2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2018 Lenoir County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C. Refer to Appendix I for documentation of project alternatives and scenarios that were studied, but are not included in the adopted CTP.

NCDOT adopted a "Complete Streets¹" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

- making it easier for travelers to get where they need to go;
- encouraging the use of alternative forms of transportation;
- building more sustainable communities;
- increasing connectivity between neighborhoods, streets, and transit systems;
- improving safety for pedestrians, cyclists, and motorists.

Complete streets are streets designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists and individuals of all ages and capabilities. These streets generally include sidewalks, appropriate bicycle facilities, transit stops, right-sized street widths, context-based traffic speeds, and are well-integrated with surrounding land uses. The complete street policy and concepts were utilized in the development of the CTP. The CTP proposes projects that include multi-modal project recommendations as documented in the problem statements within this chapter. Refer to Appendix C for recommended cross sections for all project proposals and Appendix D for more detailed information on the typical cross sections.

2.1 Unaddressed Deficiencies

N. Herritage Street (SR 1570), Local ID: LENO0110-H, is currently at capacity from College Street to Plaza Boulevard (SR 1600). By 2045, this section is projected to be over capacity. Improvements are needed to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

N. Herritage Street (SR 1570) runs north-south through northern Kinston and provides access from the Lenoir County Hospital to downtown Kinston. This facility is a two-lane minor thoroughfare with 12 foot lanes from College Street to Plaza Boulevard (SR 1600). Annual Average Daily Traffic (AADT) on N. Herritage Street (SR 1570) from College Street to Plaza Boulevard (SR 1600) is projected to increase from 11,000 vehicles per day (vpd) in 2015 to 12,300 vpd in 2045, compared to a LOS D capacity of 11,000 vpd.

¹ For more information on Complete Streets, go to: <u>http://www.completestreetsnc.org/</u>

This section of N. Herritage Street (SR 1570) passes through an established residential neighborhood with many of the housing units being close to the existing roadway. There are also commercial and institutional developments on the northern end of this section of N. Herritage Street (SR 1570), also close to the existing roadway. There is no access control along this section of N. Herritage Street (SR 1570). It is lined with numerous driveway and roadway access points. For these reasons, widening of N. Herritage Street (SR 1570) is thought to be unviable.

A crash assessment performed during the development of the CTP identified 22 crashes, including 14 injury crashes, along this section of N. Herritage Street (SR 1570) between January 1, 2011 and December 31, 2015. The proposed improvements may reduce the amount and severity of crashes along this section of N. Herritage Street (SR 1570) by increasing the different modes of transportation along this corridor.

The CTP project proposal (LENO0110-H) is to study and implement transportation demand strategies along this corridor. The Lenoir County CTP has proposed a transit route along this corridor to serve growing transportation needs. Strategies that promote other modes of transportation such as pedestrian, bicycle, transit and ridesharing are recommended for further study. Other strategies to be considered include access management, modifying signal timing, intersection improvements, driveway connections for businesses, service routes to the business for alternate access, and any other strategies to reduce turning conflicts and improve safety. Additionally, the CTP project proposal of the W. Highland Ave/N. Herritage Street (SR 1570) Offset (Local ID: LENO0006-H) should improve safety along this corridor.

2.2 Implementation

The CTP is based on the projected growth for the planning area. It is possible that actual growth patterns will differ from those logically anticipated. As a result, it may be necessary to accelerate or delay the implementation of some recommendations found within this plan. Some portions of the plan may require revisions in order to accommodate unexpected changes in development. Therefore, any changes made to one element of the CTP should be consistent with the other elements.

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the county and its municipalities. As transportation needs throughout the state exceed available funding, it is imperative that the local planning area aggressively pursue funding for priority projects. Projects should be prioritized locally and submitted to the Eastern Carolina RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Recommended improvements shown on the CTP map represent an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act² (SEPA). During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data in the NEPA/SEPA process.

2.3 Problem Statements

The following pages contain problem statements for each recommendation, organized by CTP modal element. The information provided in the problem statement is intended to help support decisions made in the NEPA/SEPA process. A full, minimum or reference problem statement is presented for each recommendation, with full problem statements occurring first in each section. Full problem statements are denoted by a gray shaded box containing project information. Minimum problem statements are more concise and less detailed than full problem statements, but include all known or readily available information. Reference problem statements are developed for Statewide Transportation Improvement Program (STIP) projects where the purpose and need for the project has already been established.

2-3

²For more information on SEPA, go to: http://www.doa.nc.gov/clearing/faq.aspx.

HIGHWAY

<u>I-42/US 70, Local ID: LENO0101-H</u>

I-42/US 70 is a vital transportation corridor that stretches from I-40 near Raleigh in Johnston County to Morehead City in Carteret County. Within North Carolina, I-42/US 70 provides a direct connection between Raleigh-Durham, Goldsboro, Kinston, New Bern, and Morehead City. The purpose of this project is to improve mobility and connectivity of statewide transportation operations along the I-42/US 70 corridor.

The I-42/US 70 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network³ (NCTN). The STC Policy and Map was adopted by the NCDOT on March 4, 2015. The purpose of the NC Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity. The I-42/US 70 corridor provides connections to four major activity centers: the Research Triangle Park in Raleigh-Durham, Seymour Johnson Air Force Base in Goldsboro, Cherry Point Marine Corps Air Station in Havelock, and the Port of Morehead City. Additionally, the NCDOT 2040 Plan⁴ identifies the following investments for eastern North Carolina:

- Strengthen Military Connections
 - Improve highway and rail connections between bases and to ports of embarkation and debarkation.
 - Improve highway connections between bases and regional healthcare and education centers.
- Strengthen Highway Connectivity from Mountains to Coast
 - Improve U.S. 70 to interstate standards from I-40 to Morehead City to improve freight movements and in-state access to the Port of Morehead City.

