June 6, 2021
NCSCP Steering Committee Meeting

Land Use Overview

Fort Bragg Joint Land Use Study
Regional Land Use, Military, and Conservation Compatibility Planning

BENCHMARK

What is a Joint Land Use Study?

A study funded by the U.S. Department of Defense, Office of Local Defense Community Cooperation (formerly OEA) to help communities and military installations work together in achieving compatible growth and long-term sustainment of the military training mission.

Joint Land Use Studies Since 1985

U.S. Department of Defense
Office of Local Defense Community Cooperation

BENCHMARK

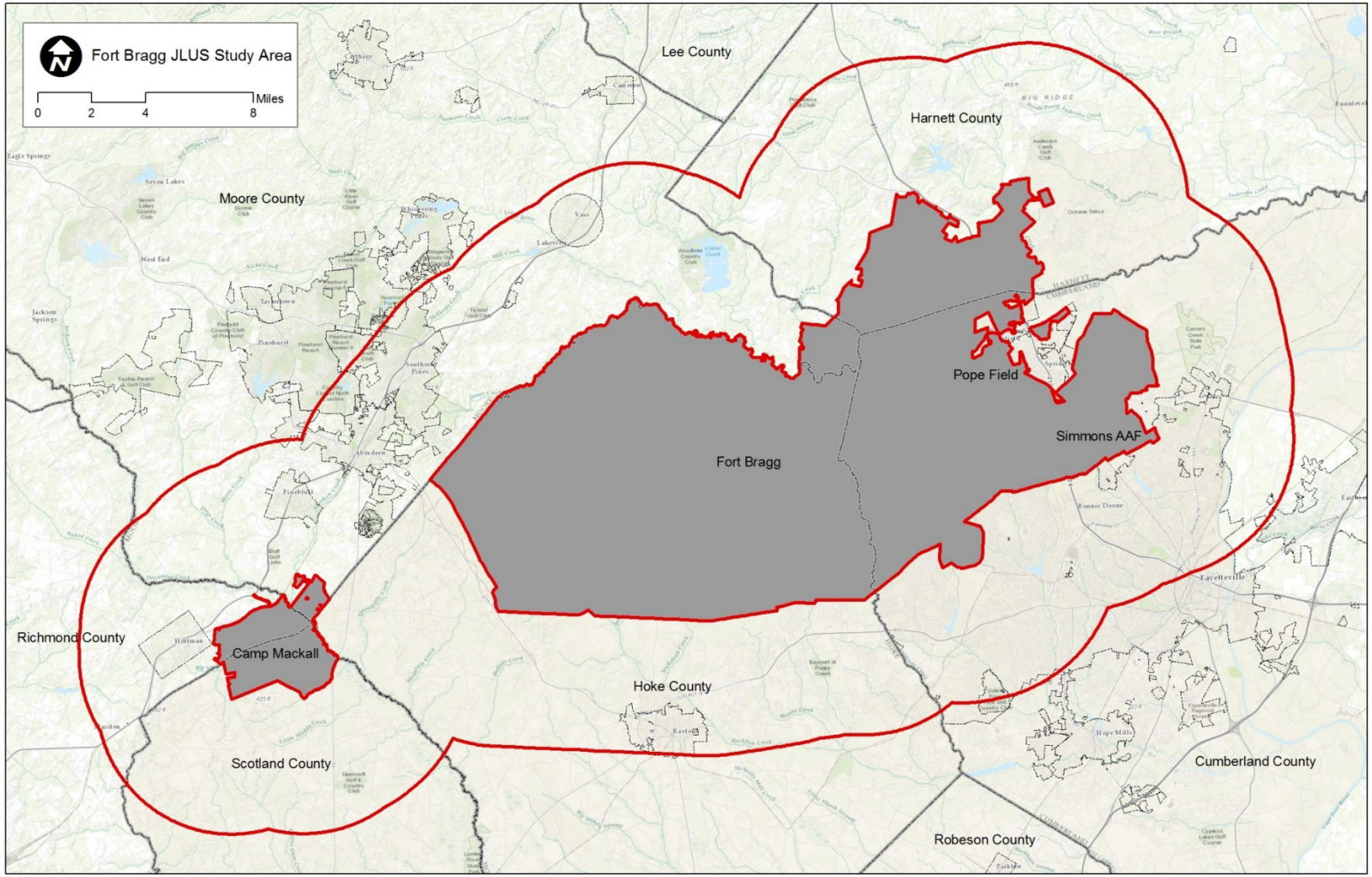
Land Use Compatibility

BENCHMARK

Fort Bragg JLUS Study Area

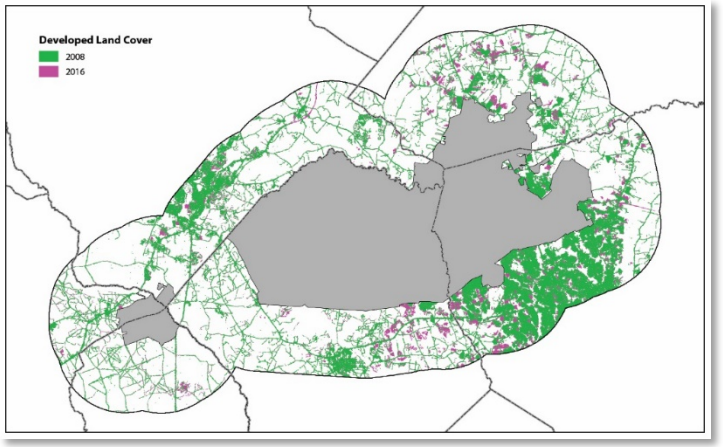
- Focus Area: 5 miles around Fort Bragg
- Counties: Cumberland, Harnett, Hoke, Moore, Richmond and Scotland
- Cities/Towns: Aberdeen, Eastover, Fayetteville, Hoffman, Pinebluff, Pinehurst, Raeford, Spring Lake, Southern Pines, Whispering Pines, Vass
- Partner Organizations: Fort Bragg, Fort Bragg Regional Alliance, Mid-Carolina COG, NC Department Commerce, NC DEQ, Sustainable Sandhills, The Nature Conservancy, US Fish & Wildlife Service
- Study Completed: Fall of 2018 (4th JLUS – a long history working on these issues as a region

5-Mile Study Area



JLUS Process

- Public Input
- Background Research
- Land Use Compatibility Analysis
- Study Prepared
- Implementation Plan Prepared



Key Findings

Continued Population Growth

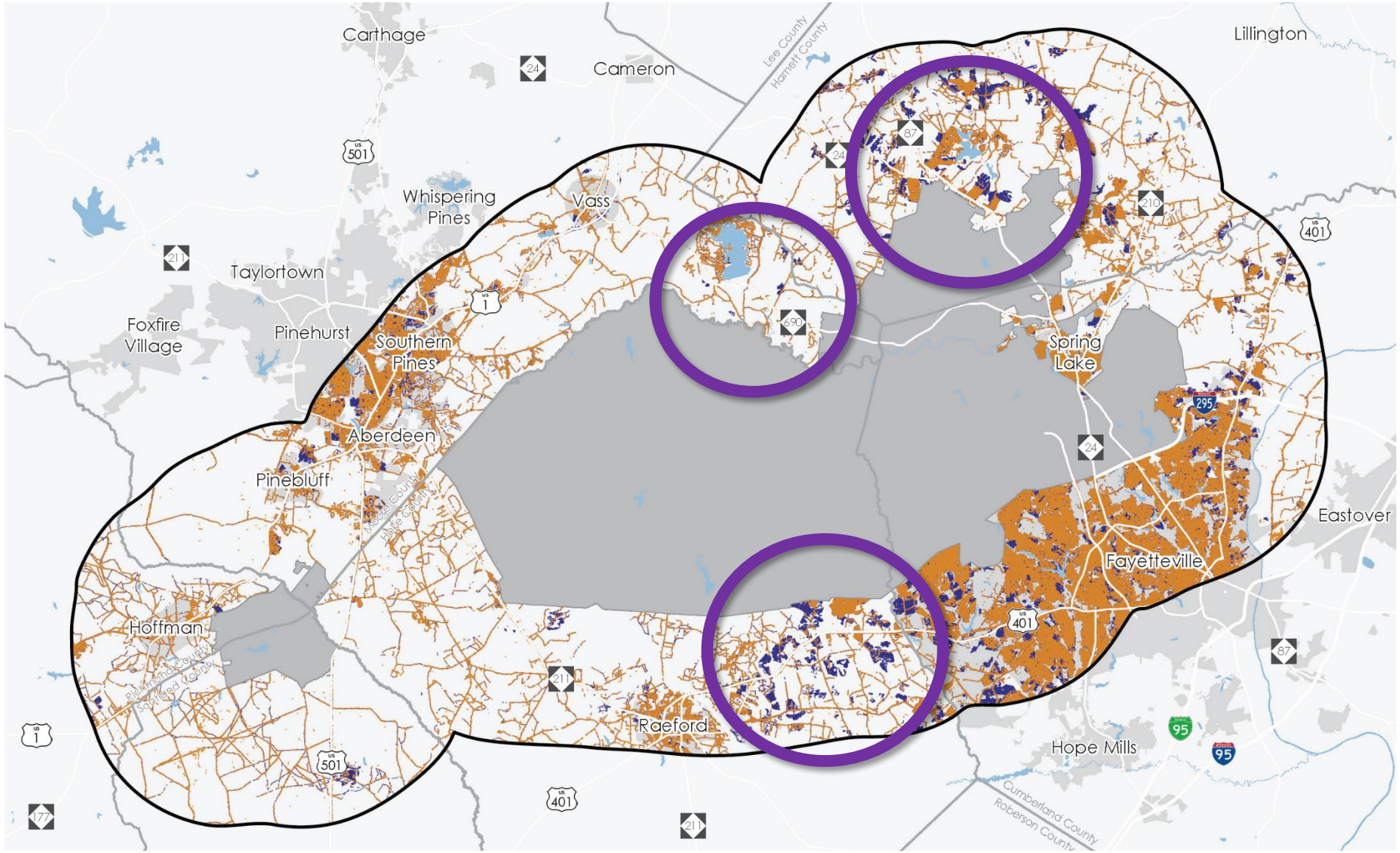
County	2000	2010	2000 to 2010 Change	2020	2010 to 2020 Change	2030	2020 to 2030 Change
Cumberland	302,963	319,431	5%	345,664	8%	364,385	5%
Harnett	91,025	114,678	26%	138,799	21%	160,844	16%
Hoke	33,646	46,952	40%	58,366	24%	70,738	21%
Moore	74,769	88,247	18%	99,561	13%	108,326	9%
Richmond	46,564	46,639	0%	**45,850**	**(-2%)**	**45,574**	**(-1%)**
Scotland	35,998	36,157	0%	**35,246**	**(-3%)**	**33,819**	**(-4%)**
Total	**584,965**	**652,104**	**11%**	**723,486**	**11%**	**783,686**	**8%**

