DCHC

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

AGENDA

July 23, 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 June 25, 2008 TCC Meeting Minutes
(Attachment 4)

A copy of the June 25, 2008 minutes is enclosed as Attachment 4.

TCC Action: Approve minutes of the June 25, 2008 TCC meeting.

5. FY 2011-2017 Transportation Improvement Program – Regional Priority List – Ranking Methodology
(Attachment 5, 5A)
Felix Nwoko, 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. At the June TCC meeting, the TCC received the schedule for the development and approval of the Ranking Methodology and Regional Priority List (Attachment 5). The TCC TIP Subcommittee met on July 2, 2008 to discuss the Ranking Methodology.

Attachment 5A is the Subcommittee's recommended methodology. The Subcommittee revised the methodology used for the FY 2009-2015 TIP Regional Priority List. Again, three separate methodologies are used for highway, bicycle/pedestrian, and transit projects. Slight changes were made to the highway and bicycle/pedestrian methodologies. More significant changes were made to the transit methodology. The LPA would like to receive feedback on the point categories highlighted in Attachment 5A.

- Bicycle/pedestrian – regional connectivity
- Transit – service type or essential services
- Transit – ridership

TCC Action: Recommend that the TAC approve the FY 2011-2017 Transportation Improvement Program Regional Priority List Ranking Methodology.

6. 2035 Long Range Transportation Plan and Comprehensive Transportation Plan
Andy Henry, LPA Staff

Staff will provide an update of the 2035 LRTP activities, including status of the modeling analysis.

TCC Action: Receive update and provide comments.

7. Regional Bicycle and Pedestrian Connections
(Attachments 7, 7A)
Dale McKeel, LPA Staff

The TAC has requested that the 2035 LRTP identify regionally significant bicycle and pedestrian connections. As part of the 2035 LRTP review process, LPA staff will solicit input on regional connections from the public and local transportation boards. As a starting point for discussion, text from the 1993 DCHC Regional Bicycle Plan is attached (Attachment 7) as well as a map showing the regional routes recommended by the 1993 plan (Attachment 7A).

TCC Action: Define regional bicycle and pedestrian connections and determine which corridors will be shown on maps that are used to solicit input from the public and local transportation boards as part of the 2035 LRTP review process.

8. Memorandum of Agreement between the DCHC MPO, DATA, Chapel Hill Transit and Triangle Transit
(Attachment 8)
Felix Nwoko, LPA Staff

The purpose of this agreement is to specify cooperative procedures for carrying out transportation planning and programming in the DCHC metropolitan planning area in compliance and conformance with federal planning regulations (23 CFR 450, Subpart C). This Memorandum of Agreement (MOA), which is Attachment 7, is intended to make explicit and expand upon existing cooperating planning and programming procedures and activities, and to establish new or expanded cooperative procedures where necessary in order to meet federal requirements for a continuing, cooperative and comprehensive urban transportation planning process.

TCC Action: Recommend that the TAC authorize the Chair to execute the Memorandum of Agreement between the DCHC MPO, DATA, Chapel Hill Transit, and Triangle Transit.

REPORTS FROM STAFF:

9. **Reports from Staff**
   (Attachment 9)
   Felix Nwoko, LPA Staff

TCC Action: Receive Report from staff

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

TCC Action: Receive Report from TCC Chair

11. **NCDOT Report**
    (Attachment 11)
    Wally Bowman, Division 5 – NCDOT
    Mike Mills, Division 7 – NCDOT

INFORMATIONAL ITEMS

PENDING ITEMS

Adjourn

Next meeting: August 27, 2008

TECHNICAL COORDINATING COMMITTEE

June 25, 2008

MINUTES OF MEETING

*Jamal Alavi	NCDOT - TPB
*David Bonk	Town of Chapel Hill (TCC Vice-Chair)
*Stanley Buff	NCDOT – Division 7 Engineer
*Tobin Freid	Durham County
*Andy Henry	City of Durham – Transportation Division
*John Hodges Copple	Triangle J COG
*Adena Messinger	Town of Carrboro
*Ryan Mickles	Town of Chapel Hill
*Felix Nwoko	City of Durham – Transportation
*Liz Rooks	Research Triangle Foundation
*Ed Venable	City of Durham
*Battle Whitley	NCDOT – Division 5 Engineer

Bill Barlow	NCDOT - PTD
Ellen Beckmann	City of Durham - Transportation
Dale McKeel	City of Durham - Transportation
Dawn Qiu	City of Durham – Transportation
Jill Stark	FHWA

*Voting Member

David Bonk, TCC Vice-Chair, called the meeting to order at 9:05 a.m.

PRELIMINARIES:

Adjustments to the Agenda

There were no adjustments to the agenda.

Public Comments

There were no public comments.

ACTION ITEMS:

Approval of May 28, 2008 TCC Meeting Minutes (Attachment 4)

A motion was made by Felix Nwoko and seconded by Jamal Alavi to approve the May 28, 2008 TCC Meeting Minutes. The motion carried unanimously.

2035 Long Range Transportation Plan and Comprehensive Transportation Plan (Attachments 5, 5A, 5B, 5C)

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

Andy Henry stated staff is working on costs and model output for the public release of the alternatives analysis. We need to send it out by mid-July because we have public hearing in August and want to bring it to the TAC in September. We have scheduled workshops in late July or early August. David Bonk stated that tonight is the Town of Chapel Hill's last council meeting until September and will not have the opportunity to comment. Andy Henry stated that there will be another opportunity later. David Bonk asked if we can have multiple preferred alternatives and Felix Nwoko stated we want to narrow it down; but it is up to the TAC. Felix Nwoko suggested scheduling a subcommittee meeting. David Bonk asked what the public notification will be and Andy Henry stated their will be an ad placed in the newspaper and e-mails. Felix Nwoko stated staff will do a flier and we will need an updated mailing list.

