Glendora Test Facility that formally designates and identifies the points of contact for jurisdictions and NSA Crane / Lake Glendora Test Facility. The point of contact should be an individual with knowledge of county and local governments and economic development initiatives, capable of relaying information between the jurisdictions and the military.

Other Primary Partners: local economic development corporations, councils and commissions, and area cities and towns

Formalize Coordination with NSA Crane / Lake Glendora Test Facility in Planning Documents

County and local governments should formalize coordination procedures with NSA Crane / Lake Glendora Test Facility in planning documents including comprehensive plans and zoning ordinance to ensure community compliance with military notification procedures outlined in Indiana Code IC 36-7-30.1 and as amended from time to time.

Other Primary Partners: Southern Indiana Development Commission, City of Sullivan, Town of Crane, other jurisdictions that may have incorporated area within the notification buffer in the future.

Key Strategies – Sullivan County

Strategy

Establish an “Official” Public Notification Protocol to Jurisdictions

NSA Crane / Lake Glendora Test Facility should establish an official public notification protocol to inform the community leaders in advance of detonation activities so the community can inform their residents. The protocol should consider the following:

- Best method to use, e.g. email, phone, media releases, to maximize outreach,
- Agreed upon timeframe for advance notification,
- Information about the activity and its duration,
- Information about impacts if other than noise, and
- A contact number for the installation.

Jurisdiction Notification to the Public

Based on the notification protocol from NSA Crane / Lake Glendora Test Facility in Strategy COM-6A, establish an official and routine public notification protocol to inform residents in advance of detonation activities at NSA Crane / Lake Glendora Test Facility. Consider methods to maximize outreach, e.g. county and city government meetings, government offices, county and city websites, county and city social media sites.

Other Primary Partners: City of Sullivan, Town of Crane



Key Strategies – Sullivan County

Strategy

Communication on Detonations Testing

NSA Crane / Lake Glendora Test Facility should communicate upcoming detonation activities to the public. Communication should take the form of formal media releases, eBlasts, website flash tickers, public service announcements, and radio / TV coverage to ensure the notification is in general circulation.

Jurisdiction Procedures for Noise Complaints

Jurisdictions should adopt coordinated and formal procedures for noise complaints lodged by residents to jurisdiction authorities to ensure complaints are officially documented, conveyed to NSA Crane and the Lake Glendora Test Facility, and that there is appropriate feedback to close the loop with the complainant.

Other Primary Partners: City of Sullivan, Town of Crane, and other area cities and towns



Key Strategies – Sullivan County

Strategy

Adopt Development Notification Checklist

Jurisdictions should work with NSA Crane / Lake Glendora Test Facility 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 NSA Crane / Lake Glendora Test Facility missions.

The checklist should define applicable development types and scales that warrant NSA Crane / Lake Glendora Test Facility 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 county commissions and city councils to acknowledge and endorse its use.

Other Primary Partners: local economic development corporations, councils and commissions; City of Sullivan; Town of Crane

Key Strategies – Sullivan County

Strategy

Formalize NSA Crane / Lake Glendora Test Facility in Development Reviews

Revise codes to include NSA Crane / Lake Glendora Test Facility in the review process for development applications per the Checklist established in Strategy COM-8B and Indiana Code Section 36-7-30.1-2. Include procedures for military notification and timeframes for review to support a proactive approach for identifying and mitigating potential military incompatibilities. Code provisions should specify:

- Opportunities for the military to provide technical input and assistance to local jurisdictions to support discussion of projects and potential compatibility issues
- Defining project types that require military review
- Identification of the Points of Contact in the development review process
- Formal procedures for transmitting applications to NSA Crane / Lake Glendora Test Facility
- Formal procedures for requesting and receiving comments
- Timeline for military responses considering review timeframes specified by state law and local procedures
- Notification to NSA Crane / Lake Glendora Test Facility on all public hearings related to development applications

This strategy applies to any jurisdiction that establishes a Development Review process in the future as indicated by the ♦ symbol.

