DCHC

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

DURHAM – CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION TRANSPORTATION ADVISORY COMMITTEE (TAC)

June 22, 2011 **Committee Room**
9:00 am **2nd Floor Durham City Hall**

1. **Roll Call**
2. **Adjustments to the Agenda**
3. **Public Comments**
4. **Directives to Staff (Attachment 4)**

ACTION ITEMS

5. **May 11, 2011 TAC Meeting Minutes (9:00-9:05)**
(Attachment 5)

A copy of the May 11, 2011 TAC meeting minutes is enclosed as Attachment 5.

TAC Action: Approve minutes of the May 11, 2011 TAC meeting.

6. **Triangle Regional Transit Program – Bus and Rail Investment Plan (9:05-9:35)**
(Attachment 6, 6A, 6B, 6C, 6D, 6E)
Patrick McDonough, Triangle Transit
Andy Henry, LPA Staff

The TAC authorized the release of the Durham and Orange Bus and Rail Investment Plans at their May 11th meeting. At the time, the release was based on a presentation of the key service and financial information for the bus and rail transit systems. The full report for the Durham and Orange plans were released on June 1st and June 8th, respectively, and the MPO conducted six public workshops and made a Web-based survey and comment card available to gather public input on the plan. Attachment 6 lists the public workshops and summarizes the public input from the workshops, survey and comments cards. Attachment 6A is a complete compilation of all comments from these sources. The MPO Web site, www.dchcmpo.org, provides copies of the draft plans, maps and other materials made available to the public.

Local elected officials (including Durham City Council, Chapel Town Council and the Carrboro Board of Aldermen) approved resolutions of support for their respective Bus and Rail Investment Plans. Attachment 6B is a copy of these resolutions. The Durham Board of County Commissioners (BOCC) conducted a public hearing on the Durham Plan and proposed one-half cent sales tax for transit at their June 13th meeting, and will consider approval of the Durham County Plan and sales tax referendum at their June 27th meeting. The Orange Board of County Commissioners (BOCC) discussed the Orange Plan and referendum at a recent meeting and will

discuss the need for further analysis and a schedule at their June 21st meeting. The Orange BOCC is not expected to take action on a referendum this year.

State legislation (HB 148) requires the MPO to approve a financial plan before a referendum can occur on a one-half cent sales tax for transit. The MPO will consider approval of the financial plan (e.g., Bus and Rail Investment Plan) for Durham County. Given that the Orange BOCC is not expected to take action on a transit sales tax referendum this year, no action on the Orange financial plan is necessary at this time.

Attachment 6C is a copy of the final Durham County Bus and Rail Investment Plan. The following changes have been made to the draft Plan:

1. Sales Tax Revenue -- The annual proceeds from a one-half cent sales tax were increased from $17.3 million to $18.4 million based on the most recent data from the Durham County government (see page 12).
2. Commuter Rail – Weekend service was not included in the draft Plan. The final Plan indicates that weekend service will be considered based on future ridership demand (see page 7).
3. Northern Durham Park-and-Ride – A park-n-ride facility was added to the area near the intersection of N. Roxboro, Infinity and Latta roads (see map on page 9).
4. Borrowing and Passenger Revenue – Borrowing has been deleted and Passenger Revenue has been added as a Revenue Source (see page 12).

Attachment 6D is a copy of the draft Bus and Rail Investment Plan in Orange County. This is the same draft Plan that was released to the public – no changes have been made.

Attachment 6E is a draft copy of the presentation for this agenda item.

TCC Recommendation (expected on June 20, 2011): That the TAC approve the final Durham County Bus and Rail Investment Plan.

TAC Action: Approve the final Durham County Bus and Rail Investment Plan.

7. Triangle Regional Transit Program – Locally Preferred Alternative (9:35-9:45)
(No Attachments)
Greg Northcutt, Triangle Transit
Andy Henry, LPA Staff

Triangle Transit continues work on the Alternatives Analysis documents for the fixed-guideway alternatives between Durham and Chapel Hill and between Durham, Raleigh and eastern Wake County. The documents are expected to be finished the second week of July 2011. In order to keep the regional rail process moving forward, the TCC will consider requesting that the TAC provide authorization at their June 22nd meeting to release the draft Alternatives Analysis documents to the public when those documents are ready. The TCC will also consider making a recommendation for a public review process to move from the Alternatives Analysis to identifying the Locally Preferred Alternative.

LPA Staff anticipates the following schedule for the Locally Preferred Alternative:

- Triangle Transit completes draft Alternatives Analysis for two corridors – 2nd week of July.
- DCHC MPO releases draft Alternatives Analysis for public review – 2nd week of July.
- Local governments review Alternatives Analysis and provide comments to MPO – July through October 12.
- TCC reviews and comments on draft Alternatives Analysis – July 27.
- TAC reviews and comments on draft Alternatives Analysis – August 10.
- TAC conducts public hearing – September 14.
- TCC recommends Locally Preferred Alternative – September 28.
- TAC reviews and takes action on Locally Preferred Alternative – October 12

TCC Recommendation (expected on June 20, 2011): That the TAC authorize the LPA to release the draft Alternatives Analysis when completed.

TAC Action: Authorize the LPA to release the draft Alternatives Analysis when completed.

8. <u>FY 2014-2020 Transportation Improvement Program – Regional Priority List</u> (9:45-10:05) (Attachment 8, 8A, 8B, 8C, 8D)
Ellen Beckmann, LPA Staff

NCDOT has begun developing the process for prioritizing projects for the next Transportation Improvement Program (TIP). All projects previously submitted by the MPOs, RPOs, and Divisions are already in the prioritization database and will be scored. MPOs, RPOs, and Divisions are asked to submit any new projects by July 2011. MPOs, RPOs, and Divisions will then be asked to rank projects by November 2011.

Attachment 8 is an overview of the 2014-2020 TIP development process. Attachment 8A is a copy of the local priority lists. Attachment 8B is a table of the projects to be considered for prioritization grouped by mode. This table includes the TCC's recommendation for the submission of highway, bicycle, and pedestrian projects. Attachment 8C is a summary comparison of the ranking methodologies for NCDOT, the adopted MPO methodology, and the TCC recommendation for changes to the MPO methodology. Attachment 8D is a document describing the recommended ranking methodology for the 2014-2020 TIP.

TCC Recommendation (expected on June 20, 2011): That the TAC approve the submission of up to 15 new highway projects, 10 new bicycle projects, 10 new pedestrian projects, and transit projects to NCDOT SPOT. That the TAC approve the MPO ranking methodology.

TAC Action: Approve the submission of up to 15 new highway projects, 10 new bicycle projects, 10 new pedestrian projects, and transit projects to NCDOT SPOT. Approve the MPO ranking methodology.

9. Section 5307 Funding (10:05-10:15)
(Attachment 9, 9A, 9B)
Maricia Brown, LPA Staff

Section 5307 funds are allocated to urbanized areas for transit capital and operating assistance and for transportation related planning. The MPO's full apportionment was released by FTA in May. The MPO transit operators met to develop a recommended distribution of the MPO's FTA Section 5307 funds. A letter to FTA regarding the allocation of these funds among the transit operators (DATA, CHT, and TTA) will need to be approved. Once the allocation has been approved by the TAC, the transit operators will be authorized to seek application for planning related reimbursement expenses. Attachment 9 is the memo detailing FFY11's process and explanation of current issues. Attachments 9A.and 9B are alternate letters of recommendation for FTA.

TCC Recommendation (expected on June 20, 2011): That the TAC endorse a letter to FTA for the distribution of Section 5307 funds.

TAC Action: Endorse a letter to FTA for the distribution of Section 5307 funds.

10. Job Access Reverse Commute and New Freedom Program (10:15-10:30)
(Attachments 10, 10A)
Maricia Brown, LPA Staff

The MPO has received JARC appropriations for FFY2006 – FFY2010, and a partial appropriation for FFY 2011. Funding through FFY 2009 have been programmed and obligated, except for $72,671 from FFY 2009. The appropriation for FFY 2010 is $195,374 and FFY 2011 is $195,080. The LPA is requesting $39,045 (10%) for administrative cost related to the FFY 2010 & 2011 grant years.

The MPO has received NFP appropriations for FFY2006 - FFY2011. Funding through FFY2009 have been programmed and obligated, except for $10,769. The appropriation for FFY2010 is $87,757 and FFY 2011 is $88,210. The LPA is requesting $17,597 (10%) for administrative cost related to the FFY 2010 & 2011 grant years.

Attachment 10 is the memo that describes the program details and summarizes the program of recommended projects. Attachment 10A is the 2011 Proposed Program of Projects.

TCC Recommendation: Recommend that TAC approve the 2011 JARC & NF program of projects.

TAC Action: Approve the 2011 JARC & NF program of projects.

11. Ramp Metering Study (10:30-10:40)
(Attachment 11)
Joey Hopkins, NCDOT
KoSok Chae, LPA Staff

The North Carolina Department of Transportation (NCDOT), Durham-Chapel Hill-Carrboro MPO, and Capital Area MPO propose a joint feasibility study for possible Ramp-Metering deployment along segments of interstate and other selected freeway facilities in DCHC and CAMPO metropolitan areas. The scope of the study is yet to be determined, but the intent is to provide recommendations for any revised or new legislation needed to implement and manage ramp metering; to develop a framework for a marketing/outreach plan to stakeholders; to develop typical installation criteria including detection on mainline, ramps, and side streets; to develop criteria to rank potential ramp metering projects/segments by county; and to develop performance measures to show effectiveness of ramp metering. The specific routes will be determined during scoping but it is anticipated that the study will include most of the interstate facilities in both MPO areas and some additional freeway facilities.

The estimated cost is $400,000 and NCDOT plans to fund $350,000 and requests that the DCHC MPO and Capital Area MPO split the other $50,000 in proportionate manner.

TCC Recommendation (expected on June 20, 2011): That the TAC endorse feasibility study and instruct staff to work with NCDOT and the CAMPO to develop the study scope and, agree to provide a portion of the $50,000 funding needed for the study.

TAC Action: Endorse feasibility study and instruct staff to work with NCDOT and the CAMPO to develop the study scope and, agree to provide a portion of the $50,000 funding needed for the study.

12. <u>Congestion Management Process (CMP) Procedures and Responsibilities Report (10:40-10:45)</u>

(Attachment 12)
KoSok Chae, LPA Staff

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) is required by federal regulations to develop and implement a Congestion Management Process (CMP) for monitoring traffic congestion, evaluating system performance, and incorporating mitigation strategies into the long range transportation plan (LRTP) and the transportation improvement plan (TIP).

The Draft Congestion Management Process (CMP) Procedures and Responsibilities Report was released for public comment from Friday, April 15, 2011 through Friday, May 6, 2011.
An electronic copy or copies of the CMP Procedures and Responsibilities Report were available for review on the DCHC MPO Web site and at the following 12 locations - the City of Durham Transportation Department, the Durham City-County Planning Department, the Chapel Hill Planning Department, the Carrboro Planning Department, the Hillsborough Planning Department, the Orange County, the Chatham County Planning Department, Durham – Main libraries, Chapel Hill libraries, Carrboro Branch libraries, Orange County libraries, and Chatham Community libraries.

No major comments were received.

Action	Date
TCC receives draft CMP Procedures and Responsibilities Report	3/23/11
TAC receives draft CMP report and releases for public comment	4/13/11
TCC receives and addresses the public comments	5/25/11
TAC approves final report	*6/22/11*
Submit to FHWA	6/30/11

TCC Recommendation: Recommend that the TAC approve the Congestion Management Process (CMP) Procedures and Responsibilities Report.

TAC Action: Approve the CMP Procedures and Responsibilities Report, and authorize to submit for FHWA approval.

13. FY 2012-2018 Metropolitan Transportation Improvement Program, 2035 Long Range Transportation Plan Amendment #2, and Air Quality Conformity Process (10:45-10:50)

(No Attachments)
John Hodges-Copple, TJ COG
Ellen Beckmann, LPA Staff
Andy Henry, LPA Staff

The DCHC MPO will be approving three documents by August 2011:

- the FY 2012-2018 Metropolitan Transportation Improvement Program;
- Amendment #2 to the 2035 Long Range Transportation Plan; and
- corresponding air quality conformity determinations.

The MTIP must be coordinated with the State Transportation Improvement Program which is scheduled to be approved by the Board of Transportation in July 2011. The LRTP amendment is needed to ensure that the MTIP/STIP and the LRTP are consistent. Since both documents are subject to the air quality conformity process, air quality conformity determination reports must be prepared and approved.

The MPO's public involvement policy requires that the Air Quality Conformity Report be released for a 30-day public review and comment period and that a public hearing be conducted to receive comments on the amendment and Conformity Report. A draft Air Quality Conformity Report is being prepared by the Triangle J Council of Governments, covering the DCHC MPO, Capital Area MPO and NCDOT elements. This determination report is scheduled to be available for review by mid-June (the report may be complete by the June 22 TAC meeting and will be distributed if available). NCDOT and NCDAQ will review the document prior to MPO availability.

The following scheduled is proposed for the Air Quality Conformity Determination Report:

- June 2011 – TAC authorizes the release of the Air Quality Conformity Determination Report document, upon availability
- August 10, 2011 – TAC conducts public hearing and adopts the final MTIP, 2035 LRTP Amendment, and Air Quality Conformity Determination Report

TCC Recommendation (expected on June 20, 2011): That the TAC release the Air Quality Conformity Determination Report for public comment and schedule a public hearing at the August 10, 2011 TAC meeting.

TAC Action: Release the Air Quality Conformity Determination Report for public comment and schedule a public hearing at the August 10, 2011 TAC meeting.

REPORTS:

14. **Report from the TAC Chair**
Lydia Lavelle, TAC Chair

TAC Action: Receive Report from TAC Chair

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

TAC Action: Receive Report from TCC Chair

16. **Report from Staff**
(Attachment 16)
Felix Nwoko, LPA Staff

17. **NCDOT Report**
(Attachment 17)
Wally Bowman, Division 5 – NCDOT
Mike Mills, Division 7 – NCDOT

TAC Action: Receive report of NCDOT

INFORMATIONAL ITEMS

18. **Recent News Articles and Updates**
(Attachment 18)

Adjourn

Next meeting: August 10, 2011, 9am

Dates of Upcoming Transportation-Related Meetings:

6/29/2011	Public Workshop on South Roxboro Street Extension, Durham PWOC, 4:30 pm–7:30 pm
6/28/2011	Durham Chamber Transportation Committee, 12 pm
7/26/2011	Durham Chamber Transportation Committee, 12 pm
8/19/2011	Tri-MAP, RDU Airport, 10:30 am

TAC Directives to Staff

06/11/03 – 12/31/09 (Pending/In Progress/On Going)
01/01/10 – Present (Completed/Pending/In Progress)

Meeting Date	Directive	Status
11/11/09	Provide the TAC a summary of the Regional Transit Leadership Group meetings and status of the county transit plans.	In Progress: Status provided to TAC, TAC Chair and elected officials on an ongoing basis
1/13/10	Send letter to Chatham County BOCC regarding MAB expansion	Completed: See Attachment 19 of 2/10/10 TAC Agenda.
1/13/10	Send letter to NCDOT describing the ranking of multi-modal projects in the DCHC MPO's FY 2012-2018 TIP Regional Priority List	Completed: See Attachment 28 of 3/10/10 TAC Agenda.
2/10/10	Provide a recommendation for how to proceed with programming funding for alternatives to U-3808, Elizabeth Brady Road.	Completed
3/10/10	Address the issues raised regarding the Farrington Road Corridor Study.	In Progress
5/12/10	Send letter to Secretary Conti regarding funding for the East End Connector.	Completed: See 5/12/10 TAC Agenda.
8/11/10	Follow-up with UNC-Chapel Hill during public involvement period for NC 54 Corridor Study.	Completed
2/9/11	Expedite the contract amendment for the NC 54 Corridor Study and direct the consultant to review the land use assumptions.	Completed
3/9/11	Provide a presentation on the NCDOT tier system and funding levels in the TIP.	Completed: See 5/11/11 TAC Agenda.
3/9/11	Improve public outreach and add links to other transportation organizations to the MPO website	In Progress
3/9/11	Provide an update on the implementation of the Greenhouse Gas Plan.	In Progress
3/9/11	Provide an update on the implementation of the Travel Demand Management program.	In Progress
3/9/11	Provide a report on the proposed closing on Pickett Road and prepare a letter/resolution for the TAC's review.	In Progress
4/13/11	Send a letter to the State Board of Education requesting that bicycle and pedestrian safety be added to the driver's education program	In Progress
4/13/11	Send a letter to the General Assembly regarding the proposed state budget	Completed: See 5/11/11 TAC Agenda.

4/13/11	Send a letter to the DCHC MPO federal legislative delegation regarding the federal budget.	In Progress

TRANSPORTATION ADVISORY COMMITTEE

May 11, 2011

MINUTES OF MEETING

The Transportation Advisory Committee met on May 11, 2011, at 9:00 a.m. in the Council Committee Room on the second floor of Durham City Hall. The following attended:

**Diane Catotti	City of Durham
**Mark Chilton	Town of Carrboro
**Alice Gordon	Orange County
**Eric Hallman	Town of Hillsborough
*Ed Harrison	Town of Chapel Hill
**Mark Kleinschmidt	Town of Chapel Hill
*Bernadette Pelissier	Orange County
**Ellen Reckhow	Durham County (TAC Vice-Chair)
**Chuck Watts, Jr.	NCDOT – Board Member
**Mike Woodard	City of Durham

Mark Ahrendsen	City of Durham – Transportation
Ellen Beckmann	City of Durham – Transportation
Julie Bollinger	NCDOT - TPB
David Bonk	Town of Chapel Hill
Maricia Brown	City of Durham – Transportation
Jeff Brubaker	Town of Carrboro
Aaron Cain	Durham City/County Planning
Damien Graham	Triangle Transit
Ray Gronberg	The Herald Sun
Wib Gulley	Triangle Transit
Andy Henry	City of Durham – Transportation
John Hodges-Copple	Triangle J COG
Joey Hopkins	NCDOT – Division 5
David King	Triangle Transit
Tom King	Town of Hillsborough
Karen Lincoln	Orange County
Patrick McDonough	Triangle Transit
Dale McKeel	City of Durham – Transportation
Ryan Mickles	Town of Chapel Hill
Joe Milazzo	Regional Transportation Alliance
Greg Northcutt	Triangle Transit
Brian Rhodes	City of Durham – Transportation
Brad Schulz	Triangle Transit
Meg Scully	Durham County
Mila Vega	Orange County
John White	Durham Chamber of Commerce

Patrick Wilson	NCDOT – Division 7
Jim Wise	News & Observer

**Voting Member
*Alternate or Non-Voting Member

PRELIMINARIES:

Adjustments to Agenda

There were no adjustments to the agenda. Mark Ahrendsen stated handouts were distributed at the beginning of the meeting and each will be discussed during the agenda item that refers to them.

Public Comments

There were no public comments.

Directives to Staff (Attachment 4)

The Directives to Staff are attached for review.

ACTION ITEMS:

April 13, 2011 TAC Meeting Minutes (Attachment 5)

Alice Gordon stated lines 122 and 123 should read as follows: "The Orange County Board of Commissioners will be putting a referendum on a ¼ cent sales tax for education and economic development on the ballot this fall." A motion was made by Mike Woodard and seconded by Diane Catotti to approve the April 13, 2011 TAC Meeting Minutes with the amendment by Alice Gordon. The motion carried unanimously.

Triangle Regional Transit Program (Attachment 6)

David King with Triangle Transit provided a Power Point Presentation on the Triangle Regional Transit Program.

Mike Woodard stated he appreciates the staff's hard work as it has been many years of work that have led to this plan. Mr. Woodard supports the plan.

Diane Catotti stated she supports the plan and stated that Mayor Bell also supports the plan.

Bernadette Pelissier stated as Chair for the Orange County Board of County Commissioners stated she is comfortable with this plan.

Alice Gordon stated the action is to receive the schedule and release the plan for public comment. We need to receive the backup materials to provide with the plan showing the assumptions. At the Triangle Transit Board meeting, they received the presentation, and RTA is concerned about raising money for the campaign because it is not part of their current budget. They need twelve months lead time to raise money. It is important to have all of our partners onboard.

Ellen Reckhow stated there needs to be presentations to all municipalities on the plan within the next thirty days so when it comes back to the TAC they will have an idea where the Boards stand. The TAC wants to have formal action from constituent elected bodies before TAC approves it. Ellen Reckhow stated there needs to be more background on the financial side; such as specific bus services and routes.

David King stated now that we have a plan we can motivate businesses to contribute to a campaign. Ellen Reckhow stated the plan also needs to include an estimate of jobs created.

Mark Chilton stated the largest source of greenhouse gas emissions for our area is transportation. Transit is the most effective thing we can do to decrease emissions. This is the major government action we can take for our region and planet. There are many benefits to local transit services in Orange County. There will be new express service from downtown Carrboro to downtown Chapel Hill into Durham; permanent funding for the circulator service in Hillsborough; brand new service on the US-70 corridor from Efland and Hillsborough into Durham; expanded rural coverage through OPT; Sunday service in Chapel Hill and Carrboro; full schedule of Saturday service; and night time service in Chapel Hill and Carrboro. Mark Chilton stated money isn't what drives elections in Orange County. There will be grassroots support and volunteers for the plan. We needed to do this a long time ago and urged there to be no delay in approving and implementing the plan.

A motion was made by Mark Chilton and seconded by Mike Woodard to receive the schedule for approving the Financial Plan and Locally Preferred Alternative (LPA) and release the draft Financial Plan for public comment. The motion carried unanimously.

FY 2011-2012 Unified Planning Work Program (Attachments 7, 7A, and 7B)

Maricia Brown provided an introduction for the FY 2011-2012 Unified Planning Work Program, along with the attachments.

The self-certification checklist has been updated. The MPO received a commendation at our certification review for the quality of the UPWP.

On Attachment 7B, Chapel Hill will be shifting previously approved funds to transit planning. The TAC had previously approved TJCOG funds to apply for a grant and they will reapply for the grant again this year. There are three resolutions which are on pages 7, 8, and 9 that need to be approved.

Alice Gordon asked what are the follow-up planning studies for the Special Transit Advisory Committee that is referenced on page 16 of Attachment 7A. Mark Ahrendsen stated this includes what we're doing right now on transit.

A motion was made by Diane Catotti and second by Mark Chilton to approve the resolutions adopting the FY 2011-2012 UPWP. The motion carried unanimously.

FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #19 (Attachment 8)

Ellen Beckmann provided an introduction for the FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #19 and the attachment.

Ms. Beckmann stated the amendment is needed to add Section 5309 funds for DATA, Chapel Hill Transit, and Triangle Transit. They were recently informed the funds were available and will expire soon. The funds need to be applied for by the end of April 2011, and they need to be in the approved MTIP and STIP. Every transit agency got the same amount of funding. In addition to the 5309 funds,

there is a shift in the schedule for a DATA CMAQ project for operating assistance which was previously approved by TAC.

A motion was made by Mike Woodard and seconded by Mark Kleinschmidt to adopt the Resolution to modify the 2009-2015 Transportation Improvement Program for the Durham-Chapel Hill-Carrboro Urban Area. The motion carried unanimously.

FY 2014-2020 Transportation Improvement Program – Regional Priority List (Attachments 9 and 9A)

Ellen Beckmann provided a Power Point Presentation on the FY 2014-2020 Transportation Improvement Program – Regional Priority List, along with the attachments. The TAC will be asked to approve the submission of projects at the June meeting.

2040 Long Range Transportation Plan and Comprehensive Transportation Plan (Attachments 10 and 10A)

Andy Henry provided an introduction for the 2040 Long Range Transportation Plan and Comprehensive Transportation Plan, along with the attachments. Andy Henry stated the differences between a LRTP and CTP.

Mr. Henry stated he was notified by NCDOT that the CTP will be adopted before July so the schedule will be changed to reflect the change. Orange County is working on their CTP and should be adopting about the same time. Mr. Henry stated staff will be working with Orange County staff.

Legislative Update (Attachment 11)

Ellen Beckmann provided a legislative update. Chuck Watts, Jr. laments the General Assembly actions on transportation. They are putting politics back into the process. We have no representation in the majority; we need to identify ways to help the whole state. It is important to share comments and ask the Governor to veto the budget.

REPORTS:

Report from the Chair

There was no report from the TAC Chair.

Report from the TCC Chair

Mark Ahrendsen stated we had a Federal Certification Review last month for the MPO transportation planning process. We got preliminary findings back yesterday. We got generally positive feedback with couple of relatively minor corrective actions that we were aware of and staff will be addressing in the next couple of months.

Florida returned $2 billion of high speed rail funds which will be redistributed. $4 million was redistributed to North Carolina for the environmental study for the Raleigh to Richmond rail corridor.

We submitted an application for the Climate Leadership Academy and were selected to send a team to D.C. to look at efforts to reduce carbon emissions. It is a two day workshop, all expenses paid.

May is Bike Month with a lot of different activities going on. Dale McKeel stated a calendar of events was distributed at the beginning of the meeting. The Smart Commute Challenge is also still going on.

Report from Staff (Attachment 14)

The Report from Staff is attached for review.

NCDOT Report (Attachment 15)

Joey Hopkins, NCDOT Division 5, provided an update on projects. NCDOT hopes to release the Complete Streets guidelines, chapters 1-4, on May 27, 2011 to the MPO. Currently they don't have the necessary information developed on intersections, operation and maintenance, and structures but it will come later. There will be a 60-day comment period. Please let us know what you like and dislike about the guidelines. Jim Westmoreland resigned.

Patrick Wilson, NCDOT Division 7, provided an update on projects. NCDOT is currently working on the I-85 resurfacing project; which is night-time work only. Installing signs along the designated bicycle routes in Orange County and should be completed by the end of summer.

Alice Gordon stated she appreciates the progress of the projects.

INFORMATIONAL ITEMS:

Recent News Articles and Updates (Attachment 16)

The recent news articles and updates are attached for review.

Adjourned

There being no further business before the Transportation Advisory Committee, the meeting adjourned at 10:49 a.m.

June 17, 2011

Bus and Rail Investment Plans

Public Workshops and Summary of Comments and Survey

Plan Released

The DCHC MPO released the Durham and Orange County Bus and Rail Transit Investment Plans for public comment on June 1, 2011 and June 8, 2011, respectively. The draft Plans, maps and meeting information were made available on the MPO Web site on those dates. Several local governments sent out press releases and LPA staff notified citizens and community leaders using established email lists, and local newspaper articles on the Plans included a list of the workshops.

Workshops

LPA staff conducted public workshops at the times and locations listed below. Triangle Transit staff and planners from local government staff assisted with the workshops, which were lightly attended, ranging from a few to seventeen participants. Staff also made presentation on the Plan at the DATA Users meeting on June 1st, and the Research Triangle Park Owners and Tenants meeting on June 9th.

- June 7, from 4 p.m. to 6:30 p.m. - Southwest Library, 3605 Shannon Road, Durham
- June 8, from 4 p.m. to 7 p.m. - Holton Career and Resource Center Senior Room, 401 N. Driver St., 2nd Floor, Durham
- June 14, from 4 p.m. to 7 p.m. - Chapel Hill Town Hall, 405 Martin Luther King, Jr. Blvd., Chapel Hill
- June 15, from 3 p.m. to 6 p.m. - North Regional Library, 221 Milton Rd., Durham
- June 16, from 4 p.m. to 7 p.m. - Orange County Library, 137 W. Margaret Ln., Hillsborough

Comments

Staff received comments from workshop participants and by citizens through email and the MPO Web site. The following bullet points provide a summary of those comments. Attachment 6A is a compilation of the comments in their entirely and of the complete survey.

- Comments showed strong support for Plans, especially given the anticipated growth in the area and need to remain economically competitive.
- Congestion and air quality benefits of the Plans are often identified.
- Detailed requests included:
    - Accommodate bicycles on rail vehicles
    - Provide more frequent bus service during non-peak hours
    - Make the Hope Valley bus route more efficient.

- Commuter Rail has advantages over Light Rail Transit (LRT) that include lower cost and less community disruption.
- Bus Rapid Transit (BRT) has advantages over LRT that include greater service flexibility and lower cost.
- Start a BRT system and move to LRT if the BRT is successful.
- The Meadowmont alternative is better because of the greater population density there.
- Make the bus improvements first. If successful, then move resources to rail transit.
- Rail needs to include RDU.
- A more compelling story is needed to get the public interested in the Plans.
- The Meadowmont Community Association presented a letter stating their support for the Light Rail Transit alternative using the NC 54 corridor and George King Road rather than the alternative that traverses Meadowmont.

Note that the comment form and survey continue to be made available on the MPO Web site. If there is additional significant input between the date of this summary document and the June 22nd TAC meeting, that input will be noted at the TAC meeting.

Survey

Citizens could take a Web-based survey designed to ascertain their preferences and support for various elements of the Bus and Rail Investment Plan. At the time this document was written, about 80 people had completed the survey. The following bullet points summarize the survey responses. The Web link for the survey is https://www.surveymonkey.com/s/Transit-Plan.

- Two-thirds of the respondents have a good knowledge of the major Plan elements through reading parts of the Plan or newspaper articles.
- Most respondents were aware of the plan through the newspapers.
- Support was slightly stronger for Commuter Rail and Local Bus Service.
- Forty percent preferred the light rail technology for the Durham-Chapel Hill corridor, while about one-in-five preferred whichever technology can be implemented the soonest.
- Thirty percent believed they would use Commuter Rail two times per week or more.
- Forty-five percent believed they would use the Light Rail Transit two times per week or more.
- Respondents believed the following bus improvements to be the most important:
    - Connect residents with jobs
    - Connect residents with other cities and towns, and regional destinations such as RDU
    - Expands service in high ridership corridors.
- The highest priority routes were for RDU airport and the Research Triangle Park (RTP).
- One-third believed they would use the transit services at least two times per week.
- Only twenty-three percent of the respondents currently use the bus transit system at least two times per week.

- There were many details in the narrative responses but perhaps the two most salient points include:
    - A desire to start implementing the bus and rail plan as soon as possible.
    - Some skepticism on the financial and service feasibility of rail transit.

Bus and Rail Investment Plans

Compilation of Comments, Comment Forms and Survey

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) released the Durham County and Orange County Bus and Rail Investment Plans for public comment on June 1, 2011 and June 8, 2011, respectively. This document provides a complete compilation of the comments received as of June 17, 2011 in the following order:

1. Comments – These are comments received by email, usually from citizens using the MPO Web site. Page 2

2. Comment Cards – Comment Cards were available at the public workshops and continue to be available on the MPO's Web site. The completed cards have been scanned and presented. Page 5

3. Survey – A Web-based survey is available on the MPO Web site and was included in email contacts to citizens and community leaders. The survey results and text comments are included in this document. Page 13

From: David Dickson Jr. [ddickson@tsihealthcare.com]
Sent: Monday, June 13, 2011 4:43 PM
To: comments@dchcmpo.org
Subject: ADD THE TRANSIT TAX

This area will DIE if we do not improve our transit infrastructure. It's time to get with the program.

David Dickson

David M. Dickson, Jr.
President and CEO

TSI Healthcare
A NextGen Healthcare Value Added Support Organization
Electronic Health Records · Practice Management Systems · Revenue Cycle Management
Document Management Division · Electronic Data Interchange

101 Europa Drive, Suite 200 | Chapel Hill, NC | 27517
800.354.4205 (O) | 603.676.5695 (F)
www.tsihealthcare.com

From: Charles S Gordon [sworth01@bellsouth.net]
Sent: Wednesday, June 15, 2011 8:41 AM
To: comments@dchcmpo.org
Subject: financial plan

I favor strongly putting the proposal on the ballot. Charles Gordon

Charles S. Gordon
Broker Assoc.
Fonville Morisey Realty
1520 E Franklin St.
Chapel Hill, NC 27514
www.homesinresearchtriangle.com
Cell/Off. 919-869-1152 e-fax. 919-595-0528

From: lori Miller [millerla26@gmail.com]
Sent: Monday, June 13, 2011 10:22 AM
To: Henry, Andrew; Beckmann, Ellen
Subject: Buss and Rail

Andrew and Ellen,
I am unable to attended the open house forums, but would like to add my input. Please create a mass transit system for the Durham, Chapel Hill, RDU and Raleigh area. If you look at cost, it will always be prohibitive- each year the cost will go up and up.
If you look at the overall financial health of the community, mass transit is the way to go. You help folks get to work, create ways for folks to travel /visit areas they would find excuses not to (not enough parking, etc) and create a place that folks/ businesses will want to move into.

I thank you for your time

Lori Miller
Carrboro Citizen

From: Bob & Susan McClanahan [smcclanahan@nc.rr.com]
Sent: Monday, June 13, 2011 4:06 PM
To: comments@dchcmpo.org
Subject: Orange County Bus and Rail Investment Plan

Dear Transit Plan Staff,

I am very excited that this planning process is moving forward. I strongly support this plan that will

help to relieve congestion on I-40.
reduce our carbon footprint on the environment.

I believe that the light rail portion of this plan will be especially effective.

I do have one question/concern however. By increasing access, will we also be importing crime from Durham to Chapel Hill? Durham has difficulties with much youth violence. What is being done to address this issue?

Thank you!

Susan McClanahan

Notes from Phone Calls on DCHC MPO Bus and Rail Investment Plans

6/7/2011, 1:45 pm

Excited about the plan. In favor of progressive policies and growth in Durham. The cost of not having a rail system is more than the cost of building it.

Likes the Bull City Connector and would like to see it expanded. In favor of DATA being fare free.

Asked about how the train would be routed over New Hope Creek through area that floods regularly. Also asked about accommodating bicycles on the trains.

From: Will Senner [will.senner@gmail.com]
Sent: Friday, June 03, 2011 2:52 PM
To: comments@dchcmpo.org
Subject:Comments
Hello-
I just wanted to send you a brief email in support of investment in regional rail infrastructure in the triangle region, in particular light and commuter rail options to connect our major cities. I feel this is a significantly more prudent investment than bus or car alternatives given the need for support for "smart growth" within our region.
Thanks.
Will Senner
Resident of Durham

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

I hope the funding comes through to accelerate the timeline on these investments.

Please use the space below to provide comments on the bus investments.

I was intrigued by the N. Durham Express route. I hope that there will be a stop at Infinity/Latta on N. Roxboro to capture traffic from the communities in this area. The current local routes take multiple transfer that can extend the trip time based on whether people make those connections or not.

Please use the space below to provide comments on the revenue and financial elements of the plan.

It is a realistic plan that achieves the main goal of increasing mobility for Durham's citizens.

Please use the space below for any additional comments.

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

Please use the space below to provide comments on the bus investments.

It would be good to have more frequency during non-peak hours.

Please use the space below to provide comments on the revenue and financial elements of the plan. I would support increasing the sales tax and providing tax incentives to companies that locate in areas that are good with mass transit.

Please use the space below for any additional comments.

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

C2 alignment appears:
- less costly
- less damaging to the environment
- less disruptive to a build out community

Please use the space below to provide comments on the bus investments.

BRT is:
- more flexible (important in our very rapidly changing environment
- cheaper

Please use the space below to provide comments on the revenue and financial elements of the plan.

Need to know more about operating cost - Cost to Chapel Hill/Orange County and possible taxes charged

Please use the space below for any additional comments.

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

DON'T. BRT IS SO MUCH CHEAPER. USE THE RIGHT OF WAY FOR BRT FIRST. IF IT PROVES TO BE INSUFFICIENT, THEN PUT TRACKS IN THE ROW. MORE GENERALLY, WHY NO TRANSIT-ORIENTED DEVELOPMENT AS A WAY TO PAY FOR SERVICES? RATHER THAN PAYMENT AND SALES TAX. (GOT THE EXPLANATION FROM McDONOUGH.)

Please use the space below to provide comments on the bus investments.

GENERALLY GOOD. FOCUS ON CARRBORO-CHAPEL HILL-DURHAM, NOT OUTLIERS (e.g. HILLSBOROUGH, MEBANE).

Please use the space below to provide comments on the revenue and financial elements of the plan.

Please use the space below for any additional comments.

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

I think the LRT proposal is smarter both because of the increased service level, increased capacity, and the permanent nature of rail which will encourage TOD.

Please use the space below to provide comments on the bus investments.

I like many aspects of the plan, but think a close look should be taken at ridership once service begins and making adjustments as needed.

Please use the space below to provide comments on the revenue and financial elements of the plan.

Please use the space below for any additional comments.

The CI alignment Draft Meadowmont makes the most sense, given Meadowmont's population density and existing infrastructure planned for LRT.

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

No Rail At This Time, Fixed The Bus First and Only.

Please use the space below to provide comments on the bus investments.

What I heard about New Setup About Bus schedule should go first to win Trust with people that really ran the Bus, not just for special.

Please use the space below to provide comments on the revenue and financial elements of the plan. I hope to Federal gov't truly get more people voice heard ~~only~~ and not a ~~chose~~ Choicing few.

Please use the space below for any additional comments.

Wait on Rail system until the Bus system is correctly done.

SW Library

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

See below

Please use the space below to provide comments on the bus investments.

Any expanded routes that do not include RDU will have little impact. I am not sure of the local RDU infrastructure to make this work, but to leave it out because of a deficient thought process will limit the attractiveness of the program

Please use the space below to provide comments on the revenue and financial elements of the plan.

* The handout is nice but not compelling

Please use the space below for any additional comments.

There is a need to energize the public on these issues
So far the benefits of these investments have had limited attractiveness - i.e. little public support
Just announcing a meeting like today's has little appeal. "What's in it for me & my kids - good jobs etc
The low $ impact - gallons of gas not used, identify time traveled - loss of optional recreational time
loss of family interaction time might make a more
Impressive Study - see above *

Comment Form

DCHC MPO Bus and Rail Investment Plans

Comments may also be emailed to comments@dchcmpo.org.

Please use the space below to provide comments on the rail investments.

Jim in favor of the gen'l concept of rail / light rail reserving comment on the specifics. Anyone who has lived in densely populated corridors of many places in Europe, understands the benefits. Need to consider connectors to the lines / routes to maximize use.

Please use the space below to provide comments on the bus investments.

Jim particularly interested in the corridor roughly paralleling Hwy 751 (Hope Valley Rd) as I live along it. Would appreciate a but route that is more convenient than the current Route #70. I would be much more likely to use it.

Please use the space below to provide comments on the revenue and financial elements of the plan.

½ ¢ sales tax (county) seems okay to me, depending on final plans. As we getting value for what we are paying for?

Please use the space below for any additional comments.

DCHC MPO Bus and Rail Investment Plan Survey

SurveyMonkey

1. To what extent are you aware of a rail and bus transit plan in Durham County or Orange County? (You may choose more than one answer)

	Response Percent	Response Count
I have participated in public workshops in the last year.	26.9%	18
I have reviewed or read parts of the rail or bus plan.	**65.7%**	**44**
I have heard talk about it among family, friends, neighbors, or co-workers.	47.8%	32
I read something about the transit plans in the newspaper.	**65.7%**	**44**
I read something about the transit plans on television	9.0%	6
I read something about the transit plans on the radio	7.5%	5
I read something about the transit plans on a website	43.3%	29
I read something about the transit plans on social networking tool such as Facebook, Twitter, or MySpace	6.0%	4
I have not heard about it until now.	4.5%	3
	answered question	**67**
	skipped question	**1**

2. Review the following major elements of the plan and answer the question below. * Light Rail Transit (starts year 2025)- Operate between Durham, Duke, UNC-Chapel Hill about 18 hours per day; every 10-20 minutes (approximately 18 mile route) ** Capital Cost = $1.4 Billion ** Operations Cost = $15 million/year * Commuter Rail(starts year 2018)- Operate between Durham, Research Triangle Park and Raleigh at mostly peak travel times; every 20-30 minutes (approximately 37 mile route) ** Capital Cost = $300 million ** Operations Cost = $3 million /year * Expanded Bus Transit(starts year 2012)- Expanded local bus service linking homes and employment sites to other destinations in the county and Expanded regional bus service linking homes and employment sites to destinations outside the county. ** Capital Cost = $88 million ** Operations Cost = $278 million NOTE: costs are for years 2012 through 2035 Use the table below to indicate your level of support for the major elements described above.

	Don't Support at All		Neutral		Strongly Support	Rating Average	Response Count
Light Rail Transit	13.2% (9)	5.9% (4)	8.8% (6)	14.7% (10)	**57.4% (39)**	3.97	68
Commuter Rail	11.8% (8)	2.9% (2)	7.4% (5)	19.1% (13)	**58.8% (40)**	4.10	68
Expanded Local Bus Transit	4.4% (3)	4.4% (3)	19.1% (13)	19.1% (13)	**52.9% (36)**	4.12	68
Expanded Regional Bus Transit	7.4% (5)	4.4% (3)	19.1% (13)	23.5% (16)	**45.6% (31)**	3.96	68
					answered question		**68**
					skipped question		**0**

3. Briefly describe any changes you want to make to the Bus and Rail Investment Plan (based on the description of major elements above, or your knowledge of other plan details).

	Response Count
	32
answered question	**32**
skipped question	**36**

4. The Bus and Rail Investment Plan proposes a fixed guideway service to operate between Durham, Duke, and UNC-Chapel Hill (approximately 18 miles). This fixed-guideway could use one of several service types. Which of the following service types do you prefer? (Please choose one answer)

	Response Percent	Response Count
Light Rail Transit (provides urban and regional service with stations every ¼ to 2 miles; can operate on separate tracks or in the street, and averages 30mph)	**39.0%**	**23**
Bus Rapid Transit (buses provide very frequent service during commuting hours and operates both in the street and on separate guideway)	11.9%	7
Whichever is least expensive.	6.8%	4
Whichever can be implemented the soonest.	18.6%	11
Whichever attracts the most mixed-use development around stations.	10.2%	6
Whichever offers the fast travel time.	13.6%	8
answered question		**59**
skipped question		**9**

5. How often do you think you might use the Commuter Rail transit services that would operate from West Durham, through downtown Durham, Research Triangle Park, Raleigh, and to eastern Wake County? (Please choose one answer)

	Response Percent	Response Count
Very (at least 7 times per week)	11.3%	7
Somewhat (at least 2 times per week)	19.4%	12
Not very (once per month or less, such as special events)	**46.8%**	**29**
Not at all	12.9%	8
Don't know	9.7%	6
	answered question	**62**
	skipped question	**6**

6. How often do you think you might use the Light Rail transit services that would operate from East Durham, through downtown Durham, Duke University and Medical Center, and to UNC-Chapel Hill? (Please choose one answer)

	Response Percent	Response Count
Very (at least 7 times per week)	12.9%	8
Somewhat (at least 2 times per week)	**32.3%**	**20**
Not very (once per month or less, such as special events)	29.0%	18
Not at all	17.7%	11
Don't know	8.1%	5
	answered question	**62**
	skipped question	**6**

7. The Bus and Rail Investment Plan proposes several improvements to local bus transit (within your county) and regional bus transit service (between cities, towns and counties). These improvements include more frequent service and extended hours for existing routes, new routes and new facilities. From the following list, please rank the three most important bus transit improvements for you with 1 being the most important and 3 being the third most important. (You will select a total of three of the services listed below).

