DCHC

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

**Member Governments**
Town of Carrboro
Town of Chapel Hill
County of Chatham
City of Durham
County of Durham
County of Orange
NC Department of Transportation
Town of Hillsborough

# DURHAM – CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TECHNICAL COORDINATING COMMITTEE (TCC)

## AGENDA

**October 22, 2008**
**9:00 a.m.**

**City Council Committee Room**
**2nd floor Durham City Hall**

1. **Preliminaries**

2. **Adjustments to the Agenda**

3. **Public Comments**

## ACTION ITEMS

**4. Approval of September 24, 2008 TCC Meeting Minutes**
**(Attachment 4)**

A copy of the September 24, 2008 minutes is enclosed as Attachment 4.

**TCC Action:** Approve minutes of the September 24, 2008 TCC meeting.

**5. 2035 Long Range Transportation Plan Preferred Option and Comprehensive Transportation Plan**
**(Attachment 5)**
**Andy Henry, LPA Staff**

The TAC released the 2035 Long Range Transportation Plan and Comprehensive Transportation Plan preferred option for public comment on October 8, 2008 and scheduled a public hearing for November 12, 2008. Public meetings and workshops on the preferred option will take place in October and November.

Attachment 5 is a copy of the preferred option report that the TAC received in October which includes project maps and tables, a financial plan, and performance data. Additional information, including the modeling results, for this report is currently being prepared by LPA staff and the TRM Service Bureau.

The following table presents the schedule for the remainder of the 2035 LRTP:

| Action | Date |
|---|---|
| TAC release Preferred Option for public review | 10/8/08 |
| TAC hold public hearing for Preferred Option | 11/12/08, **7 pm** |

| | |
|---|---|
| TAC approve 2035 LRTP | 12/10/08 |
| TAC release 2035 LRTP Air Quality Conformity Report | 2/11/09 |
| TAC hold public hearing for Conformity Report | 3/11/09 |
| TAC approve 2035 LRTP Air Quality Conformity Report | 4/8/09 |
| Federal approval of 2035 LRTP | Before 6/15/09 |

**TCC Action:** Receive update on the 2035 LRTP and CTP.

**6. FY 2011-2017 Transportation Improvement Program – Regional Priority List**
**(Attachment 6, 6A, 6B – to be provided at TCC meeting)**
**Ellen Beckmann, LPA Staff**

NCDOT has requested that MPOs provide their Regional Priority Lists for the FY 2011-2017 Transportation Improvement Program (TIP) by December 31, 2008. The TCC has proposed a schedule for the development and approval of the Ranking Methodology and Regional Priority List to meet this deadline (Attachment 6). In August 2008, the TAC approved the Ranking Methodology for the development of the Regional Priority List (Attachment 6A). Local jurisdictions have submitted their local priority lists and applied the ranking methodology to their projects.

Attachment 6B is the results of the ranking methodology for the MPO (to be handed out at TCC meeting). As with the previous methodology, three separate methodologies are used for highway, bicycle/pedestrian, and transit projects. The TCC is requested to recommend that the TAC release the results of the ranking methodology as the draft Regional Priority List in November. A public hearing will be scheduled in December.

**TCC Action:** Recommend that the TAC release for public comment the draft Regional Priority List (Attachment 6B) and schedule a public hearing at the December TAC meeting.

**7. NCDOT Proposal for Congestion Mitigation Air Quality (CMAQ) Project Selection and Programming Process**
**(Attachment 7, 7A)**
**Felix Nwoko, LPA Staff**

NCDOT is considering changes to the Congestion Mitigation Air Quality (CMAQ) project selection and programming process (Attachment 7). The NC Association of MPOs has considered the proposal and submitted the letter and resolution in Attachment 7A to NCDOT. The DCHC MPO should consider its position and provide comments to NCDOT.

**TCC Action:** Receive update on NCDOT's proposal for the CMAQ process. Provide comments to NCDOT as needed.

## REPORTS FROM STAFF:

**8. Reports from Staff**
**(Attachment 8)**
**Felix Nwoko, LPA Staff**

**TCC Action:** Receive Report from staff

**9. Report from the Chair**
**Mark Ahrendsen, TCC Chair**

**TCC Action:** Receive Report from TCC Chair

**10. NCDOT Report**
**(Attachment 10)**
**Wally Bowman, Division 5 – NCDOT**
**Mike Mills, Division 7 – NCDOT**

**INFORMATIONAL ITEMS**

**Adjourn**

**Next meeting: November 26, 2008**

**Joint TAC Meeting: October 29, 2008,**
**4:00pm to 6:00pm,**
**Research Triangle Foundation Headquarters, RTP**

**TECHNICAL COORDINATING COMMITTEE**

**September 24, 2008**

**MINUTES OF MEETING**

The Technical Coordinating Committee met on September 24, 2008 at 9:00 a.m. in the Council Committee Room on the second floor of Durham City Hall. The following attended:

| | |
|---|---|
| *Mark Ahrendsen | City of Durham – Transportation (TCC Chair) |
| *Jamal Alavi | NCDOT - TPB |
| *David Bonk | Town of Chapel Hill (TCC Vice-Chair) |
| *Andy Henry | City of Durham – Transportation |
| *John Hodges-Copple | Triangle J COG |
| *Tom King | Town of Hillsborough |
| *Karen Lincoln | Orange County |
| *Patrick McDonough | Triangle Transit |
| *Adena Messinger | Town of Carrboro |
| *Felix Nwoko | City of Durham – Transportation |
| *Pierre Osei-Owusu | City of Durham – DATA |
| *Liz Rooks | Research Triangle Foundation |
| | |
| Ellen Beckmann | City of Durham – Transportation |
| Aaron Cain | City of Durham – Planning |
| Kevin Harward | City of Durham – Transportation |
| Dale McKeel | City of Durham – Transportation |
| Dawn Qiu | City of Durham – Transportation |
| David Willauer | IEM |

*Voting Member

Mark Ahrendsen called the meeting to order at 9:10 am.

**PRELIMINARIES:**

**Adjustments to the Agenda**

There were no adjustments to the agenda.

**Public Comments**

There were no public comments.

**ACTION ITEMS:**

**Approval of August 27, 2008 TCC Meeting Minutes (Attachment 4)**

A motion was made by Felix Nwoko and seconded by Pierre Osei-Owusu to approve the August 27, 2008 TCC Meeting Minutes. The motion carried unanimously.

**2035 Long Range Transportation Plan and Comprehensive Transportation Plan – Preferred Option (Attachments 5, 5A, and 5B)**

Andy Henry provided an introduction and update on the 2035 Long Range Transportation Plan and Comprehensive Transportation Plan – Preferred Option, along with the attachments.

Andy Henry stated that the public workshops are done and to sum up the comments received, the citizens want more rail transit, transit, and bicycle and pedestrian; some did not want the proposed interchange at I-40/Farrington Road, Elizabeth Brady Road; and some in Chapel Hill did not want the widening of US 15-501. The Board of County Commissioners in Chatham County want to see some widening of the roads that provide access to Chatham County, specifically Farrington Mill Road, Lystra, and Jack Bennett. Chatham County also expressed an interest in express buses between Pittsboro and UNC Chapel Hill. The Town of Carrboro expressed an interest in extending the rail line into the Town of Carrboro. The Town of Hillsborough supported interest in bicycle and pedestrian and support express buses from Hillsborough to Chapel Hill. The regional bicycle comments were for staff to be consistent with the state regional bicycle plan. Orange County supported the rail with a stop in Hillsborough and they supported increased transit frequency, they also liked the off trail bicycle and pedestrian.

David Bonk stated that Chapel Hill adopted a resolution stating they wanted the fixed guideway to be the basis of any preferred alternative with additional transportation improvements in northern Chatham County to mitigate some of the traffic issues. Chapel Hill is not in support of widening US 15-501 or NC54/US 15-501. Capacity widening should be in Chatham County. If we go from four to six lanes improvement on US 15-501, lanes five and six must be BRT lanes. John Hodges-Copple stated that we need to show some improvements in the plan to the public. Show transportation systems

management intersection improvements in the Durham and Chatham corridors and list some Chatham projects.

David Bonk stated that on the 2035 LRTP Highway Project list ID-40 (Horace Williams Network) Carolina North network needed to be removed because UNC is paying for this project out of non highway transportation funds. Andy Henry stated it will be left in, but that he will note that the funding source is private revenue. ID-58, Mason Farm Road Realignment needs to be either removed or shown as private. Felix Nwoko suggested showing it as being funded privately.

Andy Henry reviewed the four transit alternatives with staff. Patrick McDonough suggested changing the name for STAC Lite.

David Bonk asked if the commuter rail goes to Carrboro. John Hodges Copple stated it needs to reflect what is in the feasibility study. It was suggested that someone call Jim Kessler to get clarification. Chapel Hill doesn't want commuter rail to Carrboro. Felix Nwoko stated for the time being transit will reflect what is in the feasibility study. David Bonk stated that Carolina North is oriented to MLK, not the rail line.

David Bonk stated that Chapel Hill won't finish reviewing the transit options until Thursday; Triangle Transit stated it will be needed by Thursday, and DATA is not done.

Andy Henry reviewed the bicycle alternative with staff. Andy stated we need to reduce the number of projects and put some projects into the CTP.

Andy Henry reviewed the financial plan with staff. John Hodges-Copple recommended that staff use the STAC recommendations as a starting point and then let the TAC determine if they want to make changes.

David Bonk stated that staff has to somehow reflect the fact that Chapel Hill now has the authority to increase the vehicle fee by $10 outside of the general STAC recommendation. They are also

considering transit impact fees in service areas. Andy Henry will check the Chapel Hill Transit revenue in the revenue spreadsheet.

Staff needs to make sure ITRE has the information by Friday at the latest in order to be in the model.

**Regional Bicycle Routes (Attachment 6)**

Dale McKeel provided an introduction and review for the Regional Bicycle Routes, along with the attachments.

Dale McKeel stated they received a lot of feedback on the map and he has recommended some changes based on the feedback: (1) Include Chin Page Road between Research Triangle Park and Wake County line. (2) Show O'Kelly Chapel Road going from NC 751 to in the park. (3) Add a trail network in Northern Durham County around West Point on the Eno Park and going up Highway 501 toward Person County. (4) Add the Mountains-to-Sea Bicycle route. (5) Cornwallis Road between Chapel Hill Street and Erwin Road in Durham was added. There was a trail along I-40 between Old 86 and NC 86 in Orange County and based on a recommendation from the Orange County Commissioners it has been removed. Mark Ahrendsen suggested adding St. Mary's Road from Hillsborough to US 15-501 in Durham. Ellen Beckmann suggested adding complete descriptions of the routes from origin to destination for clarification.

**2009-2015 Metropolitan Transportation Improvement Program – Administrative Modification #1 (Attachment 7)**

Ellen Beckmann provided an introduction and update for the 2009-2015 Metropolitan Transportation Improvement Program – Administrative Modification #1, along with the attachment.

Ellen Beckmann is still working with Mike Kozak on updates. Patrick McDonough asked that when Ellen Beckmann emails Mike Kozak that he be copied. Ellen Beckmann is concerned because Mike

Kozak has added and deleted projects. We are under the understanding that can only do administrative modifications not additions and deletions.

A motion was made by Felix Nwoko and seconded by Patrick McDonough that approve the Administrative Modification with a caveat subject to conversation between Jill Stark and Mike Kozak for guidance in regards to the requested changes; plus adding Table 13 to include Triangle Transit funds for passenger amenities at the transfer station. The motion carried unanimously.

**U-4763B Triangle Parkway (Attachment 8)**

Mark Ahrendsen provided an introduction for the U-4763 Triangle Parkway, along with the attachment.

Patrick McDonough asked the distance from this proposed intersection at the intersection of Hopson Road to the North Carolina Railroad line. Mark Ahrendsen stated it is on the western side. Patrick McDonough asked if this is a cost cutting measure; is it a net cost cut measure or is it NCTA cost cut.

Liz Rooks stated her concern is it looks like they are providing the sidewalk only on the north side and if they are building a bridge, then the bridge should be wide enough to have sidewalks on both sides and future bike lanes. Dale McKeel stated the bridge is wide enough for sidewalks and has 14' wide outside lanes; but not bike lanes.

A motion was made by Felix Nwoko and seconded by Patrick McDonough that the Research Triangle Park work with the N.C. Turnpike Authority and the affected communities to ensure there are proper and appropriate bicycle and pedestrian connections on either side of the turnpike project. The motion carried unanimously.

**REPORTS FROM STAFF:**

**Reports from Staff (Attachment 9)**

The report from staff is attached for review. Patrick McDonough asked that Felix Nwoko send him a copy of the scope for the NC-54/I-40 corridor study.

Dale McKeel stated that the Old Durham Chapel Hill Road project kick off meeting is next week on September 29, 2008 at 10:30 a.m. at NCDOT Division 5.

**Report from the TCC Chair**

There was no report from the TCC Chair.

**NCDOT Report (Attachment 11)**

The NCDOT Report is attached for review.

**Other Business**

David O. Willauer, with IEM, just relocated here from Portland, Maine where he worked with an MPO for about fifteen years doing transportation planning. He just wanted to introduce himself to staff.

**Adjournment**

There being no further business before the Technical Coordinating Committee, the meeting adjourned at 11:09 a.m.

DCHC

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**Member Governments**
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Town of Chapel Hill
County of Chatham
City of Durham
County of Durham
Town of Hillsborough
N.C. Department of Transportation
County of Orange

# 2035 Long Range Transportation Plan (LRTP)

# Preferred Option



City of Durham • Department of Transportation • 101 City Hall Plaza • Durham, North Carolina 27701 • (919) 560-4366 • Facsimile (919) 560-4561

# 2035 LRTP and CTP
## Preferred Option -- Introduction

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## What is the 2035 LRTP?

The 2035 Long-Range Transportation Plan (LRTP) is the guide for major transportation investments in the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) area. The DCHC-MPO area covers the entire Durham County and the urbanized portions of Orange and Chatham Counties. The 2035 LRTP recommends major transportation projects, policies and strategies designed to maintain existing transportation systems and serve the region's future travel needs. The 2035 LRTP is also designed to support land use and air quality goals for the urban area, and must be prepared in accordance with Federal transportation and environmental requirements. Projects must be in the 2035 LRTP in order to receive state and federal transportation funding through the North Carolina Transportation Improvement Program (TIP).

## What is the Preferred Option?

The Preferred Option is the draft 2035 LRTP. It shows the highway, transit, bicycle and other transportation projects that are to be included in the Plan, and the costs and revenues associated with the proposed set of projects. In addition, the Triangle Regional Model (TRM) uses the proposed set of projects to create a future transportation network and combines that network with a future Land Use Scenario (i.e., forecasted location of population and employment) to produce performance measures and congestion maps. These performance measures, such as the level of roadway congestion, average travel time, and transit ridership, will be used to evaluate the extent to which the proposed set of projects will meet the MPO's Goals and Objectives.

The MPO staff and policy board (Transportation Advisory Committee – TAC) will review the Preferred Option and consider public comments to develop the final 2035 LRTP.

## How Can Citizens Participate?

There are many opportunities for citizens to review and comment on the Preferred Option at a series of public workshops and public hearings that will take place from October through December 2009. The public involvement calendar for the Preferred Option is displayed below. The DCHC MPO Website will continue to post a detailed list of these public involvement opportunities in the 2035 LRTP section of the Website – www.dchcmpo.org. For more information, citizens can also contact Andy Henry, (919) 560-4366, andrew.henry@durhamnc.gov.

**Preferred Option** – Public Involvement Calendar

| Jurisdiction | Elected Board | Planning Board | Transportation Board | Bicycle/ Pedestrian Board | Transit Board | Public Workshops |
|---|---|---|---|---|---|---|
| **City of Durham** | 11/20/2008 | 10/14/2008 | n/a | 10/21/2008 | 11/5/2008 | 2 in October/ November* |
| **Durham County** | 11/3/2008 or 11/10/2008 | 10/14/2008 | n/a | 10/21/2008 | n/a | |
| **Chapel Hill** | 11/10 | 10/21 | 10/23 | | | 1 in October/ November |
| **Carrboro** | 11/4/2008 | 10/16/2008 | 10/16/2008 | | | |
| **Hillsborough** | 10/24 | 10/20 | n/a | n/a | n/a | 1 in October/ November |
| **Orange County** | 11/6/2008 | Can attend Trans. Bd. Mtg. | 10/15/2008 | n/a | n/a | |
| **Chatham County** | 11/17 | | n/a | n/a | n/a | 1 in October/ November |

*One workshop will be focused for environmental justice organizations

Note: Check DCHC MPO Web site for any meeting date and time updates – www.dchcmpo.org

## What is the Next Step in the 2035 LRTP Process?

In the next major step in the 2035 LRTP development process, the MPO's board (TAC) and technical staff will evaluate the Preferred Option and consider public input to develop the final 2035 LRTP. After approving the 2035 LRTP in early December 2008, the 2035 LRTP will go through an evaluation and public input process to ensure that the Plan meets air quality conformity regulations.

### Remaining Steps/Actions in LRTP Process

| Action | Date |
|---|---|
| TAC release Preferred Option for public review | 10/8/08 |
| TAC hold public hearing for Preferred Option | 11/12/08, 7 pm |
| TAC approve 2035 LRTP | 12/12/08 |
| TAC release 2035 LRTP Air Quality Conformity Report | 2/11/09 |
| TAC hold public hearing for Conformity Report | 3/11/09 |
| TAC approve 2035 LRTP Air Quality Conformity Report | 4/8/09 |
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## Summary Description of Preferred Option

The MPO believes that evaluation beyond the Alternatives Analysis phase of the LRTP process is needed to identify the transit services for the 2035 LRTP. As a result, there are actually four transit options in the Preferred Option:

1. Bus Transit;
2. Commuter Rail;
3. Rail Transit using DMU (Diesel Multiple Unit); and,
4. Rail Transit using Electric rail cars.

There is only a single option for the highway, bicycle and other transportation modes.

Each Transportation System is composed of many highway, transit and other transportation projects. A review of the long list of projects is a difficult task. The table on the next page provides a summary of the major projects in each of the options for the Preferred Option.

The section of this report, called *Preferred Option – Detailed Description*, presents maps and project tables for each of the options.

# Summary of Preferred Options(1)

| Preferred Option | Highway | Bus Transit | Fixed Guideway |
|---|---|---|---|
| **Bus Transit**<br>(from Bus Intensive alternative) | • HOV/HOT on I-40 (from Wake Co. to NC 86 )<br>• Triangle Parkway (toll)<br>• US 15-501 freeway<br>• 7 Highway Trust Fund "loop" projects (including East End Connector) | • Local bus expansion<br>  ○ Peak headways **10-20 minutes**<br>  ○ Off-Peak headways **15-30 minutes**<br>• Express bus expansion<br>• Regional bus expansion (to outlying communities)<br>• Employment center circulators | • No fixed guideway service |
| **Commuter Rail**<br>(from Moderate multi-modal alternative) | • Same as above | • Same with addition of bus feeder service to commuter stations | • Commuter Rail – Hillsborough to Downtown Durham to RTP to Downtown Raleigh to Clayton<br>• Commuter Rail – Downtown Durham to Carrboro via Carolina North<br>• Bus Rapid Transit – Downtown Durham to UNC-Chapel Hill |
| **STAC – DMU**<br>((from Fixed Guideway alternative) | • Same as above | • Same with addition of bus feeder service to rail transit stations | • Rail Transit -- Duke to Downtown Raleigh using Diesel Multiple Units (DMU)<br>• Light Rail Transit – Duke to UNC-Chapel Hill using electric rail cars |
| **STAC – Electric**<br>(New alternative – the only preferred option not evaluated as part the alternatives analysis | • Same as above | • Same with addition of bus feeder service to rail transit stations | • Light Rail Transit – UNC-Chapel Hill to Duke to Downtown Durham to NCCU to RTP to Downtown Raleigh using electric rail cars |

(1) Some helpful definitions: HOV/HOT = High Occupancy Vehicle/Toll; lanes that can only be used by vehicles that pay a toll or have at least a specified number of passengers. Headway = minutes to wait before next bus arrives. Peak = period of highest travel, generally 7am-9am and 4pm-6pm. BRT = Bus Rapid Transit, which are buses on a separate roadway. Fixed Guideway = transit vehicles on traveling on separate track or roadway. STAC = Special Transit Advisory Commission, which was a regional commission that recommended major transit investments. Highway Trust Fund "loop" = Highway projects designated in state legislation to receive special funding, in DCHC MPO these include: a) East End Connector; b) US 70 widening and freeway upgrade between Wake County and East End Connector; c) I-85 widening in Durham County; d) all three section of the Northern Durham Parkway; and, e) North Roxboro Road widening. DMU = Diesel Multiple Unit; each car carries own propulsion capacity and thus trains can be scaled more easily to meet demand. However, the DMUs are relatively large and heavy, and cannot be mixed on streets with regular traffic. Electric = Using electric rail cars (often called light rail transit) that can be, to some extent, mixed on streets with regular traffic. Commuter Rail = Locomotive passenger trains running on mainline rail tracks that have stations relatively far apart and typically only run during peak commute hours.

## What is the CTP?

At this time, the DCHC MPO is completing the development and public input process for adopting the 2035 LRTP by June 2009. The same process for the Comprehensive Transportation Plan (CTP) will be carried out from June 2009 through December 2009, or once the 2035 LRTP is adopted, and the CTP adoption process will be completed from December 2009 through June 2010. The development process for the LRTP and the Comprehensive Transportation Plan (CTP), which includes the use of a travel demand model and the development of project attributes, are very similar. As a result, the 2035 LRTP Preferred Option documentation will often identify transportation projects that are not in the 2035 LRTP but are expected to be part of the CTP. This identification process helps the MPO match future projects with their partner MPO centered in Raleigh, the Capital Area Metropolitan Planning Organization (CAMPO), and to get a good start on the CTP development process.

A description of the CTP and comparison with the LRTP might help to understand this relationship. North Carolina General Statute 136-66.2 requires each municipality or Metropolitan Planning Organization (MPO), with the cooperation of the NCDOT, to develop a Comprehensive Transportation Plan (CTP) serving present and anticipated travel demand in and around the MPO. The CTP is a series of 5 sheets that include: Adoption Sheet, Highway Map, Public Transportation and Rail Map, Bicycle Map, and Pedestrian Map. These sheets show current and future transportation facilities. The principal differences between the LRTP and CTP include:

- Planning Horizon -- LRTP has a 2035 planning horizon and thus only shows new projects to be operational by the year 2035, whereas the CTP has no planning horizon and thus shows projects to be implemented beyond the year 2035.
- Fiscal Constraint -- LRTP must be fiscally-constrained, i.e., the anticipated revenues must cover the anticipated costs, but the CTP has no fiscal element and thus will contain more projects than the LRTP;
- Current and New Projects -- LRTP lists only proposed highway improvements and transit services, whereas the CTP maps out both the current and proposed projects;
- Air Quality – LRTP must pass Air Quality Conformity but the CTP does not.
- Approval – LRTP is a federal requirement and must be approved by the MPO and federal oversight agencies, whereas the CTP is a state requirement and must be approved by the North Carolina Board of Transportation and the MPO.

# 2035 LRTP
## Preferred Option – Detailed Description and Maps

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## Introduction

Although there are four transit options in the Preferred Option, there is only one highway option. This section presents:

- the proposed set of highway projects;
- the corresponding attribute information, such as project cost and implementation year; and,
- a brief discussion on the criteria used for selecting these projects from the larger set of highway projects in the Alternatives.

## Project Selection for Preferred Option

The Preferred Option includes 84 of the 150 highway projects that were presented in the Highway Intensive Alternative of the Alternatives Analysis. Several factors were considered in selecting these 84 projects from the Alternatives Analysis, including:

1. Congestion (V/C) – The Triangle Regional Model (TRM) produces maps that show the level of congestion on the road segments – these maps are often called "volume over capacity" maps. Highway projects in corridors in which the forecast indicated high levels of congestion, and highway projects that were shown to help relieve that congestion, were given preference.

2. Fiscal Constraint – The revenues must cover the costs in the 2035 LRTP. The cost of the 150 projects in the Highway Intensive Alternative (reviewed in the Alternatives Analysis) exceeded the revenues by $1.75 billion. Thus, many highway projects were removed from that set of highway projects to produce the set of highway project in the Preferred Option.

3. Environmental Impacts – Some proposed road widenings cross wetlands and other environmentally sensitive areas. It is difficult to increase the right-of-way of these existing roadways or add to negative impacts such as storm water runoff. The MPO proposes to implement capacity improvement that have less overall environmental impact, such as intersection capacity and design improvements, to meet these capacity improvements.

4. Local Support – In some cases, the board of local elected officials, a community organization or citizen has provided a clear indication during the Alternatives Analysis process that they support or oppose a project or type of project (e.g., rail transit.

Highway projects that are expected to be completely constructed or funded (as stated in the current TIP – Transportation Improvement Program) before January 1, 2008 are not included in the Preferred Option. It is assumed that these projects will be completed and their fiscal impact occurs before the beginning of the 2035 LRTP planning horizon, which is January 1, 2009.

## Projects in the Comprehensive Transportation Plan (CTP)

The DCHC MPO plans to develop and adopt a Comprehensive Transportation Plan (CTP) from June 2009 to December 2009. Indeed, much of the analysis work required for the CTP is being completed in the 2035 LRTP process. Given that the CTP has a time horizon that extends beyond that of the 2035 LRTP, many of the projects from the Highway Intensive Alternative that are not included in the 2035 LRTP will be part of the adopted CTP.

## Preferred Option Map and Tables

The map of the highway projects in the Preferred Option is on page 4 of this section. A table that lists these projects and their attributes follows the map and a key to the attribute information is below.

The Introduction in this report provides a summary of the highway projects that indicates the major projects.

## Key Information in Project Table

Each row in the table is a separate highway project. The attribute information for each project is presented by columns, and includes the following:

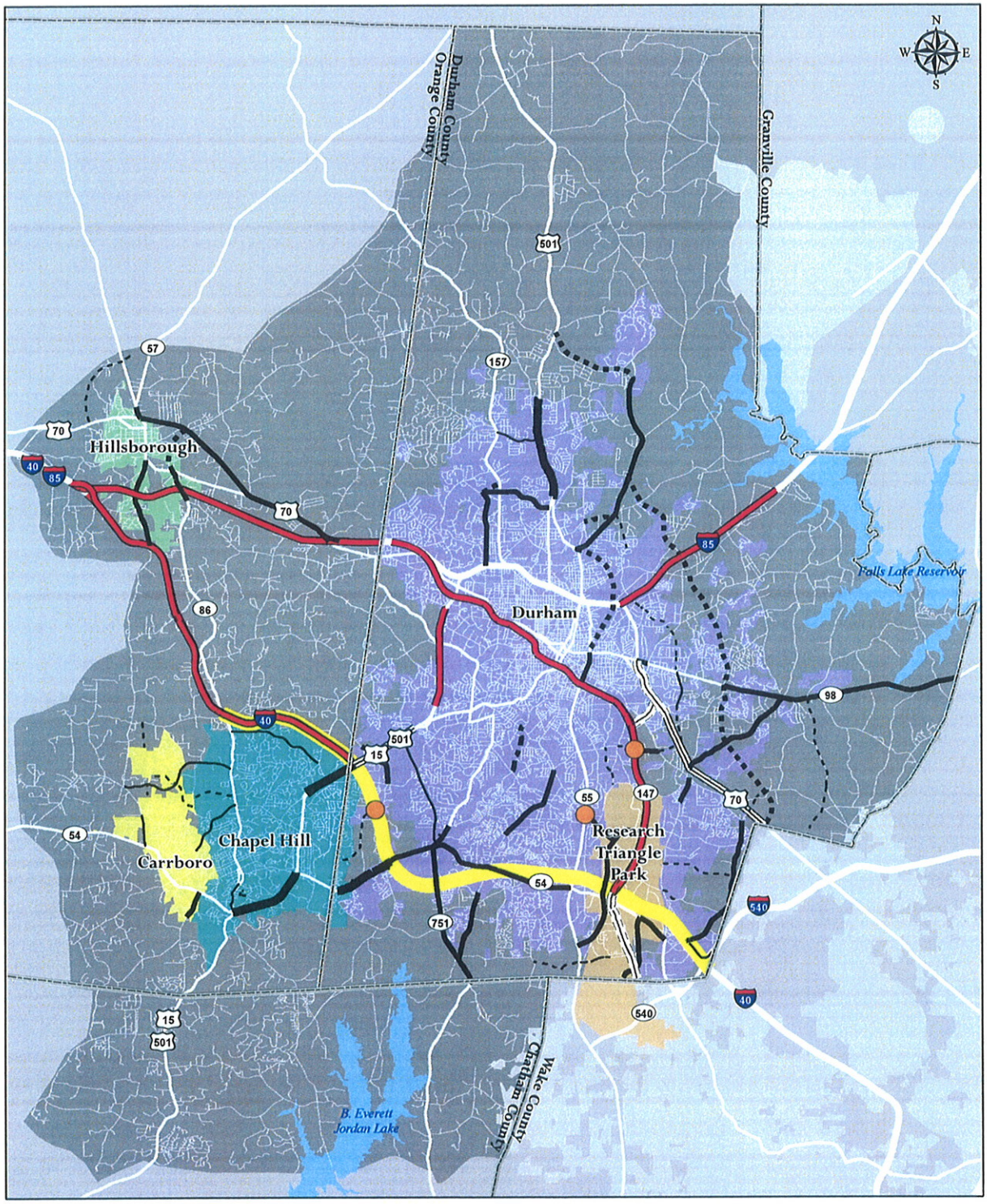
- New ID – This number facilitates the identification of projects in the long-range plan.
- Project – The project name is the name of the road.
- Project Limits – This usually identifies the name of the two road intersections between which the project is to be constructed.
- Existing Cross-Section – This identifies the number of current lanes. "0" indicates a new road alignment – in other words, there is no existing road.
- Proposed Cross-Section – This identifies the number of lanes proposed in the plan.
- County – This identifies the county location of the project.
- Length – This shows the length, in miles, of the project roadway.

- Total Cost – The total costs includes those estimated costs to be incurred between January 1, 2009 and December 31, 2035. Cost information from the current Transportation Improvement Program (TIP) and any related studies (e.g., I-40 HOV) was used to calculate costs for projects, when available, and a modified version of the current highway cost template from the NCDOT (North Carolina Department of Transportation) was used for the majority of projects
- AQ Year – There are five Air Quality analyses thresholds – there are three periods, 2009 to 2015, 2016 to 2025, and 2026 to 2035, and two stand alone years, 2011 and 2017. The AQ Year indicates in which analysis period the particular project will be completed and in service.
- Reg. Significant? – Regionally Significant projects provide access to and from the region, or to major destinations in the region. They are usually classified by the FHWA as interstate, freeway/expressway, urban principal arterial, rural interstate, or rural principal arterials. Note that the FHWA functional classifications serve a different purpose than the local functional classification used by the MPO, and as a result, the two classification systems are significantly different. Generally, the regionally significant designation includes interstate highways, U.S. highways, freeways, and North Carolina signed roads that are the primary road in a corridor. Rail transit facilities, which are described in a separate section, are considered regionally significant. The Regionally Significant designation is important – if a Regionally Significant project is changed (e.g., completion year, travel capacity) after the Air Quality Conformity Determination for the 2035 LRTP has been approved, then the Conformity Determination process might have to be done again.
- Exempt? – Some transportation projects are exempt from air quality conformity determination according to Title 40, Code of Federal Regulations (CFR), PART 93.126 and PART 93.127. The most important implication of this exemption is that the projects may proceed toward implementation in the absence of an approved and conforming Long Range Transportation Plan. These exempt projects tend to be transit services, and highway project that do not add overall roadway capacity but reduce travel delays, thereby reducing vehicle emissions.
- TIP No. – Some projects are completely or partially funded in the current Transportation Improvement Plan (TIP). If so, the TIP identification number is shown.
- Funding Source – The proposed funding sources for most projects are federal and/or state programs. In some cases, the local government or a private source is identified.

# Highway Preferred Option – Projects and Maps

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Roadway Improvements in Preferred Option




Interstates
US and NC Highways
**Preferred Option Projects**
2-3 Lane New Location
2-3 Lane Improvement
4-5 Lane Divided New Location
4-5 Lane Divided Improvement
6-Lane Divided Improvement
Upgrade to Freeway
New Freeway/Expressway
Upgrade Existing Freeway
Intersection Improvements
HOV Projects
Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park
MPO Boundary
County Boundaries

Transportation Plan 2035

The Louis Berger Group, Inc.
8.6.2008

0 1.25 2.5 5 Miles

# 2035 LRTP

*DCHC MPO Highway Projects -- Preferred Option*

| New ID | Project | Project Limits | Existing Cross-Section | Proposed Cross-Section | County | Length (miles) | Total Cost (2008 dollars) | AQ Year | Reg. Signifant? | Exempt? | TIP No. | Funding Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Alexander Dr (T.W. Alexander) | Cornwallis Rd to NC 147 | 2 | 4 | Durham | 0.50 | $8,900,000 | 2017 | No | No | U-3309 | State/Fed |
| 3 | Alexander Dr (T.W. Alexander) | NC 54 to NC 55 | 2 | 4 | Durham | 1.64 | $25,083,066 | 2025 | No | No | | State/Fed/Private |
| 4 | Alexander Dr (T.W. Alexander) | NC 54 to Cornwallis Rd | 2 | 4 | Durham | 1.58 | $24,204,905 | 2025 | No | No | | State/Fed/Private |
| 5 | Alston Ave Ext | Holloway St to Old Oxford/Roxboro | 0 | 4 | Durham | 3.49 | $64,185,815 | 2035 | No | No | | State/Fed/Private |
| 8.11 | Briggs Ave Ext | So-Hi Dr to Riddle Rd | 0 | 2 | Durham | 1.08 | $11,492,938 | 2035 | No | No | U-2831B | State/Fed |
| 9 | Carver Street Ext | Armfield St to Old Oxford Rd | 0 | 4 | Durham | 0.73 | $7,660,000 | 2017 | No | No | CIP | Local |
| 10.11 | Chin Page Ext. | Page Rd to Wake County Line | 0 | 2 | Durham | 0.20 | $2,128,322 | 2025 | No | No | | State/Fed/Private |
| 12 | Cornwallis Rd | MLK to Alexander Dr | 2 | 4 | Durham | 0.79 | $8,210,476 | 2025 | No | No | | State/Fed |
| 13.11 | Cornwallis Rd Ext | Miami Blvd to Chin Page Rd | 0 | 2 | Durham | 0.55 | $5,852,885 | 2035 | No | No | | State/Fed |
| 15 | East End Connector (EEC) | NC 147 to US 70 E; US 70:EEC to NC 98 | 0 | 4 | Durham | 2.50 | $155,401,000 | 2017 | Yes | No | U-0071 | State/Fed/Hwy Trust Fund |
| 16 | Elizabeth Brady Rd Ext | US 70 Business to St Mary's Rd | 0 | 4 | Orange | 1.30 | $33,594,000 | 2017 | No | No | U-3808 | State/Fed |
| 17 | Estes Dr | Greensboro Rd to NC 86 | 2 | 3 | Orange | 1.70 | $6,600,000 | 2025 | No | No | U-2909 | State/Fed |
| 22.1 | Fayetteville Rd | Renaissance Pkwy to NC 751 | 2 | 4 | Durham | 1.90 | $20,826,715 | 2025 | No | No | | State/Fed |
| 23 | Fayetteville Rd | Woodcroft Pkwy to Cornwallis Rd | 2 | 4 | Durham | 2.31 | $23,134,000 | 2017 | No | No | CIP | Local |
| 24.11 | Garrett Rd | NC 751 to US 15-501 | 2 | 3 | Durham | 3.09 | $16,753,108 | 2025 | No | No | | State/Fed |
| 26.11 | Globe Rd. Ext. (Brier Creek Pkway) | Miami Blvd. To Wake County Line | 0 | 2 | Durham | 2.18 | $23,198,709 | 2035 | No | No | | State/Fed/Private |
| 27 | Glover Rd | Glover Rd/NC 147 interchange: 147 to Angier | 2 | 4 | Durham | 0.64 | $33,231,525 | 2025 | No | No | | State/Fed/Private |
| 28.11 | Glover Rd | Angier to US 70 | 0 | 2 | Durham | 0.59 | $6,278,550 | 2025 | No | No | | State/Fed/Private |
| 30 | Hillandale Rd | I-85 to Carver St. | 2 | 4 | Durham | 0.62 | $10,943,000 | 2011 | No | No | U-3804 | State/Fed |
| 31 | Hillandale Rd | Carver to Horton Rd | 2 | 4 | Durham | 1.38 | $14,342,351 | 2025 | No | No | | State/Fed |
| 32 | Hillandale Rd Ext | Horton Rd to Guess Rd | 0 | 4 | Durham | 0.55 | $9,094,040 | 2035 | No | No | | State/Fed/Private |
| 33 | Hillsborough Rd/Old Fayetteville | Strowd Ln to Old Fayetteville/NC 54 | 2 | 3 | Orange | 0.85 | $1,800,000 | 2025 | No | Yes | U-3100 | State/Fed |
| 35 | Homestead Rd | High School Rd to NC 86 | 2 | 3 | Orange | 1.58 | $10,300,000 | 2025 | No | No | U-2805 | State/Fed |
| 36 | Homestead Rd | Old NC 86 to High School Rd | 2 | 3 | Orange | 1.74 | $8,825,634 | 2025 | No | No | | State/Fed |
| 39 | Horton Rd | Duke St to Hillandale Rd | 2 | 4 | Durham | 1.94 | $22,322,436 | 2035 | No | No | | State/Fed |
| 40 | (Horace Williams Network) Carolina North | Carolina North Campus (this is not an extension of Weaver Dairy Rd.) | 0 | 2 | Orange | 1.14 | $12,131,435 | 2020 | No | No | | Private |
| 41 | I-40/Farrington Rd interchange | I-40/Farrington Rd interchange | 0 | 1 | Durham | 0.20 | $25,500,000 | 2025 | No | No | | State/Fed |
| 43 | I-40 (general purpose widening) | US 15-501 to NC 86 | 4 | 6 | Orange | 4.08 | $43,790,031 | 2035 | Yes | No | I-3306 | State/Fed |
| 44 | I-40 (general purpose widening) | NC 86 to I-85 | 4 | 6 | Orange | 7.32 | $77,277,997 | 2035 | Yes | No | I-3306 | State/Fed |

