

## IV Compatibility Mitigation Tools

### Introduction

This section will examine the use of various tools available to local bodies that assist in creating an environment for promoting compatible use. Some of these programs are intentional in their efforts to assist with compatible use; while others have the desired affect even though a different purpose may be the focus of a particular program.

Specific programs were discussed and evaluated on their potential value to this region as illustrated by analysis of the gathered data. Some of these are already in use locally and those cases will be highlighted. A presentation of other tools that aren't currently being used in the study area but based on results elsewhere could be adapted to the local needs.

The tools available have varied parameters. They are implemented at different levels of government or jurisdictional authority; have a range of defined levels of permanence, and degrees of acceptance from voluntary to regulatory in nature.

### Federal Programs

The regulatory nature of land use has spawned many programs within federal agencies that can be used to assist with compatible use. Environmental programs such as the Clean Water Act via EPA, the Endangered Species Act via the U.S. Fish and Wildlife Service and NOAA, or the US Dept of Agriculture's (USDA) land set aside programs

such as Natural Resource Conservation Service's (NRCS) Agricultural Conservation Easement Program (ACEP)

### REPI & ACUB

The primary direct program within Department of Defense (DoD) that exist for assisting with compatible use at the federal level is the Readiness and Environmental Protection Integration (REPI) program and its many components. From the program's website " *The REPI Program protects these military missions by helping remove or avoid land-use conflicts near installations and addressing regulatory restrictions that inhibit military activities.*"<sup>168</sup> The promotion of these programs thru public / private partnerships serves both to protect these missions and contribute to overall preservation in particular of natural habitats. Fort Knox has implemented this program with some success in the past. In a 2006 agreement the LTADD served as the cooperative partner with Fort Knox to protect lands in the Eastern Corridor Battle Space with the Army Compatible Use Program (ACUB). In conjunction with partners such as the Kentucky Lands Trust, Bernheim Arboretum and Research Forest, and the Kentucky State Nature Preserve, over 314 acres was permanently protected at the expenditure of just over \$700,000 of DoD and Partner funds through FY 2010. Through 2019, ACUB has expended \$926,490 of DoD and \$119,231 of Partner funds to protect 462 acres that contained known habitats of the endangered Gray and Indiana bat populations and assist in restricting light pollution and other physical encroachments.<sup>169</sup> See Map 40 Protected Lands.

The REPI program also has ties with the US Dept of Agriculture (USDA) that provide opportunities to leverage dollars across programs to enhance these partnerships. The most recent example being the 2018

Farm Bill which provides funding to assist lands that are protected from development yet maintain their agricultural use. USDA's primary tool is the Agricultural Conservation Easement Program (ACEP). There are currently over 1,033 acres of farmland in the ACEP program in the study area.<sup>170</sup>

### Military Planning Documents

The AR 200-1, *Environmental Protection and Enhancement* is another tool that is provided by the Department of Defense. This Army Regulation is an overall guide for use on Army facilities and lays out policies for the protection and enhancement about environmental issues. While covering everything from pest management to munitions use on ranges; for our purposes, it also provides a tool the surrounding communities could use with regards to their own policies and procedures. It outlines various statutes, regulations, and other policy factors that could be implemented by local communities. In particular, regarding noise, it provides guidance for acceptable uses for tracts of land that fall within certain zones. It defines these areas and provides suggestions. Other areas such as cultural resources, emergency preparedness, and environmental inventory could prove useful.

As part of Fort Knox's responsibility, they create plans to layout and mark goals. These include an Integrated Natural Resource Management Plan (INRMP) and an Integrated Cultural Resource Management Plan (ICRMP). As the names imply the Nature Resource plan focuses on ecomanagement of things such as water resources, outdoor recreation, and preservation of many types all while maintaining the military mission of the post. The Cultural Resource plan is similar in concept with focus on aspects such as archaeology,

historic buildings and landscapes, and Native American culture. Both these documents are updated annually and reevaluated every five years. They serve, however, as living documents with outlines of issues, actions, and goals that are in concert with the overlying mission of the installation.

### Sentinel Landscapes

A new program instituted in 2013 combines some of the many federal programs into a more understandable pathway for access. The Sentinel Landscapes Partnership leverages federal programs also working with state and local efforts to promote advantageous land use objectives. This program works by having an entity obtain the designation of being a Sentinel Landscape. These are granted biennially by the overarching Federal Coordinating Committee (FCC). A potential designee can be a combination of federal, state, local, and private groups with a military installation serving as part of this group. The underlaying component of the program is promoting military readiness. The benefits of common purpose, communication, and funding sources can be combined to create a plan and focus area to help in creating a compatible landscape. This program will next be available in the winter of 2023 as the 2021 designations will be announced by December 2021. For FY 2019 over \$150 million was available to designees nationwide.<sup>171</sup>

The ability to combine resources and partnering provides a powerful tool to preserve and protect lands of many types. Figure 51 illustrates just the federal partners involved in this program.