	Most Important	2nd most Important	3rd most Important	Rating Average	Response Count
Bus transit service that connects residents with jobs	**45.7% (16)**	37.1% (13)	17.1% (6)	2.29	35
Bus transit service that connects residents with post-secondary and vocational education opportunities	10.0% (1)	**50.0% (5)**	40.0% (4)	1.70	10
Expanded bus services in corridors with high ridership (for example, increase frequency to 15 minutes)	**39.4% (13)**	27.3% (9)	33.3% (11)	2.06	33
Bus service that connects residents with other cities and towns and regional destinations such RDU airport	**50.0% (17)**	20.6% (7)	29.4% (10)	2.21	34
Expanded dial-a-ride service for rural residents	0.0% (0)	**50.0% (3)**	**50.0% (3)**	1.50	6
More park-and-ride lots	35.7% (5)	21.4% (3)	**42.9% (6)**	1.93	14
Transit emphasis corridors with bus shelters and sidewalks	15.8% (3)	36.8% (7)	**47.4% (9)**	1.68	19
Neighborhood transit centers with bus shelters and seating	17.6% (3)	**47.1% (8)**	35.3% (6)	1.82	17
			Other (please specify)		6
			answered question		**58**
			skipped question		**10**

8. Which of the following routes do you think should be the highest priority for new or expanded bus transit services? (Please choose one answer)

	Response Percent	Response Count
Traveling to and from the Research Triangle Park	14.0%	8
Traveling to and from RDU Airport	**17.5%**	**10**
Traveling to and from the downtown Durham area	8.8%	5
Traveling to and from the downtown Raleigh area	5.3%	3
Traveling to and from Duke University and Medical Center	10.5%	6
Traveling to and from UNC-Chapel Hill and the adjacent hospitals	8.8%	5
Traveling to and from retail centers (such as malls, Wal-Mart, Target, etc.)	5.3%	3
Traveling within the city or county where you live	12.3%	7
No priority	5.3%	3
Don't know	12.3%	7
	Other (please specify)	4
	answered question	**57**
	skipped question	**11**

9. How often do you think you might use the bus transit services proposed in the Bus and Rail Investment Plan? (Please choose one answer)

	Response Percent	Response Count
Very (at least 7 times per week)	18.3%	11
Somewhat (at least 2 times per week)	**33.3%**	**20**
Not very (a few times per year, such as special events)	21.7%	13
Not at all	11.7%	7
Don't know	15.0%	9
answered question		**60**
skipped question		**8**

10. How often do you use public transportation, such as bus services, that are currently available in your area? (Please choose one answer)

	Response Percent	Response Count
Very (at least 7 times per week)	6.7%	4
Somewhat (at least 2 times per week)	16.7%	10
Not very (a few times per year, such as special events)	**38.3%**	**23**
Not at all	35.0%	21
Don't know	3.3%	2
answered question		**60**
skipped question		**8**

Page 2, Q3. Briefly describe any changes you want to make to the Bus and Rail Investment Plan (based on the description of major elements above, or your knowledge of other plan details).

1	I don't like the route chosen for LRT. Station location isn't the issue--it's the route. I would have designed it differently, but there may be constraints that I'm unaware of. I assume the route is a done deal at this point, anyway.	Jun 15, 2011 6:10 PM
2	Include AIRPORT stops, esp on *any* RAIL plan.	Jun 14, 2011 4:17 PM
3	A more comprehensive, Triangle-wide, light rail / commuter rail plan system would be even better.	Jun 14, 2011 1:10 PM
4	We need the TTA to run on Sunday!!!!	Jun 14, 2011 6:15 AM
5	Consider alternative crossing of New Hope Creek.	Jun 13, 2011 5:55 PM
6	It is important to pursue options that can be developed relatively quickly, since this is all about 20 years late getting started.	Jun 13, 2011 2:35 PM
7	Selfishly, I'm tired of paying for things that serve everyone else. Buses do not go near where I work so I don't care. It's easier to drive. I'msingle, working class and I'm tire of supporting poor peole with no car and rich people who work at the universities.	Jun 13, 2011 11:26 AM
8	Ensure bus routes are integrated and coordinated and new development is burgers along lines to provide ridership.	Jun 13, 2011 9:04 AM
9	no rail support it is a waste of many that will not benefit the environement or help many people move	Jun 13, 2011 8:59 AM
10	I would like to see southern Durham county linked in to the rail system--there are many residents within a few miles of the I-40 corridor that would benefit from having nearby train service to Raleigh, RTP, downtown Durham, Chapel Hill, or even closer places like Southpoint Mall.	Jun 13, 2011 8:22 AM
11	Pay a couple billion now, or five times that cost when the 1 million new residents arrive by the 2020s. Pay me now, or pay me later.	Jun 13, 2011 8:17 AM
12	Given the rate of growth in the region, traffic conjestion and $5 to $10 gas in the near future, waiting until 2025 for light rail seems like it may be too little too late. the rail plans should be pushed up much soon for both regional and light rail.	Jun 13, 2011 7:53 AM
13	Why do we keep funding empty busses? The BullCity Connector is FREE, clean, convenient and still running practically empty according to my own eyes and recent stories in the paper.	Jun 13, 2011 7:23 AM
14	I urge more focus to be on the Durham-Chapel Hill corridor and eventually Charlotte.	Jun 13, 2011 7:13 AM
15	The most important thing is to get started with a plan.	Jun 13, 2011 7:02 AM
16	I can't imagine the rail would have enough ridership between Chapel Hill and Durham to sustain itself, no matter what numbers your consultants have presented. Set light rail up between Durham, RTP and Raleigh. Concentrate better bus service between Durham and UNC. Make it the gold standard for bus transportation in the southeast. Boulder, CO did it.	Jun 13, 2011 6:57 AM

Page 2, Q3. Briefly describe any changes you want to make to the Bus and Rail Investment Plan (based on the description of major elements above, or your knowledge of other plan details).		
17	Any rail or regional bus lines must be able to connect to viable local transit as well. It doesn't help to travel between Durham and Raleigh if you can't get to where you need to go once you get there.	Jun 13, 2011 6:32 AM
18	Would prefer to link the light rail lines to the existing i-40 corridor if possible from UNC Hospitals up to RTP.	Jun 13, 2011 5:51 AM
19	I'm a bit skeptical that any rail option will work in the Triangle region. But, with gas prices staying high and the proper land use designations, people may take them. BRT may be the best short-term bet.	Jun 13, 2011 5:47 AM
20	N/A	Jun 13, 2011 5:40 AM
21	Add more Bike Paths	Jun 12, 2011 2:02 PM
22	Bring it on faster! As the population increases, it will be more difficult and costly to build what we've needed for decades already!	Jun 12, 2011 10:43 AM
23	Approximately 58% of the Durham-Orange Light Rail is in Durham County. However, Durham County is proposed to bear about 75% of the capital and operating costs. In part this may be due to Orange County/Chapel Hill not providing parking in support of the light rail transit. Whatever the reason, the proposed financial burden for Durham County seems out of proporation to the amount of light rail.	Jun 12, 2011 10:43 AM
24	So far so good. I would not waste a lot of resources on expanded regional bus. I'd rather see that money go towards either Light Rail or Bus Rapid Tranist.	Jun 12, 2011 10:07 AM
25	I want to be sure you plan stations farther out on Hwy 98, to include all Grove Park subdivision entrances. (I'm a homeowner in Grove Park.)	Jun 11, 2011 9:35 AM
26	not sure light rail is financially feasible not sure the frequency of commuter rail provides much value	Jun 11, 2011 8:20 AM
27	Better coordination with study of NC54 corridor	Jun 11, 2011 8:03 AM
28	Sooner rather than later.	Jun 10, 2011 4:32 PM
29	I would like to have an idea about how much it would cost to ride. Also, would major employers provide free passes such as UNC which currently provides me with a TTA bus pass. Your question below has an answer"whichever is least expensive". Does this mean least expensive to build or to ride?	Jun 10, 2011 4:24 PM
30	expand the bus portion	Jun 10, 2011 2:25 PM
31	NO RAIL!!!!	Jun 10, 2011 11:53 AM
32	Move park and ride in north Durham to snow hill at Roxbury roads.	Jun 10, 2011 11:42 AM

Page 3, Q7. The Bus and Rail Investment Plan proposes several improvements to local bus transit (within your county) and regional bus transit service (between cities, towns and counties). These improvements include more frequent service and extended hours for existing routes, new routes and new facilities.
...

1	Expanded service on weekends (Saturday night and Sunday) -- this is my 3rd most important choice	Jun 15, 2011 6:11 PM
2	any transit incentives geared toward transit-oriented development	Jun 13, 2011 7:14 AM
3	More Bike Paths.. this is also a low cost method of transportation	Jun 12, 2011 2:03 PM
4	Add trash cans that can't be removed	Jun 11, 2011 9:37 AM
5	Service that helps to accommodate future growth concentrated in compact, walkable communities	Jun 11, 2011 9:09 AM
6	Making sure the bus service is attractive and convenient	Jun 11, 2011 8:04 AM

Page 4, Q8. Which of the following routes do you think should be the highest priority for new or expanded bus transit services? (Please choose one answer)

1	connect Raleigh, Durham, and Chapel Hill so you can get anywhere in those cities within about an hour on public transportation.	Jun 14, 2011 10:49 AM
2	Crosstown buses in Durham that do not connect to the downtown station - grids please!	Jun 13, 2011 8:30 AM
3	These are terrible description. Increase bus transit services for everything. (Local and Express) Currently have to drive 9 miles to catch an express bus to downtown Raleigh or catch local bus to Express bus that takes almost 2 hours. Raleigh is only 23 miles away. based on current route and schedule , it does not make sense (economical/env./or time) to take an express bus that is inaccessible.	Jun 13, 2011 7:04 AM
4	Traveling to and from Brier Creek area (jobs)	Jun 11, 2011 9:39 AM

The following resolution was introduced by Alderman Gist and duly seconded by Alderman Haven-O'Donnell:

A RESOLUTION PROVIDING RECOMMENDATIONS TO THE ORANGE COUNTY BOARD OF COMMISSIONERS AND THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE ON THE PROPOSED ORANGE COUNTY TRANSIT PLAN AND SUPPORTING A NOVEMBER 2011 REFERENDUM TO INCREASE THE COUNTY SALES TAX TO IMPLEMENT THE PLAN
Resolution No. 129/2010-11

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization and Triangle Transit have proposed to construct light rail between Chapel Hill and Durham; and

WHEREAS, House Bill 148, approved in 2009, provides for funding from an increase in the county sales tax and vehicle registration fee to fund the construction of the light rail system; and

WHEREAS, House Bill 148 requires the development and adoption of a county transit plan to guide the use of additional sales tax and vehicle registration fees to construct and operate the light rail system and provide for bus services within Orange County; and

WHEREAS, the Town has worked in conjunction with Orange County, Chapel Hill, Hillsborough, the University of North Carolina at Chapel Hill, and Durham County to develop an Orange County Transit Plan which provides funding for bus services within Orange County and provides for the construction and operation of a light rail system between Chapel Hill and Durham; and

WHEREAS, House Bill 148 requires the approval of the Orange County Transit Plan by the Orange County Board of Commissioners and the Durham-Chapel Hill-Carrboro Transportation Advisory Committee; and

WHEREAS, implementation of the ½ cent sales tax increase requires approval through a county-wide referendum; and

WHEREAS, the Town has reviewed the proposed Orange County Transit Plan and believes adoption of the Plan will provide important resources to maintain and expand public transit services within Orange County;

NOW, THEREFORE, BE IT RESOLVED by the Carrboro Board of Aldermen that the Board of Aldermen endorses the proposed Orange County Transit Plan with the following recommendations:

- An inter-local agreement be developed and approved between Orange County, Carrboro, Chapel Hill, Hillsborough and the University of North Carolina at Chapel Hill.

- The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization should include a provision requiring an annual report from Triangle Transit on the status of the Plan. This assessment should include an update on the status of all elements of the Plan.

BE IT FURTHER RESOLVED that the Board of Aldermen recommends that the Orange County Commissioners place a referendum to increase the Orange County sales tax by ½ cent to fund the Orange County Transit Plan on the November 2011 ballot.

The foregoing resolution having been submitted to a vote received the following vote and was duly adopted this 24th day of May 2011;

Ayes: Dan Coleman, Sammy Slade, Mark Chilton, Joal Hall Broun, Jacquelyn Gist, Randee Haven-O'Donnell

Noes: None

Absent or Excused: Lydia Lavelle

I, Catherine C. Wilson, Town Clerk for the Town of Carrboro do hereby certify that the foregoing is a true and accurate copy of a resolution duly adopted by the Board of Aldermen of the Town of Carrboro, NC.

Catherine C. Wilson
Town Clerk

(SEAL)
TOWN OF CARRBORO
INCORPORATED
1911
NORTH CAROLINA

A RESOLUTION PROVIDING RECOMMENDATIONS TO THE ORANGE COUNTY BOARD OF COMMISSIONERS AND THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE ON THE PROPOSED ORANGE COUNTY TRANSIT PLAN.

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization and Triangle Transit have proposed to construct light rail between Chapel Hill and Durham; and

WHEREAS, N.C. House Bill 148, approved in 2009, provides for funding from an increase in the county sales tax and vehicle registration fee to fund the construction of the light rail system; and

WHEREAS, House Bill 148 requires the development and adoption of a county transit plan to guide the use of additional sales tax and vehicle registration fees to construct and operate the light rail system and provide for bus services within Orange County; and

WHEREAS, the Town has worked in conjunction with Orange County, Carrboro, Hillsborough, the University of North Carolina at Chapel Hill and Durham County to develop an Orange County Transit Plan which provides for the construction and operation of a light rail system between Chapel Hill and Durham and provides funding for bus services within Orange County; and

WHEREAS, House Bill 148 requires the approval of the Orange County Transit Plan by the Orange County Board of Commissioners and the Durham-Chapel Hill-Carrboro Transportation Advisory Committee; and

WHEREAS, implementation of the ½ cent sales tax increase requires approval through a county-wide referendum; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Town Council endorses the proposed Orange County Transit Plan with the following recommendations:

- An inter-local agreement be developed and approved between Orange County, Chapel Hill, Carrboro, Hillsborough and the University of North Carolina at Chapel Hill.

- The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization should include a provision requiring an annual report from Triangle Transit on the status of the Plan. This assessment should include an update on the status of all elements of the Plan.

This the 25th day of May, 2011.

RESOLUTION #9769

Resolution of the Durham City Council in Support of the Bus and Rail Investment Plan for Durham and Orange Counties

WHEREAS, the Durham community has been recognized for its wonderful quality of life and economic vitality on many occasions over the past decade, including Durham's recent ranking as the best mid-sized city for jobs in the US by Forbes magazine, as the #1 housing market in the US by the Wall Street Journal, as one of the top places in the world to visit in 2011 by the New York Times and the #2 "green city" for lifestyle and quality of life by Country Home magazine; and

WHEREAS, the blessings of a vibrant local economy and high quality of life have brought significant transportation challenges to Durham and the region, including a surge in population growth that will add over one million new residents to our regional population of 1.5 million in the next 30 years, a 23% increase in commute times in the last decade, worsening traffic congestion on the area's major roads and streets, and difficulty in meeting air quality standards, with the most recent indication of the challenges being a study cited in Forbes magazine on May 10, 2011 which found that the Triangle region was the urban region in the US that suffered the most from rising gasoline prices; and

WHEREAS, over four years ago the region's two Transportation Advisory Committee's saw a need to strengthen mobility and transit options and named a blue ribbon group of citizens to address our transportation challenges and recommend bus and rail investments needed over the next 25 years; and

WHEREAS, that appointed citizens group (the STAC or Special Transit Advisory Commission) unanimously made recommendations that were formally adopted into the region's long-range transportation plan in 2009; and

WHEREAS, the North Carolina General Assembly enacted the Intermodal Transportation Fund Act in 2009 which allows Durham, Orange and Wake counties to hold referendums of their voters on adoption of an ½ cent sales tax for public transportation improvements; and

WHEREAS, local elected officials and their staffs in both Durham and Orange have prepared a detailed plan for needed bus and rail transportation improvements in their respective counties over the next quarter century that will provide substantial transportation, economic, environmental and quality of life benefits for their citizens.

NOW THEREFORE, BE IT RESOLVED by the Durham City Council that they have reviewed the Bus and Rail Investment Plan presented to them and by this Resolution do support and recommend its adoption to the Durham Board of County Commissioners and recommend that if the Durham

Board of County Commissioners holds a referendum and the referendum passes, that the Durham Board of County Commissioners not implement the ½ cent sales tax or motor vehicle tax until a similar referendum is passed by the voters in either Orange or Wake Counties or both Orange and Wake Counties.

APPROVED BY
CITY COUNCIL
JUN 6 2011
CITY CLERK

The DRAFT Durham County Bus and Rail Investment Plan

6/16/2011

The Draft Durham County Bus and Rail Investment Plan

The Draft Durham Bus and Rail Investment Plan

I. INTRODUCTION

The Durham community has achieved an enviable quality of life at the end of the first decade of the 21st century. Recent accolades include its ranking as the best mid-sized city for jobs in the US by *Forbes* magazine, as the #1 housing market in the US by the *Wall Street Journal*, as one of the top places in the world to visit in 2011 by the *New York Times* and the #2 "green city" for lifestyle and quality of life by *Country Home* magazine.

The Triangle region has also enjoyed a diverse, growing economy and attractive quality of life for a number of years, topping many best places to live and best places to work lists. With these successes has come a surging growth in population and demand upon our roads and highways. Since 2004, the Triangle has moved from 46th largest metro area to 40th in the US for 2009, and our vehicle demand on freeways is up by 28% over those five years. Recently, our region was named the 3rd most sprawling urban area in the country among the 83 areas studied.

In its 2009 long-range (2035) report, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) noted that the region's population would more than double over the 25-year period. For the last two decades, the demand on our roads has grown significantly faster than our population. Even with planned highway improvements and likely additional revenues for new roads, it is clear that Durham and the region will see declining levels of service on major roads in the next 25 years.

The economic costs for our increasingly congested roads are significant. In its 2010 Mobility report, the Texas Transportation Institute estimated that our region has "congestion costs" of almost one-half billion dollars a year. A May 10, 2011 study cited in Forbes magazine found that the Triangle region was ranked "America's Biggest Gas Guzzler." Finally, it will be difficult to impossible for many of Durham's low to moderate income families to afford to get to new jobs and take advantage of the region's prosperity unless enhanced transportation options are created.

Durham residents and its regional neighbors are aware of the growth in clogged roads, as well as the accompanying air quality problems, negative economic impacts and the loss of the quality of life we enjoy if these transportation challenges are not met. Local citizens and elected leaders have responded to these challenges, with some assistance from state government, as described below.

II. TRANSIT PLANNING STEPS LEADING UP TO THIS PLAN

In 2008, a blue-ribbon group of Triangle leaders (the Special Transit Advisory Commission, or STAC) began meeting. In May 2009 the STAC unanimously recommended a regional vision for bus and rail investments. One year later, the region's two MPO's fully incorporated the STAC recommendations into their long-range (25 year) transportation plan.

In August 2009, Governor Beverly Perdue signed into law the Congestion Relief and Intermodal Transport Fund Act (HB 148), legislation that allows Durham, Orange and Wake counties to generate new revenues for public transportation. These new revenues can include a one-half cent sales tax, if approved by the public through a referendum, and an additional $10 in local and regional vehicle registration fees.

Over the last 18 months, Triangle Transit staff have worked with Durham, Durham County, the MPO and other regional transportation staff to develop a detailed, 25-year plan for new bus and rail investments designed to provide greater transportation options for residents and employers. This option would positively impact traffic congestion and air quality while supporting local land use policies. This plan is the culmination of that work and represents crucial public investments and services designed to maintain our quality of life and economic vitality in the next 25 years.

Extensive public engagement has occurred over the past year in the development of the bus and rail elements of this plan. Triangle Transit and local transportation staff members from the city, county and MPO conducted a series of 19 public workshops, at various locations throughout the Triangle, on the process and substance of the plan's development. A total of over 1,100 participants attended the meetings and provided over 500 comments on the plan. The project web site, www.ourtransitfuture.com, was viewed by over 31,000 individuals with 1.4 million page hits. The web site houses all of the presentation materials and proposed plan elements.

There have been dozens of meetings with citizens, local elected officials, staff and members of the region's MPO's, community stakeholders and business leaders to have feedback on the proposed bus and rail elements. The financial and service elements of this plan are coordinated with the corresponding Orange County Bus and Rail Investment Plan. Additionally, this bus and rail investment plan builds on existing transit services and does not eliminate current financial and service commitments.

III. PLAN ELEMENTS

A. New Bus Service

The major goals of the new and strengthened bus service in Durham County would include:

- connect more residents with job opportunities in Durham and the region
- connect more residents with post-secondary and vocational educational opportunities
- expand bus capacity in corridors with high current bus ridership
- provide better regional connections to other cities and the RDU Airport

Over the 23 year life of the plan, a total of 77,000 additional bus hours in Durham County would be added (50,000 in the first three years, 27,000 over the 20 years). Today, DATA provides 177,000 annual bus hours. This 44% increase in bus service will provide service benefits to all areas of the county as detailed below and illustrated in the map in Section IV.

Over the first three years following a successful sales tax referendum, the following transit improvements will be made:

First 12-18 months following successful Sales Tax referendum

- Connecting more residents with jobs
  - New service from southwest Durham to Duke and VA Medical Centers
  - More frequent service to jobs at retail centers including Brier Creek, Northgate Mall, Southpoint Mall, The Village, and the vicinity of NC 54 and NC 55
  - New services from rural Durham County, Mebane and Hillsborough to Duke and VA Medical Centers
  - More dial-a-ride trips from rural Durham County to jobs throughout the county
- Connecting more residents with post-secondary and vocational educational opportunities
  - More dial-a-ride trips from rural Durham County to Durham Tech and job training opportunities
  - More frequent service to North Carolina Central University and Durham Tech
- Expanding bus capacity in corridors with high current bus ridership (15 minute frequency during peak hours)
  - Holloway Street/Liberty Street Corridor
  - North Roxboro Street
  - Chapel Hill-Durham Boulevard (US 15-501)
  - Fayetteville Street
  - West Chapel Hill Street
- Providing better regional connections to other cities and the RDU International Airport
  - Later Saturday Service between Downtown Durham and Downtown Chapel Hill; between Downtown Durham, RTP, and Raleigh; and, between Chapel Hill, southern Durham, RTP, and Raleigh
  - Sunday Service between Downtown Durham and Downtown Chapel Hill; between Downtown Durham, RTP, and Raleigh; and, between Chapel Hill, southern Durham, RTP, and Raleigh
  - Seven day per week service to RDU Airport

- More frequent express trips between Durham and Raleigh
- More frequent service between Chapel Hill, southern Durham, and RTP

Over the remaining 20 years of the transit investment plan, it is estimated that the sales tax will raise enough revenue to fund an additional 32,000 bus hours of service per year that will be phased in over the life of the plan. The resources will be used to continue to meet the plan's four goals as jobs and residences shift. When light rail and commuter rail services begin operation in later years of the plan, bus services will be shifted to avoid service duplication and to connect people with the rail stations.

Small Capital Projects

An estimated $15 million in small capital projects supporting the Durham County bus network are also included in the Durham County Bus and Rail Investment Plan. The projects should be completed in the first three to five years. They include:

- Park-and-Ride lots in northern Durham County and various other locations of the city
- Four new neighborhood transit centers
- Three transit emphasis corridors (sidewalks, shelters, and transit signal priority)
- Pedestrian accessibility and amenities improvements at the 200 most-used bus stops

Please see spreadsheet at the end of the document for more specific information.

B. New Light Rail Service

The Durham County Bus and Rail Investment plan provides funding for a fixed guideway transit system that serves Durham and Orange Counties using Light Rail technology (LRT). The 17-mile alignment extends from the University of North Carolina (UNC) Hospitals to Alston Avenue in East Durham. A total of 17 stations have been proposed including a station next to the Dean Smith Center, the Friday Center, as well as a potential station at Meadowmont in Chapel Hill. Stations in Durham include Patterson Place along US 15-501, the South Square area, at Duke Medical Center and VA Medical Hospital, Ninth Street and downtown Durham, with convenient access to nearby bus and Amtrak intercity rail connections. Light Rail service characteristics and the type of activity centers and neighborhoods being served along the corridor dictate light rail station spacing of between ¼ mile and 2 miles.

Light Rail vehicles are electrically powered and travel at speeds up to 55 mph. The total, end-to-end, travel time for the 17-mile alignment is about 35 minutes including stops. The vehicles are approximately 90 feet long, can operate in both directions, and can be coupled with additional cars as ridership demand increases. Initial 2035 projections indicate that ridership will exceed 12,000 boardings per day. As with all long range projections, this estimate is subject to change as the ridership forecasting model is refined and validated.

Light rail vehicles can operate in exclusive right of way, as well as along urban streets, and characteristically serve accessible low platform (14 inches high) stations. The operations plan for the 17-mile alignment includes train frequencies (headways) of every 10 minutes during the morning and evening peak and 20 minutes during the off-peak hours and on weekends. Fifteen vehicles will be required to operate the system based on an 18 hour schedule each weekday. Several potential light rail vehicle maintenance facility locations are being evaluated and are also included in the financial plan. Detailed alignment and station location decisions will occur in the future at the preliminary engineering and final design stages, within 1-4 years after a successful referendum.

Durham County's share of capital cost for the Durham and Orange Light Rail Project is approximately $1, 050 billion (2011 dollars). The total cost for the project is $1.4 billion ($2011). Durham County's share of operations and maintenance costs are estimated at $11.3 million/year (2011 dollars). Total operations and maintenance cost are estimated at $15 million/year.

C. New Commuter Rail Service

The Durham County Bus and Rail Investment Plan provides funding for a transit system that serves Durham and Wake County using Commuter Rail technology (CRT). The 37-mile alignment extends from West Durham to Greenfield Parkway in Garner via Durham, the Research Triangle Park, Morrisville, Cary, Raleigh, and Garner. A total of 12 stations have been proposed, including locations with major bus and Amtrak intercity rail connections available in downtown Durham, downtown Cary, and downtown Raleigh. Due to the vehicle's performance capabilities, length of the corridor, and the needs of activity centers being served, station spacing is typically between 2 miles and 10 miles for commuter rail systems..

Commuter Rail vehicles are pulled by diesel powered locomotives and travel at speeds up to 79 mph. Total, end-to-end, travel time for the 37-mile alignment is about 51 minutes including stops. The train would include a locomotive and multiple coach cars, sized according to anticipated ridership. Initial 2035 projections indicate ridership will exceed 7,000 boardings per day. This estimate is subject to change as the ridership forecsting model is refined and validated.

Commuter rail vehicles must remain in the railroad corridor (i.e. no street running). The operations plan for the alignment assumes the use of existing freight tracks where possible. In some instances, a second track will be constructed to enhance the capacity of the corridor to allow for continued increases in demand for both passenger and freight traffic in the corridor. Commuter Rail operation is recognized as an inter-urban service and operates on 20 to 30 minute train frequencies (headways), primarily during the morning and evening peak periods, with the opportunity for some limited off-peak service The service is primarily oriented towards the work-week and peak-period commuting to major employment centers. Weekend service will be considered based upon future

ridership demand. Fifteen vehicles and a rail maintenance facility are also included in the plan.

Durham County's share of the capital cost for the Commuter Rail Project would be $300 million ($2011). The total capital cost for the Commuter Rail project is approximately $645 million (2011). Durham County's annual operating and maintenance costs are estimated at $2.57 million/year ($2011). Total Operations and Maintenance costs are estimated at $11 million/year (2011).

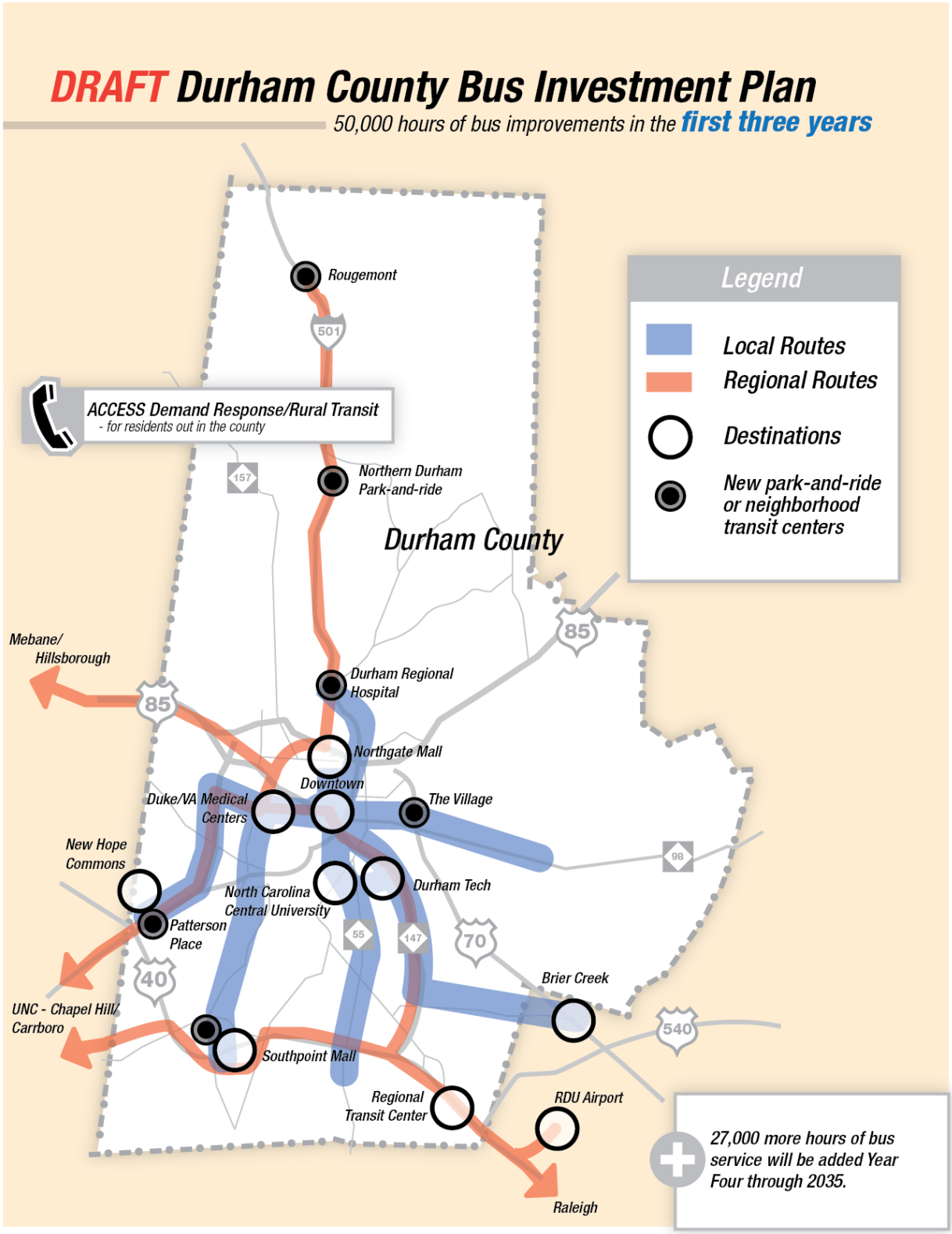
IV. Maps

Below you will find three maps.

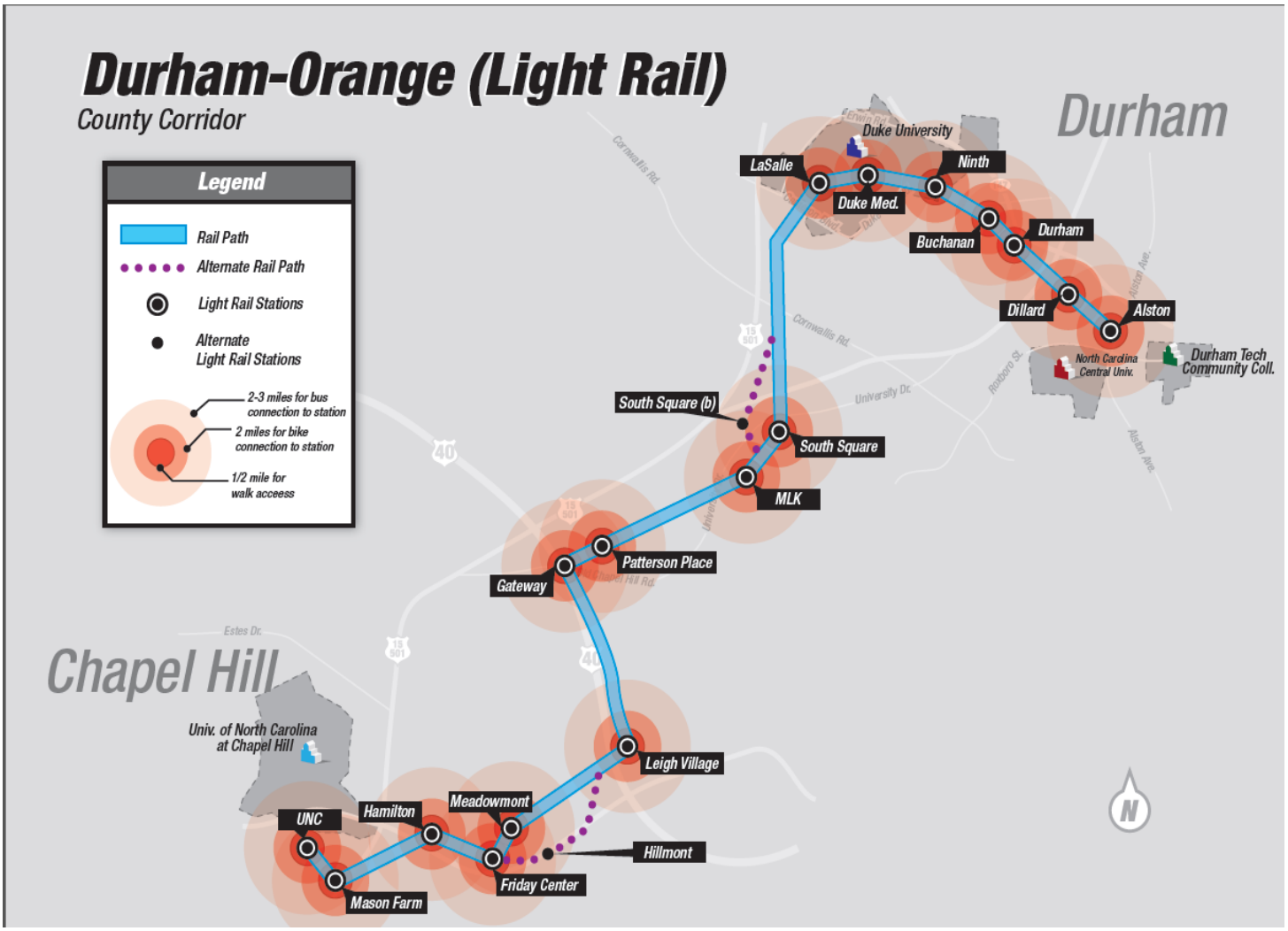
The first map (page 9) is a conceptual representation of where frequent local and regional bus service will be put into operation in the first three years following the implementation of this plan.

The second map (page 10) shows the Light Rail alignment from Downtown Durham to Chapel Hill.

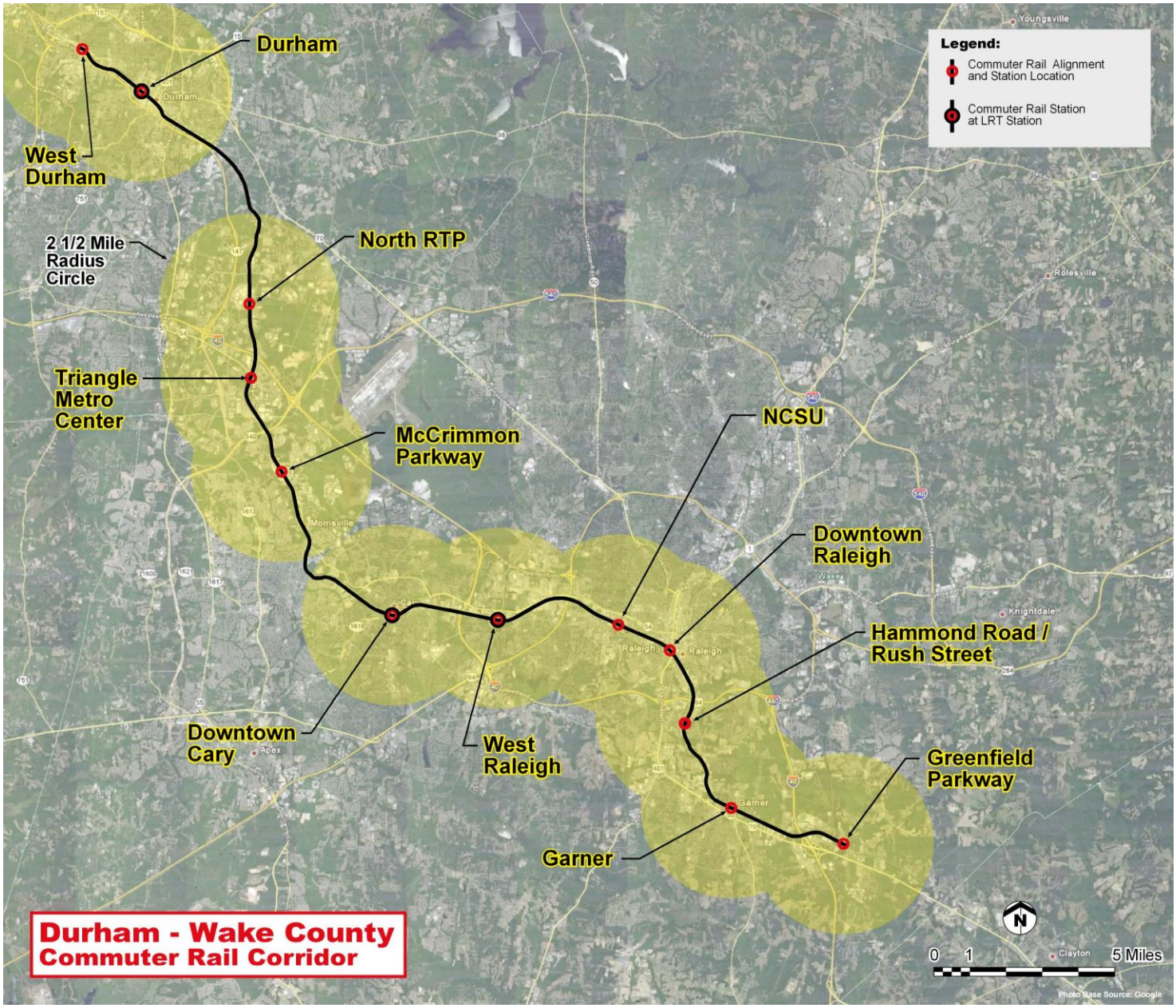
The third map (page 11) shows the Commuter Rail alignment from West Durham to Raleigh and Eastern Wake County.


DRAFT Durham County Bus Investment Plan
50,000 hours of bus improvements in the first three years
Legend
Local Routes
Regional Routes
Destinations
New park-and-ride or neighborhood transit centers
ACCESS Demand Response/Rural Transit
- for residents out in the county
Rougemont
Northern Durham Park-and-ride
Durham County
Mebane/ Hillsborough
Durham Regional Hospital
Northgate Mall
Downtown
Duke/VA Medical Centers
The Village
New Hope Commons
North Carolina Central University
Durham Tech
Patterson Place
UNC - Chapel Hill/ Carrboro
Southpoint Mall
Brier Creek
Regional Transit Center
RDU Airport
Raleigh
27,000 more hours of bus service will be added Year Four through 2035.
501
157
85
98
55
147
70
40
540

DRAFT Durham-Orange Light Rail Plan



DRAFT Durham-Wake Commuter Rail Plan



V. DURHAM COUNTY REVENUES

A variety of revenue sources provide the funding for the Durham County Bus and Rail Investment Plan. Those revenues include:

- A new one-half-cent sales tax in Durham County (referendum required)
- A new $7 vehicle registration fee levied by Durham County
- An increase of $3 to the existing $5 vehicle registration fee currently levied by Triangle Transit in Durham County
- Revenue from Triangle Transit's rental car tax
- NC State Government contributions to funding
- Federal Government contributions to funding
- Passenger Revenue

Further details for each revenue source follow below.

A. Initial Proceeds Assumptions for Local Revenue

The initial annual projections for each local revenue stream for Durham County (see prior section V) in 2012 for transit are as follows:

- One-half cent sales tax: $18.4 million
- $7 vehicle registration fee: $1.58 million
- $3 vehicle registration fee increase: $677,000
- Rental Car Tax revenue (Durham): $1.0 million

B. Growth Rates Assumed for Each Revenue Source

- ½-cent sales tax:
  - Growth Rate from 2011 through 2014: 1.5%
  - Growth Rate from 2015 through 2035: 3.5%
- $7 vehicle registration fee: 2.0%
- $3 vehicle registration fee increase: 2.0%
- Rental Car Tax revenue: 4.0%

C. One-half cent sales tax in Durham County

A one-half cent sales tax in Durham County means that when individuals spend $10.00 on certain goods and services, an additional five cents ($0.05) is added to the transaction to

support the development of the Bus and Rail Investment Plan. Purchases of food, gasoline, medicine, health care and housing generally are excluded from the tax.

A one-half cent sales tax in Durham County is estimated to generate $17.3 million. Over the life of the plan to 2035, the sales tax is expected to generate $625 million in Year-Of-Expenditure (YOE) dollars. Implementation of the Plan as described above is subject to authorization of a referendum by the Durham Board of County Commissioners and approval by the voters.

D. $7 Vehicle Registration Fee in Durham County

A seven dollar ($7) vehicle registration fee in Durham County means that when an individual registers a new vehicle or renews the registration for an existing vehicle in Durham County, an additional $7 per year is added to the cost above the other required registration fees for that vehicle.

The seven dollar fee in Durham County is expected to bring in $1.58 million in 2012. Over the life of the plan to 2035, the seven dollar fee is expected to generate $58.1 million in Year-Of-Expenditure (YOE) dollars.

E. $3 Vehicle Registration Fee Increase in Durham County

A three dollar ($3) vehicle registration fee increase in Durham County means that when an individual registers a new vehicle or renews the registration for an existing vehicle in Durham County, an additional $3 per year is added to the cost above the other required registration fees for that vehicle. An existing $5 fee for vehicle registration supports activities of Triangle Transit, including bus operations and long-term planning. This fee would increase to $8 after the $3 increase is implemented.

The three dollar fee in Durham County is projected to generate $677,000 in 2012. Over the life of the plan to 2035, the three dollar fee is expected to generate $24.9 million in Year-Of-Expenditure (YOE) dollars.

