

Hurricane Matthew Resilient Redevelopment Plan

Scotland County



May 2017

Version 1.2

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Change Log

Version	Date	Summary of Changes
1.1	6/19/17	Minor Revisions
1.2	8/25/17	Labor and unemployment data updated

Executive Summary

In October 2016, Hurricane Matthew caused widespread destruction in the Caribbean and up the Eastern Seaboard of the United States. In North Carolina, at least 26 people lost their lives, and 100,000 homes, businesses, and government buildings sustained damage estimated at \$4.8 billion.¹ At the storm's peak, 3,744 individuals fled to 109 shelters across the region. More than 800,000 households lost power and 635 roads were closed, including the major east-west and north-south corridors.

In December 2016, the North Carolina General Assembly established the North Carolina Resilient Redevelopment Planning (NCRRP) program as part of the 2016 Disaster Recovery Act (*Session Law 2016-124*). The purpose of the program is to provide a roadmap for community rebuilding and revitalization assistance for the communities that were damaged by the hurricane. The program empowers communities to prepare locally driven recovery plans to identify redevelopment strategies, innovative reconstruction projects, and other needed actions to allow each community not only to survive but also to thrive in an era when natural hazards are increasing in severity and frequency.

The NCRRP consists of planning and implementation phases and is managed through North Carolina Emergency Management.



Figure 1. NCRRP Counties

This document is a snapshot of the current needs of Scotland County regarding holistic recovery and redevelopment. The plan will evolve as the county analyzes the risk to its assets, identifies needs and opportunities, determines the potential costs and benefits of projects, and prioritizes projects. As projects are more fully defined, the potential impact on neighboring communities and the region may lead to modifications.

Implementation of the proposed projects and actions described in this plan is subject to applicable federal, state, and local laws and regulations. Proposed projects or actions may be eligible for state or federal funding, or could be accomplished with municipal, nonprofit, or private investments. However, inclusion of a project or action in this plan does not guarantee that it will be eligible for recovery funding.

¹ State of North Carolina Supplemental Request for Federal Assistance Hurricane Matthew Recovery, <https://governor-new.s3.amazonaws.com/s3fs-public/documents/files/Hurricane%20Matthew%20Relief--2017%20Federal%20Request%20%28002%29.pdf>.

After multiple public meetings, Scotland County has identified 14 projects in four pillars: Housing, Infrastructure, Economic Development, and Environmental. Details of these projects can be found in Section IV of this plan.

Pillar	Project/Action Count
Housing	3
Economic Development	4
Infrastructure	4
Environment	3
Grand Total	14

Table 1. Scotland County Summary of Projects by Pillar

An aerial photograph showing a residential neighborhood severely affected by flooding. The water is a murky brown color, submerging lawns, streets, and parts of the houses. Numerous trees are isolated in the water, some with only their tops visible. The houses are mostly two-story structures with light-colored siding and dark roofs. The flooding appears to be extensive, covering a large portion of the visible area.

1. Background

1. Background

Summary of Hurricane Matthew Storm Damage

Hurricane Matthew was an extraordinarily severe and sustained event that brought record-level flooding to many areas in eastern North Carolina’s coastal plain, sound, and coastal communities. Hurricane Matthew hit North Carolina on October 8, 2016, as a Category 1 storm. Communities were devastated by this slow-moving storm primarily by widespread rainfall. During a 36-hour period, up to 18 inches of heavy rainfall inundated areas in central and eastern North Carolina.

Riverine flooding began several days after Hurricane Matthew passed and lasted for more than 2 weeks. New rainfall records were set in 17 counties in the Tar, Cape Fear, Cashie, Lumber, and Neuse River watersheds. Entire towns were flooded as water levels throughout eastern North Carolina crested well beyond previously seen stages.

During the peak of the hurricane, 800,000 households lost power and 635 roads were closed, including a section of I-40 West in Johnston County that was closed for 7 days, and sections of I-95 North and South in Robeson and Cumberland Counties that were closed for 10 days.

Approximately 88,000 homes were damaged and 4,424 were completely destroyed. Losses totaled more than \$967 million, representing an economic loss as high as 68% of the damages, or \$659 million, not expected to be covered by insurance or FEMA assistance.

North Carolina Governor McCrory requested FEMA assistance on October 9, 2016, and FEMA subsequently declared a major disaster (DR-4285) for North Carolina on October 10, 2016, for 48 counties encompassing approximately 325 cities, towns, townships, and villages.

Preliminary estimates indicate more than 30,000 businesses suffered physical or economic damage, and 400,000 employees were affected as a result. Hurricane Matthew also had a significant impact on the agriculture and agribusiness economy in eastern North Carolina. The nearly 33,000 agricultural workers and 5,000 agricultural-support workers hit by the storm account for more than half of the state’s agriculture and agriculture-support workforce.

Initial economic analysis of the impacts of crop and livestock losses caused by Hurricane Matthew estimated the loss of more than 1,200 jobs and roughly \$10 million in state and local income and sales tax revenue. 2.²

State / Legislative Response

North Carolina’s response to Hurricane Matthew included 2,300 swift-water rescues using 79 boats and more than 90 air rescues. North Carolina also deployed over 1,000 National Guard and State Highway Patrol to assist with rescue and sheltering missions. There were 3,744 individuals transported to 109 shelters across central and eastern North Carolina during the storm’s peak.

FEMA’s disaster declaration made 50 counties eligible for FEMA assistance, 45 of which are eligible for Individual Assistance and Public Assistance and 5 of which are eligible for Public Assistance only.

² *Governors McCrory’s Request for Federal Assistance for Hurricane Matthew Recovery, November 14, 2016*

- There were 81,832 individuals registered for FEMA/state assistance.
- Federal/state financial assistance in the amount of \$92.5 million was approved to help flood survivors recover.
- Small Business Administration (SBA) loans approved for individuals after Hurricane Matthew totaled \$65.6 million.
- SBA loans approved for businesses after Hurricane Matthew totaled \$23.2 million.

After the immediate response period, North Carolina Governor McCrory and the North Carolina General Assembly took the steps summarized below to obtain and allocate long-term funding for Hurricane Matthew.

November 1: The Hurricane Matthew Recovery Committee is established. Preliminary damage assessments are completed, and the State Emergency Response Task Force continues to administer programs and identify needs unmet by existing federal programs.

November 14: Governor McCrory formally submits North Carolina’s request for supplemental federal disaster assistance to the delegation as Congress returns to work.

Late November/Early December: Congress appropriates supplemental disaster assistance for North Carolina. After the supplemental federal disaster recovery assistance package is received, Governor McCrory submits a supplemental state disaster assistance package (House Bill 2) recommendations to the General Assembly and calls a special session. Governor McCrory then signs the Hurricane Matthew Recovery Act to fund disaster recovery efforts.

This supplemental federal assistance was to focus on housing, infrastructure, economic development, and the environment. These four pillars were to be funded through the following programs and agencies: The U.S. Department of Housing and Urban Development’s Community Development Block Grant–Disaster Recovery (CDBG-DR) program, Army Corps of Engineers Operations and Maintenance, the FEMA National Dam Safety Program, the Federal Highway Administration’s Emergency Highway Funding, and the U.S. Department of Agriculture’s Emergency Conservation and Watershed Protection programs.

Resilient Redevelopment Planning

The purpose of the NCRRP program is to provide a roadmap for communities in eastern North Carolina to rebuild and revitalize after being damaged by Hurricane Matthew. The program empowers communities to prepare locally driven, resilient redevelopment plans to identify redevelopment strategies, innovative reconstruction projects, and other actions to allow each community not only to survive, but also to thrive in an era when natural hazards are increasing in severity and frequency.

The NCRRP process employs a holistic approach to planning that includes four pillars: housing, infrastructure, economic development, and the environment. Redevelopment strategies and reconstruction projects for each of the five pillars is included in each plan.

The NCRRP process consists of planning and implementation phases and is managed through North Carolina Emergency Management (NCEM).

Scope of the Plan

This document is a snapshot of Scotland County’s current needs for achieving holistic recovery and redevelopment. The plan will evolve as Scotland County analyzes the risk to its assets, identifies needs and opportunities, determines the potential costs and benefits of projects, and prioritizes the projects. As projects are more fully defined, the potential impact on neighboring communities and the region may lead to modifications.

Planning objectives are to (1) develop strategic, resilient redevelopment plans and actions, and (2) to define any unmet funding needed to implement such actions after taking into account other funding sources.

The resulting resilient redevelopment plans will be the foundation for any supplemental funding received through Congress, the North Carolina General Assembly, and other funding sources. These plans will also be the basis for the state’s Recovery Action Plan, which is required by the U.S. Department of Housing and Urban Development before the state can expend funds received from the CDBG-DR program.

Local Participation and Public Engagement

Stakeholder engagement and public involvement was an essential component of the NCCRRP initiative. Three robust rounds of discovery, analysis, collaboration, and interaction were held with each affected county. Each meeting had two components: an in-depth working session with county officials, subject matter experts, and planners from the affected counties and municipalities; and a public open house. The purpose of each meeting was as follows:

Meeting 1 – Initiated the planning process and validated the existing data pertaining to damage and impacts.

Meeting 2 – NCEM presented draft documentation of resilient redevelopment strategies and received feedback from community leaders and the public.

Meeting 3 – NCEM presented refined resilient redevelopment strategies based on feedback from Meeting 2 and received additional feedback for finalization of the plan.

Each of the 50 counties that were declared a major disaster by the President of the United States as a result of Hurricane Matthew under the Stafford Act (P.L. 93-288) participated in the resilience redevelopment planning process. Each municipality in those counties, as well as the five economic development regions that sustained damage from Hurricane Matthew, were also invited to participate.

The counties impacted by the storm cover the eastern half of North Carolina and occupy parts of the piedmont, sand hills, and coastal areas of the state. A map depicting Scotland County and surrounding counties is shown below.

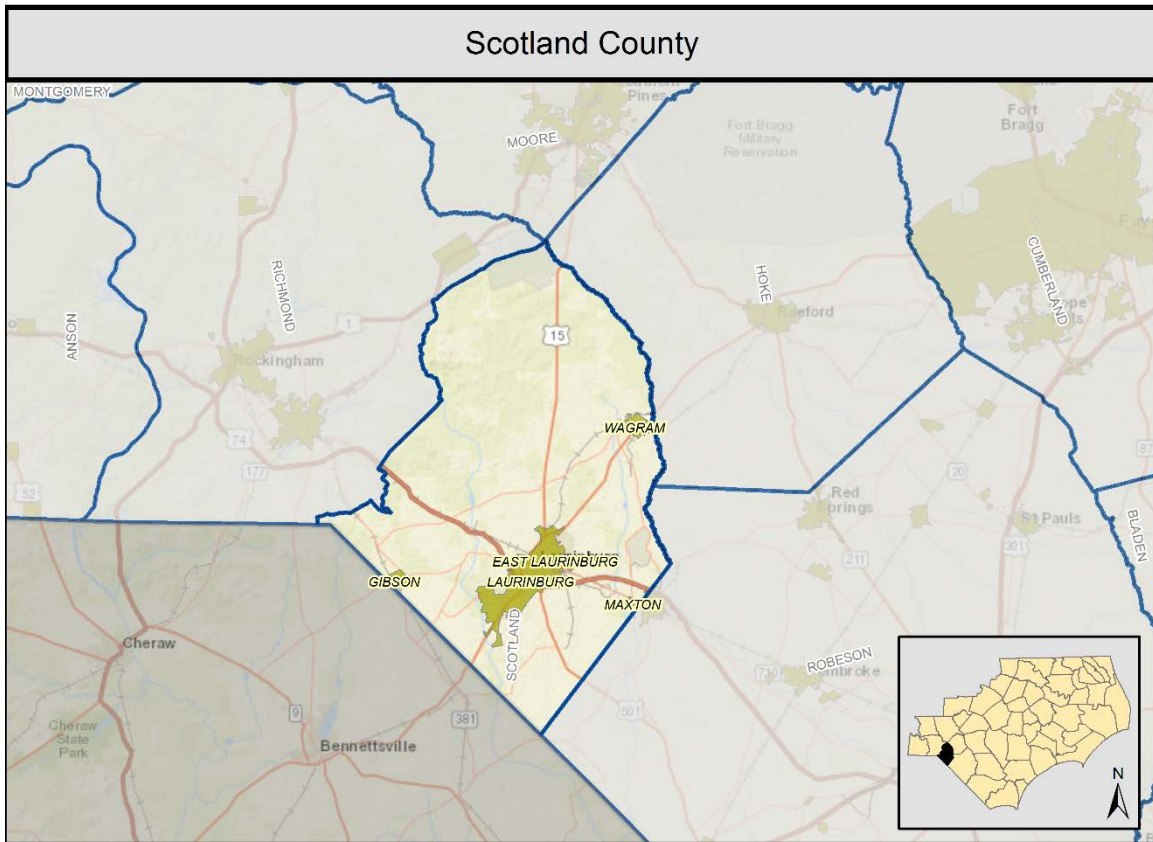


Figure 2. Scotland County and Neighboring Counties

Data, Assumptions, and Methodologies

NCEM has assembled a wealth of data, resources, and technical expertise from state agencies, the private sector, and the University of North Carolina system to support the development of innovative best practice strategies.

Implementation of the proposed projects and actions described in this plan is subject to applicable federal, state, and local laws and regulations. Inclusion of a project or action in this plan does not guarantee that it will be eligible for recovery funding. However, proposed projects or actions may be eligible for state or federal funding or could be accomplished with municipal, nonprofit, or private investment.

An aerial photograph showing a residential neighborhood severely affected by flooding. The water is a murky, brownish-yellow color, covering large areas of the landscape. Numerous houses with grey roofs are visible, some partially submerged. A network of roads crisscrosses the area, with some sections completely underwater. Large green trees are scattered throughout, many of which are isolated in the floodwater. The overall scene depicts significant environmental damage and displacement.

2. County Profile

2. County Profile

Scotland County is located in southern North Carolina between Rockingham and Fayetteville. It is comprised of eight census-designated places: Deercroft, Town of East Laurinburg, Town of Gibson, Laurel Hill, Laurinburg City, Old Hundred, Scotch Meadows, and Town of Wagram. Its current population is 35,932. This section provides a profile of housing, economics, infrastructure, environment, and administration within Scotland County.