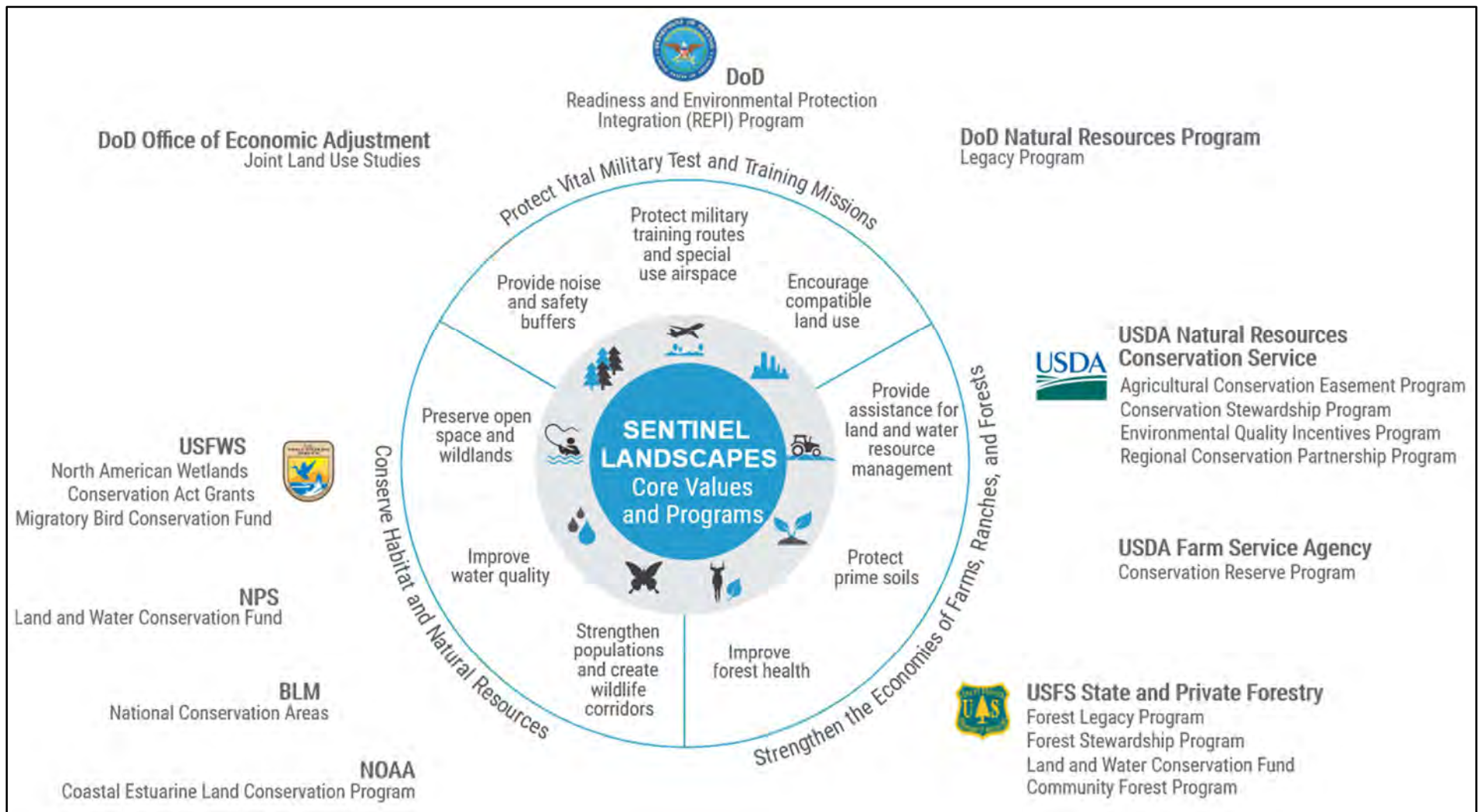


Figure 51 Sentinel Landscapes Federal Programs. Source: [sentinellandscapes.org](http://sentinellandscapes.org)

"In 2018, the National Defense Authorization Act (NDAA) introduced language that formally recognized the Sentinel Landscapes Partnership in statute. Under Section 317 of the NDAA, the Secretary of Agriculture and the Secretary of the Interior are encouraged to give any eligible

landowner or agricultural producers within a designated sentinel landscape, "priority consideration for participation in any easement, grant, or assistance program administered by that Secretary's department.""<sup>172</sup> Further information can be found at [sentinellandscapes.org](http://sentinellandscapes.org).

## State Options

The Commonwealth of Kentucky does not currently have a state level administered program to encourage compatible use. This is an area that has a potential to allow development of such a plan. Two existing programs were reviewed to provide information and context for establishing such a program. Washington's *State Guidebook on Military and Community Compatibility* and Maryland's *JLUS Response Implementation Strategy*. Washington's plan includes guidance on creating a planning framework, the use of regulations and other planning tools and outlines of roles and assistance of state departments in assisting in the implementation and maintenance of these efforts. Maryland's was an outgrowth of the JLUS process and understanding the need for coordination on a state level to assist both the resident military components and their communities in implementing the compatible use guidance that arose from the studies. Both of these documents provide for the establishment of frameworks of stakeholders, mission identification and compatible use issues to further assist in their mitigation. Communications are key and the legislative and regulatory power that can be used for the continued success of military mission and the continues social and economic success of the communities involved.