John Hodges Copple stated there will be project lists and maps; model output; costs by mode and revenue by source. John asked if we can show bus miles or bus hours. Felix Nwoko stated we will have lane miles for highway.

David Bonk stated we have unrealistic headways. Anything below fifteen minutes does not change the model. Felix Nwoko stated we will probably adjust headways to adjust costs.

Bill Barlow stated if staff could come up with the passenger numbers for passenger increase you will have a very good idea of the efficiency.

Andy Henry stated he will schedule a subcommittee meeting in early July.

Triangle Regional Model Travel Demand Model (Attachment 6)

Felix Nwoko provided an introduction for the Triangle Regional Model Travel Demand Model, along with attachments.

Felix Nwoko stated at our federal certification we were asked to use the Trans CAD model. We have been working on this. The attachment shows the performance is better.

A motion was made by Felix Nwoko and seconded by John Hodges Copple to recommend that the TAC send a letter to the Triangle Model Service Bureau adopting the Triangle Regional Model version TCV4-2008.

Felix Nwoko stated the service bureau is helping with model work for the parking survey and transit headways. John Hodges Copple stated we will look at TAZ's this year. There will be consolidated TAZ's. This is due February 2009 to the census.

Bill Barlow stated we don't have bike/pedestrian counts to compare to the model output and David Bonk stated the Town of Chapel Hill does bike/pedestrian counts. The Town of Chapel Hill will do a combined mobility report card in 2009. Felix Nwoko stated staff did bike/pedestrian counts in Durham and Hillsborough.

David Bonk restated the motion made by Felix Nwoko and seconded by John Hodges Copple to recommend that the TAC send a letter to the Triangle Model Service Bureau adopting the Triangle Regional Model version TCV4-2008. The motion carried unanimously.

FY 2011-2017 Transportation Improvement Program (Attachment 7)

Ellen Beckmann provided an introduction for the FY 2011-2017 Transportation Improvement Program, along with the attachment.

The FY 2009-2015 TIP was approved by the State in June and was brought to the TAC last month and they deferred it to August. Ellen Beckmann stated staff will be adding the description of adding sidewalk and bicycle improvements on highway projects per the TAC recommendation. Ellen is still waiting to hear back on comments regarding transit.

Jamal Alavi stated the State needs the approved MTIP by the end of August.

Ellen Beckmann stated the FY 2011-2017TIP was added to the agenda because Mike Stanley stated that NCDOT would like to have our approved priority list by December 31, 2008. Attachment 7 is a schedule through the end of 2008. There will be a subcommittee meeting on July 2, 2008 at 9 a.m.

Transportation Demand Management – FY 2009 Funding (Attachment 8)

Dale McKeel provided an update on the Transportation Demand Management – FY 2009 Funding, along with the attachment.

Dale stated the 7-Year Transportation Demand Management Plan has been approved. An oversight committee has been formed. Applications were received from Smart Commute at RTP; NCSU; UNC/Chapel Hill; Triangle Transit service Raleigh, Durham hot spots. The recommended 2009 funding is on page 5 of Attachment 8.

David Bonk stated the process was confusing and the communication could be better. We need a better definition of hot spots. Felix Nwoko said we need to do counts before and after yearly. Regarding evaluation, David Bonk stated we need a single data set across the region. John Hodges-Copple said this is one thing the oversight committee will be working on.

REPORTS FROM STAFF:

Reports from Staff (Attachment 9)

Felix Nwoko provided an update on projects.

Report from the Chair

David Bonk stated the recommendations of the STAC are dead in the legislative short session. It includes a ½ cents sales tax for schools in November 2008. David stated the sales tax is not a given as it is competing with other needs. The Town of Chapel Hill has requested raising vehicle fees to the limit for transit.

NCDOT Report (Attachment 11)

Battle Whitley, NCDOT Division 5 Engineer provided an update on projects. U-4010 project is behind schedule and B-3169 project is just getting start.

Dale McKeel requested an update of spring 2008 projects from Battle Whitley. Battle stated he would send an email to Dale McKeel.

Stanley Buff, NCDOT Division 7 Engineer provided an update on projects. Stanley stated they are still working on the superstreet.

David Bonk asked for the status on expanding the MPO and Ellen Beckmann stated there is no update at this time.

Adjournment

There being no further business before the Technical Coordinating Committee, the meeting adjourned at 10:10 a.m.

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

Development Schedule

FY 2011-2017 Metropolitan Transportation Improvement Program

Due Date	Task
July-August 2008	Jurisdictions develop local priority lists
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**
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**
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
DRAFT
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 2030 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 a 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 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?

d. Specific Project Merits - How many points does a project receive using scoring criteria? Local jurisdictions may elect to use the ranking methodology to create their local priority lists but are not required to do so.

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. If the criteria are not applied consistently, the TCC can agree to change some criteria 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 criteria 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. Project criteria points are weighted and totaled for each project request using the three modal ranking methodologies outlined on the last pages of this document.