Continued Population Growth

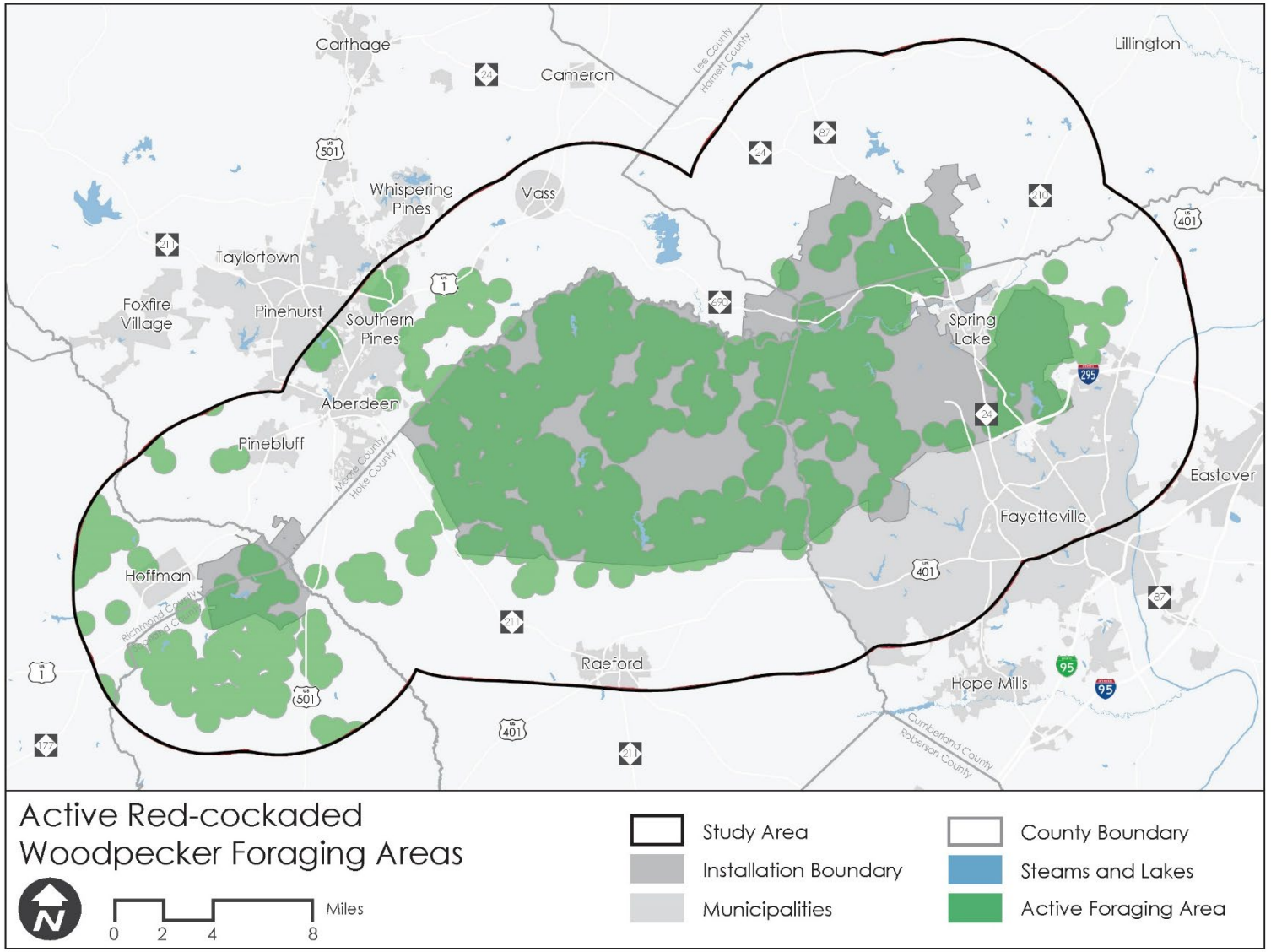
(Based on Vintage 2020 Estimates & State Demographer Projections)

County	2000	2010	2000 to 2010 Change	2020	2010 to 2020 Change	2030	2020 to 2030 Change
Cumberland	302,963	319,431	5%	336,364	5%	**334,709**	-.05%
Harnett	91,025	114,678	26%	137,058	20%	154,930	13%
Hoke	33,646	46,952	40%	55,830	19%	57,946	4%
Moore	74,769	88,247	18%	**103,352**	17%	**120,258**	16%
Richmond	46,564	46,639	0%	**44,332**	**(-5%)**	**43,921**	**(-1%)**
Scotland	35,998	36,157	0%	**34,637**	**(-4%)**	35,389	2%
Total	**584,965**	**652,104**	**11%**	**711,573**	**9%**	**747,153**	**6%**

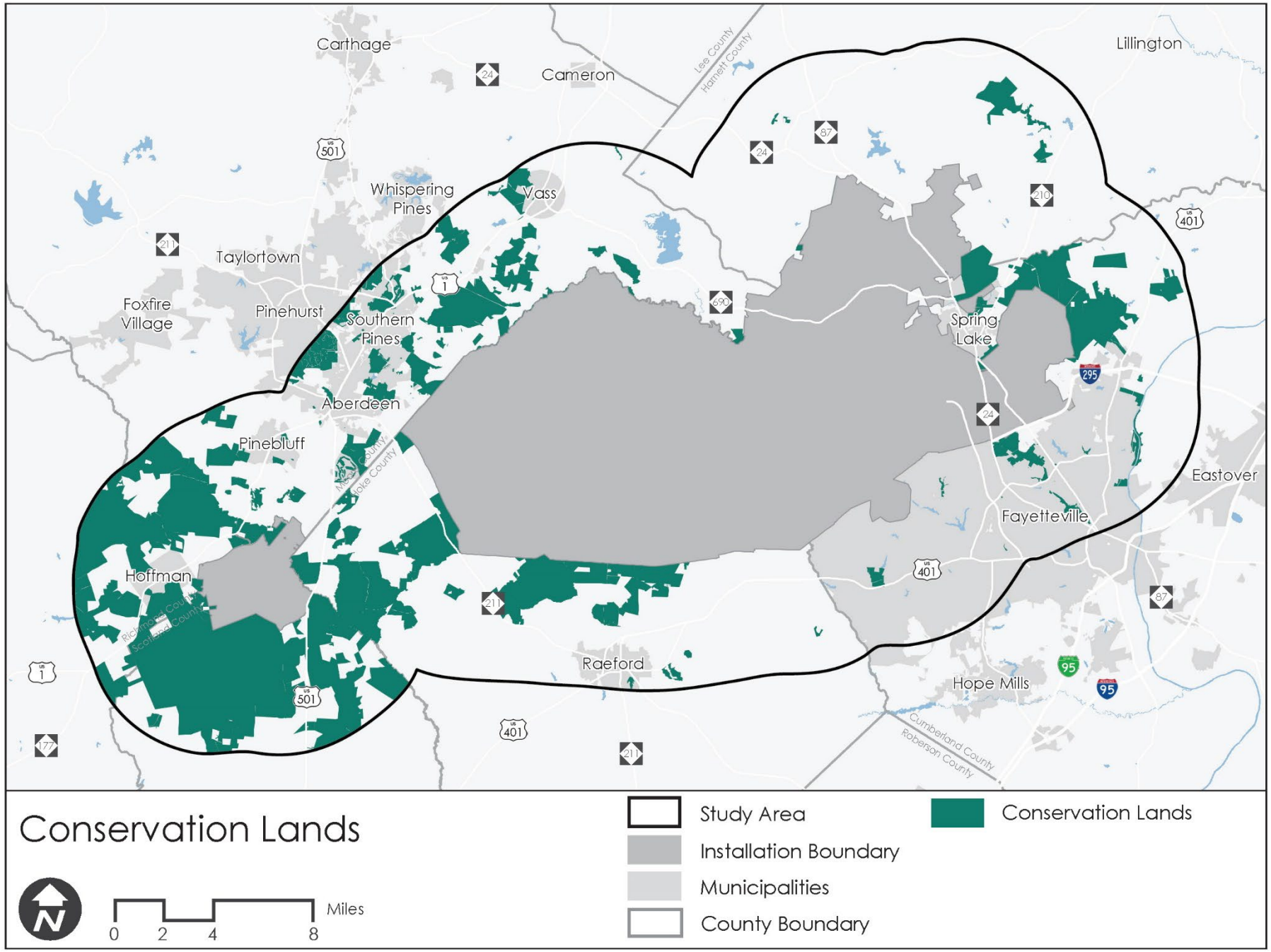
Change in developed land cover 2008-2016