Kentucky has a need to implement such a program. The impact of not only Fort Knox but also Fort Campbell, the Blue Grass Army Depot, and the large presence of both the National and Air National Guards and their training areas comprising over 194,000 acres in the state are important to maintain. The economic impact of \$8.2 billion in Defense spending in the state as of FY 2017 serves as a primary driver for this. The need to get legislative impetus behind this is further amplified by

the fact that the military is the largest single employer in the state with respect to ones that could physically relocate.

### PACE

A current tool that exists at the state level is the Purchase of Agricultural Conservation Easements (PACE) program. Founded in 1994, set up by KRS 262.900, et al and managed by the Department of Agriculture; it was designed to protect valuable farmland being lost to urbanization.



Figure 52 PACE, KY Dept. of Agriculture

The advantages of the program include the preservation of agricultural uses which tend to be highly compatible with military missions and continued ownership and use of the land and its economic output by the

landowner and the Agricultural resources protected in perpetuity.

Currently the program has some drawbacks due to land only being accepted into the program by donation of easements. This can be offset however, since the program is in direct partnership with both the DoD and USDA and does work with the ACUB program. Fort Campbell has had great success with this program, currently protecting over 1,500 acres around its boundary. The land around Fort Know, while not having the larger tract size and large agricultural crop presence does contain areas with potential to use this program to good effect. There

are current easements totaling over 1,000 acres of farmland in the PACE program in Hardin and Nelson Counties.<sup>173</sup>

### Disclosures

A Real Estate Disclosure's main goal is to make a buyer aware of the current existence of such things as flood zones, various structural problems, water and sewer utilities, HOA memberships, lead paint, radon, and even knowledge of methamphetamine contamination. The awareness of military training in the vicinity of the property and the potential impacts of additional training in the in the future would seem to be an apt fit. The particular focus for noise, vibration, physical encroachment, overflights and other direct impacts to a property owner. In Kentucky all disclosure forms are created at the state level and require approval of the Real Estate Commission for any changes and must be implemented via legislation. The Kentucky standard disclosure form is the 402 – *Seller's Disclosure of Property Conditions*. Even with a change in the state's standard disclosure form, sales of property without a realtor, sales of new homes with warranty, auctions or court supervised foreclosures do not have to use this form.<sup>174</sup>

Providing mechanisms to assist buyers in understanding the area could assist in mitigating conflicts. Access to such things as locations of noise contours, future development plans, and other planning information as part of an interactive web-based interface could help make everyone more aware of the ongoing growth of their community.

Additional areas of focus that could be furthered and implemented at a state level include the emphasis of multi-jurisdictional planning, and promotion of water way protection programs.



## Local Options

A primary tool for local promotion of compatible use are the creation of land use policies and zoning regulations. This is primarily done through the use of Comprehensive Plans and are governed in Kentucky by KRS 100. All jurisdictions within the study area have some form of planning commission and zoning regulations. The status and some existing outcomes of some of their policies and implementations were addressed in Section I. The use of these comprehensive plans and zoning regulations to help create and maintain compatible use should be encouraged. They can play a key role in establishing a baseline and assist in making any changes also be aware of the needs of Fort Knox.

Of note is KRS 100.187, paragraph 5, regarding the contents of a comprehensive plan:

*(a) Provisions for the accommodation of all military installations greater than or equal in area to three hundred (300) acres that are:*

- 1. Contained wholly or partially within the planning unit's boundaries;*
- 2. Abutting the planning unit's boundaries; or*
- 3. Contained within or abutting any county that contains a planning unit.*

*(b) The goal of providing for the accommodation of these military installations shall be to minimize conflicts between the relevant military installations and the planning unit's residential population. These provisions shall be made after consultation with the relevant installation's command authorities to*

*determine the needs of the relevant military installation. These consultations shall include but not be limited to questions of installation expansion, environmental impact, issues of installation safety, and issues relating to air space usage, to include noise pollution, air pollution, and air safety concerns;...*

Zoning may address many things such as defined by KRS 100.201, paragraph 2. The following would have many applications towards promoting compatible use:

*"...land use and zoning regulations may be employed to provide for ..., and to prevent... the loss of life, health, or property from fire, flood, or other dangers. Land use and zoning regulations may also be employed to protect airports, highways, and other transportation facilities, public facilities, schools, public grounds, historical districts, central business districts, prime agricultural land, and other natural resources;...and to protect other specific areas of the planning unit which need special protection by the planning unit."*

This could take the form of language specifically addressing compatible use regarding requirements for:

- Awareness of noise buffers noted in development plans and subsequent subdivision plats.
- Require traffic studies to factor in access points and congestion.
- Lot size requirements to assist in lowering density.
- Creation of buffer areas for preservation of natural areas.
- Conversion of lands to public areas of compatible use.
- Outdoor lighting standards.
- Notification process for rezoning applications.

## Building Codes and Noise Attenuation

Kentucky's currently adopted Building Codes do not appear to specifically address the issue of Noise Attenuation or Abatement. The 2018 Kentucky Building Code, which was addressed in Section I, and the 2018 Kentucky Residential Code (both May 2020, 2<sup>nd</sup> Editions<sup>5</sup>) were reviewed and no mentions were found regarding noise attenuation or abatement. It is noted, as an example, that the City of Radcliff and Bullitt, Hardin, and Meade County's Comprehensive Plans list noise in relation to Fort Knox as a concern but there appears to be nothing in their respective ordinances or subdivision regulations that seem to work toward mitigation of this specific issue.

