NCDOT Prioritization 3.0 Project Summary

SPOT ID: H140788 **Mode:** Highway **Status:** Submitted

(Crabtree Valley Avenue)

From/Cross Street: US 70

To: Ridge Road

Length: 0.8

Specific Improvement Type: 5 - Construct Roadway on New Location

Project Category: Statewide Mobility

TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: $59,052,000

Description:

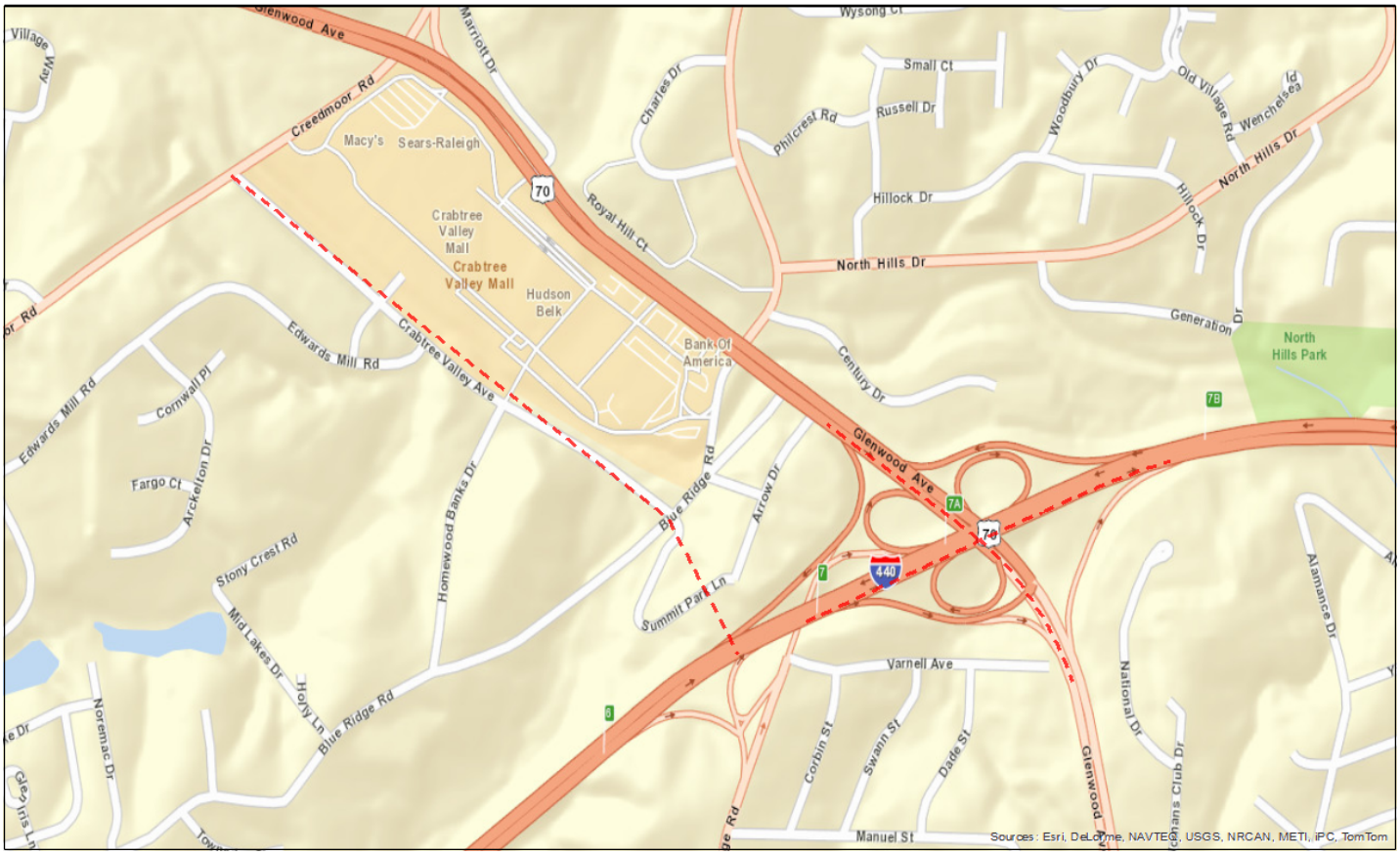
Relieve congestion at I-440/US 70 Interchange by extending and widening Crabtree Valley Avenue to Ridge Road and constructing a new interchange on I-440

Division(s): Division 5

County(s): WAKE

MPOS(s)/RPO(s): Capital Area MPO

Project Location



Statewide Mobility Total Score: 46.84

Quanitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (30%)	100.00	N/A	N/A
Safety (10%)	81.29		
Economic Competitiveness (10%)	13.29		
Multimodal + [Freight & Military] (20%)	29.04		
[Travel Time] Benefit/Cost (30%)	5.26		
Totals: Weight: 100% Weighted Score: 46.84			

Regional Impact Total Score: 0

Quanitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Accessibility / Connectivity (10%)	58.98	Percent: 15%	Percent: 15%
Congestion (V/C) (25%)	100.00	Points:	Points:
Safety (10%)	81.29		
[Travel Time] Benefit/Cost (25%)	5.26		
Totals: Weight: 70% Weighted Score: 40.34			

Division Needs Total Score: 0

Quantitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%)	100.00	Percent: 25%	Percent: 25%
Safety (10%)	81.29	Points:	Points:
[Travel Time] Benefit/Cost (20%)	5.26		
Totals: Weight: 50% Weighted Score: 29.18			

Project Data *

Existing Conditions

Existing Cross-Section:	
Speed Limit:	45
Length (miles);	1
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	6
Roadway has Curb & Gutter?	No
Volume (AADT):	176939.69
Capacity:	152690.96
Volume/Capacity Ratio:	1.16
% Autos:	97%
% Trucks:	3%
Truck Volume:	5808.49
Crash Density:	99.8
Crash Severity:	44.29
Critical Crash Rate:	99.8
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	19
Existing Median Type (for Cost Estimation):	Divided
Pavement Condition Rating:	97
Actual Congested Speed:	42.49
Travel Time Index:	1.41

Project Benefits

Project Cross-Section:	4B - 4 Lane Divided (23' Raised Median) with Paved Shoulders and Sidewalks
Speed Limit:	45
Length (miles):	0.8
Facility Type:	Arterial
Access Control:	Partial
Functional Classification:	Minor Arterial
TerrainType:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	10
Travel Time Savings for 30 Years (Total):	13934251.28
Travel Time Savings for 30 Years (Autos):	13476824.62
Travel Time Savings for 30 Years (Trucks):	457426.66
Long-Term Employment:	158.85
% Change in Economy:	0.00010696
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:	Capital Area MPO

* 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
Capital Area MPO	100%	0	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		**0**	**0**

Project Cost and Source

Construction Cost:	$57,114,000	TIP Unit
Right-of-Way Cost:	$1,938,000	TIP Unit
Utilities Cost:	$0	TIP Unit
Total Project Cost:	$59,052,000	
Other Funding:	$0	None
Cost to NCDOT :	**$59,052,000**	