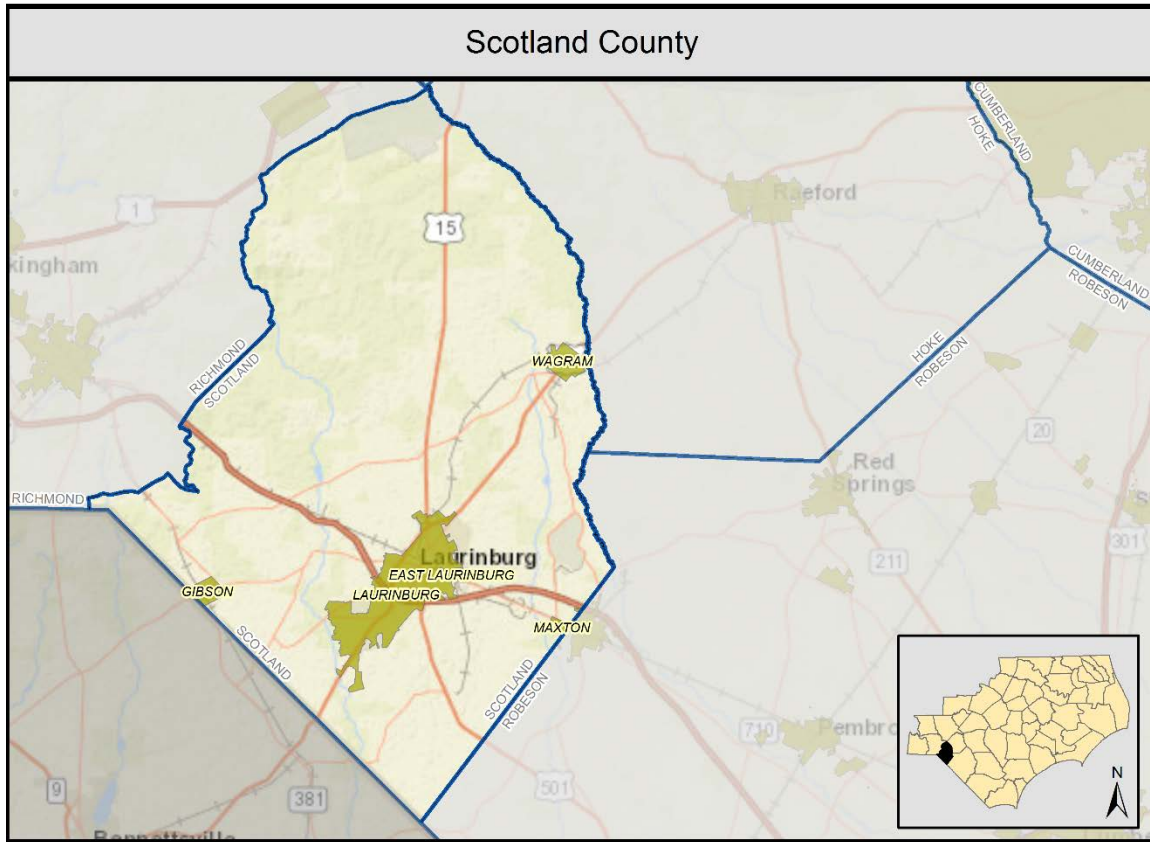


Figure 3. Scotland Base Map

Demographic Profile

Demographics for Scotland County and census-designated places within the county are summarized and compared to statewide averages in this profile. The demographic data is from the 2000 Census, 2010 Census, and 2011-2015 American Community Survey Five-year Estimates.

Population

Scotland County has a population of 35,932. Laurinburg City is the most populous place within Scotland County with a population of 15,694, and Deercroft is the least populous place with a population of 289.³

Population Change (2000 to 2010)

The Scotland County population remained relatively the same between the 2000 and 2010 Census. In 2000, the population was 35,966, and in 2010, it was 36,157. The population increased by 191 people, or less than 1

³ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B01001, "Sex by Age."

percent. In comparison, North Carolina grew by 19 percent from 8,049,313 people in 2000 to 9,535,483 in 2010.⁴

Age

The median age in Scotland County is 39, which is 2 years younger than the median age in North Carolina. Within Scotland County, the Deercroft population has the oldest median age, 62, and the Town of Gibson population has the youngest median age, 39.⁵

Race and Ethnicity

Scotland County is mostly White (46 percent) and African American (39 percent) with other races constituting the remaining 15 percent. In comparison, North Carolina is 70 percent White, 22 percent African American, 1 percent American Indian and Alaska Native, 3 percent Asian, less than 1 percent Native Hawaiian/Pacific Islander, 3 percent Some Other Race, and 2 percent Two or More Races. Refer to the table below.⁶

Within Scotland County, Deercroft and Laurel Hill are predominantly White while the Town of Gibson is majority African American. In Laurel Hill, 11 percent of the population identifies as Two or More Races.

The Latino population in Scotland County is 3 percent compared to 9 percent for North Carolina. Deercroft has the largest Latino population (3.5 percent) while Old Hundred does not have Latino populations according to the census data. The Town of East Laurinburg, Laurel Hill, the Town of Gibson, and the Town of Wagram have a Latino population of less than 1 percent.

Geography	White	Black or African American	American Indian and Alaska Native Alone	Asian	Native Hawaiian/ Pacific Islander	Some Other Race	Two or More Races	Total Non-White
Deercroft	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
East Laurinburg	58.9%	15.3%	18.3%	0.0%	0.0%	0.0%	7.6%	41.1%
Gibson	33.1%	56.4%	9.3%	0.0%	0.0%	0.2%	1.0%	66.9%
Laurel Hill	69.3%	18.5%	1.0%	0.0%	0.0%	0.0%	11.3%	30.7%
Laurinburg	42.3%	46.3%	6.3%	1.4%	0.0%	1.6%	2.1%	57.7%
Old Hundred	48.0%	0.0%	52.0%	0.0%	0.0%	0.0%	0.0%	52.0%
Scotch Meadows	51.6%	26.6%	18.4%	0.0%	0.0%	0.0%	3.5%	48.4%
Wagram	39.5%	47.8%	9.4%	0.0%	0.0%	0.0%	3.3%	60.5%
Scotland County	46.1%	38.5%	10.4%	0.8%	0.0%	1.2%	3.1%	53.9%
North Carolina	69.5%	21.5%	1.2%	2.5%	0.1%	3.0%	2.4%	30.5%

Table 2. Scotland County Race and Ethnicity

⁴ Source: Minnesota Population Center. National Historical Geographic Information System: Version 11.0 [Database]. Minneapolis: University of Minnesota. 2016. <http://doi.org/10.18128/D050.V11.0>. Census 2000/Census 2010 Time Series Tables Geographically Standardized

⁵ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B01001, "Sex by Age."

⁶ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B02001, "Race" and Table B03002, "Hispanic or Latino Origin by Race."

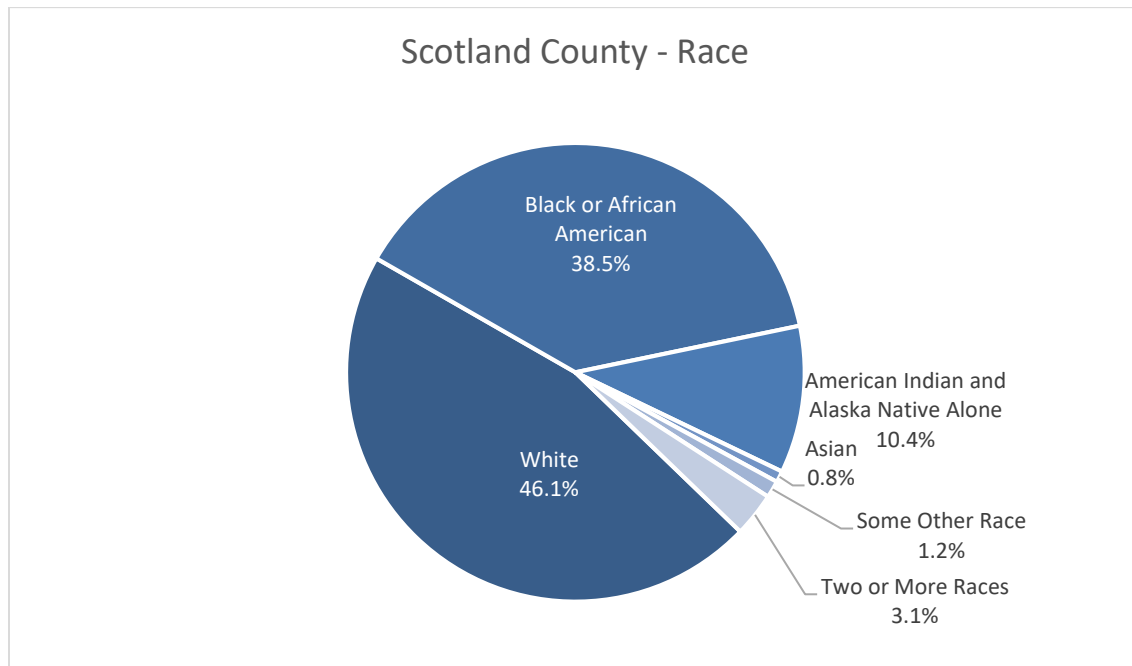


Figure 4. Scotland County – Racial Distribution

Limited English Proficiency

Limited English Proficiency (LEP) is defined as populations 18 years or older that speak English less than very well. In Scotland County, most individuals identified as LEP speak Spanish while others speak languages of Indo-Euro-origin, Asian/Pacific-origin, or other languages. Similarly, the primary language group for LEP individuals in North Carolina is Spanish. Within Scotland County, Laurinburg City has the largest LEP population. The primary language group for LEP populations in Laurinburg City is Spanish. Other areas within the county do not have a LEP population according to census data.⁷

Poverty

In Scotland County, 31 percent of the population is below the poverty level compared to 17 percent of the North Carolina population. Old Hundred has the highest population percentage below the poverty level, 87 percent, and Scotch Meadows has the lowest reported population, 13 percent. Deercroft has 0 percent of its population below the poverty level according to census data.⁸

Low and Moderate Income Individuals

In Scotland County, 50 percent of the population is classified as low and moderate income (LMI) individuals based on the US Department of Housing and Urban Development's definition. In comparison, 39 percent of the North Carolina population is classified as LMI.⁹

⁷ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B16004, "Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over."

⁸ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."

⁹ Source: US Department of Housing and Urban Development, Estimate of Low and Moderate Income Individuals, <https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary-data-block-groups-places/>

Median Household Income

The median household income of the 25 to 64 year-old population is \$52,000 in Scotland County and \$53,000 in North Carolina. Scotch Meadows has the highest median household income for this age group, \$111,000, and the Town of Gibson has the lowest: \$20,000. Median household income was not available for Laurinburg City and Old Hundred.¹⁰

Zero Car Households

In Scotland County, 11 percent of households do not have a vehicle available compared to 7 percent of North Carolina households. Within Scotland County, the Town of Gibson has the highest percentage of households without access to a vehicle, 21 percent, while the Town of Wagram has the lowest percentage: 8 percent. There was no data available for Scotch Meadows and Old Hundred.¹¹

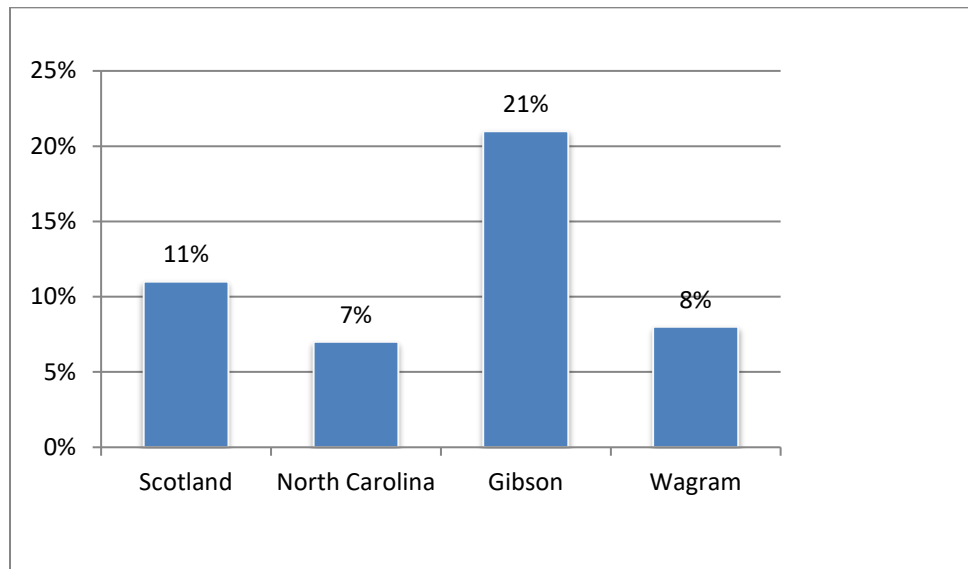


Figure 5. Zero Car Households by Percentage

¹⁰ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B19094, "Median Household Income in the Past 12 Months."

¹¹ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B25044, "Tenure by Vehicles Available."

Commuting: Travel Time to Work, Means of Transportation

The majority of Scotland County residents commute alone to work by vehicle, 86 percent, which is similar to the North Carolina average of 81 percent. Within Scotland County, Scotch Meadows has the largest percentage of commuters commuting alone, 100 percent, and Old Hundred has the least: 53 percent.

The Town of Wagram has the largest percentage of residents commuting by public transportation, 1.3 percent, which is similar North Carolina commuters using public transportation, 1 percent. A greater percentage of the Town of Gibson residents, 7 percent, commute by walking, biking, or by motorcycle than the North Carolina average of 2 percent.

The mean commute time to work for Scotland County residents is 22.3 minutes. In comparison, the North Carolina mean commute time is 24.7 minutes. Within Scotland County, Scotch Meadows has the shortest mean commute time at 18.8 minutes while Deercroft has the longest at 37.1 minutes.¹²

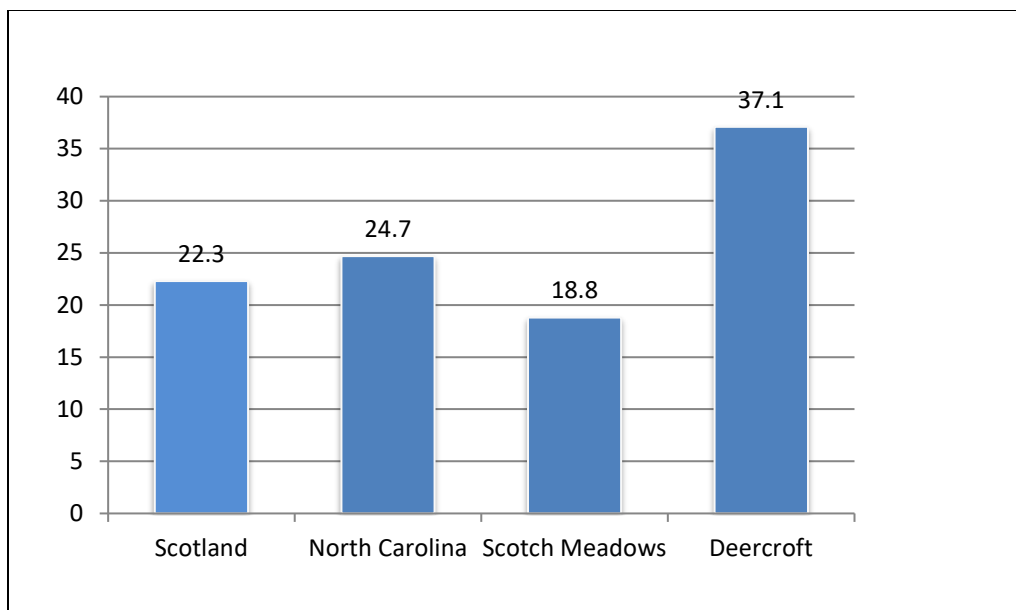


Figure 6. Mean Commute Time to Work in Minutes

¹² Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B08301, "Means of Transportation to Work" and Table GCT0801, "Mean Travel Time to Work of Workers 16 Years and Over Who Did Not Work at Home (Minutes)."

Housing Profile

Scotland County has over 15,000 housing units, 61 percent of which are single-family homes, 14 percent multi-family units, and 25 percent manufactured housing.