In Kentucky noise issues are routinely addressed by KYTC as part of the design of any new or reconstruction of highways. The current KYTC *Noise Analysis and Abatement Policy* addresses the need to coordinate with local officials regarding highway noise. It points out that:

*"...where local government exercises control over land development through planning and zoning ordinances, KYTC shall share predicted noise levels along highway corridors and techniques that can be used to minimize highway noise related impacts to adjacent properties." It further states that, "Noise abatement measures for properties developed ... should be considered by the local government or developer as permits and approvals for these land use changes are considered."*<sup>175</sup>

This would seem to imply that local officials, through zoning regulations, have the ability to implement noise attenuation policies.

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<sup>5</sup> Available online from the Kentucky Department of Housing, Buildings and Construction. [[https://dhbc.ky.gov/newstatic\\_info.aspx?static\\_id=297](https://dhbc.ky.gov/newstatic_info.aspx?static_id=297)].

The City of Hopkinsville, which is located less than ten miles north of Fort Campbell, has addresses noise concerns in its "Special Standards" section 158.406. It provides restrictions in an overlay zone that accounts for DNL Zones II & III. These are implemented through the creation of a Special Use District.

TABLE II Specific Development Restrictions Within SUD 41A			
Land Use Classification	APZ-2 (Allowable)	DNL Zone II (Allowable)	DNL Zone III (Allowable)
#1	NO	YES (DNL 45)	YES (DNL 45)
#2	NO	YES (DNL 45)	YES (DNL 45)
#3	NO	YES (DNL 45)	YES (DNL 45)
#4	YES	YES	YES
#5	YES/NO(1,2)	YES	YES
#6	YES/NO(1,2)	YES	YES
#7	YES/NO(1,2)	YES	YES
#8	YES	YES	YES
I-1/I-2	YES/NO(1,2)	YES	YES
RMH-1/RMH-2	NO	NO	NO
<b>Notes to table:</b>			
(1) Use is not allowable if it involves the lodging of people (transient lodging, hotels, motels, recreational vehicle parks, camp grounds).			
(2) Use is not allowable if it involves a large concentration of people. A large concentration of people is defined as a gathering of individuals in an area that would result in an average density of greater than 25 people per acre per hour during a 24-hour period, or a single event that would result in the gathering of 50 or more individuals per acre at any one time. Density averages shall be calculated per Ft. Campbell JLUS, Joint Land Use Study, dated January 1996.			
DNL < 45 Interior Day Night Noise Level of < 45dB. Noise attenuation measures incorporated into the construction of the building to bring the interior DNL to < (less than or equal to) 45dB.			

**Figure 53 Hopkinsville Noise Restrictions**

This district in turn allows the city to set standards for compatible use respecting these noise zones including buffer zones to reduce conflicts between land uses. Highlights include such things as requiring:

*“...for the location of outdoor activity areas, such as balconies and patios, on the side of the building which is sheltered from the aircraft flight path. In the designated DNL-II and DNL-III...”*

*“Sound attenuation features are built into the dwelling to bring the interior DNL of the living unit to 45 decibels or below.”*

*“The contents and covenants of deeds identifies the property as being located near an airport and in a DNL-II or DNL-III zone, and the aircraft noise may affect normal livability, value and marketability of the property.”*

The full text of this section (F – H) is provided in Appendix B – Data Sources and Issues, because of its perceived value to implementation of compatible use.

The U.S. Office of Housing and Urban Development (HUD) in their noise training materials state that one of their “Noise Assessment Goals” is to:

*“Comply with Compatible Land Uses at Federal Airfields to not promote incompatible land uses within the influence of military and other federal air installations.”<sup>176</sup>*

HUD lays out policies and guidance in the “Noise Guidebook” that serves as a resource for identify noise issues, regulations, and attenuation concepts. HUD funds cannot be used for projects that are exposed to 75dB DNL or greater. If between 65 and 75dB with interior reductions and outdoor mitigation it is possible to implement.<sup>177</sup> This type of policy could be used as a base line for local policies.