This project area in Lenoir County consists of two non-contiguous sections, connected by the proposed Kinston Bypass (STIP Project R-2553). The first section begins at the terminus of the Goldsboro Bypass in Western Lenoir County and ends at the western end of the proposed Kinston Bypass (STIP Project R-2553), just west of Kinston. The second section begins at the eastern end of the proposed Kinston Bypass (STIP Project R-2553) east of Kinston and continues to the Jones County Line.

US 70 also forms the part of the southern route of the "Quad-East Interstate Loop" concept. Four facilities form this quadrangle: I-795 between I-587/US 264 and I-42/70

https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx.

³ For more information on the NCTN, go to:

⁴ For more information on the 25 Year Vision for North Carolina, go to: https://www.ncdot.gov/performance/reform/2040Plan/.

form the western route, I-42/US 70 and NC 148 between I-795 and NC 11 form the southern route, NC 11 between NC 148 and US 264 form the eastern route, and I-587/US 264 between NC 11 and I-795 form the northern route. The vision of this Quad-East Interstate Loop is to provide high-speed interstate access between eastern North Carolina cities and I-95.

This project area is comprised of mostly rural farmland, with some commercial and industrial development interspersed throughout. Based on a planning level environmental review using available GIS data, the proposed project may potentially impact the Neuse River Basin watershed area as well as local watershed areas. National wetland areas and Natural Heritage Element Occurrences may also be affected along this facility.

Project Description and Overview

The project proposal (LENO0101-H) is to upgrade the existing facility to interstate standards from the US 70 Bypass/Business interchange west of La Grange to the proposed Kinston Bypass, west of Kinston, and from the proposed Kinston Bypass, east of Kinston, to Jones County, including the addition of an interchange (STIP Project R-5813) near Willie Measley Road (SR 1252) with the addition of service roads to existing land uses near US 70. This interchange will also necessitate the relocation of Washington Street (SR 1603).

I-42/US 70 Kinston Bypass, STIP No. R-2553

US 70 is currently a four-to-five lane major thoroughfare from NC 148 west of Kinston to Neuse Road (SR 1804) east of Kinston and is projected to be either near or over capacity by 2045. The 2018-27 STIP includes project R-2553 to address this problem. The project consists of constructing a four-lane freeway on new location from east of NC 148 to east of Neuse Road (SR 1804), including possible interchanges with existing US 70 west of Kinston, NC 11/55, US 258, NC 58, and/or existing US 70 east of Kinston. The project is currently in the project development phase. For additional information, including Purpose and Need, contact either NCDOT's Central Project Delivery Team or NCDOT Division 2.

US 258, Local ID: LENO0102-H (Formally STIP No. R-2235, since removed from the STIP)

US 258 is currently a two lane major thoroughfare from Jones County to Tyree Road (SR 1341). There is a history of several fatal and injury crashes along this section of roadway. This section of roadway has a higher than average critical crash rate and severity index rating. Through traffic from Jacksonville to points further north mixes with local traffic, creating conflicts with speed and safety, in particular in passing zones and at intersections. While there are not any projected capacity issues along this section of roadway, traffic volumes are high enough that crashes in existing passing zones could increase if not addressed.

The US 258 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network⁵ (NCTN). The STC Policy and Map was adopted by the NCDOT on March 4, 2015. The purpose of the NC Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity. The US 258 corridor provides a connection from US 70 in Kinston to Camp Lejeune Marine Corps Base in Jacksonville. Additionally, the NCDOT 2040 Plan⁶ identifies the following investments for eastern North Carolina:

- Strengthen Military Connections
 - Improve highway and rail connections between bases and to ports of embarkation and debarkation.
 - Improve highway connections between bases and regional healthcare and education centers.
- Strengthen Highway Connectivity from Mountains to Coast
 - Improve U.S. 258 to from US 70 in Kinston to NC 24-27 just north of Jacksonville to improve freight movements and in-state access to Camp Lejeune.

A crash assessment performed during the development of the CTP identified the following intersections along this section of US 258 as experiencing a high number of crashes between January 1, 2011 and December 31, 2015:

Crash Location	Number of Crashes (2011-15)
Pleasant Hill Rd (SR 1105)	5
Jonestown Rd (SR 1116)	6
Nobles Mill Rd (SR 1120)	6
Sandy Foundation Rd (SR 1137)	11
Woodington Rd (SR 1909)	10

This crash assessment also identified 18 segments along this section of US 258 as experiencing a high number of crashes between January 1, 2011 and December 31, 2015. These sections experienced 4 fatal or serious injury crashes as well as 54 other injury accidents during this time period. Information provided by the local fire departments indicated that several of these crashes were head-on collisions.

Refer to Chapter 1 of the CTP report for more detailed information on this location. The proposed improvements to US 258 will help to reduce congestion and improve mobility in the area.

https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx.

⁵ For more information on the NCTN, go to:

⁶ For more information on the 25 Year Vision for North Carolina, go to: https://www.ncdot.gov/performance/reform/2040Plan/.

Project Description and Overview

The project proposal (LENO0102-H) is to add an alternating passing lane along this section of roadway, improve intersection visibility where applicable, add rumble stripes along the center yellow lines and the white lines along the shoulders, and apply more reflective thermoplastic paint to road markings. The proposed improvements could help address the safety issues along this facility.

