

6

LAND USE COMPATIBILITY ANALYSIS

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APZs and noise contours make up the AICUZs for an air installation. The AICUZs define the minimum recommended area within which land use controls are needed to protect the health, safety, and welfare of those living or working near a military airfield and to preserve the flying mission. The AICUZ combined with the guidance and recommendations set forth in this AICUZ Study are the fundamental tools necessary for the planning process. The Navy recommends that the 2012 AICUZ noise contours and APZs be adopted into individual county planning studies, regulations, and processes to best guide compatible development around the installations.

The information presented in this chapter is intended for consideration by NAS Meridian, government entities at the city, state, and county level, surrounding communities, as well as other interested groups and participating agencies. The purpose of this AICUZ Study is to present data in a community planning format to encourage cooperative land use planning between NAS Meridian and the surrounding community so that future growth and development are compatible with the operational missions and to seek ways to lessen the operational impacts on adjacent land (Navy 1988). Although ultimate control over land use and development surrounding the installation is the responsibility of local governments, through the provision of information in this AICUZ Study, the Navy encourages local governments to plan for compatible development.

This chapter addresses land use compatibility by examining existing and planned land uses near NAS Meridian. It also addresses local planning authorities in place in the region and their related regulatory authority.

6.1 LAND USE COMPATIBILITY GUIDELINES AND CLASSIFICATIONS

Navy Land Use Compatibility Recommendations

Noise-sensitive land uses (e.g., houses, churches, schools) be placed outside high noise zones.

People-intensive uses (e.g., apartments, theaters, churches, shopping centers) be placed outside APZs.

The Navy has developed land use compatibility recommendations for APZs and noise zones. The guidelines recommend that noise-sensitive land uses (e.g., houses, churches, schools) be placed outside high noise zones, and people-intensive uses (e.g., apartments, theaters, churches shopping centers) not be placed in APZs. Certain land uses are considered incompatible with APZs and high noise zones, while other land uses may be considered compatible or compatible under certain conditions (compatible with restrictions). The land use compatibility analysis conducted for NAS Meridian was based on the Navy's land use compatibility recommendations, which are presented in Appendix B.

Table 6-1 shows existing generalized land use classifications and the associated land use compatibility with each land use designation for noise zones and APZs. These generalized land uses in Table 6-1 do not represent the local community's land use designations. Local land use and zoning for each county and airfield are discussed in the remainder of this chapter. Table 6-1 provides only generic land use categories for the purpose of illustrating a basic and high-level understanding of land use compatibility across some common land use types.

Table 6-1. Land Use Classifications and Compatibility Guidelines

	Land Use Compatibility Noise Zone (DNL)						Land Use Compatibility with APZs		
	Noise Zone 1		Noise Zone 2		Noise Zone 3		Clear Zone	APZ I	APZ II
	<55	55-65	65-70	70-75	75-80	>80			
Single-Unit, Detached (residential)									(1)
Multi-Family Residential, (apartment, transient lodging)									
Public Assembly									
Schools and Hospitals			(2)	(2)					
Manufacturing (ex. petrol/chem.; textile)									
Parks								(4)	(4)
Business Services				(2)	(2)			(3)	(3)
Agriculture, Forestry, and Mining									

Source: Adapted from OPNAVINST 11010.36C, Navy 2008

Notes:

This generalized land use table provides an overview of recommended land use. To determine specific land use compatibility, see Appendix B.

- (1) Maximum density of 1-2 dwellings per acre.
- (2) Land use and related structures generally compatible; however, measures to achieve NLR 25 or 30 must be incorporated into design and construction of the structures.
- (3) Maximum floor area ratio that limits people density may apply.
- (4) Facilities must be low intensity.

Key:

	Compatible
	Incompatible

6.2 PLANNING AUTHORITY

The development and control of lands outside of the installation fence are beyond the authority of NAS Meridian. Development of these lands is dictated by local land use planning, ordinances, and regulations. NAS Meridian is located in unincorporated areas of Lauderdale and Kemper Counties.

Therefore, the land use ordinances covering the off-installation property within the AICUZ footprint are within the jurisdiction of the two counties. However, land use practices of the nearby city of Meridian also impact NAS Meridian. Land use planning programs, polices, and regulations for Lauderdale and Kemper

Military installations can make **recommendations** or **advise** local government and agencies on land use outside the fence, but development of the land is dictated by local land use planning, ordinances, and regulations.

Counties, the City of Meridian, and the East Central Planning and Development District (ECPDD) are addressed in this section.

6.2.1 Lauderdale and Kemper Counties

The 1978 NAS Meridian AICUZ Study established AICUZ areas for the airfields and strategies for promoting compatible land use within the AICUZ footprint. At that time, the strategies were not adopted by Lauderdale and Kemper Counties; however, following the recommendations in the 1987 AICUZ Update, and under the authority of Section 61-7-13 Mississippi Code, both Lauderdale and Kemper Counties created and adopted AICUZ ordinances in September 1992 and January 1995, respectively (Navy 2004). The AICUZ provisions of both county ordinances were never updated to reflect the 2004 AICUZ Study Update. These county ordinances are equivalent and work collectively to promote compatible development around NAS Meridian (Navy 2004).

Both Lauderdale and Kemper Counties have a five-member Board of Supervisors that adopts regulations (e.g., AICUZ ordinances) affecting unincorporated areas of their respective county.

