



Table B-1: CMP Evaluation Factors

| | Project Project Name | | | | | Volume | | | Crash | nes | | | | | |
|----------|----------------------|---|---------------------------------|--|--------------------------------|-------------------------|-----------------------|------------------|---------------------------------------|--|-----------------------|------------------------------|----------------------|-----------------|--------------|
| Corridor | | Project Name | Improvement Type | Project Segment | Existing NCDOT 2011 AADT | Annual Growth Rate * | Future Volume 2035 | Total Crashes | Historic Crash Rate 2008-2013 + | Statewide Avg Crash Rate for Similar Facilities ** | Existing No. Lanes | INRIX TTI AM/PM Max ++ | Existing Capacity | Existing V/C | Futur V/C |
| | 47 | I-77/W Plaza Drive (NC 150) | Improve Existing Interchange | - | 58,000 | 0.5% | 65,000 | 204 | - | - | - | - | - | - | - |
| | 97 | I-77/Gilead Road | Improve Existing Interchange | - | 96,000 | 0.5% | 108,000 | 192 | - | - | - | - | 88,000 | 1.09 | 1.23 |
| I-77 | 143 | I-77 | Widening | I-277 (Belk Frwy) (Exit 9) to I-277 (Brookshire Fwy) (Exit 11) | 140,000 | 0.5% | 157,000 | 561 | 139 | 116 | 8 | 1.46 | 190,000 | 0.74 | 0.83 |
| | 145 | I-77 | Widening with Managed Lanes | Woodlawn Rd (Exit 6) to I-277 (Belk Fwy) (Exit 9) | 163,000 | 0.5% | 183,000 | 1,876 | 192 | 116 | 6 | 1.18 | 132,000 | 1.23 | 1.39 |
| | 132 | l-277 (Belk Freeway)/l-77 | Improve Existing Interchange | - | 161,000 | 1.0% | 200,000 | 263 | - | - | - | - | 114,000 | 1.41 | 1.7 |
| | 135 | I-277 (Brookshire Freeway)/I-77 | Improve Existing Interchange | - | 110,000 | 0.5% | 123,000 | 289 | - | - | - | - | 152,000 | 0.72 | 0.8 |
| 116.74 | 148 | Independence Boulevard (US 74) | Widening with Managed Lanes | Conference Dr to Sardis Rd North | 59,000 | 1.0% | 73,000 | 828 | 366 | 313 | 4 | 2.00 | 96,000 | 0.61 | 0.7 |
| US 74 | 189 | Independence Boulevard (US 74) | Widening with Managed Lanes | Sardis Rd North to I-485 | 49,000 | 1.5% | 67,000 | 890 | 310 | 313 | 4 | 2.85 | 63,000 | 0.78 | 1.0 |
| | 26 | River Highway (NC 150) | Widening | Waddell Rd to Perth Rd | 35,000 | 1.0% | 43,000 | 208 | 330 | 239 | 2 | 1.29 | 22,000 | 1.59 | 1.9 |
| | 43 | River Highway (NC 150) | Widening | Perth Rd to Ervin Rd | 35,000 | 1.0% | 43,000 | 124 | 347 | 239 | 2 | 1.29 | 22,000 | 1.59 | 1.9 |
| NC 150 | 44 | River Highway/W Plaza Drive (NC 150) | Widening | Ervin Rd to I-77 (Exit 36) | 35,000 | 1.0% | 43,000 | 536 | 905 | 306 | 4 | 1.29 | 22,000 | 1.59 | 1.9 |
| | 45 | Plaza Drive (NC 150) | Widening | I-77 (Exit 36) to US 21 | 35,000 | 1.0% | 43,000 | 748 | 823 | 306 | 4 | 1.45 | 32,000 | 1.09 | 1. |
| | 70 | Statesville Road (US 21) | Widening | Northcross Center Court to Westmoreland Rd | 19,000 | 1.0% | 24,000 | 46 | 110 | 212 | 2 | 1.63 | 11,000 | 1.73 | 2. |
| US 21 | 78 | Statesville Road (US 21) | Widening | Gilead Rd to Holly Point Dr | 18,000 | 0.5% | 20,000 | 182 | 299 | 212 | 2 | 2.11 | 8,550 | 2.11 | 2. |
| | 103 | Statesville Road (US 21) | Widening | WT Harris Blvd (NC 24) to Gilead Rd | 14,000 | 1.0% | 17,000 | 176 | 205 | 212 | 2 | 2.00 | 10,300 | 1.36 | 1. |
| NC 51 | 198 | Matthews Township Parkway (NC 51) | Widening | Sardis Rd to Monroe Rd/E John St | 33,000 | 1.0% | 41,000 | 142 | 335 | 332 | 4 | 1.55 | 23,500 | 1.40 | 1. |
| NC 31 | 210 | Matthews-Mint Hill Road (NC 51) | Widening | Matthews Township Pkwy to Lawyers Rd | 18,000 | 1.5% | 24,000 | 296 | 262 | 239 | 2 | 1.61 | 11,900 | 1.51 | 2. |
| NC 115 | 71 | Old Statesville Road (NC 115) | Widening | Washam Potts Rd to Sam Furr Rd (NC 73) | 15,000 | 0.5% | 17,000 | 63 | 109 | 239 | 2 | 1.36 | 14,300 | 1.05 | 1. |
| NC 115 | 165 | Old Statesville Road (NC 115) | Widening | Harris Blvd to I-485 | 15,000 | 0.5% | 17,000 | 128 | 233 | 239 | 2 | 1.61 | 19,000 | 0.79 | 0.8 |
| NC 72 | 81 | Sam Furr Road (NC 73) | Widening | West Catawba Ave to Northcross Dr | 32,000 | 1.5% | 44,000 | 115 | 194 | 332 | 4 | 1.40 | 17,400 | 1.84 | 2. |
| NC 73 | 96 | NC 73 | Widening | Vance Rd Ext to West Catawba Ave | 24,000 | 1.0% | 30,000 | 61 | 82 | 239 | 2 | 1.33 | 13,500 | 1.78 | 2. |





