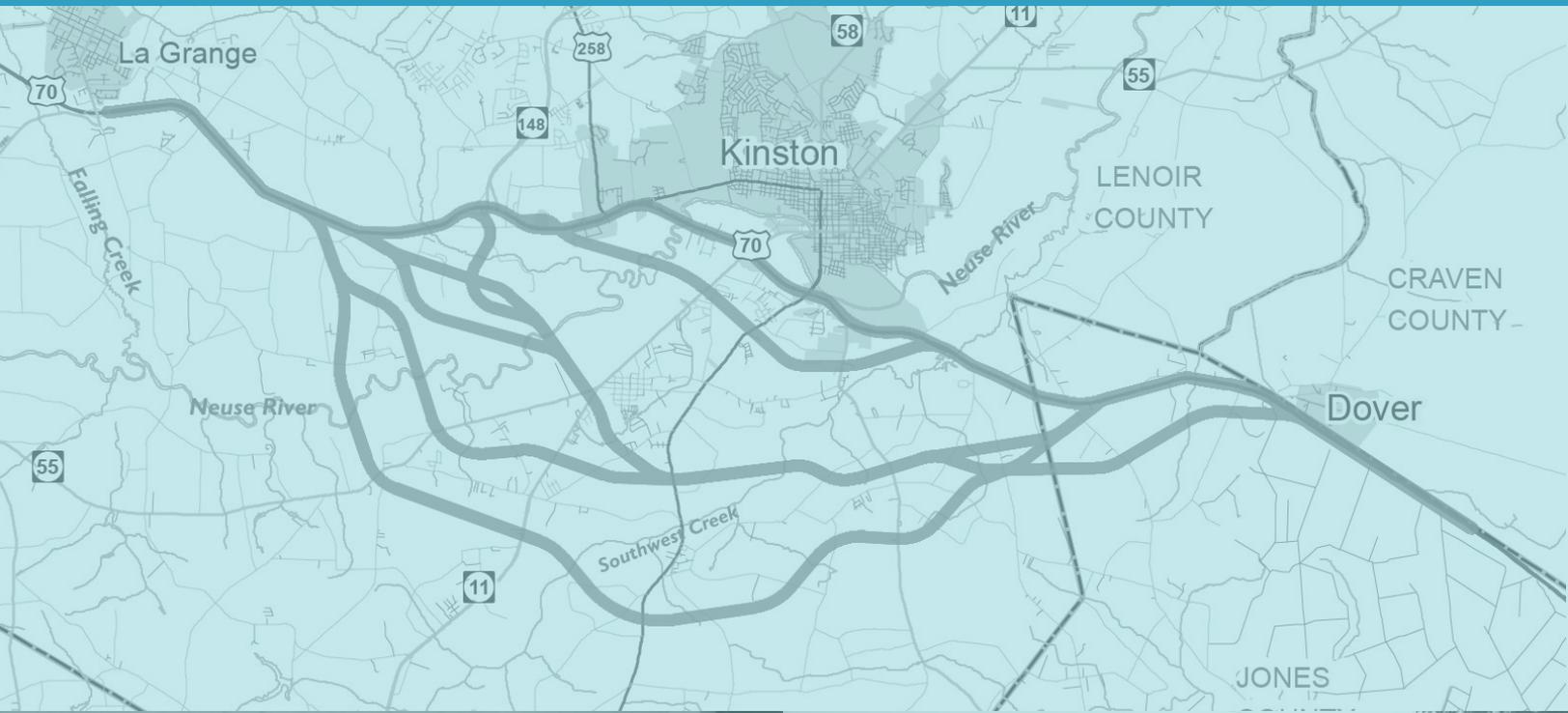


KINSTON BYPASS



STIP Project Number R—2553

Community Impact Assessment



North Carolina Department of Transportation

September 2018
(Updated July 2019)





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Acronyms and Abbreviations

ACS	American Community Survey
BG	Block group
CAMA	Coastal Area Management Act
CBD	Central Business District
CFR	Code of Federal Regulations
CT	Census tract
CTP	Comprehensive Transportation Plan
dB(A)	A-weighted decibel
DCIA	Direct community impact area
DSA	Demographic study area
EIA	Economic Impact Assessment
EJ	Environmental justice
EMS	Emergency management services
ETJ	Extraterritorial jurisdiction
EVAD	Enhanced Voluntary Agricultural District
FHWA	Federal Highway Administration
FLUSA	Future Land Use Assessment
FPPA	Farmland Protection Policy Act
GIS	Geographic information system
GTP	Global TransPark
HUD	Housing and Urban Development
LCC	Lenoir Community College
LEP	Limited English proficiency
mph	miles per hour
NAC	Noise abatement criteria
NC	North Carolina
NCDOT	North Carolina Department of Transportation
NDPD	National Housing Preservation Database
NRCS	Natural Resources Conservation Service
PIN	Parcel identification number
PIP	Public Involvement Plan
SB	Shallow Bypass
STIP	State Transportation Improvement Program
UE	Upgrade Existing
US	United States
USDA	United States Department of Agriculture
VAD	Voluntary Agricultural District
WS IV-CA	Critical areas
WS IV-PA	Protected areas



EXECUTIVE SUMMARY

Planner, firm: AECOM	Division: 2	Existing No. of Lanes: 4	Existing Median: Variable
NCDOT Project Manager: Maria Rogerson	WBS:	Proposed No. of Lanes: 4	Addition of Median(s): Yes
Document Type: National Environmental Policy Act, Environmental Impact Statement	Existing Control of Access: No Control -X Partial Control Limited Control	Proposed Control of Access: No Control Partial Control Limited Control	
CS Project Reviewer:	Full Control	Full Control - X	

Project Description:

The North Carolina Department of Transportation (NCDOT) is proposing State Transportation Improvement (STIP) project R-2553, termed the Kinston Bypass, that is currently planned as a four-lane, median-divided freeway with full control of access on new location in Lenoir, Jones, and Craven counties, North Carolina. The proposed design speed of the project is 70 miles per hour. The project extends from United States (US) 70 near La Grange (in Lenoir County) to US 70 near Dover (on the Jones and Craven county line). Twelve build alternatives are being evaluated, including an upgrade existing (UE) US 70 alternative, an alternative that includes upgrading a portion of existing US 70 and a shallow bypass (SB), and ten new location alternatives south of existing US 70. The alternatives vary in length from approximately 20 to 24 miles long.

NOTABLE CHARACTERISTICS

- Notable human environmental features in the direct community impact area (DCIA) include the Wyse Fork Battlefield, the Federal Emergency Management Agency’s Hazard Mitigation Grant Program properties, and multiple community facilities, churches, businesses, and schools. The DCIA is defined in section 1.6.
- Agricultural land uses, including both crop fields and livestock, are the most dominant land use type throughout the DCIA.
- Several voluntary agricultural district (VAD) properties are located in Lenoir County, and one is within the DCIA.
- Between 2000 and 2010, the population of Lenoir County has remained static, and in 2016 the North Carolina Office of State Budget Management showed an estimated population of 57,587, which is a decline from 59,488 in 2010. Population growth is projected to remain stagnant for the next two decades.

- Kinston uses a Unified Development Ordinance as its basis for land development. This ordinance applies to areas within the municipal limits of Kinston and within Kinston’s extraterritorial jurisdiction.
- The project is discussed in the transportation section of the *Lenoir County Future Land Use Plan* (Lenoir County 2001), which states that the project was listed as a priority by the community residents, and is identified as a project recommendation in the *Kinston Comprehensive Transportation Plan* (CTP) (NCDOT 2011), listed as 2011–2016 STIP number R-5353.
- Kinston completed a Comprehensive Pedestrian Plan in February 2008. The plan recommends a pedestrian bridge over the Neuse River, implementing safety measures throughout the city, and developing a Safe Routes to School Program. Limited pedestrian activity was observed in the DCIA outside of Kinston during site visits. Most of the pedestrian activity was observed in downtown Kinston on Queen Street. A limited number of pedestrian facilities exist within the DCIA, given the rural context.
- Neither Kinston nor Lenoir County has a bicycle plan in place. There are, however, six designated Lenoir County bicycle routes along the more lightly-traveled and scenic roads in central Lenoir County and Kinston, as provided in the Kinston CTP map of bicycle routes. None of the routes have dedicated bicycle lanes and the extent to which they are used is unknown.
- During the small group meetings held during the preparation of this Community Impact Assessment, many of the residents voiced concerns about some of the study alternatives that may have the potential to affect flooding, divide communities, or directly impact community features such as existing businesses along existing US 70, cultural resources, churches, community stores, etc. Residents were also concerned about impacts to farms and farming operations that had been in some families for over 100 years.
- The minority population of the demographic study area (DSA) constitutes 34.1 percent, in Kinston 72.1 percent, and in Lenoir County 49.5 percent. Within the DSA, two block groups (BG) have minority populations greater than 50 percent. CT 103, BG 1 is located in Kinston, just south of downtown, while CT 107, BG 1 is also located in Kinston but to the west of downtown. Notably adverse community impacts are anticipated with this project but appear to affect all populations equivalently; thus, impacts to minority and low-income populations do not appear to be disproportionately high and adverse. No disparate impacts are anticipated under Title VI and related statutes.
- Within the DSA, 5.9 percent of the population is Hispanic. The greatest concentration of Hispanic populations is within Lenoir County in BGs surrounding NC 11 and NC 55. The BGs of these Hispanic populations include CT 113, BG 1 (19.5 percent Hispanic), CT 113, BG 2 (22.2 percent Hispanic), and CT 113, BG 3 (12.5 percent Hispanic).
- Census data do not indicate limited English proficiency (LEP) populations meeting the US Department of Justice LEP Safe Harbor threshold, but do indicate a Spanish-speaking population exceeding 50 persons within the DSA that may require language assistance. Specific outreach included 125 bilingual (English/Spanish) two-sided postcard invitations for small group meetings hand-delivered to six manufactured home communities where lower income families, recent arrivals, new tenants, and people with LEP were likely to reside.

SUMMARY OF IMPACTS

- State or national parks or forests do not exist in the DCIA. Kinston Rotary Dog Park would be directly impacted by a proposed interchange at NC 11/55 and upgraded US 70 under Alternative 1. The Governor Richard Caswell Memorial Park is also located near the Upgrade Existing US 70 Alternative (Alternative 1) and changes in access (temporary or permanent) are possible.
- In Lenoir County, one VAD, comprised of two parcels, is located within the DCIA boundary of alternatives 35 and 36 along Black Harper Road. This VAD may be impacted by right-of-way acquisition, and land within the VAD may be temporarily converted to non-agricultural use as part of a temporary construction easement.
- The project would result in displacements and right-of-way encroachment impacts for alternatives, especially Alternative 1UE, Upgrade Existing US 70, and 1SB, the Shallow Bypass Alternative. Within the project DCIA, Alternative 1UE would have the highest number of business relocations (133), followed by Alternative 1SB (64), while all others would have far fewer business relocations. Alternative 1SB would have the most residential relocations (156), followed by Alternative 35 (130) and Alternative 1UE (125). Alternatives 1UE and 1SB would have 274 and 507 impacts to utilities and miscellaneous physical building impacts, respectively, compared with all other alternatives that would have between 6 and 98 impacts to utilities and miscellaneous physical building impacts.
- Given that the project would be a full control of access freeway, there would be no bicycle or pedestrian accommodations on the actual roadway. No bicycle or pedestrian accommodations have been considered at this stage of design. In the final project design, it is likely bicycle and pedestrian facilities will be provided on the Y-lines and side streets that cross (either grade separated over or under the preferred controlled access freeway alternative).
- The project is expected to influence future land use by altering access to properties and influencing the location of new development that is primarily expected to occur near proposed interchanges. The *Land Use Scenario Assessment* reports that the majority of future development is expected to occur with or without the project primarily at proposed interchange locations that are served by sewer. The project would result in changes to property access. However, given that the project will be full control of access, increases in access would be greatest at new transportation nodes where the project intersects existing roadways.
- As a new location project, the project would alter access to communities in some cases. Communities in the project study area would benefit from the project through its enhancement of the existing transportation network by improving regional connectivity and east-west mobility within the region.
- All alternatives would have impacts to some neighborhoods and communities. Impacts range from minor right-of-way encroachments on properties, acting as a barrier, and in direct acquisitions of parts of neighborhoods, businesses, and communities. All alternatives would result in access changes to some existing neighborhoods.



- The project has the potential to have an impact on areas of community cohesion in or near the DCIA. Potential impacts of the project would stem from the creation of a new barrier and/or the displacement of community facilities, gathering spots and dislocations.
- Current designs show that one mobile home community located on Carrie Hill Drive and Howard Place Drive would be directly impacted by alternatives 35 and 36. Outreach was conducted to this community with hand-delivered bilingual (English/Spanish) two-sided postcard invitations for the small group meetings. The small group meetings were held on Sep 26 and 28, 2017.
- The proposed project would impact the Wyse Fork Volunteer Fire Department. The project may temporarily impact response times of several emergency management services and fire facilities located within the DCIA during construction.
- Benefits of the project, including improved safety and mobility, would be enjoyed by both regional travelers and local residents, including minority and low-income residents.



I. PROJECT DESCRIPTION

The North Carolina Department of Transportation (NCDOT) is proposing a four-lane, median-divided freeway with full control of access in Lenoir, Jones, and Craven counties in North Carolina. This roadway is being proposed as a principal arterial. The project extends from United States (US) 70, a designated principal arterial, near La Grange (in Lenoir County) to US 70 near Dover (on the Jones and Craven county line). The project location is shown on Figure 1-1. Other highways that are within the project vicinity include US 70 Business, US 258, North Carolina (NC) 11, NC 55, NC 58, and NC 148 (C.F. Harvey Parkway).

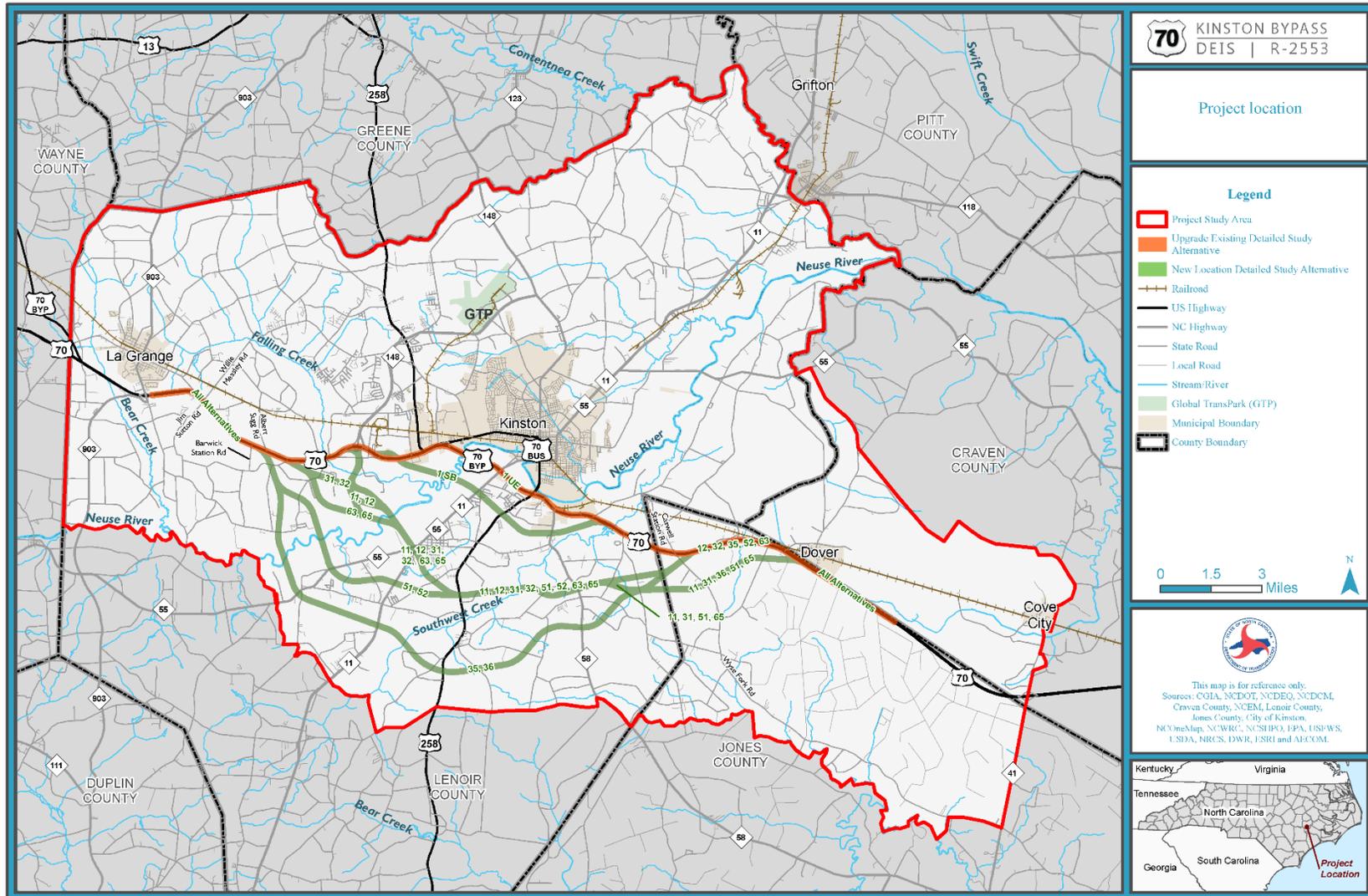
The project has a design speed of 70 miles per hour (mph), and would upgrade existing US 70 or bypass Kinston from La Grange to Dover. The lengths of alternatives vary from 20 to 24 miles long. The proposed action is listed in the 2018-2027 State Transportation Improvement Program (STIP) as Project Number R-2553, and is funded for \$379 million.

I.1 PROJECT PURPOSE AND NEED

The purpose of the project is to improve regional mobility, connectivity, and capacity for US 70 between La Grange and Dover in a manner that meets the intent of the North Carolina Strategic Transportation Corridors Policy. The primary need for the project is to address traffic congestion, capacity deficiencies, and through-traffic delays on US 70 between La Grange and Dover. US 70, designated as a Strategic Transportation Corridor (which runs from Raleigh to Morehead City), is part of the North Carolina Intrastate System. The Strategic Transportation Corridors Map designates this portion of US 70 as a freeway. Other projects planned along the US 70 corridor that support this vision include US 70 Goldsboro Bypass and US 70 Havelock Bypass.

In addition to addressing the primary need, additional benefits of the proposed action include improving the mobility of armed forces at Seymour Johnson Air Force Base and Cherry Point Marine Corps Air Station and reducing clearance time during hurricane evacuations for residents and visitors that use the US 70 Corridor during evacuations.

Figure I-1: Project location





An Economic Impact Assessment (EIA) Report prepared for the Kinston Bypass project anticipates that project-related benefits would at least maintain and likely improve Lenoir County's business competitiveness and business development potential (NCDOT 2018). Population growth, employment growth, educational attainment, and income all lag below the state averages. Over the next twenty years, negligible changes in Lenoir County's population are projected to occur as reported in in the 2018 EIA.

The 2018 EIA findings indicate that the project's potential retail sales shifts are relatively minor and could readily be offset with other new business growth by successful marketing, planning, and other development efforts. In addition, the build alternatives may be expected to facilitate such business growth and/or business retention. Furthermore, the 2018 EIA conservatively assumes that under the 2040 No Build baseline conditions, future retail business growth would not be negatively impacted despite its projected worsening future travel conditions.

1.2 EXISTING ROADWAY CONDITIONS

The existing primary US and NC routes in or around the project study area are shown on Figure 1-1, are as follows:

US 70/US 70 Bypass/US 70 Business

US 70 is a major east-west route that extends from Atlantic Beach, North Carolina, to Globe, Arizona. US 70 is one of the primary east-west corridors in this region, connecting eastern North Carolina to I-795, I-95, and I-40. US 70 traverses Lenoir County from west to east through the middle of the project study area and continues through Jones and Craven counties at the eastern edge of the project study area.

West of Kinston, US 70 splits into US 70 Business and US 70 Bypass just east of its intersection with US 258. US 70 Business (West Vernon Avenue) continues east into the Kinston central business district (CBD), turning south along South Queen Street, and crossing over the Neuse River before merging back with US 70 Bypass south of Kinston.

US 70 Bypass veers to the southeast after splitting from US 70 Business, crossing over the Neuse River and NC 11/NC 55 southwest of Kinston before merging back with US 70 Business south of Kinston.

US 258/US 258 Business

US 258 is a north-south route that runs from Fort Monroe, Virginia, to Jacksonville, North Carolina. Both termini are located near or on military installations. US 258 provides regional connections to Jacksonville to the south, and Snow Hill, Farmville, and Tarboro, North Carolina, to the north. US 258 Business runs concurrent with US 70 Business through downtown Kinston.

NC 903

NC 903 is a north-south route that extends from the Virginia state line at Lake Gaston in Warren County, North Carolina, to NC 411 east of Garland, North Carolina. NC 903 runs south to north through the western part of the study area intersecting US 70 with a diamond interchange south of La Grange, North Carolina.



NC 11

NC 11 is a north-south route that extends from Murfreesboro, North Carolina, to US 74/76 near Freeman, North Carolina. NC 11 runs from the southwest to the northeast through the project study area and runs through Kinston concurrent with NC 55. NC 11/NC 55 crosses US 70 Bypass southwest of Kinston and US 70 Business/US 258 Business in Kinston. NC 11 connects Kinston with Greenville to the north and is a major route for travelers going south towards Wilmington from the Greenville area as it connects to I-40 near Wallace, North Carolina.

NC 55

NC 55 is an east-west route that extends from I-85 in Durham, North Carolina, to Oriental, North Carolina. NC 55 runs from the southwest to the northeast through the project study area and runs concurrent with NC 11 through Kinston.

NC 58

NC 58 is a north-south route that extends from Warrenton, North Carolina, near I-85, crossing I-95 north of Wilson, continuing through the Croatan National Forest in Jones and Craven counties, terminating at the entrance to Fort Macon State Park on Bogue Island in Carteret County, North Carolina. NC 58 traverses north-south through the middle of the project study area and runs through the Kinston CBD concurrent with US 70 Business and US 258 Business as North and South Queen Street.

NC 41

NC 41 forms part of the eastern edge of the project study area. NC 41 is a north-south route that begins at the diamond interchange with US 70 just south of Cove City in Craven County. From US 70, NC 41 runs south and connects with NC 58 at Trenton in Jones County. NC 41 then runs southwest through Lumberton, North Carolina, into South Carolina where it continues as SC 41 until it terminates at US 17 near Charleston, South Carolina.

NC 148

NC 148 is an east-west route that extends from NC 58 in Lenoir County to US 258 in Lenoir County. Locally it is known as the C.F. Harvey Parkway and provides access to Global TransPark (GTP).

I.3 PROPOSED MODIFICATIONS

Twelve detailed study alternatives (alternatives) are currently being evaluated for the proposed Kinston Bypass. Each design option is a four-lane, median-divided freeway that would accommodate speeds of 70 mph and have full control of access, meaning access to the roadway would be allowed only at interchanges. As shown on Figure 1-2, the 12 alternatives are comprised of upgrade existing roadway and/or new location corridor segments with connector segments that run between the corridors.