US 258, Local ID: LENO0103-H

US 258 is projected to be near capacity by 2045 from Tyree Road (SR 1341) to the proposed Kinston Bypass (STIP Project R-2553). Improvements are needed to accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved under most conditions. While the AADT in 2045 is projected to be slightly less than capacity, seasonal variations are likely to result in traffic volumes above capacity on a number of days. This is based on historic seasonal variability data developed by NCDOT.

The US 258 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network⁷ (NCTN). The STC Policy and Map was adopted by the NCDOT on March 4, 2015. The purpose of the NC Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity. The US 258 corridor provides a connection from US 70 and Kinston to Camp Lejeune Marine Corps Base and Jacksonville. Additionally, the NCDOT 2040 Plan⁸ identifies the following investments for eastern North Carolina:

- Strengthen Military Connections
 - Improve highway and rail connections between bases and to ports of embarkation and debarkation.
 - Improve highway connections between bases and regional healthcare and education centers.
- Strengthen Highway Connectivity from Mountains to Coast
 - Improve U.S. 258 to from US 70 in Kinston to NC 24-27 just north of Jacksonville to improve freight movements and in-state access to Camp Lejeune.

By 2045, this section of US 258 is projected to be near capacity from Tyree Road (SR 1341) to the proposed Kinston Bypass (STIP Project R-2553). Traffic is projected to increase from 8,500 vehicles per day (vpd) in 2015 to 12,300 vpd in 2045, compared to a LOS D capacity of 12,700 vpd.

https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx.

⁷ For more information on the NCTN, go to:

⁸ For more information on the 25 Year Vision for North Carolina, go to: https://www.ncdot.gov/performance/reform/2040Plan/.

Ten crashes were identified occurring at the intersection of US 258 and Will Baker Road (SR 1342) between January 1, 2011 and December 31, 2015.

This crash assessment also identified 3 segments along this section of US 258 as experiencing a high number of crashes between January 1, 2011 and December 31, 2015. These sections experienced 1 fatal or serious injury crashes as well as 18 other injury accidents during this time period.

Refer to Chapter 1 of the CTP report for more detailed information on this location. The proposed improvements to US 258 could help to help address the safety issues as well as improve mobility along this facility.

Project Description and Overview

The proposed project (Local ID: LENO0103-H) is to widen the existing two-lane facility to a four-lane divided boulevard with 12-foot lanes and a left-turn lane at Tyree Road (SR 1341) and Will Baker Road/Central Avenue (SR 1342). The widening to four lanes is to address capacity deficiencies, while the median divided cross-section is recommended to help improve safety and improve the transition from the Kinston Bypass and the more developed area just south of Kinston to the rural area of southern Lenoir County.

US 258, STIP No. R-5814

US 258 is projected to be near capacity by 2045 from 0.3 miles north of NC 148 to 0.6 miles north of NC 148 and from 0.7 miles south of Wheat Swamp Road (SR 1536) to Wheat Swamp Road (SR 1536). Improvements are needed to accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved under most conditions. While the AADT in 2045 is projected to be slightly less than capacity, seasonal variations are likely to result in traffic volumes above capacity on a number of days. This is based on historic seasonal variability data developed by NCDOT.

By 2045, these sections of US 258 are projected to be near capacity. Traffic along US 258 from 0.3 miles north of NC 148 to 0.6 miles north of NC 148 is projected to increase from 10,300 vehicles per day (vpd) in 2015 to 13,200 vpd in 2045, compared to a LOS D capacity of 16,400. Traffic along US 258 from 0.7 miles south of Wheat Swamp Road (SR 1536) to Wheat Swamp Road (SR 1536) is projected to increase from 10,200 vpd in 2015 to 12,200 vpd in 2045, compared to a LOS D capacity of 12,700.

A crash assessment performed during the development of the CTP identified the following intersections along this section of US 258 as experiencing a high number of crashes between January 1, 2011 and December 31, 2015:

Crash Location	Number of Crashes (2011-15)
NC 148	5
Institute Rd (SR 1541)	9

This crash assessment also identified 5 segments along this section of US 258 as experiencing a high number of crashes between January 1, 2011 and December 31, 2015. These sections experienced 16 injury accidents during this time period.

Refer to Chapter 1 of the CTP report for more detailed information on this location. The proposed improvements to US 258 could help to help address the safety issues as well as improve mobility along this facility.

Project Description and Overview

The proposed project (STIP Project R-5814) is to widen the existing two-to-three lane facility to a four-lane divided expressway with 12-foot lanes and left turn lanes at major intersections and points of activity from 0.3 miles north of NC 148 to Greene County. The widening to four lanes is to address capacity deficiencies, while the median divided cross-section will improve the continuity of the existing four-lane divided section of US 258 from NC 148 to 0.3 miles north of NC 148 and to a lesser extent, improve safety.

NC 11 South, Local ID: LENO0104-H

NC 11 is a vital transportation corridor that stretches from I-40 in Duplin County to US 70 in Lenoir County. NC 11 provides a direct connection between Kenansville and Kinston. The purpose of this project is to improve mobility along the NC 11 corridor.

NC 11 is currently a two-lane facility from Duplin County, through Pink Hill, to Rosewood Drive (SR 1194), then becomes a three-lane facility with center left-turn lane from Rosewood Drive (SR 1194) to 0.7 miles south of Jonestown Road (SR 1116), and then becomes a multi-lane divided facility from 0.7 miles south of Jonestown Road (SR 1116) to US 70 in Kinston.

