

NCDOT Prioritization 4.0 Project Summary

SPOT ID: H129640-B Mode: Highway Status: Draft

US- (New Route - Northern Durham Parkway)

From/Cross Street: US 70 Specific Improvement Type: 5 - Construct Roadway on New

Location

To: NC 98/Wake Forest Hwy/Holloway St Project Category: Division Needs

Length: 4.26 TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: \$78,380,000

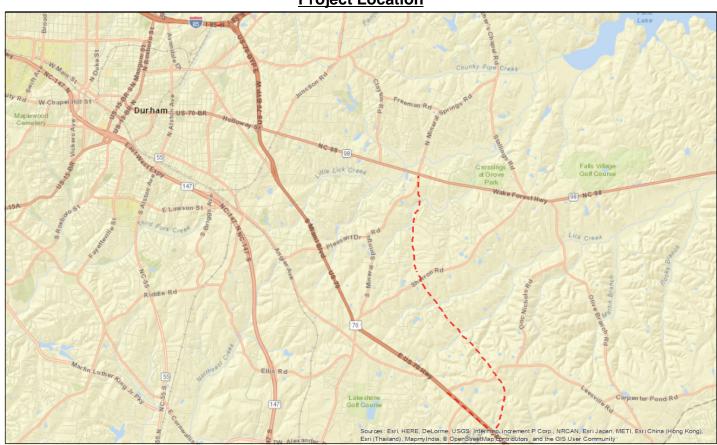
Description:

Construct Multi-Lane Roadway on New Location

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 |
| Totals: Weight: 0% Weighted Score: 0 | | |

SPOT ID: H129640-B

Regional Impact Total Score: 0

| Quantitative Score | Division Engineer Points | MPO/RPO Points |
|--------------------------------------|--------------------------|-------------------------|
| | Percent: 15% Points: | Percent: 15% Points: |
| Totals: Weight: 0% Weighted Score: 0 | | |

Division Needs Total Score: 0

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

Criteria measures

| | | | Cilleria | <u>measures</u> | | | |
|--------------------------|--|--------------|--------------|-----------------------|--|--------------|--------------|
| Creiteria | Measure | Raw Value | Scaled value | Creiteria | Measure | Raw Value | Scaled value |
| | Volume/Capacity (SW 60%, REG 80%, DIV | 0.97 | | Accessibility / | County Economic Indicator (50%) | 337 | |
| Congestion | 100%) Volume (SW 40%, REG | 34616.08 | | Connectivity | Upgrade Roadway Travel Time Savings (50%) | | |
| | 20%, DIV 0%) | | | | Truck Volume (50%) | 2298.66 | |
| Benefit-Cost (SW/REG) | Benefit/Cost SW/REG (100%) | | | | Volume/Capacity on Non- Interstate STRAHNET or Future | | |
| Benefit-Cost | Benefit/Cost DIV (100%) | | | Freight | Interstate (30%) | | |
| (DIV) | Crash Density (33%) | 62.81 | | | Distance to Freight Terminal (20%) | 2.6 | |
| Safety | Crash Severity (33%) | 41.07 | | | Distance to Multimodal Terminal | 2.6 | |
| (Segments) | Critical Crash Rate (33%) | 100 | | - Multimodal | (60%) | | |
| Safety | Crash Frequency (50%) | 100 | | | Volume/Capacity on Route near Multimodal Terminal (40%) | | |
| (Intersections) | Severity Index (50%) | | | Lane Width | Lane Width Difference (100%) | 0 | |
| Economic | %Change in Economy (50%) | | | Shoulder Width | Paved Shoulder Width Difference (100%) | 2 | |
| Competitiveness | Long-term Jobs (50%) | | | Pavement Condition | Pavement Condition Rating (100%) | 82 | |

Project Data*

Existing Conditions

Existing Cross-Section: New Roadway Speed Limit (mph): 55 0.92 Length (miles): Facility Type: Arterial Access Control: None Functional Classification: Other Principal Arterial Terrain Type: Rolling Lane Width (ft): 12 Paved Shoulder Width (ft): 2 Roadway has Curb & Gutter? No Volume (AADT): 33606.1 Volume (PADT): 34616.08 Peak ADT (PADT) Factor: 1.03 Capacity (vpd): 35773.91 Volume (PADT)/Capacity Ratio: 0.97 93% % Autos: 7% % Trucks: Truck Volume (AADTT): 2298.66 Crash Density (seg): 62.81 41.07 Crash Severity (seg): Critical Crash Rate (seg): 100 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: 82

Project Benefits

SPOT ID: H129640-B

| Project Benef | ItS |
|--|--|
| Project Cross-Section: | 4D - 4 Lane Divided (23' Raised Median) with Curb & Gutter, Bike Lanes, and Sidewalks |
| Speed Limit (mph): | 45 |
| Length (miles): | 4.26 |
| Facility Type: | Multi-Lane Highway |
| Access Control: | Partial |
| Functional Classification: | Other Principal Arterial |
| TerrainType: | Rolling |
| DOT Design Lane Width (ft): | 12 |
| DOT Design Paved Shoulder Width (ft): | 4 |
| Travel Time Savings for 10 Years (NCSTM) - SW/REG: | -14964851.02 |
| 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): | 2.6 |
| Nearest Multimodal Passenger Terminal : | Raleigh-Durham International Airport |
| Distance to Multimodal Terminal (miles): | 2.6 |
| Does project upgrade how the roadway functions? | Yes |
| Travel Time Savings/User: | |
| In CTP or LRTP? | Yes |
| CTP/LRTP Name: | 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

SPOT ID: H129640-B

| Division | Percent | Regional Impact Points | Division Needs Points |
|-----------------------|---------|------------------------|-----------------------|
| Division 5 | 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

| Cost to NCDOT : | \$78,380,000 | |
|---------------------|--------------|----------------------|
| Other Funding: | \$0 | None |
| Total Project Cost: | \$78,380,000 | |
| Utilities Cost: | \$2,303,000 | Cost Estimation Tool |
| Right-of-Way Cost: | \$19,196,000 | Cost Estimation Tool |
| Construction Cost: | \$56,881,000 | Cost Estimation Tool |