
Vision Statement

North Carolina Department of Transportation
Strategic Transportation Corridor Vision Plans

Corridor S: Future I-795

Wilson County to I-40 in Sampson County

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1. Overview and Project Background

This memorandum presents base and future year mobility analyses for Corridor S (Future I-795) of the North Carolina Strategic Transportation Corridors (STC). All data, maps, and conclusions are based on information available as of May 2022 and stakeholder input from November 2022. It is recognized that local plans are updated regularly, and this Vision Statement reflects information current at the time of preparation.

1.1. Overview of Strategic Transportation Corridors

In 2015, the North Carolina Department of Transportation (NCDOT) identified a network of key multimodal transportation corridors called Strategic Transportation Corridors (STC) to support smart planning, help set long-term investment decisions, and ensure that North Carolina's economic prosperity goals are achieved. The STCs are intended to promote transportation system connectivity, provide high levels of mobility, and improve access to important state and regional activity centers. A key element in the advancement of the STCs is the development of corridor master plan visions.

The purpose of the master plan visions is to:

- Identify high-level corridor mobility visions and associated improvement strategies,
- Guide improvements and development in a manner that defines a long-term vision and performance level for the corridors, and
- Help protect the corridor's key functions as defined in the corridor profiles.

1.2. Corridor Description

Future I-795 is approximately 50 miles in length and spans from Wilson County to Sampson County. Future I-795 is regularly used to transfer freight from Goldsboro to I-95 in Wilson County. The corridor serves as a short reliever to I-95 and is an important part of the Strategic Highway Network (STRAHNET) system as it connects Seymour-Johnson Air Force Base to I-95. Future I-795 provides the link to the economic centers of Wilson and Goldsboro and connects to I-95 and I-40.

Future I-795 is envisioned to support freight service along with safe, reliable travel; to facilitate economic development and safety; and to afford safe, reliable travel as part of the STRAHNET to support Seymour Johnson Air Force Base.

2. Existing Conditions

Existing conditions are detailed in the Transportation Facilities Inventory Technical Memorandum (May 2022) and summarized below.

2.1. Highway Network Inventory

- Approximately 50 miles long
- National Highway System's (NHS) Eisenhower Interstate System on future I-795 north of U.S. 70
- Non-Interstate Strategic Highway Network (STRAHNET) south of U.S. 70
- Federally designated truck route
- NC Priority Freight Network
- Military route
- Evacuation route



Table 1. Existing Facility Types Along Future I-795

Facility Type	Length (miles)
Freeway	25
Expressway	10
Boulevard	8

Note: The corridor includes 7 miles of unconstructed freeway on new location

Table 2. Recommended and Programmed Facility Types Along Future I-795

Facility Type	Length (miles)
Freeway	40
Expressway	10

2.2. Rail Network Inventory

- No at-grade railroad crossing along the corridor

2.3. Bridge Inventory

- 50 bridges along highway corridor
- 2 structurally deficient
- 9 functionally obsolete

2.4. Safety Inventory

Table 3. Planning Level Section Safety Scores Along Future I-795

Section Safety Score*	Length of Corridor per Safety Score (miles)
0 to 33	10.3
33 to 66	20.8
66 to 100	15.5
Less than 60% Mileposted**	0

*Higher scores are considered to have poorer highway safety performance.

**Routes having a mileposted crash percentage of 60% or lower were not scored.

2.5. Resiliency Inventory

The resiliency of Future I-795 is critical to achieving the goal of providing safe and reliable travel. The resiliency is defined by the corridor's ability to continue to provide service during natural disasters and weather events and to recover from crashes, accidents, and other safety concerns in a timely manner. Environmental resiliency along the corridor was analyzed using North Carolina Flood Risk Information System (FRIS) floodplain data, historic flood events catalogued in the NCDOT Drive N.C. database from 2011 to 2019, and road inundation incidents. Data is summarized below and provided in additional detail in the Baseline and Future Year Mobility Conditions Report (May 2022).