Lauderdale and Kemper Counties are each divided into five separate districts, with each district electing a duly appointed supervisor to oversee the district, as well as the county as a whole. The majority of NAS Meridian is located in District 2 of Lauderdale County (with small portions within Districts 1 and 2 of Lauderdale and Kemper Counties, respectively) and NOLF Joe Williams is located in District 4 of Kemper County. Each county's five-member Board of Supervisors is the governing body that meets to make policy decisions pertaining to their respective county. The Boards are responsible for adopting an annual budget, establishing the annual property tax rate, setting policies, goals and objectives to direct the county's growth and development, and carrying out other responsibilities as set forth by State of Mississippi statutes. In addition, the Boards of County Supervisors typically conduct public hearings on budget/taxes, solid waste plans, road system maps, and zoning (Mississippi Association of Supervisors et al. 2003). The Boards also adopt local regulations affecting the unincorporated areas of the county to protect the public (e.g., AICUZ ordinances).

Lauderdale County’s Board appointed an Airport Zoning Commission in 1992 to study and make recommendations regarding the adopted AICUZ ordinances. The Commission rarely meets for airport zoning issues, but does act as a Planning Board for subdivision developments. Lauderdale County has subdivision regulations that provide limited development authority to ensure that proper lot layout, design, and improvements are included in new residential developments. However, the subdivision regulations do not address the problem of existing incompatible land uses, nor do they contain specific language on restricting development within the AICUZ footprint.

Neither Lauderdale nor Kemper County has an official county-wide planning department. Most planning actions related to comprehensive planning, land use regulations, and zoning are under the jurisdiction of the individual cities and municipalities in each county.

6.2.2 City of Meridian

The local planning authority for the City of Meridian is the Meridian Planning Commission, which provides comprehensive planning services to guide city decision makers. The Commission developed the City of Meridian Comprehensive Plan, outlining policies to guide the physical and economic development of the city and its surrounding planning area (City of Meridian 2009). The City of Meridian adopted a comprehensive zoning ordinance in 1994. The general purpose and intent of the zoning ordinance is the attainment of the goals and objectives of the people of the Meridian as expressed in the City of Meridian Comprehensive Plan (City of Meridian 2009). The City Council adopted the Comprehensive Plan in November 2003, with the latest revision to the document occurring in September 2009. The Comprehensive Plan was developed to “bring about coordinated physical development in accordance with present and future needs. . . .” in compliance with Sections 17-1-1 through 17-1-39 of the Mississippi Code. The Comprehensive Plan delineated additional planning areas that are outside of existing municipal boundaries, but are within the City of Meridian’s logical growth path. The City of Meridian annexed 9.3 square miles of land in 2008, much of it between the City of Meridian and NAS Meridian (NAS Meridian 2011b). The Comprehensive Plan is implemented by

The Meridian Planning Commission is the local planning authority for the City of Meridian and was responsible for developing the City of Meridian Comprehensive Plan.

The City of Meridian Comprehensive Plan and city ordinances do not contain any specific language on the AICUZ Program or coordination with NAS Meridian regarding land use decisions.

zoning ordinances, subdivision regulations, building codes, and a capital improvements program (City of Meridian 2009).

Aside from the City of Meridian Comprehensive Plan, the region's local governments conduct limited land use planning. The City of Meridian Comprehensive Plan and city ordinances do not contain any specific language on the AICUZ Program or coordination with NAS Meridian on land use decisions.

6.2.3 East Central Planning and Development District

The ECPDD, located in Newton, Mississippi, is one of ten planning and development districts in the state and was officially designated in 1968 by the Economic Development Administration as a result of the Public Works and Economic Development Act of 1965 (Mississippi Association of Planning and Development Departments [MAPDD] 2007). ECPDD serves nine counties and thirty-one municipalities, including both Lauderdale and Kemper Counties and the City Meridian. The ECPDD assists the towns and counties with economic and community development efforts, with an emphasis on planning, developing, and coordinating local and regional projects and programs and with an interpretation of federal and state regulations and guidelines (MAPDD 2007).

ECPDD completed a Comprehensive Economic Development Strategy (CEDS) plan in 2007 for counties in the district. The plan provides a thorough analysis of the region and delineates the economic goals and objectives of the region, as well as strategic action steps toward accomplishing them. As a regional planning and development organization, the ECPDD can influence development within the AICUZ footprint by aiding the local governments to adopt the study recommendations in the development of policies, plans, and regulations for the physical and economic growth of the region.

The ECPDD assists towns and counties (including Kemper and Lauderdale Counties and the City of Meridian) with economic and community development efforts and can influence development decisions for areas within the AICUZ footprint.

The MMCC monitors developments concerning military installations throughout Mississippi, and advises decision makers regarding BRAC activities.