F. Revenue from Triangle Transit's Rental Car Tax

Triangle Transit operations are partially funded by a five percent (5%) tax on car rentals in Wake, Durham, and Orange Counties. Under existing policy adopted by the TTA Board, 50% of the~~se~~ rental revenues are dedicated to advancing long-range bus and rail transit.

Since a significant portion of all cars rented and driven in the three counties are rented at RDU International Airport, it is difficult to determine which rentals are driven primarily in one county or another. Therefore, the 50% rental revenues dedicated to long-term transit were allocated by county according to the percentage of population in the Triangle Region, which is: Wake (68%); Durham (21.5%); Orange (10.5%).

The Triangle Transit rental car tax proceeds directed to Durham County is estimated at $1.0 million in 2012. Over the life of the plan to 2035, the rental car tax is expected to generate $36 million in Year-Of-Expenditure (YOE) dollars for Durham County.

G. NC State Government Funding

The plan includes a 25% capital cost contribution by the NC Department of Transportation (NCDOT) for both light rail and commuter rail projects in Durham County. This level of participation was established by the State in its participation in the Charlotte Blue Line light rail project in 2003. The plan assumes that NCDOT also pays for 10% of bus capital costs (replacement buses, new buses, park and ride lots, etc) consistent with its current practices. Based on these precedents, NCDOT assumed contributions to the plan total $465 million in YOE dollars from 2012 through 2035.

H. Federal Government Funding

The plan projects that the US Government will contribute 50% of the capital cost for both the light rail and commuter rail projects in Durham County. This was the federal level of participation in the Charlotte Blue Line light rail project and is consistent with federal funding outcomes for most rail projects in the Federal Transit Administration's New Starts program in recent years.

The plan assumes that the Federal Government also pays for 80% of bus capital costs, consistent with its current practices, and continues to provide operating appropriations consistent with present FTA operating grant formulas. Federal Government contributions to the plan are projected to be $926 million in YOE dollars from 2012 through 2035.

VI. DURHAM FINANCIAL PLAN DATA

The following is a list of the total spending for each technology and category identified in the Durham County Bus and Rail Investment Plan.

- Rail Capital: $1,669 million ($1350 million in 2011 dollars)
- Rail Ops: $283 million
- Bus Capital: $47 million
- Bus Ops: $151 million
- Debt: $136 million

VII. IMPLEMENTATION AGREEMENT: ANNUAL REVIEW AND CHANGES TO THE PLAN

The Durham County Bus and Rail Investment Plan details the specific elements of local and regional bus service, LRT and commuter rail service to be added in Durham County over a twenty-three year period. Because of the long time frame for implementation of the Plan and its major capital projects, over time there will need to be changes and revisions made to the Plan. As the statutory implementation agency, Triangle Transit will

work with Durham County, the DCHC Metropolitan Planning Organization (MPO), and the City of Durham, the public transit provider in Durham County to develop and execute an Implementation agreement which details the following aspects of implementation of the Plan:

(a) Annual review presentations of the activities and progress made in implementation of the Plan by Triangle Transit to the County and the MPO;
(b) The process for review and vote by the County, the MPO and Triangle Transit's Board of Trustees on any significant or substantial revisions to the Plan required by changes experienced in revenues received, capital costs, operating expenses, or other substantial issues affecting the Plan;
(c) Responsibility of Triangle Transit for direct disbursement of funds from the revenues received per Section V (above) to the public agency responsible for implementing the bus services set forth in the Plan; and
(d) Other necessary provisions regarding implementation of this Plan as agreed to by the County, the MPO, and Triangle Transit.

VIII. CLOSING SUMMARY

The Durham County Bus and Rail Investment Plan is the result of years of collaborative work by local elected leaders, regional stakeholders, municipal and county staff and Triangle Transit. The plan consists of a balance of bus improvements and rail investment to help accommodate the intense population growth that the region is expected to experience in the next 25 years.

The proposed plan addresses the ongoing need to provide greater choice to transit riders with improved and expanded bus and rail connections. Once implemented, the residents of Durham County will be able to have greater access to jobs, shopping, and activity centers such as downtown Durham, the Universities, the Research Triangle Park, and the Raleigh-Durham International Airport.

Additionally, the plan will provide core infrastructure investment that will help support the goals and objectives of Durham's local land use plans. In particular, as evidence in communities across the country, investment in light rail has proven to be a great motivator for private companies to build transit-oriented development (TOD) at station locations along the rail corridor. This kind of more intense development generally consists of a mixed-use, walkable environment that can allow a more sustainable alternative to the suburban growth pattern that exists today, without paralyzing the suburban options.

All of the elements listed in the Draft Durham County Bus and Rail Investment Plan are fiscally constrained. At every turn, the Plan has been conservative in revenue assumptions and through added contingencies for capital and operating expenditures.

The draft plan will be shared with the general public, Durham City Council, the DCHC MPO and the Durham County Commission. The draft plan will be considered for approval by the DCHC MPO, the Triangle Transit Board of Trustees, and the Durham County

Commission. The Durham County Commission will determine when to set a referendum date. Once a voter referendum passes, work can begin on implementation of the Bus and Rail Investment Plan.

Durham County Bus Transit Plan -- Annual Operating and Maintenance Costs

Complements Express rail to TMC and Light Rail to Leigh Village

Highest Priority Recommendations

	Service Type (Responsible Party)	Projects	Enhanced or New?	Total New Hours	Annual Operating Cost	Annual New Bus Hours Cumulative
YEARS 1 THROUGH 3					**$4,290,000**	**50,000**
	Local (City of Durham)	Brier Creek-Downtown (Route 15)	Enhanced	3,800	$320,000	3,800
	Local (City of Durham)	Southern High-Liberty Street-Downtown (Route 16)	Enhanced	3,000	$260,000	6,800
	Local (City of Durham)	NC 54/NC 55-Downtown (Route 12)	Enhanced	3,000	$260,000	9,800
	Regional (Triangle Transit)	Carrboro-Chapel Hill-Durham Boulevard Express (Route 405) - 15 minute service during peak hours	Enhanced	1,500	$130,000	11,300
	Local (City of Durham)	New Hope Commons-Downtown via Duke	New	3,400	$290,000	14,700
	Local (City of Durham)	Northgate Mall-Downtown (Route 1) - peak only	Enhanced	1,500	$130,000	16,200
	Local (City of Durham)	The Village-Holloway Street-Downtown (Route 3) - peak only	Enhanced	1,500	$130,000	17,700
	Regional (Triangle Transit)	Chapel Hill-Durham Express (Route 405) - extend Saturday hours to 11pm	Enhanced	200	$20,000	17,900
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - extend Saturday hours to 11pm	Enhanced	200	$20,000	18,100
	Regional (Triangle Transit)	Durham-Regional Transit Center-RDU (Route 700/100) - extend Saturday hours to 11pm	Enhanced	200	$20,000	18,300
	Regional (Triangle Transit)	Carrboro-Chapel Hill-Durham Express (Route 405) - Sundays	Enhanced	600	$50,000	18,900
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Sundays	Enhanced	600	$50,000	19,500
	Regional (Triangle Transit)	Durham-Regional Transit Center-RDU (Route 700/100) - Sundays	Enhanced	600	$50,000	20,100
	Rural (Durham County)	Durham County Dial-A-Ride	Enhanced	1,200	$100,000	21,300
	Local (City of Durham)	Southpoint Mall-Duke/VA Medical Centers Express	New	8,000	$680,000	29,300
	Local (City of Durham)	Durham Regional-North Roxboro Street-Downtown (Route 4)	Enhanced	3,000	$260,000	32,300
	Regional Express (Triangle Transit)	Durham-Raleigh Express (Route DRX) 30 minute service during peak hours	Enhanced	800	$70,000	33,100
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) 15 minute service during peak hours	Enhanced	1,500	$130,000	34,600
	Regional Express (Triangle Transit)	Mebane-Hillsborough-Duke/VA Medical Centers Express	New	1,600	$140,000	36,200
	Regional Express (Triangle Transit)	Rougemont-Duke/VA Medical Centers Express	New	3,300	$280,000	39,500
	Rural (Durham County)	Durham County Dial-A-Ride	Enhanced	1,200	$100,000	40,700
	Local (City of Durham)	NCCU-Fayetteville Street-Downtown (Route 5)	Enhanced	1,500	$130,000	42,200
	Local (City of Durham)	Durham Tech-Downtown (Route 8)	Enhanced	1,500	$130,000	43,700
	Local (City of Durham)	American Village-Duke-West Chapel Hill Street-Downtown (Route 6)	Enhanced	1,500	$130,000	45,200
	Local (City of Durham)	East Durham-Downtown (Route 2)	Enhanced	1,500	$127,500	47,000
	Regional (Triangle Transit)	Durham-Regional Transit Center (Route 700) 15 minute service during peak hours	Enhanced	3,300	$280,500	**50,000**
BY 2035		**Local and Rural Bus Service Improvements**			**$4,590,000**	**54,000**
		Regional Bus Service Improvements			**$1,955,000**	**23,000**
		Total Bus Service Improvements			**$6,545,000**	**77,000**

Note: Cost per hour is assumed to be $85.

Durham County Bus Transit Plan -- Small Capital Costs (excluding buses)

Complements Express rail to TMC and Light Rail to Leigh Village

Highest Priority Recommendations

CAPITAL PROJECTS	RELATED OPERATING PROJECT	Unit Cost		Quantity	Est. Cost
Park-and-Ride lot in northern Durham County	Rougemont-Duke-Downtown Express	$350,000	per lot	1	$350,000
Park-and-Ride lot near Durham Regional Hospital	Rougemont-Duke-Downtown Express AND Durham Regional-Duke Medical Hospital Connector	$350,000	per lot	2	$700,000
Park-and-Ride lots at Patterson Place and/or South Square	Chapel Hill-Durham Express (Route 405) - peak only AND New Hope Commons-Downtown via Duke				Associated with Light Rail Project
Park-and-Ride near Southpoint Mall	Southpoint-Duke Connector AND Chapel Hill-Regional Transit Center via Southpoint (Route 800) - peak only	$350,000	per lot	2	$700,000
Park-and-Ride near Woodcroft Shopping Center	Chapel Hill-Regional Transit Center via Woodcroft (Route 805)	$350,000	per lot	1	$350,000
Transit Emphasis Corridor (Holloway St between The Village and Alston Ave)	The Village-Downtown (Route 3) - peak only	$530,000	per mile	2	$1,060,000
Transit Emphasis Corridor (Roxboro Rd between I-85 and Durham Regional Hospital)	Durham Regional-Downtown (Route 4)	$530,000	per mile	3	$1,590,000
Transit Emphasis Corridor (Fayetteville St between Lakewood and Cornwallis)	NCCU-Downtown (Route 5)	$530,000	per mile	4	$2,120,000
Neighborhood Transit Center (Northern Durham)	Durham Regional-Downtown (Route 4)	$220,000	per bay	3	$660,000
Neighborhood Transit Center (The Village)	The Village-Downtown (Route 3) - peak only AND Southern High-Downtown (Route 16)	$220,000	per bay	3	$660,000
Neighborhood Transit Center (Southern Durham)	Southpoint-Duke Connector AND Chapel Hill-Regional Transit Center via Southpoint (Route 800)	$220,000	per bay	3	$660,000
Neighborhood Transit Center (I-40/US 15-501)	Chapel Hill-Durham Express (Route 405) AND New Hope Commons-Downtown via Duke	$220,000	per bay	2	$440,000
Pedestrian Accessibility / Amenities Improvements	Top 200 Boarding Locations	$10,000	Per stop	200	$2,000,000
				Subtotal	$11,300,000
Contingency		30%			$3,400,000
				Total	$15,000,000

The DRAFT Bus and Rail Investment Plan in Orange County

The concept of the Bus and Rail Investment Plan for Orange County was supported through resolutions approved by the Chapel Hill Town Council (Resolution # 2011-05-25/R1), the Carrboro Board of Aldermen (Resolution #129/2010-11) and via letter from the University of North Carolina at Chapel Hill.

The DRAFT document provided for public input by the DCHC has not been reviewed by the Town of Chapel Hill, the Town of Carrboro, or The University of North Carolina at Chapel Hill either individually or together as the Chapel Hill Transit Public Transit Committee.
DCHC and Triangle Transit do not make representation that these bodies support this detailed document.

5/26/2011

The Orange County Bus and Rail Investment Plan

The Orange County Bus and Rail Investment Plan

I. INTRODUCTION

Orange County has achieved an enviable quality of life at the end of the first decade of the 21st century. Recent accolades include its ranking as the best place to live in the South by *Money* magazine, the #1 housing market in the US by the *Wall Street Journal* and one of the best places in the nation to raise children by *Business Week* magazine. The Chapel Hill-Carrboro City School System is one of the best in the nation, consistently ranking at the top of the state in student test score and boasting the lowest dropout rate in the state. The University of North Carolina at Chapel Hill consistently ranks among the great institutions of higher education in the nation, most recently honored by *US News & World Report*.

But, with these successes has come a surging growth in population and demand upon our roads and highways. Since 2004, the Triangle has moved from 46th largest metro area to 40th in the US for 2009, and our vehicle demand on freeways is up by 28% over those five years. Recently, our region was named the 3rd most sprawling urban area in the country among the 83 areas studied.

In its 2009 long-range (2035) report, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) noted that the region's population would more than double over the 25-year period. For the last two decades, the demand on our roads has grown significantly faster than our population. Even with planned highway improvements and likely additional revenues for new roads, it is clear that Orange County and the region will see declining levels of service on major roads in the next 25 years.

The economic costs for our increasingly congested roads are significant. In its 2010 Annual Urban Mobility Report, the Texas Transportation Institute estimated that our region has "congestion costs" of almost one-half billion dollars a year. Recently, a May 10, 2011 study cited in Forbes magazine found that the Triangle was the urban region in the nation that is most vulnerable to rising gasoline prices. Finally, it will be difficult to impossible for many of Orange County's low to moderate income families to afford to get to new jobs and take advantage of the region's prosperity unless enhanced transportation options are created.

Orange County residents and its regional neighbors are aware of the growth in clogged roads, as well as the accompanying air quality problems, negative economic impacts and the loss of the quality of life we enjoy if these transportation challenges are not met. Local citizens and elected leaders have responded to these challenges, with some assistance from state government, as described in this investment plan.

II. TRANSIT PLANNING STEPS LEADING UP TO THIS PLAN

Beginning in 2007, a blue-ribbon group of Triangle leaders (the Special Transit Advisory Commission, or STAC) met for over a year and in 2008 unanimously recommended a regional vision for bus and rail investments. One year later, the region's two MPOs fully incorporated the STAC recommendations into their long-range (25 year) transportation plan.

In August 2009, Governor Beverly Perdue signed into law the Congestion Relief and Intermodal Transport Fund Act (HB 148), legislation that allows Orange, Durham and Wake counties to generate new revenues for public transportation. These new revenues can include a one-half cent sales tax, if approved by the public through a referendum, as well as an additional $10 in local and regional vehicle registration fees.

Over the last 18 months, Triangle Transit staff have worked with municipal, Orange County, MPO and other regional transportation staff to develop a detailed, 25-year plan for new bus and rail investments designed to provide greater transportation options for residents and employers. These investments would positively impact traffic congestion and poor air quality, and support local land use policies. This plan is the culmination of that collaboration and purposes crucial public investments and services to maintain our quality of life and economic vitality in the next 25 years.

Extensive public engagement has occurred over the past year in the development of the bus and rail elements of this plan. Triangle Transit and local transportation staff members from municipalities, counties and MPOs conducted a series of 19 public workshops, at various locations throughout the Triangle, on the process and substance of the plan's development. A total of over 1,100 participants attended the meetings and they provided over 500 comments on the plan. The project web site, www.ourtransitfuture.com, was viewed by over 31,000 unique individuals with 1.4 million page hits. The web site houses all of the presentation materials and proposed plan elements.

There have been dozens of meetings with citizens, local elected officials, staff and members of the region's MPOs, community stakeholders and business leaders, allowing extensive feedback on the proposed bus and rail elements of the plan. The financial and service elements of this plan are coordinated with the corresponding Durham County Bus and Rail Investment Plan. Additionally, this bus and rail investment plan builds on the existing transit services and therefore does not eliminate or reduce the current financial and service commitments.

III. PLAN ELEMENTS

A. Public Transit Providers

The Triangle has a number of public transit providers who have been involved in the development of this plan and will have responsibility to implement the recommendations of the plan once it is approved. Below is a brief description of the transit agencies:

Triangle Transit is a regional transit agency serving Wake, Durham and Orange counties. Triangle Transit is responsible for the provision of regional commuter express and demand response service connecting Wake, Durham and Orange counties

Chapel Hill Transit is a multijurisdictional agency formed by a partnership of the Towns of Chapel Hill, Carrboro and the University of North Carolina at Chapel Hill. Chapel Hill Transit is responsible for regular and express route and demand response service in the Chapel Hill, Carrboro, and University area. Chapel Hill Transit also provides regional express bus service, in cooperation with Triangle Transit to Hillsborough.

Orange County Public Transit is a county agency that provides demand response service in unincorporated Orange County and operates local service in Hillsborough in cooperation with the Town of Hillsborough.

B. New Bus Service

Representatives from Orange County, Chapel Hill, Carrboro, Hillsborough, The University of North Carolina at Chapel Hill, and Triangle Transit have worked collaboratively to develop a comprehensive bus service improvement plan that supports the effort to improve public transit in Orange County. The group identified a range of services that would address county-wide transit service needs. Identified services were ranked and prioritized based on a set of goals and strategies.

Goals include:

- Improve mobility in the region
- Provide geographic equity
- Support improved capital facilities
- Support transit supportive land use
- Provide positive impact on air quality.

Strategies to accomplish these goals include:

- Improve connectivity
- Increase frequency in peak hours
- Improve weekend, night services (off peak)
- Fill in gaps in existing service

- Maintain existing services.

Over the course of the plan, a new half-cent sales tax would enable delivery of a total of 50,000 additional bus hours in Orange County. By comparison, Chapel Hill Transit currently provides 190,000 annual bus hours and Orange Public Transportation provides 3,525 annual bus hours. The projects will provide benefits to all areas of the county by enhancing urban and rural transit services.

Bus improvement projects were classified by type of service:

- Local bus service - service operating within Orange County boundaries
- Regional bus service - service operating in more than one county
- Regional express service - over the road coaches operating in more than one county

First Three Years following successful sales tax referendum

An investment that equals about 44,000 bus service hours will be provided during the first three years. Improvements include:

- Improve connectivity
    - New regional express service connecting Mebane, Hillsborough and Durham.
- Increase frequency in peak hours
    - Enhanced services in the US 15/501 corridor between Durham and Chapel Hill for Chapel Hill Transit, Triangle Transit, and DATA.
    - Improvements in the NC 54 corridor transit service.
    - Increased peak hour service on the existing Triangle Transit Route 405 between Chapel Hill and Durham.
    - Increased peak hour service on the in-town Hillsborough circulator.
    - Increased peak hour service on Triangle Transit Route 800 between Research Triangle Park and Chapel Hill and Triangle Transit Route 420 between Hillsborough and Chapel Hill.
- Improve weekend, night services (off peak)
    - New Saturday service on the in-town Hillsborough circulator.
    - Expanded local Saturday service in Chapel Hill, Carrboro and UNC.
    - Expanded regional Saturday service on existing Triangle Transit Route 405 between Durham and Chapel Hill and Triangle Transit Route 800 between Chapel Hill and the Research Triangle Park.
    - New local Sunday service in Chapel Hill, Carrboro and UNC.
    - Expanded local evening service in Chapel Hill, Carrboro and UNC.
- Fill in gaps in existing service
    - Enhanced rural transit service in unincorporated Orange County.
- Maintain existing services.
    - A portion of revenues generated by the new vehicle registration fee will be used to support existing bus service.

Year four and beyond following successful sales tax referendum

A total investment that equals about 50,000 new bus service hours will be provided during year four of the plan implementation through the end of the program (year 2032).

Improvements include:

- Increase frequency in peak hours
  - Increased peak hour service on Pittsboro – Chapel Hill Express.
  - Continued increased peak hour service on the existing Triangle Transit Route 800 between Research Triangle Park and Chapel Hill.
  - Continued increased peak hour service in Chapel Hill, Carrboro and UNC.
- Fill in gaps in existing service
  - Continued enhancements to rural transit service in unincorporated Orange County.

C. New Light Rail Service

The Orange County Bus and Rail Investment plan provides funding for a fixed guideway transit system that serves Durham and Orange counties using Light Rail technology (LRT). The 17-mile alignment extends from the University of North Carolina (UNC) Hospitals to Alston Avenue in East Durham. A total of 17 stations have been proposed including a station next to the Dean Smith Center, the Friday Center, as well as a potential station at Meadowmont in Chapel Hill. Stations in Durham include Patterson Place along US 15-501, the South Square area, at Duke Medical Center, Ninth Street, and downtown Durham, with convenient access to nearby bus and Amtrak intercity rail connections. Due to the light rail vehicle's capabilities and the requirements of the activity centers and neighborhoods being served along the corridor, light rail station spacing is routinely between ¼ mile and 2 miles apart.

Light Rail vehicles are electrically powered and travel at speeds up to 59 mph. The total travel time for the 17-mile alignment is about 35 minutes, including stops. The vehicles are approximately 90 feet long, can operate in both directions, and can be coupled with additional cars as demand increases. Initial 2035 projections indicate that ridership will exceed about 12,000 boardings per day. These projections are subject to change as the model is refined and validated.

Light rail vehicles can operate in exclusive right of way, as well as along urban streets, and characteristically serve accessible low platforms (14 inches high) at each station. The operations plan for the 17-mile alignment includes train frequencies (headways) of 10 minutes during the morning and evening peak and 20 minutes during the off-peak hours and on weekends. Fifteen vehicles will be required to operate the system on the basis of an 18-hour schedule each weekday. Several potential light rail vehicle maintenance facility locations are being evaluated. Detailed alignment and station location decisions will occur in the future when final project design is addressed.

The total capital cost for the Durham and Orange Light Rail Project is approximately $1.4 billion (2011 dollars). Orange County's share is $330 million (2011 dollars). Operations and Maintenance costs are estimated at $15 million/year (2011 dollars). Orange County's share of the Operations and Maintenance costs are $3.2 million/ year (2011 dollars).

D. Martin Luther King Boulevard Bus Lanes

This investment provides for bus-only lanes on Martin Luther King (MLK) Boulevard from Interstate 40 to Estes Drive. It will make bus travel times more reliable in peak periods. Existing buses in the MLK corridor will be re-routed to take advantage of the enhanced bus lanes.

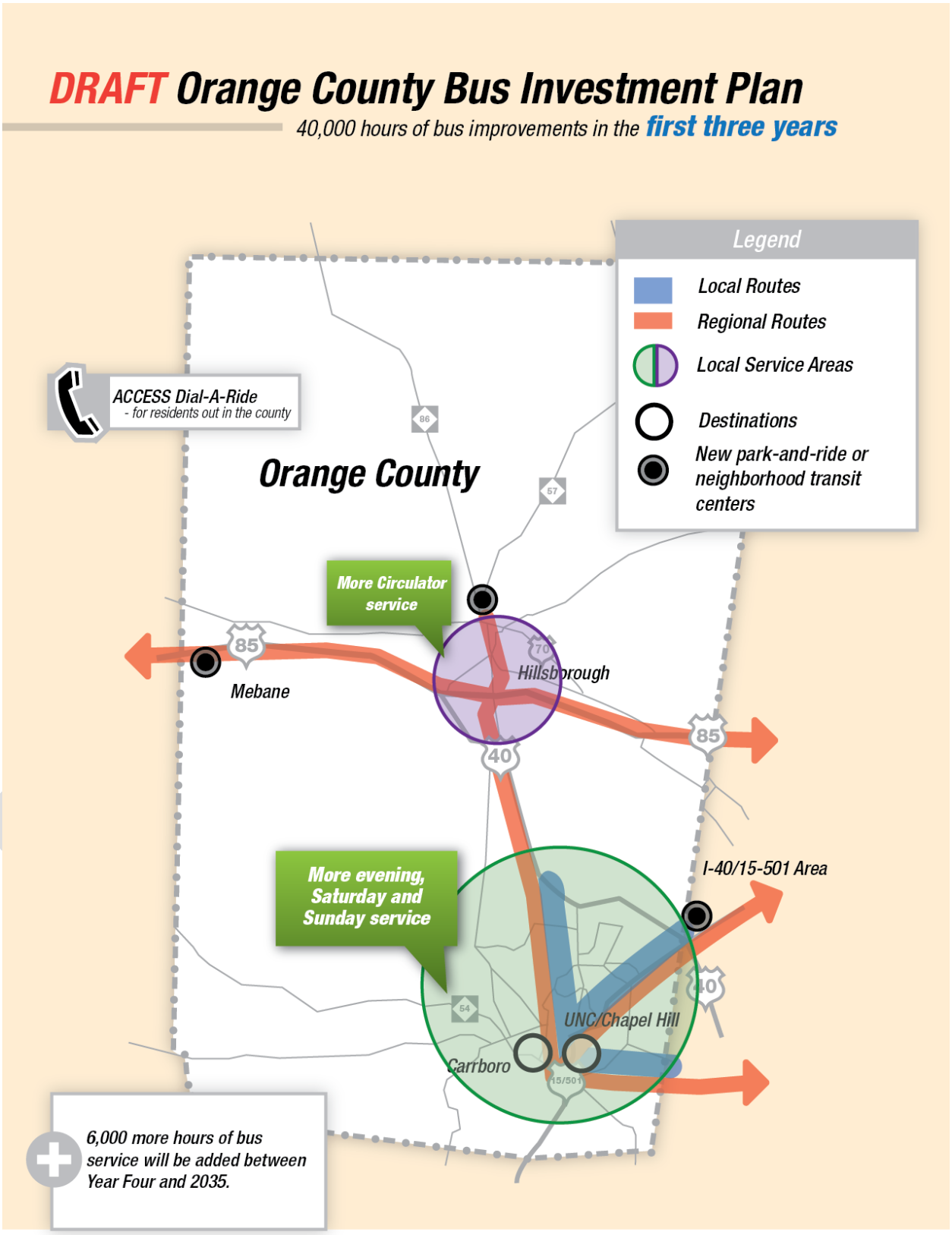
Orange County's cost for the bus lanes is anticipated to be $20 to $25 million. Since the bus lanes will be used by existing services, they do not generate any additional operational costs within the plan.

IV. Maps

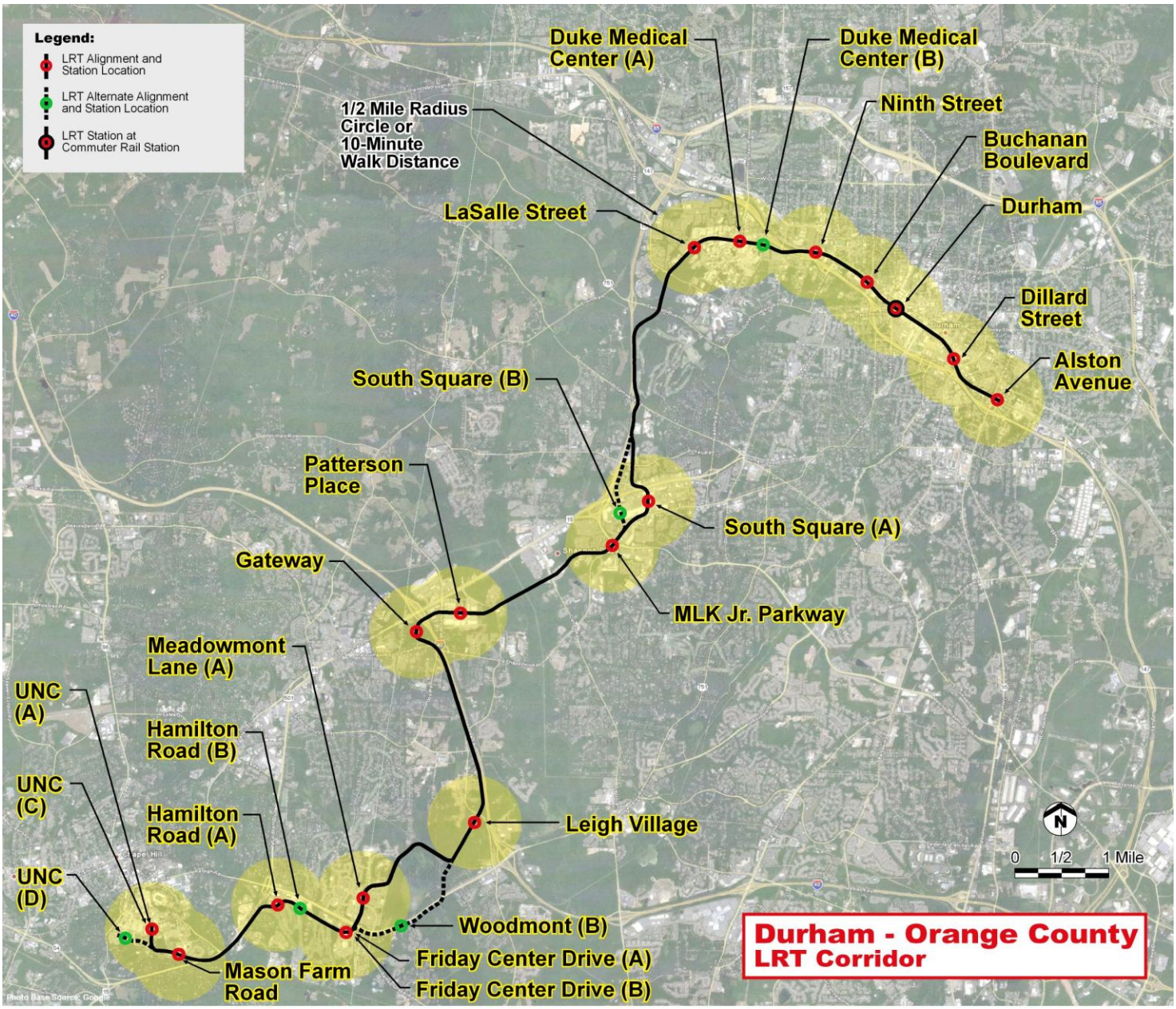
Two maps follow.

The first map (page 9) is a conceptual representation of where frequent local and regional bus service will be put into operation in the first three years following the implementation of this plan.

The second map (page 10) shows the Light Rail alignment from Downtown Durham to Chapel Hill.


DRAFT Orange County Bus Investment Plan
40,000 hours of bus improvements in the first three years
Legend
Local Routes
Regional Routes
Local Service Areas
Destinations
New park-and-ride or neighborhood transit centers
ACCESS Dial-A-Ride
- for residents out in the county
Orange County
More Circulator service
Mebane
Hillsborough
More evening, Saturday and Sunday service
I-40/15-501 Area
UNC/Chapel Hill
Carrboro
6,000 more hours of bus service will be added between Year Four and 2035.

DRAFT Durham-Orange Light Rail Plan



V. ORANGE COUNTY REVENUES

A variety of revenue sources provide the funding for the Orange County Bus and Rail Investment Plan. Those revenues include:

- A new one-half-cent sales tax in Orange County
- A new $7 vehicle registration fee levied by Orange County
- An increase of $3 to the existing $5 vehicle registration fee currently levied by Triangle Transit in Orange County
- Revenue from Triangle Transit's rental car tax
- NC State Government contributions to funding
- Federal Government contributions to funding

The initial proceeds for each local revenue stream for Orange County in 2012 for transit are assumed to be:

- ½-cent sales tax: $5.1 million
- $7 vehicle registration fee: $770,000
- $3 vehicle registration fee increase: $330,000
- Rental car tax revenue: $560,000

Growth rates assumed for each revenue source:

- ½-cent sales tax:
  - Growth rate from 2011 through 2014: 1.5%
  - Growth rate from 2015 through 2035: 3.6%
- $7 vehicle registration fee: 2.0%
- $3 vehicle registration fee increase: 2.0%
- Rental car tax revenue: 4.0%

$28 million would be borrowed over the life of the plan. This borrowing would allow for the large capital expenditures necessary during a small number of the years in the plan. Any borrowing would be from capital markets through government bonds, would require approval by the NC Local Government Commission, and would have to meet debt to revenue ratios required by the capital markets for bond issuance.

Further details for each revenue source follow.

A. One-half cent sales tax in Orange County

A one half-cent sales tax in Orange County means that when individuals spend $10.00 on certain goods and services, an additional five cents ($0.05) is added to the transaction to support the development of the Bus and Rail Investment Plan. Purchases of food, gasoline, medicine, health care and housing generally are excluded from the tax.

A one half-cent sales tax in Orange County is estimated to generate $5.1 million in 2012. Over the life of the plan to 2035, the sales tax is expected to generate $180 million in Year-Of-Expenditure (YOE) dollars. All of which is subject to authorization of a referendum by the Orange Board of County Commissioners and approval by the voters.

B. $7 Vehicle Registration Fee in Orange County

A seven dollar ($7) vehicle registration fee in Orange County means that when an individual registers a new vehicle or renews the registration for an existing vehicle in Orange County, an additional $7 per year is added to the cost above the other required registration fees for that vehicle.

The seven dollar fee in Orange County is expected to bring in $770,000 in 2012. Over the life of the plan to 2035, the seven dollar fee is expected to generate $23.8 million in Year-Of-Expenditure (YOE) dollars.

C. $3 Vehicle Registration Fee Increase in Orange County

A three dollar ($3) vehicle registration fee increase in Orange County means that when an individual registers a new vehicle or renews the registration for an existing vehicle in Orange County, an additional $3 per year is added to the cost above the other required registration fees for that vehicle. An existing $5 fee for vehicle registration supports activities of Triangle Transit, including bus operations and long-term planning. This fee would increase to $8 after the $3 increase is implemented.

The three dollar fee in Orange County is projected to generate $330,000 in 2012. Over the life of the plan to 2035, the three dollar fee is expected to generate $10.2 million in Year-Of-Expenditure (YOE) dollars.

D. Revenue from Triangle Transit's Rental Car Tax

Triangle Transit operations are partially funded by a five percent (5%) tax on car rentals in Wake, Durham, and Orange Counties. Under existing policy adopted by the TTA Board, 50% of the rental car tax revenues are dedicated to advancing long-range bus and rail transit.

Since a significant portion of all cars rented and driven in the three counties are rented at RDU International Airport, it is difficult to determine which rentals are driven primarily in one county or another. Therefore, the 50% rental revenues dedicated to long-term transit were allocated by county according to the percentage of population in the Triangle Region, which is: Wake (68%); Durham (21.5%); Orange (10.5%).

The Triangle Transit rental car tax proceeds directed to Orange County are estimated to be $560,000 in 2012. Over the life of the plan to 2035, the rental car tax is expected to generate $24 million in Year-Of-Expenditure (YOE) dollars for Orange County.

E. NC State Government Funding

The plan includes a 25% capital cost contribution by the NC Department of Transportation (NCDOT) for both light rail and commuter rail projects in Orange County. This level of participation was established by the State in its participation in the Charlotte Blue Line light rail project in 2003. The plan assumes that NCDOT also pays for 10% of bus capital costs (replacement buses, new buses, park and ride lots, etc) consistent with its current practices. NCDOT assumed contributions to the plan total $132 million in YOE dollars from 2012 through 2035.

F. Federal Government Funding

The plan assumes that the Federal Government contributes 50% of the capital cost for both the light rail and commuter rail projects in Orange County. This was the federal level of participation in the Charlotte Blue Line light rail project and is consistent with federal funding outcomes for most rail projects in the Federal Transit Administration's New Starts program in recent years.

The plan assumes that the Federal Government also pays for 80% of bus capital costs, consistent with its current practices, and continues to provide operating appropriations consistent with present Federal Transit Administration operating grant formulas. Assumed Federal Government contributions to the plan total $239 million in YOE dollars from 2012 through 2035.

G. Transit Fares

The plan assumes fares for all operating agencies remain unchanged from the existing fare structures.

H. Additional Revenue Sources

This draft Bus and Rail Investment Plan does not rely on additional municipal contributions, public or private 3rd party contributions, or value added forms of revenue.

VI. ORANGE FINANCIAL PLAN DATA

The following is a list of the total spending for each technology and category identified in the Orange County Bus and Rail Investment Plan.

- Rail Capital: $423 million ($330 million in 2011 dollars)
- Rail Operations: $58 million
- Bus Capital: $41 million (including MLK Bus Lanes)
- Bus Operations: $127 million
- Debt: $23 million

VII. IMPLEMENTATION AGREEMENT: ANNUAL REVIEW AND CHANGES TO THE PLAN

The Orange County Bus and Rail Investment Plan details the specific elements of local and regional bus service, and Light Rail service to be added in Orange County over a twenty-three year period. Because of the long time frame for implementation of the Plan and its major capital projects, over time there will need to be changes and revisions made to the Plan. As the statutory implementation agency, Triangle Transit will work with Orange County, the DCHC Metropolitan Planning Organization (MPO), and the towns of Chapel Hill, Carrboro, Hillsborough, the University of North Carolina at Chapel Hill and Chapel Hill Transit, the public transit provider in Orange County, to develop and execute an Implementation agreement which details the following aspects of implementation of the Plan:

(a) Annual review presentations of the activities and progress made in implementation of the Plan by Triangle Transit to the County and the MPO;
(b) The process for review and vote by the County, the MPO and Triangle Transit's Board of Trustees or the role of the operating agency regarding on any significant or substantial revisions to the Plan required by changes experienced in revenues received, capital costs, operating expenses, or other substantial issues affecting the Plan;
(c) Recognizes and preserves the integrity of the operating agencies;
(d) Responsibility of Triangle Transit for direct disbursement of funds from the revenues received per Section V (above) to the public agency responsible for implementing the bus services set forth in the Plan; and
(d) Other necessary provisions regarding implementation of this Plan as agreed to by the County, the MPO, and Triangle Transit

VIII. CLOSING SUMMARY

The Orange County Bus and Rail Investment Plan is the result of years of collaborative work of local elected leaders, regional stakeholders, municipal and county staff and Triangle Transit. The plan consists of a balance of bus improvements and rail investment to help accommodate the intense population growth that the region is expected to experience in the next 25 years.

The proposed plan addresses the ongoing need to provide greater service options to transit riders with improved and expanded bus and rail connections. Once implemented, the residents of Orange County will be able to have greater access to jobs, shopping, and activity centers such as downtown Chapel Hill and Carrboro, the University, or the Hospital.

Additionally, the plan will provide core infrastructure investment that will help support the goals and objectives of local land use plans in Orange County and its municipalities. In particular, as evidence in communities across the country, investment in light rail has proven to be a great motivator for private companies to build transit-oriented development at station locations along the rail corridor. This kind of more intense development generally

consists of a mixed-use, walkable environment that can provide a more sustainable alternative to the suburban growth pattern that exists today.

All the elements listed in the Draft Orange County Bus and Rail Investment Plan are fiscally constrained. At every turn, the Plan is conservative in revenue assumptions and incoroporated additional contingencies for capital and operating expenditures.

The draft plan will be shared with the general public, Carrboro Board of Aldermen, Chapel Hill Town Council, the Hillsborough Town Commissioners, the DCHC MPO and the Orange County Commission. The draft plan will be considered for approval by the DCHC MPO, the Triangle Transit Board of Trustees, and the Orange County Commission. The Orange County Commission will determine when to set a referendum date. Once a referendum passes, work can begin on implementation of the Bus and Rail Investment Plan.

DRAFT Orange County Transit Plan -- Annual Operating and Maintenance Costs

Complements Light Rail from UNC-Chapel Hill Medical Center to Leigh Village

Highest Priority Recommendations

	Service Type (Responsible Party)	Projects	Enhanced or New?	Total New Hours	Annual Operating Cost	Annual New Bus Hours Cumulative
YEARS 1 THROUGH 3					**$ 2,630,000**	**44,000**
	Local (Chapel Hill Transit)	Local Chapel Hill Transit routes in the 15/501 corridor to improve connections with Triangle Transit and DATA	Enhanced	7,300	$ 710,000	7,300
	Regional Exp (Triangle Transit)	Chapel Hill-Durham Boulevard Express (Route 405) - 15 minute service during peak hours	Enhanced	3,300	$ 630,000	10,600
	Local (Chapel Hill Transit)	54 Corridor Improvements (Orange and Durham Counties)	Enhanced	4,000	$ 390,000	14,600
	Local (Chapel Hill Transit)	Support operating costs of existing services		6,000	$ 580,000	20,600
	Regional Exp (Triangle Transit)	Chapel Hill-Durham Express (Route 405) - extend Saturday hours to 11pm	Enhanced	200	$ 40,000	20,800
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - extend Saturday hours to 11pm	Enhanced	200	$ 40,000	21,000
	Regional Exp (Triangle Transit)	Carrboro-Chapel Hill-Durham Express (Route 405) - Sundays	New	600	$ 120,000	21,600
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Sundays	New	600	$ 120,000	22,200
	Regional Exp (Triangle Transit)	Mebane-Hillsborough-Duke/VA Medical Centers Express - peak only	New	1,600	$ 320,000	23,800
	Local (Chapel Hill Transit)	Chapel Hill -Carrboro-UNC Sunday service	New	5,100	$ 490,000	28,900
	Local (Town of Hillsborough)	Hillsborough Circulator	New	2,000	$ 190,000	30,900
	Local (Chapel Hill Transit)	Chapel Hill-Carrboro-UNC Expanded Saturday service	Enhanced	3,600	$ 350,000	34,500
	Regional (Triangle Transit)	Chapel Hill-Regional Transit Center via Southpoint (Route 800) 15 minute service during peak hours	Enhanced	1,600	$ 320,000	36,100
	Local (Orange County)	Improve service in unincorporated Orange County	Enhanced	3,000	$ 290,000	39,100
	Local (Chapel Hill Transit)	Chapel Hill-Carrboro-UNC Expanded Evening service	Enhanced	4,100	$ 400,000	43,200
	Local (Town of Hillsborough)	Hillsborough Circulator expanded hours on weekdays and Saturdays	New	500	$ 50,000	44,000
BY 2035						
	Local (Orange County)	Improve service in unincorporated Orange County	Enhanced	3,000	$ 290,000	47,000
	Regional Exp	Pittsboro-Chapel Hill Express 30 minute frequency during peak hours	Enhanced	800	$ 160,000	47,800
	Local (Chapel Hill Transit)	Chapel Hill-Carrboro-UNC peak hour bus frequency improvements	Enhanced	2,200	$ 210,000	50,000
		Local and Rural Bus Service Improvements			**$ 3,485,000**	**41,000**
		Regional Bus Service Improvements			**$ 765,000**	**9,000**
		Total Bus Service Improvements			**$ 4,250,000**	**50,000**

Note: Cost per hour is assumed to be $85.