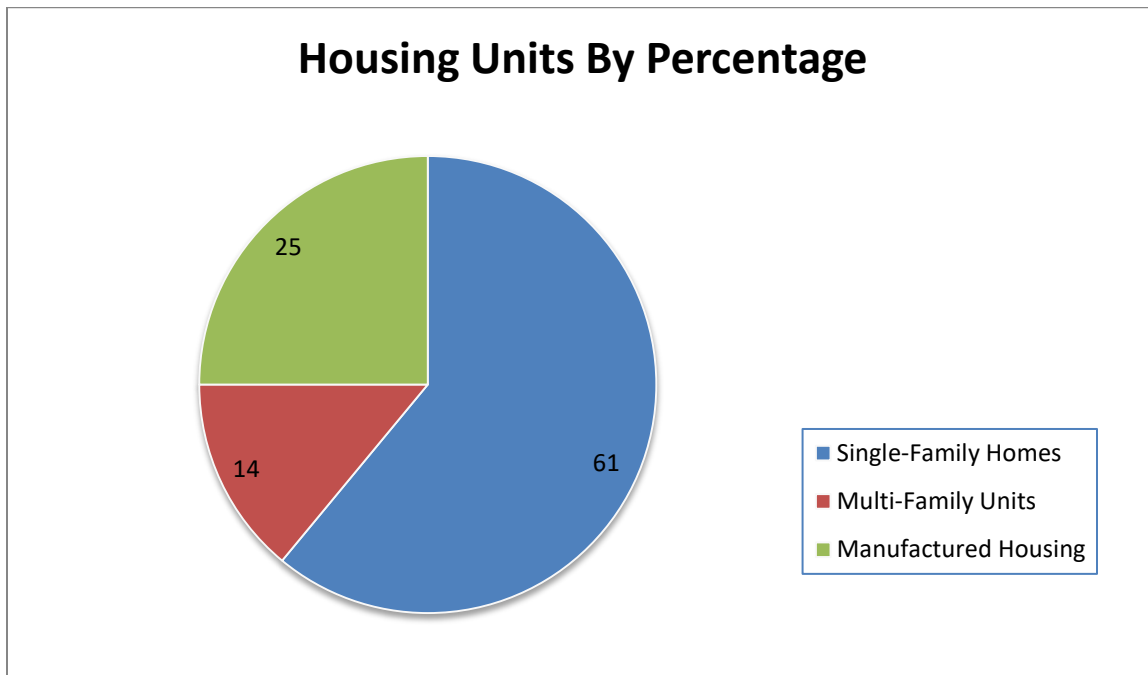


Figure 7. Housing Units By Percentage

In Scotland County, 14 percent of housing units are vacant, which is the same percentage for North Carolina. Within Scotland County, Laurel Hill has the largest percentage of vacant housing units, 26 percent, while Old Hundred and Scotch Meadows have the least: 0 percent.

Of the occupied housing units, 63 percent are owner-occupied compared to 65 percent in North Carolina; 37 percent are renter-occupied compared to 35 percent in North Carolina.

The median housing value in Scotland County is \$79,000. In comparison, the median housing value in North Carolina is \$140,000. Within Scotland County, Deercroft has the highest median housing value: \$316,000. Laurinburg has the lowest median housing value: \$40,000.

According to the National Housing Preservation Database, Scotland County has 1,294 affordable housing units. Most of the affordable housing is located within Laurinburg. Other units are located in the Town of Gibson.¹³

Economic / Business Profile

Scotland County is home to a diverse array of businesses from paper production to glass manufacturing. According to the US Census Bureau's Longitudinal-Employer Household Dynamics Program, the largest concentrations of jobs within Scotland County are in downtown Laurinburg, along Hospital Service Road and Lauchwood Drive.¹⁴

¹³ Sources: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B25002, "Occupancy Status"; Table B25003, "Tenure"; Table B25024 "Units in Structure"; Table B25077, "Median Value (Dollars)", National Housing Preservation Database

¹⁴ Source: US Census Bureau Longitudinal-Employer Household Dynamics Program

Labor Force

According to the local area unemployment statistics (LAUS) from the Labor and Economic Analysis Division (LEAD) for the unadjusted data for all periods in 2016, the civilian labor force population of Scotland County is 11,693.¹⁵ Within Scotland County, the Town of Wagram has the largest percentage of residents in the labor force, 50 percent, while Old Hundred has the smallest: 28 percent.

The civilian unemployment rate in Scotland County is 9.2 percent. In comparison, the North Carolina civilian unemployment rate is 5.1 percent.¹⁵ Within Scotland County, Laurel Hill has the smallest civilian unemployment rate at 8 percent while Old Hundred has the largest: 50 percent.¹⁶

Major Employers

The top ten employers in Scotland County¹⁷ represent the manufacturing, public administration, education and health service industries, and are listed in order of total employees:

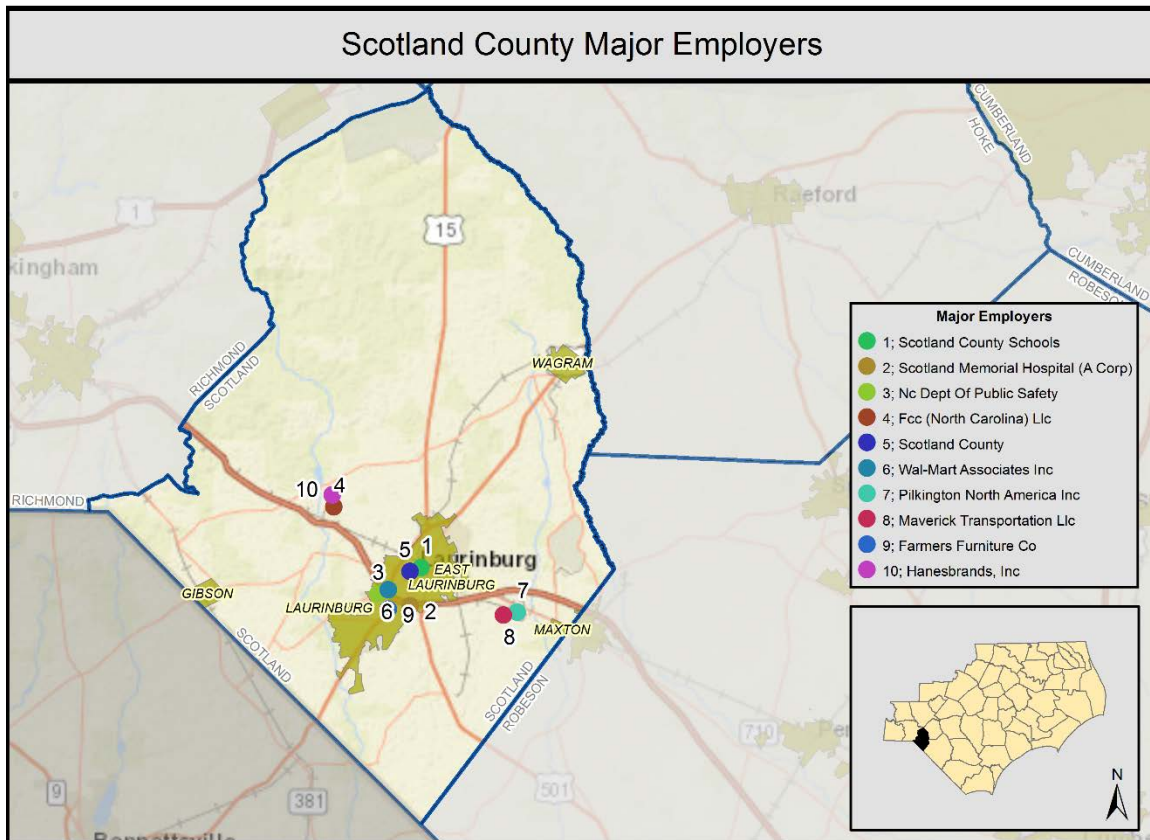


Figure 8. Major Employers by Number of Employees

Economic Development

Laurinburg Maxton Airport has an industrial park located nearby its facility. This facility is home to numerous corporations, including HuvePharma Inc and We Pack Logistics. It is located east of the county. The industrial

¹⁵ Source: Civilian Population and Unemployment Rate - Labor and Economic Division (LEAD) of North Carolina Department of Commerce – Local Area Unemployment Statistics <http://d4.nccommerce.com/LausSelection.aspx>

¹⁶ Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B23025, "Employment Status for The Population 16 Years and Over."

¹⁷ Sources: NC Department of Commerce

park includes 1,800 to 4,000 total acres for industrial and commercial development as well as air transportation. There is ample space for future growth.

The Southeastern Economic Development Commission serves Scotland County in its mission to create new jobs, retain existing jobs, and stimulate economic development and industrial growth. The organization has established goals and works with member county governments with project development necessary for growth.¹⁸

Infrastructure Profile

Transportation, health, education, water, and power infrastructure are summarized for Scotland County in the sections that follow.

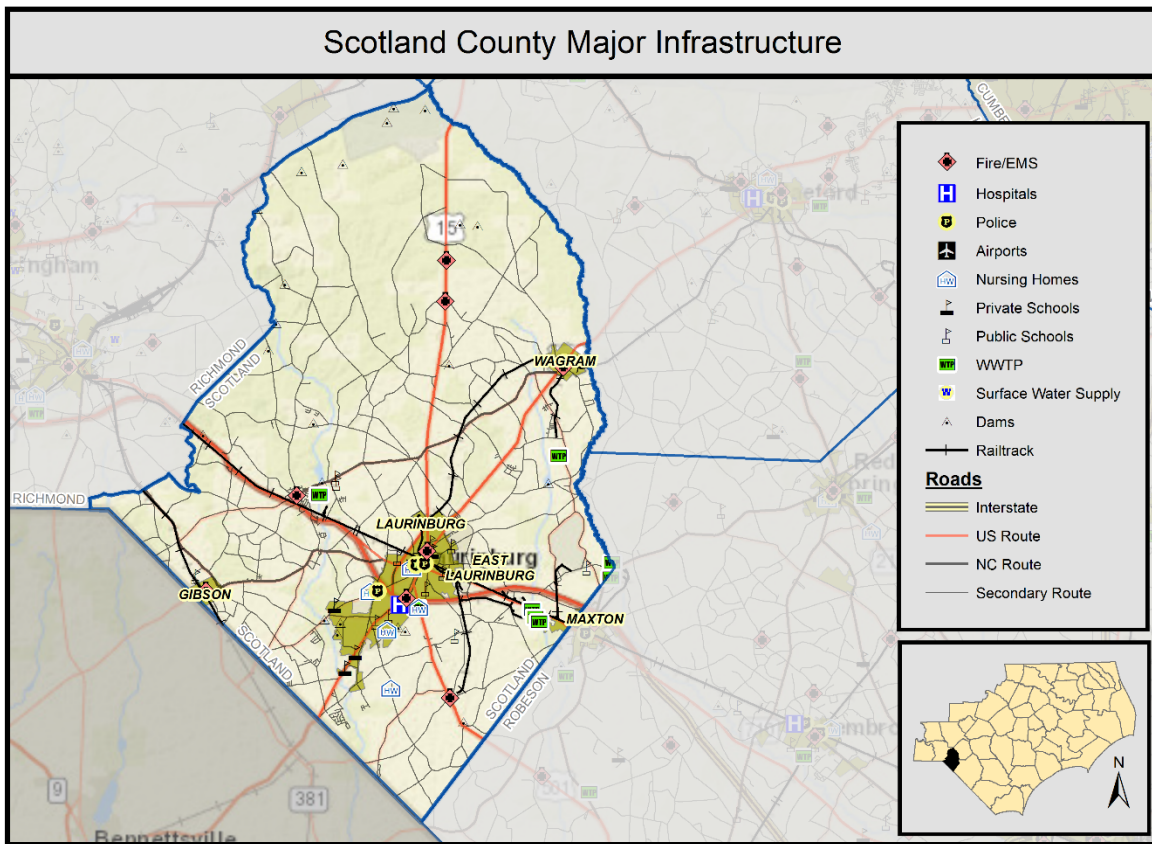


Figure 9. Scotland County Major Infrastructure

Transportation

Scotland County is connected to the region by I74 and US 501, 401, and 15. I74 is a major east-west highway that provides Scotland County with access to Rockingham and Charlotte to the west and Wilmington and deep water ports to the east. Scotland County is also served by rail by Southern Railroad Co. from Laurinburg that runs north, east, and west. The Laurinburg-Maxton Airport at Maxton has a 6,500-foot runway capable of handling large aircrafts.

¹⁸ Source: Southeastern Economic Development Commission

Health

Scotland Memorial Hospital is the only hospital located in Scotland County. It is located in Laurinburg on Lauchwood Drive.

Education

Scotland County Public Schools consists of six elementary, two middle, and one high school. St. Andrews University is located in Laurinburg and is a branch of Webber International University.¹⁹

Water

Scotland County has three municipality water systems and one water system for the Laurinburg-Maxton Airport. The Laurinburg Water System provides water to more than 7,000 residents and commercial properties. Its averaged metered use is 1.8 million gallons per day and its permitted capacity is 8 million gallons per day. Municipal wastewater is treated at the Wagram, Gibson and Laurinburg municipality water systems.²⁰

Power

There are several solar farms located within Scotland County around the surrounding area of Laurinburg. These solar farms have a net summer capacity of 42 megawatts.²¹

Environmental Profile

Water resources, natural areas, managed areas, biodiversity, wildlife habitat, and recreation are summarized for Scotland County in the sections that follow.

Water Resources

The Lumber River flows north-south along the eastern boarder of Scotland County. Creeks run throughout the county and are at times attached to small lakes, including Richmond Mill Lake, Saint Andrews College Lake, and Big Muddy Lake. The most common wetland type in Scotland County is freshwater forested/shrub wetland.²²

Natural and Managed Areas

According to the NC Natural Heritage Program, natural areas of high, very high, or exceptional value in Scotland County are located in the north portion of the county around Aberdeen Road, along Lumber River. Another area of very high natural value is between Upper Beaver Dam Creek and Gum Swamp Creek towards the west. Most natural areas to the north and west of the county with significant value is state-owned. These managed areas are properties and easements where natural resource conservation is one of the current primary management goals, or are of conservation interest. Camp Mackall Military Reservation is federally owned.²³

Biodiversity and Wildlife Habitat

The NC Natural Heritage Program produces a biodiversity and wildlife habitat assessment for the state. According to this assessment, areas with the highest rating for biodiversity and wildlife habitat are in the

¹⁹ Source: Scotland County Public Schools and Scotland Community College

²⁰ Sources: NC Division of Water Resources, Local Water Supply Plans; and the Neuse Regional Water and Sewer Authority

²¹ Sources: US Department of Energy, US Energy Mapping System

²² Source: NC Natural Heritage Program

²³ Source: NC Natural Heritage Program

northern portion of the county around Little Muddy Creek and West Prong Jupiter Creek. These areas rank between a 7 and 10, with 10 being the highest possible score. Other areas of the county rank 5 to 6. Most of the county is unrated.²⁴

Parks and Recreation

The Scotland County Parks and Recreation Department maintains several parks and facilities in Scotland County. The James L. Morgan Recreation Complex is located on 53 acres adjacent to Bridge Creek southwest of downtown Laurinburg. The park includes four softball fields, picnic shelters, a splash pad, and 5 soccer fields. The recreation department also offers several neighborhood parks, tennis courts, gyms, summer programs, recreation/community centers. Most of these facilities are located in Laurinburg.²⁵

Administrative Profile

Scotland County has the *Pee Dee Lumber Regional Hazard Mitigation Plan* in place, which was last updated in 2012. The assessment evaluates the capabilities of the County and municipalities to implement mitigation actions across the areas of planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and political capabilities. Many more details about the capabilities of Scotland County and the municipalities can be found in that document.