There are inconsistencies in the cross-sections of NC 11, especially through the Town of Pink Hill, making it more difficult for vehicles to traverse this corridor. There are also numerous roads, streets, and driveways that intersect NC 11 through Pink Hill. Any left-turning traffic must wait to turn, potentially causing backups for through travel. And while there are not any projected capacity issues along this section of roadway, traffic volumes are high enough that left-turning traffic may increase the likelihood of rear-end crashes if not addressed.

Project Description and Overview

The proposed project (Local ID: LENO0104-H) is to widen the existing two-lane facility to a three-lane major thoroughfare with center left-turn lane, where feasible, from Duplin County to Rosewood Drive (SR 1194). The proposed improvements will help to improve mobility and safety along this facility. Bike lanes are recommended from NC 241 to Old Pink Hill Road (SR 1111) and sidewalks are recommended on both sides of NC 11 for the entire length of the project.

NC 11 Relocation, Local ID: LENO0001C-H, Feasibility Study No. FS-0802A

NC 11 is a vital transportation corridor that stretches from US 264 in Pitt County to US 70 in Lenoir County. NC 11 provides a direct connection between Greenville and Kinston and points south. The purpose of this project is to improve mobility and connectivity of statewide transportation operations along the NC 11 corridor.

The NC 11 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network⁹ (NCTN). The STC Policy and Map was adopted by the NCDOT on March 4, 2015. The purpose of the NC Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity. The NC 11 corridor provides connections to two major activity centers: East Carolina University in Greenville and the Global TransPark in Kinston. Additionally, the NCDOT 2040 Plan¹⁰ identifies the following investments for eastern North Carolina:

- Strengthen Military Connections
 - Improve highway and rail connections between bases and to ports of embarkation and debarkation.
 - Improve highway connections between bases and regional healthcare and education centers.
- Strengthen Highway Connectivity from Mountains to Coast
 - o Improve NC 11 to interstate standards from the proposed NC 148 Harvey Parkway Extension just north of Kinston to the proposed Kinston Bypass, just south of Kinston to improve freight movements and in-state access between the Global TransPark and points south and east.

Existing NC 11 traverses downtown Kinston, concurrently in some locations with other routes, including Business US 70/US 258 and NC 58. North-south travelers that do not need access to downtown Kinston are forced either to find an indirect route consisting of east-west and north-south facilities, or travel through the increasingly-congested central business district (CBD). The relocation of NC 11 would accommodate both through trips and trips with destinations in downtown Kinston and also would help alleviate current and projected congestion.

Project Description and Overview

It is recommended that NC 11 be upgraded to a four-lane freeway from the proposed Harvey Parkway Extension to 0.2 miles south of NC 55 and that a new four-lane free facility be constructed on new location from 0.2 miles south of NC 55 to the proposed Kinston Bypass. This proposal also includes the construction of four interchanges at: the proposed Kinston Bypass, US 70, existing Tower Hill Road (NC 55 Relocation), and NC

https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx.

⁹ For more information on the NCTN, go to:

¹⁰ For more information on the 25 Year Vision for North Carolina, go to: https://www.ncdot.gov/performance/reform/2040Plan/.

11, 0.2 miles south of NC 55. This proposal also includes three grade separations at: the North Carolina Railroad and spur line, and Dunn Road (SR 1811). For additional information, refer to Feasibility Study FS-0802A.

The primary benefits of this project will be to relieve congestion in the downtown Kinston central business district and allow traffic from the south and east to access the Global TransPark more efficiently.

At the request of the Lenoir County CTP Steering Committee, an alternative for crossing the Neuse River was considered on the east side of downtown Kinston, connecting NC 58 north to S. Tiffany Street, just south of NC 11/NC 55. As this alternative was further researched, environmental concerns, including an old landfill, were discovered in the project area between the Neuse River and downtown Kinston. Due to the old landfill's close proximity to the Neuse River, it would be infeasible to build such a facility without risking breaches in the landfill and its contents.

NC 11 North, STIP No. R-5815

NC 11 is a vital transportation corridor that stretches from US 264 in Pitt County to US 70 in Lenoir County. NC 11 provides a direct connection between Greenville and Kinston. The purpose of this project is to improve mobility and connectivity of statewide transportation operations along the NC 11 corridor.

The NC 11 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network¹¹ (NCTN). The STC Policy and Map was adopted by the NCDOT on March 4, 2015. The purpose of the NC Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity. The NC 11 corridor provides connections to two major activity centers: East Carolina University in Greenville and the Global TransPark in Kinston. Additionally, the NCDOT 2040 Plan¹² identifies the following investments for eastern North Carolina:

- Strengthen Military Connections
 - o Improve highway and rail connections between bases and to ports of embarkation and debarkation.
 - Improve highway connections between bases and regional healthcare and education centers.

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¹¹ For more information on the NCTN, go to:

https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx.

¹² For more information on the 25 Year Vision for North Carolina, go to: https://www.ncdot.gov/performance/reform/2040Plan/.

- Strengthen Highway Connectivity from Mountains to Coast
 - Improve NC 11 interstate standards from the southwest bypass just south
 of Greenville (currently under construction) to the proposed NC 148 –
 Harvey Parkway Extension just north of Kinston to improve freight
 movements and in-state access between the Global TransPark and points
 north.

NC 11 also forms the eastern route of the "Quad-East Interstate Loop" concept. Four facilities form this quadrangle: I-795 between I-587/US 264 and I-42/70 form the western route, I-42/US 70 and NC 148 between I-795 and NC 11 form the southern route, NC 11 between NC 148 and US 264 form the eastern route, and I-587/US 264 between NC 11 and I-795 form the northern route. The vision of this Quad-East Interstate Loop is to provide high-speed interstate access between eastern North Carolina cities and I-95.