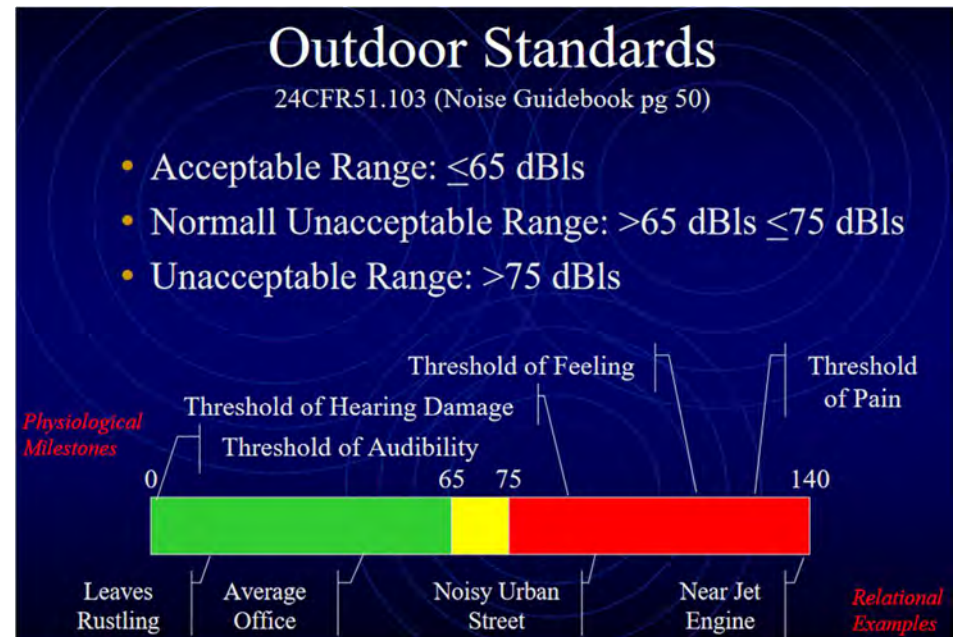


Figure 54 HUD Noise Guidebook Outdoor Standards<sup>178</sup>

HUD also has guidance and checklist to evaluate and assist in determining if and how to proceed regarding noise issues. Their Noise Abatement and Control checklist is a useful tool for conducting an evaluation of plans to understand potential issues with projects. HUD also publishes a supplement to the *Noise Guidebook* that provides additional background and construction material factors on noise reduction capabilities based on its Sound Transmission Class (STC). The STC ratings are based on a one for one reduction of noise measured in decibels.



## Transfer Development Rights

This is legislated by KRS 100.208. Paragraph 1 lays out the outline:

*Any city, county, consolidated local government, or urban-county government which is part of a planning unit may provide, by ordinance, for:*

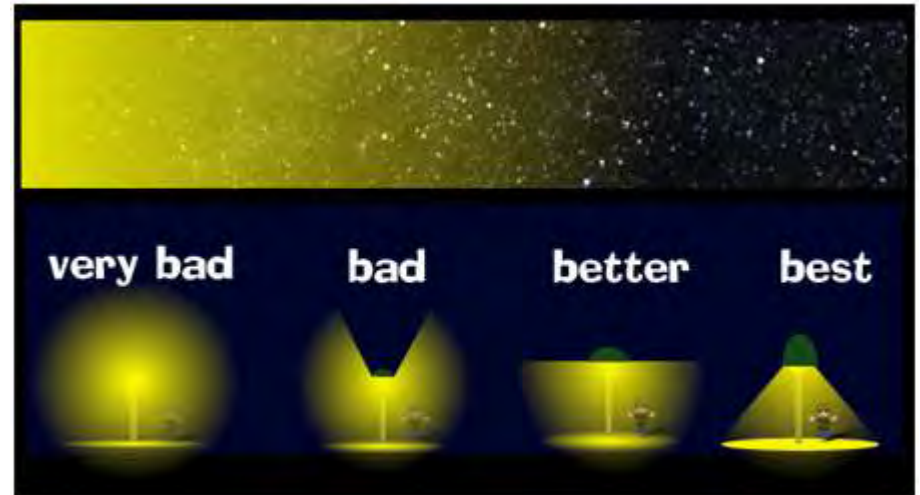
- (a) The voluntary transfer of the development rights permitted on one (1) parcel of land to another parcel of land;*
- (b) Restricting or prohibiting further development of the parcel from which development rights are transferred; and*
- (c) Increasing the density or intensity of development of the parcel to which such rights are transferred.*

The ability to trade growth from one area that needs specific protection to another that may not be a vulnerable can be an effective tool. Some aspects of this may require inter-local agreements between cities or cities and counties to be effective.

## Light Pollution

Regulating the types, style, and quantity of outdoor lighting can benefit by reducing the amount of light pollution and glare that exist. Outdoor lighting in most settings is desired to assist visually seeing things on the ground. Requiring lighting to be shielded from above does not preclude this.

An example ordinance for regulation outdoor lighting is provided by the International Dark-Sky Association. The IDA is a recognized authority



**Figure 55 Shielded Lighting.** Source: University of Florida, Extension Service.

on light pollution. They provide background and the causes, issues, and prevention of light pollution. This includes help for not only policy makers but also individual citizens. A sample ordinance, which has information on establishing zones, definitions, and a basic template can be found at their website here: [www.darksky.org/our-work/lighting/public-policy/mlo/](http://www.darksky.org/our-work/lighting/public-policy/mlo/)

An interactive, light-pollution map is available at <https://www.lightpollutionmap.info> which uses VIIRS data overlaid on Microsoft Bing Map data. It may be helpful to understand the levels of light pollution in each place. As with the maps previously presented in Section III the issue of granularity or resolution of any precise location can be an issue.

The advent of LED's has allowed the additional ability to dim outdoor lighting when not needed. Reducing yet further energy costs and less light pollution. The "color" of the light source also plays a role. Reducing the blue end of the spectrum by using warmer lighting can also help with this.<sup>179</sup>

#### Military Overlay Districts (MOD)

Kentucky law does not appear to specifically address the possibility of the creation of Military Overlay Districts that could accommodate planned development and prevent rezoning within such a district. KRS 82.670, paragraph 1 provides for the creation of an overlay district in the concept of protecting: *"...the historical, cultural, architectural, aesthetic, or other distinctive characteristics of the district."* This could be an issue that could be raised legislatively as another tool to promote compatible use. In the interim, city planning units could investigate the potential use of overlay districts to protect areas *"...suitable for conservation"* such as *"...near a river or other body of water..."* as described in KRS 82.660, paragraph 1a.