The 12 alternatives include the following:

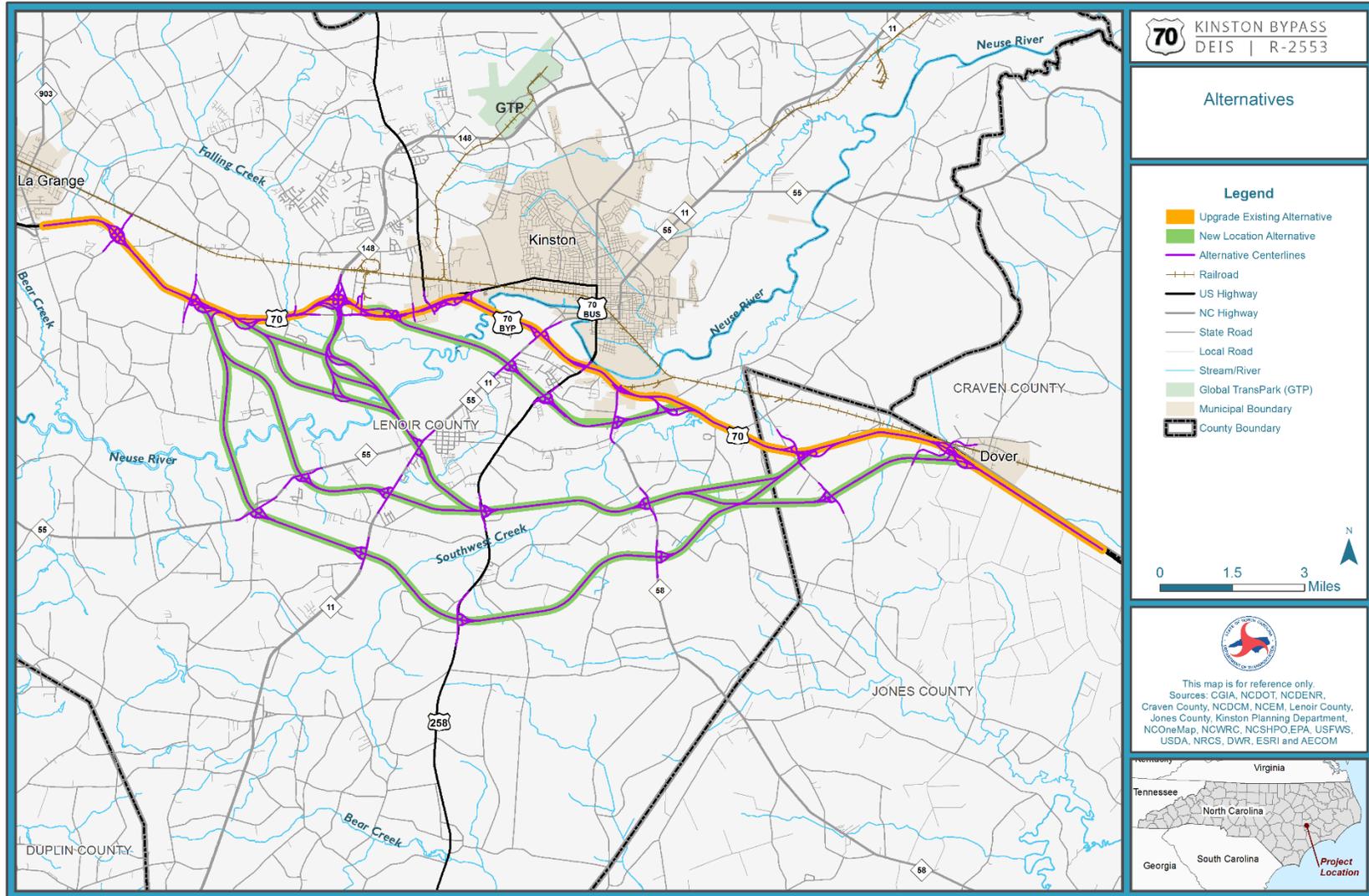
- Upgrade Existing US 70 (Alternative 1UE)
- Upgrade Existing US 70 with Shallow Bypass (Alternative 1SB)



- Ten new location alternatives south of existing US 70 (alternatives 11, 12, 31, 32, 63, 65, 51, 52, 35, and 36)



Figure I-2: Alternatives



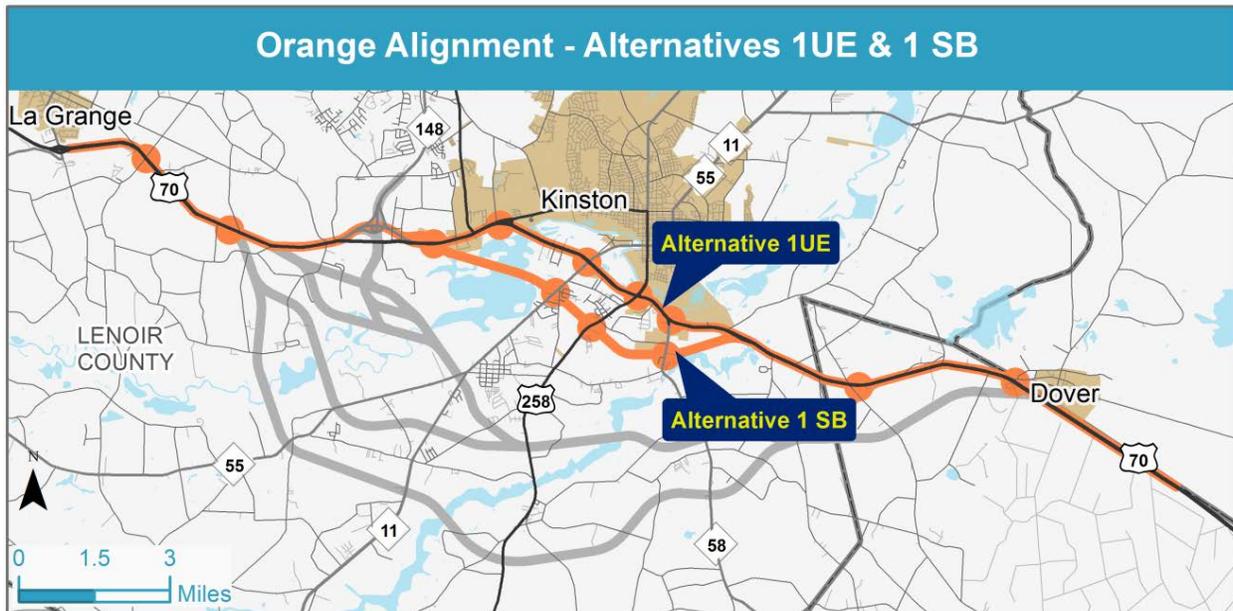


These alternatives were selected for their potential to fulfill the purpose of the project while minimizing impacts to human and natural environment resources. Designs for major project elements, including the location of interchanges with highways and other major roadways, have been completed. Design criteria developed for the study alternatives are shown in Table 1-1.

Table 1-1: Build alternative design criteria

Factor	Classification
Facility Type/Functional Classification	Freeway
Terrain Type	Level
Design Speed	70 mph
Posted Speed	65 mph
Right-of-Way Width	Varies 250 feet to 300 feet
Control of Access	Full
Rumble Strips (Y/N)	N
Ultimate Typical Section Type	4-Lane Divided with Shoulder
Lane Width	12 feet
Sidewalks (Y/N)	N
Bicycle Lanes (Y/N)	N
Median Width	46 feet
Shoulder Width	10 feet
Horizontal Alignment	8%
Cross Slopes	2.5%

1.3.1 Alternatives 1UE (Upgrade Existing US 70) and 1SB (Shallow Bypass)



Alternative 1UE (Upgrade Existing US 70) and Alternative 1SB (Shallow Bypass) would begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange. Alternative 1UE would follow existing US 70 for approximately 21 miles from the NC 903/US 70 interchange south of La Grange to the project terminus east of Dover and would upgrade the existing US 70 to a full control-of-access highway. Interchanges would provide access to other major roads and would be located along upgraded US 70 at the following points:

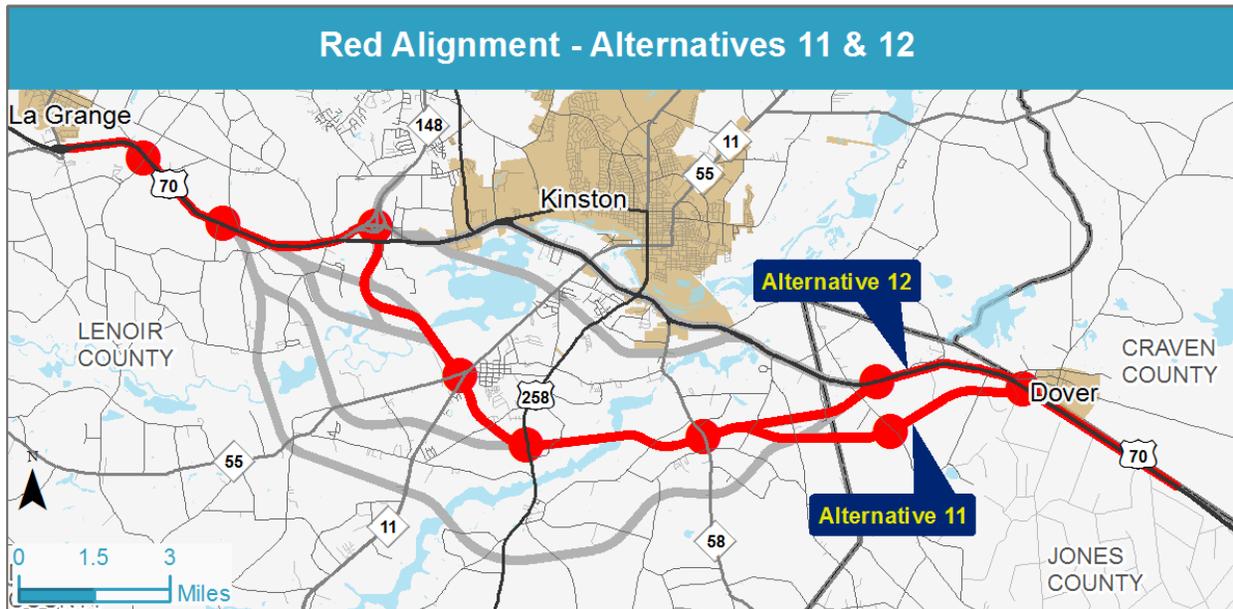
- Willie Measley Road/Jim Sutton Road
- Albert Sugg Road/Barwick Station Road
- NC 148 (C.F. Harvey Parkway)
- US 258
- US 258/US 70 Business (West Vernon Avenue)
- NC 11/NC 55
- US 258 (South Queen Street)
- NC 58 (Trenton Highway)
- Wyse Fork Road (SR 1002)/Caswell Station Road (SR 1309)
- Old US 70 (West Kornegay Street)

Alternative 1SB would also begin at the NC 903/US 70 interchange in La Grange and would follow existing US 70 for approximately 7 miles to just east of NC 148 (C.F. Harvey Parkway). Interchanges would be located at Willie Measley Road/Jim Sutton Road, Albert Sugg Road/Barwick Station Road, and NC 148. A new interchange east of NC 148 would provide access to the Shallow Bypass section of Alternative 1SB, which would parallel existing US 70 to



the south on new location for approximately 6.5 miles. Interchanges along the new location Shallow Bypass would be located at NC 11/NC 55, US 258 (South Queen Street), and NC 58 (Trenton Highway). A new interchange east of Lenoir Community College (LCC) would connect the Shallow Bypass back to existing US 70. Alternative 1SB would follow existing US 70 from this interchange east to the project terminus east of Dover and would upgrade existing US 70 to a full control of access highway with interchanges at Wyse Fork Road (SR 1002)/Caswell Station Road (SR 1309) and Old US 70 (West Kornegay Street). Alternative 1SB is 21.1 miles in length.

I.3.2 Alternatives 11 and 12

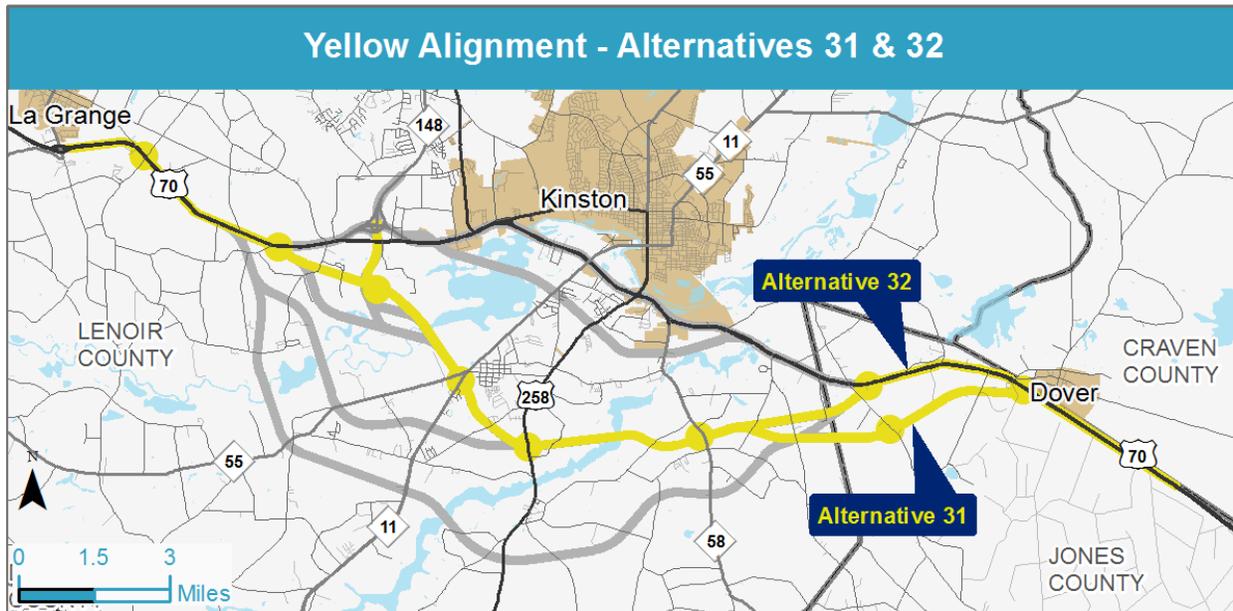


Alternatives 11 and 12 begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange and follow existing US 70 for approximately 7 miles to the NC 148/US 70 interchange. Interchanges would be located at Willie Measley Road/Jim Sutton Road, Albert Sugg Road/Barwick Station Road, and NC 148. At NC 148, both alternatives turn south and then east on new location for approximately 9.5 miles with interchanges at NC 11/NC 55, US 258, and NC 58. The alternatives cross NC 58 just south of Southwood Elementary School before diverging east of NC 58.

Alternative 11 continues eastward on new location with an interchange at Wyse Fork Road (SR 1002), approximately 1.25 miles south of existing US 70, before interchanging with existing US 70 near Old US 70 just west of Dover. Alternative 11 would include upgrades to existing US 70 between this interchange and the project terminus east of Dover. Alternative 11 is 23.2 miles in length.

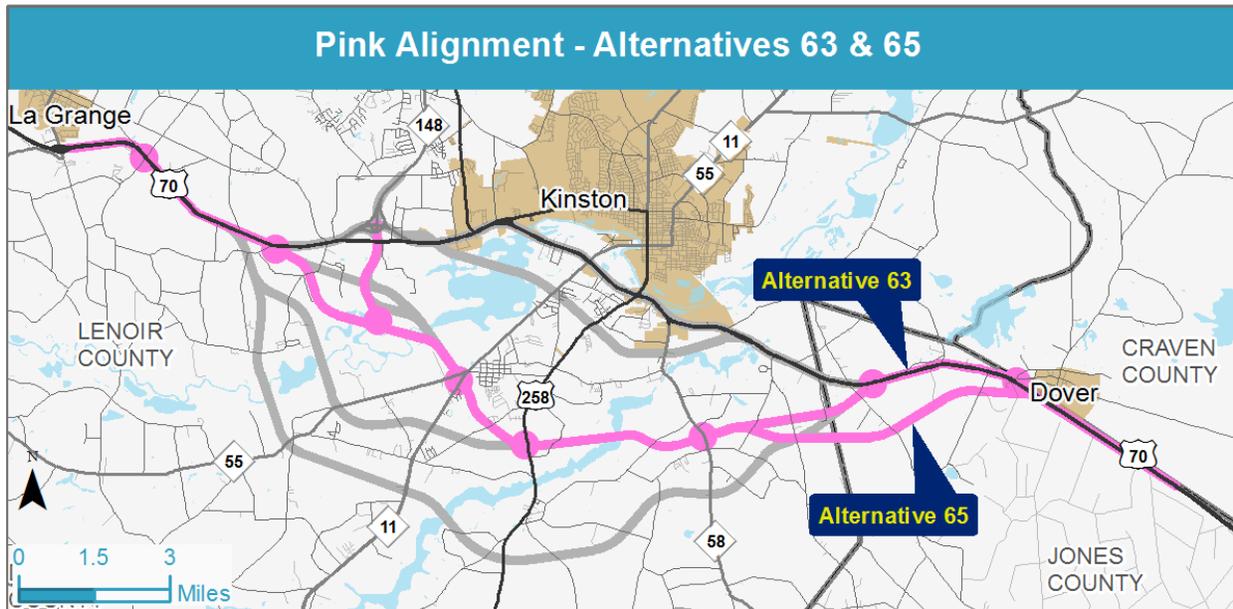
Alternative 12 would turn back to the north to interchange with existing US 70 just east of the Lenoir/Jones county line at Wyse Fork Road (SR 1002) and would upgrade existing US 70 to the project terminus east of Dover with an interchange at Old US 70 (West Kornegay Street). Alternative 12 is 23.4 miles in length.

I.3.3 Alternatives 31 and 32



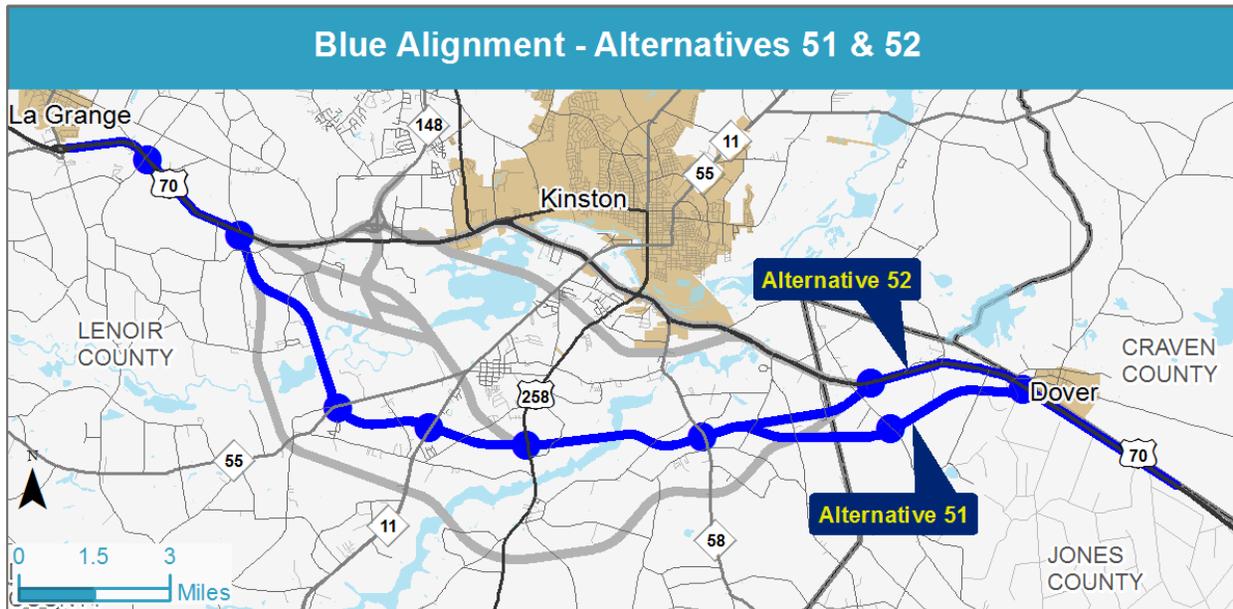
Alternatives 31 and 32 begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange and follow existing US 70 for approximately 4.5 miles, with an interchange at Willie Measley Road/Jim Sutton Road, to near where Harold Sutton Road intersects with existing US 70. At this point, a new interchange would provide access to the new location alternatives, which would travel southeast on new location. A new connector approximately 1.5 miles long would connect north to the US 70/NC 148 interchange. From the Neuse River crossing to US 58, alternatives 31 and 32 are the same as alternatives 11 and 12, including interchanges at NC 11/NC 55, US 258, and NC 58. East of NC 58, Alternative 31 is the same as Alternative 11, and Alternative 32 is the same as Alternative 12. Alternative 31 is 22 miles in length. Alternative 32 is 22.1 miles in length.

I.3.4 Alternatives 63 and 65



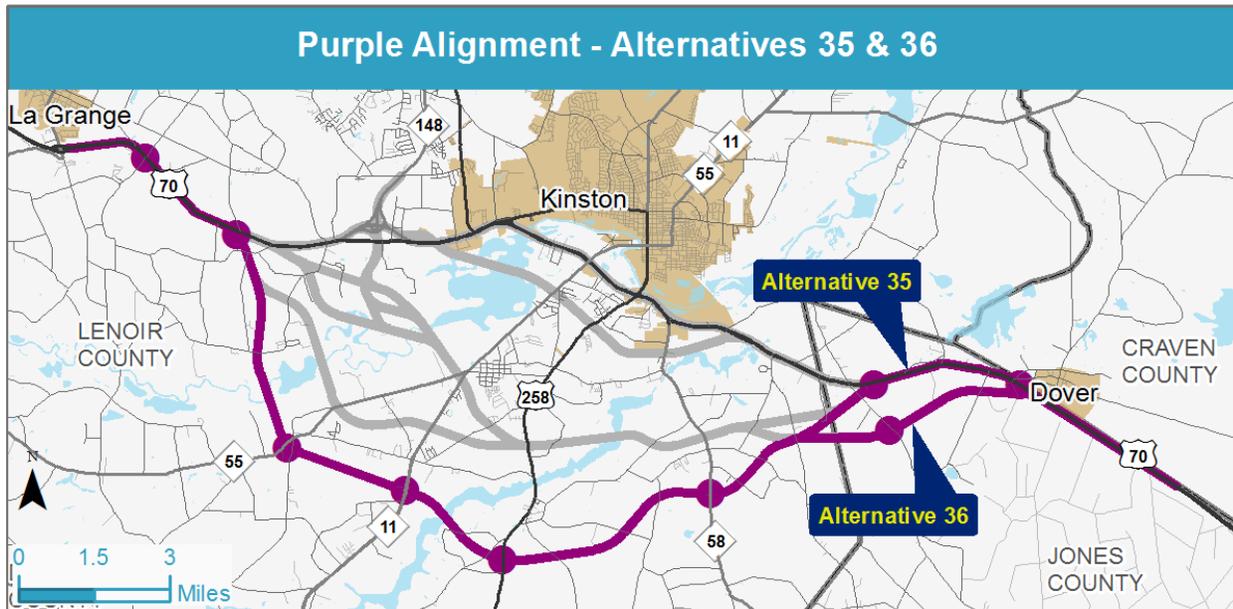
Alternatives 63 and 65 begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange and follow existing US 70 for approximately 4.5 miles, with an interchange at Willie Measley Road/Jim Sutton Road, to near where Harold Sutton Road intersects with existing US 70. At this point, a new interchange would provide access to the new location alternatives, which would travel south and then east on new location. A new connector approximately 2 miles long would connect north to the US 70/NC 148 interchange. From east of the Neuse River crossing, Alternative 63 is the same as alternatives 12 and 32, and Alternative 65 is the same as alternatives 11 and 31. Alternative 63 is 22.2 miles in length. Alternative 65 is 22.1 miles in length.

I.3.5 Alternatives 51 and 52



Alternatives 51 and 52 begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange and follow existing US 70 for approximately 2.25 miles, with an interchange at Willie Measley Road/Jim Sutton Road, to Albert Sugg Road. A new interchange here would allow both alternatives to diverge onto new location and travel to the south. Interchanges would be located at NC 55 (about 2.75 miles west of the split with NC 11), NC 11 (about 1.5 miles south of the split with NC 55), and US 258. East of US 258, Alternative 51 is the same as alternatives 11, 31, and 65, and Alternative 52 is the same as alternatives 12, 32, and 63. Alternative 51 is 22.6 miles in length. Alternative 52 is 22.7 miles in length.

I.3.6 Alternatives 35 and 36



Alternatives 35 and 36 begin at the western terminus of the project at the NC 903/US 70 interchange south of La Grange and follow existing US 70 for approximately 2.25 miles, with an interchange at Willie Measley Road/Jim Sutton Road, to Albert Sugg Road. A new interchange here would allow both alternatives to diverge onto new location and travel to the south. Interchanges would be located at NC 55 (about 4 miles west of the split with NC 11), NC 11 (about 2.75 miles south of the split with NC 55), US 258 (just north of Woodington Middle School), and NC 58 (just south of Southwood Road). The alternatives swing back to the north before diverging at Cobb Road. East of Cobb Road, Alternative 36 is the same as alternatives 11, 31, 65, and 51. Alternative 36 is 25.0 miles in length. Alternative 35 continues northeast on new location, and from Wyse Fork Road eastward is the same as alternatives 12, 32, 63, and 52. Alternative 35 is 25.3 miles in length.

I.4 METHODOLOGY

The purpose of this report is to update the *Screening Community Impact Assessment* (2013 CIA) prepared for this project in August 2013, and to assess potential community impacts that will assist project decision-making. Wherever possible, this report will update mapping of community attributes from the 2013 Screening CIA to assist in project decision-making. The content of this report includes the existing conditions and area trends in the vicinity of the proposed project. Analysis of project effects and relocations also included review of designs for major project elements, including the location of interchanges with highways and other major roadways, and the project cost estimate report, R-2553 US-70 Property Acquisition Cost Estimate. It also updates inventories of community resources, issues, and concerns that the project may affect or impact. The 2013 CIA Direct Community Study Area was revised to include only the current alternatives, since the northern alternatives were eliminated from further study. The report includes the most recent demographic data merged with data from local plans,

policies, maps, and regulations. It further includes observations from field visits and interviews with local planners in an effort to document resources and community visions, values, and goals.

I.5 PROJECT STUDY AREAS

In addition to the overall project study area (shown on Figure 1-1) that originally included both northern and southern alternatives, this report makes references to two community study areas, the demographic study area (DSA), and direct community impact area (DCIA), as described below and shown on Figure 1-3. The DSA and DCIA are determined based on census block groups (BG) surrounding the alternatives and 1,000 foot corridors surrounding the alternatives respectively. Therefore, the DSA and DCIA were both revised following the elimination of the northern alternatives for the proposed project.