- Flood Incident Summary: 15 flood incidents between 2016-2018 along the corridor as recorded in the NCDOT Drive N.C. database of historic flood incidents from 2011-2019.
- Flood Zone Summary: 8.9 of 49.2 miles of corridor within the floodway, 100-year, and 500-year floodplains.
- Road Inundation Incident Summary:
 - At the 25-year recurrence interval, 0.33% of the corridor's length is inundated at an average depth of 0.4 feet.
 - At the 50-year recurrence interval, 1.75% of the corridor's length is inundated at an average depth of 1.0 feet.
 - At the 100-year recurrence interval, 2.81% of the corridor's length is inundated at an average depth of 1.3 feet.

3. Intelligent Transportation Systems

Connected and Autonomous Vehicle (CAV) emerging technologies cover a wide range of potential solutions along a roadway to improve mobility, safety, and operations. These may include additional infrastructure or expansions of current programs and can either build upon existing infrastructure or deploy additional infrastructure. A CAV Emerging Technologies Memo (March 2022) provides potential solutions for Corridor S, which are summarized below.

3.1. Existing Infrastructure

Corridor S currently includes intelligent transportation system (ITS) devices along the Future I-795 and along arterial routes that connect, such as U.S. 70 Bypass, I-587/U.S. 264 and U.S. 117. The majority of the devices in this area are along the U.S. 70 Bypass around Goldsboro, with a small amount along Future I-795. These devices consist of closed-circuit television (CCTV) cameras, dynamic message signs (DMS), and vehicle detectors and speed probe data. The current ITS infrastructure is primarily used for situational awareness, providing traveler information messages to motorists reflecting travel time and incident information, and collecting data to be used for identifying congestion points. There are several ongoing projects along this corridor that will expand the number of ITS devices and provide the necessary fiber communications.

3.2. Strategies

Based on a qualitative review of the limitations of the existing geometrics of the corridor and potential stakeholder needs, the Department can determine the best strategy or combination of strategies that address the specific corridor needs. This assessment is typically done at the project level, although can be done as part of a longer corridor study. The CAV memo includes a list of possible strategies for arterial improvements (connected vehicle notifications, pedestrian notification, transit applications) and motorist information (e.g., hard shoulder running, incident reporting and notification, ramp metering).

3.3. Mitigations

There are always risks involved when deploying infrastructure or the need for additional technology, such as alternative power to devices, operational strategies in event of an evacuation, and design considerations for hard shoulder running. Additional detail is in the CAV memo.



4. Programmed Improvements

4.1. NCDOT STIP Projects

Future I-795 is programmed to freeway standards with access only at interchanges and ramps, speed limits of 55 mph or greater, and no traffic signals. STIP projects supporting conversion to a freeway include those listed in **Table 4**.

Table 4. Freeway Projects Funded by NCDOT along Corridor S

STIP No.	County	Description	Length (Miles)	Dates*
R-5719	Wayne	Convert at-grade intersection of S.R. 1135 (Country Club Road) and U.S. 117 to an interchange	N/A	Right-of-Way: Completed Construction: Underway
U-3125E/F	Wayne/Duplin/Sampson	New location roadway built to freeway standards from south of S.R. 1927 to I-795	5.5	Right-of-Way: 2029 Construction: Unfunded
U-5796	Wayne	Convert at-grade intersection of S.R. 1120 (O'Berry Road) and U.S. 117 to an interchange	N/A	Right-of-Way: Complete Construction: Underway

*Based on February 2021 NCDOT 2020-2029 Current STIP

5. MPO and County Characteristics

To better understand priorities in the Future I-795 planning area, goals were gathered from Comprehensive Transportation Plans (CTP) and a Metropolitan Transportation Plan (MTP) that include Future I-795. The goals found in these plans are categorized into 12 Goal Areas found at the national, state, and county/MPO levels. These are detailed in the Performance Measures Technical Memorandum (May 2022) and summarized below.