Other potential zone or overlay concepts include:

Safety Zones to enable restrictions or codes to create clear areas where accident potential is greater.

Frequency Zones, areas of limited use to prevent spectrum conflicts.

Energy Zones to yield protections from wind or solar farms.

#### Land Use Recommendations

A potential aspect of any planning unit's comprehensive plan could be in inclusion of a Military Influence Planning District (MIPD). This can be

directly used to highlight the unique relationships that a local community has with Fort Knox. It can outline procedures to involve both parties. Promoting communication on issues such as land use, compatible use, conservation, and infrastructure development and needs.

#### **Urban Heat Islands**

Fort Knox and the surrounding communities can work together on this subject to deter some of the effects of urban heat if urban encroachment continues. The groups should encourage and promote smart growth that mix development and conservation strategies that will protect the natural environment and not inhibit community and economic development. This includes having a proper mix of commercial, residential, and recreational area; constructing eco-friendly buildings; making the communities walkable; and providing multiple means of transportation.<sup>180</sup> Managing urban heat islands without stifling an outside community's growth is the objective for the installation and its neighbors.

Another area of concern that plays directly into this is the issue of Stormwater. Due to increases in regulations from the EPA and the concerns raised by runoff many municipalities and other areas with dense population must adhere to stricter standards. Large areas of impermeable surfaces that contribute to heat islands also can create stormwater issues. Kentucky regulates these through MS4, municipal separate storm sewer system. Small MS4 have a population greater than 10,000 and are therefore permitted.<sup>181</sup> In turn the governing bodies must have a Kentucky Pollutant Discharge Elimination System (KPDES) permit. This will include the need to have a Stormwater

Pollution Prevention Plan (SWPPP).<sup>182</sup> These all tie into creating and maintaining a stormwater system and limiting runoff.

**Table 22 Stormwater KPSES Permit Holders**

STORMWATER KPDES PERMIT HOLDERS		
Bullitt County	Fiscal Court	MS4
Shepherdsville	Council	MS4
Hardin County	Fiscal Court	MS4
Elizabethtown	Council	MS4
Radcliff	Council	MS4
Vine Grove	Council	MS4
West Point	Council	MS4
Meade County		
Muldraugh	Council	MS4
Nelson County		

*Source: KYTC, MS4 Local Contacts List*

## Energy

To properly balance the use of renewable energy sources, Fort Knox and the surrounding communities must collaborate on any development of energy infrastructure. The construction of solar panels, wind turbines, and their supporting infrastructure being a prime example. This could include prior communication about any renewable energy development, encouraging solar developers to use glare analysis before construction, or informing the public on how aircraft trainings are conducted so they know how they could affect operations. Communication about any renewable energy development will assist in the safe and efficient training in Fort Knox and smart growth in surrounding communities. The need to include the military in the process locally would be encouraged. Because no specific requirements exist to do this, an additional opportunity here is

presented for such things as the MIPD component in each comprehensive plan. Due to the need for regulation of energy production at the state level. Involvement of the Public Service Commission to include the State’s Department of Military Affairs in this planning process would also seem to be an additional level of protection and understanding for all parties.