DRAFT Orange County Transit Plan -- Annual Operating and Maintenance Costs

Complements Light Rail from UNC-Chapel Hill Medical Center to Leigh Village

Highest Priority Recommendations

CAPITAL PROJECTS	RELATED OPERATING PROJECT	Unit Cost		Quantity	Est. Cost
Park&Ride near Mebane	Mebane-Hillsborough-Duke/VA Medical Centers Express	$350,000	per lot	1	$350,000
Park&Ride in northern Orange County	Northern Orange County-Hillsborough-UNC/Chapel Hill (Route 420)	$350,000	per lot	1	$350,000
Park&Ride near I-40 / NC 54 Interchange	Various Routes				Associated with Light Rail Project
Transit Emphasis Corridor (NC 54 between Fordham Boulevard and I-40)	54 Corridor Local Service Improvements and Regional Routes 800 and 805	$300,000	per mile	3	$900,000
Neighborhood Transit Center (I-40/US 15-501)	Chapel Hill-Durham Express (Route 405) AND Local Chapel Hill Transit routes in the 15/501 corridor	$220,000	per bay	1	$220,000
Pedestrian Accessibility / Amenities Improvements	Top 50 Boarding Locations	$10,000	Per stop	50	$500,000
				Subtotal	$2,300,000
Contingency		30%			$700,000
				Total	$3,000,000

Triangle Regional Transit Program

The DRAFT Durham County Bus and Rail Investment Plan

Triangle Transit

June 22, 2011

Triangle Regional Transit Program

A lot has happened since we last met…

Development and release of the narratives

Triangle Regional Transit Program

The DRAFT Durham County Bus and Rail Investment Plan

5/26/2011

The DRAFT Bus and Rail Investment Plan in Orange County

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5/26/2011

Additional Public Outreach

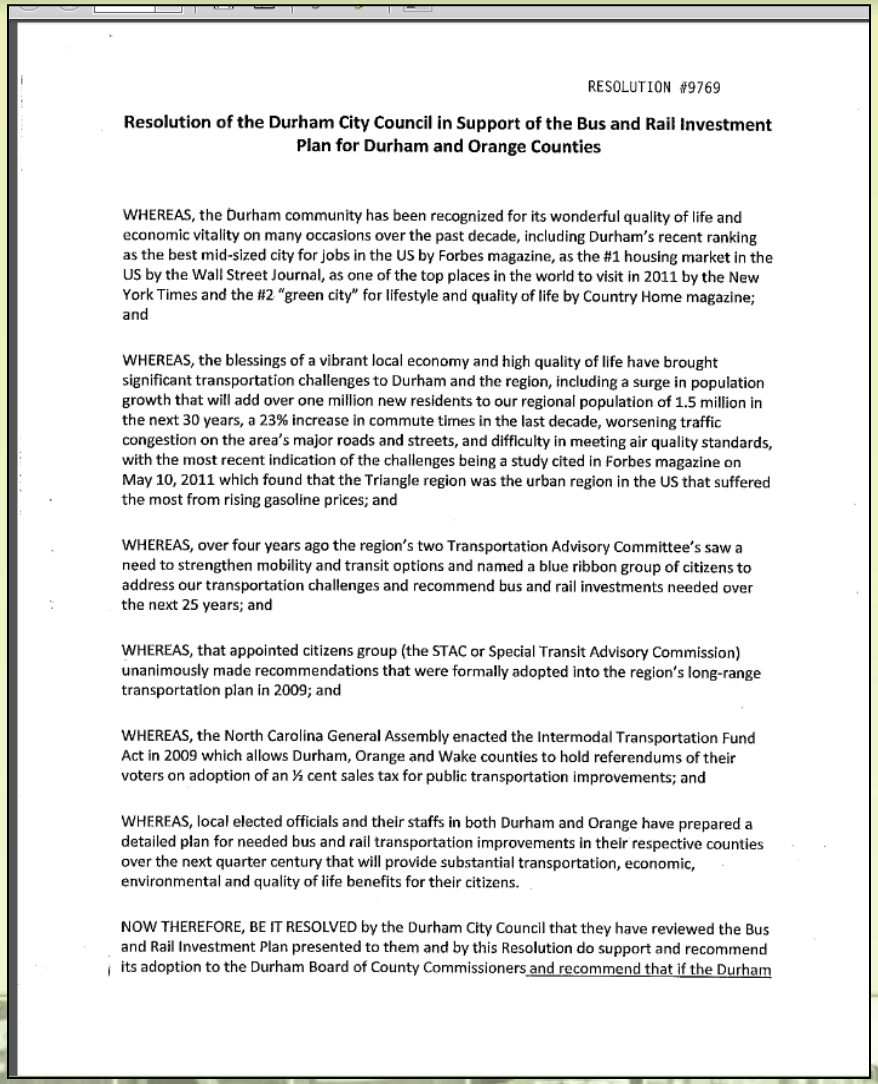
Triangle Regional Transit Program

MPO Public Workshops

- **June 7** – Southwest Library, 3605 Shannon Rd., Durham
- **June 8** – Holton Career and Resource Center's Senior Room, Second Floor, 401 N. Driver St., Durham
- **June 9** – Presentation to the RTP Owners and Tenants Association
- **June 14** – Chapel Hill Town Hall, 405 Martin Luther King, Jr. Blvd., Chapel Hill
- **June 15** – North Regional Library, 221 Milton Rd., Durham
- **June 16** – Orange County Library, 137 W. Margaret Ln., Hillsborough

Support for the plan

Triangle Regional Transit Program



RESOLUTION #9769

Resolution of the Durham City Council in Support of the Bus and Rail Investment Plan for Durham and Orange Counties

WHEREAS, the Durham community has been recognized for its wonderful quality of life and economic vitality on many occasions over the past decade, including Durham's recent ranking as the best mid-sized city for jobs in the US by Forbes magazine, as the #1 housing market in the US by the Wall Street Journal, as one of the top places in the world to visit in 2011 by the New York Times and the #2 "green city" for lifestyle and quality of life by Country Home magazine; and

WHEREAS, the blessings of a vibrant local economy and high quality of life have brought significant transportation challenges to Durham and the region, including a surge in population growth that will add over one million new residents to our regional population of 1.5 million in the next 30 years, a 23% increase in commute times in the last decade, worsening traffic congestion on the area's major roads and streets, and difficulty in meeting air quality standards, with the most recent indication of the challenges being a study cited in Forbes magazine on May 10, 2011 which found that the Triangle region was the urban region in the US that suffered the most from rising gasoline prices; and

WHEREAS, over four years ago the region's two Transportation Advisory Committee's saw a need to strengthen mobility and transit options and named a blue ribbon group of citizens to address our transportation challenges and recommend bus and rail investments needed over the next 25 years; and

WHEREAS, that appointed citizens group (the STAC or Special Transit Advisory Commission) unanimously made recommendations that were formally adopted into the region's long-range transportation plan in 2009; and

WHEREAS, the North Carolina General Assembly enacted the Intermodal Transportation Fund Act in 2009 which allows Durham, Orange and Wake counties to hold referendums of their voters on adoption of an ½ cent sales tax for public transportation improvements; and

WHEREAS, local elected officials and their staffs in both Durham and Orange have prepared a detailed plan for needed bus and rail transportation improvements in their respective counties over the next quarter century that will provide substantial transportation, economic, environmental and quality of life benefits for their citizens.

NOW THEREFORE, BE IT RESOLVED by the Durham City Council that they have reviewed the Bus and Rail Investment Plan presented to them and by this Resolution do support and recommend its adoption to the Durham Board of County Commissioners and recommend that if the Durham

- Presentations to Durham and Orange County Commissions
- Presentations and Resolutions of Support from:
  - Durham City Council
  - Chapel Hill Town Council
  - Carrboro Town Aldermen

Durham County is keeping options open for this fall

Triangle Regional Transit Program

Durham County
Bus and Rail Investment Plan

Nov. 8
2011 ?

Orange County
Bus and Rail Investment Plan

2012?

Wake County
Bus and Rail Investment Plan

2012?

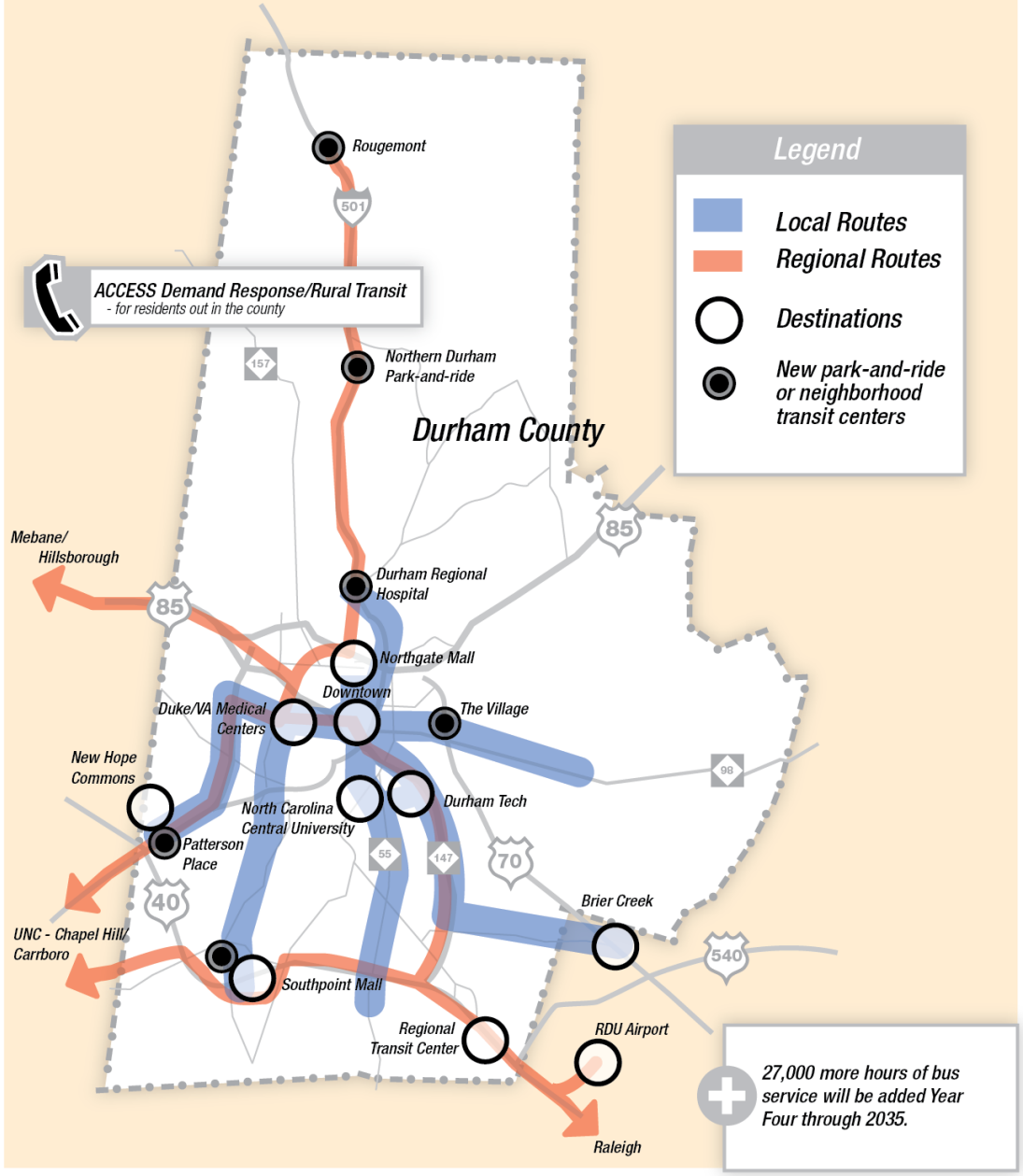
DRAFT Durham Bus Investment Plan

Triangle Regional Transit Program

- New bus hours by end of FIRST year– **27,000 hrs**
- New bus hours by end of THIRD year - **50,000 hrs**
- Total new bus hours by 2033 - **77,000 hrs**
- Potential Rail Dividend Bus Hours **15,000- 37,500** additional hours

DRAFT Durham County Bus Investment Plan

50,000 hours of bus improvements in the first three years



More Connections to…

- Jobs
- Durham Tech and North Carolina Central University
- Duke Medical Center

Expanding bus capacity in corridors with HIGH currently bus ridership

- 15 minute frequency during peak hours

Better regional connections (Saturday and Sunday service)

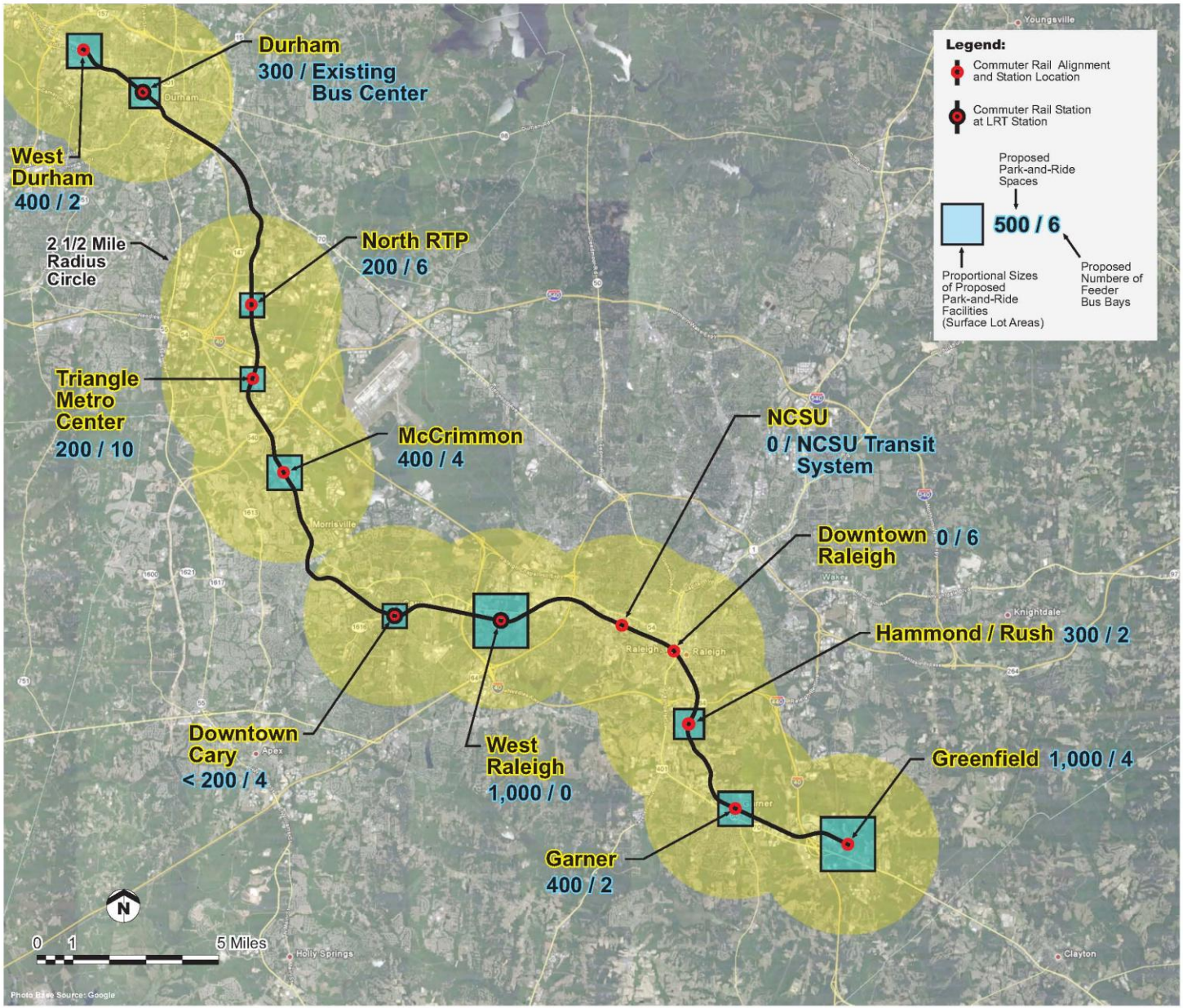
- **Raleigh, Chapel Hill, RTP**
- **RDU International Airport**

DRAFT Durham Rail Investment Plan

Triangle Regional Transit Program

Commuter Rail (CR)	Light Rail Train (LRT)
• Opening year for Commuter Rail – **2018** • CR Capital Cost - **$300 m** • CR Annual Operating Cost – **$2.57 m**	• Opening year of Light Rail – **2025** • LRT Capital Cost - **$1,050 m** • LRT Annual Operating Cost - **$11.3 m**

Durham-Wake (Commuter Rail)



Commuter Rail
Station Locations

**Durham-Wake
County Corridor**

March 5, 2011

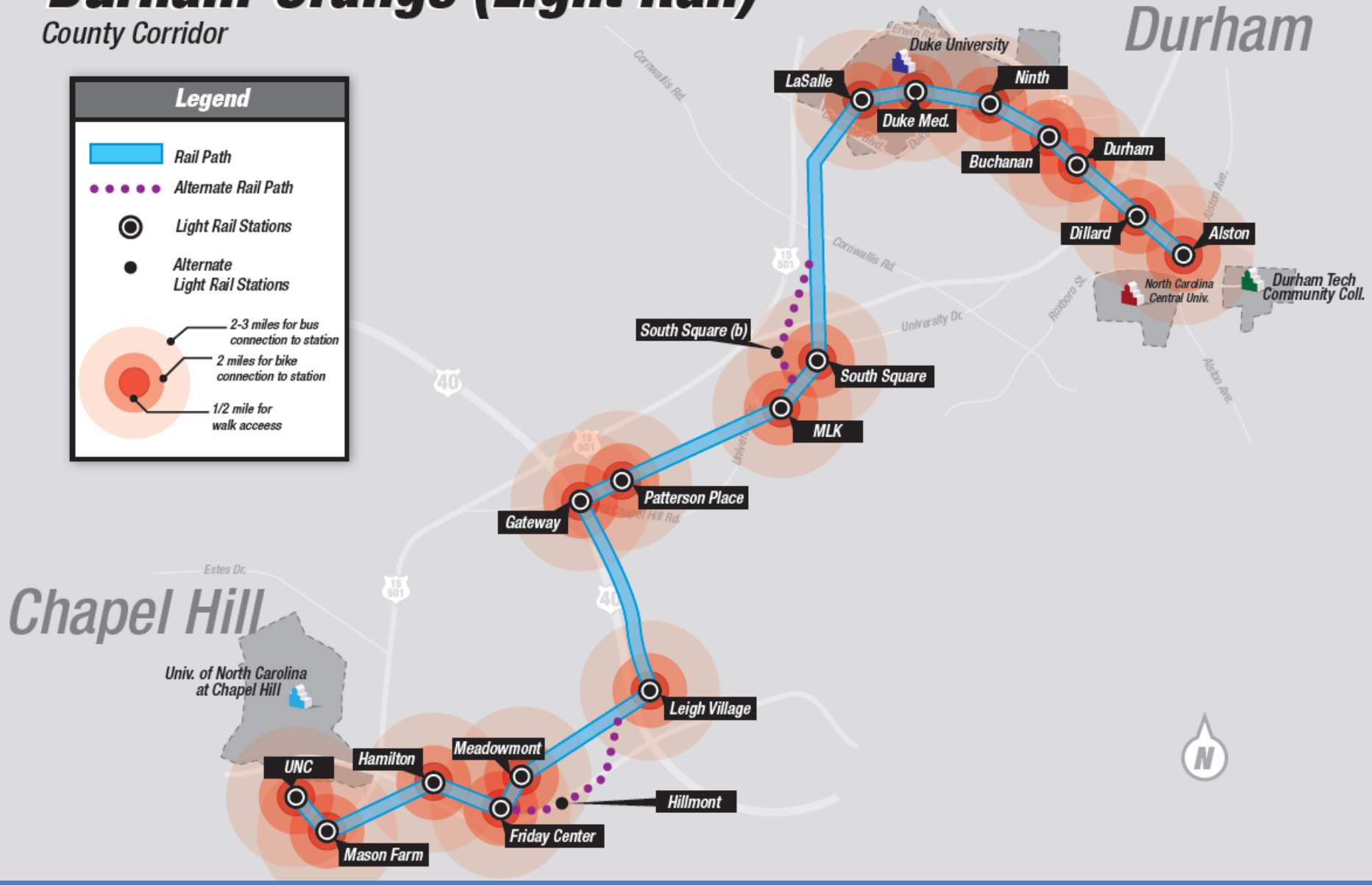
URS

Program Management Services

triangletransit
take it. easy.

Durham-Orange (Light Rail)

County Corridor



Financial Resources

Triangle Regional Transit Program

- Local revenue in Bus and Rail Transit Investment Plan
  - One-half cent sales tax
  - $7 vehicle registration fee
  - $3 increase in Triangle Transit vehicle registration fee
  - Rental car tax revenue
- State participation - 25% assumed
- Federal participation – 50% assumed

Revenue Projections

- One-half cent sales tax:
  - Growth Rate from 2011 through 2014: 1.5%
  - Growth Rate from 2015 through 2035: 3.5%
- $7 vehicle registration fee: 2.0%
- $3 vehicle registration fee increase: 2.0%
- Rental Car Tax revenue: 4.0%

Exclusions from the tax

Triangle Regional Transit Program

- **The One-half Cent Transit Sales Tax does not apply to the following…**

- Food
- Medicine
- Utilities
- Housing
- Gasoline

“. . . the more the base of the sales tax excludes necessities (such as food and prescription drugs) and includes luxury or nonessential goods and services, the less regressive the tax is likely to be”.

Robert D. Lee, Jr., Ronald W. Johnson and Phillip G. Joyce (2008). Public Budgeting Systems, 8th Edition (Boston: Jones Bartlett).

Investment in our people

Triangle Regional Transit Program

Investment in transit means…JOBS, JOBS, JOBS

- More bus service means more bus operators, mechanics, supervisors, etc.
- The Commuter Rail Project- potentially creates close to **2,000** construction and professional service jobs.
- The Light Rail Project – potentially creates over **4,400** new construction and professional service jobs

Proposed Schedule

Triangle Regional Transit Program

Durham County

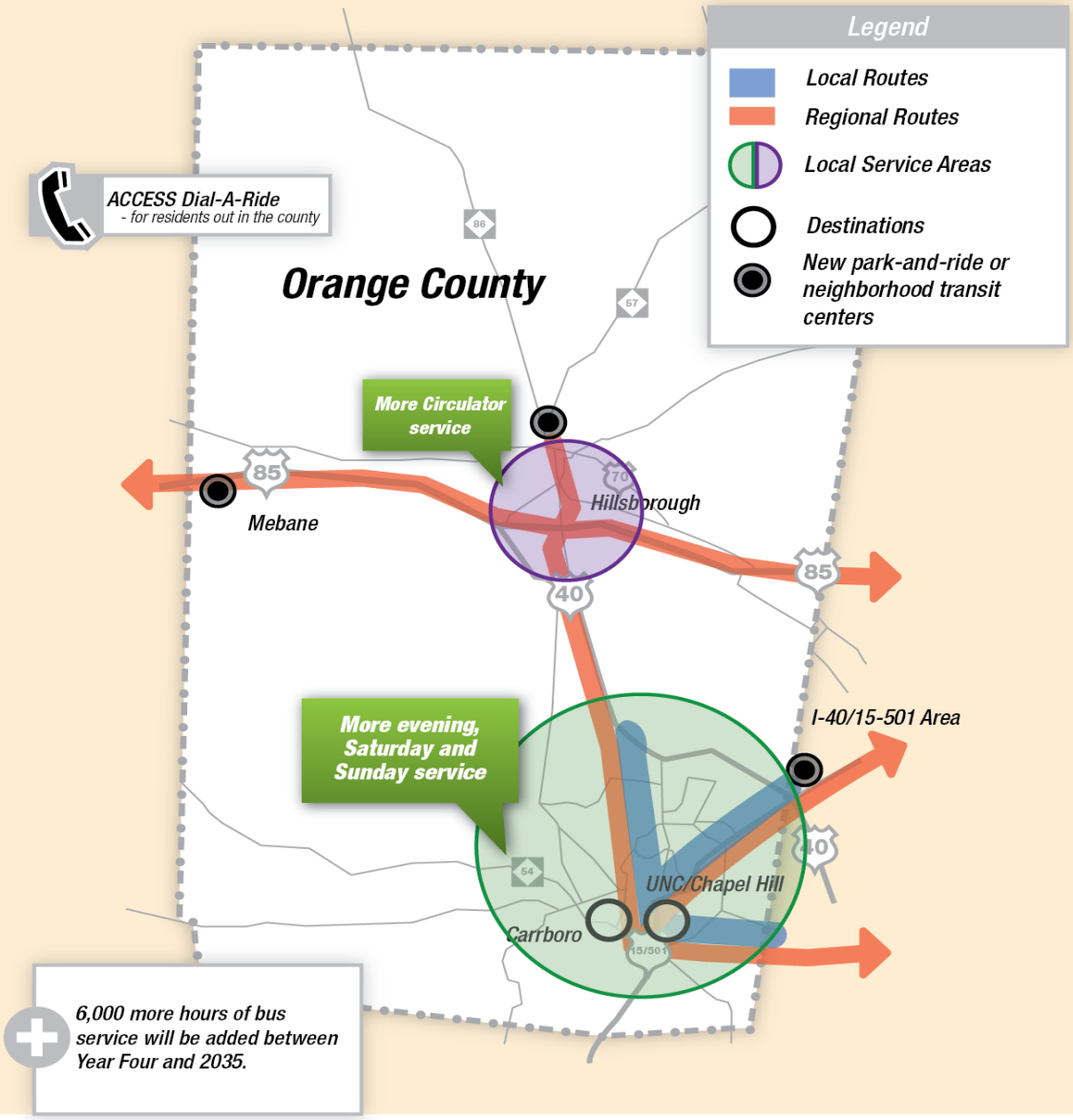
- DCHC TAC Bus and Rail Investment Plan review – **May 11** ✓
- Durham City Council review Bus and Rail Investment Plan- **May 19** ✓
- Triangle Transit review of D/O Bus and Rail Investment Plan – **May 25** ✓
- BOCC Worksession review Bus and Rail Investment Plan **– June 6** ✓
- BOCC Public Hearing of Bus and Rail Investment Plan – **June 13** ✓
- DCHC TAC review and consider for approval of D/O Bus and Rail Investment Plan **– June 22**
- Triangle Transit Board review and consider for approval – **June 22**
- BOCC consider for approval of Bus and Rail Investment Plan and consider authorization of referendum- **June 27**

Triangle Regional Transit Program

Discussion and Questions

DRAFT Orange County Bus Investment Plan

*40,000 hours of bus improvements in the **first three years***



DRAFT Orange Bus and Rail Investment Plan

Triangle Regional Transit Program

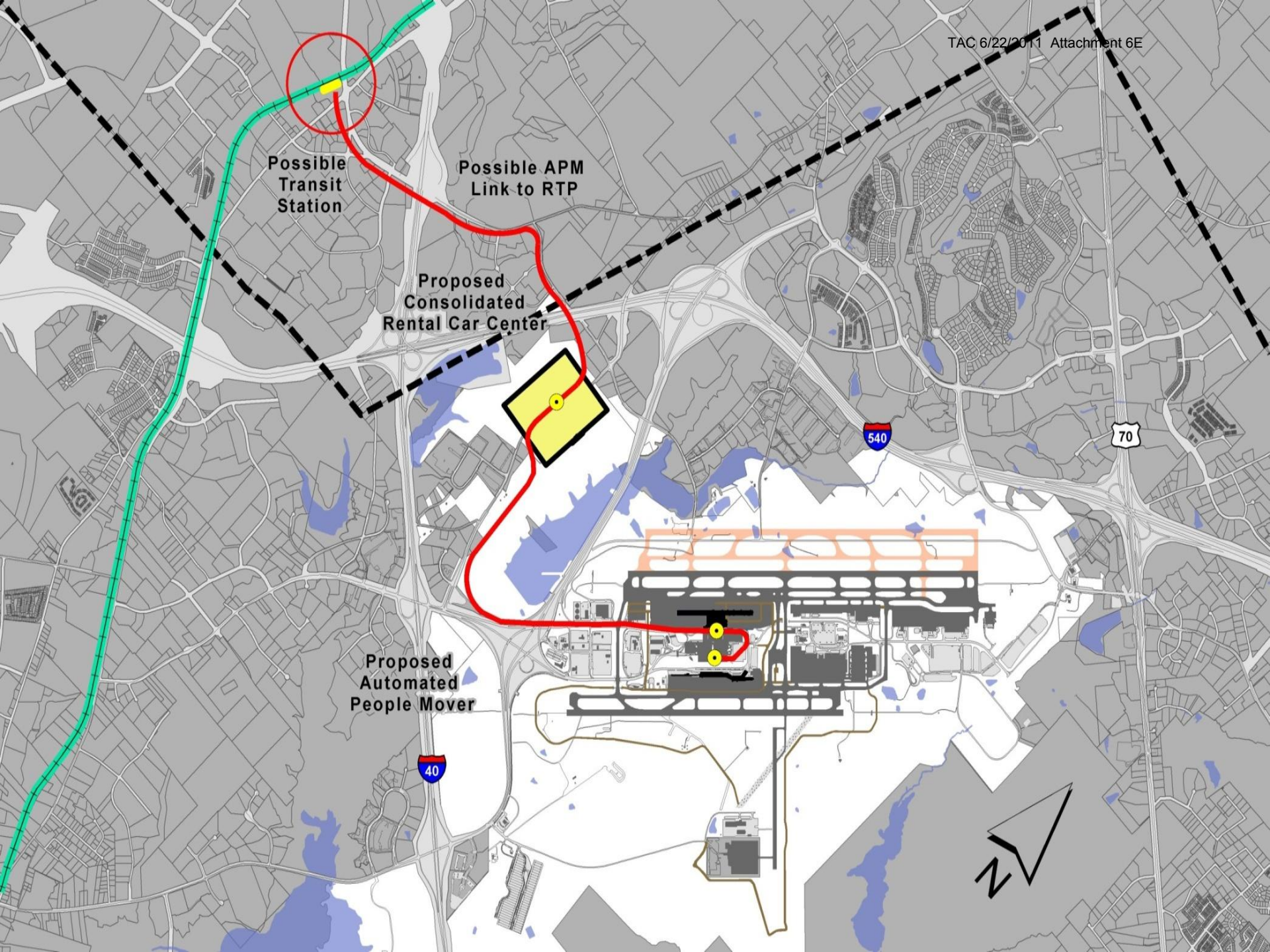
Bus Investment

- New bus hours by end of FIRST year – **22,050 hrs**
- New bus hours by end of THIRD year - **44,100 hrs**
- Total number of new bus hours by 2035 – **50,400 hrs**
- MLK Busway Improvements completed -2017
- Potential Rail Dividend Bus Hours – **30,000 to 45,000**

Rail Investment

- Opening year of Light Rail – **2025**
- LRT Capital Cost - **$330 m**
- LRT Annual Operating Cost – **$3.2 m**

* *Sales Tax Growth Rate –* ***3.6 %***


Possible
Transit
Station
Possible APM
Link to RTP
Proposed
Consolidated
Rental Car Center
Proposed
Automated
People Mover
540
70
40

Who rides our DATA buses?

Triangle Regional Transit Program

The typical DATA bus customer relies on DATA for their daily activity.

62% do not have a car available for use.
59% use the bus six or seven days per week.
36% are riding more than they did last year.

The typical DATA bus customer is a low-income worker or student.

42% report annual household incomes below $10,000 and 89% report annual household incomes below $35,000.
51% report to be currently employed and 62% reported having used DATA to go to or from work in the past month.
23% report to be current students mostly at the college and vocational school and 8% at the middle or high school level

The typical DATA bus customer is a person of color.

63% self-identify as Black
3% self-identify as Native American
4% self-identify as Other
5% self-identify as Hispanic
1% self-identify as Asian
10% self-identify as White

Bus customers (54%) are women - (46%) are men

Durham Riders (DATA) – On-Board Survey, April 2011

(2,200 respondents) - Average Daily Boardings – 17,600

Approval Process

Triangle Regional Transit Program

DCHC MPO

- Considers for Approval Bus and Rail Investment Plan

Triangle Transit Board of Trustees

- Considers for Approval Bus and Rail Investment Plan

Durham County Commissions

- Considers for Approval Bus and Rail Investment Plan
- Authorizes referendum

The people will have an opportunity to vote on the Plan by way of a public referendum

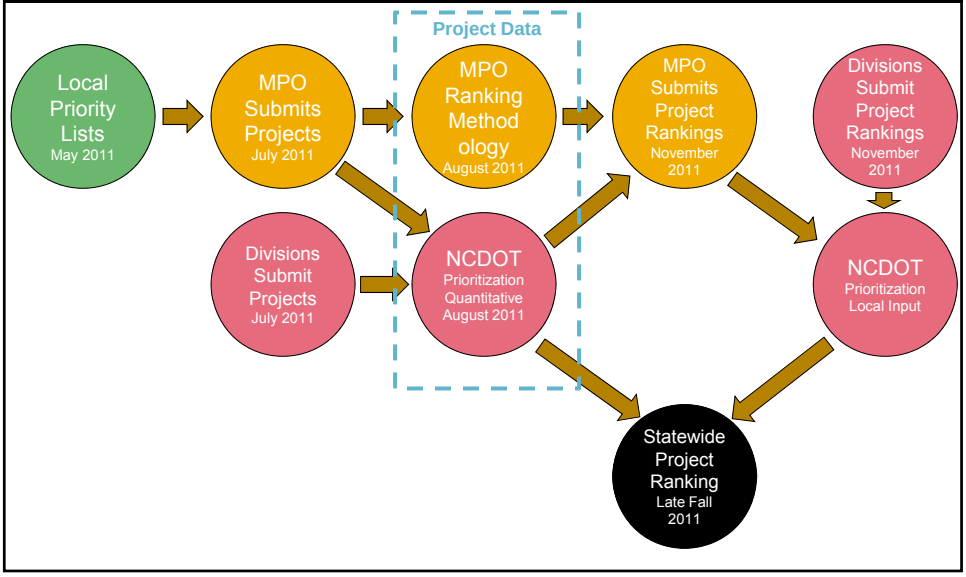
June 22, 2011

Development of the FY 2014-2020 TIP

TAC Meeting

1

TIP Prioritization Process



TAC Schedule

- June 22 TAC
  - Approval of submission of up to 15 new highway, 10 new bicycle, 10 new pedestrian, and transit projects.
  - Approval of MPO Ranking Methodology.
- October 12 TAC
  - Public Hearing on MPO Priority List.
- November 9 TAC
  - Approval of application of MPO's 1,300 highway points
  - Approval of ranking of 5 bicycle and 5 pedestrian projects.
  - Approval of ranking of transit projects.

3

2014-2020 TIP Schedule

- Spring 2012 – NCDOT releases draft 10 Year Work Program
- Spring 2013? – NCDOT approves final 10 Year Work Program

4

Project Types

- **Highway**
  - **Mobility** – capacity widening, new location
  - **Modernization** – upgrade, shoulders, on-road bicycle >$1M, etc.
- **Bicycle** – on-road <$1M and greenways
- **Pedestrian**
- **Transit** – capital projects in FY 2013-2015

- Other Modes: Rail, Ferry, Aviation
- Not Included in Prioritization: Highway Safety, Highway Infrastructure Health, CMAQ, STPDA, Urban Loops

5

Project Types and Tiers

	Highway Mobility	Highway Modernization	Bicycle	Pedestrian	Public Transit
Statewide	X	X	X		X
Regional	X	X	X		X
Subregional	X	X	X	X	X

- NCDOT develops project rankings for each category
- NCDOT will hold investment strategy summits to determine how much funding to provide to each category – winter 2011/2012

6

MPO Project Ranking Methodology

- Methodology for the 12-18 TIP needed to be updated to reflect new NCDOT SPOT process.
- Four modes: highway, bicycle, pedestrian, and transit
- The TCC will use the results of the MPO methodology and the results of the SPOT quantitative methodology to develop its recommendation for the MPO's final project ranking.

7

MPO Project Ranking Methodology

- TCC Recommendation (Pending):
  - Use our existing methodology as the basis for the new methodology.
  - Simplify data collection by using SPOT data as much as possible.
  - Retain criteria unique to our methodology.
    - Environmental Impacts
    - Community Impacts
    - Environmental Justice Impacts
  - Vary the weighting of the criteria based on type and tier.

8

Durham City and County

Adopted FY 2014-2020 Transportation Improvement Program Local Priority List

Highway

	Project Description	Tier	Goal	Previous SPOT Rank
A	NC 147/Glover Road Interchange – Construct new interchange. Widen Glover Road from NC 147 to Angier Ave. Provide bicycle, pedestrian, and transit facilities as appropriate.	Statewide	Mobility	New Project
B	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. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	1
C	NC 54 (I-40 to Barbee Chapel Rd.) – Widen to 6-lane divided. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	17
D	M.L. King, Jr. Pkwy./NC 55 Interchange (U-2405) – Extend Martin Luther King Jr. Pkwy from NC 55 intersection to Cornwallis Rd. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	91
E	NC 751 (Phase I, S. Roxboro Rd. to NC 54) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	107
F	NC 751 (NC 54 to Renaissance Pkwy.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	New Project
G	NC 751 (Renaissance Pkwy. To Fayetteville Rd.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	New Project
H	Fayetteville Rd. (Woodcroft Pkwy. to Riddle Rd.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	35
I	Old Oxford Highway (Phase I, N. Roxboro to Hamlin Rd.) – Expand capacity. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	212
J	Fayetteville Rd. (Renaissance Pkwy. To NC 751) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project
K	S. Roxboro Rd. (Cornwallis Rd. to MLK Pkwy.) – Part widen to 4-lane, part 4-lane on new location. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project
L	Southwest Durham Drive (US 15-501 to Mt. Moriah Rd.) – Construct 4-lane road on new location. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project
M	NC 751/Hope Valley Rd. (S. Roxboro Rd. to M.L. King Jr. Pkwy.) - On-road bicycle facilities and sidewalks	Regional	Modernization	Unranked (B/P)
N	Club Blvd. (Ambridge St. to Geer St.) – On-road bicycle facilities and sidewalks	Subregional	Modernization	70 (B/P)

	Project Description	Tier	Goal	Previous SPOT Rank
O	Dearborn Dr. (E. Club Blvd. to Old Oxford Rd.) - On-road bicycle facilities and sidewalks	Subregional	Modernization	76 (B/P)
P	Cornwallis Rd. (Erwin Rd. to Chapel Hill Rd.) - On-road bicycle facilities and sidewalks (where appropriate)	Subregional	Modernization	78 (B/P)
Q	Erwin Rd. (Orange County Line to NC 751) - On-road bicycle facilities and sidewalks (where appropriate)	Subregional	Modernization	42
R	Barbee Chapel Rd./Farrington Rd. (NC 54 to Stagecoach Rd.) - On-road bicycle facilities and sidewalks (where appropriate)	Subregional	Modernization	Unranked (B/P)
S	Ephesus Church Rd./Pope Rd. (Orange County Line to Old Durham-Chapel Hill Rd.) - On-road bicycle facilities and sidewalks	Subregional	Modernization	38
T	Sedwick Rd. (Grandale Dr. to Alston Ave.) - On-road bicycle facilities and sidewalks	Subregional	Modernization	Unranked (B/P)

Bicycle

Rank	Project Description
B1	W. Ellerbe Creek Trail (existing trail to Stadium Drive) – Shared Use Path
B2	Scott King Road (Fayetteville Rd. to Grandale Rd.) – On-road bicycle facilities
B3	Rocky Creek Trail (NC 55 to Kelly Bryant Bridge) – Shared Use Path
B4	Duke Beltline Trail – Shared Use Path
B5	NC 751 (Erwin Rd. roundabout to Hillsborough Rd./US 70) – On-road bicycle facilities
B6	Cole Mill Road (Rose of Sharon Rd. to Orange County line) – On-road bicycle facilities

Pedestrian

Rank	Project Description
P1	NC 54 (NC 55 to RTP) – Sidewalks
P2	Roxboro Road (Pacific Ave. to Murray Ave.) – Sidewalks
P3	Cook Road (Fayetteville Rd. near Hillside High to Martin Luther King, Jr. Parkway) – Sidewalks
P4	Duke Street (Murray Ave. to Roxboro Rd.) – Sidewalks
P5	Horton Road (Guess Rd. to Roxboro Rd.) – Sidewalks
P6	Holloway Street (Junction Rd. to Chandler Rd.) – Sidewalks

Transit

Project Description	Year Needed	Cost
14 40' Hybrid Replacement Buses @$650,000/bus	2013	$9.1 million
14 40' Hybrid Replacement Buses @ $700,000/bus	2014	$9.8 million
15 ADA Replacement Vans @ $45,000/van	2013	$675,000
6 Replacement Service Vehicles @ $30,000/vehicle	2013	$180,000
4 Replacement Service Vehicles @ $35,000/vehicle	2014	$140,000
Passenger Amenities (shelters, benches, trashcans, solar lights)	2013	$500,000
Passenger Amenities (shelters, benches, trashcans, solar lights)	2015	$750,000
8 40' Hybrid Expansion Buses @$650,000/bus • 15 minutes headways to Duke • Direct route from downtown to Southpoint • Direct route from downtown to Riverside HS • Direct route from Duke to Southpoint	2013	$5.2 million
18 40' Hybrid Expansion Buses @$700,000/bus • 15 minutes headways on routes 1, 3, 4, 6, 7, and 10 • 30 minutes headways on route 15 • Cross-town routes	2014	$12.6 million
4 40' Hybrid Expansion Buses @$750,000/bus • 15 minutes headways on routes 12 and 16	2015	$3.0 million
4 40' Hybrid Expansion Buses @ $750,000/bus • New Route on MLK Pkwy, NC 55 to South Square • New route from Downtown to Butner	2015	$3.0 million
Land Acquisition and Construction of 2 Park –n-ride Lots @ $1.1 million/lot • North Durham/Treyburn area • US 70 east or Parkwood area	2015	$2.2 million
Regional Rail Service – Durham to Chapel Hill – Light Rail Transit or Bus Rapid Transit - planning and engineering phase *Description and cost will be determined by Triangle Regional Transit Program	2013-2015	*
Regional Rail Service – Durham to Raleigh – Commuter Rail – planning and engineering phase *Description and cost will be determined by Triangle Regional Transit Program	2013-2015	*

Town of Carrboro
Transportation Improvement Program 2014-2020
Local Priority List: approved May 18, 2011

Highway

Priority #	***Description***
1	Estes Dr. – Add bike lanes and transit accommodations on both sides of the road, and a sidewalk on the south side of the road, from Greensboro St. to Town limits.
2	Homestead Rd. – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Seawell School Rd. to Old NC 86.
3	Old NC 86 – Add bike lanes and transit accommodations on both sides of the road, and a sidewalk on the east side of the road, from Hillsborough Rd. to Homestead Rd.
4	Old NC 86 – Add bike lanes and transit accommodations on both sides of the road, and a sidewalk on the east side of the road, from Homestead Rd. to Eubanks Rd.
5	Eubanks Rd. – Add bike lanes, sidewalks, and transit accommodations on both sides of the road from Old NC 86 to Rogers Rd.
6	Franklin/Main/Merritt Mill/Brewer intersection improvements – Make changes to improve operation and safety for motorists, pedestrians, bicyclists, and transit.

