



# NCDOT Prioritization 4.0 Project Summary

**SPOT ID:** H111011

**Mode:** Highway

**Status:** Draft

## NC-751 (Hope Valley Road)

**From/Cross Street:** NC 54

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

**To:** Southpoint Auto Park Blvd

**Project Category:** Regional Impact

**Length:** 0.73

**TIP#:** HoldTank

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$9,644,000

### Description:

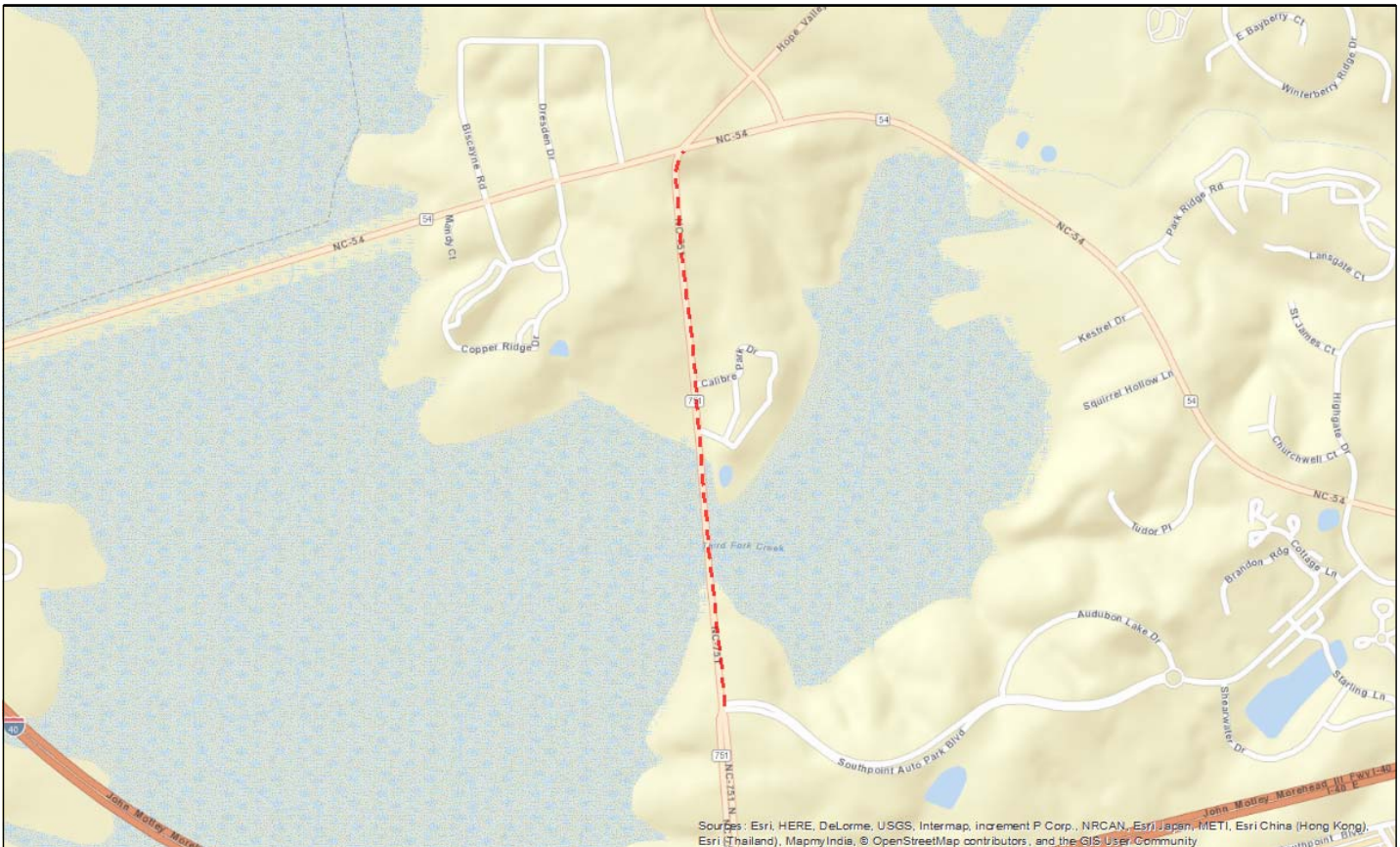
Widen Roadway to Four Lanes with a Median with Bicycle, Pedestrian and Transit Facilities As Appropriate.