In terms of administrative capabilities, the County has many of the staff and the necessary plans, policies and procedures in place that are found in communities with “moderate” capabilities. Scotland County has Emergency Management and Planning departments with the capacities to assist in implementing the resilience strategies proposed in this plan. Some of the other indicators of capability for the County include the following: Comprehensive Land Use Plan, Zoning Ordinance, Subdivision Regulations, and Floodplain Management Ordinance. These plans, policies and procedures help ensure that new development in the County will be managed in a responsible manner and will take place in non-hazardous areas.

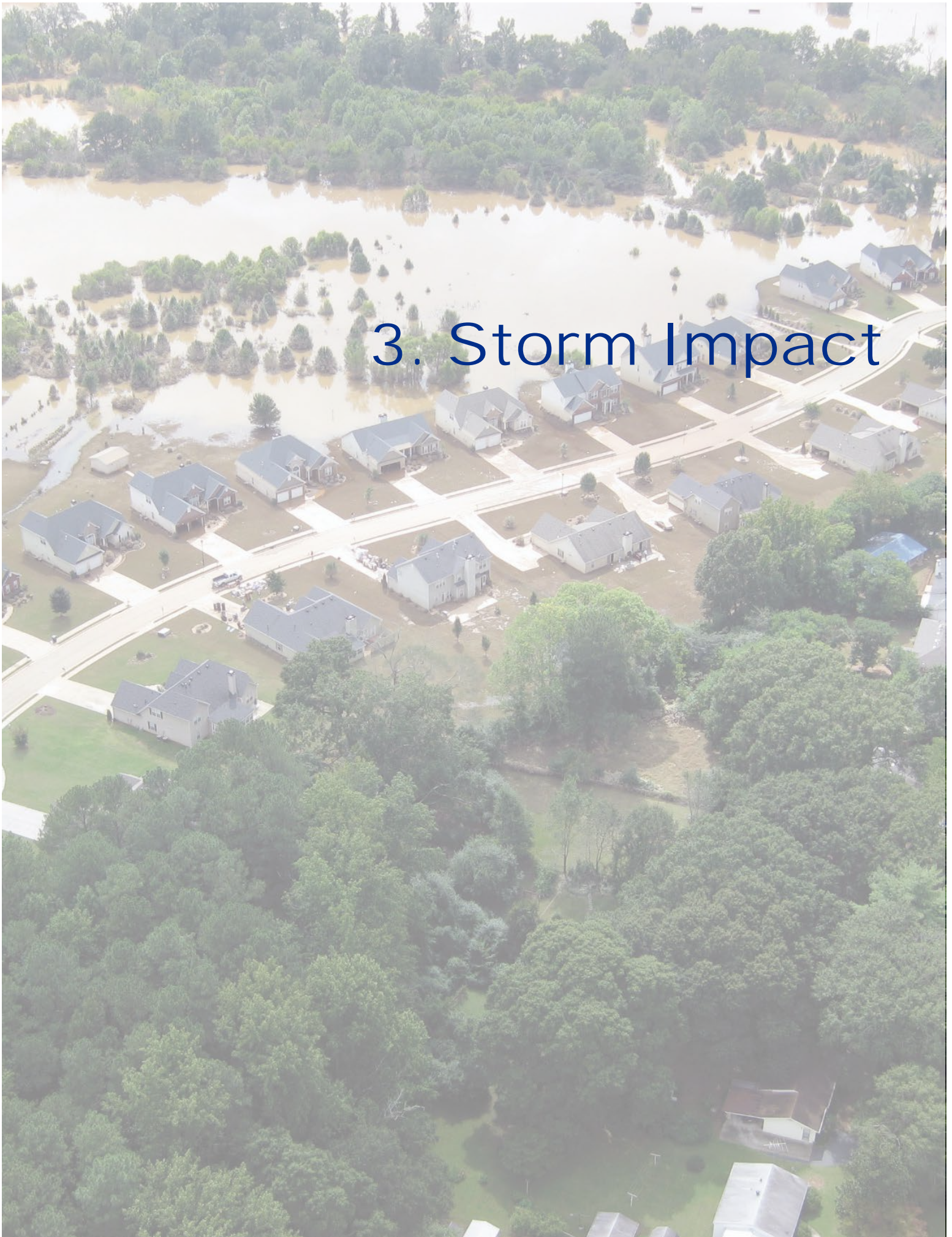
The City of Laurinburg also has significant capabilities. The City has a Planning department that would likely be able to assist with implementing the strategies in this plan as well. In addition, the City has the plans, policies and procedures in place that indicate moderate capability. Smaller communities and towns within Scotland County may need assistance in the administration and implementation of projects due to their limited staff capacity.²⁶

²⁴ Source: NC Natural Heritage Program

²⁵ Sources: NC Natural Heritage Program, Scotland County Parks and Recreation Department

²⁶ Source: Scotland County

3. Storm Impact



3. Storm Impact

Rainfall Summary

Hurricane Matthew officially made landfall as a Category 1 storm southeast of McClellanville, South Carolina early on October 8, 2016. The track and speed of the storm resulted in nearly two days of heavy precipitation over much of North Carolina that caused major flooding in parts of the eastern Piedmont and Coastal Plain. The storm produced widespread rainfall of 3-8 inches in the central regions of North Carolina and 8 to more than 15 inches in parts of eastern North Carolina. A number of locations received all-time record, one-day rainfall amounts. Many locations in the Coastal Plain of North Carolina had received above normal rainfall in the month of September leading to wet antecedent conditions prior to Hurricane Matthew. Total rainfall depth for Scotland County is highlighted graphically in the figure below:

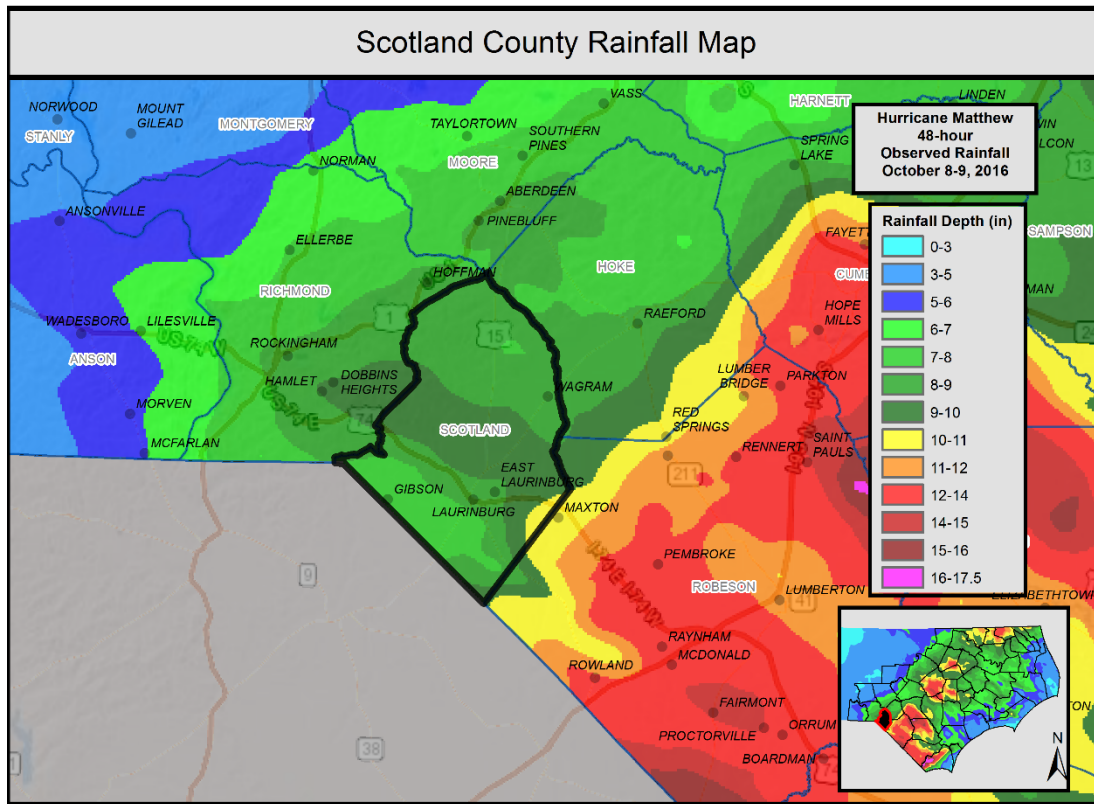


Figure 10. Hurricane Matthew 48-hour Observed Rainfall Depth

Housing Storm Impacts

Scotland County suffered limited direct housing damage from Hurricane Matthew. Seven insured houses received damage from storm wind and debris, while one uninsured house was destroyed by a falling tree. One of the county's four shelters was activated at Scotland High School to house 21 county residents immediately following the storm.

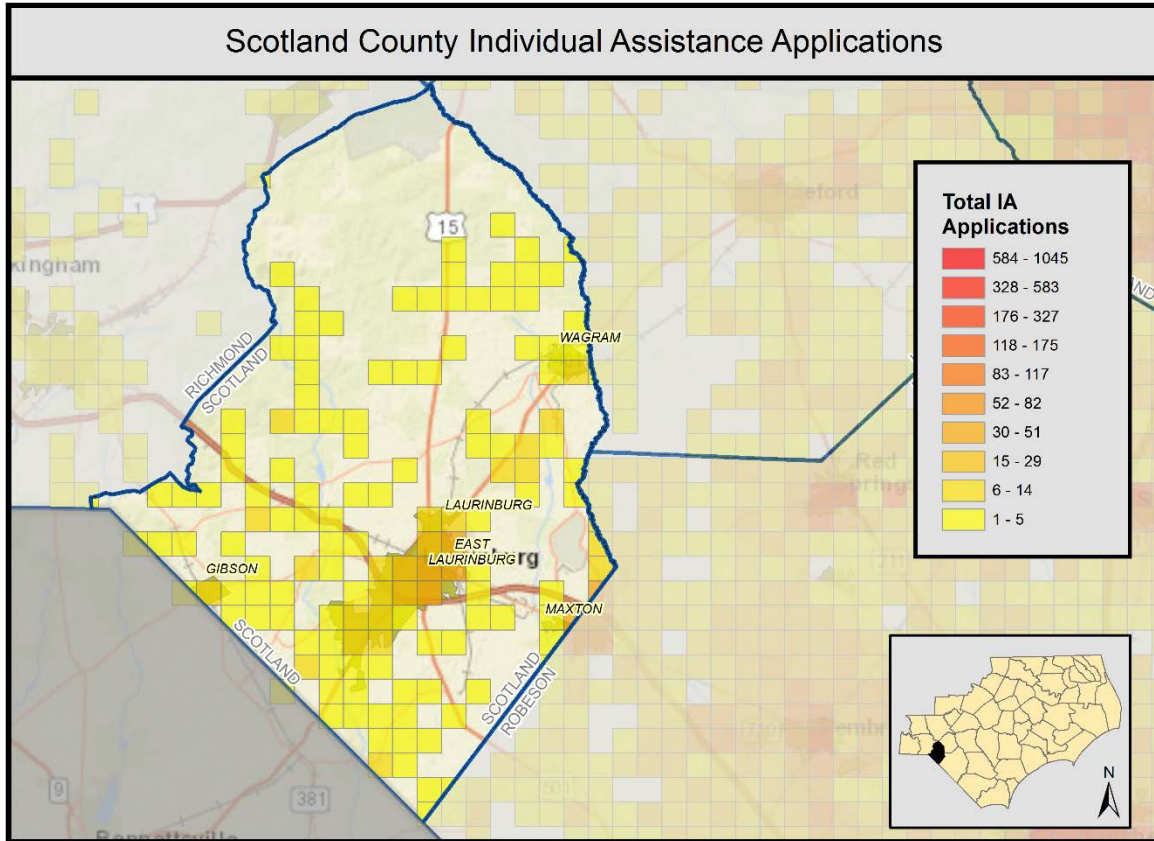


Figure 11. Scotland County IA Applications by Area

Otherwise, the largest housing-related impact from the storm was the loss of power for 48 hours. 97 percent of county customers were affected by power outage, including the entire city of Laurinburg consisting of 6,000 households.²⁷ This resulted in spoiled refrigerated products for thousands of homes. As of May 2017, there were roughly 500 Individual Assistance (IA) claims, the bulk of them from related to refrigerator spoilage. FEMA reimbursed the county around \$90,000 in IA claims alone.

²⁷ <http://www.fayobserver.com/ae17eb90-8f0f-11e6-b4c1-074e598399b6.html>

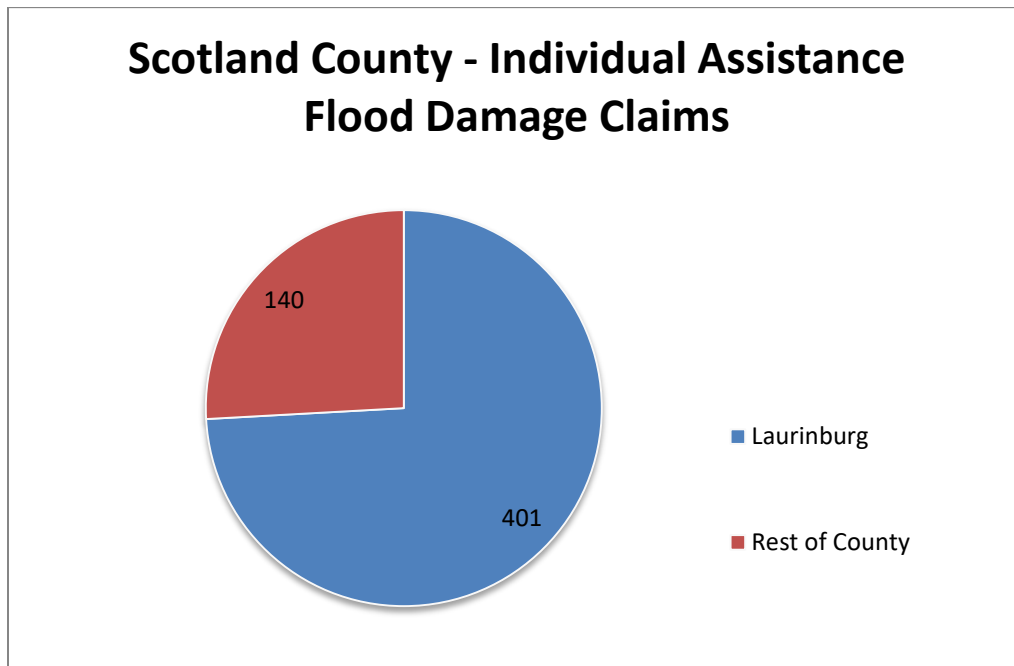


Figure 12: Number of IA Flood Damage Claims by Area

Economics / Business / Jobs Storm Impacts

Hurricane Matthew did not have a significantly negative impact on business in Scotland County. Most industry and businesses were closed for one day, while schools were closed for a week. Like for housing, the loss of power compromised refrigerated products for several local businesses.

The Walmart in Laurinburg had backup generators and never lost power or closed. As a result, it became an important place for citizens to get supplies as needed, completely selling out its flashlights for residents to combat power outage. The parking lot quickly became overcrowded, which further exacerbated traffic on Highway 74.

Although flooding was not severe in the county and did not have a significant impact on business, one notable area of flooding was St. Andrews University. At St. Andrews, overflow from a pond caused nearly a foot of water to flood its science building and several inches of flooding in its cafeteria. The extent of flood damage necessitated that the university cancel classes for two days.²⁸ The University also made Public Assistance requests to help with debris removal.