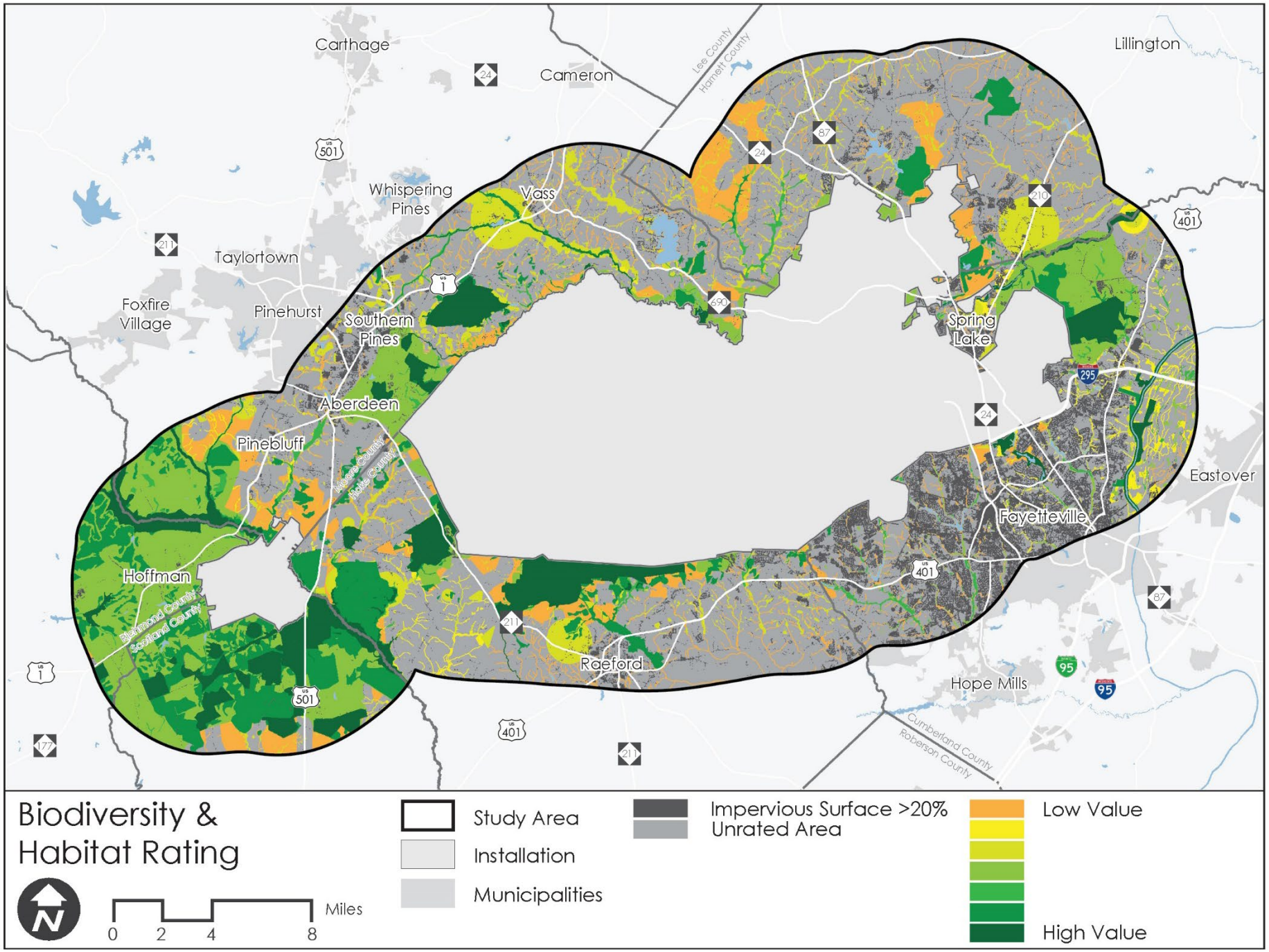


Need to Protect the Longleaf Pine Ecosystem



▼ IMAGE 4.1 RED-COCKADED WOODPECKER


Carthage
Cameron
Lillington
Lee County
Harnett County
Whispering Pines
Vass
Taylortown
Foxfire Village
Pinehurst
Southern Pines
Aberdeen
Pinebluff
Spring Lake
Fayetteville
Eastover
Hoffman
Raeford
Hope Mills
Moore County
Richmond County
Scotland County
Cumberland County
Robeson County
Conservation Lands
Miles
0 2 4 8
Study Area
Installation Boundary
Municipalities
County Boundary
Conservation Lands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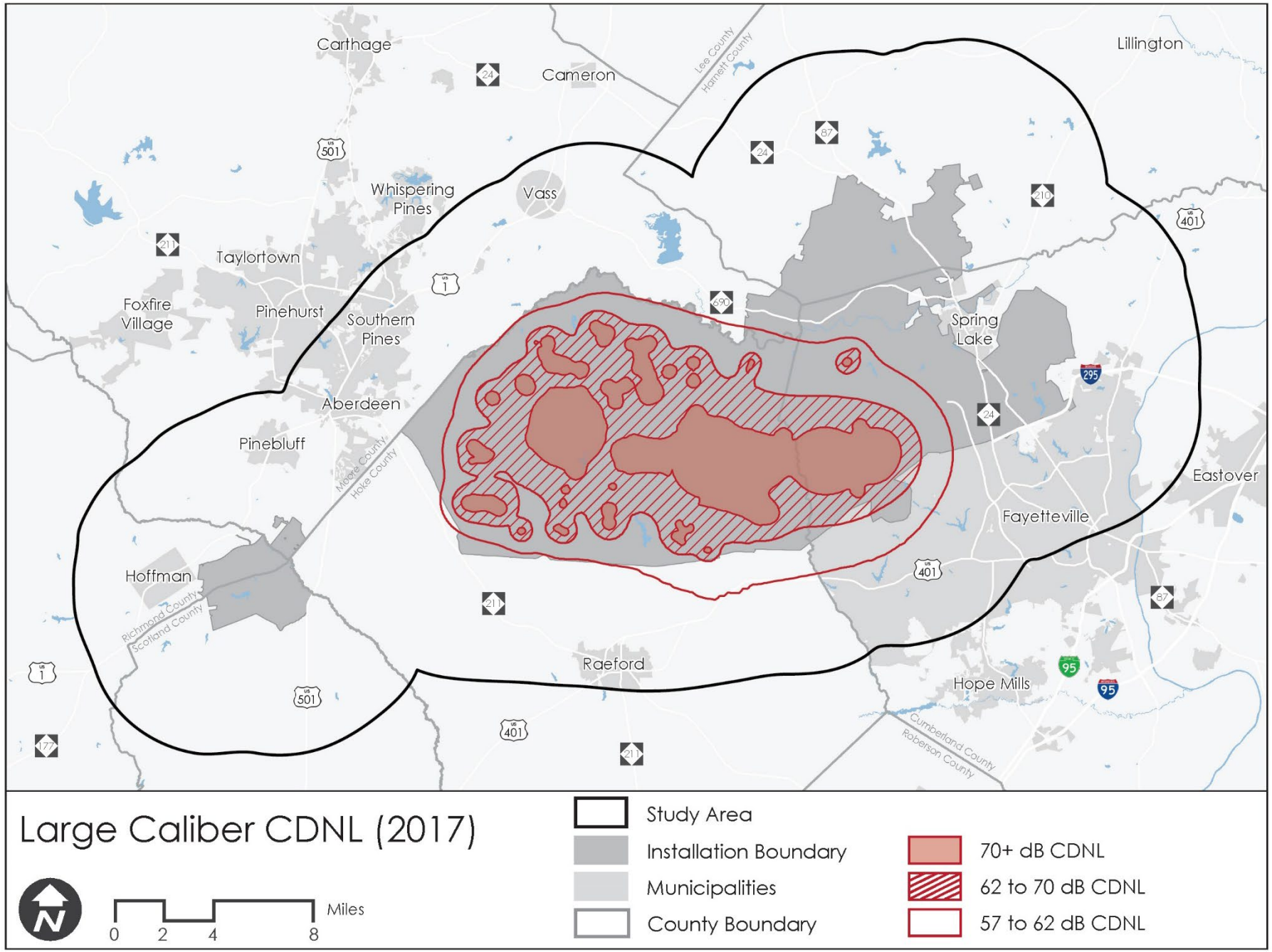
Whispering Pines
Vass
Taylortown
Foxfire Village
Pinehurst
Southern Pines
Aberdeen
Pinebluff
Spring Lake
Fayetteville
Eastover
Hoffman
Richmond County
Scotland County
Moore County
Hoke County
Raeford
Hope Mills
Cumberland County
Robeson County
Biodiversity & Habitat Rating
Miles
0 2 4 8
Study Area
Installation
Municipalities
Impervious Surface >20%
Unrated Area
Low Value
High Value

Changes in Training Mission

- The Army has shifted training from counterinsurgency training to a Decisive Action Training Environment (DATE).
  - An increase in combined arms live fire maneuver training
  - New noise contour study did not reveal any major expansions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Whispering Pines
Vass
Taylortown
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Eastover
Fayetteville
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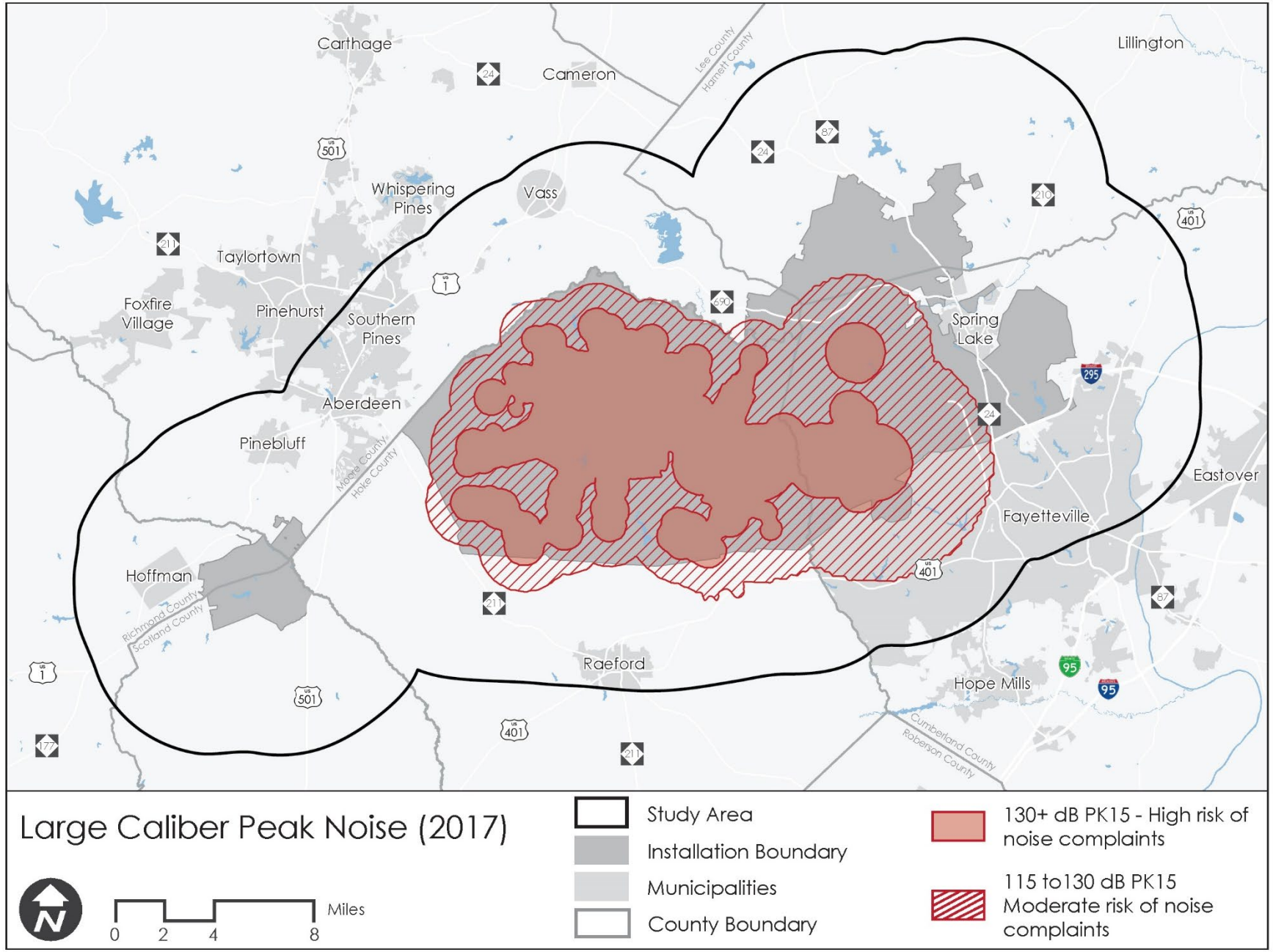
Hoke County
Hoffman
Richmond County
Scotland County
Raeford
Hope Mills
Cumberland County
Robeson County
Large Caliber CDNL (2017)
Miles
0 2 4 8
Study Area
Installation Boundary
Municipalities
County Boundary
70+ dB CDNL
62 to 70 dB CDNL
57 to 62 dB CDNL