3. Projects receiving the same number of project criteria 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.

4. The draft Regional Priority List will consist of three modal priority lists: 1) highway; 2) bicycle and pedestrian; and 3) transit. Projects with the highest number of project criteria points are selected first – taking into consideration local priority rankings, geographical balance, and a mixture of project types.

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.

The following was added by MPO staff subsequent to the TCC Subcommittee meeting to address pedestrian only projects. Staff request feedback on the following: Points are awarded to pedestrian only projects based on if the project provides a pedestrian connection to regional and local buses. Projects that connect to existing Triangle Transit regional routes receive three points. Projects that connect to future regional rail receive two points. Projects that connect to local bus routes receive one point. Projects that do not connect to transit routes 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 eight categories. A maximum of four points can be received for each point category except for the year needed category. The year needed category has a maximum of seven points and is weighted double the other point categories.

1. *Year Needed* – Projects receive points based on the year that they are needed by the transit agencies. This category is weighted double and is out of 7 possible points. Projects in earlier years receive more points.

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

2. *Service Type OR Essential Services – This category is designed to award points to projects that are essential to maintaining the current transit service. There was debate at the TCC Subcommittee on whether transit agencies would always prioritize replacement buses and maintenance above service expansion and enhancements and thus whether these categories should receive more points. The TCC Subcommittee requests feedback from the transit operators on this point category.*

3. *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 * services 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.

4. *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.

5. *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. This varies by project type as displayed on the environmental impacts worksheet. 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.

   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.

6. *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.

7. *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.

8. *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.

	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 air quality impacts and GIS analysis including wetlands, stream crossings, wildlife 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 air quality impacts and GIS analysis including wetlands, stream crossings, wildlife 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	***Year Needed***		2
	Based on year that the transit operator requests the project.		
	2011	7	
	2012	6	
	2013	5	
	2014	4	
	2015	3	
	2016	2	
	2017	1	
2	***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	
3	***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	
4	***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	
5	***Environmental Impacts***		1
	Based on vehicle type, air quality impacts and GIS analysis including wetlands, stream crossings, wildlife 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	
6	***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	
7	***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	
8	***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 within 1000 feet	#
	+
In critical water supply watershed	2 or
In protected water supply watershed	1 or
Not in water supply watershed protection	0
	= Score

	Score
High+	0
Medium+	1-2
Low+	3
Negative	4+

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 within 1000 feet	#
	+
In critical water supply watershed	2 or
In protected water supply watershed	1 or
Not in water supply watershed protection	0
	+
Adjacent to park	1 or
Not adjacent to park	0
	+
Reduces emissions	-1
Does not reduce emissions	0
	= Score

	Score
Positive	-1
Low-	0
Medium-	1-2
Medium/High-	2-4
High-	5+

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	
High+	6	
Medium+	4-5	
Low+	0-3	
Negative	0-3	and construction would negatively impact a community resource (church, school, park, historic property)

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

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	
Positive	0	and the project would positively impact a neighborhood
Low-	0	
Medium-	0-3	
Medium/High-	4-5	
High-	6	

ENVIRONMENTAL JUSTICE IMPACTS WORKSHEET

For BikePed Projects

		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
Percent Household Income Below Poverty	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 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
Percent Household Income Below Poverty	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 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
Percent Household Income Below Poverty	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

Section 7:

Regional Bicycle Route Planning

A major objective of the Regional Bicycle Plan is to develop a plan for implementing bicycle facilities throughout Durham and Orange Counties. This section of the report contains the following elements:

- a plan for a regional system of bikeways
- an explanation of the route planning process conducted for the Bicycle Plan
- a plan for implementing bicycle facilities throughout the region

Explanation of the Proposed Regional System of Bikeways

The Bicycle Route Maps serve as a master transportation plan for bicycles throughout Durham and Orange Counties. This system is composed of linkages between major destinations and between urban centers. The Regional Bicycle Plan is not intended to serve as a complete local bicycle facility development strategy for each jurisdiction. The Plan will solve some local bicycle transportation needs, where those needs have regional significance. Each community is encouraged to make local additions to the Regional Plan where necessary.

The Urban Route Plan map identifies a variety of corridors to be in need of bicycle facilities. The map mainly recommends on-road bikeways. It is important to remember that **the specific type of on-road bikeway has not been identified** for each road highlighted by the map. Although a preliminary engineering evaluation has been completed for each proposed bikeway, it would be premature to determine the facility type for each individual situation. These proposed bikeways must undergo further study through local jurisdictions to specify facility type.

Bicycle routes proposed by the Rural Route Plan map will link small towns and rural communities, county recreation areas, and out-of-county bicycle routes. Complete recommendations for rural bicycle facilities are included at the end of this section.

PLEASE NOTE: The route plan maps in this report represent a starting point. Future regional route planning and re-evaluation will be necessary, as the reality of implementing each bikeway is not known at the present time.

The route plan maps propose bicycle connector routes for commuting between urban areas in Durham and Orange Counties. Five specific zones of connection require attention: Durham to Chapel Hill, Chapel Hill to Research Triangle Park, Durham to Research Triangle Park, Chapel Hill to Hillsborough, and Durham to Hillsborough (see Urban Bicycle Route Map).

Through route planning discussions with bicycle commuters and city planners, it was determined that there were usually several options available for each regional bicycle connection. These routes are listed below. At least one route from each group should be considered initially. Additional routes should be considered as funds permit (each route option serves a different urban zone).