I.5.1 Demographic Study Area

The DSA is defined to provide demographic characteristics for the census BGs surrounding the project. Census BGs are the smallest geographic area from the 2010 US Census and 2011-2015 American Community Survey (ACS), and provide demographic data for the populations and their attributes within the study area. The DSA is comprised of 16 BGs: 13 in Lenoir County, 1 in Jones County, and 2 in Craven County. The total number of census BGs in the DSA is fairly large and includes properties that may be far removed from the alternatives. The information obtained from the US Census may not reflect the exact character of the area surrounding the project but should provide accurate information on the area trends.

I.5.2 Direct Community Impact Area

The DCIA is the area surrounding the project that is likely to be directly affected in any way during, throughout, and after project construction. The DCIA was created by buffering the 12 alternatives by 1,000 feet, as shown on Figure 1-3. The DCIA extends into small portions of Jones and Craven counties. Parts of the DCIA are within the municipal boundary of the City of Kinston, which is both the county seat and the largest city in Lenoir County. The analysis in this report includes consideration of community facilities, community and natural features, and neighborhoods crossed by the DCIA.

I.5.3 Community Context Map

Community and natural features are mapped for the entire study area on Figure 1-4, the community characteristics map.

I.6 REGIONAL/COMMUNITY CONTEXT

Lenoir County is geographically situated in the center of the eastern Coastal Plain physiographic province of North Carolina. The dominant natural features are the Neuse River and its associated floodplains and wetland systems. Lenoir County has a rich agricultural history and much of the land outside of the urban area of the City of Kinston is farmed. Many of the farms have been in the same families for over 100 years, and the local residents have a strong sense of community.



In 1985 and 2009, Kinston was awarded the prestigious All-America City Award by the National Civic League, recognizing the city as a community whose citizenry works together to identify and tackle community-wide challenges and achieve uncommon results.



Figure I-3: Demographic study area

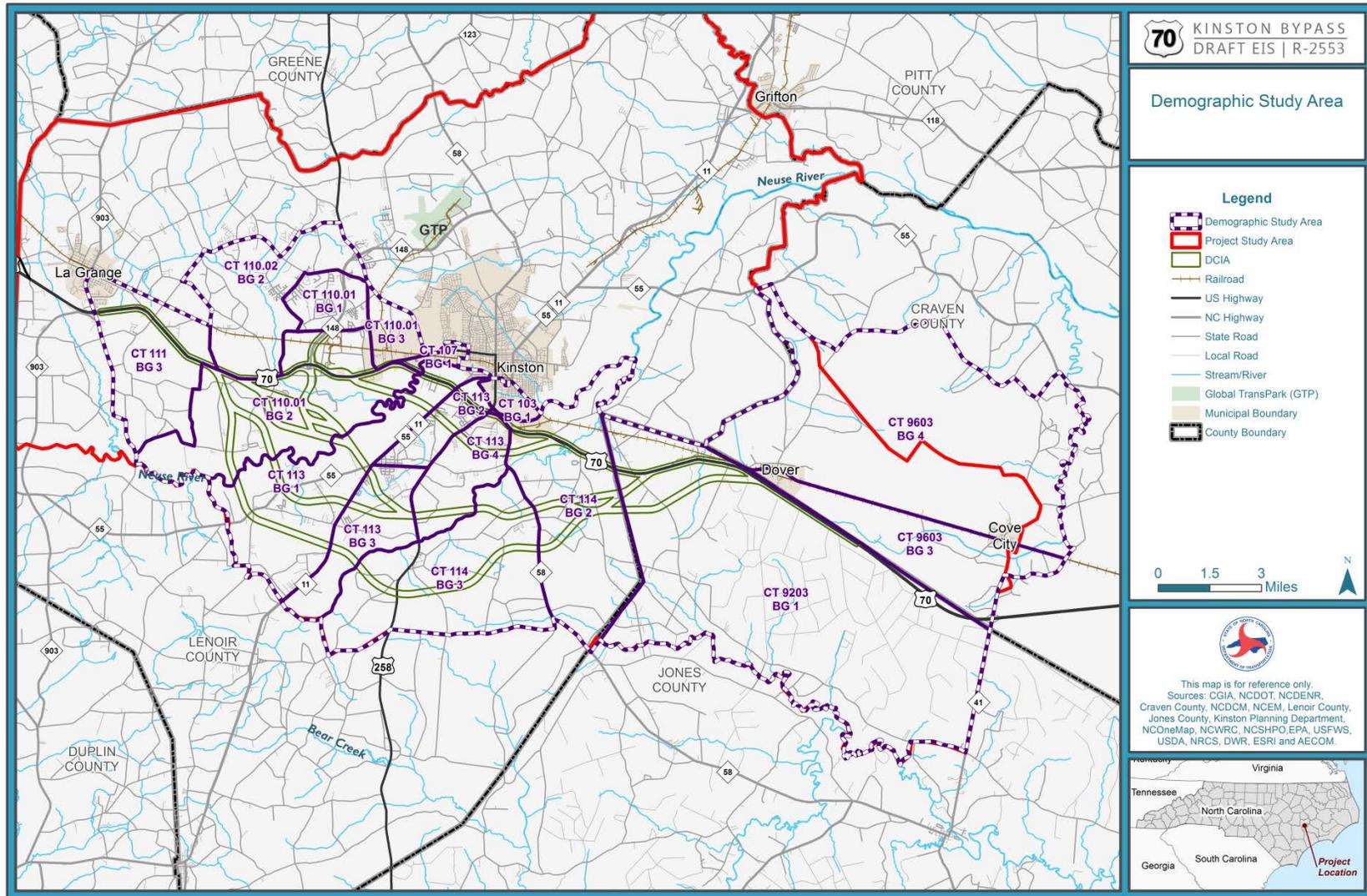
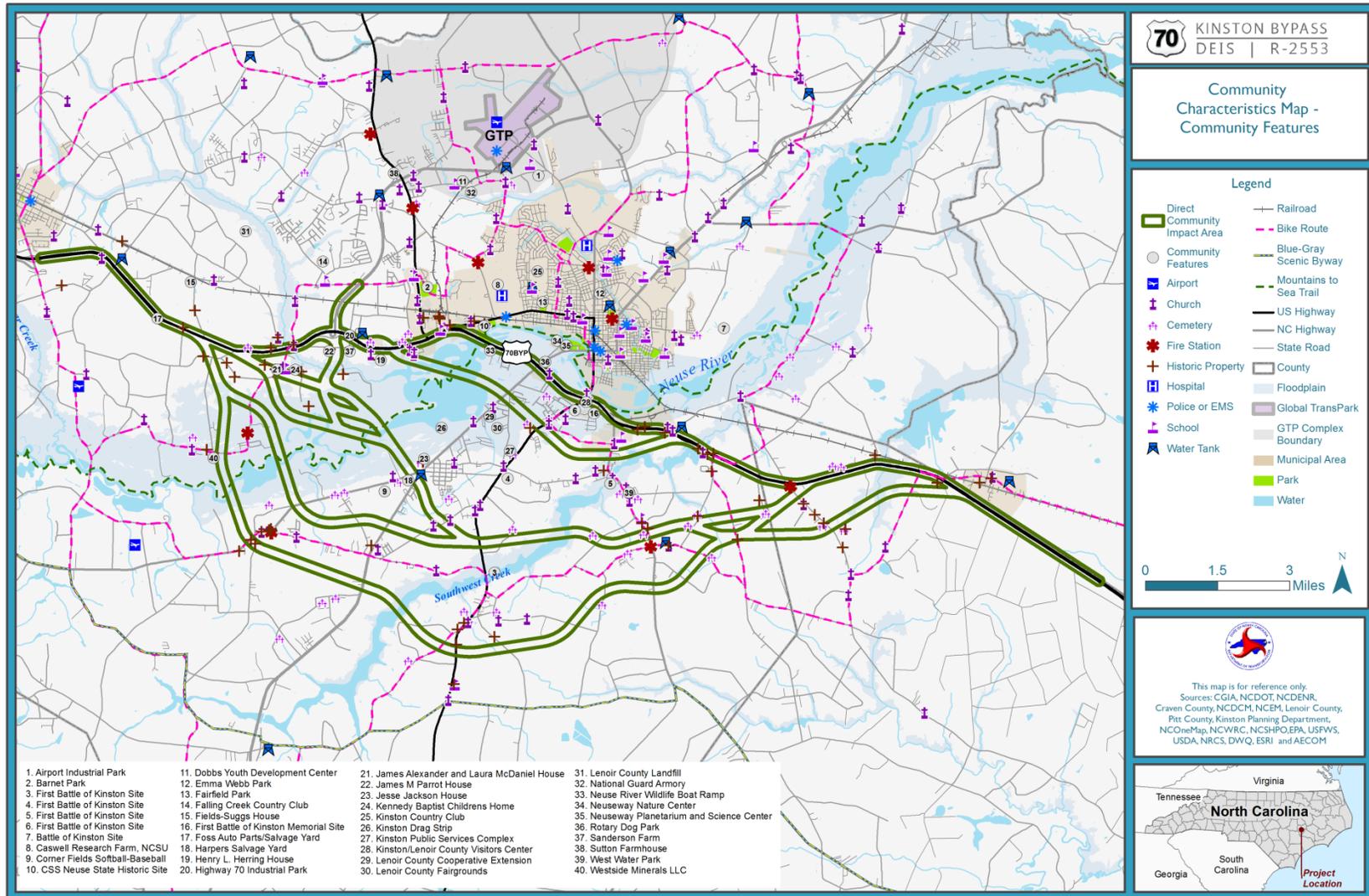
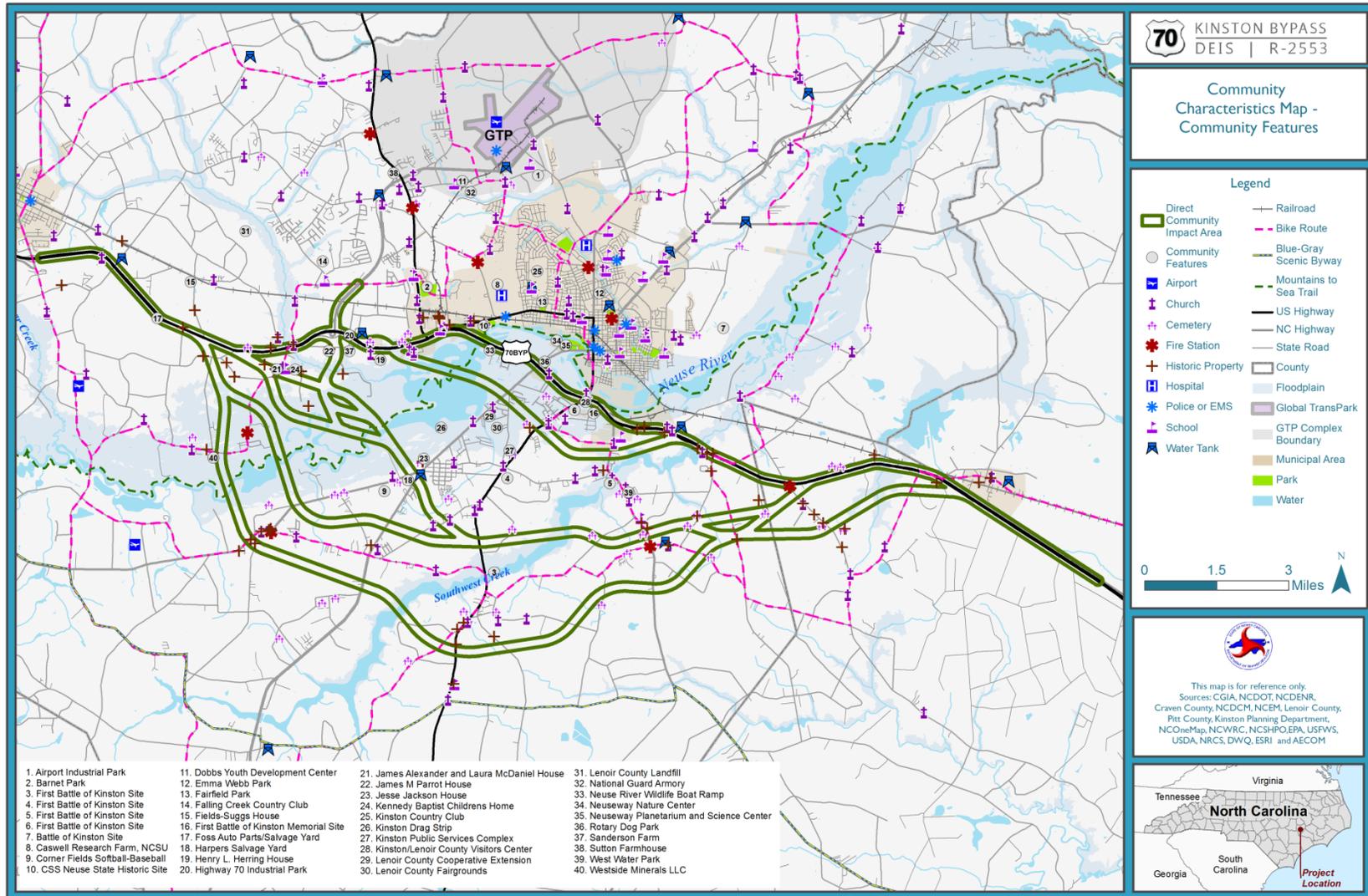


Figure I-4: Community characteristics map - west



1. Airport Industrial Park	11. Dobbs Youth Development Center	21. James Alexander and Laura McDaniel House	31. Lenoir County Landfill
2. Barnett Park	12. Emma Webb Park	22. James M Parrot House	32. National Guard Armory
3. First Battle of Kinston Site	13. Fairfield Park	23. Jesse Jackson House	33. Neuse River Wildlife Boat Ramp
4. First Battle of Kinston Site	14. Falling Creek Country Club	24. Kennedy Baptist Childrens Home	34. Neuseway Nature Center
5. First Battle of Kinston Site	15. Fields-Suggs House	25. Kinston Country Club	35. Neuseway Planetarium and Science Center
6. First Battle of Kinston Site	16. First Battle of Kinston Memorial Site	26. Kinston Drag Strip	36. Rotary Dog Park
7. Battle of Kinston Site	17. Foss Auto Parts/Salvage Yard	27. Kinston Public Services Complex	37. Sanderson Farm
8. Caswell Research Farm, NCSU	18. Harpers Salvage Yard	28. Kinston/Lenoir County Visitors Center	38. Sutton Farmhouse
9. Corner Fields Softball-Baseball	19. Henry L. Herring House	29. Lenoir County Cooperative Extension	39. West Water Park
10. CSS Neuse State Historic Site	20. Highway 70 Industrial Park	30. Lenoir County Fairgrounds	40. Westside Minerals LLC

Figure I-5: Community characteristics map - east



The most prominent land use throughout the DCIA, excluding the developed area within Kinston, is agriculture. Other rural land uses include pasture, cropland, forest, and wetlands (Figure 1-6). Clusters of residential development in and around the municipal areas and large-lot residential development are spread throughout the rural areas. The US 70 Corridor south of Kinston is a commercial center for the region that has several big box retailers and multiple locally-owned businesses that have deep roots in the community. Kinston is a popular stop for beach travelers as well as a regional destination for notable restaurants and a brewery. A number of establishments feature locally-sourced foods that support sustainable agriculture.

The Neuse River flows through Kinston, dividing Lenoir County in half. Kinston was heavily impacted by flooding from Hurricane Fran in 1996, Hurricane Floyd in 1999, and Hurricane Matthew in 2016. Hurricane Matthew caused road and bridge overtopping, with over 700 damaged bridges, pipes, and culverts and resulted in 600 road closures occurring throughout eastern North Carolina. Flooding along US 70 in Lenoir County closed the road for over one week. The road closure limited north-south mobility and access to population centers and many businesses. Residents in southern Lenoir County reported that they had to take 100-mile detours to reach downtown Kinston as US 70 was closed during the flood. Low-income and vulnerable populations were affected as flooding closed many businesses, affecting incomes, thereby straining the finances of low-income employees. Local officials reported that over 3,000 homes were impacted and 100 applications that are pending for buyouts under the Federal Emergency Management Agency Hazard Mitigation Grant Program in Lenoir County were submitted after Hurricane Matthew. Many of those properties are located in the floodplain areas of Kinston where previous buyouts of repetitive loss properties occurred. These buyout applications from Hurricane Matthew are currently pending. Recovery efforts are ongoing and are expected to last a number of years.

Several major highways go through Kinston and provide connections to the neighboring communities of La Grange, Dover, Pink Hill, and Grainger. Kinston is half-way between Raleigh and coastal destinations, and attracts beach travelers during the summer season. Goldsboro and New Bern are within 40 minutes of Kinston along US 70. North Carolina's state capital, Raleigh, is located approximately 78 miles to the northwest of Kinston; and Morehead City and its port are located approximately 70 miles east of Kinston. Wilmington is located approximately 89 miles to the south.

1.6.1 Population Trends

According to the US Census Bureau, between 2000 and 2016 the populations of Craven, Jones, and Lenoir counties experienced growth rates of 0.4, 2.8, and -3.2 percent, respectively. Based on projections from the North Carolina Office of State Budget, growth rates in Craven, Jones, and Lenoir counties are expected to remain much lower than the state as a whole through 2037 (see Table 1-2). A large portion of this future growth is expected to result from future in-migration. No indications of recent notable growth and development, such as new, proposed, or permitted development, have been noted in the DCIA in field visits or in interviews.

Figure I-6: Community context property use - west

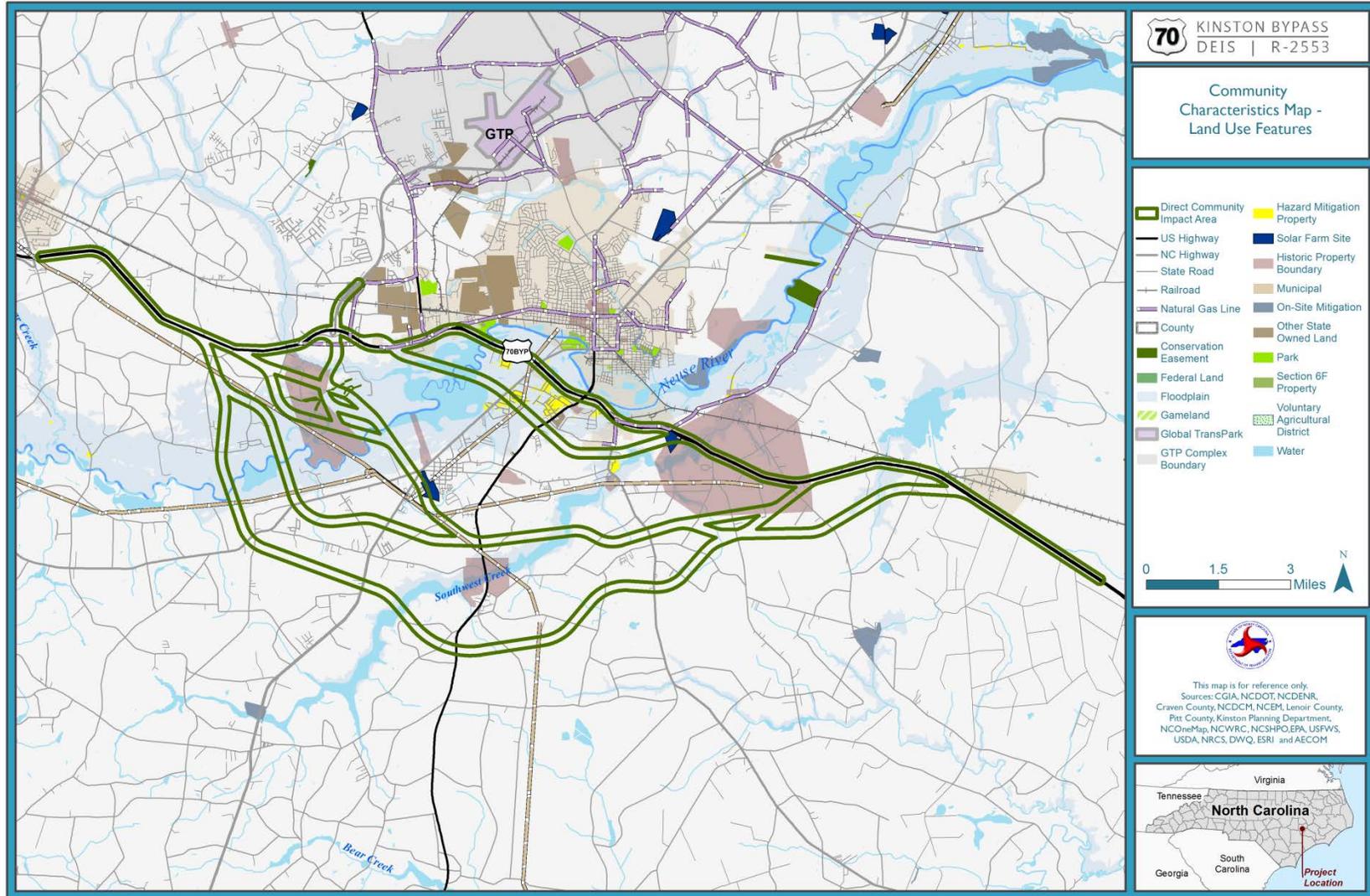


Figure I-7: Community context property use - east

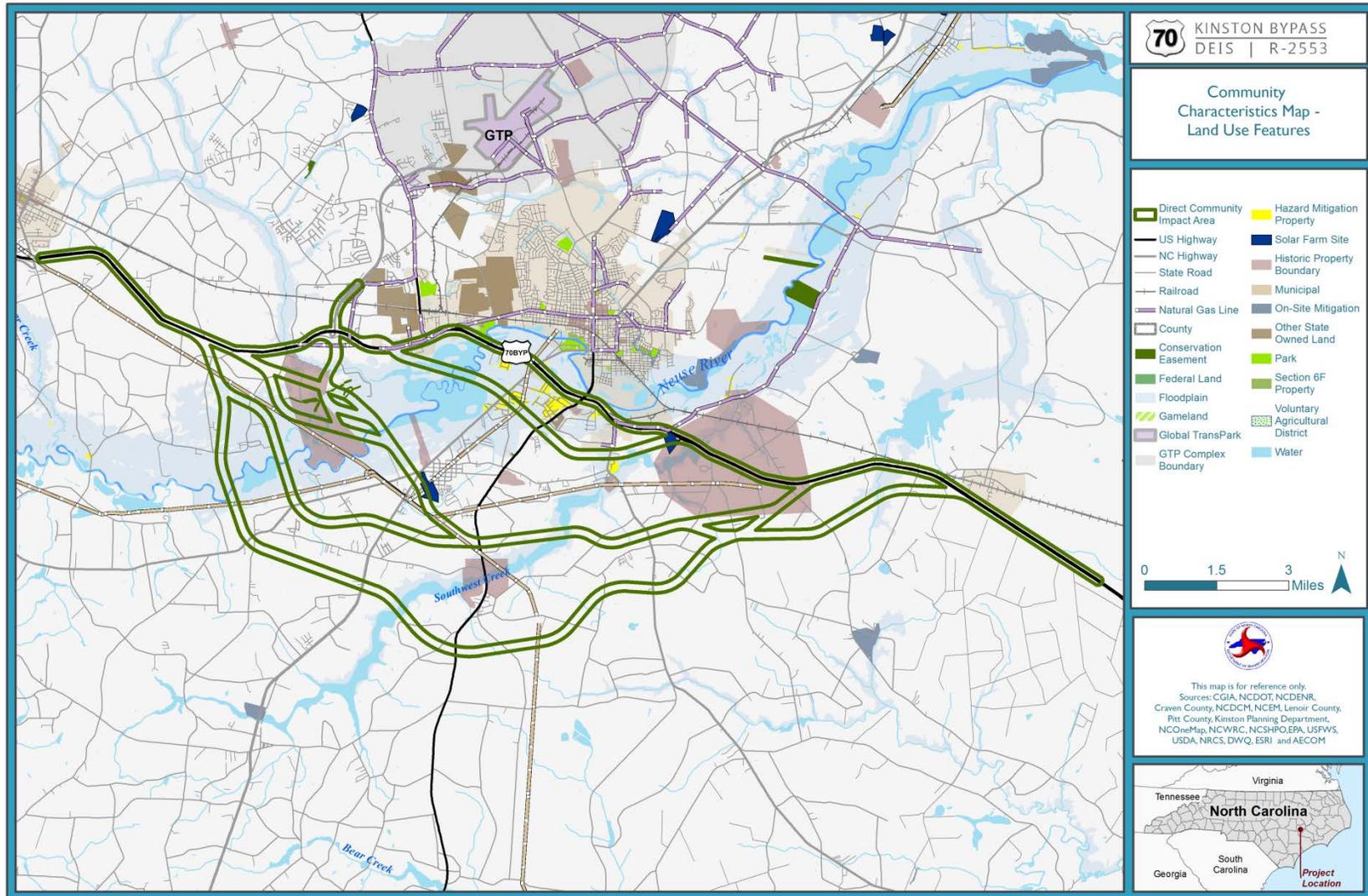


Table I-2: Population growth forecasts

Area	Population		Difference	Growth	
	2016	2037		Percent Change	Annualized Growth Rate
Lenoir County	57,587	55,275	-2,312	-4.0%	-0.2%
Craven County	103,737	104,109	372	0.4%	0.0%
Jones County	10,354	10,355	1	0.0%	0.0%
North Carolina	10,155,942	12,553,271	2,397,329	23.6%	1.1%

Source: North Carolina Office of State Budget Management

1.6.2 Unemployment Trends

The historical unemployment trends for the counties that encompass the DSA and North Carolina are shown in Table 1-3. In general, the unemployment rate of the three counties mirrors the unemployment rate of North Carolina.

