DCHC

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

AGENDA

August 22, 2007 **City Council Committee Room**
9:00 a.m. **2nd floor Durham City Hall**

1. **Preliminaries**

2. **Adjustments to the Agenda**

3. **Public Comments**

ACTION ITEMS

4. Approval of July 25, 2007 TCC Meeting Minutes
(Attachment 4)

A copy of the July 25, 2007 minutes is enclosed as Attachment 4.

TCC Action: Approve minutes of the July 25, 2007 TCC meeting.

5. 2009-2015 Transportation Improvement Program – Regional Priority List
(Attachment 5, 5A, 5B, 5C, 5D, 5E)
Ellen Beckmann, LPA Staff

The TAC approved the 2009-2015 TIP Regional Ranking Methodology at the TAC meeting on June 13, 2007 (Attachment 5A). The LPA requested that local jurisdictions provide the MPO with their local priority lists and project information by July 27, 2007. A TIP Subcommittee meeting was held on August 2, 2007 to review the submitted projects and prepare a recommendation. At this meeting, the Subcommittee clarified some issues related to the application of the ranking methodology. LPA Staff then finalized the application of the ranking methodology to the local priority list projects. Attachments 5B, 5C, and 5D display the project rankings for the highway, bicycle/pedestrian, and transit projects. Attachment 5E is a compendium of the local priority lists approved by the member jurisdictions.

Attachment 5 is a brief memo on the regional priority list and the application of the ranking methodology. The TCC should review the project rankings and make a recommendation to the TAC for the draft TIP Regional Priority List. The TAC will need to release the draft TIP Regional Priority List at their September meeting. A public hearing will be held in October and approval of the final list is expected in October or November 2007. NCDOT has requested priority lists by November 30, 2007 for input into the final 2009-2015 STIP.

TCC Action: Recommend that the TAC release the draft Regional Priority List (Attachments 5B, 5C, and 5D) for a 21-day public comment period and schedule a public hearing at the October TAC meeting.

6. STP-DA Call for Projects
(Attachment 6)
Felix Nwoko, LPA Staff
Dale McKeel, LPA Staff

At its June meeting, the TAC requested that the MPO issue a call for projects for unobligated STP-DA funds and the bicycle/pedestrian STP-DA allocation through 2013. The most recent STP-DA spreadsheet is included as Attachment 6. The LPA requested that local jurisdictions submit their projects using the first page of the TIP project forms by August 17, 2007.

The TIP Subcommittee met on August 2, 2007 and discussed the STP-DA Call for Projects. The Subcommittee recommends the following:

- The TCC will provide a recommendation to the TAC regarding STP-DA funding at the October TAC meeting.
- Each local government should provide an endorsement for local project requests, including an acknowledgement that projects require a 20 percent local match.
- Each local government should provide a status report for projects to which STP-DA funds previously were programmed.
- The LPA will review the future STP-DA funding forecasts against NCDOT and FHWA estimates.
- The intent of the call for projects is to program anticipated STP-DA funds through FY 2013. However, a reserve will be set aside and not programmed. The Subcommittee discussed setting this reserve at 10 percent.
- The existing bike-ped allocation ($200,000 through FY09; $500,000 in later years) will be used to fund smaller projects.

TCC Action: Discuss the TIP Subcommittee's recommendations on the STP-DA Call for Projects

7. 2035 Long Range Transportation Plan and Comprehensive Transportation Plan – Land Use Scenarios
(Attachment 7, 7A)
Andy Henry, LPA Staff

For the most part, development of the Socioeconomic Data (SE Data) has been based on the location of undeveloped land and the long-range land use plans and policies of the local jurisdictions. The TAC and other officials have asked whether any alternative land use scenarios have been developed to help inform the elected officials, staff and the public on the impact that changes to land use plans and policies might have on the transportation system. The table in Attachment 7 provides a summary of the five alternative land use scenarios that staff has identified for development in conjunction with the 2035 LRTP and CTP process. In addition, Attachment 7A is a simple flowchart demonstrating how the land use scenarios will be coordinated with the 2035 LRTP and CTP development process. An LRTP subcommittee is

scheduled for Tuesday, August 21st – thus, staff will provide an oral report on any subcommittee decisions affecting the land use scenario process.

TCC Action: Recommend alternative land use scenarios to TAC for development with the 2035 LRTP and CTP process

8. 2035 Long Range Transportation Plan and Comprehensive Transportation Plan – Goals and Objectives
(Attachment 8, 8A, 8B)
Andy Henry, LPA Staff

Staff has published the Goals and Objectives and a brief survey to receive public input. Public feedback has been solid. As of Wednesday, August 15th, there were 154 electronic survey responses and 24 mail/e-mail responses. Attachment 8 is a summary of survey responses as of that date.

There are two public workshops, one in Chapel Hill and one in Durham, scheduled for August 30 and September 4, respectively, and the TAC will conduct a public hearing on the Goals and Objectives at their meeting on September 12, 2007. The TAC can adopt the Goals and Objectives as early as their October meeting.

There are several documents that are useful for assuring that the Goals and Objectives are coordinated with other guidance documents. Please note that the attached documents are drafts, requiring additional input and discussion from the TCC. The documents include:

- The table in Attachment 8A shows those Goals and Objectives (using a "check mark") that meet the eight Planning Factors from the Federal Highway Administration (FHWA).
- The table in Attachment 8B shows proposed measurements (Measures of Effectiveness) for the Goals and Objectives.

An LRTP subcommittee is scheduled for Tuesday, August 21st – thus, staff will provide an oral report on any subcommittee decisions affecting the Goals and Objectives.

TCC Action: Receive update and provide comments.

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

12. Recent News Articles
(Attachment 12)

PENDING ITEMS

UPCOMING SUBCOMMITTEE MEETINGS

TBD	TIP/STPDA Subcommittee
Subject:	STP-DA Call for Projects – Evaluate Projects
TBD	Administrative Subcommittee
Subject:	Metropolitan Area Boundary Expansion
TBD	Transit Subcommittee
Subject:	2008 Job Access Reverse Commute and New Freedom Call for Projects, 7 Year TDM Plan

Adjourn

Next meeting: September 26, 2007

TECHNICAL COORDINATING COMMITTEE

July 25, 2007

MINUTES OF MEETING

*Mark Ahrendsen	City of Durham/Transportation (TCC Chair)
*Wally Bowman	NCDOT – Division 5 Engineer
*Stan Buff	NCDOT – Division 7 Engineer
*Andy Henry	City of Durham/Transportation
*Ray Magyar	UNC/Transportation
*Patrick McDonough	Triangle Transit Authority
*Adena Messinger	Town of Carrboro
*Felix Nwoko	City of Durham/Transportation
*Pierre Osei-Owusu	City of Durham/DATA
*Scott Walston	NCDOT - TPB
Ellen Beckmann	City of Durham/Transportation
Jeff Dayton	HNTB
Dale McKeel	City of Durham/Transportation
Jill Stark	FHWA
Chao Wang	City of Durham/Transportation

*Voting Member

Mark Ahrendsen, TCC Chair, called the meeting to order at 9:04 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 June 27, 2007 TCC Meeting Minutes (Attachment 4)

A motion was made by Andy Henry and seconded by Ray Magyar to approve the June 27, 2007 TCC Meeting Minutes. The motion carried unanimously.

2035 Long Range Transportation Plan Update – SE Data (Attachment 5)

Andy Henry provided a Power Point presentation for the 2035 Long Range Transportation Plan Update – SE Data. A recommendation was made by Mark Ahrendsen to change the "vacancy rate" to "occupancy rate" to provide better clarification. Mark Ahrendsen also stated that the presentation needs to capture NCCU's student households and we need to be able to justify that the student households and university beds agree with the three universities. Mark recommended putting a footnote about the ESC estimate.

A motion was made by Felix Nwoko and seconded by Pierre Osei-Owusu to recommend approval of the SE Data to the TAC, subject to the changes noted earlier. The motion carried unanimously.

2035 Long Range Transportation Plan Update – Land Use Scenarios (No Attachment)

Andy Henry provided an update on the 2035 Long Range Transportation Plan Update – Land Use Scenarios.

Andy Henry stated he has provided five scenarios. Felix stated he thinks five scenarios is a lot.

Patrick McDonough suggested a scenario based on Transfer of Development Rights to include less development in rural areas.

Andy Henry stated scenarios two and three are not an increase in growth, just a reallocation.

Andy Henry stated we want to do some scenarios that may be acted upon by local planning departments. Mark Ahrendsen stated we may want to follow the work of the Special Transit Advisory Committee (STAC) because it may be a recommendation from the STAC to look at reallocating growth.

Patrick McDonough asked if there is a way for the travel corridors or transit oriented development zones to say the baseline SE data says it is on average twelve dwelling units an acre in the corridor; but under the two or three scenario it is fifteen dwelling units an acre or twenty-one dwelling units an acre. Would one of the scenarios push us beyond the mark to where transit efficiency really begins to snowball? Andy Henry said yes it could.

Wally Bowman stated NCDOT relies on the MPO data for traffic projections. The projections are often low and the growth may need to slow. Felix Nwoko stated land use scenarios are built into our LRTP schedule.

Scott Walston stated that the future tolling on I-540 may increase the congestion on I-40. Scott stated, as the TCC, we need to think about doing something on I-40 at Page Road. Scott Walston stated that we need to address the I-540 and Page Road bottleneck in the LRTP. Felix Nwoko stated it will be in the LRTP.

2009-2015 Transportation Improvement Program (TIP) Regional Priority List (Attachment 7)

Ellen Beckmann provided an update on the 2009-2015 Transportation Improvement Program (TIP) Regional Priority List, along with the attachment.

The due date was July 20, 2007; but we are stilling accepting projects this week. We need the projects by this Friday, July 27, 2007 so the LPA staff can get everything compiled for the subcommittee meeting which is August 2, 2007 where they will be looking at how everyone applied the ranking methodology and to make sure it was consistent across the MPO. The subcommittee will begin to work on developing the regional list. There may be adjustments made to the ranking and methodology.

Patrick McDonough stated that they have concerns with how the TDM plan will fit in. The other concern is how is TDM classified collectively and we want to make sure that the

projects fit in. Ellen Beckmann stated the transit projects will be interesting to look at because they are so diverse that it has been hard to come up with a methodology that applies to all. Once the list is developed by the subcommittee, a recommendation will be brought back at the August TCC meeting for a regional priority list that will forwarded to the TAC in September. Then we will have a couple months for the TAC to make adjustments and then it will be forwarded to the NCDOT by November. NCDOT has asked for input for the draft TIP by August, but we are not going to meet that deadline. As a backup, NCDOT stated we could provide it by November 30, 2007 for input on the final TIP.

Mark Ahrendsen stated for informational purposes, if we follow the schedule we could share with NCDOT a preliminary TCC approved recommended list by August that will be going to the TAC at their September meeting. Mark stated that we could ask that NCDOT make it available only for comment for approval either at the October or November at the latest.

STP-DA Call for Projects (Attachment 8)

Ellen Beckmann provided an update on the STP-DA Call for Projects, along with the attachment.

Ellen stated we are not very far along on this item. The TAC asked that we look at this and obligate our funds through 2013 including the bike/pedestrian allocation and we have set a date to get project submissions by August 17, 2007. We are asking that the jurisdictions provide the first page of the TIP project sheets without the ranking criteria because we are not using the ranking criteria for the TIP for this; but we haven't decided what we are using. This is another item that will be addressed at the subcommittee meeting next Thursday.

Mark Ahrendsen asked if an e-mail was sent out for a call for projects that included the TAC policy for the use of the STP-DA funds. If the policy was not included, this needs to be

done. This needs to be made clear from the beginning. Felix Nwoko stated an e-mail has been sent out requesting projects.

REPORTS FROM STAFF:

Reports from Staff (Attachment 9)

Felix Nwoko provided an update on the projects.

Report from the Chair

Mark Ahrendsen stated that the STAC is moving along. They are in the process of getting a plan together to make recommendations regarding the major transit investments in the Triangle. The Environmental Study for the East End Connector project is moving along. They have established an Ad Hoc committee that the City Council requested and scheduled the first meeting for August 9, 2007. They had a meeting Monday night with East Durham Leadership Group and representatives from NCDOT to discuss the East End Connector Project and how it will proceed.

Andy Henry asked about the status of the gap funding. Mark Ahrendsen stated there is a bill that is proposed to raise the highway use tax from 3% to 4% phased in over two years that would raise about $200 million from which the gap funding will be pulled.

There is also a bill that developers are required to pay a share of the costs of roadway improvements for the traffic that they generate. This is a very complicated bill.

Mark stated that a Management Plan needs to be provided before FTA will approve the JARC and New Freedom grants.

Felix Nwoko suggested reviewing the project delivery report for NCDOT. Mark Ahrendsen stated perhaps it can be scheduled for someone from NCDOT Project Development to make a presentation at the next meeting.

Felix Nwoko stated that KTRPO passed a resolution supporting the not using the equity formula for I-40 repairs. This needs to be forwarded to the legislation and also with the TAC.

NCDOT Reports

Wally Bowman, NCDOT Division 5 Engineer, provided an update on projects. On NC-55, they are working on the punch list and it should be done by August. They are still working on the I-40 repairs; but it moving along very well. It is possible that they might be able to finish the project this year. There was an issue with I-85 and a lane closure that was coordinated through Verizon and the Durham Police Department that had some communication problems.

Stan Buff, NCDOT Division 7 Engineer, provided an update on projects. The Superstreet project is moving along. The Homestead project should be complete before school starts. Mike Cowan retired at the end of June.

Dale McKeel asked if the project costs on NC-54/Main Street in Carrboro included some changes to the islands. Stan stated he is not familiar with the project; but he will find out and get back to Dale.

INFORMATIONAL ITEMS:

Recent News Articles (Attachment 12)

The recent news articles are attached for review.

Letter from FHWA re MPO Certification Review (Attachment 13)

Jill Stark stated she sent the final draft of the Certification Review. FHWA wanted two recommendations; one is just to put the Operations section in the LRTP because it is a SAFETEA-LU requirement. The other is to really evaluate the measures for the CMP. The MPO needs to have it documented and regularly evaluate the strategies. Other than that, there are no changes. Jill stated that the signed copy will be in the mail today.

Adjournment

There being no further business before the Technical Coordinating Committee, the meeting was adjourned at 10:56 a.m.

MEMORANDUM

TO: Technical Coordinating Committee (TCC)
DCHC MPO

FROM: Lead Planning Agency

DATE: August 22, 2007

RE: FY 2009-2015 Transportation Improvement Program Regional Priority List

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The MPO creates a Regional Priority List to provide input to NCDOT on the Transportation Improvement Program. As part of the development of this list, the MPO uses a ranking methodology to assign points to projects submitted by member jurisdictions (Attachment 5E). Attachment 5A is this ranking methodology as approved by the TAC in June 2007. Attachment 5A includes a few minor adjustments to the ranking methodology to fix problems that were identified by the TIP Subcommittee and LPA Staff. The ranking methodology divides projects up into three lists by mode.

LPA Staff applied the ranking methodology to the projects using information provided by the member jurisdictions. This ranking is displayed in Attachments 5B, 5C, and 5D. There are a few items to note when looking at these rankings:

1. Some jurisdictions ranked their projects by mode. Some ranked their projects all together in one list. Since the ranking methodology divides projects by mode, LPA Staff reassigned priority rankings so that each jurisdiction has a #1 ranked project in each mode, a #2 ranked project in each mode, etc.

2. Chapel Hill and Carrboro submitted a nearly identical project on Seawell School Road in two different modes. Chapel Hill classified this as a highway project while Carrboro classified it as a bicycle/pedestrian project. Similarly, Chapel Hill and Orange County submitted a project on Homestead Road as a highway project while Carrboro submitted it as a bicycle/pedestrian project. These projects should be included in only one list and the submitting agencies should discuss how to classify these projects.

3. TDM and ITS projects were submitted by Durham and Durham County. These have been classified as highway projects. However, the ranking methodology is difficult to apply to projects like these.

4. For the bicycle/pedestrian projects, the TIP Subcommittee recommended adding together the bicycle and pedestrian travel demand points if a project includes

both bicycle and pedestrian improvements. The result is that no bike only or sidewalk only projects rank very high.

5. Chatham County submitted a project for a roadway/bicycle/pedestrian plan in northeast Chatham County near Cary. This is an unconventional TIP project and may be better as an STPDA or UPWP project.

6. Chapel Hill provided a bicycle pedestrian project that is a package of 15 intersection improvements. The ranking methodology was applied to each of the 15 projects and then the points were either assigned by an average of the 15 projects or a sum of the 15 projects. The travel demand points and connectivity points are a sum, the rest of the point categories are an average.

7. The transit ranking methodology did not allow for much differentiation between projects. In addition, as intended, replacement vehicles received the most points because the points for essential services were weighted double (maximum of 8 points).

TTA Statement on the Transit Ranking Methodology

"While it is certainly a good thing to try to direct funds for transit projects to those with any riders, TTA staff wishes to point out to the TAC that there are other priorities that can get lost in this being the primary criterion for transit benefits. This criterion will tend to de-value long-distance transit trips. Another common metric for evaluating transit benefits which levels the playing field for services of different distances is passenger miles, which is used in the FTA's 5307 funds program as a primary metric.

Within DCHC, Chapel Hill Transit's current average trip length is about 2.0 miles. DATA's average trip length is about 4.2 miles, while TTA's average trip length is approximately 11.2 miles. Chapel Hill Transit carries almost 9-10 times as many passengers as TTA, yet only carries 1.4 times the amount of TTA's passenger miles. It is important for TAC members to recognize that there should be a close connection between their goals and the criterion used to rate projects for funding. Projects that produce the most riders may or may not be the best transit projects to reduce growth of Vehicle Miles Traveled (VMT) or address congestion in a corridor."

DURHAM-CHAPEL HILL-CARRBORO MPO
METHODOLOGY FOR RANKING
METROPOLITAN TRANSPORATION IMPROVEMENT PROGRAM
PRIORITY PROJECT REQUESTS (FY 2009-2015)

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. Ranking Criteria

The screening criteria for project ranking fall into four broad groups:

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?

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. Local jurisdictions may elect to use the ranking methodology to create their local priority lists but are not required to do so. When the local priority lists are submitted to the MPO, local jurisdictions are requested to provide project information and, in some cases, award points in categories. Some point categories can only be applied by the MPO once all projects have been submitted and evaluated.

3. The TCC first examines the consistency in which local jurisdictions have responded to the project criteria. If the criteria are not applied consistently, the TCC can agree to change some criteria responses for consistency among all projects.

4. Project criteria points are weighted and totaled for each project request using the three modal ranking methodologies outlined on pages 7 through 10 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-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.

5. The draft Regional Priority List is then forwarded to the TAC, as the TCC's recommended project priorities for the urban area.

6. The TAC will use the draft Regional Priority List as a starting point for the creation of the final Regional Priority List. The TAC may wish to combine the three modal lists into one comprehensive list. If this is done, it is important to note that the points are not comparable across different modes.

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. After roadway projects are ranked, the projects will be sorted by estimated cost into two lists so that high cost and low cost projects can be considered separately.

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 (Accidents/100 Million Vehicle Miles)* - Safety points are awarded to projects with reported accident rates significantly greater than statewide averages for urban road segments – the statewide average is 330 to 370 accidents per 100 million vehicle miles (or, 330-370 ACC/100 MVM). Projects must have an accident rate of at least 300 ACC/100 MVM to receive points. All projects with an accident rate of at least 300 ACC/100 MVM will be divided equally into four quartiles based on accident 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 accident rate for their local priorities. MPO staff will divide the projects into quartiles and award points.

3. *Environmental Impacts – natural environment* - Points are awarded based on the impact on wetlands, streams, wildlife habitat, parks, and air quality.

   The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

4. Community Impacts – Points are awarded based on the impact on neighborhoods and communities.

   Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

5. *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 Transportation Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

6. *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.

7. *Benefits to Other Modes of Transportation or Deployment 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 3 other modes.

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

Bicycle and Pedestrian

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

1. *Street Classification* - This category awards points to projects based on the type of road 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 classification facilities to reflect the safety hazard for bicyclists and pedestrians on larger busier roadways. The street classification should be taken from the Federal Functional Classification maps on the NCDOT website.

   Local jurisdictions are asked to provide the street classification 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. 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* – This category awards points to projects based on the proximity to schools, colleges, 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/multi-use paths 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 (major as defined by the local jurisdiction), major employment centers (major as defined by the local

jurisdiction), and 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. *Environmental Impacts – natural environment* - Points are awarded based on the impact on wetlands, streams, wildlife habitat, parks, and air quality.

   The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

5. Community Impacts – Points are awarded based on the impact on neighborhoods and communities. Population density should also be considered for the benefits to the community. The MPO will provide local jurisdictions a map of population density.

   Local jurisdictions are asked to apply the ranking methodology 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 reward projects that may have positive impacts on low income areas or federally recognized disadvantaged groups. Most bicycle and pedestrian projects directly benefit neighborhoods by increasing accessibility and safety. If negative impacts are expected, the project will not receive points.