This project area in Lenoir County begins at the terminus of the proposed NC 148 – Harvey Parkway Extension (STIP Project No. R-2553) to the Pitt County Line. This project area is comprised of mostly rural farmland, with some commercial and industrial development scattered along the route. Based on a planning level environmental review using available GIS data, national wetland areas may potentially be affected along this facility.

Project Description and Overview

The project proposal (R-5815) is to upgrade the existing facility to interstate standards consistent with the "Quad East Interstate Loop" concept from the proposed NC 148 – Harvey Parkway Extension (STIP Project R-5703) to Pitt County, including the addition of interchanges at the proposed NC 148 – Harvey Parkway Extension and NC 118 near Grifton.

NC 55 Relocation, Local ID: LENO0023-H

The proposed NC 11 relocation (LENO0001C-H) will begin on the current NC 11/NC 55 corridor, approximately 0.2 miles southwest of where NC 55 joins NC 11, requiring the construction of an interchange.

Project Description and Overview

To avoid possible conflicts with the proposed NC 11 Eastern Bypass relocation interchange being in too close of proximity to the existing NC 11 and NC 55 intersection, it is recommended that NC 55 be rerouted to join the NC 11 relocation interchange.

The project will require approximately 0.3 miles of two-lane facility on new location starting on the current NC 55 approximately 0.3 miles east of the existing NC 11 and NC 55 intersection to the proposed NC 11 Eastern Bypass relocation interchange.

NC 148 (Global TransPark area), Local ID: LENO0105-H

NC 148 is a vital transportation corridor that stretches from US 70 west of Kinston to NC 58 north of Kinston. NC 148 provides a direct connection between US 70 and points to the west, including Goldsboro, I-95, I-40, and Raleigh Durham to the Global TransPark, a multi-modal industrial/airport site north of Kinston. The purpose of this project is to improve mobility and connectivity of transportation operations along the NC 148 Corridor.

Currently, NC 148 is a four-lane freeway from US 70 to US 258. It then becomes a four-lane divided boulevard with intersections and traffic signals from US 258 to its current terminus at NC 58.

NC 148 also forms the part of the southern route of the "Quad-East Interstate Loop" concept. Four facilities form this quadrangle: I-795 between I-587/US 264 and I-42/US 70 form the western route, I-42/US 70 and NC 148 between I-795 and NC 11 form the southern route, NC 11 between NC 148 and US 264 form the eastern route, and I-587/US 264 between NC 11 and I-795 form the northern route. The vision of this Quad-East Interstate Loop is to provide high-speed interstate access between eastern North Carolina cities and I-95.

This project area is comprised of a mix of residential and industrial development as well as some farmland. Based on a planning level environmental review using available GIS data, the proposed project may potentially local watershed areas as well as national wetland areas.

Project Description and Overview

The project proposal (LENO0105-H) is to upgrade the existing facility to interstate standards consistent with the "Quad East Interstate Loop" concept from US 258 to NC 58, including the addition of possible interchanges at Poole Road (SR 1575)/Proposed Spine Road and/or Airport Road (SR 1578). The proposed improvements will improve mobility along the NC 148 Corridor.

NC 148 (Harvey Parkway Extension), STIP No. R-5703

NC 148 is a four-lane divided facility that currently terminates at NC 58. There is a lack of connectivity between the Global TransPark on the north side of Kinston and NC 11 and Greenville to the northeast of Kinston. The 2018-27 STIP includes project R-7503 (Alternative 2) to address this problem. The project consists of constructing a four-lane freeway on new location from east of NC 58 to NC 11, including interchanges at NC 58 and NC 11 as well as grade separations at Hugo Road (SR 1004), Wallace Family Road (SR 1732), Ferrell Road (SR 1735), and Sharon Church Road (SR 1720). The project is currently in the right-of-way phase. For additional information, including Purpose and Need, contact NCDOT Division 2.

Banks School Road (SR 1546) Improvements, Local ID: LENO0017-H

Banks School Road (SR 1546) is currently a two-lane minor thoroughfare from US 70 to Hill Farm Road (SR 1548) and a three-lane minor thoroughfare with a center left-turn lane from Hill Farm Road (SR 1548) to US 258, West of Kinston. There is a history of several crashes along this section of roadway, as well as reoccurring congestion, especially near the intersections of Banks School Road (SR 1546) and Falling Creek Road (SR 1544). These issues are caused in part due to Banks Elementary School and Bethel Christian Academy. Through traffic from rural residential areas west of Kinston traveling to US 258 and Kinston mixes with local traffic, especially the two schools, creating conflicts with speed and safety, in particular in passing zones and at intersections.

A crash assessment performed during the development of the CTP identified the following intersections along Banks School Road (SR 1548) as experiencing a high number of crashes between January 1, 2011 and December 31, 2015:

Crash Location	Number of Crashes (2011-15)
US 70	12
Falling Creek Rd (SR 1544)	8
Parrott Dickerson Rd (SR 1547)	9
Hill Farm Rd (SR 1548)	12
US 258	18

This crash assessment also identified five segments along Banks School Road (SR 1546) as experiencing a high number of crashes between January 1, 2011 and December 31, 2015. These sections experienced 9 injury accidents during this time period.

Refer to Chapter 1 of the CTP report for more detailed information on this location. The proposed improvements to Banks School Road (SR 1546) will help to reduce congestion and improve mobility in the area.

Project Description and Overview

The project proposal (LENO0017-H) is to add center left-turn lanes at major intersections on Banks School Road (SR 1546) from US 70 to Hill Farm Road (SR 1548), including at Falling Creek Road (SR 1544) and to construct operational improvements on Banks School Road (SR 1546) from Hill Farm Road (SR 1548) to US 258. The proposed improvements should help address the safety and mobility issues along this facility.