Table B-1: CMP Evaluation Factors (continued)

| | | | | | | Volume | | | Cras | nes | | | | | |
|----------|---------------|--|----------------------|--|--------------------------------|-------------------------|-----------------------|------------------|---------------------------------------|-----|-----------------------|------------------------------|----------------------|-----------------|---------------|
| Corridor | Project ID | Project Name | Improvement Type | Project Segment | Existing NCDOT 2011 AADT | Annual Growth Rate * | Future Volume 2035 | Total Crashes | Historic Crash Rate 2008-2013 + | | Existing No. Lanes | INRIX TTI AM/PM Max ++ | Existing Capacity | Existing V/C | Future V/C |
| NC 84 | 247 | Rea Road/Marvin School Road (NC 84) | New Location | NC 16 to Twelve Mile Creek Rd | 15,000 | 1.5% | 20,000 | - | - | - | - | 1.28 | 9,000 | 1.67 | 2.22 |
| NC 160 | 172 | Steele Creek Road (NC 160) | Widening | Shopton Rd West to S Tryon St (NC 49) | 15,000 | 1.0% | 19,000 | 299 | 244 | 239 | 2 | 1.43 | 17,000 | 0.88 | 1.12 |
| INC 160 | 173 | Steele Creek Road (NC 160) | Widening | S Tryon St (NC 49) to South Carolina State Line | 15,000 | 1.0% | 19,000 | 89 | 1,133 | 239 | 2 | 1.22 | 20,000 | 0.75 | 0.95 |
| NC 49 | 170 | South Tryon Street (NC 49) | Widening | I-77 to Yorkmont Rd | 29,000 | 2.0% | 43,000 | 175 | 1,297 | 332 | 4 | 3.60 | 35,000 | 0.83 | 1.23 |
| NC 49 | 175 | University City Boulevard (NC 49) | Widening | John Kirk Dr to I-485 | 36,000 | 1.5% | 49,000 | 357 | 584 | 332 | 4 | 1.40 | 33,000 | 1.09 | 1.48 |
| NC 16 | 249 | Providence Road South (NC 16) | Widening | Rea Rd Ext to Cuthbertson Rd | 16,000 | 1.0% | 20,000 | 242 | 192 | 239 | 2 | 1.18 | 10,000 | 1.60 | 2.00 |
| INC 16 | 113 | Brookshire Boulevard (NC 16) | Widening | Idaho Dr to I-85 | 49,000 | 1.0% | 61,000 | 143 | 614 | 332 | 4 | 1.72 | 40,000 | 1.23 | 1.53 |
| | 129 | WT Harris Boulevard | Widening | Reames Rd to I-485 | 32,000 | 1.5% | 44,000 | 14 | 78 | 332 | 4 | 1.41 | 24,000 | 1.33 | 1.83 |
| | 190 | Old Monroe Road | Widening | Waxhaw-Indian Trail Rd to Wesley Chapel Rd | 16,000 | 1.0% | 20,000 | 271 | 325 | 228 | 2 | 1.56 | 9,000 | 1.78 | 2.22 |
| | 228 | Old Monroe Road | Widening | l-485 to Waxhaw - Indian Trail Rd | 22,000 | 0.5% | 25,000 | 301 | 426 | 228 | 2 | 1.89 | 9,000 | 2.44 | 2.78 |
| | 199 | East John Street | Widening | Trade St to I-485 | 21,000 | 1.0% | 26,000 | 122 | 292 | 253 | 2 | 1.56 | 12,100 | 1.74 | 2.15 |
| | 34 | Cornelius Road/Mazeppa Road | New Location | NC 115 to US 21 | 8,100 | 1.0% | 10,000 | - | - | - | - | - | - | - | - |
| | 46 | Brawley School Road | Widening | Talbert Rd to US 21 | 13,000 | 1.0% | 16,000 | 61 | 335 | 253 | 2 | 0.00 | 14,000 | 0.93 | 1.14 |
| | 50 | Midnight Lane/Oates Road | New Grade Separation | - | 40,000 | 1.0% | 50,000 | - | - | - | - | - | - | - | - |
| | 51 | Williamson Road | Widening | Brawley School Rd to NC 150 | 21,000 | 1.0% | 26,000 | 281 | 840 | 253 | 2 | 0.00 | 19,000 | 1.11 | 1.37 |
| | 68 | Catawba Avenue | Widening | Jetton Rd to NC 73 | 21,000 | 0.5% | 24,000 | 102 | 126 | 228 | 2 | 1.40 | 11,000 | 1.91 | 2.18 |
| | 107 | Airport Entrance Road | New Location | Scott Futrell Dr to Wilkinson Blvd | 13,000 | 0.5% | 15,000 | - | - | - | - | - | - | - | - |
| | 161 | North University Research Park Bridge | New Location | Louis Rose PI to Doug Mayes PI | 12,000 | 0.5% | 13,000 | - | - | - | - | - | - | - | - |
| | 194 | South Trade Street | Widening | Fullwood Ln to Weddington Rd | 22,000 | 0.5% | 25,000 | 65 | 309 | 228 | 2 | 0.00 | 8,850 | 2.49 | 2.82 |
| | 213 | Idlewild Road | Widening | I-485 to Stevens Mill Rd | 20,000 | 1.0% | 25,000 | 70 | 317 | 253 | 2 | 2.22 | 10,000 | 2.00 | 2.50 |
| | 261 | Charlotte Avenue | Widening | Seymour St to Dickerson Blvd (NC 200) | 14,000 | 0.5% | 16,000 | 16 | 158 | 712 | 2 | 1.30 | 8,000 | 1.75 | 2.00 |

^{*} The annual percent growth rate is calculated using a straight line growth equation from the Metrolina Regional Models (MRM) 2010 and 2040 projections.

⁺ The Historic Crash Rate is based on crash data from 11/01/2008 through 10/31/2013. This is a high level analysis based on mileposted crashes only. This analysis should not be used for design decisions as the crashes were not located to that level of precision.

^{**} The Statewide Crash Rate is provided by NCDOT and is reported per 100 million vehicle miles traveled. The crash rate is categorized by the facility type, number of lanes, and access control of the roadway. This rate includes only route segments with computerized traffic volumes.

⁺⁺ The travel time index (TTI) is based on INRIX Real Time Travel data and is calculated as the ratio of travel time during the peak period to the travel time during free flow speeds on the same roadway section.







| Tab | le B-2: CMP | 'Implementation | on – Fully Co | ontrolled <i>F</i> | Access Facilities |
|-----|-------------|-----------------|---------------|--------------------|-------------------|
|-----|-------------|-----------------|---------------|--------------------|-------------------|

Yes (Implemented or Planned) Possible (Needed or Considered; Not Implemented)