Bicycle

Priority #	***Description***
1	Broad St. to Seawell School Rd. – Construct a multi-use path between Broad St. and Village Dr. and between Village Dr. and Seawell School Rd.; install on-street bicycle facilities on Village Dr.
2	Morgan Creek Greenway – Construct a multi-use path from University Lake to the western terminus of the first phases of the greenway and a multi-use path spur to BPW Club Rd.
3	NC 54 from James St. to Anderson Park – Construct a side path on the north side of the road to accommodate two-direction bicycle transportation.

Pedestrian

Priority #	***Description***
1	W. Main St. – Install improved pedestrian crossings and sidewalks from Hillsborough Rd. to Jones Ferry Rd.
2	S. Greensboro St. – Add sidewalks on the west side of the road from the northern end of Old Pittsboro Rd. to Merritt Mill Rd.
3	N. Greensboro St. corridor from Weaver St. to Shelton St. – pedestrian improvements
4	Estes Dr. – Construct a sidewalk on the south side of the road from N. Greensboro St. to the Town limits.
5	Old NC 86 – Construct a sidewalk on the east side of the road from Homestead Rd. to Eubanks Rd.

A RESOLUTION APPROVING FY2014-2020 CHAPEL HILL TRANSPORTATION PRIORITY PROJECTS (2011-05-23/R-4)

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee has begun the process to develop the 2014-2020 Metropolitan Transportation Improvement Program; and

WHEREAS, the Transportation Advisory Committee will develop a Regional Transportation Priority List for use in developing the Metropolitan Transportation Improvement Program; and

WHEREAS, the Transportation Advisory Committee has requested local governments develop transportation priority lists for use in preparing the Regional Priority List; and

WHEREAS, the council received comments from the public on the 2014-2020 transportation priorities;

NOW, THEREFORE, BE IT RESOLVED, by the Council of the Town of Chapel Hill that the Council adopts the following list as the 2014-2020 Transportation Priority List for submission to the Durham-Chapel Hill-Carrboro Transportation Advisory Committee:

FY2014-2020 Transportation Priority List

New	*Eubanks Road:* Martin Luther King Jr. Boulevard to Roger's Road, construct bicycle lanes, sidewalks, safety, and intersection improvements.
New	*Merritt Mill Road:* Franklin Street to Fordham Boulevard, construct bicycle lanes and sidewalks.
New	*Carmichael Street:* Fordham Boulevard to Northern terminus, repave road surface and provide bicycle accommodations
New	*Mt. Carmel Church Road/Bennett Road Intersection:* Installation of roundabout and related safety improvements
New	*Campus to Campus Connector:* Broad Street to Estes Drive Extension
New	*Horace Williams Greenway:* Chapel Hill Watch Village to Homestead Road
New	*Dry Creek Trail:* Phase 1 Perry Creek Road to Erwin Road

This the 23rd day of May, 2011.

Chatham County Projects for SPOT 2.0

Presented to and endorsed by the Board of County Commissioners on May 16, 2011

Highway Project

US 15-501 Bike Lanes (Orange County line to 400' south of Mann's Chapel Rd)

Description: Widen US 15-501, from the Orange County line to 400 feet south of Manns' Chapel Rd, by three to six feet on each side to create either 15' wide outside lanes or six-foot bike lanes.

Needs Statement: This section of US 15-501 is a four-lane divided highway, with typical 12' wide travel lanes, a 2.5' curb-and-gutter, a 45 mph speed limit and AADT of 21,000. There is no safe space for a bicycle to operate in this section, aside from potentially using the newly constructed four-foot wide sidewalk on the east side of the roadway. In contrast, US 15-501 just south of this section has six-foot wide shoulders, and north into Orange County the roadway has 13' wide outside lanes that transition to 6.5' wide shoulders.

Project Length: 1.3 miles

Planning-Level Cost Estimate: $2,340,000

Pedestrian Project

US 15-501 at Mann's Chapel Rd Pedestrian Crossing

Description: Improve the pedestrian crossing at US 15-501 and Mann's Chapel Rd by installing a "pork chop island" in each quadrant, pedestrian-actuated crossing signals and crosswalk striping; relocate or remove existing wheelchair ramps.

Needs Statement: The intersection of US 15-501 and Mann's Chapel Rd is a large signalized intersection – 4 to 6 lanes per crossing, made even wider by large turning radii – and currently has no pedestrian facilities. A new sidewalk terminates in the northeast quadrant of this intersection and there are retail establishments on each corner. This intersection also has a high incidence of vehicle crashes based on anecdotal evidence.

Project Length: N/A

Planning-Level Cost Estimate: $300,000

Hillsborough TIP Priority List
2014-2020

1. **Improvements along South Churton Street (project R-2825):** Develop congestion management, limited access, aesthetic and capacity improvements between US 70 Business and Interstate 40 consistent with the recommendations in the 2006 Churton Street Corridor Plan. 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.

2. **Orange Grove Road (SR 1006) extension to US 70 Business:** Construct road extension of Orange Grove Road east to cross (over or under to be determined) NCRR to intersect with US 70 Business. Traffic projections should determine road capacity. Improvements for bicycles and pedestrians are included with this request.

3. **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.

4. **Train station/multi-modal center:** Construct a train station in Hillsborough and request AMTRAK service to Orange County. The train station can also serve future commuter rail operations and anchor a multimodal transportation hub in Hillsborough. A revenue and ridership study conducted by the North Carolina Department of Transportation Rail Division and AMTRAK has indicated that there is enough potential ridership to make a stop in Hillsborough financially feasible.

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 1 of the primary bicycle routes proposed in the Orange County Bicycle Transportation Plan adopted April 6, 1999.

6. **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.

7. **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 and the western portion will conform with the recommendations in the 2007 US 70/Cornelius Street Plan.

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.

ORANGE COUNTY TRANSPORTATION PRIORITY LIST
2014 – 2020 DURHAM-CHAPEL HILL-CARRBORO
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

1. TIP Project No. EB-4980, SR 1006 (Orange Grove Road) at Interstate 40: Construct a pedestrian bridge over I-40; construct sidewalk along the north side of Orange Grove Road from the bridge to Timbers Drive. This pedestrian bridge is the central element in the Safe Routes to School plan for Grady A. Brown Elementary School and for Cedar Ridge High School. Without the bridge, the SRTS plan cannot move forward. Construction of 0.14 mile (approx.) sidewalk on the north side of the bridge extending from the bridge to Timbers Avenue will provide connectivity from the bridge to three high-density neighborhoods: Patriot's Point, Colonial Estates, and the Timbers. To improve the pedestrian access to the south of the bridge, the Orange County School System has committed to constructing a safe and comfortable path from the pedestrian bridge to the Cedar Ridge entrance.

   Interstate 40 separates two schools, Grady Brown Elementary and Cedar Ridge High School, from residential areas north of the interstate. The Orange County school system estimates that over 262 students live within one mile of the schools. Most of these students live in the high-density Timbers, Patriot's Pointe, and Colonial Estates neighborhoods.

   The "Access Management and Awareness Project and Report for Orange Grove Road" recommends this project.

2. TIP Project No. R-2825, SR 1009 (South Churton Street) Improvements: Develop congestion management, limited access, aesthetic and capacity improvements including bicycle and pedestrian 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 by NCDOT in February 2002 recommends a 4-lane divided curb and gutter cross section, with 16-foot median, for the entire corridor from I-40 to the 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.

3. Hillsborough Train Station: Construct a train station in Hillsborough as designated in Hillsborough's *Rail Station Small Area Plan*, and implement AMTRAK service to Orange County. The train station can also serve future commuter rail operations and anchor a multimodal transportation hub in Hillsborough. A revenue and ridership study conducted by the North Carolina Department of Transportation Rail Division and AMTRAK has indicated that there is enough potential ridership to make a stop in Hillsborough financially feasible.

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4. Park and Ride Lot in the Buckhorn Economic Development District: Orange County requests funding for a park and ride facility (from the adopted Orange County Economic Development District Design Manual) to be located in the I-85/Buckhorn Road Economic Development District. This project would provide an opportunity for coordination of public transportation efforts between two growing regions in North Carolina, the Triad and Triangle.

5. US 70 East-Interstate 85 Connector: Modify the I-85 Connector interchange at US 70 to provide access from all directions. This project would enable traffic from northwest Orange County to access Interstate 85 more easily without risking the many points of traffic conflict through Efland. The Interstate 85/US 70 Connector just east of Efland is not accessible to traffic on eastbound US 70 and there is no access to westbound US 70 from the connector.

   Traffic has increased through northwestern Orange County on Efland Cedar Grove Road as an alternative to NC 86. Much of that traffic "dog-legs" through Efland via Forrest Avenue to Mt. Willing Road to access Interstate 85. Mt. Willing Road provides an at grade crossing of the North Carolina Railroad corridor, the only access across the railroad tracks between Hillsborough and Buckhorn Road.

6. SR 1009 (Old NC 86) Bicycle Facilities: Construct bicycle facilities on Old NC 86 from Hillsborough Road in Carrboro to I-40 in Hillsborough. This route along Old NC 86, from Carrboro's Transition Area just north of Eubanks Road (SR 1727) to Rippy Lane (SR 1224), is priority 6 of the primary bicycle routes listed in the Orange County Bicycle Transportation Plan. This project would extend bicycle accommodations requested in TIP Project R-2825 (South Churton Street bicycle lanes from Interstate 40 to the Eno River) to Hillsborough Road in Carrboro and provide a connection between proposed bicycle facilities in Carrboro along Old Fayetteville Road, Homestead Road and Eubanks Road.

7. SR 1006 (Orange Grove Road) Extension: Extend Orange Grove Road from the east side of Churton Street (SR 1009) to US 70 business. This project is scheduled for reprioritization. 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. This project could also provide access to a potential site for Orange County's priority rail project, AMTRAK service and train station in Hillsborough, although the site for such rail station has not been determined.

8. Tip Project No. 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 not included in the Draft 2012 – 2018 TIP, and is scheduled for reprioritization. The Hillsborough Town Board and Orange County Board of Commissioners have endorsed this project in two joint studies that included commissioners from both jurisdictions. 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.

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9. U-2805, SR 1777 (Homestead Road) Improvements: Improve Homestead Road from Old NC 86 (SR 1009) to NC 86 to include bicycle lanes and sidewalks in sections of the corridor where those facilities do not exist. This project is not in included in the Draft 2012-2020 TIP , and is scheduled for reprioritization. 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

10. SR 1727 (Eubanks Road) bicycle lanes: Construct bicycle lanes on Eubanks Road from Old NC 86 (SR 1009) to Rogers Road (SR 1729). The project would provide bicycle access to the new Morris Grove Elementary School off Eubanks Road. Increased traffic on Eubanks from the solid waste convenience center and Chapel Hill Public Works Facility and Transportation Facility on Millhouse Road off of Eubanks presents conflicts with bicycle transportation on the facility.

11. Dairyland Road bicycle facilities: Construct 4-foot paved shoulders on Dairyland Road (SR 1112, SR 1113, SR 1177) from Union Grove Church Road (SR 1111) to Orange Grove Road (SR 1006). This project is one segment of a route providing connection from Carrboro to the Efland/Mebane area via Orange Grove Road and Buckhorn Road (SR 1114) to West Ten Road (SR 1144). The complete route would extend bicycle facilities proposed with highway improvements on Buckhorn Road in the Buckhorn Road Economic Development District.

    This project was submitted for the 2011-2017 TIP through the Triangle Rural (TARPO) Planning Organization. The Dairyland segment ranked #3 in the Strategic Planning Office of Transportation (SPOT) ranking of bicycle projects in the TARPO.

12. NC 86 (North of Hillsborough) Improvements: Widen NC 86 from US 70 bypass to north of NC 57 to four lanes with intersection improvements at US 70 bypass and NC 57. Improvements at the NC 86/US 70 intersection should include extending the queuing lane for traffic turning east onto US 70 Bypass from northbound Churton Street/NC 86. Improvements at the NC 86/NC 57 intersection should include a crosswalk and provide a safe crossing for pedestrians with sidewalk connecting the intersection of NC 86 and NC 57 to Rencher Street. Improvements at the NC 86/NC 57 intersection are identified in the developing Safe Routes to School Action Plan for Stanford Middle School as a major need to provide a safe access for students living north of US 70 and west of NC 86 to walk or bike to school. NC 86 is the major north-south route through Orange County and is designated in North Carolina's Long-Range Statewide Multimodal Transportation Plan as a Strategic Highway Corridor. 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.

OTHER PROJECTS

Orange County has submitted several priority projects for previous updates to the Transportation Improvement Program that the County has omitted from this priority list for the following reasons:

1. The projects are bicycle projects with estimated costs greater than $1,000,000, and will be prioritized as new highway modernization projects and Orange County complies with the Metropolitan Planning Organization's request to limit requests to 3 new highway projects; or
2. The projects are highway projects that are not included in the 2035 DCHC Long Range Transportation Plan.

These projects will be important for future mobility. Orange County requests the following projects be considered for funding in future updates to transportation plans and programs as traffic and congestion conditions warrant:

- SR 1114 (Buckhorn Road) Widening: Widen Buckhorn Road from US 70 to West Ten Road (SR 1144) to a multi-lanes with bicycle and pedestrian facilities. This stretch of roadway borders the western boundary of the I-85/Buckhorn Road Economic Development District EDD). Orange County has extended water and sewer to this area to serve the Gravelly Hill Middle School on West Ten Road and to increase the attractiveness of the Economic Development District. Improvements to the transportation system to support plans for that district will be necessary to efficiently and safely accommodate anticipated traffic. The Gravelly Hill Middle School and soccer fields on the north side of West Ten Road also increase traffic on this segment of Buckhorn Road.

- SR 1008 (Mt. Carmel Church Road) bicycle lanes: Construct bicycle lanes on Mt. Carmel Church Road from US 15-501 to the Orange/Chatham County line. This project is a segment of the Mountains to Seas Bicycle Route. Mt. Carmel Church Road, from Chapel Hill's extraterritorial planning jurisdiction (ETJ) to the Orange/Chatham County line is priority 8 of the primary priority bicycle routes on the Orange County Bicycle Transportation Plan. Increased traffic on Mt. Carmel Church has worsened travel conditions in this corridor that has many blind curves, making this popular bicycle route unsafe for bicycling.

- US 70 Bypass Widening: Widen US 70 Bypass, from the Orange/Durham County line to the I-85-US 70 Connector east of Efland, to a four-lane divided section with bike and pedestrian improvements. This project should be phased to address traffic counts and existing congestion. Two segments of this corridor are of particular interest. The first segment is the one through northern Hillsborough because of the economic development potential of this segment (as referenced in the US 70/Cornelious Street Corridor Strategic Plan) and proximity to C.W. Stanford Middle School and Orange High School. The second segment is the segment through the Eno Economic Development District that includes the interchange of Interstate 85 and US 70, and should be contemporaneous with TIP Project I-0305, Interstate 85 widening from I-40 to the Orange/Durham County line.

- NC 86, Bicycle Facilities: Construct bicycle facilities (4-foot paved shoulders) from Chapel Hill (Whitfield Road, SR 1730, SR 1731) to Hillsborough (US 70 Business). This project will extend bicycle facilities on Martin Luther King, Jr. Boulevard (NC86) in Chapel Hill to US 70 Business in Hillsborough. 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, A.L. Stanback Middle School and New Hope Elementary School (just off NC 86 on New Hope Church Road, SR 1723). This route is listed as priority I of the primary bicycle routes proposed in the Orange County Bicycle Transportation Plan.

Highway Projects on Local Priority Lists that are already in the SPOT database

Local Rank	Project Description	Tier	Goal	Previous SPOT Rank	Submitted by	Notes	Cost
not provided	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. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	1	Durham, Durham County		$ 91,500,000
not provided	NC 54 (I-40 to Barbee Chapel Rd.) – Widen to 6-lane divided. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	17	Durham, Durham County		$ 39,100,000
not provided	Fayetteville Rd. (Woodcroft Pkwy. to Riddle Rd.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	35	Durham, Durham County		$ 21,100,000
not provided	Ephesus Church Rd./Pope Rd. (Orange County Line to Old Durham-Chapel Hill Rd.) - On-road bicycle facilities and sidewalks	Subregional	Modernization	38	Durham, Durham County		$ 600,000
not provided	Erwin Rd. (US 15-501 to NC 751) - On-road bicycle facilities and sidewalks (where appropriate)	Subregional	Modernization	42	Durham, Durham County		$ 5,527,000
1, 1	Churton Street (SR 1009) I-40 to Eno River. Widen to Multi-Lanes with landscaped median, bicycle lanes, and sidewalks, widen Bridge No. 240 over Southern Railroad.	Subregional	Mobility	87	Hillsborough, Orange County		$ 19,260,000
not provided	M.L. King, Jr. Pkwy./NC 55 Interchange (U-2405) – Extend Martin Luther King Jr. Pkwy from NC 55 intersection to Cornwallis Rd. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	91	Durham, Durham County		$ 30,000,000
not provided	NC 751 (Phase I, S. Roxboro Rd. to NC 54) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	107	Durham, Durham County		$ 7,200,000
1	SR 1780/Estes Dr. (SR 1772 (Greensboro Street) to NC 86). Widen to add bike lanes, sidewalks, and transit accommodations.	Subregional	Modernization	109	Carrboro		$ 2,197,000
not provided	SR 1114 (Buckhorn Road) Widening: Widen Buckhorn Road from US 70 to West Ten Road (SR 1144) to a multi-lanes with bicycle and pedestrian facilities.	Subregional	Mobility	120	Orange County	Project now in MPO MAB, Not in 2035 LRTP	?
6	Franklin/Main/Merritt Mill/Brewer intersection improvements – Make changes to improve operation and safety for motorists, pedestrians, bicyclists, and transit.	Subregional	Mobility	131	Carrboro		$ 1,000,000
2, 4	Orange Grove Road Extension (Orange Grove Road to US 70) with sidewalks and bicycle lanes	Subregional	Mobility	136	Hillsborough, Orange County		$ 30,000,000
3. 5	SR 1148 (Eno Mountain Road) and SR 1192 (Mayo Street) at SR 1006 (Orange Grove Road). Realign Intersection and Make Safety Improvements. include bicycle lanes and sidewalks.	Subregional	Modernization	180	Hillsborough, Orange County		$ 2,350,000
not provided	Old Oxford Highway (Phase I, N. Roxboro to Hamlin Rd.) – Expand capacity. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	212	Durham, Durham County		$ 38,100,000
2, 6	Homestead Rd. - SR 1009 (Old NC 86) to NC 86. Widen to include bicycle lanes, sidewalks, transit accommodations, and safety improvements (design may vary along length).	Subregional	Modernization	237	Carrboro, Orange County		$ 5,505,000
2	US 70 East-Interstate 85 Connector: Modify the I-85 Connector interchange at US 70 to provide access from all directions.	Regional	Mobility	250	Orange County	Project now in MPO MAB, Not in 2035 LRTP	?
not provided	Club Blvd. (Ambridge St. to Geer St.) – On-road bicycle facilities and sidewalks	Subregional	Modernization	70 (B/P)	Durham, Durham County		$ 2,978,000
not provided	Dearborn Dr. (E. Club Blvd. to Old Oxford Rd.) - On-road bicycle facilities and sidewalks	Subregional	Modernization	76 (B/P)	Durham, Durham County		$ 2,389,000
not provided	Cornwallis Rd. (Erwin Rd. to Chapel Hill Rd.) - On-road bicycle facilities and sidewalks (where appropriate)	Subregional	Modernization	78 (B/P)	Durham, Durham County		$ 3,024,000
not provided	NC 751 (HOPE VALLEY RD) (SR 1146 (S ROXBORO RD) TO Martin Luther King Pkwy BIKE LANES AND SIDEWALKS.	Regional	Modernization	Unranked (B/P)	Durham, Durham County	Needs to be reclassified by SPOT	$ 4,916,000
4, not provided	NC 86 (US 70A TO Whitfield Rd.) WIDE OUTSIDE LANES.	Regional	Modernization	Unranked (B/P)	Hillsborough, Orange County	Needs to be reclassified by SPOT	$ 933,340
not provided	SR 1110 (BARBEE CHAPEL RD/Farrington Rd.) (NC 54 TO SR 1107 (STAGECOACH RD)) (DESIGN MAY VARY ALONG LENGTH) BIKE LANES AND SIDEWALKS.	Subregional	Modernization	Unranked (B/P)	Durham, Durham County	Needs to be reclassified by SPOT	$ 1,759,000
not provided	SR 1102/SR1977 (SEDWICK RD) (SR 1100 (GRANDALE DR) TO SR 1945 (S ALSTON AVE)) BIKE LANES AND SIDEWALKS.	Subregional	Modernization	Unranked (B/P)	Durham, Durham County	Needs to be reclassified by SPOT	$ 2,187,000
3, 3	SR 1009 (OLD NC 86) (SR 1009 (HILLSBOROUGH RD) TO SR 1777 (HOMESTEAD RD))(DESIGN MAY VARY ALONG LENGTH) SIDEWALKS AND BICYCLE LANES and transit accommodations.	Subregional	Modernization	Unranked (B/P)	Carrboro, Orange County	Needs to be reclassified by SPOT	$ 1,320,000

Local Rank	Project Description	Tier	Goal	Previous SPOT Rank	Submitted by	Notes	Cost
4. 3	SR 1009 (OLD NC 86) (SR 1777 (HOMESTEAD RD) TO SR 1727 (EUBANKS RD)) (DESIGN MAY VARY ALONG LENGTH) SIDEWALKS AND BICYCLE LANES and transit accommodations.	Subregional	Modernization	Unranked (B/P)	Carrboro, Orange County	Needs to be reclassified by SPOT	$ 4,233,000
5, 7	SR 1727 (EUBANKS RD) (SR 1009 (OLD NC 86) TO ROGERS RD) (DESIGN MAY VARY ALONG LENGTH) SIDEWALKS, BICYCLE LANES, and transit improvements.	Subregional	Modernization	Unranked (B/P)	Carrboro, Orange County	Needs to be reclassified by SPOT	$ 1,992,000
3	SR 1009 (OLD NC 86) (I-40 TO SR 1727 (EUBANKS RD.)) WIDE OUTSIDE LANES.	Subregional	Modernization	Unranked (B/P)	Orange County	Needs to be reclassified by SPOT	$ 1,598,000
not provided	SR 1008 (MOUNT CARMEL CHURCH RD) (US 15-501 TO CHATHAM COUNTY LINE) BICYCLE LANES.	Subregional	Modernization	Unranked (B/P)	Orange County	Needs to be reclassified by SPOT	$ 1,215,000

Highway Projects on Local Priority Lists that are not in the SPOT database - MPO can submit up to 15 new projects

Local Rank	Project Description	Tier	Goal	Previous SPOT Rank	Submitted by	Notes	Cost
not provided	NC 147/Glover Road Interchange – Construct new interchange. Widen Glover Road from NC 147 to Angier Ave. Provide bicycle, pedestrian, and transit facilities as appropriate.	Statewide	Mobility	New Project	Durham, Durham County		?
8	Dairyland Road bicycle facilities: Construct 4-foot paved shoulders on Dairyland Road (SR 1112, SR 1113, SR 1177) from Union Grove Church Road (SR 1111) to Orange Grove Road (SR 1006)	Subregional	Modernization	New Project	Orange County		$ 4,217,000
9	NC 86 (North of Hillsborough) Improvements: Widen NC 86 from US 70 bypass to north of NC 57 to four lanes with intersection improvements at US 70 bypass and NC 57.	Statewide	Mobility	New Project	Orange County		?
not provided	NC 751 (NC 54 to Renaissance Pkwy.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	New Project	Durham, Durham County		?
not provided	NC 751 (Renaissance Pkwy. To Fayetteville Rd.) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Regional	Mobility	New Project	Durham, Durham County		?
not provided	Fayetteville Rd. (Renaissance Pkwy. To NC 751) – Widen to 4-lane. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project	Durham, Durham County		?
not provided	S. Roxboro Rd. (Cornwallis Rd. to MLK Pkwy.) – Part widen to 4-lane, part 4-lane on new location. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project	Durham, Durham County		?
not provided	Southwest Durham Drive (US 15-501 to Mt. Moriah Rd.) – Construct 4-lane road on new location. Provide bicycle, pedestrian, and transit facilities as appropriate.	Subregional	Mobility	New Project	Durham, Durham County		?
1	US 15-501 (Orange County Line to 400' south of Mann's Chapel Rd.) - Add either 15' wide outside lanes or 6' bike lanes	Statewide	Modernization	New Project	Chatham County		$ 2,340,000
not provided	Eubanks Rd. (Rogers Rd. to NC 86) construct bicycle lanes, sidewalks, safety, and intersection improvements.	Subregional	Modernization	New Project	Chapel Hill		?
not provided	Merritt Mill Road (Franklin St. to Fordham Blvd.) construct bicycle lanes and sidewalks.	Subregional	Modernization	New Project	Chapel Hill		?
not provided	Carmichael St. (Fordham Blvd. to Northern terminus) repave road surface and provide bicycle accomm	Subregional	Modernization	New Project	Chapel Hill		?
not provided	Mt. Carmel Church Road/Bennett Road Intersection: Installation of roundabout and related safety imp	Subregional	Modernization	New Project	Chapel Hill		?

Highway Projects on Local Priority Lists that do not pass the MPO's screening criteria

Local Rank	Project Description	Tier	Goal	Previous SPOT Rank	Submitted by	Notes	Cost
5, not provided	US 70 Bypass widening from the Orange/Durham County line to the I-85-US 70 Connector east of Efland: Widen US 70 Bypass to a four-lane divided section with bike and pedestrian improvements.	Subregional	Mobility	New Project	Hillsborough, Orange County	Not in 2035 LRTP	?
6	Hillsborough Western Bypass - US 70 to NC 57. Two Lanes on New Location.	Subregional	Mobility	New Project	Hillsborough	Not in 2035 LRTP	?

Projects not on Local Priority Lists that are already in the SPOT database

Project Classification					Project Location						
SPOTID	Tier	Goal	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	First Division	First MPO/RPO Name
42688	Statewide	Mobility	Capacity	I-0305A	I-085		SR 1006 near Hillsborough	East of SR 1709	I-40 at Hillsborough to Durham County Line. Widen to Six Lanes and Reconstruct Interchanges and Structures. Section A: SR 1006 near Hillsbourgh to East of SR 1709.	07	Durham-Chapel Hill-Carrboro MPO
42689	Statewide	Mobility	Capacity	I-0305B	I-085		East of SR 1709	Durham County Line	I-40 at Hillsborough to Durham County Line. Widen to Six Lanes and Reconstruct Interchanges and Structures. Section B: East of SR 1709 to Durham County Line.	07	Durham-Chapel Hill-Carrboro MPO
42714	Statewide	Mobility	Capacity	I-3306A	I-040		I-85	US 15/501	I-85 in Orange County to NC 147 (Buck Dean Freeway) in Durham County. Add Additional Lanes. Section A: I-85 to US 15/501.	07	Durham-Chapel Hill-Carrboro MPO
43506	Statewide	Mobility	Capacity	U-2807	US015, US501		I-40	US 15/501	I-40 to US 15/501 Bypass in Durham. Major Corridor Upgrade.	05	Durham-Chapel Hill-Carrboro MPO
43514	Subregional	Mobility	Capacity	U-2831B		New Route - Briggs Avenue Extension	Riddle Road	SR 1951 (So-Hi Drive)	Riddle Road to SR 1951 (So-Hi Drive). Two Lanes on Multi-Lane Right of Way.	05	Durham-Chapel Hill-Carrboro MPO
43623	Regional	Mobility	Capacity	U-4010	NC098	Holloway Street	East of US 70	East of Junction Road	East of US 70 to East of Junction Road. Widen For Center Turn Lane.	05	Durham-Chapel Hill-Carrboro MPO
43673	Subregional	Mobility	Capacity	U-4716B	SR1980	New Route - SR 1980 (Church Street) Extension	NC 54	SR 1978 (Hopson Road)	Extend Church Street north, including sidewalks and bicycle lanes, to Hopson Road and close Church St. at-grade crossing	05	Durham-Chapel Hill-Carrboro MPO
45383	Subregional	Mobility	Capacity	U-4716D	SR1978	Hopson Street	SR 1999 (Davis Drive)	NC 54 (Miami Blvd)	Widen to multi-lanes.	05	Durham-Chapel Hill-Carrboro MPO
44257	Statewide	Health	Modernization	U-5304	US015, US501		NC 86 (Columbia Street)	SR 1742 (Ephesus Church Road)	(US 15/501) Fordham Boulevard (NC 86 (Columbia Street)/US 15/501 South to SR 1742 (Ephesus Church Road)) sidewalks, wide-outside lanes, and transit accommodations.	07	Durham-Chapel Hill-Carrboro MPO
44250	Subregional	Health	Modernization		SR1717	Jack Bennett Road	US 15/501	SR 1721 (Lystra Rd)	Jack Bennett Rd (SR 1717) (US 15/501 to Lystra Rd (SR 1721) safety improvements.	08	Durham-Chapel Hill-Carrboro MPO
44262	Subregional	Health	Modernization		SR1780	Estes Drive	NC 86	Caswell Road	Estes Drive (NC 86 to Caswell Road) widen existing roadway to include two 12-foot travel lanes, four-foot bicycle lanes and sidewalks.	07	Durham-Chapel Hill-Carrboro MPO
44273	Subregional	Health	Modernization		SR1762	Jeremiah Drive	SR 1721 (Lystra Road)	End of Road	Elevate road for flood control.	08	Durham-Chapel Hill-Carrboro MPO
44277	Subregional	Health	Modernization		SR1721	Lystra Road	US 15/501	SR 1008 (Farrington Point Road)	Safety improvements.	08	Durham-Chapel Hill-Carrboro MPO
44279	Subregional	Mobility	Interchange/Intersection		SR1780	Estes Drive	SR 1772 (Greensboro Street)		SR 1780 (Estes Drive)/SR 1772 (Greensboro Street) construct roundabout.	07	Durham-Chapel Hill-Carrboro MPO
44308	Regional	Health	Modernization		NC086	Martin Luther King, Jr. Boulevard	I-40	North Street	Construct Bicycle Lanes and Sidewalks	07	Durham-Chapel Hill-Carrboro MPO
44311	Regional	Health	Modernization		NC054		US 15/501	SR 1110 (Barbee Chapel Road)	Construct Bicycle Lanes and Sidewalks	07	Durham-Chapel Hill-Carrboro MPO
44892	Subregional	Health	Modernization		SR1843	Seawell School Road	SR 1780 (Estes)	SR 1777 (Homestead)	Seawell School Road (Homestead to Estes) bicycle lanes, sidewalks, transit accommodations, and Intersection safety improvements (design may vary along length)	07	Durham-Chapel Hill-Carrboro MPO
46022	Statewide	Mobility	Interchange/Intersection		US015, US501		SR 1742 (Ephesus Church Road)		Intersection Improvements	07	Durham-Chapel Hill-Carrboro MPO
44327	Subregional	Health	Modernization		SR1900	Old Mason Farm Road/Finley Golf Course Road	NC 54	NC 54/US 15-501 (Fordham Blvd.)	Construct bike lanes and sidewalks.	07	Durham-Chapel Hill-Carrboro MPO

Bicycle Projects on Local Priority Lists - MPO can submit up to 10 new projects

Local Rank	Project Description	Submitted by
1, 1	W. Ellerbe Creek Trail (existing trail to Stadium Drive) – Shared Use Path	Durham, Durham County
2, 2	Scott King Road (Fayetteville Rd. to Grandale Rd.) – On-road bicycle facilities	Durham, Durham County
3, 3	Rocky Creek Trail (NC 55 to Kelly Bryant Bridge) – Shared Use Path	Durham, Durham County
4, 4	Duke Beltline Trail – Shared Use Path	Durham, Durham County
5, 5	NC 751 (Erwin Rd. roundabout to Hillsborough Rd./US 70) – On-road bicycle facilities	Durham, Durham County
6, 6	Cole Mill Road (Rose of Sharon Rd. to Orange County line) – On-road bicycle facilities	Durham, Durham County
1, not provided	Campus to Campus Connector (Broad St. to Seawell School Rd.) – Construct a multi-use path between Broad St. and Village Dr. and between Village Dr. and Seawell School Rd.; install on-street bicycle facilities on Village Dr.	Carrboro, Chapel Hill
not provided	Horace Williams Greenway: Chapel Hill Watch Village to Homestead Road	Chapel Hill
not provided	Dry Creek Trail: Phase 1 Perry Creek Road to Erwin Road	Chapel Hill

Bicycle Projects that are already in the SPOT Database

3	NC 54 from James St. to Anderson Park – Construct a side path on the north side of the road to accommodate two-direction bicycle transportation.	Carrboro
2	Morgan Creek Phase II (from the end of Phase I to Carrboro Town line) - Construct a multi-use path from University Lake to the western terminus of the first phases of the greenway and a multi-use path spur to BPW Club Rd.	Carrboro
	SR 1727 (Eubanks Rd) (Rogers Rd to NC 86) bicycle lanes.	
	Horace Williams Trail (Homestead Rd and Carolina North to the Town Operations Center, adjacent to the Norfolk Southern rail line (formerly Southern Railroad Greenway)).	
	NC 86 (US 70A to I-40) wide outside lanes.	
	US 15-501 (Fordham Blvd) pedestrian and bicycle overpass/underpass across Fordham Blvd between SR 1902 (Manning Dr) and Old Mason Farm Rd.	
	Bolin Creek Phase IV (Umstead Park to Carolina North, follow Umstead Dr to Estes Dr, then along Estes Dr to Carolina North) multi-use path.	
	Bolin Creek/Little Creek Greenway (Chapel Hill Community Center to Pinehurst Dr) multi-use path.	

Pedestrian Projects on Local Priority Lists - MPO can submit up to 10 new projects

Local Rank	Project Description	Submitted by
1, 1	NC 54 (NC 55 to RTP) – Sidewalks	Durham, Durham County
2, 2	Roxboro Road (Pacific Ave. to Murray Ave.) – Sidewalks	Durham, Durham County
3, 3	Cook Road (Fayetteville Rd. near Hillside High to Martin Luther King, Jr. Parkway) – Sidewalks	Durham, Durham County
4, 4	Duke Street (Murray Ave. to Roxboro Rd.) – Sidewalks	Durham, Durham County
5, 5	Horton Road (Guess Rd. to Roxboro Rd.) – Sidewalks	Durham, Durham County
1	W. Main St. – Install improved pedestrian crossings and sidewalks from Hillsborough Rd. to Jones Ferry Rd.	Carrboro
4	Estes Dr. – Construct a sidewalk on the south side of the road from N. Greensboro St. to the Town limits.	Carrboro
5	Old NC 86 – Construct a sidewalk on the east side of the road from Homestead Rd. to Eubanks Rd.	Carrboro
1, 1	SR 1006, Orange Grove Road, at Interstate 40: Construct a pedestrian bridge over I-40. Include sidewalk from I-40 to Timbers Drive	Hillsborough, Orange County
1	US 15-501 at Mann's Chapel Rd. - Add pedestrian refuge islands, signals, crosswalks	Chatham County

Pedestrian Projects on Local Priority Lists that are already in the SPOT Database

6, 6	Holloway Street (Junction Rd. to Chandler Rd.) – Sidewalks	Durham, Durham County
2	S. Greensboro St. – Add sidewalks on the west side of the road from the northern end of Old Pittsboro Rd. to Merritt Mill Rd.	Carrboro
3	N. Greensboro St. corridor from Weaver St. to Shelton St. – pedestrian improvements	Carrboro
	SR 1118 (Fayetteville St) (SR 1158 (W Cornwallis Rd) to NC 147) sidewalks.	
	W Chapel Hill Street (Kent St to Buchanan Blvd) sidewalks.	
	SR 1800 (Cheek Rd) (SR 1670 (E Geer St) to Hardee St) sidewalks.	
	E Main St (Hood St to NC SS (Alston Ave)) sidewalks.	
	SR 1926 (Angier Ave) and S Driver St intersection sidewalks.	

	US 15-501 Business (N Mangum St)-Corporation St intersection sidewalks.	
	E Main St (Gary St to S Driver St) sidewalks.	
	US 15-501 (Fordham Boulevard) (SR 1742 (Ephesus Church Rd) to Elliott Rd) sidewalks.	
	SR 1994 (Culbreth Rd) (Adam Way to SR 1919 (Smith Level)) sidewalks.	
	SR 1919 (S Greensboro St) (Old Pittsboro Rd to SR 1771 (Merritt Mill Rd)) sidewalk on the west side.	
	Cleland Dr/Burning Tree Dr (Cleland Dr and Burning Tree Dr) sidewalks.	

Bicycle and Pedestrian Projects already in the SPOT database

Local Rank	Project Description	Submitted by	Notes
	SR 1118 (Fayetteville Rd) (SR 1158 (W Cornwallis Rd) to Nelson St) bike lanes and sidewalks.		Funded with SRTS
	NC 55 (Avondale Dr) (US 501 Bus (Roxboro Rd) to SR 1670 (E Geer St)) bike lanes and sidewalks.		Funded with STPDA
	NC 98 (Holloway St) (US 70 Bus (S Miami Blvd) to US 70) sidewalk and wide outside lanes.		To be constructed as part of the East End Connector
	NC 98 (Holloway St) (SR 1838 (Junction Rd) to SR 1919 (Lynn Rd)) sidewalk and wide outside lanes.		
	SR 1008 (Mount Carmel Church Rd) (US 15-501 to Bennett Rd) sidewalks and bicycle lanes.		
	18 Chapel Hill Intersections-bicycle and pedestrian improvements.		