Connections between Durham and Chapel Hill/Carrboro:

Route a: Erwin Road
Northern and central Durham connection to northern Chapel Hill

Route b: Picket Road to Erwin Road
Central Durham connection to northern Chapel Hill

Route c: Old Durham/Chapel Hill Road
Central Durham connection to northern Chapel Hill

Route d: Old Durham/Chapel Hill Rd. to Farrington to Ephesus Church Road
Central Durham connection to northern Chapel Hill

Route e: Option 1:
NC 751 Hope Valley Road to NC 54
Central Durham connection to southern Chapel Hill

Option 2:
South Roxboro Road to NC 54:
Central Durham connection to southern Chapel Hill

Special consideration:
US 15-501 should be examined through future Corridor Study as to the possibility of including bicycle facilities. A bicycle route within this corridor may eliminate the immediate need for bicycle facilities along other alternatives.

Connections between Chapel Hill/ Carrboro and Research Triangle Park

Route a: NC 54 to Barbee Chapel Road to Stagecoach Road to Massey Chapel Road to Barbee Road to NC 54
Southern Chapel Hill connection to RTP via southern Durham County

Route b: Old Durham-Chapel Hill Road to Martin Luther King Jr. Parkway
Northern Chapel Hill connection to RTP

Route c: Option 1:
NC 54
Southern Chapel Hill connection to RTP

Option 2:
NC 54 to Woodcroft Parkway
Southern Chapel Hill connection to RTP

Connections between Durham and Research Triangle Park

Route a: Cornwallis Road
Central Durham connection to northwest RTP

Route b: Martin Luther King Jr. Parkway
Southern Durham connection to northwest RTP

Route c: American Tobacco Trail to Cornwallis Drive
Downtown Durham connection to northwest RTP

Route d: Midland Terrace to Lynn Road to Angier Avenue to South Miami Blvd.
North-eastern Durham connection to eastern RTP

Route e: Eno Drive Extension to Sherron Road to South Miami Blvd.
North-eastern Durham connection to eastern RTP

Route f: Option 1:
Alston Avenue
Central Durham connection to RTP

Option 2:
Briggs Avenue to Northeast Creek Parkway
Eastern central Durham connection to northwest RTP

Connections between Chapel Hill/Carrboro and Hillsborough

Route a: Option 1:
NC 86
Northern Chapel Hill connection to Hillsborough

Option 2:
Old NC 86
Western Chapel Hill connection to Hillsborough

Option 3:
I-40 corridor pathway
Northern Chapel Hill connection to Hillsborough

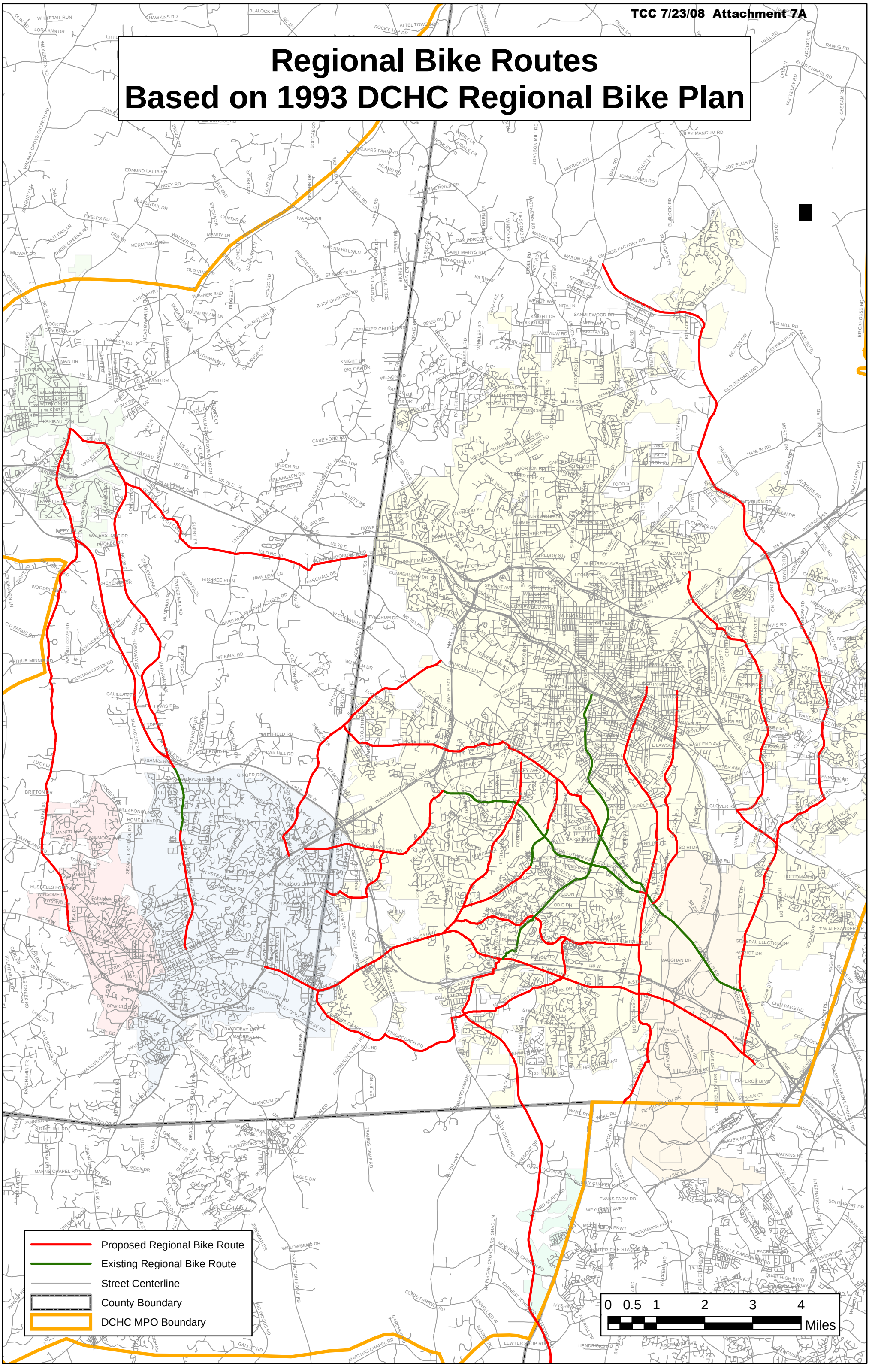
Connection between Durham and Hillsborough