Carthage
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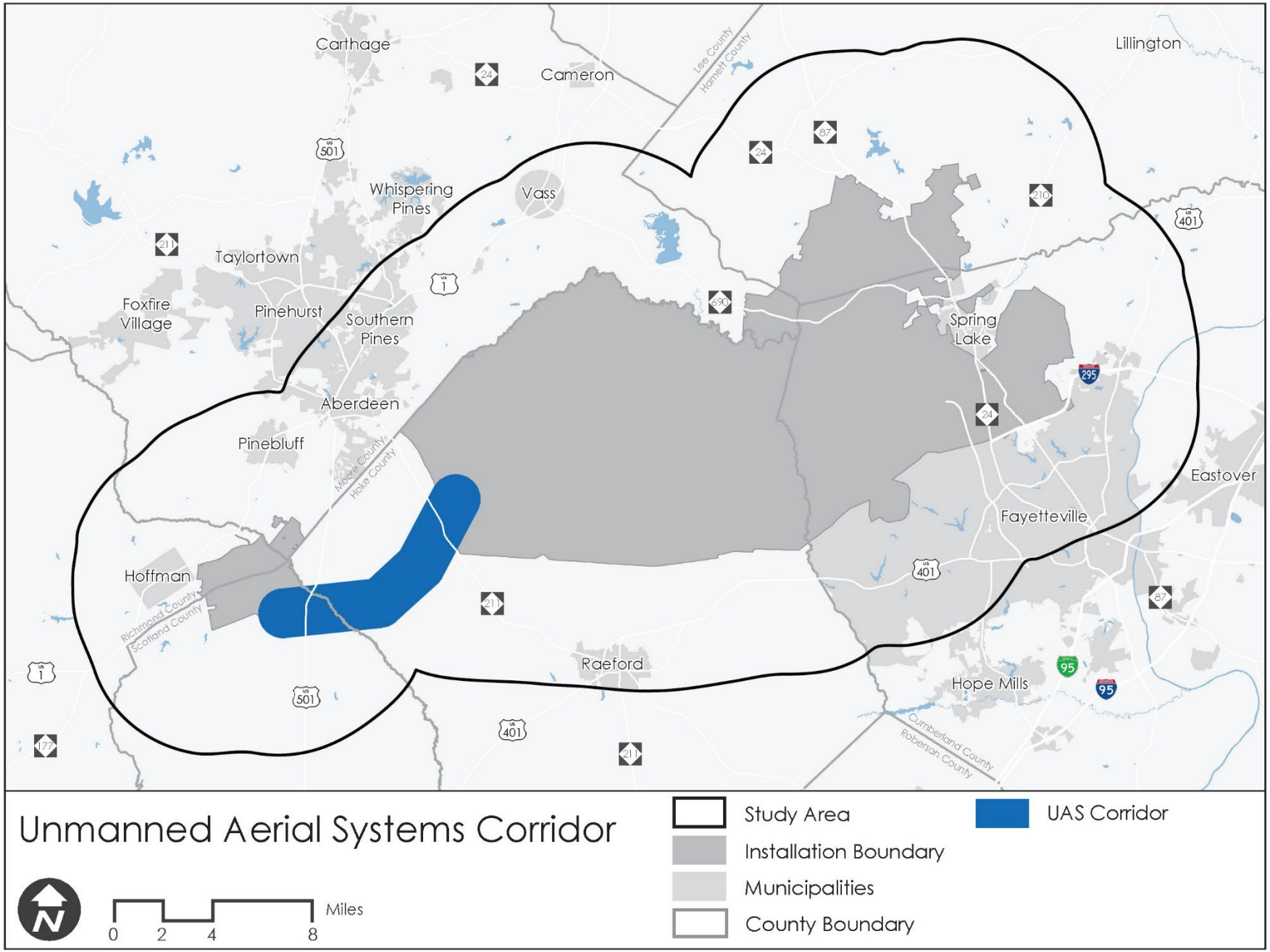
Lee County
Harnett County
Whispering Pines
Vass
Taylortown
Foxfire Village
Pinehurst
Southern Pines
Aberdeen
Pinebluff
Moore County
Hoke County
Spring Lake
Fayetteville
Eastover
Hoffman
Richmond County
Scotland County
Raeford
Hope Mills
Cumberland County
Robeson County
Large Caliber Peak Noise (2017)
Miles
0 2 4 8
Study Area
Installation Boundary
Municipalities
County Boundary
130+ dB PK15 - High risk of noise complaints
115 to130 dB PK15 Moderate risk of noise complaints

Changes in Training Mission

- The use of Small Unmanned Aerial Systems (SUAS) and Tactical Unmanned Aerial Vehicles (TUAV)
  - Although not a major issue today
    - Need for continued monitoring/management of airspace
    - Potential frequency spectrum challenges with the deployment of new systems


Carthage
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Whispering Pines
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Taylortown
Foxfire Village
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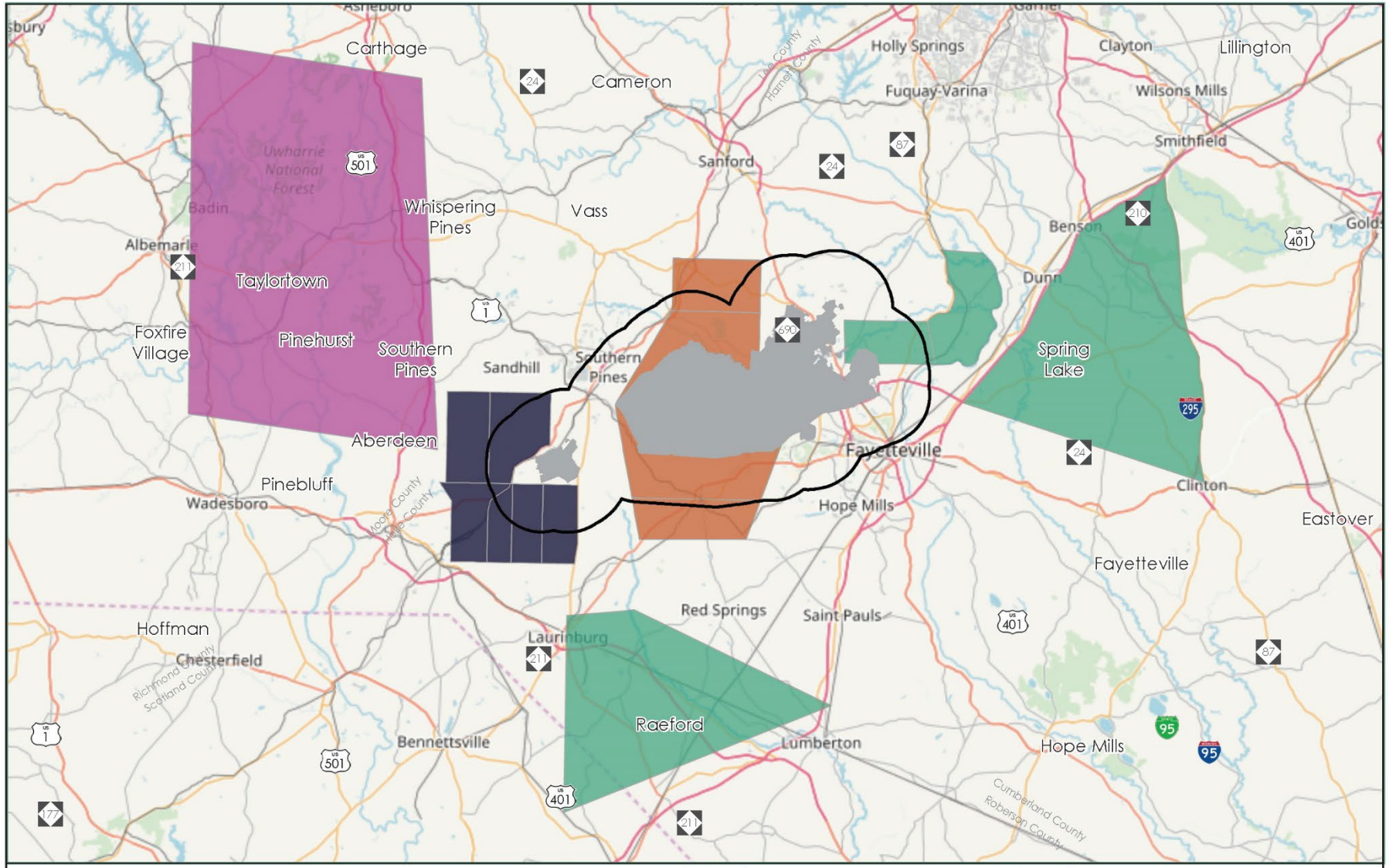
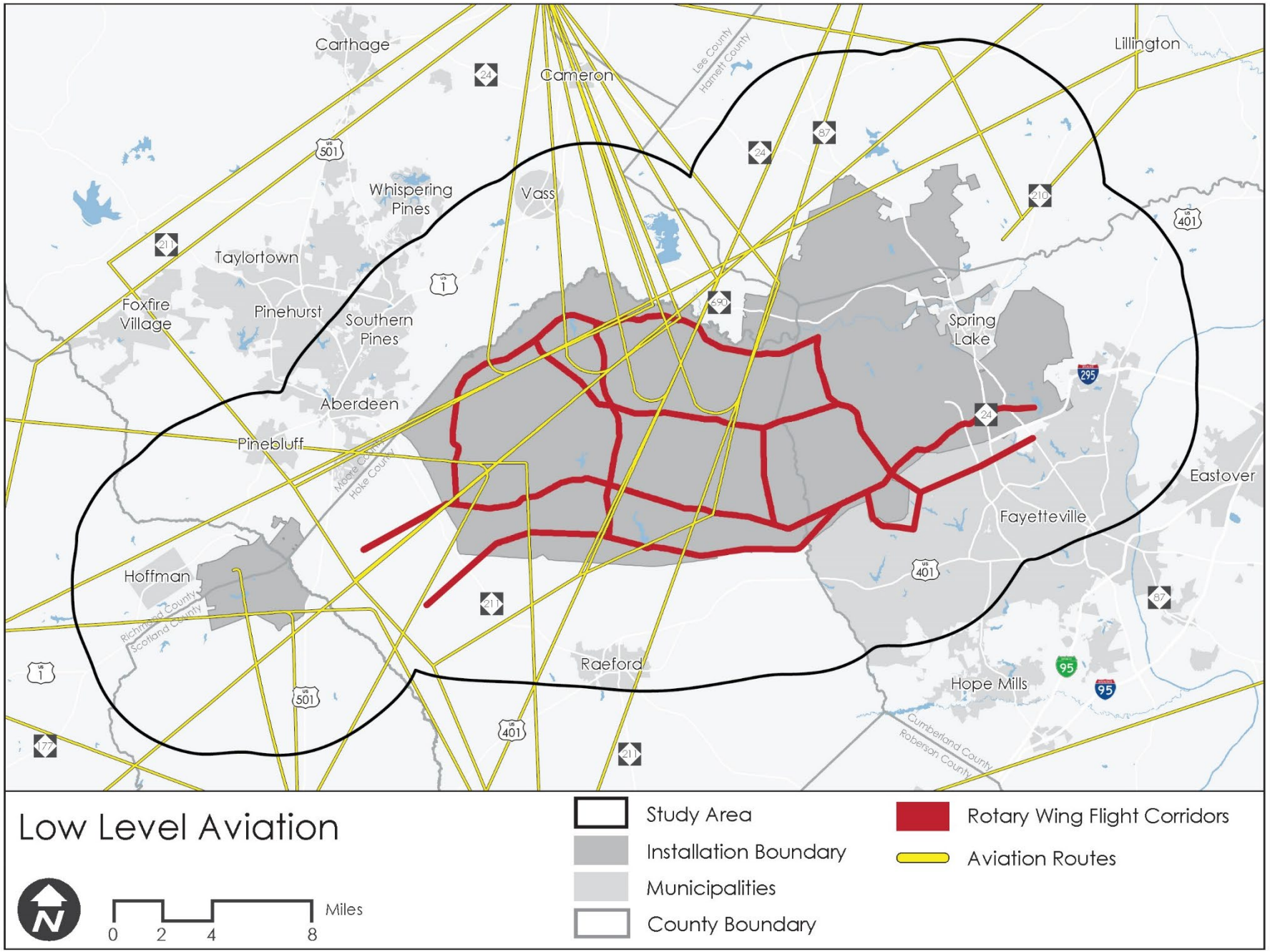
Southern Pines
Spring Lake
Aberdeen
Pinebluff
Moore County
Hoke County
Eastover
Fayetteville
Hoffman
Richmond County
Scotland County
Raeford
Hope Mills
Cumberland County
Robeson County
Unmanned Aerial Systems Corridor
Miles
0 2 4 8
Study Area
Installation Boundary
Municipalities
County Boundary
UAS Corridor