   The MPO will provide local jurisdictions a base map that indicates which Transportation Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

7. *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. 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.

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 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. Essential services is weighted double the other point categories. Most projects will not receive points in every category because transit projects often have specific purposes.

After transit projects are ranked, the projects will be sorted into two lists for short- and long-term needs. These lists should correspond to what is shown as funded (short-term) and unfunded (long-term) in the TIP.

1. *Expansion of Existing Routes* - Projects that expand existing routes are awarded points based on travel demand on the existing route as is measured by the vehicle crowding or load factor. The load factor used will be the average daily riders divided by the product of the peak vehicle pullout and the average vehicle capacity. The load factor is calculated separately for bus and paratransit vehicles. Projects will be divided equally into four quartiles based on the load factor. 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 the load factor. MPO staff will divide the projects into quartiles and award points.

2. *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, Duke University Transit, Chatham Transit Network (must connect in Chatham County), and Capital Area Transit (CAT). These are the fixed route systems in the MPO with the exception of the Chatham Transit Network because Chatham County does not have a fixed route service.

   Local jurisdictions are asked to apply the ranking methodology.

3. *Essential Services* – Projects receive points based on if the project provides funds to maintain the current level of transit service. This category will award points for maintenance projects and replacement vehicles. This point category is weighted double to reflect the importance of maintaining the existing system.

   Local jurisdictions are asked to apply the ranking methodology.

4. *Enhancement of Existing Service of New Service* – Projects receive points based on the estimated increase in new riders. For new service, this should be based on surveys or other market research. For enhancements of existing service (bus shelters, ITS projects, etc.), this should be based on studies of similar projects. Jurisdictions are expected to document and justify their estimates. Projects will be divided equally into four quartiles based on the number of new riders. 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 the number of new riders anticipated. MPO staff will divide the projects into quartiles and award points.

5. *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.

6. *Environmental Impacts – natural environment* - Points are awarded based on the impact on wetlands, streams, wildlife habitat, parks, and air quality.

The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

7. *Community Impacts* – Points are awarded based on the impact on neighborhoods and communities.

   Local jurisdictions are asked to apply the ranking methodology based on a GIS analysis.

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 significance of ranking more than 25 projects is minimal, at best due, to the availability of project funds.

ROADWAY

	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
	Accident rate (accidents/100 million VMT)		
	Traffic Signal System, TDM, ITS Projects	4	
	First quartile of ranked projects, Accident Rate >300 accidents/100 million VMT	4	
	Second quartile of ranked projects, Accident Rate >300 accidents/100 million VMT	3	
	Third quartile of ranked projects, Accident Rate >300 accidents/100 million VMT	2	
	Fourth quartile of ranked projects, Accident Rate >300 accidents/100 million VMT	1	
	Accident Rate <=300 accidents/100 million VMT	0	
3	***Environmental Impacts - natural environment***		1
	Based air quality impacts and GIS analysis including wetlands, stream crossings, wildlife habitat, parks, etc.		
	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	
4	***Community Impacts***		1
	Based on GIS analysis including proximity to neighborhoods		
	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	
5	***Environmental Justice***		1
	Based on GIS analysis of low-income and minority areas (TAZ)		
	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	
6	***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	
7	***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	

BIKE/PED

	RANKING CRITERIA (MEASURES)	SCORE (points)	Category Weight
1	***Street Classification of Roadway or Parallel Roadway for Off-Road Facilities***		1
	Arterial	3	
	Collector	2	
	Local	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***		1
	Based on proximity to schools, colleges, parks, major retail centers, transit, and major employment centers (see attached 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	***Environmental Impacts - natural environment***		1
	Based air quality impacts and GIS analysis including wetlands, stream crossings, wildlife habitat, parks, etc.		
	High positive impact	3	
	Medium positive impact	2	
	Low positive impact	1	
	Negative impact	0	
5	***Community Impacts***		1
	Based on GIS analysis including proximity to neighborhoods		
	High positive impact	3	
	Medium positive impact	2	
	Low positive impact	1	
	Negative impact	0	
6	***Environmental Justice***		1
	Based on GIS analysis of low-income and minority areas (TAZ)		
	High positive impact	3	
	Medium positive impact	2	
	Low positive impact	1	
	Negative impact	0	
7	***Connectivity to Existing Bicycle and Pedestrian Facilities***		1
	First quartile of ranked projects	3	
	Second quartile of ranked projects	2	
	Third quartile of ranked projects	1	
	Fourth quartile of ranked projects	0	
8	***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	

BIKE/PED TRAVEL DEMAND WORKSHEET

For Bicycle Projects or Multi-Use Trails

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

		Proximity				
		# within 1 mile	2 points per #	# within 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 #	# within 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**

Projects will be ranked by total points and categorized into quartiles.
The final points for this travel demand will be based on the quartile.

	Points
First quartile of ranked projects	3
Second quartile of ranked projects	2
Third quartile of ranked projects	1
Fourth quartile of ranked projects	0

TRANSIT

	RANKING CRITERIA (MEASURES)	SCORE (points)	Category Weight
1	***Expansion of Existing Routes***		1
	Vehicle crowding (load factor) on a specific route (daily riders/peak vehicle capacity)		
	First quartile of ranked projects	4	
	Second quartile of ranked projects	3	
	Third quartile of ranked projects	2	
	Fourth quartile of ranked projects	1	
2	***Regional Connectivity***		1
	Connections to other transit systems		
	Provides 4 or more connections	4	
	Provides 3 connections	3	
	Provides 2 connections	2	
	Provides 1 connection	1	
	Does not provide a connection	0	
3	***Essential Services (maintenance or replacement vehicles)***		2
	Provides an essential service to maintain the current level of transit service	4	
	Does not provide an essential service	0	
4	***Enhancement of Existing Service or New Service***		1
	Estimated number of new riders		
	First quartile of ranked projects	4	
	Second quartile of ranked projects	3	
	Third quartile of ranked projects	2	
	Fourth quartile of ranked projects	1	
5	***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	
6	***Environmental Impacts - natural environment***		1
	Based air quality impacts and GIS analysis including wetlands, stream crossings, wildlife habitat, parks, etc.		
	High positive impact	4	
	Medium positive impact	3	
	Low positive impact	2	
	Low negative impact	1	
	High Negative impact	0	
7	***Community Impacts***		1
	Based on GIS analysis including proximity to neighborhoods		
	High positive impact	4	
	Medium positive impact	3	
	Low positive impact	2	
	Low negative impact	1	
	High Negative impact	0	

HIGHWAY PROJECTS

			1: Travel Demand			2: Safety			3: Environmental Impacts		4: Community Impacts		5: Environmental Justice Impacts		6: Funding Status		7: Benefits to Other Modes or Deployment of New Technology		
Rank	Name	Local Priority #	v/c	v/c >0.8?	Points	Accident Rate	Accident Rate>300?	Points	Impact	Points	Impact	Points	Impact	Points	Percent funded	Points	Number of modes	Points	Total Points
1	TDM	12 - D 12 - DC	Other	Other	4	Other	Other	4	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	4	4	24
2	ITS Deployment	11 - D 11 - DC	Other	Other	4	Other	Other	4	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	2	2	22
3	Franklin/Main/Merritt Mill/Brewer Intersection	11 - C	1.04	1.04	2	879.59	879.59	3	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	3	3	20
4	East End Connector	1 - D 1 - DC	1.63	1.63	4	2016.03	2016.03	4	dLowNeg	3	bMedHNeg	1	bMedNeg	1	e 25%+	4	2	2	19
5	S. Churton St.	2 - H, 2 - OC	1.3	1.3	4	429	429	2	dLowNeg	3	ePositive	4	ePositive	4	a Unfunded	0	2	2	19
6	Orange Grove Rd. extension	6 - OC	0.93	0.93	1	1253.5	1253.5	4	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	2	2	19
7	Triangle Parkway	3 - D 3 - DC	1.04	1.04	2	351.61	351.61	1	bMedHNeg	1	dLowNeg	3	dNeutral	3	e 25%+	4	3	3	17
8	EnoMt./Mayo St./at Orange Grove Rd.	4 - H, 5 - OC	0.82	0.82	1	2146	2146	4	ePositive	4	cMedNeg	2	ePositive	4	a Unfunded	0	2	2	17
9	NC 751 (Phase 1)	9 - D 9 - DC	1.17	1.17	3	913.86	913.86	3	dLowNeg	3	cMedNeg	2	dNeutral	3	a Unfunded	0	3	3	17
10	Elizabeth Brady Rd. extension	1 - H	1.19	1.19	3	489.26	489.26	2	aHighNeg	0	bMedHNeg	1	dNeutral	3	e 25%+	4	3	3	16
11	MLK Jr Pwky/Hwy 55	2 - D 2 - DC	0.93	0.93	1	3342	3342	4	dLowNeg	3	dLowNeg	3	cLowNeg	2	a Unfunded	0	3	3	16
12	Seawell School Road	2 - CH, **3 - C (bike/ped)**	0.3	no	0	409.12	409.12	1	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	3	3	16
13	Homestead Road	1 - CH, 1 - OC, **4 - C (bike/ped)**	0.97	0.97	1	278.67	no	0	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	2	2	15
14	Piney Mountain Road	4 - CH	0.57	no	0	109.56	no	0	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	3	3	15
15	NC 751 widening	2 - CC	1.31	1.31	4	151.6	no	0	dLowNeg	3	dLowNeg	3	dNeutral	3	a Unfunded	0	1	1	14
16	NC 54 (I-40 east to 55)	5 - D 5 - DC	1.19	1.19	3	664.28	664.28	2	aHighNeg	0	dLowNeg	3	dNeutral	3	a Unfunded	0	3	3	14
17	Old Oxford Highway	8 - D 8 - DC	1.2	1.2	3	826.16	826.16	3	dLowNeg	3	cMedNeg	2	aHighNeg	0	a Unfunded	0	3	3	14
18	Estes Drive	3 - CH	1.01	1.01	2	405.15	405.15	1	ePositive	4	ePositive	4	ePositive	4	a Unfunded	0	2	2	13
19	Fayetteville Road	4 - D 4 - DC	1.11	1.11	2	700.42	700.42	3	dLowNeg	3	bMedHNeg	1	bMedNeg	1	a Unfunded	0	3	3	13
20	Perry Harrison School Turn Lanes	5 - CC	0.16	no	0	1072.1	1072.1	4	dLowNeg	3	dLowNeg	3	dNeutral	3	a Unfunded	0	0	0	13
21	US 70 (Lynn Rd. to County Line	6 - D 6 - DC	1.24	1.24	4	297.97	no	0	cMedNeg	2	dLowNeg	3	dNeutral	3	a Unfunded	0	1	1	13
22	NC 54 (I-40 to Barbee-Chapel)	10 - D 10 - DC	1.89	1.89	4	256.29	no	0	aHighNeg	0	dLowNeg	3	dNeutral	3	a Unfunded	0	3	3	13
23	Northern Durham Pwky.	7 - D 7 - DC	1.24	1.24	4	669.05	669.05	2	aHighNeg	0	bMedHNeg	1	cLowNeg	2	a Unfunded	0	3	3	12
24	US 70 Bypass widening	3 - H, 4 - OC	1.03	1.03	2	310	310	1	bMedHNeg	1	dLowNeg	3	cLowNeg	2	a Unfunded	0	2	2	11
25	Jack Bennett/Lystra Rd	3 - CC	0.54	no	0	n/a	no	0	dLowNeg	3	dLowNeg	3	cLowNeg	2	a Unfunded	0	1	1	9
26	NC 86 North	3 - OC	0.94	0.94	1	363	363	1	ePositive	4	bMedHNeg	1	cLowNeg	2	a Unfunded	0	0	0	9
27	N. Chatham School Turn Lanes	4 - CC	0.69	no	0	n/a	no	0	dLowNeg	3	dLowNeg	3	dNeutral	3	a Unfunded	0	0	0	9
28	Western Bypass	5 - H	0.62	no	0	804.76	804.76	3	bMedHNeg	1	ePositive	4	bMedNeg	1	a Unfunded	0	0	0	9

			1: Travel Demand			2: Safety			3: Environmental Impacts		4: Community Impacts		5: Environmental Justice Impacts		6: Funding Status		7: Benefits to Other Modes or Deployment of New Technology		
Rank	Name	Local Priority #	v/c	v/c >0.8?	Points	Accident Rate	Accident Rate>300?	Points	Impact	Points	Impact	Points	Impact	Points	Percent funded	Points	Number of modes	Points	Total Points

Key:	CH (Chapel Hill)	v/c<0.80	no	0	Accident Rate<300	no	0	aHighNeg	0	aHighNeg	0	aHighNeg	0	a Unfunded	0	0	0		
	C (Carrboro)	Fourth Quartile	0.8	1	Fourth Quartile	300	1	bMedHNeg	1	bMedHNeg	1	bMedNeg	1	b Post Year	1	1	1		
	OC (Orange Co)	Third Quartile	1	2	Third Quartile	414.09	2	cMedNeg	2	cMedNeg	2	cLowNeg	2	c 5%+	2	2	2		
	D (Durham)	Second Quartile	1.14	3	Second Quartile	684.735	3	dLowNeg	3	dLowNeg	3	dNeutral	3	d 10%+	3	3	3		
	DC (Durham Co)	First Quartile	1.24	4	First Quartile	1032.54	4	ePositive	4	ePositive	4	ePositive	4	e 25%+	4	4	4		
	CC (Chatham Co)	Other	Other	4	Other	Other	4												
	H (Hillsborough)																		
	TTA																		

BIKE/PED PROJECTS

			1: Street Classification		2: Right-of-Way Availability		3: Travel Demand		4: Environmental Impacts		5: Community Impacts		6: Environmental Justice Impacts		7: Connectivity		8: Funding Status		
Rank	Name	Local Priority #	Class	Points	Availability	Points	Travel Demand Points	Points	Impact	Points	Impact	Points	Impact	Points	Number of Connections	Points	Percent funded	Points	Total Points
1	Cornwallis Road Bike and Ped	3 - D 3 - DC	cArterial	3	Sufficient	3	105	2	dHigh+	3	dHigh+	3	dHigh+	3	5	3	d25%+	3	23
2	Northeast Chatham County Roadway/Ped/Bike Plan	6 - CC	cArterial	3	Sufficient	3	300	3	dHigh+	3	dHigh+	3	dHigh+	3	100	3	aUnfunded	0	21
3	MLK-NC 86 Corridor Bike and Ped	1 - CH	cArterial	3	Sufficient	3	212	3	cMedium+	2	dHigh+	3	dHigh+	3	21	3	aUnfunded	0	20
4	Fayetteville Rd (Cornwallis to Nelson) Bike and Ped	13 - D 13 - DC	cArterial	3	Some Needed	2	175	3	dHigh+	3	dHigh+	3	dHigh+	3	13	3	aUnfunded	0	20
5	Bolin Creek Greenway	2 - CH	aLocal	1	Sufficient	3	153	3	dHigh+	3	dHigh+	3	dHigh+	3	4	3	aUnfunded	0	19
6	Morreene Road Bike and Ped	4 - D 4 - DC	aLocal	1	Sufficient	3	98	2	dHigh+	3	dHigh+	3	cMedium+	2	3	2	d25%+	3	19
7	Avondale Drive (Roxboro to Geer) Bike and Ped	6 - D 6 - DC	cArterial	3	Sufficient	3	138	3	cMedium+	2	dHigh+	3	cMedium+	2	6	3	aUnfunded	0	19
8	University Drive (Garrett to Hope Valley) Bike and Ped	14 - D 14 - DC	cArterial	3	Sufficient	3	143	3	cMedium+	2	dHigh+	3	cMedium+	2	10	3	aUnfunded	0	19
9	15 Chapel Hill Intersection Improvements	4 - CH	Average Points	3.0	Average Points	3.0	311	3	Average Points	1.2	Average Points	3.0	Average Points	1.9	39	3	Average Points	0.0	18.1
10	Estes Extension Bike and Ped	1 - C	cArterial	3	Some Needed	2	126	3	dHigh+	3	dHigh+	3	cMedium+	2	3	2	aUnfunded	0	18
11	Hillandale Road Bike and Ped	2 - D 2 - DC	bCollector	2	Some Needed	2	146	3	cMedium+	2	dHigh+	3	bLow+	1	4	3	c10%+	2	18
12	Club Boulevard Bike and Ped	7 - D 7 - DC	bCollector	2	Sufficient	3	135	3	cMedium+	2	dHigh+	3	cMedium+	2	5	3	aUnfunded	0	18
13	Erwin Road Bike and Ped	17 - CH	cArterial	3	Sufficient	3	68	1	cMedium+	2	dHigh+	3	dHigh+	3	4	3	aUnfunded	0	18
14	Fordham (15-501 South to Ephesus Ch) Bike and Ped	18 - CH	cArterial	3	Sufficient	3	210	3	cMedium+	2	dHigh+	3	dHigh+	3	2	1	aUnfunded	0	18
15	Old Fayetteville Road Bike and Ped	2- C	bCollector	2	Sufficient	3	60	1	cMedium+	2	dHigh+	3	dHigh+	3	2	1	c10%+	2	17
16	Seawell School Road Bike and Ped	3 - C, **2 - CH (highway)**	aLocal	1	Sufficient	3	110	2	dHigh+	3	dHigh+	3	dHigh+	3	3	2	aUnfunded	0	17
17	Cornwallis Rd. (Erwin Rd. to Chapel Hill Rd.) Bike and Ped	11 - D 11 - DC	cArterial	3	Sufficient	3	116	2	cMedium+	2	dHigh+	3	bLow+	1	4	3	aUnfunded	0	17
18	Bolin Creek Little Creek Greenway	15 - CH	cArterial	3	Sufficient	3	124	3	cMedium+	2	dHigh+	3	cMedium+	2	2	1	aUnfunded	0	17
19	NC 54 Corridor Bike and Ped	19 - CH	cArterial	3	Sufficient	3	122	2	cMedium+	2	dHigh+	3	bLow+	1	8	3	aUnfunded	0	17
20	Homestead Road Bike and Ped	4 - C, **1 - CH (highway), 1 - OC (highway)**	cArterial	3	Sufficient	3	48	1	cMedium+	2	dMedium+	3	dHigh+	3	2	1	aUnfunded	0	16
21	Holloway Street Sidewalk	1 - D 1 - DC	cArterial	3	Some Needed	2	15	0	dHigh+	3	cMedium+	2	dHigh+	3	4	3	aUnfunded	0	16
22	Estes Drive Sidewalk	5 - CH	cArterial	3	Sufficient	3	33	0	cMedium+	2	dHigh+	3	cMedium+	2	4	3	aUnfunded	0	16

