



## NCDOT Prioritization 3.0 Project Summary

**SPOT ID:** H128071

**Mode:** Highway

**Status:** Submitted

### I-540

**From/Cross Street:** NC 54

**Specific Improvement Type:** 1 - Widen Existing Roadway

**To:** US 1

**Project Category:** Statewide Mobility

**Length:** 17.51

**TIP#:** FS-1305A

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$209,040,000

#### Description:

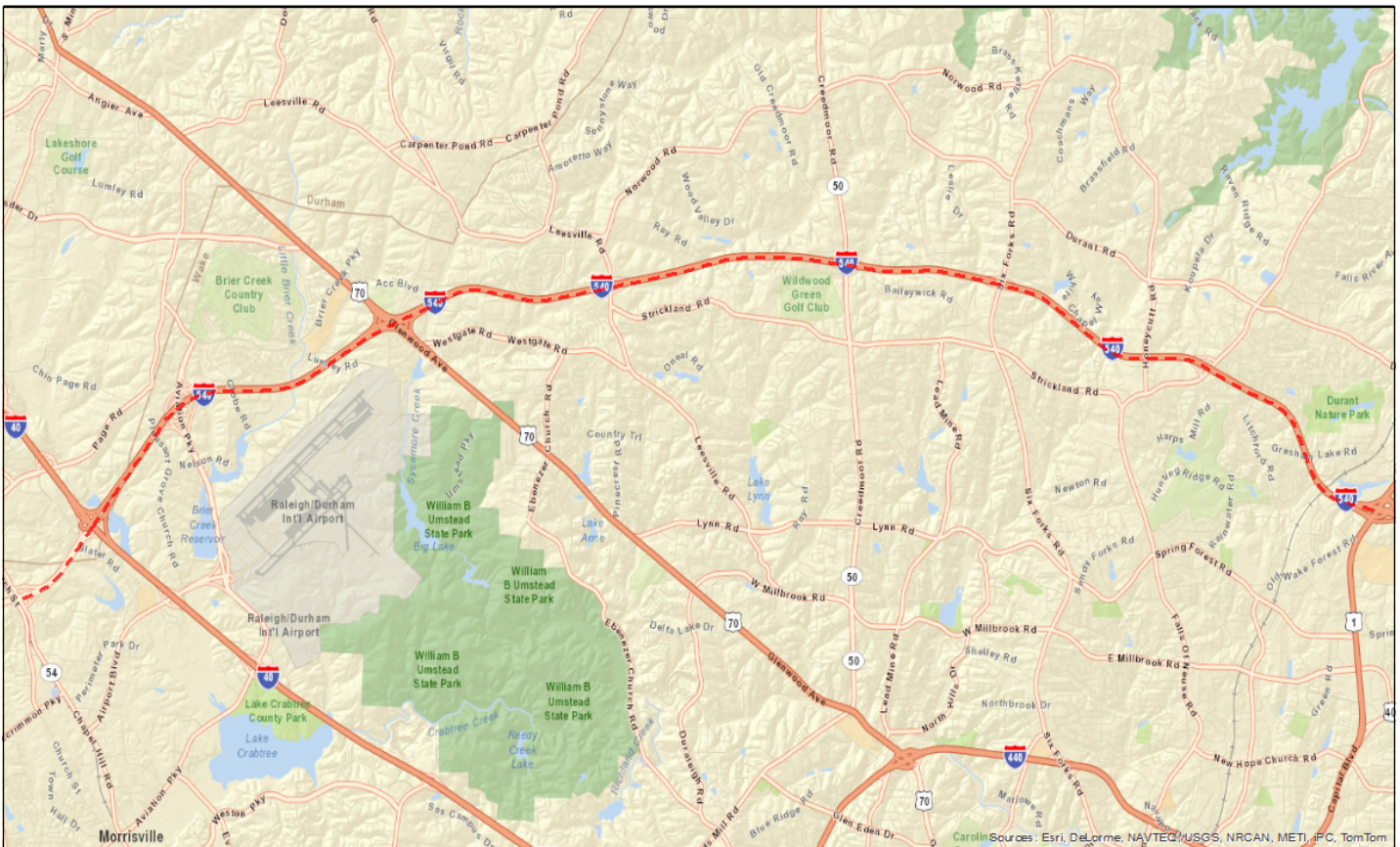
Construct one Express toll Lane in Each Direction within the Existing Median.

**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: 37.1**

<b>Quantitative Score</b>		<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (30%)	74.27	N/A	N/A
Safety (10%)	59.73		
Economic Competitiveness (10%)	17.30		
Multimodal + [Freight & Military] (20%)	33.32		
[Travel Time] Benefit/Cost (30%)	1.51		
<b>Totals: Weight: 100% Weighted Score: 37.1</b>			

**Regional Impact Total Score: 0**

<b>Quantitative Score</b>		<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Safety (10%)	59.73	Percent: 15% Points:	Percent: 15% Points:
[Travel Time] Benefit/Cost (25%)	1.51		
Accessibility / Connectivity (10%)	26.73		
Congestion (V/C) (25%)	74.27		
<b>Totals: Weight: 70% Weighted Score: 27.59</b>			

**Division Needs Total Score: 0**

<b>Quantitative Score</b>		<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Safety (10%)	59.73	Percent: 25% Points:	Percent: 25% Points:
[Travel Time] Benefit/Cost (20%)	1.51		
Congestion (V/C) (20%)	74.27		
<b>Totals: Weight: 50% Weighted Score: 21.13</b>			

**Project Data \*****Existing Conditions**

Existing Cross-Section:	
Speed Limit:	70
Length (miles):	17.51
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):	80180.06
Capacity:	114013.68
Volume/Capacity Ratio:	0.7
% Autos:	96%
% Trucks:	4%
Truck Volume:	3148.7
Crash Density:	70.31
Crash Severity:	48.23
Critical Crash Rate:	60.67
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):	Divided
Pavement Condition Rating:	84
Actual Congested Speed:	59.61
Travel Time Index:	1.17

**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):	17.51
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):	14078747.05
Travel Time Savings for 30 Years (Autos):	13525869.44
Travel Time Savings for 30 Years (Trucks):	552877.61
Long-Term Employment:	202
% Change in Economy:	0.00014401
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.

**Project Ownership****Division**

<b>Division</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
Division 5	100%	0	0
	0%	0	0
	0%	0	0
<b>TOTAL Division Points</b>		<b>0</b>	<b>0</b>

**MPO/RPO**

<b>MPO/RPO</b>	<b>Percent</b>	<b>Regional Impact</b>	<b>Division Needs</b>
Capital Area MPO	94%	0	0
Durham Chapel Hill Carrboro MPO	6%	0	0
	0%	0	0
<b>TOTAL MPO/RPO Points</b>		<b>0</b>	<b>0</b>

**Project Cost and Source**

Construction Cost:	\$234,540,000	TIP Unit
Right-of-Way Cost:	\$1,870,000	TIP Unit
Utilities Cost:	\$0	TIP Unit
Total Project Cost:	\$236,410,000	
Other Funding:	\$54,740,000	See below
<b>Cost to NCDOT :</b>	<b>\$209,040,000</b>	

Other Funds:                      \$27,370,000 Toll Revenue  
    \$27,370,000 Toll Revenue less Roadway Maintenance & Financing