Table I-3: Unemployment percentage for Craven, Jones, and Lenoir counties

	2000	2005	2010	2015	2017
Craven County	4.1	4.7	10.7	6.1	4.7
Jones County	4.5	4.9	11.2	5.8	4.5
Lenoir County	5.2	5.8	11.9	6.3	4.6
North Carolina	3.7%	5.2%	10.8%	5.7%	4.6%

Source: NC Bureau of Labor Statistics

1.6.3 Commuting

According to the ACS the mean commute times for workers in the three counties that encompass the DSA are 20.8 minutes for Craven County, 25.5 minutes for Jones County, and 21.5 minutes for Lenoir County. Table 1-4 shows the percentage of workers who are employed outside of the community where they reside.

Table I-4: Percentage of workers employed outside their residential community

Area	Percentage Working Outside Place of Residence
Cove City	44.8
Dover	72.0
Jackson Heights	21.2
Kinston	13.8
La Grange	39.8

Craven County	16.6
Jones County	69.0
Lenoir County	23.0

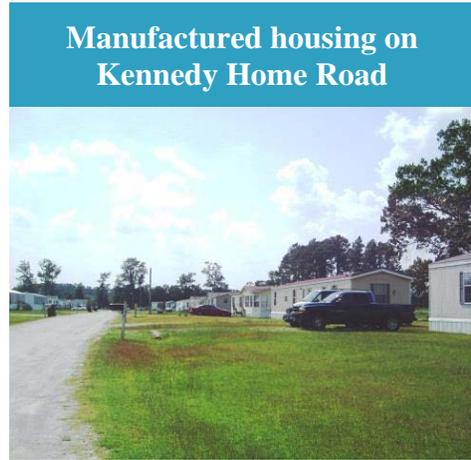
Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015)

1.6.4 Housing Characteristics

Lenoir County has over 27,000 housing units, 60 percent of which are single-family homes, 16 percent multi-family units, and 24 percent manufactured housing. In Lenoir County, 15 percent of housing units are vacant, which is the same percentage for North Carolina. Of the occupied housing units in Lenoir County, 60 percent are owner-occupied and 40 percent are renter-occupied, compared to 65 percent and 45 percent, respectively, in North Carolina.

The median housing value in Lenoir County is \$93,000. In comparison, the median housing value in North Carolina is \$140,000.

According to the National Housing Preservation Database (NDPD), Lenoir County has 1,076 affordable housing units. The database is an inventory of federally-assisted rental housing in the United States. The data come from the US Department of Housing and Urban Development (HUD) and the US Department of Agriculture (USDA) and include 10 federally-subsidized housing programs. Most of the affordable housing is located within Kinston. There is also a concentration of affordable housing units in La Grange.



Manufactured housing on Kennedy Home Road

Lenoir County also includes over 3,000 homes that were impacted by Hurricane Matthew, of which approximately 100 applications are pending for buyouts under the Federal Emergency Management Agency Hazard Mitigation Grant Program.

Jones County has 4,863 housing units, of which 64.5 percent are single-family, 5 percent are multi-family, and 30.6 percent are manufactured housing, with nearly 15 percent of units vacant. The median housing value in Jones County is 93,900, significantly lower than the state median. The NDPD does not include information for Jones County.

Craven County has over 45,700 housing units, 71 percent of which are single-family homes, 14.5 percent multi-family units, and 14.5 percent manufactured housing. The median housing value in Craven County is \$154,500, which is higher than the median housing value of \$140,000 in North Carolina. According to the NHPD, Craven County has 2,207 affordable housing units. Most of the affordable housing is located within New Bern.

1.6.5 Economic Characteristics

Lenoir County is home to a diverse array of businesses from agriculture and aerospace manufacturing, to biotech and pharmaceutical companies. According to the US Census Bureau’s Longitudinal-Employer Household Dynamics Program, the largest concentrations of jobs within

Lenoir County are in downtown Kinston, at the C.F. Harvey Parkway interchange with US 70 (US 70 Industrial Park), and near the intersection of NC 58 and Airport Road (near Lenoir Memorial Hospital). Lenoir County Economic Development is an organization that seeks to improve the economy of Lenoir County by attracting and creating investments that expand the tax base, create new jobs, and increase wages and personal income. Interviews with the Lenoir County geographic information system (GIS) department staff, Wayland Humphrey on September 28, 2017, noted new solar farms that have been built (shown on Figure 1-6) and plan to locate within the southern area of Lenoir County.

Lenoir County's economy has a large agricultural base, with crop farms and animal operations located throughout the study area. LCC has a Small Business Center that creates partnerships with business and industry and assists in small business startup and expansions. LCC offers job placement services through the Workforce Investment and Opportunities Act. Most of the commercial and retail uses in the study area are found along existing US 70. Recently Dollar General Stores have located in Jackson Crossroads, Southwood community, and Pink Hill.

1.6.6 Major Employers – Economic Centers

The NC Department of Commerce Labor and Economic Analysis identifies the top employers in Lenoir County as those employers that have the largest number of employees. They represent manufacturing, public administration, education, and health service industries and are listed below in order of total employees:

- Sanderson Farms Inc., Manufacturing, 1,000+ employees
- NC Department of Health and Human Services, Public Administration, 1,000+ employees
- Lenoir County Schools, Education and Health Services, 1,000+ employees
- Lenoir Memorial Hospital Inc., Education and Health Services, 500-999 employees
- Smithfield Foods Inc., Manufacturing, 500-999 employees
- City of Kinston, Public Administration, 500-999 employees
- Lenoir County, Public Administration, 500-999 employees
- Electrolux Home Products Inc., Manufacturing, 500-999 employees
- Spirit Aerosystems, Manufacturing, 500-999 employees
- Aristokraft/Decora/Schrock, Manufacturing, 500-999 employees

None of the top employers for Jones or Craven counties, as listed by the North Carolina Department of Commerce, are in the vicinity of the DCIA.

2. COMMUNITY CHARACTERISTICS AND IMPACTS

2.1 OVERVIEW OF DIRECT COMMUNITY IMPACT AREA LAND USES AND PHYSICAL IMPACTS

Noble community characteristics are shown on Figure 1-4. Land uses within the DCIA are listed in Table 2-1.

Parcel impacts and relocations are shown in Table 2-2. Depending on the alternative, right-of-way acquisition would be required from between 285 parcels (Alternative 31) and 569 parcels (Alternative 1UE). In addition, alternatives would require between 80 (Alternative 31) and 165 (Alternative 1SB) residential relocations. Alternatives 1UE and 1SB would have the largest business relocations, with 188 and 115 business relocations, respectively. The remaining alternatives have a range of business impacts from 24 to 35 business relocations. Alternatives 63 and 65 have higher impacts to community facilities because they require the most amount of land from Kennedy Memorial Home (see section 2.13).

2.2 RECREATIONAL RESOURCES

2.2.1 Presence

The Kinston/Lenoir County Parks and Recreation Department maintains multiple park and recreation facilities. Within the DCIA, the Kinston Rotary Dog Park is located on NC 11/55 just north of US 70 (West New Bern Road) south of downtown Kinston, and the Governor Richard Caswell Memorial Park is located at 2612 West Vernon Avenue in Kinston just east of the US 70 Bypass split.

In addition to county parks, several neighborhood parks, community centers, a golf course, and tennis courts are located throughout the project area. The Woodsman of the World Lodge on US 70 at Whaley Road and West Water Park on Strawberry Branch Road in Kinston are private recreational resources in the DCIA.

There are no parks in the Craven or Jones counties portions of the study area.

Several historic areas associated with Civil War battles, including the First Battle of Kinston and the Wyse Fork Battlefield, are located near the existing US 70 corridor (see Figure 1-4). The First Battle of Kinston is comprised of four archaeological sites. The Wyse Fork Battlefield historical area covers approximately 4,069 acres southeast of Kinston and is crossed by existing US 70. This area includes several important historical sites associated with the 1865 Battle of Wyse Fork and is listed on the National Register of Historic Places. The Blue-Gray Parkway, a designated scenic-byway for its historical significance relating to the Civil War, runs south of the DCIA.

Table 2-1: Land uses within the DCIA

	Total Acreage Impacted ^a	Agriculture (acres)	Commercial (acres)	Community Facilities (acres)	Industrial (acres)	Other (acres) ^b	Residential (acres)
Alternative 1 UE	2,153	1,009	309	71	104	557	103
Alternative 1 SB	2,276	1,273	135	38	86	632	112
Alternative 11	2,828	1,903	81	64	147	544	89
Alternative 12	2,782	1,940	89	64	154	451	84
Alternative 31	2,874	1,921	59	142	124	540	88
Alternative 32	2,827	1,957	68	142	131	447	82
Alternative 35	3,102	2,269	48	6	74	557	148
Alternative 36	3,132	2,216	39	5	67	649	156
Alternative 51	2,851	2,080	38	6	13	614	100
Alternative 52	2,805	2,116	47	6	20	522	94
Alternative 63	2,951	1,992	68	277	113	419	82
Alternative 65	2,997	1,956	59	277	106	511	88

^aTotal acreage within 1,000 foot alternative corridors.

^bOther land uses include vacant or forested properties, utilities, and right-of-way.



Table 2-2: Summary of parcel and relocation impacts

Alternative	Parcels	Residential Relocations	Business Relocations	Civic/ Institutional ^a	Utilities/ Misc. ^b	Graves	Signage
Alternative 1UE	569	128	188	6	16	414	126
Alternative 1SB	467	165	115	4	2	0	56
Alternative 11	316	99	30	4	2	0	21
Alternative 12	358	103	35	4	2	0	34
Alternative 31	285	80	27	3	1	0	17
Alternative 32	310	95	33	3	2	0	29
Alternative 35	358	135	28	3	1	14	24
Alternative 36	348	118	25	3	1	14	12
Alternative 51	310	108	24	3	1	0	14
Alternative 52	338	122	29	3	3	0	26
Alternative 63	313	100	33	3	2	0	27
Alternative 65	291	85	28	3	2	0	15

Source: R-2553 US 70 Property Acquisition Cost Estimate, O.R. Colan Associates, LLC. October 12, 2017, and a revised report dated May 11, 2018.

^aCivic/Institutional relocations include churches and non-profits.

^bUtilities/Miscellaneous relocations include lift and pump stations, storage units, cell towers, water towers, and solar farms.



2.2.2 Impacts

Kinston Rotary Dog Park would be directly impacted by a proposed interchange at NC 11/55 and upgraded US 70 under Alternative 1UE. The Governor Richard Caswell Memorial Park is also located near Alternative 1UE and changes in access (temporary or permanent) are possible. The Woodman of the World Lodge would also be directly impacted by alternatives 1UE and 1SB.

Wyse Fork Battlefield would be crossed by alternatives 1UE, 1SB, 12, 32, 35, 52, and 63. None of the alternatives impact the sites associated with the First Battle of Kinston.

2.3 SECTION 6(F) LAND AND WATER CONSERVATION FUND RESOURCES

2.3.1 Presence

There are Section 6(f) properties within Craven, Jones, and Lenoir counties; however, none of the properties are within the boundaries of the DCIA. In Jones and Craven counties, the Section 6(f) properties are far removed from the project. In Lenoir County the nearest Section 6(f) properties are in Kinston, to the north of the Neuse River.

2.3.2 Impacts

No Section 6(f) properties in Craven, Jones, or Lenoir counties would be impacted by any of the alternatives under consideration.

2.4 VOLUNTARY AND ENHANCED VOLUNTARY AGRICULTURAL DISTRICTS

2.4.1 Presence

Under North Carolina state law, local governments can offer voluntary agricultural district (VAD) designation in the local jurisdictions, which provide land owners with a voluntary way to support the conservation and preservation of farmland from non-farm development. Lands under VAD protection have a conservation agreement between the landowner and the local jurisdiction that prohibits non-farm use or development for a period of at least ten years.

In Lenoir County, eight VADs are located within the project area, with one VAD that is composed of two parcels. In Jones County, two VADs are within the project area. In Craven County, six VADs are within the project study area.

Lenoir, Jones, and Craven counties do not participate in the enhanced voluntary agricultural district (EVAD) program.

2.4.2 Impacts

In Lenoir County, one VAD, comprised of two parcels, has the potential to be impacted. The two properties, parcel identification numbers (PIN) 450200425447 and 450200523932, are located within the DCIA boundary of alternatives 35 and 36 along Black Harper Road. This VAD may be impacted by right-of-way acquisition, and land within the VAD may be temporarily converted



to non-agricultural use as part of a temporary construction easement. If right-of-way will need to be acquired from the VAD property through eminent domain, the Lenoir Voluntary Agricultural District Ordinance requires that the Agricultural Advisory Board hold a public hearing on the proposed condemnation before condemnation may be initiated, and any VAD lands converted to non-agricultural use as part of a temporary construction easement must be returned to farmable condition by the project's completion.

Seven VADs are located to the south of the southernmost new location alternatives (alternatives 35 and 36), and one VAD is located north of US 70. These properties would not be impacted by any of the alternatives under consideration. No VADs in Jones or Craven counties would be impacted by any of the alternatives under consideration.

2.5 AGRICULTURAL RESOURCES AND ACTIVITY

2.5.1 Presence

There are numerous active agricultural operations and farmlands within the DCIA. Most notable is the Sanderson Farms Processing Plant, located on Sanderson Way just south of the NC 148 and US 70 interchange. Crop farms and animal operations of all sizes are located throughout the DCIA.

The North Carolina Department of Agriculture and Consumer Services has a Century Farm program that recognizes family farms that have been continuously operating for over 100 years. There are 17 Century Farms in Lenoir County. While being recognized as a Century Farm provides no protections to the owners, it is a measure of community stability and shows the longevity and ties to a community that many families have had for more than 100 years. There is no data or mapping of the location of the 17 Century Farms in Lenoir County or for those located in Jones County (12) or Craven County (15); however, anecdotally, several citizens at the small group meetings for the project indicated that their families' farms had been in operation for over 100 years.

2.5.2 Impacts

Impacts to individual agricultural operations are likely with any of the alternatives under consideration, particularly those on new location, including changes in access, and division of farms and agriculture fields (see Table 2-3). Farming operations may be disrupted by noise, vehicle exhaust, dust, and farm equipment being able to cross new infrastructure. Changes in access and mobility for each alternative are addressed in section 2.10, including descriptions of changes in access to farms and farming operations. Alternatives 1UE, 1SB, 11, 12, 31, 32, 63, and 65 would also result in temporary and permanent changes in access to the Sanderson Farms Processing Plant. These access changes are not expected to adversely affect overall operations. An interview with the Sanderson Farm Manager, Mr. Tommy Robertson on December 13, 2017, indicated support for the project in order to reduce traffic on US 70, especially on Friday afternoons. Mr. Robertson noted the need for the company to have good access to US 70, NC 58, and NC 11. All impacts are calculated based on a 1,000-foot corridor for the different alternatives. The impacts will be recalculated during final design to indicate the impacts of the project footprint, which will be smaller than the 1,000-foot corridor.

Table 2-3: Total active farmland impacted

Alternative	Total Farmland within DCIA (acres) ^a
Alternative 1UE	1,009
Alternative 1SB	1,273
Alternative 11	2,123
Alternative 12	1,951
Alternative 31	2,159
Alternative 32	1,987
Alternative 35	1,736
Alternative 36	1,844
Alternative 51	2,080
Alternative 52	1,844
Alternative 63	2,038
Alternative 65	2,210

^aTotal farmland acreage within 1,000 foot alternative corridors.

2.6 FARMLAND SOILS

2.6.1 Presence

The Farmland Protection Policy Act (FPPA) of 1981 (7 Code of Federal Regulations [CFR] 568), implemented by the USDA Natural Resources Conservation Service (NRCS), requires all federal agencies or state agencies that receive federal funding, as in the case of NCDOT, to consider the impact of land acquisition and construction activities on prime and **unique** farmland soils in an effort to “minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to non-agricultural uses” (Public Law 97-98, Section 1539-1549, 7 U.S.C. 4201 et seq.).

Prime and unique farmland soils are present throughout the DCIA and in all of the alternative corridors.

2.6.2 Impacts

Table 2-4 shows the impacts by alternative to farmland soils, including prime and unique farmland soils based on a 1,000 foot corridor, so actual impacts will be less based on the foot print of the highway. Impacts to prime farmland would be lower with the upgrade existing alternatives, but Alternative 1UE would have the highest impacts to unique farmland. The FPPA does not regulate non-federal land or private farmland but is intended to minimize the impact federal programs have on the conversion of farmland to nonagricultural uses.

Impacts to prime farmland by acreage are included in Table 2-4 and indicate Alternative 32 would have the greatest (896 acres), followed by Alternative 52 (895 acres), Alternative 31 (879 acres), and Alternative 51 (878 acres).

Table 2-4: Acreage impacts to farmland soils by alternative

Alternative	All areas are prime farmland	Farmland of statewide importance	Farmland of unique importance	Not prime farmland	Prime farmland if drained
Alternative 1UE	694	539	123	468	1,104
Alternative 1SB	629	555	98	596	1,112
Alternative 11	847	522	107	575	1,186
Alternative 12	864	517	107	599	1,168
Alternative 31	880	537	107	546	1,161
Alternative 32	896	533	107	569	1,143
Alternative 35	771	506	80	557	1,575
Alternative 36	782	497	80	544	1,547
Alternative 51	878	451	80	516	1,235
Alternative 52	895	446	80	539	1,217
Alternative 63	857	495	107	770	1,142
Alternative 65	840	499	107	746	1,160

2.7 BICYCLE, PEDESTRIAN, AND/OR GREENWAY FACILITIES AND ACTIVE TRANSPORTATION

2.7.1 Presence

A limited number of sidewalks exist within the DCIA, given the rural context.

Kinston completed a *Comprehensive Pedestrian Plan* in February 2008. Through a survey that was conducted as part of the planning study, citizens identified several factors that make walking in Kinston difficult or unpleasant, including the lack of sidewalks, poor lighting, and hazardous conditions. The *Comprehensive Pedestrian Plan* identifies and prioritizes 63 projects that will help alleviate these conditions. The most notable projects include constructing a pedestrian bridge over the Neuse River, implementing pedestrian safety measures throughout the community, creating a greenway master plan, and developing a safe route to school program.

Bicyclists are most likely to be found along the six bicycle routes that have been designated by NCDOT and mapped in the CTP in Lenoir County (see Figure 1-4), although no roads have dedicated bicycle lanes or wide paved shoulders. The Mountains to Sea Trail, a trail that runs through North Carolina from the Great Smoky Mountains to the Outer Banks, passes through the DCIA. This trail is a part of the North Carolina State Trails Program.

Bike Route Sign at Pine Bush Road and Hardy Bridge Road





The route names and descriptions for the designated bicycle routes are:

- County Loop: A 59-mile route that circles Lenoir County and the four spoke routes, along the Mountains to Sea Trail to the west and south, Cobb Road/Neuse Road/Faulkner Roads to the east, and Cameron Langston/Taylor Heath/Institute Roads to the north.
- Loftin’s Spoke: An 8-mile route from downtown Kinston to Loftin’s Crossroads along US 258, Collier-Loftin Road, and NC 58.
- Garden Spot Spoke: A 16-mile route from Kinston northwest to Institute along Carey, Rouse, Shackelford, Poole, and Institute roads.
- Connector Spoke: An 11-mile connector route running between the County Loop and the town of Pink Hill in the south of Lenoir County. This route is primarily outside of the DCIA.
- Oak Tree Spoke: A 15-mile route from Kinston northeast to Grifton along Heritage, Briery Run, Wallace Family, Cameron Langston, Sharon Church, and Grifton Hugo roads.
- Tractor Spoke: A 29-mile route from Kinston southwest to Pink Hill along Bank’s School, Kennedy Home, Pine Bush, Hardy Bridge, Smith Grady, and Old Pink Hill roads.

2.7.2 Impacts

Table 2-5 lists the alternative crossings of the seven designated bicycle routes. Note that currently a small portion of existing US 70 from Whaley Road to British Road is designated as a bicycle route. If Alternative 1UE is selected, the bicycle route would need to be re-routed off US 70 since bicycles are not permitted on freeways. No bicycle or pedestrian accommodations have been considered in this phase of design. When the preferred alternative is selected, bicyclists and pedestrians would likely be accommodated on the Y-lines and side streets that cross (either grade separated over or under) the preferred alternative.

Table 2-5: Bicycle routes crossed

Alternative	Number of Crossings
Alternative 1UE	4
Alternative 1SB	4
Alternative 11	1
Alternative 12	1
Alternative 31	1
Alternative 32	1
Alternative 35	9
Alternative 36	9
Alternative 51	3
Alternative 52	3
Alternative 63	1
Alternative 65	1



2.8 TRANSIT ROUTES, FACILITIES, AND/OR ACTIVITY

2.8.1 Presence

Lenoir County Transit provides transit services to the general public using a van service. They provide a demand response system service, picking passengers up at their homes, including paratransit options, and transporting them to a desired location from 6:00 a.m. to 6:00 p.m., Monday through Saturday. In addition to local transit service, Greyhound offers intercity bus transportation throughout the state and nationwide. The Union Bus Station on East Blount Street in downtown Kinston serves Greyhound. Greyhound offers one or two daily routes to all major cities in North Carolina. During site visits to Kinston, neither the Lenoir County Transit van service nor Greyhound bus service were observed.

Craven Area Regional Transit System provides public transportation services to human service agencies and the general public through subscription, demand response, and Americans with Disabilities Act complementary paratransit service in Craven and Jones counties.

The Amtrak North Carolina Thruway bus service runs through Kinston and provides transportation to and from the Amtrak station in Wilson. The pick-up/drop-off point is at the Kinston Visitor's Center on US 70.

2.8.2 Impacts

Overall a controlled access freeway could enhance regional transit travel by providing an alternative route to existing congested facilities. Transit demand services may utilize altered routes depending on the selected alternative. Alternative 1UE would directly impact the Visitor's Center that is used as the pick-up/drop-off point for the Amtrak North Carolina Thruway bus service. Impacts to the Visitor's Center would include a loss of land and parking as well as a change in access. This could require that the pick-up/drop-off site be relocated to another location in Kinston. Routes and pickup points for transit demand services maybe altered as a result of Alternative 1 UE. However, because these services are on-demand, adverse impacts to minority or low-income populations are not anticipated.

2.9 LOCAL AREA GOALS, PLANS, AND DEVELOPMENT ACTIVITY

2.9.1 Presence

Portions of the DCIA are within the planning jurisdictions of Lenoir County, the Town of La Grange, City of Kinston, Jones County, and Craven County. These local governments have adopted land use plans, Coastal Area Management Act (CAMA) Land Use Plans, and comprehensive plans that set forth policies to guide land use in their respective jurisdictions. The local jurisdictions and their respective planning areas are shown on Figure 2-1.



2.9.1.1 Land Use and Development Regulations

2.9.1.1.1 Lenoir County

The *Lenoir County Land Use Plan* was adopted in 2001 and applies to areas of the DCIA that are in Lenoir County and outside municipal limits. The mission of the county’s plan is to “foster economic development and the creation of jobs for the county’s residents and to place minimal constraints on individual and business decisions while enhancing the county’s environment and quality of life” (Lenoir County 2001). The *Land Use Plan* references the plans for the Kinston Bypass Project.