			1: Street Classification		2: Right-of-Way Availability		3: Travel Demand		4: Environmental Impacts		5: Community Impacts		6: Environmental Justice Impacts		7: Connectivity		8: Funding Status		
Rank	Name	Local Priority #	Class	Points	Availability	Points	Travel Demand Points	Points	Impact	Points	Impact	Points	Impact	Points	Number of Connections	Points	Percent funded	Points	Total Points
23	Pope Road (Old Durham-Chapel Hill Rd. to Ephesus Church Rd.) & Ephesus Church Road Bike and Ped	19 - DC (Pope only), 6 - CH (Pope & Ephesus Church)	aLocal	1	Sufficient	3	151	3	dHigh+	3	dHigh+	3	bLow+	1	3	2	aUnfunded	0	16
24	Nash Street Sidewalk	6 - H	bCollector	2	Sufficient	3	13	0	cMedium+	2	dHigh+	3	dHigh+	3	1	0	d25%+	3	16
25	Hope Valley Road Bike and Ped	9 - D 9 - DC	cArterial	3	Sufficient	3	110	2	cMedium+	2	cMedium+	2	bLow+	1	4	3	aUnfunded	0	16
26	Dearborn Drive Bike and Ped	10 - D 10 - DC	cArterial	3	Sufficient	3	59	1	dHigh+	3	dHigh+	3	dHigh+	3	1	0	aUnfunded	0	16
27	Southern Railroad Greenway	10 - CH	cArterial	3	Sufficient	3	110	2	dHigh+	3	dHigh+	3	cMedium+	2	1	0	aUnfunded	0	16
28	Country Club Road Sidewalk	13 - CH	aLocal	1	Sufficient	3	52	1	cMedium+	2	dHigh+	3	dHigh+	3	4	3	aUnfunded	0	16
29	Cook Rd. (Fayetteville St. to Martin Luther King) Bike and Ped	16 - DC	aLocal	1	Sufficient	3	93	1	dHigh+	3	dHigh+	3	dHigh+	3	3	2	aUnfunded	0	16
30	I-40/Orange Grove Road Ped Bridge	1 - OC	cArterial	3	Sufficient	3	4	0	dHigh+	3	dHigh+	3	dHigh+	3	0	0	aUnfunded	0	15
31	Old NC 86 (Hillsborough to Homestead) Bike and Ped	8 - C	cArterial	3	Sufficient	3	38	0	cMedium+	2	cMedium+	2	cMedium+	2	4	3	aUnfunded	0	15
32	Barbee Chapel Road (NC 54 to Stagecoach Rd) Bike and Ped	17 - DC (NC 54 to Stagecoach), 9 - CH (NC 54 to Downing Creek)	bCollector	2	Sufficient	3	67	1	cMedium+	2	dHigh+	3	bLow+	1	4	3	aUnfunded	0	15
33	Franklin St./Bolin Creek Bike and Ped Access	11 - CH	cArterial	3	Some Needed	2	113	2	cMedium+	2	dHigh+	3	cMedium+	2	2	1	aUnfunded	0	15
34	Cheek Road (Geer to Hardee) Bike and Ped	12 - D 12 - DC	cArterial	3	Sufficient	3	81	1	cMedium+	2	dHigh+	3	dHigh+	3	1	0	aUnfunded	0	15
35	Fordham (Manning to Carmichael) Sidewalk	14 - CH	cArterial	3	Sufficient	3	17	0	cMedium+	2	dHigh+	3	dHigh+	3	2	1	aUnfunded	0	15
36	Fordham Pedestrian Overpass	3 - CH	cArterial	3	Much Needed	1	111	2	cMedium+	2	dHigh+	3	dHigh+	3	1	0	aUnfunded	0	14
37	Fordham (Ephesus Ch to Elliott) Sidewalk	7 - CH	cArterial	3	Sufficient	3	30	0	cMedium+	2	dHigh+	3	cMedium+	2	2	1	aUnfunded	0	14
38	Mt.Carmel Church Rd Bike and Ped	12 - CH	cArterial	3	Sufficient	3	115	2	cMedium+	2	cMedium+	2	bLow+	1	2	1	aUnfunded	0	14
39	NC 86 Bike Route	5 -OC 5 - H	bCollector	2	Sufficient	3	29	0	cMedium+	2	dHigh+	3	dHigh+	3	1	0	aUnfunded	0	13
40	BPW Club Rd/Westbrook Dr. Greenway	7 - C	aLocal	1	Some Needed	2	69	1	cMedium+	2	dHigh+	3	dHigh+	3	2	1	aUnfunded	0	13
41	Alston Avenue Bike and Ped	8 - D 8 - DC	bCollector	2	Sufficient	3	105	2	cMedium+	2	dHigh+	3	bLow+	1	1	0	aUnfunded	0	13
42	Culbreth Road Sidewalk	8 - CH	aLocal	1	Sufficient	3	14	0	cMedium+	2	dHigh+	3	dHigh+	3	2	1	aUnfunded	0	13
43	Erwin Rd (Orange County Line to NC 751) Bike and Ped	18 - DC	cArterial	3	Sufficient	3	89	1	cMedium+	2	dHigh+	3	bLow+	1	1	0	aUnfunded	0	13
44	Carpenter Fletcher Road Bike and Ped	5 - D 5 - DC	aLocal	1	Some Needed	2	68	1	cMedium+	2	cMedium+	2	bLow+	1	2	1	c10%+	2	12

			1: Street Classification		2: Right-of-Way Availability		3: Travel Demand		4: Environmental Impacts		5: Community Impacts		6: Environmental Justice Impacts		7: Connectivity		8: Funding Status		
Rank	Name	Local Priority #	Class	Points	Availability	Points	Travel Demand Points	Points	Impact	Points	Impact	Points	Impact	Points	Number of Connections	Points	Percent funded	Points	Total Points
45	S. Greensboro Street Sidewalks	6 - C	cArterial	3	Barriers	0	29	0	cMedium+	2	dHigh+	3	dHigh+	3	2	1	aUnfunded	0	12
46	Sedwick Rd. (Grandale Dr. to Alston Avenue) Bike and Ped	15 - D 15 - DC	aLocal	1	Sufficient	3	78	1	cMedium+	2	cMedium+	2	bLow+	1	3	2	aUnfunded	0	12
47	Old Mason Farm Bike and Ped	16 - CH	aLocal	1	Sufficient	3	118	2	cMedium+	2	cMedium+	2	cMedium+	2	1	0	aUnfunded	0	12
48	Old NC 86 (SR 1009) Bike Lanes	4 - OC	bCollector	2	Much Needed	1	16	0	cMedium+	2	dHigh+	3	dHigh+	3	0	0	aUnfunded	0	11
49	Old NC 86 (Homestead to Eubanks) Bike and Ped	9 - C	cArterial	3	Sufficient	3	22	0	bLow+	1	cMedium+	2	bLow+	1	1	0	aUnfunded	0	10
50	Eubanks Bike and Ped	10 - C	aLocal	1	Sufficient	3	20	0	cMedium+	2	cMedium+	2	cMedium+	2	0	0	aUnfunded	0	10

Key:

CH (Chapel Hill)	aLocal	1	Barriers	0	1	0	aNegative	0	aNegative	0	aNegative	0	0	0	aUnfunded	0	
C (Carrboro)	bCollector	2	Much Needed	1	40.5	1	bLow+	1	bLow+	1	bLow+	1	1.25	1	bPost Year	1	
OC (Orange Co)	cArterial	3	Some Needed	2	95.5	2	cMedium+	2	cMedium+	2	cMedium+	2	2.5	2	c10%+	2	
D (Durham)			Sufficient	3	123.5	3	dHigh+	3	dHigh+	3	dHigh+	3	4	3	d25%+	3	
DC (Durham Co)																	
CC (Chatham Co)																	
H (Hillsborough)																	
TTA																	

TRANSIT PROJECTS

			1: Expansion of Existing Routes		2: Regional Connectivity		3: Essential Services		4: Enhancement of Existing Service		5: Funding Status		6: Environmental Impacts		7: Community Impacts		
Rank	Name	Local Priority #	Load Factor	Points	Connections	Points	Yes/No	Points	Number of New Riders/Day	Points	Percent funded	Points	Impact	Points	Impact	Points	Total Points
1	Paratransit Fleet Replacement	1 - TTA	n/a	0	5	4	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	27
2	Replacement Buses	1 - CH; 1 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
3	Purchase 31 40-foot Hybrid Buses for Service Replacement	6 - D 6 - DC	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
4	Replacement Buses	7 - CH; 7 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
5	Replacement Buses	14 - CH; 14 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
6	Replacement Buses	16 - CH; 16 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
7	Replacement Buses	22 - CH; 22 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	26
8	Replacement Vans	2 - CH; 2 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
9 (tie)	Replacement Support Vehicles	3 - CH; 3 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
9 (tie)	Purchase 18 paratransit vans for svc. Replacement	3 - D 3 - DC	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
11	Replacement Support Vehicles	4 - CH; 4 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
12	Replacement Service Trucks	5 - CH; 5 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
13	Replacement Vans	9 - CH; 9 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
14	Replacement Support Vehicles	10 - CH; 10 -C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
15	Replacement Support Vehicles	13 - CH; 13 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
16	Replacement Service Trucks	18 - CH; 18 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
17	Replacement Vans	19 - CH; 19 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
18	Replacement Support Vehicles	20 - CH; 20 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
19	Replacement Support Vehicles	21 - CH; 21 - C	n/a	0	2	2	yes	8	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	25
20	Purchase 12 Hybrid buses for svc. Expansion	1 - D 1 - DC	9.63	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
21	Regional Transit Svc. Phase 2	7 - D 7 - DC	1.86	2	4	4	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
22	Expansion Buses	8 - CH; 8 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
23	Expansion Buses	11 - CH; 11 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
24	Expansion Buses	15 - CH; 15 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
25	Expansion Buses	17 - CH; 17 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
26	Expansion Buses	23 - CH; 23 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
27	Expansion Buses	24 - CH; 24 - C	4.76	4	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	14
28	15-501 Bus Route	1 - CC	1.86	2	3	3	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	13

			1: Expansion of Existing Routes		2: Regional Connectivity		3: Essential Services		4: Enhancement of Existing Service		5: Funding Status		6: Environmental Impacts		7: Community Impacts		
Rank	Name	Local Priority #	Load Factor	Points	Connections	Points	Yes/No	Points	Number of New Riders/Day	Points	Percent funded	Points	Impact	Points	Impact	Points	Total Points
29	Paratransit Fleet Expansion	4 - TTA	0.83	1	5	4	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	13
30	Regional Transit Svc. Phase 1	2 - D 2 - DC	1.86	2	2	2	no	0	n/a	0	Unfunded	0	eHighPos	4	eHighPos	4	12
31	Real Time Passenger Information Project	2 - TTA	n/a	0	2	2	no	0	1090	2	Unfunded	0	eHighPos	4	eHighPos	4	12
32	Vanpool Fleet Expansion	3 - TTA	0.91	1	5	4	no	0	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	12
33	Park and Ride Lot	6 - CH; 6 - C	n/a	0	0	0	no	0	2019	4	Unfunded	0	eHighPos	4	eHighPos	4	12
34	Park and Ride Lot Expansion - Design and Land Acquisition	12 - CH; 12- C	n/a	0	0	0	no	0	2019	4	Unfunded	0	eHighPos	4	eHighPos	4	12
35	Purchase 6 Paratransit Vans for Service Expansion	4 - D 4 - DC	2.23	2	2	2	no	0	n/a	0	Unfunded	0	dMedPos	3	eHighPos	4	11
36	Bus Priority at Traffic Signals along 15-501	5 - TTA	n/a	0	2	2	no	0	646	1	Unfunded	0	eHighPos	4	eHighPos	4	11
37	Purchase land and construct a 500 space Park and Ride Lot in the Treyburn area	5 - D 5 - DC	n/a	0	0	0	no	0	2000	3	Unfunded	0	dMedPos	3	eHighPos	4	10

Key:																	
	CH (Chapel Hill)	n/a	0	0	0	no	0	n/a	0	Unfunded	0	aHighNeg	0	aHighNeg	0		
	C (Carrboro)	0.01	1	1	1	yes	8	1	1	Post Year	1	bLowNeg	1	bLowNeg	1		
	OC (Orange Co)	1.86	2	2	2			1090	2	5	2	cLowPos	2	cLowPos	2		
	D (Durham)	4.76	3	3	3			2000	3	10	3	dMedPos	3	dMedPos	3		
	DC (Durham Co)	4.76	4	4	4			2019	4	25	4	eHighPos	4	eHighPos	4		
	CC (Chatham Co)																
	H (Hillsborough)																
	TTA																

Town of Carrboro Transportation Improvement Program 2009-2015 Local Priority List	
Priority #	*Description*
1	**Estes Drive** – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Greensboro Street to Town limits, as well as a multi-use path from Williams Street to Estes Drive to provide an alternative bicycle-pedestrian connection.
2	**Old Fayetteville Road -** Add bike lanes and transit accommodations on both sides of the road and sidewalk on the east side from McDougle Middle School to NC 54.
3	**Seawell School Rd** – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Homestead Road to Estes Drive.
4	**Homestead Rd**. – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Seawell School Road to Old NC 86.
5	**Transit Capital Projects** – Fund transit capital projects as identified by Chapel Hill Transit and agreed to by the Transit Partner's Committee.
6	**South Greensboro Street** – Add sidewalks and transit accommodations on both sides of the road from Main Street to Merritt Mill Road.
7	**BPW Club Road-Westbrook Drive Multi-Use Path** – *Feasibility Study* – Provide pedestrian and bicycle access from the BPW Club Road area to the Westbrook Drive area by building a pedestrian/bicycle path and creek crossings behind the Sterling Bluff Apartments.
8	**Old NC 86 -** Add bike lanes and transit accommodations on both sides of the road, and sidewalk on the east side from Hillsborough Road to Homestead Road.
9	**Old NC 86** – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Homestead Road to Eubanks Road.
10	**Eubanks Rd** – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Old NC 86 to Rogers Road.
11	**Franklin / Main / Merritt Mill / Brewer Intersection –** Make changes to improve operation and safety for motorists, pedestrians, bicyclists, and transit.
12	**Fixed Guideway –** Connection to Carolina North / Horace Williams property utilizing existing railroad right-of-way from University Power Plant to Carolina North
13	**Fixed Guideway –** TTA Phase II project **(**US 15-501) from Duke Medical Center to UNC Hospitals
	(approved by the Board of Aldermen on 6/19/2007)

2009-2015 CHAPEL HILL TRANSPORTATION PRIORITY LIST

Adopted May 21, 2007

1. *Transit Capital Projects: (FY 2007-2011).*
   (Partial funding FY07)
2. *Martin Luther King Jr. Boulevard/NC 86 Corridor*: I-40 to North Street- Bicycle and pedestrian improvements.
   (Partial funding in prior years)
3. *Bolin Creek Greenway*: Construct a greenway from Martin Luther King Jr. Blvd. to Umstead Park.
4. *Homestead Road:* NC 86 to High School Road, provide bicycle lanes, sidewalks and turn lanes.
5. *Seawell School Road:* Improvements from Homestead Road to Estes Drive Extension, including turn lanes, bicycle lanes, sidewalks and transit accommodations.
6. *Pedestrian and Bicycle Overpass/Underpass Across Fordham Boulevard:* Construct a pedestrian and bicycle overpass or underpass across Fordham Boulevard in the area between Manning Drive and Old Mason Farm Road.
7. ***Townwide Intersection Improvements:* Safety improvements for pedestrians and bicyclists in 15 locations, as identified in 2006 Townwide pedestrian safety evaluation.
8. *Estes Drive:* NC 86 to Curtis Road, widen existing roadway to include two 12-foot travel lanes, four-foot bicycle lanes and sidewalks.
9. *Estes Drive*: Curtis Road to Franklin Street, construct sidewalk along entire length and provide pedestrian signal at intersection with Chapel Hill Library Drive.
10. *Pope Road - Ephesus Church Road*: Construct sidewalks and five foot bicycle lanes.
11. ***Fordham Boulevard:* Construct sidewalk from Ephesus Church Road to Elliott Road
12. ***Culbreth Road:* Construct sidewalk from Adam Way to Smith Level Road
13. *Barbee Chapel Road*: NC 54 to Downing Creek Parkway, provide sidewalks and bicycle lanes.
14. *Southern Railroad Greenway*: Construct a greenway along the Southern Railroad right of way from Estes Drive to the UNC Horace Williams property.
15. *Franklin Street/Bolin Creek Greenway Pedestrian/Bicycle Access*: Install pedestrian/bicycle access between Franklin Street and Bolin Creek Greenway.
16. *Piney Mountain Road*: Improvements from NC 86 to Riggsbee Road, including turn lanes, sidewalks, bicycle lanes and transit accommodations.
17. *Mount Carmel Church Road*: Improvements from US 15-501 South to Chatham County line, to be limited to include bicycle lanes, sidewalks, transit and safety improvements.
18. *Country Club Road*: Construct a sidewalk on the east side from South Road to Raleigh

Street.

19. *Fordham Boulevard*: Construct a sidewalk along the north side, Manning Drive to Carmichael Street.

20. *Bolin Creek/Little Creek Greenway*: Construct a greenway from Chapel Hill Community Center to Pinehurst Drive.

21. *Old Mason Farm/Finley Golf Course Road*: Construct bicycle lanes and sidewalks.

22. *Erwin Road:* Construct bicycle lanes, sidewalks and safety improvements, Sage Road to Durham County line.

23. *Fordham Boulevard Corridor*: US 15-501 South to Ephesus Church Road- bicycle and pedestrian Improvements.

24. *NC 54 Corridor*: Fordham Boulevard to Barbee Chapel Road- bicycle and pedestrian Improvements.

** Newly added to Priority List

CHATHAM COUNTY
NORTH CAROLINA

Established 1771

• COUNTY COMMISSIONERS
Carl E. Thompson, *Chairman*
George Lucier, *Vice Chairman*
Patrick Barnes
Mike Cross
Tom Vanderbeck

• COUNTY MANAGER
Charlie Horne

P. O. Box 1809, Pittsboro, NC 27312-1809 • Phone: (919) 542-8200 • Fax: (919) 542-8272

RESOLUTION IN SUPPORT OF PROJECTS TO BE INCLUDED IN THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) 2009-2015 FOR PROJECTS IN CHATHAM COUNTY IN THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

Whereas, the North Carolina Board of Transportation, every two years, develops a Transportation Improvement Program that identifies transportation projects over the next seven years; and

Whereas, the North Carolina Board of Transportation requests candidate projects be submitted by local jurisdictions for the 2009-2015 Transportation Improvement Program update; and

Whereas, the Transportation Improvement Program provides an opportunity to develop multi-modal facilities and services throughout Chatham County and its' incorporated jurisdictions; and

Whereas, Chatham County is as a member of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization and works cooperatively to encourage interconnected transportation facilities regionally; and

Now, Therefore, Be It Resolved by the Chatham County Board of Commissioners that:

1. The attached list of transportation projects are considered for inclusion into the 2009-2015 Transportation Improvement Program.

2. Transportation projects listed in the 2007-2013 Transportation Improvement Program continue to be supported.

Respectfully Adopted, this the 19th day of March, 2007.

Carl Thompson, Chairman

ATTEST:

Sandra B. Sublett, CMC, Clerk to the Board
Chatham County Board of Commissioners

CHATHAM COUNTY LIST OF TRANSPORTATION PROJECTS CONSIDERED FOR INCLUSION IN THE 2009-2015 TRANSPORTATION IMPROVEMENT PROGRAM FOR THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

1. Establish a bus route from Pittsboro to Chapel Hill with a park and ride lot on US 15-501.

2. Widen NC 751 from two lanes to four lanes with bicycle lanes from US 64 to the Durham County Line. This project has also been included in the Triangle Area Rural Planning Organization (TARPO) candidate project list.

3. Safety improvements to Jack Bennett Road (SR 1717), between US 15-501 and Lystra Road (SR 1721), and Lystra Road (SR 1721), between US 15-501 and Farrington Point Road (SR 1008). The improvements include widening shoulders and improving several curves. Jack Bennett Road and Lystra Road between Jack Bennett and Farrington Point Road are identified as Bicycle Routes on the Chatham County Bicycle Map prepared by the NCDOT Division of Bicycle and Pedestrian Transportation.

4. Increase the length of turn lanes at North Chatham Elementary School on Lystra Road (SR 1721).

5. Increase the length of turn lanes at Perry Harrison Elementary School on Hamlets Chapel Road (SR 1525).

6. Develop a roadway/pedestrian/bicycle plan in area generally north of US 64 and east of Jordan Lake in conjunction with the Town of Cary.

Recommended TIP Project Priority List
FY 2009-2015
City of Durham

1. Additional Funding Requests for Partially Funded Projects in the FY 2007-2013 TIP

Priority	Project Description
1	East End Connector – (A) US 70 from Southern Railway to NC 98 including railway structure. (B) US 70 from Miami Blvd. to Southern Railway (C) Freeway connector between NC 147 and US 70. Current funding: $99.292M in 2010-2012 Total funding needed: $135M – $200M depending on the preferred alternative selected
2	Purchase 17 new buses for DATA service expansion. Current funding: $1.5M in 2007-2008 for hybrid buses Total funding needed: $8.075M for hybrid buses (cost expected to rise)
3	Holloway Street (Junction Road to Lynn Road, and Miami Blvd. to US 70) – Construct sidewalk. Current funding: Miami Blvd. to US 70 included in the East End Connector project Total funding needed: TBD for Junction Road to Lynn Road section
4	Hillandale Road (I-85 to NC 147) – Construct sidewalk. Current funding: $165,000 in 2008 for I-85 to Club Boulevard section, Club Boulevard to NC 147 currently under construction as a CIP project. Total funding needed: TBD for I-85 to Club Boulevard section
5	M.L. King, Jr. Parkway/NC 55 Interchange – Revise feasibility study to consider at-grade crossing at NC 55 to reduce project costs and complete connector to Cornwallis Road. Current funding: Feasibility study re-evaluation in progress. Current estimate of $25.8M is unfunded. Total funding needed: TBD by feasibility study
6	Regional Rail Service (Phase I) – Rail transit service to connect Durham, RTP, RDU, Cary, and Raleigh. Current funding: $692M project currently unfunded. Total funding needed: Regional transit priorities are currently being re-evaluated by the MPOs and the Special Transit Advisory Commission. Recommend full funding of the recommendations developed through this process.

Priority	Project Description
7	Cornwallis Road (South Roxboro Road to Chapel Hill Road) – Curb & gutter, bicycle and pedestrian facilities. Current funding: $2.27M funded for S. Roxboro Rd. to University Dr. section. Total funding needed: TBD, must reflect new project limits from South Roxboro Road to Chapel Hill Road.
8	Morreene Road (Erwin Road to Neal Road) – Bicycle and pedestrian facilities. Current funding: $556,000 funded Total funding needed: TBD
9	Carpenter Fletcher Road (Woodcroft Parkway to Alston Avenue) – Bicycle and pedestrian facilities Current funding: $142,740 funded for bicycle improvements through the MPO's STPDA bicycle/pedestrian allocation. Total funding needed: TBD
10	Triangle Parkway – Durham Freeway (NC 147) Extension from I-40 to I-540. Construct new multi-lane freeway facility. Current funding: This project is to be constructed as a NC Turnpike Authority project. Total funding needed: Tolls will not cover the entire construction costs. $12M - $24M per year of gap funding needed. The Durham City Council endorses additional gap funding for the Triangle Parkway only if the additional gap funding is from a new source of funds typically not available to transportation projects in Durham and if the gap funding does not adversely affect the funding of any other projects in Division 5.