Route a: Old NC 10 Road to NC 86
Northern Durham connection to southern Hillsborough

How Were the Urban and Rural Route Maps Developed?

In developing the Bicycle Route Plan Maps, previous plans for bicycle facilities within urban areas were reviewed for their regional significance. This review included facilities listed within the 1992 Transportation Improvement Plan (TIP) produced by the NCDOT Office of Bicycle and Pedestrian Transportation. In this funding schedule, Orange County is scheduled for 6 independent projects and 14 incidental projects. Durham County is scheduled for 3 independent projects and 29 incidental projects. Nearly all

Regional Bike Routes
Based on 1993 DCHC Regional Bike Plan



MEMORANDUM OF AGREEMENT

BETWEEN

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING

ORGANIZATION AND

CHAPEL HILL TRANSIT (CHT), DURHAM AREA TRANSIT AUTHORITY (DATA)

AND THE TRIANGLE TRANSIT

FOR IMPLEMENTING

THE US DEPARTMENT OF TRANSPORTATION (USDOT) METROPOLITAN TRANSPORTATION PLANNING REGULATION

This MEMORANDUM OF AGREEMENT hereinafter called MOA is entered into this 13th day of August 2008, by and between the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, hereinafter called DCHC MPO, and three publicly owned transit operators, namely the Chapel Hill Transit hereinafter called "CHT", the Durham Area Transit Authority, hereinafter called "DATA", and the Research Triangle Regional Public Transportation Authority hereinafter called "Triangle Transit." DCHC MPO, CHT, DATA, and Triangle Transit may be individually referred to herein as "Party" and collectively referred to as "Parties." The MOA is created pursuant to 23 CFR 450.310 (b) which states that there be an agreement between DCHC MPO, as the designated "Metropolitan planning organization" (MPO), and CHT, DATA & TT as the operators of publicly owned transit services which specifies cooperation procedures for carrying out transportation planning and programming.

The purpose of this agreement is to specify cooperative procedures and for carrying out transportation planning and programming in the DCHC metropolitan planning area in compliance and conformance with federal planning regulations (23 CFR 450, Subpart C). This MOA is intended to make explicit and expand upon existing cooperating planning and programming procedures and activities, and to establish new or expanded cooperative procedures where necessary in order to meet federal requirements for a continuing, cooperative and comprehensive urban transportation planning process.

In making this MOA, the Parties affirm the following planning responsibilities:

A. Planning Responsibilities of DCHC MPO

DCHC MPO is the regional transportation planning agency for the Durham-Chapel Hill-Carrboro urban area pursuant to US Department of Transportation regulation, CFR Part 450 and 49 Part 613. The MPO provides comprehensive regional transportation planning for the planning

area comprising the City and County of Durham, Town of Chapel Hill, Town of Carrboro, Town of Hillsborough, Orange County and Chatham County. In accordance with federal regulations, the Governor of the State of North Carolina designated the DCHC Metropolitan Planning Organization and the City of Durham as the Lead Planning Agency (LPA) for the MPO. Under this designation DCHC MPO, in cooperation with the North Carolina Department of Transportation (NCDOT) and publicly owned operators of mass transportation services, is responsible for carrying out the urban transportation planning process specified in federal regulations (23 CFR Sections 450, Subpart C). That process includes the development of a Unified Planning Work Program, a Long Range Transportation Plan, Transportation Improvement Program, Congestion Management Program, Public Involvement Program, Environmental Justice Program, Intelligent Transportation System Deployment Plan, Safety programs, Freight and Urban Goods Movement plan, and other programs as may be required by federal law.

B. Planning Responsibilities of the Transit Operators

The transit operators within the DCHC MPO planning area consist of CHT, DATA and Triangle Transit. CHT provides public transportation within the Towns of Chapel Hill and Carrboro, DATA provides public transportation mostly within the City of Durham and Triangle Transit provides public transportation for the entire Wake, Durham and Orange counties region.