Other Primary Partner: City of Sullivan

Key Strategies – Sullivan County

Strategy

Adopt Military Notification Procedures for Development Projects through Tax Abatement Process

Jurisdictions without a planning regulatory framework should adopt formal requirements for notification and review of development by NSA Crane / Lake Glendora Test Facility per the Checklist identified Strategy COM-8B and Indiana Code Section 36-7-30.1-2.

As part of the tax abatement application process require transmittal of a copy of the application to NSA Crane / Lake Glendora Test Facility at the time of application to ensure adequate review prior to the public hearing. Incorporate notification and review requirements per Indiana Code Section 36-7-30.1-2.

Other Primary Partners: local economic development corporations, councils and commissions; Town of Crane

Key Strategies – Sullivan County

Strategy

Adopt Development Notification Procedures through Jurisdiction Building Permitting Process

City of Sullivan should adopt formal requirements through the building permit process for notification and review to the Lake Glendora Test Facility per the Checklist in Strategy COM-8B and Indiana Code Section 36-7-30.1-2. Adopt requirements that specify:

- Building project types that require military review
- Points of Contact in the building permit review process
- Formal procedures for transmitting building applications to the Lake Glendora Test Facility
- Formal procedures for requesting and receiving comments from the Lake Glendora Test Facility
- Timeline for military responses considering review timeframes specified by state law and local procedures

Other Primary Partner: City of Sullivan



Key Strategies – Sullivan County

Strategy

Adopt Development Notification Procedures through State Building Permit Review Process

Jurisdictions that employ the Indiana Department of Homeland Security Division of Fire and Building Safety to review and approve building permits should enter into a Memorandum of Agreement with the Division acknowledging that notification and review procedures for NSA Crane / Lake Glendora Test Facility are conducted as part of the Division review and approval of building permits in compliance with Indiana Code Section 36-7-30.1-2.

Note: Requires legislative action to modify procedures for the Indiana Department of Homeland Security Division of Fire and Building Safety – see Strategy LEG-1B

Other Primary Partners: Indiana Department of Homeland Security Division of Fire and Building Safety, Town of Crane

Key Strategies – Sullivan County

Strategy

FREQUENCY SPECTRUM IMPEDANCE / INTERFERENCE (FSI)

Establish Procedures to Avoid Frequency Conflicts

The Lake Glendora Test Facility should coordinate with Sullivan County on review of projects with frequency requirements that could impact communications off-installation. The criteria that triggers coordination includes:

- Proximity to the Lake Glendora Test Facility
- Tower height
- Power emission from tower sources
- High output transmission devices

Formalize Communication Procedures

Identify and convene a coalition of spectrum stakeholders to discuss use of frequencies and notification procedures for mitigating and troubleshooting possible service interruptions.

Other Primary Partners: Local wireless broadband providers, Indiana Office of Technology



Key Strategies – Sullivan County

Strategy

LAND USE (LU)

Coordination on Infrastructure Planning

Notify and coordinate infrastructure expansion plans with the Lake Glendora Test Facility such as water and sewer extensions and transportation improvements. This coordination can be done in conjunction with Strategies COM-2A, COM-2B, COM-2C, COM-3B and COM-8A.

LEGISLATIVE INITIATIVES (LEG)

**Amend Indiana Code Annotated Title 36, Article 7, Section 30.1
Planning and Zoning Affecting Military Bases**

The Indiana Legislature should amend IC 36-7-30.1 to improve on existing legislation for military compatibility. Consider appointing a committee to determine the most effective changes to clarify and enhance the compatibility language. At minimum the legislation should be amended to:

- Clarify that the code applies to permitting, in addition to planning and regulating
- Specify development types for coordination with the military so that it is focused on relevant plans and developments with the potential to adversely impact military operations
- Specify the form of notification required to ensure consistent interpretation and application across jurisdictions
- Specify that plans/ documentation is required that adequately explain the activity and location such that the military can provide informed feedback on any potential impact on their operations
- Provide for the ability to impose conditions, require modifications to eliminate or mitigate potential adverse impacts, or include a mediation process to resolve compatibility conflicts where other remedies cannot be applied
- Incorporate compliance enforcement provisions. This will require the identification of an appropriate state authority, procedures to track compliance and a progressive (stepped) framework to attain compliance, perhaps beginning with education and assistance.