Figure 2-1: Local planning jurisdictions - west

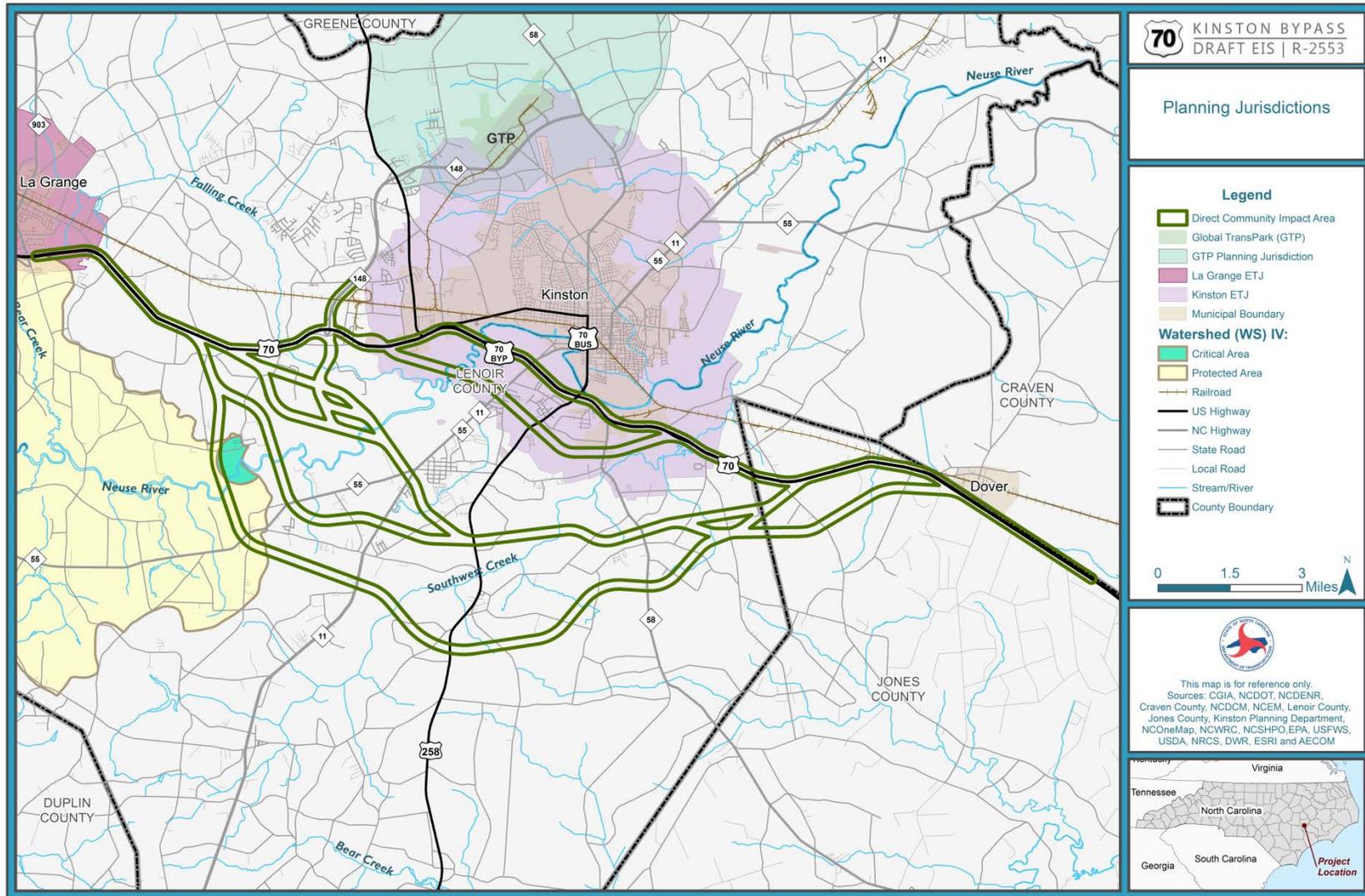
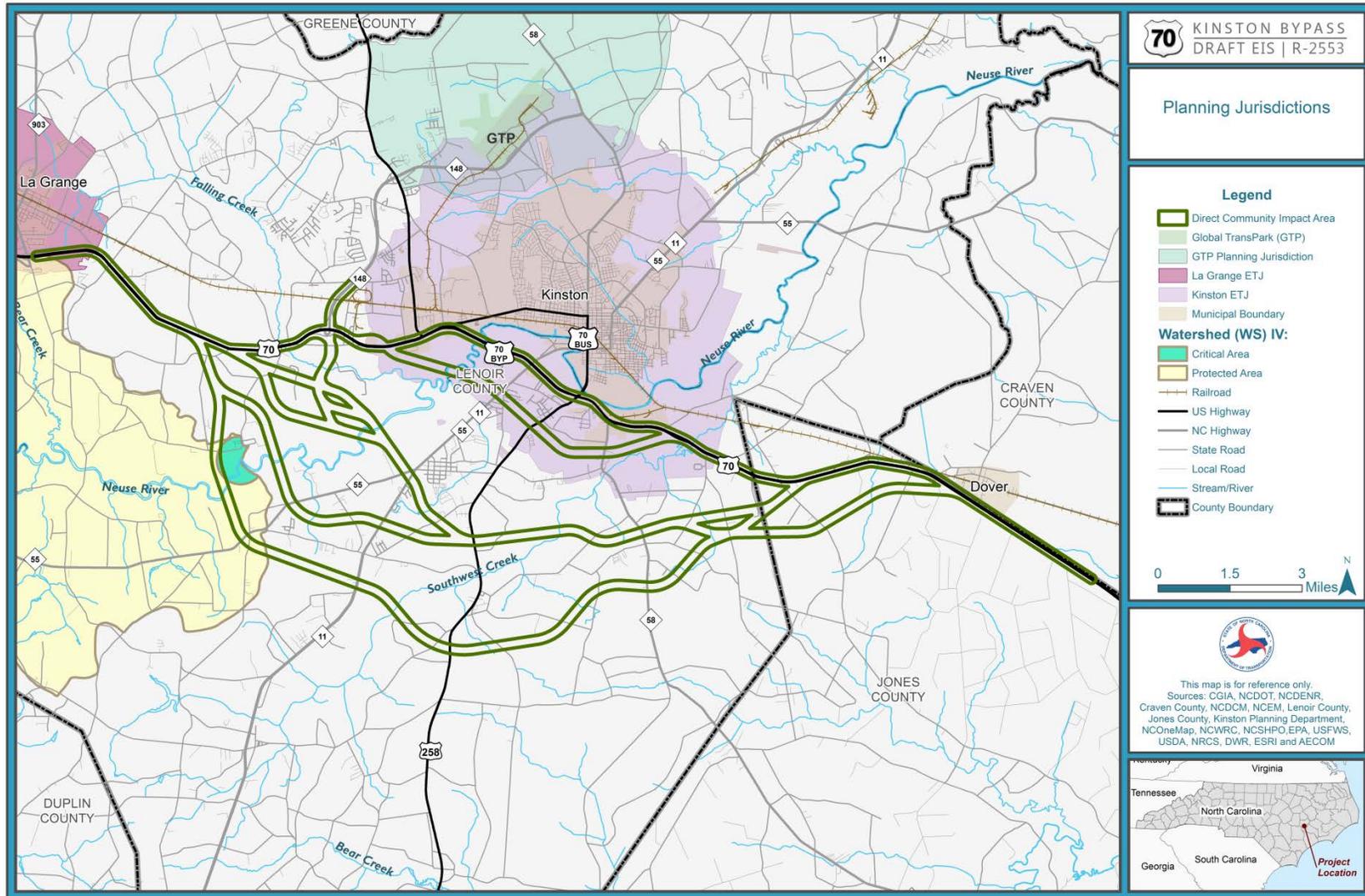


Figure 2-2: Local planning jurisdictions - east



The Lenoir County Zoning Ordinance applies to areas of the DCIA that are in Lenoir County and outside municipal limits. The zoning ordinance contains three zoning districts: rural, commercial, and industrial. The zoning district standards apply to sites within the district and require minimum standards for the buildings, setbacks, driveways, and permitted and special uses. The county has separate ordinances, including flood damage and prevention ordinance, subdivision ordinance, watershed protection ordinance, and several others that regulate nuisance activities.

The Lenoir County Flood Damage and Protection Ordinance is intended to minimize both public and private losses due to flood conditions. The ordinance includes standards for development in the floodway or floodway fringe. Major provisions of the ordinance include the following:

- Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards, or that result in damaging increases in erosion or floor heights or velocities.
- Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction.
- Regulate through a floodplain development permit the alteration of natural floodplains, stream channels, and natural protective barriers that are involved in the accommodation of flood waters.
- Control filling, grading, dredging, and other development that may increase erosion or flood damage.
- Prevent or regulate the construction and flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands.

The Lenoir County Watershed Protection Ordinance applies to a portion of the southwest area of the DCIA. It establishes density and intensity standards for residential and nonresidential development within the WS IV-CA (critical areas) and WS IV-PA (protected areas) of the watershed.

2.9.1.1.2 City of Kinston

The City of Kinston adopted the *Kinston Comprehensive Land Use Plan* in October 2015. The plan sets out land use policies to guide development and future land use. The plan documents recommendations for transportation improvements that include the Kinston Bypass project.

Kinston implements a Unified Development Ordinance that regulates land development. This ordinance applies to areas within the municipal limits of Kinston and within Kinston's extraterritorial jurisdiction (ETJ). The ordinance regulates land uses and guides development throughout the city. The ordinance establishes a development review process and contains performance standards and provisions to regulate landscaping, building façade design, parking, subdivisions, signage, dedication of open space, flood damage, and historic district and rowhouse districts.

2.9.1.1.3 Craven County

Craven County does not implement county-wide zoning. Separate ordinances regulate subdivisions, manufactured home parks, flood damage prevention, off-premise signs, and septic tanks. Craven County adopted a *CAMA Core Land Use Plan* in 2009 that establishes land use policies to guide development in the CAMA major and minor permitting process. Policies also



address the need to guide development along the US 70 Corridor by enacting a corridor zoning ordinance.

2.9.1.1.4 Jones County

The *Jones County Land Use Plan* was adopted on July 1, 2013, and establishes goals for the County's future land use, and implementation strategies for achieving the goals. Goals identified in the *Jones County Land Use Plan* are centered on future land use, agricultural preservation, transportation, environmental resources, and economic development. The plan references the 2009-2015 STIP; therefore, the Kinston Bypass project is not identified as a planned transportation improvement project since the project was put on hold during this time. Jones County does not implement county-wide zoning. The county does have a subdivision ordinance and a building code.

2.9.1.1.5 Town of La Grange

La Grange adopted its Land Use Plan in 2008 and it applies to land within the municipal boundary of La Grange and within its ETJ. The Land Use Plan establishes the policies for regulating land use within the town.

La Grange adopted its zoning ordinance in 2010 and it applies to land within the municipal boundary of La Grange and its ETJ. The majority of the land along existing US 70 is zoned Agriculture-Residential and Highway Commercial. The purpose of the Agriculture-Residential zone is to promote the rural character of the land and to provide open space. The purpose of the Highway Commercial zone is to cluster and encourage commercial and larger scale development that is intended to cater to vehicular traffic along the corridor.

2.9.1.2 Resilient Redevelopment Plans

After Hurricane Matthew struck North Carolina in October 2016, the North Carolina General Assembly established the Resilient Redevelopment Program initiative as part of the 2016 Disaster Recovery Act (Session Law 2016-124). The plans for Lenoir, Craven, and Jones counties identify storm impacts, needs and opportunities, and strategies for rebuilding more resilient communities. The plans address recovery and redevelopment projects and prioritize those for any supplemental funding received. Lenoir County's plan includes five top ranked projects located in Kinston that focus on housing improvements. The top ranked project for Lenoir County is a housing study to determine gaps in housing needs and develop programs and policies to address unmet needs in the community. Increasing affordable housing is the second ranked project in Lenoir County. Constructing housing at previously prepped sites for development after Hurricane Floyd is the third ranked priority project. Infill housing development is the fourth priority project. Housing for seniors is the fifth priority project. The Kinston Bypass project is identified as a low priority infrastructure need. Other projects identified in the plan are county or municipality-wide projects such as stormwater improvements in Kinston and La Grange, stream and drainage clean up, and a riparian buffer program. The plan also includes several site specific projects. Those located within the Future Land Use Scenario Assessment (FLUSA) include: flood proofing the Lenoir County Sheriff's Department in downtown Kinston, relocating the Lenoir County Center for the North Carolina Cooperative (located on NC 11), and constructing phase two of the river walk. None of the proposed



alternatives would impact the site specific projects in the FLUSA. Funding for the identified projects had not been secured at the time of the plan’s completion. Plans are not at a level that can contribute meaningfully to inform decision making.

Jones County’s plan includes five top ranked projects that focus on acquisition of flood prone properties and residential dwellings. Craven County’s plan prioritizes three infrastructure projects for roadway, rail and emergency shelter retrofits, and two housing projects to elevate residential units that are outside of the DCIA.

2.9.1.3 Comprehensive Transportation Plans

2.9.1.3.1 Kinston Comprehensive Transportation Plan (CTP)

The CTP was developed by Kinston, Lenoir County, the Eastern Carolina Rural Planning Organization, and NCDOT in March 2011. The CTP is a long-range multimodal transportation plan that addresses Kinston’s travel needs through 2030. The plan addresses highway improvements and references the Kinston Bypass Project, see Figure 2-1. An update to the CTP is currently underway.

2.9.1.3.2 Jones County CTP

The 2016 Jones County CTP includes the Kinston Bypass and the need to upgrade US 70 to freeway standards in Jones County.

2.9.1.3.3 Craven County CTP

A CTP is currently underway for Craven County, and a document that describes what the CTP will address was published on November 8, 2017. This document provides examples of maps and the next steps for the CTP development, including defining what roads will be studied.

2.9.2 Impacts

The Kinston Bypass Project is consistent with all local land use and transportation plans described in Section 2.9.1. Potential land use changes that may result from the project are evaluated in the *Land Use Scenario Assessment* report.

The *Land Use Scenario Assessment* report anticipates limited growth is expected for Lenoir County and the Future Land Use Scenario Assessment in general. Growth induced project effects are likely to occur near the proposed interchange locations that are served or planned to be served with sewer.

The 2018 EIA states that if there is an insufficient supply of suitable highway-accessible sites then some displaced “highway-market-dependent” businesses may leave the area, which can increase the future “sales leakage” out of the local economy. This would represent a negative economic impact for both the permanently displaced businesses and also potentially for the local economy (if the sales leakage can be served and captured by other local businesses). The economic impact could also be more long-term if the site-availability constraints persist and are not corrected through planning, rezoning, or other means.

Non-highway market dependent businesses will have a greater selection of alternative relocation sites and will be far less liable to long-term adverse sales or business impacts from the



relocation. The economic impacts for specific businesses from relocation may also differ depending on the condition of their current properties. Businesses and/or land owners of outmoded buildings may benefit from an opportunity to revitalize their businesses.

2.10 DRIVEWAYS AND CROSS STREETS

2.10.1 Presence

Numerous roads and driveways are located within the DCIA. A listing of those roads follows:

Alt 11/12/31/32

- Sanderson Farm’s farm/forest service road (off Kennedy Dairy Road 35.247387, -77.681477 and off Pruitt Road 35.239393, -77.669709);
- Stroud farm service road (off Joe Nunn Road - 35.208304, -77.639956) – would landlock the remaining farmland;
- Weyerhaeuser forest service road closed (off Pearson Road - 35.202678, -77.602233)
- Johnson farm service road (off Woodington Road - 35.202048, -77.582778) – would landlock the remaining farmland

Alt 11 /31/36/51/65

- Lenoir Jones farms service road (off Cobb Road/Bill Smith Road - 35.201343, -77.520839) Service Road to Wyse Fork
- Sutton farm service road to chicken house (off Wyse Fork Road 35.201293, -77.497766) Service Road to Wyse Fork
- Bryant farm service road closed (off 70/ new 70Bus - 35.211596, -77.481122) – would landlock the remaining farm
- Weyerhauser forest service road closed (off 70/new 70Bus - 35.213760, -77.452117)

Alt 12/32/35/52/63/UE/SB

- Bryant farm service road closed (off 70/ new 70Bus - 35.222331, -77.482556) – converted to service road access
- Weyerhauser forest service road closed (off 70/new 70Bus - 35.216655, -77.453561)

Alt 35/36

- Haynes farm service road (off Green Haynes Road - 35.196565, -77.685339) land locks remaining farm
- Unnamed dirt road off NC 11 (multiple property access) – converted to service road 35.186997, -77.666157
- Williams forest service road cut in half – off Chase Road – south half accessed by service road 35.186030, -77.656562
- Weyerhaeuser / Rouse forest service access road off Alexander Rouse Road – land locks parcels - 35.171674, -77.599385



Alt 35

- Lenoir Jones farms service road (off Cobb Road/Bill Smith Road - 35.201343, -77.520839) Service Road to Wyse Fork
- Bryant farm service road closed (off 70/ new 70Bus - 35.206489, -77.482379) – would landlock the remaining farm
- Weyerhaeuser forest service road closed (off 70/new 70Bus - 35.213760, -77.452117)

Alt 51/52

- Davis farm back access road (off Jessie Bryan Road – 35.208497, -77.674130) cut
- Rhodes farm back access road (off Jessie Bryan Road) eliminated (35.208272, -77.668375)
- Heath farm service road cut (35.208831, -77.663852)
- Forest service roads between 11 and Joe Nunn
- Weyerhaeuser forest service road closed (off Pearson Road - 35.202678, -77.602233)

2.10.2 Impacts

Each alternative would have multiple interchanges along the alignments where major roadways intersect with the alternative. The other roadways that are crossed by the project would either go over or under the project or the roadways would be bisected by the project and closed.

Mobility and access impacts for each of the alternatives are identified in Table 2-6 and summarized in the following sections.



Table 2-6: Mobility and access impacts

Road	Alt 1UE	Alt 1SB	Alt 11	Alt 12	Alt 31	Alt 32	Alt 35	Alt 36	Alt 51	Alt 52	Alt 63	Alt 65
Washington Street	SR/RR	SR/RR	SR/RR	SR/RR	SR/R R	SR/RR						
George Abbott Road	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
Castelloe Drive	SR/RR	SR/RR	SR/RR	SR/RR	SR/R R	SR/RR						
Willie Measley Road/Jim Sutton Road	I	I	I	I	I	I	I	I	I	I	I	I
Norbert Hill Road	SR/RR	SR/RR	SR/RR	SR/RR	SR/R R	SR/RR						
Albert Sugg Road/Barwick Station Road	I	I	I	I	SR	SR	SR	SR	SR	SR	SR	SR
Foss Farm Road	C	C	C	C	SR	SR	C	C	C	C	SR	SR
Harold Sutton Road	SR	SR	SR	SR	SR/R R	SR/RR	GS	GS	GS	GS	SR	SR
Louie Pollock Road	-	-	-	-	-	-	RR	RR	RR	RR	-	-
Kennedy Home Road	SR	SR	SR	SR	GS	GS	GS	GS	GS	GS	GS	GS
Eason Road	SR	SR	SR	SR	-	-	-	-	-	-	-	-
Kennedy Dairy Road	-	-	-	C	-	C	-	-	-	-	-	-
Banks School Road	SR	SR	SR/RR	SR/RR	-	-	-	-	-	-	-	-
NC 148 (C.F. Harvey Parkway)	I	I	I	I	RR/I	RR/I	-	-	-	-	RR/I	RR/I
Innovation Way	C	C	-	-	-	-	-	-	-	-	-	-



Road	Alt 1UE	Alt 1SB	Alt 11	Alt 12	Alt 31	Alt 32	Alt 35	Alt 36	Alt 51	Alt 52	Alt 63	Alt 65
Sanderson Way	SR	SR	SR/	SR/	GS	GS	-	-	-	-	GS	GS
Pruitt Road	-	C	-	-	-	-	-	-	-	-	-	-
Hill Farm Road / Sussex St	GS	-	-	-	-	-	-	-	-	-	-	-
Sheffield Drive	C	-	-	-	-	-	-	-	-	-	-	-
Stratford St / 258	GS	-	-	-	-	-	-	-	-	-	-	-
Mt Vernon Church Road	C	-	-	-	-	-	-	-	-	-	-	-
Hillcrest Road	SR	-	-	-	-	-	-	-	-	-	-	-
Wooten Dr	SR	-	-	-	-	-	-	-	-	-	-	-
US 258/US 70 Business (West Vernon Avenue)	I	I	-	-	I	I	-	-	-	-	-	-
Sugg-Kivett Road	SR	-	-	-	-	-	-	-	-	-	-	-
Tyndall Park Drive	SR	-	-	-	-	-	-	-	-	-	-	-
Crystal Drive	SR	-	-	-	-	-	-	-	-	-	-	-
NC 11/55	I	I	-	-	-	-	-	-	-	-	-	-
NC 55	-	-	RR	RR	RR	RR	I	I	I	I	RR	RR
NC 11	-	-	I	I	I	I	I	I	I	I	I	I
Sherry Drive	-	-	C	C	C	C	-	-	-	-	C	C
Goodman Road	-	C	-	-	-	-	-	-	-	-	-	-
Meadow Brook Drive	SR	-	-	-	-	-	-	-	-	-	-	-
Trenton Road/ Trenton Hwy	GS	-	-	-	-	-	-	-	-	-	-	-
Bohamon Road	SR	-	-	-	-	-	-	-	-	-	-	-
Neuse Road	SR	RR	-	-	-	-	-	-	-	-	-	-



Road	Alt 1UE	Alt 1SB	Alt 11	Alt 12	Alt 31	Alt 32	Alt 35	Alt 36	Alt 51	Alt 52	Alt 63	Alt 65
Magnolia Drive	-	C	-	-	-	-	-	-	-	-	-	-
Whitfield Drive	-	C	-	-	-	-	-	-	-	-	-	-
Bobbie Drive	-	C	-	-	-	-	-	-	-	-	-	-
Baker	-	C	-	-	-	-	-	-	-	-	-	-
4th Street	-	C	-	-	-	-	-	-	-	-	-	-
Collier-Loftin Road	-	RR/C	-	-	-	-	-	-	-	-	-	-
Fordham Lane	-	C	-	-	-	-	-	-	-	-	-	-
Pine Tree Lane	-	C	-	-	-	-	-	-	-	-	-	-
S Croom-Bland Road	-	-	-	-	-	-	SR/RR	SR/RR	-	-	-	-
N Croom-Bland Road	-	-	-	-	-	-	C	C	RR	RR	-	-
Jesse T Bryan Road	-	-	-	-	-	-	-	-	C	C	-	-
Tyree Road	-	-	C	C	C	C	-	-	-	-	C	C
Joe Nunn Road	-	-	C	C	C	C	-	-	C	C	C	C
Black Harper Road	-	-	-	-	-	-	C	C	-	-	-	-
John Green Smith Road	-	-	-	-	-	-	C	C	-	-	-	-
US 258	I	I	I	I	I	I	I	I	I	I	I	I
Strouds Corner Road	-	-	-	-	-	-	C	C	-	-	-	-
Patterson Road	-	-	C	C	C	C	-	-	C	C	C	C
Collier-Loftin Road	-	-	-	-	-	-	-	-	-	-	-	-
Woodington Road	-	-	C	C	C	C	-	-	C	C	C	C



Road	Alt 1UE	Alt 1SB	Alt 11	Alt 12	Alt 31	Alt 32	Alt 35	Alt 36	Alt 51	Alt 52	Alt 63	Alt 65
Alexander Rouse Road	-	-	-	-	-	-	GS	GS	-	-	-	-
Parker Fork Road	-	-			-	-	C	C	-	-	-	-
NC 58	I	I	I	I	I	I	I	I	I	I	I	I
Southwood Road	-	-	-	-	-	-	C	C	-	-	-	-
Elijah Loftin Road	-	-	-	-	-	-	GS	GS	-	-	-	-
Elijah Skyes Road	-	-	C	C	-	-	-	-	-	-	C	C
Whaley Road	SR	SR	C	C	C	C	-	-	C	C	C	C
British Road	SR	SR	-	-	-	-	-	-	-	-	-	-
King Heights Road	SR	SR	-	-	-	-	-	-	-	-	-	-
Cobb Road	SR	SR	GS	GS	GS	GS	GS	GS	GS	GS	GS	GS
Bill Smith Road	SR	SR	-	C	-	C	-	-	-	C	C	-
Caswell Station Road	I (with Wyse Fork Rd)	I (with Wyse Fork Rd)	-	SR/RR (to connect with Roy White Rd)	-	SR/RR (to connect with Roy White Rd)	SR/RR (to connect with Roy White Rd)	-	-	SR/RR (to connect with Roy White Rd)	SR/RR (to connect with Roy White Rd)	-
Wyse Fork Road	I (with Caswell Station Rd)	I (with Caswell Station Rd)	I	GS	I	GS	GS	I	I	GS	GS	I



Road	Alt 1UE	Alt 1SB	Alt 11	Alt 12	Alt 31	Alt 32	Alt 35	Alt 36	Alt 51	Alt 52	Alt 63	Alt 65
Roy White Road	C	C	-	SR/RR (to connect with Caswell Station Rd)	-	SR/RR (to connect with Caswell Station Rd)	SR/RR (to connect with Caswell Station Rd)	-	-	SR/RR (to connect with Caswell Station Rd)	SR/RR (to connect with Caswell Station Rd)	-
Tilghman Road	SR	SR	-	SR/RR	-	SR/RR	SR/RR	-	-	SR/RR	SR/RR	-
Burkett Road	RR/I (with Old US 70/ Kornegay St)	RR/I (with Old US 70/ Kornegay St)	GS	RR/I (with Old US 70/ Kornegay St)	GS	RR/I (with Old US 70/ Kornegay St)	RR/I (with Old US 70/ Kornegay St)	GS	GS	RR/I (with Old US 70/ Kornegay St)	RR/I (with Old US 70/ Kornegay St)	GS
Old Dover Road	C	C	-	C	-	C	C	-	-	C	C	-
Old US 70 (West Kornegay Street)	RR/I (with Burkett Rd)	RR/I (with Burkett Rd)	RR	RR/I (with Burkett Rd)	RR	RR/I (with Burkett Rd)	RR/I (with Burkett Rd)	RR	RR	RR/I (with Burkett Rd)	RR/I (with Burkett Rd)	RR

* Mobility and Access Impacts Codes:

-: No Impact

C: Closed at the project

GS: Grade Separation

I: Interchange

RR: Road Realigned

SR: Access to Service Road along US 70



2.10.2.1 Alternative 1UE

All access driveways and at-grade intersections along the corridor would be removed to create a controlled access freeway.

