



Part II

Implementation Guide

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Introduction

Achieving the vision articulated in this plan will occur incrementally over time through the combined efforts of local/state government, private property owners, residents, developers and many others. This Implementation Guide is primarily a staff document that outlines specific steps that can be taken by various public and private bodies so that the future envisioned in this plan may be realized. These strategies are listed in the table that follows. The lead responsible agency and tentative time frame is also included. The strategies are numbered sequentially and correspond to the policies discussed in the Concept Plan. This allows staff to track progress of the plan's policies over time.

Some strategies are physical such as installing sidewalks and building new thoroughfare alignments like Carowinds Boulevard Extension. Other strategies involve continued enforcement of adopted City policies and regulations such as the Post Construction Controls Ordinance that deals with the effects of storm water runoff; still others consider policy or ordinance changes to accommodate new policy recommendations, such as a zoning ordinance change to allow for increased retail use in marinas.

These implementation strategies do not imply a specific public or private sector commitment. The Charlotte City Council will not be asked to adopt this implementation Guide. However, many of the strategies in this section will require future action by elected officials and will be presented to them for approval as needed on a case-by-case basis.

Finally, since conditions change over time, staff will periodically update this Implementation Guide to reflect changes and progress.

Recommended Implementation Strategies

The number of each action corresponds to the policies beginning on page 12 of the Concept Plan.

| Policy Number | Action Item | Project Type | Lead Agency | Time Frame |
|--|--|--------------|-------------|---------------------------------|
| Land Use & Community Design | | | | |
| 1-20 | Use land use and community design policies to guide and evaluate development proposals. | Zoning | Planning | as development occurs |
| 10a | Work with Planning GIS staff to modify the Centers, Corridors and Wedges boundary layer reflecting the changes adopted for the RiverGate Mixed-Use Activity Center, as indicated on Graphic 1. | Zoning | Planning | Within 1 month of Plan Adoption |
| 11a | Work with Planning GIS staff to modify the Center, Corridors and Wedges boundary layer reflecting the changes adopted for the Westinghouse Industrial Activity Center, as indicated on Graphic 2. | Zoning | Planning | Within 1 month of Plan Adoption |
| 12a | Work with Planning GIS staff to modify the Centers, Corridors and Wedges boundary layer reflecting the changes adopted for the Whitehall / Ayrley Mixed-Use Activity Center, as indicated on Graphic 3. | Zoning | Planning | Within 1 month of Plan Adoption |
| 13a | Work with Planning GIS staff to modify the Center, Corridors and Wedges boundary layer reflecting the changes adopted for the Sopton Road Industrial Activity Center, as indicated on Graphic 4. | Zoning | Planning | Within 1 month of Plan Adoption |
| 14-20 | Consider appropriate zoning ordinance revisions including those recommendations in the Residential Design Standards (RDS), and the Heights in Residential Districts (H.I.R.D.) stakeholder processes currently underway. | Zoning | Planning | Short (0-5 yr) |