5.1. Recommendations

From Mt. Olive to Sampson County, and from Wilson to Goldsboro, Future I-795 exists as a freeway. The corridor through Sampson County is an expressway. The recommendation in current plans include:

- From Goldsboro to north of Mount Olive, the corridor exists as a boulevard and is currently recommended to be a freeway.

5.2. Major Goal Areas

- Federal, Freight movement and economic vitality—Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- MPO/County, Cohesive and strategic planning—Promote the integration of transportation, land use, and policy planning through the cooperation and communication between local and regional agencies.

5.3. Major Performance Measures

- Federal, Safety—To achieve a significant reduction in traffic fatalities and serious injuries on public roads.
- Federal, Infrastructure Condition—Maintain the highway infrastructure asset system in a state of good repair
- MPO/County—None listed



6. Visions

6.1. Long-Term Vision (30 years)

Future I-795 is envisioned to support freight service along with safe, reliable travel along U.S. 117 consistent with service provided by I-795. To accomplish this expectation, the following is proposed:

- Future I-795 is programmed to freeway standards with access only at interchanges and ramps, speed limits of 55 mph or greater, and no traffic signals.
- The portion of the corridor in Sampson County near I-40 (approximately 1.25 miles) operates as an expressway with limited access and is expected to remain an expressway.

Future I-795 will facilitate economic development and safety by providing a more resilient route, along with regional connectivity, which will consider active transportation and transit needs for the communities the corridor passes through. Additionally, it will afford safe, reliable travel as part of the STRAHNET to support Seymour Johnson Air Force Base.

6.2. Interim Solution (15 years)

The section of Future I-795 in Wayne County that does not meet freeway standards is programmed in the 2020-2029 STIP as project U-3125, though funds for construction are not yet committed. The Goldsboro Urban Area MPO MTP and Mount Olive CTP include goals that emphasize the importance of reducing congestion, supporting freight movement and economic vitality, and improved mobility. To achieve these goals, an interim solution could include continuing to improve segments of the road based on localized needs (such as alternative intersection treatments to address traffic needs or access management strategies to address traffic or safety needs), including upgrading to limited access standards as appropriate.

7. Next Steps

7.1. Areas of Additional Study

Topics that need to be studied in greater depth following the STC Master Plan Vision Development include the safety of Future I-795, railroad considerations, a vulnerability assessment, and a study to identify improvements in areas of frequent flood inundation along I-795 and N.C. 42. Agricultural equipment currently utilizes U.S. 117 to travel along or to cross the facility; additional information is needed on the type of equipment which uses U.S. 117 and the needs of these users. These areas should be evaluated further to have a comprehensive understanding of the corridor's existing conditions and future needs.

Additional study is recommended to consider improvements for the following segments:

- U.S. 117 between S.R. 1927 and U.S. 70 is recommended to be upgraded to freeway standards and has been identified as project U-3125E and U-3125F in the STIP, but is not currently funded in the first five years of the STIP. Additional study is recommended for the following segment:
- U.S. 117 south of S.R. 1135 is recommended to be upgraded to freeway standards but is not currently programmed in the STIP as a project.

7.2. Future Outreach Needs

Targeted outreach is needed along the corridor as it runs through southern Goldsboro and near Mount Olive in Wayne and Duplin County where Future I-795 is currently a boulevard and not yet funded to be upgraded to freeway standards. This section of Future I-795 in Goldsboro serves as a connector to businesses and community



resources in the area. Future I-795 near Mount Olive provides the link between the town center to the east of the corridor and farmland and industry such as Enviva Pellets Sampson to the west. Previous public input indicated concern about changes to access control through removal of existing at-grade intersections, addition of interchanges, and left-turn restrictions. This outreach should take the form of public meetings and additional surveys that engage the community in the development and funding of both the interim solution and long-term vision for Future I-795 in that area.