Carey Road (SR 1569) Extension, STIP No. U-3618

Currently there is no direct east/west route connecting the northern portion of downtown Kinston and the residential and commercial developments directly to the west of the city. Traveling between these areas requires use of an inefficient route that can include a combination of east-west and north-south facilities, including Rouse Road (SR 1572) and Hull Road (SR 1557) which connect to Carey Road (SR 1571) and Pauls Path Road (SR 1001), respectively. The 2018-27 STIP includes project U-3618 to address this problem.

The project consists of constructing a four-lane divided boulevard on new location from the intersection of Paul's Path Road (SR 1001) and US 258 to intersection of Rouse Road (SR 1572) and existing Carey Road (SR 1569). This project may also call for the realignment of Hull Road (SR 1557) to avoid a five-legged intersection with US 258, Paul's Path Road (SR 1001) and the proposed Carey Road (SR 1569) extension. The project is currently in the project development phase. For additional information, including Purpose and Need, contact either NCDOT's Central Project Delivery Team or NCDOT Division 2.

Cunningham Road (SR 1745) Extension, Local ID: LENO0002A-H

Cunningham Road (SR 1745) is currently a two-lane minor thoroughfare from NC 58 to Dunn Road (SR 1811) to NC 58. There is a lack of connecting facilities from the eastern part of Kinston to Airport Road (SR 1578) and the Global TransPark. The primary purpose of this project will be to add an east-west alternative from the eastern part of Kinston to the Global TransPark.

Project Description and Overview

The project proposal (LENO0002A-H) is to construct a two-lane facility on new location from the current terminus of Cunningham Road (SR 1745) to Airport Road (SR 1578). The proposed improvements will improve access to the Global TransPark from the eastern part of Kinston.

Spine Road, Local ID: LENO0115-H (Formally STIP No. U-3341, since removed from the STIP)

There is currently a lack of connecting roads through the Global TransPark. Global TransPark is expected to develop significantly, creating thousands of jobs over the next 20-30 years. This degree of development will require significant changes to the transportation system around the Global TransPark, including efficient access to the GTP facilities from everywhere in the region. The proposed Spine Road would provide optimum access for delivery to, and shipment from internal facilities at the GTP. The project will serve as a crucial link to both NC 148 (C.F. Harvey Parkway) and NC 58.

Project Description and Overview

The project proposal (LENO0106-H) is to construct a four-lane divided facility, part on new location to serve as the Global TransPark internal loop, beginning from NC 148 at Poole Road (SR 1575) to NC 58, including an interchange with NC 148 as well as left turn lanes at other major intersections and points of activity. The proposed improvements will improve access to existing and future Global TransPark facilities with NC 148 and NC 58.

Minor Widening Improvements

The following routes are not expected to exceed capacity, but were identified as candidates for upgrading to NCDOT design standards. All facilities listed are recommended to have a minimum of 12-foot lanes with paved shoulders in order to improve mobility, safety and/or to accommodate bicycles. Additionally, some facilities may require improvements to the vertical and/or horizontal alignment. Implementation of the proposed projects should be coordinated through NCDOT's Highway Division 2 office (reference Appendix A for contact information).

- NC 55, LENO0010-H: from Wayne County to NC 11, including operational improvements at the NC 11/NC 55 intersection
- NC 241, LENO0106-H: from Duplin County to Old Beulaville Road
- NC 903, LENO0107-H: from Duplin County to Jenny Lend Road (SR 1309)
- NC 903, LENO0108-H: from 0.3 miles north of Brothers Road (SR 1514) to Greene County
- Hugo Road (SR 1004), LENO0111-H: from NC 58 to Greene County
- Paul's Path Road (SR 1001), LENO0112-H: from Greene County to US 258
- E. Railroad Street/Fields Station Road (SR 1503), LENO0113-H: from 0.1 miles east of N. Carey Street to Willie Measley Road (SR 1515)
- Willie Measley Road (SR 1690), LENO0115-H: from US 70 to Paul's Path Road (SR 1001)

Other Operational Improvements

US 70 and **US 258** (Queen Street) Overpass with Square Loop Design, Feasibility Study No. FS-1502A – The US 70 and US 258 (Queen Street) intersection experiences delays, especially during peak travel periods and seasons. There have also been nine traffic crashes at this intersection between January 1, 2011 and December 31, 2015 as well as numerous crashes along US 70 and US 258 leading up to the intersection. The project proposal (FS-1502A) is to construct an overpass with a square loop design. The proposed improvements will improve mobility and safety through this intersection.

NC 58 Restriping, Local ID: LENO0025-H – NC 58 is a major thoroughfare through downtown Kinston. By 2045, NC 58 from Summit Ave to Daniels St will be nearing capacity. NC 58 is a direct connection between downtown Kinston, the Lenoir County Hospital, and Global TransPark. The purpose of this project is to improve mobility along the NC 58 Corridor. Currently, NC 58 is a two-lane facility from Summit Ave to Highland Ave. Any left-turn traffic causes delays for through traffic along this section of NC 58. This portion of NC 58 traverses through a historically significant residential area of Kinston. The project proposal (LENO0025-H) is to restripe NC 58 from Summit Avenue to Highland Avenue from its current two-lane configuration to a three-lane section with center left-turn lane.

Airport Road (SR 1578), Local ID: LENO0109-H – Airport Road (SR 1578) is a minor thoroughfare serving Global TransPark, Kinston High School, and several medical facilities. It also serves as an important connector between downtown Kinston, NC 58, and the Global TransPark.