| Policy Number | Action Item | Project Type | Lead Agency | Time Frame |
|---|---|--------------|------------------------|---|
| Transportation and Streetscape (see table on page 56 for estimated costs of improvements) | | | | |
| 21 | Upgrade Farm-to-Market Roads as shown on Map 4, farm-to-market upgrades include: -Choate Circle -Hamilton Road -Sandy Porter Road -Shopton Road and Shopton Road West -Sledge Road -Smith Road -Youngblood Road -Zoar Road | Transp. | CDOT / Planning | as development occurs and/or as funding becomes available |
| 22 | Extend Carowinds Blvd. from S. Tryon Street (NC 49) to Sam Neely and Winget Roads. Widen Carowinds Blvd. [2 to- 4 lanes] from S. Tryon Street (NC 49) to Choate Circle. Widen S. Tryon Street (NC 49) [4 to 6 lanes] from Arrowood Road to Steele Creek Road (NC 160) Widen Steele Creek Road (NC 160) [2 to 4 lanes] from Shopton Rd. West to State Line (S.C.) | Transp. | CDOT / E&PM | as development occurs |
| 23 | Work with MPO staff to amend Thoroughfare Plan to reflect recommendation to realign Choate Circle to South Tryon Street. | Transp. | CDOT / E&PM / Planning | Short (0-5 yr) |
| 24 | Enhance the following intersections to improve traffic flow, area accessibility and safety; and further analyze their feasibility through the capital needs assessment process: -Carowinds Rd. at Choate Circle -Steele Creek Rd. at Brown Grier -Steele Creek Rd. (NC-160) at Sam Neely Rd. -Steele Creek Rd. (NC-160) at Sledge Rd. -Steele Creek Rd. (NC-160) at Westinghouse Blvd. -Steele Creek Rd. (NC-160) at I-485 -S. Tryon Street (NC-49) at Carowinds Blvd. -S. Tryon Street (NC-49) at I-485 -S. Tryon Street (NC-49) at Shopton Rd. -S. Tryon Street (NC-49) at Steele Creek Rd. (NC-160) -S. Tryon Street (NC-49) at Whitehall Park Dr. -S. Tryon Street (NC-49) at Corsica Forest Dr. pending Choate Circle realignment -Westinghouse Blvd. at I-77 -S. Tryon (NC-49) at Grand Palisades | Transp. | CDOT / E&PM / Planning | as funding becomes available and/or as development occurs |

| Policy Number | Action Item | Project Type | Lead Agency | Time Frame |
|----------------------|---|---------------------|------------------------------|-----------------------------|
| 25 | Work with petitioner in the rezoning process to request that key connector streets shown on Map 5, are provided as development occurs. | Transp. | CDOT / Planning | as development occurs |
| 26 | Work with petitioner in the rezoning process to facilitate cross-access and parrallel connections along S. Tryon (NC-49). | Transp. / Zoning | CDOT / Planning | as development occurs |
| 27 | Work with MUMPO to review the major thoroughfare alignments of Carowinds Blvd. Extension and Youngblood Rd., and amend Thoroughfare Plan accordingly. | Trasp. | CDOT / Planning | Short (0-5 yr) |
| 28 | Construct new sidewalks along existing thoroughfares, refer to Maps 4 and 13. | Transp. | CDOT | as development occurs |
| 29 | Work with CDOT in identifiing areas in need of sidewalks within established residential areas, and identify potential funding sources to construct new sidewalks. | Transp. | CDOT | Short (0-5 yr) and on-going |
| 30 | Construct bicycle lanes along all thoroughfares. | Transp. | CDOT | as development occurs |
| 31 | Complete Steele Creek Greenway | Transp. | Park & Rec / Planning | Long (>10 yrs) |
| 32 | Work with petitioners in the rezoning process to encourage bikeway connections to primary greenways. | Transp. | CDOT / Park & Rec / Planning | as development occurs |
| 33 | Work with petitioners in the rezoning process to develop a parrallel shared-use path or paved shoulders along Shopton Road West. | Transp. | CDOT / E&PM / Planning | as development occurs |
| 34 | Review expansion of transit to the plan area as part of CATS' next update to the 5-year Countywide Transit Services Plan. | Transp. | CATS / Planning | Medium (5-10 yr) |

| Policy Number | Action Item | Project Type | Lead Agency | Time Frame |
|---|--|-------------------|--|-----------------------|
| Infrastructure and Public Facilities | | | | |
| 35-37 | Continue to develop and maintain water and sewer systems needed to support the area's growth. | Utilities | CMU | Ongoing |
| 35-37 | Use land use and community design policies, as well as information about existing and planned infrastructure to guide and evaluate development proposals. | Utilities | CMU | Ongoing |
| 35-37 | Replace Steele Creek pump station | Utilities | CMU | Medium (5-10 yr) |
| 38-40 | Develop Capps Community Park | Park | P&R | Medium (5-10 yr) |
| 38-40 | Develop Palisades Neighborhood Park | Park | P&R | Short (0-5 yr) |
| 38-40 | Develop Steele Creek, Walkers Branch, and Polk Ditch Greenways, as well as dedicate more areas for new greenways where possible. | Park | P&R | Ongoing |
| 38-40 | Work through the rezoning and subdivision processes to support the development of public access points to the Catawba River, including boat ramps, picnic areas and public open space along the river. | Park | P&R | as development occurs |
| 41-42 | Construct Palisades Elementary School | Schools | CMS | Long (>10 yrs) |
| 41-42 | Construct middle school at Steele Creek Road site to serve southwest portion of the plan area | Schools | CMS | Long (>10 yrs) |
| 41-42 | Construct high school to serve southwest portion of the plan area. | Schools | CMS | Long (>10 yrs) |
| 45 | Construct regional library at the Shopton Road site | Public Facilities | PLCMC | Long (>10 yrs) |
| 38-45 | Work with civic infrastructure providers such as libraries, parks and schools through the Joint Use Task Force (JUTF), to build facilities along major or minor thoroughfares in mixed-use areas, and seek new opportunities for joint use projects. | Public Facilities | Planning / Police / Fire / Schools & Library | Ongoing |