Other Partner: Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council

Key Strategies – Sullivan County

Strategy

Amend State Building Permit Review Procedures

Amend Indiana Code 4-21.5-3-1 to require the Indiana Department of Homeland Security Division of Fire and Building Safety as the authority for building permits within counties not employing local building inspection program to notify a military installation of construction pursuant to IC 36-7-30.1.

Amend Title 675 Indiana Administrative Code 12-10-6: Required Administrative Provisions to include a provision that no building permit would be issued that would cause a violation of IC 36-7-30.1.

Other Partner: Indiana Department of Homeland Security Division of Fire and Building Safety; Indiana Office of Defense Development; Indiana Commission on Military and Veteran's Affairs; Indiana Military Base Council

Strategy

SAFETY ZONES

Develop a Composite Map of the locations of Methane Wells, High-Pressure Pipelines and Coal Mines and Incorporate into Hazard Mitigation Planning

Through shared data from different sources, develop a composite map that identifies the locations of methane wells, high-pressure pipelines and active and abandoned coal mines. Incorporate the maps into hazard mitigation planning documents for the area.

Other Partners: Pipeline and Hazardous Materials Safety Administration, Mine Safety and Health Administration, Indiana Department of Homeland Security, Indiana Office of Technology

Coordinate with the Lake Glendora Test Facility

Sullivan County should use the composite map developed in Strategy SA-2A to coordinate with the Lake Glendora Test Facility regarding locations of wells, pipelines, and mines to ensure operations at the Lake Glendora Test Facility do not trigger impacts to these facilities / conveyances and conversely so that new development will not trigger impacts to wells and transport pipelines that could impact the mission at the Lake Glendora Test Facility.

Other Partner: City of Sullivan



How to Provide Comments

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

Comment Cards:

- Complete and...
 - hand it to us at the end of the Forum

Comment Sheet:

- Complete and...
 - Email, mail or fax to Matt Crouch

Comment Sheet for Public Draft JLUS

NAME AND CONTACT INFORMATION

#	Name	Comments/Concerns	Timing/Location	Response	Follow Up
1					
2					
3					
4					
5					

NSA CRANE JOINT LAND USE STUDY

A cooperative land use planning effort between NSA Crane and surrounding communities.

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

Comments

Please return this comment form to the registration table or to a project representative.



How to Provide Comments

Email comments to:
mcrouch@ocra.in.gov

Mail comments to:
Mr. Matt Crouch
One N Capitol Avenue, Suite 600
Indianapolis, IN 46204-2027

Fax comments:
Attn: Matt Crouch, OCRA
317-233-3597

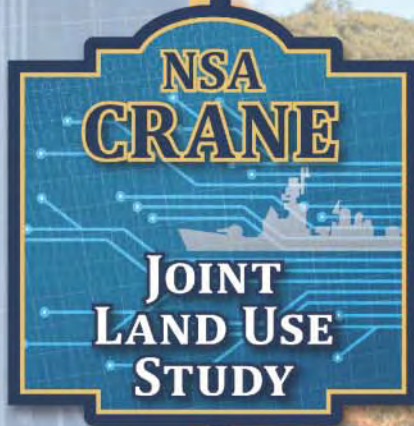
The image shows two forms related to the NSA CRANE JOINT LAND USE STUDY. The top form is a 'Comment Sheet for Public Draft J.L.U.S.' with a table for recording comments. The bottom form is a 'Comments' sheet with a large area for writing comments.

