



NCDOT Prioritization 4.0 Project Summary

SPOT ID: H150228

Mode: Highway

Status: Draft

I-85, NC-86

From/Cross Street: NC 86

Specific Improvement Type: 8 - Improve Interchange

To:

Project Category: Statewide Mobility

Length: 2

TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: \$10,230,000

Description:

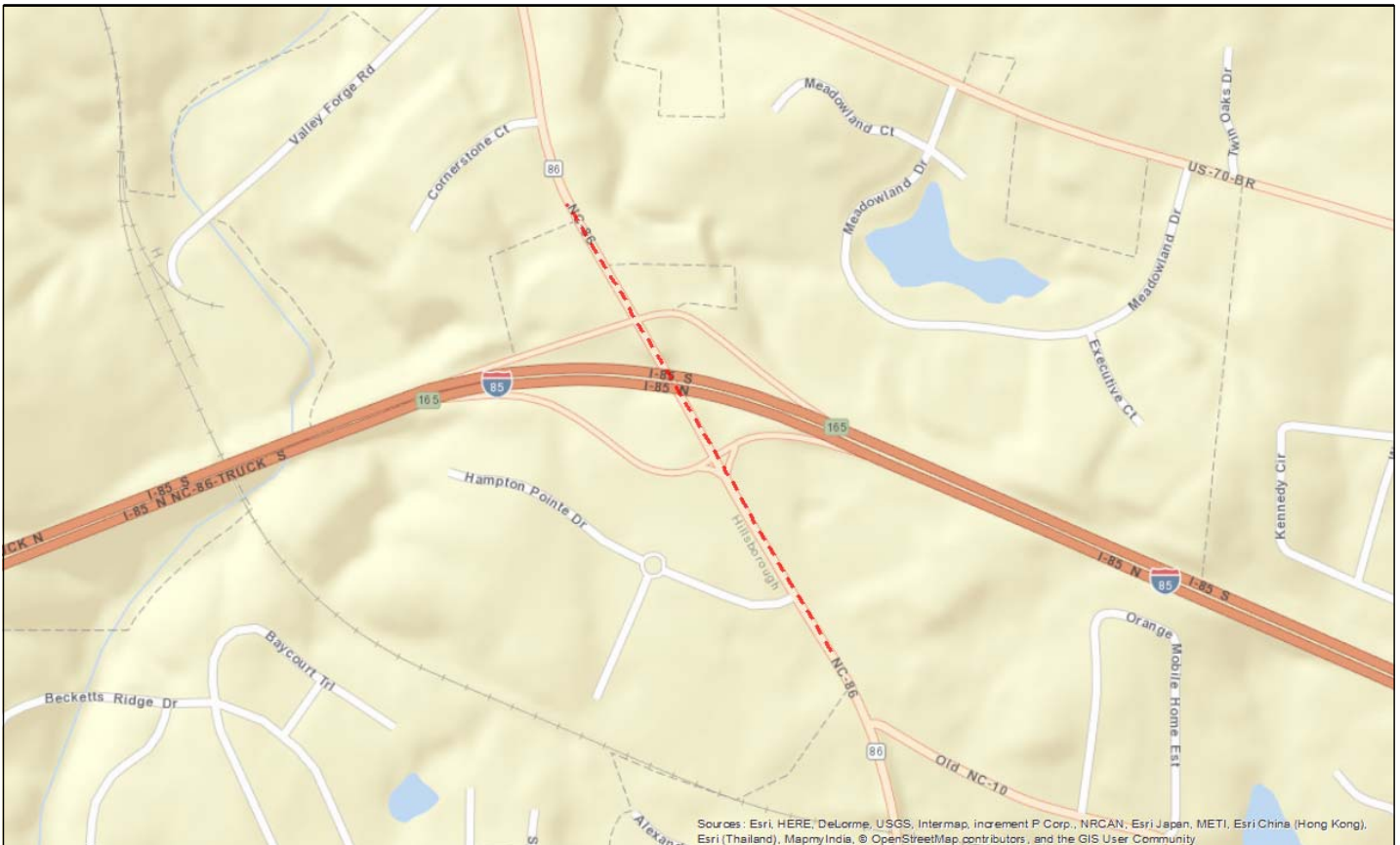
Construct new interchange to accommodate increased increased traffic & Diamond with 2-lane and 4-lane widened NC 86 on bridge with turn lanes.

