
Vision Statement

North Carolina Department of Transportation
Strategic Transportation Corridor Vision Plans

Corridor X: U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Parkway/U.S. 258

U.S. 17 in Onslow County to U.S. 64E in Edgecombe County

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1. Overview and Project Background

This memorandum presents base and future year mobility analyses for Corridor X (U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258) 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

U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 is approximately 90 miles in length and spans from Jacksonville to Greenville. U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 is primarily used to transfer freight from Jacksonville to Greenville. The corridor provides rural connection to economic development centers in Jacksonville, Kinston, and Greenville, including Camp Lejeune, Global TransPark, and East Carolina University. The principal expectation of the corridor is to provide safe, reliable mobility to these activity centers.

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 100 miles long
- Non-Interstate Strategic Highway Network (STRAHNET) in Onslow County
- Federally designated truck route
- NC Priority Freight Network
- Evacuation route in Onslow County

Table 1. Existing Highway Facility Types along U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258

Facility Type	Length (miles)
Freeway	27
Boulevard	23
Major Thoroughfare	41



Note: The corridor includes 9 miles of unconstructed freeway on new location

Table 2. Recommended and Programmed Facility Types Along U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258

Facility Type	Length (miles)
Freeway	57
Major Thoroughfare	43

2.2. Rail Network Inventory

- No at-grade railroad crossing along the corridor

2.3. Bridge Inventory

- 63 bridges along highway corridor
- None structurally deficient
- 8 functionally obsolete

2.4. Safety Inventory

Table 3. Planning Level Section Safety Scores Along U.S. 13/U.S. 264/N.C. 11/C.F. Harvey

Section Safety Score*	Length of Corridor per Safety Score (miles)
0 to 33	10.9
33 to 66	22.9
66 to 100	52.9
Less than 60% Mileposted**	0.05

*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 U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 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: 19 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: 10.6 of 100.8 miles of corridor within the floodway, 100-year, and 500-year floodplains.



- Road Inundation Incident Summary:
 - At the 10-year recurrence interval, 0.02% of the corridor's total length is inundated at an average depth of 0.4 feet.
 - At the 25-year recurrence interval, 0.03% of the corridor's length is inundated at an average depth of 0.8 feet.
 - At the 50-year recurrence interval, 1.68% of the corridor's length is inundated at an average depth of 0.4 feet.
 - At the 100-year recurrence interval, 3.52% of the corridor's length is inundated at an average depth of 0.9 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 X, which are summarized briefly below.

3.1. Existing Infrastructure

Corridor X currently includes intelligent transportation system (ITS) devices mainly along the arterial road network adjacent to U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258. The majority of the devices are existing municipal devices within Greenville, Kinston, and Jacksonville. 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

Corridor X recommendations vary depending on location ranging from conversion to a freeway to improved major thoroughfare. STIP projects along this corridor include those listed in **Table 4**.



Table 4. Freeway Projects Funded by NCDOT along Corridor X

STIP No.	County	Description	Length (Miles)	Dates*
R-2553C	Lenoir	Construct Kinston Bypass from NC 148 (Harvey Parkway) to NC 58.	6.5	Right-of-Way: FY 2026 Construction: Unfunded
R-5703	Lenoir	Construct N.C. 148 (C.F. Harvey Pkwy) on new location from N.C. 58 to N.C. 11	4.0	Right-of-Way: Completed Construction: Underway
U-5716	Onslow	Convert at-grade intersection of N.C. 24 and U.S. 258 to an interchange	1	Right-of-Way: 2027 Construction: 2029
U-5719	Onslow	Realign Blue Creek Road/Ridge Road at U.S. 258/N.C. 24 to form an at-grade intersection	0.5	Right-of-Way: Completed Construction: Underway
U-5739	Onslow	Convert U.S. 258/N.C. 24 to a superstreet from Pony Farm Road to Blue Creek Road	1.9	Right-of-Way: Completed Construction: 2029
U-6148	Onslow	Improve intersection of U.S. 258/N.C. 24 and S.R. 1329 (Rhodestown Fire Department Road)	0.5	Right-of-Way: 2028 Construction: Unfunded

*Based on February 2021 NCDOT 2020-2029 Current STIP

5. MPO and County Characteristics

To better understand priorities in the U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 planning area, goals were gathered from CTPs, a LRTP and a MTP that include U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258. 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

The corridor is a boulevard from Grindle Creek through Greenville to the N.C. 11 Bypass, and from N.C. 55 to Vernon Avenue in Kinston. Recommendations in current plans include:

- The corridor is recommended to be upgraded to freeway standards north of Greenville from Grindle Creek to N.C. 30, from the N.C. 11 Bypass in Ayden to Hanrahan Road, and from N.C. 118 in Grifton to N.C. 55 near Kinston.
- The corridor is recommended as a boulevard needing improvement in Kinston, south of the Neuse River to just north of S.R. 1342.
- The corridor is recommended as another major thoroughfare needing improvement from south of Kinston (just north of S.R. 1342) to the Jones County line.
- The corridor is recommended as an expressway needing improvement in Jones County.

No recommendations were made for the corridor in Onslow County or the other intermittent sections.

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, Mobility—Increase the transportation network’s ability to move people and goods locally and regionally



5.3. Major Performance Measures

- 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)

U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 is envisioned to support economic development and regional connectivity by providing connection to employment centers, regional airports, and East Carolina University, considering transit needs for the communities the corridor passes through. Additionally, it will afford safe, reliable travel, and a more resilient route as part of the STRAHNET to support Marine Corps Air Station New River.

To accomplish this expectation, the following is proposed:

- Upgrades to freeway standards with access only at interchanges and ramps, speed limits of 55 mph or greater, and no traffic signals.
- For segments where full freeway standards are not feasible, upgrade to expressway standards with increased speed limits, increased control of access, decreased signalized intersections, and median divided roadways.

6.2. Interim Solution (15 years)

The CTPs and MTPs in the counties and cities along the U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 corridor include goals that emphasize freight movement and economic viability, congestion reduction, mobility, and safety. 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

Additional corridor studies that consider U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 in segments and as a whole are needed to further understand how the corridor is used today, and how the disparate recommendations in the CTPs and MTPs are envisioned to come together in the future. Other topics that need to be studied in greater depth following the STC Master Plan Vision Development include the safety of U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258, railroad considerations, a vulnerability assessment, and a study to identify improvements in areas of frequent flood inundation along U.S. 264 in Greenville and U.S. 258 in Jacksonville. 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. 13/N.C. 11 north of Greenville from Grindle Creek to N.C. 30 is recommended to be upgraded to freeway standards but is not currently programmed as a project in the STIP.
- N.C. 11 is recommended to be upgraded to freeway standards from the N.C. 11 Bypass in Ayden to Hanrahan Road and from N.C. 118 in Grifton to N.C. 55 near Kinston, but are not currently programmed as projects in the STIP.



- Proposed improvements south of Kinston in Lenoir and Jones County are also not currently programmed as projects in the STIP.
- U.S. 258 in Onslow County where there are currently no identified recommendations

7.2 Future Outreach Needs

Targeted outreach is needed north of Greenville in rural Pitt County, Grifton in Lenoir County, and south of Kinston in Lenoir and Jones County where U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 improvements are recommended but not currently programmed in the STIP. These areas should receive targeted public outreach that determines the best solutions to fit the context of the corridor. 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 U.S. 13/U.S. 264/N.C. 11/C.F. Harvey Pkwy/U.S. 258 in these areas.