



## NCDOT Prioritization 3.0 Project Summary

**SPOT ID:** H111014

**Mode:** Highway

**Status:** Submitted

### I-540

**From/Cross Street:** I-40

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

**To:** US 64 Bypass

**Project Category:** Statewide Mobility

**Length:** 25.82

**TIP#:**

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$1

#### Description:

Convert Freeway to tolled Facility and Widen to 8 Lanes (Requested by the Capital Area MPO in 2011)

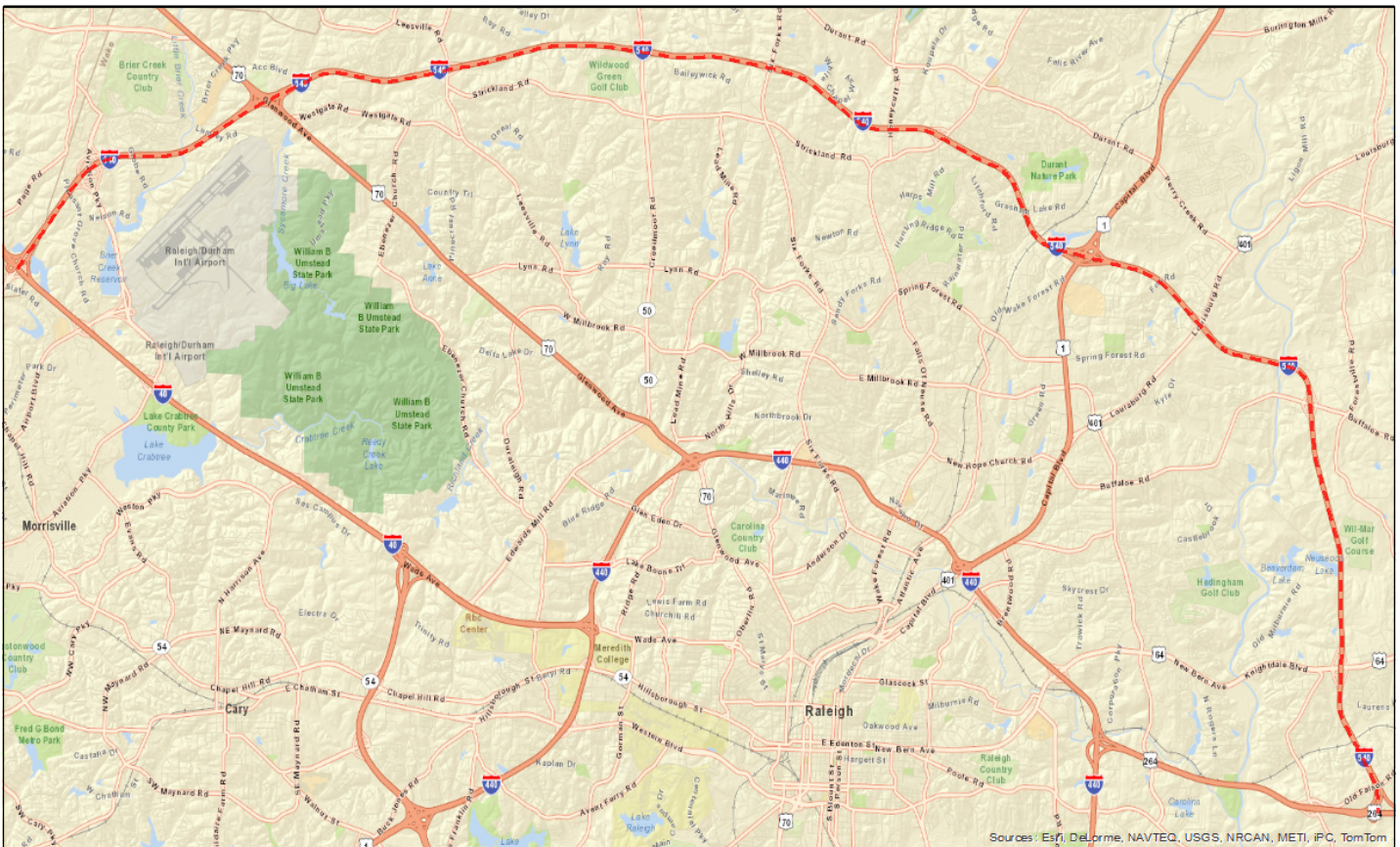
**\*\*REQUIRES FEDERAL ACTION TO BE CONSTRUCTED\*\***

**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: 63.49**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (30%) 65.36 Safety (10%) 59.07 Economic Competitiveness (10%) 12.36 Multimodal + [Freight & Military] (20%) 33.68 [Travel Time] Benefit/Cost (30%) 100.00	N/A	N/A
<b>Totals: Weight: 100% Weighted Score: 63.49</b>		

**Regional Impact Total Score: 0**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (25%) 65.36 Safety (10%) 59.07 [Travel Time] Benefit/Cost (25%) 100.00 Accessibility / Connectivity (10%) 25.24	Percent: 15% Points:	Percent: 15% Points:
<b>Totals: Weight: 70% Weighted Score: 49.77</b>		

**Division Needs Total Score: 0**

<b>Quantitative Score</b>	<b>Division Engineer Local Input Points</b>	<b>MPO/RPO Local Input Points</b>
Congestion (V/C) (20%) 65.36 Safety (10%) 59.07 [Travel Time] Benefit/Cost (20%) 100.00	Percent: 25% Points:	Percent: 25% Points:
<b>Totals: Weight: 50% Weighted Score: 38.98</b>		

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

Existing Cross-Section:	
Speed Limit:	70
Length (miles):	25.82
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):	69732.01
Capacity:	111662.13
Volume/Capacity Ratio:	0.62
% Autos:	95%
% Trucks:	5%
Truck Volume:	3614.17
Crash Density:	68.57
Crash Severity:	47.57
Critical Crash Rate:	61.09
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	21
Existing Median Type (for Cost Estimation):	Divided
Pavement Condition Rating:	85
Actual Congested Speed:	61.2
Travel Time Index:	1.12

**Project Benefits**

Project Cross-Section:	8B - 8 Lane Divided (27' Median with Jersey Barrier with Paved Shoulders)
Speed Limit:	70
Length (miles):	25.82
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):	10031605.51
Travel Time Savings for 30 Years (Autos):	9511672.59
Travel Time Savings for 30 Years (Trucks):	519932.92
Long-Term Employment:	144
% Change in Economy:	0.00010318
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	98%	0	0
Durham Chapel Hill Carrboro MPO	2%	0	0
	0%	0	0
<b>TOTAL MPO/RPO Points</b>		<b>0</b>	<b>0</b>

**Project Cost and Source**

Construction Cost:	\$368,610,000	TIP Unit
Right-of-Way Cost:	\$3,000,000	TIP Unit
Utilities Cost:	\$0	TIP Unit
Total Project Cost:	\$371,610,000	
Other Funding:	\$1,322,460,750	Toll Revenue less Roadway Maintenance & Financing
<b>Cost to NCDOT :</b>	<b>\$1</b>	