



Meeting 1/October 9, 2012

**AECOM**

# What is a Joint Land Use Study?

- A cooperative land use planning and communications strategy between a military installation and the surrounding communities
- Purpose is to protect the current and future military mission, while safely accommodating local growth



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# Study Partners

- Franklin County
- City of Frankfort
- Boone National Guard Center
- Capital City Airport



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# JLUS Process

- The JLUS is **not** a binding document, but a series of best practices to consider
- All recommendations related to zoning or land use management must still go through regular local legislative channels
- The JLUS is not a “no growth” plan
- Identifies development options that can fit safely with nearby training activities and airport operations



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# Why Do a JLUS?

- It protects public safety and helps maintain quality of life
- It allows the National Guard and airport to carry out training activities and operations
- It gives the flexibility to take on future missions
- It protects a major economic asset for the region



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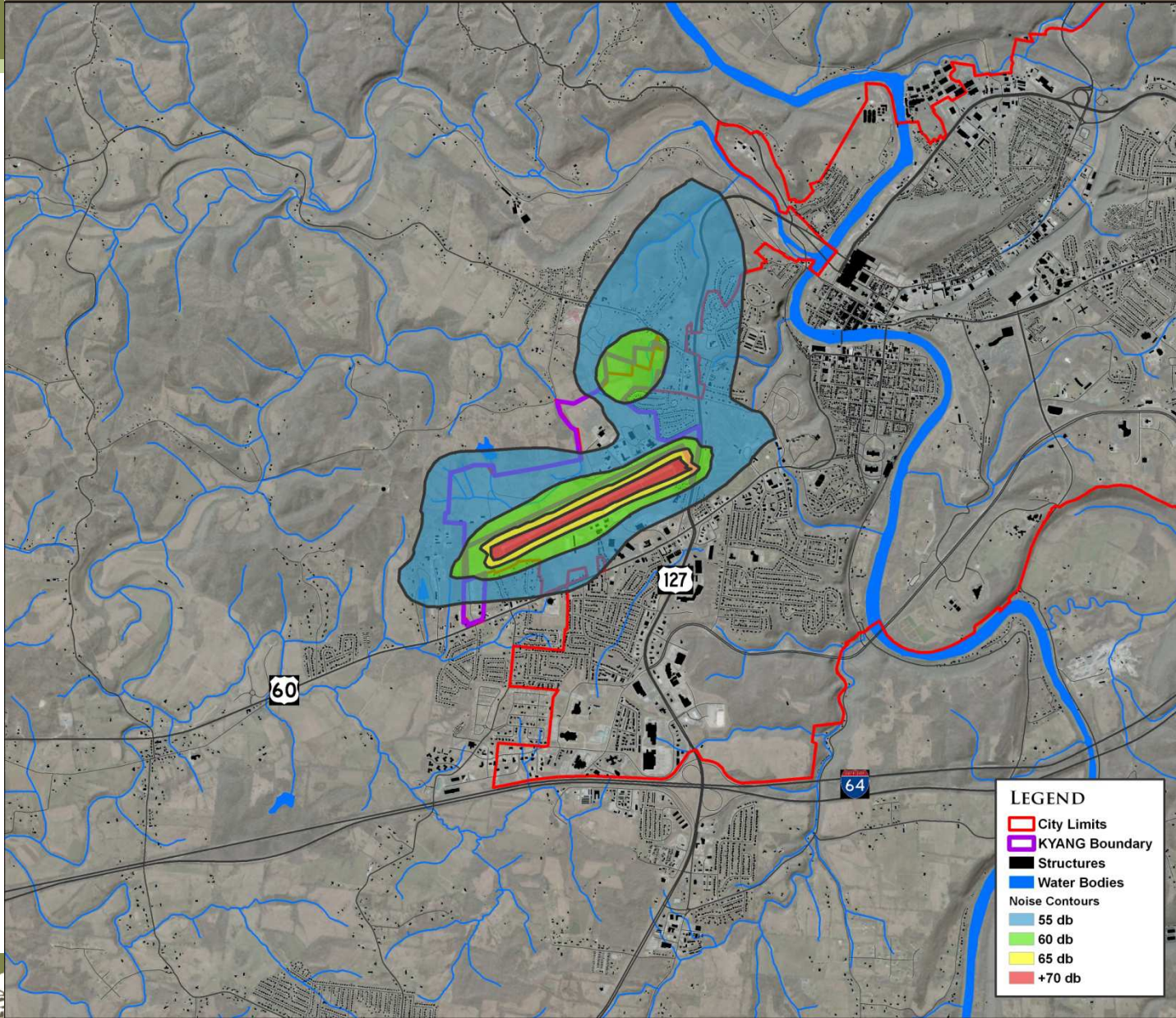
# JLUS Committee