Further, the Parties affirm the following:

DCHC MPO, CHT, DATA & Triangle Transit are mutually interested in the conduct of the planning process and in the development, exchange and analysis of information related to the performance of the existing and future multimodal transportation system; and

The Parties are mutually interested in the implementation of a multimodal transportation system. DCHC MPO, CHT, DATA & Triangle Transit agree to the consultation and coordination in development of the following plans and programs: Long Range Transportation Plan (LRTP), Transportation Improvement Program (TIP), Congestion Management Program (CMP), Intelligent Transportation Systems (ITS), multi-modal corridor studies, Transit Environmental Impact Statements/Preliminary Engineering, Unified Planning Work Program (UPWP), Job Access Reverse Commute (JARC/New Freedom (NF) coordinated plan/program management plan and a short-range transit plan (transit development plan) and other corridor/transit investment studies; and

The Metropolitan Transportation Planning program is in the mutual interest of DCHC MPO, CHT, DATA and Triangle Transit, and the Parties mutually agree to appropriate funding shares to support the program; and

The Parties have existing responsibilities for complying with Federal, State, and Local regulations related to transportation and the provision of public transit.

In light of the foregoing, DCHC MPO, CHT, DATA and Triangle Transit do hereby covenant and agree as follows:

DCHC MPO AGREES TO:

1. Adopt and maintain the Long Range Transportation Plan, Comprehensive Transportation Plan, Transportation Improvement Program, Congestion Management Program, Unified Planning work Program, ITS Strategic Deployment plan and Public the Involvement Program/Public Participation Program as required for the receipt of federal and State transportation funds including coordination of DCHC MPO, CHT, DATA & Triangle Transit public involvement and environmental justice/Title XI processes.

2. Provide for the coordinated, cooperative and continuing transportation planning and programming process.

3. Manage the administration and operation of the Technical Coordinating Committee ("TCC"), the technical body of the MPO and the Transportation Advisory Committee ("TAC"), the policy body of the MPO.

4. Manage and administer JARC and New Freedom funds; CMAQ funds, FTA 5303 and 5307 funds; and Section 104(f) and Section133(b)(3)(7) funds.

5. Develop the Congestion Management System Plan that is inclusive of transit, transportation demand management, and traffic operations strategies as required by federal regulations.

6. Conduct multi-modal corridor studies and planning in areas needing major transportation investments. Coordinate with Triangle Transit as they conduct studies of transit system related projects and needed major transportation investment.

7. Conduct air quality conformity determinations for transportation plans, programs, and projects as required by federal and state regulations.

8. Develop, maintain and analyze transportation-related data and GIS information for use in transportation planning, programs and studies.

9. Maintain and update regional travel forecasting models which provide base year and future year travel estimates for person trips, transit trips and walk/bike trips in coordination with Triangle Transit, Capital Area Metropolitan Planning Organization, and the North Carolina Department of Transportation.

10. Coordinate with CHT, DATA and Triangle Transit on the development of the annual Unified Planning Work Program and include work elements of interest to the CHT, DATA and Triangle Transit in the UPWP.

11. Coordinate with NCDOT on early, ongoing, and responsive public involvement activities, as required by SAFETEA-LU, in the transportation planning and programming process.

CHT, DATA & TRIANGLE TRANSIT AGREE TO:

1. Coordinate and consult with the DCHC MPO on development of transit plans and programs as they relate to performance of the local regional transportation system. These include but are not limited to the following: short range transit plan (transit development plan-TDP), ADA Paratransit Service Plan, transit management systems planning, job access and reverse commute programs, other transit services planning, pedestrian access to transit planning and park-and-ride facility planning. CHT, DATA and Triangle Transit shall also provide technical assistance in preparing transit elements of the Long Range Transportation Plan. This includes development of proposed transit networks for regional travel forecasting models.

2. Coordinate and consult with DCHC MPO in conducting studies for transit system projects requiring a major transportation investment and development of related transit Environmental Impact Statements/Preliminary Engineering.

3. Submit appropriate invoices and documentation for grant invoicing and disbursement.

4. Coordinate with DCHC MPO in the collection and analysis of transit related data.

5. Submit the following for review and comment by TCC and the TAC:

    a. The short range transit plan with documentation of its consistency with the Long Range Transportation Plan (LRTP).

    b. The Paratransit Service Plan with documentation of compliance with Federal regulations and the JARC-NF Coordinated plan and LRTP.

IT IS MUTUALLY AGREED:

In accordance with Part 450 Subsection 450.310 (Metropolitan Planning Organization Agreements) of Title 23 U.S.C., the undersigned Parties do hereby mutually agree to consultation and coordination in carrying out transportation planning and programming in the DCHC Metropolitan Planning Area Boundary as required by this section of the United States Code..

This MOA will be reviewed every five years and amended or reaffirmed as necessary to reflect changing conditions and responsibilities. Nothing in this MOA shall be interpreted as restricting or diminishing those cooperative procedures and activities that presently exist or may exist in the future between the DCHC MPO and the publicly owned operators of mass transportation services, CHT, DATA and Triangle Transit. Minor adjustments of the MOA established herein shall be accomplished informally by mutual consent between the DCHC MPO and the transit operators. Major changes to the cooperative procedures established herein shall be accomplished by written amendment to this agreement. The TCC shall decide what constitutes major and minor changes to this MOA.

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

By _____
Alice Gordon, PhD, TAC Chair

(SEAL)

_____
Date

Attest

_____
Name, Title and Date

DURHAM AREA TRANSIT AUTHORITY

By _____
Durham City Manager

(SEAL)

_____
Date

Attest

_____
City Clerk

CHAPEL HILL TRANPORTATION BOARD

By _____
Town Manager

(SEAL)

_____
Date

Attest

_____
Town Clerk

RESEARCH TRIANGLE REGIONAL PUBLIC TRANSPORTATION AUTHORITY

By _____
Sig Hutchinson, Chair

(SEAL)

_____
Date

Attest

_____
Name, Title and Date

MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: June 11, 2008

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

This memorandum provides a summary status of tasks for projects in the FY 2007-2008 Unified Planning Work Program.