# 2035 LRTP

*DCHC MPO Highway Projects -- Preferred Option*

| New ID | Project | Project Limits | Existing Cross-Section | Proposed Cross-Section | County | Length (miles) | Total Cost (2008 dollars) | AQ Year | Reg. Signifant? | Exempt? | TIP No. | Funding Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | I-40 HOV | Wake County Line to NC 86 | 0 | 2 | Durham | 16.63 | $604,500,000 | 2035 | Yes | No | | State/Fed |
| 46 | I-540 | Ramp improvement: I-540 W to I-40 W | 1 | 2 | Durham | 0.86 | $4,930,000 | 2011 | Yes | No | R-2000 | State/Fed |
| 48 | I-85 | I-40 to the Durham Co line | 4 | 6 | Orange | 8.35 | $210,782,000 | 2025 | Yes | No | I-0305 | State/Fed |
| 49 | I-85 | US 70 to Redwood Rd. | 4 | 6 | Durham | 5.25 | $132,527,605 | 2025 | Yes | No | I-4743 | Hwy Trust Fund |
| 51 | Lake Hogan Farms Rd Ext | Lake Hogan Farms Rd to Eubanks Road | 0 | 2 | Orange | 0.96 | $10,419,610 | 2020 | No | No | | Private |
| 52 | Latta Rd | Guess Rd to Roxboro Rd | 2 | 3 | Durham | 1.20 | $5,409,315 | 2035 | No | No | | State/Fed |
| 54.11 | Leesville Rd Ext | Leesville Rd to US 70/Page Rd | 0 | 2 | Durham | 0.81 | $9,587,110 | 2035 | No | No | | State/Fed/Private |
| 57 | Lynn Rd. Ext | NC 98/Glover Rd Ext to Existing Lynn Rd. | 0 | 2 | Durham | 0.86 | $9,346,199 | 2035 | No | No | | State/Fed/Private |
| 58 | Mason Farm Rd Realignment | Near S Columbia St | 0 | 4 | Orange | 0.63 | $23,282,312 | 2025 | No | No | | Private |
| 60 | Midland Terrace | NC 98 to Geer St | 0 | 2 | Durham | 2.44 | $17,207,959 | 2035 | No | No | | State/Fed |
| 61 | Midland Terrace | Dearborn to Old Oxford Rd/Hamlin Junction | 0 | 2 | Durham | 0.98 | $17,862,527 | 2035 | No | No | | State/Fed/Private |
| 63 | MLK Pkwy (NC 55 interchange) | NC 55 to Cornwallis Rd connector | 0 | 4 | Durham | 0.28 | $25,800,000 | 2035 | Yes | No | U-2405 | State/Fed |
| 64.11 | NC 147 General purpose widening | Alston Ave to East End Connector | 4 | 6 | Durham | 1.84 | $25,497,857 | 2035 | Yes | No | | State/Fed |
| 64.12 | NC 147 General purpose widening | Alston Ave to I-85 | 4 | 6 | Durham | 6.73 | $120,515,944 | 2035 | Yes | No | | State/Fed |
| 64.13 | NC 147 General purpose widening | East End Conn to I-40 | 4 | 6 | Durham | 4.78 | $52,645,086 | 2035 | Yes | No | | State/Fed |
| 66 | NC 147 South Ext (Triangle Pkwy -toll) | I-40 to Wake County Line | 0 | 6 | Durham | 2.40 | $156,700,000 | 2017 | Yes | No | U-4763B | State/Fed/Tolls |
| 69 | NC 54 | I-40 Interchange to NC 55 | 2 | 4 | Durham | 5.24 | $36,357,032 | 2025 | No | No | | State/Fed |
| 70 | NC 54 | I-40 to Barbee Chapel Rd | 4 | 6 | Durham | 1.65 | $34,540,862 | 2025 | Yes | No | | State/Fed |
| 73 | NC 54/US 15-501 Bypass | NC 54 to US 15-501 | 4 | 6 | Orange | 2.12 | $22,372,618 | 2025 | Yes | No | | State/Fed |
| 75 | NC 55 (Alston Ave.) | NC 147 to NC 98 | 2 | 4 | Durham | 0.90 | $23,320,000 | 2017 | No | No | U-3308 | State/Fed |
| 77.1 | NC 751 | S Roxboro St to NC 54 | 2 | 4 | Durham | 0.7 | $10,245,211 | 2025 | No | No | | State/Fed |
| 77.2 | NC 751 | NC 54 to Renaissance Pkwy | 2 | 4 | Durham | 1.23 | $12,783,400 | 2025 | No | No | | State/Fed |
| 77.3 | NC 751 | Renaissance Pkwy to Fayetteville/Scott King Rd | 2 | 4 | Durham | 1.94 | $20,162,436 | 2025 | No | No | | State/Fed |
| 78 | NC 751 | O'Kelly Chapel Rd to Fayetteville/Scott King Rd | 2 | 4 | Durham | 0.74 | $7,690,826 | 2035 | No | No | | State/Fed |
| 80 | NC 86 | Old NC 10 to US 70 Business | 2 | 4 | Orange | 0.90 | $11,513,707 | 2025 | No | No | | State/Fed |
| 81 | NC 86 | US 70 Bypass to NC 57 | 2 | 4 | Orange | 0.34 | $3,533,623 | 2025 | No | No | | State/Fed |
| 81.1 | NC 98 (Holloway St) | Wake County Line to Mineral Springs | 2 | 4 | Durham | 6.46 | $68,218,832 | 2035 | No | No | | State/Fed |
| 83 | Northern Durham Pkwy | US 70 E to I 85 North | 0 | 4 | Durham | 8.07 | $133,434,364 | 2025 | Yes | No | U-4721 | Hwy Trust Fund |
| 84 | Northern Durham Pkwy | I 85 North to Old Oxford Hwy | 0 | 4 | Durham | 3.80 | $64,991,547 | 2025 | Yes | No | U-4721 | Hwy Trust Fund |

# 2035 LRTP

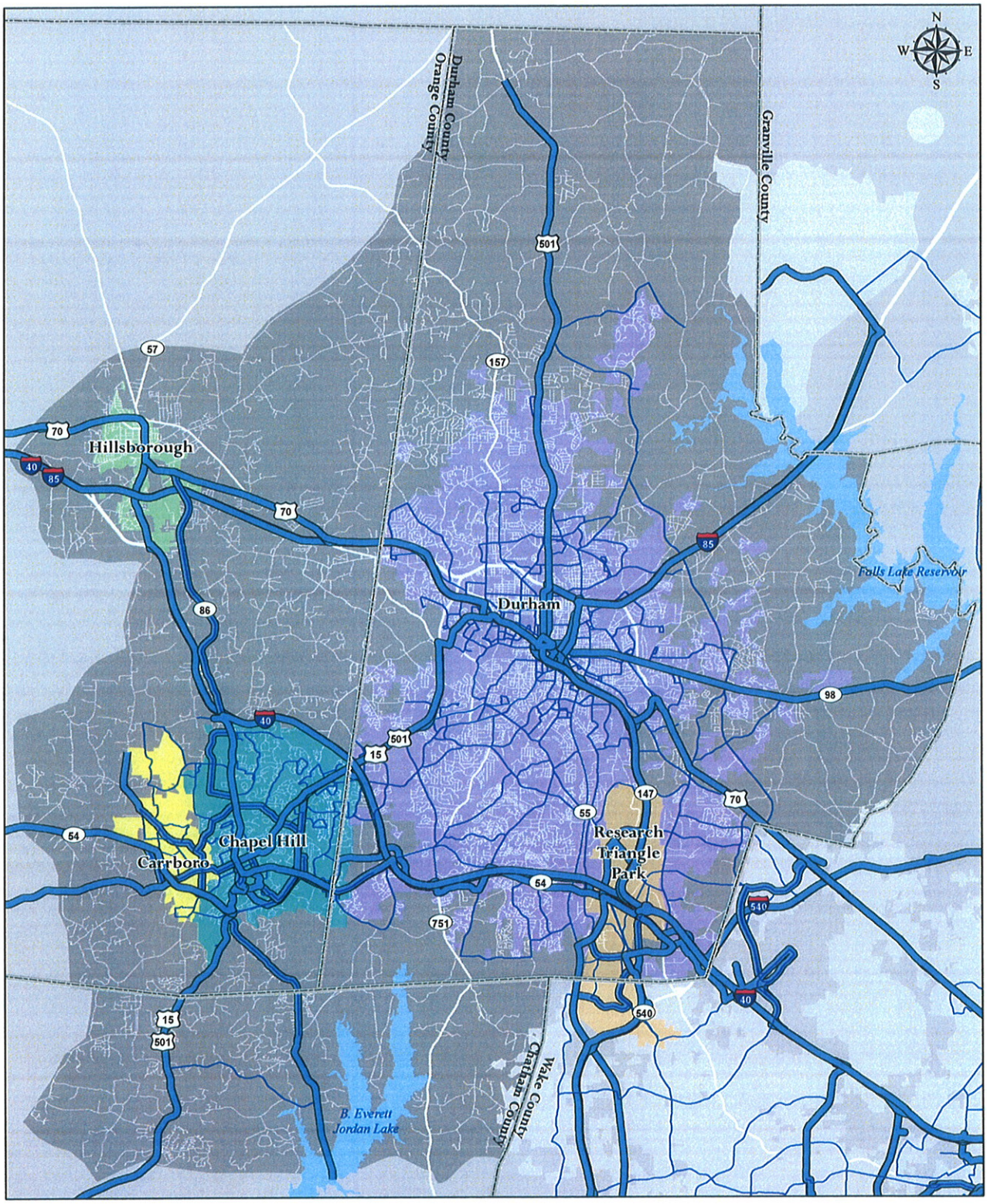
*DCHC MPO Highway Projects -- Preferred Option*

| New ID | Project | Project Limits | Existing Cross-Section | Proposed Cross-Section | County | Length (miles) | Total Cost (2008 dollars) | AQ Year | Reg. Signifant? | Exempt? | TIP No. | Funding Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 85 | Northern Durham Pkwy | Old Oxford Hwy to Roxboro Rd | 0 | 2 | Durham | 2.64 | $28,093,849 | 2025 | No | No | U-4721 | Hwy Trust Fund |
| 86 | Old NC 86 | I-40 to Lafayette Dr. | 2 | 4 | Orange | 0.80 | $6,176,000 | 2035 | No | No | R-2825 | State/Fed |
| 87 | Old NC 86 | Lafayette Dr to US 70 Business | 2 | 4 | Orange | 1.63 | $13,124,000 | 2035 | No | No | R-2825 | State/Fed |
| 88 | Old Oxford Rd | Roxboro Rd to Snow Hill Rd | 2 | 4 | Durham | 2.57 | $27,790,031 | 2025 | No | No | | State/Fed |
| 89 | Olive Branch Rd Ext | NC 98 to Wake County Line | 0 | 2 | Durham | 1.48 | $16,869,085 | 2035 | No | No | | Private |
| 90 | Page Rd | I-40 to Page Rd Ext | 2 | 4 | Durham | 3.88 | $40,324,871 | 2035 | No | No | | State/Fed |
| 91 | Riddle Rd. Extension | Ellis Rd. to NC 147 | 0 | 2 | Durham | 0.49 | $5,214,389 | 2025 | No | No | | State/Fed/Private |
| 92 | Roxboro Road (501N) | Duke Street to Goodwin Rd | 4 | 6 | Durham | 2.65 | $40,962,074 | 2035 | Yes | No | U-4722 | Hwy Trust Fund |
| 94 | Roxboro St | Cornwallis Rd to MLK Pkwy | 0 | 4 | Durham | 1.29 | $21,329,657 | 2025 | No | No | | State/Fed |
| 95.11 | Scott King Rd | Grandale Dr to Hopson Rd | 0 | 2 | Durham | 1.15 | $13,317,851 | 2035 | No | No | | State/Fed |
| 96 | Seawell School Connector | Lake Hogan Farms Rd to Seawell School Rd | 0 | 2 | Orange | 1.61 | $17,132,991 | 2035 | No | No | Private | Private |
| 96.1 | Sherron Rd. | US 70 to NC 98 | 2 | 4 | Durham | 3.25 | $33,777,276 | 2040 | No | No | | State/Fed |
| 97 | Smith Level Rd | Rock Haven Rd to NC 54 bypass | 2 | 3 | Orange | 0.75 | $5,400,000 | 2017 | No | No | U-2803 | State/Fed |
| 98 | South Columbia St | NC 54 to Manning Dr. | 0 | 2 | Orange | 0.86 | $3,650,000 | 2017 | Yes | Yes | U-624 | State/Fed |
| 102 | SW Durham Dr | Meadowmont Dr to I-40 | 0 | 2 | Durham | 1.79 | $21,208,481 | 2025 | No | No | | State/Fed/Private |
| 104 | SW Durham Dr. | Watkins Rd (Old Chapel Hill Rd to US 15-501) | 2 | 4 | Durham | 0.70 | $10,245,211 | 2017 | No | No | | Private |
| 106 | SW Durham Dr. | US 15-501 to Mt. Moriah Rd. | 0 | 4 | Durham | 0.35 | $9,054,232 | 2025 | No | No | | Private |
| 111 | US 15-501 | I-40 to Franklin St | 4 | 6 | Orange | 1.40 | $24,270,422 | 2035 | Yes | No | U-2807 | State/Fed |
| 113 | US 15-501 (freeway conversion) | Bypass to I-40 | 4 | 6 | Durham | 1.88 | $106,381,000 | 2035 | Yes | No | U-2807 | State/Fed |
| 114 | US 15-501 Bypass | Pickett Rd to Morreene Rd | 4 | 6 | Durham | 2.64 | $35,386,491 | 2035 | Yes | No | | State/Fed |
| 116 | US 70 (freeway conversion) | Lynn Rd to Wake Co line | 4 | 6 | Durham | 4.08 | $128,210,945 | 2025 | Yes | No | U-4720 | Hwy Trust Fund |
| 117 | US 70 Bypass | NC 86 to I-85 (exit 170) | 2 | 4 | Orange | 6.90 | $102,068,510 | 2025 | No | No | | State/Fed |
| 119 | Weaver Dairy Rd | NC 86 to Erwin Rd | 2 | 3 | Orange | 2.65 | $11,070,000 | 2017 | No | No | U3306 | State/Fed |
| 120 | Western Bypass | US 70 to NC 86 | 0 | 2 | Orange | 2.23 | $23,730,789 | 2025 | No | No | R-3438 | State/Fed |
| 121 | Western Bypass | NC 86 to Stroud Creek Rd | 0 | 2 | Orange | 0.30 | $3,192,483 | 2025 | No | No | R-3438 | State/Fed |
| 123.11 | Woodcroft Pkwy Ext | Garrett Rd to Hope Valley Rd | 0 | 2 | Durham | 0.25 | $2,660,402 | 2025 | No | No | | State/Fed/Private |
| | **Total** | | | | | **187** | **$3,339,881,961** | | | | | |

# Transit Preferred Option (bus) – Projects and Maps

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Transit Preferred Option-Bus Focus




Interstates
US and NC Highways
MPO Boundary
County Boundaries

**Transit in Bus Intensive Scenario**
Local Bus
Express Bus

Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

Transportation Plan 2035

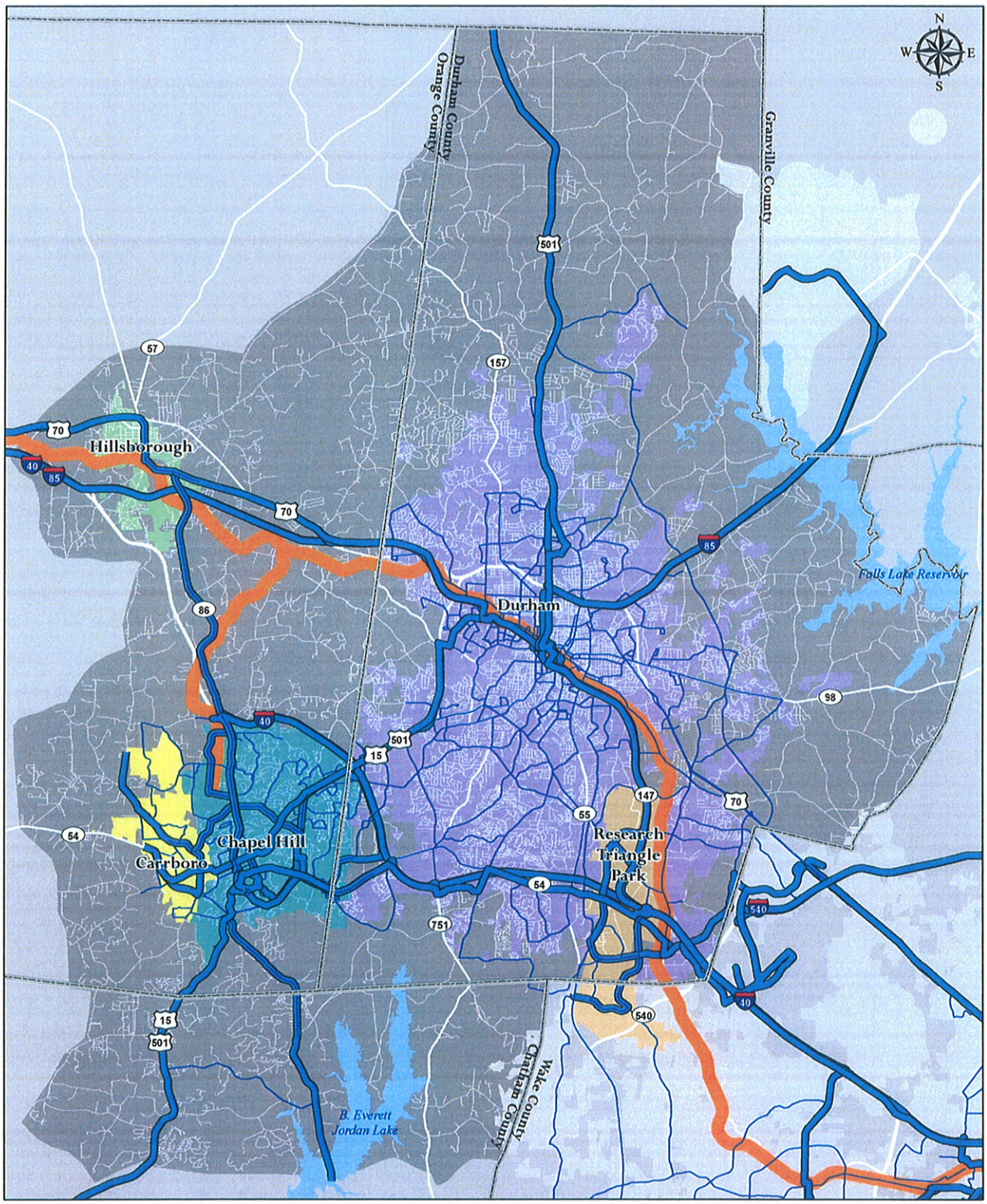
The Louis Berger Group, Inc.
8.6.2008



0 1.25 2.5 5 Miles

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Transit Preferred Option-Commuter Rail




Interstates
US and NC Highways
MPO Boundary
County Boundaries

**Transit in Modified Scenario**
Local Bus
Express Bus
Commuter Rail

Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

Transportation Plan 2035

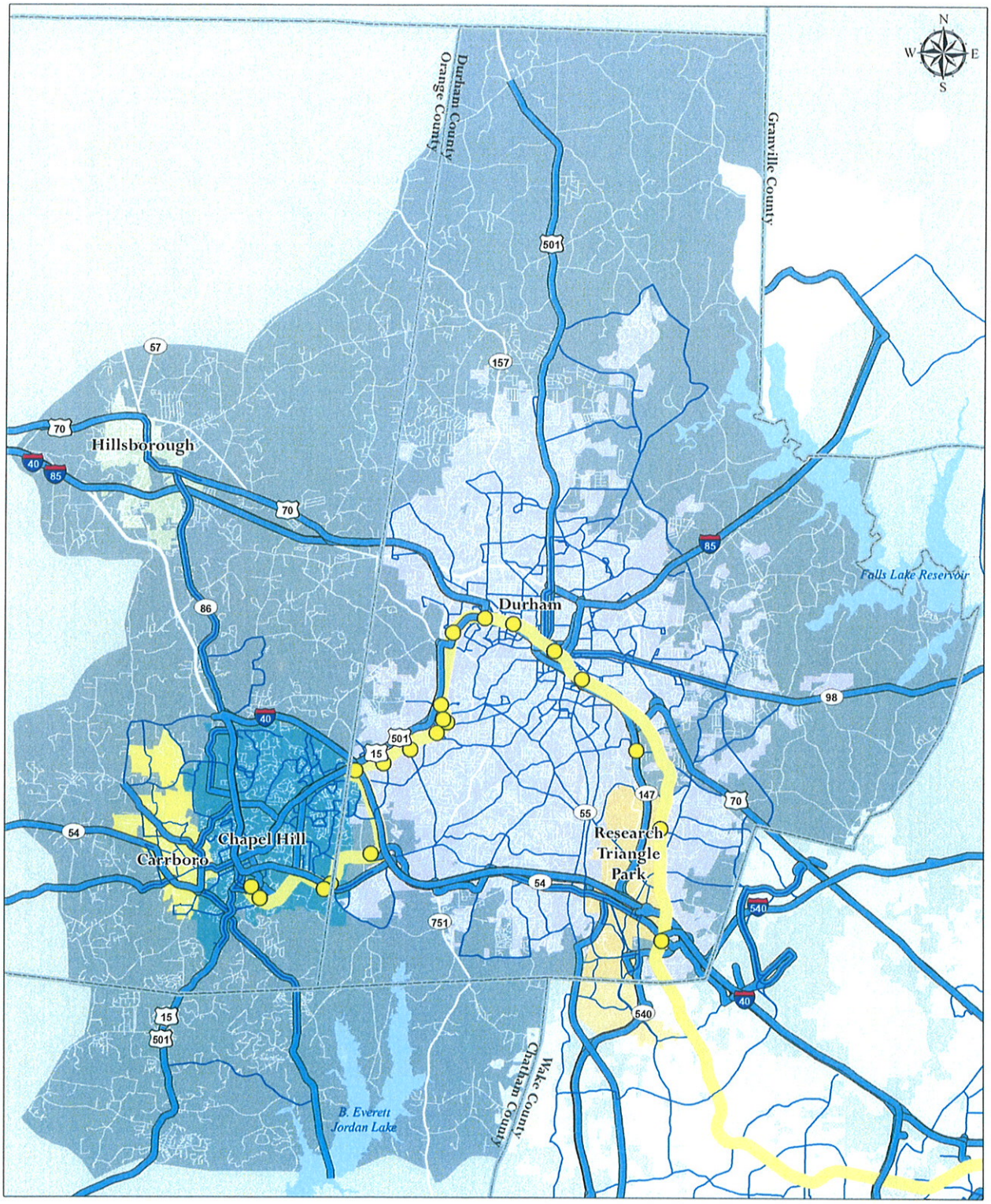
The Louis Berger Group, Inc.
8.6.2008



0 1.25 2.5 5 Miles

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Transit Preferred Option-STAC/DMU




Fixed Guideway Stations
Interstates
US and NC Highways
MPO Boundary
County Boundaries

**Transit in Fixed Guideway Scenario**
Local Bus
Express
Fixed Guideway

Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

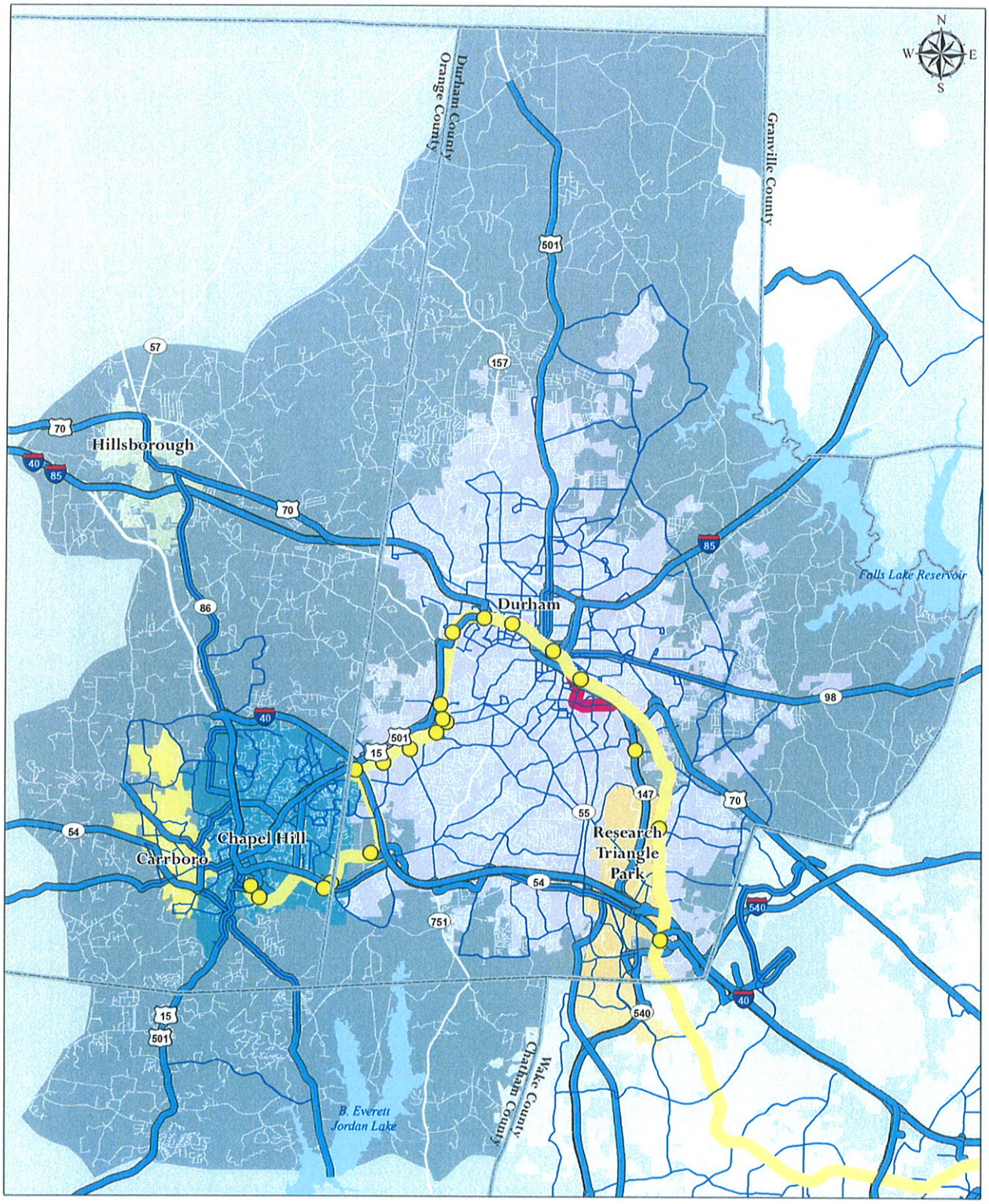
Transportation Plan 2035

The Louis Berger Group, Inc.
8.6.2008

0 1.25 2.5 5

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Transit Preferred Option-STAC Electric




Fixed Guideway Stations
Interstates
US and NC Highways
MPO Boundary
County Boundaries

