NC 211 Widening

From US 15/501 in Aberdeen and east of West Palmer Street (SR 1244)/Mockingbird Hill Road (SR 1311)

Local ID: **R-5709**

Purpose: Congestion

Improvement: Improve Existing

Identified Need

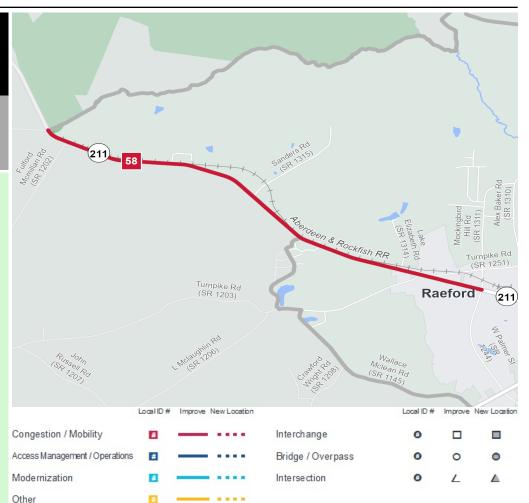
NC 211 is projected to be over capacity by year 2045. Improvements are needed to relieve congestion on the existing facility and accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved.

Recommendation

The NCDOT proposes to widen NC 211 to a four-lane divided roadway with a grass median from US 15-501 in Aberdeen (Moore County) to east of SR 1244 (West Palmer Street) / SR 1311 (Mockingbird Hill Road) in Raeford (Hoke County), a distance of approximately 15.4 miles.

Proposal At A Glance

Highway Class	Congestion & Mobility	
Facility Type	Boulevard	
Typical Section	04 A	
Section Options	-	
Length (miles)	4.00	
Existing ROW (feet)	60	
Safety Risk Score	33-89	



Proposal Data:	2018 Base Year	2045 Future Year	
Improved Route	Existing	<u>Without Proposal*</u>	With Proposal
Facility Type	Major Thoroughfare 2-lane	Boulevard	Boulevard
Travel Lanes	2	4	4
Volume (vpd)	8700-10500	11400-15300	11400-15300
Capacity (vpd)	15100-16400	43300-49000	43300-49000

* Volume (vpd) and Capacity (vpd) values listed under Without Proposal column represents Existing and Committed (E+C) scenario.

Capacity Data:

Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)

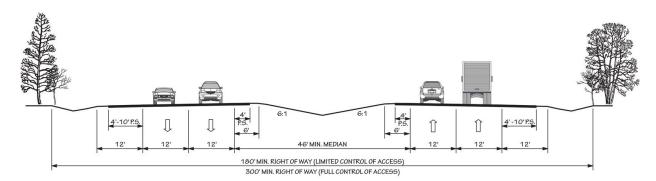


Typical Section Options:

None

TYPICAL SECTION No. 4A

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

Project History/Linkage to Other Plans

The project is included in the 2020-2029 State Transportation Improvement Program (STIP) and is state funded. Right of way acquisition and construction are scheduled for state fiscal years 2021 and 2024, respectively. The total cost for the project included in the 2020-2029 STIP is \$192,023,000.

CTP Goal Analysis

Project Need:

By meeting or exceeding the performance measures, the proposed project addresses the following needs:

- Traffic congestion along the existing facility is expected to worsen in the future. Traffic volumes are projected to increase up to 66 percent. By 2040, almost all segments of NC 211 within the project limits will exceed the roadway's capacity in at least one peak hour.
- Travel delays occur along the existing facility. Traffic volumes and sight distance limitations due to the horizontal and vertical alignment of the roadway limit passing opportunities.
- Roadway deficiencies include narrow travel lanes and shoulders with inadequate clear zones. In addition, there are sight distance limitations due to the horizontal and vertical alignment in some sections of the roadway, as well as problems with the alignment of intersecting roadways.

Other Information

The alternative selected for the project achieved the following along NC 211 within the project limits:

- provided additional traffic capacity in order to achieve a level of service C or better for the NC 211 roadway (mainline) segments during the peak hours in 2045;
- improved traffic operations by reducing travel delays and queue lengths and achieving an overall level of service D or better at signalized intersections during the peak hours in 2045;
- improved NC 211's horizontal and vertical alignment, clear zones and sight distance to reduce, mitigate or eliminate existing design deficiencies; and
- provided at least minimum acceptable standards for lane and shoulder widths based on the current NCDOT Roadway Design Manual.

Additional Information - Environmental

This project is within 150 feet of:

- River(s) and Stream(s)
- Gameland(s)
- Land Habitat Indicator Guild(s)
- Managed Area(s)
- National Wetlands Area(s)
- Targeted Local Watershed Area(s)
- National Heritage Significant Area(s)

Additional Information - Title VI

This recommendation passes through one or more Census Blocks with the following characteristics:

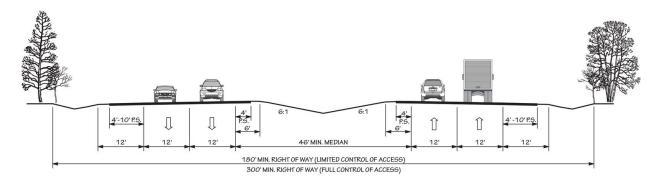
- Between 25% and 50% identify as African American
- Between 0% and 25% identify as 65+

Typical Section Options:

None

TYPICAL SECTION No. 4A

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 w/ Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 w/ Limited English Proficiency (LEP) - Spanish
- Between 0% and 15% identify as Native American
- Between 25% and 50% identify as Below Poverty Line
- Between 5% and 10% identify as Some Other Race
- Between 0% and 5% identify as Two of More Races
- Between 15% and 20% identify as Households with No Car