- Committee provides:
  - overall direction
  - identifies issues
  - evaluates report findings
  - develops recommendations
  - considers acceptance of recommendations



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**LEGEND**

- City Limits
- KYANG Boundary
- Structures
- Water Bodies
- Noise Contours
  - 55 db
  - 60 db
  - 65 db
  - +70 db

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0 0.25 0.5 MILES

BASE MAP

D CENTER  
E STUDY

# JLUS Elements

- Collecting up-to-date information on Boone Center and Capital City Airport facilities and operations
- Assessing operation impacts on the surrounding community
- Assessing growth trends in surrounding area
- Identifying existing and emerging land use incompatibilities
- Developing tools to reduce land use conflict (encroachment )



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# Encroachment

- Encroachment occurs when:
  - Nearby development interferes with the ability of the military to perform its mission or causes modifications to operating procedures; or
  - Members of the public are exposed to a higher than normal level of operational impacts, such as noise or the risk of an aircraft accident



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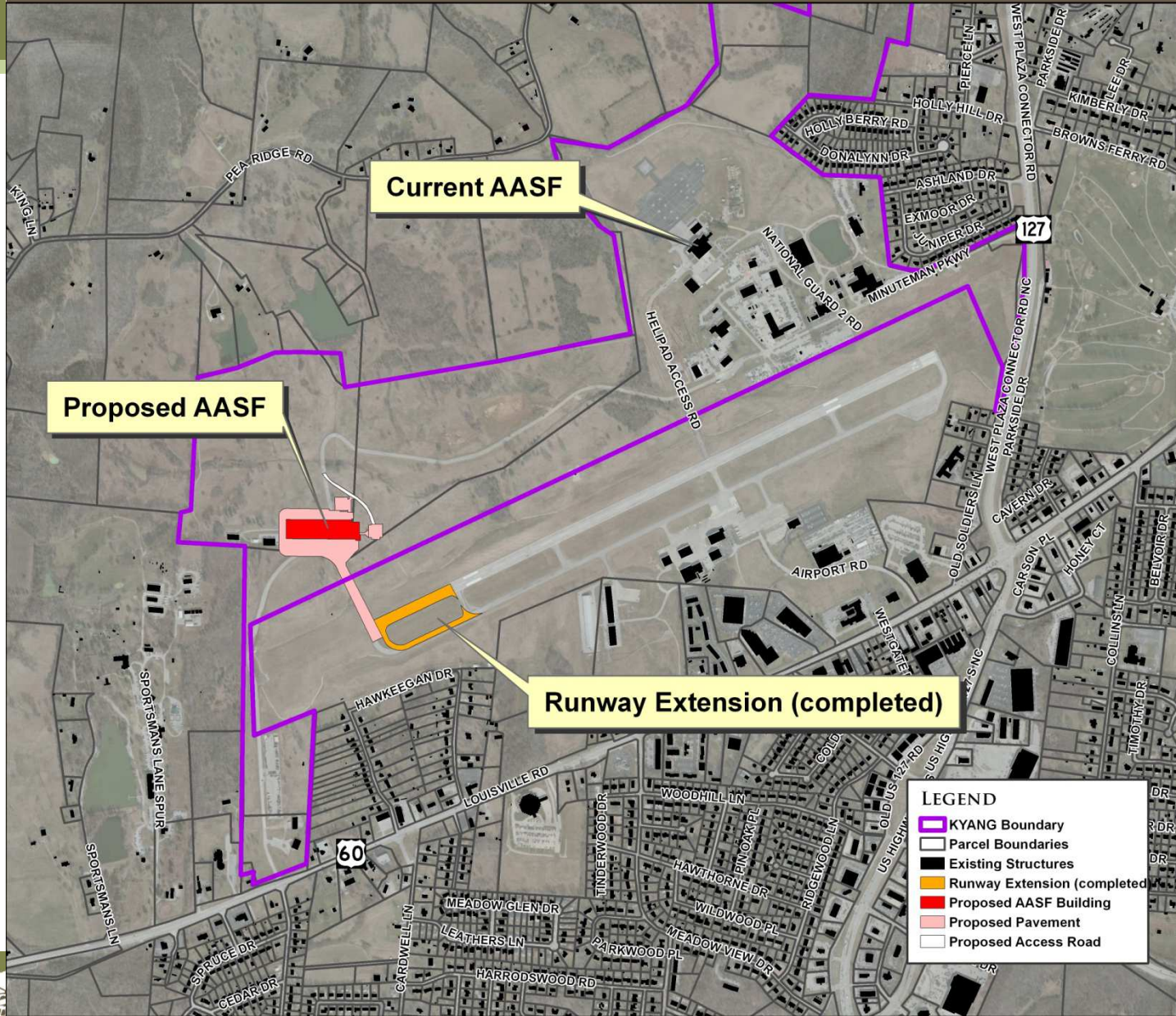
# Current Mission