6.2.4 Mississippi Military Communities Council

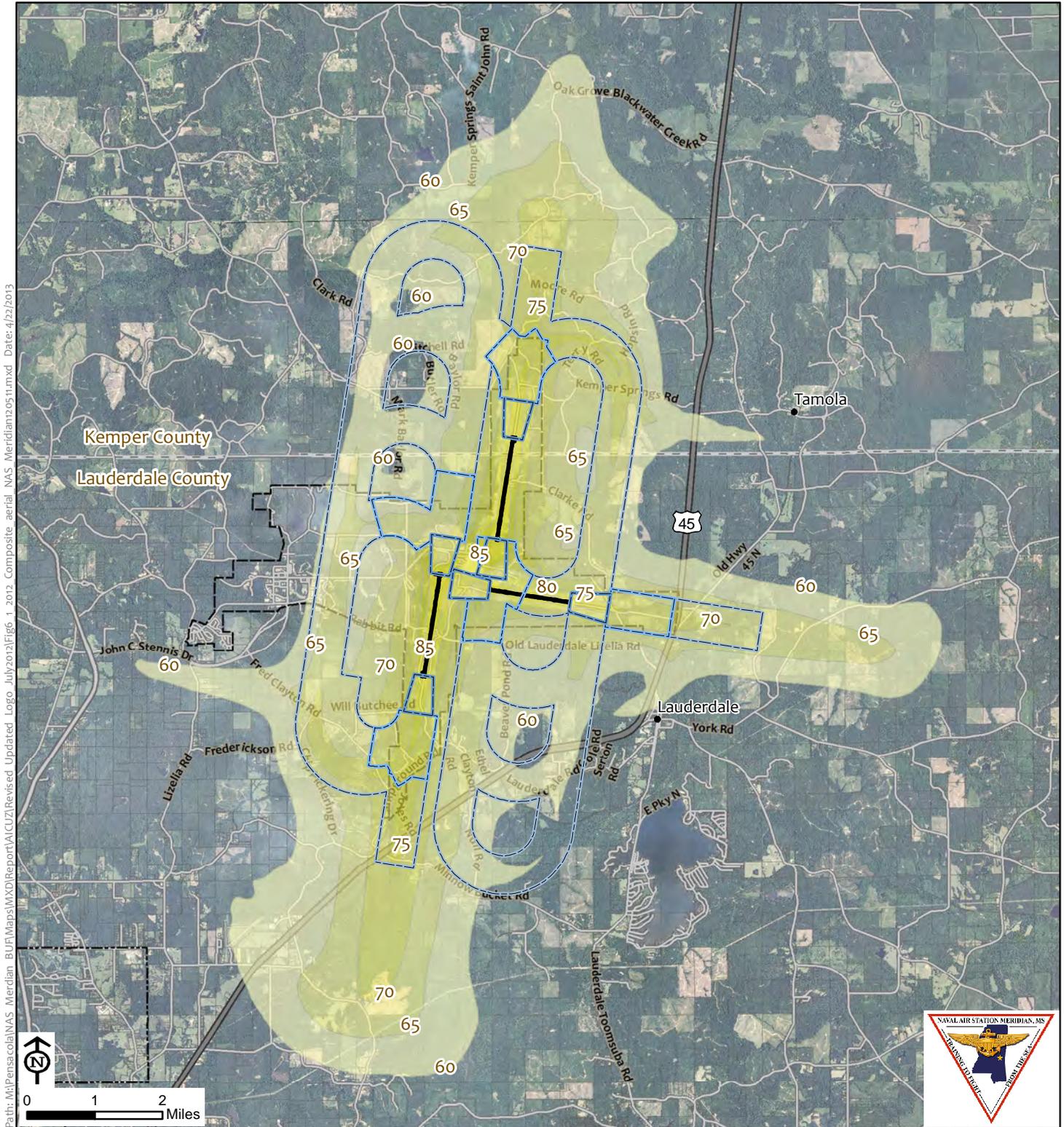
In January 2004, the Governor established the Mississippi Military Communities Council (MMCC) through an executive order to advise state leaders on Base Realignment and Closure (BRAC) activities and "regarding opportunities to enhance, expand, add or otherwise improve missions, programs, facilities, operations on or affecting the military installations in the State" (MMCC 2011). The MMCC is charged with monitoring developments concerning Mississippi's military installations and to advise executive and legislative officials of the State of Mississippi regarding the ongoing efforts by the DOD to close, realign, restructure, streamline, or other actions that would impact, military installations located within the state. The MMCC also identifies opportunities to enhance, expand, add, or otherwise improve missions, programs, facilities, and operations on or affecting the military installations. The MMCC promotes coordinating efforts by state government agencies and local governments to ensure the longevity of Mississippi's military bases. Each military installation in the state may be represented on the MMCC by their respective community teams. Currently, the MMCC is comprised of 23 committee members and 13 legislative members.

6.3 Land Use Compatibility Analysis

The composite AICUZ map, which is comprised of the 2012 AICUZ noise contours and APZs, is also commonly known as the "AICUZ footprint." The AICUZ footprints for NAS Meridian and NOLF Joe Williams are used as the basis for the land use compatibility analysis and are provided on Figures 6-1 and 6-2, respectively.

As noted above, NAS Meridian and NOLF Joe Williams are located in unincorporated areas of Lauderdale and Kemper Counties. Therefore, the land use ordinances covering the off-installation property within the AICUZ footprint are within the jurisdiction of the two counties. Currently, neither county has an official county-wide planning authority, and all land use and zoning issues are managed by the Board of Supervisors.