From the western project terminus at NC 903 to west of Sanderson Way, service roads would be provided on both sides of the upgraded US 70 freeway. Existing cross streets would have access to the service roads and would travel east or west to the nearest interchange to access US 70 or cross to the service roads on the opposite side of US 70. Interchanges are proposed at Willie Measley Road/Jim Sutton Road and Albert Sugg Road/Barwick Station Road.

The service road on the south side of US 70 would extend onto Sanderson Way to provide access to the Sanderson Farms facility. Access to Sanderson Way from US 70/Alternative 1UE would be via the proposed interchange at Albert Sugg Road/Barwick Station Road from the west. Access to Sanderson Way would also be available from Industrial Drive. Industrial Drive would be grade separated from Alternative 1UE, so access to Industrial Drive, including the Electrolux facility, would be from the Albert Sugg Road/Barwick Station Road interchange to the service road to Sanderson Way from the west. From the east, the route to these areas would be more circuitous, with access from Alternative 1UE via the US 258 interchange and then a series of local roads, including Hill Farm Road and Smithfield Way, to connect back to Industrial Drive.

Interchanges at US 258 and US 258/US 70 Business (West Vernon Avenue) would provide access into downtown Kinston.

East of the Neuse River crossing, existing cross streets and driveways would have access to service roads on either side of Alternative 1UE. Access to or across Alternative 1UE would be at interchanges proposed at NC 11/NC 55, US 258 (South Queen Street), NC 58 (Trenton Highway), Wyse Fork Road/Caswell Station Road, and Old US 70 (West Kornegay Street). Service roads on the south side of US 70 are continuous between NC 11/55 and the eastern project terminus, using a combination of existing roads and new location segments. North of US 70, the service road is not continuous, so travelers may have to travel in the opposite direction to access or cross Alternative 1UE via the nearest interchange.

2.10.2.2 Alternative 1SB

From the western project terminus to Sanderson Way, access changes would be the same as in Alternative 1UE. An interchange would be provided at Sanderson Way/NC 148 (C.F. Harvey Parkway) and would allow direct access from US 70 eastbound to Sanderson Way and the Sanderson Farms facility. Access to Industrial Drive would be available from Sanderson Way, and Industrial Drive would be grade separated from US 70 to provide access to the Electrolux facility. From US 70 westbound, a new interchange near the existing intersection of Sanderson Way and US 70 would provide access from Alternative 1SB to Sanderson Way. East of this interchange, Alternative 1SB is on new location, and existing streets would be severed by the alignment with no direct access to Alternative 1SB.

East of the Neuse River, an interchange is proposed at NC 11/55, and several minor roads would be severed, including Magnolia Drive, Goodman Road, 4th Street, and Whitfield Drive. However, there are adequate alternate routes in the area that would provide access from NC 11/55 to residences on these roads. An interchange proposed at US 258 would also impact



several local streets, including Collier-Loftin Road, which would be closed at US 258. At NC 58, Collier-Loftin Road would be relocated to the north along NC 58 and Pine Tree Lane would be severed.

An interchange between Alternative 1SB and existing US 70 is proposed. East of this interchange, Alternative 1SB is on existing US 70 and access changes would be the same as with Alternative 1UE. A service road on the south side of Alternative 1SB between NC 58 and the eastern project terminus would provide access to existing streets and driveways with access to Alternative 1SB at interchanges proposed at NC 58, Wyse Fork Road/Caswell Station Road, and Old US 70 (West Kornegay Street). On the north side of Alternative 1SB, the service road is not continuous, and out-of-direction travel may be required to access or cross Alternative 1SB.

2.10.2.3 Alternative 11

From the western project terminus to Sanderson Way, access changes would be the same as in alternatives 1UE and 1SB. As with Alternative 1UE, the service road on the south side of US 70 would extend onto Sanderson Way; however, Alternative 11 would cross Sanderson Way west of the Sanderson Farms facility. Access to Sanderson Way from existing US 70 east of the Sanderson Farms facility would be maintained, and access would be available from existing US 70 to Alternative 11 at a proposed interchange at NC 148 (C.F. Harvey Parkway). Access to the Electrolux facility would be available from existing US 70 via Innovation Way or Sanderson Way to Industrial Drive.

At NC 148, Alternative 11 turns south on new location, and existing streets would not have direct access to Alternative 11 except at proposed interchanges. An interchange is proposed near the existing intersection of NC 11 and NC 55. NC 55 would be severed at Alternative 11 and would be reconnected via a new location roadway to NC 11 south of the proposed interchange. Tyree Road would also be closed east of NC 11 and local traffic rerouted to other streets to access NC 11. Joe Nunn Road would be closed on both sides of Alternative 11. East of a proposed interchange an US 258, Patterson Road would also be closed on both sides of Alternative 11, and travelers would have to go back to US 258 to cross Alternative 11. West of a proposed interchange at NC 58, Woodington Road would be closed on both sides of Alternative 11, with travelers being forced to detour to US 258 to the south or NC 58 to the north to cross Alternative 11. At NC 58, Elijah Sykes Road would be closed, with alternate access to NC 58 farther north via Strawberry Branch Drive. East of NC 58, Whaley Road would be closed on both sides of Alternative 11 requiring travelers to go south to Elijah Loftin Road or north to Strawberry Branch Drive to access NC 58 and cross Alternative 11. Cobb Road would be maintained with a grade separation of Alternative 11.

At Wyse Fork Road, a proposed interchange would include service roads to provide access to properties from Wyse Fork Road north and south of Alternative 11. Burkett Road would be maintained with a grade separation of Alternative 11 and service roads north and south of Alternative 11 to provide access to properties from Burkett Road.

2.10.2.4 Alternative 12

From the western project terminus to NC 58, Alternative 12 would have the same access changes as Alternative 11. East of NC 58, Whaley Road would be closed on both sides of Alternative 12 requiring travelers to go south to Elijah Loftin Road or north to Strawberry Branch Drive to



access NC 58 and cross Alternative 12. Cobb Road would be maintained with a grade separation of Alternative 12. Bill Smith Road would be closed on both sides of Alternative 12 with a service road to connect back to Cobb Road on the south side of Alternative 12. Wyse Fork Road would be maintained with a grade separation of Alternative 12. A new interchange east of Wyse Fork Road would provide access to existing US 70. East of this interchange, Alternative 12 would be on US 70 and access changes would be the same as in alternatives 1UE and 1SB with continuous service roads south of US 70, some service road connections north of US 70, and interchange access at Old US 70 (West Kornegay Street).

2.10.2.5 Alternative 31

From the western project terminus to east of Barwick Station Road, service roads would be provided on both sides of the upgraded US 70 freeway. Existing cross streets would have access to the service roads and would travel east or west to the nearest interchange to access US 70 or cross to the service roads on the opposite side of US 70. An interchange is proposed at Willie Measley Road/Jim Sutton Road. East of Barwick Station Road, Alternative 31 would turn south on new location, and a proposed interchange between Alternative 31 and existing US 70 would cut off Harold Sutton Road at US 70. Harold Sutton Road would be relocated to connect to the service road on the south side of Alternative 31.

A new location connection from Alternative 31 to NC 148 would have a grade separation at Sanderson Way. Access to Sanderson Way, Sanderson Farms, and Industrial Drive would be maintained from existing US 70.

Along the new location portion of Alternative 31, Kennedy Home Road would be maintained with a grade separation. Kennedy Dairy Road would be closed on both sides of Alternative 31, and a service road would provide a connection on the south side of Alternative 31 back to Kennedy Home Road.

East of the Neuse River crossing to the eastern project terminus, access changes from Alternative 31 would be the same as with Alternative 11.

2.10.2.6 Alternative 32

From the western project terminus to NC 58, access changes for Alternative 32 would be the same as with Alternative 31. From NC 58 to the eastern project terminus, access changes for Alternative 32 would be the same as with Alternative 12.

2.10.2.7 Alternative 35

From the western project terminus to Barwick Station Road, service roads would be provided on both sides of the upgraded US 70 freeway. Existing cross streets would have access to the service roads and would travel east or west to the nearest interchange to access US 70 or cross to the service roads on the opposite side of US 70. An interchange is proposed at Willie Measley Road/Jim Sutton Road. East of Barwick Station Road, Alternative 35 would have an interchange with existing US 70 and then turn south on new location.

Along the new location section of Alternative 35, Harold Sugg Road would be maintained with a grade separation. Louie Pollock Road would be closed at Alternative 35 and relocated to

intersect with Harold Sugg Road west of Alternative 35. Kennedy Home Road would be maintained with a grade separation of Alternative 35.

An interchange is proposed at NC 55 near the existing intersection with Croom-Bland Road. Croom-Bland Road would be closed on both sides of Alternative 35 with alternate access provided back to NC 55. An interchange is proposed at NC 11. East of NC 11, Black Harper Road and John Green Smith Road would be closed on both sides of Alternative 35, with traffic having to go back to US 258 to cross Alternative 35 at a proposed interchange. East of US 258, Strouds Corner Road would be closed on both sides of Alternative 35 and travelers would have access back to US 258 north of Alternative 35 and to US 258 via Lightwood Knot Road south of Alternative 35. Alexander Rouse Road would be maintained with a grade separation of Alternative 35. Parker Fork Road would be closed on both sides of Alternative 35, with access to the south back to Alexander Rouse Road and to the north to Elijah Loftin Road. An interchange is proposed at NC 58, and east of NC 58, Southwood Road would be closed on both sides of Alternative 35 with access to the north back to NC 58 and to the south to Elijah Loftin Road. Elijah Loftin Road and Cobb Road would be maintained with grade separations of Alternative 35.

From Wyse Fork Road to the eastern project terminus, access changes from Alternative 35 would be the same as with alternatives 12 and 32.

2.10.2.8 Alternative 36

From the western project terminus to Cobb Road, access changes from Alternative 36 would be the same as with Alternative 35. East of Cobb Road, access changes from Alternative 36 would be the same as alternatives 11 and 31.

2.10.2.9 Alternative 51

From the western project terminus to east of Harold Sutton Road/Louie Pollock Road, access changes from Alternative 51 would be the same as with Alternative 35 and 36. Kennedy Home Road would be maintained with a grade separation of Alternative 51. At the proposed interchange at NC 55, Croom-Bland Road would be relocated to intersect with NC 55 south of Alternative 51. Jesse T. Bryan Road would be closed on both sides of Alternative 51 with access to the north to NC 55 and to the east to NC 11 via Green Haynes Road. NC 11 would have an interchange with Alternative 51. East of NC 11, Joe Nunn Road would be closed on both sides of Alternative 51 with access to the south back to NC 11 via Albrittons Road and to the north to US 258. An interchange is proposed at US 258 for Alternative 51.

East of US 258, access changes with Alternative 51 would be the same as with alternatives 11 and 31.

2.10.2.10 Alternative 52

From the western project terminus to NC 58, Alternative 52 is the same as Alternative 51. East of NC 58, Alternative 52 is the same as alternatives 12 and 32.



2.10.2.11 Alternative 63

From the western project terminus to east of Barwick Station Road, Alternative 63 would be the same as alternatives 31 and 32, with upgrades to existing US 70, service roads to provide access to existing cross streets and driveways, and an interchange at Willie Measley Road/Jim Sutton Road. An interchange is proposed with existing US 70 before Alternative 63 turns south on new location. Kennedy Home Road would be maintained with a grade separation of Alternative 63.

A new location connection from Alternative 31 to NC 148 would have a grade separation at Sanderson Way. Access to Sanderson Way, Sanderson Farms, and Industrial Drive would be maintained from existing US 70.

East of the Neuse River crossing, Alternative 63 would be the same as alternatives 12 and 32.

2.10.2.12 Alternative 65

From the western project terminus to the Neuse River crossing, Alternative 65 would be the same as Alternative 63. East of the Neuse River crossing, Alternative 65 would be the same as alternatives 11 and 31.

2.11 BUSINESS AND ECONOMIC RESOURCES AND TRANSPORTATION ACTIVITY

2.11.1 Presence

The entire existing US 70 Corridor south of Kinston is a commercial center for the region that has several big box retailers and multiple locally owned businesses that have deep roots in the community. Vernon Park Mall, located near the Walmart Super Center at the intersection of Vernon Avenue, contains over 623,000 square feet of commercial and office space. The mall is struggling to keep its tenants and redevelopment plans were publicized in February 2017 to turn the mall into a sportsplex, with recreation facilities and a flagship hotel. Other activity centers include Frenchmen’s Creek, Kinston Pointe Shopping Center, Kinston Plaza Shopping Center, Neuse River Sports Shop and Lenox Factory Outlet.

Numerous commercial and industrial uses are dispersed along the US 70 Corridor between Kinston and La Grange, with clusters located at the intersections of Willie Measley Road, Hill Farm Road, and US 258. These areas include convenience businesses, heavy commercial, storage, highway-oriented uses, and retail. Businesses include the Electrolux manufacturing plant, West Pharmaceutical, Dopaco Chemical Plant, Sanderson Farms, Car Quest Warehouse, an office/industrial “shell” building, and numerous smaller industrial and commercial businesses.

2.11.2 Impacts

Table 2-2 summarizes the direct physical impacts including the number of parcels impacted and relocations required for each alternative. Direct impacts to businesses include 188 relocations on existing US 70 with Alternative 1UE and 115 for Alternative 1SB. These two alternatives would also experience the greatest changes in access with service roads along large segments of the corridor. Business impacts from the other new location alternatives range from a low of 24 to a



high of 35 (see Table 2-2 for a summary of business relocations). Remaining businesses would have new access via service roadways and driveways.

The EIA for the Kinston Bypass estimates that altogether the project-related benefits would at least maintain and likely improve Lenoir County's business competitiveness and business development potential. Improved highway accessibility would both enhance the GTP's ability to attract new business growth and may help support continued efforts for downtown Kinston's revitalization. While Lenoir County's future population is projected to remain relatively unchanged, future US 70 traffic growth can be expected to result in minor future retail growth of up to \$50 million in annual retail sales for highway market dependent retail businesses along US 70 and/or at future US 70 interchanges. The expected sales shift is estimated to result in potential net sales reductions of between \$6.7 million to \$19.1 million per year.

2.12 EMERGENCY MANAGEMENT SERVICES OPERATIONS

2.12.1 Presence

The Lenoir County Department of Emergency Services consists of four divisions: 911 communications, emergency management services (EMS), emergency medical services, and the fire marshal. Lenoir County Emergency Services and Jones Lenoir County 911 provide staffing 24/7/365 to provide emergency services for medical, fire, and police to Lenoir and Jones counties.

Volunteer fire/rescue departments are located in Sandy Bottom (on NC 55) and Bucklesberry (on Kennedy Home Road). The Southwood Volunteer Fire and Rescue Department is located on NC 58 at Woodington Road. The Wyse Fork Volunteer Fire Department is located on Wyse Fork Road near the intersection with US 70, and the Dover Fire Department is located on US 70. These facilities are shown on Figure 1-4.

Lenoir Memorial Hospital, located in central Kinston, is licensed for 261 beds. It is a not-for-profit hospital offering inpatient, outpatient, and preventive healthcare services. Lenoir Memorial offers many free educational health programs, seminars, and screenings each year serving the communities and residents of Lenoir, Greene, Jones, and surrounding counties.

2.12.2 Impacts

Wyse Fork Volunteer Fire Department (6939 Wyse Fork Road, Dover) would be impacted by alternatives 1UE, 1SB, 12, 32, 35, 52, and 63. Sandy Bottom Fire and Rescue (4640 NC 55, Kinston) could be impacted by a change in access related to the access change to NC 55 associated with alternatives 35 and 36, but there would be no direct impacts to the property. Southwood Volunteer Fire Department would be impacted by alternatives 31, 35, and 36. The project may also temporarily impact response times for emergency services during construction. Lenoir County EMS planner, Sam Korney provided input on October 10, 2017, and recommended coordination among partner agencies for any road closures and detours.

2.13 COMMUNITY RESOURCES

2.13.1 Presence

Cemeteries are present throughout the DCIA (see Figure 1-4) and are listed below.

- Pinelawn Memorial Park Cemetery
- Westview Cemetery
- Green Taylor Cemetery
- Family plot off of Wyse Fork Road (identified through field visits)
- Family plot off of US 70 behind the Mallard Gas Station (identified through field visits)
- Family plot off of Bill Smith Road (identified through field visits)
- Family plot off of Woodington Road (identified through field visits)
- Two potential family plots (identified by residents at October 2017 small group meeting)

The Kennedy Memorial Home, on Kennedy Home Road, is run by the Kinston Area Family Services branch of the organization Baptist Children's Homes. It offers school-age children an environment in which they can overcome personal and family challenges.

There are three schools within the study area: Southwood Elementary, Lenoir Early College, and Woodington Middle School. Other community facilities near the DCIA include Lenoir County Cooperative Extension, Lenoir County Fairgrounds, a US Post Office, Conner Fields, and the Kinston Public Services Complex. There is a Woodmen of the World Lodge on US 70 at Whaley Road, and Lenoir County Shrine Club on US 70. The West Water Park on Strawberry Branch Road serves as a center for community recreation. The Kinston/Lenoir County Visitors Center is located on US 70 and US 258



Twenty-one churches are located within the DCIA.

The towns of Dover and Cove City each have three churches, fire departments, and small stores. Cove City has a public library.

In terms of infrastructure, there is a small airport on Hardy Bridge Road, one water tower, a water treatment plant on Kennedy Home Road, and a wastewater treatment plant south of the US 70/C.F. Harvey Parkway interchange that is associated with Sanderson Farms Processing Plant. Several solar farms are also located within the study area.

2.13.2 Impacts

Table 2-7 includes a summary of impacts to community facilities.



Table 2-7: Impacts to community facilities

Feature	Alternative											
	1UE	1SB	11	12	31	32	35	36	51	52	63	65
Cemeteries												
Pinelawn Memorial Park Cemetery	X	X										
Westview Cemetery	X											
Civic Buildings												
Woodman of the World Lodge	X	X										
Lenoir County Shrine Club	X	X										
Government Facilities												
US Post Office	X											
Kinston/Lenoir County Visitors Center	X											
Lenoir County Fairgrounds		X										
Schools												
Woodington Middle School							X	X				
Southwood Elementary School & Southwood Gym			X	X	X	X			X	X	X	X
Lenoir Community College	X	X										
Churches												
Church of God, La Grange	X	X	X	X	X	X	X	X	X	X	X	X



Feature	Alternative											
	1UE	1SB	11	12	31	32	35	36	51	52	63	65
Chosen Vessel Ministries	X	X	X	X	X	X	X	X	X	X	X	X
Greater Vision Baptist Church	X											
Identity Ministries Church	X											
Destiny Ministries	X											
Trinity United Methodist	X		X	X								
Kennedy Home Church						X						
Grace Baptist Church		X										
Tabernacle Free Will Baptist Church	X											
New Testament Baptist Church	X											
Armenia Christian Church	X	X										
Victorious Living Chapel	X	X	X	X	X	X	X	X	X	X	X	X

2.14 NEIGHBORHOODS AND COMMUNITIES

2.14.1 Presence

Suburban and rural residential uses are located throughout the DCIA, in the unincorporated communities, at numerous cross road communities, with most of the residential land uses being primarily rural residential with large lots and either conventional stick built or manufactured housing.

The NC 11/55 corridor contains a mixture of residential, commercial, industrial, and community uses. Jackson's Crossroads, located where NC 11 and NC 55 split, has a shopping center and residential development. A notable feature in this area includes a house listed on the National Register of Historic Places (NRHP). A large cluster of single-family residences is located on the eastern side of NC 11/55 at Tyree Road.

Other single-family residential clusters are located in the unincorporated communities of Albrittons, Woodington, Sandy Bottom, and Bucklesberry. There are also several manufactured home parks, one of which would be directly impacted by alternatives 35 and 36. Special outreach included approximately 125 invitations for small group meetings that were hand-delivered to 6 manufactured home parks in both English and Spanish on 2 sided postcards.

Other single-family residential clusters are located in the unincorporated communities identified by the US Geological Survey (USGS) in the geographic names information system (GNIS), which include Albrittons, Bucklesberry, Little Baltimore, Sandy Bottom, Southwood, and Woodington (USGS 2018). There are also several manufactured home parks.

Loftin's Crossroads is located in the southeastern portion of the DCIA at the intersection of NC 58 and Elijah Loftin Road. Loftin's Crossroads/Southwood has been identified as an activity center and contains a convenience grocery store and Southwood Elementary School is just north of the community.

Other residential areas within Lenoir County include a neighborhood along Cedar Dell Lane, just off of Kennedy Home Road located southwest of the C.F. Harvey interchange, the Howard Place Drive neighborhood, which is located off of NC 11, and the Murray Circle neighborhood, located along Whaley Road south of US 70.

Craven County includes the Town of Dover. The Town of Dover has a population of approximately 400 and is marked by a clustering of residential development with a few community facilities. The area bounded by US 258 to the west, US 70 to the north, and NC 41 to the east is predominately agriculture and forestry interspersed with rural residential land uses. An area of undeveloped land (much of it used for forestry) lies between Wyse Fork Road and US 70.

There are no towns within the DCIA in Jones County; however, Wyse Forks, an unincorporated GNIS community, is located near Wyse Fork Road and US 70. Wyse Forks consists of residences, community facilities, and a convenience store along Wyse Fork Road.

2.14.2 Impacts

Potential impacts to neighborhoods in the DCIA are discussed qualitatively in terms of the following types of impacts based on review of the preliminary design details, relative level of perceived impacts, public input, professional judgment, and knowledge of the study area:

- Access and Mobility – While the terms “access” and “mobility” are often used interchangeably when discussing a transportation project, they have distinct definitions and care should be taken to use the appropriate term for a given circumstance. These definitions apply to all modes of transportation, including non-vehicular transport.
 - Access is the ability to reach private property from a transportation network. Access effects were assessed by determining where the alternatives would result in changes to the existing pattern of vehicular or pedestrian/bicycle traffic, how they would restrict access at locations where access currently exists, or where new or enhanced access would be provided.
 - Mobility is the ability to move around a transportation network. Mobility effects were assessed through the change in transportation options, as well as changes in the efficiency of travel. These impacts are indicated by the expansion, addition, reduction, or removal of travel lanes, transit, or pedestrian facilities.
- Residential Property Relocations and Acquisitions – Residential relocations are the complete taking of property. Residential properties within the proposed right-of-way or affected by the proposed right-of-way (i.e., inaccessible, close proximity to improvements) were identified as relocations. A detailed assessment of relocations can be found in Table 2-2.
- Visual Quality – Visual quality and aesthetic effects were assessed by determining where alternatives would result in the addition of new elements or the removal of existing features from the visual environment and where the alternatives would change the visual character of the community.
- Noise – Noise effects were assessed by determining where increases in noise generated by the alternatives and stations would exceed FTA noise abatement criteria (NAC). These criteria and noise effects of the project are discussed in more detail in the *Traffic Noise Assessment Report*.

Impacts to neighborhoods and communities are summarized in Table 2-8 and in the following sections.

The following neighborhoods and communities would be impacted by project alternatives.

- Cedar Dell Lane

A neighborhood along Cedar Dell Lane, just off of Kennedy Home Road, is located southwest of the C.F. Harvey interchange. The neighborhood contains single family housing, the Baptist Children’s Organization’s Kennedy Memorial Home, the Lenoir County Learning Academy, and tennis courts. Alternatives 1UE and 1SB would not directly impact the neighborhood but would reduce access from the neighborhood to US 70 as well as destinations north of US 70. Access to the neighborhood would not be impacted by any additional alternatives, but alternatives 31 and 32 would pass just south of the neighborhood.

Table 2-8: Neighborhood and community impacts

Neighborhood	Alternative											
	1UE	1SB	11	12	31	32	35	36	51	52	63	65
Cedar Dell Lane	X	X										
Jackson’s Crossroads				X	X	X					X	X
Howard Place Drive Neighborhood							X	X				
Albrittons									X	X		
Woodington							X	X				
Sandy Bottom							X	X				
Bucklesberry							X	X				
Loftin’s Crossroads			X	X	X	X			X	X	X	X
Murray Circle	X	X										
Town of Dover												
Little Baltimore	X	X	X	X	X	X	X	X	X	X	X	X
Wyse Forks	X	X		X		X	X			X	X	

- Bucklesberry

Alternatives 35 and 36 intersect Kennedy Home Road within the neighborhood of Bucklesberry. Only one home would be directly impacted, but the proposed roadway would split the housing along Louie Pollock Road and the housing to the east along Kennedy Home Road. While one home would be directly impacted, the dominant issue in the neighborhood is access and mobility. The neighborhood contains residential housing and a church.