Demand **Land Use Traffic Operations Background and Strategy Notes** Management on Pricing Lanes or Medians afety
ements
/ Ramp
ring
Speed
its
rtatione Plans
ocals

| | | | | | HOV La | estior (HO | Work Z Manage | sible able A | Spot Sa Improve | Freeway Meter | Variable Limi | ransport and Use with Lc Governr | |
|----------|------------|------------------------------------|---------------------|--|--------|-------------------|------------------|-------------------------|--------------------|------------------|------------------|---|--|
| Corridor | Project ID | Project Name | Improvement Type | Project Segment | I | Congestior (HO | M M | Reversible Movable N | ys Im | Fre | Var | Trans Land wit Gove | |
| I-77 | 47 | I-77/West Plaza Drive (NC 150) | Imp Ex Intc | - | | | | | | | | Р | NC 150 is a highly congested east-west corridor through Iredell County; interchange provides one of few access points to I-77 in the area; NCDOT performed a concept study; project combined with NCDOT NC 150 widening project; dedicated right turn lane eastbound on NC 150 to southbound I-77 is a short-term fix; all other options exhausted |
| I-77 | 97 | I-77/Gilead Road | Imp Ex Intc | - | | | | | | Р | | Y | Growth and development has led to increased traffic on I-77 and Gilead Rd; traffic demand and historic crash data suggest improvements are necessary; conversion to divergent diamond interchange; ramp metering study proposed for Mecklenburg County |
| | 143 | I-77 | W | I-277 (Belk Fwy) (Exit 9) to I-277 (Brookshire Fwy) (Exit 11) | Υ | Р | Р | | | Р | | | Currently one of the heaviest congested corridors in the area and with the anticipated growth, congestion is expected to increase; due to its proximity to the center city, |
| I-77 | 145 | I-77 | W (HOT) | Woodlawn Rd (Exit 6) to I-277 (Belk Fwy) (Exit 9) | | Υ | Р | | | Р | | | peak duration is long; directional flow is balanced, which creates longer congestion in both peak periods; parallel collector-distributor lanes construction proposed; bus on shoulder considered, but found not to be feasible; queue detection on Moorehead St ramp considered, but found not to be feasible; work zone management critical during this proposed project |
| I-77 | 132 | I-277 (Belk Freeway)/I-77 | Imp Ex Intc | - | | | Р | | | | Р | | Rural interchange design; traffic demand is now higher resulting in weaving issues and high crash locations; new interchange helps improve weaving; short-term bridge widening considered, but found not to be feasible; closing low volume ramps possible |
| I-77 | 135 | l-277 (Brookshire Freeway)/l-77 | Imp Ex Intc | - | | | Р | | | Р | | | Rural interchange design; traffic demand is now higher resulting in weaving issues and high crash locations; short-term ramp improvements; candidate for the proposed regional ramp metering study |
| US 74 | 148 | Independence Boulevard (US 74) | W (HOT) | Conference Dr to Sardis Rd North | | Υ | | Р | Υ | | | Р | Multiple traffic issues compound the already deteriorated functionality in this corridor (volumes, access management, signal timing, etc.); signal timing maximized; consider installing queue jumpers; pedestrian signals installed at Village Lake Dr; |
| 3374 | 189 | Independence Boulevard (US 74) | W (HOT) | Sardis Rd North to I-485 | | Υ | | Р | Υ | | | Р | two-phased pedestrian improvements could be considered if funding available; superstreets, left-over, or other unconventional design possible; implement parallel street system between Sardis Rd and I-485 |

Note: The following strategies have been deemed not applicable for the Fully Controlled Access Facilities identified in the table:

Demand Management Strategies

- Variable Priced Lanes
- Bridge Tolling
- Electronic Payment Systems

Alternative Mode Promotion

- Park-and-Ride Lot Improvements
- Use of shoulders for Transit Vehicles during Peak Periods

Traffic Operations

- Imaging for Surveillance and Detection
- Service Patrols (e.g. IMAP)
- Variable Message Signs (VMS)

Corridor

NC 150

US 21

NC 51



Background and Strategy Notes



Table B-3: CMP Implementation – Limited/Partially Controlled Access Facilities

Demand

Alternative Mode Promotion Traffic Operations

Yes (Implemented or Planned)

Project

26

43

45

70

78

103

198

Possible (Needed or Considered; Not Implemented)

Project Name

River Highway (NC 150)

River Highway (NC 150)

River Highway/West Plaza

Drive (NC 150)

Plaza Drive (NC 150)

Statesville Road (US 21)

Statesville Road (US 21)

Statesville Road (US 21)

Matthews Township

Parkway (NC 51)