2. New Projects

A. Highway

Priority	Project Description
A1	Fayetteville Road (Woodcroft Parkway to Riddle Road) – Widen to 4-lane. Include bicycle and pedestrian facilities.
A2	NC 54 (I-40 east to NC 55) – Widen existing two-lane facility to multi-lanes with a divided median with consideration for a bus rapid transit. Include bicycle and pedestrian facilities.
A3	US 70 (Lynn Road to County Line) – Convert existing 4-lane facility to 6-lane freeway consistent with the recommendations of the 2030 Long-Range Transportation Plan (LRTP) and the Highway Trust Fund (HTF) legislation. Initiate planning study with the Northern Durham Parkway project.

Priority	Project Description
A4	Northern Durham Parkway (A) I-85 to Old Oxford Road, 4-lane divided; (B) US 70 to I-85, 4-lane divided; and (C) Old Oxford Road to Roxboro Road – construct 2 lane road on a 4-lane right-of-way consistent with the recommendations of the 2030 Long-Range Transportation Plan (LRTP) and the Highway Trust Fund (HTF) legislation. Include bicycle and pedestrian features. Initiate the planning study with the US 70 (Lynn Rd. to County Line) project.
A5	Old Oxford Highway (Phase I, North Roxboro to Hamlin Road) – Expand capacity. Include bicycle and pedestrian facilities.
A6	NC 751 (Phase I, S. Roxboro Road to NC 54) – Widen to 4-lane. Include bicycle and pedestrian facilities
A7	NC 54 (I-40 to Barbee Chapel Road) – Widen to 6-lane divided. Include bicycle and pedestrian facilities.

B. Bicycle and Pedestrian

Priority	Project Description
B1	Avondale Drive (Roxboro to Geer) - pedestrian and bicycle facilities
B2	Club Boulevard (Ruffin to Geer) - pedestrian and bicycle facilities
B3	Alston Avenue (Carpenter Fletcher to Sedwick) - pedestrian and bicycle facilities
B4	Hope Valley Road (South Roxboro to US 15-501 Business) - pedestrian and bicycle facilities.
B5	Dearborn Drive (East Club Boulevard to Old Oxford Road) – pedestrian and bicycle facilities.
B6	Cornwallis Road (Erwin to Chapel Hill) - pedestrian and bicycle facilities.
B7	Cheek Road (Geer to Hardee) - pedestrian and bicycle facilities
B8	Fayetteville Road (Cornwallis to Nelson) - pedestrian and bicycle facilities.
B9	University Drive (Garrett to Hope Valley) - pedestrian and bicycle facilities
B10	Sedwick Road (Grandale Drive to Alston Avenue) – pedestrian and bicycle facilities

C. Transit

Priority	Project Description
C1	Purchase 18 new replacement vans for DATA (07-13 TIP: unfunded in 2009)
C2	Purchase 6 new vans for DATA service expansion. (07-13 TIP: unfunded in 2009)
C3	Treyburn - North Durham Park-n-Ride Lot
C4	Purchase 31 new replacement buses for DATA (07-13 TIP: unfunded in 2013)
C5	US 15-501 regional rail from Duke University to Chapel Hill consistent with the MPO long-range transportation plan and the US 15-501 Major Investment Study (MIS). Regional transit priorities are currently being re-evaluated by the MPOs and the Special Transit Advisory Commission. Recommend full funding of the recommendations developed through this process.

D. Other

Priority	Project Description
D1	Intelligent Transportation System (ITS) Improvements (cameras, dynamic message boards, vehicle detectors, transit signal preemption, etc.) – citywide.
D2	Transportation Demand Management (TDM)

Recommended TIP Project Priority List
FY 2009-2015
Durham County

1. Additional Funding Requests for Partially Funded Projects in the FY 2007-2013 TIP

Priority	Project Description
1	East End Connector – (A) US 70 from Southern Railway to NC 98 including railway structure. (B) US 70 from Miami Blvd. to Southern Railway (C) Freeway connector between NC 147 and US 70. Current funding: $99.292M in 2010-2012 Total funding needed: The estimated construction costs for the alternatives being considered are $135M – $200M.
2	Purchase 17 new buses for DATA service expansion. Current funding: $1.5M in 2007-2008 for hybrid buses Total funding needed: $8.075M for hybrid buses (cost expected to rise)
3	Holloway Street (Junction Road to Lynn Road, and Miami Blvd. to US 70) – Construct sidewalk. Current funding: Miami Blvd. to US 70 included in the East End Connector project Total funding needed: TBD for Junction Road to Lynn Road section
4	Hillandale Road (I-85 to NC 147) – Construct sidewalk. Current funding: $165,000 in 2008 for I-85 to Club Boulevard section, Club Boulevard to NC 147 currently under construction as a City of Durham CIP project. Total funding needed: TBD for I-85 to Club Boulevard section
5	M.L. King, Jr. Parkway/NC 55 Interchange – Revise feasibility study to consider at-grade crossing at NC 55 to reduce project costs and complete connector to Cornwallis Road. Current funding: Feasibility study re-evaluation in progress. Current estimate of $25.8M is unfunded. Total funding needed: TBD by feasibility study
6	Regional Transit Service – Transit service to connect Durham, RTP, RDU, Cary, and Raleigh. Current funding: $692M project currently unfunded. Total funding needed: Regional transit priorities are currently being re-evaluated by the MPOs and the Special Transit Advisory Commission. Recommend full funding of the recommendations developed through this process.

Priority	Project Description
7	Cornwallis Road (South Roxboro Road to Chapel Hill Road) – Curb & gutter, bicycle and pedestrian facilities. Current funding: $2.27M funded for S. Roxboro Rd. to University Dr. section. Total funding needed: TBD, must reflect new project limits from South Roxboro Road to Chapel Hill Road.
8	Morreene Road (Erwin Road to Neal Road) – Bicycle and pedestrian facilities. Current funding: $556,000 funded Total funding needed: TBD
9	Carpenter Fletcher Road (Woodcroft Parkway to Alston Avenue) – Bicycle and pedestrian facilities Current funding: $142,740 funded for bicycle improvements through the MPO's STPDA bicycle/pedestrian allocation. Total funding needed: TBD
10	Triangle Parkway – Durham Freeway (NC 147) Extension from I-40 to I-540. Construct new multi-lane freeway facility. Current funding: This project is to be constructed as a NC Turnpike Authority project. Total funding needed: Tolls will not cover the entire construction costs. $12M - $24M per year of gap funding needed.

2. New Projects

A. Highway

Priority	Project Description
A1	Fayetteville Road (Woodcroft Parkway to Riddle Road) – Widen to 4-lane. Include bicycle and pedestrian facilities.
A2	NC 54 (I-40 east to NC 55) – Widen existing two-lane facility to multi-lanes with a divided median with consideration for a bus rapid transit. Include bicycle and pedestrian facilities.
A3	US 70 (Lynn Road to County Line) – Convert existing 4-lane facility to 6-lane freeway consistent with the recommendations of the 2030 Long-Range Transportation Plan (LRTP) and the Highway Trust Fund (HTF) legislation. Initiate planning study with the Northern Durham Parkway project.

Priority	Project Description
A4	Northern Durham Parkway (A) I-85 to Old Oxford Road, 4-lane divided; (B) US 70 to I-85, 4-lane divided; and (C) Old Oxford Road to Roxboro Road – construct 2 lane road on a 4-lane right-of-way consistent with the recommendations of the 2030 Long-Range Transportation Plan (LRTP) and the Highway Trust Fund (HTF) legislation. Include bicycle and pedestrian features. Initiate the planning study with the US 70 (Lynn Rd. to County Line) project.
A5	Old Oxford Highway (Phase I, North Roxboro to Hamlin Road) – Expand capacity. Include bicycle and pedestrian facilities.
A6	NC 751 (Phase I, S. Roxboro Road to NC 54) – Widen to 4-lane. Include bicycle and pedestrian facilities
A7	NC 54 (I-40 to Barbee Chapel Road) – Widen to 6-lane divided. Include bicycle and pedestrian facilities.

B. Bicycle and Pedestrian

Priority	Project Description
B1	Avondale Drive (Roxboro to Geer) - pedestrian and bicycle facilities
B2	Club Boulevard (Ruffin to Geer) - pedestrian and bicycle facilities
B3	Alston Avenue (Carpenter Fletcher to Sedwick) - pedestrian and bicycle facilities
B4	Hope Valley Road (South Roxboro to US 15-501 Business) - pedestrian and bicycle facilities.
B5	Dearborn Drive (East Club Boulevard to Old Oxford Road) – pedestrian and bicycle facilities.
B6	Cornwallis Road (Erwin to Chapel Hill) - pedestrian and bicycle facilities.
B7	Cheek Road (Geer to Hardee) - pedestrian and bicycle facilities
B8	Fayetteville Road (Cornwallis to Nelson) - pedestrian and bicycle facilities.
B9	University Drive (Garrett to Hope Valley) - pedestrian and bicycle facilities
B10	Sedwick Road (Grandale Drive to Alston Avenue) – pedestrian and bicycle facilities
B11	Cook Road (Fayetteville to Martin Luther King) – pedestrian and bicycle facilities
B12	Barbee Chapel Road (NC 54 to Stagecoach Road) – pedestrian and bicycle facilities
B13	Erwin Road (Orange County Line to NC 751) – pedestrian and bicycle facilities

Priority	Project Description
B14	Pope Road (Old Durham-Chapel Hill Road to Ephesus Church Road) – pedestrian and bicycle facilities

C. Transit

Priority	Project Description
C1	Purchase 18 new replacement vans for DATA (07-13 TIP: unfunded in 2009)
C2	Purchase 6 new vans for DATA service expansion. (07-13 TIP: unfunded in 2009)
C3	Treyburn - North Durham Park-n-Ride Lot
C4	Purchase 31 new replacement buses for DATA (07-13 TIP: unfunded in 2013)
C5	Regional Transit Service – Transit service to connect Duke University to Chapel Hill. The DCHC MPO Long Range Transportation Plan includes TTA "Phase II" transit service along the US 15-501 corridor as the MPO's second priority for regional transit service. Regional transit priorities are currently being re-evaluated by the MPOs and the Special Transit Advisory Commission. Durham County recommends full funding of the recommendations developed through this process.

D. Other

Priority	Project Description
D1	Intelligent Transportation System (ITS) Improvements (cameras, dynamic message boards, vehicle detectors, transit signal preemption, etc.) – countywide.
D2	Transportation Demand Management (TDM)

Town of Hillsborough
Since 1754

Hillsborough TIP Priority List
2009-2015

1. **Elizabeth Brady Road extension (project U-3808):** Construct proposed 4-lane boulevard that connect US 70 Business, US 70 Bypass, and St. Mary's Road (SR 1002). Special Design consideration should be used in crossing the Eno River and the overall impact of the road on neighboring properties.

2. **Improvements along South Churton Street (project R-2825):** Develop congestion management, limited access, aesthetic and capacity improvements between US 70 Business and Interstate 40. The portion between Interstates 40 and 85 will conform to the design criteria in the Economic Development District Design Manual (4-lane divided section with bike and pedestrian improvements). The feasibility study completed in February 2002 recommended a 4-lane divided with 16-foot median, curb and gutter cross section for the entire corridor from I-40 to the Eno River bridge.

3. **US 70 Bypass widening:** Widen US 70 Bypass to a four-lane divided section with bike and pedestrian improvements. This project should be phased to address the traffic counts and existing congestion.

4. **SR 1006, Orange Grove Road, at Interstate 40**: Construct a pedestrian bridge over I-40. Two schools are within walking and cycling distance from residential areas north of I-40. Bicyclists and pedestrian must share the roadway with motor vehicles crossing the narrow two-lane bridge that carries Orange Grove Road over Interstate 40.

5. **NC 86, Bicycle Lanes:** Construct bicycle lanes (4-foot paved shoulders) from Chapel Hill (Whitfield Road) to Hillsborough (US 70 Business). This route is listed as priority I of the primary bicycle routes proposed in the Orange County Bicycle Transportation Plan adopted April 6, 1999.

6. **Nash Street Sidewalk**: Construct sidewalk along the west side of Nash Street (SR 1156) from Faucette Mill Road to Dimmocks Mill Road. Construct sidewalk connections to Hillsborough Elementary School along West Union Street and Central Elementary School along Hayes Street.

7. **U-3436, SR 1148 (Eno Mountain Road) and SR 1192 (Mayo Street) at SR 1006 (Orange Grove Road):** Realign intersection and make safety improvements. Both the EDD Transportation Work Group Recommendations and the Access Management and Awareness Project and Report for Orange Grove Road recommend this project for improved traffic flow and safety.

8. **Western Bypass (project R-3438)** Construct proposed 2-lane facility connecting US 70 with NC 86 North using a portion of Coleman Loop Road (SR 1332) right of way.

The above list was set to a vote at the June 25, 2007 Hillsborough Town Board of Commissioners meeting and received the following vote:
Ayes: 5
Noes: 0
Absent/excused: 0

Donna F. Armbrister

Donna F. Armbrister, MMC
Town Clerk

ORANGE COUNTY TRANSPORTATION PRIORITY LIST WITHIN THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN AREA BOUNDARY FOR CONSIDERATION OF FUNDING IN THE 2009 – 2015 TRANSPORTATION IMPROVEMENT PROGRAM

1. SR 1006, Orange Grove Road, at Interstate 40: Construct a pedestrian bridge over I-40. New Grady Brown Elementary and newly constructed Cedar Ridge High School are located on New Grady Brown School Road that has access from Orange Grove Road south of I-40. The schools are within walking and cycling distance from residential areas north of I-40. Bicyclists and pedestrian must share the roadway with motor vehicles crossing the narrow two-lane bridge that carries Orange Grove Road over Interstate 40. The bridge is too narrow to accommodate a pedestrian walkway. Lack of an adequate pedestrian crossing presents an unsafe environment for students to walk to the schools.

2. U-2805, Homestead Road (SR 1777) Improvements: Improve Homestead Road from SR 1834, High School Road, to NC 86. This project should include bicycle and pedestrian facilities. There are three schools in the vicinity of Homestead Road: Chapel Hill High School, Smith Middle School and Seawell Elementary School. Many students live within walking distance and cycling distance to Chapel Hill High School and must walk or cycle along Homestead Road, and cross the road daily. Provision of sidewalks is of utmost importance for the safety of students and other pedestrians who use this corridor. Provision of bicycle facilities is, likewise, necessary for the safety of students and others.

   This project should also include appropriate safety improvements to the intersection of Homestead Road with High School Road.

3. R-2825, Improvements to South Churton Street: Develop congestion management, limited access, aesthetic and capacity improvements between US 70 Business and Interstate 40. The portion between Interstates 40 and 85 will conform to the design criteria of the Economic Development District Design Manual (4-lane divided section with bike and pedestrian improvements). The feasibility study completed in February 2002 recommends a 4-lane divided, with 16-foot median, curb and gutter cross section for the entire corridor from I-40 to Eno River. Orange County stresses the need to study improvements within the current right-of-way for the segment north of Interstate 85. Improved capacity through widening is not the County's first choice because of significant constraints between Interstate 85 and US 70 Business and the proximity of the historic district north of the project limits. Orange County requests that, where conditions do not prevent the addition of frontage roads, the feasibility study include the addition of frontage roads with limited access from the corridor.

ORANGE COUNTY TRANSPORTATION PRIORITY LIST WITHIN THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN AREA BOUNDARY FOR CONSIDERATION OF FUNDING IN THE 2009 – 2015 TRANSPORTATION IMPROVEMENT PROGRAM

4. Old NC 86 (SR 1009) Bicycle Lanes: Construct bicycle lanes (4-foot paved shoulders) from Carrboro (Eubanks Road) to Hillsborough (I-40). This project, from the Carrboro Transition area (Hickory Forest Road) to Lafayette Drive, is priority 6 of the primary bicycle routes listed in the Orange County Bicycle Transportation Plan, and would extend bicycle accommodations requested in TIP Project R-2825 to Carrboro, where its Transportation Advisory Committee has also established bicycle routes on Old NC 86 as a transportation priority connection between proposed bicycle facilities along Old Fayetteville Road, Homestead Road and Eubanks Road.

   The feasibility study for TIP Project R-2825, improvements to South Churton Street, recommends a four-lane divided section for Old NC 86 (S. Churton St.) from I-40 to Lafayette Drive. That study also anticipates accommodations for bicycles (wide outside lanes) from I-40 to I-85. This project would connect bicycle facilities proposed in the South Churton Street project to Carrboro. Carrboro's Priority List for the 2006-2012 TIP included two bicycle projects on Old NC 86 that, along with this request and TIP project R-2825, would complete a Hillsborough-Carrboro bicycle route:
   - from Old Fayetteville Road to Homestead Road; and
   - from Homestead Road to Eubanks Road.

5. NC 86, Bicycle Lanes: Construct bicycle lanes (4-foot paved shoulders) from Chapel Hill (Whitfield Road) to Hillsborough (US 70 Business). This project will extend bicycle lanes on Airport Road (NC86) in Chapel Hill to US 70 Business in Hillsborough. Bicycle lanes have recently been completed along NC 86 from UNC to Whitfield Road (SR 1731) in Orange County. NC 86 from Chapel Hill to Hillsborough is experiencing increasing numbers of bicyclists using this route and there are also two schools along this route. This route is listed as priority I of the primary bicycle routes proposed in the Orange County Bicycle Transportation Plan adopted April 6, 1999. This project is included in the Bicycle Program as an incidental need. Orange County requests that bicycle lanes be constructed as an independent project, and, if necessary, programmed in phases.

ORANGE COUNTY TRANSPORTATION PRIORITY LIST WITHIN THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN AREA BOUNDARY FOR CONSIDERATION OF FUNDING IN THE 2009 – 2015 TRANSPORTATION IMPROVEMENT PROGRAM

6. NC 86 (North of Hillsborough) Improvements: Widen NC 86, from US 70 Bypass north of Hillsborough to SR 1332, Coleman Loop (Coleman Loop also being the intersection area of the planned connector between NC 86 and NC 57), to four lanes with intersection improvements at US 70 Bypass to include extending the queuing lane for traffic turning east onto US 70 Bypass from northbound Churton Street/NC 86. NC 86 is the major north-south route through Orange County. NC 57 converges into US 86 just north of US 70 Bypass. The segment of NC 86 between NC 57 and US 70 is congested, rendering a high accident location at the intersection of US 70 Bypass at NC 86.

7. US 70 Bypass Widening: Widen, from the Orange/Durham County Line to the US 70 – I-85 Connector east of Efland, US 70 Bypass to a four-lane divided section with bike and pedestrian improvements. This project should be phased to address traffic counts and existing congestion. Orange County requests that this project be identified as a need and included in the 2006-2012 STIP.

8. U-3436, SR 1148 (Eno Mountain Road) and SR 1192 (Mayo Street) at SR 1006 (Orange Grove Road): realign intersection and make safety improvements. This project is listed in the 2004 – 2010 TIP as an unfunded project. It was a "first priority project" in the Town of Hillsborough Thoroughfare Plan for 1989 but the Hillsborough Town Board removed the realignment from the Hillsborough Transportation Plan in 1997. More recently, Hillsborough Commissioners and Orange County Commissioners have endorsed the project in two joint studies that included commissioners from both jurisdictions, the Economic Development District (EDD) Transportation Work Group and the Joint Orange Grove Road Transportation Group (JOGRTG). Both the "EDD Transportation Work Group Recommendations" and the "Access Management and Awareness Project and Report for Orange Grove Road" recommend this project for improved traffic flow and safety.

9. Extend Orange Grove Road east to US 70 business. The "EDD Transportation Work Group Recommendations" and the "Access Management and Awareness Project and Report for Orange Grove Road" recommend this project as an alternative access to the US 70 Business/NC 86 corridor to alleviate congestion on Churton Street.