**Transit in Fixed Guideway Scenario**
Local Bus
Express
Fixed Guideway
Electric Light Rail

Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

Transportation Plan 2035

The Louis Berger Group, Inc.
8.6.2008

0 1.25 2.5 5 Miles

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 3.54.0 | CHT A OB:MLKBlvd-Weiner | CHT | Local Bus | $1,669,560 | $1,144,560 | $1,669,560 | $1,144,560 | $1,669,560 | $1,144,560 | $1,669,560 | $1,144,560 |
| 3.54.0 | CHT A IB:Weiner-MLKBlvd | CHT | Local Bus | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 |
| 3.56.0 | CHT CW OB:JonesFerry-Ptsboro | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.56.0 | CHT CW IB:Ptsboro-JonesFerry | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.57.0 | CHT CM IB:FamPrac-JonesFerry | CHT | Local Bus | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 |
| 3.57.0 | CHT CM OB:JonesFerry-FamPrac | CHT | Local Bus | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 3.64.0 | CHT CL OB: UNCHosp-WldnGrnfld | CHT | Local Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.64.0 | CHT CL IB: WldnGrnfld-UNCHosp | CHT | Local Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.60.0 | CHT CPX OB:CarrboroP&R-UNC | CHT | Express Bus | $667,824 | $7,048,080 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.60.0 | CHT CPX IB:UNC-CarrboroP&R | CHT | Express Bus | $667,824 | $7,048,080 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.62.0 | CHT D OB:SmithLevel-Provdnce | CHT | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 3.62.0 | CHT D IB:Prvdnce-SmithLevel | CHT | Local Bus | $1,669,560 | $963,840 | $1,669,560 | $963,840 | $1,669,560 | $963,840 | $1,669,560 | $963,840 |
| 3.66.0 | CHT FCX OB:FridayCntr-Pttsbor | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.66.0 | CHT FCX IB:Pttsbor-FridayCntr | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.67.0 | CHT F IB:ColonyWds-McDougle | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.67.0 | CHT F OB:McDougle-ColonyWds | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.70.0 | CHT G OB:BookerCrk-Briarcliff | CHT | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| 3.70.0 | CHT G IB:Briarcliff-BookerCrk | CHT | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| 3.72.0 | CHT HS OB:Hghsch-VarsityTh | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.72.0 | CHT HS IB:VarsityTh-Hghsch | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.74.0 | CHT HUX OB:HedrckBldg-UNCHosp | CHT | Express Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.74.0 | CHT HUX IB:UNCHosp-HedrckBldg | CHT | Express Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.76.0 | CHT J OB:RockCrkApt-SGrnsboro | CHT | Local Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.76.0 | CHT J IB:SGrnsboro-RockCrkApt | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.78.0 | CHT JFX OB:JonesFerry-Ptsboro | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.78.0 | CHT JFX IB:Ptsboro-JonesFerry | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.92.0 | CHT M OB:CrestCole-UnivMall | CHT | Local Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.92.0 | CHT M IB:UnivMall-CrestCole | CHT | Local Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.91.0 | CHT N OB:FamPract-EstsPrkApt | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.91.0 | CHT N IB:EstsParkApt-FamPract | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.79.0 | CHT NS OB:Eubanks-SVillage | CHT | Local Bus | $1,001,736 | $421,680 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.79.0 | CHT NS IB:SVillage-Eubanks | CHT | Local Bus | $1,001,736 | $421,680 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.81.0 | CHT NUX OB: PRLot-UNCHosp | CHT | Express Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 3.81.0 | CHT NUX IB:UNCHosp-PR Lot | CHT | Express Bus | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 3.96.0 | CHT S OB:HedrickBldg-UNCHosp | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.96.0 | CHT S IB:UNCHosp-HedrickBldg | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.83.0 | CHT T OB:ECHHghSch-UNCHosp | CHT | Local Bus | $667,824 | $7,319,160 | $667,824 | $7,319,160 | $667,824 | $7,319,160 | $667,824 | $7,319,160 |
| 3.83.0 | CHT T IB:UNCHosp-ECHHghSch | CHT | Local Bus | $667,824 | $7,319,160 | $667,824 | $7,319,160 | $667,824 | $7,319,160 | $667,824 | $7,319,160 |
| 3.85.0 | CHT U LP:clockwise loop | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.87.0 | CHT RU LP:counter clock loop | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.89.0 | CHT V OB:SVillage-Meadowmont | CHT | Local Bus | $0 | $100,400 | $0 | $100,400 | $0 | $100,400 | $0 | $100,400 |
| 3.89.0 | CHT V IB:Meadowmont-SVillage | CHT | Local Bus | $0 | $100,400 | $0 | $100,400 | $0 | $100,400 | $0 | $100,400 |
| 3.46.0 | CHT Base 1 Carr N IB | CHT | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 3.46.0 | CHT Base 1 Carr N OB | CHT | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 3.17.0 | CHT Base 11 S Orange IB | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.17.0 | CHT Base 11 S Orange OB | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.44.0 | CHT Base 13 Hills. Exp IB | CHT | Express Bus | $1,669,560 | $1,144,560 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.44.0 | CHT Base 13 Hills. Exp OB | CHT | Express Bus | $1,669,560 | $1,144,560 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.42.0 | CHT Base 2 New Hope Commons IB | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.42.0 | CHT Base 2 New Hope Commons OB | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.50.0 | CHT Base 3 Estes-Carrboro IB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.50.0 | CHT Base 3 Estes-Carrboro OB | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.48.0 | CHT Base 4 Laurel Hills IB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.48.0 | CHT Base 4 Laurel Hills OB | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.40.0 | CHT Base 8 UNC Exp IB | CHT | Express Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.40.0 | CHT Base 8 UNC Exp OB | CHT | Express Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.38.0 | CHT Base 9 Mason Farm Exp IB | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.38.0 | CHT Base 9 Mason Farm Exp OB | CHT | Express Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.15.0 | CHT CARR 2 Feeder | CHT | Local Bus | $667,824 | $10,120,320 | $667,824 | $10,120,320 | $667,824 | $10,120,320 | $667,824 | $10,120,320 |
| 3.14.0 | CHT CH MODY | CHT | Local Bus | $667,824 | $7,048,080 | $667,824 | $7,048,080 | $667,824 | $7,048,080 | $667,824 | $7,048,080 |
| 3.36.0 | CHT Carr 1A Feeder | CHT | Local Bus | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 3.35.0 | CHT Carr 1B Feeder | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.34.0 | CHT EW Crosstown | CHT | Express Bus | $667,824 | $502,000 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.9.0 | CHT Eubanks Station 1A Feeder | CHT | Local Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.8.0 | CHT Eubanks Station 1B Feeder | CHT | Local Bus | $0 | $0 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.2-2.0 | CHT Gateway Feeder 2 | CHT | Local Bus | $0 | $0 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.3-3.0 | CHT Gateway Feeder 3 | CHT | Local Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.7-1.0 | CHT HW 1A Feeder | CHT | Local Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.6-1.0 | CHT HW 1B Feeder | CHT | Local Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.5-5.0 | CHT HW 2A Feeder | CHT | Local Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.4-4.0 | CHT HW 2B Feeder | CHT | Local Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.32.0 | CHT HW 3 Feeder | CHT | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.23.0 | CHT MOD 1 IB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.23.0 | CHT MOD 1 OB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.11.0 | CHT MOD 10 XPS IB | CHT | Express Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.11.0 | CHT MOD 10 XPS OB | CHT | Express Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.52.0 | CHT MOD 20 Pitt. Exp IB | CHT | Express Bus | $2,003,472 | $843,360 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.52.0 | CHT MOD 20 Pitt. Exp OB | CHT | Express Bus | $1,335,648 | $562,240 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.31.0 | CHT MOD 21 IB | CHT | Local Bus | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.31.0 | CHT MOD 21 OB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.29.0 | CHT MOD 22 Exp IB | CHT | Express Bus | $667,824 | $411,640 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.29.0 | CHT MOD 22 Exp OB | CHT | Express Bus | $667,824 | $411,640 | $0 | $0 | $0 | $0 | $0 | $0 |
| 3.19.0 | CHT MOD 8 IB-1 | CHT | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 3.19.0 | CHT MOD 8 OB-1 | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.21.0 | CHT MOD 8 IB-2 | CHT | Express Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.21.0 | CHT MOD 8 OB-2 | CHT | Express Bus | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 3.27.0 | CHT MODV IB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.27.0 | CHT MODV OB | CHT | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.25.0 | CHT Meadowmont Feeder 2 | CHT | Local Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.24.0 | CHT Meadowmont Feeder 3 | CHT | Local Bus | $0 | $0 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 3.13.0 | CHT Meadowmont Feeder IB | CHT | Local Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.13.0 | CHT Meadowmont Feeder OB | CHT | Local Bus | $0 | $0 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.1-1.0 | CHT Gateway Feeder 1 | CHT | Local Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.97-1.0 | CHT BRT-1 I40-Rsmry-UNC IB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $863,440 | $1,605,333 | $863,440 | $1,605,333 | $863,440 |
| 3.97-1.0 | CHT BRT-1 I40-Rsmry-UNC OB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $863,440 | $1,605,333 | $863,440 | $1,605,333 | $863,440 |
| 3.99-1.0 | CHT BRT-3A I40-US15-UNC IB | CHT | BRT Guideway | $0 | $0 | $1,070,222 | $502,000 | $1,070,222 | $502,000 | $1,070,222 | $502,000 |
| 3.99-1.0 | CHT BRT-3A I40-US15-UNC OB | CHT | BRT Guideway | $0 | $0 | $1,070,222 | $502,000 | $1,070,222 | $502,000 | $1,070,222 | $502,000 |
| 3.101-1 | CHT BRT-3B I40-Elzbth-UNC IB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $863,440 | $1,605,333 | $863,440 | $1,605,333 | $863,440 |
| 3.101-1 | CHT BRT-3B I40-Elzbth-UNC OB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $863,440 | $1,605,333 | $863,440 | $1,605,333 | $863,440 |
| 3.103-1 | CHT BRT-3C I40-Carolina N IB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $642,560 | $1,605,333 | $642,560 | $1,605,333 | $642,560 |
| 3.103-1 | CHT BRT-3C I40-Carolina N OB | CHT | BRT Guideway | $0 | $0 | $1,605,333 | $642,560 | $1,605,333 | $642,560 | $1,605,333 | $642,560 |
| 3.105-1 | CHT BRT-5 I40 to UNC IB | CHT | BRT Guideway | $0 | $0 | $1,070,222 | $502,000 | $1,070,222 | $502,000 | $1,070,222 | $502,000 |
| 3.105-1 | CHT BRT-5 I40 to UNC OB | CHT | BRT Guideway | $0 | $0 | $1,070,222 | $502,000 | $1,070,222 | $502,000 | $1,070,222 | $502,000 |
| 3.107-1 | CHT BRT-6 to Carolina N IB | CHT | Express Bus | $0 | $0 | $1,001,736 | $642,560 | $1,001,736 | $642,560 | $1,001,736 | $642,560 |
| 3.107-1 | CHT BRT-6 from Carolina N OB | CHT | Express Bus | $0 | $0 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| 3.109-1 | CHT BRT-7a to Carolina N IB | CHT | Express Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.109-1 | CHT BRT-7a from Carolina N OB | CHT | Express Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.110-1 | CHT BRT-7 to UNC IB | CHT | Express Bus | $0 | $0 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 3.110-1 | CHT BRT-7 from UNC OB | CHT | Express Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.113-1 | CHT BRT-8 to UNC IB | CHT | Express Bus | $0 | $0 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 3.113-1 | CHT BRT-8 from UNC OB | CHT | Express Bus | $0 | $0 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 3.115-1 | CHT BRT-8a to Carolina N IB | CHT | Express Bus | $0 | $0 | $333,912 | $361,440 | $333,912 | $361,440 | $333,912 | $361,440 |
| 3.115-1 | CHT BRT-8a from Carolina N OB | CHT | Express Bus | $0 | $0 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.64.0 | DATA 1-3:Hillndal-Guess-Mdlnd | DATA | Local Bus | $1,669,560 | $8,433,600 | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $7,730,800 |
| 4.64.0 | DATA 3-1:Mdlnd-Guess-Hillndal | DATA | Local Bus | $2,003,472 | $10,120,320 | $2,003,472 | $14,337,120 | $2,003,472 | $843,360 | $2,003,472 | $9,276,960 |
| 4.90.0 | DATA 1-3:Hillndal-Point-Mdlnd | DATA | Local Bus | $1,669,560 | $8,433,600 | $1,669,560 | $18,604,120 | $1,669,560 | $1,094,360 | $1,669,560 | $12,037,960 |
| 4.90.0 | DATA 3-1:Mdlnd-Point-Hillndal | DATA | Local Bus | $2,003,472 | $9,276,960 | $2,003,472 | $20,993,640 | $2,003,472 | $1,234,920 | $2,003,472 | $13,584,120 |
| 4.73.0 | DATA 4-2:Horton-Angier | DATA | Local Bus | $667,824 | $3,092,320 | $333,912 | $4,608,360 | $1,335,648 | $823,280 | $333,912 | $2,981,880 |
| 4.73.0 | DATA 2-4:Angier-Horton | DATA | Local Bus | $667,824 | $3,092,320 | $333,912 | $4,608,360 | $1,335,648 | $823,280 | $333,912 | $2,981,880 |
| 4.92.0 | DATA 6-5:Cnstitutn-Crnw-Emrld | DATA | Local Bus | $1,001,736 | $4,638,480 | $667,824 | $6,997,880 | $1,669,560 | $963,840 | $667,824 | $11,114,280 |
| 4.92.0 | DATA 5-6:Emrld-Crnw-Cnstitutn | DATA | Local Bus | $1,001,736 | $4,638,480 | $667,824 | $9,216,720 | $1,669,560 | $1,094,360 | $667,824 | $14,638,320 |
| 4.80.0 | DATA 5-6:Emerald-HV-Cameron | DATA | Local Bus | $1,001,736 | $5,060,160 | $667,824 | $3,092,320 | $1,669,560 | $702,800 | $667,824 | $281,120 |
| 4.80.0 | DATA 6-5:Cameron-HV-Emerald | DATA | Local Bus | $1,001,736 | $5,060,160 | $667,824 | $3,092,320 | $1,669,560 | $702,800 | $667,824 | $281,120 |
| 4.84.0 | DATA 7 OB:Downtown-Southpoint | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $9,276,960 | $2,003,472 | $20,993,640 | $2,003,472 | $1,234,920 |
| 4.84.0 | DATA 7 IB:Southpoint-Downtown | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $9,276,960 | $2,003,472 | $20,993,640 | $2,003,472 | $1,234,920 |
| 4.91.0 | DATA 8-10:DrhmTech-NewHopeCmn | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $9,276,960 | $2,003,472 | $1,234,920 | $2,003,472 | $1,234,920 |
| 4.91.0 | DATA 10-8:NewHopeCmn-DrhmTech | DATA | Local Bus | $1,669,560 | $13,132,320 | $2,337,384 | $10,823,120 | $2,337,384 | $1,506,000 | $2,337,384 | $1,506,000 |
| 4.78.0 | DATA 8-10:DrhmTech-Woodcroft | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $9,276,960 | $2,003,472 | $1,234,920 | $2,003,472 | $1,234,920 |
| 4.78.0 | DATA 10-8:Woodcroft-DrhmTech | DATA | Local Bus | $1,669,560 | $13,132,320 | $2,337,384 | $10,823,120 | $2,337,384 | $1,506,000 | $2,337,384 | $1,506,000 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 4.76.0 | DATA 9-11:DRHosp-Bennett | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $14,337,120 | $2,003,472 | $1,234,920 | $2,003,472 | $1,234,920 |
| 4.76.0 | DATA 11-9:Bennett-DRHosp | DATA | Local Bus | $1,335,648 | $9,879,360 | $2,003,472 | $14,337,120 | $2,003,472 | $1,234,920 | $2,003,472 | $1,234,920 |
| 4.83.0 | DATA 12 OB:Downtown-TTATerm | DATA | Local Bus | $1,001,736 | $10,361,280 | $1,335,648 | $9,558,080 | $1,335,648 | $11,044,000 | $1,335,648 | $1,004,000 |
| 4.83.0 | DATA 12 IB:TTATerm-Downtown | DATA | Local Bus | $1,001,736 | $10,361,280 | $1,335,648 | $9,558,080 | $1,335,648 | $11,044,000 | $1,335,648 | $1,004,000 |
| 4.65.0 | DATA 13 OB:Birchwood-Fayette | DATA | Local Bus | $1,001,736 | $5,060,160 | $1,001,736 | $7,168,560 | $1,001,736 | $4,638,480 | $1,001,736 | $421,680 |
| 4.65.0 | DATA 13 IB:Fayette-Birchwood | DATA | Local Bus | $667,824 | $3,373,440 | $667,824 | $4,779,040 | $667,824 | $3,092,320 | $667,824 | $281,120 |
| 4.69.0 | DATA 14 LP:NCCUShuttle | DATA | Local Bus | $333,912 | $1,686,720 | $333,912 | $2,389,520 | $333,912 | $1,546,160 | $333,912 | $140,560 |
| 4.75.0 | DATA 15 OB:Dtn-BrierCreek | DATA | Local Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.75.0 | DATA 15 IB:BrierCreek-Dtn | DATA | Local Bus | $333,912 | $361,440 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.86.0 | DATA 16 IB:MineralSprng-Dtn | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $15,702,560 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.86.0 | DATA 16 OB:Dtn-MineralSprng | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $15,702,560 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.70.0 | DATA 17 IB:Treyburn-Horton | DATA | Local Bus | $1,335,648 | $7,590,240 | $667,824 | $3,795,120 | $667,824 | $843,360 | $667,824 | $3,795,120 |
| 4.70.0 | DATA 17 OB:Horton-Treyburn | DATA | Local Bus | $2,003,472 | $11,385,360 | $667,824 | $3,795,120 | $1,335,648 | $1,686,720 | $667,824 | $3,795,120 |
| 4.59.0 | DATA 12X DTT-EPA OB | DATA | Express Bus | $1,335,648 | $1,004,000 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.59.0 | DATA 12X DTT-EPA IB | DATA | Express Bus | $1,669,560 | $1,144,560 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.25.0 | DATA 15 Willowdale OB | DATA | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $17,288,880 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.25.0 | DATA 15 Willowdale IB | DATA | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $17,288,880 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.12.0 | DATA 17 Feeder Eno Loop | DATA | Local Bus | $0 | $0 | $667,824 | $8,534,000 | $333,912 | $361,440 | $333,912 | $361,440 |
| 4.14.0 | DATA 17 Feeder IB | DATA | Local Bus | $0 | $0 | $667,824 | $6,997,880 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.14.0 | DATA 17 Feeder OB | DATA | Local Bus | $0 | $0 | $667,824 | $6,997,880 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.37.0 | DATA 17 Horton-Davinci NWB | DATA | Local Bus | $1,001,736 | $2,530,080 | $333,912 | $3,654,560 | $333,912 | $7,048,080 | $333,912 | $7,048,080 |
| 4.37.0 | DATA 17 Horton-Davinci SEB | DATA | Local Bus | $1,001,736 | $2,530,080 | $333,912 | $3,654,560 | $333,912 | $7,048,080 | $333,912 | $7,048,080 |
| 4.30.0 | DATA 17 Roxboro-Davinci NB | DATA | Local Bus | $667,824 | $502,000 | $667,824 | $281,120 | $667,824 | $502,000 | $667,824 | $502,000 |
| 4.30.0 | DATA 17 Roxboro-Davinci SB | DATA | Local Bus | $667,824 | $502,000 | $667,824 | $281,120 | $667,824 | $502,000 | $667,824 | $502,000 |
| 4.58.0 | DATA 18 Feeder IB | DATA | Local Bus | $0 | $0 | $667,824 | $4,528,040 | $667,824 | $4,528,040 | $667,824 | $411,640 |
| 4.58.0 | DATA 18 Feeder OB | DATA | Local Bus | $0 | $0 | $667,824 | $4,528,040 | $667,824 | $4,528,040 | $667,824 | $411,640 |
| 4.56.0 | DATA 19 Feeder IB | DATA | Local Bus | $0 | $0 | $1,335,648 | $9,056,080 | $1,335,648 | $9,056,080 | $333,912 | $271,080 |
| 4.56.0 | DATA 19 Feeder OB | DATA | Local Bus | $0 | $0 | $1,335,648 | $9,056,080 | $1,335,648 | $9,056,080 | $333,912 | $271,080 |
| 4.24.0 | DATA 20 Ngate-RTP OB | DATA | Local Bus | $2,003,472 | $7,409,520 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.24.0 | DATA 20 Ngate-RTP IB | DATA | Local Bus | $2,337,384 | $8,252,880 | $1,669,560 | $963,840 | $1,669,560 | $963,840 | $1,669,560 | $963,840 |
| 4.27.0 | DATA 20 UniDr-RTP OB | DATA | Local Bus | $2,003,472 | $1,234,920 | $333,912 | $271,080 | $1,335,648 | $823,280 | $333,912 | $271,080 |
| 4.27.0 | DATA 20 UniDr-RTP IB | DATA | Local Bus | $2,003,472 | $1,234,920 | $333,912 | $271,080 | $1,335,648 | $823,280 | $333,912 | $271,080 |
| 4.40.0 | DATA 21 Ngate-Spoint IB | DATA | Local Bus | $1,335,648 | $562,240 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 4.40.0 | DATA 21 Ngate-Spoint OB | DATA | Local Bus | $1,335,648 | $562,240 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 4.22.0 | DATA 25 DurReg-DukeMed OB | DATA | Local Bus | $667,824 | $281,120 | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 |
| 4.22.0 | DATA 25 DurReg-DukeMed IB | DATA | Local Bus | $667,824 | $281,120 | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 |
| 4.19.0 | DATA 27 Ngate-RTP W OB | DATA | Local Bus | $2,337,384 | $983,920 | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 |
| 4.19.0 | DATA 27 Ngate-RTP W IB | DATA | Local Bus | $2,337,384 | $983,920 | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 |
| 4.17.0 | DATA 28 RTP E OB | DATA | Local Bus | $1,669,560 | $963,840 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.17.0 | DATA 28 RTP E IB | DATA | Local Bus | $1,669,560 | $963,840 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.15.0 | DATA 30 Duke Hospital OB | DATA | Local Bus | $1,001,736 | $4,638,480 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 4.15.0 | DATA 30 Duke Hospital IB | DATA | Local Bus | $1,001,736 | $4,638,480 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 4.61.0 | DATA 7SP Southpoint Mall OB | DATA | Local Bus | $2,003,472 | $9,276,960 | $2,003,472 | $1,506,000 | $2,003,472 | $1,506,000 | $2,003,472 | $1,506,000 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 4.61.0 | DATA 7SP Southpoint Mall IB | DATA | Local Bus | $2,671,296 | $12,369,280 | $2,671,296 | $2,008,000 | $2,671,296 | $2,008,000 | $2,671,296 | $2,008,000 |
| 4.35.0 | DATA Bethesda NB | DATA | Local Bus | $667,824 | $3,092,320 | $333,912 | $3,514,000 | $667,824 | $7,028,000 | $333,912 | $3,514,000 |
| 4.35.0 | DATA Bethesda SB | DATA | Local Bus | $667,824 | $3,092,320 | $333,912 | $3,514,000 | $667,824 | $7,028,000 | $333,912 | $3,514,000 |
| 4.47.0 | DATA Dtech-Snow IB | DATA | Local Bus | $1,669,560 | $963,840 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 4.47.0 | DATA Dtech-Snow OB | DATA | Local Bus | $1,669,560 | $1,094,360 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.51.0 | DATA Dtown Terminal Feeder IB | DATA | Local Bus | $667,824 | $411,640 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $5,692,680 |
| 4.51.0 | DATA Dtown Terminal Feeder OB | DATA | Local Bus | $667,824 | $411,640 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $5,692,680 |
| 4.49.0 | DATA Dtown Terminal Shuttle IB | DATA | Local Bus | $1,335,648 | $5,622,400 | $667,824 | $3,514,000 | $1,335,648 | $7,028,000 | $1,335,648 | $7,028,000 |
| 4.49.0 | DATA Dtown Terminal Shuttle OB | DATA | Local Bus | $1,335,648 | $5,622,400 | $667,824 | $3,514,000 | $1,335,648 | $7,028,000 | $1,335,648 | $7,028,000 |
| 4.31.0 | DATA Durham XT NWB | DATA | Local Bus | $1,001,736 | $421,680 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.31.0 | DATA Durham XT SEB | DATA | Local Bus | $1,335,648 | $562,240 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.53.0 | DATA EPA IB | DATA | Express Bus | $1,001,736 | $421,680 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.53.0 | DATA EPA OB | DATA | Express Bus | $1,001,736 | $421,680 | $0 | $0 | $0 | $0 | $0 | $0 |
| 4.42.0 | DATA Holoway/The Village IB | DATA | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.42.0 | DATA Holoway/The Village OB | DATA | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.6.0 | DATA Joyner-Club-Duke IB | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.6.0 | DATA Joyner-Club-Duke OB | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.93.0 | DATA L1 NDP: Carver to RDU NB | DATA | Local Bus | $2,003,472 | $843,360 | $2,003,472 | $843,360 | $2,003,472 | $843,360 | $2,003,472 | $843,360 |
| 4.93.0 | DATA L1 NDP: Carver to RDU SB | DATA | Local Bus | $2,003,472 | $843,360 | $2,003,472 | $843,360 | $2,003,472 | $843,360 | $2,003,472 | $843,360 |
| 4.95.0 | DATA L2 Cornwallis-Brier Crk EB | DATA | Local Bus | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 |
| 4.95.0 | DATA L2 Cornwallis-Brier Crk WB | DATA | Local Bus | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 | $1,669,560 | $702,800 |
| 4.97.0 | DATA L3 Cornwallis-Miami EB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.97.0 | DATA L3 Cornwallis-Miami WB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.99.0 | DATA L4 W Cornwallis-SP Mall NB | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.99.0 | DATA L4 W Cornwallis-SP Mall SB | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.101.0 | DATA L5 Mt Moraih-NC 54 EB | DATA | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $4,939,680 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.101.0 | DATA L5 Mt Moraih-NC 54 WB | DATA | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $4,939,680 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.103.0 | DATA L6 Morehead-Cornwallis NB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.103.0 | DATA L6 Morehead-Cornwallis SB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.105.0 | DATA L7 Avondale-Chpl Hill St EB | DATA | Local Bus | $333,912 | $271,080 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.105.0 | DATA L7 Avondale-Chpl Hill St WB | DATA | Local Bus | $333,912 | $271,080 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.107.0 | DATA L8 Hillsbor N-Hillsbor S NB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.107.0 | DATA L8 Hillsbor N-Hillsbor S SB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.109.0 | DATA L9 Rennaisance-Hopson EB | DATA | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $4,939,680 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| 4.109.0 | DATA L9 Rennaisance-Hopson WB | DATA | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $4,096,320 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| 4.4.0 | DATA Meridian Pkwy circulator IB | DATA | Local Bus | $0 | $0 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.4.0 | DATA Meridian Pkwy circulator OB | DATA | Local Bus | $0 | $0 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.46.0 | DATA NC98 - US70 - Miami IB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.46.0 | DATA NC98 - US70 - Miami OB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 4.43.0 | DATA Riddle Station Feeder IB | DATA | Local Bus | $0 | $0 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 4.43.0 | DATA Riddle Station Feeder OB | DATA | Local Bus | $0 | $0 | $667,824 | $1,686,720 | $667,824 | $281,120 | $667,824 | $281,120 |
| 4.8.0 | DATA S Square Feeder IB | DATA | Local Bus | $0 | $0 | $667,824 | $2,469,840 | $667,824 | $6,997,880 | $667,824 | $411,640 |
| 4.8.0 | DATA S Square Feeder OB | DATA | Local Bus | $0 | $0 | $667,824 | $2,469,840 | $667,824 | $6,997,880 | $667,824 | $411,640 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 4.10.0 | DATA S Square Shuttle IB | DATA | Local Bus | $1,335,648 | $562,240 | $1,335,648 | $3,373,440 | $1,335,648 | $9,558,080 | $1,335,648 | $562,240 |
| 4.10.0 | DATA S Square Shuttle OB | DATA | Local Bus | $1,335,648 | $562,240 | $1,335,648 | $3,373,440 | $1,335,648 | $9,558,080 | $1,335,648 | $562,240 |
| 4.33.0 | DATA Treyburn NB | DATA | Local Bus | $1,335,648 | $562,240 | $1,335,648 | $3,373,440 | $1,335,648 | $562,240 | $1,335,648 | $562,240 |
| 4.33.0 | DATA Treyburn SB | DATA | Local Bus | $1,335,648 | $562,240 | $1,335,648 | $3,373,440 | $1,335,648 | $562,240 | $1,335,648 | $562,240 |
| 4.1.0 | DATA Treyburn Station Feeder | DATA | Local Bus | $0 | $0 | $2,003,472 | $7,409,520 | $2,003,472 | $1,234,920 | $2,003,472 | $1,234,920 |
| 4.2.0 | DATA Woodcroft Feeder IB | DATA | Local Bus | $0 | $0 | $667,824 | $2,469,840 | $667,824 | $6,997,880 | $667,824 | $411,640 |
| 4.2.0 | DATA Woodcroft Feeder OB | DATA | Local Bus | $0 | $0 | $667,824 | $2,469,840 | $667,824 | $6,997,880 | $667,824 | $411,640 |
| 1.27.0 | DCHC B10a Durham-Capital Blvd | dchc | Express Bus | $2,450,000 | $1,094,360 | $1,470,000 | $682,720 | $1,470,000 | $682,720 | $1,470,000 | $682,720 |
| 1.27.0 | DCHC B10b Capital Blvd-Durham | dchc | Express Bus | $4,900,000 | $1,797,160 | $2,450,000 | $963,840 | $2,450,000 | $963,840 | $2,450,000 | $963,840 |
| 1.28.1 | DCHC B11a Duke to N Raleigh EB | dchc | Local Bus | $1,335,648 | $823,280 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.28.1 | DCHC B11b N Raleigh to Duke WB | dchc | Local Bus | $1,669,560 | $963,840 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 1.29.0 | DCHC B12a Duke to W Wake fwy OB | dchc | Local Bus | $667,824 | $411,640 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 1.29.0 | DCHC B12b W Wake fwy to Duke IB | dchc | Local Bus | $667,824 | $411,640 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 1.30.0 | DCHC B13a Durham to Apex OB | dchc | Express Bus | $3,430,000 | $1,506,000 | $1,960,000 | $823,280 | $1,960,000 | $823,280 | $1,960,000 | $823,280 |
| 1.30.0 | DCHC B13b Apex to Durham IB | dchc | Express Bus | $3,430,000 | $1,506,000 | $1,960,000 | $823,280 | $1,960,000 | $823,280 | $1,960,000 | $823,280 |
| 1.31.0 | DCHC B14a W Wake pkwy to US70 | dchc | Local Bus | $1,335,648 | $823,280 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.31.0 | DCHC B14b US70 to W Wake pkwy | dchc | Local Bus | $1,335,648 | $823,280 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.32.1 | DCHC B15a Southpoint to RDU | DATA | Local Bus | $1,001,736 | $682,720 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.32.1 | DCHC B15b RDU to Southpoint | DATA | Local Bus | $1,001,736 | $682,720 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.18.1 | DCHC B1a Durham to Roxboro NB | DATA | Express Bus | $1,960,000 | $823,280 | $490,000 | $271,080 | $980,000 | $411,640 | $490,000 | $271,080 |
| 1.18.1 | DCHC B1b Roxboro to Durham SB | DATA | Express Bus | $1,960,000 | $823,280 | $490,000 | $271,080 | $980,000 | $411,640 | $490,000 | $271,080 |
| 1.19.1 | DCHC B2a Durham-Butner OB | DATA | Express Bus | $2,450,000 | $963,840 | $2,450,000 | $963,840 | $2,450,000 | $963,840 | $2,450,000 | $963,840 |
| 1.19.1 | DCHC B2b Butner-Durham IB | DATA | Express Bus | $2,450,000 | $963,840 | $2,450,000 | $963,840 | $2,450,000 | $963,840 | $2,450,000 | $963,840 |
| 1.20.1 | DCHC B3a Duke-Mebane OB | DATA | Express Bus | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 |
| 1.20.1 | DCHC B3b Mebane-Duke IB | DATA | Express Bus | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 | $5,390,000 | $2,329,280 |
| 1.21.1 | DCHC B4a CH to Hillsborough OB | DATA | Express Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.21.1 | DCHC B4b Hillsborough to CH IB | DATA | Express Bus | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 1.22.0 | DCHC B5a RDU to Hillsborough OB | DATA | Express Bus | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 |
| 1.22.0 | DCHC B5b Hillsborough to RDU IB | DATA | Express Bus | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 | $2,940,000 | $1,234,920 |
| 1.23.0 | DCHC B6a CH to Alamance OB | DATA | Express Bus | $1,001,736 | $863,440 | $1,001,736 | $863,440 | $1,001,736 | $863,440 | $1,001,736 | $863,440 |
| 1.23.0 | DCHC B6b Alamance to CH IB | DATA | Express Bus | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 | $1,335,648 | $1,004,000 |
| 1.24.1 | DCHC B7a CH to Alamance OB | DATA | Express Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.24.1 | DCHC B7b Alamance to CH IB | DATA | Express Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.25.0 | DCHC B8a UNC to Pittsboro SB | DATA | Local Bus | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 | $667,824 | $411,640 |
| 1.25.0 | DCHC B8b Pittsboro to UNC NB | DATA | Local Bus | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 | $1,001,736 | $552,200 |
| 1.26.0 | DCHC B9a CH to Old Farrington OB | DATA | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 1.26.0 | DCHC B9b Old Farrington to CH IB | DATA | Local Bus | $1,335,648 | $562,240 | $1,335,648 | $562,240 | $1,335,648 | $562,240 | $1,335,648 | $562,240 |
| 1.9.1 | TT Butner-Durham OB | DATA | Express Bus | $1,960,000 | $5,903,520 | $1,960,000 | $281,120 | $1,960,000 | $281,120 | $1,960,000 | $281,120 |
| | Total | | | $239,659,816 | $441,679,680 | $230,906,222 | $578,304,000 | $241,569,670 | $366,269,240 | $229,236,662 | $301,511,240 |
| 6.33.0 | DUKE C1 OB:ECampus-WCampus | Duke | Local Bus | $667,824 | $2,951,760 | $667,824 | $2,951,760 | $667,824 | $2,951,760 | $667,824 | $2,951,760 |
| 6.33.0 | DUKE C1 IB:WCampus-ECampus | Duke | Local Bus | $667,824 | $2,951,760 | $667,824 | $2,951,760 | $667,824 | $2,951,760 | $667,824 | $2,951,760 |
| 6.18.0 | DUKE C2 OB:WCampus-ECampus | Duke | Local Bus | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 |
| 6.18.0 | DUKE C2 IB:ECampus-WCampus | Duke | Local Bus | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 | $1,335,648 | $5,903,520 |

# Transit Preferred Options - Projects and Costs

| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| 6.20.0 | DUKE C3 OB:SciDr-EastCampus | Duke | Local Bus | $667,824 | $3,373,440 | $667,824 | $3,373,440 | $667,824 | $3,373,440 | $667,824 | $3,373,440 |
| 6.20.0 | DUKE C3 IB:EastCampus-SciDr | Duke | Local Bus | $667,824 | $3,373,440 | $667,824 | $3,373,440 | $667,824 | $3,373,440 | $667,824 | $3,373,440 |
| 6.21.0 | DUKE H1 OB:PG3-Entry11 | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $1,686,720 | $333,912 | $1,686,720 | $333,912 | $1,686,720 |
| 6.21.0 | DUKE H1 IB:Entry11-PG3 | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $1,686,720 | $333,912 | $1,686,720 | $333,912 | $1,686,720 |
| 6.23.0 | DUKE H2 OB:PG3-HospNorth | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.23.0 | DUKE H2 IB:HospNorth-PG3 | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.25.0 | DUKE H3 OB:HospN-HillsbghRd | Duke | Local Bus | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 |
| 6.25.0 | DUKE H3 IB:HillsbghRd-HospN | Duke | Local Bus | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 |
| 6.34.0 | DUKE H5 OB:MillBldg-HockPlaza | Duke | Local Bus | $667,824 | $4,528,040 | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 |
| 6.34.0 | DUKE H5 IB:HockPlaza-MillBldg | Duke | Local Bus | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 | $333,912 | $2,981,880 |
| 6.36.0 | DUKE H6 OB: LaSalleLot-Ent11 | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.36.0 | DUKE H6 IB:Ent11-LaSalleLot | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.27.0 | DUKE PR1 OB:BassettDr-Ent11 | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.27.0 | DUKE PR1 IB:Entry11-BassettDr | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 | $333,912 | $3,252,960 |
| 6.28.0 | DUKE C6 OB:Chapel-Ecampus | Duke | Local Bus | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 6.28.0 | DUKE C6 IB:Ecampus-Chapel | Duke | Local Bus | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 6.13.0 | Duke E/Cent./W EB | Duke | Local Bus | $667,824 | $3,373,440 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 6.13.0 | Duke E/Cent./W WB | Duke | Local Bus | $667,824 | $3,373,440 | $667,824 | $281,120 | $667,824 | $281,120 | $667,824 | $281,120 |
| 6.15.0 | Duke E/W EB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.15.0 | Duke E/W WB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $271,080 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.1.0 | Duke Med 1 EB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.1.0 | Duke Med 1 WB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.9.0 | Duke Med 3 NB | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $843,360 | $333,912 | $140,560 | $333,912 | $140,560 |
| 6.9.0 | Duke Med 3 SB | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $843,360 | $333,912 | $140,560 | $333,912 | $140,560 |
| 6.5.0 | Duke Med 4 EB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.5.0 | Duke Med 4 WB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.12.0 | Duke Science Loop CCW | Duke | Local Bus | $667,824 | $4,939,680 | $667,824 | $2,469,840 | $667,824 | $411,640 | $667,824 | $411,640 |
| 6.11.0 | Duke Science Loop CW | Duke | Local Bus | $1,001,736 | $5,060,160 | $1,001,736 | $2,530,080 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| 6.7.0 | Duke Student Park EB | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $843,360 | $333,912 | $140,560 | $333,912 | $140,560 |
| 6.7.0 | Duke Student Park WB | Duke | Local Bus | $333,912 | $1,686,720 | $333,912 | $843,360 | $333,912 | $140,560 | $333,912 | $140,560 |
| 6.3.0 | Duke Villa NB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 6.3.0 | Duke Villa SB | Duke | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.1.1 | NCCU Circulator | NCCU | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.2.1 | NCCU Shuttle NB | NCCU | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| 4.2.1 | NCCU Shuttle SB | NCCU | Local Bus | $333,912 | $3,252,960 | $333,912 | $1,626,480 | $333,912 | $271,080 | $333,912 | $271,080 |
| | Total Duke-NCCU | | | $25,377,312 | $124,767,080 | $25,711,224 | $90,530,680 | $25,711,224 | $69,296,080 | $25,711,224 | $69,296,080 |
| 1.1.1 | OPT Hillsborough-Chapel Hill NB | OPT | Local Bus | $2,671,296 | $16,465,600 | $2,671,296 | $16,465,600 | $0 | $0 | $2,671,296 | $16,465,600 |
| 1.1.1 | OPT Hillsborough-Chapel Hill SB | OPT | Local Bus | $2,671,296 | $16,465,600 | $2,671,296 | $16,465,600 | $0 | $0 | $2,671,296 | $16,465,600 |
| X.24.0 | **ChapelHill Circulator EB** | TBD | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| X.24.0 | **ChapelHill Circulator WB** | TBD | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| X.24.0 | **ChapelHillCirculator NB** | TBD | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| X.24.0 | **ChapelHillCirculator SB** | TBD | Local Bus | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 | $1,335,648 | $10,702,640 |
| X.25.0 | **Durham Circulator NB** | TBD | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |

# Transit Preferred Options - Projects and Costs

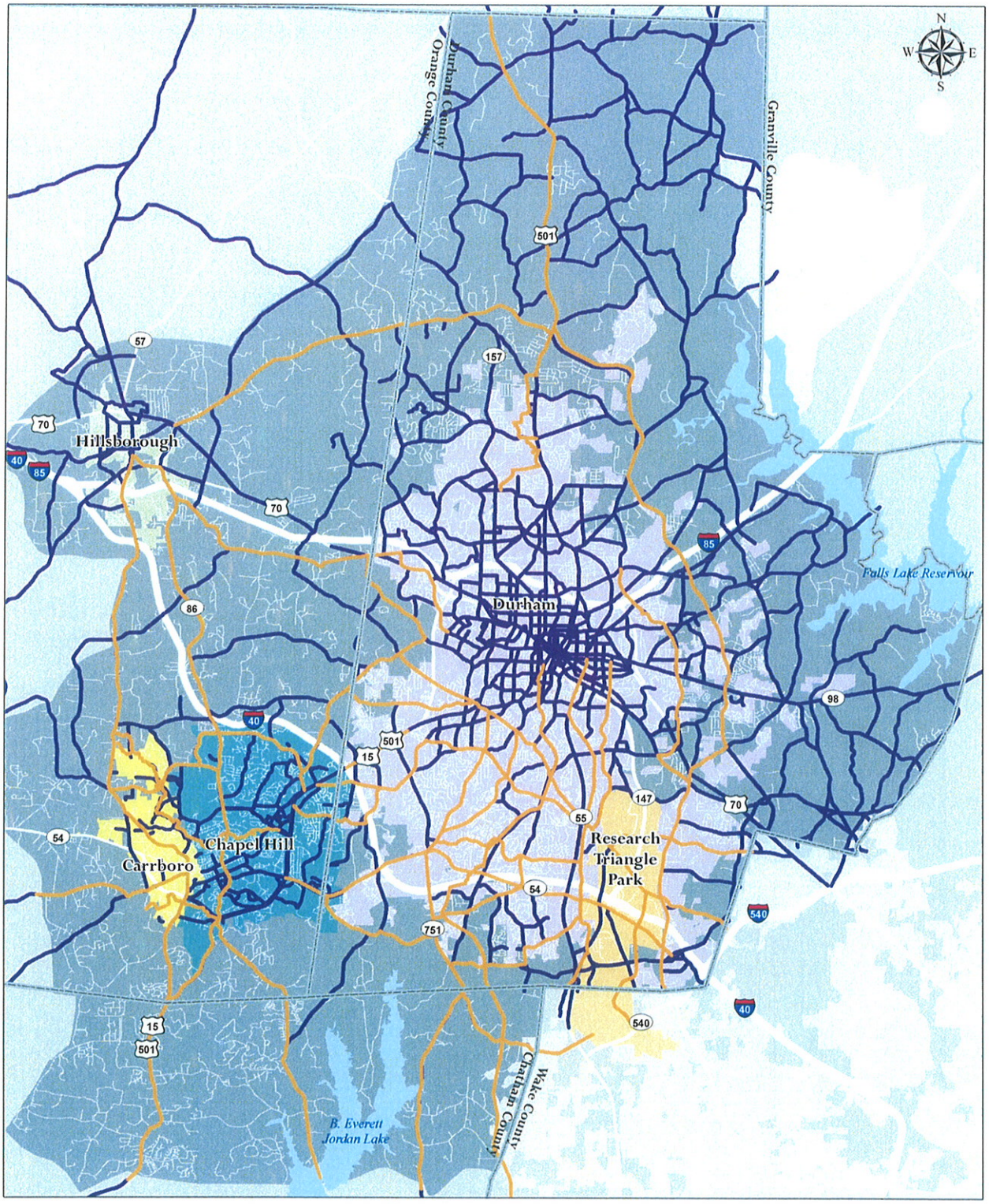
| egional | Route Name | company | Local Bus Circulator Express Bus Guideway | R0 -bus focus | R0 -bus focus | R2 - STAC-DMU | R2 - STAC-DMU | R3- Light Rail | R3- Light Rail | R1 - Commuter | R1 - Commuter |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reg_ID | Route_Name | company | SrvcType | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost | Bus Capital Cost | Bus Total Operating Cost |
| X.25.0 | Durham Circulator SB | TBD | Local Bus | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 | $1,001,736 | $421,680 |
| X.26.0 | RTP Circulator CCW | TBD | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| X.26.0 | RTP Circulator CW | TBD | Local Bus | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 | $1,001,736 | $682,720 |
| X.28.0 | TMC-RDU EB | TBD | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| X.28.0 | TMC-RDU WB | TBD | Local Bus | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 | $667,824 | $502,000 |
| X.4.0 | UNC-CarolinaNorth NB | TBD | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| X.4.0 | UNC-CarolinaNorth SB | TBD | Local Bus | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 | $1,335,648 | $823,280 |
| X.9.0 | Durham-NorthDurham NB | TBDe | Express Bus | $2,450,000 | $702,800 | $2,450,000 | $702,800 | $2,450,000 | $702,800 | $2,450,000 | $702,800 |
| X.9.0 | Durham-NorthDurham SB | TBDe | Express Bus | $2,450,000 | $702,800 | $2,450,000 | $702,800 | $2,450,000 | $702,800 | $2,450,000 | $702,800 |
| X.18.0 | Pittsboro-ChapelHill NB | TBDe | Express Bus | $3,430,000 | $1,375,480 | $3,430,000 | $1,375,480 | $3,430,000 | $1,375,480 | $3,430,000 | $1,375,480 |
| X.18.0 | Pittsboro-ChapelHill SB | TBDe | Express Bus | $2,450,000 | $1,094,360 | $2,450,000 | $1,094,360 | $2,450,000 | $1,094,360 | $2,450,000 | $1,094,360 |
| X.19.0 | TMC-ChapelHill(BRT) EB | TBDe | Express Bus | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 |
| X.19.0 | TMC-ChapelHill(BRT) WB | TBDe | Express Bus | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 | $333,912 | $140,560 |
| | | | | $54,864,256 | $133,230,800 | $54,864,256 | $133,230,800 | $49,521,664 | $100,299,600 | $54,864,256 | $133,230,800 |
| | | | | | | | | | | | |
| | Total DCHC (minus duke/nccu) | | | $294,524,072 | $574,910,480 | $285,770,478 | $711,534,800 | $291,091,334 | $466,568,840 | $284,100,918 | $434,742,040 |

# Transit Preferred Option (Rail-fixed guideway) – Projects and Maps

# Bicycle Preferred Option – Projects and Maps

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## On-Road Bicycle Facilities




Interstates
US and NC Highways
MPO Boundary
County Boundaries
Regional Bicycle Facilities
On-Road Bicycle Facilities
Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

