



# NCDOT Prioritization 3.0 Project Summary

**SPOT ID:** H090418-B

**Mode:** Highway

**Status:** Submitted

## NC-84 (New Route - Rea Road Extension)

**From/Cross Street:** NC 16

**Specific Improvement Type:** 5 - Construct Roadway on New Location

**To:** 12 Mile Creek Road

**Project Category:** Regional Impact

**Length:** 1.59

**TIP#:** U-3467B

**Fully Funded in Draft STIP?** No

**Cost to NCDOT:** \$20,174,000

### Description:

Construction Four Lane Roadway on New Location

**Division(s):** Division 10

**County(s):** UNION

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

### Project Location



**Statewide Mobility Total Score: 0**

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

**Regional Impact Total Score: 56.08**

| Quantitative Score                               | Division Engineer Local Input Points | MPO/RPO Local Input Points  |
|--|--------------------------------------|-----------------------------|
| Congestion (V/C) (25%) 70.02                     | Percent: 15%<br>Points: 100          | Percent: 15%<br>Points: 100 |
| Safety (10%) 39.26                               |                                      |                             |
| [Travel Time] Benefit/Cost (25%) 9.97            |                                      |                             |
| Accessibility / Connectivity (10%) 21.56         |                                      |                             |
| <b>Totals: Weight: 70% Weighted Score: 26.08</b> |                                      |                             |

**Division Needs Total Score: 19.93**

| Quantitative Score                               | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|--|--------------------------------------|----------------------------|
| Congestion (V/C) (20%) 70.02                     | Percent: 25%<br>Points: 0            | Percent: 25%<br>Points: 0  |
| Safety (10%) 39.26                               |                                      |                            |
| [Travel Time] Benefit/Cost (20%) 9.97            |                                      |                            |
| <b>Totals: Weight: 50% Weighted Score: 19.93</b> |                                      |                            |

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

|   |                 |
|---|-----------------|
| Existing Cross-Section:                     |                 |
| Speed Limit:                                | 35              |
| Length (miles):                             | 2.4             |
| Facility Type:                              | Arterial        |
| Access Control:                             | None            |
| Functional Classification:                  | Major Collector |
| Terrain Type:                               | Rolling         |
| Lane Width:                                 | 11              |
| Paved Shoulder Width:                       | 0               |
| Roadway has Curb & Gutter?                  | No              |
| Volume (AADT):                              | 16682.37        |
| Capacity:                                   | 15800           |
| Volume/Capacity Ratio:                      | 1.06            |
| % Autos:                                    | 96%             |
| % Trucks:                                   | 4%              |
| Truck Volume:                               | 645.66          |
| Crash Density:                              | 41.14           |
| Crash Severity:                             | 47.4            |
| Critical Crash Rate:                        | 29.24           |
| Crash Frequency:                            | 0               |
| Severity Index:                             | 0               |
| County Tier Designation:                    | 3               |
| Non-Interstate STRAHNET Route?              | No              |
| Average Commuting Time:                     | 28              |
| Existing Median Type (for Cost Estimation): | Undivided       |
| Pavement Condition Rating:                  | 100             |
| Actual Congested Speed:                     | 39.58           |
| Travel Time Index:                          | 0.88            |

**Project Benefits**

|  |  |
|--|--|
| Project Cross-Section:                                 | 4B - 4 Lane Divided (23' Raised Median) with Paved Shoulders and Sidewalks |
| Speed Limit:   | 35   |
| Length (miles):  | 1.59   |
| Facility Type:   | Arterial   |
| Access Control:  | Partial  |
| Functional Classification:                             | Minor Arterial   |
| Terrain Type:  | Rolling  |
| DOT Design Lane Width:                                 | 12   |
| DOT Design Paved Shoulder Width:                       | 4  |
| Travel Time Savings for 30 Years (Total):              | 9001353.7  |
| Travel Time Savings for 30 Years (Autos):              | 8652972.99   |
| Travel Time Savings for 30 Years (Trucks):             | 348380.71  |
| Long-Term Employment:                                  |  |
| % Change in Economy:                                   |  |
| Provides Direct Connection to Transportation Terminal? | No   |
| Does project upgrade how the roadway functions?        | No   |
| In CTP or LRTP?  | No   |
| CTP/LRTP Name:   |  |
| CTP/LRTP Completion Year:                              |  |
| Submitted by:  | Division 10  |

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

**Project Ownership**

**Division**

| Division                     | Percent | Regional Impact | Division Needs |
|------------------------------|---------|-----------------|----------------|
| Division 10                  | 100%    | 100             | 0              |
|                              | 0%      | 0               | 0              |
|                              | 0%      | 0               | 0              |
| <b>TOTAL Division Points</b> |         | <b>100</b>      | <b>0</b>       |

**MPO/RPO**

| MPO/RPO   | Percent | Regional Impact | Division Needs |
|---|---------|-----------------|----------------|
| Charlotte Regional Transportation Planning Organization | 100%    | 100             | 0              |
|   | 0%      | 0               | 0              |
|   | 0%      | 0               | 0              |
| <b>TOTAL MPO/RPO Points</b>                             |         | <b>100</b>      | <b>0</b>       |

**Project Cost and Source**

|                        |                     |          |
|------------------------|---------------------|----------|
| Construction Cost:     | \$15,609,000        | TIP Unit |
| Right-of-Way Cost:     | \$2,365,000         | TIP Unit |
| Utilities Cost:        | \$2,200,000         | TIP Unit |
| Total Project Cost:    | \$20,174,000        |          |
| Other Funding:         | \$0                 | None     |
| <b>Cost to NCDOT :</b> | <b>\$20,174,000</b> |          |