| Policy Number | Action Item | Project Type | Lead Agency | Time Frame |
|--------------------|--|----------------------|------------------------------------|-----------------------|
| Environment | | | | |
| 46-50 | Use the rezoning and subdivision process to implement land use and environmental policies. | Zoning | Planning | as development occurs |
| 46-50 | Continue to apply PCCO (Post Construction Controls Ordinance) and other City regulations and policies that address the protection of environmentally sensitive areas that are impacted by storm water run-off. | Storm-water | E&PM | as development occurs |
| 46-50 | Limit the amount of land cleared, graded or compacted during the land development process to the maximum allowable built upon area, detailed in the watershed overlay zoning districts that apply | Land Development | E&PM | as development occurs |
| 46-50 | Continue to apply the City's Tree Ordinance (and subsequent text amendments) in preserving the tree canopy, by encouraging a 10% tree save requirement for residential sites and a 15% for commercial sites | Zoning/ Tree Ord. | Planning / E&PM | as development occurs |
| 38-40; 46-50 | Request easements and/or dedications during the land development process to expand the Greenways and passive open space. | Zoning/ Tree Ord. | Park & Rec./ Planning / E&PM | as development occurs |
| 48 | Limit development in and around contaminated sites to non-residential uses consistent with land use policies. | Zoning | Planning | as development occurs |