Overall, the storm contributing to a small economic boom in Scotland County during the days that followed. This was caused by South Carolinians, Floridians, and evacuees from eastern North Carolina driving into or through the county to avoid the effects of Hurricane Matthew. Out-of-towners took refuge in hotels and purchased food and supplies from local stores. Scotland County was at complete occupancy of its hotels during the days that followed Hurricane Matthew.

Top Ten Employers in Scotland County

- Scotland County Schools
- Scotland Memorial Hospital
- NC Department of Public Safety
- FCC (NC) LLC

²⁸ <http://www.govtech.com/em/disaster/We-were-not-ready.html>

- Scotland County
- Walmart Associates Inc
- Pilkington North America Inc
- Maverick Transportation LLC
- City of Laurinburg
- Saint Andrews Presbyterian College

Aside from what was already stated in this section, none of the top ten employers of Scotland County were seriously affected by Hurricane Matthew.

Infrastructure Storm Impacts

Hurricane Matthew inflicted a wide variety of damage to Scotland County's various infrastructures—from utilities to roadways.

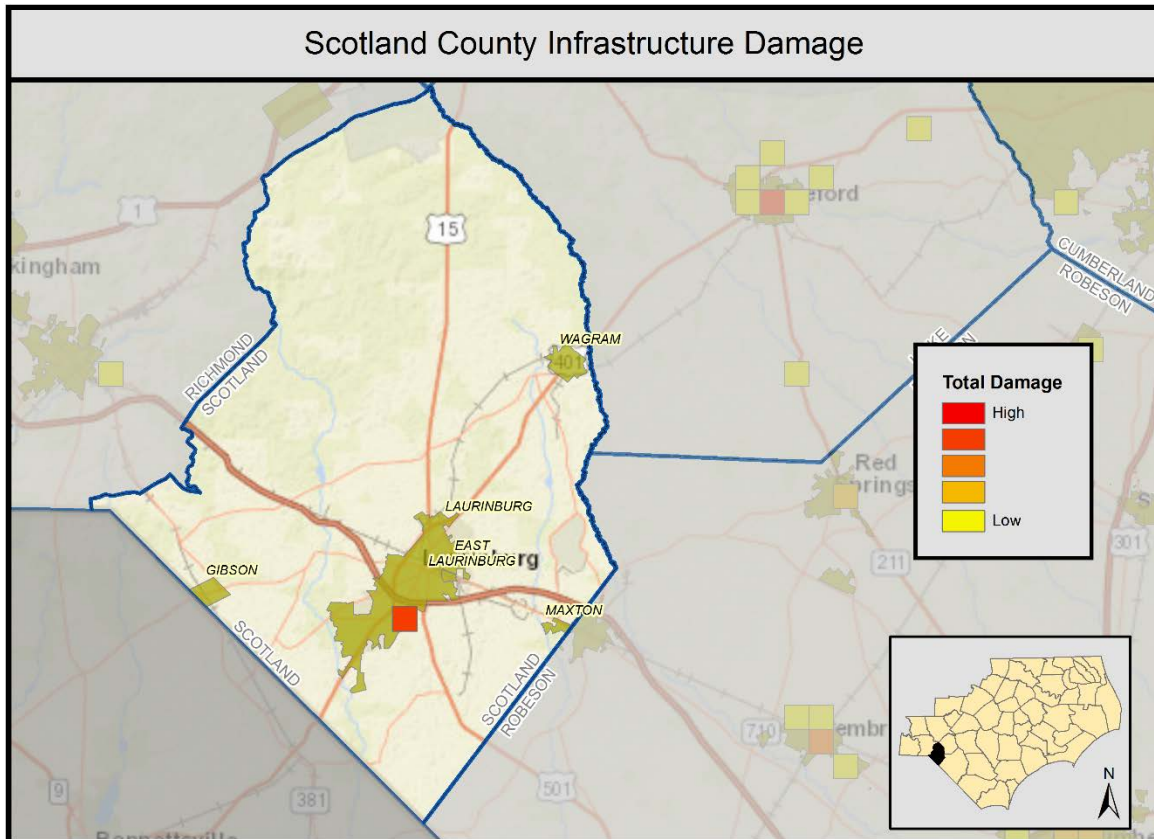


Figure 13. Scotland County Infrastructure Damage

The county's electric supply infrastructure was significantly damaged during the storm, causing secondary cascading failures across the county. Hundreds of electric transmission lines were damaged beyond repair. Sheet metal from the roof of a convenience store collided with a key transformer that cut off power to Laurinburg's only substation, losing power supply to the entire city.²⁹ It took over a week to restore power to the entire county.

County roadways and those of nearby counties also experience slight disruptions from the storm, which presented a challenge to Scotland County in several ways. Debris and flooding blocked five roads throughout the county, all in Laurinburg and including Main Street, which was briefly blocked by the awning of a storefront.³⁰

²⁹ <http://laurinburgexchange.com/top-stories/7382/the-aftermath-of-hurricane-matthew>

³⁰ <http://www.fayobserver.com/528329d7-6ec6-5166-9dd6-823b6cb6a2d0.html>

The main travel artery through the county, Highway 74, was backed up in neighboring counties due to increased traffic flow which caused major congestion along this route in Scotland County. Additionally, Interstate 95 was closed in nearby counties and diverted traffic through Scotland County,³¹ further increasing traffic congestion and the demand for traffic control. The traffic lights along Highway 74 and across Laurinburg were out as well. To direct the influx of traffic, law enforcement representatives were strategically placed at key intersections, which became quickly overwhelming due to the volume of traffic.

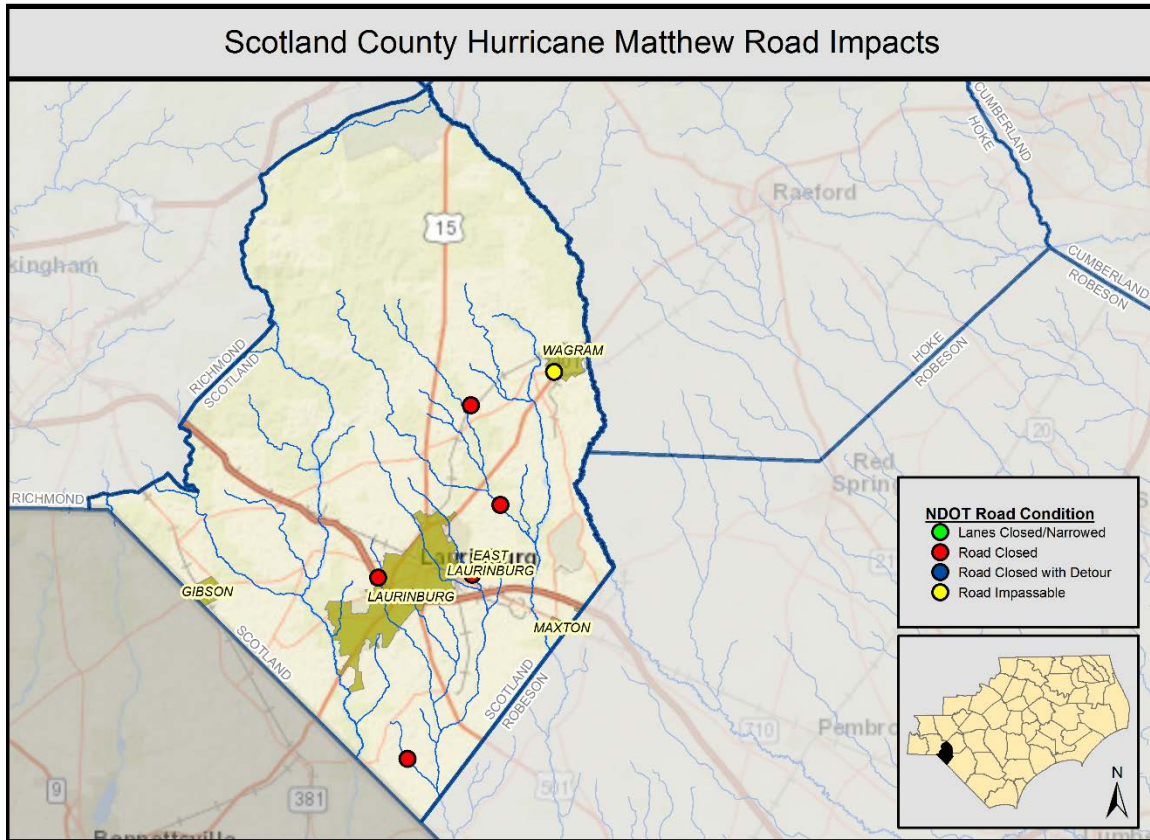


Figure 14. Impacted NCDOT Structures in Scotland County

Water infrastructure in the county received some damage from flooding. A pump station in Laurinburg flooded and a culvert overtopped. There were also concerns over the well water conveyance system failing due to the power outages, however, the system remained functional.

Emergency response infrastructure in the county was impacted by the storm as well. The fire department was inundated with calls while they were assisting neighboring counties in responding to downed trees. The power outage had a greater effect on the police department and the hospitals. As previously noted, the police department was overwhelmed performing traffic control operations. Scotland Memorial Hospital experienced complete power failure and had to operate on its backup generator, drastically limiting its operations and capabilities.

An infrequently used railroad also experienced a washout as a result of Hurricane Matthew, but this did not impact the county.

³¹ <http://www.scotlandcounty.org/Data/Sites/1/media/newsletter/october2016.pdf>

Ecosystems / Environment Storm Impact

There was not much damage to the overall environment and ecosystems of the county. 13,000 cubic yards of debris were generated from the storm damage that has since been chipped. The chipped debris will be used in mulching operations throughout the county.

Agriculture Storm Impact

There was notable agriculture loss from Hurricane Matthew. Flooding destroyed 20 percent of the county's cotton crop and 15 to 20 percent of its soybean crop. The damage sustained will affect the crops beyond just this season, further impacting the county's agricultural output.

Summary of Critical Issues and Community Assets

- Although Scotland County was mostly spared from the damages associated with Hurricane Matthew compared to neighboring and nearby counties, the extent of the situation could have been made much worse based on several identified issues associated with the storm and vulnerabilities within the county.
- Power outage arguably had the most impact in Scotland County. The county has four electrical utility providers servicing its residents—Duke, Pee Dee Electric, Lumber River Electric, and City of Laurinburg Electric—which can challenge coordination in emergency response. Scotland County is located on the periphery of these electric companies' networks, meaning it is less of a priority in power outage situations. Additionally, the largest city in the county, Laurinburg, has only one substation for the entire city, making it more vulnerable to major disruption as exemplified by the damage caused by Matthew.
- Scotland County is home to a county jail, state prison, and maximum security prison. Historically and during Hurricane Matthew, there was concern over possibly evacuating these sites due to flooding and power outage.
- Congestion of Highway 74 was an issue that challenged first responders during Hurricane Matthew; within Scotland County, it is not designated as an interstate designation like neighboring counties. This designation makes the highway less appealing for business and limits federal and state aid for the highway. Hurricane Matthew highlighted the value of Highway 74 as a critical artery for people to move within and through the county.
- Scotland County has only a small number of salaried firefighters and relies on participation from volunteers during emergencies. During Hurricane Matthew, firefighters were assisting more severely impacted counties, which delayed response within Scotland County and frustrated residents.
- Scotland County experienced a partial railroad wash out during Hurricane Matthew. That same railroad is often used to transport hazardous materials through the county. This poses a hazardous risk for county residents if the railroad sustains damage that goes unrepaired or if hazardous material is being transported or stored nearby during a comparable storm.

An aerial photograph showing a residential neighborhood severely affected by flooding. The water is murky brown and has inundated the streets, yards, and surrounding forested areas. Several houses are visible, some partially submerged. The text "4. Strategies for Resilient Redevelopment" is overlaid in the center of the image.

4. Strategies for Resilient Redevelopment

4. Strategies for Resilient Redevelopment

This section provides details about the resilience and revitalization strategies and actions identified in Scotland County. These actions were identified and refined during three public meetings with local officials and county residents held in March and April 2017. The actions are tied to impacts from Hurricane Matthew and organized by the pillars of housing, economic development, infrastructure and environment. In addition to the public meetings, frequent coordination calls with County officials and data gathered from state agencies and organizations were utilized to formulate the actions listed below.

Meeting 1 was designed to introduce the community and County points of contact to the Resilient Redevelopment Planning process and goals. This meeting allowed the planning team to capture areas within the county that were damaged during Hurricane Matthew and to hear what potential mitigation actions had already been considered. Draft resilience actions were then presented at Meeting 2 of the planning process. This was done to garner general buy-in on the draft actions from the County-level planning teams and residents. More details on the actions were collected between Meetings 2 and 3 through research and follow-up phone calls and emails with the primary points of contact. Meeting 3 provided the opportunity to collect and finalize details for the draft actions. Meeting 4, scheduled in early May 2017, allowed the county points of contact to rank the identified actions, group them into High, Medium, and Low Priorities, and to approve their inclusion in the plan.

Pillar	Project/Action Count
Housing	3
Economic Development	4
Infrastructure	4
Environment	3
Grand Total	14

Table 3. Scotland County Summary of Projects by Pillar

The following table is ordered by the rankings and priorities provided by Scotland County during Meeting 4:

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Secure Funding for an Additional Substation and Conduct a Study to Implement a Microgrid Power System	High	1
Economic Development	Identify Leading Causes and Development of Outreach Campaign to Address "Brain Drain" in Scotland County	High	2
Housing	Prepare the Housing Sector to Meet the Needs of an Aging Population	High	3
Environment	Perform an Assessment of County-Owned Parking Lots and Determine a Strategy for Prioritizing Parking Lot Resurfacing	High	4
Infrastructure	Protect the County's Existing Building Stock by Ensuring that Adequate Protective Resources Exist	High	5
Infrastructure	Perform an Assessment of Scotland County's Infrastructure	Medium	6
Economic Development	Engage State Legislators, Major Employers, and Schools in Scotland County to Support Economic Development and Job Growth	Medium	7
Economic Development	Improve the Public Realm in the Central Business District (CBD)	Medium	8
Housing	Development of a Long-Term Strategy to Increase Availability of Affordable and Accessible Housing Across the County	Medium	9

Pillar	Action Name	Priority	Overall Ranking
Environment	Update Zoning Codes to Reflect Current Best Practices to Improve Coastal Water Quality through Improved Stormwater Management and Hazard Mitigation	Medium	10
Economic Development	Workforce Program Awareness	Low	11
Environment	Perform Studies of Vacant and Contaminated Areas in Scotland County to Determine Whether and Where Future Land-Use will be Safe, and When	Low	12
Infrastructure	Secure Funding to Add a Minimum of 1,500 Feet to the Existing Length and 50 Feet in Width (25 Feet on Each Side) of the Laurinburg-Maxton Airport's Longest Runway	Low	13
Housing	Conduct an Assessment to Determine the Feasibility of Dredging Leith Creek versus Acquiring Repetitive Loss Properties	Low	14

Table 4. Projects by Rank

On the following pages, we have organized the projects and actions by pillar. Within each pillar, the projects are grouped by county priority. Please note that maps are provided for all projects that have a specific location within the county. Projects without maps are county-wide projects that will benefit citizens throughout the county.