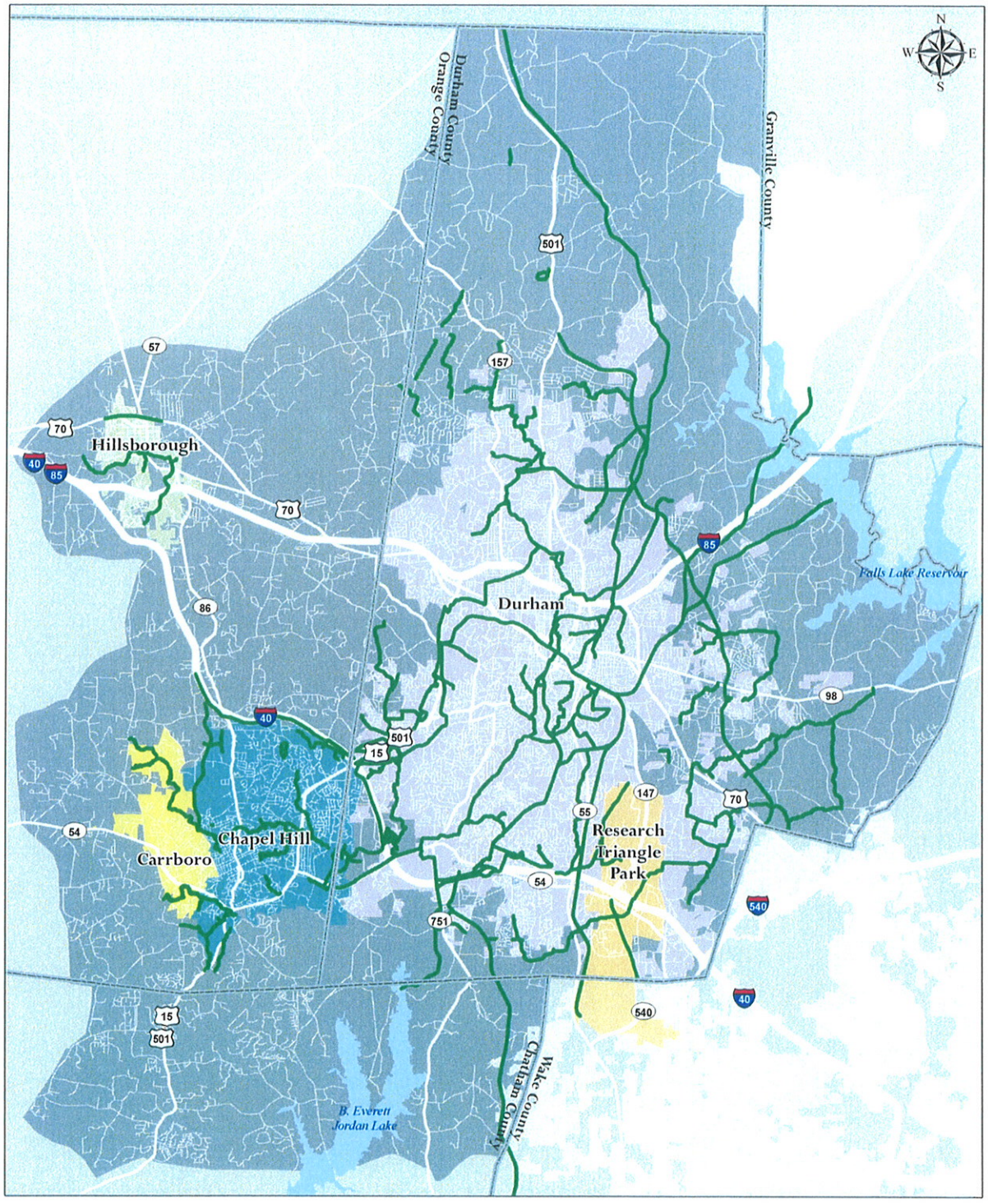
Transportation Plan 2035

The Louis Berger Group, Inc.
8.6.2008

0 0.5 1 2 Miles

# DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING ORGANIZATION

## Off-Road Bicycle Facilities




Off-Road Bicycle Facilities
Interstates
US and NC Highways
MPO Boundary
County Boundaries
Carrboro
Chapel Hill
Durham
Hillsborough
Other Municipalities
Research Triangle Park

Transportation Plan 2035

The Louis Berger Group, Inc.
8.6.2008

0 1.25 2.5 5 Miles

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 1 | Academy Rd | | | Bicycle Lane | Durham | 1.19 | City/County | 714,000 |
| 2 | Academy Rd | | | Existing Bicycle Lane | Durham | 0.51 | City/County | 0 |
| 3 | Adcock Rd | | | Paved Shoulder | Durham | 0.92 | City/County | 552,000 |
| 4 | Airport Rd | | | Bicycle Lane | Durham | 0.2 | City/County | 120,000 |
| 5 | Albany St | | | Sharrows | Durham | 0.21 | City/County | 546 |
| 6 | Alston Ave | | | Bicycle Lane | Durham | 10.8 | City/County | 6,480,000 |
| 7 | Amber Pl | | | Sharrows | Durham | 0.07 | City/County | 182 |
| 8 | American Dr | | | Sharrows | Durham | 1.86 | City/County | 4,836 |
| 9 | American Tobacco Trail | NC 54 | Chatham County line | Multi-Use Path | Durham | 4 | City/County | 4,753,000 |
| 10 | Anderson St | | | Restripe Bicycle Lane | Durham | 1.76 | City/County | 4,576 |
| 11 | Andrews Chapel Rd | | | Paved Shoulder | Durham | 1.23 | City/County | 738,000 |
| 12 | Angier Ave | | | Bicycle Lane | Durham | 5.71 | City/County | 3,426,000 |
| 13 | Apex St | | | Sharrows | Durham | 0.1 | City/County | 260 |
| 14 | Archdale Dr | | | Bicycle Lane | Durham | 0.52 | City/County | 312,000 |
| 15 | Avondale Dr | | | Bicycle Lane | Durham | 1.06 | City/County | 636,000 |
| 16 | Bacon Rd | | | Paved Shoulder | Durham | 1.8 | City/County | 1,080,000 |
| 17 | Bacon St | | | Bicycle Lane | Durham | 1.13 | City/County | 678,000 |
| 18 | Bahama Rd | | | Paved Shoulder | Durham | 9.35 | City/County | 5,610,000 |
| 19 | Ball Rd | | | Paved Shoulder | Durham | 2.38 | City/County | 1,428,000 |
| 20 | Baptist Rd | | | Paved Shoulder | Durham | 4.07 | City/County | 2,442,000 |
| 21 | Barbee Chapel Rd | | | Bicycle Lane | Durham | 1.75 | City/County | 1,050,000 |
| 22 | Barbee Rd | | | Bicycle Lane | Durham | 2.84 | City/County | 1,704,000 |
| 23 | Bennett Memorial Rd | | | Bicycle Lane | Durham | 0.67 | City/County | 402,000 |
| 24 | Berini Dr | | | Sharrows | Durham | 1.14 | City/County | 2,964 |
| 25 | Bill Poole Rd | | | Paved Shoulder | Durham | 3.19 | City/County | 1,914,000 |
| 26 | Bivins Rd | | | Paved Shoulder | Durham | 3.64 | City/County | 2,184,000 |
| 27 | Blackwell St | | | Sharrows | Durham | 0.56 | City/County | 1,456 |
| 28 | Bowen Rd | | | Paved Shoulder | Durham | 1.05 | City/County | 630,000 |
| 29 | Boyce Mill Rd | | | Paved Shoulder | Durham | 0.83 | City/County | 498,000 |
| 30 | Briggs Ave | | | Bicycle Lane | Durham | 1.52 | City/County | 912,000 |
| 31 | Broad St | | | Restripe Bicycle Lane | Durham | 2.37 | City/County | 6,162 |
| 32 | Broad St | | | Sharrows | Durham | 0.33 | City/County | 858 |
| 33 | Buchanan Blvd | | | Bicycle Lane | Durham | 1.48 | City/County | 888,000 |
| 34 | Burton Rd | | | Paved Shoulder | Durham | 1.59 | City/County | 954,000 |
| 35 | Camden Ave | | | Bicycle Lane | Durham | 1.99 | City/County | 1,194,000 |
| 36 | Cameron Blvd | | | Bicycle Lane | Durham | 1.08 | City/County | 648,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 37 | Cammie St | | | Bicycle Lane | Durham | 0.48 | City/County | 288,000 |
| 38 | Campus Dr | | | Bicycle Lane | Durham | 0.25 | City/County | 150,000 |
| 39 | Campus Dr | | | Existing Bicycle Lane | Durham | 1.17 | City/County | 3,510 |
| 40 | Campus Walk Ave | | | Bicycle Lane | Durham | 0.34 | City/County | 204,000 |
| 41 | Capps St | | | Bicycle Lane | Durham | 0.32 | City/County | 192,000 |
| 42 | Carolina Cir | | | Sharrows | Durham | 0.07 | City/County | 182 |
| 43 | Carpenter Fletcher Rd | | | Bicycle Lane | Durham | 0.78 | City/County | 468,000 |
| 44 | Carpenter Pond Rd | | | Paved Shoulder | Durham | 4.82 | City/County | 2,892,000 |
| 45 | Carpenter Rd | | | Paved Shoulder | Durham | 1.12 | City/County | 672,000 |
| 46 | Carver Rd | | | Paved Shoulder | Durham | 0.78 | City/County | 468,000 |
| 47 | Carver St | | | Bicycle Lane | Durham | 4.31 | City/County | 2,586,000 |
| 48 | Cassam Rd | | | Paved Shoulder | Durham | 3.75 | City/County | 2,250,000 |
| 49 | Cecil St | | | Bicycle Lane | Durham | 0.36 | City/County | 216,000 |
| 50 | Chandler Rd | | | Paved Shoulder | Durham | 0.96 | City/County | 576,000 |
| 51 | Chapel Dr | | | Existing Bicycle Lane | Durham | 0.32 | City/County | 0 |
| 52 | Chapel Hill Rd | | | Restripe Bicycle Lane | Durham | 2.35 | City/County | 6,110 |
| 53 | Chapel Hill St | | | Restripe Bicycle Lane | Durham | 0.89 | City/County | 2,314 |
| 54 | Chapel Hill St | | | Sharrows | Durham | 0.4 | City/County | 1,040 |
| 55 | Cheek Rd | | | Paved Shoulder | Durham | 5.91 | City/County | 3,546,000 |
| 56 | Cheek Rd. (SR 1800) | East Geer St. | Wake County line | Bicycle Lane | Durham | 8.5 | City/County | 5,100,000 |
| 57 | Chin Page Rd. (SR 1969) | S. Miami Blvd. | Page Rd. | Bicycle Lane | Durham | 1.5 | City/County | 900,000 |
| 58 | Church St | | | Sharrows | Durham | 0.13 | City/County | 338 |
| 59 | Circuit Dr | | | Bicycle Lane | Durham | 0.5 | City/County | 0 |
| 60 | City Hall Plz | | | Sharrows | Durham | 0.1 | City/County | 260 |
| 61 | Clayton Rd | | | Paved Shoulder | Durham | 1.84 | City/County | 1,104,000 |
| 62 | Clermont Rd | | | Bicycle Lane | Durham | 0.76 | City/County | 456,000 |
| 63 | Club Blvd. (SR 1669) | Hillandale Rd. | East Geer St. | Bicycle Lane | Durham | 5.33 | City/County | 3,198,000 |
| 64 | Cole Mill Rd | Orange County line | Hillsborough Rd. | Bicycle Lane | Durham | 3.73 | City/County | 2,238,000 |
| 65 | Coley Rd | | | Paved Shoulder | Durham | 3.66 | City/County | 2,196,000 |
| 66 | Colonial St | | | Sharrows | Durham | 0.15 | City/County | 390 |
| 67 | Compton Pl | | | Sharrows | Durham | 0.11 | City/County | 286 |
| 68 | Constitution Dr | | | Sharrows | Durham | 0.58 | City/County | 1,508 |
| 69 | Cook Rd | | | Bicycle Lane | Durham | 1.69 | City/County | 1,014,000 |
| 70 | Cooksbury Dr | | | Paved Shoulder | Durham | 0.59 | City/County | 354,000 |
| 71 | Corcoran St | | | Sharrows | Durham | 0.18 | City/County | 468 |
| 72 | Cornwallis Rd | | | Existing Bicycle Lane | Durham | 4.5 | City/County | 0 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 73 | Cornwallis Rd | | | Paved Shoulder | Durham | 3.12 | City/County | 1,872,000 |
| 74 | Cornwallis Rd | | | Restripe Bicycle Lane | Durham | 4.35 | City/County | 11,310 |
| 75 | Corporation St | | | Bicycle Lane | Durham | 0.82 | City/County | 492,000 |
| 76 | Cothran Rd | | | Paved Shoulder | Durham | 0.91 | City/County | 546,000 |
| 77 | Craig Rd | | | Paved Shoulder | Durham | 2.06 | City/County | 1,236,000 |
| 78 | Cranford Rd | | | Sharrows | Durham | 0.44 | City/County | 1,144 |
| 79 | Creech Rd | | | Paved Shoulder | Durham | 0.95 | City/County | 570,000 |
| 80 | Danube Ln | | | Bicycle Lane | Durham | 1.56 | City/County | 936,000 |
| 81 | Davis Dr. (SR 1999) | Cornwallis Rd. | Wake County line | Bicycle Lane | Durham | 2.8 | City/County | 1,680,000 |
| 82 | Dearborn Dr. (SR 1666) | Club Blvd. | Old Oxford Hwy. | Bicycle Lane | Durham | 1.6 | City/County | 960,000 |
| 83 | Denfield St | | | Bicycle Lane | Durham | 0.69 | City/County | 414,000 |
| 84 | Dillard St | | | Sharrows | Durham | 0.66 | City/County | 1,716 |
| 85 | Dixon Rd | | | Bicycle Lane | Durham | 0.67 | City/County | 402,000 |
| 86 | Doc Nichols Rd | | | Paved Shoulder | Durham | 1.9 | City/County | 1,140,000 |
| 87 | Drew St | | | Bicycle Lane | Durham | 0.48 | City/County | 288,000 |
| 88 | Driver St | | | Bicycle Lane | Durham | 0.19 | City/County | 114,000 |
| 89 | Driver St | | | Sharrows | Durham | 1.15 | City/County | 2,990 |
| 90 | Duke Homestead Rd | | | Bicycle Lane | Durham | 1.64 | City/County | 984,000 |
| 91 | Duke St | US 501 | University Dr. | Bicycle Lane | Durham | 4.87 | City/County | 2,922,000 |
| 92 | Duke University Rd | Cameron Blvd. | W. Chapel Hill St. | Existing Bicycle Lane | Durham | 1.13 | City/County | 0 |
| 93 | Dunnegan Rd | | | Paved Shoulder | Durham | 0.42 | City/County | 252,000 |
| 94 | Dunwoody Rd | | | Paved Shoulder | Durham | 1.83 | City/County | 1,098,000 |
| 95 | Durham-Chapel Hill Blvd | | | Bicycle Lane | Durham | 0.78 | City/County | 468,000 |
| 96 | Durham-Chapel Hill Blvd | | | Sidepath | Durham | 5.1 | City/County | 3,570,000 |
| 97 | East End Ave | | | Bicycle Lane | Durham | 0.5 | City/County | 300,000 |
| 98 | Ebenezer Church Rd | | | Paved Shoulder | Durham | 0.8 | City/County | 480,000 |
| 99 | Ed Cook Rd | | | Bicycle Lane | Durham | 0.9 | City/County | 540,000 |
| 100 | Elizabeth St | | | Sharrows | Durham | 1.08 | City/County | 2,808 |
| 101 | Ellis Chapel Rd | | | Paved Shoulder | Durham | 3.13 | City/County | 1,878,000 |
| 102 | Ellis Rd | So-Hi Dr. | S. Miami Blvd. | Bicycle Lane | Durham | 4.06 | City/County | 2,436,000 |
| 103 | Emperor Boulevard (SR 2103) | NC 54 | Page Rd. | Bicycle Lane | Durham | 1.1 | City/County | 660,000 |
| 104 | Enterprise St | | | Sharrows | Durham | 0.4 | City/County | 1,040 |
| 105 | Ephesus Church Rd | Farrington Rd. | Orange County line | Bicycle Lane | Durham | 1.05 | City/County | 630,000 |
| 106 | Erwin Rd. (SR 1306) | Cameron Blvd. | Orange County line | Bicycle Lane | Durham | 2.3 | City/County | 1,380,000 |
| 107 | Erwin Rd. (SR 1320) | Cameron Blvd. | Main St. | Bicycle Lane | Durham | 2.3 | City/County | 1,380,000 |
| 108 | Falkirk Dr | | | Sharrows | Durham | 0.11 | City/County | 286 |
| 109 | Farrington Mill Rd | | | Paved Shoulder | Durham | 3.08 | City/County | 1,848,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 110 | Farrington Rd | Old Chapel Hill Rd. | Farrington Mill/Barbee Ch. | Bicycle Lane | Durham | 4.49 | City/County | 2,694,000 |
| 111 | Farrington Rd. (SR 1110) | Old Chapel Hill Rd. | Farrington Mill/Barbee Ch. | Bicycle Lane | Durham | 4.2 | City/County | 2,520,000 |
| 112 | Fayetteville St | | | Restripe Bicycle Lane | Durham | 9.26 | City/County | 24,076 |
| 113 | Fenwick Pkwy | | | Bicycle Lane | Durham | 0.49 | City/County | 294,000 |
| 114 | Ferrand Rd | | | Sharrows | Durham | 0.16 | City/County | 416 |
| 115 | Ferrell Rd | East Geer St. | East Geer St. | Paved Shoulder | Durham | 1.42 | City/County | 852,000 |
| 116 | Fifteenth St | | | Restripe Bicycle Lane | Durham | 0.25 | City/County | 650 |
| 117 | Fletchers Chapel Rd | | | Paved Shoulder | Durham | 1.61 | City/County | 966,000 |
| 118 | Flowers Dr | | | Bicycle Lane | Durham | 0.73 | City/County | 0 |
| 119 | Forest Hills Blvd | | | Sharrows | Durham | 0.55 | City/County | 1,430 |
| 120 | Foster St | | | Restripe Bicycle Lane | Durham | 0.58 | City/County | 1,508 |
| 121 | Foster St | | | Sharrows | Durham | 0.08 | City/County | 208 |
| 122 | Fountain Ridge Rd | | | Sharrows | Durham | 0.7 | City/County | 1,820 |
| 123 | Freeman Rd | | | Paved Shoulder | Durham | 0.92 | City/County | 552,000 |
| 124 | Front St | | | Bicycle Lane | Durham | 0.62 | City/County | 372,000 |
| 125 | Fulton St. (SR 1321) | Hillandale Rd. | Erwin Rd. | Bicycle Lane | Durham | 0.4 | City/County | 240,000 |
| 126 | Garrett Rd. (SR 1116) | Pickett Rd. | Hope Valley Rd. | Bicycle Lane | Durham | 4.1 | City/County | 2,460,000 |
| 127 | Geer St | | | Bicycle Lane | Durham | 4.25 | City/County | 2,550,000 |
| 128 | Geer St | | | Paved Shoulder | Durham | 3.38 | City/County | 2,028,000 |
| 129 | Gibson Rd | | | Paved Shoulder | Durham | 0.84 | City/County | 504,000 |
| 130 | Glendale Ave | Leon St. | Washington St. | Sharrows | Durham | 0.66 | City/County | 1,716 |
| 131 | Glenn Rd | | | Paved Shoulder | Durham | 3.67 | City/County | 2,202,000 |
| 132 | Glenn School Rd | | | Paved Shoulder | Durham | 0.83 | City/County | 498,000 |
| 133 | Glover Rd | NC 147 | Angier Ave. | Bicycle Lane | Durham | 1.24 | City/County | 744,000 |
| 134 | Goodwin Rd | | | Paved Shoulder | Durham | 2.28 | City/County | 1,368,000 |
| 135 | Grandale Dr | Scott King Rd. | Sedwick Rd. | Bicycle Lane | Durham | 2.81 | City/County | 1,686,000 |
| 136 | Gray Ave | | | Bicycle Lane | Durham | 0.41 | City/County | 246,000 |
| 137 | Great Jones St (Loop) | | | Restripe Bicycle Lane | Durham | 0.13 | City/County | 338 |
| 138 | Greenhaven Dr | | | Paved Shoulder | Durham | 0.03 | City/County | 18,000 |
| 139 | Gregson St | | | Bicycle Lane | Durham | 1.8 | City/County | 1,080,000 |
| 140 | Gregson St./Vickers St. (SR 1327, 1361) | Club Blvd. | University Dr. | Bicycle Lane | Durham | 2.3 | City/County | 1,380,000 |
| 141 | Guess Rd | | | Bicycle Lane | Durham | 4.9 | City/County | 2,940,000 |
| 142 | Guess Rd | | | Paved Shoulder | Durham | 6.22 | City/County | 3,732,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 143 | Guess Rd./NC 157/Buchanan Blvd. | Orange County line | W. Chapel Hill St. | Bicycle Lane | Durham | 12.2 | City/County | 7,320,000 |
| 144 | Gurley St | | | Sharrows | Durham | 0.14 | City/County | 364 |
| 145 | Hale St | | | Sharrows | Durham | 0.03 | City/County | 78 |
| 146 | Hall Rd | | | Paved Shoulder | Durham | 1.47 | City/County | 882,000 |
| 147 | Hamilton Way | | | Bicycle Lane | Durham | 0.13 | City/County | 78,000 |
| 148 | Hamlin Rd | Red Mill Rd. | Old Oxford Hwy. | Paved Shoulder | Durham | 3.41 | City/County | 2,046,000 |
| 149 | Hampton Rd | Red Mountain Rd. | Range Rd. | Paved Shoulder | Durham | 4.45 | City/County | 2,670,000 |
| 150 | Hanover St | | | Bicycle Lane | Durham | 0.03 | City/County | 18,000 |
| 151 | Hardee St | | | Bicycle Lane | Durham | 1.41 | City/County | 846,000 |
| 152 | Heather Glen Rd | | | Sharrows | Durham | 0.25 | City/County | 650 |
| 153 | Hebron Rd | | | Paved Shoulder | Durham | 1.57 | City/County | 942,000 |
| 154 | Hereford Rd | | | Paved Shoulder | Durham | 0.63 | City/County | 378,000 |
| 155 | Herndon Rd | | | Bicycle Lane | Durham | 2.57 | City/County | 1,542,000 |
| 156 | Hillandale Rd | Rose of Sharon Rd. | Fulton St. | Bicycle Lane | Durham | 3.69 | City/County | 2,214,000 |
| 157 | Hillsborough Rd | | | Bicycle Lane | Durham | 4.32 | City/County | 2,592,000 |
| 158 | Hillsborough Rd | | | Paved Shoulder | Durham | 0.95 | City/County | 570,000 |
| 159 | Holloway St | | | Bicycle Lane | Durham | 3.86 | City/County | 2,316,000 |
| 160 | Hope Valley Rd | Cornwallis Rd. | NC 54 | Bicycle Lane | Durham | 4.31 | City/County | 2,586,000 |
| 161 | Hopkins | South Lowell Rd. | Orange County line | Paved Shoulder | Durham | 3.47 | City/County | 2,082,000 |
| 162 | Hopson Rd | Alston Ave. | NC 54 | Bicycle Lane | Durham | 2.29 | City/County | 1,374,000 |
| 163 | Horton Rd | Duke St. | Hillandale Rd. | Bicycle Lane | Durham | 2.04 | City/County | 1,224,000 |
| 164 | Humphrey St | | | Sharrows | Durham | 0.05 | City/County | 130 |
| 165 | Hurley Rd | | | Paved Shoulder | Durham | 0.24 | City/County | 144,000 |
| 166 | Hyde Park Ave | | | Sharrows | Durham | 1.02 | City/County | 2,652 |
| 167 | Indian Trl | | | Sharrows | Durham | 0.44 | City/County | 1,144 |
| 168 | Infinity Rd | US 501 | Snow Hill Rd. | Paved Shoulder | Durham | 2.76 | City/County | 1,656,000 |
| 169 | Isham Chambers Rd | | | Paved Shoulder | Durham | 1.42 | City/County | 852,000 |
| 170 | Jackie Robinson Dr | | | Bicycle Lane | Durham | 0.08 | City/County | 48,000 |
| 171 | James St | | | Sharrows | Durham | 0.9 | City/County | 2,340 |
| 172 | Jeffries Rd | | | Paved Shoulder | Durham | 1.22 | City/County | 732,000 |
| 173 | Jock Rd | | | Paved Shoulder | Durham | 1.81 | City/County | 1,086,000 |
| 174 | Joe Ellis Rd | | | Paved Shoulder | Durham | 0.81 | City/County | 486,000 |
| 175 | John Jones Rd | | | Paved Shoulder | Durham | 2.36 | City/County | 1,416,000 |
| 176 | Johnson Mill Rd | South Lowell Rd. | Mason Rd. | Paved Shoulder | Durham | 3.44 | City/County | 2,064,000 |
| 177 | Juliette Dr | | | Bicycle Lane | Durham | 0.9 | City/County | 540,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 178 | Junction Rd | NC 98 | Ferrell Rd. | Paved Shoulder | Durham | 2.92 | City/County | 1,752,000 |
| 179 | Juniper St | | | Bicycle Lane | Durham | 0.7 | City/County | 420,000 |
| 180 | Kelvin Dr | | | Paved Shoulder | Durham | 0.47 | City/County | 282,000 |
| 181 | Kemp Rd | NC 98 | Wake County line | Paved Shoulder | Durham | 3.21 | City/County | 1,926,000 |
| 182 | Kenan Rd | | | Sharrows | Durham | 0.38 | City/County | 988 |
| 183 | Kenmore Rd | | | Bicycle Lane | Durham | 0.18 | City/County | 108,000 |
| 184 | Kent St | | | Sharrows | Durham | 1.43 | City/County | 3,718 |
| 185 | Kerley Rd | NC 751 | Erwin Rd. | Paved Shoulder | Durham | 2.45 | City/County | 1,470,000 |
| 186 | Kirkwood Dr | | | Bicycle Lane | Durham | 0.7 | City/County | 420,000 |
| 187 | Kit Creek Rd | | | Bicycle Lane | Durham | 0.43 | City/County | 258,000 |
| 188 | Knox St | | | Sharrows | Durham | 2.19 | City/County | 5,694 |
| 189 | Lakeland St | | | Sharrows | Durham | 0.51 | City/County | 1,326 |
| 190 | Lakewood Ave | Roxboro Rd. | University Dr. | Bicycle Lane | Durham | 1.66 | City/County | 996,000 |
| 191 | Lasalle St | | | Bicycle Lane | Durham | 1.35 | City/County | 810,000 |
| 192 | Latta Rd | Guess Rd. | US 501 | Bicycle Lane | Durham | 1.2 | City/County | 720,000 |
| 193 | Lawson St | | | Restripe Bicycle Lane | Durham | 1.76 | City/County | 4,576 |
| 194 | League Way | | | Sharrows | Durham | 0.07 | City/County | 182 |
| 195 | Leesville Rd | | | Paved Shoulder | Durham | 4.04 | City/County | 2,424,000 |
| 196 | Legion Rd | | | Bicycle Lane | Durham | 0.13 | City/County | 78,000 |
| 197 | Leon St | | | Sharrows | Durham | 0.67 | City/County | 1,742 |
| 198 | Leon St. | Broad St. | Glendale Ave. | Existing Bicycle Lane | Durham | 0.6 | City/County | 0 |
| 199 | Liberty St | | | Bicycle Lane | Durham | 2.01 | City/County | 1,206,000 |
| 200 | Lumley Rd | Miami Blvd. | Wake County line | Bicycle Lane | Durham | 2.55 | City/County | 1,530,000 |
| 201 | Lynn Rd | NC 98 | Gibson Rd. | Paved Shoulder | Durham | 1.8 | City/County | 1,080,000 |
| 202 | Mackwood Dr | | | Paved Shoulder | Durham | 0.17 | City/County | 102,000 |
| 203 | Madden Ave | | | Paved Shoulder | Durham | 0.27 | City/County | 162,000 |
| 204 | Main St | | | Restripe Bicycle Lane | Durham | 4.26 | City/County | 11,076 |
| 205 | Main St | | | Sharrows | Durham | 0.47 | City/County | 1,222 |
| 206 | Mangum St | Markham Ave. | Lakewood Ave. | Bicycle Lane | Durham | 1.81 | City/County | 1,086,000 |
| 207 | Mangum-Roxboro Connector | | | Bicycle Lane | Durham | 0.11 | City/County | 66,000 |
| 208 | Market St | | | Sharrows | Durham | 0.04 | City/County | 104 |
| 209 | Markham Ave | | | Bicycle Lane | Durham | 0.13 | City/County | 78,000 |
| 210 | Markham Ave | | | Sharrows | Durham | 2 | City/County | 5,200 |
| 211 | Martin Luther King Jr Pkwy | | | Existing Bicycle Lane | Durham | 4.91 | City/County | 0 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 212 | Maryland Ave | | | Sharrows | Durham | 0.6 | City/County | 1,560 |
| 213 | Mason Rd | US 501 | Guess Rd. | Paved Shoulder | Durham | 2.46 | City/County | 1,476,000 |
| 214 | Massey Chapel Rd | NC 751 | Herndon Rd. | Bicycle Lane | Durham | 1.84 | City/County | 1,104,000 |
| 215 | Medford Rd | | | Bicycle Lane | Durham | 1.02 | City/County | 612,000 |
| 216 | Miami Blvd | | | Bicycle Lane | Durham | 8.92 | City/County | 5,352,000 |
| 217 | Midland Terrace (and Ext.) (SR 1827) | Cheek Rd. | Club Blvd. | Bicycle Lane | Durham | 1.8 | City/County | 1,080,000 |
| 218 | Mile Branch Rd | | | Paved Shoulder | Durham | 0.28 | City/County | 168,000 |
| 219 | Milton Rd | | | Paved Shoulder | Durham | 2.48 | City/County | 1,488,000 |
| 220 | Mineral Springs Rd | | | Paved Shoulder | Durham | 4.48 | City/County | 2,688,000 |
| 221 | Moores Mill Rd | | | Paved Shoulder | Durham | 3.54 | City/County | 2,124,000 |
| 222 | Morehead Ave | | | Restripe Bicycle Lane | Durham | 1.52 | City/County | 3,952 |
| 223 | Morgan St | | | Sharrows | Durham | 0.47 | City/County | 1,222 |
| 224 | Morgan St (Loop) | | | Restripe Bicycle Lane | Durham | 0.44 | City/County | 1,144 |
| 225 | Moriah Rd | | | Paved Shoulder | Durham | 1.33 | City/County | 798,000 |
| 226 | Morning Glory Ave | | | Sharrows | Durham | 0.05 | City/County | 130 |
| 227 | Morreene Rd | | | Bicycle Lane | Durham | 1.52 | City/County | 912,000 |
| 228 | Morris St | | | Restripe Bicycle Lane | Durham | 0.35 | City/County | 910 |
| 229 | Morris St | | | Sharrows | Durham | 0.08 | City/County | 208 |
| 230 | Mt Herman Rd | | | Paved Shoulder | Durham | 1.01 | City/County | 606,000 |
| 231 | Mt Hermon Church Rd | | | Paved Shoulder | Durham | 1.76 | City/County | 1,056,000 |
| 232 | Mt Moriah Rd | | | Bicycle Lane | Durham | 2.01 | City/County | 1,206,000 |
| 233 | Mt Sinai Rd | | | Paved Shoulder | Durham | 0.73 | City/County | 438,000 |
| 234 | NC 54 | Orange County line | Wake County line | Bicycle Lane | Durham | 10.6 | City/County | 6,360,000 |
| 235 | NC 55 | Cornwallis Rd. | Wake County line | Bicycle Lane | Durham | 3.4 | City/County | 2,040,000 |
| 236 | NC 751 (Garrett Rd.) | NC 54 | Chatham County line | Bicycle Lane | Durham | 3.8 | City/County | 2,280,000 |
| 237 | NC 98 - Wake Forest Hwy | | | Bicycle Lane | Durham | 2.89 | City/County | 1,734,000 |
| 238 | NC 98 - Wake Forest Hwy | | | Paved Shoulder | Durham | 4.94 | City/County | 2,964,000 |
| 239 | Neal Rd | | | Bicycle Lane | Durham | 1.24 | City/County | 744,000 |
| 240 | Nichols Farm Dr | | | Sharrows | Durham | 0.32 | City/County | 832 |
| 241 | Ninth St | | | Sharrows | Durham | 0.76 | City/County | 1,976 |
| 242 | Northeast Creek Pkwy | Cornwallis Rd. | Cornwallis Rd. to So-Hi Dr. | Bicycle Lane | Durham | 1.3 | City/County | 780,000 |
| 243 | Northern Durham Pkway | US 70 | Roxboro (501N) | Bicycle Lane | Durham | 12.1 | City/County | 7,260,000 |
| 244 | Northlake Dr | | | Sharrows | Durham | 0.41 | City/County | 1,066 |
| 245 | O'Kelly Church Rd | | | Paved Shoulder | Durham | 1.02 | City/County | 612,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 246 | Oakland Ave | | | Sharrows | Durham | 0.65 | City/County | 1,690 |
| 247 | Old Creedmoor Rd | | | Paved Shoulder | Durham | 0.11 | City/County | 66,000 |
| 248 | Old Durham/Chapel Hill Rd. (SR 2220) | University Dr. | Orange County line | Bicycle Lane | Durham | 3.4 | City/County | 2,040,000 |
| 249 | Old NC 10 | | | Paved Shoulder | Durham | 1.47 | City/County | 882,000 |
| 250 | Old Oxford Hwy | US 501 | Granville County line | Paved Shoulder | Durham | 10.24 | City/County | 6,144,000 |
| 251 | Olive Branch Rd | Leesville Rd. | NC 98 | Paved Shoulder | Durham | 3.84 | City/County | 2,304,000 |
| 252 | Olympic Ave. | Stadium Dr. | US 501 | Bicycle Lane | Durham | 0.3 | City/County | 180,000 |
| 253 | Orange Factory Rd | US 501 | US 501 to Staggsville Rd. | Paved Shoulder | Durham | 3.05 | City/County | 1,830,000 |
| 254 | Page Rd | | | Bicycle Lane | Durham | 4.94 | City/County | 2,964,000 |
| 255 | Parrish St | | | Sharrows | Durham | 0.28 | City/County | 728 |
| 256 | Pat Tilley Rd | | | Paved Shoulder | Durham | 1.05 | City/County | 630,000 |
| 257 | Patrick Rd | US 501 | Johnson Mill Rd. | Paved Shoulder | Durham | 1 | City/County | 600,000 |
| 258 | Patterson Rd | Cheek Rd. | NC 98 | Paved Shoulder | Durham | 3.53 | City/County | 2,118,000 |
| 259 | Pervis Rd | | | Paved Shoulder | Durham | 0.46 | City/County | 276,000 |
| 260 | Pettigrew St | | | Bicycle Lane | Durham | 2.87 | City/County | 1,722,000 |
| 261 | Pickett Rd | Erwin Rd. | Cornwallis Rd. | Bicycle Lane | Durham | 3.76 | City/County | 2,256,000 |
| 262 | Pleasant Dr | | | Paved Shoulder | Durham | 1.33 | City/County | 798,000 |
| 263 | Plum St | | | Bicycle Lane | Durham | 0.18 | City/County | 108,000 |
| 264 | Plum St | | | Sharrows | Durham | 0.18 | City/County | 468 |
| 265 | Pope Rd | Ephesus Church Rd. | Old Chapel Hill Rd. | Bicycle Lane | Durham | 1 | City/County | 600,000 |
| 266 | Preston Andrews Rd | | | Paved Shoulder | Durham | 0.86 | City/County | 516,000 |
| 267 | Preston Ave | | | Bicycle Lane | Durham | 0.14 | City/County | 84,000 |
| 268 | Quail Roost Farm Rd | | | Paved Shoulder | Durham | 1.28 | City/County | 768,000 |
| 269 | Quail Roost Rd | US 501 | Bahama Rd. | Paved Shoulder | Durham | 2.47 | City/County | 1,482,000 |
| 270 | Quincemoore Rd | | | Sharrows | Durham | 0.38 | City/County | 988 |
| 271 | Ramseur St (Loop) | | | Restripe Bicycle Lane | Durham | 0.58 | City/County | 1,508 |
| 272 | Range Rd | Hampton Rd. | Cassam Rd. | Paved Shoulder | Durham | 6.1 | City/County | 3,660,000 |
| 273 | Red Mill Rd | Old Oxford Hwy | E. Geer St. | Paved Shoulder | Durham | 3.88 | City/County | 2,328,000 |
| 274 | Red Mountain Rd | US 501 | Hampton Rd. | Paved Shoulder | Durham | 2.6 | City/County | 1,560,000 |
| 275 | Redpine Rd | | | Paved Shoulder | Durham | 0.24 | City/County | 144,000 |
| 276 | Redwood Rd | | | Paved Shoulder | Durham | 5.2 | City/County | 3,120,000 |
| 277 | Renaissance Pkwy | | | Existing Sidepath | Durham | 1.22 | City/County | 0 |
| 278 | Research Dr | | | Bicycle Lane | Durham | 0.21 | City/County | 0 |
| 279 | Revere Rd | | | Existing Bicycle Lane | Durham | 1.38 | City/County | 0 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 280 | Riddle Rd | | | Bicycle Lane | Durham | 1.91 | City/County | 1,146,000 |
| 281 | Rigsbee Ave | | | Bicycle Lane | Durham | 0.39 | City/County | 234,000 |
| 282 | Rigsbee Ave | | | Sharrows | Durham | 0.08 | City/County | 208 |
| 283 | Rivermont Rd | | | Paved Shoulder | Durham | 1.17 | City/County | 702,000 |
| 284 | Rocky Springs Rd | | | Sharrows | Durham | 0.35 | City/County | 910 |
| 285 | Rogers Rd | | | Paved Shoulder | Durham | 1.02 | City/County | 612,000 |
| 286 | Rose of Sharon Rd | Cole Mill Rd. | Guess Rd. | Bicycle Lane | Durham | 2.53 | City/County | 1,518,000 |
| 287 | Ross Rd | Junction Rd. | Chandler Rd. | Paved Shoulder | Durham | 1.03 | City/County | 618,000 |
| 288 | Rougemont Rd | Bill Poole Rd. | South Lowell Rd. | Paved Shoulder | Durham | 2.66 | City/County | 1,596,000 |
| 289 | Rowena Ave | | | Bicycle Lane | Durham | 0.33 | City/County | 198,000 |
| 290 | Roxboro St | | | Existing Bicycle Lane | Durham | 0.78 | City/County | 0 |
| 291 | Roxboro St | | | Paved Shoulder | Durham | 9.44 | City/County | 5,664,000 |
| 292 | Roxboro St | | | Restripe Bicycle Lane | Durham | 13.96 | City/County | 36,296 |
| 293 | Russell Rd | | | Paved Shoulder | Durham | 3.81 | City/County | 2,286,000 |
| 294 | Safeway St | | | Restripe Bicycle Lane | Durham | 0.07 | City/County | 182 |
| 295 | Saint Marys Rd | | | Paved Shoulder | Durham | 2.36 | City/County | 1,416,000 |
| 296 | Santee Rd | | | Paved Shoulder | Durham | 1.51 | City/County | 906,000 |
| 297 | Scarlett Dr | | | Bicycle Lane | Durham | 0.2 | City/County | 120,000 |
| 298 | Science Dr | | | Bicycle Lane | Durham | 0.66 | City/County | 0 |
| 299 | Scott King Rd | Hwy 751/Fayetteville Rd. | Grandale Dr. | Bicycle Lane | Durham | 1.95 | City/County | 1,170,000 |
| 300 | Sedwick Rd | Grandale Dr. | Alston Ave. | Bicycle Lane | Durham | 1.84 | City/County | 1,104,000 |
| 301 | Shady Grove Rd | Leesville Rd. | Wake County line | Paved Shoulder | Durham | 1.1 | City/County | 660,000 |
| 302 | Shannon Rd | | | Bicycle Lane | Durham | 1.04 | City/County | 624,000 |
| 303 | Sherron Rd | US 70 | NC 98 | Paved Shoulder | Durham | 3.25 | City/County | 1,950,000 |
| 304 | Slater Rd | Emperor Boulevard | Wake County line | Bicycle Lane | Durham | 0.66 | City/County | 396,000 |
| 305 | Snow Hill Rd | US 501 | Old Oxford Hwy. | Paved Shoulder | Durham | 4.55 | City/County | 2,730,000 |
| 306 | So Hi Dr | | | Bicycle Lane | Durham | 0.72 | City/County | 432,000 |
| 307 | South Lowell Rd | | | Paved Shoulder | Durham | 4.95 | City/County | 2,970,000 |
| 308 | South St | | | Bicycle Lane | Durham | 0.84 | City/County | 504,000 |
| 309 | Southview Rd | | | Paved Shoulder | Durham | 2.41 | City/County | 1,446,000 |
| 310 | Southwest Durham Dr | | | Bicycle Lane | Durham | 0.12 | City/County | 72,000 |
| 311 | Sowell St | | | Sharrows | Durham | 0.07 | City/County | 182 |
| 312 | Sparger Rd | | | Bicycle Lane | Durham | 1.78 | City/County | 1,068,000 |
| 313 | Sprunt Ave | | | Sharrows | Durham | 1.06 | City/County | 2,756 |
| 314 | St. Mary's Rd. (SR 1002) | Guess Rd. | Orange County line | Bicycle Lane | Durham | 4.5 | City/County | 2,700,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 315 | Stadium Dr | Olympic Ave. | Horton Rd. | Restripe Bicycle Lane | Durham | 2.71 | City/County | 7,046 |
| 316 | Stagecoach Rd | Farrington Rd. | NC 751 | Bicycle Lane | Durham | 1.62 | City/County | 972,000 |
| 317 | Stagville Rd | Bahama Rd. | Old Oxford Hwy. | Paved Shoulder | Durham | 3.78 | City/County | 2,268,000 |
| 318 | Stallings Rd | Cheek Rd. | Patterson Rd. | Paved Shoulder | Durham | 1.86 | City/County | 1,116,000 |
| 319 | State Forest Rd | | | Paved Shoulder | Durham | 2.23 | City/County | 1,338,000 |
| 320 | Summit St | | | Restripe Bicycle Lane | Durham | 0.4 | City/County | 1,040 |
| 321 | Swift Ave | Duke University Rd. | Main St. | Restripe Bicycle Lane | Durham | 0.51 | City/County | 1,326 |
| 322 | Swing Rd | | | Paved Shoulder | Durham | 0.15 | City/County | 90,000 |
| 323 | T W Alexander Dr | NC 55 | Wake County line | Bicycle Lane | Durham | 8.25 | City/County | 0 |
| 324 | Tavistock Dr | | | Sharrows | Durham | 0.21 | City/County | 546 |
| 325 | Taylor St | | | Bicycle Lane | Durham | 1.43 | City/County | 858,000 |
| 326 | Teknika Pkwy | | | Paved Shoulder | Durham | 0.68 | City/County | 408,000 |
| 327 | Third Fork Creek Greenway | Southern Boundaries Pk | NC 751 | Multi-Use Path | Durham | 3.3 | City/County | 2,310,000 |
| 328 | Tom Clark Rd | | | Paved Shoulder | Durham | 0.73 | City/County | 438,000 |
| 329 | Tom Wilkinson Rd | | | Paved Shoulder | Durham | 0.23 | City/County | 138,000 |
| 330 | Towerview Rd | | | Bicycle Lane | Durham | 1.01 | City/County | 0 |
| 331 | Trent Dr | | | Bicycle Lane | Durham | 0.29 | City/County | 0 |
| 332 | Trent Dr | | | Sharrows | Durham | 0.21 | City/County | 546 |
| 333 | Tri Center Boulevard | Alston Ave. | Cornwallis Road | Bicycle Lane | Durham | 0.6 | City/County | 360,000 |
| 334 | Trinity Ave | | | Bicycle Lane | Durham | 1.15 | City/County | 690,000 |
| 335 | Trinity Ave | | | Sharrows | Durham | 0.38 | City/County | 988 |
| 336 | Umstead Rd | Guess Rd. | Cole Mill Rd. | Paved Shoulder | Durham | 3.41 | City/County | 2,046,000 |
| 337 | Umstead Rd. (SR 1449) | Guess Rd. | Cole Mill Rd. | Bicycle Lane | Durham | 3.4 | City/County | 2,040,000 |
| 338 | University Dr | Lakewood Ave. | Old Chapel Hill Rd. | Restripe Bicycle Lane | Durham | 4.55 | City/County | 11,830 |
| 339 | US 15/501 | Orange County line | University Dr. | Bicycle Lane | Durham | 4.9 | City/County | 2,940,000 |
| 340 | US 70 | Angier Ave. | Wake County line | Bicycle Lane | Durham | 1.2 | City/County | 720,000 |
| 341 | Valley Springs Rd | | | Paved Shoulder | Durham | 0.44 | City/County | 264,000 |
| 342 | Vickers Ave | | | Bicycle Lane | Durham | 0.83 | City/County | 498,000 |
| 343 | Virgil Rd | | | Paved Shoulder | Durham | 2.36 | City/County | 1,416,000 |
| 344 | Ward St | | | Sharrows | Durham | 0.77 | City/County | 2,002 |
| 345 | Washington St | Glendale Ave. | Corporation St. | Restripe Bicycle Lane | Durham | 1.43 | City/County | 3,718 |
| 346 | Watkins Rd | | | Bicycle Lane | Durham | 0.87 | City/County | 522,000 |
| 347 | Wiley Mangum Rd | | | Paved Shoulder | Durham | 1.37 | City/County | 822,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 348 | Wilkins Rd | Hampton Rd. | Bahama Rd. | Paved Shoulder | Durham | 2.98 | City/County | 1,788,000 |
| 349 | Willard St | | | Bicycle Lane | Durham | 0.37 | City/County | 222,000 |
| 350 | Winkler Rd | | | Paved Shoulder | Durham | 0.68 | City/County | 408,000 |
| 351 | Woodcroft Pkwy | Hope Valley Rd. | Carpenter Fletcher Rd. | Bicycle Lane | Durham | 3.8 | City/County | 2,280,000 |
| | **Durham City/County Totals** | | | | | **675.46** | | **341,173,846** |