- 21 military aircraft at Boone Center; primarily Blackhawk helicopters
- Four main flight corridors:
  - To Georgetown (to the East)
  - To Lexington (to Southeast)
  - To Danville (South)
  - To the North
- Current Army Aviation Support Facility to relocate to southwestern portion of installation near runway



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ZONING MAP

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# Operational Impacts

- Noise related to aircraft operations, especially low level helicopter lights
- Risk of an aircraft accident
- Structures or objects that can interfere with safe aircraft operations



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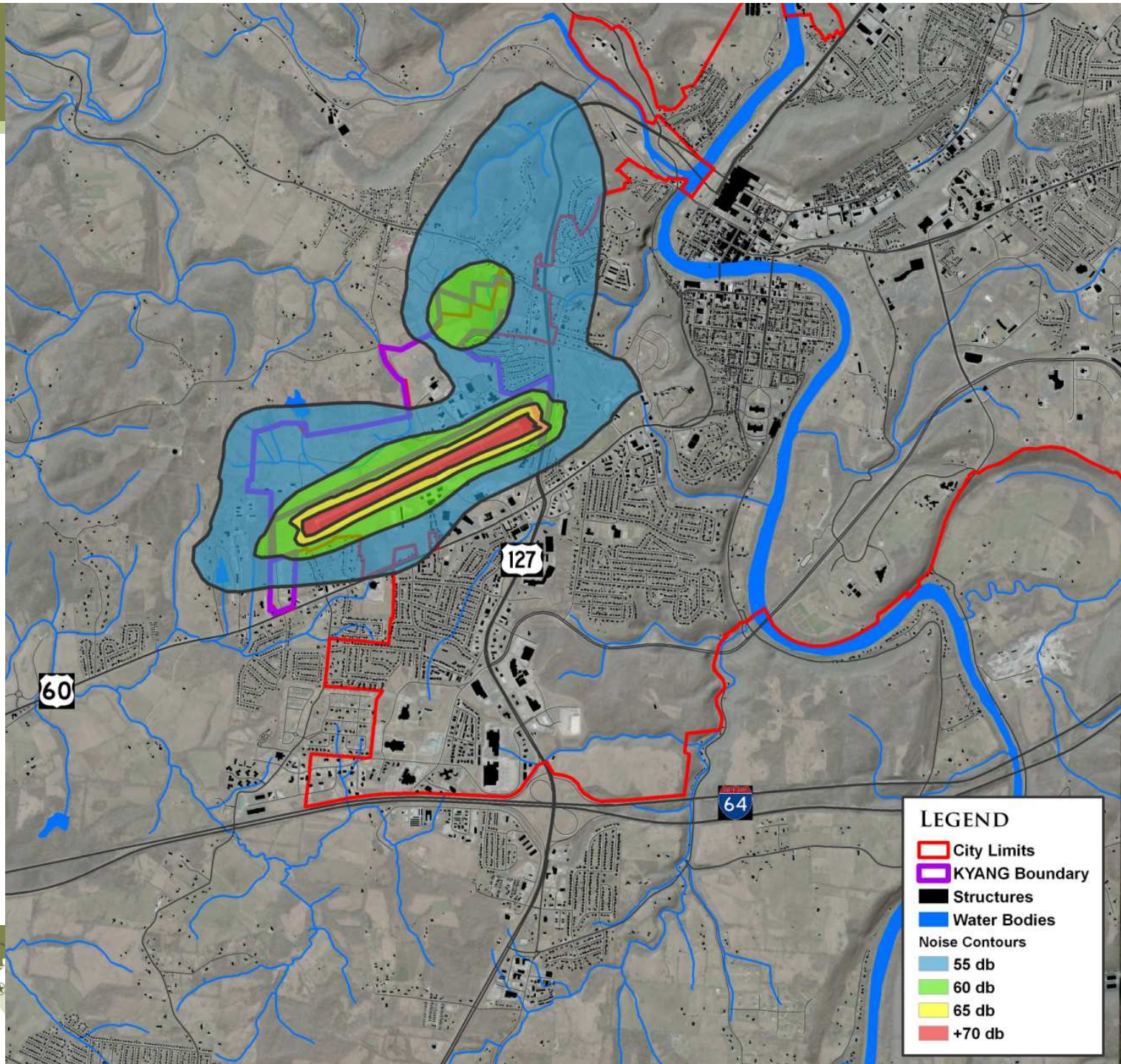
# Noise Impacts