NAS Meridian



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0 1 2 Miles

NAS Runways
 19L
 19R
 01R
 10
 28
 01L

- Runway
- US Highway
- State Highway
- Secondary/Local Road
- Meridian Corporate Boundary
- Installation Boundary
- County Boundary
- Parcel Boundary

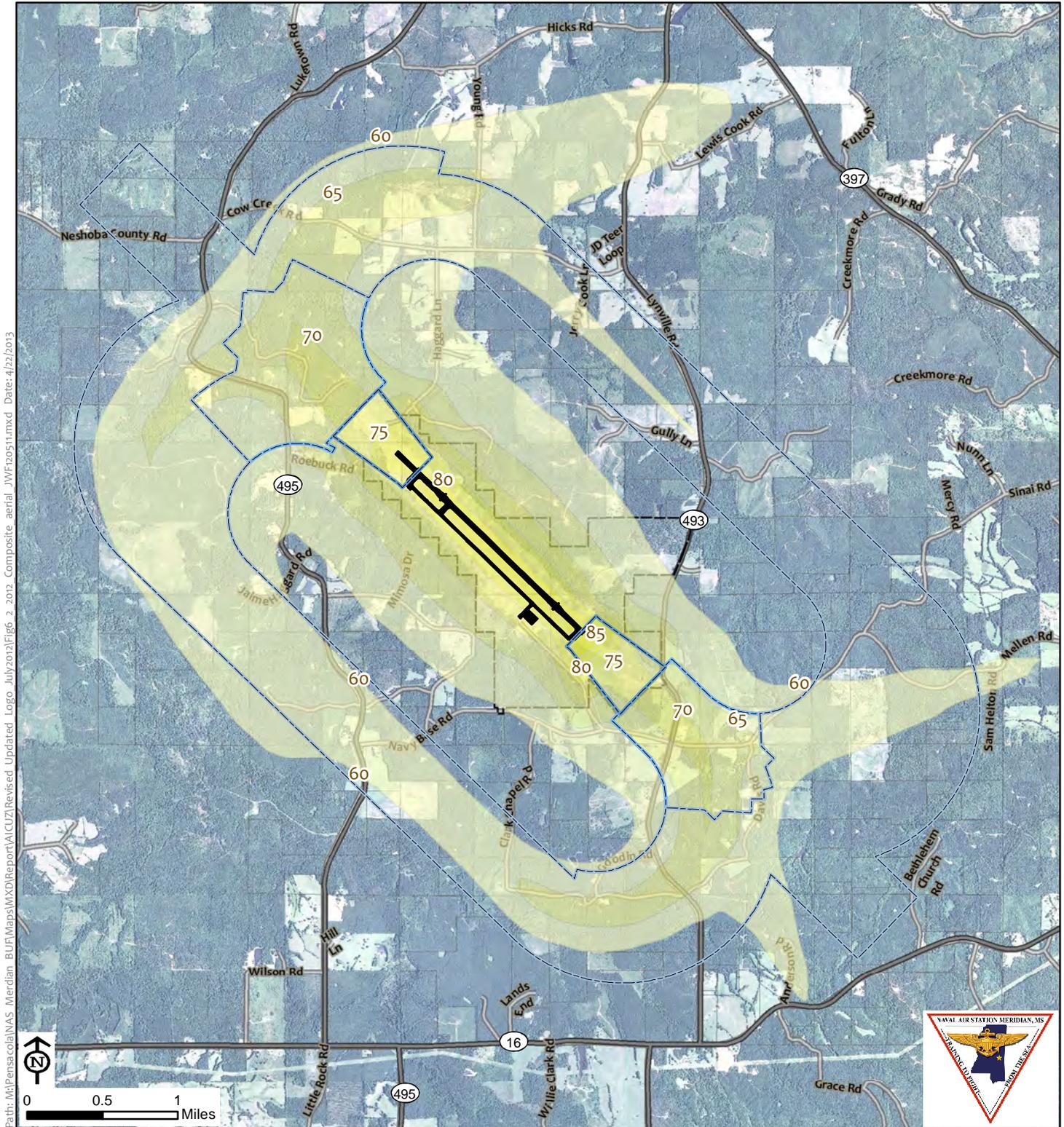
- 2012 APZs**
- Clear Zone
 - APZ I
 - APZ II

- 2012 Noise Contours**
- 60 DNL
 - 65 DNL
 - 70 DNL
 - 75 DNL
 - 80 DNL
 - 85 DNL



Figure 6-1
 2012 Composite AICUZ Map
 NAS Meridian
 Lauderdale County, Mississippi
 Source: U.S. Navy 2011; ESRI 2010;
 Wyle 2011; ENE 2011; NAIP 2010

NOLF Joe Williams



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14
NOLF
Runways
32

- State Highway
- Secondary/Local Road
- Installation Boundary
- Parcel Boundary

- 2012 APZs**
- Clear Zone
 - APZ I
 - APZ II
 - Runway

- 2012 Noise Contours**
- 60 DNL
 - 65 DNL
 - 70 DNL
 - 75 DNL
 - 80 DNL
 - 85 DNL

Figure 6-2
2012 Composite AICUZ Map
NOLF Joe Williams
Kemper County, Mississippi

Source: U.S. Navy 2011; ESRI 2010; Wyle 2011; ENE 2011; NAIP 2010

This section addresses land use compatibility within the AICUZ footprints by examining existing and planned land uses near NAS Meridian and NOLF Joe Williams. The land use criteria used in this AICUZ Study to evaluate compatibility was previously presented in Table 6-1, along with a description of the local planning authority in the area, provided in Section 6.2. The analysis was based on the Navy's land use compatibility recommendations which are presented in Appendix B. Land use patterns and zoning in the immediate vicinity of NAS Meridian and NOLF Joe Williams, along with the land use compatibility assessment, are discussed below.