Special Use Airspace

Miles
0 5 10 20

- Study Area
- Installation Boundary
- Municipalities
- County Boundary
- Alert Area
- Nap of Earth Flight Area
- Military Operations Area
- Maintenance Test Flight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Taylortown
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Southern Pines
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Spring Lake
Fayetteville
Eastover
Hoffman
Raeford
Hope Mills
Lee County
Harnett County
Moore County
Hoke County
Richmond County
Scotland County
Cumberland County
Robeson County
Low Level Aviation
Miles
0 2 4 8
Study Area
Installation Boundary
Municipalities
County Boundary
Rotary Wing Flight Corridors
Aviation Routes

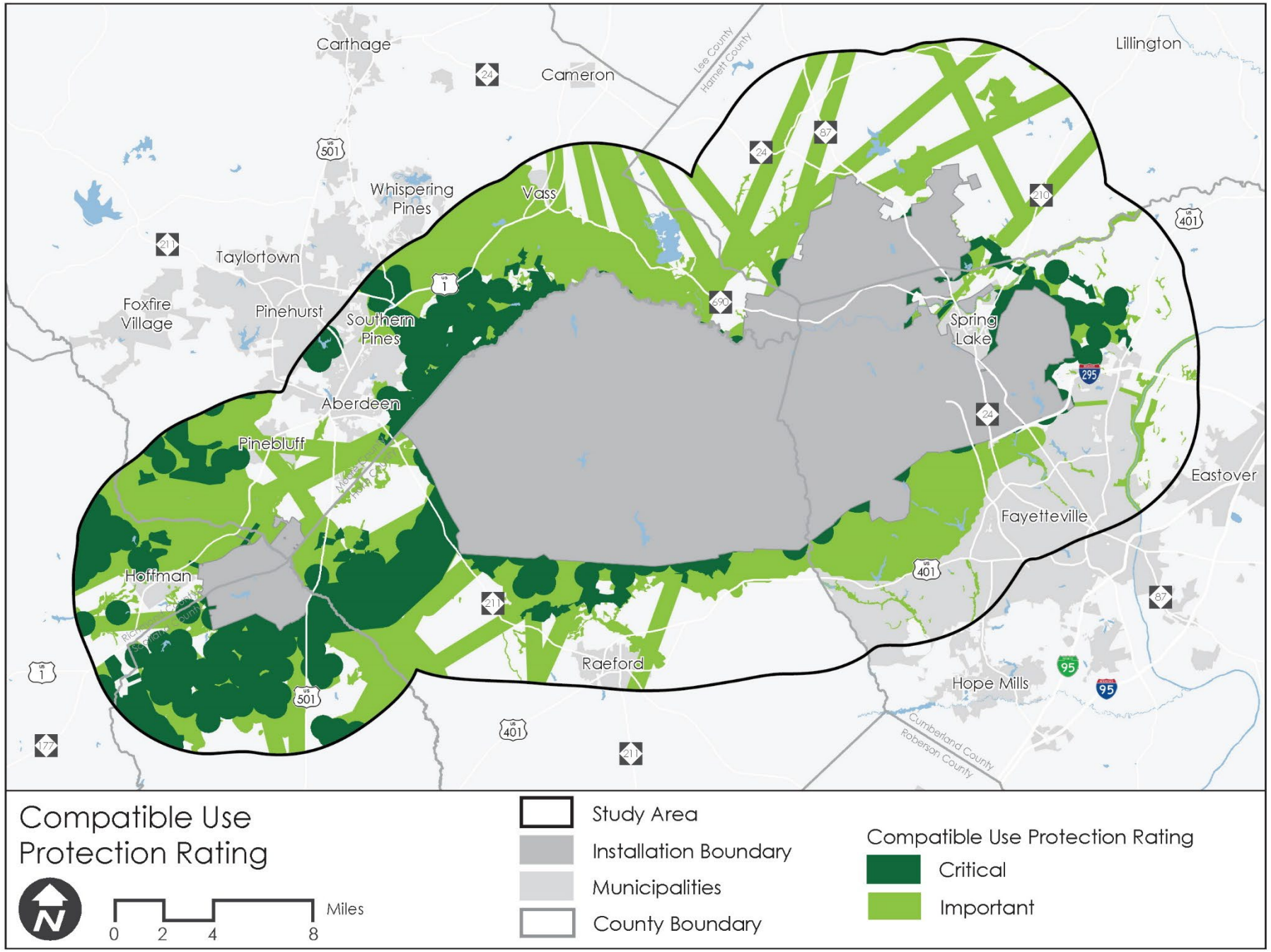
JLUS Recommendations

Areas of Recommendation

- Regional Coordination
- Compatible Growth
- Environmental
- Fort Bragg

2. COMPATIBLE GROWTH

#	Recommendation	Time frame	Resources	Partners
CG1	Implement updated compatibility / conservation rating criteria for use in RLUAC land use reviews.	Short-term	Policy	RLUAC, LG, FB, ORP
CG2	Perform regular reviews and updates to the areas of compatibility concern in coordination with Fort Bragg.	Ongoing	Policy	RLUAC, LG, FB, ORP
CG3	Enhance the land use review communications to local governments to provide more in-depth information regarding the basis for RLUAC's recommendation and emphasizing the advisory nature of the recommendation.	Short-term	Policy	RLUAC, FB, ORP
CG4	Develop and implement an online land use case management system to streamline the workflow of receiving, reviewing, providing recommendation on, and tracking land use cases.	Short-term	$$$	RLUAC, LG, OEA
CG5	Implement a plan to regularly update compatibility and conservation data on the SandhillsGIS.com mapping platform.	Ongoing	$	RLUAC, LG, FB, ORP, NC
CG6	Work with other military communities in North Carolina, the NC Department of Military and Veterans Affairs, and legislative representatives from military communities to update and strengthen military land use coordination statutes.	Mid-term	Policy	RLUAC, LG, NC, MCP
CG7	Work with other military communities in North Carolina, the NC Real Estate Commission, local real estate advocacy trade groups and legislative representatives from military communities to update real property disclosure requirements.	Mid-term	Policy	RLUAC, LG, NC, MCP
CG8	Include the presence of military training / operational impacts as part of the official real property assessment records maintained by the tax assessor in each county.	Mid-term	$	LG, RLUAC, FB



Compatible Use Protection Rating

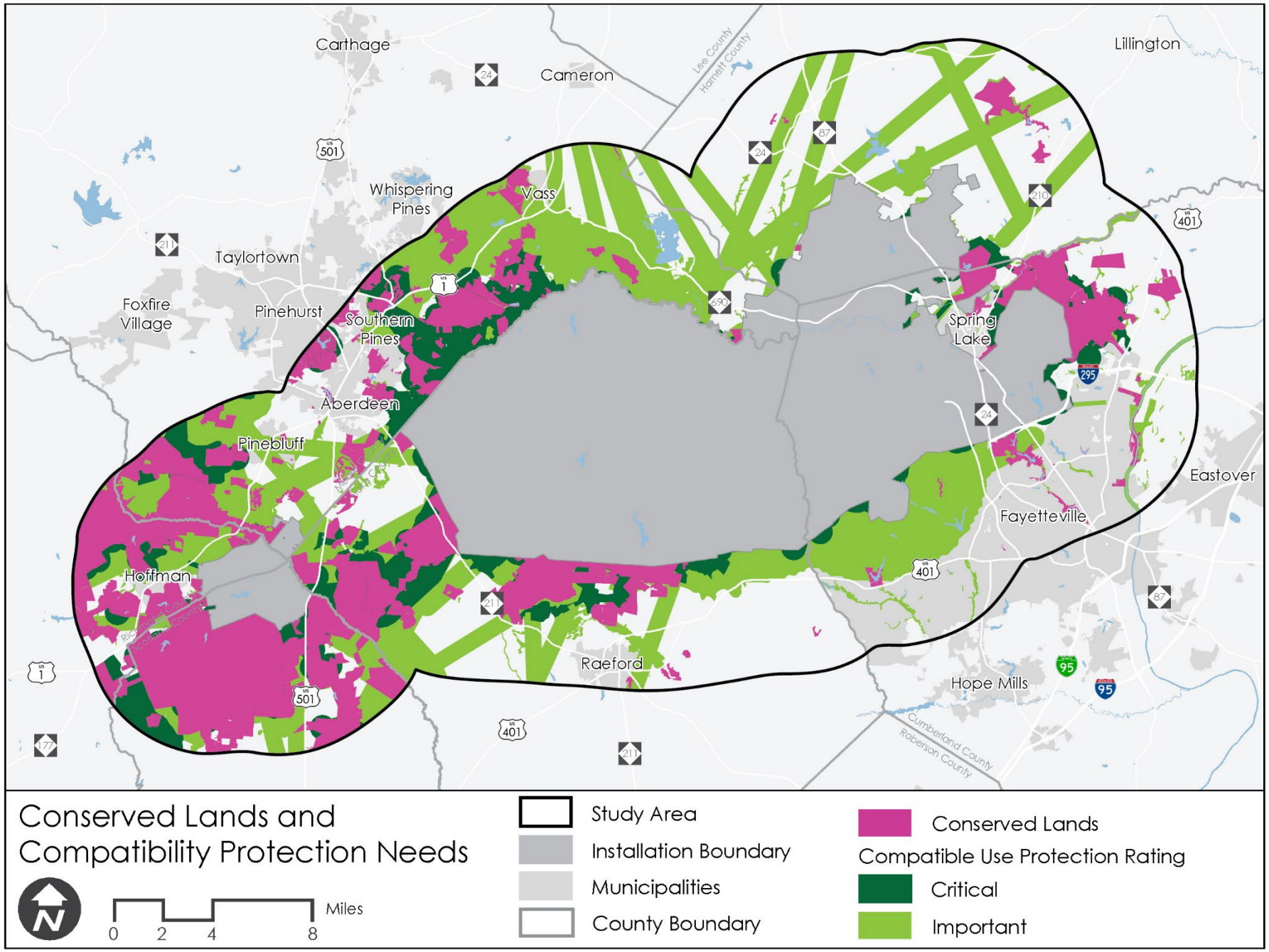
- Utilizes criteria refined during the JLUS process