- Noise contours:
  - Expresses aircraft sound in decibels
  - Creates an annual average of noise that penalizes sound occurring at night because it is more disruptive
  - Includes both civilian and military flight operations
  - Reflects current helipad position in north of Boone Center
  - Shows areas with highest average exposure – sound does occur outside of the contour lines



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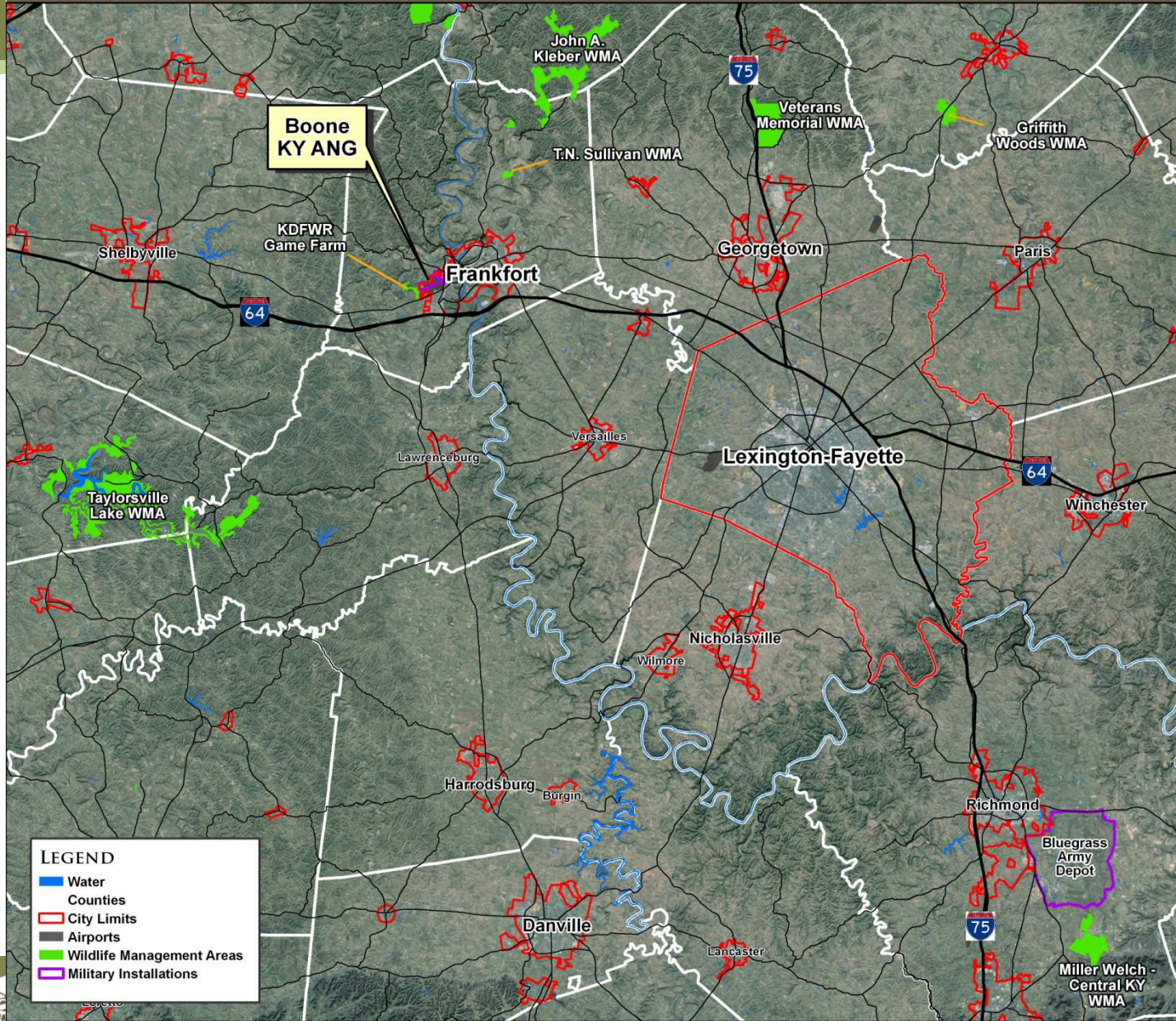
# Noise Impacts

