



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H140412

Mode: Highway

Status: Submitted

NC-16 (Providence Road South)

From/Cross Street: SR 1316 (Rea Road Extension)

Specific Improvement Type: 1 - Widen Existing Roadway

To: SR 1321 (Cuthbertson Road)

Project Category: Regional Impact

Length: 4.09

TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: \$38,410,000

Description:

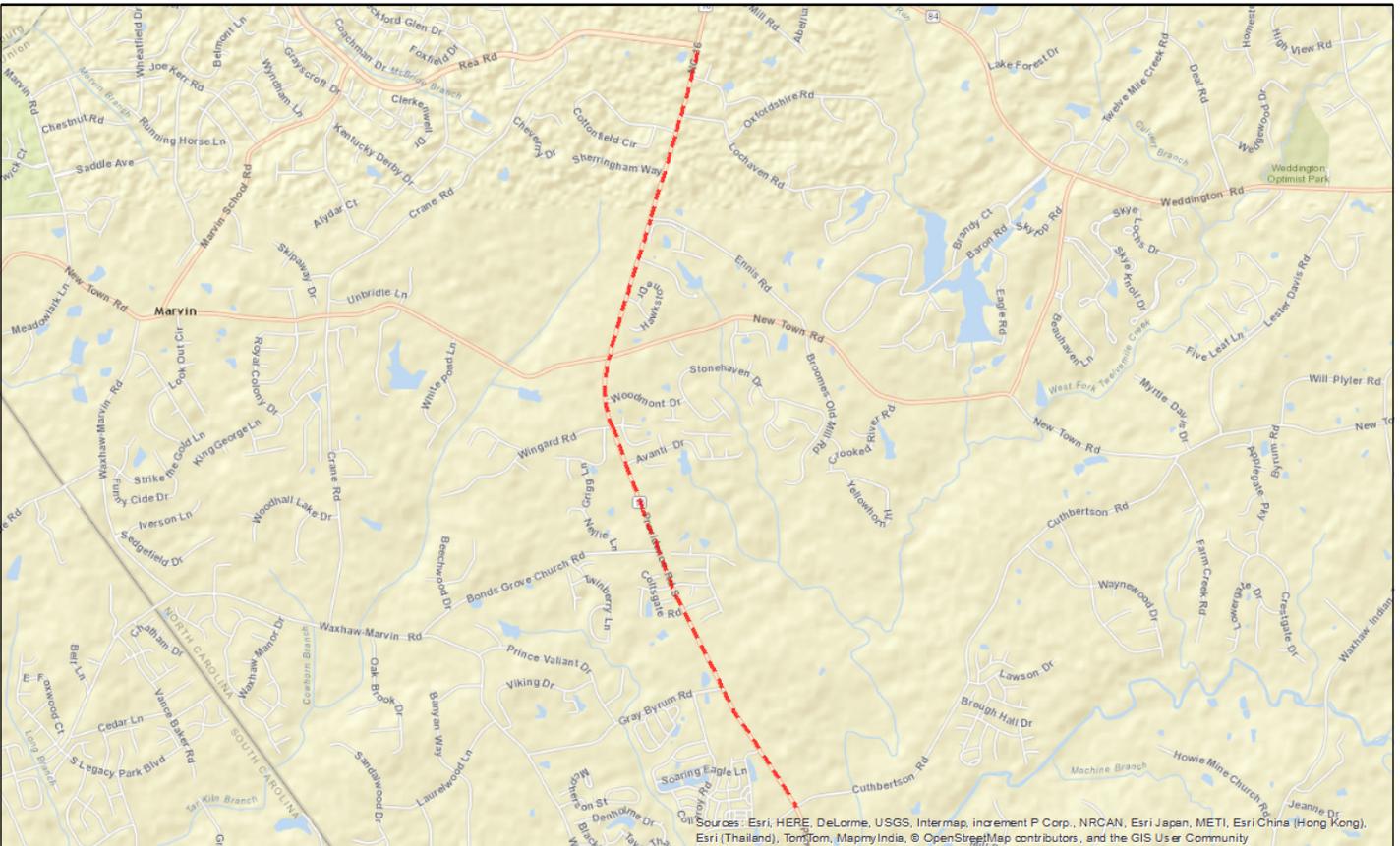
Widen from 2 lanes to 4 lanes, with median, wide outside lanes and sidewalks. NC 16 is the primary north-south thoroughfare in western Union County. The roadway currently experiences heavy peak hour congestion.

Division(s): Division 10

County(s): UNION

MPOS(s)/RPO(s): Charlotte Regional Transportation Planning Organization

Project Location



Statewide Mobility Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
	N/A	N/A
Totals: Weight: 0% Weighted Score: 0		

Regional Impact Total Score: 58.28

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 68.87	Percent: 15% Points: 100	Percent: 15% Points: 100
Safety (10%) 77.64		
[Travel Time] Benefit/Cost (25%) 2.99		
Accessibility / Connectivity (10%) 25.47		
Totals: Weight: 70% Weighted Score: 28.28		

Division Needs Total Score: 22.14

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 68.87	Percent: 25% Points: 0	Percent: 25% Points: 0
Safety (10%) 77.64		
[Travel Time] Benefit/Cost (20%) 2.99		
Totals: Weight: 50% Weighted Score: 22.14		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	43
Length (miles):	4.09
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Major Collector
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	0
Roadway has Curb & Gutter?	No
Volume (AADT):	16407.83
Capacity:	15800
Volume/Capacity Ratio:	1.04
% Autos:	96%
% Trucks:	4%
Truck Volume:	632.46
Crash Density:	95.74
Crash Severity:	70.63
Critical Crash Rate:	66.56
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	30
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	95
Actual Congested Speed:	37.99
Travel Time Index:	1.18

Project Benefits

Project Cross-Section:	4C - 4 Lane Divided (23' Raised Median) with Curb & Gutter, Wide Outside Lanes, and Sidewalks
Speed Limit:	45
Length (miles):	4.09
Facility Type:	Arterial
Access Control:	Partial
Functional Classification:	Major Collector
Terrain Type:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	4
Travel Time Savings for 30 Years (Total):	5021869.95
Travel Time Savings for 30 Years (Autos):	4828294.93
Travel Time Savings for 30 Years (Trucks):	193575.02
Long-Term Employment:	
% Change in Economy:	
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	No
In CTP or LRTP?	Yes
CTP/LRTP Name:	2040 Metropolitan Transportation Plan
CTP/LRTP Completion Year:	2014
Submitted by:	Charlotte Regional Transportation Planning Organization

* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!ine tool and associated databases.

Project Ownership

Division

Division	Percent	Regional Impact	Division Needs
Division 10	100%	100	0
	0%	0	0
	0%	0	0
TOTAL Division Points		100	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
Charlotte Regional Transportation Planning Organization	100%	100	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		100	0

Project Cost and Source

Construction Cost:	\$29,248,000	Cost Estimation Tool
Right-of-Way Cost:	\$8,180,000	Cost Estimation Tool
Utilities Cost:	\$982,000	Cost Estimation Tool
Total Project Cost:	\$38,410,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$38,410,000	