6.3.1 Existing Land Use

The term "land use" refers to the management of land and the extent to which land has been modified.

Land use is a term given to describe the management of land and the extent to which it has been modified. Typical uses include developed land, agricultural areas, residential, commercial, open water, and forested areas. Patterns of land use arise naturally in communities and are fundamental to the physical form of the county and municipalities, and are usually a key component of the comprehensive plans which are the primary policy documents that guide local land use and development. The limited land use data surrounding airfields in Lauderdale and Kemper Counties has not been converted into a Geographic Information System (GIS) format; therefore, the classification and analysis of the surrounding land for this report was conducted by using United States Geological Survey (USGS) Land Cover data. USGS Land Cover data present only broad land use data in terms of what is developed and what is the predominate agronomic land cover; thus, it was also necessary to utilize aerial photos, county online mapping systems, individual parcel data, other reports, and discussions with local officials to fully interpret existing land use.

Existing Land Use Surrounding NAS Meridian

Land use surrounding NAS Meridian features low-density development and includes:

- ▲ Residential
- ▲ Light Commercial
- ▲ Water/Wetlands
- ▲ Agricultural
- ▲ Forest Land

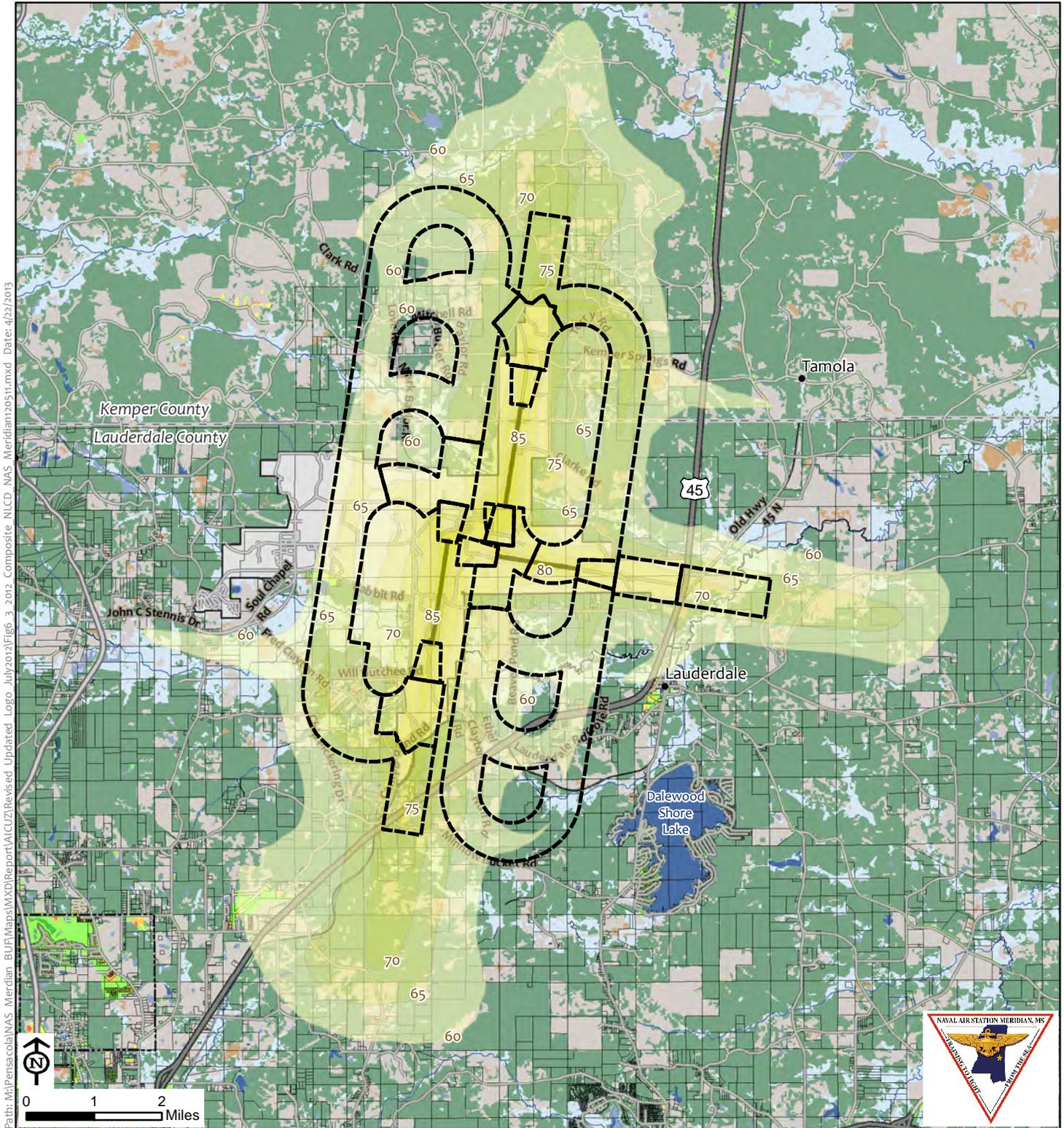
The land use surrounding NAS Meridian features low to medium-intensity development with a mix of residential, light commercial, water/wetlands, agricultural, and forest lands. Figure 6-3 illustrates the existing land cover/use surrounding NAS Meridian. In addition, Figure 6-4 illustrates existing structures and points of interest, such as residential, commercial, and recreational structures, surrounding the airfield which provides additional insight into the land use type and development intensity.