Airport Road (SR 1578) is projected to be near capacity by 2045 from Academy Heights Road (SR 1579) to Dobbs Farm Road (SR 1573) Improvements are needed to accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved.

Traffic along Airport Road (SR 1578) from Academy Heights Road (SR 1579) to Dobbs Farm Road (SR 1573) is projected to increase from 8,000 vehicles per day (vpd) in 2015 to 12,500 vpd in 2045, compared to a LOS D capacity of 12,700 vpd.

A crash assessment performed during the development of the CTP identified the following intersections along this section of Airport Road (SR 1578) as experiencing a high number of crashes between January 1, 2011 and December 31, 2015:

Crash Location	Number of Crashes (2011-15)
Academy Heights Rd (SR 1579)	5
Farmgate Rd (SR 1604)	5
Dobbs Farm Rd (SR 1573)	5

This crash assessment also identified this segment of Airport Road (SR 1578) as experiencing a high number of crashes (16) between January 1, 2011 and December 31, 2015.

Project Description and Overview

The project proposal (LENO0109-H) is to construct operational improvements on Airport Road (SR 1578) from Academy Heights Road (SR 1579) to Dobbs Farm Road (SR 1573). The proposed improvement should help address the safety and mobility issues along this facility.

Secrest Bridge, Local ID: LENO0013-H – For the neighborhoods north and south of Adkin Branch, there is a lack of nearby river crossings for vehicles. While there are some pedestrian bridges, motor vehicles must travel out of their way either east or west in order to get from north of the Adkin Branch to US 70, or from south of the Adkin Branch to northern Kinston. It is recommended that a two-lane bridge be constructed over the Adkin Branch linking S. Secrest Street and Forrest Street. This will link the two neighborhoods, and provide easier access to local facilities. In particular, the neighborhoods south of Adkin Branch will have more efficient access to Rochelle Middle School to the north, and the neighborhoods north of Adkin Branch will have better access to US 70 to the south.

W. Highland Ave/N. Herritage Street (SR 1570) Offset, Local ID: LENO0006-H – N. Herritage Street (SR 1570) is a major north-south corridor through the Kinston central business district. The misaligned intersection with W. Highland Avenue causes difficult turning movements and contributes to unnecessary congestion on both W. Highland Avenue and N. Herritage Street (SR 1570). Westbound travel on W. Highland Avenue necessitates a right turn at N. Herritage Street (SR 1570) and an immediate left to get back on W. Highland Avenue. Similarly, eastbound travel on W. Highland Avenue necessitates a right onto N. Herritage Street (SR 1570) and an immediate left to get back onto W. Highland Avenue. It is recommended that the portion of W. Highland Avenue that is west of N. Herritage Street be realigned to intersect properly with the opposite leg of the intersection. This can help create a safer, more efficient intersection with less conflict points.

PUBLIC TRANSPORTATION & RAIL

A public transportation and rail assessment was completed during the development of the CTP. Existing and planned public transportation and rail facilities are shown on the Public Transportation and Rail Map, Sheet 3 of Figure 1. Recommended public transportation and rail improvements identified during the development of the CTP are detailed below.

Proposed Global TransPark Rail Connector, LENO0001-R

Currently, the existing Global TransPark Railroad Line connects from the Norfolk-Southern Line, west of Kinston to the Global TransPark. The CSX line connects between Greenville along NC 11 to just northeast of Kinston. There is no connection between the Global TransPark Rail Line to the CSX Line. The primary purpose of proposing a rail connection between these two lines is to provide more industrial rail access to and from the Global TransPark.

The project proposal (LENO0001-R) is to construct a new rail facility from the existing Global TransPark Rail Line terminus within the Global TransPark east along the NC 148 – Harvey Parkway Extension to the terminus of the CSX Line near NC 11, northeast of Kinston. The proposed rail connector will improve rail access between the Global TransPark and Greenville.

Proposed Kinston Fixed Bus Route, LENO0001-T

Currently, there are no fixed route bus services within Kinston. Many residents in Kinston commute within the city each day for work, shopping, higher education opportunities, medical appointments, and other purposes. The primary purpose of proposing transit service is to provide another mode of transportation throughout the Kinston area.

The proposed project recommends that the Lenoir County Public Transportation Department pursue development of a fixed route bus service throughout Kinston. The proposed route(s) will be used to connect the follow major points of activity within Kinston:

- Electrolux Manufacturing Plant
- Sanderson Farms Processing Plant
- Smithfield Packaging Plant
- Walmart and surrounding commercial areas along US 70/US 258 (W. Vernon Avenue)
- Caswell Development Center
- Vernon Park Mall
- Commercial businesses along Business US 70/Business US 258 (W. Vernon Avenue)
- Residential neighborhoods and commercial developments north of downtown Kinston
- UNC Lenoir Health Care Hospital and surrounding medical facilities
- Downtown Kinston
- Residential neighborhoods east of downtown Kinston
- Commercial areas along US 70 (E. New Bern Road)
- Lenoir Community College

The CTP process identified potential locations for Park-and-Ride lots throughout the county as listed below:

- Near the E Washington Street (SR 1603)/Robina Drive intersection in La Grange
- Near the NC 11/Ash Davis Rd (SR 1113) intersection north of Pink Hill

BICYCLE

During the development of the CTP, a goal of the Lenoir County CTP Steering Committee was to develop a transportation system that preserves and promotes the quality of life within the county. One of the objectives of this goal is to improve bicycle opportunities throughout Lenoir County. Feedback from the CTP Steering Committee and members of the public indicated that a comprehensive bicycle network should take advantage of the existing Riverwalk along the Neuse River on the southwestern side of downtown Kinston and improve roadways to accommodate bicycles from residential areas to downtown Kinston as well as other shopping, recreational, and educational facilities.