| No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| **CHAPEL HILL** | | | | | | | | |
| 1 | Bolin Creek Bikeway | CHPD | Community Center | Bike lanes | Orange | 1.1 | CH | $0 |
| 2 | Booker Creek Rd | Honeysuckle Rd. | Old Oxford Rd. | Bike lanes | Orange | 0.4 | CH | $240,000 |
| 3 | Boundary St. | Country Club Rd. | Rosemary St. | Bike lanes | Orange | 0.4 | CH | $240,000 |
| 4 | Burning Tree Dr./Pinehurst Dr. | NC 54 | Ephesus Church Rd. | Bike lanes | Orange | 2 | CH | $1,200,000 |
| 5 | Cameron Ave. | Pittsboro St. | Raleigh St. | Bike lanes | Orange | 0.5 | CH | $300,000 |
| 6 | Caswell Rd./Curtis Rd./N. Lakeshore | Estes Dr. | Weaver Dairy Rd. | Bike lanes | Orange | 2.5 | CH | $1,500,000 |
| 7 | Culbreth Rd. | Smith Level Rd. | US 15-501 South | Bike lanes | Orange | 1.1 | CH | $660,000 |
| 8 | Elliott Rd. | Curtis Rd. | E. Franklin St. | Bike lanes | Orange | 0.7 | CH | $420,000 |
| 9 | Ephesus Church Rd. | US 15-501 | Durham Co. line | Bike lanes | Orange | 2.1 | CH | $1,260,000 |
| 10 | Erwin Rd. | US 15-501 | Durham Co. line | Bike lanes | Orange | 0.9 | CH | $540,000 |
| 11 | Estes Dr./Estes Dr. Extension | US 15-501 | N. Greensboro St. | Bike lanes | Orange | 3.7 | CH | $2,220,000 |
| 12 | Eubanks Rd. | Old NC 86 | NC 86 | Bike lanes | Orange | 2.6 | CH | $1,560,000 |
| 13 | Finley GC/Mason Farm Rds. | NC 54 East | NC 54 Bypass | Bike lanes | Orange | 1.4 | CH | $840,000 |
| 14 | Fordham Blvd./Chapel Hill Blvd. | Old Durham Rd. | Culbreth Rd. | Bike lanes | Orange | 5.1 | CH | $3,060,000 |
| 15 | Franklin St. (E. Franklin St.) | Boundary St. | N. Fordham Blvd. | Bike lanes | Orange | 2.9 | CH | $1,740,000 |
| 16 | Homestead Rd. | Airport Rd. | Old NC 86 | Bike lanes | Orange | 3.3 | CH | $1,980,000 |
| 17 | Manning Dr. | NC 54 Bypass | S. Columbia St. | Bike lanes | Orange | 1.2 | CH | $720,000 |
| 18 | Mason Farm Rd. | Fordham Blvd. | S. Columbia St. | Bike lanes | Orange | 1.2 | CH | $720,000 |
| 19 | Merritt Mill Rd./ S. Greensboro St. | Cameron Ave. | NC 54 Bypass | Bike lanes | Orange | 0.8 | CH | $480,000 |
| 20 | Mt. Carmel Church Rd. | US 15-501 | Chatham Co. line | Bike lanes | Orange | 2.5 | CH | $1,500,000 |
| 21 | NC 86/Airport Rd. | Columbia St. | Whitfield Rd. | Bike lanes | Orange | 4.3 | CH | $2,580,000 |
| 22 | Old Durham Rd. | US 15-501 | Durham Co. line | Bike lanes | Orange | 0.6 | CH | $360,000 |
| 23 | Old Oxford Rd. | Elliot Rd. | Erwin Rd. | Bike lanes | Orange | 0.4 | CH | $240,000 |
| 24 | Piney Mtn. Rd./Emily Rd./Partin St./H | Airport Rd. | Weaver Dairy Rd. | Bike lanes | Orange | 2.2 | CH | $1,320,000 |
| 25 | Pittsboro St. | Cameron Ave. | S. Columbia St. | Bike lanes | Orange | 0.4 | CH | $240,000 |
| 26 | Rogers Rd. | Homestead Rd. | Eubanks Rd. | Bike lanes | Orange | 1.2 | CH | $720,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 27 | Rosemary St. | Boundary St. | Carrboro limits (Merritt Mill Rd.) | Bike lanes | Orange | 1.4 | CH | $840,000 |
| 28 | Seawell School Rd. | Homestead Rd. | Estes Dr. Ext | Bike lanes | Orange | 1.5 | CH | $900,000 |
| 29 | South Columbia St. | Airport Rd. | US 15-501 Bypass | Bike lanes | Orange | 0.2 | CH | $120,000 |
| 30 | Raleigh Rd. (NC 54) | Country Club Rd. | Durham Co. line | Bike lanes | Orange | 1.9 | CH | $1,140,000 |
| 31 | Smith Middle School Greenway | Homestead Rd. | Seawell School Rd. | Multi-Use Path | Orange | 0.5 | CH | $350,000 |
| 32 | South Rd. | S. Columbia St. | Country Club Rd. | Bike lanes | Orange | 0.6 | CH | $360,000 |
| 33 | Sunrise Rd. | Whitfield Rd. | Weaver Dairy Rd. | Bike lanes | Orange | 1.3 | CH | $780,000 |
| 34 | Umstead Dr. | Estes Dr. Ext. | Airport Rd. | Bike lanes | Orange | 1 | CH | $600,000 |
| 35 | US 15-501 Corridor | Old Durham Rd. | Durham Co. line | Bike lanes | Orange | 0.3 | CH | $180,000 |
| 36 | US 15-501 South | Culbreth Rd. | Chatham County Line | Bike lanes | Orange | 0.5 | CH | $300,000 |
| 37 | Weaver Dairy Rd. | NC 86 | Erwin Rd. | Bike lanes | Orange | 0.4 | CH | $240,000 |
| 38 | Weaver Dairy Rd. Ext. | Homestead Rd. | NC 86 | Bike lanes | Orange | 1.3 | CH | $780,000 |
| | **Chapel Hill Totals** | | | | | **56.4** | | **$33,230,000** |

| No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| **HILLSBOROUGH** | | | | | | | | |
| 1 | Eno Mt. Rd./Allison St. | Dimmocks Mill Rd. | Orange Grove Rd. | 4' shoulders | Orange | 0.8 | Hillsborough | $480,000 |
| 2 | Lakeshore Dr./Brownville St./Bellvue | Latimer St. | Dimmocks Mill Rd. | shared | Orange | 0.7 | Hillsborough | $1,820 |
| 3 | Mt. Sinai Rd. | NC 86 | Kerley Rd. (Durham line) | 4' shoulders | Orange | 4.9 | Hillsborough | $2,940,000 |
| 4 | Nash St./Eno St. | Revere Rd. | Dimmocks Mill Rd. | shared | Orange | 1 | Hillsborough | $2,600 |
| 5 | NC 751/US 70/Old NC 10 | Durham County | NC 86 | 4' shoulders | Orange | 6.6 | Hillsborough | $3,960,000 |
| 6 | NC 86 | US 70 Business | Whitfield Rd. | 4' shoulders | Orange | 7.1 | Hillsborough | $4,260,000 |
| 7 | NC 86 N | US 70 Bypass | Coleman Loop SR1334 | shared | Orange | 3.3 | Hillsborough | $8,580 |
| 8 | New Hope Church Rd. | Old NC 10 | Old NC 86 | 4' shoulders | Orange | 4.1 | Hillsborough | $2,460,000 |
| 9 | Oakdale Dr. | Old NC 86/Churton St | Orange Grove Rd. | 4' shoulders | Orange | 1.1 | Hillsborough | $660,000 |
| 10 | Old Greensboro Rd. | Sturbridge Ln. | Alamance County line | 4' shoulders | Orange | 9.6 | Hillsborough | $5,760,000 |
| 11 | Old NC 86 | Eubanks Rd. | LaFayette Dr. | 4' shoulders | Orange | 6.1 | Hillsborough | $3,660,000 |
| 12 | Orange Grove Rd. | Old NC 86/Churton St. | Dimmocks Mill Rd. | shared | Orange | 3.2 | Hillsborough | $8,320 |
| 13 | Orange Grove Rd./Dodsons Crossrd | Dimmocks Mill Rd. | Chatham County line | 4' shoulders | Orange | 12.6 | Hillsborough | $7,560,000 |
| 14 | Pleasant Green Rd./Schley Rd. | US 70 | Walnut Grove Church Rd. | 4' shoulders | Orange | 15.6 | Hillsborough | $9,360,000 |
| 15 | Revere Rd./Corbin St./Orange High | Cornelius St. | Holman Dr. | shared/bike path | Orange | 1.7 | Hillsborough | $1,190,000 |
| 16 | Riverwalk | S. Cameron St. | Allison St. | Multi-Use Path | Orange | 1.6 | Hillsborough | $1,120,000 |
| 17 | Sawmill Rd./Carr Store Rd. | Walnut Grove Church Rd. | NC 49 | 4' shoulders | Orange | 8.5 | Hillsborough | $5,100,000 |
| 18 | St. Mary's Rd. | E. King St. | US 70 Bypass | shared | Orange | 1.2 | Hillsborough | $3,120 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 19 | St. Mary's Rd./New Sharon Church F | US 70 Bypass | NC 157 (Guess Rd.) | 4' shoulders | Orange | 8.6 | Hillsborough | $5,160,000 |
| 20 | Torain St./Lawndale Ave./(off road b | Faucette Mill Rd. | Orange High School Rd. | shared/bike path | Orange | 0.7 | Hillsborough | $490,000 |
| 21 | US 70 Business (partially on new ali | Churton St. | Lawrence Rd. | 4' shoulders | Orange | 2 | Hillsborough | $1,200,000 |
| 22 | US 70 Bypass | NC 86 | I-85 exit 170 | 4' shoulders | Orange | 7.5 | Hillsborough | $4,500,000 |
| | **Orange County/Hillsborough Totals** | | | | | **108.5** | | **$59,884,440** |

| No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| ORANGE COUNTY | | | | | | | | |
| 1 | Ben Johnston Rd./US 70/I-85 Conne | Dimmocks Mill Rd. | Mattress Factory Rd. | 4' shoulders | Orange | 7.2 | Orange Co. | $4,320,000 |
| 2 | Buckhorn Rd./Orange Grove Rd./Da | West Ten Rd. | Union Grove Church Rd. | 4' shoulders | Orange | 13.5 | Orange Co. | $8,100,000 |
| 3 | Cornwallis Rd./Mt. Herman Ch. Rd. | Durham County Line | US 70 | 4' shoulders | Orange | 3.4 | Orange Co. | $2,040,000 |
| 4 | Dimmocks Mill Rd./Orange Grove Rd./ Dodsons Crossroads/Butler Rd./White Cross Rd. | I-40/I-85 | Chatham County line | 4' shoulders | Orange | 14.7 | Orange Co. | $8,820,000 |
| 5 | Faucette Mill Rd./Frank Perry Rd./Cc | Thompson Ct. | NC 86 | 4' shoulders | Orange | 3.8 | Orange Co. | $2,280,000 |
| 6 | Highland Farm Rd./Efland-Cedar Gr | Coleman Loop Rd. | Carr Store Rd. | 4' shoulders | Orange | 4.7 | Orange Co. | $2,820,000 |
| 7 | Jones Ferry Rd. | Old Greensboro Rd. | Chatham County Line | 4' shoulders | Orange | 4.1 | Orange Co. | $2,460,000 |
| 8 | Lawrence Rd. | Old NC 10 | St. Mary's Rd. | 4' shoulders | Orange | 2.8 | Orange Co. | $1,680,000 |
| 9 | Lebanon Rd./Brookhollow Rd./Forres | Mill Creek Road | West Ten Rd. | 4' shoulders | Orange | 6.5 | Orange Co. | $3,900,000 |
| 10 | Mt. Sinai Rd. | NC 86 | Kerley Rd. (Durham line) | 4' shoulders | Orange | 4.9 | Orange Co. | $2,940,000 |
| 11 | NC 751/US 70/Old NC 10 | Durham County | NC 86 | 4' shoulders | Orange | 6.6 | Orange Co. | $3,960,000 |
| 12 | NC 86 | US 70 Business | Whitfield Rd. | 4' shoulders | Orange | 7.1 | Orange Co. | $4,260,000 |
| 13 | NC 86/Walnut Grv. Ch. Rd. | Coleman Loop Rd. | Person County line | 4' shoulders | Orange | 7.97 | Orange Co. | $4,782,000 |
| 14 | New Hope Church Rd. | Old NC 10 | Old NC 86 | 4' shoulders | Orange | 4.1 | Orange Co. | $2,460,000 |
| 15 | Old Greensboro Rd. | Sturbridge Ln. | Alamance County line | 4' shoulders | Orange | 9.6 | Orange Co. | $5,760,000 |
| 16 | Old NC 86 | Eubanks Rd. | I-40/I-85 | 4' shoulders | Orange | 4.9 | Orange Co. | $2,940,000 |
| 17 | Old NC 86 | I-40/I-85 | LaFayette Dr. | 4' shoulders | Orange | 0.8 | Orange Co. | $480,000 |
| 18 | Pleasant Green Rd./Schley Rd. | US 70 | Walnut Grove Church Rd. | 4' shoulders | Orange | 15.6 | Orange Co. | $9,360,000 |
| 19 | Sawmill Rd./Carr Store Rd. | Walnut Grove Church Rd. | NC 49 | 4' shoulders | Orange | 8.5 | Orange Co. | $5,100,000 |
| 20 | St. Mary's Rd./New Sharon Church F | US 70 Bypass | NC 157 (Guess Rd.) | 4' shoulders | Orange | 8.6 | Orange Co. | $5,160,000 |
| 21 | US 70 Bypass | St. Mary's Rd. | I-85 exit 170 | 4' shoulders | Orange | 6.5 | Orange Co. | $3,900,000 |
| 22 | Whitfield Rd. | NC 86 | Erwin Rd. | 4' shoulders | Orange | 3.4 | Orange Co. | $2,040,000 |
| | **Orange County Totals** | | | | | **149.27** | | **$89,562,000** |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|

| No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| **CARRBORO** | | | | | | | | |
| 1 | Bolin Creek Greenway Trail | Estes Dr. | Homestead Road | Multi-Use Path | Orange | 2.3 | Carrboro | $1,610,000 |
| 2 | Bolin Creek Greenway Trail | Homestead Road | Lake Hogan Farms | Multi-Use Path | Orange | 1 | Carrboro | $0 |
| 3 | Bolin Creek Greenway Trail | Lake Hogan Farms | Old NC 86 | Multi-Use Path | Orange | 0.2 | Carrboro | $140,000 |
| 4 | BPW Club Rd / Tar Hill Dr./Rock Hav | Tar Hill Dr. | Rock Haven Road | Bike Lanes | Orange | 0.2 | Carrboro | $0 |
| 5 | Dairyland Road | Old NC 86 | Union Grove Church Rd. | Bike Lanes | Orange | 0.6 | Carrboro | $360,000 |
| 6 | Davie Rd. | W.Main St. | Jones Ferry Rd. | Bike Lanes | Orange | 0.6 | Carrboro | $360,000 |
| 7 | Farm House/Tramore Connector | Farm House Drive | Tramore Road | Bike Lanes | Orange | 0.1 | Carrboro | $60,000 |
| 8 | Jones Ferry Road | Old Greensboro Rd. | Highway 54 | Bike Lanes | Orange | 0.7 | Carrboro | $420,000 |
| 9 | Morgan Creek Greenway Trail | Smith Level Road | University Lake | Multi-Use Path | Orange | 1.7 | Carrboro | $1,190,000 |
| 10 | N. Lake Hogan Farm Extension | Lake Hogan Farm Road | Eubanks Road | Bike Lanes | Orange | 1 | Carrboro | $600,000 |
| 11 | Old Fayetteville Road | Jones Ferry Road | Strowd Lane | Bike Lanes | Orange | 1.6 | Carrboro | $960,000 |
| 12 | Old Greensboro Road | Jones Ferry Road | Sturbridge Lane | 4' shoulders | Orange | 0.4 | Carrboro | $240,000 |
| 13 | Old NC 86 | Farm House Drive | Eubanks Road | Bike Lanes | Orange | 2.3 | Carrboro | $1,380,000 |
| 14 | Pathway Drive | Cates Farm Rd. | end | Bike Lanes | Orange | 1.2 | Carrboro | $0 |
| 15 | Quail Roost Drive | Hillsborough Road | McDougle School | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 16 | Roberson Place Bikepath | Eugene St. | Rand Rd. | Multi-Use Path | Orange | 0.4 | Carrboro | $0 |
| 17 | S. Lake Hogan Farm Road | Tramore Road | Homestead Road | Bike Lanes | Orange | 0.3 | Carrboro | $0 |
| 18 | Seawell School Connector | Lake Hogan Farm Road | Seawell School Road | Bike Lanes | Orange | 1.7 | Carrboro | $1,020,000 |
| 19 | Smith Level Road | NC 54 Bypass | Woodcrest Dr. | Bike Lanes | Orange | 0.7 | Carrboro | $0 |
| 20 | Strowd Lane | Old Fayetteville Road | Anderson Community Park | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 21 | Tripp Farm Road | Fairoaks | Seawell School Road | Multi-Use Path | Orange | 0.5 | Carrboro | $350,000 |
| 22 | Tripp Farm Road | Hillsborough Road | Fair Oaks | Bike Lanes | Orange | 0.3 | Carrboro | $180,000 |
| 23 | Smith Level Rd | Woodcrest Dr. | US 15-501 | 4' shoulders | Orange | 2.2 | Carrboro | $1,320,000 |
| 24 | Damascus Church Rd. | Smith Level Rd. | planning boundary | 4' shoulders | Orange | 0.6 | Carrboro | $360,000 |
| 25 | Pathway Drive | Eastern terminus | Seawell School Rd. | Multi-Use Path | Orange | 0.2 | Carrboro | $140,000 |
| 26 | W. Main | Poplar | Jones Ferry Rd. | Bike Lanes | Orange | 0.3 | Carrboro | $180,000 |
| 27 | Weaver st. | N. Greensboro | Main St. | Bike Lanes | Orange | 0.1 | Carrboro | $60,000 |
| 28 | E Main St. | Weaver St./Roberson | Brewer Ln. | Bike Lanes | Orange | 0.3 | Carrboro | $180,000 |
| 29 | Bolin Creek Greenway Trail | Old NC 86 | Old NC86 | Multi-Use Path | Orange | 1.8 | Carrboro | $1,260,000 |
| 30 | Estes spur trail | Estes Ext. @ Estes Park Apts | Wilson Park | Multi-Use Path | Orange | 0.2 | Carrboro | $140,000 |
| 31 | Jones Creek Trail | Lake Hogan Farms Rd. | Morris Grove Elem. | Multi-Use Path | Orange | 0.9 | Carrboro | $630,000 |
| 32 | Old Fayetteville Rd. | Poplar | Laycock | Bike Lanes | Orange | 0.15 | Carrboro | $90,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 33 | Old Fayetteville Rd. | Swansea | NC 54 | Bike Lanes | Orange | 0.25 | Carrboro | $150,000 |
| 34 | Old Pittsboro Rd. | S. Greensboro Rd. | S. Greensboro Rd | Sharrow | Orange | 0.4 | Carrboro | $1,040 |
| 35 | Carr St. | PTA bike path | Sweet Bay Pl. | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 36 | Roberson St. | S. Greensboro Rd. | Sweet Bay Pl. | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 37 | Sweet Bay Pl. | Roberson St. | Red Sunset | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 38 | Red Sunset | Sweet Bay Pl. | Purple Leaf | Sharrow | Orange | 0.07 | Carrboro | $182 |
| 39 | Purple Leaf | Red Sunset | Rand | Sharrow | Orange | 0.08 | Carrboro | $208 |
| 40 | Rand | Purple Leaf | S. Greensboro Rd | Sharrow | Orange | 0.07 | Carrboro | $182 |
| 41 | Brewer Ln. | Roberson Place bike path | E. Main St. | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 42 | Greensboro St. | Old Pittsboro Rd. | Poplar St. | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 43 | Pleasant St. | N. Greensboro St. | dead end | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 44 | Shelton St. | Hillsborough Rd. | N. Greensboro St. | Sharrow | Orange | 0.4 | Carrboro | $1,040 |
| 45 | Elm St. | Weaver St. | Shelton | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 46 | Cobblestone | Hillsborough Rd. | Rock Garden | Sharrow | Orange | 0.4 | Carrboro | $1,040 |
| 47 | Colfax | Rock Garden | Homestead | Sharrow | Orange | 0.5 | Carrboro | $1,300 |
| 48 | Barrington Hills | Hillsborough Rd. | Circadian | Sharrow | Orange | 0.1 | Carrboro | $260 |
| 49 | Rock Garden | Cates Farm | Bolin Creek Trail | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 50 | Horne | Horne Hollow path | Hillsborough Rd. | Sharrow | Orange | 0.2 | Carrboro | $520 |
| 51 | James St. | Hillsborough Rd. | Main St. | Sharrow | Orange | 0.6 | Carrboro | $1,560 |
| 52 | Carol | Old Fayetteville | Lorraine | Sharrow | Orange | 0.6 | Carrboro | $1,560 |
| 53 | Lorraine | James | Hillsborough Rd. | Sharrow | Orange | 0.35 | Carrboro | $910 |
| 54 | Pine St. | Hillsborough Rd. | N. Greensboro St. | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 55 | Williams St. | N. Greensboro St. | Wilson Park | Sharrow | Orange | 0.15 | Carrboro | $390 |
| 56 | Bolin Creek Dr. | Pathway | end | Sharrow | Orange | 0.5 | Carrboro | $1,300 |
| 57 | Bolin Forest | Hillsborough Rd. | Bolin Creek Dr. | Sharrow | Orange | 0.3 | Carrboro | $780 |
| 58 | Camilla | Sharp | Atterbury | Sharrow | Orange | 0.6 | Carrboro | $1,560 |
| 59 | Talley Ho | Rogers | Lake Hogan farms Rd | Sharrow | Orange | 1.3 | Carrboro | $3,380 |
| **Carrboro Totals** | | | | | | **34.22** | | **$13,404,492** |

| No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| **CHATHAM COUNTY** | | | | | | | | |
| 1 | American Tobacco Trail | Durham County Line | Wake County Line | Bike Path | Chatham | 5.2 | County | $0 |
| 2 | Mt. Carmel Church Road | Orange County line | Old Farrington Point Road | Bike lanes | Chatham | 1.2 | County | $720,000 |
| 3 | NC 751 | Durham County line | US 64 Hwy | Bike lanes | Chatham | 3.2 | County | $1,920,000 |

# Bicycle Element of the LRTP - Bike Preferred Option

| 2035 No. | Facility Description | Begin Segment (Limits from) | End Segment (Limits to) | Facility Type | County | Length | Municipality | 2035 Total Cost |
|---|---|---|---|---|---|---|---|---|
| 4 | Old Farrington Point Road | Durham County Line | Mt. Carmel Church Road | Bike lanes | Chatham | 1.7 | County | $1,020,000 |
| 5 | US 15-501 South | Orange County line | US 64 Bypass | Bike lanes | Chatham | 3.2 | County | $1,920,000 |
| | **Chatham County Totals** | | | | | **14.5** | | **$5,580,000** |
| | **TOTAL BICYCLE FACILITIES** | | | | | **1038.35** | | **$542,834,778** |