Transit Projects on Local Priority Lists - MPO can submit unlimited number of projects

Project Description	Year Needed	Cost	Submitted By
14 40' Hybrid Replacement Buses @$650,000/bus	2013	$9.1 million	Durham, Durham County
14 40' Hybrid Replacement Buses @ $700,000/bus	2014	$9.8 million	Durham, Durham County
15 ADA Replacement Vans @ $45,000/van	2013	$675,000	Durham, Durham County
6 Replacement Service Vehicles @ $30,000/vehicle	2013	$180,000	Durham, Durham County
4 Replacement Service Vehicles @ $35,000/vehicle	2014	$140,000	Durham, Durham County
Passenger Amenities (shelters, benches, trashcans, solar lights)	2013	$500,000	Durham, Durham County
Passenger Amenities (shelters, benches, trashcans, solar lights)	2015	$750,000	Durham, Durham County
8 40' Hybrid Expansion Buses @$650,000/bus • 15 minutes headways to Duke • Direct route from downtown to Southpoint • Direct route from downtown to Riverside HS • Direct route from Duke to Southpoint	2013	$5.2 million	Durham, Durham County
18 40' Hybrid Expansion Buses @$700,000/bus • 15 minutes headways on routes 1, 3, 4, 6, 7, and 10 • 30 minutes headways on route 15 • Cross-town routes	2014	$12.6 million	Durham, Durham County
4 40' Hybrid Expansion Buses @$750,000/bus • 15 minutes headways on routes 12 and 16	2015	$3.0 million	Durham, Durham County
4 40' Hybrid Expansion Buses @ $750,000/bus • New Route on MLK Pkwy, NC 55 to South Square • New route from Downtown to Butner	2015	$3.0 million	Durham, Durham County
Land Acquisition and Construction of 2 Park –n-ride Lots @ $1.1 million/lot • North Durham/Treyburn area • US 70 east or Parkwood area	2015	$2.2 million	Durham, Durham County
Regional Rail Service – Durham to Chapel Hill – Light Rail Transit or Bus Rapid Transit - planning and engineering phase *Description and cost will be determined by Triangle Regional Transit Program	2013-2015	*	Durham, Durham County
Regional Rail Service – Durham to Raleigh – Commuter Rail – planning and engineering phase *Description and cost will be determined by Triangle Regional Transit Program	2013-2015	*	Durham, Durham County
Park and Ride Lot in the Buckhorn Economic Development District:			Orange County

Rail Projects on Local Priority Lists - Projects to be submitted directly to the Rail Division

Project	Submitted by
Train station/multi-modal center: Construct a train station in Hillsborough and request AMTRAK service to Orange County. The train station can also serve future commuter rail operations and anchor a multimodal transportation hub in Hillsborough. A revenue and ridership study conducted by the North Carolina Department of Transportation Rail Division and AMTRAK has indicated that there is enough potential ridership to make a stop in Hillsborough financially feasible.	Hillsborough, Orange County

NCDOT SPOT Prioritization 2.0								DCHC MPO Current Project Ranking Methodology			TCC Recommendation *Pending							
		Mobility			Modernization							Mobility			Modernization			
Criteria	Metric	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier	Criteria	Metric	% of Score	Criteria	Metric	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier
Congestion	current volume/capacity + AADT	20%	20%	20%	10%	5%		Travel Demand	2035 volume/current capacity	14.3%	Congestion	current volume/capacity + AADT	30%	30%	30%	5%	5%	no SPOT data
Safety	critical crash rates, crash density, severity	10%	5%	5%	10%	10%	10%	Safety	crashes/100 million vehicle miles	14.3%	Safety	critical crash rates, crash density, severity	20%	20%	25%	15%	15%	20%
Pavement Condition	pavement condition rating	10%	5%	5%	10%	5%		not included			Do not include. Poor road maintenance does not justify widening or modernization.							
Benefit/Cost	difference between 2009 v/c and 2009 v/c with project * AADT *	20%	15%					not included			Do not include. Difference in v/c should not be the sole measurement of a project's benefits. Also duplicative of congestion criteria.							
Economic Competitiveness	use TREDIS model, input change in VHT, output economic value added based on % change in Division	10%	5%					not included			Economic Competitiveness	use TREDIS model, input change in VHT, output economic value added based on % change in Division	20%	20%	no SPOT data	no SPOT data	no SPOT data	no SPOT data
Lane Width	existing width vs. standard width				20%	15%	10%	not included			Lane Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Shoulder Width	existing width vs. standard width				20%	15%	10%	not included			Shoulder Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Multi-modal	options, connection, or design features	Bonus Points: 8 for HOV/HOT, BRT, Rail, BOSS; 5 for connection to terminal; 3 for sidewalks, bike lanes, transit facilities, etc.						Multi-modal	number of modes benfited	14.3%	Multi-modal	options, connection, or design features	Bonus Points: 8 for HOV/HOT, BRT, Rail, BOSS; 5 for connection to terminal; 3 for sidewalks, bike lanes, transit facilities, etc.					
not included								Environmental Impacts	Air quality impacts and GIS analysis of wetlands, streams, species habitat, parks, and water supply watershed	14.3%	Environmental Impacts	Air quality impacts and GIS analysis of wetlands, streams, species habitat, parks, and water supply watershed	10%	10%	15%	10%	10%	10%
not included								Community Impacts	GIS analysis of population density, schools, parks, historic resources, and cemeteries	14.3%	Community Impacts	GIS analysis of population density, schools, parks, historic resources, and cemeteries	10%	10%	15%	10%	10%	10%
not included								Environmental Justice	GIS analysis of negative impact to low-income and minority areas	14.3%	Environmental Justice	GIS analysis of low-income and minority areas	10%	10%	15%	10%	10%	10%
not included								Funding Status	percent of funding in current TIP	14.3%	Do not include. Unfunded/post-year projects are no longer listed in the TIP.							
MPO Rank		10%	25%	40%	10%	25%	40%											
Division Rank		20%	25%	30%	20%	25%	30%											
Total		100%	100%	100%	100%	100%	100%			100%			100%	100%	100%	100%	100%	100%

NCDOT SPOT Prioritization 2.0			DCHC MPO Current Project Ranking Methodology			TCC Recommendation *Pending					
						Bicycle			Pedestrian		
Criteria	Metric	% of Score	Criteria	Metric	% of Score	Criteria	Metric	% of Score	Criteria	Metric	% of Score
Right-of-Way Acquired	Amount of right-of-way acquired	18%	Right-of-Way Availability	Amount of right-of-way acquired	10%	Right-of-Way Acquired	Amount of right-of-way available	10%	Right-of-Way Acquired	Amount of right-of-way available	10%
			Local Connectivity	Number of connections to existing sidewalks, greenways, and bicycle facilities	10%						
Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	15%	Travel Demand from Local Land Uses	Number of schools, colleges, parks, major retail centers, major employment centers, and transit routes within 0.5 miles of ped facility or 2 miles of bike facility	10%	Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%	Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%
Inclusion in an Adopted Plan	In adopted plan	18%	not included			Do not include. All DCHC MPO jurisdictions have plans.					
Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years	2%	Safety	Number of bike/ped crashes within last 3 years	10%	Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%	Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 0.5 miles of ped facility or 1.5 miles of bicycle facility	12%	Community Impacts	GIS analysis of population density, schools, and parks	10%	Demand/Density	Population density within 1.5 miles of bicycle facility	15%	Demand/Density	Population density within 0.5 miles of ped facility	15%
not included			Traffic volume	AADT on roadway	10%	Congestion	v/c on roadway	15%	Traffic volume	AADT on roadway	15%
not included			Regional Connectivity	Part of regional bicycle route or pedestrian connection to Triangle Transit regional route, future rail, or local bus route	10%	Regional Connectivity	Part of regional bicycle route or pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%	Regional Connectivity	Part of regional bicycle route or pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%
not included			Environmental Impacts	GIS analysis of impact to wetlands, streams, species habitat, and water supply watersheds	10%	Do not include. Negative environmental impact of construction of bicycle facilities, sidewalks, and greenways is minimal.					
not included			Environmental Justice	GIS analysis of benefit to minority and low-income population	10%	Environmental Justice	GIS analysis of benefit to minority and low-income population	10%	Environmental Justice	GIS analysis of benefit to minority and low-income population	10%
not included			Funding Status	percent of funding in current TIP	10%	Do not include. Unfunded/post-year projects are no longer listed in the TIP.					
MPO Rank		35%									
Total		100%			100%			100%			100%

NCDOT SPOT Prioritization 2.0									DCHC MPO Current Project Ranking Methodology			TCC Recommendation *Pending		
		Statewide Tier	Regional Tier			Subregional Tier						All Tiers and Types		
Criteria	Metric	All % of Score	Mobility % of Score	Infrastructure Health % of Score	Safety & Security % of Score	Mobility % of Score	Infrastructure Health % of Score	Safety & Security % of Score	Criteria	Metric	% of Score	Criteria	Metric	% of Score
Availability	One point for every percent increase in system-wide service hours; maximum 12 points	18%	6%	2%	6%	2%	2%	6%	not included			Availability	One point for every percent increase in system-wide service hours	15%
Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway; maximum 10 points	15%	5%	2%	5%	2%	2%	5%	Connectivity	Number of connections to fixed route transit systems	14.3%	Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
Technology	One point for every percent increase in funding spend on information technology; maximum 8 points	12%	4%	2%	4%	2%	2%	4%	not included			Technology	One point for every percent increase in funding spend on information technology	5%
Age/Modernization	One point for every percent decrease in average age of fleet; Facilities: age of old facility/expected life of new facility + one-tenth of one point for every percent increase in surface area of space; maximum 20 points	30%	10%	4%	10%	4%	4%	10%	not included			State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
not included									Service Type	Replacement/O&M, Expansion/LRT/BRT/PnR, Enhancements/Amenities/ITS	14.3%	Do not include. The high weighting of the State of Good Repair criterion should result in a high ranking of replacement vehicles.		
not included									Ridership	Estimated number of new or benefitted riders per year	14.3%	Do not include. This criteria is difficult to consistently apply to all project types.		
not included									Environmental Impacts	Based on project type, vehicle type, GIS analysis	14.3%	Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
not included									Community Impacts	Based on density, schools, parks served	14.3%	Community Impacts	Based on density, schools, parks served	5%
not included									Environmental Justice	GIS analysis of benefit to low-income and minority areas	14.3%	Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%
not included									Funding Status in TIP	percent of funding in current TIP	14.3%	Do not include.		
MPO Rank		25%	75%	90%	75%	90%	90%	75%						
Total		100%	100%	100%	100%	100%	100%	100%			100%			100%

DURHAM-CHAPEL HILL-CARRBORO MPO
METHODOLOGY FOR RANKING
METROPOLITAN TRANSPORATION IMPROVEMENT PROGRAM
PRIORITY PROJECT REQUESTS (FY 2014-2020)

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. The TCC will make its technical recommendation on a draft Priority List based on the methodology described in this document, and the TAC will then be afforded the opportunity to make any changes it deems appropriate.

METHODOLOGY GOALS

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

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

- Be understandable by the general public.

PROCEDURE FOR RANKING PROJECTS

1) Goal Setting For Regional Priority List

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

2) Submission of Local Priority Lists

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

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

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

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

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

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

Local jurisdictions shall provide the DCHC MPO a list of projects. The list should be grouped by mode (highway, transit, bicycle, and pedestrian). The local jurisdictions shall provide a short description of the project, including the project limits, name, mileage, and cost. The description should note any essential elements of the project such as bike lanes, sidewalks, transit accommodations, vehicle types, etc.

3) Submission of Projects for the Regional Priority List

For the 2014-2020 TIP, the DCHC MPO will submit projects to NCDOT's Strategic Planning Office of Transportation by July 2011for the application of the NCDOT's quantitative ranking methodology. The MPO is limited to fifteen new highway projects, ten new bicycle projects, ten new pedestrian projects, and an unlimited number of transit projects. Highway, bicycle, and pedestrian projects that were submitted for the 2012-2018 TIP do not need to be resubmitted.

DCHC MPO will combine the local priority lists into a list that the MPO will submit to NCDOT. In the event that more projects are submitted to the MPO than the MPO is allowed submit to NCDOT, the TCC will select projects based on the screening criteria, the air quality horizon year in the LRTP, regional significance, geographic distribution, and local priority.

4) Application of the Ranking Methodology

The NCDOT will apply a quantitative ranking methodology to the MPO's projects and provide the MPO project scores and data. DCHC MPO staff in coordination with local staff will use the project data and collect additional data to apply the MPO ranking methodology. The list of projects will then be presented to the TCC as the draft regional priority list.

The TCC first examines the consistency in which local jurisdictions and MPO staff have responded to the screening criteria and applied the methodology. If the methodology is not applied consistently, the TCC can agree to change some responses for consistency among all projects. The draft Regional Priority List is then forwarded to the TAC, as the TCC's recommended project priorities for the urban area. The TCC will also recommend a distribution of highway ranking points among projects.

5) Approval of Project Rankings and Points

The TAC will release the draft list for public comment and hold a public hearing at a TAC meeting. 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. After review and public comment, the TAC will approve the final Regional Priority List including the distribution of highway ranking points.

APPLICATION OF THE METHODOLOGY

1. There are four separate ranking methodologies based on the primary mode of transportation: 1) highway; 2) bicycle; 3) pedestrian; and 4) transit. The four ranking methodologies are independent of each other. Points for different modes are on different scales and are not comparable.

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

MODAL RANKING METHODOLOGIES IN DETAIL

Highway

There are nine criteria. All criteria are not applied to all project types and tiers, and the criteria are weighted differently based on the project type and tier.

1. *Congestion* - This category awards points to projects based on the level of congestion and travel demand. For road projects, congestion is measured by the volume to capacity (V/C) ratio and the annual average daily traffic (AADT). For new road facilities in which traffic counts are not available, volumes on a parallel existing facility may be used.

   Data will be collected and provided by NCDOT's SPOT.

2. *Safety* - Safety points are awarded to projects based on the critical crash rate, crash density, and severity.

   Data will be collected and provided by NCDOT's SPOT.

3. *Economic Competitiveness* – Points are awarded based on the output from the TREDIS model.

   Data will be collected and provided by NCDOT's SPOT.

4. *Lane Width* – Points are awarded based on the existing width of the lane versus the standard width

   Data will be collected and provided by NCDOT's SPOT.

5. *Shoulder Width* – Points are awarded based on the existing width of the shoulder versus the standard width.

   Data will be collected and provided by NCDOT's SPOT.

6. *Multi-modal Benefits*– Points are awarded to projects based on if they include multi-modal options (BRT, LRT, BOSS, HOV/HOT), connections (airport, rail depot, transit terminal), or design features (sidewalks, pedestrian crossings, bicycle lanes, wide outside shoulders, bus pullouts, transit prioritization, bus shelters).

   Local jurisdictions are asked to describe the benefits. Data will be collected and provided by NCDOT's SPOT.

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

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

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

   The MPO will provide local jurisdictions a base map of community resources and 2010 population density. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

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

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

Bicycle and Pedestrian

There are seven criteria that are weighted differently. All project types and tiers are subject to the same criteria.

1. *Right-of-Way Availability* – This category awards points to projects based on the right-of-way available for the project. Right-of-way should be estimated based on the local jurisdiction's best knowledge of the area and the NCDOT right-of-way database. Extensive research into property deeds is not required.

   Data will be collected and provided by NCDOT's SPOT.

2. *Connectivity* – This category awards points to projects based on the proximity to transit, schools, central business districts, high density residential or commercial areas, parks, and other bicycle and pedestrian facilities.

   Data will be collected and provided by NCDOT's SPOT.

3. *Bicycle or Pedestrian Crashes* - Points are awarded based on if there have been three or more bicycle or pedestrian crashes within the last five years.

Data will be collected and provided by NCDOT's SPOT.

4. *Demand/Density* – Points are awarded based on the population density within 1.5 miles of a bicycle facility or 0.5 miles of a pedestrian facility.

   Data will be collected and provided by NCDOT's SPOT.

5. *Congestion/Traffic Volume* - This category awards points to projects based on the amount of vehicular congestion as measured by volume/capacity ratios for bicycle projects, and traffic volumes for pedestrian projects. Off-road greenways are based on the parallel or alternate roadways. More points are provided for more congested or higher volume facilities to reflect the safety hazard for bicyclists and pedestrians on larger busier roadways. The volume/capacity ratio will be provided by the MPO model. The traffic counts should be taken from the latest Annual Average Daily Traffic (AADT) maps on the NCDOT website.

   Congestion data will be provided by the MPO. Traffic volume data will be collected and provided by NCDOT's SPOT.

6. *Regional Connectivity* – Points are awarded to bicycle based on if the project is a part of the regional routes recognized in the 2035 LRTP. Projects part of a regional bicycle route that partially exists receive three points. Projects part of a regional bicycle route that does not currently exist receive two points. Projects not part of a regional bicycle route that connect to a regional bicycle route receive one points. Projects that are not part of a regional bicycle route and do not connect to a regional bicycle route receive zero points.

   Points are awarded to pedestrian only projects based on if the project provides a pedestrian connection to regional and local buses. Project limits that include a bus stop for an existing Triangle Transit regional route receive three points. Project limits that include a station area for a future regional rail receive two points. Project limits that include a bus stop for a local bus route receive one point. Project limits that do not include a bus stop for a transit route receive zero points.

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

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

Transit

There are seven criteria for transit projects that are weighted differently. All project types and tiers are subject to the same criteria.

1. *State of Good Repair* – This category is designed to award points to projects that are essential to maintaining the current transit service. Projects will receive more points for every percentage

decrease in average age of fleet. Facilities receive more points for every percentage increase in surface area of space.

Data will be collected and provided by NCDOT's SPOT.

2. *Availability* – This category awards points based on the percentage increase in system-wide service hours.

   Data will be collected and provided by NCDOT's SPOT.

3. *Connectivity* – Projects receive points based on connections to taxi stands, bicycle facilities, sidewalk facilities, demand response transit, high density housing within 0.5 miles, mixed use development, and fixed route services.

   Data will be collected and provided by NCDOT's SPOT.

4. *Technology* – Projects receive points based on the percentage increase in funding on information technology.

   Data will be collected and provided by NCDOT's SPOT.

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

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

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

   The MPO will provide local jurisdictions a base map of community resources and 2010 population density. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

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

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

OBSERVATIONS

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

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

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

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

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

		Mobility			Modernization		
Criteria	**Metric**	**% of Score - Statewide Tier**	**% of Score - Regional Tier**	**% of Score - Subregional Tier**	**% of Score - Statewide Tier**	**% of Score - Regional Tier**	**% of Score - Subregional Tier**
Congestion	current volume/capacity + AADT	30%	30%	30%	5%	5%	no SPOT data
Safety	critical crash rates, crash density, severity	20%	20%	25%	15%	15%	20%
Economic Competitiveness	use TREDIS model, input change in VHT, output economic value added based on % change in Division	20%	20%	no SPOT data	no SPOT data	no SPOT data	no SPOT data
Lane Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Shoulder Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Multi-modal	options, connection, or design features	Bonus Points: 8 for HOV/HOT, BRT, Rail, BOSS; 5 for connection to terminal; 3 for sidewalks, bike lanes, transit facilities, etc.					
Environmental Impacts	Air quality impacts and GIS analysis of wetlands, streams, species habitat, parks, and water supply watershed	10%	10%	15%	10%	10%	10%
Community Impacts	GIS analysis of population density, schools, parks, historic resources, and cemeteries	10%	10%	15%	10%	10%	10%
Environmental Justice	GIS analysis of low-income and minority areas	10%	10%	15%	10%	10%	10%
		100%	100%	100%	100%	100%	100%

Criteria	Metric	% of Score
Right-of-Way Acquired	Amount of right-of-way available	10%
Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%
Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 1.5 miles of bicycle facility	15%
Congestion	v/c on roadway	15%
Regional Connectivity	Part of regional bicycle route or pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%
Environmental Justice	GIS analysis of benefit to minority and low-income population	10%

100%

Criteria	Metric	% of Score
Right-of-Way Acquired	Amount of right-of-way available	10%
Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%
Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 0.5 miles of ped facility	15%
Traffic volume	AADT on roadway	15%
Regional Connectivity	Part of regional bicycle route or pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%
Environmental Justice	GIS analysis of benefit to minority and low-income population	10%

100%

All Tiers and Types		
Criteria	**Metric**	**% of Score**
Availability	One point for every percent increase in system-wide service hours	15%
Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
Technology	One point for every percent increase in funding spend on information technology	5%
State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
Community Impacts	Based on density, schools, parks served	5%
Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%
		100%

MEMORANDUM

TO: **Transportation Advisory Committee**
DCHC MPO

FROM: **Maricia Brown, DCHC MPO Lead Planning Agency**

DATE: **June 22, 2011**

SUBJECT: **FFY 2011 (FY 2012) Section 5307/5340 Apportionment for Durham NC UZA**

The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes Federal resources available to urbanized areas and to Governors for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.

Funding is made available to designated recipients that must be public bodies with the legal authority to receive and dispense Federal funds. Governors, responsible local officials and publicly owned operators of transit services are to designate a recipient to apply for, receive, and dispense funds for transportation management areas pursuant to 49USCA5307(a)(2). Generally, a transportation management area is an urbanized area with a population of 200,000 or over. The Governor or Governor's designee is the designated recipient for urbanized areas between 50,000 and 200,000.

For urbanized areas with 200,000 in population and over, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive Federal funds. Eligible activities include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

The DCHC- MPO has received it FFY2011 Apportionment and have submitted a recommended split by agency. Funding is apportioned on the basis of legislative formulas. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guide way revenue vehicle miles, and fixed guideway route miles as well as population and population density.

Attachment B and C are letters of recommended split by the MPO. Pursuant to DCHC MPO's Policy #2, both DATA and TTA are out of compliance, with the required Section 5307 quarterly oversight reporting. If this report becomes compliant before the June 22, 2011 TAC meeting we can move forward with the attached letter A. If not, the letter B is the alternative recommendation by the MPO. Upon resolution of this compliance issue, the MPO will bring forwarded a second letter of recommendation for TAC approval in August 2011.

Member Organizations

Town of Carrboro ▪ Town of Chapel Hill ▪ County of Chatham ▪ City of Durham ▪ Durham County ▪ Town of Hillsborough
NC Department of Transportation ▪ Orange County

June 15, 2011

Regional Administrator
Federal Transit Administration
Atlanta Federal Center
230 Peachtree Street, NW, Suite 800
Atlanta, GA 30303-8917

Attn: Marie Lopez, Transportation Program Specialist

Subject: FFY 2011 (FY2012) Section 5307/5340 Apportionment for Durham NC UZA

Dear Regional Administrator:

We have been advised that the FFY 2011 apportionment for the Durham-Chapel Hill-Carrboro Urbanized Area includes both 5307 and 5340 funds and is $6,694,989. Distribution of the FFY 2011 5307/5340 Durham UZA apportionment in the table below includes an allocation to all three transit operators within the DCHC MPO. The Transit Enhancement and Safety and Security apportionments are also calculated in the table below.

Transit System	FFY 2011 Full Apportionment	Transit Enhancement 1%	Safety and Security 1%	Net Available for Transit Expenditures
Chapel Hill Transit	$1,965,794	$19,658	$19,658	$1,926,478
Durham (DATA)	$3,629,558	$36,296	$36,296	$3,556,967
Triangle Transit	$1,099,637	$10,996	$10,996	$1,077,644
Totals	**$6,694,989**	**$66,950**	**$66,950**	**$6,561,089**

The Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO), as the Designated Recipient for the Durham UZA, request that the Federal Transit Administration approve each operator's FFY 2011 FTA Section 5307/5340 grant application in accordance with the amounts apportioned.

*City of Durham * Department of Transportation * 101 City Hall Plaza * Durham, NC * 27701 * Phone (919) 560-4366 * Facsimile (919) 560-4561*

Please copy the North Carolina Department of Transportation, Public Transportation Division with your confirmation letter stating that the approved distribution has been completed. Should you have any questions regarding this request, please contact Felix Nwoko (Felix.Nwoko@Durhamnc.gov) or Maricia Brown, (Maricia.brown@Durhamnc.gov).

Sincerely,

Lydia Lavelle, Chair
Transportation Advisory Committee

cc: Marie Lopez, Transportation Program Specialist - FTA
Tom Bonfield, Durham City Manager
Roger Stancil, Chapel Hill Town Manager
David D. King, TTA General Manager
Felix Nwoko, MPO Lead Planning Agency
Harmon Crutchfield, DATA Transit Administrator
Stephen Spade, Chapel Hill Transit Administrator
Bill Barlow, NCDOT PTD
Miriam Perry, NCDOT PTD

Member Organizations

Town of Carrboro ▪ Town of Chapel Hill ▪ County of Chatham ▪ City of Durham ▪ Durham County ▪ Town of Hillsborough
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Sincerely,

Lydia Lavelle, Chair
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Bill Barlow, NCDOT PTD
Miriam Perry, NCDOT PTD

MEMORANDUM

TO: Transportation Advisory Committee (TAC)
DCHC MPO

FROM: Lead Planning Agency

DATE: June 22, 2011

RE: Job Access Reverse Commute and New Freedom 2011 Call for Projects

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The available funds are from two sources – Job Access/Reverse Commute (JARC) and New Freedom (NF). JARC funds are intended to fund "the development and maintenance of transportation services designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment". NF funds are intended to provide improved public transportation services and alternatives to public transportation for people with disabilities beyond those required by the Americans with Disabilities Act of 1990 (ADA). Eligible applicants for both programs include state or local governments, private non-profit organizations, and operators of public transportation services including private operators of public transportation services. Funds may be used for planning, capital, or operating costs. Funds can be used to support up to 80 percent for capital projects, and not more than 50 percent for operating assistance. Up to 10% of annual funds are permitted to be spent on administration of the program

As required by the FTA, the DCHC MPO created a Coordinated Public Transit - Human Services Transportation Plan to guide the selection and funding of future JARC and NF projects. The TAC approved this plan in March 2007. The DCHC MPO has held three Calls for Projects in 2007, 2008, and 2009 for the MPO's FY 2006- FY 2009 JARC and NF funds using the procedures outlined in the Coordinated Public Transit - Human Services Transportation Plan. The DCHC MPO has allocated all of the FY 2007, 2008 and a portion of FY 2009 funds. The remainder of FY 2009 funds available will be made available for allocation during FY 2011's Call for Projects.

Funding Availability

The MPO has received JARC appropriations for FFY2006 – FFY2010, and a partial appropriation for FFY 2011. Funding through FFY 2009 have been programmed and obligated, except for $72,671 from FFY 2009. The appropriation for FFY 2010 is $195,374 and FFY 2011 is $195,080. The LPA will be requesting $39,045 (10%) for administrative cost related to the FFY 2010 & 2011 grant years.

The MPO has received NFP appropriations for FFY2006 - FFY2010, and a partial appropriation for FFY 2011. Funding through FFY2009 have been programmed and obligated, except for $10,769 from FFY 2009. The new appropriation for FFY2010 is $87,757 and FFY 2011 is $88,210. The LPA will be requesting $17,597 (10%) for administrative cost related to the FFY 2010 & 2011 grant years.

Updated Schedule

The LPA recommends the following schedule for the 2011 Call for Projects:

- 9/22/2010 TCC received FFY 2010 appropriation & updated schedule for 2011 Call for Projects.
- 10/13/2010 TAC receives updated schedule for 2011 Call for Projects.
- 11/17/2010 TCC will receive 2011 Call-for-Projects application package.
- 12/08/10 TAC approve application package and request LPA staff begins project solicitations.
- 12/10/10 Begin Advertising & Solicitation for applications
- 1/19/11 Application Workshop
- 2/28/11 Application deadline
- 3/1/11 Review Committee reviews and scores proposals
- 4/21/11 Review Committee selects CPT-HSTP projects for recommendation to the TCC
- 5/25/2011 TCC action on Review Committee recommendations
- 6/22/2011 TAC action on TCC recommendations & STIP Amendment to add new projects
- 6/27/2011 Notifications sent out to grant recipients
- 6/30/2011 FTA Application Deadline for obligation 2010 program of projects.
- 09/23/2011 FY 2009 funds lapse if not obligated

Committee Recommendations

The Capital Area Metropolitan Planning Organization (CAMPO) reviewed and scored the applications. The LPA staff made the final recommendations for funding based on the scoring results. The DCHC has traditionally, for the last two calls for projects, agreed to be lenient on the project requirement that projects be new or expanded due to the current budget conditions.

Recommendations for JARC funding:

- CHT – Year-Round night service (continuation) - $63,687
  - This project would maintain the 1 year of operations of evening service on the NS and G routes, providing transportation for low-income and transit dependent residents and employees with non-traditional work hours.
- Durham County – On-Demand transportation services - $37,950
  - The Durham County Job Access Transportation Program will provide demand-responsive service through Durham County ACCESS (DCA) to residents of Durham County to and from jobs and activities related to their employment. The service will be provided to residents throughout the county, but will be marketed especially to those who are transportation disadvantaged - low-income, live in the rural areas of the county and to those who are otherwise limited in their ability to access other modes of transportation.
- CHT – HS/Rogers Road extended bus service (continuation) - $42,408
  - Continuation of extension service hours on two routes that connect downtown/UNC to north Chapel Hill and east Chapel Hill.
- Suzie Taxi – The Work Wheels Work Para-Transit service - $163,958
  - Work Wheel Works Program is a para-transit service that offers transportation for low-income individuals and welfare assistance recipients, in Durham, NC.
- City of Durham – 10% for administration of the program - $39,045

Recommendations for NF funding:

- CHT – Go Triangle Regional Transit Information Partnership - $66,000
  - This project would allow CHT to continue membership for 2 years in the Go Triangle Regional Transit Information Center.
- DATA – Improved Service for Paratransit Clients - $54,600
  - This project is a continuation of taxi and accessible shuttle services for DATA ACCESS passengers who require early pick-ups from medical appointments.
- City of Durham – 10% for administration of the program - $17,597

SUMMARY

Job-Access Reverse Commute (JARC)	**Applicant**	**Chapel Hill Transit**	**Durham County**	**Chapel Hill Transit**	**Suzie Taxi**	**City of Durham**	**Total**
	Service	Year-Round Night Bus Service	County On-Demand Transportation Service	HS/Rogers Road Extended Bus Service	The Work Wheels Work Para-Transit Program	10% Program Administration	
	Requested	$191,061	$37,950	$127,225	$163,958	$39,045	$559,239
	Recommendation	$63,687	$37,950	$42,408	$163,958	$39,045	$347,048
New Freedom (NFP)	**Applicant**	**Chapel Hill Transit**	**DATA**			**City of Durham**	**Total**
	Service	Go Triangle Call Center Membership	Access Medical Taxi Program			10% Program Administration	
	Requested	$99,000	$54,600			$17,597	$171,197
	Recommendation	$66,000	$54,600			$17,597	$138,197

Attachment 8A is the 2011 Proposed Program of Projects.

TCC Action: Review 2011 Proposed JARC & NF Program of Projects and recommend that TAC approve it also. Recommendation is pending TCC June 20, 2011 meeting.

TCC Action: Approve TCC recommendation.

2011 Call for Projects
Proposed Program of Projects
JARC (Section 5317) FTA Grant Program

TAC 6/22/2011 Attachment 10A

MPO Approval Date	Subrecipient	Agency Type	Location of Service	Description of the Service	Project Type	Total Cost	Federal Share	% Federal	% Planning and Program Administration	FTA TEAM Project ID
5/11/2011	CHT	Public Transit	Year-round Night Service	Chapel Hill Transit (CHT) is requesting funding to continue night service available during full service periods on the CM, CW, D, J, and V routes to be year-round extend the Froute service later in the evening on a year-round basis, and continue evening service on the NS and G routes. The operation of these services between the hours of 6:30 p.m. and 10:00 p.m. on a year-round basis will provide consistent nighttime access to a greater proportion of residents and employees in CHT's service area for those with non-traditional work hours.	Operating	$ 127,374	$ 63,687	50%	0%	NC-37-X017-XX
5/11/2011	Durham County	Government	Durham County	The Durham County Job Access Transportation Program will provide demand-responsive service through Durham County ACCESS (DCA) to residents of Durham County to and from jobs and activities related to their employment. The service will be provided to residents throughout the county, but will be marketed especially to those who are transportation disadvantaged - low-income, live in the rural areas of the county and to those who are otherwise limited in their ability to access other modes of transportation.	Operating	$ 75,900	$ 37,950	50%	0%	NC-37-X017-XX
5/11/2011	CHT	Public Transit	CHT HS/Rogers Road	Continuation of extension service hours on two routes that connect downtown/UNC to north Chapel Hill and east Chapel Hill	Operating	$ 84,817	$ 42,408	50%	0%	NC-37-X017-XX
5/11/2011	Suzie Taxi	Private Service Co.	Durham City/County	Work Wheel Works Program is a para-transit service that offers transportation for low- income individuals and welfare assistance recipients, in Durham, NC. The program's focus is offering safe, reliable and discounted para-transport services for the targeted group to job training and employment opportunities.	Capital /Operating	$ 296,778	$ 163,958	80% cap. 50% oper.	0%	NC-37-X017-XX
5/11/2011	DURHAM	MPO	DCHC MPO-wide	Administration of the JARC program in FY2010	Admin.	$ 19,537	$ 19,537	100%	100%	NC-37-X017-XX
5/11/2011	DURHAM	MPO	DCHC MPO-wide	Administration of the JARC program in FY2011	Admin.	$ 19,508	$ 19,508	100%	100%	NC-37-X017-XX
					Totals	$ 623,914	$ 347,048			

MPO Approved Funding					
Total Prior Programmed/Obligated		$626,107			
DCHC MPO Appropriations	FY 2006	$152,453	**Remaining in each FY**	FY 2006	$124
	FY 2007	$160,702		FY 2007	$0
	FY 2008	$174,094		FY 2008	$0
	FY 2009	$204,341		FY 2009	$72,671
	FY 2010	$195,374		FY 2010	$195,374
	FY 2011	$195,080		FY 2011	$195,080
	Total Appropriations	$1,082,044		Total Unobligated Balance	$463,125
	Remaining Funds	$ 116,077			

LEGEND	
	Lapsed funds
	Partial Federal Appropriation

2011 Call for Projects
Proposed Program of Projects
NFP (Section 5316) FTA Grant Program

MPO Approval Date	Subrecipient	Agency Type	Location of Service	Description of the Service	Project Type	Total Cost	Federal Share	% Federal	% Planning and Program Administration	FTA TEAM Project ID
5/11/2011	CHT	Public Transit	Regional Call Center	Continue (2 years)membership in the Go Triangle Call center	Operating	$ 132,000	$ 66,000	50%	0%	NC-37-X017-XX
5/11/2011	DATA	Public Transit	Access Taxi-Cab Medical Trip Program	Continue taxi and accessible shuttle services for DATA ACCESS passengers who require early pick-ups from medical appointments.	Operating	$ 109,200	$ 54,600	50%	0%	NC-37-X017-XX
5/11/2011	DURHAM	MPO	DCHC MPO-wide	Administration of the NF program in FY2010	Administration	$ 8,776	$ 8,776	100%	100%	NC-37-X017-XX
5/11/2011	DURHAM	MPO	DCHC MPO-wide	Administration of the NF program in FY2011	Administration	$ 8,821	$ 8,821	100%	100%	NC-37-X017-XX
					Totals	$ 258,797	$ 138,197			

MPO Approved Funding					
Total Prior Programmed/Obligated		$251,275			
DCHC MPO Appropriations	FY 2006	$71,878	**Remaining in each FY**	**FY 2006**	-$48,633
	FY 2007	$71,810		**FY 2007**	$0
	FY 2008	$77,573		**FY 2008**	$0
	FY 2009	$89,416		**FY 2009**	$10,769
	FY 2010	$87,757		**FY 2010**	$87,757
	FY 2011	$88,210		**FY 2011**	$88,210
	Total Appropriations	$486,644		Total Unobligated Balance	$186,736
	Remaining Funds	$ 48,539			

LEGEND	
	Lapsed funds
	Partial Federal Appropriation

Ramp Metering Study

Background

The population of North Carolina and especially the Triangle region is growing. As the population grows so, too, does the demand on the transportation system. This demand is seen throughout the state every day during the peak periods as commute times to and from work continue to increase. Historically, as highways near capacity, the most frequent response by NCDOT and other public agencies has been to add additional lane miles. Today, as development increases, it is becoming increasingly difficult to add additional lanes without expensive right-of-way acquisitions and construction cost and excess natural and environmental impacts. In order for the MPO, State and local governments to respond to growing demands for maintaining and improving our mobility needs, these agencies must cost-effectively manage existing facilities. Ramp management and other ITS strategies have evolved over the last decade and can be implemented at relatively low cost to balance freeway demand and capacity, to reduce incidents that produce traffic delays, to improve safety on the adjacent freeway or surface street, or to give special treatment to a specific class of vehicles.

Objective

This project will prepare a feasibility study for ramp metering deployment along segments of interstate and other selected freeway facilities in Durham and Wake Counties. This study will support and will complement the goals and strategies outlined in both the DCHC – Congestion Management Process Procedures and Responsibilities and the CAMPO – Congestion Management Process and will use the Triangle Regional ITS Deployment plan as a guideline.

The intent of the study is to provide recommendations for any revised and/or new legislation needed to implement and manage ramp metering; to develop a framework for a marketing/outreach plan to stakeholders; to develop typical installation criteria including detection on the mainline, ramps, and adjacent streets; to develop criteria to rank potential ramp metering projects/segments by county (including costs, mobility improvement, and diversion impact); and to develop performance measures to show the effectiveness of ramp metering.

Desired End-Product

This study will provide an overall implementation plan for ramp metering and will include strategies for immediate, interim and long-term recommendations that include performance criteria. The study will provide specific information on the benefits of each project/segment. Specific benefits include but will not be limited to reducing crash rates at and upstream of merge areas; improving mobility by increasing freeway speeds and volumes; and improving air quality by reducing emissions. Also, the study will provide specific suggestions to mitigate the potential impacts of traffic diversion; queue spillback; equity among urban and suburban motorists; increased emissions on ramps; and other public opposition based on misconceptions about delay or inconveniences. The goal is to use this plan to select and to support for funding one or more ramp metering projects in the area.

Funding

The estimated cost of the feasibility study is $400,000. NCDOT plans to fund $350,000 and requests that CAMPO and DCHC-MPO split the other $50,000. The recommended split is 70% CAMPO and 30% DCHC.

Congestion Management Process

Procedures and Responsibilities

Report (DRAFT)

Durham-Chapel Hill-Carrboro

Metropolitan Planning Organization

May 2011

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1. Introduction

The Congestion Management Process (CMP), which is required by Federal law, is a systematic approach to managing new and existing transportation systems for relieving congestion and maximizing the safety and mobility of people and goods. The measured system performance and defined strategies should be incorporated in the process of the long range transportation plan (LRTP) and the transportation improvement plan (TIP).

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) is responsible for transportation planning in the urbanized areas of Durham and Orange counties and parts of northern Chatham County. As part of the planning process, the DCHC MPO is required to develop and implement a CMP for monitoring traffic congestion, evaluating system performance, and incorporating mitigation strategies into the LRTP and TIP.

This Procedures and Responsibilities Report describes how the CMP will be implemented and used on a continuing basis to comply with federal requirements. It will include congestion management objectives; the monitored coverage area and networks; performance measures; performance monitoring plan; identifying & evaluating strategies, and implementation & management.

1.1. Background

a) Legislative Background

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU)[1] is the Federal authorization of funding for surface transportation programs for highways, highway safety, and transit. The act was in place from August 2005 to September 2009 and was extended until the end of 2010.

SAFETEA-LU requires that "the transportation planning process in Transportation Management Areas (TMA – urban areas over 200,000 populations) shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding through the use of travel demand reduction and operational management strategies [23 CFR 450.320]."

The Congestion Management Process evolved from the Congestion Management System (CMS), which was required by previous surface transportation authorization laws: the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the Transportation Equity Act for the 21st Century (TEA-21). The CMP differs from the CMS primarily in mandating the incorporation of CMP within metropolitan transportation planning, rather than as a stand-alone program or system. The CMS has been described as a "7 Step" process, but the CMP is an "8 Step" process with the addition of a new "first step - Develop Congestion Management Objectives."

[1] Public Law 109–59, 109th Cong., August 10, 2005

b) Requirements

Federal rules define congestion as "the level at which transportation system performance is no longer acceptable due to traffic interference. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea, rural area), and/or time of day."

An effective CMP is defined as "a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to the levels that meet State and local needs. The CMP results in consideration and implementation of strategies that provide the most efficient and effective use of existing and future transportation systems."

A CMP will provide planners, policy makers and the public with a clearer understanding of congestion problems and the most cost-effective means for addressing them. In order to accomplish this mission, USDOT recommends that the following key elements be part of a CMP:

- Congestion management objectives;
- identification of the CMP coverage area;
- transportation system definition, including modes and network;
- performance measures;
- performance monitoring plan;
- identification and evaluation of strategies;
- monitoring of strategy effectiveness; and
- implementation and management.

The SAFETEA-LU planning rule states that the CMP shall include the definition of congestion management objectives and performance measures to assess the extent of congestion, and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods.

1.2. Outreach

Although the CMP is the responsibility of the DCHC MPO, it is an interagency multidisciplinary approach that seeks to optimize the performance of infrastructure through the implementation of multimodal, intermodal, and cross-jurisdictional systems, services and projects. As such, the expertise of a diverse team is needed that can provide input on transportation operations, the availability of existing and new data sources, and policy issues related to the development and update on the CMP. To assure this multidisciplinary approach, the DCHC MPO recommends working with the three groups described below, in the development of a CMP that addresses congestion through shared goals.

a) Stakeholders

The stakeholder group will be involved in all elements of the CMP program including discussing ideas, identifying improvement strategies, and working towards consensus on key elements. The stakeholder group includes representatives from the following organizations:

- DCHC MPO member agencies,
- NC DOT,
- Transit agencies,
- Federal Highway Administration,
- Federal Transit Administration, and
- Others as deemed necessary

b) Technical Steering Committee

The Technical Steering Committee is a technical advisory group. The committee will be made up of a diverse set of specialists. The committee members provide guidance on the availability of existing and new data sources that are necessary to identify recurring and nonrecurring congestion. The committee members also provide substantial guidance on the selection and use of performance measures, the review of the technical analysis methodologies and the results, and the identification of an improvement strategy. The committee members include:

- DCHC MPO planners and engineers,
- Transit planners,
- Bicycle & pedestrian specialists,
- Congestion management engineers,
- Traffic signal, operation, ITS engineers, and
- Others as deemed necessary.

c) Public

Citizens will have opportunities for involvement throughout all stages of the CMP process including development, update, monitoring and implementation. To increase public understanding of both the CMP and congestion issues, all documented reports, statistics, and maps will be uploaded to an interactive WEB tool or web-based map.

1.3. CMP Goals and Objectives

a) Goals

In order for the MPO, State and local governments to respond to growing demands for maintaining and improving our mobility needs, these agencies must cost-effectively manage existing facilities. In order to maximize our return on transportation investments, we must effectively manage congestion. A primary purpose for the CMP is to provide a systematic approach for a better understanding of existing and projected system performance and the effectiveness of various management strategies.

b) Objectives

CMP objectives should be consistent with regional goals and plans. To develop the congestion management objectives, the list of 2035 LRTP goals, objectives, and the measures of effectiveness (MOE) were reviewed for application to the CMP. The goals and objectives which are related to the CMP are shown in Table 1.1.

Table 1.1 LRTP Goals and Objectives that Relate to the CMP

Goals	ID	Objectives	MOE
Overall Transportation System	L-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.	N/A
	L-1.2	- Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.	Benefit-Cost Ratio
	L-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.	N/A
	L-1.4	- Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.	Person-to-Capacity ratios, by facility and mode
Multi-Modal Street and Highway System	L-2.1	- Establish performance standards and report on the condition and effectiveness of the multimodal street and highway system.	N/A
	L-2.2	- Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.	N/A
Public Transportation System	L-3.1	- Establish performance standards and report on the condition and effectiveness of the public transportation system.	N/A
	L-3.2	- Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.	N/A
Pedestrian and Bicycle System	L-4.1	- Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.	N/A
	L-4.2	- Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.	N/A
	L-4.3	- Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.	N/A
Public Involvement	L-7.1	- 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 and Contacts
Safety and Security	L-8.1	- Reduce fatality, injury, and crash/incident rates on all modes.	Fatality & Crash Rates, Local transit crashes, Bike/Ped incidents/injuries
Freight Transportation and Urban Goods Movement	L-9.1	- Relieve congestion on heavily-traveled truck routes.	Percentage of truck VMT under congested conditions / in off-peak

In order to achieve the regional goals and objectives that relate to the CMP, seven CMP objectives are selected: the objectives and the associated measurements are described in Table 1.2.

Table 1.2 CMP Objectives

CMP ID	Objectives	Possible Support Measurements	Related LRTP Goals & Objectives (ID)
C-1	Improve accessibility and mobility for people and freight	Travel Time Index – Ratio of actual travel time to uncongested travel time during peak-hour and daily Duration of Congestion – the congested time length Control Delay – the average vehicle delay at intersection during peak-hour	L-1.4
C-2	Maintain productivity and efficiency of the transportation facilities	Volume-to-Capacity Ratio during peak-hour	L-1.4
C-3	Identify and implement transportation safety enhancements	Number of Crashes and Incident Severity by intersection, by corridor	L-8.1, L-4.3
C-4	Increase transit service to reduce dependency on single occupant auto travel	Number of transit routes / frequency Ridership	L-3.1, L-2.1, L-2.2
C-5	Increase bicycle/pedestrian facilities to promote the use of non-motorized mode	Center line miles Pedestrian/Bicyclist count during weekday	L-2.1, L-2.2, L-4.1, L-4.2
C-6	Provide system operational status to public using a state-of-the-art technology, and maintain system reliability	Travel Time and Standard deviation of travel time or 85 percentile of travel time during peak-hour and daily Number of web visitor during weekdays	L-7.1
C-7	Develop and maintain a multi-modal regional operation model to evaluate and estimate the system performance	N/A	L-1.1, L-1.3

1.4. Study Area

a) Geographic Coverage

The geographic area will cover the Metropolitan Area Boundary (MAB) as shown in Figure 1.1. This coverage includes all of Durham County, the City of Durham, Carrboro, Chapel Hill, Hillsborough, and the MPO planning jurisdiction portions of Orange County and Chatham County. This wide coverage is more beneficial in identifying existing and future congestion locations, evaluating systemwide effects of management strategies, and providing perspective for the extent and degree of congestion throughout the area. This coverage and transportation facilities within the area will dictate data needs for both system performance and strategy effectiveness.

b) CMP Network

Since congestion is an interacted result between the supply and demand of the transportation system and its operation, congestion management is associated with most transportation systems. The selected network should be able to achieve the goals and objectives, and the existing facilities and financially committed projects in the transportation plans will be considered. Recommendations from the stakeholders, technical steering committee, and public will be included in the selection of the networks. The transportation systems, which are related to our CMP goals and objectives, are highways, public transportation, pedestrians and bicycles, safety and security, freight and goods movement, and ITS.

The selection criteria for the CMP network differ by transportation system as shown in Table 1.3. Figure 1.2 illustrates some examples of the identified facilities.