Improvement

Type

W

W

W

W

W

W

W

W

| | | Management | Aiteili | iative n | nout i io | motion | mann | c operat | 10113 | Lan | u osc | Background and Strategy Notes |
|-------------------------------------|--|------------------------------|-----------------------------------|---------------------------------|--|---|-----------------------|--|----------------------------|--|--|--|
| nt | Project Segment | Access Management Program | Park-and-Ride Lot Improvements | Sidewalk Gap Closure Program | Improve Pedestrian Facilities at Intersections | Creation of new Bicycle and Pedestrian Facilities | Traffic Signal Timing | Turn Lane Construction and Extension | Roundabout Construction | Transportation-Land Use Plans with Local Governments | Develop Overlay Districts to Manage Development Densities and Form | |
| | Waddell Rd to Perth Rd | | | | | Y | | Y | | Р | | NC 150 is a major east-west corridor between I-85 and I-40; trucks use corridor as a bypass to I-85 and I-40; traffic demand and congestion become a bigger problem closer to I-77 (commercial area near I-77); minimal transit service exists and is under-utilized (CATS does not extend to Iredell County); CMAQ project funded to add sidewalks on the eastern side of I-77; bridge over I-77 needs to be replaced to have bicycle and pedestrian crossing; TIP project R-2307 will include access management, bicycle and pedestrian improvements; traffic signals coordinated and maintained by NCDOT; NC 150 from Perth Rd to the Catawba County line is part of the Thread |
| | Perth Rd to Ervin Rd | | | | | Р | Υ | Υ | | Р | | Trail and Lake Norman Bike Route; improvements |
| | Ervin Rd to I-77 (Exit 36) | Υ | | | | | | Υ | | Р | | are required at Williamson Rd/NC 150, but not funded; CMAQ project funded at Talbert Rd and NC 150 to install a northbound left turn lane |
| | I-77 (Exit 36) to US 21 | | | | | Р | | Υ | | | | (southbound right turn lane scheduled in 2016); |
| | Northcross Center Ct to Westmoreland Rd | Р | | Y | | | Р | Y | | Р | | Parallel alternative to I-77 and functions as reliever for I-77; access management would improve roadway functionality; state maintained roadway |
| | Gilead Rd to Holly Point Dr | Р | | Υ | | | Р | Υ | | Р | | so the towns work with NCDOT to improve signal timing; bus route extended to Eastfield Rd; access |
| | WT Harris Blvd (NC 24) to Gilead Rd | Р | | | | | Р | Υ | | Р | | management needed approaching Gilead Rd northbound (two way left turn lanes) |
| Sardis Rd to Monroe Rd/E John St | | | | Y | | | Y | Y | | | | Major east-west corridor west of US 74 in highly developed area; provides alternative to I-485 in south Mecklenburg County; bus service exists from Matthews to Pineville (CATS Route 51); sidewalk exists on south side of NC 51, and Town of Matthews is adding sidewalk to north side from Reid Hall Ln to Charing Cross Dr; town is considering adding a right turn lane on NC 51 eastbound at Fullwood Ln |

Land Use



RS&H



Table B-3: CMP Implementation – Limited/Partially Controlled Access Facilities (continued)

Yes (Implemented or Planned)

Possible (Needed or Considered; Not Implemented)

| ntinuea) | IIAMANA | | | | | Traffi | c Operat | ions | Lan | d Use | Background and Strategy Notes |
|----------|------------------------------|-----------------------------------|---------------------------------|--|---|-----------------------|--|----------------------------|--|--|---|
| ıment | Access Management Program | Park-and-Ride Lot Improvements | Sidewalk Gap Closure Program | Improve Pedestrian Facilities at Intersections | Creation of new Bicycle and Pedestrian Facilities | Traffic Signal Timing | Turn Lane Construction and Extension | Roundabout Construction | Transportation-Land Use Plans with Local Governments | Develop Overlay Districts to Manage Development Densities and Form | |
| | | | | | | | | | | | Major east west corridor between the to |