# Pedestrian Preferred Option – Projects (Durham portion)

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Academy1 | Duke University | Cornwallis | B | 5269.320 | 0.998 | Durham | Durham City | $526,932 | 2025 |
| 2 | Academy2 | Cornwallis | University | B | 3725.660 | 0.706 | Durham | Durham City | $372,566 | 2025 |
| 3 | Acadia | Knox | Markham | C | 1020.980 | 0.193 | Durham | Durham City | $102,098 | 2035 |
| 4 | Albany | Sprunt | Indian | C | 1124.630 | 0.213 | Durham | Durham City | $112,463 | 2035 |
| 5 | AlstonA1 | Trinity | Holloway | B | 5056.600 | 0.958 | Durham | Durham City | $505,660 | 2025 |
| 6 | AlstonA2 | Holloway | NC 147 | B | 4941.160 | 0.936 | Durham | Durham City | $494,116 | 2025 |
| 7 | AlstonA3 | Cecil | Riddle | B | 6482.510 | 1.228 | Durham | Durham City | $648,251 | 2025 |
| 8 | AlstonA4 | Riddle | Cornwallis | C | 9621.750 | 1.822 | Durham | Durham City | $962,175 | 2035 |
| 9 | AlstonA5 | Cornwallis | Carpenter Fletcher | B | 5743.800 | 1.088 | Durham | Durham City | $574,380 | 2025 |
| 10 | AlstonA6 | Carpenter Fletcher | Sedwick | A | 7649.360 | 1.449 | Durham | Durham City | $764,936 | 2015 |
| 11 | AlstonA7 | Sedwick | TW Alexander | C | 5063.450 | 0.959 | Durham | Durham City | $506,345 | 2035 |
| 12 | Ancroft | Delray | Riddle | C | 843.643 | 0.160 | Durham | Durham City | $84,364 | 2035 |
| 13 | Ancroft2 | Ancroft | ATT | C | 1048.150 | 0.199 | Durham | Durham City | $104,815 | 2035 |
| 14 | Anderson2 | Lewis | Campus | B | 1337.880 | 0.253 | Durham | Durham City | $133,788 | 2025 |
| 15 | AndersonA1 | Lewis | Yearby | B | 545.928 | 0.103 | Durham | Durham City | $54,593 | 2025 |
| 16 | AngierPW | Hoover | Midway | B | 5466.900 | 1.035 | Durham | Durham City | $546,690 | 2025 |
| 17 | Archdale1 | Old Chapel Hill | Hope Valley | C | 4090.320 | 0.775 | Durham | Durham City | $409,032 | 2035 |
| 18 | Archdale2 | Alpine | Oak Ridge | C | 1691.560 | 0.320 | Durham | Durham City | $169,156 | 2035 |
| 19 | Avondale | Roxboro | Geer | A | 5613.870 | 1.063 | Durham | Durham City | $561,387 | 2015 |
| 20 | Barbee | Fayetteville | Herndon | B | 15009.700 | 2.843 | Durham | Durham City | $1,500,970 | 2025 |
| 21 | Briggs | Holloway | Main | C | 2841.960 | 0.538 | Durham | Durham City | $284,196 | 2035 |
| 22 | Broad1 | Durham Freeway | F Street | B | 900.339 | 0.171 | Durham | Durham City | $90,034 | 2025 |
| 23 | Broad2 | F Street | North Pointe | B | 3621.810 | 0.686 | Durham | Durham City | $362,181 | 2025 |
| 24 | Broad3 | Eatondale | Carver | C | 2678.890 | 0.507 | Durham | Durham City | $267,889 | 2035 |
| 25 | Buchanan1 | Old Chapel Hill | Butler | C | 1109.840 | 0.210 | Durham | Durham City | $110,984 | 2035 |
| 26 | Buchanan2 | Yancey | Main | C | 3125.260 | 0.592 | Durham | Durham City | $312,526 | 2035 |
| 27 | Buchanan3 | Trinity | Club | B | 1511.390 | 0.286 | Durham | Durham City | $151,139 | 2025 |
| 28 | Cameron | Erwin | Duke University | A | 4425.240 | 0.838 | Durham | Durham City | $442,524 | 2015 |
| 29 | Campus Walk | Morrene | LaSalle | A | 1811.510 | 0.343 | Durham | Durham City | $181,151 | 2015 |
| 30 | Canal | Roxboro | Gearwood | C | 1967.520 | 0.373 | Durham | Durham City | $196,752 | 2035 |
| 31 | Carpenter Fletcher | E Woodcroft Pkwy | Alston | B | 4098.280 | 0.776 | Durham | Durham City | $409,828 | 2025 |
| 32 | Casa | Valley | Horton | C | 1408.070 | 0.267 | Durham | Durham City | $140,807 | 2035 |
| 33 | Chapel Hill1 | Kent | Carroll | C | 511.406 | 0.097 | Durham | Durham City | $51,141 | 2035 |
| 34 | Chapel Hill2 | Maplewood | Lakewood | C | 3930.690 | 0.744 | Durham | Durham City | $393,069 | 2035 |
| 35 | Chapel Hill3 | Prince | Huron | C | 1015.010 | 0.192 | Durham | Durham City | $101,501 | 2035 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 36 | Chapel Hill4 | Huron | Anderson | C | 379.130 | 0.072 | Durham | Durham City | $37,913 | 2035 |
| 37 | Chapel Hill5 | Vesson | University | B | 5585.590 | 1.058 | Durham | Durham City | $558,559 | 2025 |
| 38 | Cheek | Hoover | Junction | B | 5460.260 | 1.034 | Durham | Durham City | $546,026 | 2025 |
| 39 | CheekPW2 | Geer | Hardee | A | 2556.150 | 0.484 | Durham | Durham City | $255,615 | 2015 |
| 40 | Club1 | Ruffin | Ambridge | A | 6296.050 | 1.192 | Durham | Durham City | $629,605 | 2015 |
| 41 | Club2 | Ambridge | Dearborn | B | 4446.080 | 0.842 | Durham | Durham City | $444,608 | 2025 |
| 42 | Cobb | Carroll | Duke | B | 1984.680 | 0.376 | Durham | Durham City | $198,468 | 2025 |
| 43 | Cole Mill | Sparger | Hillsborough | C | 14011.000 | 2.654 | Durham | Durham City | $1,401,100 | 2035 |
| 44 | Cook - Juliette | Fayetteville | Fayetteville | B | 13264.400 | 2.512 | Durham | Durham City | $1,326,440 | 2025 |
| 45 | Cornwallis1 | Erwin | Chapel Hill | B | 13320.900 | 2.523 | Durham | Durham City | $1,332,090 | 2025 |
| 46 | Cornwallis3 | Fayetteville | TW Alexander | B | 13596.000 | 2.575 | Durham | Durham City | $1,359,600 | 2025 |
| 47 | CornwallisA1 | 15-501 | Roxboro | A | 6184.760 | 1.171 | Durham | Durham City | $618,476 | 2015 |
| 48 | CornwallisA2 | Roxboro | Fayetteville | C | 3460.410 | 0.655 | Durham | Durham City | $346,041 | 2035 |
| 49 | Corporation1 | Duke | Rigsbee | C | 1903.390 | 0.360 | Durham | Durham City | $190,339 | 2035 |
| 50 | Corporation2 | Rigsbee | Mangum | C | 1436.000 | 0.272 | Durham | Durham City | $143,600 | 2035 |
| 51 | Dacian | Buchanan | Watts | C | 310.139 | 0.059 | Durham | Durham City | $31,014 | 2035 |
| 52 | DearbornA1 | Old Oxford | Ruth | A | 3957.340 | 0.749 | Durham | Durham City | $395,734 | 2015 |
| 53 | DearbornA2 | Ruth | Club | B | 4470.350 | 0.847 | Durham | Durham City | $447,035 | 2025 |
| 54 | Dixon | University | Archdale | C | 3556.580 | 0.674 | Durham | Durham City | $355,658 | 2035 |
| 55 | Duke Homestead | Carver | Guess | C | 4539.290 | 0.860 | Durham | Durham City | $453,929 | 2035 |
| 56 | Duke2 | Leon | Club | B | 3157.140 | 0.598 | Durham | Durham City | $315,714 | 2025 |
| 57 | Duke3 | Club | Minerva | C | 4534.070 | 0.859 | Durham | Durham City | $453,407 | 2035 |
| 58 | Duke4 | Peabody | Memorial | B | 253.689 | 0.048 | Durham | Durham City | $25,369 | 2025 |
| 59 | Duke6 | Cobb | Lakewood | B | 855.514 | 0.162 | Durham | Durham City | $85,551 | 2025 |
| 60 | DukeA1 | Roxboro | Carver | B | 5758.210 | 1.091 | Durham | Durham City | $575,821 | 2025 |
| 61 | DukeA2 | Carver | Murray | B | 4148.350 | 0.786 | Durham | Durham City | $414,835 | 2025 |
| 62 | Durham - Chapel Hill | I-40 | 15-501 | B | 13846.000 | 2.622 | Durham | Durham City | $1,384,600 | 2025 |
| 63 | Durham - Chapel Hill | 15-501 | Cornwallis | B | 7954.570 | 1.507 | Durham | Durham City | $795,457 | 2025 |
| 64 | Durham - Chapel Hill | Cornwallis | University | B | 4136.820 | 0.783 | Durham | Durham City | $413,682 | 2025 |
| 65 | Englewood | Watts | Ruffin | C | 2318.940 | 0.439 | Durham | Durham City | $231,894 | 2035 |
| 66 | Erwin1B | Kerley | Mt. Sinai | B | 2095.730 | 0.397 | Durham | Durham City | $209,573 | 2025 |
| 67 | Erwin2 | Cameron | LaSalle | B | 4287.290 | 0.812 | Durham | Durham City | $428,729 | 2025 |
| 68 | Erwin3 | Flowers | Pettigrew | B | 3343.540 | 0.633 | Durham | Durham City | $334,354 | 2025 |
| 69 | Everett | Arbor | Edgevale | C | 894.353 | 0.169 | Durham | Durham City | $89,435 | 2035 |
| 70 | FayettevilleA1 | Massey Chapel | Crooked Creek | B | 5982.630 | 1.133 | Durham | Durham City | $598,263 | 2025 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | FayettevilleA2 | Woodcroft | MLK | A | 8664.450 | 1.641 | Durham | Durham City | $866,445 | 2015 |
| 72 | FayettevilleA3 | MLK | Buxton | B | 3846.420 | 0.728 | Durham | Durham City | $384,642 | 2025 |
| 73 | FayettevilleA4 | Buxton | Pilot | B | 5959.010 | 1.129 | Durham | Durham City | $595,901 | 2025 |
| 74 | FayettevilleA5 | Nelson | Pekoe | B | 796.112 | 0.151 | Durham | Durham City | $79,611 | 2025 |
| 75 | Fern | Calvin | Driver | C | 1722.790 | 0.326 | Durham | Durham City | $172,279 | 2035 |
| 76 | Forestview | Forest Hills | Lakewood | C | 1336.120 | 0.253 | Durham | Durham City | $133,612 | 2035 |
| 77 | Formosa | Pekoe | Concord | C | 855.838 | 0.162 | Durham | Durham City | $85,584 | 2035 |
| 78 | Foster | Hunt | Monmouth | C | 414.102 | 0.078 | Durham | Durham City | $41,410 | 2035 |
| 79 | Freeman | Clayton | Valmet | B | 6243.860 | 1.183 | Durham | Durham City | $624,386 | 2025 |
| 80 | GarrettA1 | Hope Valley | Swarthmore | A | 5389.910 | 1.021 | Durham | Durham City | $538,991 | 2015 |
| 81 | GarrettA2 | Swarthmore | Old Chapel Hill | B | 5535.590 | 1.048 | Durham | Durham City | $553,559 | 2025 |
| 82 | GarrettA3 | Old Chapel Hill | 15-501 | B | 5374.980 | 1.018 | Durham | Durham City | $537,498 | 2025 |
| 83 | GarrettA4 | 15-501 | Pickett | B | 5270.260 | 0.998 | Durham | Durham City | $527,026 | 2025 |
| 84 | Geer1 | Washington | Foster | C | 498.795 | 0.094 | Durham | Durham City | $49,880 | 2035 |
| 85 | Geer3 | Elizabeth | Miami | B | 3716.920 | 0.704 | Durham | Durham City | $371,692 | 2025 |
| 86 | Geer4 | Miami | Club | B | 12785.100 | 2.421 | Durham | Durham City | $1,278,510 | 2025 |
| 87 | Georgia | Hillsborough | Club | C | 936.252 | 0.177 | Durham | Durham City | $93,625 | 2035 |
| 88 | Gibson | Lynn | Mineral Springs | C | 4416.390 | 0.836 | Durham | Durham City | $441,639 | 2035 |
| 89 | Glendale1 | Leon | Lavender | C | 2375.330 | 0.450 | Durham | Durham City | $237,533 | 2035 |
| 90 | Glendale2 | I-85 | Corporation | C | 5481.040 | 1.038 | Durham | Durham City | $548,104 | 2035 |
| 91 | Grandale | Barbee | Scott King | C | 10859.500 | 2.057 | Durham | Durham City | $1,085,950 | 2035 |
| 92 | Green1 | Oakland | Carolina | C | 1048.450 | 0.199 | Durham | Durham City | $104,845 | 2035 |
| 93 | Green2 | Carolina | Ninth | C | 1117.440 | 0.212 | Durham | Durham City | $111,744 | 2035 |
| 94 | Green3 | Ninth | Broad | C | 717.107 | 0.136 | Durham | Durham City | $71,711 | 2035 |
| 95 | Green4 | Watts | Glendale | C | 4453.480 | 0.843 | Durham | Durham City | $445,348 | 2035 |
| 96 | Gregson1 | Duke | Club | C | 1417.780 | 0.269 | Durham | Durham City | $141,778 | 2035 |
| 97 | Gregson2 | Club | Markham | B | 2540.510 | 0.481 | Durham | Durham City | $254,051 | 2025 |
| 98 | Guess1 | Bramble | Redmond | C | 4120.210 | 0.780 | Durham | Durham City | $412,021 | 2035 |
| 99 | GuessA1 | Hillcrest | Carver | B | 6010.480 | 1.138 | Durham | Durham City | $601,048 | 2025 |
| 100 | GuessA2 | Carver | Horton | B | 7164.250 | 1.357 | Durham | Durham City | $716,425 | 2025 |
| 101 | Hammond | Farthing | Roxboro | C | 861.391 | 0.163 | Durham | Durham City | $86,139 | 2035 |
| 102 | HardeePW | Holloway | Cheek | B | 5069.650 | 0.960 | Durham | Durham City | $506,965 | 2025 |
| 103 | Hart | Maple | Harvard | C | 2752.950 | 0.521 | Durham | Durham City | $275,295 | 2035 |
| 104 | Herndon | Barbee | Ainsley | C | 2448.960 | 0.464 | Durham | Durham City | $244,896 | 2035 |
| 105 | Hillandale1 | Rose of Sharon | Peppertree | B | 4402.770 | 0.834 | Durham | Durham City | $440,277 | 2025 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 106 | HillandaleA1 | Peppertree | Carver | A | 6383.010 | 1.209 | Durham | Durham City | $638,301 | 2015 |
| 107 | HillandaleA2 | Carver | I-85 | A | 3420.290 | 0.648 | Durham | Durham City | $342,029 | 2015 |
| 108 | Hillsborough1 | Sparger | LaSalle | B | 12854.700 | 2.435 | Durham | Durham City | $1,285,470 | 2025 |
| 109 | Hillsborough2 | LaSalle | Ninth | C | 7933.120 | 1.502 | Durham | Durham City | $793,312 | 2035 |
| 110 | HollowayA1 | Guthrie | Miami | B | 1906.870 | 0.361 | Durham | Durham City | $190,687 | 2025 |
| 111 | HollowayA2 | Miami | Junction | B | 3417.710 | 0.647 | Durham | Durham City | $341,771 | 2025 |
| 112 | HollowayA3 | Junction | Chandler | B | 5565.660 | 1.054 | Durham | Durham City | $556,566 | 2025 |
| 113 | Holt School | Valley | Duke | C | 1863.910 | 0.353 | Durham | Durham City | $186,391 | 2035 |
| 114 | Hope ValleyA1 | HWY 54 | Swarthmore | A | 6131.640 | 1.161 | Durham | Durham City | $613,164 | 2015 |
| 115 | Hope ValleyA2 | Swarthmore | Surrey | C | 5768.520 | 1.093 | Durham | Durham City | $576,852 | 2035 |
| 116 | Hope ValleyA3 | Surrey | Archdale | B | 4753.100 | 0.900 | Durham | Durham City | $475,310 | 2025 |
| 117 | Hope ValleyA4 | Archdale | 15-501 | A | 5992.040 | 1.135 | Durham | Durham City | $599,204 | 2015 |
| 118 | HortonA1 | Hillandale | Stadium | B | 5583.460 | 1.057 | Durham | Durham City | $558,346 | 2025 |
| 119 | HortonA2 | Stadium | Roxboro | B | 4652.440 | 0.881 | Durham | Durham City | $465,244 | 2025 |
| 120 | HWY 54 PW2 | Alston | Miami | B | 13582.800 | 2.572 | Durham | Durham City | $1,358,280 | 2025 |
| 121 | HWY 54 PW3 | Highgate | Fayetteville | B | 3341.730 | 0.633 | Durham | Durham City | $334,173 | 2025 |
| 122 | HWY54A1 | Fayetteville | Barbee | B | 5492.280 | 1.040 | Durham | Durham City | $549,228 | 2025 |
| 123 | HWY54A2 | Barbee | NC55 | B | 6605.000 | 1.251 | Durham | Durham City | $660,500 | 2025 |
| 124 | HWY54A3 | NC 55 | Alston | B | 2087.940 | 0.395 | Durham | Durham City | $208,794 | 2025 |
| 125 | Hyde Park | Fern | Drew | C | 2012.280 | 0.381 | Durham | Durham City | $201,228 | 2035 |
| 126 | Indian | Hillandale | Albany | C | 2300.720 | 0.436 | Durham | Durham City | $230,072 | 2035 |
| 127 | James | Lakewood | University | C | 4731.950 | 0.896 | Durham | Durham City | $473,195 | 2035 |
| 128 | Jester | Alston | end | C | 1201.970 | 0.228 | Durham | Durham City | $120,197 | 2035 |
| 129 | Juniper | Hanover | Miami | B | 4077.090 | 0.772 | Durham | Durham City | $407,709 | 2025 |
| 130 | Kenan | Duke Homestead | Carver | C | 2009.550 | 0.381 | Durham | Durham City | $200,955 | 2035 |
| 131 | Kent1 | Morehead | Lakewood | C | 2016.400 | 0.382 | Durham | Durham City | $201,640 | 2035 |
| 132 | Kent2 | Lakewood | University | B | 3612.890 | 0.684 | Durham | Durham City | $361,289 | 2025 |
| 133 | Knox1 | Watts | Vista | C | 6806.500 | 1.289 | Durham | Durham City | $680,650 | 2035 |
| 134 | Lakewood1 | Chapel Hill | University | B | 5446.560 | 1.032 | Durham | Durham City | $544,656 | 2025 |
| 135 | Lakewood2 | University | Blackwell | B | 732.032 | 0.139 | Durham | Durham City | $73,203 | 2025 |
| 136 | LasalleA1 | Kangaroo | Erwin | A | 2335.100 | 0.442 | Durham | Durham City | $233,510 | 2015 |
| 137 | LasalleA2 | Sprunt | Kangaroo | B | 3631.150 | 0.688 | Durham | Durham City | $363,115 | 2025 |
| 138 | Latta | Guess | Roxboro | B | 6347.330 | 1.202 | Durham | Durham City | $634,733 | 2025 |
| 139 | Lebanon | Guess | Guess | B | 3014.650 | 0.571 | Durham | Durham City | $301,465 | 2025 |
| 140 | Leon | Duke | Glendale | B | 2270.770 | 0.430 | Durham | Durham City | $227,077 | 2025 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 141 | Liberty1 | Dillard | Alston | B | 2641.860 | 0.500 | Durham | Durham City | $264,186 | 2025 |
| 142 | Liberty2 | Park | Miami | B | 3139.340 | 0.595 | Durham | Durham City | $313,934 | 2025 |
| 143 | Luther | Rose of Sharon | Rose of Sharon | C | 4933.940 | 0.934 | Durham | Durham City | $493,394 | 2035 |
| 144 | Lynn | Gibson | Miami | C | 2643.740 | 0.501 | Durham | Durham City | $264,374 | 2035 |
| 145 | Main | Briggs | Gary | B | 1154.650 | 0.219 | Durham | Durham City | $115,465 | 2025 |
| 146 | Maple1 | Liberty | Taylor | C | 1339.820 | 0.254 | Durham | Durham City | $133,982 | 2035 |
| 147 | Maple2 | Taylor | Angier | C | 2097.090 | 0.397 | Durham | Durham City | $209,709 | 2035 |
| 148 | Markham1 | Ninth | Washington | B | 6624.360 | 1.255 | Durham | Durham City | $662,436 | 2025 |
| 149 | Markham2 | Washington | Avondale | A | 5877.510 | 1.113 | Durham | Durham City | $587,751 | 2015 |
| 150 | Martin Luther King | Yorktown | HWY 55 | C | 1239.360 | 0.235 | Durham | Durham City | $123,936 | 2035 |
| 151 | Maryland | Guess | Club | C | 3179.330 | 0.602 | Durham | Durham City | $317,933 | 2035 |
| 152 | Masondale | Roxboro | Formosa | C | 1040.440 | 0.197 | Durham | Durham City | $104,044 | 2035 |
| 153 | Mathison | Ridgeway | End | C | 1215.230 | 0.230 | Durham | Durham City | $121,523 | 2035 |
| 154 | Merrimac | Morehead | House | C | 295.719 | 0.056 | Durham | Durham City | $29,572 | 2035 |
| 155 | Miami | Angier | Stirrup Creek | B | 10509.700 | 1.990 | Durham | Durham City | $1,050,970 | 2025 |
| 156 | MidlandPW | Cheek | Geer | B | 3647.070 | 0.691 | Durham | Durham City | $364,707 | 2025 |
| 157 | Milton | Tom Wilkinson | Roxboro | B | 3603.790 | 0.683 | Durham | Durham City | $360,379 | 2025 |
| 158 | Morehead1 | Anderson | Shepherd | C | 5869.710 | 1.112 | Durham | Durham City | $586,971 | 2035 |
| 159 | Morehead3 | Duke | Roxboro | B | 3689.820 | 0.699 | Durham | Durham City | $368,982 | 2025 |
| 160 | Morreene1 | Neal | Campus Walk | B | 5146.890 | 0.975 | Durham | Durham City | $514,689 | 2025 |
| 161 | Morreene2 | Campus Walk | Erwin | B | 2888.080 | 0.547 | Durham | Durham City | $288,808 | 2025 |
| 162 | Murray | Broad | Roxboro | B | 6991.050 | 1.324 | Durham | Durham City | $699,105 | 2025 |
| 163 | Newby | Horton | Holt School | C | 1649.670 | 0.312 | Durham | Durham City | $164,967 | 2035 |
| 164 | Ninth | Club | Pettigrew | C | 133.513 | 0.025 | Durham | Durham City | $13,351 | 2035 |
| 165 | North Bend | Carpenter Fletcher | Meridian | C | 533.440 | 0.101 | Durham | Durham City | $53,344 | 2035 |
| 166 | North Pointe | Woodmont | Broad | B | 4495.620 | 0.851 | Durham | Durham City | $449,562 | 2025 |
| 167 | Oakland | Sprunt | Green | C | 3457.760 | 0.655 | Durham | Durham City | $345,776 | 2035 |
| 168 | Old Chapel Hill A1 | Pope | Garrett | B | 8772.170 | 1.661 | Durham | Durham City | $877,217 | 2025 |
| 169 | Old Chapel Hill A2 | University | Archdale | C | 6781.610 | 1.284 | Durham | Durham City | $678,161 | 2035 |
| 170 | Old Chapel Hill A3 | Archdale | University | C | 3315.530 | 0.628 | Durham | Durham City | $331,553 | 2035 |
| 171 | Old Oxford | Roxboro | Dearborn | B | 2762.060 | 0.523 | Durham | Durham City | $276,206 | 2025 |
| 172 | Pettigrew | Fayetteville | Briggs | B | 7315.350 | 1.385 | Durham | Durham City | $731,535 | 2025 |
| 173 | Pinecrest | Academy | Marion | C | 2343.400 | 0.444 | Durham | Durham City | $234,340 | 2035 |
| 174 | Randolph | Solterra Way | Pickett | B | 3064.120 | 0.580 | Durham | Durham City | $306,412 | 2025 |
| 175 | RaynorPW | Miami | Hardee | B | 1819.860 | 0.345 | Durham | Durham City | $181,986 | 2025 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 176 | RiddleA1 | Fayetteville | HWY 55 | B | 4420.440 | 0.837 | Durham | Durham City | $442,044 | 2025 |
| 177 | RiddleA2 | HWY 55 | Ellis | B | 5695.230 | 1.079 | Durham | Durham City | $569,523 | 2025 |
| 178 | Ridgeway | Mathison | Lakeland | C | 1357.700 | 0.257 | Durham | Durham City | $135,770 | 2035 |
| 179 | Rose of Sharon | Cole Mill | Guess | C | 13361.700 | 2.531 | Durham | Durham City | $1,336,170 | 2035 |
| 180 | Roxboro2 | Pacific | Murray | A | 7418.380 | 1.405 | Durham | Durham City | $741,838 | 2015 |
| 181 | Roxboro3 | Davidson | Knox | B | 2073.690 | 0.393 | Durham | Durham City | $207,369 | 2025 |
| 182 | Roxboro5 | Holloway | Liberty | B | 262.525 | 0.050 | Durham | Durham City | $26,252 | 2025 |
| 183 | Roxboro6 | Enterprise | Cornwallis | A | 8747.800 | 1.657 | Durham | Durham City | $874,780 | 2015 |
| 184 | Roxboro7 | Cornwallis | Oak Ridge | C | 2740.120 | 0.519 | Durham | Durham City | $274,012 | 2035 |
| 185 | Roxboro8 | Juliette | Hope Valley | C | 8671.830 | 1.642 | Durham | Durham City | $867,183 | 2035 |
| 186 | RoxboroA1 | Pacific | Monk | B | 4823.270 | 0.913 | Durham | Durham City | $482,327 | 2025 |
| 187 | RoxboroA2 | Monk | Infinity | B | 6996.280 | 1.325 | Durham | Durham City | $699,628 | 2025 |
| 188 | RoxboroA3 | Infinity | Tom Wilkinson | B | 6470.040 | 1.225 | Durham | Durham City | $647,004 | 2025 |
| 189 | Seaton | Revere | Wenonah | C | 2187.400 | 0.414 | Durham | Durham City | $218,740 | 2035 |
| 190 | Sedwick | Grandale | Alston | B | 9288.050 | 1.759 | Durham | Durham City | $928,805 | 2025 |
| 191 | Shannon | Durham-Chapel Hill | Old Chapel Hill | B | 5472.490 | 1.036 | Durham | Durham City | $547,249 | 2025 |
| 192 | Shoreham | University | Stuart | C | 664.518 | 0.126 | Durham | Durham City | $66,452 | 2035 |
| 193 | Solitude | Whisperwood | Sedwick | C | 1331.310 | 0.252 | Durham | Durham City | $133,131 | 2035 |
| 194 | Sparger | Cole Mill | Stafford | C | 10352.200 | 1.961 | Durham | Durham City | $1,035,220 | 2035 |
| 195 | Swarthmore | end | Hope Valley | C | 6212.370 | 1.177 | Durham | Durham City | $621,237 | 2035 |
| 196 | Swift | Duke University | Durham Freeway | B | 2676.610 | 0.507 | Durham | Durham City | $267,661 | 2025 |
| 197 | Taylor1 | Elizabeth | Alston | B | 2038.720 | 0.386 | Durham | Durham City | $203,872 | 2025 |
| 198 | Taylor3 | Guthrie | Gary | B | 1632.180 | 0.309 | Durham | Durham City | $163,218 | 2025 |
| 199 | Tom Wilkinson | Milton | Roxboro | C | 1219.320 | 0.231 | Durham | Durham City | $121,932 | 2035 |
| 200 | Trinity2 | Rosetta | Edgar | B | 2632.490 | 0.499 | Durham | Durham City | $263,249 | 2025 |
| 201 | Umstead1 | Scout | Merrick | B | 2086.750 | 0.395 | Durham | Durham City | $208,675 | 2025 |
| 202 | Umstead2 | Riverdale | Guess | C | 6921.410 | 1.311 | Durham | Durham City | $692,141 | 2035 |
| 203 | University1 | Old Chapel Hill | Ivy Creek | B | 3588.730 | 0.680 | Durham | Durham City | $358,873 | 2025 |
| 204 | University2 | Martin Luther King | Old Chapel Hill | B | 5335.560 | 1.011 | Durham | Durham City | $533,556 | 2025 |
| 205 | University3 | Old Chapel Hill | Hope Valley | A | 4091.050 | 0.775 | Durham | Durham City | $409,105 | 2015 |
| 206 | University4 | Hope Valley | Forest Hills | B | 6470.530 | 1.225 | Durham | Durham City | $647,053 | 2025 |
| 207 | University5 | Forest Hills | Lakewood | B | 3374.580 | 0.639 | Durham | Durham City | $337,458 | 2025 |
| 208 | Urban | Buchanan | Washington | C | 3080.180 | 0.583 | Durham | Durham City | $308,018 | 2035 |
| 209 | Valley | Casa | Holt School | C | 1885.060 | 0.357 | Durham | Durham City | $188,506 | 2035 |
| 210 | Vickers | Proctor | University | C | 2357.610 | 0.447 | Durham | Durham City | $235,761 | 2035 |

# Pedestrian Network Element of the 2035 LRTP

| No. | Project Name | From | To | Rank | Length (Feet) | Length (Miles) | County | Municipality | Cost | AQ Implement'n Year |
|---|---|---|---|---|---|---|---|---|---|---|
| 211 | Wabash | end | Plum | C | 2488.470 | 0.471 | Durham | Durham City | $248,847 | 2035 |
| 212 | Ward | Chapel Hill | Forest Hills | C | 4514.890 | 0.855 | Durham | Durham City | $451,489 | 2035 |
| 213 | Washington | Glendale | Urban | B | 5325.100 | 1.009 | Durham | Durham City | $532,510 | 2025 |
| 213 | Watts | Green | Englewood | C | 1999.950 | 0.379 | Durham | Durham City | $199,995 | 2035 |
| | | | | | | | | | **$89,555,622** | |

# ITS/CMS/TDM

# DCHC-MPO 2035 LRTP : ITS Component

Intellligent Transportation Systems

| | ITS Component of the 2035 LRTP | | 2035 LRTP Cost Estimates |
|---|---|---|---|
| | | | |
| 1 | **Freeway Management I-40, I-85, US 15-501, US 70, NC 147, Triangle Parkway, East End Connector** | | $17,550,000 |
| | | | |
| | Electronic Surveillance and traffic monitoring | | |
| | Ramp metering | | |
| | DMS | | |
| | HAR | | |
| | CCTV | | |
| | IMAP Expansion | | |
| | | | |
| 2 | **Incident Management System** | | $7,450,000 |
| 2.1 | Surveillance cameras | | |
| 2.2 | Incident Management algorithms | | |
| 2.3 | Cell phone communication | | |
| 2.4 | On-Call sErvice Patrol/Towing Services | | |
| 2.5 | Road access and disruption mangement system | | |
| | Work zone safety monitoring | | |
| | | | |
| | | | |
| 3 | **Arterial Mangement (advanced signal/traffic control systems)** | | $79,740,000 |
| | **CCTVs** | | |
| | **DMS** | | |
| | **Fibers/communications** | | |
| | **Traffic Adaptive signals** | | |
| | Signal Systems upgrade and Enhancements | | |
| 4 | **Public Transportation ITS - Regional Rail (Phase1, Phase 2, NC54; and Buses: Chapel Hill Transit ( 245 fixed route buses, 38 demand-responsive buses. )** | | $21,000,000 |
| 4.1 | Automated Vehicle Tracking-AVL/AVI | | |
| 4.2 | Eletronic Fare Payment including smard card fare system | | |
| 4.3 | Public Transporttaion (Transit Center) | | |

# DCHC-MPO 2035 LRTP : ITS Component

Intellligent Transportation Systems

| | ITS Component of the 2035 LRTP | | 2035 LRTP Cost Estimates |
|---|---|---|---|
| 4.4 | Real time bus information (bus stops and transfer centers | | |
| 4.5 | Transit corridor priority systems and multi-modal coordination | | |
| 4.6 | Web-based scheduling system and trip planner | | |
| 4.7 | Transit security | | |
| | Transit center** | | |
| **5** | **Rail Operation Information Network** | | $2,300,000 |
| 5.1 | Operation network | | |
| 5.2 | Rail Crossing | | |
| | | | |
| **6** | **Advanced Traveler Information System (ATIS)** | | $4,000,000 |
| | | | |
| **7** | **Electronic Toll/transponders/smart card for Triangle Parkway and I-40 HOT** | | $4,000,000 |
| | | | |
| **8** | **Emergency Mangement** | | $4,900,000 |
| 8.1 | HAZMAT Mangement | | |
| 8.2 | Emergency routing | | |
| 8.3 | Weather Information Processing and Distribution | | |
| | | | |
| **9** | **ITS Data Wharehouse and Archive** | | $2,800,000 |
| | | | |
| **10** | **Commercial Vehicle ITS** | | $2,700,000 |
| | | | |
| | **Total ITS Investment** | | $146,440,000 |

**Projects Descriptions**

| | | | |
|---|---|---|---|
| | | | |
| | Deployment of Variable Message Sign along Arterials cross I-40, I-85, NC 147, US 70 and US 15-501 | | |

# DCHC-MPO 2035 LRTP : ITS Component

Intellligent Transportation Systems

| | ITS Component of the 2035 LRTP | | 2035 LRTP Cost Estimates |
|---|---|---|---|
| | Deployment of video traffic system and traveler information system that provide live and still image data via cable television and internet. Deployment locations to include transportation center/kiosk. | | |
| | Siganal upgrade | | |
| | Advanced Signal Priority System for Transit | | |
| | | | |
| | Regional rail and intercity rail Operations Information Network for distribiting information on service status, passengers, operators/staff and mangement center | | |
| | | | |
| | | | |
| | Transit Priority Systems along major DATA, CHT and TTA routes (approx. 25 routes within the MPO) | | |
| | | | |
| | School Bus ITS system | | |
| | | | |
| | CCTV | | |
| | DMS | | |
| | | | |
| | | | |

# Preferred Option Costs and Revenue Summary

**DCHC 2035 Long-Range Transportation Plan (LRTP)**
**Preferred Option Transportation Plan Elements : Cost Estimates**

| | **COST ESTIMATES (2008 Dollars)** | |
|---|---|---|
| | | |
| No. | **Cost Componests** | **2035 LRTP (2008 $)** |
| 1 | **Highway** | |
| 1.1 | construction/Improvements | $3,339,881,960 |
| 1.2 | Maintenance | $1,018,070,580 |
| | Total Highway Cost Estimates | $4,357,952,540 |
| | | |
| 2 | Others | |
| 2.0 | Non Motorized Transportation | |
| 2.1 | Bike Facilities | $542,834,780 |
| 2.1 | Sidewalks & Pedestrian Walkways | $180,435,000 |
| | Total non-motorized | $723,269,780 |
| | | |
| 3 | **ITS/CMS/TDM** | $193,306,300 |
| | | |
| | Total Others | $916,576,080 |
| | | |
| 4 | **Transit/Public Transportation** | |
| 4.1 | ***Buses (local and Express)- bus component of the light rail option*** | |
| 4.1.1 | Bus Capital Cost | $291,091,330 |
| 4.1.2 | Bus Operating & Maintenance | $466,568,840 |
| 4.1.3 | Amenities and Park&Ride | $46,550,400 |
| | Total Bus Cost | $804,210,570 |
| | | |
| 4.2 | ***Fixed guideway*** | |
| 4.2.1 | Fixed Guideway Capital | $0 |
| 4.2.2 | Fixed Guideway Operating & Maintenace | $0 |
| | Total Fixed Guideway Cost Estimate | $0 |
| | | |
| 4.3 | Rail Corridor Protection | |
| | | $12,454,700 |
| | | |
| | Total Transit/Public Transportation Cost Estimate | $816,665,270 |
| | | |
| | | |

**DCHC 2035 Long-Range Transportation Plan (LRTP)**
**Preferred Option Transportation Plan Elements : Cost Estimates**

| | COST ESTIMATES (2008 Dollars) | |
|---|---|---|
| | | |
| No. | Cost Componests | 2035 LRTP (2008 $) |
| | | |
| | | |
| | TOTAL COST ESTIMATES | $6,091,193,890 |
| | | |

| | 2035 LRTP Revenue Table | |
|---|---|---|
| | | |
| 1 | **Highway Funding** | Amount |
| 1.1 | Federal/State Construction | $ 2,774,801,447 |
| 1.2 | Federal/State Maintenance | $ 1,018,070,580 |
| 1.3 | N.C. Highway Trust Fund | $ 683,621,383 |
| 1.4 | N.C. Turnpike Authority Projects | $ 156,700,000 |
| | Local (CIP) | $ 71,845,820 |
| | Private | $ - |
| | **Total** | $ 4,705,039,230 |
| | | |
| | | |
| | **Bus Transit Funding** | |
| | Federal/State Capital | $ 81,488,210 |
| | Federal/State Op./Mtce/Planning | $ 90,172,140 |
| | Local | $ 438,481,620 |
| | Fares | $ 263,798,020 |
| | Private - Capital (Duke and NCCU) | $ 25,377,310 |
| | Private - Operating (Duke and NCCU) | $ 124,767,220 |
| | **Total** | $ 899,317,300 |
| | | |
| | | |
| | **Fixed Guideway Transit Funding** | |
| | Federal | $ - |
| | State | $ - |
| | Fares | $ - |
| | **Total** | $ - |
| | | |
| | | |
| | **Other Funding (bike/ped)** | |
| | Federal | $ 1,850,000 |
| | Local | $ 36,500,000 |
| | Total Others | $ 38,350,000 |
| | | |
| | **TOTAL Traditional Revenue** | **$ 5,642,706,530** |
| | | |
| | | |
| | **Local Revenue Source Funding** | |
| | Vehicle Rental Tax | $ - |
| | Bonds? | $ - |
| | Sales Tax | $ - |
| | Vehicle Registration Fee | $ - |
| | Tax Increments Financing | $ - |
| | Special Tax District | $ - |
| | Etc... | $ - |
| | **Total** | $ - |
| | | |
| | | |
| | **Highway and Transit Funding** | |
| | Federal Highway ("flexible) | $ - |
| | **Total** | $ - |
| | | |

# Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO)

## *Development Schedule*

### FY 2011-2017 Metropolitan Transportation Improvement Program

| Due Date | Task |
|---|---|
| July-August 2008 | TCC Subcommittee develops Regional Priority List Ranking Methodology |
| 23-July-2008 | TCC recommends Regional Priority List Ranking Methodology |
| **13-Aug-2008** | **TAC approves the Regional Priority List Ranking Methodology** |
| August - September 2008 | Jurisdictions develop local priority lists |
| 1-Oct-2008 | TCC receives local priority lists from member jurisdictions/agencies with application of the Ranking Methodology |
| October 2008 | Development of the Draft Regional Priority List |
| 22-Oct-2008 | TCC recommends Draft Regional Priority List. |
| **12-Nov-2008** | **TAC releases Draft Regional Priority List for a minimum 21-day public comment period** |
| November – December 2008 | Local jurisdictions offer comments on the Regional Priority List |
| **10-Dec-2008** | **TAC holds a Public Hearing on Draft Regional Priority List. TAC may approve the Final Regional Priority List.** |
| 17-Dec-2008 | TCC considers TAC comments, public comments and input from local governments on the Regional Priority List. TCC makes recommendations as needed. |
| **14-Jan-2008** | **TAC approves Final Regional Priority List** |
| **31-Dec-2008** | **NCDOT deadline for Regional Priority Lists (NCDOT has given the DCHC MPO permission to approve in January if necessary.)** |
| January-March 2009 | NCDOT holds Statewide public comment and One-on-One project priority review session with the MPO |
| **TBD (spring 2009)** | **NCDOT releases Draft 2011-2017 State Transportation Improvement Program (STIP)** |

# DURHAM-CHAPEL HILL-CARRBORO MPO
# METHODOLOGY FOR RANKING
# METROPOLITAN TRANSPORATION IMPROVEMENT PROGRAM
# PRIORITY PROJECT REQUESTS (FY 2011-2017)

## INTRODUCTION

The purpose of the Regional Priority List is to facilitate determination of the region's project priorities to be used in development of a fiscally constrained Transportation Improvement Program (TIP). SAFETEA-LU calls for a TIP development process that documents a methodology for ranking project requests, reflects local and metropolitan goals, and addresses mobility, environmental and air quality goals.

## OBJECTIVE

The methodology outlined below is designed to address multi-modal transportation needs and to ensure regional balance through the use of specific technical criteria. The Technical Coordinating Committee (TCC) will use the methodology to develop a draft Regional Priority List. This draft Priority List is to be used as a starting point or a reference base by the Transportation Advisory Committee (TAC) for the approval of a final Regional Priority List.

The TAC may reorder projects at its discretion to promote jurisdictional and geographical balance, or based upon the TAC members' knowledge of the urban area and the policies of their communities. Therefore, the TCC will make its technical recommendation on a draft Priority List based on the methodology described in this document, and the TAC will then be afforded the opportunity to make any changes it deems appropriate.

## METHODOLOGY GOALS

- Produce a program of projects (or project priorities) which satisfies MPO, local and state goals, and addresses SAFETEA-LU policies of system preservation, operational efficiency in the movement of people and goods, multi/inter-modalism, and air quality mandates.

- Be simple enough for project-level analysis without requiring unnecessary data collection.

- Be understandable by the general public.

## PROCEDURE FOR RANKING PROJECTS

### 1. Goal Setting For Regional Priority List

Since the Regional Priority List should be a subset of the DCHC MPO Long Range Transportation Plan (LRTP), the goals for the regional priority list are the same as the DCHC MPO goals and objectives in the 2035 LRTP.

### 2. Submission of Local Priority Lists

All MPO member jurisdictions and Triangle Transit will submit a local priority list to the MPO. The

DCHC MPO requests that the local jurisdictions apply screening criteria during the development of these lists. The screening criteria are:

a. Regional Goals - How well does the project meet the adopted regional goals? Is the project an element of the current long-range plan? Does it implement community objectives (for the intrastate system, does it meet NCDOT mobility objectives)? Does the project have a broad base of local support?

b. Cost Effectiveness - How much benefit does the project offer compared to the estimated cost?

c. Timing Factor – Is the project needed within the TIP funding cycle? Is timing a critical element for the project (one-time opportunity)? Will the opportunity to do the project be lost if it is not in the current priority cycle?

Local jurisdictions may also elect to use the ranking methodology to create their local priority lists but are not required to do so. The TCC will review local priority lists for adherence to these screening criteria before applying the ranking methodology.

Local jurisdictions shall provide the DCHC MPO a list of projects in priority order. The list may be grouped by mode (highway, transit, bicycle and pedestrian), but does not need to be. The local jurisdictions shall provide a short description of the project, including the project limits, name, mileage, and cost. The description should note any essential elements of the project such as bike lanes, sidewalks, transit accommodations, vehicle types, etc. Local jurisdictions are also asked to gather information about their projects and apply the ranking methodology by using the input spreadsheet.

**3. <u>Development of the Regional Priority List</u>**

DCHC MPO staff will combine the local priority lists into a regional priority list by mode and complete the application of the ranking methodology. Projects will be listed in order of the points on the draft regional priority list. This draft list will be presented at a TCC meeting. The TCC first examines the consistency in which local jurisdictions have responded to the screening criteria and applied the methodology. If the methodology is not applied consistently, the TCC can agree to change some responses for consistency among all projects. The draft Regional Priority List is then forwarded to the TAC, as the TCC's recommended project priorities for the urban area.

The TAC will release the draft list for public comment and hold a public hearing at a TAC meeting. <u>The TAC may reorder projects at its discretion to promote jurisdictional and geographical balance, or based upon the TAC members' knowledge of the urban area and the policies of their communities.</u> After review and public comment, the TAC will approve the final Regional Priority List and forward this to NCDOT.

The TCC and TAC may also develop a combined mode comprehensive Regional Priority List. This list would be based on policy priorities, not the ranking methodology because the points are not comparable across different modes.

## APPLICATION OF THE METHODOLOGY

1. There are three separate ranking methodologies based on the primary mode of transportation: 1) highway; 2) bicycle and pedestrian; and 3) transit. ITS, TSM, and TDM projects would be included

in whichever mode best fits the specific project. The three ranking methodologies are independent of each other. Points for different modes are on different scales and are not comparable.

2. Points are weighted and totaled for each project using the three modal ranking methodologies outlined on the last pages of this document.