Future Transportation Projects

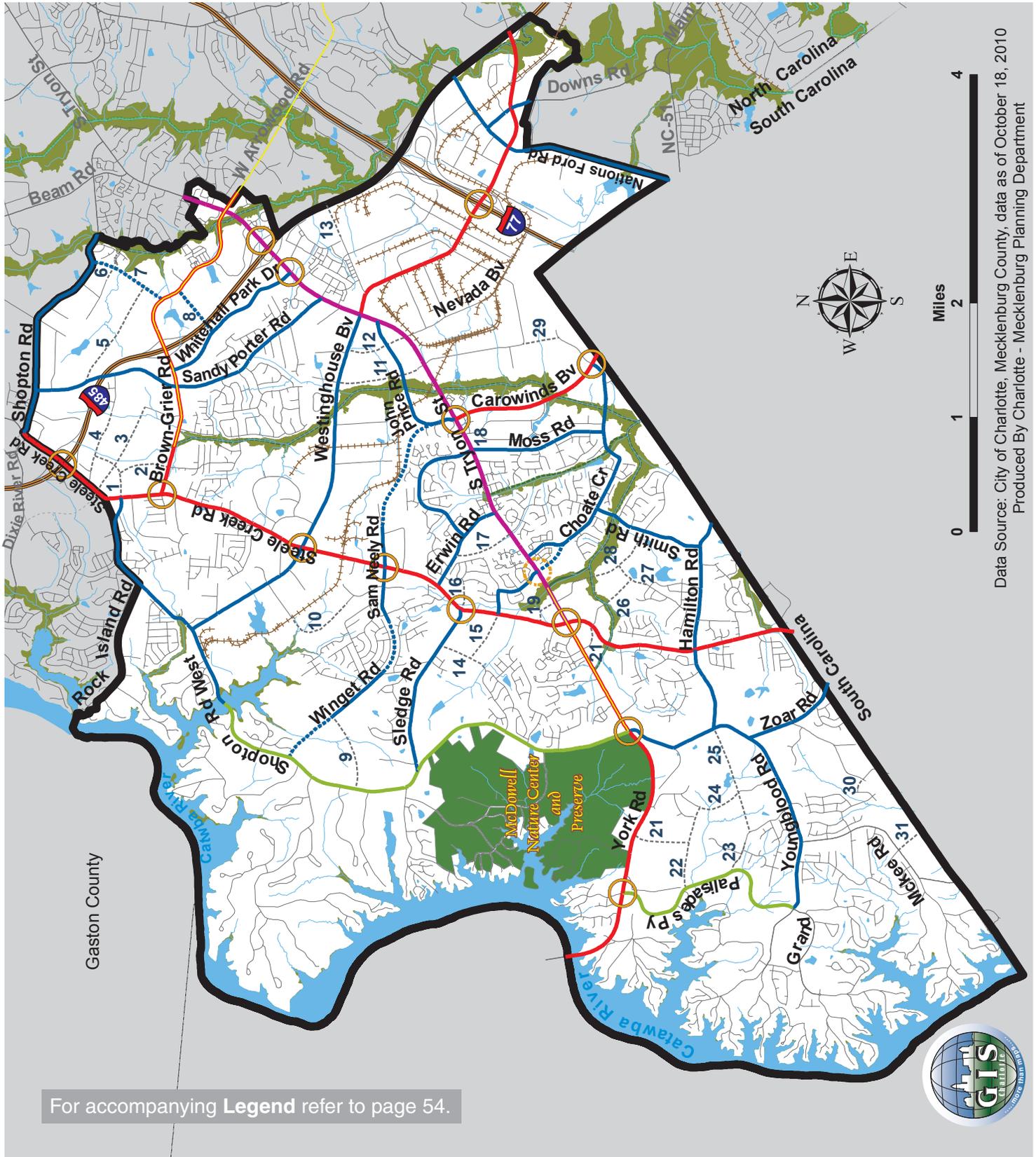
See **Map 5, Future Transportation Projects** on following page.

1. Extension of Shopton Road West across Steele Creek Road (NC 160) to new local street #4
2. New street between Brown-Grier Road at Cedar Hill Road and Shopton Road West Extension
3. Extension of Realigned Dixie River Road across Steele Creek Road (NC 160) to Gallant Lane
4. New street between Rigsby Road and Williams Glenn Road
5. New street between Sandy Porter Road and Arrowood Road inside Interstate 485
6. New street between Beaman Avenue and Blithe Low Place
7. New street between Shopton Road and Arrowood Road inside Interstate 485
8. New street between Arrowood Road and Whitehall Park Drive with bridge over Interstate 485 between Arrowood Road and South Tryon Street (NC 49)
9. New street between Shopton Road West and Winget Road
10. Extension of Means Court to Quality Drive
11. Extension of General Drive to Westinghouse Boulevard
12. Extension of Nevada Boulevard to Westinghouse Boulevard
13. New street between Pioneer Avenue and Arrowpoint Boulevard with bridge over Interstate 485 between South Tryon Street (NC 49) and Interstate 77
14. Extension of Waterlyn Drive to Sledge Road
15. New street between Waterlyn Drive Extension and Steele Creek Road (NC 160) at Huntington Meadow Lane
16. Extension of Swann Branch Drive to Steele Creek Road (NC 160) at Sledge Road
17. New Street between Erwin Road and South Tryon Street (NC 49) at Stephendale Drive
18. The *2009 Feasibility Study* recommends a connection between South Ridge Drive and Moss Road. The connection will be considered only if parcels located on the west side of Moss Road are redeveloped.
19. Extension of Rivergate Parkway across South Tryon Street (NC 49) to Steele Creek Road (NC 160)
20. New street between Steelecroft Parkway and Walker Branch Drive
21. New street between York Road (NC 49) and Grand Palisades Parkway
22. New street between Hickory View Lane Extension and Grand Palisades Parkway
23. Extension of Capps Road to Palisades Parkway
24. New street between Hickory View Lane and Shallow Pond Road
25. Extension of Hamilton Road to Capps Road
26. Extension of Walker Branch Drive to Superior Street Extension
27. Extension of Superior Street to Rivergate Parkway Extension
28. Extension of Rivergate Parkway to Smith Road
29. Extension of General Drive to Carowinds Boulevard via Catawba Trace
30. New street between Thomas Road and Kentucky Home Lane
31. New street between McKee Road and Tega Cay/Goldhill Road Connector

