



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H090185-B

Mode: Highway

Status: Submitted

NC-73

From/Cross Street: Vance Road Extension / Beatties Ford Road

Specific Improvement Type: 1 - Widen Existing Roadway

To: SR 5544 (West Catawba Avenue) in Mecklenburg County

Project Category: Regional Impact

Length: 4.24

TIP#: R-2706

Fully Funded in Draft STIP? No

Cost to NCDOT: \$20,099,000

Description:

Widen roadway from 2 lanes to 4 lanes, with median, wide outside lanes and sidewalks on both sides. Existing roadway experiences significant congestion, serves as strategic regional highway and evacuation route from McGuire Nuclear Station. School traffic contributes to the congestion along this corridor. NC 73 is one of only a few east-west routes that cross Lake Norman.

Division(s): Division 10

County(s): MECKLENBURG

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

Regional Impact Total Score: 77.02

| Quantitative Score | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|--|--------------------------------------|-----------------------------|
| Congestion (V/C) (25%) 88.80 | Percent: 15% Points: 100 | Percent: 15% Points: 100 |
| Safety (10%) 64.59 | | |
| [Travel Time] Benefit/Cost (25%) 49.35 | | |
| Accessibility / Connectivity (10%) 60.26 | | |
| Totals: Weight: 70% Weighted Score: 47.02 | | |

Division Needs Total Score: 34.09

| Quantitative Score | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|--|--------------------------------------|----------------------------|
| Congestion (V/C) (20%) 88.80 | Percent: 25% Points: 0 | Percent: 25% Points: 0 |
| Safety (10%) 64.59 | | |
| [Travel Time] Benefit/Cost (20%) 49.35 | | |
| Totals: Weight: 50% Weighted Score: 34.09 | | |

Project Data ***Existing Conditions**

| | |
|---|--------------------------|
| Existing Cross-Section: | |
| Speed Limit: | 43 |
| Length (miles): | 4.24 |
| Facility Type: | Arterial |
| Access Control: | None |
| Functional Classification: | Other Principal Arterial |
| Terrain Type: | Rolling |
| Lane Width: | 12 |
| Paved Shoulder Width: | 0 |
| Roadway has Curb & Gutter? | No |
| Volume (AADT): | 21538.83 |
| Capacity: | 16117.22 |
| Volume/Capacity Ratio: | 1.34 |
| % Autos: | 93% |
| % Trucks: | 7% |
| Truck Volume: | 1418.03 |
| Crash Density: | 89.69 |
| Crash Severity: | 63.8 |
| Critical Crash Rate: | 40.3 |
| Crash Frequency: | 0 |
| Severity Index: | 0 |
| County Tier Designation: | 3 |
| Non-Interstate STRAHNET Route? | No |
| Average Commuting Time: | 25 |
| Existing Median Type (for Cost Estimation): | Undivided |
| Pavement Condition Rating: | 67 |
| Actual Congested Speed: | 33.71 |
| Travel Time Index: | 1.28 |

Project Benefits

| | |
|--|---|
| Project Cross-Section: | 4A - 4 Lane Divided (46' Depressed Median) with Paved Shoulders |
| Speed Limit: | 43 |
| Length (miles): | 4.24 |
| Facility Type: | Multi-Lane Highway |
| Access Control: | Partial |
| Functional Classification: | Other Principal Arterial |
| Terrain Type: | Rolling |
| DOT Design Lane Width: | 12 |
| DOT Design Paved Shoulder Width: | 4 |
| Travel Time Savings for 30 Years (Total): | 43877759.09 |
| Travel Time Savings for 30 Years (Autos): | 40989025.81 |
| Travel Time Savings for 30 Years (Trucks): | 2888733.28 |
| Long-Term Employment: | |
| % Change in Economy: | |
| Provides Direct Connection to Transportation Terminal? | No |
| Does project upgrade how the roadway functions? | Yes |
| 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 |
| TOTAL Division Points | | 100 | 0 |

MPO/RPO

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

Project Cost and Source

| | | |
|------------------------|---------------------|----------------------|
| Construction Cost: | \$16,087,000 | Cost Estimation Tool |
| Right-of-Way Cost: | \$3,582,000 | Cost Estimation Tool |
| Utilities Cost: | \$430,000 | Cost Estimation Tool |
| Total Project Cost: | \$20,099,000 | |
| Other Funding: | \$0 | None |
| Cost to NCDOT : | \$20,099,000 | |