NCDOT Prioritization 3.0 Project Summary

SPOT ID: H090172-D **Mode:** Highway **Status:** Submitted

US-401 (New Route - Fuquay Varina Bypass)

From/Cross Street: US 401 south of Fuquay-Varina

To: NC 55 southeast of Fuquay-Varina

Length: 8.41

Specific Improvement Type: 5 - Construct Roadway on New Location

Project Category: Regional Impact

TIP#: R-2609

Fully Funded in Draft STIP? No

Cost to NCDOT: $97,327,000

Description:

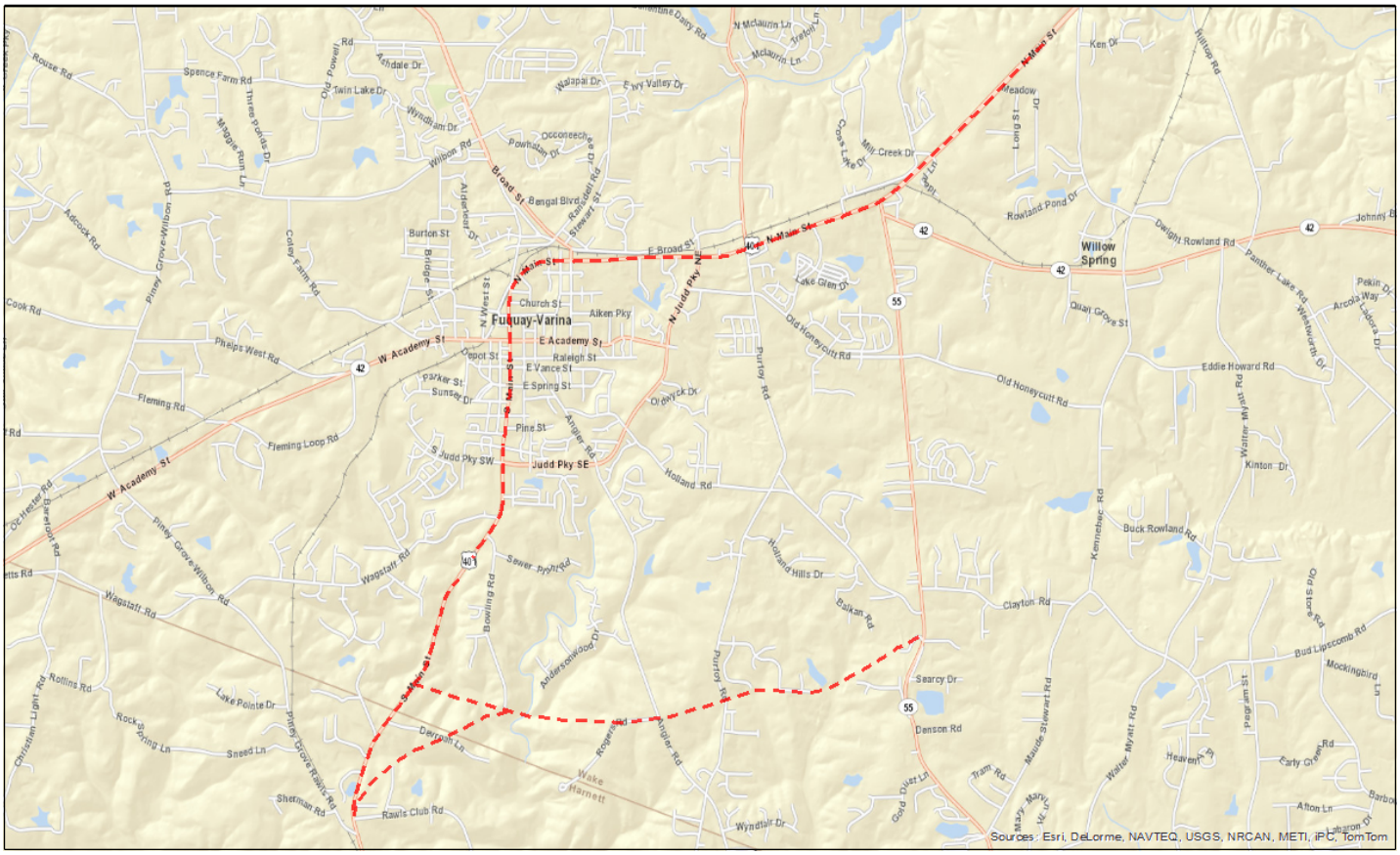
Construct Freeway on New Location

Division(s): Division 5, Division 6

County(s): WAKE, HARNETT

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

Project Location



Statewide Mobility Total Score: 0

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

Regional Impact Total Score: 0

Quanitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%)	50.39	Percent: 15%	Percent: 15%
Safety (10%)	65.63	Points:	Points:
[Travel Time] Benefit/Cost (25%)	3.62		
Accessibility / Connectivity (10%)	63.53		
Totals: Weight: 70% Weighted Score: 26.42			

Division Needs Total Score: 0

Quantitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
[Travel Time] Benefit/Cost (20%)	3.62	Percent: 25%	Percent: 25%
Congestion (V/C) (20%)	50.39	Points:	Points:
Safety (10%)	65.63		
Totals: Weight: 50% Weighted Score: 17.37			

Project Data *

Existing Conditions

Existing Cross-Section:	
Speed Limit:	39
Length (miles);	7.3
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Other Principal Arterial
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	2
Roadway has Curb & Gutter?	No
Volume (AADT):	16941.3
Capacity:	23304.89
Volume/Capacity Ratio:	0.73
% Autos:	95%
% Trucks:	5%
Truck Volume:	803.68
Crash Density:	73.95
Crash Severity:	56.12
Critical Crash Rate:	66.84
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	32
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	70
Actual Congested Speed:	36.44
Travel Time Index:	0.88

Project Benefits

Project Cross-Section:	4A - 4 Lane Divided (46' Depressed Median) with Paved Shoulders
Speed Limit:	70
Length (miles):	8.41
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Other Principal Arterial-Other Freeway
TerrainType:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	4
Travel Time Savings for 30 Years (Total):	33180426.39
Travel Time Savings for 30 Years (Autos):	31606367.28
Travel Time Savings for 30 Years (Trucks):	1574059.11
Long-Term Employment:	
% Change in Economy:	
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	Yes
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	82%	0	0
Division 6	18%	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:	$72,125,000	Cost Estimation Tool
Right-of-Way Cost:	$22,502,000	Cost Estimation Tool
Utilities Cost:	$2,700,000	Cost Estimation Tool
Total Project Cost:	$97,327,000	
Other Funding:	$0	None
Cost to NCDOT :	**$97,327,000**	