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

2007-08 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 – June 2008

Travel Time Survey/Speed Study

- ✓ Consultant has been selected for the survey.
- ✓ Scoping and contract negotiations completed.
- ✓ Field reconnaissance and data collection – in progress.
- • Field survey completed. Analysis in progress

GIS/Data Integration and Automation

- ✓ Issue RFQ – September 11, 2006
- ✓ Non-mandatory pre-proposal conference – September 25, 2006
- ✓ Receive written proposals – October 15, 2006
- ✓ Consultant short list by October 23-27, 2006

- ✓ Consultant short list interviews/references check and city issues Notice of Intent to Award a Contract by October 30-November 13, 2006
- ✓ Contract negotiation and scoping in progress
- ✓ Council approves contract – August 13, 2007
- ✓ City issues contract
- ✓ Notice to proceed
- ✓ Kick-off meeting held in October
- ✓ Project underway

Land-use Model development

- ✓ Issue RFQ – August 7, 2006
- ✓ Pre-proposal conference – August 29, 2006
- ✓ Receive written proposals – September 8, 2006
- ✓ Consultant short list – September 13-22, 2006
- ✓ Consultant short list interviews/references check and City issues notice of intent to award a contract – September 25-29, 2006
- ✓ Contract negotiation and scoping completed
- ✓ Council approves contract March 5, 2007
- ✓ City issues contract – March 25, 2007
- ✓ Notice to proceed – March 25, 2007
- Study underway – completion December 2008

Non-Motorized Model development

- ✓ Issue RFQ – August 21, 2006
- ✓ Non-mandatory pre-proposal conference – September 6, 2006
- ✓ Receive written proposals – September 21, 2006
- ✓ Consultant short list – September 25-29, 2006
- ✓ Consultant short list interviews/references check and City issues notice of intent to award a contract – October 2-6, 2006
- ✓ Contract negotiation and scoping completed
- ✓ Council approves contract – March 5, 2007
- ✓ City issues contract – March 25, 2007
- ✓ Notice to proceed – March 25, 2007
- Study underway –completion December 2008

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.
- Consultants selection in spring of 2008
- Notice to proceed in spring 2008
- Completion of Project expected in spring of 2009.

Farrington Road/Stagecoach Road Corridor Study

- This study would involve 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 2008

Regional Transit Infrastructure Blueprint

- ✓ Establish and convene sponsors and partners teams, agree on detailed task list, responsibilities, products, begin infrastructure and corridor descriptions; begin investment principles - summer 2006
- ✓ Finish corridor and infrastructure descriptions; finalize principles fall 2006
- ✓ Begin land use, travel and cost analysis - winter 2006
- ✓ Finish land use, travel, cost analysis - spring 2007
- Conclude work, issue Blueprint, implement tracking mechanism - summer 2007

Chapel Hill/Carrboro/UNC Long Range Transit Plan

- Project underway
- Projected to be completed in spring of 2008

Unified Planning Work Program (UPWP) – Continuing Projects

Greenhouse Gas (GHG) Emission Inventory and Action Plan

- ✓ Execute contract and give consultant Notice-to-Proceed – March 2006 (delayed due to contract issues)
- ✓ Formation of Technical Committee finalized in February 2006.
- ✓ Formation of stakeholder committee (Advisory Committee) finalized in February 2006.
- ✓ Kick off meeting for the study held March 23, 2006
- ✓ Establish Project Team List serve in February 2006
- ✓ Base Year data Collection and Information Gathering to be completed in March-August 2006 (Durham – complete; Orange – in progress).

- ✓ Data Analysis and Projection likely to be completed in (Durham - August 2006; Orange - ?).
- ✓ Determine and quantify historic and existing measures likely to be completed in July-August 2006.
- ✓ Identify new measures to be completed in August 2006.
- ✓ Criteria Air Pollutant (CAP) Analysis anticipated to be completed in September 2006.
- ✓ Identify GHG target and model reduction targets anticipated to be completed in February-March 2006.
- ✓ Formulate Action Plan anticipated to be completed in March 2007.
- ✓ Recommend reduction targets, strategies and action plan anticipated to be done by March 2007.
- ✓ Draft Plan finalized in June 2007.
- ✓ Durham Public Forum - June 21, 2007
- ✓ Plan Adoption anticipated occurring during fall 2007. Durham City and Durham County approved on September 19, 2007.
- The Orange County plan has been delayed several months beyond the Durham County plan.

Congestion Management System (CMS)/Mobility Report Card

- ✓ Consultants selected for the study.
- ✓ Data collection for the Mobility Report Card underway
- ✓ Data Collection for the Durham study about 80% complete.
- ✓ Data Collection and field inventory completed.
- Level of Service analysis and draft report completed.
- Development of CMS performance measures and guidelines likely to be completed in winter 2008.
- Evaluation of congestion management strategies and development of cost-effective mitigation measures expected to be done in winter 2008.
- Draft CMS State of System Report likely to be done in winter 2008.
- Public Comment and local review in spring 2008.
- Adoption anticipated in spring/summer 2008.