Compatible Growth Rating System

- **Compatibility evaluation criteria for "CRITICAL" conservation areas:**
  - 130+ dB PK15 Large Caliber Noise Contour
  - 70+ dB CDNL Large Caliber Noise Contour
  - 104+ dB Small Arms Noise Contour
  - 75+ dB ADNL Aviation Noise Contour
  - Clear Zones
  - Accident Potential Zone 1
  - Red Cockaded Woodpecker Active Foraging Areas
  - Areas Located Under: UAS Corridor
  - Wildlife Habitat Connector Areas

Compatible Growth Rating System

- **Compatibility evaluation criteria for "IMPORTANT" conservation areas:**
  - 115+ dB PK15 Large Caliber Noise Contour
  - 62+ dB CDNL Large Caliber Noise Contour
  - 87+ dB Small Arms Noise Contour
  - 65+ dB ADNL Aviation Noise Contour
  - Accident Potential Zone 2
  - Areas Located Under: Air Corridors, Aviation Routes
  - Biodiversity / Wildlife Habitat Rating of 7+
  - Within High Quality / Outstanding Resource Waters Area



Conservation Lands and Compatibility Protection Needs

- Many of the critical areas are now protected
- Compatibility work still remains

JLUS Implementation

Implementation Tasks

- Task 1 – Website and Case Management and Tracking System
- Task 2 – Organizational Strategic Plan
- Task 3 – Scotland County GIS Data Layer of Zoning Map
- Task 4 - Comprehensive Plan/Land Use Plan Supplements
- Task 5 - Military Land Use Compatibility Toolbox (White & Smith)

Website & Case Management/Tracking System

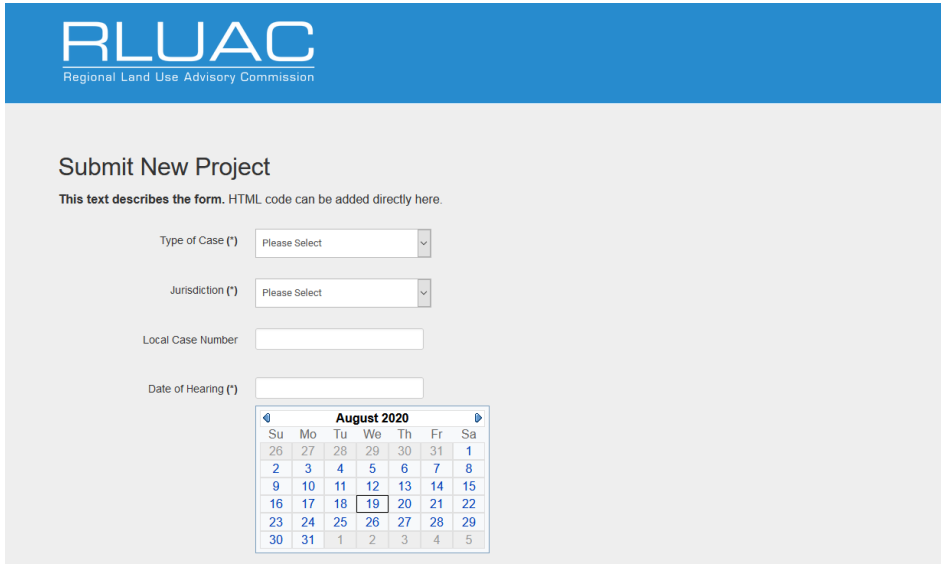
- **New website is LIVE!**
  - ✓ Modern template selected for development of the new website
  - ✓ Modernized RLUAC logo for new website
  - ✓ Improved organization of site and available information

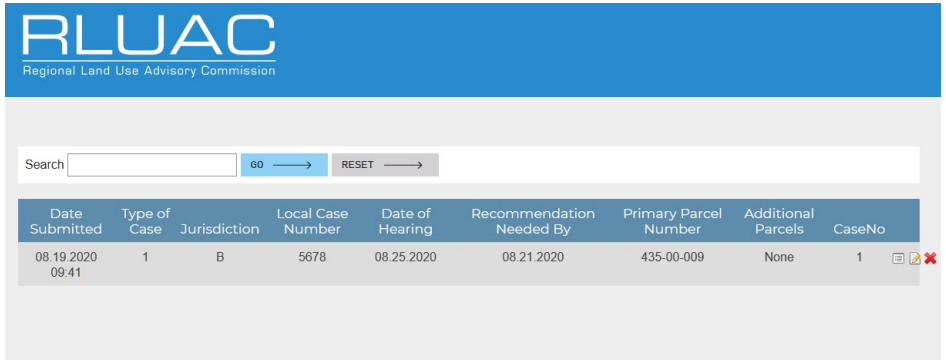
RLUAC
Regional Land Use Advisory Commission

RLUAC
Regional Land Use Advisory Commission

Website & Case Management/Tracking System

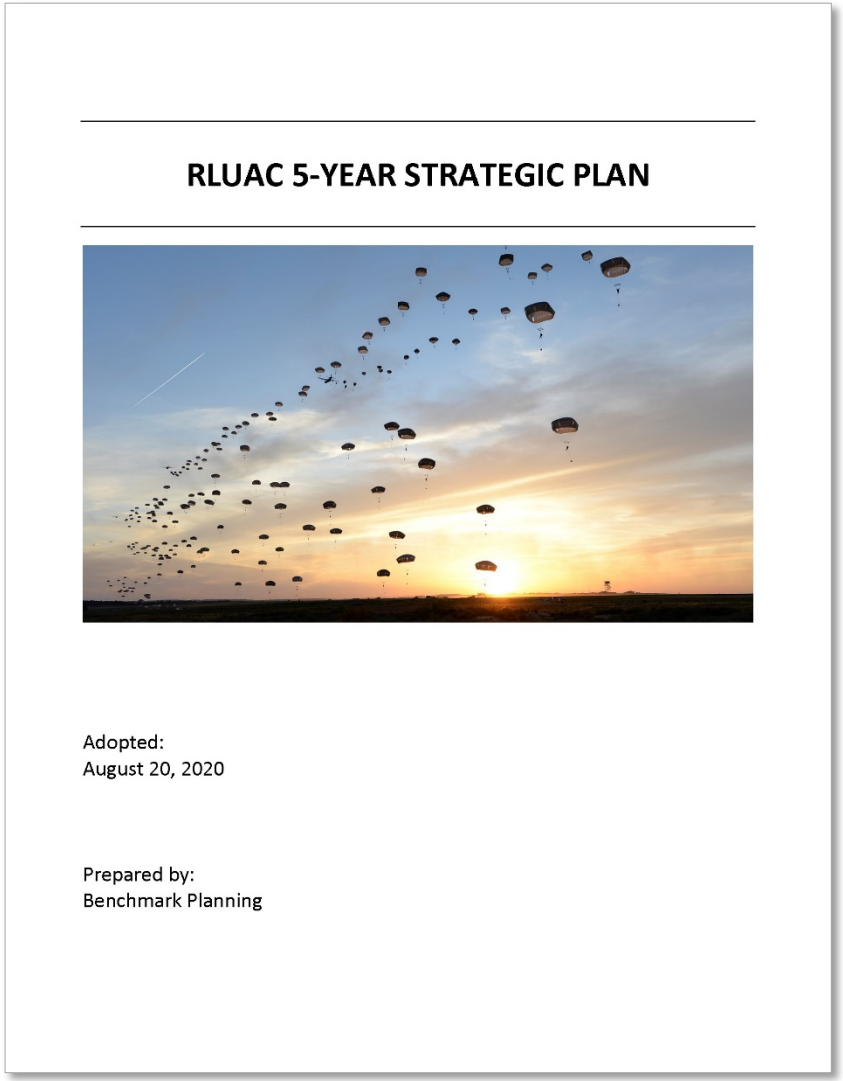
- **Case review/tracking system**
  - ✓ System is fully constructed
  - ✓ Performing final testing before roll out to communities
  - ✓ 5-year commitment to maintenance of system and website





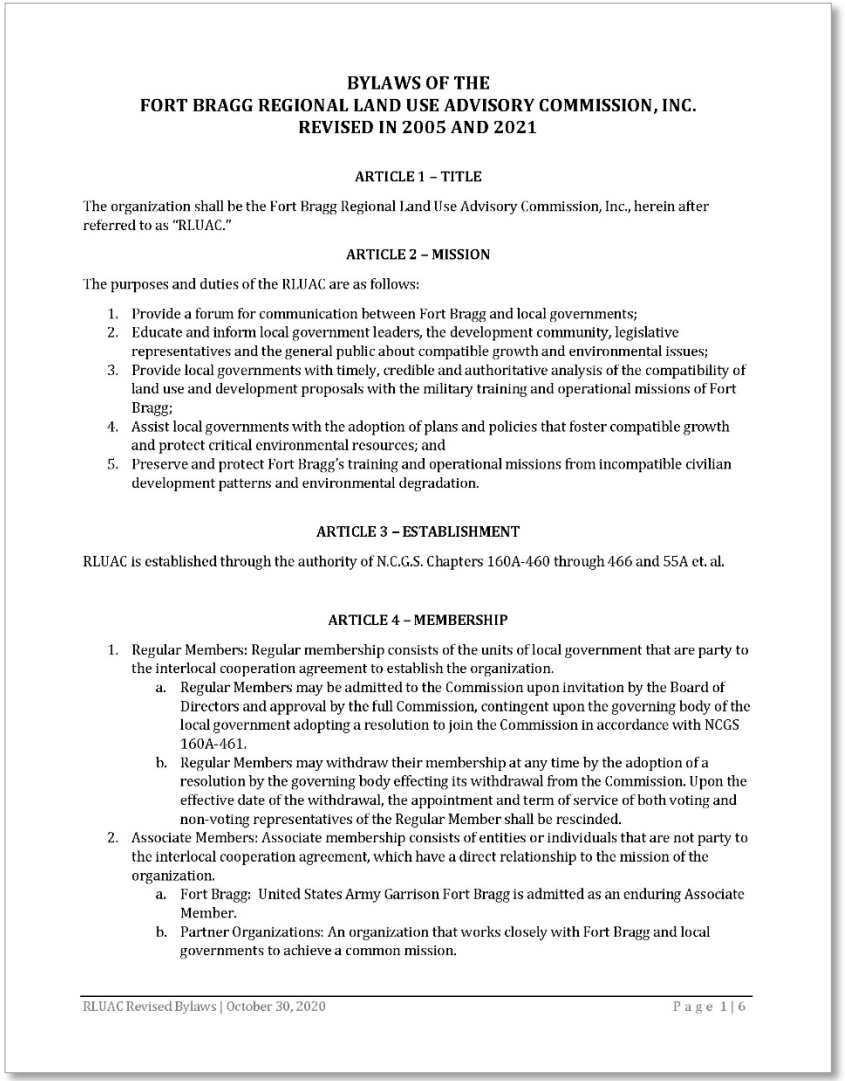
Organizational Strategic Plan

- Adopted on August 20, 2020
- Includes a separate list of priorities developed with the Board of Directors



Organizational Strategic Plan

- Revised RLUAC Bylaws
- RLUAC membership approved in November
- Ready to go out to Local Governments for approval



BYLAWS OF THE
FORT BRAGG REGIONAL LAND USE ADVISORY COMMISSION, INC.
REVISED IN 2005 AND 2021

ARTICLE 1 – TITLE

The organization shall be the Fort Bragg Regional Land Use Advisory Commission, Inc., herein after referred to as "RLUAC."