Comments Number	Name	Address	Comments	Project Location	Response	Action Taken
1						
2						
3						
4						
5						

Comments

Your comments are VERY IMPORTANT to the development of this Plan and will be taken into consideration throughout the project duration.

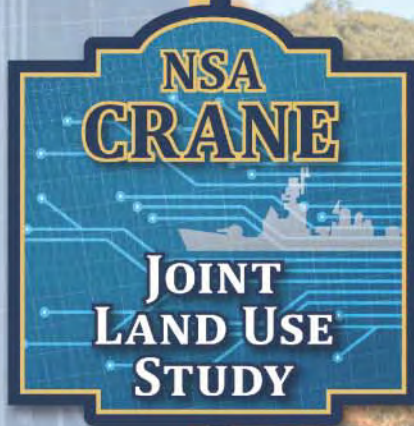
Please return this completed form to the registration table or to a project representative.





Next Steps

1. **Public Draft Documents / Public Review Period is NOW through midnight December 1, 2016**
 - **JLUS Report**
 - **Background Report**
2. **Review and revise JLUS per Public Comments / Committee approval**
3. **Acceptance by JLUS Policy Committee**
4. **Acceptance by JLUS Study Area jurisdictions**
5. **Implementation**



Questions and Answers



**Before leaving today's Forum please return your
completed comment card to a project representative**

Thank you for your attendance!



For Questions Contact:

Indiana Office of Community and Rural Affairs

Matt Crouch, EDFP, Project Manager

One North Capitol, Suite 600

Indianapolis, IN 46204

Email: MCrouch@ocra.IN.gov

Phone: 317.750.7670

www.cranejplus.com



Naval Support Activity Crane JLUS Comments Received by Comment Card at Public Forum #3

Comment #	Public Comment
Lawrence County Forum (November 15, 2016)	
1	No comments submitted at forum.
Daviess, Greene, and Martin County Forum (November 16, 2016)	
2	I would suggest we pursue state legislative language to specifically clarify local planning jurisdictions have the option to appoint a non-resident Crane representative as a non-voting member of the local plan commission.
3	Require that property splits/subdivisions in the MCA be recorded in the county auditors' and recorder' office with language that notes the presence of the MCA.
Sullivan County Forum (November 17, 2016)	
4	Please consider the <u>positive</u> effect of the testing: vibration is a common method of making wet concrete more dense. Large vibrations may <u>cure</u> mine subsidence in the impacted area.
5	Would it be possible to have pre-blast surveys done on structures by an independent surveyor prior to the next round of detonation studies? Will the government pick up cost? Would it be possible to get a small number of seismographs placed x amount of feet from detonation zone in 4 different directions to encompass wide study area?
6	I would like to see more public forums with Crane facility.
7	We need <u>compatible</u> communication with Naval Base personnel.

Naval Support Activity Crane JLUS Comments Received by Comment Card at Public Forum #3

Comment #	Public Comment
8	We need a US Navy interface.
9	Noise, vibrations, cracks in our ceilings. We had our foundation redone. It's cracking and falling apart again. We live 1735 feet from Lake Glendora. Also my husband works swing shift and when testing is going on there is no sleep for him. Purchasing property at fair market value would help the problem.
10	We need more information. It looks like a 50/50 deal – we give and you take.
11	Comment: Warning- audible prior to detonation about 2-5 minutes in advance.
12	<p>Kitchen broke- came unglued- heavy blasting in June/July. Ceiling tile basement bathroom ruined.</p> <p>Pre-blasting survey of homes before next blasting begins?</p> <p>Who pays for our damage to ceiling in basement?</p> <p>Crane had chance to buy 5,000 acres before all of us moved in and built a house.</p> <p>Crane is a bad neighbor – support the military but want damage to my home paid. I want a <u>reason</u> for destroying our home. I want a <u>real</u> Crane person to show up to my house to discuss issues.</p>

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