## Small Area Plans & Studies

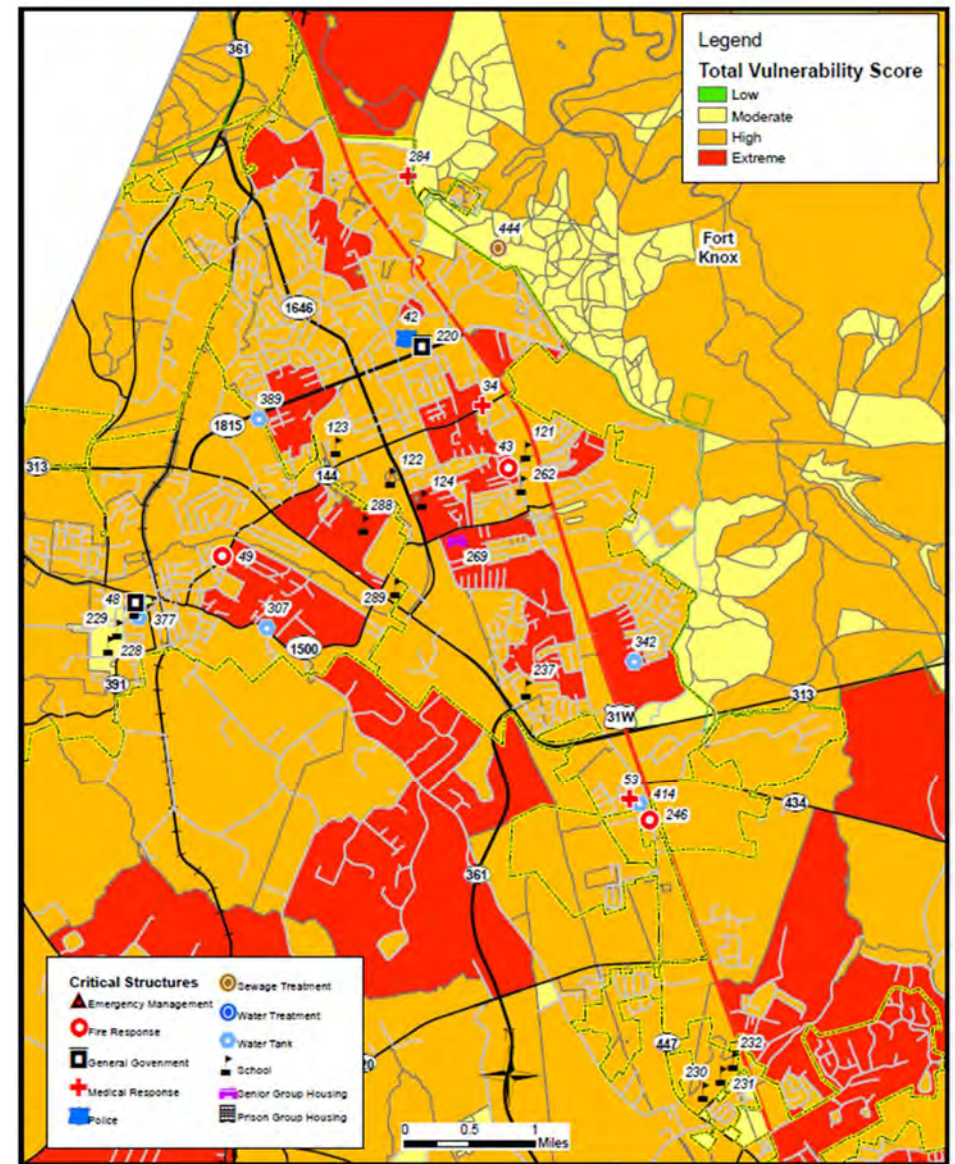
Several locations were areas of focus in Sections I & III. This included areas subject to ongoing development pressures or potential future pressures. A need to “dig deeper” into these focus areas to mitigate conflicts should be undertaken. Understandings of current zoning suitability, infrastructure costs, conservation issues, or untended growth are some types of issues that should be investigated. New roads create growth, increased densities create congestion, and the need for additional infrastructure with greater costs are a factor that should be considered.

## Compatible Land Use, Risk Assessment and Analysis

For planning purposes, an understand of what areas are most susceptible to incompatible land use would be of great benefit. The ability to look at cross sections of factors such as existing land use, zoning, noise zones, vertical obstructions, hazard exposure, proximity to adjacent issues, population density, infrastructure access, government regulatory authority, geomorphology, or even endangered or invasive species adds a level of understanding. Today, however, it is possible to review all these data simultaneously and evaluate as a whole system. The use of spatial analysis techniques, data mining, and calibrating assessment criteria on a scoring system can allow a clear picture of the situation to be viewed and understood. Creating a set of

risk scoring factors and assigning these values across the study area could assist in future land use planning and allow metrics to be established to enhance the decision-making process. Discerning that the risk of any given land use can affect both the mission of Fort Knox and the living environment of the surrounding communities, the use of such tools can only aid in adapting better solutions for a more balanced outcome.

LTADD has done this type of planning with the creation of their regional Hazard Mitigation Plan with some success. See Figure 56 showing the City of Radcliff. Assisting to evaluate the return on investment of mitigation dollars from funding sources and conveying the risk of property exposure to individual and groups of hazards. Included in this type of analysis were additional socio-economic factors that can add insights along with other factors such and at-risk facilities. These types of analysis can also aid as predictors of growth and establish areas of focus for further study.



**Figure 56 Sample Map of Natural Hazards Risk Assessment. Source: Lincoln Trail Region - Hazard Mitigation Plan 2015 Update.**



## Communication & Outreach

The need to continue with a designated body to discuss ongoing issues would appear to be an obvious need. While all parties involved, both inside and outside the fence, do cross paths by virtue of various boards, organizations, or committees, a more formal arrangement could be established.

The need to put in place policies that formally make the installation aware of proposed changes to the comprehensive plan, zoning regulations, new development plans, infrastructure expansions, etc. This could be done in the comprehensive plan, perhaps via the MIPD concept, and done through Memorandums of Understanding or Agreement (MOU -A) to facilitate these actions.

To mitigate the harm from activities not directly regulated by these groups, the installation and the communities should communicate and coordinate on any upcoming development or activities planned by either side. This will give each side the chance to voice concerns over issues that could be easily avoided given some prior knowledge. For example, a community event could be going on in a location near the installation the same day the army is planning drills that include explosions that will temporarily affect air quality all the way at the event. Coordination by both sides could bring a swift resolution to the potential issues.

Communications also need to be pushed out from Fort Knox. Unawareness of the mission, need for compatible use, or timing of some activities do sometimes become incognizant to the communities at large. Several instances of reports in local media regarding upticks

in noise levels or increases in traffic were noted during this study. The ability for topics to slip through however remain persistent.