Legend for **Map 5, Future Transportation Projects**

-  Enhanced Intersection
-  Enhanced Intersection (Pending Connection)
-  Boulevard: Six Lane
-  Boulevard: Four Lane
-  Avenue: Two Lane
-  Avenue: Two Lane with Parkway Edge
-  Proposed Avenue: Two Lane
-  Local Street
-  Proposed New Street *
-  Railroad
- Greenways**
-  Developed
-  Proposed
-  Overland Connectors
-  100 Year Floodplain
-  Creeks and Streams
-  Ponds & Wetlands
-  Plan Area Boundary

* In most cases, these new connectors will be requested through the land development process to support increased travel demand and to provide additional travel routes to area Activity Centers. *The locations of the proposed connector streets are conceptual. Alternative locations, consistent with the intent of the proposed network, will also be considered. Additional streets may also be identified to facilitate improved network and connectivity.*



Data Source: City of Charlotte, Mecklenburg County, data as of October 18, 2010
Produced By Charlotte - Mecklenburg Planning Department

For accompanying Legend refer to page 54.

Steele Creek - Transportation Improvements & Costs

These estimates were developed using the unit costs from the 2035 LRTP document approved by MUMPO in 2010 and are in 2008 dollars. These are planning level estimates only using aerial information and planimetric info to determine the location of bridges and culverts that would need to be widened or replaced. It does include costs for items such as utility relocations, right of way and construction contingencies that are necessary to make a project whole.

| Project | Limits | Existing | Proposed Improvement | Estimated Cost (000) | Funding Responsibility | Under Current Funding when will this project be built? |
|-----------------------------|--|----------|----------------------|----------------------|------------------------|--|
| Brown-Grier Road | Steele Creek Rd. to Sandy Porter Rd. | 2 lane | Widening to 4 lanes | \$ 9,000 | Charlotte | Beyond 2035 |
| Carowinds Blvd. | S. Tryon St. (NC 49) to Choate Circle | 2 lane | Widening to 4 lanes | \$ 12,000 | Charlotte | Beyond 2035 |
| Carowinds Blvd. Extension | S. Tryon St. to Shopton Rd. West | n/a | New 4-lane road | \$ 19,000 | Charlotte | Beyond 2035 |
| New bridge over I-485 | Arrowood Rd. to Whitehall Park Dr. | n/a | New 2-lane bridge | \$ 12,600 | Charlotte | Beyond 2035 |
| S. Tryon Street (NC 49) | Arrowood Rd. to Steele Creek Rd. (NC 49) | 4 lane | Widening to 6 lanes | \$ 50,000 | Charlotte/NC DOT | Beyond 2035 |
| Shopton Road West Extension | S. Tryon St. to Zoar Rd. | n/a | New 2-lane road | \$ 7,300 | Charlotte | Beyond 2035 |
| Steele Creek Road | I-485 to York Rd. (NC 49) | 2 lane | Widening to 4 lanes | \$ 42,300 | NC DOT | Beyond 2035 |
| Steele Creek Road | York Rd. (NC 49) to South Carolina line | 2 lane | Widening to 4 lanes | \$ 23,200 | NC DOT | Beyond 2035 |
| Total | | | | \$ 175,400 | | |