- Jackson's Crossroads

Neighborhoods in the vicinity of the NC 55 and NC 11 intersection include a manufactured home park on Williams Loop and a neighborhood of single family and manufactured homes east of NC 11 off Sherry Drive. No alternatives would result in direct impacts to the neighborhoods; however, alternatives 11, 12, 21, 32, 63, and 65 would result in minor changes in the access to the neighborhood as current access from NC 11 would be closed.

- Howard Place Drive Neighborhood

The Howard Place Drive neighborhood is located off of NC 11 and includes 34 manufactured homes. Alternatives 35 and 36 would have a half cloverleaf interchange at NC 11 that would directly impact the entire community, requiring acquisition and relocation of all 34 homes.

- Albrittons

Development occurs in a relatively dense manner along a triangle comprised of NC 55, Jesse T. Bryan Road, and Green Haynes Road. The neighborhood includes or is in close proximity to multiple churches and businesses. Alternatives 51 and 52 intersect Jesse T. Bryan Road, causing direct impacts to houses along the road. Access is also changed for homes that are not directly impacted, given the control of access of the proposed corridor.

- Sandy Bottom

The Sandy Bottom community is located along NC 55 near the intersections of Croom-Bland Road and Green Haynes Road and consists of scattered single family housing, churches, and a fire station. For alternatives 35 and 36, there would be direct impacts on houses along NC 55 and Croom-Bland Road. The alternatives would also be in the vicinity of the Sandy Bottom Fire Station, making access an important issue in this area. Two churches are currently located along the portion of NC 55 that would be realigned leading up to the proposed interchange.

- Woodington

Woodington is a rural community composed of scattered residential housing, a church, and a middle school along US 258. Alternatives 35 and 36 intersect John Green Smith Road and US 258. In both locations, the proposed alternatives would directly impact homes. An interchange at the proposed alignment of alternatives 35 and 36 and US 258 would maintain overall access between the northern and southern side of the proposed alignment; however, access along smaller roads would be affected by the closing of local roads, including Joe Nunn Road and Patterson Road. This could impact the overall connectivity of housing to the north of the proposed alternatives and the middle school to the south of the proposed alternatives.

- Loftin's Crossroads

The crossroads community near the intersection of Elijah Loftin Road and NC 58 would be impacted by alternatives 11, 12, 31, 32, 51, 52, 63, and 65. It appears that only one home would be directly impacted by the proposed alternatives. Access would not be impacted due to the interchange at the proposed alignment and NC 58. The neighborhood includes, or is located in the vicinity of, a church and multiple businesses.

- Crossroads Community at Cobb Road and Silo Road

The neighborhood along the intersection of Cobb Road and Silo Road is located south of all proposed alternatives. Access from the neighborhood to more northern destinations would be maintained due to the planned grade separations at Cobb Road for all alternatives.

- Murray Circle

Access along Murray Circle would be slightly changed for alternatives 1UE and 1SB given residents would have to access or cross US 70 using the proposed interchanges at NC 58 or Wyse Fork Road. However, no direct impacts would occur.

- Town of Dover

The housing and development within the Town of Dover would not be impacted by any of the proposed alternatives. All alternatives would maintain the current access the town has to US 70.

- Little Baltimore

Little Baltimore contains a church and several small businesses and restaurants. All DSAs would directly impact the community. The proposed interchange and service roads at the intersection of Willie Measley Road/Jim Sutton Road and US 70 would include business and residential relocations. Access to Washington Street and Sugg Road would be available by the proposed service roads. STIP project number R-5813 proposes to construct this intersection to an interchange.

- Wyse Forks

Wyse Forks contains a fire station, EMS station, church, and a convenience store. Alternatives 1UE and 1SB would directly impact the fire station and the convenience store. Alternatives 12, 32, 35, 52, and 63 would have change of access impacts to US 70 and a new interchange would be constructed near Wyse Fork Road and US 70.

2.15 COMMUNITY COHESION AND CONNECTIVITY

Community cohesion is found where people make connections in settings such as a church, school, or work place. It can also be found in neighborhoods, parks, restaurants, and community stores. Community cohesion was reported and discussed in public outreach, at stakeholder meetings, and at small group meetings held for the project.

2.15.1 Presence

Several neighborhoods, communities, and residential areas showed indicators of community cohesion. Some indicators include residential stability, community perceptions and

identification, community connections, and community interactions. Residential stability involves the length of time residents have lived in the area and attendees at a series of meetings over the project life report living in the same location, many on family farmland most of their lives, and report close ties to family members and their neighbors. Community perceptions and identification are statements regarding the residents' viewpoints of the area, if they identify with the area and know who else lives in the area. Attendees at small group meetings provided statements that indicate a high level of perceived community stability, cohesion, and connection with long-standing neighbors, relatives, and friends, with many reporting strong ties to their community and rural lifestyle.

Community cohesion is most likely to be found in many of the crossroad locations and communities where community stability and cohesion have been reported in interviews and at public meetings for the project. Some small group meeting attendees reported attending numerous meetings on the Kinston Bypass with community members and sharing information and updates. Kinston, Jackson Heights, Lenoir and Craven counties have the lowest percentages of workers outside of their neighborhoods. The following section describes the location of communities where community cohesion is reported along the corridors. Some indicators of community cohesion may be the use of the community facilities and public spaces that are within the corridors. Crossroad communities and locations where community cohesion was noted by interviews and the small group meetings are described below and summarized in Table 2-9.

- Little Baltimore contains a church and several small businesses and restaurants.
- Jackson Crossroads contains a church and the only full service grocery store in the southern portion of the DCIA. At small group meetings for the project, several citizens noted that there was a cohesive community around Jackson Crossroads.
- Sandy Bottom community contains two facilities owned by the Sandy Bottom Volunteer Fire Department, two churches, and the Groom Meeting House. Citizens at the small group meetings for the project indicated that there was a high level of community cohesion in the Sandy Bottom community.
- Southwood Crossroads contains Southwood Elementary School, the Southwood Volunteer Fire Department, and a community store. At the small group meeting, citizens indicated that the Southwood area had strong community cohesion.
- Woodington Community was identified by citizens at the small group meeting as having a high level of community cohesion among the neighbors in this area.
- Commercial node on US 70 that contains the Kinston/Lenoir County Visitors Information Center, LCC, and several commercial businesses that community members noted as community gathering spots. These include King's Restaurant, Byrd's Café, and the Neuse River Sports Shop
- Wyse Fork contains the Wyse Fork Volunteer Fire Department and the Wyse Fork Emergency Medical Services. US 70 runs through the Wyse Fork Battlefield, which includes several important historical sites associated with the 1865 Battle of Wyse Fork, and was recently listed on the National Register of Historic Places. At the small group meetings for the project, it was noted that these historic sites carry special meaning for the Southwood and Wyse Fork communities located in this area.

- The Town of Dover contains the Dover Volunteer Fire Department, a Woodmen of the World Lodge, the town hall, a civic center, and a public library. All were identified in the small group meetings as having a high level of community cohesion.

2.15.2 Impacts

Impacts to community cohesion and stability are most likely to result with Alternative 1UE, given the highest number of community facilities and community gathering spots that will be impacted along the corridor. A moderate level of impacts is expected for Alternative 1SB that results from disruption between neighborhoods and commercial areas, employment facilities, and dislocation of community gathering places due to a moderately high number of relocations. A lower level of impact is expected from the other new location alternatives based on areas of community cohesion noted at the small group meetings and by local planners. During the small group meetings, residents expressed concern about potential relocations and impacts to front yards from the various alternatives. Residents indicated that they would prefer to lose their home rather than a portion of their front yards. Community cohesion impacts are summarized in Table 2-9.

Table 2-9: Community cohesion impacts

Residential Area	Alternatives	Impacts ^a
Little Baltimore	1UE, 1SB, 11, 12, 31, 32, 35, 36, 51, 52, 63, 65	The proposed interchange and service roads at the intersection of Willie Measley Road/Jim Sutton Road and US 70 would include business and residential relocations. Among the businesses impacted, would be the Sandpiper Seafood House, which was identified as a popular community meeting location during public involvement.
Jackson Crossroads	11, 12, 31, 32, 63, 65	All associated alternatives would pass south of the Jackson Crossroads residential area. However, there would be direct impacts to residential houses in close proximity to Jackson Crossroads, the Southeastern Freight Lines property, and a solar farm adjacent to the Jackson Crossroads area. The proposed alternatives would also change access between Jackson Crossing and residential developments to the south along NC 11.

Residential Area	Alternatives	Impacts ^a
Sandy Bottom	35, 36, 52	<p>Alternatives 35 and 36 would cause direct impacts to houses along NC 55 and Croom-Bland Road. The alternatives would also be in the vicinity of the Sandy Bottom Fire Station, making access an important issue in this area. Two churches are located along the portion of NC 55 that would be realigned leading up to the proposed interchange, but neither church would be directly impacted. Alternative 52 would pass north of the Sandy Bottom and would intersect NC 55 and Jesse T Brian Road in a location that would separate residential and community features in and adjacent to Sandy Bottom.</p>
Southwood	11, 12, 31, 32, 51, 52, 63, 65	<p>The alternatives would largely avoid impacts to the Southwood area. However, a couple residential parcels could potentially be impacted by the alternatives. The associated alternatives would pass south of Southwood Elementary School. This could impact connectivity between residential areas south of the alternatives and the school.</p>
Woodington	35, 36	<p>Alternatives 35 and 36 intersect John Green Smith Road and US 258. In both locations, the alternatives would directly impact homes. Access along smaller roads would be affected by the closing of local roads, including Joe Nunn Road and Patterson Road. This could impact the overall connectivity of housing to the north of the alternatives and the middle school to the south of the alternatives.</p>
Commercial Node	1UE	<p>Alternative 1UE would impact all community features noted in this area, including the Kinston Lenoir County Visitors and Information Center. Several impacts would involve total parcel impacts due to the proposed interchange; others would involve control of access that would eliminate existing entrances to the parcels.</p>
Wyse Fork	1UE, 1SB, 12, 32, 35, 52, 63	<p>Alternatives 1UE and 1SB would impact residential homes, a Mallard gas station, and the Wyse Fork Volunteer Fire Department. Local concern was vocalized regarding the Fire Department throughout public involvement. The remaining alternatives that would pass near the Wyse Fork area would pass south of the community features.</p>



Residential Area	Alternatives	Impacts ^a
Dover	1UE, 1SB, 11, 12, 31, 32, 35, 36, 51, 52, 63, 65	The housing and development within the Town of Dover would not be impacted by any of the alternatives. All alternatives would maintain the current access the town has to US 70.

^aImpacts are based on 1,000 foot corridors for each alternative

2.16 COMMUNITY HEALTH AND SAFETY

2.16.1 Presence

Overall, Kinston and the communities within the DSA have a variance in the respective health indicators, as shown in appendix F. The median household incomes of the DSA, Lenoir County, and Jones County fall below the North Carolina median household income, while the median household income of Craven County is slightly higher than that of North Carolina. Craven and Jones counties both have average pedestrian crash rates that fall below the crash rate of North Carolina, while the average pedestrian crash rate of Lenoir County exceeds that of the state. Lenoir and Craven counties both have average bicyclist crash rates that exceed the crash rate of North Carolina, while the average bicyclist crash rate of Jones County is lower than that of North Carolina. Within the DCIA, 20 pedestrian crashes and 6 bicycle crashes were recorded between 2007 and 2014. These crashes were predominately located along the Alternative 1UE. All three counties have a higher age-adjusted motor vehicle mortality rate than the state as a whole. Each county also has a higher percentage of physical inactivity than North Carolina, with Lenoir County having the highest percentage of adults with no leisure-time physical activity. However, all three counties have a lower percentage of the population with limited access to healthy foods than the statewide percentage.

2.16.2 Impacts

Construction of a Kinston bypass would have impacts on the health-related indicators, which are found in appendix F. While the predicted impacts would vary based on the different alternatives, some general impacts would be present regardless of the selected alternative, given the development of a freeway with full control of access. The project will serve high-speed through traffic and would neither facilitate the movement of pedestrian nor bicycle traffic along the selected route. When the preferred alternative is selected, bicyclists and pedestrians would likely be accommodated on the Y-lines and side streets that cross (either grade separated over or under) the preferred alternative. Table 2-5 provides a summary of the crossings of designated bicycle routes.

While the percentage of households with no vehicles available is lower within the DSA than in the state as a whole, it should be noted that the development of a freeway could decrease these households' connectivity to local resources. Impacts resulting from the multiple proposed interchanges along each of the alternatives to driveways and cross streets, and mobility and access are discussed in section 2.10.



In Lenoir County, the percentage of adults reporting no leisure-time physical activity is seven percentage points higher than that of the state. While the development of a freeway would not induce active modes of transportation along the corridor, due to the currently low bicycle and pedestrian traffic along the proposed corridors, the development of the Kinston Bypass would be unlikely to substantially decrease bicycle and pedestrian activity.

The potential impact on median household income in the area is less predictable. Alternative 1UE would impact 137 businesses, Alternative 1SB would impact 67 businesses, and the remaining alternatives would impact between 26 and 40 businesses. The impacts to any displaced businesses (and distinct from the land owners who will be financially compensated) would potentially consist of their lost future net earnings potential (i.e., revenues minus business costs). However, except for the one-time relocation cost, the displaced businesses would probably not incur any long-term net earnings losses if other comparable relocation sites were available nearby. Given the general availability of underused and developable land sites in Lenoir County, it would be reasonable to expect that future business relocation should be possible to reduce the future displacement impacts. While alternatives 1UE and 1SB have a more severe impact on businesses as they would be built in the more urban areas, the more southern alternatives are in the rural area of Lenoir County and so would have larger impacts on agricultural land.

Agriculture is an important economic sector in Lenoir, Jones, and Craven counties and Eastern North Carolina as a whole. Converting agricultural land into a transportation facility eliminates the current and future earning potential for farmland within the right-of-way, but it is only a small fraction of the available farmland in the county. However, if the hope that upgrading transportation infrastructure and improving connectivity along the US 70 corridor will attract businesses to the region is realized, employment opportunities could increase, positively impacting median household income. Detailed economic impact information is provided in the EIA report for this project.

Access to local amenities is another issue that can have impacts on community health. This includes access to parks, recreational facilities, and healthy food sources. While the proposed alternatives help facilitate local and regional connectivity through the presence of interchanges and grade separations at NC and US highways, the restriction of movement along local roads may have negative consequences for local connectivity. In addition, some alternatives would have direct and indirect impacts on grocery stores and additional food sources. Alternative 1UE would directly impact four grocery stores currently located along the existing US 70 Corridor. Also along the existing US 70 corridor is a long-time produce stand that has been located on the northern side of US 70, just east of Harold Sutton Road, for years. This produce stand would be directly impacted by alternatives 1UE, 1SB, 11, and 12. The alternatives that do not directly impact the stand would have indirect impacts due to the removal of through traffic along the existing US 70 corridor.

2.17 VISUAL/AESTHETICS

2.17.1 Presence

The DCIA contains the existing US 70 Corridor, a highway commercial corridor that is primarily comprised of commercial, office, retail and other businesses, signage, parking, and lighting.

There are also a number of residential properties; see Table 2-1 land use for each alternative. The DCIA surrounding the other southern alternatives is primarily an agricultural landscape that contains agricultural, forestry, open space, and rural residential land uses reflecting a long history of farming and forestry.

2.17.2 Visual Impacts

Visual impacts are likely to result along each of the southern alternatives in the vicinity of the full control of access freeway through a visual barrier across the rural and agricultural landscape. Alternatives 1UE and 1SB would traverse mostly developed parcels along the commercial portion of the corridor, with about half of the corridor being rural areas that have limited development. Alternatives 1UE and 1SB would alter the corridor through the relocation of residences and businesses.

Because of the flat terrain and near sea level elevations, the design of the project's mainline, interchanges, and crossings of roadways, railways, and waterways dictates the project be constructed above grade. Portions of Alternative 1UE and larger portions of Alternative 1SB would be elevated and bridged over the floodplain, and other alternatives would include areas where the mainline crosses over secondary roads or railroads.

A comparison of Table 2-1 Land Uses in the DCIA with the total active farmland acreage impacted by each alternative is provided in Table 2-10.

Table 2-10: Alternative impacts by active farmland acreage

Alternatives	Percentage of impacted agricultural acreage ^a
Alternative 1UE	46%
Alternative 1SB	55%
Alternative 11	88%
Alternative 12	67%
Alternative 31	70%
Alternative 32	73%
Alternative 35	73%
Alternative 36	70%
Alternative 51	72%
Alternative 52	75%
Alternative 63	67%
Alternative 65	66%

^a Percentage of impacted agricultural acreage is based on 1,000 foot alternative corridors within DCIA.

Per Table 2-1, Alternative 1UE and Alternative 1SB would have the lowest impact to active farmland, and therefore the lowest aesthetic visual effect. Alternative 11 would impact the largest percentage (88 percent) of active farmland in the DCIA, therefore has the highest level of aesthetic effect. This is followed by alternatives 52, 32, and 51 with percentages in the 70 percent range.

In general, visual quality is enhanced or improved for those using the facility and degraded for those viewing the facility from surrounding communities. Proposed interchanges would require elevated grade separations. The elevated grade separations would be highly visible in areas of open space and near crop fields where there would be unobstructed views, and thus the roadway would have an adverse impact on those living within these view sheds. In wooded areas or locations with a built environment, the view sheds are already obstructed by buildings, trees, and other structures, and thus the roadway would not have as much of an adverse impact to the view shed. The project would provide motorists opportunities for scenic views across agricultural fields, the Neuse River, and forested areas, which would be a positive effect. In the urban settings, visual impacts are still possible, especially surrounding proposed interchanges and grade separations, but the project context is more in line with urban land uses and would likely be in context to the surrounding areas.

The new roadway would also likely have some lighting associated with it, in particular near the transportation nodes where there are interchanges. The addition of new lighting in the rural areas would be noticeable where it is currently absent.



2.18 RECURRING IMPACTS

In general there may be individual minor recurring effects on communities and populations within the DCIA. Impacts to individuals and businesses located near CF Harvey Parkway could experience recurring effects from the construction of Alternatives 1UE and 1SB as well as from Alternatives 63 and 65, as these alternatives would involve construction in the area previously disturbed by the construction of the CF Harvey Parkway.

Flooding impacts resulting from previous storm events may be perceived as recurring effects on business, properties, and communities throughout the DCIA, especially for businesses and residents near Alternatives 1UE and 1SB and for properties located in and near the floodplain. There may be a perception that some flooding is a result of cumulative development of roadway projects and commercial development along the existing US 70 corridor. During small group meetings and public outreach functions, residents have expressed concern about flooding and the potential effects of the project, especially Alternative 1SB. As appropriate, recommendations will be added to address the impacts from the preferred alternative.

2.19 ENVIRONMENTAL JUSTICE AND TITLE VI POPULATIONS

Title VI of the Civil Rights Act of 1964 protects individuals from discrimination on the grounds of race, age, color, religion, disability, sex, and national origin. In accordance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations" by federal agencies are mandated to identify and address any disproportionately high and adverse effects on minority and/or low-income populations.

The Executive Order also directs federal agencies to provide minority and low-income communities access to public information and meaningful public participation. The three environmental justice (EJ) principles are as follows:

- To ensure the full and fair participation of all potentially affected communities in the transportation decision-making process.
- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority or low-income populations.
- To fully evaluate the benefits and burdens of transportation programs, policies, and activities, upon low-income and minority populations.

A disproportionately high and adverse effect on minority and low-income populations means an adverse effect that

- is predominately borne by a minority population and/or a low-income population;
- will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non-low-income population.

2.19.1 Presence

Based on demographic data available from the U.S. Census ACS data from 2011-2015 and NCDOT guidance, thresholds are used to determine the presence of EJ communities at the block

group level. The thresholds are determined based upon the percent of minorities and low income populations living in a block group compared to the overall county average. The standard of practice used for minority populations is 10 percent above the county average, or 50 percent, whichever is less. For this project, it was determined that the minority threshold is 43.4 percent for Craven County, 48 percent for Jones County, and 50 percent for Lenoir County.

There are two BGs within the DSA that surpass the minority thresholds for presence of EJ, both of which are in Lenoir County. The BGs are census tract (CT) 103, block group 1 (100 percent minority population) and census tract 107, block group 1 (60.7 percent minority population).

For low-income populations the standard of practice for determining EJ populations is 25 percent of the total population or 5 percent above the county average being at or below the poverty level. The low income threshold is 20.6 percent for Craven County, 26.5 percent for Jones County, and 28.2 percent for Lenoir County. Very poor populations (under 50 percent of the poverty level) are also identified and compared to the county rate for EJ screening. The very poor threshold is 12.1 percent for Craven County, 14.8 percent for Jones County, and 14.3 percent for Lenoir County. Finally, populations who are considered near poor (between 100 and 149 percent of the poverty level) are identified and compared to the county rate. The near poor threshold is 15 percent for Craven County, 17.8 percent for Jones County, and 21.3 percent for Lenoir County.

There are several BGs that surpass one or more of the EJ thresholds for poverty. They are all in Lenoir County. BGs that surpass the EJ poverty thresholds in the various categories are shown in Table 2-11.

Table 2-1 I: Block groups above the environmental justice poverty threshold

Poverty	Total Population for Whom Poverty Status is Determined	Below Poverty Level		Very Poor: Under 50% of Poverty Level		Near Poor: Between 100% and 149% of Poverty Level	
		#	%	#	%	#	%
CT 103, BG 1	780	537	68.8%	292	37.4%	99	12.7%
CT 107, BG 1	759	228	30.0%	16	2.1%	159	20.9%
CT 110.1, BG 2	1,091	88	8.1%	33	3.0%	285	26.1%
CT 110.1, BG 3	1,040	274	26.3%	252	24.2%	82	7.9%
CT 111, BG 3	1,354	268	19.8%	200	14.8%	233	17.2%
CT 114, BG 2	1,422	200	14.1%	50	3.5%	329	23.1%

- Above EJ threshold

In order to identify the presence of EJ populations at a more granular level, data on minority populations at the block level from the 2010 Decennial Census was evaluated using the same thresholds used for the block group analysis (43.4 percent for Craven County, 48 percent for Jones County, and 50 percent for Lenoir County). In addition, locations of EJ populations from field observations, information provided by local officials, and EJ residential areas identified

with the US Environmental Protection Agency's (USEPA) EJ Screening and Mapping Tool have also been included. As a result of block level analysis and field visits, the following locations of potential EJ residential areas located within the DCIA have been identified and assessed for potential impacts.

- Norbert Hill Road

The Norbert Hill Road residential area, located on Norbert Hill Road between US 70 and Gregg Drive, contains low-income populations that would be affected by all the DSAs. The DSAs may displace some of these residences that are closest to US 70 and those that remain would experience a change in access, as they would be connected to US 70 via a service road.

- Foss Farm Road

The Foss Farm Road residential area, located on US 70 between Barwick Station Road and Albert Sugg Road, contains concentrations of minority and low-income populations that would be dislocated by Alternatives 1UE, 1SB, 11, 12, 35, 36, 51, and 52. Alternatives 31, 32, 63, and 65 (from Willie Measley/Little Baltimore interchange) would provide a service road to this community.

- Crooms Drive

The Crooms Drive residential area, located on Crooms Drive off of NC 55, contains low-income populations that would be impacted by Alternatives 51 and 52. Some of the residences would be displaced by the proposed interchange with NC 55 and those that remained would experience a change of access to NC 55.

- Jesse T. Bryan Road

The Jesse T. Bryan Road residential area, located off of Jesse T. Bryan Road and Barwick Road, contains low-income populations. Alternatives 51 and 52 would change how the residences access the local road network.

- Carrie Hill Drive and Howard Place Drive

The Carrie Hill Drive and Howard Place Drive residential area, located off of NC 11, contains low-income populations. Alternatives 35 and 36 would displace this residential area that contains approximately 35 homes.

- Lonesome Pine Drive

The Lonesome Pine Drive residential area, located on Lonesome Pine Drive between Joe Nunn Road and Randy Road, contains low-income populations. Alternatives 63 and 65 are expected to displace several of these homes.

- Albert Baker Road

The Albert Baker Road residential area, located on Albert Baker Road off of NC 58, contains concentrations of minority and low-income populations. Alternatives 35 and 36 propose an interchange with NC 58 in a location that would directly impact the residential area.

- Fordham Lane

The Fordham Lane residential area, located on Fordham Lane off of US 258, contains a minority and low-income population that would be directly impacted by Alternative 1 SB due to the proposed interchange with US 258.

- Johnson Road/NC 58

The Johnson Road/NC 58 residential area contains a concentrated minority population that would likely be directly impacted by Alternative 1SB due to the proposed interchange with NC 58.

- British Road and Caswell Station Road

A minority residential area is located in the British Road and Caswell Station Road area, located on the north side of US 70 between British Road and Caswell Station Road.