The vast majority of land use surrounding the air field is identified as forest/agricultural. However, scattered around the airfield and within that forest/agricultural designation are low-intensity developed uses which can be characterized as mainly residential uses. Lands indicated as developed, open spaces by the USGS are associated with the regional and local roadway infrastructure. Lands indicated as developed, low- and medium-intensity by the USGS are associated with residential and light commercial land uses.

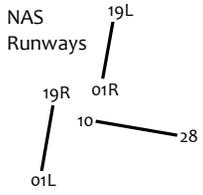
The residential uses surrounding NAS Meridian are typically single-family dwellings (including manufactured homes) on large parcels (greater than 1.0 acre). However, there are limited areas surrounding NAS Meridian where the residential density increases to more than one dwelling per acre. The majority of the development around NAS Meridian has occurred to the south along local and regional roadway corridors in the unincorporated areas of the county.

There are single-family residence and manufactured homes (medium density) west of the South Runway along Rabbit Road and near McElroy's Lake. In addition, there are low-density residential land uses (greater than 1.0-acre parcels) along Fred Clayton Road and Lockhart Trailer Court Road to the southwest including manufactured homes. Directly south of the airfield, there are residential units that are located along Campground Road and Fred Clayton Road. Scattered residential uses exist along Campground Road east of the South Runway near the US-45 intersection, along Null Road south of US-45, and down Old Lauderdale-Lizelia Road and Beaver Pond Road.

NAS Meridian



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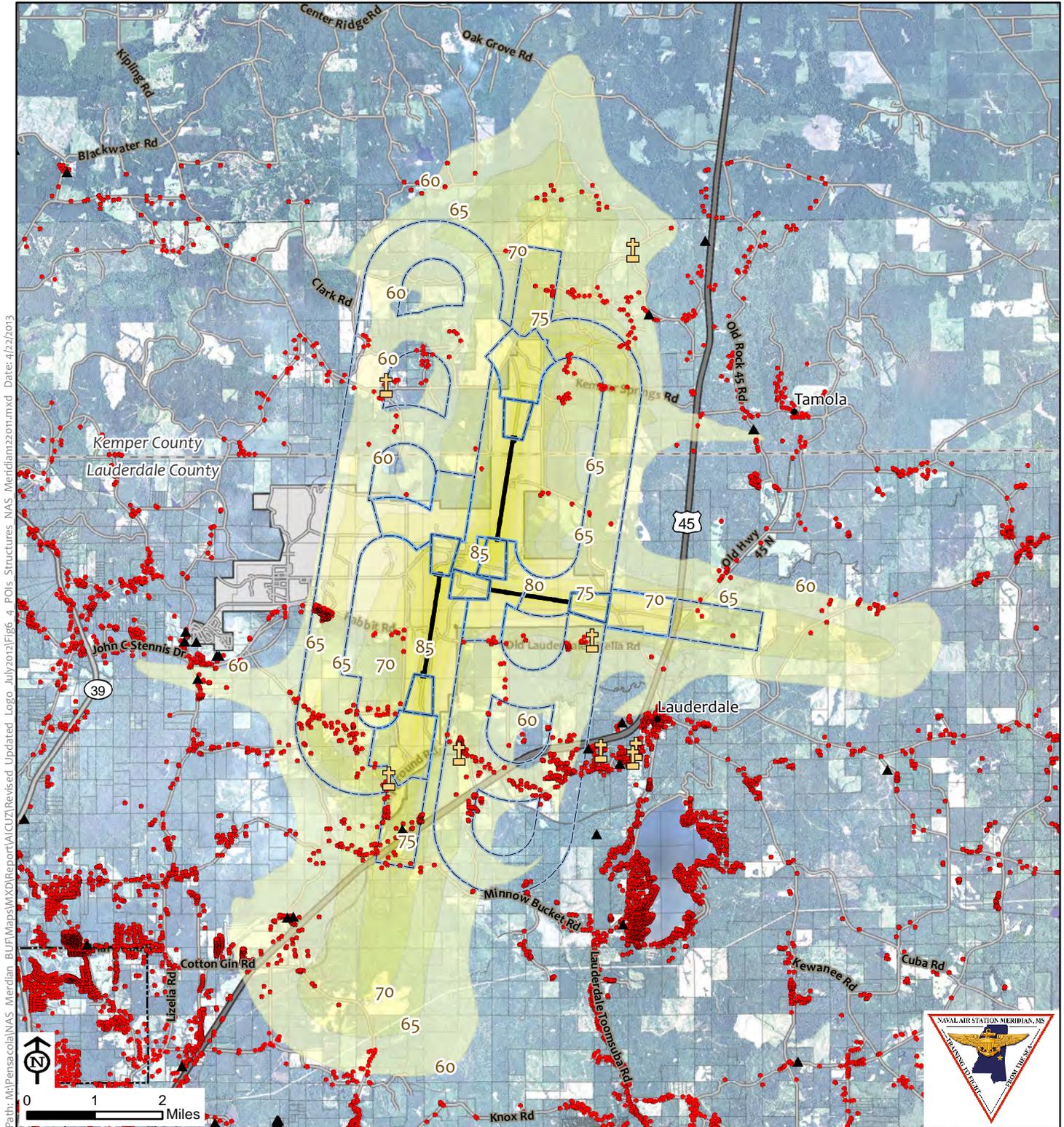
- US Highway
- State Highway
- Secondary/Local Road
- Runway
- County Boundary
- Installation Boundary
- Parcel Boundary
- APZ Boundary