Travel Demand Model Update – Model Revision to Incorporate FTA New Start Enhancement

- ✓ Consultant has been selected to assist the Triangle Regional Model (TRM) Service Bureau at ITRE in the model update.
- ✓ Data collection is complete.
- ✓ Migration of model from Tranplan to TransCad has been completed.
- ✓ Phase 1 (TTA new start model revision) completed in October 2005.
- ✓ Phase II TTA New Start model conversion to TransCad to be completed in August 2006.
- Calibration of 2002 model in TransCad anticipated to be completed in fall 2007.
- Validation of 2002 model against 2005 count data anticipated to be completed in fall 2007.

Unified Planning Work Program (UPWP) – Routine and Other Special Projects

MPO Environmental Justice (EJ) and Limited English Proficiency (LEP) Plan Integration

- Mandated by federal regulations
- Draft plan to be prepared in 2008.

Update of the MPO Public Involvement Policy Consistent with SAFETEA-LU

- ✓ Draft to be ready for fall of 2007.
- ✓ Adopted anticipated in Spring of 2008

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 - Spring 2008

NCDOT PROJECTS UNDER CONSTRUCTION IN DURHAM COUNTY - 7/1/2008

County	TIP #	Route	Location Description	Contract Amount	Length	Contractor Name	Resident Engineer	RE Ph. #	Contract Completion	Scheduled Progress	Actual Progress	Estimated Completion
DURHAM	I-306C	I-85	WIDENING OF I-85 FROM EAST OF COLE MILL RD TO WEST OF BROAD STREET.	$ 66,628,382.65	3.416 km	Granite Construction Company	Durham RE Office	(919) 220-4680	12/31/2006	100%	100%	
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	88.0%	31.7%	12/15/2008
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	64.0%	56.0%	10/1/2008
DURHAM	2008 RESURF	US-501, NC-55, SR	RESURFACING AND SHLDR RECONSTR. OF US-501, NC-55 AND 14 SECTIONS OF SECONDARY RDS	$ 3,389,883.53	21.5 miles	C C Mangum Company LLC	Cadmus Capehart, PE	(919) 840-0914	8/1/2008	54.0%	70.0%	8/1/2008
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	39.7%	50.8%	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	14.0%	17.1%	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	12.9%	12.1%	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	9.0%	14.0%	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			
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			

NCDOT PROJECTS FOR LET NEXT 12 MONTHS IN DURHAM COUNTY - 7/1/2008

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	summer 2008
DURHAM	U-2055D	AVONDALE DRIVE	CONSTRUCTION OF ROUNDABOUT ON AVONDALE DRIVE	$ 493,065.78		B. UPSHAW	(919) 220-4600	summer 2008
DURHAM	U-3309A	TW ALEXANDER DR	WIDENING FROM CORNWALLIS ROAD TO EAST OF NC-147	$ 8,900,000.00	1.072 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/

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	Proposal **under review**
Orange	41096	NC 54 @ SR 2016 (Southern Drive)	Construct a left turn lane on NC 54 westbound	$200,000.00	Barrett, Irvin & Jordan Contr., Inc.**=95% complete**
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	District design underway; **construction pending completion of OWASA project**
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. **= 10% complete**
Orange	41953	SR 1733 (Weaver Dairy Rd.) @ SR 1737 (Sunrise Dr.)	Install a traffic signal	$75,000	**Signal operable**
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	42039	SR 1115 (Bradshaw Quarry Rd. 0.4 mi. west of SR 1114 (Buckhorn Rd.)	Install guardrail at Bridge# 33	$30,000	Req. by OWASA; District POC **to be compl. by 10/31/08**
Orange	42040	SR 1006 (Orange Grove Rd.) 0.3 mi. south of SR 1177 (Orange Grove-Calvander Rd.)	Install guardrail at the culvert	$24,000	Req. by OWASA; District POC **to be compl. by 10/31/08**

Orange	**42170**	**SR 1710 (Old NC 10) @ NC 86**	**Construct a right turn lane on SR 1710 and install a traffic signal**	**$165,000**	**Survey pending**
Orange	**42171**	**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**	**$230,000**	**Survey pending**
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.; **to begin 7/7/08** ICD 8/8/08 Compl. 10/31/08; **FA patching complete**
Orange	SF-4907 B 41699.1	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	$35,000 PE	**No R/W required; req. construction funds 7/1/08**
Orange	SF-4907 C 41698.1	NC 57@ NC157 near Hillsborough	Install center traffic islands with stop signs on NC 157	$7,000 PE	Scope revised to include a signal; **re-design underway**
Orange	SS-4907E 41026.3	NC 54 @ SR 1952 (White Cross Road)	Construct a left turn lane	$173,000.00	APAC-Atlantic, Thompson Arthur Div. **= 95% complete**
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. **=Began 6/23/08; 5% complete**
Orange	U-4008 35009.3.2	US 15-501 & SR 1734 (Erwin Rd.)	Grading,drainage, paving and intersection improvements(Super Street)	$4.98 million	**100% complete; Final inspection 7/2/08**
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-4218	SR 1730 (Turkey Farm Rd.)	Replace Bridge # 108 over New Hope Creek	$750,000.00	July 15,2008
Orange	B-4592	SR 1561 (Lawrence Rd.)	Replace Bridge # 64 over the Eno River	$1.6 million	Jan. 20, 2009
Orange	R-4468	I-85/I-40 Weigh Station	Upgrade weigh in motion technology on SBL/WBL	$1.0 million	**Bid opened 6/25 is under review**
Orange	U-4704	Chapel Hill-Carrboro	Computerized Traffic Signal System	$5.0 million	April 21, 2009