**Division(s):** Division 5

**County(s):** DURHAM

**MPOS(s)/RPO(s):** Durham Chapel Hill Carrboro MPO

### Project Location



**Statewide Mobility Total Score: 0**

Quantitative Score	Division Engineer Points	MPO/RPO Points
	N/A	N/A
<b>Totals: Weight: 0% Weighted Score: 0</b>		

**Regional Impact Total Score: 0**

Quantitative Score	Division Engineer Points	MPO/RPO Points
Safety (10%) In Progress Accessibility / Connectivity (10%) In Progress Congestion REG (20%) In Progress Freight (10%) In Progress Benefit-Cost SW & REG (20%) In Progress	Percent: 15% Points:	Percent: 15% Points:
<b>Totals: Weight: 70% Weighted Score: 0</b>		

**Division Needs Total Score: 0**

Quantitative Score	Division Engineer Points	MPO/RPO Points
Safety (10%) In Progress Accessibility / Connectivity (5%) In Progress Congestion DIV (15%) In Progress Freight (5%) In Progress Benefit-Cost DIV (15%) In Progress	Percent: 25% Points:	Percent: 25% Points:
<b>Totals: Weight: 50% Weighted Score: 0</b>		

**Criteria measures**

Criteria	Measure	Raw Value	Scaled value
Congestion	Volume/Capacity (SW 60%, REG 80%, DIV 100%)	0.95	
	Volume (SW 40%, REG 20%, DIV 0%)	16000	
Benefit-Cost (SW/REG)	Benefit/Cost SW/REG (100%)		
Benefit-Cost (DIV)	Benefit/Cost DIV (100%)		
Safety (Segments)	Crash Density (33%)	100	
	Crash Severity (33%)	66.7	
	Critical Crash Rate (33%)	64.2	
Safety (Intersections)	Crash Frequency (50%)		
	Severity Index (50%)		
Economic Competitiveness	%Change in Economy (50%)		
	Long-term Jobs (50%)		

Criteria	Measure	Raw Value	Scaled value
Accessibility / Connectivity	County Economic Indicator (50%)	337	
	Upgrade Roadway Travel Time Savings (50%)		
Freight	Truck Volume (50%)	278.4	
	Volume/Capacity on Non-Interstate STRAHNET or Future Interstate (30%)		
	Distance to Freight Terminal (20%)	9.23	
Multimodal	Distance to Multimodal Terminal (60%)	6.19	
	Volume/Capacity on Route near Multimodal Terminal (40%)		
Lane Width	Lane Width Difference (100%)	0	
Shoulder Width	Paved Shoulder Width Difference (100%)	2	
Pavement Condition	Pavement Condition Rating (100%)	86	

**Project Data\***

**Existing Conditions**

Existing Cross-Section:	2 Lane Undivided
Speed Limit (mph):	45
Length (miles):	0.73
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
Lane Width (ft):	12
Paved Shoulder Width (ft):	2
Roadway has Curb & Gutter?	No
Volume (AADT):	16000
Volume (PADT):	16000
Peak ADT (PADT) Factor:	1
Capacity (vpd):	16784.04
Volume (PADT)/Capacity Ratio:	0.95
% Autos:	98%
% Trucks:	2%
Truck Volume (AADTT):	278.4
Crash Density (seg):	100
Crash Severity (seg):	66.7
Critical Crash Rate (seg):	64.2
Crash Frequency (int):	
Severity Index (int):	
Adjusted Property Tax Base Per Capita Rank:	
Population Growth Rank:	
Median Household Income Rank:	
12 Month Average Unemployment Rate Rank:	
Sum County Rank:	337
Non-Interstate STRAHNET Route?	No
Future Interstate Route?	No
Pavement Condition Rating:	86

**Project Benefits**

Project Cross-Section:	4D - 4 Lane Divided (23' Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks
Speed Limit (mph):	45
Length (miles):	0.73
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
DOT Design Lane Width (ft):	12
DOT Design Paved Shoulder Width (ft):	4
Travel Time Savings for 10 Years (NCSTM) - SW/REG:	1249516.43
Travel Time Savings in \$ (NCSTM) - SW/REG:	
Travel Time Savings for 10 Years (CALC) - DIV:	
Travel Time Savings in \$ (CALC) - DIV:	
Safety Benefits in \$:	
Long-Term Employment:	
% Change in Economy:	
Nearest Freight Terminal:	Raleigh-Durham International Airport
Distance to Freight Terminal (miles):	9.23
Nearest Multimodal Passenger Terminal :	Durham Station Transportation Center
Distance to Multimodal Terminal (miles):	6.19
Does project upgrade how the roadway functions?	No
Travel Time Savings/User:	
In CTP or LRTP?	Yes
CTP/LRTP Name:	DCHC MPO 2040 MTP
CTP/LRTP Completion Year:	2013
Submitted by:	Durham Chapel Hill Carrboro MPO

\* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT Online tool and associated databases.

**Project Ownership**

**Division**

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

**MPO/RPO**

MPO/RPO	Percent	Regional Impact Points	Division Needs Points
Durham Chapel Hill Carrboro MPO	100%	0	0
	0%	0	0
	0%	0	0
<b>TOTAL MPO/RPO Points</b>		<b>0</b>	<b>0</b>

**Project Cost and Source**

Construction Cost:	\$7,391,000	Cost Estimation Tool
Right-of-Way Cost:	\$2,012,000	Cost Estimation Tool
Utilities Cost:	\$241,000	Cost Estimation Tool
Total Project Cost:	\$9,644,000	
Other Funding:	\$0	None
<b>Cost to NCDOT :</b>	<b>\$9,644,000</b>	