- 2012 Noise Contours**
- 60 DNL
 - 65 DNL
 - 70 DNL
 - 75 DNL
 - 80 DNL
 - 85 DNL

- Landcover**
- Open Water
 - Developed, Open Space
 - Developed, Low Intensity
 - Developed, Medium Intensity
 - Developed, High Intensity
 - Forest
 - Grassland/Shrub
 - Cultivated Crops
 - Wetlands
 - Meridian Corporate Boundary



Figure 6-3
 2012 Composite AICUZ Map
 with Existing Landcover
 NAS Meridian
 Lauderdale County, Mississippi
 Source: U.S. Navy 2011; ESRI 2010;
 Wyle 2011; USGS 2011; ENE 2011



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- | | | | | | |
|---|--|---|--|---|--|
| <ul style="list-style-type: none"> NAS Runways 19L 19R 01R 10 28 01L | <ul style="list-style-type: none"> Church Installation Boundary County Boundary Parcel Boundary Meridian Corporate Boundary | <ul style="list-style-type: none"> US Highway State Highway Secondary/Local Road Runway | <ul style="list-style-type: none"> Cell Tower Building | <p>2012 APZs</p> <ul style="list-style-type: none"> Clear Zone APZ I APZ II | <p>2012 Noise Contours</p> <ul style="list-style-type: none"> 60 DNL 65 DNL 70 DNL 75 DNL 80 DNL 85 DNL |
|---|--|---|--|---|--|

Figure 6-4
2012 Composite Map with Structures and Points of Interest
NAS Meridian
Lauderdale County, Mississippi

Source: U.S. Navy 2011; ESRI 2010; Wyle 2011; ENE 2011; NAIP 2010

There are numerous churches and worship facilities surrounding NAS Meridian which are indicated on Figure 6-4. Churches and other types of gathering places are important in the analysis because they are public assembly locations and are people-intensive land uses. There are medium-density residential uses surrounding NAS Meridian in the form of manufactured housing developments and other manufactured homes located on East Cook Road between US-45 and York Road. These residential developments are located on parcels less than 1.0 acre in size.

Developed land east of the airfield is mainly located along Old Highway 45 N with scattered residential uses along York Road. These residential units are typically located on parcels larger than 1.0 acre and can be considered low-density. There are scattered, light commercial land uses centered around the small unincorporated community of Lauderdale, just southeast of the airfield, which include a gas station, post office, small grocery store, and a Dollar General store.

North of NAS Meridian, into Kemper County, the lands are less developed and more rural, with large tracts of land for forestry/agricultural uses; however, there are low-density residential developments scattered throughout. The majority of the residential and other developed areas are located along Kemper Springs Road, Hogeeye Road, and Hook Hopson Road.

Overall, the land use around NAS Meridian reveals a pattern of low-density development, as there is still a large amount of undeveloped property. However, there are areas that may experience an increase in development and densities in the future due to their increased accessibility via regional roadways (US-45) and their proximity to other services. It is reasonable to assume that as commercial development increases along the US-45 segment and other roadway connectors south of the airfield towards the city of Meridian, this could act as an attractant for additional residential development, as well. From a land use compatibility standpoint, some of the residential and other land uses surrounding NAS Meridian are currently incompatible with certain APZs and noise contours. An evaluation of specific land use compatibility is discussed later in this section.

Land use surrounding NAS Meridian is mainly low-density development; however, increased accessibility on local roadways may intensify development south of the airfield, including residential development.

Some current land uses surrounding NAS Meridian are considered incompatible with certain APZs and noise contours.

Existing Land Use Surrounding NOLF Joe Williams

Land use surrounding NOLF Joe Williams features rural, low-density development with a mix of residential, water/wetlands, agricultural, grassland, and forest lands. Figure 6-5 illustrates existing land cover/use surrounding NOLF Joe Williams. In addition, Figure 6-6 illustrates existing structures and points of interest surrounding the airfield, and provides additional insight into the land use type and development intensity.

The vast majority of land use surrounding the NOLF Joe Williams is undeveloped forested and/or agricultural lands. However, scattered around airfield are low-density residential uses on large parcels (greater than 1.0 acre) which include manufactured homes. Many of the residential land uses are associated with farm residences supporting livestock (e.g., cattle).

The majority of residential development around NOLF Joe Williams has occurred along the two state highways that traverse north-south on either side of the airfield. Highway 495 is located to the west, and Lynville Road (Highway 493) is located to the east. Other local roadways in which residential land uses are located include Air Base Road just south of the airfield, and Cow Creek Road just to the north.

There are no commercial or industrial land uses surrounding NOLF Joe Williams. Overall, the land use around NOLF Joe Williams reveals a pattern of low-density development, as there is still a great deal of undeveloped open land. However, from a land use compatibility standpoint some of the residential uses surrounding NOLF Joe Williams are incompatible in certain APZs and noise contours. An evaluation of specific land use compatibility is discussed later in this section.