Alternative 1UE and 1SB would upgrade existing US 70 and require the construction of service roads, which would directly impact several of the homes along existing US 70 in this area due to the need for additional right-of-way. Homes that would not be directly impacted would experience change in access to the US 70 corridor.

- US 70/Tilghman Road

A cluster of housing that contains potential minority and low-income populations is located on the southern side of US 70 just west of its junction with Tilghman Road. Alternatives 1UE, 1SB, 12, 32, 35, 52, and 63 would involve upgrading existing US 70 in this location, which would include adding service roads. These alternatives are expected to directly impact most of these residences and would alter access to any that might remain.

2.19.1.1 Limited English Proficiency

For public outreach purposes, it is important to identify populations with LEP. LEP individuals are defined by the US Census Bureau as speaking English less than very well. The US Department of Justice's LEP Safe Harbor Act requires that vital public involvement materials be translated if certain LEP population thresholds are surpassed. The thresholds for NCDOT projects are five percent of the DSA or 1,000 individuals, whichever is less. If the thresholds are not met, but there is a notable LEP population, language assistance is required in the form of interpreters, local area contacts and/or media campaigns. NCDOT defines a notable LEP population as being greater than 50 persons within a block group who speak English less than very well.

According to the US Census Bureau, 485 Spanish-speaking adults speak English less than very well in the DSA (3 percent of the total population). This total does not meet the US Department of Justice LEP Safe Harbor Act threshold of 1,000 persons or 5 percent of the DSA. However, census data indicate a Spanish-speaking population exceeding 50 persons within the DSA that may require language assistance. There are three BGs that surpass the threshold for EJ LEP:

- Census tract 9603, block group 4 (Craven County)
- Census tract 113, block group 2 (Lenoir County)
- Census tract 113, block group 3 (Lenoir County)

Because Spanish-speaking populations requiring language assistance are located within the DCIA, appropriate measures will continue to ensure meaningful public involvement to satisfy the requirements of Executive Order 12898.

2.19.2 Impacts

Benefits and burdens resulting from the project are anticipated to be distributed throughout the community. No disparate impacts are anticipated under Title VI and related statutes.

Benefits of the project, including improved safety and mobility, would be enjoyed by both regional travelers and local residents, including minority and low-income residents. While adverse community impacts including right-of-way acquisition, relocations, and construction delays and detours are possible as a result of this project, impacts to minority and low-income populations are not anticipated to be disproportionate. Public involvement and outreach activities will ensure full and fair participation of all potentially affected communities in the transportation decision-making process.

2.20 OTHER DEMOGRAPHIC DATA

2.20.1 Racial Makeup

According to the ACS, 71.2 percent of the DSA identified themselves as white, 25.4 percent as black or African-American, with the remaining 3.4 percent of the population identifying as Asian, Native Hawaiian/Pacific Islander, some other race, or two or more races. Of the three counties, Lenoir County has a larger EJ component, with 55.2 percent white and 40.2 percent black or African American and the remaining 4.6 percent American Indian, Hawaiian/Pacific Islander, Asian, and mixed race. Craven County is ethnically diverse with 70.5 percent white and 21.8 percent black or African American, and the remaining 7.7 percent American Indian, Hawaiian/Pacific Islander, Asian, mixed race, and other race. Jones County is 65.1 percent white and 31.7 percent black or African American, with the remaining 3.2 percent American Indian, Asian, mixed, or other race.

2.20.2 Ethnic Makeup

The minority population, which includes both racial and ethnic minorities, is 34.1 percent in the DSA. The minority populations in Craven, Jones, and Lenoir counties are 33.4, 38.0, and 49.5 percent, respectively. The threshold for identifying potential EJ populations is a DSA block group minority population 10 or more percentage points higher than the respective county or 50 percent, whichever is less. There are two potential BGs that exceed the threshold, both within Lenoir County. The two BGs, CT 103, BG 1 and CT 107, BG 1, are both within the city limits of Kinston. Figure 2-3 depicts BGs exceeding the minority threshold. Table 2-13 provides a high level overview of the minority population within the DSA and detailed data on minority populations can be found in appendix A.

Within the DSA, 5.9 percent of the population is Hispanic compared to 6.9 percent in Craven County, 4.2 percent in Jones County, and 7.1 percent in Lenoir County. The greatest concentrations of Hispanic populations are within Lenoir County in the following BGs:

- CT 113, BG 1 – 19.5 percent Hispanic

- CT 113, BG 2 – 22.2 percent Hispanic
- CT 113, BG 3 – 12.5 percent Hispanic

These BGs surround NC 11 and NC 55 southwest of Kinston. For more information see appendix B.

2.20.3 Median Income Values

Table 2-12 compares the per capita income and poverty rates in the City of Kinston with the counties in the DCIA and the state average. The current median income in Kinston is \$21,600 and \$23,900 for Lenoir County as a whole. In comparison, the median income for North Carolina is higher at \$29,300. Similar differences in income, the poverty rate, and other wealth indicators all reflect the trend that Kinston is economically lagging behind its neighboring counties and the state. Kinston has a 33 percent poverty rate, which is nearly double North Carolina's 17 percent poverty rate.

Table 2-12: Median earnings and poverty in 2015 (2016 \$)

Area	Median Earnings (per worker)	Population Below Poverty Level
Kinston	\$ 21,565	33%
Dover	N/A	30%
Lenoir County	\$ 23,859	23%
Craven County	\$ 26,635	16%
Jones County	\$ 25,817	22%
North Carolina	\$ 29,280	17%

Source: American Community Survey 2017.

Figure 2-3: Minority and low income populations

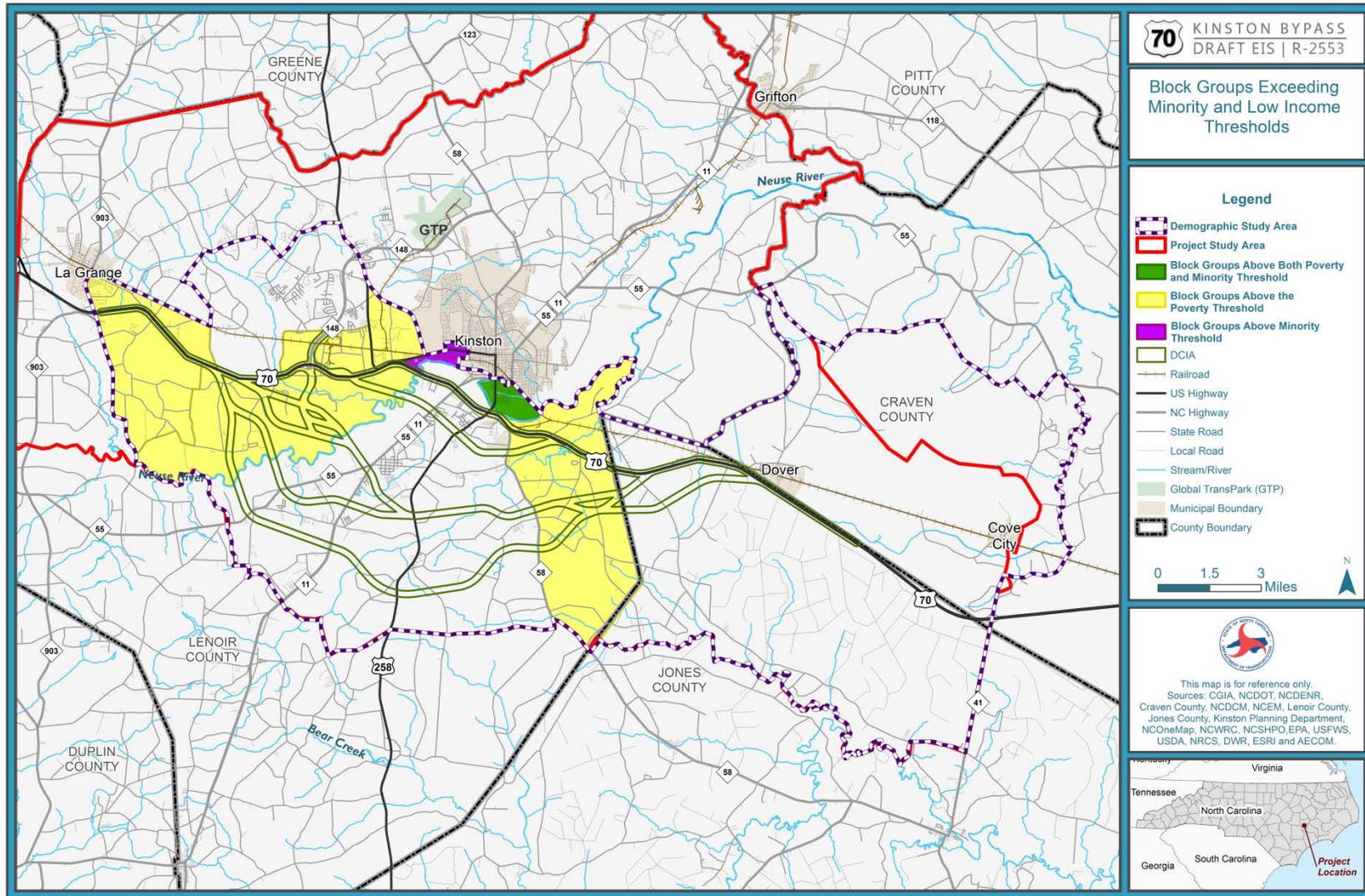


Table 2-13: Low income population

Geography	Total Population for Whom Poverty Status is Determined	Below Poverty Level		Very Poor: Under 50% of Poverty Level		Near Poor: Between 100% and 150% of Poverty Level	
		#	Percent	#	Percent	#	Percent
DSA	20,474	3,488	17.0%	1,380	6.7%	2,809	13.7%
Craven County	100,560	15,664	15.6%	7,163	7.1%	10,071	10.0%
Jones County	10,116	2,173	21.5%	990	9.8%	1,296	12.8%
Lenoir County	57,746	13,401	23.2%	5,385	9.3%	9,384	16.3%
North Carolina	9,592,619	1,667,465	17.4%	725,635	7.6%	1,049,151	10.9%

Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015)

Low income is defined as any block group where the percentage of the population in any poverty category (i.e., below poverty level, very poor, or near poor) equals or exceeds 25 percent of the total population of that block group OR any block group where the percentage of the population in any poverty category exceeds the county average by 5 percentage points or more. Within the DSA, only one block group surpasses the EJ threshold. Census tract 103, block group 1 in Lenoir County has a below poverty level rate of 68.8 percent. This block group is located within the city limits of Kinston, just south of downtown. In addition, three BGs had populations classified as very poor that were greater than 5 percent of the county rate in the DSA, all in Lenoir County. Those BGs were census tract 103, block group 1 (located within the city limits of Kinston, just south of downtown); census tract 110.01, block group 3 (located within the city limits of Kinston, west of downtown); and census tract 111, block group 3 (located to the southeast of La Grange). Finally, two BGs had populations classified as near poor that were greater than 5 percent of the county rate in the DSA, both in Lenoir County. Those BGs were census tract 110.01, block group 2 (located to the south of the interchange of US 70 and Felix Harvey Parkway), and census tract 114, block group 2 (located south of Kinston, and to the east of NC 58).

Figure 2-3 illustrates the BGs exceeding the low-income threshold.

2.21 NOISE

2.21.1 Presence

A *Traffic Noise Report* was prepared for this project to document the traffic noise impacts to residences, businesses, schools, and other areas or frequent human use. Traffic noise impacts occur when the predicted traffic noise levels either (a) approach or exceed the Federal Highway Administration (FHWA) noise abatement criteria (with "approach" meaning within 1 A-

weighted decibel (dB(A)) of the NAC values), or (b) substantially exceed the existing noise levels by 10 dB(A) or more. FHWA and NCDOT require that feasible and reasonable measures be considered to abate traffic noise at all predicted traffic noise impacts. Measures considered include highway alignment selection, traffic systems management, buffer zones, noise walls, and earth berms. The analysis conducted as part of the *Traffic Noise Report* was performed based on guidance provided by the NCDOT Traffic Noise Policy and NCDOT Traffic Noise Manual, and complies with 23 CFR 772.

2.21.2 Impacts

In general, noise levels based on traffic are projected to increase in the proximity of alternatives 1UE, 1SB, and all new southern alternatives. Under proposed conditions, 2040 Build Alternative 1 UE resulted in 42 impacted receptors, Alternative 1 SB resulted in 63 impacted receptors, Alternative 11 resulted in 48 impacted receptors, Alternative 12 resulted in 54 impacted receptors, Alternative 31 resulted in 62 impacted receptors, Alternative 32 resulted in 67 impacted receptors, Alternative 35 resulted in 38 impacted receptors, Alternative 36 resulted in 34 impacted receptors, Alternative 52 resulted in 46 impacted receptors, Alternative 63 resulted in 58 impacted receptors, and Alternative 65 resulted in 54 impacted receptors.

Consideration for noise abatement measures was given to all impacted receptors. Following the criteria for feasibility and reasonableness as described in NCDOT's Traffic Noise Policy, noise abatement for this project would likely be at one location for Alternative 1 UE, one location for Alternatives 11 and 12, two locations for Alternatives 31 and 32, and two locations for Alternatives 63 and 65. Detailed study of potential mitigation measures will be necessary for the final design of this project.



3. PUBLIC INVOLVEMENT

3.1 METHODS FOR PUBLIC OUTREACH

A Public Involvement Plan (PIP) has been developed to guide agency coordination and public outreach efforts in support of the proposed Kinston Bypass project. The PIP was updated in January 2018 and covers public involvement activity from project initiation through circulation of the Draft Environmental Impact Statement (DEIS) in May 2018.

The PIP describes the key goals of the plan, methods to achieve the stated goals, appropriate steps for successful implementation of the PIP, dates for previously completed activities, and a schedule of planned activities. The objective of the plan is to involve the public in the decision-making process and provide opportunities for citizens and organizations to participate in the project planning process. NCDOT seeks to achieve the following goals:

- Deliver informational products that provide a useful means of understanding the various issues associated with the project.
- Create an open and ongoing dialogue with business, environmental, civic, and other groups that may be interested in the proposed project. This will ensure that important local issues and concerns are considered during the planning process.
- Establish multiple outlets for providing feedback to ensure that public interests and concerns are captured.
- Ensure that all populations affected by or interested in the outcome of the proposed project have convenient, meaningful opportunities to participate in the environmental review planning process and provide comment.
- Incorporate the advice and recommendations received into project decisions to the maximum extent possible and relevant supporting technical studies that include the CIA and the EIA.
- Incorporate information gathered from the public into the Draft and Final Environmental Impact Statement documents and associated processes.

Project information is provided on the Kinston Bypass project website at <https://www.ncdot.gov/projects/kinstonbypass/>.

NCDOT and consultants have maintained and augmented a public outreach list with new residents, business owners, and potentially affected property owners for the life of the Kinston Bypass project.

General public outreach on the project was important to ensure that the public was aware that the Kinston Bypass project was being evaluated after a period of inactivity. Public outreach also included a direct mailing of a project postcard in July 2017 and March 2018, and a project exhibit at the Eastern North Carolina Food, Brew n' Que festival in October 2017 and at the BBQ Festival on the Neuse in May 2018.

In addition to previous and ongoing outreach efforts for the project, the NCDOT organized small group meetings for residents potentially impacted by one or more of the alternatives under consideration, and with business owners for the purpose of obtaining information for the EIA.

Invitations for the small group meetings were emailed to residents within the vicinity of the corridors.

As of May 2018, the outreach effort has included distributing informational project flyers, public meetings, and small group meetings in known low-income and/or minority communities and translating the project's written materials into Spanish as well as providing Spanish-speaking professionals at public meetings. Flyers detailing information about the small group meetings were hand-delivered to 6 manufactured home parks.

Given the amount of EJ and LEP communities within the DCIA, an additional EJ and LEP memo was created as a supplement to the PIP. The memo was designed to plan targeted outreach to minority, low income, and Spanish speaking populations within the project study area. As result of the memo on March 22nd, Kinston Bypass Update bilingual postcards (English and Spanish) were hand-delivered at the following community offices:

- La Grange Public Library, 119 E Washington St, La Grange, NC 28551
- La Grange Medical Center: Carl L. Haynes Jr., MD, 101 S Carey St
- La Grange, NC 28551 Taqueria De La Tienda Mexicana Garibaldi, 1746 NC-11 S, Kinston, NC 28504
- Neuse Regional Library, 510 N Queen St, Kinston, NC 28501
- Lenoir County Social Services, 130 W King St, Kinston, NC 28501
- Kinston - Lenoir County Chamber of Commerce, 301 N Queen St, Kinston, NC 28501
- Kinston Community Health Center, Inc, 324 N Queen St, Kinston, NC 28501

More details on planned EJ and LEP outreach efforts can be found in the EJ and LEP memo which is attached to the PIP.

A MetroQuest online public engagement survey is being used to enhance traditional public involvement programs and project websites. MetroQuest survey tools engage the public in a more personal way; guide them through the decision making process, and help them to provide comments on the proposed project. The target audience for these surveys is the project mailing list, especially those who cannot participate in public engagement in traditional ways due to distance or ability to physically engage in public meetings.

3.2 SMALL GROUP MEETINGS

In order to gain insight and a better understanding of the communities and neighborhoods within the DCIA, NCDOT invited residents within the DCIA who might be affected by the alternatives being considered to participate in one of two small group meetings. The meetings were held on September 26, 2017, at Southwood Memorial Christian Church, and September 28, 2017, at Woodmen Community Center. Both locations had large multi-purpose meeting space that could be scaled up to meet larger attendance levels. More information and details about the location, attendees, and specific comments are provided in appendix B.

Home owners and tenants who had participated in previous Kinston Bypass meetings were invited by postal mail and by email. Invitations were mailed to 170 residents. The invitation offered each invitee two meeting times and locations to choose from and encouraged the inviting



of other interested individuals. Approximately 80 percent of the people who registered to attend the small group meetings were invited, while the remaining 20 percent learned about the meeting through word of mouth. The ability for residents to bring their spouses and neighbors was an important community engagement consideration.

The consultant team conducted additional outreach to over 125 households in six manufactured home parks situated in the DCIA to ensure that potential LEP, lower income, and new occupants were invited to comment. Bilingual staff hand-delivered 2 sided bilingual (English/Spanish) postcards regarding the small group meetings to addresses in the manufactured home parks. Additional information regarding outreach efforts for low-income and minority communities can be found in the EJ and LEP Outreach Plan Memo, which is included in the PIP.

A total of 106 people participated in the small group meetings. The small group meetings included table top mapping exercises where the attendees were asked a series of questions to help the project team identify their travel routes and community resources and help determine potential impacts from the project. The information exchanged during the small group meetings was captured on maps, notes, and lists of priorities. These maps, flipcharts, along with the comment forms received are included in appendix B and incorporated into the inventory of community and natural features and the analysis of community impacts throughout this report.

3.3 INTERVIEWS WITH LOCAL OFFICIALS

Local officials and some businesses were interviewed for the CIA, LUSA, and EIA reports during September, October, and November 2017. Local economic development, planning, and GIS staff were interviewed to assist the project team with identifying community resources not previously mapped, protected populations, and local plans. They also helped the project team identify potential community impacts. The interviews are documented in appendix D and summarized and incorporated into the inventory of community and natural features and the analysis of community impacts throughout this report.

3.4 PUBLIC COMMENTS/AREA CONCERNS

Overall, Kinston and the surrounding community are generally aware of the proposed project and have been included in multiple community project meetings for a number of years. According to Lenoir County Planning officials, community members are generally supportive of the project, but there are individual concerns over the location and how it might impact individual property owners and businesses, especially business opportunities and existing businesses along US 70. There are also generalized community concerns of how it might change the community character of the rural landscape and farmland.

Over the years, Kinston and Lenoir County have been subjected to severe flooding along the Neuse River, including three severe flood events: in 1996 and 1999 following Hurricanes Fran and Floyd, and Hurricane Matthew in 2016. The Disaster Recovery Act of 2016 tasked North Carolina Emergency Management with facilitating the creation of resilient redevelopment plans for the 50 federally declared counties impacted by Hurricane Matthew. Public meetings were conducted for the Hurricane Matthew resilient redevelopment plans between January and April 2017 where issues and concerns about future flooding, and recovery strategies and projects were discussed.



During previous meetings and at the small group meetings for the Kinston Bypass project held in September 2017, the community expressed concerns over flooding and evacuation during storm events. Concerns were raised that Alternative 1SB would create and/or expand flooding and cause traffic problems on NC 58.

Residents expressed concern that US 70 was closed for over one week during the aftermath of Hurricane Matthew and some residents in the study area reported taking 100-mile detours to reach locations in Kinston and areas north of Kinston. During the small group meetings, many of the residents voiced concern about study alternatives that would have the potential to increase flooding and to affect evacuation during an emergency. These concerns were expressed over Alternative 1SB and its potential impacts on the floodplain.

Other concerns were the potential of alternatives to divide communities or to directly impact community features such as cultural resources, farming, churches, community stores, and community gathering places, etc. Southwood or Loftin's Crossroads was mentioned as an important community activity center to the community having churches and a school. Meeting attendees were also uneasy about impacts to farms and farming operations and the rural character of their communities. Other attendees noted that their families had been farming the same land for over 100 years, which demonstrates the stability of agriculture and farming in this area. Others expressed concern that families would be divided through potential relocations causing some to relocate away from the support and stability of their family members. They also expressed their desire that NCDOT not take their front yards, or portions of their property, but take the entire parcel if impacted. Numerous concerns were expressed over potential impacts to access and connections to local roadways as a result of the project. In addition, concerns were expressed about potential impacts to environmental and wildlife resources.



4. REFERENCES

- City of Kinston. 2000. Neuse River Basin: Stormwater Program for Nitrogen Control.
- City of Kinston. 2008. *Comprehensive Pedestrian Plan*. Prepared by Rivers & Associates.
- City of Kinston. 2010. Unified Development Ordinance.
- Craven County. 2009. *Coastal Area Management Act (CAMA) Land Use Plan*. Prepared by Holland Consulting Planners.
- Eastern Carolina Council. 2007. *Comprehensive Economic Development Strategy*. <http://www.eccog.org/common/ewe/documents/CEDS2007.pdf>.
- Eastern Carolina Council. 2017. "TIP 2011-2017 Priority List - Current TIP Projects." Eastern Carolina RPO. 2011-2017. http://www.eccog.org/common/ewe/documents/Public_Notice_TIP_2011_2017_ECC_Web_Site.pdf.
- Lenoir County. 2001. *Land Use Plan*.
- Lenoir County. 2003. Watershed Protection Ordinance.
- Lenoir County. 2003. Zoning Ordinance.
- NCDOT. 2009. *Traffic Forecast Technical Memorandum for Kinston Bypass Alternatives Study*. Prepared by PB Americas, Incorporated.
- NCDOT. 2011. *Kinston Comprehensive Transportation Plan*.
- NCDOT. 2015. *North Carolina Strategic Transportation Corridors Policy*. <https://connect.ncdot.gov/projects/planning/pages/NCTransportationNetwork.aspx>. (accessed January 2018.)
- NCDOT. 2013. "Draft 2013-2023 State Transportation Improvement Program (STIP)." Connect NCDOT STIP Division Maps. <https://connect.ncdot.gov/projects/planning/Planning%20Document%20Library/Div02.pdf>.
- NCDOT. 2018. R-2553 Public Involvement Plan.
- North Carolina Department of Environment and Natural Resources Division of Water Quality. Redbook: Surface Waters and Wetlands Standards. Raleigh: NC Administrative Code 15A NCAC 02B.0100, 0200, & 0300, 2007.
- North Carolina Department of Environment and Natural Resources. 2012. "Final 303(d) List of Impaired Waters."
- North Carolina Employment Security Commission. 2012. "Demand Driven Data Delivery System." Labor Market Information Division. October 2012. <http://esesc23.esc.state.nc.us/d4/QCEWLargestEmployers.aspx>.
- North Carolina Office of Demographics. 2013. "Population Estimates and Projections." North Carolina Office of State Budget and Management. http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimate.s.htm.



O.R. Colan Associates, LLC. 2017. R-2553 US-70 Property Acquisition Cost Estimate. October 12, 2017.

Town of La Grange. 2008. *Land Use Plan*. North Carolina Department of Commerce Division of Community Assistance.

Town of La Grange. 2008. *Land Use Plan*. La Grange, NC.

Town of La Grange. 2010. "Zoning Ordinance."

U.S. 70 Corridor Commission and NCDOT. 2014. *U.S. 70 Corridor Economic Assessment*. Prepared by Cambridge Systematics, Inc.

United State Census Bureau. 2010. "Summary File 1 Data." American Fact Finder. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

United States Census Bureau. 2000. "Summary File 1 Data." American Fact Finder. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

United States Census Bureau. 2011. "American Community Survey." American Fact Finder. 2007-2011. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

USDA NRCS. n.d. "Soils Protected Under the Farmland Protection Policy Act." <http://www.nc.nrcs.usda.gov/>.

USGS 2018. Geographic Names Information System. <https://geonames.usgs.gov/domestic/>.

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