| | | | | | ss Ma Pro | Park-and Improv | valk (Pro | Improve Facili Inters | Creatio Bicyc Pedestria | Traffic Sig | Turn Constru Exte | Round | Transport Use Plans Gover | Develop Districts Develop | |
|----------|---------------|--|---------------------|--|--------------|--------------------|---------------|-----------------------------|-------------------------------|-------------|-------------------------|-------|---------------------------------|---------------------------------|--|
| Corridor | Project ID | Project Name | Improvement Type | Project Segment | Acce | Par | Sidewalk | ldwl | Cr | Traff | Col | | Trans Use I | De Disti D | |
| NC 51 | 210 | Matthews-Mint Hill Road (NC 51) | W | Matthews Township Pkwy to Lawyers Rd | | | | | Y | | Y | Y | | | Major east-west corridor between the towns of Matthews and Mint Hill to the east of US 74; provides alternative to I-485 in southeast Mecklenburg County; intersection improvements funded at western terminus of project (superstreet design to improve safety and access); roundabout to be constructed at the intersection of Idlewild Rd and NC 51; proposed widening project will include median and multi-use path |
| NC 115 | 71 | Old Statesville Road (NC 115) | W | Washam Potts Rd to Sam Furr Rd (NC 73) | | | | | Y | Υ | Y | | | | Parallel alternative to I-77; school in proximity; multi-use path is proposed as part of the project |
| NC 115 | 165 | Old Statesville Road (NC 115) | W | WT Harris Blvd (NC 24) to I-485 | | Y | | | | Y | Y | | Υ | | Parallel alternative to I-77; provides access to dense residential land uses; improvements to the Eastfield Rd intersection are planned; bike lanes and sidewalks will be part of proposed widening project |
| NC 73 | 81 | Sam Furr Road (NC 73) | W | W Catawba Ave to Northcross Dr | Y | | | | Y | Y | Y | | Y | | Major east-west corridor providing access to I-77 to the east and crossing Catawba River to the west; one of few alternatives due to restrictions from Lake Norman to the north and the river to the west; median and sidewalks to be constructed as |
| | 96 | NC 73 | W | Vance Rd Ext to W Catawba Ave | Р | | | | | Υ | Y | | Р | | part of project; signals retimed every two years; turn lanes being considered at several signalized intersections |
| NC 84 | 247 | Rea Road/Marvin School Road (NC 84) | N Loc | NC 16 to Twelve Mile Creek Rd | | | | | Y | | Р | | Р | | Rapid development in the area; serves as major east-west thoroughfare through Union County; NC 16 was recently improved at the intersection of NC 84/Weddington-Matthews Rd, and at the intersection of NC 16/NC 84; these improvements helped traffic flow, but congestion still exists |
| NC 160 | 172 | Steele Creek Road (NC 160) | W | Shopton Rd West to S Tryon St (NC 49) | | | | Y | | Y | Y | | Р | | Rapid development in the area; high volume of truck traffic; width is not adequate and pedestrian facilities are needed; bus service extended to nights and weekends; CDOT plans to install pedestrian signal at South Branch Bend |
| | 173 | Steele Creek Road (NC 160) | W | S Tryon St (NC 49) to South Carolina State Line | | | | Y | | Р | Y | | Р | | Ln; speed limit recently changed from 50 to 45 mph; turn lanes are being added at the Hamilton Rd intersection |



Background and Strategy Notes

Table B-3: CMP Implementation – Limited/Partially Controlled Access Facilities (continued)

Yes (Implemented or Planned)