3. Projects are listed in order of points except for the transit projects. Transit projects are first sorted by year needed with the earliest year (2011) first and then they are listed in order of points. Projects receiving the same number of points are ordered by the local ranking. If the local ranking is also the same (for example, Orange County-1 vs. Chapel Hill-1), then the project with the most additional local rankings will be ranked higher. If the projects also have the same number of additional local rankings, then the project with the highest additional local ranking will be ranked higher.

**MODAL RANKING METHODOLOGIES IN DETAIL**

**Highway**

All seven point categories are weighted equally. A maximum of four points can be received for each point category.

1. *Travel Demand* - This category awards points to projects based on the level of travel demand. For road projects, travel demand is measured by the volume to capacity (V/C) ratio based on the 2035 socio-economic data on the existing plus committed network. For new road facilities in which traffic counts are not available, volumes on a parallel existing facility may be used. Projects must have a V/C ratio of at least 0.80 to receive points. All projects with a V/C greater than 0.80 will be divided equally into four quartiles based on V/C ratio. Assigning points by quartile will ensure that points are distributed evenly and that projects are compared relative to each other. Traffic signal systems, Intelligent Transportation Systems (ITS), and Transportation Demand Management (TDM) projects receive four points because these projects reduce congestion system-wide.

   Local jurisdictions are asked to provide the V/C ratio for their local priorities. MPO staff will divide the projects into quartiles and award points.

2. *Safety (Crashes/100 Million Vehicle Miles)* - Safety points are awarded to projects with reported crash rates significantly greater than statewide averages for urban road segments – the statewide average is 330 to 370 crashes per 100 million vehicle miles (or, 330-370 CRASHES/100 MVM). Projects must have a crash rate of at least 300 CRASHES/100 MVM to receive points. All projects with a crash rate of at least 300 ACC/100 MVM will be divided equally into four quartiles based on crash rate. Assigning points by quartile will ensure that points are distributed evenly and that projects are compared relative to each other. Traffic signal systems, Intelligent Transportation Systems (ITS), and Transportation Demand Management (TDM) projects receive four points because these projects improve safety system-wide.

   Local jurisdictions are asked to provide the crash rate for their local priorities using the NCDOT database. MPO staff will divide the projects into quartiles and award points.

3. *Benefits to Other Modes of Transportation or Use of New Technology* – Points are awarded to projects based on how they benefit other modes of transportation and deploy new technology (carpool, transit, bicycle, pedestrian, ITS, and TDM). For example, a road widening that adds

additional travel lanes, bicycle lanes, and sidewalks on a transit route would benefit three other modes.

Local jurisdictions are asked to describe the benefits and apply the ranking methodology.

4. *Environmental Impacts* - Points are awarded based on the impact on wetlands, streams, water supply watersheds, wildlife habitat, parks, and air quality.

   The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to use the environmental impacts worksheet to assess the impact of projects based on a GIS analysis.

5. *Community Impacts* – Points are awarded based on the impact on neighborhoods, communities, schools, parks, recreation facilities, historic resources, and cemeteries.

   The MPO will provide local jurisdictions a base map of community resources and 2005 population density by Traffic Analysis Zone. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

6. *Environmental Justice*- Points are awarded based on the impact on low-income and minority populations. This item is designed to penalize projects that may have negative impacts on low income areas or federally recognized disadvantaged groups.

   The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

7. *Funding Status in the Transportation Improvement Program (TIP)* - Points are awarded to projects based on the percentage of the total project cost that is funded in the currently adopted Transportation Improvement Program (TIP), or if the project has postyear status in the TIP.

   Local jurisdictions are asked to provide funding status and apply the ranking methodology.

**Bicycle and Pedestrian**

All nine point categories are weighted equally. A maximum of three points can be received for each point category.

1. *Traffic Volume* - This category awards points to projects based on the amount of vehicular traffic on the road that the bicycle and pedestrian facility is provided on. Off-road greenways are based on the parallel or alternate roadways. More points are provided for higher volume facilities to reflect the safety hazard for bicyclists and pedestrians on larger busier roadways. The traffic counts should be taken from the latest Annual Average Daily Traffic (AADT) maps on the NCDOT website.

   Local jurisdictions are asked to provide the AADT and apply the ranking methodology.

2. *Right-of-Way Availability* – This category awards points to projects based on the right-of-way available for the project. Right-of-way should be estimated based on the local jurisdiction's best

knowledge of the area and the NCDOT right-of-way database. Extensive research into property deeds is not required.

Local jurisdictions are asked to provide an estimate of right-of-way and apply the ranking methodology.

3. *Travel Demand from Local Land Uses* – This category awards points to projects based on the proximity to schools, colleges, parks, major retail centers, transit routes, and major employment centers. The bicycle and pedestrian project travel demand worksheet will be used to assign interim points for each project. Projects will be divided equally into four quartiles based on the interim points. Final points will be assigned by quartile to ensure that points are distributed evenly and that projects are compared relative to each other.

   The interim points are assigned using two different tables for bicycle and pedestrian projects to reflect the different travel times and accessibility of the two modes. The numbers of land uses or amenities within the specified distance for the project are recorded on the worksheet. The worksheet multiplies the number of land uses by the appropriate points and total points are calculated by the worksheet. The land uses considered are schools (public or private elementary, middle, or high schools), colleges and universities, major retail centers (over 100,000 square feet or locally recognized shopping districts – i.e. downtown areas), major employment centers (Traffic Analysis Zones over 1,000 in employment in 2005), and fixed transit routes. If a project includes both bicycle and pedestrian improvements, the travel demand points are added together for a total.

   Local jurisdictions are asked to provide the number of land uses served by the project in the travel demand worksheet. MPO staff will divide the projects into quartiles and award final points.

4. *Local Connectivity to Existing Bicycle and Pedestrian Facilities* - Points are awarded based on if projects connect to existing bicycle and pedestrian facilities. This will reward projects that extend the existing bicycle and pedestrian network. Connections are to be counted by street and greenway centerlines (i.e. if a project connects to a street that has sidewalks on both sides of the street, it is only counted as one connection). Projects will be divided equally into four quartiles based on the number of connections. Final points will be assigned by quartile to ensure that points are distributed evenly and that projects are compared relative to each other.

   Local jurisdictions are asked to provide a list of facilities that the project will connect. MPO staff will divide the projects into quartiles and award final points.

5. *Regional Connectivity* – Points are awarded to bicycle based on if the project is a part of the regional routes recognized in the 1992 Regional Bicycle Plan (these routes will be reevaluated as part of the 2035 LRTP process). Projects part of a regional bicycle route that partially exists receive three points. Projects part of a regional bicycle route that does not currently exist receive two points. Projects not part of a regional bicycle route that connect to a regional bicycle route receive one points. Projects that are not part of a regional bicycle route and do not connect to a regional bicycle route receive zero points.

   Points are awarded to pedestrian only projects based on if the project provides a pedestrian connection to regional and local buses. Project limits that include a bus stop for an existing Triangle Transit regional route receive three points. Project limits that include a station area for

a future regional rail receive two points. Project limits that include a bus stop for a local bus route receive one point. Project limits that do not include a bus stop for a transit route receive zero points.

6. *Environmental Impacts* - Points are awarded based on the impact on wetlands, streams, water supply watersheds, and wildlife habitat.

   The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to use the environmental impacts worksheet to assess the impact of projects based on a GIS analysis.

7. *Community Impacts* – Points are awarded based on the impact on neighborhoods, communities, schools, parks, and recreation facilities. Since bicycle and pedestrian facilities are perceived as amenities and usually require little right-of-way acquisition, projects that serve more dense neighborhoods and community facilities receive more points.

   The MPO will provide local jurisdictions a base map of community resources and 2005 population density by Traffic Analysis Zone. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

8. *Environmental Justice* - Points are awarded based on the impact on low-income and minority populations. Since bicycle and pedestrian facilities are perceived as amenities and usually require little right-of-way acquisition, projects that serve low income and minority areas will receive more points.

   The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

9. *Funding Status in the Transportation Improvement Program (TIP)* - Points are awarded to projects based on the percentage of the total project cost that is funded in the currently adopted Transportation Improvement Program (TIP), or if the project has postyear status in the TIP.

   Local jurisdictions are asked to provide funding status and apply the ranking methodology.

**Transit**

Transit projects are awarded points based on seven categories. A maximum of four points can be received for each point category. The year needed must be provided for each project. Projects will be ordered by year needed and then by points.

1. *Service Type* – This category is designed to award points to projects that are essential to maintaining the current transit service. Service expansion and enhancements receive fewer points.
   Local jurisdictions are asked to categorize projects and apply the ranking methodology.

2. *Annual Ridership* – This category awards points to projects that serve more riders. Ridership is calculated on an annual basis. The method of calculating riders varies by project type:

   Replacement Vehicles = # of vehicles * average annual ridership per vehicle

Operating & Maintenance Expenses = annual system ridership
Expansion Vehicles = model output OR # of vehicles * system minimum standard for annual ridership per vehicle
Fixed Guideway / BRT / Express Bus = model output
Park & Ride Lots = spaces * service days/year
Passenger Amenities = # of stops * average daily boarding per stop * service days/year
ITS = annual ridership on affected vehicles

Local jurisdictions are asked to provide the annual ridership. MPO staff will divide the projects into quartiles and award points.

3. *Regional Connectivity* – Projects receive points based on the number of connections to other transit systems. The transit systems considered are: DATA, Chapel Hill Transit, TTA, Orange Public Transit, and Duke University Transit. These are the fixed route systems in the MPO.

   Local jurisdictions are asked to apply the ranking methodology.

4. *Environmental Impacts* - Points are awarded based on the impact on the natural environment. Since most transit projects use existing roadway facilities and thus do not require construction, projects are assessed based on their relative positive air quality impacts. Transit projects that require construction such as fixed guideway, BRT, and park and ride lots should have points deducted if significant environmental impacts may occur due to construction, including impacts on wetlands, streams, water supply watersheds, and rare species habitats.

   The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to use the environmental impacts worksheet to assess the impact of projects based on project type and a GIS analysis for construction projects.

5. *Community Impacts* – Points are awarded based on the impact on neighborhoods, communities, schools, parks, and recreation facilities. Since transit projects are community amenities and usually require little right-of-way acquisition, projects that serve more dense neighborhoods and community facilities receive more points.

   The MPO will provide local jurisdictions a base map of community resources and 2005 population density by Traffic Analysis Zone. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

6. *Environmental Justice* - Points are awarded based on the impact on low-income and minority populations. Since transit projects are community amenities and usually require little right-of-way acquisition, projects that serve low income and minority areas will receive more points.

   The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

7. *Funding Status in the Transportation Improvement Program (TIP)* - Points are awarded to projects based on the percentage of the total project cost that is funded in the currently adopted Transportation Improvement Program (TIP), or if the project has post year status in the TIP.

   Local jurisdictions are asked to provide funding status and apply the ranking methodology.

**OBSERVATIONS**

The order of transit priorities could vary significantly from year to year if anticipated funding sources are reduced or eliminated by Congress.

- Mandates (e.g., the American's with Disabilities Act) may take precedence when programming projects from the Regional Priority List in the TIP.

- The fiscal constraints of programming projects in the TIP may result in the programming of less expensive, lower ranked projects.

- Some lower ranking projects may be implemented earlier than a higher ranked, large project due to the time constraints associated with a more complex project (i.e., major investment studies, preparing environmental documents, designing the project, right-of way acquisition, etc.).

- The utility of ranking more than 25 projects is minimal due to the availability of project funds.

**HIGHWAY**

| | RANKING CRITERIA (MEASURES) | SCORE (points) | Category Weight |
|---|---|---|---|
| | | | |
| 1 | ***Travel Demand*** | | 1 |
| | **2035 volume to capacity ratio (v/c) on existing or parallel roadway** | | |
| | Traffic Signal System, TDM, ITS Projects | 4 | |
| | First quartile of ranked projects, v/c >0.80 | 4 | |
| | Second quartile of ranked projects, v/c >0.80 | 3 | |
| | Third quartile of ranked projects, v/c >0.80 | 2 | |
| | Fourth quartile of ranked projects, v/c >0.80 | 1 | |
| | v/c <= 0.80 | 0 | |
| | | | |
| 2 | ***Safety*** | | 1 |
| | **Crash rate (accidents/100 million VMT)** | | |
| | Traffic Signal System, TDM, ITS Projects | 4 | |
| | First quartile of ranked projects, Crash Rate >300 accidents/100 million VMT | 4 | |
| | Second quartile of ranked projects, Crash Rate >300 accidents/100 million VMT | 3 | |
| | Third quartile of ranked projects, Crash Rate >300 accidents/100 million VMT | 2 | |
| | Fourth quartile of ranked projects, Crash Rate >300 accidents/100 million VMT | 1 | |
| | Crash Rate <=300 accidents/100 million VMT | 0 | |
| | | | |
| 3 | ***Benefits to Other Modes of Transportation or Deployment of New Technology*** | | 1 |
| | Any 4 or more modes (Carpool, transit, bike, pedestrian, ITS, TDM) | 4 | |
| | Any 3 modes (Carpool, transit, bike, pedestrian, ITS, TDM) | 3 | |
| | Any 2 modes (Carpool, transit, bike, pedestrian, ITS, TDM) | 2 | |
| | Any 1 mode (Carpool, transit, bike, pedestrian, ITS, TDM) | 1 | |
| | No other modes | 0 | |
| | | | |
| 4 | ***Environmental Impacts*** | | 1 |
| | **Based on air quality impacts and GIS analysis including wetlands, stream crossings, rare species habitat, parks, and water supply watersheds. Uses environmental impacts worksheet.** | | |
| | No negative or adverse impacts or positive impact | 4 | |
| | Low negative or adverse impacts | 3 | |
| | Medium negative or adverse impacts | 2 | |
| | Medium-High negative or adverse impacts | 1 | |
| | High negative or adverse impacts | 0 | |
| | | | |
| 5 | ***Community Impacts*** | | 1 |
| | **Based on GIS analysis including population density, schools, parks and recreation, historic resources, and cemeteries. Uses community impacts worksheet.** | | |
| | No negative or adverse impacts or positive impact | 4 | |
| | Low negative or adverse impacts | 3 | |
| | Medium negative or adverse impacts | 2 | |
| | Medium-High negative or adverse impacts | 1 | |
| | High negative or adverse impacts no mitigation | 0 | |
| | | | |
| 6 | ***Environmental Justice Impacts*** | | 1 |
| | **Based on GIS analysis of low-income and minority areas (TAZ). Uses environmental justice impacts worksheet.** | | |
| | Positive impact | 4 | |
| | No negative or adverse impacts | 3 | |
| | Low negative or adverse impacts | 2 | |
| | Medium negative or adverse impacts | 1 | |
| | High negative or adverse impacts | 0 | |
| | | | |
| 7 | ***Funding Status in TIP*** | | 1 |
| | Partially funded in current TIP cycle at least 25% of total cost (construction & ROW) | 4 | |
| | Partially funded in current TIP cycle at least 10% of total cost (construction & ROW) | 3 | |
| | Partially funded in current TIP cycle at least 5% of total cost (construction & ROW) | 2 | |
| | Partially funded in post year (construction & ROW) | 1 | |
| | Not programmed in TIP | 0 | |

**BIKE/PED**

| | RANKING CRITERIA (MEASURES) | SCORE (points) | Category Weight |
|---|---|---|---|
| | | | |
| 1 | ***Traffic Count*** | | 1 |
| | **2005 AADT on existing or parallel roadway** | | |
| | 10,000 or greater AADT | 3 | |
| | 2,000 to 10,000 AADT | 2 | |
| | Under 2,000 AADT | 1 | |
| | | | |
| 2 | ***Right-of-Way Availability*** | | 1 |
| | Adequate right-of-way available | 3 | |
| | Some right-of-way available | 2 | |
| | Much right-of-way needed | 1 | |
| | Major barriers to right-of-way acquisition | 0 | |
| | | | |
| 3 | ***Travel Demand from Local Land Uses*** | | 1 |
| | **Based on proximity to schools, colleges, parks, major retail centers, transit, and major employment centers. Uses bike/ped travel demand worksheet.** | | |
| | First quartile of ranked projects | 3 | |
| | Second quartile of ranked projects | 2 | |
| | Third quartile of ranked projects | 1 | |
| | Fourth quartile of ranked projects | 0 | |
| | | | |
| 4 | ***Local Connectivity to Existing Bicycle and Pedestrian Facilities*** | | 1 |
| | **Based on number of connections to existing bicycle and pedestrian facilities** | | |
| | First quartile of ranked projects | 3 | |
| | Second quartile of ranked projects | 2 | |
| | Third quartile of ranked projects | 1 | |
| | Fourth quartile of ranked projects | 0 | |
| | | | |
| 5 | ***Regional Connectivity*** | | 1 |
| | **Based on recognized regional bicycle routes AND/OR pedestrian connections to transit** | | |
| | Part of regional bicycle route that already partially exists AND/OR pedestrian connection to TT regional route | 3 | |
| | Part of regional bicycle route that does not partially exist AND/OR pedestrian connection to future regional rail | 2 | |
| | Local bicycle route that connects to an existing regional bicycle route AND/OR pedestrian connection to local bus | 1 | |
| | Local bicycle route OR no pedestrian connection to transit | 0 | |
| | | | |
| 6 | ***Safety*** | | 1 |
| | **Based on number of crashes involving pedestrians and bicyclists on existing or parallel roadway.** | | |
| | First quartile of ranked projects | 3 | |
| | Second quartile of ranked projects | 2 | |
| | Third quartile of ranked projects | 1 | |
| | Fourth quartile of ranked projects | 0 | |
| | | | |
| 7 | ***Environmental Impacts*** | | 1 |
| | **Based on GIS analysis including wetlands, stream crossings, rare species habitat, and water supply watershed. Uses environmental impacts worksheet.** | | |
| | High positive impact | 3 | |
| | Medium positive impact | 2 | |
| | Low positive impact | 1 | |
| | Negative impact | 0 | |
| | | | |
| 8 | ***Community Impacts*** | | 1 |
| | **Based on GIS analysis including population density, schools, and parks and recreation facilities. Uses community impacts worksheet.** | | |
| | High positive impact | 3 | |
| | Medium positive impact | 2 | |
| | Low positive impact | 1 | |
| | Negative impact | 0 | |
| | | | |
| 9 | ***Environmental Justice Impacts*** | | 1 |
| | **Based on GIS analysis of low-income and minority areas (TAZ). Uses environmental justice impacts worksheet.** | | |
| | High positive impact | 3 | |
| | Medium positive impact | 2 | |
| | Low positive impact | 1 | |
| | Negative impact | 0 | |
| | | | |
| 10 | ***Funding Status in TIP*** | | 1 |
| | Partially funded in current TIP cycle at least 25% of total cost (construction & ROW) | 3 | |
| | Partially funded in current TIP cycle at least 10% of total cost (construction & ROW) | 2 | |
| | Partially funded in post year (construction & ROW) | 1 | |
| | Not programmed in TIP | 0 | |

**TRANSIT**

| | RANKING CRITERIA (MEASURES) | SCORE (points) | Category Weight |
|---|---|---|---|
| | | | |
| 1 | ***Service Type*** | | 1 |
| | Replacement vehicles, operating and maintenance expenses (provides an essential service to maintain the current level of transit service) | 4 | |
| | Expansion vehicles, new fixed guideway, BRT, or express bus, new park and ride lots | 3 | |
| | Enhancements, passenger amenities, ITS | 2 | |
| | | | |
| 2 | ***Ridership*** | | 1 |
| | **Estimated number of new or benefited riders per year** | | |
| | First quartile of ranked projects | 4 | |
| | Second quartile of ranked projects | 3 | |
| | Third quartile of ranked projects | 2 | |
| | Fourth quartile of ranked projects | 1 | |
| | | | |
| 3 | ***Connectivity*** | | 1 |
| | **Connections to fixed route transit systems (CAT, CHT, DATA, Duke, OPT, TT, Wolfline)** | | |
| | Provides 5 or more connections | 4 | |
| | Provides 4 connections | 3 | |
| | Provides 3 connections | 2 | |
| | Provides 2 connections | 1 | |
| | Provides 1 connection | 0 | |
| | | | |
| 4 | ***Environmental Impacts*** | | 1 |
| | **Based on vehicle type, air quality impacts and GIS analysis including wetlands, stream crossings, water supply watersheds, rare species habitat, parks, etc. Uses environmental impacts worksheet.** | | |
| | Very high positive impact | 4 | |
| | High positive impact | 3 | |
| | Medium positive impact | 2 | |
| | Low negative impact | 1 | |
| | High Negative impact | 0 | |
| | | | |
| 5 | ***Community Impacts*** | | 1 |
| | **Based on GIS analysis including population density, schools, and parks and recreation. Uses community impacts worksheet.** | | |
| | High positive impact | 4 | |
| | Medium positive impact | 3 | |
| | Low positive impact | 2 | |
| | Low negative impact | 1 | |
| | High Negative impact | 0 | |
| | | | |
| 6 | ***Environmental Justice Impacts*** | | 1 |
| | **Based on GIS analysis of low-income and minority areas (TAZ). Uses environmental justice impacts worksheet.** | | |
| | High positive impact | 4 | |
| | Medium positive impact | 3 | |
| | Low positive impact | 2 | |
| | Neutral | 1 | |
| | Negative impact | 0 | |
| | | | |
| 7 | ***Funding Status in TIP*** | | 1 |
| | Partially funded in current TIP cycle at least 25% of total cost | 4 | |
| | Partially funded in current TIP cycle at least 10% of total cost | 3 | |
| | Partially funded in current TIP cycle at least 5% of total cost | 2 | |
| | Partially funded in post year | 1 | |
| | Not programmed in TIP | 0 | |

**ENVIRONMENTAL IMPACTS WORKSHEET**

**For BikePed Projects:**

| | |
|---|---|
| Stream Crossings | # |
| | + |
| Major Wetland Crossings | # |
| | + |
| Natural Heritage Element Occurances (rare species habitat) within 1000 feet | # |
| | + |
| In critical water supply watershed | 2 |
| In protected water supply watershed | 1 |
| Not in water supply watershed protection | 0 |
| | = Score |

| Score --> | Impact --> | Points |
|---|---|---|
| 0 | High+ | 3 |
| 1-2 | Medium+ | 2 |
| 3 | Low+ | 1 |
| 4+ | Negative | 0 |

**For Transit Projects:**

| | | |
|---|---|---|
| Replacement Vehicle | | |
| Standard fuel vehicle | Medium+ | |
| Lower emission vehicle (specify in project description) | High+ | |
| Expansion Vehicle | | |
| Standard fuel vehicle | High+ | |
| Lower emission vehicle (specify in project description) | Very High+ | |
| Passenger Amenities | High+ | |
| ITS | High+ | |
| Operating & Maintenance Expenses | Low+ | |
| Fixed Guideway / BRT / Express Buses | Very High+ | Lower if significant physical environmental impacts |
| Park & Ride Lot | High+ | Lower if significant physical environmental impacts |

**For Highway Projects:**

| | |
|---|---|
| Stream Crossings | # |
| | + |
| Major Wetland Crossings | # |
| | + |
| Natural Heritage Element Occurances (rare species habitat) within 1000 feet | # |
| | + |
| In critical water supply watershed | 2 |
| In protected water supply watershed | 1 |
| Not in water supply watershed protection | 0 |
| | + |
| Adjacent to park | 1 |
| Not adjacent to park | 0 |
| | + |
| Reduces emissions | -1 |
| Does not reduce emissions | 0 |
| | = Score |

| Score --> | Impact --> | Points |
|---|---|---|
| -1 | Positive | 4 |
| 0 | Low- | 3 |
| 1-2 | Medium- | 2 |
| 3-4 | Medium/High- | 1 |
| 5+ | High- | 0 |

**COMMUNITY IMPACTS WORKSHEET**

**For BikePed Projects**

| | |
|---|---|
| In or adjacent to most dense TAZ | 3 |
| In or adjacent to second most dense TAZ | 2 |
| In or adjacent to third most dense TAZ | 1 |
| In or adjacent to least dense TAZ | 0 |
| | + |
| Directly adjacent to a K-12 school | 2 |
| Not adjacent to a K-12 school | 0 |
| | + |
| Directly adjacent to a park or recreation facility | 1 |
| Not adjacent to a park or recreation facility | 0 |
| | = Score |

| Score --> | Impact --> | Points |
|---|---|---|
| 6 | High+ | 3 |
| 4-5 | Medium+ | 2 |
| 0-3 | Low+ | 1 |
| 0-3 and construction would negatively impact a community resource (church, school, park, historic property) | Negative | 0 |

**For Transit Projects**

| | |
|---|---|
| In or adjacent to most dense TAZ | 3 |
| In or adjacent to second most dense TAZ | 2 |
| In or adjacent to third most dense TAZ | 1 |
| In or adjacent to least dense TAZ | 0 |
| | + |
| Directly adjacent to a K-12 school | 2 |
| Not adjacent to a K-12 school | 0 |
| | + |
| Directly adjacent to a park or recreation facility | 1 |
| Not adjacent to a park or recreation facility | 0 |
| | = Score |

| Score --> | Impact --> | Points |
|---|---|---|
| 6 | High+ | 4 |
| 4-5 | Medium+ | 3 |
| 0-3 | Low+ | 2 |
| 0 and construction would negatively impact a community resource (church, school, park, historic property) | Low- | 1 |
| 0 and construction would negatively impact more than one community resource (church, school, park, historic property) | High- | 0 |

**For Highway Projects**

| | |
|---|---|
| In or adjacent to most dense TAZ | 3 |
| In or adjacent to second most dense TAZ | 2 |
| In or adjacent to third most dense TAZ | 1 |
| In or adjacent to least dense TAZ | 0 |
| | + |
| Directly adjacent to a K-12 school | 2 |
| Not adjacent to a K-12 school | 0 |
| | + |
| Directly adjacent to a park or recreation facility | 1 |
| Not adjacent to a park or recreation facility | 0 |
| | + |
| Directly adjacent to a historic resource | 1 |
| Not adjacent to a historic resource | 0 |
| | + |
| Direcly adjacent to a cemetery | 1 |
| No adjacent to a cemetery | 0 |
| | = Score |

| Score --> | Impact --> | Points |
|---|---|---|
| 0 and the project would positively impact a neighborhood | Positive | 4 |
| 0 | Low- | 3 |
| 1-3 | Medium- | 2 |
| 4-5 | Medium/High- | 1 |
| 6 | High- | 0 |

**ENVIRONMENTAL JUSTICE IMPACTS WORKSHEET**

**For BikePed Projects**

| Percent Household Income Below Poverty | Percent Minority: At or below county average | Up to 10% above county average | 10%-25% above county average | 25%-50% above county average | Over 50% above county average |
|---|---|---|---|---|---|
| At or below county average | Low+ | Low+ | Low+ | Medium+ | Medium+ |
| Up to 10% above county average | Low+ | Low+ | Medium+ | Medium+ | High+ |
| 10%-25% above county average | Low+ | Medium+ | Medium+ | High+ | High+ |
| 25%-50% above county average | Medium+ | Medium+ | High+ | High+ | High+ |
| Over 50% above county average | Medium+ | High+ | High+ | High+ | High+ |

Negative: If at or below county averages AND construction of the project will have a negative impact on a low-income or minority area

**For Transit Projects**

| Percent Household Income Below Poverty | Percent Minority: At or below county average | Up to 10% above county average | 10%-25% above county average | 25%-50% above county average | Over 50% above county average |
|---|---|---|---|---|---|
| At or below county average | Neutral | Low+ | Low+ | Medium+ | Medium+ |
| Up to 10% above county average | Low+ | Low+ | Medium+ | Medium+ | High+ |
| 10%-25% above county average | Low+ | Medium+ | Medium+ | High+ | High+ |
| 25%-50% above county average | Medium+ | Medium+ | High+ | High+ | High+ |
| Over 50% above county average | Medium+ | High+ | High+ | High+ | High+ |

Negative: If at or below county averages AND construction of the project will have a negative impact on a low-income or minority area

| | |
|---|---|
| Replacement Vehicle | Use system average |
| Operating & Maintenance Expenses | Use system average |
| Expansion Vehicle | Use area of proposed route or system average for general expansion |
| Fixed Guideway | Use areas around proposed stations |
| Park & Ride Lot | Use system average |
| Passenger Amenities | Use system average |
| ITS | Use area of proposed improvements |

**For Highway Projects**

| Percent Household Income Below Poverty | Percent Minority: At or below county average | Up to 10% above county average | 10%-25% above county average | 25%-50% above county average | Over 50% above county average |
|---|---|---|---|---|---|
| At or below county average | Neutral | Low- | Low- | Medium- | Medium- |
| Up to 10% above county average | Low- | Low- | Medium- | Medium- | High- |
| 10%-25% above county average | Low- | Medium- | Medium- | High- | High- |
| 25%-50% above county average | Medium- | Medium- | High- | High- | High- |
| Over 50% above county average | Medium- | High- | High- | High- | High- |

Positive: If at or below county averages AND the project will have a positive impact on a low-income or minority area

## BIKE/PED TRAVEL DEMAND WORKSHEET

**Complete both tables for multi-use trails or projects that include both bicycle and pedestrian facilities.**

**For Bicycle Projects**

A project will receive points based on its proximity to the following land uses:

| | | Proximity | | | | |
|---|---|---|---|---|---|---|
| | | # within 1 mile | 2 points per # | # between 1 and 2 miles | 1 point per # | |
| Land Use | Schools | | 0 | | 0 | Total Points |
| | Colleges | | 0 | | 0 | |
| | Parks | | 0 | | 0 | |
| | Major Retail Centers | | 0 | | 0 | |
| | Major Employment Centers | | 0 | | 0 | |
| | Transit Routes | | 0 | | 0 | |
| **Total** | | | 0 | + | 0 | **0** |

**For Pedestrian Projects**

A project will receive points based on its proximity to the following land uses:

| | | Proximity | | | | |
|---|---|---|---|---|---|---|
| | | # within 1/4 mile | 2 points per # | # between 1/4 and 1/2 mile | 1 point per # | |
| Land Use | Schools | | 0 | | 0 | Total Points |
| | Colleges | | 0 | | 0 | |
| | Parks | | 0 | | 0 | |
| | Major Retail Centers | | 0 | | 0 | |
| | Major Employment Centers | | 0 | | 0 | |
| | Transit Routes | | 0 | | 0 | |
| **Total** | | | 0 | + | 0 | **0** |

| | |
|---|---|
| Schools | K-12 public or private school |
| Colleges | Duke, UNC, NCCU, Durham Tech |
| Parks | State or local public park |
| Major Retail Centers | Retail center over 100,000 square feet AND downtown shopping areas |
| Major Employment Centers | TAZ over 1,000 in employment |
| Transit Routes | DATA, CHT, TTA, OPT fixed routes |

# DEVELOPMENT OF A NEW DIRECTION FOR CMAQ AT NCDOT

## Background

Congestion Mitigation & Air Quality (CMAQ) is a Federal program that funds transportation projects and programs in air quality nonattainment and maintenance areas to help achieve and maintain national standards for pollutants. In North Carolina, the current criteria pollutants are ozone, carbon oxides and particulate matter. Figure 1 shows the current non-attainment and maintenance counties within North Carolina.

CMAQ was initially authorized with ISTEA and further continued in TEA-21 and SAFETEA-LU. The program is jointly administered by FHWA and FTA in consultation with EPA.

Funding is apportioned to North Carolina based on the population in non-attainment and maintenance areas of the state and the severity of air quality problem. These funds are outside of the Equity Formula.

## Current Status of CMAQ program

In 2004, NCDOT changed the process for funding CMAQ projects by issuing a call for projects to be locally administered within North Carolina's 21 non-attainment and maintenance counties[1]. NCDOT announced that approximately $20 million per year would be available to funds CMAQ projects in the TIP for years the 2006 – 2012.

The anticipated North Carolina CMAQ authorization was allocated to eligible MPO/RPOs. In addition, a portion was reserved for projects with statewide benefits. The allocation formula that was used mimicked the Federal apportionment formula and was approved by the Board of Transportation.

The project selection process was a cooperative process performed by an interagency review committee.

- Team was comprised of representatives from NCDOT (Transportation Planning and Program Development); NCDENR (Division of Air Quality); FHWA and FTA; and MPO/RPOs (presiding presidents from NCAMPO and NCARPO).
- Committee reviewed projects based on the CMAQ eligibility rules, emissions benefits, cost and other applicable criteria and recommended projects to the Board of Transportation.

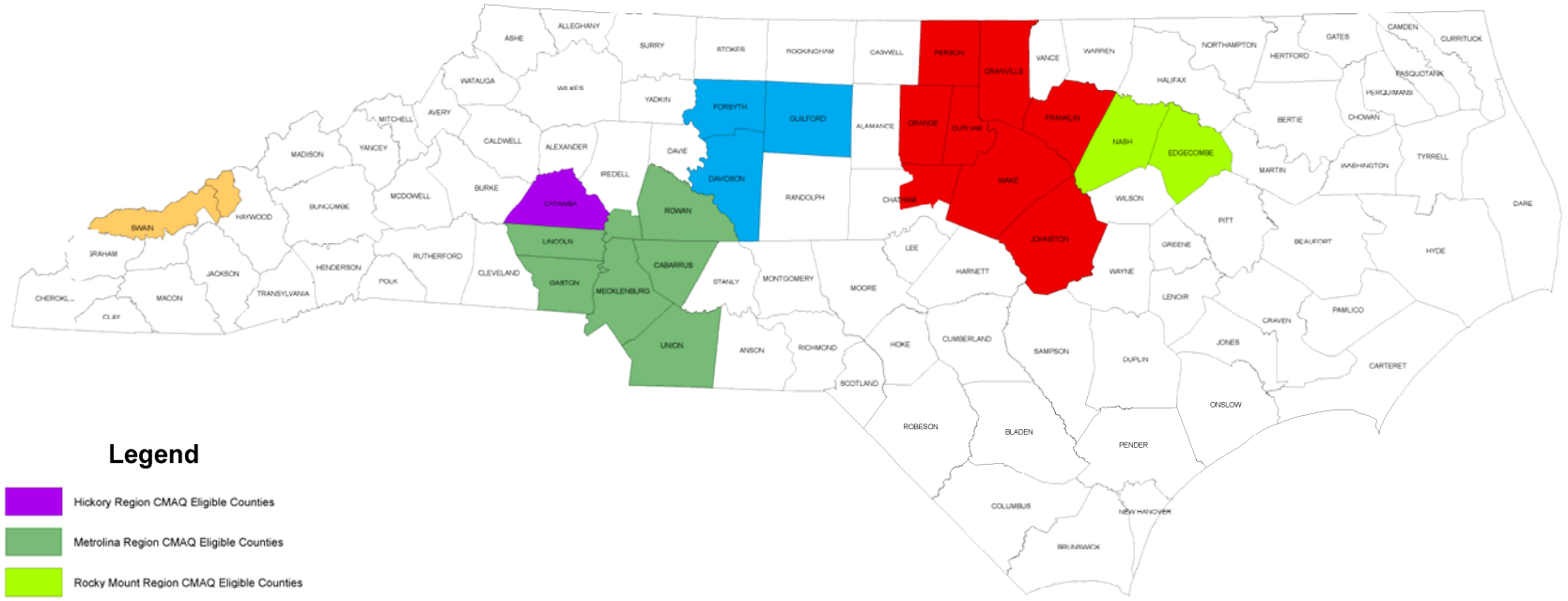
[1] Non-attainment and maintenance counties at that time included the following: Cabarrus, Catawba, Chatham, Davidson, Davie, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, Haywood, Iredell, Johnston, Lincoln, Mecklenburg, Nash, Orange, Person, Rowan, Swain, Union and Wake.



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**Figure 1**

# CMAQ Eligible Counties in North Carolina




NCDOT Transportation Planning Branch
August 4, 2008

The committee reviewed both statewide and local projects.

- **Statewide projects** – those projects benefiting multi-jurisdictions (more than one air quality region), having true statewide benefits, that can not be considered local projects
  - *Evaluated by air quality emissions benefits and cost*

- **Local projects** – awarded within eligible counties at the MPO/RPO level from a selection of candidate projects submitted by local project sponsors up to the target yearly allocation for the MPO/RPO
  - *Evaluated by air quality emissions benefits, MPO/RPO priorities and cost*
  - *Required endorsement by MPO/RPO*

As a result of this call for projects and review of submitted proposals, approximately 100 projects were selected for funding across the State.

- *Four areas did not submit any projects for consideration*[2]
- *Some areas did not submit enough projects to use their full allocation of funds with the intent to add projects based on initial distribution during the next call for projects*
- *Prior to programming projects, received notification that NCDOT cash flow model would only support CMAQ funding of $12 million for first years of program and then increase to $28 million for years 2009 – 2012*

Management of these projects has been managed by the Transportation Planning Branch (TPB) has responsibility for managing the CMAQ program. Other divisions within NCDOT are involved with the process at some point.

- *Management includes overseeing the development of local agreements, requesting Federal authorizations, approving environmental documentation, overseeing local procurement of consultants/contractors, managing individual contracts & reimbursements, etc.*

There have been issues encountered through this process, mostly focused on project implementation and meeting the TIP established cash flow targets.

- *Implementation delays due to local areas being unfamiliar with Federal funds process and our inexperience in project management*
- *Burdensome management process involving a multitude of divisions within NCDOT*
- *Same level of management and oversight required, regardless of project size/cost*

[2] NW Piedmont RPO, Hickory MPO, Unifour RPO, Upper Coastal Plain RPO



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## Opportunity for Change

In light of the issues encountered implementing the program over the last few years and NCDOT's recent transformation process, it seems appropriate to modify the current methodology to improve its functionality and align better with the goals and mission of both the CMAQ program and NCDOT.

The main goals sought with revisions to the current CMAQ methodology include the following:

- To program unused funds remaining from 2004 Call for Projects allocations;
- To better utilize NC's pre-existing CMAQ balance;
- To address implementation and management issues realized as a result of the initial call for projects; and
- To keep in mind the goals of the CMAQ program by focusing on the highest & best use of funds.