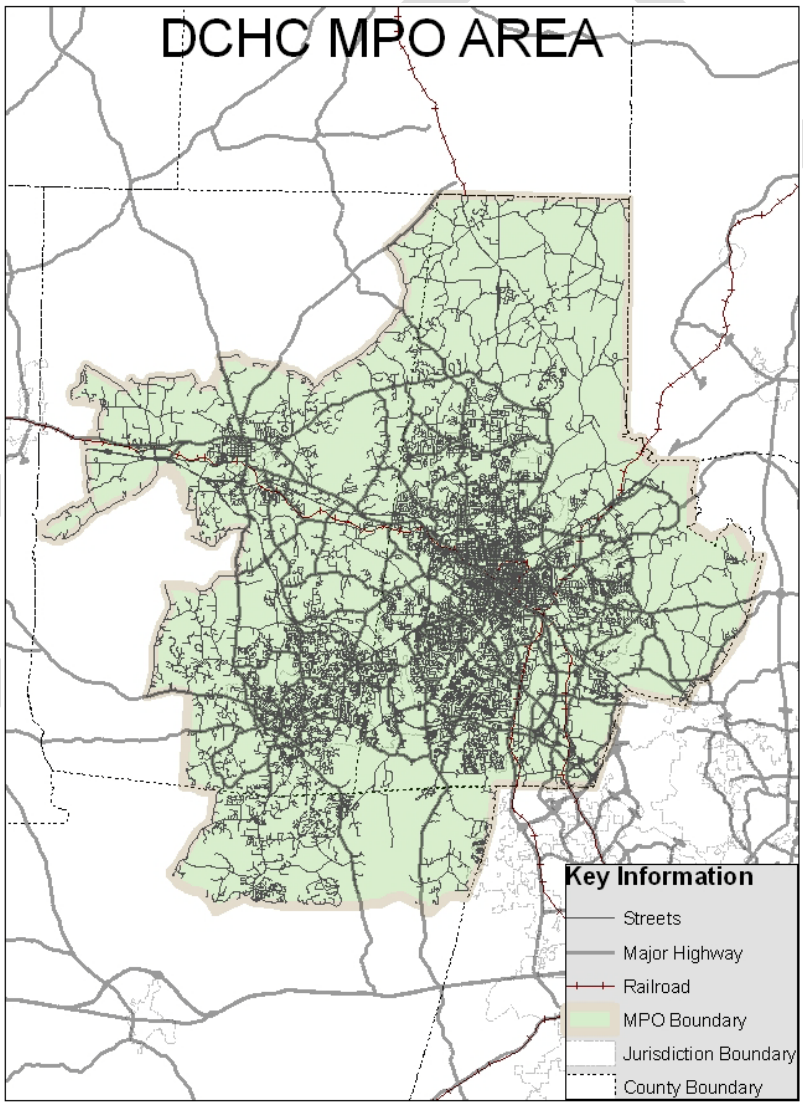


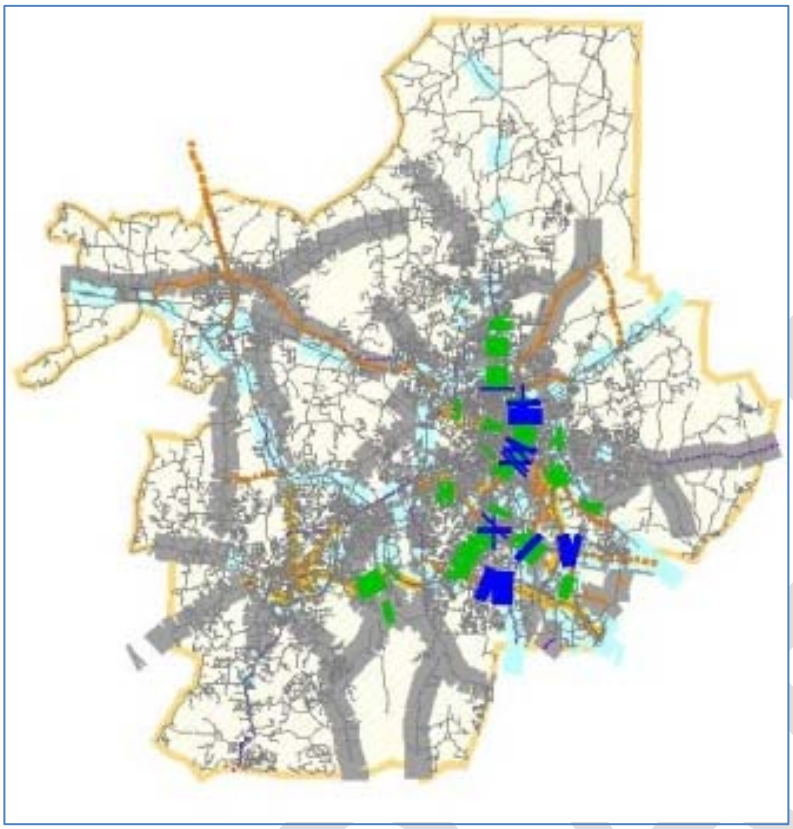
Figure 1.1 CMP Geographic Coverage

Table 1.3 Network Selection Criteria and CMP Network

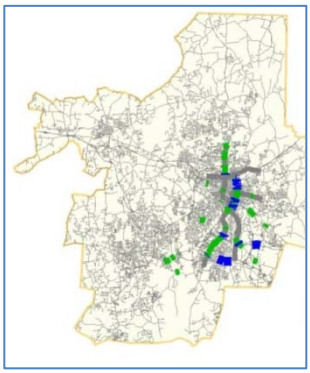
System Area & Networks	Criteria	Description
1) Highway	All roads in the Triangle Regional Model (TRM) base year highway network	Interstate Highway, Expressway, Arterial, Collector, and Local roadways
	plus the committed highway network, which will be completed within three years and the alternative routes of the network	Before-After analysis for monitoring the implemented strategy effectiveness.
	plus roadways with a fixed transit route	Durham Area Transit (DATA), Chapel Hill Transit (CHT), and Triangle Transit (TTA)
	plus Designated evacuation routes and emergency management networks	Security
	plus Major road alternative routes	Incident Management
2)Public Transportation	Fixed routes in TRM transit network	Bus, LRT, and Commuter Rail
3)Pedestrian	Pedestrian path and sidewalks/Walkways	Pedestrian facilities that provide regional connectivity with destinations to schools, major trip generators, and high activity density and land use
4)Bicycle	Bicycle paths and greenways	Bicycle facilities that provide regional connectivity with destinations to schools, major trip generators, and high activity density and land use
5)Safety	Crash rate	More than 120 crashes per million entering vehicles at intersections and segments for nonrecurring congestion.
6) Freight	Major freight route	Designated truck routes. Connectivity to land use density activity centers

c) CMP Tier System

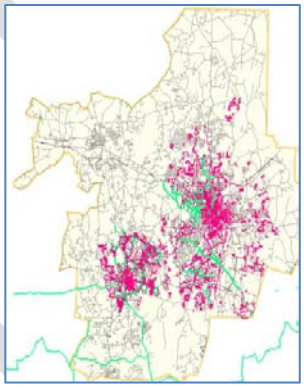
Two main considerations in decisions regarding CMP are data availability and cost. Since data collection represent the biggest portion of costs in CMP effort, a CMP data collection tiered system is recommended. The CMP tiered architecture designed to match the data collection effort to the specific system components is a cost effective approach given the financial constraints and the MPO funding situation. Each component of the transportation system will be identified as either Tier 1, Tier 2, or Tier 3. A description of the three tiers and the recommended monitoring cycle are described in Table 1.4.



(a) Example of Highway Network



(b) Examples of High Crash Sites



(c) Examples of Pedestrian/Bike Networks

Figure 1.2 CMP Network

Table 1.4 CMP Three Tier-Systems

Level	Tier-1: High priority corridors and networks of regional significance	Tier-2: Most Congested/Unsafe Corridors or Areas – Group I	Tier-3: Congested/Unsafe/Other Corridors or Areas – Group II
Purpose	Monitoring system trend	Monitoring the congested corridors including the Tier-1 group and new facilities for a Before-After evaluation	Monitoring the other corridors including the Tier-1 group
Selection Criteria	-More than 4 network selection criteria duplicated in Table 1-3 -Recommendation from the stakeholders, technical steering committee, and public	-More than 3 network selection criteria duplicated in Table 1-3* -Newly implemented strategy (projects) and the alternatives within two years, or the alternatives of the planned projects in LRTP, TIP, or etc. within 2 years	-Other corridor or area identified in Table 1-3
Monitoring Cycle	Every year	Every two years	Every four years

* More detailed selection criteria are explained in Appendix B.

2. CMP Steps

The CMP is a process; therefore, the CMP steps form a feedback loop. The CMP will continually be revised based on findings from the monitoring process and from other planning efforts.

The primary focus areas of the CMP are summarized in the following steps and displayed in Figure 2.1:

1. Develop Performance Measures: Performance measures are determined through a cooperative effort. The measures are used in all steps of the process. In this step, guidelines are also identified for determining congestion in terms of extent, intensity and duration and congestion-based ranking.

2. Collect and Analyze Data: A coordinated data collection program is to be established, using existing data sources when possible.

3. Quantify Performance, Identify and Evaluate Alternatives: Develop data summaries, graphics, and maps that quantify the performance of the system based on previously defined measures and associated data analysis. Expected benefits of the congestion management strategies are identified and evaluated based on the established performance measures.

4. Select Projects: Appropriate improvement strategies are selected. Consideration should be given to demand management, traffic operational improvements, public transportation improvements, Intelligent Transportation Systems (ITS) improvements, and where necessary, additional system capacity. Implementation schedules and responsibilities are to be identified.

5. Monitor Improvements: Compare before and after conditions using performance measures. Learn from the results and apply the appropriate findings to subsequent projects.

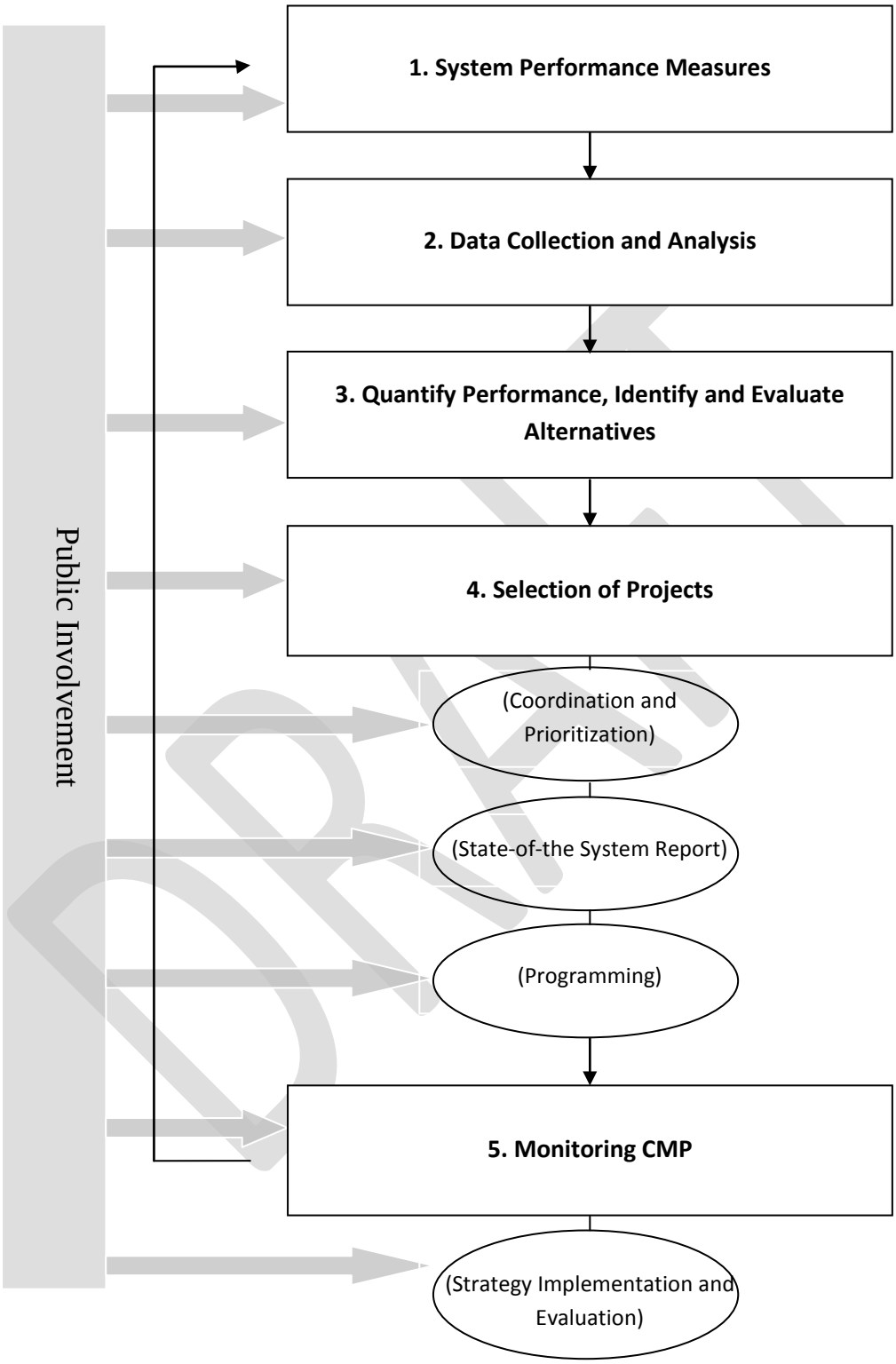


Figure 2.1 Congestion Management Process (CMP) Structure

3. Performance Measures

The performance measurements should be identified, evaluated, and selected properly to monitor system performance effectively. This chapter discusses potential measures and the initially identified performance measures. The final measures will be selected by the technical steering committee.

3.1. Identification and Evaluation of Performance Measurements

Many potential measures were considered to identify effective performance measures that fit our region. Efforts were made to adapt the various potential performance measures to the needs of our region. Table 3.1 provides a summary of the various performance measures reviewed.

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Table 3.1 Performance Measures

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Volume to Capacity (v/c) ratio	Measurement of average volume compared to adopted service volume or capacity.	• Roadway v/c ratio (daily and/or peak hour). • Intersection movement v/c ratio.	• Can indicate congestion. Can be flexible for multiple time periods and area types. Daily v/c can be determined using existing data by combining AADT and service volumes. Daily v/c can be used as first screen of congestion, providing a cost-effective use of limited resources.	• Daily v/c may limit the identification of certain types of improvements, additional data sources are needed to determine peak-hour v/c.	Estimated	C-2	Major Corridors, Intersections	Yes
Vehicle delay	Measurement of average vehicle delay of all of the movements, or average vehicle delay of an individual movement(s) during a specified time period	• Average control delay (sec/veh)	• Can indicate congestion and may highlight potential safety issues.	• Difficult to measure. • Forecast data will be useful.	Estimated	C-1	Corridor, Intersection	Yes
Number of lane miles that are congested	Miles of roadway that can be classified as "congested". The definition of "congested" can be customized for a particular area or facility type.	• Lane miles of congested roadways. • Percent of congested roadways (congested/total x 100%).	• Indicator of severity of congestion. Can be used to determine percentage of total lane miles that are congested.	• Difficult to measure. There are no existing data sources. While this is a useful areawide indicator, it does not identify specific constraints, or causes.	Observed	C-1, C-2	System wide	No
Duration of Congestion	Time duration where pre-defined sections can be classified as "congested".	• Hours of congestion.	• Indicator of severity of congestion, can be used to determine percentage of time that a facility is congested.	• Difficult to measure. There are no existing data sources. Does not identify specific constraints, causes, or needed improvements.	Observed	C-2	Interstates	Yes
Percent of daily miles traveled under congested conditions	The percentage of travel distance that is spent under congested conditions.	• Percent of congestion.	• Indicator of severity of congestion.	• Difficult to measure. While this is a useful areawide indicator, it does not identify specific constraints, causes, or needed improvements.	Estimated	C-2, C-7	Major Corridors, Interstates	For future consideration

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Daily vehicle miles	Miles traveled throughout the region.	• Miles traveled per average vehicle. Total miles traveled.	• Can be derived from AADT or TRM	• Takes more effort than AADT, but is not more informative.	Estimated	C-1, C-7	Systemwide	For future consideration
Average Delay – recurring	Average vehicle delay that occurs at a typical time-of day and day-of-week.	• Vehicle-hours.	• Indicates average congestion. Can be measured over different area types, time periods, and facilities.	• Delay is difficult to calculate when v/c ratios are exceeded.	Observed / Estimated	C-1, C-7	Systemwide, Major Corridors	For future consideration
Average Speed	Average travel speed.	• Miles per hour.	• Indicates average congestion. Can be measured over different area types, time periods, and facilities. Easily understood.	• Speed is difficult to calculate when congestion exists.	Observed / Estimated	C-1, C-7	Systemwide, Major Corridors	Yes
Person Miles of Travel	Total miles traveled per person (miles per vehicle times occupancy).	• Miles per person.	• Provides a region-wide indicator of transportation demand.	• Does not identify mode split, potential for demand management, or congested locations.	Estimated	C-1, C-7	Systemwide	For future consideration
Travel Time Index (TTI)	Ratio of actual travel time to uncongested travel time.	• Unitless; the measurement is an index. 1.0 indicates no congestion. • Travel Time • Speed Limit	• Qualifies average travel time data. Can be used to calculate average travel speed as a percent of the speed limit (or 15 percentile of free flow speed).	• Requires travel speed data.	Observed	C-1	Systemwide, Major Corridors	Yes
Buffer Index (BI)	Buffer Index measures the amount of time added to an average trip to ensure on-time arrival for 95% of trips. Buffer Index indicates predictability.	• Unitless; the measurement is an index. 0.0 indicates no volatility.	• Can indicate instability and areas with higher potential for nonrecurring congestion.	• Difficult to measure. Needs extensive data collection and processing.	Observed	C-1, C-2	Systemwide, Major Corridors	No
Planning Index (PI)	This measurement is an indicator of the total time required to arrive on time. It is calculated by combining TTI and BI.	• Unitless; the measurement is an index. 1.0 indicates no congestion.	• Indicates areas with recurring and nonrecurring congestion.	• Difficult to measure. Needs extensive data collection and processing.	Observed	C-1, C-2	Systemwide, Major Corridors	No
Roughness Index for pavement	A measurement of the quality of pavement conditions.	• Unitless; the measurement is an index. •	• Can identify potential contributing factor of congestion.	• Additional factors are more likely to cause congestion.	Observed	-	Systemwide, Major Corridors	No

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Customer Satisfaction (User Surveys) – Bike/Ped	A qualitative measure of the opinions of people using the transportation system. This can be specific to areas.	• Very satisfied. • Somewhat satisfied. • Neutral. • Somewhat dissatisfied. • Very dissatisfied. • Not applicable.	• Projects determined with user input are desirable to users.	• Collection and processing of data is relatively difficult.	Observed	C-5	Systemwide, Major Corridors	For future consideration
Incident Duration	The time elapsed from notification of an incident until all evidence of the incident has been removed from the scene.	• Minutes per incident.	• Indicator of non-recurring congestion. Great indicator of conditions before and after improvements.	• Difficult to collect data.	Observed	C-1, C-3	Systemwide, Major Corridors	For future consideration
Incident Severity	A quantitative measurement of the cost of an incident. Assumed injury costs vary by injury severity.	• Cost per incident.	• Indicator of potential safety concern that can lead to long incident durations	• Additional data is needed to prioritize locations, such as number of crashes per million vehicles.	Observed	C-3	Major Corridors, Intersections	For future consideration
Number of crashes	Measurement of the total number of crashes at a certain location per unit of time.	• Crashes per year.	• Indicator of nonrecurring congestion. Can identify problem areas to help focus limited resources. Can be determined using existing data sources.	• Ignores type, cause, severity, etc. To be more useful, there is a need to determine the relationship with total volume entering the location. Additional data needed to evaluate causes.	Observed	C-3	Major Corridors, Intersections	For future consideration
Crash Rate	Measurement of the total number of crashes at a certain location, compared to the total volume at the location. This measurement allows for the identification of locations that have a disproportionate number of crashes (compared to intersections with similar volumes).	• Crashes per million entering vehicles at intersections • Crashes per million entering vehicles at segments	• Indicator of nonrecurring congestion. Can identify problem areas to help focus limited resources. Can be determined using existing data sources.	• Ignores type, cause, severity, etc. • Additional data is needed to evaluate causes.	Observed	C-3	Major Corridors, Intersections	Yes

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Air quality analysis	A measure of the concentration of vehicle emissions.	• Emissions – kg, kg per year.	• Indicator of congestion.	• Secondary indicator; low travel speeds and excessive delay will result in poor air quality.	Estimated	-	Systemwide, Major Corridors, Intersections	Yes
Office Parking	Parking lot utilization data	• Ratio of Occupied / available parking lots	• Indicator of parking strategy • Can divert SOV user to transit	• Regarding to development of a jurisdiction's policy	Observed	C-1	Areawide	For future consideration
Bike parking	Bike parking utilization data	• Bike racks • Bike parking lots	• Can promote bike user	• Secondary indicator	Observed	C-5	Systemwide	For future consideration
Pedestrian Facilities	Sidewalk length	• Sidewalk length • Sidewalk length within transit service area	• Important for transit mobility and pedestrian safety	• Ignores connectivity and Pedestrian density or connectivity and density of population	Observed	C-5	Systemwide, areawide	Yes
Pedestrian Activity	A measure of the number of pedestrians	• Pedestrian count	• what level of pedestrian activity is being experienced • where pedestrian activity is occurring in order to better understand the reasons why there may or may not be pedestrian activity in different areas	• Difficult to understand a function for land use, facility presence, and facility design. • Difficulty of count	Observed	C-5	Systemwide, areawide	Yes
Centerline miles of bike path	Total miles of bike path	• Length of facilities	• Indicator of bicycle network	• Data does not consider demand. Does not identify specific corridors or routes that should be improved.	Observed	C-5	Systemwide, areawide	Yes
Bike Activity	A measure of the number of bicyclists	• Number of bicyclist	• what level of bicyclist activity is being experienced • where bicyclist activity is occurring	• Difficult to understand a function for land use, facility presence, and facility design. • Difficulty of count	Observed	C-5	Systemwide, areawide	Yes
Non-motorized traffic safety	Measurement of the total number of crashes related with pedestrian or bicyclist	• Number of pedestrian/bicycle accidents	• Indicator of safer route • Indicator of nonrecurring congestion	• Ignores type, cause, severity, etc.	Observed	C-5, C-3	Systemwide, major routes	For future consideration

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Transit Ridership	Number of people on a transit route per unit of time.	• Riders per hour	• Key performance measure when determining which routes to expand or reduce service on.	• It can be difficult to forecast ridership for proposed routes.	Observed	C-4	Systemwide, major routes	Yes
Schedule Adherence	Ability of transit to adhere to the planned schedule. This is typically used to determine how to operate a route.	• Percentage of stops that are on-time	• Can use adherence to identify LOS. Can be used to help determine how to run a route.	• Not used to determine whether or not to increase or reduce service.	Observed	C-4	Systemwide, major routes	For future consideration
Subsidized Cost of Transit	This measurement identifies the amount of money it costs to operate a route. This is the cost to the transit agency, not the cost paid by the user.	• Cost per rider	• The subsidized cost per route is used to make decisions about whether a route should be run or not. Critical element in decision making process.	• Cost is not a stand-alone measure. This must be used in combination with other measures.	Observed	C-4	Systemwide, major routes	For future consideration
Transit Service	Measurement of transit service availability	• Annual service hours of operation • Geographical coverage • Population coverage	• Indicates whether transit service is available	• Does not consider demand.	Observed	C-4	Systemwide	Yes
Availability of transit within congested corridor	Presence of a transit route or system within or adjacent to a congested corridor.	• Available/Not available. Type and frequency of transit should be specified.	• Indicates whether modal split options are available.	• Does not consider demand.	Observed	C-4, C-1	Systemwide	For future consideration

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3.2. Selection of Performance Measures

All of the listed performance measures have the potential to provide useful information for managing congestion. Some are most useful in certain area types, and some are most useful at certain levels of analysis. The selection of performance measures should consider a) the availability of data from existing sources, b) the applicability of those measures in quantifying system performance, and c) the ability of the performance measure to identify future system deficiencies.

In order to select a manageable list of performance measures that are customized to the unique characteristics of the DCHC MPO Area, the Technical Steering Committee will be consulted in the process of review, selection, and approval.

While a number of different performance measures were identified in Table 3.1, not all of them are applicable to each type of facility. Also, availability of data for some of the measures is limited at the current time, thus some will be phased in at a future time as the data becomes available. The performance measures, which can be selected for the DCHC CMP, are as follows:

a) Recurring Congestion

The following recurring congestion performance measures will be selected:

- TTI (peak-hour: AM, Noon, PM),
- Volume / capacity ratio for through movement at downstream boundary intersection (peak-hour: AM, Noon, PM),
- Extension of congestion[2]: spatial, temporal (daily),
- Segment volume / capacity ratio (daily, peak-hour: AM, Noon, PM),
- Average pedestrian space(peak-hour: AM, Noon, PM),
- LOS Scores for pedestrian, bicycle, and transit modes(peak-hour: AM, Noon, PM),
- Transit Ridership (including Peak passengers/seat ratio),
- Signal control delay (including retiming cost/benefit)

b) Non-Recurring Congestion

The following nonrecurring performance measures will be selected:

- High crash intersections: by crash rate (crashes per million vehicles entering) and by the number of crashes
- High crash corridors: by crash rate (crashes per million vehicles miles)
- Incident duration
- Customer or Expert survey

[2] Available data is limited currently; Interstate only.

4. Monitoring Plan

The monitoring plan includes overview and data sections; the overview includes the identification of data source, the development of a data management system, and the definition of a reporting procedure. The data section will cover data collection and analysis.

4.1. Monitoring Plan Overview

a) Data Source

Identifying existing data sources and databases that may be used as part of a performance monitoring system is important to maximize the utilization of available resources and to develop a cost-effective data collection program. The existing data sources identified for potential application and new data collection efforts are shown in Table 4.1. The existing sources have established programs for a specific purpose focused on a limited number of facilities or specific geographic coverage. The challenges or barriers of obtaining the data are described in Table 4.2.

b) Data Management

Integration and coordination of the data collection activities will create data management issues and responsibilities. Currently, there is no existing data management system. DCHC MPO will develop an appropriate data management tool using the GIS. It can be used for data management activities as well as for analysis and presentation purposes. Once the analysis is completed, tables and maps of links, corridors, or the entire system can be generated to provide spatial and temporal contexts for the discussion of congestion and mobility. It is also expected that the management tool will be connected with the DCHC MPO Web site to facilitate its use and the efficient flow of information between agencies and the public.

DCHC MPO will take an active role in ensuring that the necessary data is made available and passed forward for use in the CMP. The member agencies are responsible for the flow of data between the agencies and the MPO.

Table 4.1 Data Sources and Hierarchy

Data Type	Source	Primary	Secondary	Innovative Strategy
Travel Time	I-95 Corridor Coalition / INRIX®	X		
	Traffic .com	X		
	NCDOT Operations Center	X		
	MPO Data Collection		X	
	City of Durham – speed warning signs			X
	Downstream loop detector data			X
	Transit agency data		X	
Traffic Count	NCDOT Count Program	X		
	Municipal Signal System Count Programs	X		
	MPO Data Collection		X	
	Municipal Detector Data Counts			X
	Data collected for TIA studies	X		
Turning Movement Count	Municipal Signal System Count Programs	X		
	MPO Data Collection		X	
	Local Consulting Firm Data			X
Control Delay	Regional Operational Model			X
Ped/Bike count & survey	UNC sponsored Data	X		
	Volunteer Data Collection		X	
	MPO Data Collection		X	
Transit ridership & survey	Transit Agencies	X		
Crash rate, count, & severity	NCDOT TEAAS	X		
Public and expert survey results	MPO Survey			X
	MPO WEB survey system			X

Table 4.2 Data Collection Challenges and Barriers

Data Type	Source	Challenge	Barrier
Travel Time	I-95 Corridor Coalition/ INRIX®	Real-time acquisition	Interstate only
	Traffic .com	Real-time acquisition	Interstate only
	NCDOT Operations Center	Data acquisition ability	Interstate only
	MPO Data Collection	A detailed plan	Budget, Staff
	City of Durham – speed warning signs	Calibration	Only 2 locations
	Downstream loop detector data	Calibration	
	Transit agency data	Data acquisition & process	
Traffic Count	NCDOT Count Program		Two year program State Rd only
	Municipal Signal System Count Programs		Paused (?)
	MPO Data Collection	A detailed plan	Budget, Staff
	Municipal Detector Data Counts	Calibration	
	Data collected for TIA studies	Cooperation	
Turning Movement Count	Municipal Signal System Count Programs		Paused (?), Few locations
	MPO Data Collection	A detailed plan	Budget, Staff
	Local Consulting Firm Data	Cooperation	Legal agreement
Control Delay	Regional Operational Model		
Ped/Bike count & survey	UNC sponsored Data	Cooperation	
	Volunteer Data Collection	Identifying groups	
	MPO Data Collection		Budget, Staff
Transit ridership & survey	Transit Agencies	Cooperation	
Crash rate, count, & severity	NCDOT TEAAS	Pedestrian /Bicycle accident report acquisition	
Public & expert survey	MPO Survey		Budget, Staff
	MPO WEB survey system		Budget, Staff

c) Reporting Procedure

CMP Status Report

The main product of this activity will be the State of the System Report. The report will summarize the performance of the region's transportation system including the benefits of the strategies as related to the performance measures discussed earlier. Results will be presented using tables, graphs, or maps. This report will also include an analysis of results by: identifying performance trends; highlighting performance changes resulting from the implemented projects; and identifying system deficiencies or areas of concern.

This report will be documented on a biannual basis, staggered with development of the LRTP since these results will help inform the development of the LRTP. Project, corridor, and subarea reports may also be generated if needed.

WEB Based GIS Database Report

The summarized system performance results and data will be published through the DCHC MPO Web system. It will improve the public accessibility to the congestion information, educate the public on MPO activity and planning, and improve communication between agencies as well as the public. The system will include the following information: TMC, volume (AADT), speed, safety (accident spot, number, severity), network (existing and future routes – committed), network (existing and future routes – planned), and relevant other agencies' web-address (NCDOT, CAMPO, etc).

4.2. Coordinated Data Collection

Data should be collected in a coordinated manner between the MPO and member agencies. The corridors or areas where data should be collected would consist of a 3 tier system: 1st-benchmark corridors or areas, 2nd- congested/unsafe corridors or areas, and 3rd-other corridors or areas. The total number of corridors or areas will not exceed more than 50. Data collection methodologies for the identified measurements are described in this section, and the methodologies are focused on the MPO's data collection efforts.

a) Travel time and travel speeds

The data will be collected mainly using a GPS device (GeoLogger) if existing resources such as downstream loop detectors, ITS facilities, and etc. are not applicable.

For quality control of the data, at least, 5 good travel time samples for each direction on the corridors will be required in each peak period- AM, Noon, and PM. For instance, the total number of runs per corridor should be more than 30 (3 peaks * 2 directions * (5+alpha)) if other resources are not available. A more detailed description of the travel time data collection methodology is shown in Appendix C.

b) Traffic volume

If traffic volume from downstream loop detector or other resources is feasible, no extra data will be collected since the detector can report 365 days and 24 hours ideally. The data from the loop detectors will be analyzed, and the results will be released every year.

If the downstream system detector is not practical, the segments on the corridors identified by the CMP Tier System will be considered to be selected and the number of the selected segments will not be more than 100 including segments in the NCDOT Count Program.

The criteria and weight point for the segment selection are described in Appendix B.

Based on the locations of the segments in the Tier system, it will be categorized as annual, bi-annual, and 4th year program. Data including the vehicle classification should be collected at least during 72 consecutive hours with 15 minute time periods using the tube counter. The data and traffic counts from

various resources such as NCDOT- statewide planning branch, member agencies' traffic division and private consulting firms are analyzed, and the results will be released bi-annually.

c) Turning Movement Count

Initially, 20 intersections will be identified using GeoLogger's travel time data. Once travel time is collected, the travel time data can be geo-coded and the most congested 20 intersections in terms of travel time delay on both directions of a main approach can be recognized using the coded data within 200 feet at an upstream segment. Manual count using Jammar or tube counters can be applied to collect the TMC with 15 minute intervals.

The locations and others, where TMC was collected by various agencies' traffic divisions, will be coded into a regional operation model. The analysis results such as control delay, queue length, the optimized phasing & timing plan, and off-set parameters will be helpful to understand the causes of congestion and to create a mitigation strategy. The analyzed results will be released bi-annually.

d) Pedestrian and Bicyclist Count and Satisfaction Survey

Pedestrian and bicyclist counts will be taken using various resources. One idea is to utilize volunteers to collect this data in as much as possible. Another potential source of pedestrian crossing activity in the downtown area is the surveillance cameras already in place to support the traffic operation centers. Later the digital image can be analyzed manually or automatically. In lieu of these resources, temporary data collectors or consultant resources will be utilized for this effort. The results will be released bi-annually.

e) Transit ridership and satisfaction survey

DATA, Chapel Hill Transit, and the Triangle Transit each provide annual operating performance statistics to the Federal Transit Administration. The transit agencies also conduct a bi-annual customer satisfaction survey. These data sources will be used to monitor transit performance. It will be released biannually.

f) Crash rate, count, and severity

The Traffic Engineering Accident Analysis System (TEAAS) is a tool to analyze accidents that occur on the state's roads, and is maintained by NCDOT- Traffic Engineering and Safety Systems Branch. This tool will be used to monitor safety. The most dangerous 20 locations will be ranked by crash rate and another 20 locations will be ranked by crash frequency. The result will be released biannually.

g) Public and expert survey results

Experts' comments for CMP are mostly collected during the steering committee meeting. For hearing public comments, the MPO web-page will have a comment window and also a brief survey will be conducted biannually to the member agencies for what kind of public comments they have received.

4.3. Data Analysis

To describe congestion conditions and trends systemwide, the collected data will be analyzed and the following outputs will be summarized using tables, graphs, or maps. The Level-of-Service (LOS) criteria for the intersections and corridors in Table 4.3 and Table 4.4 will be applied to summarize the analysis results. These summaries will help identify overall congestion status and problematic areas. The LOS criteria for non-automobile modes are shown in Table 4.5 and 4.6.

- Recurring congestion performance measures
  - Travel time index and comparison result with historical data
  - V/C ratio and comparison result with historical data
  - Temporal and spatial extension of congestion, and comparison result with historical data
  - Control delay and queue length
  - Transit route/frequency, ridership, and peak-hour passenger/seat ratio
  - Bicycle/Pedestrian facilities information with counts and satisfaction survey
  - LOS Scores for pedestrian, bicycle, and transit modes
  - Key truck route, if possible
  - Evacuation route, if possible
- Nonrecurring congestion performance measures
  - High crash intersections by crash rate, the number of crashes, and incident severity
  - High crash corridors by crash rate, the number of crashes, and incident severity

Table 4.3 LOS for At-Grade Intersections

LOS	Signalized Intersection	Unsignalized Intersection
A	< 10 sec	< 10 sec
B	10~20 sec	10~15 sec
C	20~35 sec	15~25 sec
D	35~55 sec	25~35 sec
E	55~80 sec	35~50 sec
F	> 80 sec	> 50 sec

Table 4.4 LOS for Corridors (TTI)

LOS	Signalized Corridor (TTI =Posted Speed Limit / Avg. Travel Speed)	Freeway	Congestion Status
A	≤ 1.20	≤ 1.00	Not congested
B	1.20~1.50	1.00~1.08	Not congested
C	1.50~1.96	1.08~1.59	Not congested
D	1.96~2.50	1.59~2.17	Approaching congestion
E	2.50~3.46	2.17~3.25	Congested
F	> 3.46	> 3.25	Severely Congested

Table 4.5 LOS Criteria for Pedestrian Mode

Pedestrian LOS Score	LOS by Average Pedestrian Space (ft^2/p)*					
	> 60	40-60	24-40	15-24	8-15	≤ 8.0
≤ 2.00	A	B	C	D	E	F
2.00~2.75	B	B	C	D	E	F
2.75~3.50	C	C	C	D	E	F
3.50~4.25	D	D	D	D	E	F
4.25~5.00	E	E	E	E	E	F
> 5.00	F	F	F	F	F	F

Source: 2010 HCM

Table 4.6 LOS Criteria for Bicycle and Transit Modes

LOS	LOS Score*
A	≤ 2.00
B	2.00~2.75
C	2.75~3.50
D	3.50~4.25
E	4.25~5.00
F	> 5.00

Source: 2010 HCM

To identify the congested corridor or location and to develop strategies, the performance measurement results of corridors and locations will be analyzed.

For the motorized traffic congestion analysis, a rank system will be applied to the existing and projected congestion. The severity of existing congestion will be 80 % of weight and the severity of projected congestion with financially committed improvements will be 20 % of weight in the rank system. The severity of projected congestion with committed improvements in the TIP will be drawn from a Regional operation model or the TRM model at a target year. The volume-to-capacity ratio can be applied if the travel time index is not available.

The rank system is as follows:

$$\text{Rank} = \text{ELOS} + \text{FLOS}$$

$$= \text{MAX}(\{ (TTI_E + CT_E + D_E)*.80 + (TTI_P + CT_P + D_P)*.20\}, \{ (CT_E + v/c_E + D_E)*.80 + (CT_P + v/c_P + D_P)*.20\})$$

Where:

ELOS = (Existing congestion)
FLOS = (Projected congestion from a operational model or TRM)
TTI_E = (Existing Travel Time Index, Free flow speed/travel speed)
CT_E = (Duration of existing congestion)

v/c_E = (Existing volume/capacity)
D_E = (Existing control delay / 120)
TTI_P = (Projected Travel Time Index, Free flow speed/travel speed)
CT_P = (Duration of projected congestion)
v/c_P = (Projected volume/capacity)
D_P = (Projected control delay / 120)

Once the congested corridors and locations are ranked, the top ranked 20 areas will be reported for problem identification, strategy review and project selection.

The high crash intersections and corridors for nonrecurring congestion will be ranked and the top ranked 5 corridors or locations will be reported for identifying the cause of problems.

The performance measurement in the area of pedestrian & bicycle, transit, freight, and security will be analyzed independently. Once the congested areas are identified, the corridors or locations should be reported for problem identification.

In further, the Multimodal Level of Service (MMLOS) analysis method will be considered to introduce in the CMP. The MMLOS method can address the perceived quality of service within the right of way of the urban street for passenger car driver, bus passengers, bicyclists, and pedestrians. It is noted that (a) the MMLOS method is not simple, (b) it cannot be applicable for the analysis of dynamic conditions such as the determination of the beginning and end times of congestion, and (c) the MMLOS analysis for the four modes requires various additional data, which are not defined in the previous sections, including the number of times a vehicle decelerates to a full stop, number of the exclusive left turn lanes, proportion of heavy vehicles, pavement surface condition rate, percentage of segment with occupied on-street parking, lane configuration and the width on segments, number of right-turn-on-red vehicles, etc.

5. Problem Identification

To identify the causes of the problem for the reported corridors or intersections, the results of the following analyses will be carefully reviewed:

- Existing facility analysis (lane configuration, signal-timing plan, bus loading bay, bicycle/pedestrian facilities, and driveway density),
- Capacity analysis (V/C ratio during a peak-hour and daily),
- Intersection LOS analysis (control delay during a peak-hour),
- Corridor analysis (intensity of travel time index during a peak-hour and daily),
- Temporal and spatial extension of congestion (V/C ratio or TTI during daily), and
- Collision analysis (crash types and incident severity during last 5 years)

This comprehensive analysis results will help to find the problem causes and lead to develop an improvement strategy.

6. Identification of Strategies

After the causes of congestion have been identified and evaluated, specific improvement strategies will be identified. During the identification of appropriate improvement strategies, the following contributing factors that affect the feasibility of the strategies should be assessed: estimated cost, right-of-way availability, technology infrastructure, and environmental and social constraints. Environmental Justice Analysis will be conducted in the assessment of environmental and social constraints. This analysis will prove to ensure that the candidate improvement strategy will not impact negatively on minority and low-income populations. For recurring congestion problems, improvement strategies will be focused on decreasing the travel time index, V/C, and control delay. It is noted that the mentioned performance measurements are projected numbers and they can be estimated from a regional operation model or TRM. Strategies for nonrecurring congestion problems will be evaluated in terms of their ability to decrease crash rates or decrease the incident severity. To quantify estimated crash rate, number of crashes, or incident severity, the development of a regional safety model is required. The detailed identification process of appropriate improvement strategies is shown in Figure 6.1.

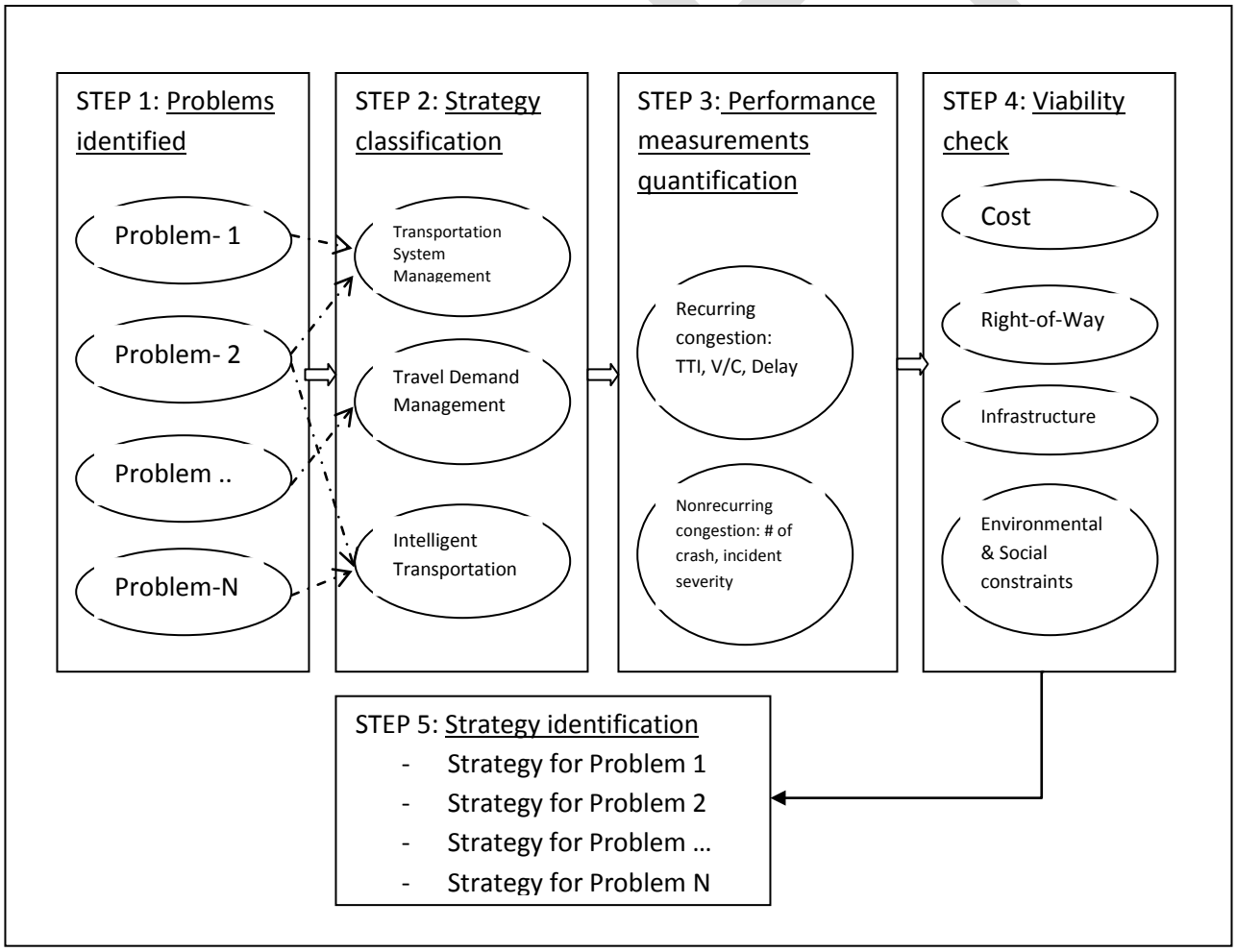

Figure 6.1 Strategies identification process

Some types of strategies are stated in SAFETEA-LU Sec. 450.320 (c) (4), and the strategies are reorganized for the following categories;

- Transportation System Management Strategies;

- Travel Demand Management Strategies; and

- Intelligent Transportation System Strategies;

Each congested area will have specific characteristics that that will lead to certain improvements. While every category of strategies will not be applicable for every situation, it is important to consider the alternatives when they are applicable. Some examples of the types of improvement strategies included in each category are shown in Table 6.1.