DCHC MPO -- STP-DA Allocation Table (FY 2007-2013) approved May 9 2007

	TIP #	Location	Description	Total Cost	Prior Years	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	Non-Fed Match	Agency
			DURHAM COUNTY															
1	I-306 C	I-85 C (15-501 to Broad)	Median Planters	$1,403,204	$0	$1,122,563											$280,641	Durham
2	I-306 C	I-85 C (15-501 to Broad)	Brick Betterment Noise Wall	$559,654	$0	$447,723											$111,931	Durham
3	I-306 C	I-85 C (15-501 to Broad)	Interchange Sidewalks	$93,842	$0	$75,074											$18,768	Durham
4	I-306 DB	I-85 DB (Broad to Camden)	Brick Betterment -- Club Blvd. E. S. Noise Wall	$133,300	$0		$106,640										$26,660	Durham
5	I-306 C	I-85 (Hillandale Commons)	Landscaping - Berm Hillandale Commons area	$25,000	$0		$20,000										$20,000	Private
6	I-306C	I-85	Islands - Hillandale and Guess Roads	$75,000	$0		$60,000										$15,000	Durham
7	EL-2921	American Tobacco Tr.	Phase E	$1,476,250	$0					$590,500	$590,500						$295,250	Durham
8	U-4724	Cornwallis Rd.	Bike/Ped Facilities (S. Roxboro to University or C.H. Rd.)	$2,270,000	$0							$1,816,000					$454,000	Durham
9	U-4009	US 15-501	Add left turn lane at Garrett Road intersection	$285,000	$0	$228,000											$57,000	Durham
10	U-3804	Hillandale Rd	I-85 to Carver Street	$0	$0												$0	State
11	R-2906	NC 55 Widening Project	MLK ROW/Extension	$2,700,000	$0	$2,160,000											$540,000	State
12	R-2906	NC 55 Widening Project	Sidewalks/Landscaping/Entryway Enhancements	$430,000	$0	$344,000											$86,000	State
13	U-4010	NC 98 (Holloway Street)	Widen for Center Turn Lane	$2,795,000	$0					$2,236,000							$559,000	State
14	U-4011	Miami Blvd.	Widening	$2,342,500	$0						$1,874,000						$468,500	State
15			ORANGE COUNTY															
32	U-3306	Weaver Dairy Rd.	Bike & Pedestrian Features	$707,500	$0									$566,000			$141,500	State
33	E-4994	Carrboro	Bolin Creek Greenway (CA)	$807,500	$0				$56,000		$590,000						$161,500	Carrboro
34	E-4828	Carrboro	Morgan Creek Greenway West (CA)	$650,000	$0				$40,000	$480,000							$130,000	Carrboro
35	E-4008	Carrboro	Roberson Place Greenway (CA)	$168,695	$0			$45,600	$89,356								$33,739	Carrboro
36	TD-4711C	Chapel Hill	Transit Maintenance Facility	$4,788,330	$0		$560,000		$1,600,000	$1,670,664							$957,666	Chapel Hill
37		Chapel Hill	Bus Replacement	$1,000,000	$0		$800,000										$200,000	Chapel Hill
38	E-4601	Chapel Hill/Carrboro	Morgan Creek Greenway (East)	$900,000	$0			$80,000		$640,000							$180,000	CH/Carrboro
39	E-4995	Chapel Hill	Dry Creek Greenway	$780,000	$0				$64,000		$560,000						$156,000	Chapel Hill
40	U-5022	Chapel Hill	Upper Booker Creek Greenway	$720,000	$0									$576,000			$144,000	Chapel Hill
41	U-4704	Chapel Hill-Carrboro	Signal System Improvements - Planning and Design	$450,000	$0					$360,000							$90,000	CH/Carrboro
42			MPO-WIDE															
43	E-4707	Old Durham-CH Rd.	Bike Lanes	$3,428,000	$0							$1,371,000	$1,371,000				$685,600	Multiple
44	**U-4727**	**MPO -UPWP**	**MPO Planning**	**$5,506,250**	**$1,510,000**	**$165,000**	**$273,000**	**$228,657**	**$224,380**	**$265,963**	**$373,000**	**$273,000**	**$273,000**	**$273,000**	**$273,000**	**$273,000**	**$1,101,250**	**Multiple**
45			UPWP Planning $165,000															
46			MPO Bike Ped Planner Position $28,000															
47			TRM Service Bureau $80,000 (FY 04 - FY 08)															
51	**U-4726**	**MPO/Various Loval Gov't.**	**Urban Area Bike/Ped Allocation**	**$3,974,895**	**$0**	**$0**	**$0**	**$71,524**	**$325,600**	**$382,792**	**$200,000**	**$200,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$794,979**	**Multiple**
52	U-4726B		CAR - Bolin Forest Drive Sidewalk	$19,950	$0			$15,960									$3,990	Carrboro
53	U-4726A		CAR - Hanna Street Sidewalk	$69,455	$0			$55,564									$55,564	Carrboro
54	U-4726F	03-04 bike allocation	CH - Chapel Hill Sidewalks	$250,000	$0					$200,000							$50,000	Chapel Hill
55	U-4726D	04 bike/ped allocation	DUR - Bicycle Pedestrian Plan	$93,750	$0				$60,000	$15,000							$18,750	Durham
56	U-4726E	05 bike/ped allocation	CH - Airport Road	$50,000	$0				$40,000								$10,000	Chapel Hill
57	U-4726C	05 bike/ped allocation	CH - Culbreth Rd.	$45,000	$0				$36,000								$9,000	Chapel Hill
58	U-4726G	05 bike/ped allocation	DUR - Holloway St sidewalks	$67,000	$0				$53,600								$13,400	Durham
59	U-4726H	05 bike/ped allocation	DUR - Bike Education	$60,000	$0				$8,000	$40,000							$12,000	Durham
60	U-4726I	05 bike/ped allocation	CAR - Bel Albor Path	$65,695	$0								$52,556				$13,139	Carrboro
61	U-4726J	06 bike/ped allocation	CAR - South Greensboro St./Smith Level Sidewalk	$46,000	$0								$36,800				$9,200	Carrboro
62	U-4726K	06 bike/ped allocation	DUR - Hillandale:Club to I-85 5' sidewalk on both sides	$165,484	$0						$132,387						$33,097	Durham
63	U-4726L	06 bike/ped allocation	CH - Fordham Blvd sidewalk NE Fordham/Estes Dr.	$15,000	$0				$12,000								$3,000	Chapel Hill
64	U-4726M	06 bike/ped allocation	CH - Drainage gate replacement (NC 86)	$10,000	$0				$8,000								$2,000	Chapel Hill
65	U-4726N	06 bike/ped allocation	Walkable Communities Workshop (MPO)	$17,000	$0					$13,600							$3,400	MPO
66	U-4726O	07 bike/ped allocation	DUR - Capenter Fletcher RD;Woodcroft- Alston bike impr.	$142,740	$0					$114,192							$28,548	Durham
67	U-4726P	07 bike/ped allocation	CH - Culbreth Rd:15501-Culbreth Park Dr sidewalk	$135,000	$0				$108,000								$27,000	Chapel Hill
68	**U-3475**	**MPO -UPWP sp projects**	**Various Planning Activities**	**$3,872,168**	$0	**$0**	**$58,000**	**$50,000**	**$617,483**	**$544,251**	**$1,148,000**	**$380,000**	**$0**	**$300,000**	**$0**	**$0**	$774,434	**MPO**
69		(flexed to UPWP planning)	MPO TDM	$343,750	$0				$85,000	$85,000	$105,000						$68,750	NCDOT
70			ITS Deployment Plan Update	$70,000	$0					$56,000							$14,000	MPO
71			Bike/Ped (non-motorized trip)Model Development	$250,000	$0						$200,000						$50,000	MPO
72			Data automation/management/GIS ($200,000)	$250,000	$0				$40,000		$160,000						$50,000	Multiple
73			I-40/NC 54 Transit Corridor -- Phase II	$0	$0												$0	Multiple
74			Land Use/Transportation Model (Placeholder)	$250,000	$0						$200,000						$50,000	Multiple
75			Congestion Management System	$750,000	$0				$100,000		$100,000	$200,000		$200,000			$150,000	Multiple
76		breaks needed ?	CH - Chapel Hill Mobility Report Card	$475,000	$0		$58,000		$122,000			$100,000		$100,000			$95,000	Chapel Hill
77			CAR - Carrboro Downtown Study	$50,000	$0				$40,000								$10,000	Carrboro
78			Old Durham-CH Rd. bike/ped feasibility study	$62,500	$0			$50,000									$12,500	Multiple
79			MPO Collector Street Plan	$100,000	$0				$40,000		$40,000						$20,000	Multiple
80			Model travel behavior surveys (HH, B&A counts)	$300,000	$0				$160,483	$79,517							$60,000	Multiple
81			Model Enhancements and major update	$325,000	$0				$30,000		$150,000	$80,000					$65,000	Multiple
82			Model surveys ph-2 (onboard, travel time, external)	$243,750	$0					$67,000	$128,000						$48,750	Multiple
83			TDM additional request (TTA)	$50,000	$0					$40,000							$10,000	Multiple
84			MPO CMS	$60,000	$0					$48,000							$12,000	Multiple
85			CH/CAR - Chapel Hill/Carrboro Transit Master plan	$200,000	$0					$160,000							$40,000	Multiple
			AQ Planning/Conformity (TJCOG)	$42,168	$0					$8,734	$25,000						$8,434	Multiple
86			Chapel Hill TDM	$50,000	$0						$40,000						$10,000	Chapel Hill
			Durham Total	$24,547,559	$7,103,867	$4,377,360	$186,640	$0	$121,600	$2,995,692	$2,596,887	$1,816,000	$0	$0	$0	$0	$5,364,512	Durham
			Orange Total	$19,673,323	$5,618,160	$0	$1,418,000	$197,124	$2,215,356	$3,510,664	$1,190,000	$100,000	$89,356	$1,242,000	$0	$0	$3,976,338	Orange
			MPO-Wide Total	$12,048,418	$1,510,000	$165,000	$273,000	$278,657	$679,863	$663,814	$1,481,000	$1,924,000	$1,644,000	$473,000	$273,000	$273,000	$2,409,684	Other
			Yearly Total		$14,232,027	$4,542,360	$1,877,640	$475,781	$3,016,819	$7,170,170	$5,267,887	$3,840,000	$1,733,356	$1,715,000	$273,000	$273,000	$44,417,040	Total Yearly
			STP DIRECT ATTRIBUTABLE		$18,059,826	$2,732,775	$3,211,059	$3,632,240	$3,552,867	$3,600,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000	$56,388,767	Total STPDA
			MPO Reserve		$0	$0	$0	$0	$0	$0	$0	$300,000	$300,000	$300,000	$300,000	$300,000		
			FY BALANCE			($1,809,585)	$1,333,419	$3,156,459	$536,048	($3,570,170)	($1,667,887)	($540,000)	$1,566,644	$1,585,000	$3,027,000	$3,027,000		
		N/A = not available	Uncommitted Balance		$3,363,353	$1,553,768	$2,887,187	$6,043,646	$6,579,694	$3,009,524	$1,341,637	$801,637	$2,368,281	$3,953,281	$6,980,281	$10,007,281		

Changes recommended by TCC Subcommittee for bike/ped allocation.

Not Included in the Final 2007-2013 STIP

-- Draft --

2035 LRTP and CTP
Proposed Land Use Scenarios

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) prepares Socioeconomic Data (SE Data) for input into the Triangle Regional Model (TRM). The model produces transportation system performance data, such as the level of congestion and vehicle miles traveled, based assumptions of the highway, transit and other transportation projects that will be implemented in the future. The SE Data, which is a key component of this process, is developed based on the current long-range land use plans and policies of the local jurisdictions and the amount of land available for development or redevelopment. The relationship between the SE Data and model's transportation system performance data demonstrates the strong linkage between transportation and land use.

Given this linkage, the question is often asked during the Long Range Transportation Plan (LRTP) and Comprehensive Transportation Plan (CTP) development process – How might changes in land use plans or policies affect the future transportation system? And, how might local jurisdictions change their plans and policies to realize a desired outcome in the future transportation system?

The DCHC MPO proposes to create land use scenarios as part of the 2035 LRTP and CTP development process. That is, the MPO will develop alternative land use assumptions that change the SE Data and subsequently have an impact on the transportation system performance data of the TRM (travel demand model).

The proposed land use scenarios are summarized in the chart on the following page.

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-- Draft --

Proposed Land Use Scenarios

No.	Name	Description	Purpose	SE Data Changes	Land Use Plan Changes	Control Total Changes
0	Baseline	Uses current land use plans and policies.	Produces adopted LRTP and Air Quality Conformity Determination	None	None	No change -- Use baseline control totals
1	Buildout	Assumes all available land is developed as proposed in existing long range land use plans and policies	Identify needs in CTP, which does not have time horizon	Realize buildout for each TAZ	None	No control totals used because there is no time horizon
2	Travel Corridors	Accelerate population and employment development in key corridors identified in Transit Infrastructure Blueprint effort	Impact of policies that direct development to existing transportation infrastructure	Accelerate development in identified TAZs, and reduce in other TAZs	Might include recommended changes to existing plans and policies	No change -- Use baseline control totals
3	Transit Compact Zone	Accelerate population and employment development in transit oriented areas	Impact of policies that direct development to existing and appropriate transportation infrastructure	Accelerate development in identified TAZs, and reduce in other TAZs	Might include recommended changes to existing plans and policies	No change -- Use baseline control totals
4	Slow Growth	Assume slower growth than current forecasts	Impact of policies that slow growth	Decclerate development in TAZs	Would include recommended changes to existing plans and policies	Reduce population and employment control totals
5	Fast Growth	Assume faster growth than current forecasts	Impact of policies that accelerate growth	Accelerate development in TAZs	Would include recommended changes to existing plans and policies	Increase population and employment control totals

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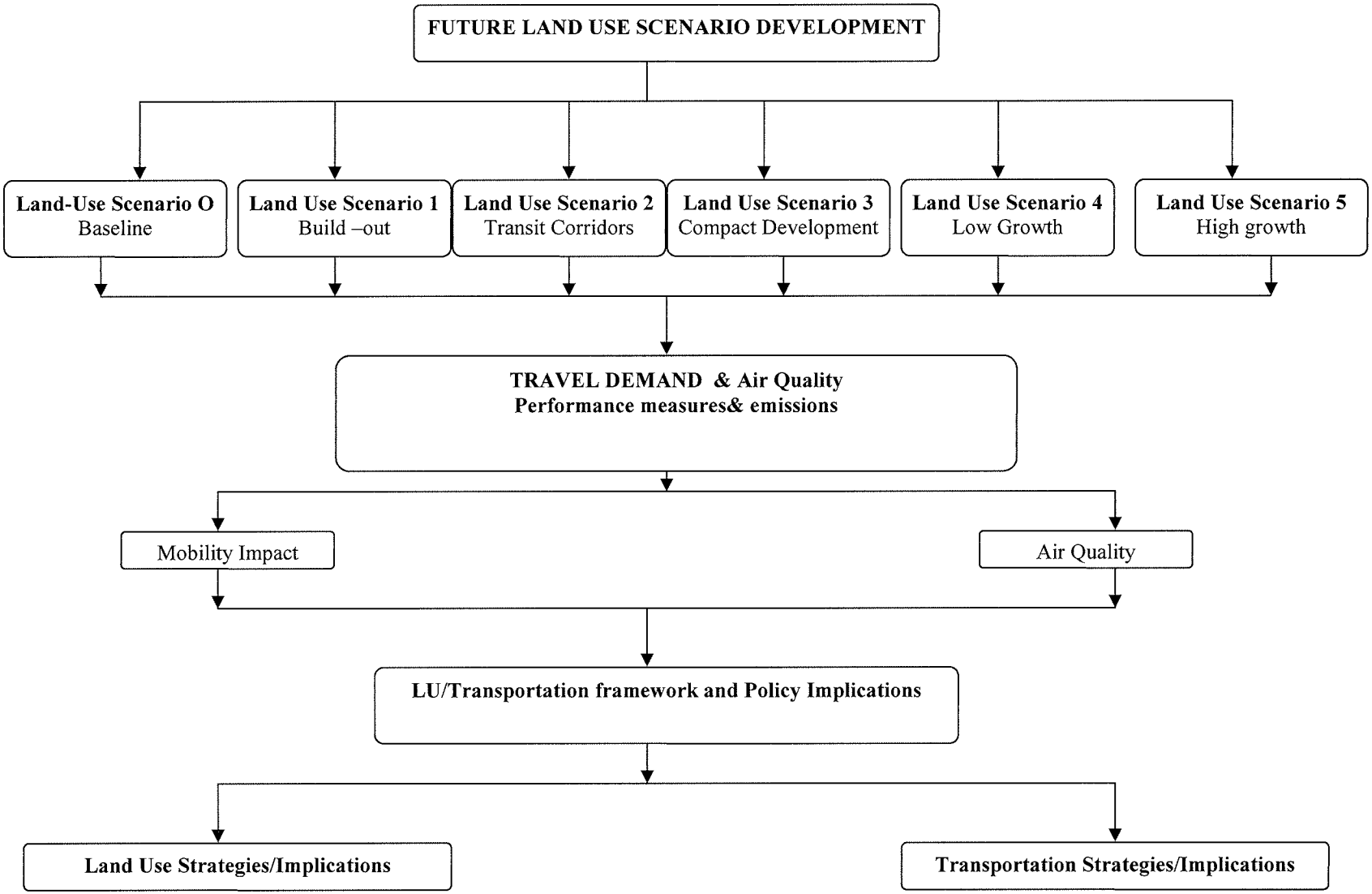
2035 LRTP Land-Use Scenarios



TCC 8/22/07 Attachment 8

TRANSPORTATION IN OUR REGION

Report Index

Your metropolitan planning organization has created nine goals through public outreach with people like you and discussion with elected officials. Please tell us how important each of these goals are to you: YOU CAN GIVE UP TO 20 POINTS FOR EACH GOAL, BUT THE TOTAL FOR ALL GOALS MUST EQUAL 100 POINTS - NO MORE AND NO LESS! This may require you to make some tough choices between competing goals, just like elected officials have to do in your community.

To accomplish the goals from the last question, the metropolitan planning organization has to develop specific objectives. Like the last question, YOU HAVE 100 POINTS TO ALLOCATE TO EACH OBJECTIVE, BUT THIS TIME YOU CAN ONLY ALLOCATE 10 POINTS AT MOST TO ONE OBJECTIVE. Again, you can help us see how you would balance objectives that sometimes complement or compete with one another.

While some of the objectives in the last question reinforce each other (for example, mixing land uses makes walking easier), other objectives are often in conflict. The following questions deal with some of the toughest choices that local, state and federal transportation agencies have to make. Tell us which choice you would make for each question. The choices are worded in a one-sided way, so feel free to offer comments on how you might make the choice easier.

ENVIRONMENT OR NEW ROADWAYS? Adding new capacity to our road system is expensive and often harmful to the natural environment. New roadways help temporarily relieve traffic congestion, may improve safety, and help spur new development to boost job growth and our economy.

COMMUNITY OR REGION? New transit stations, roadways, greenways, and other transportation improvements may negatively impact neighborhoods during and after they are constructed. The region needs to have more transportation projects to make traveling easier and safer.

NEW / LARGER ROADS OR TRANSIT, BICYCLING, AND WALKING? Transportation resources are very limited, and scarce resources are put to better use quickly constructing new biking, walking and transit services than big roadway projects that take longer and are often more expensive and harmful to human and natural environments. Roadway projects are the most needed transportation improvements and are used by the most people for everyday activities in our region; we should build more roadways to help the most people.

The following questions will help us make sure that we are getting information from everyone in our community. Your responses will not be used for any commercial purpose by the DCHC MPO or its member agencies.

Please tell us where you currently live.

Please tell us where you currently work.

Please tell us your household income.

Please tell us your race and ethnicity.

Before taking this survey, had you heard or read about the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization?

If you would like to be sent notices about other opportunities to get involved with transportation choices in your community, please choose "Yes" in the box below.

Please tell us how you would like to find out more about transportation decisions and the DCHC Metropolitan Planning Organziation (check all that apply).

Your metropolitan planning organization has created nine goals through public outreach with people like you and discussion with elected officials. Please tell us how important each of these goals are to you: YOU CAN GIVE UP TO 20 POINTS FOR EACH GOAL, BUT THE TOTAL FOR ALL GOALS MUST EQUAL 100 POINTS - NO MORE AND NO LESS! This may require you to make some tough choices between competing goals, just like elected officials have to do in your community.

	Mean	Response Total
OVERALL TRANSPORTATION		

overall transportation

Mean Score

Response Total

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	SYSTEM: A safe, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility; protects the environment and neighborhoods; and improves the quality of life for urban area residents.	16	142
	MULTI-MODAL (AUTOMOBILE, TRANSIT, BICYCLING, WALKING) TRANSPORTATION: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.	16.3	140
	PUBLIC TRANSPORTATION: A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.	15.2	144
	PEDESTRIANS AND BICYCLISTS: A pedestrian and bicycle system that: provides an alternative means of transportation; allows greater access to public transit; and supports recreational opportunities.	16.2	143
	LINKING LAND USE AND TRANSPORTATION: A Transportation Plan that is integrated with local land use plans and development policies.	12.2	136
	PROTECTION OF THE NATURAL ENVIRONMENT AND PEOPLE COMMUNITIES: A multi-modal transportation		

	Mean	Response Total
system which provides access and mobility to all residents, while protecting the natural environment, cultural resources, and social systems.	14.6	139
ENGAGING THE PUBLIC: An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.	8.8	123
SAFETY AND SECURITY: Continue to improve transportation safety and ensure the security of the transportation system.	9.3	110
FREIGHT: Improve mobility and accessibilty of freight (truck and rail transport of goods) movement	5.4	100

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

To accomplish the goals from the last question, the metropolitan planning organization has to develop specific objectives. Like the last question, YOU HAVE 100 POINTS TO ALLOCATE TO EACH OBJECTIVE, BUT THIS TIME YOU CAN ONLY ALLOCATE 10 POINTS AT MOST TO ONE OBJECTIVE. Again, you can help us see how you would balance objectives that sometimes complement or compete with one another.

