



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H140271

Mode: Highway

Status: Submitted

I-77

From/Cross Street: I-77 , I-277 Brookshire Freeway, US-21 , NC-16 Brookshire Freeway

Specific Improvement Type: 8 - Improve Interchange

To:

Project Category: Statewide Mobility

Length: 2

TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: \$101,600,000

Description:

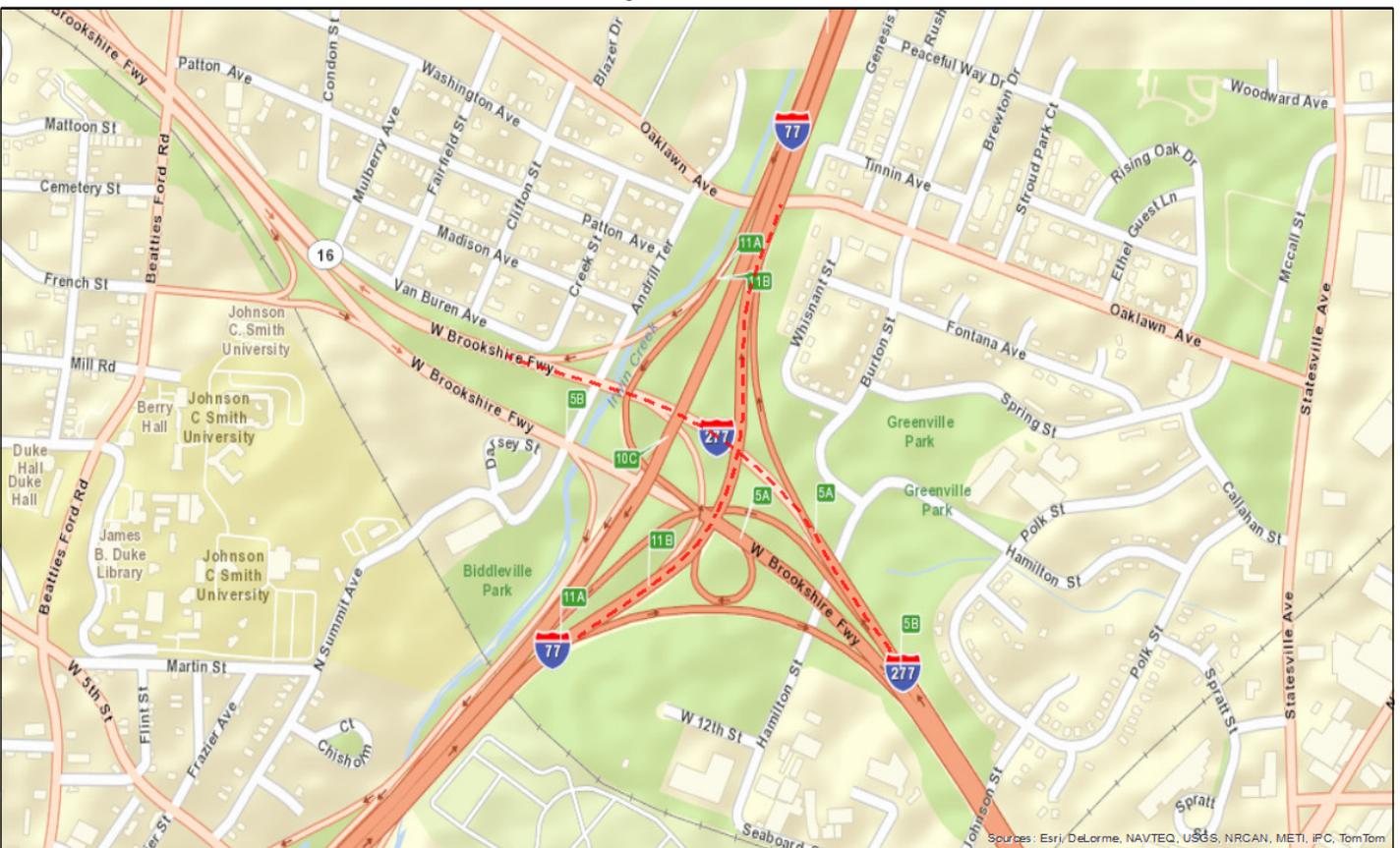
Improve interchange. This interchange functions as the main entrance into uptown Charlotte for drivers heading from the west and north. The interchange is undersized for the amount of traffic that uses it and needs to provide a safer and more efficient way to handle this traffic. The project would also include a facility for HOT traffic to connect I-77 and I-277. See supporting documents in link below:

Division(s): Division 10

County(s): MECKLENBURG

MPOS(s)/RPO(s): Charlotte Regional Transportation Planning Organization

Project Location



Statewide Mobility Total Score: 57.24

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (30%) 100.00 Safety (10%) 66.65 Economic Competitiveness (10%) 50.35 Multimodal + [Freight & Military] (20%) 65.43 [Travel Time] Benefit/Cost (30%) 8.17	N/A	N/A
Totals: Weight: 100% Weighted Score: 57.24		

Regional Impact Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 100.00 Safety (10%) 66.65 [Travel Time] Benefit/Cost (25%) 8.17 Accessibility / Connectivity (10%) 74.99	Percent: 15% Points:	Percent: 15% Points:
Totals: Weight: 70% Weighted Score: 41.21		

Division Needs Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 100.00 Safety (10%) 66.65 [Travel Time] Benefit/Cost (20%) 8.17	Percent: 25% Points:	Percent: 25% Points:
Totals: Weight: 50% Weighted Score: 28.3		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	55
Length (miles);	2
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):	224960.94
Capacity:	214995.59
Volume/Capacity Ratio:	1.05
% Autos:	94%
% Trucks:	6%
Truck Volume:	13086.33
Crash Density:	0
Crash Severity:	0
Critical Crash Rate:	0
Crash Frequency:	100
Severity Index:	33.3
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	20
Existing Median Type (for Cost Estimation):	Divided
Pavement Condition Rating:	94
Actual Congested Speed:	49.51
Travel Time Index:	1.11

Project Benefits

Project Cross-Section:	
Speed Limit:	55
Length (miles):	2
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Interstate
TerrainType:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	10
Travel Time Savings for 30 Years (Total):	36840000
Travel Time Savings for 30 Years (Autos):	34696960.16
Travel Time Savings for 30 Years (Trucks):	2143039.84
Long-Term Employment:	597.09
% Change in Economy:	0.00040994
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	No
In CTP or LRTP?	Yes
CTP/LRTP Name:	2040 Metropolitan Transportation Plan
CTP/LRTP Completion Year:	2014
Submitted by:	Charlotte Regional Transportation Planning Organization

* 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**

Division	Percent	Regional Impact	Division Needs
Division 10	100%	0	0
	0%	0	0
	0%	0	0
TOTAL Division Points		0	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
Charlotte Regional Transportation Planning Organization	100%	0	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		0	0

Project Cost and Source

Construction Cost:	\$84,100,000	TIP Unit
Right-of-Way Cost:	\$17,400,000	TIP Unit
Utilities Cost:	\$100,000	TIP Unit
Total Project Cost:	\$101,600,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$101,600,000	