Division(s): Division 7

County(s): ORANGE

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

Project Location



Statewide Mobility Total Score: 0

Quantitative Score	Division Engineer Points	MPO/RPO Points
Congestion SW (30%) In Progress Safety (15%) In Progress Economic Competitiveness (10%) In Progress Multimodal (5%) In Progress Freight (15%) In Progress Benefit-Cost SW & REG (25%) In Progress	N/A	N/A
Totals: Weight: 100% Weighted Score: 0		

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:
Totals: Weight: 70% Weighted Score: 0		

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:
Totals: Weight: 50% Weighted Score: 0		

Criteria measures

Criteria	Measure	Raw Value	Scaled value	Criteria	Measure	Raw Value	Scaled value
Congestion	Volume/Capacity (SW 60%, REG 80%, DIV 100%)	0.76		Accessibility / Connectivity	County Economic Indicator (50%)	346	
	Volume (SW 40%, REG 20%, DIV 0%)	24000			Upgrade Roadway Travel Time Savings (50%)		
Benefit-Cost (SW/REG)	Benefit/Cost SW/REG (100%)			Freight	Truck Volume (50%)	837.53	
Benefit-Cost (DIV)	Benefit/Cost DIV (100%)				Volume/Capacity on Non-Interstate STRAHNET or Future Interstate (30%)		
Safety (Segments)	Crash Density (33%)	98.84		Multimodal	Distance to Freight Terminal (20%)	20.25	
	Crash Severity (33%)	33.3			Distance to Multimodal Terminal (60%)	10.51	
	Critical Crash Rate (33%)	98.84		Volume/Capacity on Route near Multimodal Terminal (40%)			
Safety (Intersections)	Crash Frequency (50%)			Lane Width	Lane Width Difference (100%)	0	
	Severity Index (50%)			Shoulder Width	Paved Shoulder Width Difference (100%)	0	
Economic Competitiveness	%Change in Economy (50%)			Pavement Condition	Pavement Condition Rating (100%)	93	
	Long-term Jobs (50%)						

Project Data***Existing Conditions**

Existing Cross-Section:	2 Lane Undivided
Speed Limit (mph):	45
Length (miles):	2
Facility Type:	Arterial
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Rolling
Lane Width (ft):	12
Paved Shoulder Width (ft):	4
Roadway has Curb & Gutter?	No
Volume (AADT):	19078.23
Volume (PADT):	24000
Peak ADT (PADT) Factor:	1.26
Capacity (vpd):	31600
Volume (PADT)/Capacity Ratio:	0.76
% Autos:	96%
% Trucks:	4%
Truck Volume (AADTT):	837.53
Crash Density (seg):	98.84
Crash Severity (seg):	33.3
Critical Crash Rate (seg):	98.84
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:	346
Non-Interstate STRAHNET Route?	No
Future Interstate Route?	No
Pavement Condition Rating:	93

Project Benefits

Project Cross-Section:	
Speed Limit (mph):	45
Length (miles):	2
Facility Type:	Arterial
Access Control:	Full
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:	0
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):	20.25
Nearest Multimodal Passenger Terminal :	Durham Amtrak Rail Station
Distance to Multimodal Terminal (miles):	10.51
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 7	100%	0	0
	0%	0	0
	0%	0	0
TOTAL Division Points		0	0

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
TOTAL MPO/RPO Points		0	0

Project Cost and Source

Construction Cost:	\$8,580,000	Cost Estimation Tool
Right-of-Way Cost:	\$1,650,000	Cost Estimation Tool
Utilities Cost:	\$0	Cost Estimation Tool
Total Project Cost:	\$10,230,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$10,230,000	