| P Pc | Broject | | | cess Management Program | Park-and-Ride Lot Improvements | Sidewalk Gap Closure Program | Improve Pedestrian Facilities at Intersections | Creation of new Bicycle and Pedestrian Facilities | Traffic Signal Timing | Turn Lane Construction and Extension | Roundabout Construction | Transportation-Land Use Plans with Local Governments | Develop Overlay Districts to Manage Development Densities and Form | | | |
|-----------------------------|---------|--------------------------------------|-------|---|-----------------------------------|---------------------------------|--|---|-----------------------|--|----------------------------|--|---|--|--|--|
| Corridor | | Project Name | | Project Segment | Ac | Δ. | Sid | <u>=</u> | Pe | Tra | O | | Tra | | | |
| NC 49 | 170 | South Tryon Street (NC 49) | W | I-77 to Yorkmont Rd | | | | | Y | Υ | Y | | | | Provides access to I-77 South, as well as Billy Graham Pkwy (which leads to Charlotte-Douglas International Airport); significant employment centers nearby; bike lanes and sidewalks will be added as part of project | |
| NC 49 | 175 | University City Boulevard (NC 49) | W | John Kirk Dr to I-485 | Р | | Y | | | Y | Y | | Y | | Provides access from I-485 to UNC Charlotte; in close proximity to developing retail and residential areas; signal timing is maximized; third through lane is being added along northbound NC 49 by NCDOT from Broadwick Rd to I-485 due to development | |
| NC 16 | 113 | Brookshire Boulevard (NC 16) | W | ldaho Dr to I-85 | | | | | | | Y | | | | Provides access to various industrial facilities; potential for I-85 interchange upgrade | |
| NC 16 | 249 | Providence Road South (NC 16) | W | Rea Rd to Cuthbertson Rd | Y | | Р | | | Y | Y | | | | Rapid development in the area; serves as majo north-south thoroughfare through Union County turn lanes exist northbound at Gray Byrum Rd southbound at Ennis Rd, and northbound a Bonds Grove Church Rd | |
| WT Harris Blvd | 129 | WT Harris Boulevard | W | Reames Rd to I-485 | Y | | | | Y | Y | Y | | | | Congestion is significant in peak direction during both rush hours; when I-485 opens (end of 2014), express bus service will be expanded from North Lake Mall to Prosperity Church Rd; median, bike lanes, and sidewalks are proposed as part of widening project | |
| | 190 | Old Monroe Road | W | Waxhaw-Indian Trail Rd to Wesley Chapel Rd | Y | | | | Y | | Y | | Р | | Parallel alternative to US 74; significant development in the area; Emergency Medical Service and Fire vehicles use corridor; current road needs repaving; Merningwood Dr used | |
| John St/Old Monroe Rd | 228 | Old Monroe Road | W | I-485 to Waxhaw-Indian Trail Rd | Υ | | | | Y | | Y | | Υ | | as a cut-through causing increased crashes; signals not connected (too far apart); NCDOT implemented a few short-term improvements; | |
| | 199 | East John Street | W | Trade St to I-485 | | | | | Y | | Y | | Р | | proposed project will add median and improve intersections; request for speed limit change not yet implemented; land use study conducted from Post Office to town limits; proposed projects include sidewalks and bike lanes | |
| Cornelius Rd/ Mazeppa Rd | 34 | Cornelius Road/Mazeppa Road | N Loc | NC 115 to US 21 | Υ | | | | Y | | | | | | Provides major relief to truck traffic on other local streets; project will help trucks reduce travel time to I-77 southbound and reduce pollution; long range vision is to have a parallel facility to NC 150 | |