ARTICLE 2 – MISSION

The purposes and duties of the RLUAC are as follows:

1. Provide a forum for communication between Fort Bragg and local governments;
2. Educate and inform local government leaders, the development community, legislative representatives and the general public about compatible growth and environmental issues;
3. Provide local governments with timely, credible and authoritative analysis of the compatibility of land use and development proposals with the military training and operational missions of Fort Bragg;
4. Assist local governments with the adoption of plans and policies that foster compatible growth and protect critical environmental resources; and
5. Preserve and protect Fort Bragg's training and operational missions from incompatible civilian development patterns and environmental degradation.

ARTICLE 3 – ESTABLISHMENT

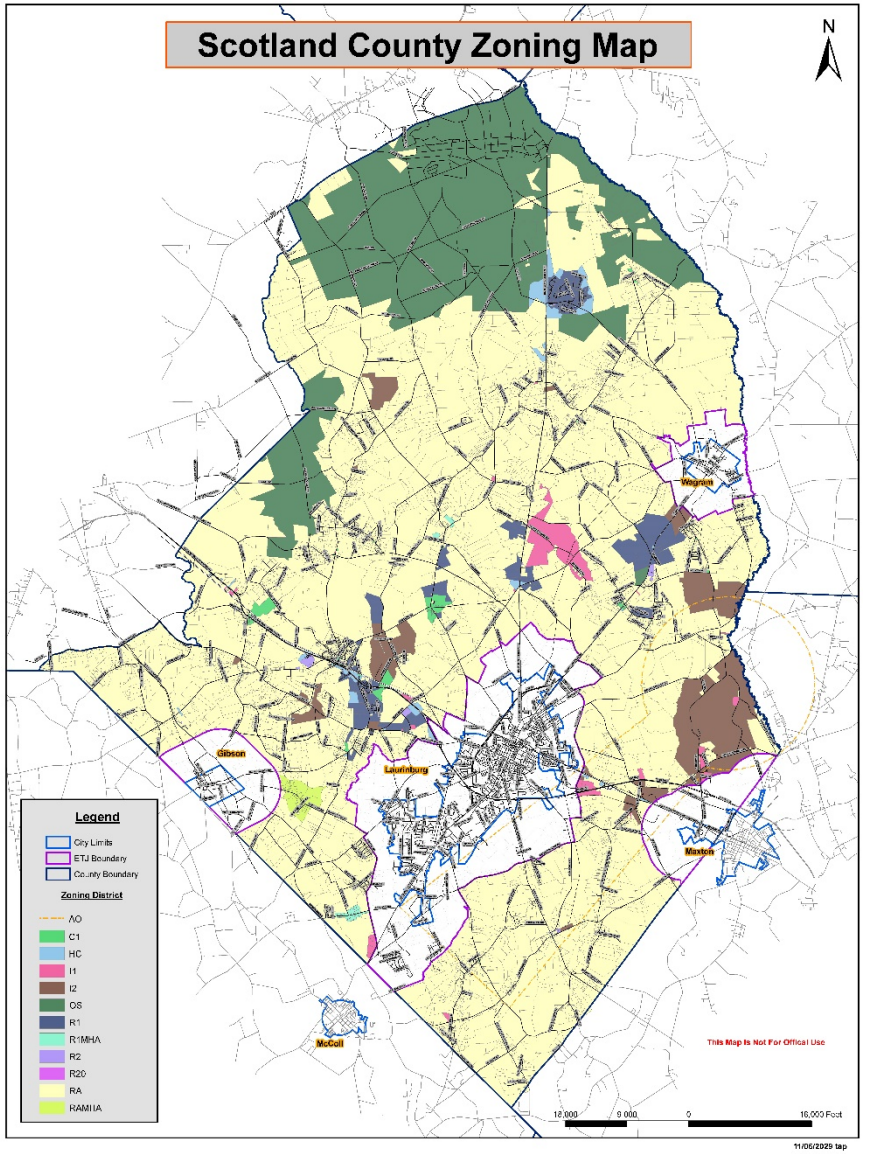
RLUAC is established through the authority of N.C.G.S. Chapters 160A-460 through 466 and 55A et. al.

ARTICLE 4 – MEMBERSHIP

1. Regular Members: Regular membership consists of the units of local government that are party to the interlocal cooperation agreement to establish the organization.
   a. Regular Members may be admitted to the Commission upon invitation by the Board of Directors and approval by the full Commission, contingent upon the governing body of the local government adopting a resolution to join the Commission in accordance with NCGS 160A-461.
   b. Regular Members may withdraw their membership at any time by the adoption of a resolution by the governing body effecting its withdrawal from the Commission. Upon the effective date of the withdrawal, the appointment and term of service of both voting and non-voting representatives of the Regular Member shall be rescinded.
2. Associate Members: Associate membership consists of entities or individuals that are not party to the interlocal cooperation agreement, which have a direct relationship to the mission of the organization.
   a. Fort Bragg: United States Army Garrison Fort Bragg is admitted as an enduring Associate Member.
   b. Partner Organizations: An organization that works closely with Fort Bragg and local governments to achieve a common mission.

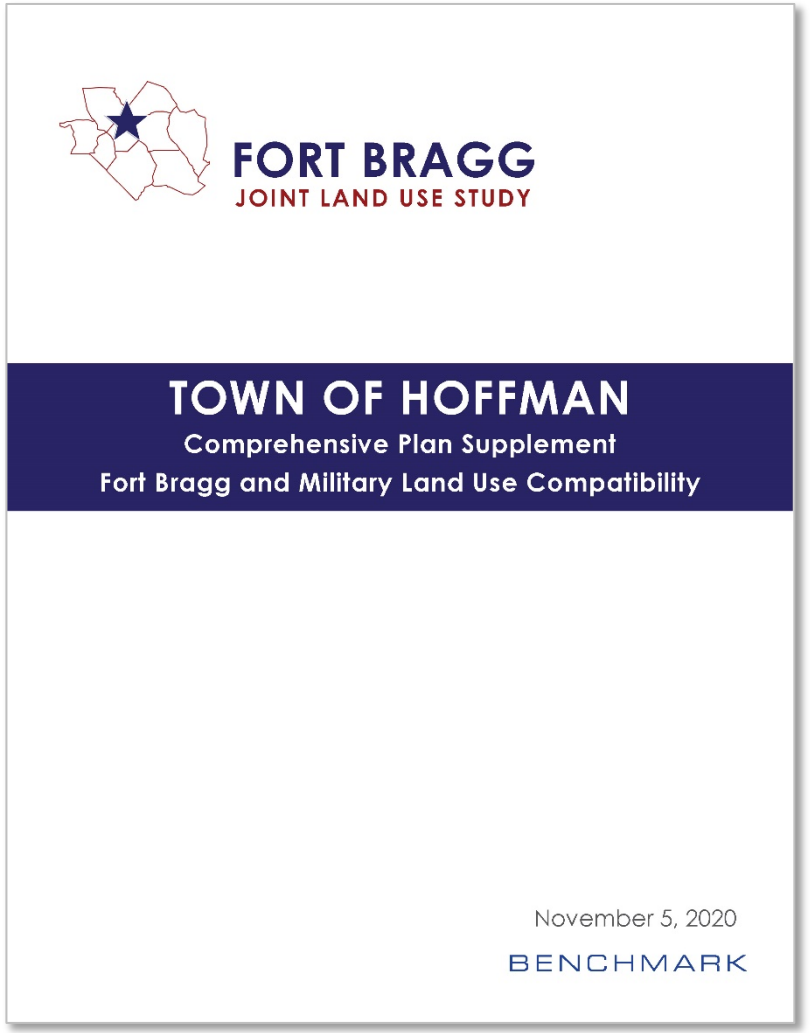
Scotland County GIS Data Layer/ Zoning Map

- Partnered with the City of Laurinburg
- City's GIS staff manages GIS for County
  - ✓ Long-term maintenance



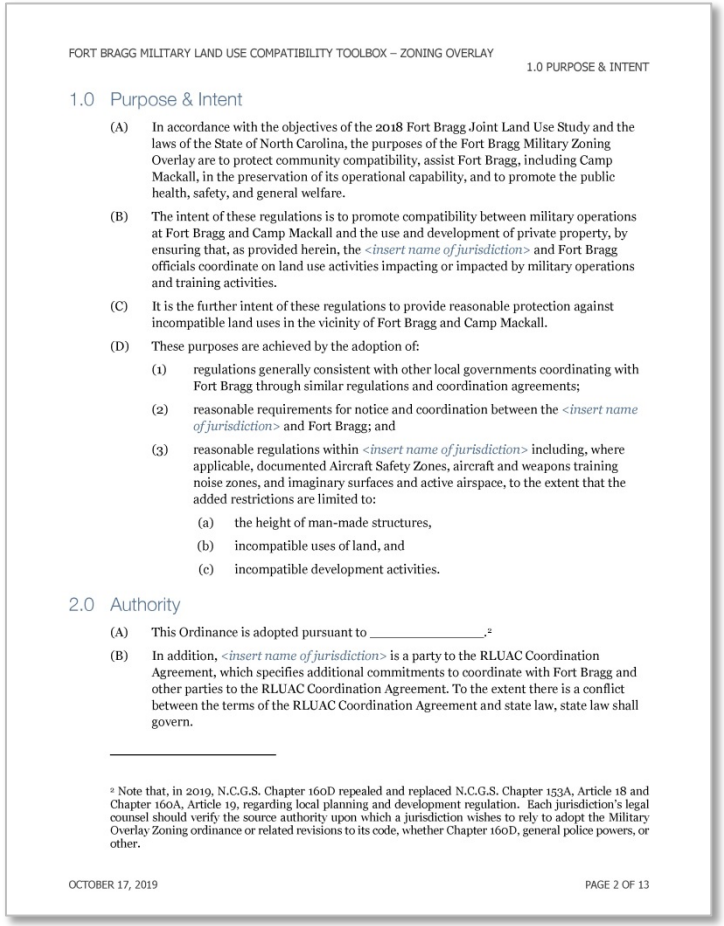
Comprehensive Plan / Land Use Plan Supplements

- 17 Plan Supplements Completed
  - ✓ Several jurisdictions have taken steps to incorporate the information into their plans



Military Land Use Compatibility Toolbox

- 18 Zoning Overlay Districts Prepared
  - ✓ Model ordinance language for each jurisdiction
  - ✓ Several jurisdictions have taken steps to incorporate the information into their plans



FORT BRAGG MILITARY LAND USE COMPATIBILITY TOOLBOX – ZONING OVERLAY

1.0 PURPOSE & INTENT

1.0 Purpose & Intent

(A) In accordance with the objectives of the 2018 Fort Bragg Joint Land Use Study and the laws of the State of North Carolina, the purposes of the Fort Bragg Military Zoning Overlay are to protect community compatibility, assist Fort Bragg, including Camp Mackall, in the preservation of its operational capability, and to promote the public health, safety, and general welfare.