Housing Strategies

High Priority Housing Strategies

Pillar	Action Name	Priority	Overall Ranking
Housing	Prepare the Housing Sector to Meet the Needs of an Aging Population	High	3

Table 5. Scotland High Priority Housing Summary

The following project represents the housing strategies that Scotland County indicated are of a higher priority to address. Additional detail on the projects can be found below:

- Prepare the Housing Sector to Meet the Needs of an Aging Population:** This strategy will culminate in a public outreach and education campaign for residents about potential community changes that would improve the quality of life for older Americans. This campaign will highlight any incentives, contests, or policies that might engage the general public in efforts to modify the housing stock and use of public spaces. In addition, this strategy will provide or identify access to training for local developers or contractors necessary to effectively perform accessibility modifications or constructions.

Prepare the Housing Sector to Meet the Needs of an Aging Population

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 5 to 10 years

Location: Scotland County

Project Summary: This strategy will culminate in a public outreach and education campaign for residents about potential community changes that would improve the quality of life for older Americans. This campaign should:

- Highlight any incentives, contests, or policies that might engage the general public in efforts to modify the housing stock and use of public spaces.
- Provide or identify access to training for local developers or contractors necessary to effectively perform accessibility modifications or constructions. Consider incentivizing the completion of such training to increase the capacity of Scotland County's construction sector to identify and meet accessibility challenges.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	More so than the general population elderly populations and individuals with access and functional needs are more at-risk during disasters and emergencies like Hurricane Matthew.	N/A
Consistent with existing plans (describe points of intersection/departure)	This will support the implementation of the county's long-term housing strategy.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Proactive education of Scotland County residents will increase the community's overall knowledge and awareness of its aging population. This awareness may carry over from the housing sector to inform other economic social or planning decisions thereby creating a cascading effect on the quality of life for older Americans and access and functional needs populations. Increased accessibility to households businesses and public facilities will benefit the economy.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	>200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Low to moderate confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$101K - \$250K	N/A

What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Medium Priority Housing Strategies

Pillar	Action Name	Priority	Overall Ranking
Housing	Development of a Long-Term Strategy to Increase Availability of Affordable and Accessible Housing Across the County	Medium	9

Table 6. Scotland Medium Priority Housing Summary

The following project represents the housing strategies that Scotland County indicated are of a medium priority to address. Additional detail on the projects can be found below:

- Development of a Long-Term Strategy to Increase Availability of Affordable and Accessible Housing Across the County:** Scotland County will develop a long-term strategy to address the community's housing needs that provides an analysis of unmet needs by socioeconomic status, geographic location, and age. Specifically, this analysis should assess factors that will impact older Americans' quality of life such as accessibility, home type, ownership type (rented or owned), and proximity to public spaces and transportation. This action will also provide series of strategies for incentivizing the development or maintenance of affordable and accessible housing. Development or renovation strategies should promote accessibility, proximity to accessible public spaces, and access to public transportation or paratransit options. The knowledge gained from completing this report will contribute to more informed and strategic methods of strengthening or modifying housing regulation, construction or zoning guidelines, or other policies, which can inform other housing related redevelopment strategies.

Development of a Long-Term Strategy to Increase Availability of Affordable and Accessible Housing across the County

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 5 years

Location: Scotland County

Project Summary: Scotland County will develop a long-term strategy to address the community's housing needs that provides the following:

- Analysis of unmet needs by socioeconomic status, geographic location, and age. Specifically, this analysis should assess factors that will impact older Americans' quality of life such as accessibility, home type, ownership type (rented or owned), and proximity to public spaces and transportation.
- A series of strategies for incentivizing the development or maintenance of affordable and accessible housing. Development or renovation strategies should promote accessibility, proximity to accessible public spaces, and access to public transportation or paratransit options.
- Policy recommendations related to zoning, development, and financial incentives or credits that would support the provision of affordable and accessible housing.
- Descriptions of pathways for access to applicable housing options for both low income and higher earning households with limited housing options but not eligible for housing assistance under current guidelines.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Lack of access to housing options poses a risk to the county that makes it vulnerable to emergencies and disasters like Hurricane Matthew through inadequate housing and a large homeless population. The resulting strategy will facilitate partnerships across the public private and non-profit sectors to ensure that access to affordable housing is equitable accessible and suited to the needs of the county thereby making Scotland County more resilient.	N/A
Consistent with existing plans (describe points of intersection/departure)	The knowledge gained from completing this report will contribute to more informed and strategic methods of strengthening or modifying housing regulation construction or zoning guidelines or other policies which can inform other housing related redevelopment strategies.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	The development of this housing strategy will result in recommendations that enable a greater portion of Scotland County residents to become permanent residents and provide a greater degree of financial security which can contribute to a stronger larger economy more frequent instances of civic engagement and/or a stronger permanent tax base.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A

Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	High confidence	N/A
What impact will this action have on the local economy/tax base?	Unknown	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$51K - \$100K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Unknown	N/A
Who will administer this project?	County	N/A

Low Priority Housing Strategies

Pillar	Action Name	Priority	Overall Ranking
Housing	Conduct an Assessment to Determine the Feasibility of Dredging Leith Creek versus Acquiring Repetitive Loss Properties	Low	14

Table 7. Scotland Low Priority Housing Summary

The following project represents the housing strategies that Scotland County indicated are of a power priority to address. Additional detail on the projects can be found below:

- Conduct an Assessment to Determine the Feasibility of Dredging Leith Creek versus Acquiring Repetitive Loss Properties:** Perform a feasibility assessment that will identify associated costs and approximate timeline for dredging Leith Creek as well as cost estimates for acquiring repetitive loss properties. Three properties surrounding Leith Creek were among the few sites impacted by flooding in Scotland County as a result of Hurricane Matthew. These three properties are affected by repetitive flood losses, and if the flood source goes unaddressed, they will flood again. The study will determine the best next step forward.

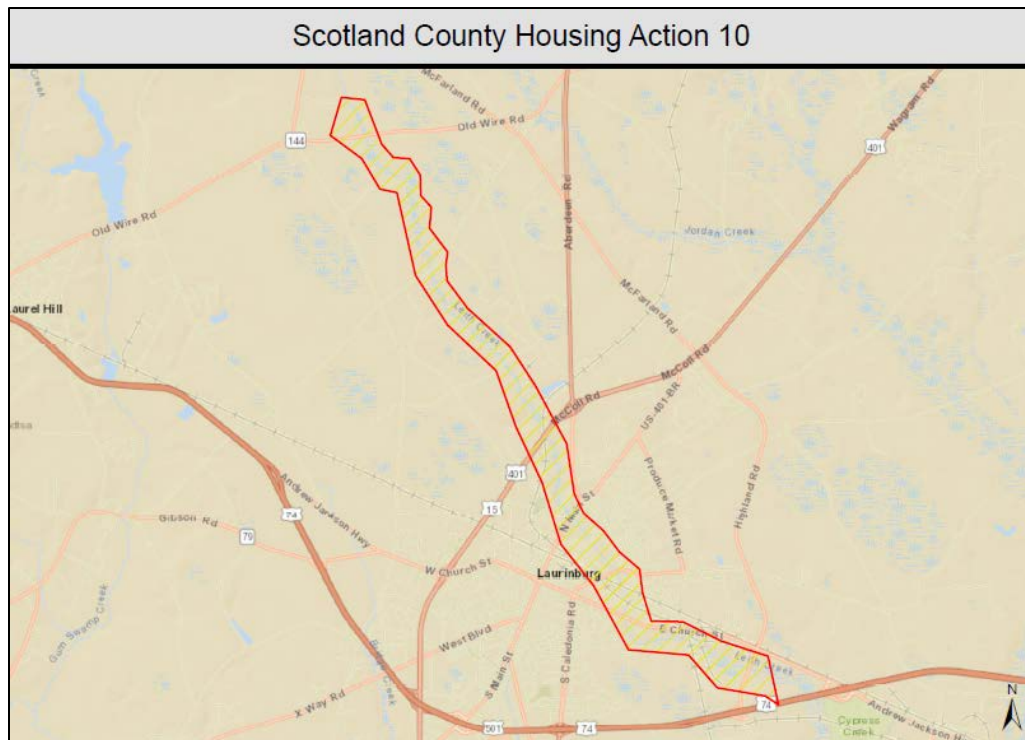


Figure 15. Scotland County Housing Action 10 - Conduct an Assessment to Determine the Feasibility of Dredging Leith Creek versus Acquiring Repetitive Loss Properties

Conduct an Assessment to Determine the Feasibility of Dredging Leith Creek versus Acquiring Repetitive Loss Properties

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 5 to 10 years

Location: Leith Creek

Project Summary: Perform a feasibility assessment that will identify associated costs and approximate timeline for dredging Leith Creek as well as cost estimates for acquiring repetitive loss properties.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Three properties surrounding Leith Creek were among the few sites impacted by flooding in Scotland County as a result of Hurricane Matthew. These three properties are affected by repetitive flood losses and if the flood source goes unaddressed they will flood again. The study will determine the best next step forward.	N/A
Consistent with existing plans (describe points of intersection/departure)	Leith Creek has been dredged in the past by the United States Army Corps of Engineers because the site is a source of repeated flooding in Scotland County.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	The study's outcome will provide insight into the most plausible and cost efficient way to reduce the flood risk to repetitive flooding properties which are currently uninsured which will reduce the cost to impacted households. Additionally the results of the affordable housing assessment may prove insightful for determining strategies for acquiring or relocating impacted properties based on the county's overall housing needs.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	>200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	N/A
What impacts to the environment of the county will result from this project?	The study will include potential impacts to the ecology of Leith Creek and the surrounding area.	N/A
What is the capability of the local government to administer this project?	Medium	N/A

What is the financial range of this project?	\$51K - \$100K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	Local	N/A

Economic Development Strategies

High Priority Economic Development Strategies

Pillar	Action Name	Priority	Overall Ranking
Economic Development	Identify Leading Causes and Development of Outreach Campaign to Address "Brain Drain" in Scotland County	High	2

Table 8. Scotland High Priority Economic Development Summary

The following project represents the economic development strategies that Scotland County indicated are of a higher priority to address. Additional detail on the projects can be found below:

- Identify Leading Causes and Development of Outreach Campaign to Address "Brain Drain" in Scotland County:** This project will determine strategies to mitigate the occurrence of this phenomenon. Scotland County will accomplish this in four parts by 1) leveraging resources available by forming partnerships with state and local colleges, such as St. Andrews University or the Kenan-Flagler Business School at The University of North Carolina at Chapel Hill, 2) conducting community assessments and outreach to determine the primary reasons that residents leave the county, 3) collaborating with relevant departments and organizations in the public, private, and non-profit sector to prevent “brain drain” and improve economic opportunities across the county, and 4) develop strategies to balance the outflow of retirement-aged workforce participants with local individuals looking to join the workforce.

Once a strategy is developed and agreed upon, Scotland County will lead an outreach campaign, assessed at 12-month, 24-month, and 36 month intervals, that seeks to counter the findings of the assessment to address sources of the Brain Drain. This campaign will include the use of media and social media, and will leverage multiple departments across Scotland County, coordinated by Scotland County's Economic Development Corporation, and in partnership with Scotland County and neighboring counties private and non-profit sectors, especially Richmond Community College (RCC). Included in this campaign will be links to opportunities and benefits that may cause individuals to retain residency and work in Scotland County, thus strengthening Scotland County's economic resiliency in the future.

Identify Leading Causes and Development of Outreach Campaign to Address “Brain Drain” in Scotland County

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 5 years

Location: Scotland County

Project Summary: Determine strategies to mitigate the occurrence of this phenomenon. Scotland County will accomplish this in four parts:

- Leverage resources available by forming partnerships with state and local colleges, such as St. Andrews University or the Kenan-Flagler Business School at The University of North Carolina at Chapel Hill.
- Conduct community assessments and outreach to determine the primary reasons that residents leave the county.
- Collaborate with relevant departments and organizations in the public, private, and non-profit sector to prevent “brain drain” and improve economic opportunities across the county.
- Develop strategies to balance the outflow of retirement-aged workforce participants with local individuals looking to join the workforce.

Once a strategy is developed and agreed upon, Scotland County will lead an outreach campaign, assessed at 12-month, 24-month, and 36 month intervals, that seeks to counter the findings of the assessment to address sources of the Brain Drain. This campaign will include the use of media and social media, and will leverage multiple departments across Scotland County, coordinated by Scotland County's Economic Development Corporation, and in partnership with Scotland County and neighboring counties private and non-profit sectors, especially Richmond Community College (RCC). Included in this campaign will be links to opportunities and benefits that may cause individuals to retain residency and work in Scotland County, thus strengthening Scotland County's economic resiliency in the future.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Retaining an educated workforce will benefit the local economy thereby making Scotland County more resilient to disasters like Hurricane Matthew.	N/A
Consistent with existing plans (describe points of intersection/departure)	Scotland County can leverage resources at local business schools (most importantly RCC in neighboring Richmond County) implementing the findings of the report in order to have a positive outcome (i.e. reduce “brain drain”).	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Encouraging residents to stay in Scotland County will strengthen the housing sector and the county's tax base by increasing the number of residents. Reducing the outflow of highly trained Scotland County residents will serve a dual purpose in supporting the county's economy. It will increase the size of the county's labor force and economic outputs while balancing the rate of retirement and openings in existing jobs.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A

Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 51 and 75%	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	High	N/A
What is the financial range of this project?	\$101K - \$250K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Medium Priority Economic Development Strategies

Pillar	Action Name	Priority	Overall Ranking
Economic Development	Engage State Legislators, Major Employers, and Schools in Scotland County to Support Economic Development and Job Growth	Medium	7
Economic Development	Improve the Public Realm in the Central Business District (CBD)	Medium	8

Table 9. Scotland Medium Priority Economic Development Summary

These projects represent the economic development strategies that Scotland County indicated are of a medium priority to address. Additional detail on the projects can be found below:

- Engage State Legislators, Major Employers, and Schools in Scotland County to Support Economic Development and Job Growth:** The intent of this strategy is to increase access to the funding necessary to implement the programs and actions decided upon in the Economic Development Corporation in order to strengthen and diversify Scotland County's local economy.

A series of workshops will take place in Scotland County with a participant pool that includes state legislators, major employers in the county, and schools, to address a strategy to support the economic development opportunities that 1) Scotland County already provides, and 2) Scotland County seeks to provide in order to further develop a resilient and growing workforce. The outcome of the workshops will be the drafting of a Workforce Development Strategy, which will provide guidance and tasks to Scotland County's Economic Development Corporation to address. Over a period of 8-12 months, the Economic Development Corporation will be tasked to build or adapt workforce development tools and strategies to align with the workshop outcomes. Following the development of these tools and strategies, an implementation period will begin, supported by a robust outreach campaign that includes traditional (newspapers, flyers,) and social media. Progress of the workforce strategy will be reported by 12 and 24-months after implementation period begins.

Engage State Legislators, Major Employers, and Schools in Scotland County to Support Economic Development and Job Growth

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 5 years

Location: Scotland County

Project Summary: The intent of this strategy is to increase access to the funding necessary to implement the programs and actions decided upon in the Economic Development Corporation in order to strengthen and diversify Scotland County's local economy.