Management Alternative Mode Promotion Traffic Operations

Land Use

Demand



RS&H



Table B-3: CMP Implementation – Limited/Partially Controlled Access Facilities (continued)

Υ Ye

Yes (Implemented or Planned)

Possible (Needed or Considered; Not Implemented)

Demand Management

Traffic Signal Timing

Program

Traffic Signal Timing

Tookerlay

Tricts to Manage

Powerlop Overlay

tricts to Manage

Powerlop Development

Bicycle and Stratesion

Roundabout

Construction and Extension

Bicycle and Governments

Extension

Bicycle and Form

Roundabout

Construction and Extension

Bicycle and Form

Bicycle and Bicycle and Bicycle and

| Corridor | Project ID | Project Name | Improvement Type | t Project Segment | Access N Pr | Park-ar Impre | Sidewalk | Improve Fac Inter | Creati Bic, Pedestr | Traffic S | Constr | Rou | Transpo Use Plar Gove | Develo Districts Deve Densitio | |
|--|---------------|--|---------------------|---------------------------------------|----------------|------------------|----------|-------------------------|---------------------------|-----------|--------|-----|-----------------------------|---|--|
| Brawley School Rd | 46 | Brawley School Road | W | Talbert Rd to US 21 | | | | | Y | Р | Y | | | | Currently only two lanes with several horizontal curves; new interchange with I-77 was recently opened which added additional traffic to this roadway; minimal transit service which is underutilized (CATS does not extend to Iredell County); improvements were implemented west of Talbert Rd and at the US 21 intersection |
| Midnight Ln/ Oates Rd | 50 | Midnight Lane/Oates Road | N Grd Sep | - | | | | | Р | | | | Р | | Parallel facility of NC 150 is the only I-77 crossing in the vicinity (and it already carries significant capacity); proposed project provides alternative crossing of I-77 and thereby helps to improve traffic flow along NC 150 |
| Williamson Rd | 51 | Williamson Road | W | Brawley School Rd to NC 150 | Υ | | | | | Υ | Y | | | | Lanes have been added as development occurs (inconsistent lane continuity); project includes access management, turn lanes, bike lanes, and sidewalks |
| Catawba Ave | 68 | Catawba Avenue | W | Jetton Rd to NC 73 | Р | | Υ | | | Р | Y | | Y | | Parallel alternative to I-77; restrictions to the west due to proximity of Lake Norman (limits alternative routes); access management, multiuse paths, and sidewalks are part of widening project (sidewalk gaps exist); town is expecting CMAQ funds to add a turn lane at West Moreland Rd and Catawba Ave |
| Airport Entrance Rd | 107 | Airport Entrance Road | N Loc | Scott Futrell Dr to Wilkinson Blvd | | | | | | | | | Y | | High amount of freight and passenger activity at Charlotte-Douglas International Airport, particularly due to the intermodal facility (opened in 2014); proposed project improves existing Little Rock Rd, and serves as new road to Charlotte-Douglas International Airport |
| North Univ. Research Park Bridge | 161 | North University Research Park Bridge | N Loc | Louis Rose Pl to Doug Mayes Pl | | | | | Y | | | | Y | | Reliever for vehicular traffic accessing retail (specifically the opening of Ikea in recent years), as well as additional growth in the University Research Park, and the anticipated operation of the Blue Line Extension; project will provide a new bridge, which will help CATS start new services between the University Research Park and Blue Line Extension train station; will also alleviate congestion along WT Harris Blvd and Mallard Creek Church Rd |