	Mean	Response Total
Keep a healthy level of air quality and clean water in our streams, rivers, and wetland areas.	8.9	146
Bicycling in our community and region should be made easier, safer, and used more often.	8.2	140
Transportation projects should be cost efficient.	6.5	111
Transportation projects should reflect the values of the communities they pass near or through.	5.2	98

	Agencies responsible for transportation projects should coordinate with each other frequently.	6.8	**129**
	Transportation projects and land development should help preserve important historic sites, sensitive natural areas, animals and plants, as well as places valued by people in our community.	7.8	**135**
	Transportation projects should be designed so that they are beautiful as well as functional and safe.	6.2	**115**
	Transportation projects should accommodate freight (truck and rail), and support the economy.	4.8	**97**
	The region should do more to educate people about safe driving, bicycling, and walking and how to use public transit.	5.9	**115**
	The region should do more to make sure that low-income and minority people are engaged in making transportation decisions.	5.3	**104**
	The transportation and land use system should reduce gas and electricity consumption.	8.1	**137**
	We should seek out more innovative funding methods to help pay for transportation projects.	5.8	**107**
	We should monitor our progress and communicate results more often to people	4.8	**98**

to get them more active in the planning process.		
Land uses should be designed to make walking and bicycling easier by building shopping, homes, and workplaces closer together.	8.2	**135**
Walking in our community and region should be made easier, safer, and more common.	7.8	**136**
The region should adopt uniform performance standards for all kinds of transportation - biking, walking, roads, and public transit.	5.6	**100**
The region needs to focus on expanding the public transit system; making catching or transferring between buses easier; and make riding a bicycle walking easier and safer.	8.5	**139**
The region needs to focus on reducing congestion on the roads.	5.8	**100**
The transportation system should be made safer to prevent accidents from happening.	4.7	**89**
The transportation system should be made more secure from man-made and natural disasters.	3.5	**78**

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

While some of the objectives in the last question reinforce each other (for example, mixing land uses makes walking easier), other objectives are often in conflict. The following questions deal with some of the toughest choices that local, state and federal transportation agencies have to make. Tell us which choice you would make for each question. The choices are worded in a one-sided way, so feel free to offer comments on

how you might make the choice easier.

ENVIRONMENT OR NEW ROADWAYS? Adding new capacity to our road system is expensive and often harmful to the natural environment. New roadways help temporarily relieve traffic congestion, may improve safety, and help spur new development to boost job growth and our economy.

	Response Percent	Response Total
Protect the environment, constructing new roadways only when absolutely necessary with maximum environmental protections.	73.4%	113
Construct new roadways, minimizing harm to protected lands and species in accordance with the law.	26.6%	41
		39

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

COMMUNITY OR REGION? New transit stations, roadways, greenways, and other transportation improvements may negatively impact neighborhoods during and after they are constructed. The region needs to have more transportation projects to make traveling easier and safer.

	Response Percent	Response Total
A new transportation project should not be constructed if it permanently disrupts a community.	43.5%	67
Continue to build transportation projects as before, working with the community to ease the disruption only when doing so doesn't delay the project or greatly increase its cost.	56.5%	87
Comments		46

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

NEW / LARGER ROADS OR TRANSIT, BICYCLING, AND WALKING? Transportation resources are very limited, and scarce resources are put to better use quickly constructing new biking, walking and transit services than big roadway projects that take longer and are often more expensive and harmful to human and natural environments. Roadway projects are the most needed transportation improvements and are used by the most people for everyday activities in our region; we should build more roadways to help the most people.

	Response Percent	Response Total
Build transit,		

biking, and walking facilities, and limit roadway improvements to small intersection, signal and safety improvements.	90.3%	139
New roads and widened roads are the most important to build first; then worry about sidewalks, bicycle paths, and buses later.	9.7%	15
Comments		47

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

The following questions will help us make sure that we are getting information from everyone in our community. Your responses will not be used for any commercial purpose by the DCHC MPO or its member agencies.

Please tell us where you currently live.	Response Percent	Response Total
In the City of Durham	69.5%	107
In Durham County, but outside the City of Durham	7.1%	11
In Carrboro	3.9%	6
In Chapel Hill	9.1%	14
In Hillsborough	1.3%	2
In Orange County, but not in Chapel Hill, Hillsborough, or Carrboro	1.9%	3
In Chatham County	0%	0
Other	7.1%	11

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

Please tell us where you currently work.	Response Percent	Response Total
In the City of Durham	45.5%	70
In Durham County, but outside the City of Durham	12.3%	19
In Carrboro	0.6%	1
In Chapel Hill	12.3%	19
In Hillsborough	0.6%	1
In Orange County, but not in Chapel Hill, Hillsborough,	0%	0

	Response Percent	Response Total
or Carrboro In Chatham County	0%	0
I am not employed at this time	7.1%	11
Other	21.4%	33

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

Please tell us your household income.

	Response Percent	Response Total
Less than $50,000 per year	23%	34
Between $50,000 and $150,000 per year	62.8%	93
More than $150,000 per year	14.2%	21

Total # of respondents **154**. Statistics based on **148** respondents **0** filtered; **6** skipped.

Please tell us your race and ethnicity.

	Response Percent	Response Total
White	92.5%	135
Black	2.7%	4
Asian	1.4%	2
Hispanic	0.7%	1
Other	4.1%	6

Total # of respondents **154**. Statistics based on **146** respondents **0** filtered; **8** skipped.

Before taking this survey, had you heard or read about the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization?

	Response Percent	Response Total
Yes	50.6%	78
No	49.4%	76

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

If you would like to be sent notices about other opportunities to get involved with transportation choices in your community, please choose "Yes" in the box below.

	Response Percent	Response Total
Yes	57.8%	89
No	42.2%	65

Total # of respondents **154**. Statistics based on **154** respondents **0** filtered; **0** skipped.

Please tell us how you would like to find out more about transportation decisions and the DCHC Metropolitan Planning Organziation (check all that apply).

Response Percent	Response Total

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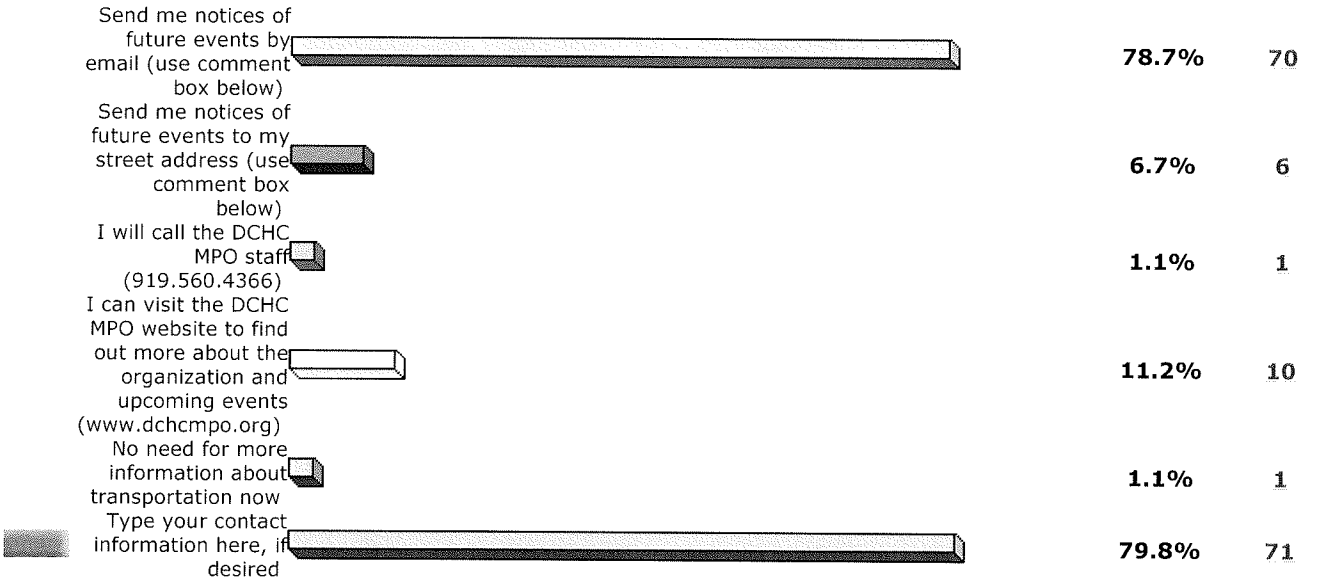

Total # of respondents **154**. Statistics based on **89** respondents **0** filtered; **65** skipped.

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 1: Overall Transportation System								
1.1 Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services activities, and destinations.							√	
1.2 Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds					√			
1.3 Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns					√			
1.4 Promote non-automobile transportation alternatives and create efficient connections between all transportation modes				√				
1.5 Conserve natural resources and reduce the rate of energy consumption					√			
1.6 Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system	√			√				
1.7 Use transportation funds based on the priority needs of the urban area, in keeping with community values, and explore new funding options							√	
1.8 Seek additional funding to ensure implementation of the long range plan								
1.9 Monitor the implementation of the Plan and the targets through the biannual TIP process							√	

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 2: Multi-Modal Street and Highway								
2.1 Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system							√	√
2.2 Create multi-modal street patterns that; encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity		√		√		√		
2.3 Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.				√			√	
2.4 Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods		√			√			
2.5 Identify and recommend design standards that: establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system		√						

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 3 - Public Transportation System								
3.1 Establish performance standards and report on the condition and effectiveness of the public transportation system							√	
3.2 Increase public transit ridership by enlarging the service area and increasing the frequency of service to the urban area.				√				
3.3 Coordinate transit service within the urban area by promoting height quality, seamless, integrated, and customer-friendly service						√		
3.4 Expand ridesharing, carpool, and vanpool services and opportunities				√				
3.5 Develop and implement alternative to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services						√		
3.6 Develop and implement the Regional Transit Plan				√				
3.7 Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing						√		
3.8 Ensure that the transportation needs of the youth and elderly, the mobility impaired, and the economically disadvantaged are met				√				
3.9 Identify and recommend land use patterns, parking requirements, and development regulations, which create compact, mixed use, transit-friendly, walkable development					√			
3.10 Identify and recommend ways that state and the urban area should work together to maintain and enhance the quality of public transportation service throughout the urban area					√			

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 4 - Pedestrian and Bicycle System								
4.1 Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system							√	
4.2 Develop and implement a Regional Pedestrian Plan				√				
4.3 Update and maintain the Regional Bicycle Plan				√				
4.4 Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs								
4.5 Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit								
4.6 Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of roadways where applicable								
4.7 Increase education about the benefits of pedestrian and bicycle alternatives								
4.8 Support the enforcement of pedestrian and bicycle regulations		√						
4.9 Pursue strong funding commitment for building both pedestrian and bicycle facilities								
4.10 Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation		√						
4.11 Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs								
4.12 Promote the construction of bicycle and pedestrian facilities that will encourage greater use of these modes by the public				√				

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 5 - Integration of Land Use and Transportation								
5.1 Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies					√			
5.2 Create transportation systems that enhance the livability of all communities					√			
5.3 Identify the impacts of different land use patterns and site designs on travel behavior					√			
5.4 Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities					√			
5.5 Identify and recommend land use patterns and development policies that increase overall mobility and that support compact, mixed-use, transit-friendly, walkable development					√			

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 6 - Protection of Natural Environment and Social Systems								
6.1 Establish performance standards and report on transportation impacts on the natural environment, cultural resources, and social systems					√			
6.2 Protect and preserve archaeological, historic and culturally valuable areas					√			
6.3 Identify and protect environmentally sensitive areas early in the planning process					√			
6.4 Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT)				√				
6.5 Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation					√			
6.6 Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area					√			
6.7 Preserve culturally diverse areas of the region					√			
6.8 Ensure that transportation facilities do not negatively effect disadvantaged populations disproportionately					√			

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 7 - Public Involvement								
7.1 Establish performance standards and report on the effectiveness of the public involvement element of Transportation Plan							√	
7.2 Encourage citizens to take a proactive role in the development of the Transportation Plan								
7.3 Bring a broad cross-section of members of the public into the public policy and transportation planning decision-making process								
7.4 Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives								
7.5 Determine the public's knowledge of the metropolitan transportation system, and public values and attitudes concerning transportation								
7.6 Determine public concerns and/or perceived impacts of elements of the Transportation Plan								
7.7 Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle					√			
7.8 Establish a channel for an effective feedback process								

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 8 - Safety and Security								
Note: Goal 8 is not in s030 LRTP. The addition of this goal is proposed to comply with recent federal legislation changes (i.e., SAFETEA-LU)								
8.1 Reduce fatality, injure, and crash/incident rates on all modes		√						
8.2 Reduce vulnerability of transportation facilities/users to terrorists, natural disasters and risks		√						
8.3 Reduce economic losses due to transportation crashes and incidents		√						
8.4 Manage risks, ensure transportation system efficiency, orderly evacuation during terrorist attacks, and natural disasters			√					
8.5 Provide a safe environment for transportation users through the "3 Es"		√	√					

2035 Goals and Objectives
Relationship to FHWA Planning Factors

Goals and Objectives / Planning Factors	**Economic Vitality**: Productivity and Efficiency	**Safety of Transportation**: Motorized and Nonmotorized Users	**Security of Transportation**: Motorized and Nonmotorized Users	**Access and Mobility**: Accessibility for people and freight	**Environment**: Energy, Conservation, Quality of Life, consistency between planned growth and economic development	**Integration and Connectivity**: People and Freight	**Management and Operation**: Efficient system	**System Preservation**
Goal 9 - Freight								
Note: Goal 9 is not in s030 LRTP. The addition of this goal is proposed to comply with recent federal legislation changes (i.e., SAFETEA-LU)								
9.1 Relieve congestion on heavily traveled truck routes	√					√		
9.2 Increase the amount of freight shipped by rail by at least the same rate that the volume of overall goods movement increases	√					√		
9.3 Support the development and reuse of under-utilized properties for freight purposes	√					√		

2035 LRTP and CTP

Goals and Objectives/Measures of Efficiency

Goal 1 - Overall Transportation System: A safe, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility; protects the environment and neighborhoods; and improves the quality of life for urban area residents.

	Objectives	Measures	Definition/Description	Standards/outcomes
1 (a)	Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services activities, and destinations.	Whether performance measures exist	TAC approval of measures and standards	
1 (b)	Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds	Benefit-Cost Ratio	Develop a measure that divides the cumulative benefits by project cost	Benefit cost ratio greater than 1 (B/C>1)
		Linkage to Targets		
		Cost effectiveness		
1 [c]	Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.	Calibrated/validated multi-modal model that meets performance measures	Calibrated and validated highway, transit and non-motorized trip model	
		Does multi-modal exist		
1 (d)	Promote non-automobile transportation alternatives and create efficient connections between all transportation modes.	Application of weights to project priorities	Weigh transit, bicycle, and pedestrian projects more heavily compared to traditional automobile modes, especially in high-activity districts	
		Future year targets	Aggressive target for non auto	
		Number of inter-modal connectivity	Inter-modal connectivity	
1 (e)	Conserve natural resources and reduce the rate of energy consumption	Gallons of fuel consumption	Estimate fuel consumption	10 % reduction
		Reduced acres of open spaces	Develop impact matrix using overlay of open space, parks, stream corridors water supply watersheds	5 % reduction loss or open space
		Measure non environmental impacts		
1 (f)	Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.	P/C Ratio	Person-to-Capacity ratios, by facility and mode (roadway, transit, bike, ped)	
		ADT		
		VMT (vehicle miles traveled)		
		Whether strategies exist and priorities		
	Use transportation funds based on the priority needs of the urban area, in keeping with community values, and explore	Do transportation and priorities and needs exist	Needs assessment and prioritization	

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1 (g)	new funding options.	Percent of new non traditional funding	Proportion of total transportation funds from local revenue or non traditional sources	
1 (h)	Seek additional funding to ensure implementation of the long range plan.	Application of weights to project priorities	Weigh projects more heavily that use a local match, private funding, and/or do not impact the State Equity Formula allocation	
		Number of feasible available non traditional resources		Cost/revenue < 1
		Ratio of transportation cost to investments		
1 (I)	Monitor the implementation of the Plan and the targets through the biannual TIP process.	Summary report to committee/members	Create an annual report charting the progress of projects and implementation	
		Number of LRTP projects in TIP		

Goal 2 - <u>Multi-Modal Street and Highway</u>: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
2 (a)	Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system.	Do performance standards and reports exist	Establishment and adoption of	TAC approval
2 (b)	Create multi-modal street patterns that: encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity.	Applications of weights to project priorities	Reward projects that create better connectivity in transportation networks. Align street cross-sections and facilities to their purpose and land use.	
		Safety factors and criterion	Use of safety criterion in LRTP evaluation of criteria and TIP project prioritization	
		Incorporate bike and peds. In all highway projects		
		Number of inter-modal connectivity		
		Number of park and ride facilities		

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2035 LRTP and CTP

Goals and Objectives/Measures of Efficiency

2 ©	Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.	MOU created	Create a MOU with member agencies to create an acceptable LOS on facility and land use area typology	
2 (d)	Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods.	Access Management Guidelines Average view of ratio	Develop and implement Access Management guidelines and standards. Create MOU with member agencies to create an acceptable LOS on facility and land use area typology	
2 (e)	Identify and recommend design standards that: establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system.	Neighborhood Development Guidelines Are local land use plans consistent with TIP and LRTP	Create neighborhood development design guidance to maximize intra-neighborhood travel by walking/biking	

Goal 3 - <u>Public Transportation System</u>: A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
3 (a)	Establish performance standards and report on the condition and effectiveness of the public transportation system.	Do standards exist Bi-annual report on section 15/)NTD)	National Transit Database	
3 (b)	Increase public transit ridership by enlarging the service area and increasing the frequency of service to the urban area.	Ridership per square mile Percent of population within service area		
3 {c}	Coordinate transit service within the urban area by promoting high quality, seamless, integrated, and customer-friendly service.	Does urban area transit committee exist The level of coordination with other agencies	Develop a standing Transit Committee to meet quarterly to identify issues and make recommendations to the Transit Manager(s) on transfer points, schedules, headways, service areas	

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2035 LRTP and CTP

Goals and Objectives/Measures of Efficiency

		Level of inter governmental coordination		
		LRTP coordination plan with transit agencies		
3 (d)	Expand ridesharing, carpool, and vanpool services and opportunities.	Mode split/(share)		
3 (e)	Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.	Application of weights to project priorities Mode shares	Weigh non-SOV modes more heavily in project prioritization. Forecast mode shares.	
		Number of non SOV transportation alternatives		
3 (f)	Develop and implement the Regional Transit Plan.	Does LRTP include a transit element		
3 (g)	Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing.	Map/Inventory Ordinance template backed by additional project priority for conforming projects	Create project mapping with candidate projects for new/improved Park-and-Ride facilities. Require major developments to include provisions for cyclists, transit users.	
		Number of park and ride facilities		
		Utilization of park and ride facilities		
3 (h)	Ensure that the transportation needs of the youth and elderly, the mobility impaired, and the economically disadvantaged are met.	Level of new outreach measures by MPO and member agencies.	Develop regular outreach to select user groups (e.g., schools/PTAs, assisted care facilities, churches in low-income neighborhoods) such as focus group meetings, email lists, school flyers	
		Distribution of travel time		
		Percent of work trips within 45 minutes of home by EJ market segmentation		

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3 (i)	Identify and recommend land use patterns, parking requirements, and development regulations, which create compact, mixed use, transit-friendly, walkable development.	Application of weights to project priorities	Weigh projects lower that will induce growth in outlying areas (Greenfield sites). Weigh projects higher that occur in infill or already-developed areas that have a mix of complimentary land uses	
		Level of integration between transportation and land use		
3 (j)	Identify and recommend ways that the state and the urban area should work together to maintain and enhance the quality of public transportation service throughout the urban area.	Local and State DOT committee		
		Level of coordination between State and MPO		
		Level of coordination between state and urban area		

Goal 4 - <u>Pedestrian and Bicycle System</u>: A pedestrian and bicycle system that: provides an alternative means of transportation; allows greater access to public transit; and supports recreational opportunities.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
4 (a)	Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.	What performance standards exist		
4 (b)	Develop and implement a Regional Pedestrian Plan	Development of planning documents	Create a regional plan of projects for bicycle facilities	
		What performance standards exist		
4 {c}	Update and maintain the Regional Bicycle Plan	Development of planning documents	Consider pedestrian connections at interfaces between jurisdictions	
		What performance standards exist		

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4 (d)	Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs.	Action Item	Provide on-call consulting assistance to municipal/county members for bike/ped design/planning assistance. Leverage private, non-profit, and advocacy agencies to get them engaged in providing field data, hazard conditions, signage needs, etc. To on-line database.	
		Resource needs and availability and		
4 (e)	Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit.	Do policies exist		
4 (f)	Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of roadways where applicable.	Number of TIP roadway projects with bike and pedestrian improvements		
4 (g)	Increase education about the benefits of pedestrian and bicycle alternatives.	Bicycle /Pedestrian Accidents, by District or Land Use Type	These issues require continuing coordination between law enforcement, campus officials, transit managers, and the business community to ensure that safety targets are achieved	
		Percent of total funding for education		
		Percent of resources and time		
		Level of ancillary programs		
4 (h)	Support the enforcement of pedestrian and bicycle regulations	Bicycle /Pedestrian Accidents, by District or Land Use Type	These issues require continuing coordination between law enforcement, campus officials, transit managers, and the business community to ensure that safety targets are achieved	
		Level of enforcement		
4 (i)	Pursue strong funding commitment for building both pedestrian and bicycle facilities.	Level of funding for bike facilities		

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4 (j)	Provide greater safety for pedestrians and bicyclists of all level of ability, and safer interaction with users of other modes of transportation.	Accident rate/crash data Level of safety programs		
4 (k)	Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs.	Number of improvements implemented Level of coordination with bike and pedestrian citizen groups	Provide direct funding for small-scale improvements identified by a MPO-wide Bicycle Advisory Committee. In return, require volunteerism by bicycle advocacy groups, such as bike mentoring, public speaking engagements, trail cleaning	
4 (l)	Promote the construction of bicycle and pedestrian facilities that will encourage greater use of these modes by the public.	Percent of facilities with bike lanes and sidewalks Percent of funds allocated to bike and pedestrian programs		

Goal 5 - Integration of Land Use and Transportation: A Transportation Plan that is integrated with local land use plans and development policies.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
5 (a)	Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies.	MOU Adoption. Conduct Review of Development Actions by LPA/Apply Higher Weights to Conforming Transportation Projects. Accessibility Index (minutes). An index of the housing plus commercial divided by area. Do performance standards exist Level of coordination between MPO and Planning agencies Degree of linkages between transportation and land use	Create policy guidance for adoption (MOU) by member agencies. Require annual report on subdivision/rezoning cases/development permits to identify compliance with land use guidance; weigh compatible transportation project requests accordingly. Report on change in accessibility to undeveloped land parcels for each transportation alternative. Report on mix of land uses in TAZs and for each adjacent TAZ.	

