



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H090531-E

Mode: Highway

Status: Submitted

NC-54

From/Cross Street: SR 1106 (Barbee Road)

Specific Improvement Type: 1 - Widen Existing Roadway

To: NC 55

Project Category: Regional Impact

Length: 1.25

TIP#: U-5324E

Fully Funded in Draft STIP? No

Cost to NCDOT: \$46,400,000

Description:

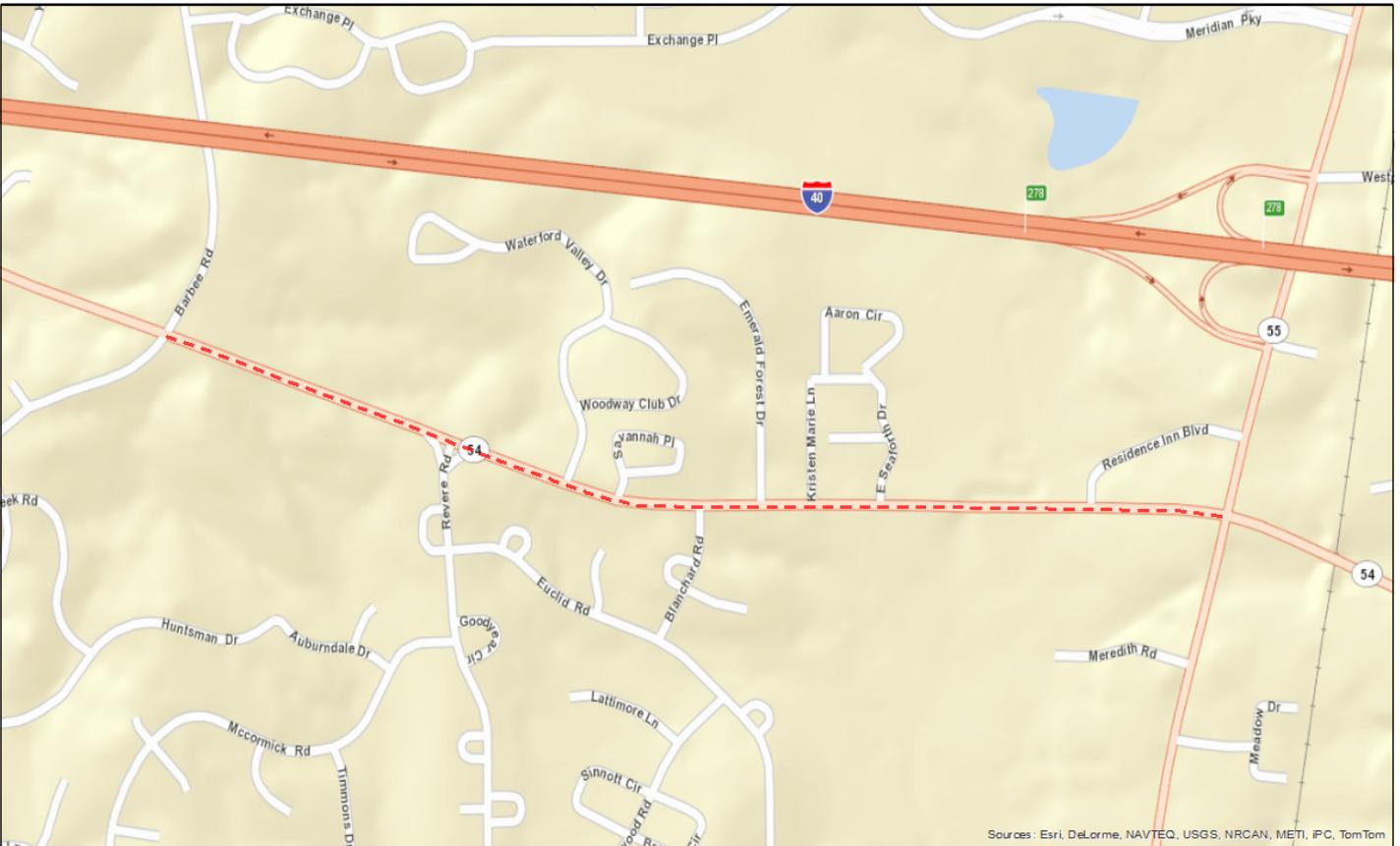
Widen to Multi-Lanes with Bicycle, Pedestrian, and Transit Accommodations

Division(s): Division 5

County(s): DURHAM

MPOS(s)/RPO(s): Durham Chapel Hill Carrboro MPO

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: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 69.33	Percent: 15% Points:	Percent: 15% Points:
Safety (10%) 81.98		
[Travel Time] Benefit/Cost (25%) 1.44		
Accessibility / Connectivity (10%) 6.31		
Totals: Weight: 70% Weighted Score: 26.52		

Division Needs Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 69.33	Percent: 25% Points:	Percent: 25% Points:
Safety (10%) 81.98		
[Travel Time] Benefit/Cost (20%) 1.44		
Totals: Weight: 50% Weighted Score: 22.35		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	45
Length (miles);	1.25
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	2
Roadway has Curb & Gutter?	No
Volume (AADT):	18933.68
Capacity:	18395.72
Volume/Capacity Ratio:	1.03
% Autos:	99%
% Trucks:	1%
Truck Volume:	278.95
Crash Density:	99.76
Crash Severity:	46.43
Critical Crash Rate:	99.76
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	20
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	95
Actual Congested Speed:	31.96
Travel Time Index:	1.41

Project Benefits

Project Cross-Section:	4D - 4 Lane Divided (23' Raised Median) with Curb & Gutter, Wide Outside Lanes, Bike Lanes, and Sidewalks
Speed Limit:	45
Length (miles):	1.25
Facility Type:	Arterial
Access Control:	Partial
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	4
Travel Time Savings for 30 Years (Total):	3013602.06
Travel Time Savings for 30 Years (Autos):	2969202.77
Travel Time Savings for 30 Years (Trucks):	44399.29
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?	No
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Division 5

* 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 5	100%	0	0
	0%	0	0
	0%	0	0
TOTAL Division Points		0	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
Durham Chapel Hill Carrboro MPO	100%	0	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		0	0

Project Cost and Source

Construction Cost:	\$30,600,000	TIP Unit
Right-of-Way Cost:	\$3,200,000	TIP Unit
Utilities Cost:	\$12,600,000	TIP Unit
Total Project Cost:	\$46,400,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$46,400,000	