Background and Strategy Notes

Land Use



| Table B-3: CMP Implementation | Limited/Partially | y Controlled Access Facilitie | s (continued) |
|-------------------------------|---------------------------------------|-------------------------------|---------------|
|-------------------------------|---------------------------------------|-------------------------------|---------------|

| Υ | Yes (Implemented or Planned) | | | nent | Lot | Closure | rian | w ities | ning | and | | and ocal s | rlay inage int Form | | |
|--------------|------------------------------|--------------------|---------------------|--|----------------------|--------------------------|----------|--|---|----------------|----------------------------------|--|---|--|---|
| P | Drainet | | | | s Managen Program | -and-Ride I provement | Gap | ove Pedestr acilities at tersections | eation of ne Bicycle and sstrian Facili | : Signal Timin | urn Lane truction xtension | Roundabout | oortation-L lans with L overnment | elop Ove cts to Ma velopme ties and | |
| Corridor | Project ID | Project Name | Improvement Type | Project Segment | Acces | Park-a Impi | Sidewalk | Impre | Cre B Pedes | Traffic | Cons | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Transp Use Pla Go | Devel District Deve | |
| S Trade St | 194 | South Trade Street | W | Fullwood Ln to Weddington Rd | Р | | | | Y | Р | Y | | | Y | Currently a bottleneck with substantial amount of traffic being added at both ends of the corridor; NCDOT not interested in SPOT safety; possible increased transit service after project completion; bike lanes and sidewalks on both sides of road with project |
| Idlewild Rd | 213 | Idlewild Road | W | I-485 to Stevens Mill Rd | Р | | | | | Р | Υ | | | | Provides access to I-485; congestion problem during peak hours; proposed project will include median, and bike lanes and sidewalks on both sides of road |
| Charlotte Av | re 261 | Charlotte Avenue | W | Seymour St to Dickerson Blvd (NC 200) | | | | | Y | | Υ | | | | Parallel alternative to US 74; provides access to downtown Monroe; proposed project will include median, and bike lanes and sidewalks on both sides of road |

Alternative Mode Promotion Traffic Operations

Note: The following strategies have been deemed not applicable for the Limited/Partially Controlled Access Facilities identified in the table:

Demand Management Strategies

- HOV Lanes
- Congestion Pricing
- Bridge Tolling

Alternative Mode Promotion

- Transit Signal Priority System
- Addition of Bicycle racks at Public Transit Stations/Stops
- Bicycle and Pedestrian access to Transit Improvement
- Bike Sharing Programs
- Enhance Transit Amenities
- Use of shoulders for Transit Vehicles during Peak Periods
- Safe Routes to School Initiatives
- Bicycle/Pedestrian Education Program
- Bicycle and/or Pedestrian Corridor Safety Studies and Implementation

Traffic Operations

Demand

Management

- Imaging for Surveillance and Detection
- Red-Light Camera Enforcement
- Dynamic Traffic Signal Systems
- Service Patrols (e.g. IMAP)
- Emergency Management Systems (EMS)
- Work Zone Management
- Reversible Lanes or Movable Medians
- Variable Message Signs (VMS)
- SPOT Safety Improvements