The following facilities were identified as recommended bicycle routes and will need improvement. In accordance with American Association of State Highway and Transportation Officials (AASHTO), roadways identified as bicycle routes should incorporate the following standards as roadway improvements are made and funding is available: Curb & gutter sections require a minimum 5-foot bike lanes or 14-foot wide shoulder lanes. Shoulder sections require a minimum of 4 foot paved shoulder. All bridges along the roadways where bike facilities are recommended shall be equipped with 54-inch railings.

- State Bicycle Route #7 (passes through the northwestern to central and eastern part of the county, including La Grange, using NC 903 NC 55, US 258, US 70, and various secondary routes)
- Lenoir County Bicycle Route #40 (passes through the northern to eastern part of the county, including La Grange, using NC 55 and various secondary routes)

- Lenoir County Bicycle Route #41 (passes through north and downtown Kinston to just sound of Kinston, using Business US 70/Business US 258, US 258, NC 58, and various secondary routes)
- Lenoir County Bicycle Route #42 (passes through north Kinston to northwest of Kinston, near Global TransPark, using various secondary routes)
- Lenoir County Bicycle Route #43 (passes through the southern part of the county, using various secondary routes). This includes improvements along NC 11 (LENO0104-H) from NC 241 to Old Pink Hill Road (SR 1111).
- Lenoir County Bicycle Route #44 (passes through north Kinston to northeast of Kinston, using NC 58 and various secondary routes)
- Lenoir County Bicycle Route #45 (passes through the southern to central part of the county, including Pink Hill and Kinston, using NC 11 and various secondary routes)

<u>PEDESTRIAN</u>

During the development of the CTP, a goal of the Lenoir County CTP Steering Committee was to develop a transportation system that preserves and promotes the quality of life within the county. One of the objectives of this goal is to improve pedestrian opportunities throughout Lenoir County.

The 2008 City of Kinston Comprehensive Pedestrian Plan¹³ and 2015 Kinston Riverfront Greenway and Cycle Track Plan¹⁴ identify existing and proposed multiuse paths and pedestrian facilities in Kinston. These features are shown on the Pedestrian Map as existing sidewalks or recommended sidewalks. It also identifies connections to the Mountains to Sea Trail and Neuse River Greenway system. These features are shown on the Bicycle and Pedestrian Maps of Figure 1 as recommended multi-use paths. The 2015 Kinston Riverfront and Cycle Track plan identify recommended greenways for bicycles and pedestrians throughout Kinston, mostly along and to the Kinston Riverwalk along the Neuse River. These features are shown on the Bicycle and Pedestrian Maps of Figure 1 as existing and recommended multi-use paths. In addition to the pedestrian and multi-use paths from the above plans, the CTP recommends the following multi-use paths to improve connectivity and mobility in the greenway system:

Sidewalks – Needs Improvement (Sidewalks needed on one side of a facility)

• <u>LENO0001-P:</u> E. Washington Street (SR 1603), from S. Carey Street to 0.1 miles east of Robina Drive

¹⁴ For more information on the 2015 Kinston Riverfront Greenway and Cycle Track Plan, go to: http://stewartinc.com/portfolio-post/kinston-riverfront-greenway-cycle-track/

¹³ For more information on the 2008 City of Kinston Comprehensive Pedestrian Plan, go to: https://connect.ncdot.gov/municipalities/PlanningGrants/Documents/Kinston%20Ped%20Plan.pdf/

<u>Sidewalks – Recommended (Sidewalks needed on one or both sides of a facility)</u>

- <u>LENO0002-P:</u> E. Washington Street (SR 1603), from 0.1 miles east of Robina Drive to Franklin Street
- <u>LENO0003-P:</u> N. Hadden Street, from W. Railroad Street to Martin Luther King Junior Drive (SR 1502)
- LENO0104-H: NC 11, from Duplin County to Rosewood Drive (SR 1194)
- LENO0004-P: Central Ave, from Macon Street to NC 11

MULTI-USE PATHS

During the development of the CTP, a goal of the Lenoir County CTP Steering Committee was to develop a transportation system that preserves and promotes the quality of life within the county. One of the objectives of this goal is to improve multi-modal opportunities throughout Lenoir County.

The North Carolina Mountains to Sea Trail¹⁵ is an approximately 1,200 mile existing and planned network of connected footpaths from Clingmans Dome in the Great Smokey Mountains to Jockey's Ridge on the Outer Banks. Part of the entire state planned route parallels the Neuse River in Lenoir County. A portion of this route has been constructed via the Kinston Riverwalk.

The 2008 City of Kinston Comprehensive Pedestrian Plan¹⁶ and 2015 Kinston Riverfront Greenway and Cycle Track Plan¹⁷ identify existing and proposed multiuse paths in Kinston. It also identifies connections to the Mountains to Sea Trail and Neuse River Greenway system. These features are shown on the Bicycle and Pedestrian Maps of Figure 1 as recommended multi-use paths.

¹⁵ For more information on the Mountains to Sea Trail, go to: https://mountainstoseatrail.org/the-trail/

¹⁶ For more information on the 2008 City of Kinston Comprehensive Pedestrian Plan, go to: https://connect.ncdot.gov/municipalities/PlanningGrants/Documents/Kinston%20Ped%20Plan.pdf/

¹⁷ For more information on the 2015 Kinston Riverfront Greenway and Cycle Track Plan, go to: http://stewartinc.com/portfolio-post/kinston-riverfront-greenway-cycle-track/