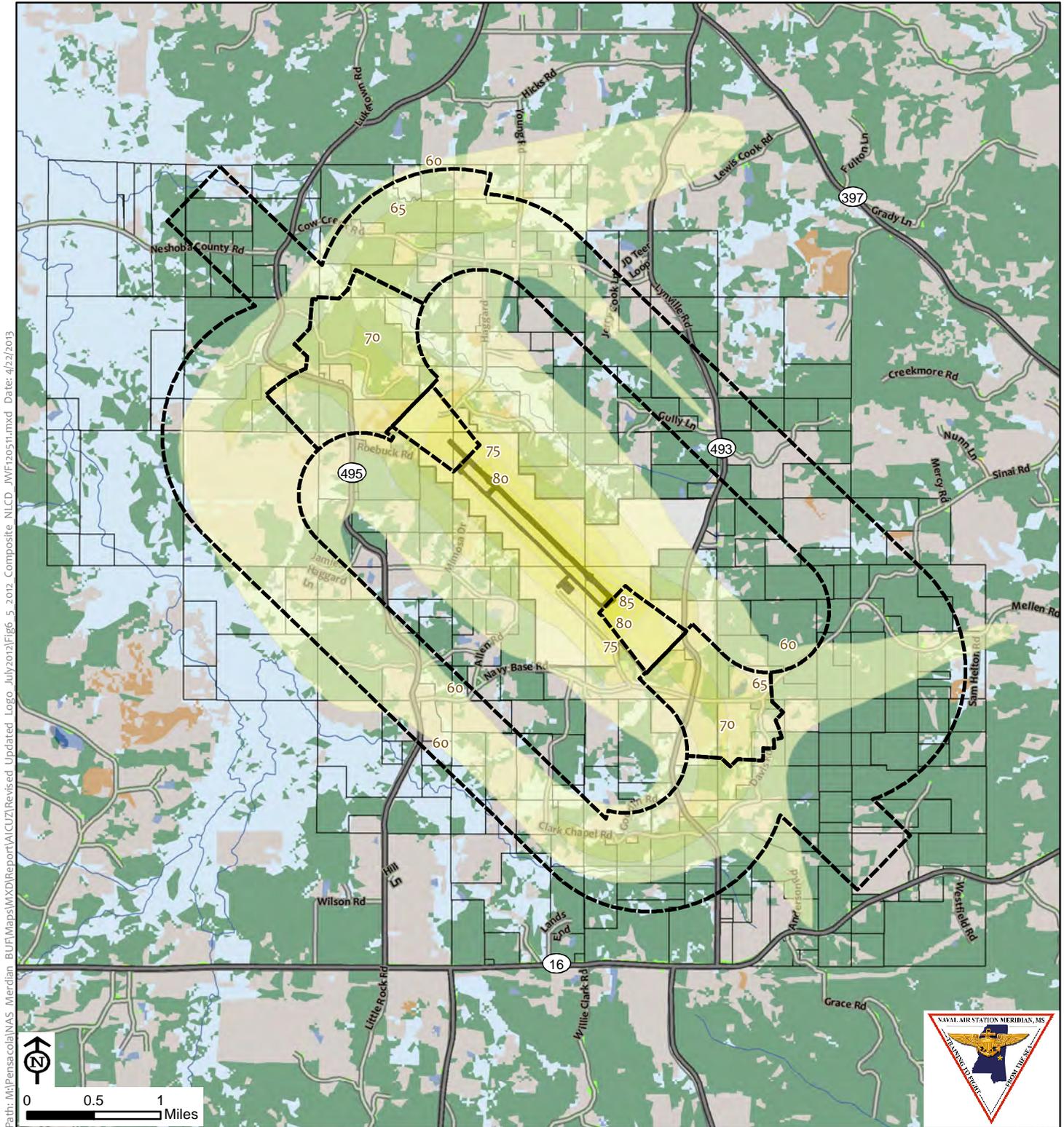
Land use surrounding NOLF Joe Williams is rural, low-density development and includes:

- ▲ Residential
- ▲ Water/Wetlands
- ▲ Agricultural
- ▲ Grassland
- ▲ Forest Land

Land use surrounding NOLF Joe Williams is mainly low-density development, with an abundance of open land.

Some current land uses surrounding NOLF Joe Williams are considered incompatible with certain APZs and noise contours.

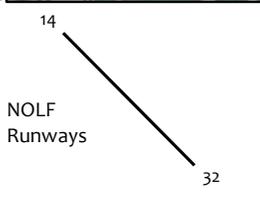
NOLF Joe Williams



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Figure 6-5
2012 Composite AICUZ Map
with Existing Landcover
NOLF Joe Williams
Kemper County, Mississippi
Source: U.S. Navy 2011; ESRI 2010;
Wyle 2011; USGS 2011; ENE 2011



- State Highway
- Secondary/Local Road
- Runway
- Installation Boundary
- Parcel Boundary
- APZ Boundary

- 2012 Noise Contours**
- 60 DNL
 - 65 DNL
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 - 85 DNL

- Landcover**
- Open Water
 - Developed, Open Space
 - Developed, Low Intensity
 - Forest
 - Grassland/Shrub
 - Cultivated Crops
 - Wetlands