A series of workshops will take place in Scotland County with a participant pool that includes state legislators, major employers in the county, and schools, to address a strategy to support the economic development opportunities that 1) Scotland County already provides, and 2) Scotland County seeks to provide in order to further develop a resilient and growing workforce. The outcome of the workshops will be the drafting of a Workforce Development Strategy, which will provide guidance and tasks to Scotland County's Economic Development Corporation to address. Over a period of 8-12 months, the Economic Development Corporation will be tasked to build or adapt workforce development tools and strategies to align with the workshop outcomes. Following the development of these tools and strategies, an implementation period will begin, supported by a robust outreach campaign that includes traditional (newspapers, flyers,) and social media. Progress of the workforce strategy will be reported by 12 and 24-months after implementation period begins.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Increasing employment opportunities in the county will benefit the local economy and contribute to resilience.	N/A
Consistent with existing plans (describe points of intersection/departure)	Strategies developed by the Economic Development Corporation	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	By funding this strategy the county has the potential to address a number of issues impeding the county's economic growth and development. Engaging major employers in meaningful discussions about economic development and developing strategies to address these challenges can strengthen the county's local economy.	N/A
For how long will this solution be effective?	Less than 10 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Higher than 75%	N/A

What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$1M+	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Between 51 and 75%	N/A
Who will administer this project?	County	N/A

- Improve the Public Realm in the Central Business District (CBD):** This action project calls for the development and installation of traffic calming measures, wider sidewalks, and development of partnerships with business owners to address safety, and reduce vehicle-pedestrian conflicts and parking by implementing a Complete Streets Program. Additionally, this plan will assess existing sidewalks in CBD for locations for plaza or gathering places, assess sidewalks for improved safety and consider adding bicycle lanes where feasible, and explore funding options under the Powell Bill to improve roads in downtown areas.

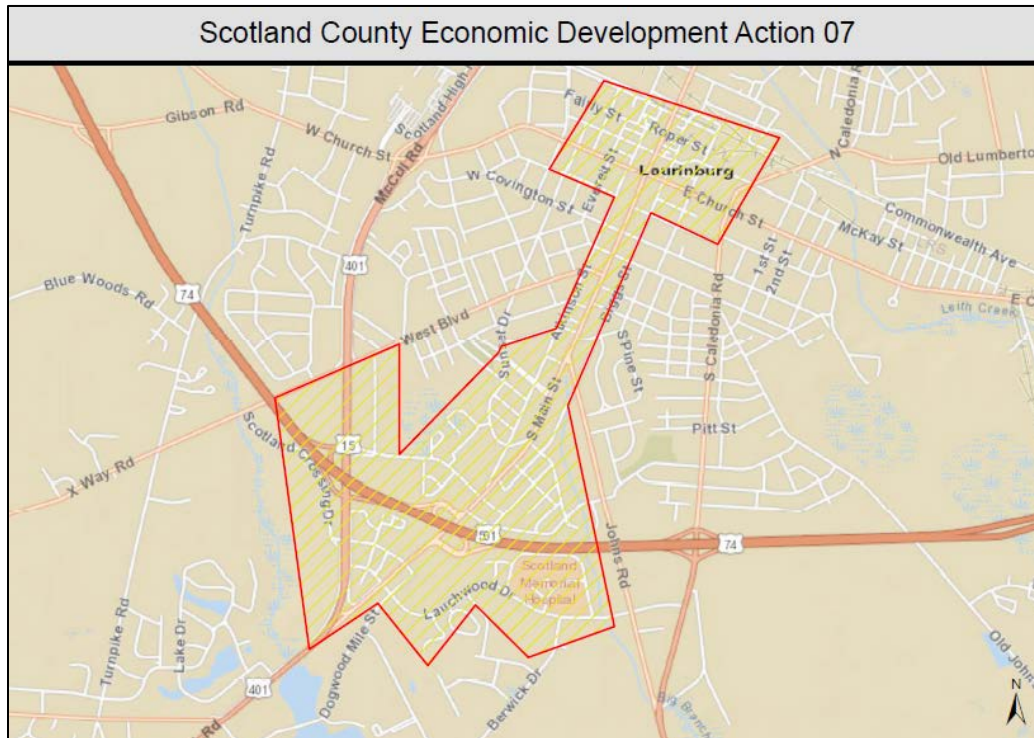


Figure 16 Scotland County Economic Development Action 7 - Improve the Public Realm in the Central Business District (CBD)

Improve the Public Realm in the Central Business District (CBD)

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 5 to 10 years

Location: City of Laurinburg

Project Summary: Use traffic calming, wider sidewalks, and partnerships with business owners; address safety; and reduce vehicle-pedestrian conflicts and parking by implementing a Complete Streets Program. Additionally:

- Assess existing sidewalks in CBD for locations for plaza or gathering places.
- Assess sidewalks for improved safety and consider adding bicycle lanes where feasible.
- Explore funding options under the Powell Bill to improve roads in downtown areas.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	A stronger CBD brings in more capital which can help the community recover faster from disasters like Hurricane Matthew.	N/A
Consistent with existing plans (describe points of intersection/departure)	The City of Laurinburg recently completed a Pedestrian Plan which will supplement this effort.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Wider sidewalks and bike paths may boost home values and encourage residents to travel or walk to commercial areas thereby supporting the housing and economic sectors.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	By making Scotland County safer for walkers joggers and bikers residents will be more inclined to use community spaces which may contribute to improvement of the environment by reducing greenhouse gas emissions.	N/A
What is the capability of the local government to administer this project?	High	N/A
What is the financial range of this project?	\$1M+	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Between 51 and 75%	N/A
Who will administer this project?	Local	N/A

Low Priority Economic Development Strategies

Pillar	Action Name	Priority	Overall Ranking
Economic Development	Workforce Program Awareness	Low	11

Table 10. Scotland Low Priority Economic Development Summary

This project represents the economic development strategy that Scotland County indicated is of a lower priority to address. Additional detail can be found below:

- Workforce Program Awareness:** The county will partner with the Economic Development Corporation to develop an awareness campaign about the job-training and learning opportunities available through local high schools and universities. Increased awareness about the opportunities available may contribute to higher rates of participation, which in turn, can bolster the size and strength of the county's workforce. Scotland County and its Economic Development Corporation will work with Richmond Community College (RCC) in neighboring Richmond County to develop a strategy, and develop an awareness campaign for workforce resiliency. This campaign will include flyer, social media, an interactive website, and newspaper advertisements.

Workforce Program Awareness

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 3 years to implement, 1 to 2 years to reassess

Location: Scotland County

Project Summary: The county will partner with the Economic Development Corporation to develop an awareness campaign about the job-training and learning opportunities available through local high schools and universities. Increased awareness about the opportunities available may contribute to higher rates of participation, which in turn, can bolster the size and strength of the county's workforce. Scotland County and its Economic Development Corporation will work with Richmond Community College (RCC) in neighboring Richmond County to develop a strategy, and develop an awareness campaign for workforce resiliency. This campaign will include flyer, social media, an interactive website, and newspaper advertisements.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	A more educated workforce provides economic benefits that make the county more resilient.	N/A
Consistent with existing plans (describe points of intersection/departure)	Scotland County already conducts job training on a smaller scale.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	This would support economic growth by contributing to an educated workforce. Supporting the meaningful employment of Scotland County residents will also positively impact the housing sector by sustaining or increasing the demand for permanent homes.	N/A
For how long will this solution be effective?	Less than 10 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	High	N/A
What is the financial range of this project?	\$0- \$50K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Infrastructure Strategies

High Priority Infrastructure Strategies

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Secure Funding for an Additional Substation and Conduct a Study to Implement a Microgrid Power System	High	1
Infrastructure	Protect the County's Existing Building Stock by Ensuring that Adequate Protective Resources Exist	High	5

Table 11. Scotland High Priority Infrastructure Summary

These projects represent the infrastructure strategies that Scotland County indicated are the highest priority to address. Additional detail can be found below:

- Secure Funding for an Additional Substation and Conduct a Study to Implement a Microgrid Power System:** Back-up, supplemental, and redundant power is needed to create better energy assurance post-disaster and to make sure that critical facilities have sufficient power to maintain operations. Scotland County will secure funding for an additional substation to provide power to the Scotland County area. In addition, Scotland County should conduct a feasibility study to implement a power microgrid system throughout the Scotland County area. This effort will be undertaken in coordination with local and regional power companies. Once a study is completed on which county and City of Laurinburg facilities and critical infrastructure sites are in most need of uncoupled power systems, the County will implement microgrid power systems that can provide power generation should the facility become uncoupled from the local and regional grids. Equipment will be identified and deployed within a period of five years at those facilities and critical infrastructure sites in most need of microgrid capabilities.

Secure Funding for an Additional Substation and Conduct a Study to Implement a Microgrid Power System

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 5 years

Location: Scotland County, City of Laurinburg

Project Summary: Back-up, supplemental, and redundant power is needed to create better energy assurance post-disaster and to make sure that critical facilities have sufficient power to maintain operations. Scotland County will secure funding for an additional substation to provide power to the Scotland County area. In addition, Scotland County should conduct a feasibility study to implement a power microgrid system throughout the Scotland County area. This effort will be undertaken in coordination with local and regional power companies. Once a study is completed on which county and City of Laurinburg facilities and critical infrastructure sites are in most need of uncoupled power systems, the County will implement microgrid power systems that can provide power generation should the facility become uncoupled from the local and regional grids. Equipment will be identified and deployed within a period of five years at those facilities and critical infrastructure sites in most need of microgrid capabilities.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Power outage was widespread across Scotland County from Hurricane Matthew contributing to almost all FEMA IA requests for spoiled food across the county. The development of a second electricity substation in Scotland County would increase the county's (and surrounding area's) resilience by reducing its dependence on existing infrastructure and creating redundancy in electrical generation transmission and distribution.	N/A
Consistent with existing plans (describe points of intersection/departure)	Power outages restoration and lack of redundant power supply have been identified in planning meetings as known areas of improvement for the county.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Microgrids and additional substations allow for greater economic development and downtown revitalization by introducing an attractive alternative power source for businesses located near the microgrid facility.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	>200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	4-6	N/A
Is coordination with other communities/counties needed to complete this project?	Yes	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	N/A

What impacts to the environment of the county will result from this project?	Microgrids reduce environmental impact integrating renewable and clean energy sources and reducing greenhouse gas emissions.	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$1M+	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Protect the County's Existing Building Stock by Ensuring that Adequate Protective Resources Exist:** This project will design and implement a recruitment strategy to attract new fire and rescue volunteers and paramedics to Scotland County. Scotland County is seeking to recruit 14-21 additional volunteer firefighters (1 per shift for duty during Monday through Friday). The estimated cost of this initiative includes marketing materials or the provision of financial incentives to new volunteers. The second portion of the strategy includes constructing two new fire substations: one in the City of Laurinburg and one outside of the city, but those projects are already funded by fire taxes and in progress.

Protect the County's Existing Building Stock by Ensuring that Adequate Protective Resources Exist.

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 1 to 5 years

Location: Scotland County, City of Laurinburg

Project Summary: Design and implement a recruitment strategy to attract new fire and rescue volunteers and paramedics to Scotland County. Scotland County is seeking to recruit 14-21 additional volunteer firefighters (1 per shift for duty during Monday through Friday). The estimated cost of this initiative includes marketing materials or the provision of financial incentives to new volunteers. The second portion of the strategy includes constructing two new fire substations: one in the City of Laurinburg and one outside of the city, but those projects are already funded by fire taxes and in progress.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Scotland County deployed a significant portion of its fire department to neighboring counties to assist in disaster response and recovery following Hurricane Matthew which caused issues in response for the county itself due to lack of resources. Bolstering the number of first responders in advance will pay dividends when the next disaster occurs.	N/A
Consistent with existing plans (describe points of intersection/departure)	Increasing the number of volunteer firefighters available will protect the county's building and housing stock therefore safeguarding investments in those sectors. Adding an additional volunteer firefighter per shift (3 shifts per day) for each weekday will increase public safety's resiliency.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	The construction of an additional fire substation in Laurinburg will lower the county's Insurance Service Office (ISO) insurance rating which will lower the county's insurance-related expenses.	N/A
For how long will this solution be effective?	Less than 10 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Unknown	N/A
What impacts to the environment of the county will result from this project?	Forest fires are common across Scotland County which damage the environment. Additional firefighter can help mitigate the results of forest fires.	N/A

What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$251K - \$500K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Unknown	N/A
Who will administer this project?	County	N/A

Medium Priority Infrastructure Strategies

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Perform an Assessment of Scotland County's Infrastructure	Medium	6

Table 12. Scotland Medium Priority Infrastructure Summary

This project represents the infrastructure strategy that Scotland County indicated is of a medium priority to address. Additional detail can be found below:

- Perform an Assessment of Scotland County's Infrastructure:** This assessment will specifically include analysis of the benefit of designating Highway 74 as an interstate, converting Highway 401 and Highway 501 to four-lane highways. The designation of the 7.92 miles of highway 74 to an Interstate will complete the Interstate designation eastward to Interstate 95. Highway 401 runs from Laurinburg to Fayetteville. The addition from a two-lane road to a four-lane highway for a length of 45.2 miles will create addition access from Scotland County to neighboring Cumberland County. The addition from a two-lane road to a four-lane highway for a length of 25.1 miles will create addition access from Scotland County to neighboring Moore County. The assessment and re-designation will improve Scotland's economic resiliency, as well as the ability to move individuals between counties during times of disaster, namely during hurricane evacuation.

The first step of this strategy is to conduct an assessment to examine the costs associated with improving or expanding those roadways in order to qualify for the designation. In this assessment, the economic and resiliency benefits will be addressed, including the use of modeling to validate traffic capacity sought for economic benefits, as well as the ability to make evacuations more efficient. Following the assessment, a multi-year development plan will be created and implemented to ensure effective use of dollars. Regional support from neighboring Richmond, Robeson, Cumberland, and Moore counties will be sought. Impacted counties will also be part of planning for re-designation of interstate and additional construction to ensure highways are built to code. Following construction and re-designation, a year assessment of the economic benefits to highways systems through Scotland County will be completed.

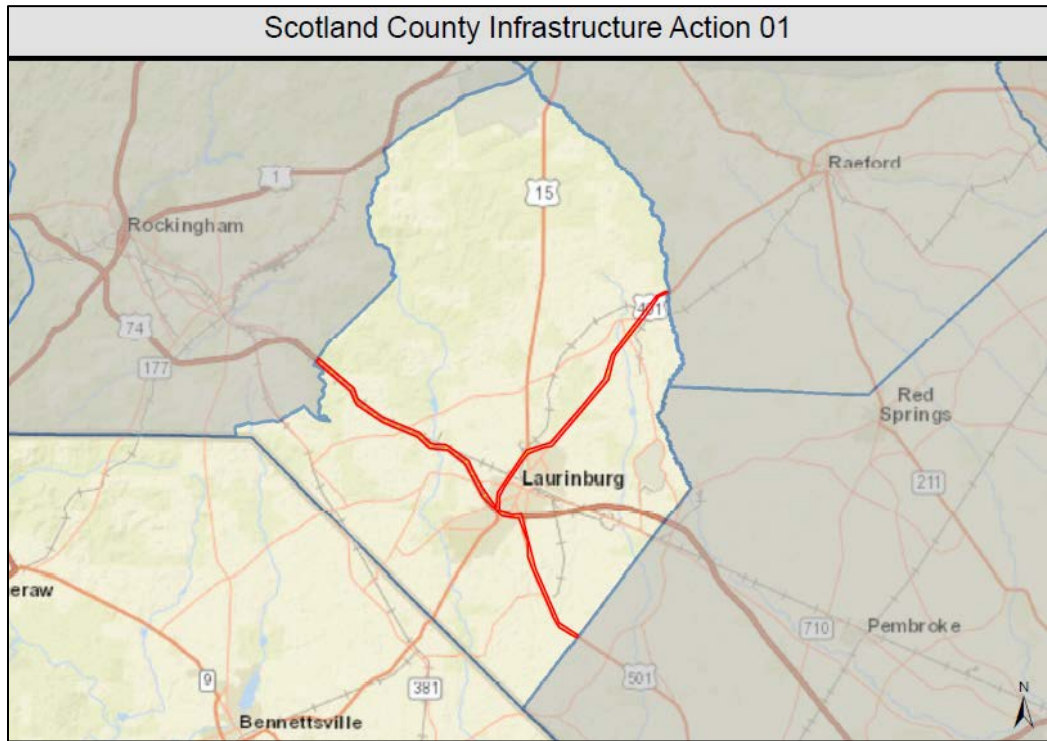


Figure 17. Scotland County Infrastructure Action 01 - Perform an Assessment of Scotland County's Infrastructure

Perform an Assessment of Scotland County's Infrastructure.

