



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H128072

Mode: Highway

Status: Submitted

I-540

From/Cross Street: NC 54

Specific Improvement Type: 1 - Widen Existing Roadway

To: US 64

Project Category: Statewide Mobility

Length: 24.94

TIP#: FS-1305A

Fully Funded in Draft STIP? No

Cost to NCDOT: \$354,280,000

Description:

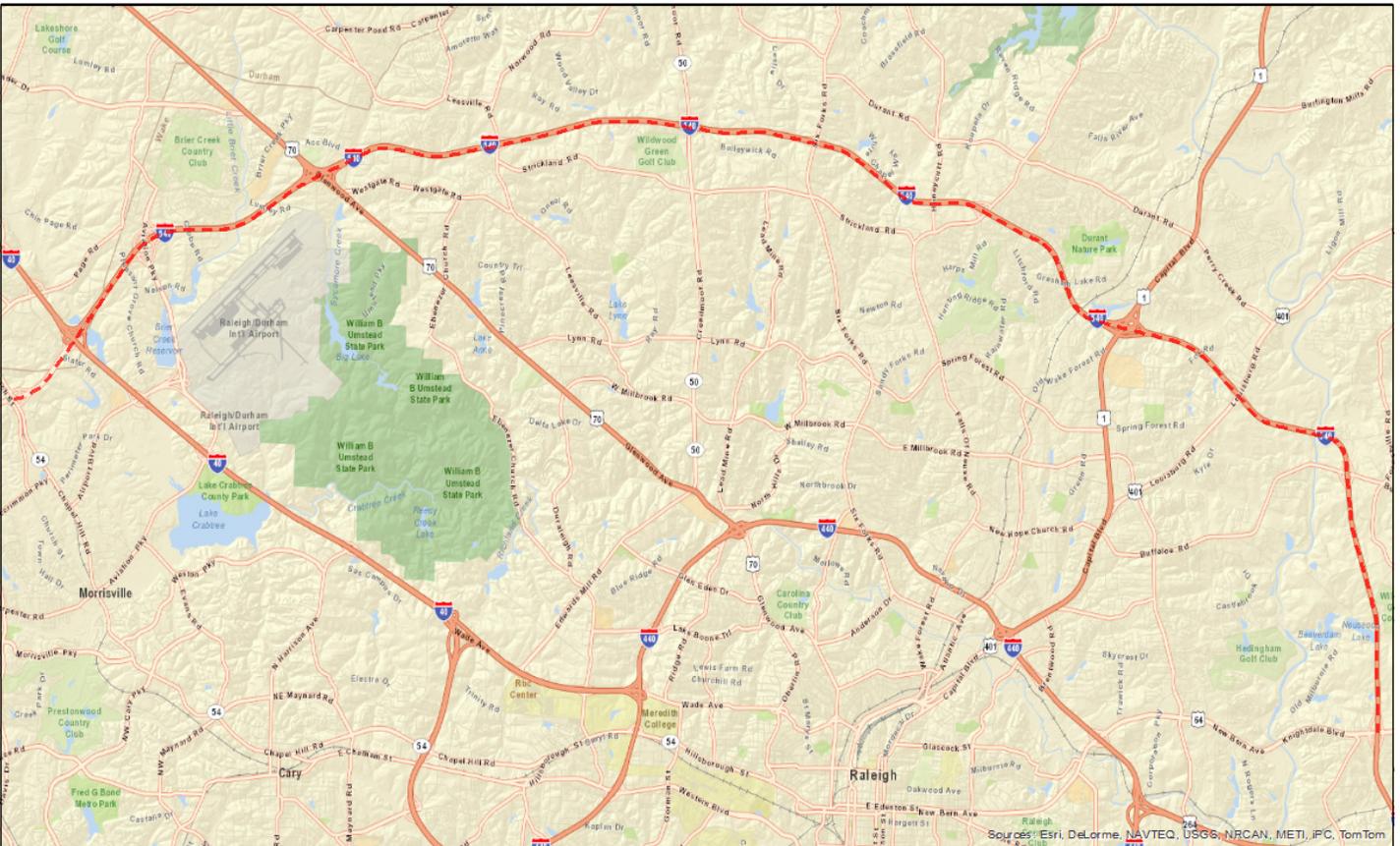
Construct one Express toll Lane in Each Direction within the Existing Median

Division(s): Division 5

County(s): WAKE, DURHAM

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

Project Location



Statewide Mobility Total Score: 34.19

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
[Travel Time] Benefit/Cost (30%) 0.75 Congestion (V/C) (30%) 66.57 Safety (10%) 58.40 Economic Competitiveness (10%) 14.59 Multimodal + [Freight & Military] (20%) 33.49	N/A	N/A
Totals: Weight: 100% Weighted Score: 34.19		

Regional Impact Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 66.57 Safety (10%) 58.40 [Travel Time] Benefit/Cost (25%) 0.75 Accessibility / Connectivity (10%) 27.68	Percent: 15% Points:	Percent: 15% Points:
Totals: Weight: 70% Weighted Score: 25.44		

Division Needs Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Safety (10%) 58.40 [Travel Time] Benefit/Cost (20%) 0.75 Congestion (V/C) (20%) 66.57	Percent: 25% Points:	Percent: 25% Points:
Totals: Weight: 50% Weighted Score: 19.3		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	70
Length (miles);	24.94
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
Terrain Type:	Rolling
Lane Width:	12
Paved Shoulder Width:	10
Roadway has Curb & Gutter?	No
Volume (AADT):	71053.14
Capacity:	111766.12
Volume/Capacity Ratio:	0.64
% Autos:	95%
% Trucks:	5%
Truck Volume:	3519.74
Crash Density:	69.11
Crash Severity:	45.76
Critical Crash Rate:	60.35
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	22
Existing Median Type (for Cost Estimation):	Divided
Pavement Condition Rating:	84
Actual Congested Speed:	61.15
Travel Time Index:	1.14

Project Benefits

Project Cross-Section:	8D - 8 Lane Freeway (6 General Purpose Lanes, 2 Managed Lanes, and 27' Median with Jersey Barrier) with Paved Shoulders
Speed Limit:	70
Length (miles):	24.94
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
Terrain Type:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	10
Travel Time Savings for 30 Years (Total):	11849246.8
Travel Time Savings for 30 Years (Autos):	11262273.5
Travel Time Savings for 30 Years (Trucks):	586973.3
Long-Term Employment:	170
% Change in Economy:	0.00012177
Provides Direct Connection to Transportation Terminal?	Yes
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!line tool and associated databases.