Farm-to-Market Road Improvements

| Project | Limits | Existing | Proposed Improvement | Estimated Cost (000) | Funding Responsibility | Under Current Funding when will this project be built? |
|-------------------|--|----------|----------------------|----------------------|------------------------|--|
| Choate Circle | S. Tryon St. to Carowinds Blvd. | 2 lane | FTM Upgrade | \$ 16,600 | Charlotte | Beyond 2020 |
| Erwin Road | Steele Creek Rd. to S. Tryon St. | 2 lane | FTM Upgrade | \$ 6,400 | Charlotte | Beyond 2020 |
| Hamilton Road | Youngblood Rd. to Steele Creek Rd. | 2 lane | FTM Upgrade | \$ 5,500 | Charlotte | Beyond 2020 |
| Hamilton Road | Steele Creek Rd. to SC line | 2 lane | FTM Upgrade | \$ 8,600 | Charlotte | Beyond 2020 |
| Sandy Porter Road | Shopton Rd. to Brown-Grier Rd. | 2 lane | FTM Upgrade | \$ 9,800 | Charlotte | Beyond 2020 |
| Sandy Porter Road | Brown-Grier Rd. to S. Tryon St. | 2 lane | FTM Upgrade | \$ 11,600 | Charlotte | Beyond 2020 |
| Shopton Road West | Steele Creek Rd. to S. Tryon St. | 2 lane | FTM Upgrade | \$ 21,300 | Charlotte | Beyond 2020 |
| Shopton Road West | York Rd. (NC 49) to Sledge Rd. | 2 lane | FTM Upgrade | \$ 15,700 | Charlotte | Beyond 2020 |
| Shopton Road West | Sledge Rd. to Winget Rd. | 2 lane | FTM Upgrade | \$ 10,000 | Charlotte | Beyond 2020 |
| Shopton Road West | Winget Rd. to Westinghouse Blvd. | 2 lane | FTM Upgrade | \$ 11,400 | Charlotte | Beyond 2020 |
| Shopton Road West | Westinghouse Blvd. to Steele Creek Rd. | 2 lane | FTM Upgrade | \$ 11,200 | Charlotte | Beyond 2020 |
| Sledge Road | Shopton Rd. to Steele Creek Rd. | 2 lane | FTM Upgrade | \$ 11,600 | Charlotte | Beyond 2020 |
| Youngblood Road | Choate Circle to Hamilton Rd. | 2 lane | FTM Upgrade | \$ 7,400 | Charlotte | Beyond 2020 |
| Zoar Road | Palisades Pkwy. to Zoar Rd. | 2 lane | FTM Upgrade | \$ 12,200 | Charlotte | Beyond 2020 |
| Youngblood Rd. | Youngblood Rd. to South Carolina line | 2 lane | FTM Upgrade | \$ 6,700 | Charlotte | Beyond 2020 |
| Total | | | | \$ 166,000 | | |

Intersection Improvements

| Project | Estimated Cost (000) | Funding Responsibility | Under Current Funding when will this project be built? |
|-------------------------------------|----------------------|------------------------|--|
| Beam Rd./Shopton Rd. | \$ 3,300 | Charlotte | Beyond 2015 |
| Sam Neely Rd./Steele Creek Rd. | \$ 6,100 | Charlotte | Beyond 2015 |
| Brown-Grier Rd./Steele Creek Rd. | \$ 2,500 | Charlotte | Beyond 2015 |
| Steele Creek Rd./Westinghouse Blvd. | \$ 5,000 | Charlotte | Beyond 2015 |
| Steele Creek Rd./York Rd. | \$ 5,000 | Charlotte | Beyond 2015 |
| Shopton Rd. West/York Rd. | \$ 5,000 | Charlotte | Beyond 2015 |
| Carowinds Blvd./S. Tryon St. | \$ 5,000 | Charlotte | Beyond 2015 |
| I-485/S. Tryon St. | \$ 5,000 | Charlotte | Beyond 2015 |
| I-77/Westinghouse Blvd | \$ 5,000 | Charlotte | Beyond 2015 |
| S. Tryon St./Whitehall Park Dr. | \$ 5,000 | Charlotte | Beyond 2015 |
| Carowinds Blvd./Choate Circle | \$ 5,000 | Charlotte | Beyond 2015 |
| Total | | \$ 51,900 | |

| | |
|--|-------------------|
| Total Road, FTM and Intersection Improvement Cost | \$ 393,300 |
|--|-------------------|

In FY10 dollars

Source: 2035 Mecklenburg-Union Long Range Transportation Plan, 2011-15 Capital Investment Plan

Source: 2035 Mecklenburg-Union Long-Range Transportation Plan, 2011-15 Charlotte Capital Investment Plan