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 5 to 10 years

Location: Scotland County

Project Summary: Perform an assessment of Scotland County's infrastructure. This assessment will specifically include analysis of the benefit of designating Highway 74 as an interstate, converting Highway 401 and Highway 501 to four-lane highways. The designation of the 7.92 miles of highway 74 to an Interstate will complete the Interstate designation eastward to Interstate 95. Highway 401 runs from Laurinburg to Fayetteville. The addition from a two-lane road to a four-lane highway for a length of 45.2 miles will create addition access from Scotland County to neighboring Cumberland County. The addition from a two-lane road to a four-lane highway for a length of 25.1 miles will create addition access from Scotland County to neighboring Moore County. The assessment and re-designation will improve Scotland's economic resiliency, as well as the ability to move individuals between counties during times of disaster, namely during hurricane evacuation.

The first step of this strategy is to conduct an assessment to examine the costs associated with improving or expanding those roadways in order to qualify for the designation. In this assessment, the economic and resiliency benefits will be addressed, including the use of modeling to validate traffic capacity sought for economic benefits, as well as the ability to make evacuations more efficient. Following the assessment, a multi-year development plan will be created and implemented to ensure effective use of dollars. Regional support from neighboring Richmond, Robeson, Cumberland, and Moore counties will be sought. Impacted counties will also be part of planning for re-designation of interstate and additional construction to ensure highways are built to code. Following construction and re-designation, a year assessment of the economic benefits to highways systems through Scotland County will be completed.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	An infrastructure assessment will help to mitigate the consequences of a disaster on the county by pre-identifying necessary repairs that could amplify damage to the county's infrastructure from the next disaster like Hurricane Matthew. Additionally the development of Highway 401 and 501 will create a more effective network of roads to evacuate households during hurricanes between Moore Cumberland Robeson and Scotland counties.	N/A
Consistent with existing plans (describe points of intersection/departure)	An infrastructure assessment will help inform future development in the county. While Highway 74 has two lanes for each direction of travel and is part of a system that runs through neighboring Richmond County (to the West) and Robeson County (to the East) both of which has Interstate designation a 7.92 mile portion that runs through Scotland County does not.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Repairs or maintenance of existing infrastructure will increase the lifespan of critical facilities roadways etc. This will ultimately reduce costs for the county because regular maintenance/improvement will prevent complete tear-down and reconstruction of critical assets. The designation of an Interstate (as opposed to a Highway) also boosts the ability to Scotland County to invite businesses into the county further developing its economy.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A

How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	Yes	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Higher than 75%	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	High	N/A
What is the financial range of this project?	\$1M+	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Low Priority Infrastructure Strategies

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Secure Funding to Add a Minimum of 1,500 Feet to the Existing Length and 50 Feet in Width (25 Feet on Each Side) of the Laurinburg-Maxton Airport's Longest Runway	Low	13

Table 13. Scotland Low Priority Infrastructure Summary

This project represents the infrastructure strategy that Scotland County indicated is of a lower priority to address. Additional detail can be found below:

- Secure Funding to Add a Minimum of 1,500 Feet to the Existing Length and 50 Feet in Width (25 Feet on Each Side) of the Laurinburg-Maxton Airport's Longest Runway:** Securing funding and begin efforts to add an additional 25 feet to each side of the runway and a minimum of 1,500 feet to the length. These modifications will enable larger aircraft to land in Scotland County. Expanding the runway will enable larger aircraft to use the facility, which will contribute to economic development. Use of the airport generates income which will improve local economy.

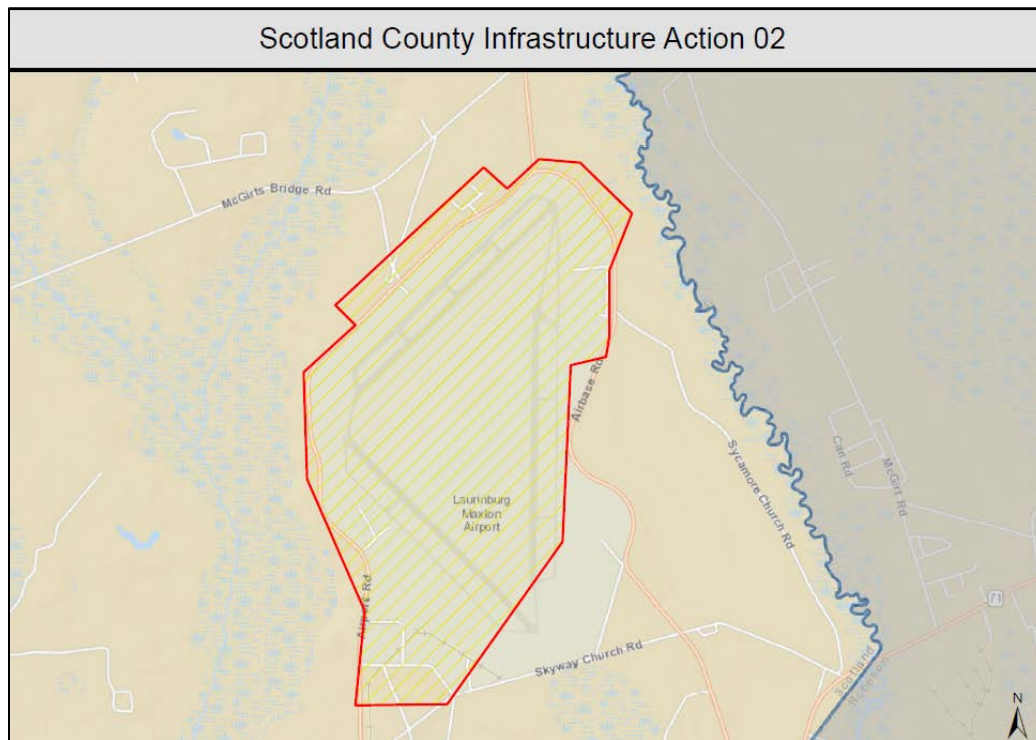


Figure 18. Scotland County Infrastructure Action 2 - Secure Funding to Add a Minimum of 1,500 Feet to the Existing Length and 50 Feet in Width (25 Feet on Each Side) of the Laurinburg-Maxton Airport's Longest Runway

Secure Funding to Add a Minimum of 1,500 Feet to the Existing Length and 50 Feet in Width (25 Feet on Each Side) of the Laurinburg–Maxton Airport’s Longest Runway

County: Scotland

Priority Grouping:

Priority Ranking:

Project Timeframe: 5 to 10 years

Location: City of Laurinburg

Project Summary: Secure funding and begin efforts to add an additional 25 feet to each side of the runway and a minimum of 1,500 feet to the length. These modifications will enable larger aircraft to land in Scotland County.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Improving the airport's runway will provide economic benefits to the county which will make the county more resilient to disaster through an influx in capital.	N/A
Consistent with existing plans (describe points of intersection/departure)	This strategy will support economic development objectives to strengthen the local economy.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Expanding the runway will enable larger aircraft to use the facility which will contribute to economic development. Use of the airport generates income which will improve local economy.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 51 and 75%	N/A
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$1M+	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Environmental, Ecosystem and Agricultural Strategies

High Priority Environmental Strategies

Pillar	Action Name	Priority	Overall Ranking
Environment	Perform an Assessment of County-Owned Parking Lots and Determine a Strategy for Prioritizing Parking Lot Resurfacing	High	4

Table 14. Scotland High Priority Environmental Summary

The following project represents the environmental strategies that Scotland County indicated are of a higher priority to address. Additional detail can be found below:

- Perform an Assessment of County-Owned Parking Lots and Determine a Strategy for Prioritizing Parking Lot Resurfacing:** This project is focused on the performance of an assessment of county parking lots and prioritize resurfacing them with pervious materials in order to restore functionality of the infrastructure while creating positive environmental outcomes.

Perform an Assessment of County-Owned Parking Lots and Determine a Strategy for Prioritizing Parking Lot Resurfacing.

County: Scotland

Priority Grouping:

Priority Ranking: 0

Project Timeframe: 1 to 5 years

Location: Scotland County

Project Summary: Perform an assessment of county parking lots and prioritize resurfacing them with pervious materials in order to restore functionality of the infrastructure while creating positive environmental outcomes. This action has already been initiated in Scotland County, to some extent. Those efforts are being funded via public loans.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Effective management of stormwater reduces the county's risk of flash flooding soil erosion or other flooding issues as seen in Hurricane Matthew	N/A
Consistent with existing plans (describe points of intersection/departure)	Managing flood risk.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Protecting the quality of North Carolina's coastal water sources by managing stormwater effectively will contribute to prolonged enjoyment of the coastline which is a major tourism attraction for out-of-state visitors. This strategy ultimately supports the economic development of Scotland County by ensuring that a tourist site with statewide impacts is maintained. Additionally green infrastructure has shown to contribute to a raise in property values.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	4-6	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	Unknown	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Unknown	N/A
What impacts to the environment of the county will result from this project?	By filtering pollutants and controlling stormwater green technology keeps local waterways cleaner create a habitat for wildlife and reduce standing water with associated vectors.	N/A
What is the capability of the local government to administer this project?	High	N/A
What is the financial range of this project?	\$51K - \$100K	N/A

What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Medium Priority Environmental Strategies

Pillar	Action Name	Priority	Overall Ranking
Environment	Update Zoning Codes to Reflect Current Best Practices to Improve Coastal Water Quality through Improved Stormwater Management and Hazard Mitigation	Medium	10

Table 15. Scotland Medium Priority Environmental Summary

The following project represents the environmental strategies that Scotland County indicated are of a medium priority to address. Additional detail can be found below:

- Update Zoning Codes to Reflect Current Best Practices to Improve Coastal Water Quality through Improved Stormwater Management and Hazard Mitigation:** Even though Scotland County is an inland county, smaller creeks, rivers, or streams eventually feed out to the coast. By creating zoning policies that are cognizant of water flowing through the county, Scotland can have a positive environmental impact on the entire region. To accomplish this, Scotland County will perform a gap analysis of the county's current policies and best practices. This will inform future zoning decisions.

Update Zoning Codes to Reflect Current Best Practices to Improve Coastal Water Quality through Improved Stormwater Management and Hazard Mitigation.

County: Scotland

Priority Grouping:

Priority Ranking: 0

Project Timeframe: 1 to 5 years

Location: Scotland County

Project Summary: Even though Scotland County is an inland county, smaller creeks, rivers, or streams eventually feed out to the coast. By creating zoning policies that are cognizant of water flowing through the county, Scotland can have a positive environmental impact on the entire region. To accomplish this, Scotland County will perform a gap analysis of the county's current policies and best practices. This will inform future zoning decisions

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Flooding was a main source of damage from Hurricane Matthew in Scotland County and North Carolina. By creating zoning policies that are cognizant of water flowing through the county Scotland can have a positive impact on the entire region.	N/A
Consistent with existing plans (describe points of intersection/departure)	To accomplish this project Scotland County will perform a gap analysis of the county's current policies and best practices related to stormwater management. This will inform future zoning decisions.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Protecting the quality of North Carolina's coastal water sources will contribute to prolonged enjoyment of the coastline which is a major tourism attraction for out-of-state visitors. If the coast continues to attract tourists the communities that they travel through will also continue to experience economic boosts. This strategy ultimately supports the economic development of Scotland County by ensuring that a tourist site with statewide impacts is maintained.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	Yes	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	High confidence	N/A
What impact will this action have on the local economy/tax base?	Unknown	N/A
What impacts to the environment of the county will result from this project?	Even though Scotland County is an inland county smaller creeks rivers or streams eventually feed out to the coast.	N/A

	Improving the state's coastal water quality will provide environmental benefit to the county as a result.	
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$0- \$50K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Unknown	N/A
Who will administer this project?	County	N/A

Low Priority Environmental Strategies

Pillar	Action Name	Priority	Overall Ranking
Environment	Perform Studies of Vacant and Contaminated Areas in Scotland County to Determine Whether and Where Future Land-Use will be Safe, and When	Low	12

Table 16. Scotland Low Priority Environmental Summary

The following project represents the environmental strategy that Scotland County indicated is of a lower priority to address. Additional detail can be found below:

- Perform Studies of Vacant and Contaminated Areas in Scotland County to Determine Whether and Where Future Land-Use will be Safe, and When:** This project seeks to maximize Scotland County's land use and ensure the safety of its residents, additional research must be conducted to determine if this land will be usable in the future, if it is already being used, and what can be done, if anything, to facilitate this process. Scotland County should expand on its involvement in the North Carolina Brownfields Program (NCBP) by forming its own brownfield development strategy to bring underutilized land back to productive use across the county.

Perform Studies of Vacant and Contaminated Areas in Scotland County to Determine Whether and Where Future Land-Use will be Safe, and When

County: Scotland

Priority Grouping:

Priority Ranking: 0

Project Timeframe: 5 to 10 years

Location: Specific Sites in Scotland County

Project Summary: To maximize Scotland County's land use and ensure the safety of its residents, additional research must be conducted to determine if this land will be usable in the future, if it is already being used, and what can be done, if anything, to facilitate this process. Scotland County should expand on its involvement in the North Carolina Brownfields Program (NCBP) by forming its own brownfield development strategy to bring underutilized land back to productive use across the county.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Stormwater can interact with contaminated land and carry hazardous material beyond the boundaries of EPA designated sites in the county. Additionally opportunities for future development will benefit the economy and make the county more resilient to disasters through additional funds.	N/A
Consistent with existing plans (describe points of intersection/departure)	The empty space could be used to support any number of the resilient redevelopment strategies described in the plan.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Scotland County is experiencing a shortage of buildable taxable land. It is therefore beneficial for the county to develop strategies to maximize the use of available land and plan for future development if these brownfields will become usable again.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	Unknown	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	High confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	Brownfields are any land that has been contaminated by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Superfund sites are polluted locations that require a longer-term response to clean up hazardous material. Addressing these EPA designated contaminated sites will benefit the local environment.	N/A

What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	\$51K - \$100K	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Unknown	N/A
Who will administer this project?	County	N/A

Summary

Implementation has already begun for some of these actions but for those that have not already been funded, the State of North Carolina will begin a process of prioritizing the actions and seeking to match a funding stream to each action. Those that are not matched with a funding source will be added to the State's Unmet Needs Report. Funding for Unmet Needs will be sought through additional funding from Congress and from the North Carolina General Assembly. Any action that cannot be matched to a funding source should be incorporated into the County's Hazard Mitigation Plan for consideration for future funding. It is important to seek to implement as many of these actions as feasible. Doing so will significantly contribute to helping improve the resiliency of North Carolina's communities.