Sounds	dB
Rocket Launching	180
Thunderclap, Air Raid Siren	130
Jet takeoff (200 ft)	120
Concert	110
Heavy Truck, City Traffic	90
Alarm Clock, Hair Dryer	80
Noisy Restaurant, Business Office	70
Conversational Speech	60
Light Traffic, Average Home	50
Living Room, Quiet Office	40
Library, Soft Whisper	30
Rustling Leaves	20
Hearing Threshold	0



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**LEGEND**

- Water
- Counties
- City Limits
- Airports
- Wildlife Management Areas
- Military Installations

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REGIONAL CONTEXT MAP

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... STUDY



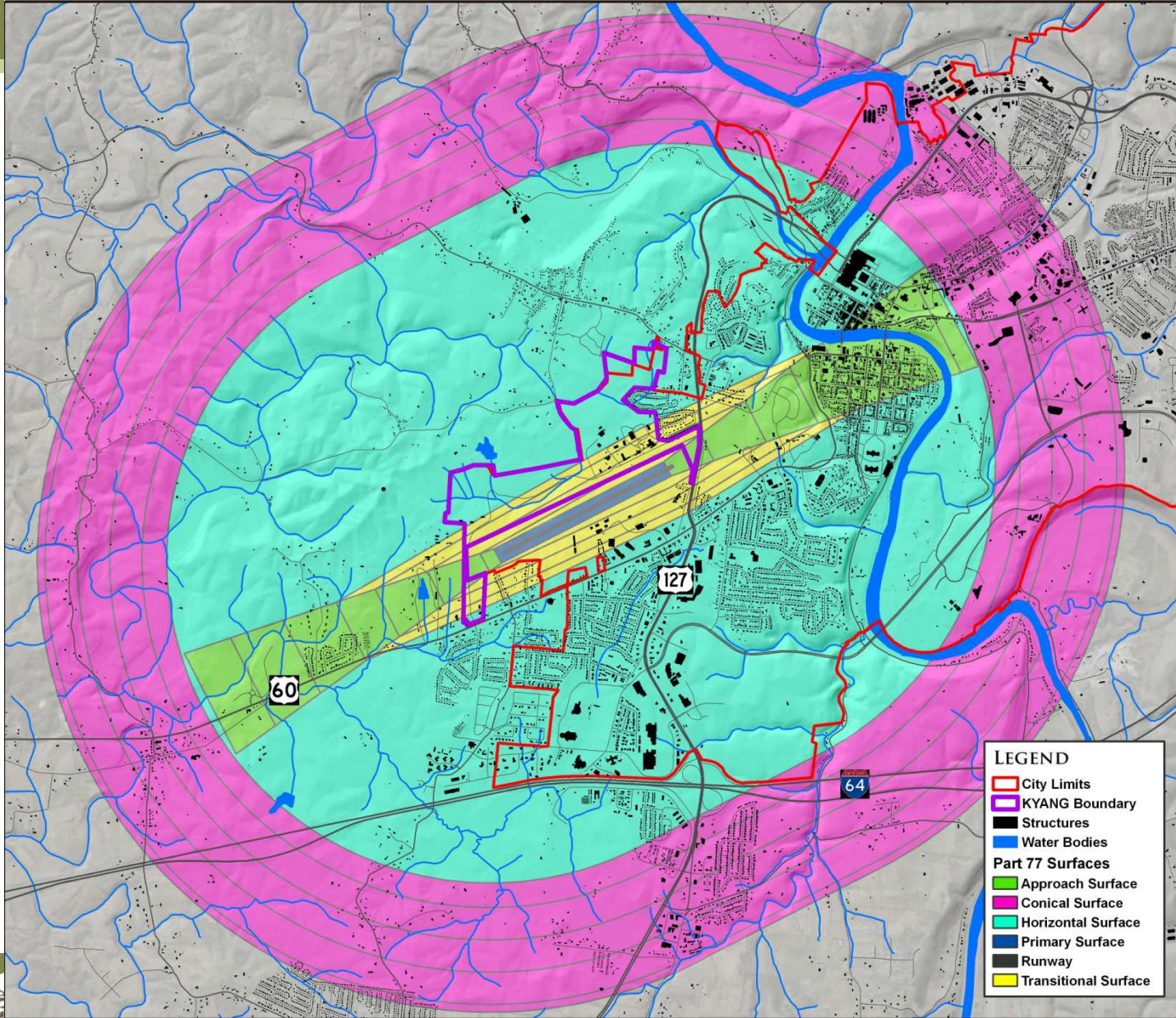
# Aircraft Safety

- Runway Airspace Surfaces:
  - Three-dimensional spaces (length and width) around runway
  - Determines the potential hazards of man-made or natural objects on flight operations



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MILES  
0 0.25 0.5

# PART 77 SURFACES MAP

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# Compatibility Guidance

- Guidance on which land uses are compatible in which areas comes from The Federal Interagency Committee on Urban Noise and the Department of Defense
- These guidelines are only advisory in nature
- Only local governments have the authority to determine how land around a military installation is used



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# Possible Land Use Conflicts

- Noise sensitive uses, such as housing, schools, medical facilities or places of worship;
- Uses that tend to concentrate people (certain higher residential densities, schools, churches, hospitals); and/or
- Uses that can interfere with safe air use, such as tall structures, or activities that throw off excessive lighting, smoke or dust and may impair pilot vision



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# Planning Areas

- Airspace surfaces
- Low level flight paths
- Noise zones
- Perimeter buffers around Boone Center and Capital City Airport



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## Current Actions

- Limit on nighttime helicopter operations at Boone Center
- Cruising altitude of helicopters set at or above 1,500 feet
- Noise avoidance areas and minimum flight elevations established around known noise-sensitive areas in Frankfort