(B) The intent of these regulations is to promote compatibility between military operations at Fort Bragg and Camp Mackall and the use and development of private property, by ensuring that, as provided herein, the *<insert name of jurisdiction>* and Fort Bragg officials coordinate on land use activities impacting or impacted by military operations and training activities.

(C) It is the further intent of these regulations to provide reasonable protection against incompatible land uses in the vicinity of Fort Bragg and Camp Mackall.

(D) These purposes are achieved by the adoption of:

(1) regulations generally consistent with other local governments coordinating with Fort Bragg through similar regulations and coordination agreements;

(2) reasonable requirements for notice and coordination between the *<insert name of jurisdiction>* and Fort Bragg; and

(3) reasonable regulations within *<insert name of jurisdiction>* including, where applicable, documented Aircraft Safety Zones, aircraft and weapons training noise zones, and imaginary surfaces and active airspace, to the extent that the added restrictions are limited to:

(a) the height of man-made structures,

(b) incompatible uses of land, and

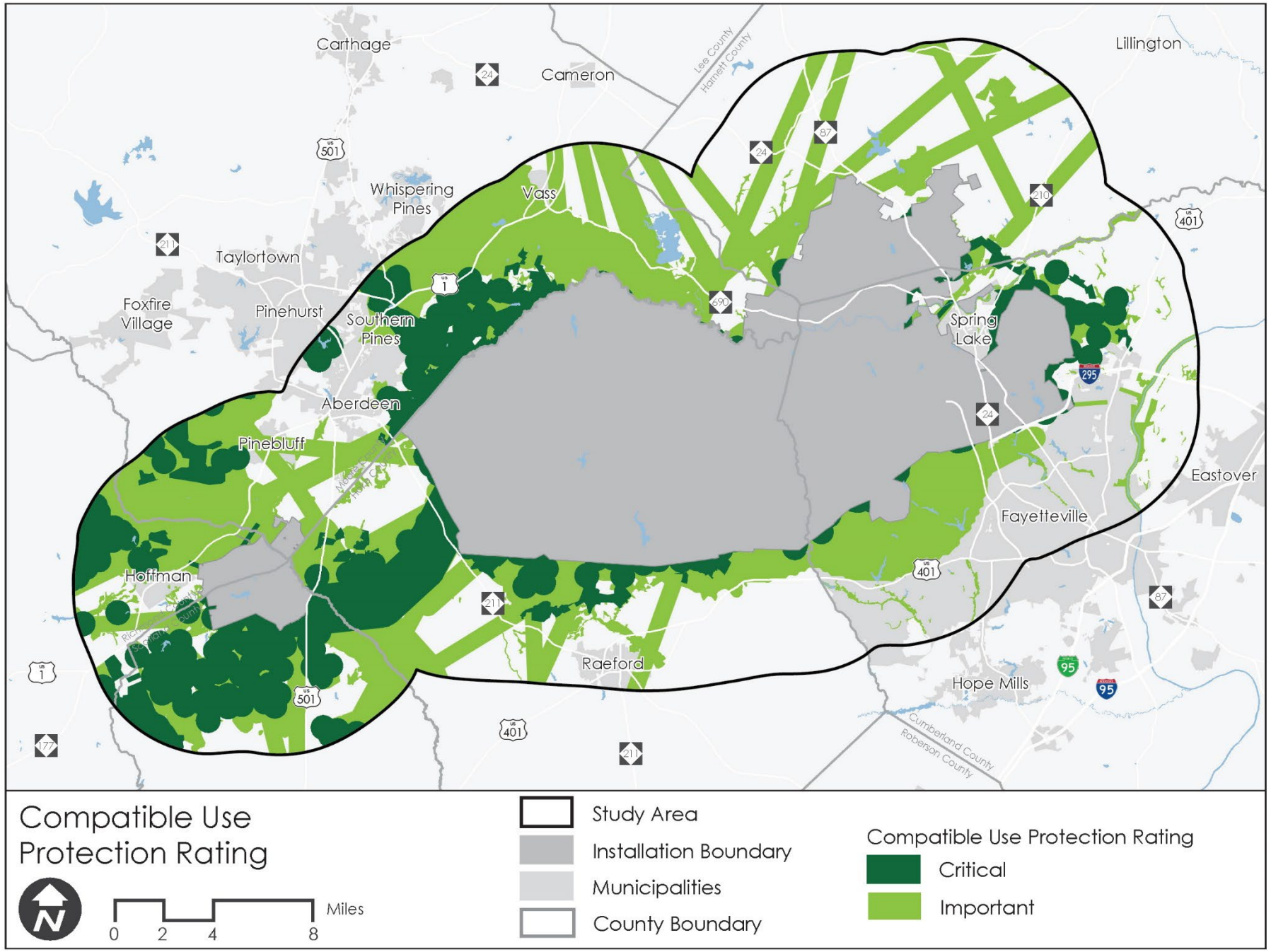
(c) incompatible development activities.

2.0 Authority

(A) This Ordinance is adopted pursuant to _____.[2]

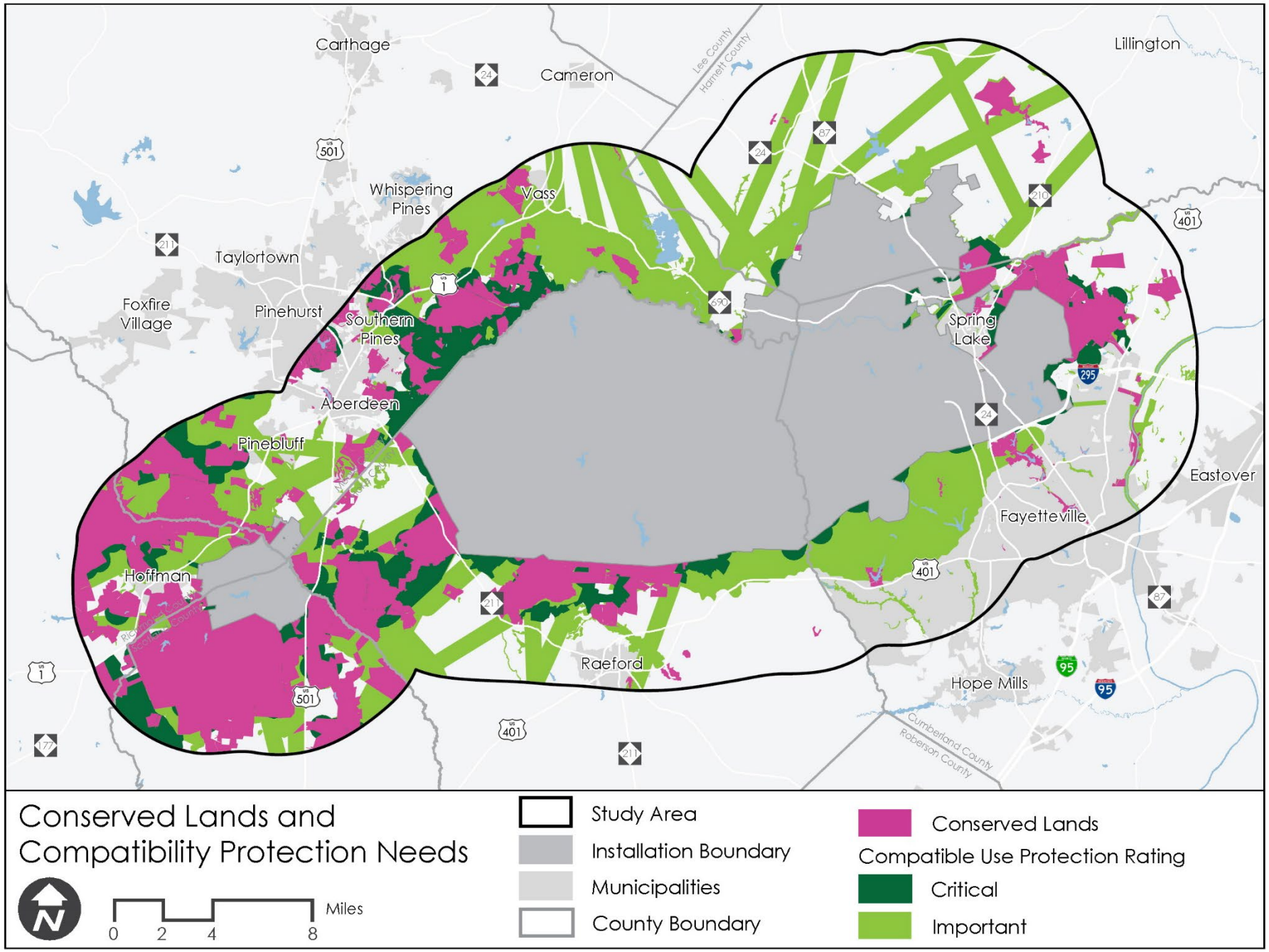
(B) In addition, *<insert name of jurisdiction>* is a party to the RLUAC Coordination Agreement, which specifies additional commitments to coordinate with Fort Bragg and other parties to the RLUAC Coordination Agreement. To the extent there is a conflict between the terms of the RLUAC Coordination Agreement and state law, state law shall govern.

[2] Note that, in 2019, N.C.G.S. Chapter 160D repealed and replaced N.C.G.S. Chapter 153A, Article 18 and Chapter 160A, Article 19, regarding local planning and development regulation. Each jurisdiction's legal counsel should verify the source authority upon which a jurisdiction wishes to rely to adopt the Military Overlay Zoning ordinance or related revisions to its code, whether Chapter 160D, general police powers, or other.



Compatible Use Protection Rating

- Utilizes criteria refined during the JLUS process



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