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5 (b)	Create transportation systems that enhance the livability of all communities.	Total cost per capita to sustain current system at base year conditions	Focus is on overall performance, including infrastructure condition. Preservation measure is a sub-set of sustainability	$20 per capita, primarily in preservation costs
		Level of projected implementations coordinated with ordered developments MPO within municipalities		
		Level of consistency between LRTP and developed patterns		
5 {c}	Identify and recommend land use patterns that improve and support transportation efficiency.	Level of consistency between LRTP and developed patterns		
5 (d)	Identify the impacts of different land use patterns and site designs on travel behavior.	Model of performance measures		
		Land use model output		
5 (e)	Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities.	same as (d)		
5 (f)	Identify and recommend land use patterns and development policies that increase overall mobility and that support compact, mixed-use, transit-friendly, walkable development.	same as (d)		
Goal 6 - <u>Protection of Natural Environment and Social Systems</u>: A multi-modal transportation system which provides access and mobility to all residents, while protecting the natural environment, cultural resources, and social systems.				
	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**

2035 LRTP and CTP

Goals and Objectives/Measures of Efficiency

6 (a)	Establish performance standards and report on transportation impacts on the natural environment, cultural resources, and social systems.	Action Items. Minutes by Destination Type	Develop Regional Green print. Develop Guidance on preservation/enhancement opportunities. Create Context-Sensitive Solutions guidance for member agencies. Weigh projects more favorably that have strong public support from nearby residents and businesses. Measure travel times to hospitals, shopping centers, and employment centers from TAZs with high concentrations of poverty and minority populations	
		Do performance standards exist		
		Do environmental evaluations criteria exist		
6 (b)	Protect and preserve archaeological, historic, and culturally valuable areas.	Action Items. Minutes by Destination Type	same	
		Acres of underdeveloped land		
		Maintenance cost per capita to preserve system at base year conditions	Focus is on infrastructure condition. Sub-set of sustainability	Maintain current conditions
6 {c}	Identify and protect environmentally sensitive areas early in the planning process.	Action Items. Minutes by Destination Type	same	
		Maintenance cost per capita to preserve system at base year conditions	Focus is on infrastructure condition. Sub-set of sustainability	Maintain current conditions
6 (d)	Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT).	VMT (vehicle miles traveled)	Calculate VMT by MPO area, by district, and by corridor for each alternative	
		VHT (vehicle hours traveled)		
		PMT (person miles traveled)		
		Number of houses and businesses impacted		
	Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation.	Greenhouse Gas CO level		

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6 (e)		Emissions generated by travel	Measured/forecast emissions include CO, NOX, PM10, SOX and VOC. CO2 as secondary measure to reflect greenhouse emissions.	
6 (f)	Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area.	Number of noise decibels		
6 (g)	Preserve culturally diverse areas of the region.	Number of historic properties impacted		
6 (h)	Ensure that transportation facilities do not negatively effect disadvantaged populations disproportionately.	Expenditures by low income		
		Benefit vs. burden for low income and EJ population	Proportionate share of benefits to each quintile ethnicity.	

Goal 7 - <u>Public Involvement</u>: An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
7 (a)	Establish performance standards and report on the effectiveness of the public involvement element of the Transportation Plan.	Do performance standards exist		
		Number of website hits		
7 (b)	Encourage citizens to take a proactive role in the development of the Transportation Plan.	Number of Communications Action Item	Record citizen "hits" on various outreach mechanisms	
		Survey of results		
		Number of public comments received		
		Number of attendance		
7 {c}	Bring a broad cross-section of members of the public into the public policy and transportation planning decision-making process.	Survey-Driven Weights	Consider meeting formats and venues that citizens already attend, or that can be integrated into other aspects of daily life (e.g., church, school, employers) Use public surveys to weigh project priority factors	
		Number of diversity of public comments received		

		Number of diversity attendance's		
		Number of EJ communities outreach		
		Location of EJ's		
7 (d)	Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.	Number of Meetings Number of Contacts Course Participants Podcast "hits"	Host elected official/public town hall meetings. Develop on introductory "course" on-line to the planning process. Create Podcast(s) on website.	
7 (e)	Determine the public's knowledge of the metropolitan transportation system, and public values and attitudes concerning transportation.	Number of Responses	Use surveys again to determine level of knowledge of planning process(es). Conduct webcasts on specific transportation topics. Work closely with public groups to refine measures that are important and intuitive to them.	
7 (f)	Determine public concerns and/or perceived impacts of elements of the Transportation Plan.	same	same	
7 (g)	Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle.	same	same	
7 (h)	Establish a channel for an effective feedback process.	same	same	

Goal 8 - Safety and Security : Continue to improve transportation safety and ensure the security of the transportation system.

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
8 (a)	Reduce fatality, injury, and crash/incident rates on all modes	Fatality rates		
		Crash rates		
		Rail road crossing crashes		
		Local transit crashes		
		Highway crashes		

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		Bike/Ped incidents/injuries		
8 (b)	Reduce vulnerability of transportation facilities /users to terrorists, natural disasters and risks	Adopted emergency plan at airport Seat belt usage rate		
8 {c}	Reduce economic losses due to transportation crashes and incidents	Cost of crashes per 100 million VMT		
8 (d)	Manage risks to ensure system and border crossing continuity for passengers/freight	Customer/stakeholder satisfaction rating		
8 (e)	Provide a safe environment for transportation users through the "3 Es"	Fatality rates Crash rates Railroad crossing crashes Local transit crashes Highway crashes Bike/ped incidents/injuries Seat belt usage rate		

Goal 9 - Freight: Improve mobility and accessibility of freight movement

	Objectives	**Measures**	**Definition/Description**	**Standards/outcomes**
9 (a)	Relieve congestion on heavily traveled truck routes	Percentage of truck VMT under congested conditions Percentage of truck VMT in off-peak Number of miles improved on local roads		
9 (b)	Increase the amount of freight shipped by rail by a least the same rate that the volume of overall goods movement increases	Share of rail mode		
	Support the development and reuse of under-utilized properties for freight purposes	Number of brownfields developed and used for freight activities		

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Goals and Objectives/Measures of Efficiency

9 {c}				
9 (d)	Improve truck connections	Percentage of truck VMT under congested conditions		
		Percentage of truck VMT in off-peak periods		
		Number of miles improved on local roads		

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MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: August 8, 2007

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 review Deficiency Analysis – October 2007.

Travel Time Survey/Speed Study

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

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
- Update of the deployment plan including development of measures of effectiveness, IDAS, Turbo Architecture.

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

MPO Collector Street Plan

- ✓ Supplemental Agreement with Kimley Horn and Associates

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

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 (Durham City, Durham County, and TAC) anticipated occurring during fall 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 to be completed by fall 2007.
- Level of Service analysis anticipated to be completed by fall 2007.
- Development of CMS performance measures and guidelines likely to be completed in fall 2007.
- Evaluation of congestion management strategies and development of cost-effective mitigation measures expected to be done by fall 2007.
- Draft CMS State of System Report likely to be done in fall 2007.
- Public Comment and local review in fall 2007.
- Adoption anticipated in winter 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 2007.

Update of the MPO Public Involvement Policy

- ✓ Draft to be ready for August 2006 TAC meeting.
- ✓ Adopted – October 2006 TAC meeting

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 – first meeting August 9, 2007

NCDOT PROJECTS UNDER CONSTRUCTION IN DURHAM COUNTY - 8/1/2007

County	TIP #	Route	Location Description	Contract Amount	Length	Contractor Name	Resident Engineer	RE Ph. #	Contract Completion	Scheduled Progress	Actual Progress	Estimated Completion
Durham, Wake	R-2906A/C	NC-55	WIDENING OF NC-55 FROM NORTH OF US-64 IN WAKE COUNTY TO CORNWALLIS RD.	$ 34,668,947.33	11.634 miles	Blythe Development Co	Phillip R. Johnson, PE, PLS	(919) 678-0444	06/01/2006	100%	96.5%	9/1/2007
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	Aaron V. Earwood, PE	(919) 560-6857	12/31/2006	100%	98.7%	8/31/2007
Durham	I-306DB	I-85	WIDENING OF I-85 FROM WEST OF BROAD STREET TO WEST OF CAMDEN AVE.	$ 73,297,064.77	4.093 km	Granite Construction Company	Aaron V. Earwood, PE	(919) 560-6857	12/31/2004	100%	100%	8/31/2007
Durham	U-2055C/H/I	GARRETT ROAD	WIDENING GARRETT RD AT INTERSECTIONS OF TROTTER RIDGE, COLORADO, SWARTHMORE	$ 743,997.00		Triangle Grading and Paving	Aaron V. Earwood, PE	(919) 560-6857	6/30/2007	100%	80.0%	8/31/2007
Durham, Wake	R-2000AB/AC	I-540	CONSTRUCTION OF I-540 FROM RESEARCH TRIANGLE PARK EAST LIMITS TO I-40.	$ 68,368,301.43	5.346 km	The Lane Construction Corp.	Phillip R. Johnson, PE, PLS	(919) 733-9499	08/01/2007	99.0%	96.4%	8/15/2007
DURHAM	I-3306BB	I-40	I-40 FROM ORANGE COUNTY LINE TO NC-147, MILL AND FILL DESIGN BUILD	$ 21,749,430.00	10.401 miles	The Lane Construction Corp.	Phillip R. Johnson, PE, PLS	(919) 733-9499	5/10/2008	46.6%	52.7%	5/10/2008
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	Phillip R. Johnson, PE, PLS	(919) 733-9499	11/1/2009	14.0%	16.6%	11/1/2009
DURHAM	RESURFACING	SECONDARY	21 SECTIONS OF SECONDARY ROADS	$ 2,795,584.75	18.9 miles	Barnhill Contracting	Bob Shultes	(919) 840-0914	9/1/2007	2.6%	29.2%	9/1/2007
DURHAM	RESURFACING	PRIMARY	NC-54 FROM FALCONBRIDGE ROAD TO DRESDEN DRIVE	$ 318,281.20	1.45 miles	Barnhill Contracting	Aaron V. Earwood, PE	(919) 560-6857				
DURHAM	RESURFACING	PRIMARY	5 SECTIONS OF US-15/501, 1 SECTION OF US-15/501 BYPASS, AND 1 SECTION OF NC-55 SB	$ 920,361.66	5.16 miles	REA CONTRACTING LLC	Bob Shultes	(919) 840-0914	9/20/2007			
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	Bob Shultes	(919) 840-0914	6/15/2008			

NCDOT PROJECTS FOR LET NEXT 12 MONTHS IN DURHAM COUNTY - 8/1/2007

County	TIP #	Route	Location Description	Contract Estimate	Length	Contact Engineer	Phone #	Contract Let Date
DURHAM	U-4410DB	HOPSON ROAD	NEW ALIGNMENT OF HOPSON ROAD FROM NC-55 TO LOUIS STEPHENS DRIVE	$ 3,800,000.00	0.587 miles	C. HAIRE	(919) 250-4016	8/21/2007
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	$ 20,300,000.00	1.769 miles	C. HOUSER / J. MOORE	(919) 250-4016	8/21/2007
DURHAM	B-3169	RIVERMONT ROAD	BRIDGE 158 ON RIVERMONT ROAD	$ 550,000.00	0.067 miles	J. MOORE	(919) 250-4016	1/15/2008
DURHAM	B-4109	PICKETT ROAD	BRIDGE OVER MUD CREEK	$ 850,000.00	0.078 miles	D. TAYLOR	(919) 250-4016	5/20/2008

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/

Orange	US-3925 31914	NC 86 @ Rosemary St.	Upgrade signal heads, install a protected/permitted left turn phase for NC 86 and install 2 metal strain poles REVISION: Mast arm to be used in lieu of metal strain poles	$85,000.00	Rev. Compl. 10/31/07
Orange	U-4008 35009.3.2	US 15-501 & SR1734 (Erwin Rd.)	Grading,drainage, paving and intersection improvements(Super Street)	$4.98 million	Const. underway for completion 10/31/07
Orange	36945	SR 1010 (Franklin St.) @ Mallette St.	Upgrade traffic signal and install pedestrian signal heads REVISION: Install mast arm	$110,000.00	Rev. compl. 12/31/07
Orange	37708	SR 1733 (Weaver Dairy Rd.) @ Sedgefield Dr.	Construct left turn lane	$150,000.00	**Completion by 7/31/07**
Orange	40553	SR 1777 (Homestead Rd.)	Widening for sidewalks and bikeways from SR 1834 (High School Road) to SR 1729 (Rogers Road) and a turn lane at SR 1834	$650,000.00	Barrett, Irvin & Jordan- completion by 8/17/07
Orange	SS-4907A 40715.3	NC 86 @ Cameron St.	Install pedestrian signal heads across the east side of Cameron St.; upgrade vehicular signal heads to 12"	$24,000.00	**100% complete**
Orange	SS-4907E 41026.3	NC 54 @ SR 1952 (White Cross Road)	Construct a left turn lane	$173,000.00	**Request for quotes pending**
Orange	**SS-4907 J 41634.3**	**NC 54 and SR 1945 (Neville Rd.)**	**Construct a left turn lane**	**$187,000.00**	**Survey pending**
Orange	41096	NC 54 @ SR 2016 (Southern Drive)	Construct a left turn lane on NC 54 westbound	$140,000.00	**Request for quotes pending**
Orange	41290	I-85 NBL	Extend the existing guardrail over SR 1713 (Mt. Herman Ch. Rd.) approximately 800 feet southward	$20,000.00	**100% 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 pending**
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 construct with PE certification
Orange	41594	SR 1010 (W. Main St.) @ NC 54	Install pedestrian signal heads and crosswalk markings	$40,000.00	**To be constructed for E-4942 (sidewalk)**
Orange	**41686**	**NC 54 @ SR 1102/1951 (Dodson's Crossroads/ Butler Rd.)**	**Construct left turn lanes in both directions**	**$250,000.00**	**Survey pending**
Orange	7CR.10681.5	Varied	Resurface 3 sections of US 15-501; 7 sections of NC 54; 1 section of NC 751 and 8 sections of secondary roads	$2.74 million	ST Wooten Corp. =**97% compl.**

Orange	**7. 2068....** SF-4907A 40740.1	SR 1567 (Pleasant Green Rd.) @ SR 1569 (Cole Mill Rd.)	Improve sight distance	$25,000.00	To be removed from TIP & constructed w/ maint. Funds by 9/4/07
Orange	SI-4807 40249.3.1	SR 1548 (Schley Rd.) @ SR 1538 (New Sharon Church Rd.)	Install center islands with stop signs on SR 1538	$60,000.00	FA const. -rev. compl. 10/5/07
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.	$1.5 million	Jan. 15, 2008
Orange	B-4218	SR 1730 (Turkey Farm Rd.)	Replace Bridge # 108 over New Hope Creek	$675,000.00	July 15,2008

Durham reaps budget bounty

BY RAY GRONBERG, The Herald-Sun
July 30, 2007 10:39 pm

DURHAM -- Durham fared so well in the 2007-08 budget that passed the N.C. House and Senate on Monday that local leaders are already saying the community had one of its best years ever in the General Assembly.

The county got four of the six new magistrates local officials asked for, after looking early on like it might not get any. Money for new magistrates was the county government's top legislative priority this year, as officials believe the workload in that office has contributed to a string of controversial bond decisions in criminal cases.

But the magistrates were just one of the many things that went Durham's way in the budget that now awaits Gov. Mike Easley's signature. Another was a two-year, $21.7 million allocation that will pay for repairs to the paving job on Interstate 40 that the N.C. Department of Transportation botched last year.

Local officials had worried legislators would force DOT to pay for the repairs out of the agency's normal allotment for roadwork in Durham and Wake counties, which would have threatened or delayed other road projects.

And county officials are happy both that the budget will take the burden of helping subsidize Medicaid off the shoulders of local governments, and give them a chance to ask voters to approve additions to the sales tax or the real-estate transfer tax.

"I don't remember a time in my 25 years [in government] where we've had such an important legislative session and where so much has been done for counties," County Manager Mike Ruffin said as the House and Senate were taking their final votes on the budget. "And our legislative delegation, I will say, has been there for us. They really stood in there."

Local officials were singing a different tune in the spring when the House's first draft of the budget earmarked little money for new magistrates, and none for any in Durham. The Senate's later version had more, but didn't earmark any for Durham.

But when the smoke cleared last week and a House-Senate conference committee produced its recommendations, it had funded the four new hires. Like the Senate's budget, it funded 42 additional magistrates statewide, but instead of leaving assignment decisions up to the Administrative Office of the Courts in Raleigh as the Senate wanted, conference committee members decided themselves which counties should get them.

Legislator staffers advised the committee to give Durham all six of the magistrates it had requested, but the conferees settled on four during final negotiations, said Rep. Paul Luebke, D-Durham, senior chairman of the House Finance Committee.

Medicaid, sales tax and transfer tax issues were a big part of the reason why the General Assembly is about a month late in passing the budget. The two chambers disagreed about how to handle Medicaid, and the transfer tax in particular provoked a lot of opposition from real-estate and development interests.

Ruffin said he'll brief county commissioners next Monday on the implications of the compromise, and on the possibility of putting a referendum on the ballot as early as this fall. But early on, it appears that either the sales or transfer tax would generate $10 million in annual revenue for the county.

If that estimate holds, "we could avoid the [property] tax-rate increase necessary to [service] about $130 million in debt," Ruffin said, referring to a large portion of the $210 million bond issue that the county has already

decided to put on the ballot this fall. "That's how huge an impact either one of those tax proceeds would have in our county."

Ruffin added that he's inclined to favor asking voters to raise the sales tax, instead of the transfer tax, lest the county get into a fight with the N.C. Home Builders Association and other development interests.

"If we were one of the first counties to put [the transfer tax] on the ballot, it would be a battle royale I'm sure, and a lot of opposition to overcome," he said. "The sales tax is generally an easier sell."

City officials like Mayor Bill Bell voiced disappointment that General Assembly didn't guarantee cities and towns a share of the local-option taxes, but otherwise joined in voicing support. "Overall, it appears to be a good budget," Bell said.

Durham's branches of the UNC system -- N.C. Central University and the N.C. School of Science and Mathematics -- also fared well.

NCCU got $2.5 million annually to help its law school cope with enrollment growth and some problems identified by an accreditation panel.

Campus officials got another $2.5 million to begin designing a building for NCCU's nursing school, a project that's estimated to have 66,000 square feet of floor space and eventually cost $24 million. The budget also pledges $1 million in additional support for NCCU's Biomanufacturing Research Institute and Technology Enterprise.

Officials at the School of Science and Mathematics got $3.3 million to begin designing the school's planned Discovery Center, a 250,000-square-foot building that will include classrooms, labs, assembly space and 200 beds of student housing. Analysts believe the project will eventually cost $70.4 million.