In order to meet these goals, the three processes described on the following pages are proposed.

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## ➲ PROGRAMMING UNALLOCATED FUNDS FROM 2004 CALL FOR PROJECTS

Goal – To program unused funds leftover from the 2004 Call for Projects allocations

During the 2004 Call for Projects, four areas did not submit any projects and several others did not submit sufficient project proposals to exhaust their entire CMAQ allocation. Table 1 presents the current balance of CMAQ funds for Fiscal Years 2009 – 2012.

**Table 1. FY 2006 – FY 2012 Summary of Funding**

| Area | 2006 - 2012 Allocation | Total Funded Projects[3] | Balance |
|---|---|---|---|
| Burlington-Graham MPO | $224,438 | $0 | $224,438 |
| Greensboro MPO | $8,649,393 | $6,682,156 | $1,967,237 |
| High Point MPO | $4,644,397 | $496,018 | $4,148,379 |
| NW Piedmont RPO | $1,048,597 | $0 | $1,048,597 |
| Piedmont Triad RPO | $2,279,712 | $765,894 | $1,513,818 |
| Winston-Salem MPO | $9,677,543 | $1,878,520 | $7,799,023 |
| Cabarrus-Rowan MPO | $7,065,979 | $6,557,380 | $508,599 |
| Gaston MPO | $4,383,131 | $6,891,000 | ($2,507,869) |
| Lake Norman RPO | $4,850,744 | $901,152 | $3,949,592 |
| Mecklenburg Union MPO | $24,484,950 | $22,600,652 | $1,884,298 |
| Rocky River RPO | $529,390 | $141,542 | $387,848 |
| Capital Area MPO | $19,076,138 | $23,259,200 | ($4,183,062) |
| Durham-Chapel Hill-Carrboro MPO | $9,332,401 | $5,566,941 | $3,765,460 |
| Kerr Tarr RPO | $3,686,237 | $1,907,140 | $1,779,096 |
| Triangle RPO | $639,141 | $329,758 | $309,383 |
| Hickory MPO | $3,336,171 | $0 | $3,336,171 |
| Unifour RPO | $524,975 | $0 | $524,975 |
| Land of Sky RPO[4] | $1,227,073 | $217,367 | $1,301,205 |
| Southwestern RPO[4] | $294,499 | | |
| Rocky Mount MPO | $1,612,865 | $844,400 | $768,465 |
| Upper Coastal Plain RPO | $4,432,227 | $0 | $4,432,227 |

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[3] As currently programmed in the Draft 2009 – 2015 STIP.

[4] Funding allocated to the Land of Sky RPO and Southwestern RPO was combined, per local request.

NCDOT proposes a process to allow each non-attainment/maintenance MPO/RPO with a balance to submit project proposals for CMAQ funding. The following process would apply:[5]

### ➲ Step 1 (Fall 2008)

MPO/RPOs having a CMAQ balance will receive notification of these balances from the NCDOT Transportation Planning Branch (NCDOT – TPB). This will initiate a window of time for these areas to submit project proposals to NCDOT to exhaust these balances.

- ➲ Project proposals will require a completed CMAQ application (and supporting details) and MPO/RPO endorsement.
- ➲ Individual project proposals will be subject to a minimum cost threshold of $250,000 or amount remaining in MPO/RPO allocation, whichever is less.

### ➲ Step 2 (Winter 2009)

Eligible MPO/RPOs will submit project proposals to NCDOT – TPB for funding consideration. TPB will initiate interagency review.

- ➲ All proposals require documentation of MPO/RPO approval.
- ➲ All proposal packages must be hard copies and must be physically received by TPB by the due date. Email submissions will not be allowed.

### ➲ Step 3 (Winter – Spring 2009)

NCDOT – TPB will distribute project proposals to **Interagency Review Team** (IRT, made up of FHWA, FTA, EPA, NCDOT and NCDAQ[6]), allowing at least **4 weeks** for review & comment. The IRT will convene for a Project Review Meeting, if needed.

- ➲ IRT will determine CMAQ eligibility of each project proposal.

### ➲ Step 4 (Spring 2009)

NCDOT – TPB will provide feedback to eligible MPO/RPOs regarding project proposals. Once all comments have been sufficiently addressed & reviewed by the IRT, NCDOT – TPB will forward IRT recommendation to NCDOT Transportation Improvement Unit Development Unit (NCDOT – TIP Unit).

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[5] Dates shown are for illustrative purposes only to establish a timeline frame of reference. Final dates and deadlines will be established upon final approval of process by NCDOT Board of Transportation.

[6] IRT for this process is not envisioned to include MPO/RPO Association representation, since IRT is only reviewing CMAQ eligibility of proposed projects.

### ➲ Step 5 (Spring 2009)

NCDOT – TIP Unit will add approved CMAQ projects to 2009 TIP by amendment, subject to current funding availability.

### ➲ Step 6 (Spring 2009)

Any funds not programmed for eligible projects through this process will then revert to the general balance of CMAQ funds and be subject to new NCDOT CMAQ Project Selection & Programming Guidelines.

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## ➲ CMAQ Project Fast-Tracking

Goal – To better utilize remaining CMAQ balance by fully funding existing projects

The Federal Energy Independence and Security Act (Energy Act) passed in 2007 allows States to obligate up to 100% Federal share for CMAQ projects for Fiscal Years 2008 and 2009. This presents an opportunity for NCDOT to exhaust a significant portion of the unobligated CMAQ balance[7] by encouraging sponsors to fast-track the preliminary engineering on their CMAQ projects and resulting construction authorization requests.

NCDOT proposes a process to apply 100% Federal CMAQ funds towards projects that meet a specified deadline for construction funding authorization. The following process would apply:[8]

### ➲ Step 1 (Fall 2008)

MPO/RPOs, along with the sponsors of local projects within these areas, will receive notification of the opportunity for full-Federal funding on currently programmed projects. This will initiate a window of time for these areas to assess their ability to meet the requirements of this process and notify NCDOT of their intent.

- ➲ In order to qualify for project fast-tracking, all required preliminary engineering (environmental document and right-of-way authorization) must be complete in time for NCDOT to request Federal funding authority by **September 15, 2009**[9].
- ➲ This offer will extend to any currently programmed CMAQ project or any project proposals programmed as a result of the *Programming of Unallocated Funds from 2004 Call for Projects* process.

### ➲ Step 2 (Fall 2009)

Project Sponsors will evaluate if the required preliminary engineering could be completed for a project so that the construction authorization could be requested no later than **September 15, 2009**. Project Sponsors will then submit documentation of these projects and their commitment to complete the preliminary engineering by this deadline to the associated MPO/RPO.

### ➲ Step 3 (Winter 2009)

MPO/RPOs will submit a list of projects to be fast-tracked via letter/memorandum to NCDOT – TPB. This submittal should include the anticipated completion date for preliminary engineering items.

[7] This unobligated balance is outside of the current MPO/RPO balances.

[8] Unless otherwise noted, dates shown are for illustrative purposes only to establish a timeline frame of reference. Final dates and deadlines will be established upon final approval of process by NCDOT Board of Transportation.

[9] This is the last day that NCDOT will request Federal authorization for funding in FY 2009.



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### ➲ Step 4 (Winter 2009)

NCDOT – TPB will request a Supplemental Agreement for each fast-track project request from the NCDOT Agreements Unit. The Supplemental Agreement will include a provision that if all preliminary engineering is completed by the locally specified completion deadline, NCDOT will request construction authorization with 100% Federal funding. NCDOT – TPB will facilitate local approval of this agreement directly with the Project Sponsor.

### ➲ Step 5 (Fall 2009)

Project Sponsor will submit required preliminary engineering items by the locally specified deadline. In turn, NCDOT – TPB will request construction authorization at 100% Federal funding. If Project Sponsor does not complete preliminary engineering by the locally specified deadline, the project will not be funded with 100% Federal funding and will be funded according to the original local agreement.

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## ➲ Programming Post-2012 CMAQ Funds with New Guidelines

Goal – To revise 2004 call methodology for allocating funds and programming projects, beginning with those funds authorized for FY 2013 and beyond

The 2004 Call for Projects was a successful process, yet there have been issues encountered from the both the State and local perspectives implementing the resulting projects. These include implementation delays and a resource-intensive management process. In addition, NCDOT has implemented new departmental goals and missions and is striving to incorporate these into all programs.

NCDOT proposes modifying the Call for Project methodology to better address these issues and incorporate the NCDOT goals and missions. This process would coincide with the STIP update cycle followed by the NCDOT – TIP Unit. The following guidelines would apply:

### ➲ Step 1 – September Year 1

Eligible MPO/RPOs will receive notification letter outlining the new project selection process and their regional monetary CMAQ allocation for the TIP under development (September – Year 1). MPO/RPOs within each AQ region should work cooperatively to develop CMAQ project proposals.

- ➲ Project proposals will be submitted with the MPO/RPO priority list to the TIP Unit.
- ➲ All projects will be subject to a minimum project cost threshold equal to $250,000.

### Step 2 – Fall Year 1

MPO/RPOs will submit CMAQ project proposals with the project priority list submitted to the NCDOT - TIP Unit. The TIP Unit will forward all CMAQ applications to the TPB.

- ➲ Project proposals will require a completed CMAQ application (and supporting details) and MPO/RPO endorsement.

### ➲ Step 3 – January Year 1

NCDOT – TPB will distribute project proposals to IRT, allowing at least **4 weeks** for review to be followed by a Project Review Meeting to be held in **early January – Year 1** to select Statewide projects and discuss any outstanding issues with local project proposals.

- ➲ **Statewide projects** (those projects benefiting multi-jurisdictions – more than one air quality region – having true statewide benefits that can not be considered local projects) evaluated by air quality emissions benefits and cost
- ➲ **Local projects (**those projects within eligible counties submitted by local project sponsors) evaluated by air quality emissions benefits, MPO/RPO priorities and cost and require endorsement by MPO/RPO

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### ➲ Step 4 – Winter/Spring Year 1

Based on IRT comments, NCDOT – TPB will provide feedback to eligible MPO/RPOs regarding project proposals. Once all comments have been sufficiently addressed & reviewed by the IRT, TPB will forward IRT recommendation to TIP Unit.

### ➲ Step 5 – June Year 1

Approved CMAQ projects will be included in the Draft TIP (June – Year 1).

- ➲ Final Statewide CMAQ projects will be determined based on coordination between the TIP Unit and the BOT/Secretary/Governor
- ➲ Final MPO/RPO projects within a region will be determined based on consultation between BOT Members and MPOs/RPOs in their region

### ➲ Step 6 – June Year 2

Any funds not programmed after final adoption of the STIP revert back to the overall balance & are reallocated per formula for the next update cycle.

**Allocation of Funds**

Allocation of the NC CMAQ apportionment under the proposed modified process is based on a revamp of the distribution formula used in the 2004 call for projects. This new formula allocates funds by AQ region, rather than MPO/RPO. In addition, the formula incorporates 2000 Census population within AQ area as established by EPA[10]. As with the previous allocation formula, factors will be used to account for the severity of AQ pollutants – ozone, carbon oxides and particulate matter – within the AQ regions.

The revised formula is as follows:

$$\text{Yearly Regional CMAQ Allocation} = \frac{\text{Factored NA Population for Region}}{\text{Total State NA Population}} * \text{Total Yearly NC CMAQ Allocation}$$

A minimum yearly allocation will be guaranteed for any AQ region whose yearly allocation resulting from this formula is less than $125,000. These funds will be allocated from the statewide allocation. This will ensure that each AQ region can program at least one CMAQ project that meets the $250,000 minimum project amount during the TIP update cycle.

The actual calculations, as shown in Table 2, are made by county, then summed up to each AQ region. The resulting regional allocations are shown in Table 3.

[10] Source - http://www.epa.gov/oar/oaqps/greenbk/anay.html

# Table 2. Calculation of Funding by County

**Assumed Yearly North Carolina CMAQ Allocation = $30,000,000[1]**

| County | Pollutant | Classification | Non Attainment Area Population (2000 Census)[2] | Pollutant Factors 8-hr Ozone Basic (1.0) 8-hr Ozone Moderate (1.1) $PM_{2.5}$ (1.2) Ozone + CO (1.2 x $O_3$ Factor) | Factored Population | % Factored Population | Yearly Allocation (FP) by County |
|---|---|---|---|---|---|---|---|
| Statewide[3] | | | | | | | $ 6,000,000.00 |
| Cabarrus | 8 hr ozone | Moderate | 131,063 | 1.1 | 144,169 | 3.291% | $ 789,901.48 |
| Gaston | 8 hr ozone | Moderate | 190,365 | 1.1 | 209,402 | 4.780% | $ 1,147,307.75 |
| Iredell[P] | 8 hr ozone | Moderate | 39,885 | 1.1 | 43,874 | 1.002% | $ 240,382.26 |
| Lincoln | 8 hr ozone | Moderate | 63,780 | 1.1 | 70,158 | 1.602% | $ 384,394.66 |
| Mecklenburg | 8 hr ozone, CO | Moderate, Not Classified | 695,454 | 1.3 | 917,999 | 20.957% | $ 5,029,704.62 |
| Rowan | 8 hr ozone | Moderate | 130,340 | 1.1 | 143,374 | 3.273% | $ 785,544.05 |
| Union | 8 hr ozone | Moderate | 123,677 | 1.1 | 136,045 | 3.106% | $ 745,386.92 |
| Davidson | PM 2.5 | Nonattainment | 147,246 | 1.2 | 176,695 | 4.034% | $ 968,110.41 |
| Forsyth | CO | Moderate | 306,067 | 1.0 | 306,067 | 6.987% | $ 1,676,936.61 |
| Guilford | PM 2.5 | Nonattainment | 421,048 | 1.2 | 505,258 | 11.535% | $ 2,768,299.00 |
| Catawba | PM 2.5 | Nonattainment | 141,685 | 1.2 | 170,022 | 3.881% | $ 931,548.05 |
| Chatham[P] | 8 hr ozone | Basic | 21,320 | 1.0 | 21,320 | 0.487% | $ 116,811.97 |
| Durham | 8 hr ozone, CO | Basic, Moderate | 223,314 | 1.2 | 267,977 | 6.118% | $ 1,468,240.97 |
| Franklin | 8 hr ozone | Basic | 47,260 | 1.0 | 47,260 | 1.079% | $ 258,936.85 |
| Granville | 8 hr ozone | Basic | 48,498 | 1.0 | 48,498 | 1.107% | $ 265,719.83 |
| Johnston | 8 hr ozone | Basic | 121,965 | 1.0 | 121,965 | 2.784% | $ 668,244.45 |
| Orange | 8 hr ozone | Basic | 118,227 | 1.0 | 118,227 | 2.699% | $ 647,764.00 |
| Person | 8 hr ozone | Basic | 35,623 | 1.0 | 35,623 | 0.813% | $ 195,177.90 |
| Wake | 8 hr ozone, CO | Basic, Moderate | 627,846 | 1.2 | 753,415 | 17.200% | $ 4,127,950.85 |
| Edgecombe | 8 hr ozone | Basic | 55,606 | 1.0 | 55,606 | 1.269% | $ 304,664.46 |
| Nash | 8 hr ozone | Basic | 87,420 | 1.0 | 87,420 | 1.996% | $ 478,972.90 |
| Haywood[P] | 8 hr ozone | Basic | 28 | 1.0 | 28 | 0.001% | N/A[4] |
| Swain[P] | 8 hr ozone | Basic | 260 | 1.0 | 260 | 0.006% | |
| | | | **3,777,689** | | **4,380,373** | **100.000%** | **$ 30,000,000.00** |

**Notes**

1 - The level of CMAQ funds to be available has not been determined. This funding is based on $30,000,000 with $6,000,000 available on a statewide basis. The total amount to be available and/or the split between regions and statewide is subject to revision.

2 - Source - http://www.epa.gov/oar/oaqps/greenbk/anay.html

3 - $125,000 from yearly Statewide allocation will be allocated for any NA area whose yearly allocation by the revised formula is less than $125,000

4 - 2000 Census population of Great Smoky National Park estimated at 288, which would result in a minimal yearly allocation. Therefore, GSMNP is not included in the distribution formula.

P - only a portion of the county is non-attainment or maintenance for AQ

**Table 3. Statewide and Regional CMAQ Allocations[11]**

| Region | Yearly Allocation | 2011 -2 017 Allocation |
|---|---|---|
| Statewide | $ 6,000,000.00[12] | $ 30,000,000.00[11] |
| Metrolina | $ 9,122,621.75 | $ 45,613,108.74 |
| Triad | $ 5,413,346.02 | $ 27,066,730.12 |
| Hickory | $ 931,548.05 | $ 4,657,740.25 |
| Triangle | $ 7,748,846.82 | $ 38,744,234.09 |
| Rocky Mount | $ 783,637.36 | $ 3,918,186.80 |
| Great Smoky Mtn. Nat'l Park | $125,000.00 | $ 625,000.00 |

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[11] The level of CMAQ funds to be available has not been determined. This funding is based on $30,000,000 with $6,000,000 available on a statewide basis. The total amount to be available and/or the split between regions and statewide is subject to revision.

[12] Minus the allocation of $125,000 per year for each region with minimal yearly allocation resulting from application of revised formula.

September 18, 2008

Mr. Mike Bruff, P.E.
Manager, Transportation Planning Branch
NCDOT
1554 Mail Service Center
Raleigh, NC 27699-1554.

**Subject: Congestion Mitigation Air Quality (CMAQ) policy changes**

Dear Mike:

On September 11 and 12, 2008 the NCAMPO Board discussed the proposed CMAQ policy changes. The NCAMPO Board passed a resolution, here attached, detailing its positions on the proposed changes.

These positions include support for moving forward at this time with some aspects, requested modifications of others, and additional suggestions for an enhanced process. One request is that NCDOT defer a decision on new CMAQ guidelines for future TIP cycles pending consultation involving the Department and the MPOs. NCAMPO intends to provide additional information regarding concerns with the current formulation of this last item prior to the October Board of Transportation meeting.

Please take these positions into account in considering action on this item at the October Board of Transportation meeting. Please feel free to contact me at (910) 342-2781 for more information and regarding follow-up on this action.

Sincerely,

Mike Kozlosky
NCAMPO President
Senior Transportation Planner, City of Wilmington/ Wilmington MPO

CC: Susan Coward, Deputy Secretary of Transportation
Doug Galyon, Board of Transportation, Chairman and Division 7

Conrad Burrell, Board of Transportation, Division 14
Bob Collier, Board of Transportation, Division 12
Marion Cowell, Board of Transportation, Division 10
Nancy Dunn, Board of Transportation, Division 9
Cam McRae, Board of Transportation, Division 2 At Large
Andrew Perkins, Board of Transportation, Division 9 At large
Kenneth Spaulding, Board of Transportation, Division 5
Nina Szlosberg, Board of Transportation, At Large Environment
Lanny Wilson, Board of Transportation, Division 3
Wally Bowman, P.E., Division Engineer, Division 5
Mike Holder, P.E., Division Engineer, Division 12
Pat Ivey, P.E., Division Engineer, Division 9
Neil Lassiter Jr., P.E., Division Engineer, Division 2
Mike Mills, P.E., Division Engineer, Division 7
Barry Moose, P.E., Division Engineer, Division 10
Allen Pope, P.E., Division Engineer, Division 3
Joel Setzer, P.E., Division Engineer, Division 14

## Addendum to NCAMPO Resolution on "A New Direction for CMAQ at NCDOT"
### *Consultation Needs Regarding Proposed Guidelines for Future TIP Cycles*

To effectively enhance project delivery, administrative efficiency, program results, and organizational goals through the CMAQ process for future TIPs (FY 13+), it is important to clearly identify the strengths, weaknesses and opportunities for improvements in the program. NCAMPO requests that the proposed guidelines be deferred pending a consultation process of the Transportation Planning Branch, MPOs, affected RPOs, and other Departmental stakeholders. Key concerns needing further review include:

**Allocation & Process**

- Integration of the CMAQ process into the two year TIP cycle (starting with the identification of priority needs) is needed for an effective and ongoing project development and selection process, for administrative efficiency, and for better outcomes overall.
- NCAMPO has concluded that there is a need to continue the CMAQ allocation through eligible MPOs and RPOs subject to appropriate guidance, administrative enhancements, and appropriate performance measures.
- The proposed regional allocation above the MPO level lacks sufficient detail and presents a series of complications and potential pitfalls. A more detailed review of issues of organizational structure, decision making, guidance and process would be needed prior to determining the relative merits and process option of a regional allocation mechanism.
- Working with MPOs with a demonstrated ability to move specific projects forward in the short term to spend against future year balances will help the department efficiently expend CMAQ resources in the short term and offset impacts that project delays elsewhere in the CMAQ program may present.
- There is a need to reallocate unexpended funds from any RPO or MPO that is unable or uninterested in directing their allocation.

**Project Selection**

- There is a need to develop project selection guidelines in cooperation with MPOs and affected RPOs. These guidelines should consider project scale and function as well as the benefit/cost ratio to ensure projects provide appropriate levels of benefit.
- There also appears to be a need to develop guidelines or other protocol for realistic project scheduling to facilitate orderly TIP project delivery.
- Integrate CMAQ project selection into the priority needs process of TIP. Develop CMAQ timeline with major milestones/ deadlines for MPOs and affected RPOs coinciding with the two year STIP cycle.

**Administrative Efficiency**

- Bundling smaller projects within a jurisdiction (or County) onto single contracts and agreements is administratively and economically efficient. Encourage and facilitate project bundling by municipalities, counties, and Highway Divisions,
- Establish reasonable minimum threshold requirements with exceptions for transit projects flexed to FTA and air quality programs.
- Streamline the agreement process using standard templates, with the local sponsors filling in needed information as appropriate

- Allocating appropriate Departmental staff resources to process the agreements and include Highway Division, Agreements Unit, PTD, and/or DBPT staff as appropriate to improve the administrative process and program outcomes.

**Information Resources**

- Provide and/or require training in federal aid, CMAQ administration, environmental & air quality documentation for project sponsors. This is a common practice in many states and for many types of grant programs.
- Develop and distribute needed information regarding project selection, project scheduling, air quality benefits analysis, and documentation. Post through an NCDOT website clearinghouse.

**MEMORANDUM**

**To:** Transportation Advisory Committee (TAC)
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** October 8, 2008

**Subject:** **Lead Planning Agency (LPA) Staff Report**

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This memorandum provides a summary status of tasks for projects in the FY 2008-2009 Unified Planning Work Program.

- ✓ Indicates that task is complete.
- ✓ Indicates that task is ongoing or not complete.

## 2008-09 Unified Planning Work Program (UPWP) – Projects

### Long Range Transportation Plan (LRTP) / Comprehensive Transportation Plan (CTP) Update

- ✓ Draft schedule – August 2006
- ✓ Release SE Data for public comment – January 2007
- ✓ Release Goals and Objectives for public comment – July 2007
- ✓ TAC approve SE Data – September 2007
- ✓ Goals and Objectives – TAC hold public hearing, September 2007, and approve, October 2007.
- ✓ TAC approve Targets – February 2008
- ✓ TAC review Deficiency Analysis – March 2008
- ✓ TAC review Land Use Scenarios – May 2008
- ✓ TAC review LRTP Alternatives – August 2008
- ✓ Public Outreach for Alternative – August-September 2008
- ✓ Public Hearing on the LRTP Alternative –September 10, 2008
- Release of the Preferred Option for Public Comments and Input – October 200.
- Public Hearing on the Preferred Option – October 8, 2008
- Approval of 2035 LRTP to be used for air quality analysis – December 2008
- Air analysis and Inter-Agency Coordination – December 2008 to February 2009
- Release of draft 2036 LRTP Conformity report – March 2009
- TAC approval of LRTP conformity Determination – April 2009

**NC 54/I-40 Corridor/Sub-Area Study**

- ✓ Staff study initiation meeting
- ✓ Draft scope of services
- ✓ Agency review of scope and time

Request for Proposal notice – October 2008
Proposal due November 2008
Consultant selection November/ December 2008
Council contract approval February/March 2009
Notice to Proceed – February/March 2009

**MPO Parking Survey and Study**

Draft scope of services
Request for Proposal notice – December 2008
Proposal due January 2009
Consultant selection February 2009
Council contract approval March/April 2009
Notice to Proceed – April 2009

**Commercial Vehicle/Freight Survey**

- ✓ Model specification September 2008

Draft scope of services September/October 2008
Request for Proposal notice – December 2008
Proposal due January 2009
Consultant selection February 2009
Council contract approval March/April 2009
Notice to Proceed – April 2009

**GIS/Data Integration and Automation**

- ✓ Phase I in progress
- ✓ Initial Kick of meeting and scan completed
- ✓ Initiation Workshop report completed
- ✓ Draft Requirement Assessment & Application Development Report - October 2008

GIS Warehouse Design & Implementation
Functional TELUDE Development
Development of Common Maps, Models & Reports
TELUDE Implementation, Testing and Evaluation
TELUDE Computing Environment
Deployment, Documentation, Users Guide and Training

**Land-use Model development**

- ✓ Multi-year project in progress
- ✓ Review of existing data and need/requirement analysis completed
- ✓ Land use data collection completed
- ✓ Development of Model specification Completed



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✓ Model architecture and design completed
Database for UrbanSim model
Phase 1 model development
Demographic and Economic Transition Models
Household and Job Location Choice Models
Development Models
Price Models
Accessibility and TRM Interface
Integration of Model Outputs
Training, documentation, User's manual
Final Presentation

**Non-Motorized Model development**

✓ Phase 1 completed.

Phase 2 underway awaiting the completion of LRTP modeling tasks

- Update and enhancement of Generation Choice Models
- Revision and revalidation of Destination choice models
- Development of improved Model Choice model
- Prepare and implement new TransCad routines to implement new models
- Documentation, User's manual, and training
- Project completion date anticipated in 2010

**ITS Deployment Plan**

✓ Two Triangle regional stakeholder coordination meetings held.
✓ Update of ITS short range strategies for the 2007-2013 TIP.
✓ Update of 2007-2010 ITS project – December 2006
✓ Request for funding from NCDOT
✓ Draft scope of services and Request for Proposals.
✓ Consultant selection in spring of 2008

- Notice to proceed in October 2008
- Scan of Best practices
- ITS Vision and goals
- Gap Assessment
- Development of ITS Architecture
- Development of ITS Cost Estimates and Cost database
- Development of Maintenance Plan
- Development of IDAS Model
- Integration & Streamlining of ITS with Transportation Planning.
- Strategic Deployment Plan
- Project Management
- Final Reports
- Completion of Project expected in Winter of 2010.

**Farrington Road/Stagecoach Road Corridor Study**



Page 3 of 4

- ✓ This study involved the following tasks:
  1. Data collection and analysis
  2. Traffic circulation plan (including a collector street system plan)
  3. Sub-area modeling analysis and forecast of future demand
  4. Alternative evaluation
  5. Recommendation
- ✓ Kimley Horn and Associates is the consultant
- ✓ Data collection underway
- ✓ Steering Committee proposed
- ✓ Completion of study expected in January
- ✓ Integration in the 2035 LRTP
- ✓ Draft report complete
- ✓ Presentation at June TAC

**MPO Collector Street Plan**

- ✓ Supplemental Agreement with Kimley Horn and Associates
- ✓ Data collection underway
- ▪ Completion of study and integration with the 2035 LRTP in Spring 2009

**MPO Expansion for the next LRTP Update**

- ✓ Initiated dialogue with Person County, Granville County, Butner, Roxboro and Pittsboro – July 2006
- ✓ Met with governing bodies of these jurisdictions – September 2006
- ✓ MPO expansion and revision of MOU expected to be completed as part of the 2035 LRTP update.

**Public Outreach for the East End Connector Planning and Environmental Study**

- ✓ LPA working on the Public Involvement and Outreach Program for the East End Connector Planning and Environmental Study (NEPA).
- ✓ Development of mailing list database complete.
- ✓ Received project schedule and time line from NCDOT.
- ✓ Newsletter distributed May 2006
- ✓ Speakers Bureau presentations June 2006 – ongoing
- ✓ First public meeting September 26, 2006
- ✓ Second public meeting – January 30, 2007
- ✓ Alternative 3 selected as LEDPA – June 19, 2007
- ✓ Ad Hoc Committee Meetings – August 9, 2007, August 27, 2007, September 19, 2007, October 10, 2007, November 7, 2007, December 5, 2007
- ✓ Third public meeting December 10, 2007, Orange Grove Missionary Baptist Church
- • Environmental Study expected completion - summer 2008



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## NCDOT PROJECTS UNDER CONSTRUCTION IN DURHAM COUNTY - 10/1/2008

| County | TIP # | Route | Location Description | Contract Amount | Length | Contractor Name | Resident Engineer | RE Ph. # | Contract Completion | Scheduled Progress | Actual Progress | Estimated Completion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DURHAM | U-4410DB | HOPSON ROAD | NEW ALIGNMENT OF HOPSON ROAD FROM NC-55 TO LOUIS STEPHENS DRIVE | $ 3,476,305.55 | 0.587 miles | Thompson Contracting, Inc. | Jeff Allen, PE | (919) 733-9499 | 10/1/2008 | 90.0% | 93.7% | 11/1/2008 |
| DURHAM | U-4010 | NC 98 | WIDENING OF NC 98 (HOLLOWAY ST) FROM EAST OF US 70 TO EAST OF JUNCTION ROAD | $ 3,288,207.30 | 0.369 miles | Triangle Grading and Paving | Cadmus Capehart, PE | (919) 840-0914 | 6/15/2008 | 100.0% | 52.9% | 12/15/2008 |
| DURHAM / WAKE | U-4026A/B R-2904 | DAVIS DRIVE / NC-54 | WIDENING OF DAVIS DRIVE FROM MORRISVILLE-CARPENTER ROAD TO NC 54, WIDENING OF NC-54 FROM DAVIS DRIVE TO MIAMI BLVD | $ 35,467,891.08 | 6.363 miles | C C Mangum Company LLC | Jeff Allen, PE | (919) 733-9499 | 11/1/2009 | 48.5% | 64.9% | 11/1/2009 |
| DURHAM | B-3169 | RIVERMONT ROAD | BRIDGE 158 ON RIVERMONT ROAD (SR-1402) | $ 539,350.81 | 0.067 miles | SMITH-ROWE, INC. | Durham RE Office | (919) 220-4680 | 11/10/2008 | 69.2% | 67.3% | 11/10/2008 |
| DURHAM | B-3450 / U-4009 / U-4012 | GARRETT ROAD | TWO BRIDGES ON GARRETT RD; SERVICE ROAD NEAR US 15-501 AND GARRETT RD INTERSECTION; US 15-501 FROM NORTH MT. MORIAH RD SOUTH OF GARRETT RD | $ 18,810,912.36 | 1.769 miles | DLB, Inc. | Durham RE Office | (919) 220-4680 | 8/1/2010 | 21.9% | 19.7% | 8/1/2010 |
| DURHAM / WAKE | B-3528 | LEESVILLE ROAD | BRIDGE OVER SYCAMORE CREEK ON LEESVILLE ROAD (SR-1839) | $ 1,174,705.74 | 0.284 miles | Mountain Creek Contractors, LLC | Cadmus Capehart, PE | (919) 840-0914 | 5/15/2009 | 22.4% | 37.1% | 5/15/2009 |
| DURHAM | B-4109 | PICKETT ROAD | BRIDGE OVER MUD CREEK ON PICKETT ROAD (SR-1303) | $ 1,102,441.20 | 0.078 miles | Kirkman Construction, Inc. | Cadmus Capehart, PE | (919) 840-0914 | 11/21/2008 | 15.5% | 21.7% | 11/21/2008 |
| DURHAM / WAKE | 2008-RESURF | US-70 | WIDENING, RESURF. AND SHLDR RECONSTR. OF US-70 W OF ANGIER AVE TO W OF ANGUS DR | $ 1,889,926.35 | 4.39 miles | Rea Contracting, LLC | Cadmus Capehart, PE | (919) 840-0914 | 10/31/2008 | 39.5% | 11.7% | 10/31/2008 |

## NCDOT PROJECTS FOR LET NEXT 12 MONTHS IN DURHAM COUNTY - 10/1/2008

| County | TIP # | Route | Location Description | Contract Estimate | Length | Contact Engineer | Phone # | Contract Let Date |
|---|---|---|---|---|---|---|---|---|
| DURHAM | U-2055B | NC 55 | CONSTRUCTION OF TURN LANES AT RIDDLE ROAD AND NC-55 | $ 223,238.50 | | B. UPSHAW | (919) 220-4600 | 12/1/2008 |
| DURHAM | U-2055D | AVONDALE DRIVE | CONSTRUCTION OF ROUNDABOUT ON AVONDALE DRIVE | $ 493,065.78 | | B. UPSHAW | (919) 220-4600 | 3/1/2009 |
| DURHAM | U-3309A | TW ALEXANDER DR | WIDENING FROM CORNWALLIS ROAD TO EAST OF NC-147 | $ 9,900,000.00 | 1.072 miles | J. MOORE | (919) 250-4016 | 8/18/2009 |
| DURHAM | U-4011 | S MIAMI BLVD | WIDENING FROM METHODIST ST TO BETHESDA AVE | $ 3,700,000.00 | 0.7 miles | J. MOORE | (919) 250-4016 | 8/18/2009 |

12 MONTH TENTATIVE LET LIST MAY BE FOUND ONLINE AT: http://www.ncdot.org/planning/development/ProjectMgmt/12month/

PROGRESS REPORTS MAY BE FOUND ONLINE AT: https://apps.dot.state.nc.us/traffictravel/progloc/

## *ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO*

| County | WBS # | Route | Location Description | Amount | Status |
|---|---|---|---|---|---|
| | | | | | |
| Orange | 36945 | SR 1010 (Franklin St.) @ Mallette St. | Upgrade traffic signal and install pedestrian signal heads REVISION: Install mast arm | $110,000.00 | Advertisement pending |
| | | | | | |
| Orange | 41488 | US 15-501 @ SR 1900 (Old Mason Farm Road) | Extend the left turn lane on northbound US 15-501 , revise the signal and add a right turn lane at SR 1900 | $147,500.00 | **FA widening began 9/10/08; UNC-CH to install ped heads & crosswalks by M.A.** |
| | | | | | |
| Orange | 41593 | Union Street | Construct 750 feet of sidewalk and a crosswalk to connect Hillsborough Elementary School to SR 1156 (Nash St.) | $32,000.00 | Town to include as part of large STP-DA sidewalk contract for Nash St.-Enc. Agreement under review |
| | | | | | |
| Orange | 41686 | NC 54 @ SR 1102/1951 (Dodson's Crossroads/ Butler Rd.) | Construct left turn lanes in both directions | $250,000.00 | S.T. Wooten Corp. **=100% complete** |
| | | | | | |
| Orange | 42037 | SR 1939 (Damascus Ch. Rd.) 0.8 mi. west of SR 1919 (Smith Level Rd.) | Install guardrail at Pipe# 89 | $17,000 | Req. by OWASA; District POC to be compl. by 10/31/08 |
| | | | | | |
| Orange | 42038 | SR 1005 (Greensboro - Chapel Hill Rd.) approx. 1.6 mi. west of SR 1942 (Jones Ferry Rd.) | Install guardrail at Bridge# 85 | $11,000 | Req. by OWASA; District POC to be compl. by 10/31/08 |
| | | | | | |
| Orange | B-4218 | SR 1730 (Turkey Farm Rd.) | Replace Bridge # 108 over New Hope Creek | $750,000.00 | Dane Const., Inc. =began work 9/2/08; Completion by 4/29/09 |
| | | | | | |
| Orange | 42170 SS-4907 T 42204.2 42204.1 | SR 1710 (Old NC 10) @ NC 86 | Construct a right turn lane on SR 1710 and install a traffic signal | $215,000 | Design pending survey |
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|---|---|---|---|---|---|
| Orange | 42171 SS-4907 U 42205.2 42205.1 | SR 1710 (Old NC 10) @ SR 1713 (Mt. Herman Church Road) | Improve sight distance on SR 1710 by lowering the crest vertical curve on the westbound approach to the intersection | $300,000 | Design pending survey |
| | | | | | |
| Orange | 7CR.10681.14 7CR.20681.14 7C.068081 | 4 sections of NC 54 and ramps and 5 sections of secondary roads | Milling, resurfacing, pavement markings, and shoulder reconstruction | | S.T. Wooten Corp.=**45% complete;** ICD 8/8/08 Compl. 10/31/08; |
| | | | | | |
| Orange | SF-4907 B 41699.3 C 41699.1 PE | US 70 (Hillsborough Rd.) and NC 751 near Durham | Install a right turn lane for traffic travelling east on US 70 and turning right onto NC 751 | $90,000 C $35,000 PE | **Barrett, Irvin & Jordan to be complete by 11/21/08** |
| | | | | | |
| Orange | SS-4907 J 41634.3 | NC 54 and SR 1945 (Neville Rd.) | Construct a left turn lane | $187,000.00 | S.T. Wooten Corp. **=100% complete** |
| | | | | | |
| ***NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTNG LIST*** | | | | | |
| | | | | | |
| **County** | **TIP #** | **Route** | **Location Description** | **TIP Est.** | **Est. Let Date** |
| | | | | | |
| Orange | I-4716 | I-40 | Grind and reseal joints on I-40 from I-85 to Durham Co. ( Scope may be revised) | $1.05 million | Jan. 20, 2009 |
| | | | | | |
| Orange | B-4592 | SR 1561 (Lawrence Rd.) | Replace Bridge # 64 over the Eno River | $1.6 million | Jan. 20, 2009 |
| | | | | | |
| Orange | U-0624 | NC 86 (S. Columbia St.) | Corridor upgrade including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.) | $4.40 million | July 21, 2009 |
| | | | | | |
| Orange | U-4704 | Chapel Hill-Carrboro | Computerized Traffic Signal System | $5.0 million | April 21, 2009 |