Communication topics can include such recommendations regarding raising public awareness. This paragraph from a Corps of Engineers study regarding noise is an excellent example.

*The finding on the importance of the noise source demonstrates the value of community outreach, such as installation Armed Forces Day events and Public Affairs press releases. The role of noise sensitivity suggests that extra effort should be made to educate noise-sensitive people in advance of their moving into areas close to ranges. The most direct way to provide such education is to make the installation noise contour maps available to the general public through local planning agencies.<sup>183</sup>*

Similar solutions are made regarding ambient light issues. In another Corps of Engineer study one recommendation was to:

*Proactively work with local communities and planning agencies to implement regulations or ordinances that will ensure the installation training standards can be met.<sup>184</sup>*

Additional topics that tend to this approach include updates on noise levels, issues and regulations regarding airspace, drones, and installation access.

Access to the ICRMP, INRMP, or other studies should have any elements that are publicly available be made easily accessible. If this cannot be done through official websites due to traffic or other considerations perhaps these elements could be hosted elsewhere.



These types of planning documents are comparable to the communities' comprehensive plans and all could serve to help provide better understanding.

The Fort Knox Community Information Exchange (CIE) could perhaps be expanded, or a derivative created to help focus more on the inter-relations between the post and community. If done, marketing the availability of such a "program" would be needed. The posting of video replays of such an event could be helpful. Many local governments also broadcast their meetings on local cable and yet another chance to get the word out.

## Regional Partners

The region has long supported Fort Knox and understands the vital role it plays in the community. From the booming growth of World War II, through the Cold War era to the hot war in Vietnam. The changes brought by the end of Soviet Communism in the early 1990's and the middle-east conflicts that followed, there is an underlying understanding that Fort Knox is integral to the area's success. This has been reflected recently by the adaption and support by the communities during the turbulence of the 2005 BRAC and the departure of the storied Armor School.



**Figure 57 Armor on the Square.** Source: *The Elizabethtown News*, c. 1943.

## **Knox Regional Development Alliance**

KRDA is a non-profit corporation founded in 2006 that works to promote the mission of Fort Knox. From their articles of incorporation, they look to work with the military to:

*"To educate and build a consensus with our business, industrial, professional, governmental and civilian communities in and around Fort Knox..."*

The overall goal to support and increase the missions in support of economic development.<sup>185</sup>

They work directly with Fort Knox, economic development authorities, business leaders, education institutions, workforce advocates, and others towards these goals. They are an active partner in all things that work toward the success of Fort Knox.

## **Lincoln Trail Area Development District**

LTADD is one of 15 regional planning agencies in Kentucky. Incorporated as a non-profit in 1968, LTADD serves to assist and guide regional planning services. Comprised of eight counties, three of which form the core of the CUP study area around Fort Knox. LTADD is involved in transportation, water, land use planning and grant management across the region. Component also include Workforce Development and training and employment services as part of the Kentucky Career Center network. The Area Agency on Aging, which coordinates services to seniors, also resides with LTADD.

LTADD serves as a facilitator due to its regional planning approach and ties to both the communities and Fort Knox. In addition to local elected officials and community leaders, Fort Knox is also represented on the

Board of Directors by the representative of Fort Knox’s Commanding General, currently the Deputy Garrison Commander. This board meets monthly to review regional issues and programs that involve many of the areas covered under the auspices of compatible use. While Bullitt County lies outside the LTADD region. It does fall under the coverage area of the LTADD’s sister organization Kentuckiana Regional Planning & Development Agency (KIPDA).

**Radcliff – Elizabethtown Metropolitan Planning Organization**

REMPO was created under the 1973 Federal Surface Transportation Assistance Act in 2003. The population of the planning area, composed of Hardin and Meade Counties, was establish at 64,504 persons per the 2000 Census. The core functions of the MPO are the development and maintenance of a Long-Range Transportation Plan (LRTP) and a Transportation Improvement Program (TIP). The MPO is also responsible, as necessary, for dealing with issues such as air quality, freight movement, public participation, environmental justice, safety, and environmental concerns for its planning area.

REMPO resides under auspices of LTADD. Its Board of Directors comprised of the two County Judge/Executives and the Mayors of Brandenburg, Elizabethtown, Radcliff, and Vine Grove and includes representatives of the Fort Knox Commanding General and Kentucky’s Secretary of Transportation. Again, while Bullitt County is part of the Louisville Urban Area Metropolitan Planning Organization, the MPO’s work together with the KYTC to coordinate all transportation plans that affect the region.

**Economic & Industrial Foundations**

Other key regional partners are the area’s economic development agencies. They play an important role in guiding the region forward with respect to business opportunities and job creation.

*Table 23 Economic Development Agencies*

STUDY AREA ECONOMIC DEVELOPMENT AGENCIES	
Bullitt County	Bullitt County Economic Development Authority
Hardin County	Elizabethtown/Hardin County Industrial Foundation
	North Hardin Economic Development Authority
Meade County	Meade County Industrial Development Authority
Nelson County	Nelson County Economic Development Agency

These agencies have the ability to create and manage concepts with regard to industrial and commercial development. They create marking plans to attract business. This in turn can drive infrastructure expansion which must be done with compatible use in mind. Having these groups integrated into any planning for compatible use is vital.