The budget also included money to continue the tuition break graduates of the school now receive at UNC system universities. The tuition break is the target of a separate repeal attempt, sponsored by Luebke, that's cleared the House but faces an uncertain future in the Senate.

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New bond tactic could aid road work

Matthew Eisley, Staff Writer
North Carolina will soon start using a new tool to help build highways: a credit card.

Hoping to catch up a bit on overdue highway construction amid spiraling construction costs, the state will begin paying for some projects by selling revenue bonds that borrow against future federal highway money.

Triangle projects include repaving part of Interstate 40 around Raleigh and building a U.S. 401 bypass around Rolesville.

The bonds are called "GARVEE" bonds, an unwieldy term that is an acronym for "Grant Anticipation Revenue Vehicles." (Government being what it is, a couple of extra letters are thrown in.) It's public-sector jargon for: a loan.

The state will sell tax-free bonds at low interest rates to investors, then repay them over 12 years as federal highway grants roll in.

The arrangement forgoes some federal revenue for future projects but buys more highway work at today's cheaper prices.

"We will save a lot of money on construction," said Mark Foster, chief financial officer at the state Department of Transportation.

Over seven years, the state will issue about $900 million of the bonds -- for core highways only, Foster said. DOT's board of directors and local transportation planning committees must first approve each project.

The state typically contributes 20 percent of the projects' cost, the same as it would if it paid for them with current federal highway grants instead of bonds.

The state legislature authorized the borrowing tool two years ago.

North Carolina's Council of State, a committee of the state's highest elected officials, approved the bonds' use Tuesday after State Treasurer Richard Moore endorsed them despite his concerns about the future availability of federal highway revenue.

"I have to admit that I have been wary of this because the federal government is not in very good shape," Moore, a Democrat running for governor, told fellow council members. "...The structure of this is financially sound. If we get to the point where we're not getting any federal highway money, we're going to have other problems than paying this debt."

Lt. Gov. Beverly Perdue, also a Democrat running for governor, agreed with issuing the bonds.

"Road projects are backed up," she said. "This is the way the General Assembly has said we can catch up on some of them."

Two Republican council members voted no: Labor Commissioner Cherie Berry and Agriculture Commissioner Steve Troxler. Troxler gave no reason. Berry suggested that she feared the bonds could be diverted to light-rail mass transit, despite the department's policy against that.

Republican State Auditor Les Merritt voted for the bonds' use. "It certainly makes sense," he said. "I'm not against it."

Help for 25 projects

The state plans to issue about $300 million in GARVEE bonds this year for 25 projects, including repaving I-40 for 13 miles around West Raleigh from Wade Avenue to I-440, I-40/85 in Alamance County and I-85 in Vance County.

And the highway bonds will contribute about $32 million to speed up construction of a U.S. 401 bypass around Rolesville, projected to begin in four years.

"There have been efforts for years to get the 401 Bypass funded," said Ken Spaulding, the Triangle's main representative on the state transportation board. "The GARVEE funds will enable us to take care of that finally."

The I-40 work around Raleigh is significant, too, he said.

"We can get these projects done now instead of paying a lot more for them later on," he said. "It's going to be very important."

But some transportation planners question why the state plans to spend so much of the bond proceeds on paving and other routine maintenance instead of using normal annual appropriations.

"GARVEE bonds are intended for the kind of expensive projects that you otherwise couldn't pay for with annual pay-as-you-go funds," said Ed Johnson, executive director of the Capital Area Metropolitan Planning Organization, based in Raleigh. "But we'll accept any help we can get."

Staff writer Matthew Eisley can be reached at 829-4538 or matthew.eisley@newsobserver.com.

State picks East End route

BY RAY GRONBERG, The Herald-Sun
July 9, 2007 10:57 pm

DURHAM -- State officials have settled on the least expensive of four possible routes for the proposed East End Connector, but one that would still cost $193 million, almost twice the money they've earmarked for the project.

The choice of what planners have termed "Alternative 3" followed reviews by local officials, the N.C. Department of Transportation and an assortment of other state agencies. Engineers are now updating the connector's environmental impact statement, a task they should finish early next year, DOT project manager Beverly Robinson said.

But the key obstacle is likely to be the project's cost.

North Carolina's latest road-construction plan earmarked about $99 million for the connector, and engineers conceded earlier this year that a significant funding gap remained. At the time, they were estimating that building the road could consume $135 million.

One of the project's leading backers, Durham lawyer and state Board of Transportation member Ken Spaulding, said he'll have to continue a lobbying campaign that secured the money for the connector that's in this year's construction plan.

"To me, this was not unanticipated," he said. "Obviously, costs have escalated. So it was not really a surprise and I anticipated that there would be an additional amount. We'll just have to work to obtain those funds, just like we did in bringing it from nothing to almost $100 million. We'll just have to have the same effort."

Spaulding's mention of escalating costs appeared to allude to the problems DOT and other groups involved in construction have experienced thanks to the rising price of steel and other materials. Competition from builders in China and other developing economies has driven a significant part of that inflation.

But on Monday, Robinson said the $60 million increase was traceable entirely to an addition for right-of-way purchases.

Preliminary figures released over the winter said the agency needs to acquire about 88 acres of land, and that officials should figure on the project displacing 36 homes and 15 businesses.

All three of the other alternatives officials studied would require more acreage and displace more homes and businesses.

Officials gathered comment on the alternatives - and floated the $135 million figure for Alternative 3 - last winter knowing they lacked firm estimates for the cost of right of way. They said as much in memos relayed to the City Council in January, just before the council endorsed Alternative 3.

As of winter, the right of way estimate still "was being prepared," Robinson said.

The East End Connector would link the Durham Freeway to U.S. 70 and Interstate 85. It would branch off the freeway just over a mile south of Briggs Avenue and proceed northeast to join U.S. 70 near East End Avenue.

Air photos and DOT maps show that the routing would traverse a series of vacant parcels over most of its path. It would displace houses at two points, first as it leaves the freeway and crosses Angier Avenue, and again as it crosses Rowena Avenue near Checkerberry Lane.

When asked about the impact of the overall inflation in the construction market, Robinson said engineers will update the cost estimates as needed.

"Numbers are as good as today, pretty much," she said.

URL for this article: http://www.heraldsun.com/durham/4-863650.cfm

POSTED ON JULY 4, 2007:

Capping greenhouse gases

Durham unveils report and plans to curb global warming

By Lisa Sorg

First, the bad news: Durham ranks well above—sometimes double—the national average in amount of greenhouse gases generated per person. And despite the city's 1999 plan to reduce these emissions, with a few exceptions, efforts to decrease these pollutants have been weak or non-existent.

Now, the good news: The city and county are starting to do something about it.

In late June, Durham unveiled its proposed Greenhouse Gas Inventory and Local Action Plan. The 102-page document details the local sources and amounts of pollutants that contribute to global warming, and offers solutions for curbing them.

Durham has a daunting task. The plan recommends that by 2030 local government should reduce its emissions by 50 percent; residential, commercial and industrial sectors, 30 percent. Without these cuts, Durham is forecast to emit more than 10 million tons of greenhouse gases annually within the next two decades.

"It's aggressive, but doable, if we're really committed," says Commissioner Ellen Reckhow, a liaison to the Greenhouse Gas Steering Committee.

"It's terrific that we're setting goals," adds Judy Kincaid of Clean Energy Durham, a nonprofit group that works with neighborhoods on home energy issues. "The important thing to come out of this is the inspiration and commitment to aggressively work on this."

The city and county paid a Canadian consulting company, ICLEI, $55,000 for the inventory and plan. If approved by city council and the board of county commissioners this fall, Durham would be the first county in North Carolina to adopt such a measure. Orange County, including Chapel Hill and Carrboro, is working on its greenhouse gas inventory.

Durham is faced with an additional challenge. The steep reductions must occur as the county's population is expected to increase by 25 percent by 2030.

"We have to cut greenhouse gases against the backdrop of population growth," says Rob Jackson, biology professor at Duke University's Nicholas School of the Environment. "Like a diet, it takes discipline. It takes a group of people to keep the topic in front of City Council and the community all the time."

That vigilance requires not only a greater energy consciousness on behalf of the citizens, but the government's political will to permanently stick to the plan. "There are no regulations to say that cities have to cut their greenhouse gases," says Ellen Beckmann, a city transportation planner. "But local government can be an example. It's going to be up to the citizens to be sure we're upholding it."

The plan calls for a sustainability coordinator, who would educate the public about energy conservation and possibly monitor the government's progress toward meeting the reductions. The city and the county would fund the position, and each has allocated $50,000 to implement the plan.

Yet, local energy activists, volunteers who for years have done much of the heavy lifting in educating Durham residents about home energy conservation, say the coordinator must be more than a figurehead.

"The sustainability coordinator is only as effective as local government," says Fred Broadwell, a sustainable energy consultant and Clean Energy Durham volunteer. He adds that government should coordinate land use, transportation, trees and recycling into the greenhouse gas plan. "We need an energy plan. It's not fair to ask the coordinator to magically rally all these other plans to make this effective."

In addition to car and truck emissions, electricity usage, much of it generated from coal, is Durham's main culprit in greenhouse gases. And the city, perennially beset by budget woes, is wasting millions of dollars on energy costs—money that could go toward efficiency and conservation. In government buildings alone, energy efficiency could save the city and county $3.5 million annually; if each of Durham's 90,000 households saved $100 a year in energy costs, residents would save $9 million.

"As a community, we are throwing away money every day through horribly inefficient buildings," Broadwell says.

The 2007 report points out that there have been no significant greenhouse gas reductions in homes or businesses. Many energy-saving measures sponsored by Duke Energy and PSNC Energy have not been implemented in Durham. Nor are there many incentives for energy efficiency. Any advances have come from

private developers, including GreenFire and Xero Flor, an international company specializing in green roofs, which has relocated to Durham.

To their credit, Durham County and Duke University have built or retrofitted seven facilities to meet Leadership in Energy and Environmental Design (LEED) standards, the national certification for green buildings—the most of any county in North Carolina. The City of Durham has no LEED-certified buildings. The city's performing arts center, currently under construction downtown, is not being built to LEED standards.

Although the city is beginning to work toward energy efficiency, including passive solar heat for its indoor swimming pools, an approved bond didn't include money for such initiatives, only overdue maintenance. "We don't really have the means to carry out a comprehensive plan," says Chris Boyer, interim director of the general services department. "We're trying to work within the budgets we have."

A lack of money and direction eight years ago put Durham further behind in its emissions reductions. A 1999 plan, prepared by engineering firm CH2M HILL, set a low target—a mere 5 percent reduction in emissions by 2025. Yet, the plan, which excluded the county, was never presented to City Council and was shelved.

"It was unclear as to what the plan meant," says Nancy Newell, now a civil engineer in the city's water management department. For the 1999 plan, she supplied data on the city's solid waste. "Budgets were tight and it was unclear what you could and couldn't do."

While the 2007 plan is voluntary, Jackson says there soon could be a critical point at which emissions cuts could, or should, become mandatory.

"In my view, we need a mandatory plan as soon as possible. I say that as a scientist who studies the earth," Jackson says. "The trick is to craft the plan so that the hammer is as light as possible. The longer we wait, the heavier and more expensive the hammer is going to be."

Goals of Durham's Greenhouse Gas Inventory and Local Action Plan

- Target year: 2030
- City and county government: 50 percent reduction in greenhouse gas emissions from 2005 levels
- Community, including citizens, business and industry: 30 percent reduction over the same period
- Reductions can be made through energy efficiency and conservation and hybrid or alternative-fuel vehicles
- Hire a sustainability coordinator, funded by the city and county, to oversee local government's progress, educate the public and submit annual reports

Other highlights:

- In 2005, local government emitted 158,710 tons of greenhouse gases, equivalent to the amount of emissions in 60 million gallons of gasoline.
- The same year, the community emitted 6,837,430 tons of GHG, equal to the emissions in nearly 2.6 billion gallons of gasoline.
- In Durham, electricity usage, cars, trucks and buses are the main sources of GHG emissions.

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Durham to tackle global warming

BY ANDREW DUNN, The Herald-Sun
June 21, 2007 10:12 pm

DURHAM -- Durham is moving forward with a plan to curb any impact it might have on global warming, following the trend of cities fearing potentially catastrophic projections.

At least one regional expert scoffs at the idea.

Nonetheless, local officials requested feedback on a local action plan to reduce greenhouse gas emissions at a public forum Thursday night. About 30 area residents were on hand.

The plan is the work of Durham County, the city and the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, and aims to curb greenhouse gas emissions based on 2005 levels.

The goal is to reduce emissions from homes, businesses and cars across the county by 30 percent before 2030.

And it aims to reduce emissions from government operations by 50 percent in the same time period.

The project is part of Durham's membership in the Cities for Climate Protection group, an organization of about 800 local governments across the world. No other Tar Heel cities are participating. Durham joined the climate group in 1996.

A local global warming study was conducted in 1999, but resulted in no subsequent action.

"We're trying to revisit this and make it an issue again," said Ellen Beckmann, transportation planner with Durham's Department of Public Works and the greenhouse gas emissions project's director.

A 2006 study, done as one of the group's "milestones," found that Durham had produced 6,837,430 tons of greenhouse gases in 2005.

That puts the city about four tons above the national average for per capita emissions -- 24.1 tons per year.

Greenhouse gases, of which the most recognizable is carbon dioxide, are thought to contribute to global warming. These gases trap heat in the atmosphere.

The federal Environmental Protection Agency's position is that humans are most likely contributing to the increase in global temperatures, but natural variation cannot be ruled out.

A National Aeronautics and Space Administration report stated that temperatures have risen about 1.3 degrees Fahrenheit since 1900.

The advisory board that Durham called upon to make this plan was made up of representatives from the city, the county, utility companies, the state Division of Air Quality, the sustainability coordinator at Duke University and environmental advocacy groups.

Some ideas to achieve the goals include increasing energy-efficient building techniques, encouraging mass transit, limiting urban sprawl, and promoting alternative vehicles and fuels, according to the local action plan.

Durham is also installing energy-efficient LED traffic lights and increasing the deployment of bike cops.

Rob Jackson, a professor at Duke University's Nicholas School of the Environment and Earth Sciences, said Earth has reached uncharted emissions territory.

He said that for 400,000 years, atmospheric carbon dioxide levels were less than 300 parts per million, even with drastic fluctuations between ice ages and warmer conditions. But that level began rising with the onset of the Industrial Revolution, and is now more than 380 parts per million.

He also said Arctic Sea ice has shrunk 20 percent in the past 30 years, and if the warming trend continues, it could lead to inland flooding, more powerful hurricanes, exacerbated droughts and ocean current changes.

"All these reasons lead me to the conclusion that we should be addressing this," he said. "We control the outcome. It's in our best interest environmentally and economically to take care of this."

But some scientists disagree with those conclusions and decry efforts to reverse such a trend as useless.

Fred Singer, a professor emeritus at the University of Virginia and a climate scientist for 45 years, said that while Earth has experienced slight warming, it is a function of natural variation.

If global warming were man-made, Singer said, the temperature change would increase percentage-wise with altitude, up to six miles above sea level.

But data from last year's U.S. Climate Change Science Program report does not show this. And saying global warming is bad indicates that the present temperature is perfect, Singer said, which is unlikely.

"The climate fluctuates in funny ways, just like the stock market," he said. "Any attempt to stop it would be completely useless and ineffective and very costly."

In Durham, the energy efficient building would be rolled into construction cost, Beckmann said, but there is no estimate for how much these measures would cost.

"A lot could change between now and then," she said. "Technology will become cheaper, hopefully."

But some of the measures can get pricey.

"I don't want to say everything we do will be cost-effective," Beckmann said. "We might just do things because they're the right things to do and to show we're taking leadership on this."

But she said the efficiency measures are an up-front cost for long-term benefit, and that the city would be cost-effective if possible.

The next step is to review the feedback received at Thursday's public forum from comment cards and surveys, and present a final plan to the city, county and MPO this fall.

Implementation is a separate process. The City Council would evaluate and vote on programs aimed at meeting these goals on a yearly basis.

"This is, for the most part, a target," Beckmann said. "It doesn't bind us to starting any projects."

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Drivers might pay road taxes by mile

Bruce Siceloff, Staff Writer
North Carolinians are driving more miles every year, but they're buying less gas.

Although better fuel economy sounds great for the pocketbook and good for the planet, it spells trouble for our long-term reliance on gas-tax money to finance transit and highway needs.

After spending more than it takes in for several years, the federal Highway Trust Fund is expected to run out of money for road projects by 2009.

So, as part of a $16.5 million nationwide study over the next two years, 450 Triangle drivers will help road-test a new way to pay for transportation -- by the mile, not by the gallon.

"In the old days, when cars got 13 or 14 miles to a gallon, we were pretty flush with cash," said David J. Forkenbrock of the University of Iowa Public Policy Center. "But we're already seeing major drops in the revenues coming in. We know it's going to get worse."

Forkenbrock will oversee the Road User Charge Study in North Carolina and five other states.

Replacing the fuel tax with a mileage fee would be a long-range idea -- and possibly a long shot. Federal officials are mulling privacy issues raised by the Iowa study and its use of satellite navigation technology.

Lew Rentel of Morrisville drives one reason our road money is running low -- a Toyota Prius.

Rentel, 69, used to drive a hulking Lincoln Aviator that burned up a gallon of gas every 13 miles. With 48.6 cents in state and federal taxes per gallon, he was paying the government 3.7 cents for every mile he drove.

But he ditched the luxury SUV for what he called patriotic reasons: to help fight global warming and cut our need for foreign oil. Now with a thrifty hybrid that gets 44 miles per gallon, Rentel has cut his tax payments to barely a penny per mile.

He realizes that people like him are doing less to help pay for the roads.

"Something's going to have to be done," said Rentel, a retired UPS executive. "You're either going to tax by the mile, or you're going to tax some other way."

The federal Highway Trust Fund relies mostly on gas-tax money to pay for state road construction. The fund is expected to drop from an $8.1 billion surplus this year to a $1.7 billion deficit by 2009.

A study commission is looking for new ways to pay the bills. Congress has held the federal gas tax at 18.4 cents per gallon since 1993. The Bush administration wants more tolls, private investment and local funding.

North Carolina collects 30.2 cents per gallon of gas.

Troubling trends

North Carolina gas sales have dipped since 2004. The state gas tax has jumped 5.6 cents per gallon higher since then, pushing total gas-tax collections up slightly to a peak of $1.23 billion in 2006. If gas sales keep falling without more rate hikes, tax collections will decline, too.

Traffic counts are climbing twice as fast as the state population, and road construction costs are also rising. Every $100 worth of asphalt, steel, concrete and other highway ingredients that North Carolina road builders bought in 2002 costs more than $175 today.

The mileage fee idea is fueled by the same forces that are pushing North Carolina into the business of collecting tolls from expressway drivers. North Carolina and 14 other states joined Congress in commissioning the Iowa study to weigh collecting user fees for city streets and rural highways as well.

The Iowa researchers will outfit volunteers' cars with computers and satellite gear to record where and how far they drive. Each month, the volunteers will receive sample bills for how many miles they have driven. Their mileage fees will be compared to the per-gallon taxes they pay now. Congress is considering a call to boost new-car fuel efficiency standards by about 40 percent, to an average of 35 mpg, by 2020. By then, some Americans will be driving cars that use no gas or diesel fuel -- and pay no fuel taxes. Honda will sell a limited-production hydrogen fuel-cell car in 2008. Other high-efficiency engines are also in the works.

"As people drive around in cars that don't burn gas, we're going to have to find a way to get those folks to contribute their share to road construction and maintenance as well," said Joseph Hummer, an N.C. State University engineering professor. "A tax that's pinned to just one fuel source makes you vulnerable."

Exploring a shift

The Iowa study will test the hardware, the billing system and the popular support that would be needed for a shift to mileage fees. Forkenbrock wants to experiment with rates that would generate about the same revenue now produced from the gas tax. Congress and state legislatures would decide whether to set fees higher or lower.

The tests will use technology similar to the navigational aids that have become popular automobile options. The on-board computer will know which state the car is traveling in, and it will calculate the mileage fees payable to each state at the end of the month.

Local government jurisdictions will be included as well. That would give legislators the option to share mileage fees with cities or counties, to pay for local roads.

The study will also test options to vary the fee per mile for different vehicles and different times of day. Some possibilities:

* Higher fees for heavy trucks to reflect their share of pavement wear and tear.

* A rush-hour premium to cover the cost of freeway congestion.

* Lower fees to encourage more alternative-fuel and low-emission cars.

Forkenbrock says no records will be made on specific travel routes, so it won't be possible to find out where anyone has driven.

"The only number that is identified with your vehicle is how much you owe the city or the state," he said. "So the user's privacy is absolutely protected, even if the government subpoenas the on-board computer."

The Federal Highway Administration is reviewing his assurances about privacy protection. He hopes for approval to start recruiting Triangle volunteers late this summer.

Staff writer Bruce Siceloff can be reached at 829-4527 or bruce.siceloff@newsobserver.com.