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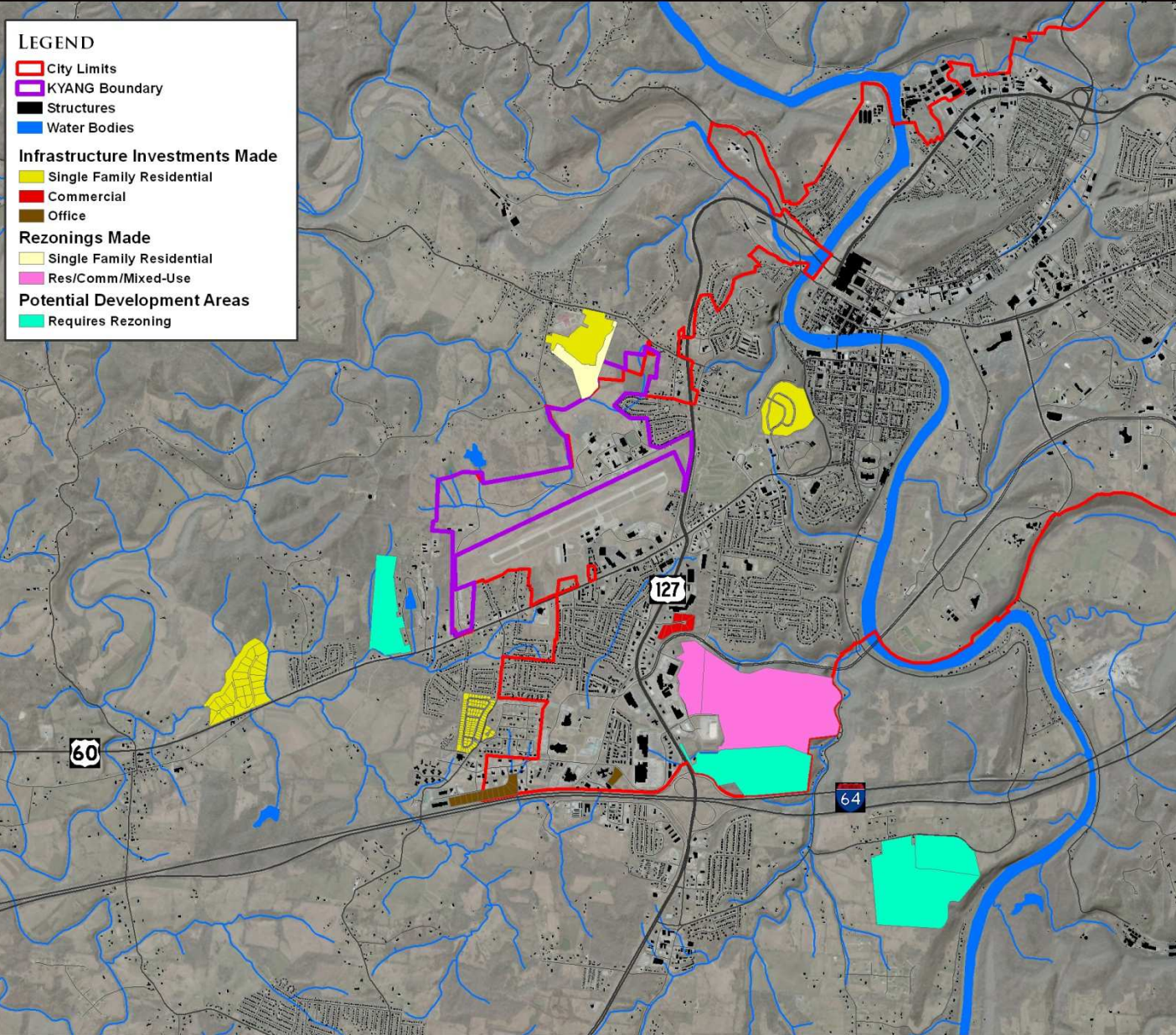
# Current Challenges

- Noise exposure in areas west of Boone Center along Highway 60
- East of the runway centerline in south Frankfort
- North of Boone Center near current helipad location



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FUTURE DEVELOPMENT MAP

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# Overview of Tools

- Land use controls that can:
  - limit residential density or the number of workers on a site
  - prohibit certain types of uses
  - limit size and height of buildings
- Conservation subdivision design
- Sound attenuation that requires certain new buildings to be built in such a way to reduce indoor noise



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# Overview of Tools

- Real estate disclosure that requires notice of a property's proximity to the installation
- Consultation and communication procedures between the military, surrounding communities, and residents
- Memoranda of Understanding
- Transfer of development rights
- Conservation easements, including Army Compatible Use Buffer program
- Modifications in flight procedures that do not diminish training effectiveness



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## Next Steps

- Public meeting to review recommendations in Nov/Dec
- Visit website at: [boonelanduse.org](http://boonelanduse.org)



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