Table 6.1 DCHC MPO CMP Improvement Strategies Tool Box

Main group	Sub group	Strategies
Transportation System Management Strategies	Traffic Signalization and Control	- new signal installation, - signal re-timing, - signal hardware upgrades, - signal interconnection, and - demand-responsive signal system
	System capacity and Intersection Improvements	- new travel lanes on major freeway and streets, - Intersection/street widening, - lane assignment changes, - installation of turn lanes, - land use restrictions, - bus loading bays, and - Bus on Shoulder System (BOSS)
	Bottleneck Removal	- re-striping, - installation of signage, - addition of lanes, - reduction of merging and weaving
	Special-Event Management	- traffic management plans, - signal timing plans, and - dynamic lane assignments
	Access Management	- turn lanes, - driveway closures - median treatment - implementation of superstreet design

Table 6-1 Improvement strategies (continue)

Main group	Sub group	Strategies
Travel Demand Management Strategies	Improve Transportation Options	- alternative work schedules, - vanpooling/carpooling, - park & ride, and - bike and pedestrian improvements
	Incentives to Use Alternative Modes	- parking management/shared parking, - congestion pricing/road pricing, and - guaranteed ride home programs
	Sustainable Development	- transit-oriented development, - land use density and clustering, and - bicycle parking facilities
	Policy and Institutional Reform	- car-free planning, - speed reduction, and - context sensitive design
	TDM Marketing and Education	- walking and cycling encouragement, and - transit and alternative mode encouragement
Intelligent Transportation System Strategies	Public Transportation	- transit vehicle tracking, - transit fixed-route operations, - transit passenger and fare management, and - transit traveler information
	Traffic Management	- network surveillance, - surface street control, - freeway control, - traffic incident-management system, - advanced railroad-grade crossing, - roadway closure management, and - Traffic Management Center improvement
	Commercial Vehicle Operations	- fleet and freight administration, - electronic clearance, - weigh-in-motion, - roadside commercial vehicle operations safety, and - freight assignment tracking
	Emergency Management	- emergency routing, - roadway service patrols, and - disaster traveler information
	Maintenance & Construction Management	- maintenance and construction vehicle and equipment tracking, - road weather data collection, and - work-zone management

7. Implementing Strategies and Monitoring Strategy Effectiveness

7.1. Implementation and Management

The previously identified improvement strategies should be incorporated into the long range transportation plan (LRTP) and the transportation improvement plan (TIP). The implementation processes of the defined strategies will be closely monitored if the improvements are adopted in the TIP or other program with the financial commitment. The implementation of the improvement strategies will be led by the operating agencies, and the progress should be reported to the MPO every month.

7.2. Monitoring Strategy Effectiveness

The implemented strategies will be monitored to assess their effectiveness. Monitoring techniques and schedules will be dependent on the type of improvement that is implemented, and the data availability. It may take years to assess the benefits of safety-type improvements that are intended to reduce crash rates, crash severity, or incidents. Conversely, the benefits of capacity improvements are relatively easy to measure and assess.

The benefits of the implemented strategies will be documented in the biannual report. For the improvements that may not be accurately measured in a two year time frame, results will be presented with a description of the limitations of monitoring. Capacity projects and other improvements that are implemented through non CMP methods will still be monitored to determine their benefits. Based upon the monitoring results, the learned facts will feedback for the CMP to verify and update the used performance measures, the applied data analysis techniques, and the considered strategies. If necessary, the CMP objectives and the CMP itself will be adjusted.

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Appendix A: TITLE 23--HIGHWAYS

CHAPTER I--FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

PART 450—PLANNING ASSISTANCE AND STANDARDS

Subpart C—Metropolitan Transportation Planning and Programming

< http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e1e6fded77bb21ea5585c6420e6552eb&rgn=div8&view=text&node=23:1.0.1.5.11.3.1.11&idno=23 >

§ 450.320 Congestion management process in transportation management areas.

(a) The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction and operational management strategies.

(b) The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP. The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

(c) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:

(1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;

(2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

(3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

(4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

(i) Demand management measures, including growth management and congestion pricing;

(ii) Traffic operational improvements;

(iii) Public transportation improvements;

(iv) ITS technologies as related to the regional ITS architecture; and

(v) Where necessary, additional system capacity;

(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decisionmakers and the public to provide guidance on selection of effective strategies for future implementation.

(d) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (*i.e.* , a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.

(e) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

(f) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

Appendix B: Tier-2 Selection Criteria

Travel Time

The selection criteria of corridors in the Tier-2 and the associated weight points are;

- Daily and peak-hour v/c ratio: if the ratio on a corridor is greater than 80 percentile in the predefined network, the weight is 4, else 0.
- Traffic volume: if the percentile of the volume on a corridor is greater than 80, the weight is 1, else 0.
- Transit route and service frequency: if a transit service is provided on a corridor, the weight is 1, else 0. If a transit service is provided and the service frequency percentile is more than 50, another two points of weight are given. In transit subject, maximum 3 points are available.
- Incident rate and numbers: the each subject has 1 weight point if each subjects of percentile is greater than 80. Maximum is 2 weight points.
- Truck route: if a corridor is designated as truck route, the weight is 2, else 0.
- Evacuation route: if a corridor is evacuation route, the weight is 2, else 0.
- Bypass or an alternative route of a committed project in LRTP (Metropolitan transportation Plan such as LRTP, TIP, or etc.): if a committed project in LRTP will be completed and was completed within 2 years, both the alternative corridor(s) and the completed project or the alternative corridor(s) alone will be selected in the 2nd tier level regardless of the weight points.
- Newly implemented projects within three years or the alternative routes of the planned projects in LRTP, Tip, etc. within two years.
- Corridor suggested by this steering committee: the corridor will be selected, regardless of the weight points.

Traffic Count

The selection criteria of segments for traffic count and the associated weight points are;

- TTI(maximum weight: 5),
- Transit route and service frequency (max 3),
- Incident rate and numbers (max 2),
- Truck route (max 2), and
- Evacuation route (2).

A segment on the bypass or an alternative route of a committed project, and segments suggested by the Technical Steering Committee will be selected, regardless of the weight points.

Appendix C: Travel Time Data Collection Procedures

1. Sample Size Calculation
   a. Using Standard Deviation of Travel Time

$$n = \left(\frac{t \times s}{\varepsilon}\right)^2 = \left(\frac{t \times c.v.}{e}\right)^2$$

Where n = Sample Size;
t = Student's t statistics value from confidence interval for (n-1) degree of freedom;
$c.v.$ = Coefficient of variance – the relative variability in the travel times from empirical data, expressed as a percentage (%); and
e = Relative error- the relative permissible error in the travel time estimate, expressed as a percentage (%).

Coefficients of Variance for the Test Vehicle Technique on Freeway and Arterial Streets from Empirical data[1)]

Freeway		Arterial Streets	
Average Daily Traffic (ADT) Volume per lane	Average Coefficient of Variation (%)	Traffic Signal Density (signals per database)	Average Coefficient of Variation (%)
0 ~ 15,000	9	< 3	9
15,000 ~ 20,000	11	3 to 6	12
> 20,000	17	> 6	15

Source 1) Lomax, T. and e.t.c. "quantifying Congestion: User's Guide". NCHRP Report 398, Volume II. Transportation Research Board, Washington, DC, 1997.

Test Vehicle Sample Sizes on Freeways[1)]

Average Daily Traffic (ADT) Volume per lane	Average Coefficient of Variation (%)	Sample Sizes		
		90% Confidence, ± 10% error[2)]	95% Confidence, ± 10% error	95% Confidence, ± 5% error[3)]
< 15,000	9	5	6	15
15,000 to 20,000	11	6	8	21
> 20,000	17	10	14	47

Test Vehicle Sample Sizes on Arterial Streets1)

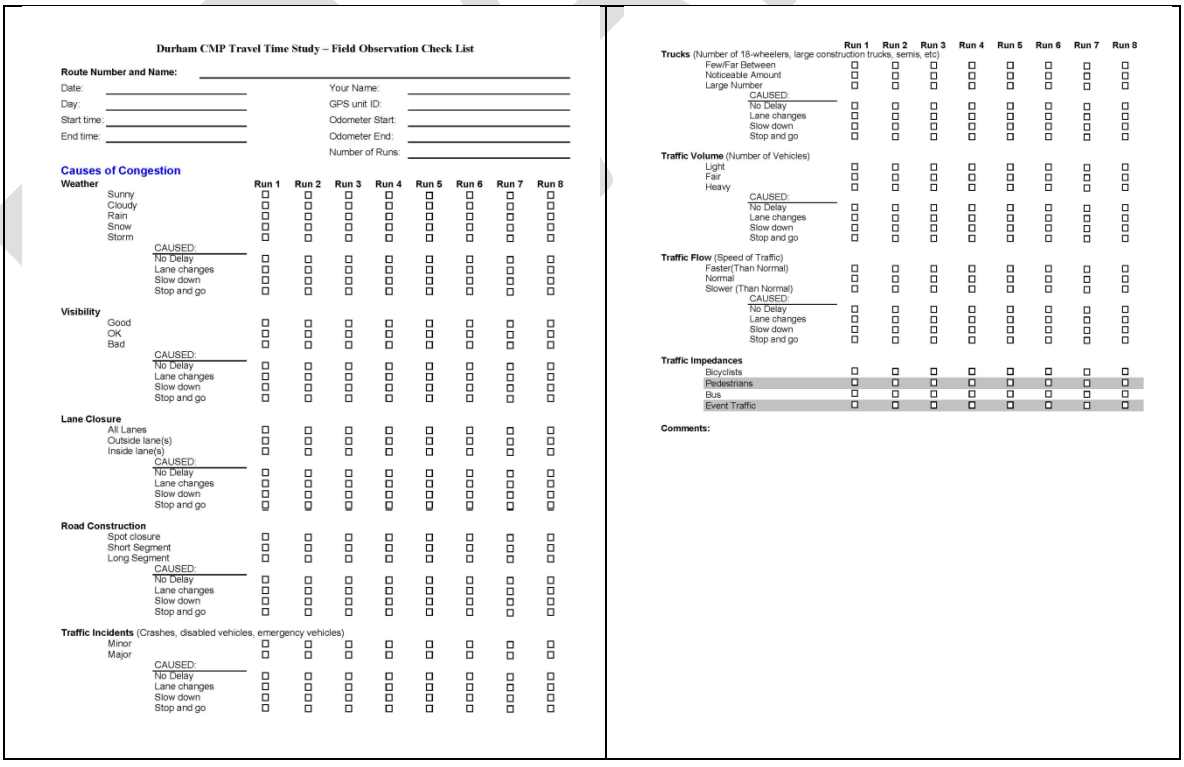
Average Daily Traffic (ADT) Volume per lane	Average Coefficient of Variation (%)	Sample Sizes		
		90% Confidence, ± 10% error[2)]	95% Confidence, ± 10% error	95% Confidence, ± 5% error[3)]
< 3	9	5	6	15
3 to 6	12	6	8	25
> 6	13	9	12	37

2) Planning purpose
3) Operational purpose

b. Budget restriction method (Common practice?)
   1. Typically 3 to 6 runs per routes
   2. In our plan, 5 runs/direction/peak-period/route are designed.

2. Procedures
   a. Safety considered highest priority. Do not attempt to fill out any forms while driving. Do not feel pressured to make unsafe lane changes, travel at unsafe speeds or drive in any unsafe manner in order to "keep up" with normal traffic speed. If fatigued, discontinue study. Become familiar with the route and turnaround locations well in advance of the study. If possible, make a practice run to familiarize yourself with the route.
   b. When it is safe to do so, driving should reflect the average speed of those around you. Try to keep up with a platoon if possible. Try not to accelerate or stop quickly. Unless there is a safety issue necessitating a stop or deviation from the specified route, drive the entire route from start to finish for each run without interruption.
   c. Install and turn on the GPS equipment at least a few minutes before driving is to start, as it can take a minute or two for the unit to pick up a signal. Make sure battery in unit is working (back of unit has instructions for determining whether battery is working, signal is received, etc.). Make sure unit is properly plugged into vehicle's power source (red light indicates power source is connected properly).

The following sheet is used to record information about the travel time runs. The sheet should be filled out in a safe location *before and after* driving the runs, NOT while driving.



Durham CMP Travel Time Study – Field Observation Check List

Route Number and Name: _____

Date: _____ Your Name: _____

Day: _____ GPS unit ID: _____

Start time: _____ Odometer Start: _____

End time: _____ Odometer End: _____

Number of Runs: _____

Causes of Congestion

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Weather								
Sunny	☐	☐	☐	☐	☐	☐	☐	☐
Cloudy	☐	☐	☐	☐	☐	☐	☐	☐
Rain	☐	☐	☐	☐	☐	☐	☐	☐
Snow	☐	☐	☐	☐	☐	☐	☐	☐
Storm	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Visibility								
Good	☐	☐	☐	☐	☐	☐	☐	☐
OK	☐	☐	☐	☐	☐	☐	☐	☐
Bad	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Lane Closure								
All Lanes	☐	☐	☐	☐	☐	☐	☐	☐
Outside lane(s)	☐	☐	☐	☐	☐	☐	☐	☐
Inside lane(s)	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Road Construction								
Spot closure	☐	☐	☐	☐	☐	☐	☐	☐
Short Segment	☐	☐	☐	☐	☐	☐	☐	☐
Long Segment	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Traffic Incidents (Crashes, disabled vehicles, emergency vehicles)								
Minor	☐	☐	☐	☐	☐	☐	☐	☐
Major	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Trucks (Number of 18-wheelers, large construction trucks, semis, etc)								
Few/Far Between	☐	☐	☐	☐	☐	☐	☐	☐
Noticeable Amount	☐	☐	☐	☐	☐	☐	☐	☐
Large Number	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Traffic Volume (Number of Vehicles)								
Light	☐	☐	☐	☐	☐	☐	☐	☐
Fair	☐	☐	☐	☐	☐	☐	☐	☐
Heavy	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Traffic Flow (Speed of Traffic)								
Faster(Than Normal)	☐	☐	☐	☐	☐	☐	☐	☐
Normal	☐	☐	☐	☐	☐	☐	☐	☐
Slower (Than Normal)	☐	☐	☐	☐	☐	☐	☐	☐
CAUSED:								
No Delay	☐	☐	☐	☐	☐	☐	☐	☐
Lane changes	☐	☐	☐	☐	☐	☐	☐	☐
Slow down	☐	☐	☐	☐	☐	☐	☐	☐
Stop and go	☐	☐	☐	☐	☐	☐	☐	☐
Traffic Impedances								
Bicyclists	☐	☐	☐	☐	☐	☐	☐	☐
Pedestrians	☐	☐	☐	☐	☐	☐	☐	☐
Bus	☐	☐	☐	☐	☐	☐	☐	☐
Event Traffic	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

3. Examples

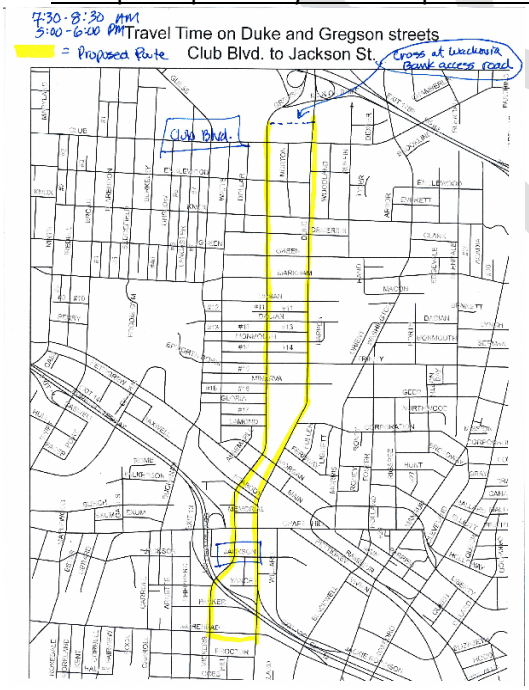
Example of Schedule

a. Date (typically middle 3 days of week): Tuesday, Wednesday, Thursday
b. Time (Approximately 12.75 hours, 8 core hours)
   i. 6:15 ~6:45 (0.5hr): travel to target route
   ii. 6:45 ~8:45 (2.0hr): AM peak hour runs – inbound / outbound (2/2 times)
   iii. 8:45 ~9:30 (0.75hr): Break
   iv. 9:30 ~10:30 (1.0hr): Off-peak I runs – inbound / outbound (1/1 times)
   v. 10:30 ~11:30 (1.0hr): Break
   vi. 11:30 ~13:30 (2.0hr): Noon peak hour runs – inbound / outbound (2/2 times)
   vii. 13:30 ~14:30 (1.0hr): Break
   viii. 14:30 ~15:30 (1.0hr): Off-peak II runs – inbound / outbound (1/1 times)
   ix. 15:30 ~16:30 (1.0hr): Break
   x. 16:30 ~18:30 (2.0hr): PM peak hour runs – inbound / outbound (2/2 times)
   xi. 18:30 ~19:00 (0.5hr): Return
c. Prior to study, information about the route should be collected and organized as follows. A map should be prepared with the route as well as turnaround locations.

Example of pre-study information (MLK Blvd.)

Route	Apporx.Length (miles)	# of signals	Signal density	start point	end point	AADT	Speed limit (mph)
Martin Luther King Jr. Blvd.	5	11	2.2 (signal/ mile)	MLK and NC 55	MLK and University	15,000 to 23,000	35 to 45

Example of pre-study route map with turnaround points (Duke/Gregson)



MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: June 22, 2011

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

This memorandum provides a summary status of tasks for projects in the FY 2010-2011 Unified Planning Work Program.

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

FY 2011/FY 2012 Unified Planning Work Program (UPWP) – Projects

Town of Carrboro Transportation Study/Main Street Road Diet

- ✓ Consultant selected
- Scope development/contract negotiation underway

Town of Hillsborough Downtown Transportation Study

- ✓ Consultant selected
- Scope development/contract negotiation underway

2040 Long Range Transportation Plan LRTP

- LRTP Schedule/Timeline TAC Approval – August 2011
- Socio-economic and demographic data analysis completed
- LRTP Public Involvement plan – Nov/December 2011
- LRTP Goals and Objectives – January 2012
- Approval of LRTP Targets January/February 2012
- Deficiency Analysis – April 2012
- Socio-economic Forecasts – January 2012
- Land use Scenario – January 2012
- Alternative Analysis – May –July 2010
- Draft LRTP Recommendation September 2012
- Air Quality analysis and Conformity Adopted -October 2012 - February 2013
- Approval of LRTP and Conformity determination April/may 2013
- Technical report and implementation

Comprehensive Transportation Plan (CTP)

- Draft CTP – November 2011 – Depends on NCDOT Schedule
- Public Input
- Recommended CTP
- Adopted CTP - March 2012

- Technical report and implementation

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

- ✓ Staff study initiation meeting
- ✓ Draft scope of services
- ✓ Agency review of scope and time
- ✓ Request for Proposal notice – October 2008
- ✓ Proposal due January 2009
- ✓ Consultant selected
- ✓ Contract negotiation underway
- ✓ Council contract approval May 18, 2009
- ✓ Notice to Proceed – June 2009
- ✓ Kickoff Meeting – July 2009
- ✓ Public Outreach Plan – August 2009
- ✓ Prepare Corridor / Subarea Community Profile – Dec 2009
    - ✓ Public Workshop #1 – Fall 2009
- ✓ Development and Evaluation of Scenarios – Apr 2010
    - ✓ Public Workshop #2 – Feb 25, 2010
- ✓ Transportation/Land Use Master Plan – June 2010
    - ✓ Public Workshop #3 – May 11, 2010
- ✓ Documentation and Final Presentation – June 2010
- Local agency review – ongoing
- Additional study to address issues raised during public comment
- Phase 2 - ongoing
- Study completion – June 2012

GIS/Data Integration and Automation

- ✓ Phase I completed. Internal review and implementation in progress
- ✓ Phase I deployment
- Database development – ongoing.
- Phase 2 – underway

Land-use Model Development

- ✓ Multi-year project in progress
- ✓ Phase 1 completed
- ✓ Sensitivity analysis and testing in progress
- ✓ Data development in on-going
- Phase 2- Parcel level model for DCHC – To commence in July 2011
    - Initial database – TBD
    - Initial model estimation – TBD
    - Initial calibration – TBD

MPO Parking Survey and Study (postponed)

- Parking model specification
- Regional Coordination and planning
- Draft scope of services
- Request for Proposal notice
- Consultant selection
- Council contract approval
- Project commences

MPO Community Viz. Scenarios Planning and Visualization

- ✓ Project kick- off in November 2010 – completed
- ✓ Data collection – completed
- ✓ Build Scenario Planning Tool
- ✓ Develop and approve Place Typology – Place Type Palette – completed
- ✓ Focus Group Meetings – completed
- Trend Forecasts
- Partnering Strategy
- Build Development Strategy
- Rationalize Scenarios
- Land use and Transportation MOEs
- Documentation/Protocol Report

MPO Congestion Management Process CMP

- ✓ CMP Procedure Plan approval – completed
- FHWA Approval of CMP procedure plan – August 2011
- CMP data requirement collection plan –Fall of 2011
- CMP Data collection and monitoring – ongoing
- CMP implementation – ongoing
- State- of Systems Report – December 2010
- Evaluation of effective of CMP projects and funded projects - ongoing

MPO Safety and Security Plan

- Action Plan and schedule under development

Update of the MPO Public Involvement consistent with Federal Certification Review

- Action Plan and schedule under development

MPO Title VI/Environmental Justice (EJ)/Limited English Proficiency (LEP)y Plan

- Action Plan and schedule under development

MPO Climate Change (Sustainability Adaptation) Plan/ Update of Greenhouse Emissions Plan

- Action Plan and schedule under development

MPO Freight Plan and Integration

- Action Plan and schedule under development

Contract Number: C201487 **Route:** US-15
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** B-3450, U-4009, U-4012
Length: 1.769 miles **Federal Aid Number:** BRSTP-1116(6)
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: BRIDGES OVER SANDY CRK & TRIBUTARY & APPROACHES ON SR-1116, SR-1126 NEAR US-15/501 & SR-1116, US-15/501 AT MT MORIAH RD.
Type of Work: GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES.
Contractor Name: DLB, INC DBA DLB INC (OF VA)
Contract Amount: $18,810,912.36 **Cost Overrun/Underrun:** 0.4%
Availability Date: 10/1/2007 **Letting Date:** 8/21/2007
Completion Date: 8/1/2010 **Work Began:** 10/1/2007
Revised Completion Date: 12/15/2010 **Estimated Completion:** 4/30/2011
Last Estimate Thru: 4/21/2011 **Scheduled Progress:** 100%
Last Estimate Paid: 4/26/2011 **Actual Progress:** 99.99%

Contract Number: C201994 **Route:** NC-147
Physical Division: 5 **County:** Durham
Administrative Division: 15 **TIP Number:** U-4763B
Length: 4.2 miles **Federal Aid Number:** TIFIA-540(2)
Resident Engineer: D. Brian Harrington, PE **RE Phone Number:** (919)836-4873
Location Description: TRIANGLE PARKWAY FROM NC-540 IN WAKE CO TO I-40 IN DURHAM CO
Type of Work: GRADING, DRAINAGE, PAVING, SIGNALS, TOLL FACILITIES & STRS.
Contractor Name: S. T. WOOTEN CORPORATION
Contract Amount: $137,446,000.00 **Cost Overrun/Underrun:**
Availability Date: 9/19/2008 **Letting Date:** 8/5/2008
Completion Date: 7/1/2011 **Work Began:** 8/3/2009
Revised Completion Date: **Estimated Completion:**
Last Estimate Thru: **Scheduled Progress:**
Last Estimate Paid: **Actual Progress:**

Contract Number: C202064 **Route:** SR-2028
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** U-3309A
Length: 1.165 miles **Federal Aid Number:** STP-2028(4)
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: SR-2028 (TW ALEXANDER DR) FROM CORNWALLIS RD TO EAST OF NC-147 IN DURHAM.
Type of Work: WIDENING, GRADING, DRAINAGE, PAVING & SIGNALS.
Contractor Name: THOMPSON CONTRACTING GRADING PAVING & UTILITIES INC
Contract Amount: $6,502,648.68 **Cost Overrun/Underrun:** 3.15%
Availability Date: 2/1/2010 **Letting Date:** 12/15/2009
Completion Date: 8/15/2011 **Work Began:** 2/8/2010
Revised Completion Date: **Estimated Completion:** 12/31/2011
Last Estimate Thru: 4/30/2011 **Scheduled Progress:** 82.5%
Last Estimate Paid: 5/10/2011 **Actual Progress:** 40.27%

Contract Number: C202340 **Route:** SR-1321
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** U-3804
Length: 1.07 miles **Federal Aid Number:** STM-0505(50)
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: SR-1321 (HILLANDALE RD) FROM I-85 TO NORTH OF SR-1407 (CARVER AVE).
Type of Work: GRADING, DRAINAGE, PAVING, AND SIGNAL.
Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT
Contract Amount: $4,222,625.78 **Cost Overrun/Underrun:** 0%
Availability Date: 8/30/2010 **Letting Date:** 7/20/2010
Completion Date: 6/15/2012 **Work Began:** 9/30/2010
Revised Completion Date: **Estimated Completion:** 6/15/2012
Last Estimate Thru: 5/7/2011 **Scheduled Progress:** 22.5%
Last Estimate Paid: 5/17/2011 **Actual Progress:** 19.68%

Contract Number: C202493 **Route:** I-85
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** R-5164A
Length: 9.6 miles **Federal Aid Number:** STM-085-4(114)171
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: 1 SECTION OF I-85, 1 SECTION OF US-15/501, AND 1 SECTION OF NC-147.

Type of Work: MILLING, RESURFACING & MILLED RUMBLE STRIPS.
Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT
Contract Amount: $6,088,736.11 **Cost Overrun/Underrun:** -8.96%
Availability Date: 3/15/2010 **Letting Date:** 1/19/2010
Completion Date: 12/16/2010 **Work Began:** 8/4/2010
Revised Completion Date: **Estimated Completion:** 4/30/2011
Last Estimate Thru: 2/7/2011 **Scheduled Progress:** 100%
Last Estimate Paid: 2/17/2011 **Actual Progress:** 97.58%

Contract Number: C202507 **Route:** -
Physical Division: 5 **County:** Durham
Administrative Division: 15 **TIP Number:** R-2635, U-4763B
Length: 18.8 miles **Federal Aid Number:** TIFIA-540(2)
Resident Engineer: Jason R. Peterson, PE **RE Phone Number:** (919)571-3000
Location Description: NC-540 FROM NC-55 NEAR APEX TO NC-54 NEAR RTP AND NC-147 FROM I-40 TO NC-540.
Type of Work: DESIGN-BUILD LANDSCAPING.
Contractor Name: SOUTHERN GARDEN, INC.
Contract Amount: $4,800,000.00 **Cost Overrun/Underrun:**
Availability Date: 8/15/2011 **Letting Date:** 4/21/2011
Completion Date: 7/1/2015 **Work Began:**
Revised Completion Date: **Estimated Completion:**
Last Estimate Thru: **Scheduled Progress:**
Last Estimate Paid: **Actual Progress:**

Contract Number: C202538 **Route:** NC-55, NC-751, SR-1118 SR-1357, SR-1404, SR-1615 SR-1641, SR-1646, SR-1656 SR-1670, SR-1671, SR-1901 SR-1954, SR-1955, SR-1981 US-70
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:**
Length: 22.96 miles **Federal Aid Number:**
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: 1 SECTION OF US-70, 1 SECTION OF NC-55, 1 SECTION OF NC-751 & 13 SECTIONS OF SECONDARY ROADS.
Type of Work: MILLING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: TRIANGLE GRADING & PAVING, INC
Contract Amount: $4,474,348.51 **Cost Overrun/Underrun:** 0.56%
Availability Date: 3/15/2010 **Letting Date:** 1/19/2010
Completion Date: 12/16/2010 **Work Began:** 4/5/2010
Revised Completion Date: **Estimated Completion:** 6/30/2011
Last Estimate Thru: 5/22/2011 **Scheduled Progress:** 100%
Last Estimate Paid: 5/25/2011 **Actual Progress:** 95.56%

Contract Number: C202610 **Route:** NC-147
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** R-5164D
Length: 6.8 miles **Federal Aid Number:** STM-0147(3)
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: NC-147 FROM NORTH OF SR-1322 (BROAD ST) TO NORTH OF SR-2028 (TW ALEXANDER BLVD).
Type of Work: DIAMOND GRINDING, CONC PVT SLAB REMOVAL & SHOULDER RECONST.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: $4,274,880.20 **Cost Overrun/Underrun:** 1.19%
Availability Date: 3/15/2011 **Letting Date:** 9/21/2010
Completion Date: 11/1/2011 **Work Began:** 3/15/2011
Revised Completion Date: **Estimated Completion:** 11/1/2011
Last Estimate Thru: 5/7/2011 **Scheduled Progress:** 24%
Last Estimate Paid: 5/12/2011 **Actual Progress:** 32.86%

Contract Number: C202613 **Route:** US-15501
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** R-5164E
Length: 7.59 miles **Federal Aid Number:** STM-0070(140)
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: 1 SECTION OF US-70 BUS, 13 SECTIONS OF US-15/501 BUS, 1 SECTION OF NC-751 AND 4 SECTIONS OF SECONDARY ROADS.

Type of Work: MILLING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: $1,844,694.96 **Cost Overrun/Underrun:** 0%
Availability Date: 3/15/2011 **Letting Date:** 9/21/2010
Completion Date: 9/2/2011 **Work Began:** 4/1/2011
Revised Completion Date: **Estimated Completion:** 9/2/2011
Last Estimate Thru: 5/7/2011 **Scheduled Progress:** 31.87%
Last Estimate Paid: 5/13/2011 **Actual Progress:** 6.79%

Contract Number: C202620 **Route:** I-85
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** I-5145
Length: 12.6 miles **Federal Aid Number:** IMS-085-4(118)178
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: I-85 FROM NORTH OF US-70 IN DURHAM COUNTY TO NORTH OF NC-56 IN GRANVILLE COUNTY.
Type of Work: PAVEMENT REHABILITATION AND BRIDGE REPAIR OVERLAYS.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: $8,098,211.15 **Cost Overrun/Underrun:**
Availability Date: 6/1/2011 **Letting Date:** 4/19/2011
Completion Date: 7/15/2012 **Work Began:**
Revised Completion Date: **Estimated Completion:**
Last Estimate Thru: **Scheduled Progress:**
Last Estimate Paid: **Actual Progress:**

Contract Number: C202712 **Route:** NC-751, SR-1811, SR-1903 SR-1905, SR-1919, SR-1921 SR-1959
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:**
Length: 13.04 miles **Federal Aid Number:**
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: NC-751 FROM 3 LANE SECTION TO THE CHATHAM COUNTY LINE & 6 SECTIONS OF SECONDARY ROADS.
Type of Work: WIDENING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT
Contract Amount: $2,700,860.68 **Cost Overrun/Underrun:** 0%
Availability Date: 4/4/2011 **Letting Date:** 2/15/2011
Completion Date: 9/30/2011 **Work Began:** 5/5/2011
Revised Completion Date: **Estimated Completion:** 9/30/2011
Last Estimate Thru: 5/31/2011 **Scheduled Progress:** 10%
Last Estimate Paid: **Actual Progress:** 23.51%

Contract Number: C202713 **Route:** NC-157
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:**
Length: 14.99 miles **Federal Aid Number:**
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: US-15/501 FROM MT MORIAH RD TO ORANGE CO LINE, NC-157 FROM BEG 2 LANE TO ORANGE CO LINE & 7 SECTIONS OF SECONDARY RDS.
Type of Work: WIDENING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT
Contract Amount: $3,152,859.31 **Cost Overrun/Underrun:** 0%
Availability Date: 4/4/2011 **Letting Date:** 2/15/2011
Completion Date: 8/26/2011 **Work Began:** 4/4/2011
Revised Completion Date: **Estimated Completion:** 8/26/2011
Last Estimate Thru: 4/30/2011 **Scheduled Progress:** 17%
Last Estimate Paid: 5/10/2011 **Actual Progress:** 21.18%

Contract Number: DO00069 **Route:** NC-147
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** BK-5102G
Length: 0 miles **Federal Aid Number:** BRNHS-0147(4)
Resident Engineer: Cadmus Capehart, PE **RE Phone Number:** (919)840-0914
Location Description: BRIDGES #12, 71, 137, 154, 156, AND 169 ON NC-147.
Type of Work: BRIDGE PAINTING.
Contractor Name: S & D INDUSTRIAL PAINTING, INC.
Contract Amount: $922,562.15 **Cost Overrun/Underrun:**
Availability Date: **Letting Date:** 8/19/2010

Completion Date:		**Work Began:**	
Revised Completion Date:		**Estimated Completion:**	
Last Estimate Thru:		**Scheduled Progress:**	
Last Estimate Paid:		**Actual Progress:**	

Contract Number:	DO00070	**Route:**	NC-147
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	BK-5102E
Length:	0 miles	**Federal Aid Number:**	BRZ-1940(2)
Resident Engineer:	Cadmus Capehart, PE	**RE Phone Number:**	(919)840-0914
Location Description:	BRIDGES #194 ON SR-1940, #202 ON SR-2080, #206 ON SR-1121, AND #212 ON NC-147.		
Type of Work:	BRIDGE PAINTING.		
Contractor Name:	ASTRON GENERAL CONTRACTING COMPANY INC		
Contract Amount:	$1,079,557.80	**Cost Overrun/Underrun:**	
Availability Date:		**Letting Date:**	8/19/2010
Completion Date:		**Work Began:**	
Revised Completion Date:		**Estimated Completion:**	
Last Estimate Thru:		**Scheduled Progress:**	
Last Estimate Paid:		**Actual Progress:**	

Contract Number:	DO00076	**Route:**	-
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	BK-5102F
Length:	0 miles	**Federal Aid Number:**	BRSTP-1959(5)
Resident Engineer:	Jeffrey D. Allen, PE	**RE Phone Number:**	(919)733-9499
Location Description:	BRIDGES #228 ON SR-1959, #224 ON SR-1999, AND #100 ON SR-2028.		
Type of Work:	BRIDGE PAINTING.		
Contractor Name:	SAFFO CONTRACTORS INC		
Contract Amount:	$1,138,000.00	**Cost Overrun/Underrun:**	
Availability Date:		**Letting Date:**	9/2/2010
Completion Date:		**Work Began:**	
Revised Completion Date:		**Estimated Completion:**	
Last Estimate Thru:		**Scheduled Progress:**	
Last Estimate Paid:		**Actual Progress:**	

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO- ARRA

County	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
Orange	EL-4601	Morgan Creek Greenway	11/9/2009	5/31/2011	**95% complete**	**$987,488**	ARRA
Orange	ER-5100 GE	Landscape planting on US 15-501@ SR 1734 (Erwin Rd./Europa Dr.)	11/24/2009	4/30/2012	**on schedule**	$65,000	ARRA
Orange	U-3306 34913.3.ST1 STM-1733 (16)	Grading, drainage, paving, signals, curb and gutter,and retaining wall on SR 1733 (Weaver Dairy Rd.) from NC 86 to Old Sterling Road	7/20/2010	6/15/2013	**ahead of schedule**	$13.4 million	ARRA
Orange	U-4704	Computerized Traffic Signal System for Chapel Hill-Carrboro	9/15/2009	8/1/2012	**behind schedule**	$5.175 million	ARRA
Orange	U-4726 GA	Twin Creeks Park Greenway	11/19/2009	6/30/2011	**100% complete**	$429,457.00	ARRA
Orange	U-4726 JA	Construct sidewalks in Hillsborough	11/19/2009	9/17/2011	**ahead of schedule**	$1,034,110.00	ARRA, STP-DA & Contingency; M.A. w/ City
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTNG LIST							
County	TIP #	Description	Let Date	Completion Date	Status	Cost	Comments

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

County	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
Orange	36945	Upgrade traffic signal with mast arm and install pedestrian signal heads on SR 1010 (Franklin St.) @ Mallette St.	11/4/2010	6/1/2011	**behind schedule**	$140,000.00	Small Construction
Orange	42502	Replace deteriorated curb and gutter at several locations on both sides of SR 1010 (Franklin St.) between Hillsborough St. and Plant Rd.	TBD	TBD	Awaiting execution of M.A. by Town	$30,000	Small Construction
Orange	43030	Safety improvements near railroad crossing #736157R on SR 1843 (Seawell School Rd.)(signing, tree removal, grading for visibility, paved shoulders, wedging, short overlay & snow-plowable pavement markers)	N/A	**8/30/2011**	F.A. construction	$45,000	Small Construction
Orange	43114	Install a pedestrian countdown signal and crosswalk on SR 1005 (Jones Ferry Road) at SR 1937 (Old Fayetteville Road)	N/A	**8/30/2011**	F.A. construction	$20,000	Small Construction
Orange	C-4932 A	Construct a Transit Shelter at the Park and Ride Lot for DTCC in Hillsborough and install bike racks on Orange Public Transportation buses	5/17/2011	TBD	**Administered by County**	$20,275	CMAQ
Orange	EB-4409 34025.1.1	Installation of Orange County Bike Route Signs	4/5/2011	7/22/2011	**on schedule**	$34,564.50	STP
Orange	I-5142	Mill, resurface and install pavement markers and rumble strips on I-85/I-40from west of SR 1114(Buckhorn Road) to the I-85/I-40 interchange	3/16/2010	7/15/2011	**behind schedule**	$8.60 million	TIP (IM)
Orange	SR-5000 S 40922.1.18 PE	Education, encouragement, evaluation, and neighborhood outreach for Carrboro Elementary School	N/A	N/A	Municipal Agreement with Town	$12,865	Safe Routes to Schools
Orange	SR-5001 AE	Construct 870 linear feet of 5' sidewalk from existing sidewalk near Weaver Street to Shelton Street in Carrboro	TBD	4/21/2012	**PS&E review underway**	$300,000.00	SRTS
Orange	SR-5001 AR	Construct 320' of 5' sidewalk between Cobbleridge Rd. and Rossburn Rd. in Chapel Hill	TBD	**7/22/2012**	**Construction authorization pending completion of PS&E review**	$50,000 $108,000	SRTS/STP-DA
Orange	**SS-4907 G 43190.3.1**	**Widen radii and install 4-way stop on US 70 Bus./Alt. and SR 1709(Lawrence Rd.)**	**N/A**	**8/30/2011**	**F.A. construction**	**$24,000.00**	**Spot Safety**

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

Orange	SS-4907 T 42204.2 42204.1 42170	Construct a right turn lane on SR 1710 and install a traffic signal @ NC 86	10/20/2010	9/1/2011	**behind schedule**	$215,000	Spot Safety-State
Orange	SS-4907 U 42205.2 42205.1 42171	Improve sight distance on SR 1710 by lowering the crest vertical curve on the westbound approach to the intersection of SR 1710 (Old NC 10) @ SR 1713 (Mt. Herman Church Road)	TBD	TBD	**hydro design required prior to utility relocation meeting**	$320,000	Spot Safety-State
Orange	SS -4907 V 42423.3 42423.1	Realign intersection of SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	TBD	TBD	**Design pending scope revision**	$198,000	Spot Safety-State
Orange	SS-4907 AG 07-09-1320	Widen radii and install 4-way stop on US 70 Bus./Alt. and SR 1709 (Lawrence Road)	N/A	8/30/2011	F.A. construction	$1000 R/W/U $24,000 C	Spot Safety-State
Orange	W-5207 E 45337.1.5 PE	Installation of a roundabout on SR 1734 (Erwin Rd.) and SR 1791 (Mt. Moriah Rd.) near Chapel Hill	6/1/2012	**12/31/2012**	To replace SS-4907 AC	$450,000	High Hazard Safety
Orange							
NCDOT PROJ	**TIP #**	**Location Description**	**Est. Let Date**	**Completion Date**	**Status**	**Cost**	**Comments**
County	EB-4707	Bicycle improvements(Bikeway and signals) on Durham/ Chapel Hill (SR 1838/SR 2220)from SR 1116 (Garrett Road) in Durham County to US 15-501 inOrange County	Apr. 17, 2012			$4.0 million	
Durham/ Orange	U-0624	Corridor upgrade on NC 86 (S. Columbia St.)including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	Nov. 15, 2011			$4.85 million	

County OKs plan to reduce midday, increase peak-time bus service

Concerns remain about dental patients

The Carrboro Citizen **By Susan Dickson,** *Staff Writer* May 5, 2011

The Orange County Board of Commissioners voted unanimously on Tuesday to approve a proposed Triangle Transit plan that would reduce midday service and increase peak-time service for the bus between Chapel Hill and Hillsborough.

Triangle Transit provides funding for the 420 route operated by Chapel Hill Transit during peak morning and afternoon hours and Orange Public Transportation during midday hours. Based on recent ridership data, Triangle Transit has proposed adding four round trips during peak hours and cutting funding for the less-popular four midday trips, which it funds at 50 percent.

The remaining 50 percent of funding for midday trips – about $51,000 – is provided by Orange Public Transportation, which plans to maintain the funding in order to continue two of the four midday trips. However, OPT will no longer serve the Triangle SportsPlex or Chapel Hill Senior Center stops during midday trips.

“We don’t think we’re really losing much overall,” county Planning Director Craig Benedict said. “We think that the midday service can be collapsed into two routes.”

Commissioners said they were concerned about how the reduced midday service would affect county dental-clinic patients traveling to Hillsborough. The board voted last fall to close the county’s dental clinic at Carr Mill Mall and consolidate services at its Hillsborough clinic.

At present, the county operates a dental clinic at Carr Mill Mall two days a week and one at the Whitted Human Services Center on West Tryon Street in Hillsborough three days a week. Under the approved plan, the Hillsborough dental clinic will serve patients five days a week when the Carrboro clinic closes at the end of July.

“I really have very big concerns about making sure that we address folks who need to come for dental services,” board Chair Bernadette Pelissier said.

OPT Manager Al Terry said the county health department is screening patients who go to the Carrboro clinic to determine transportation needs and that OPT would consider adding limited service to meet the needs of those patients.

If approved by Triangle Transit, the changes will go into effect in August. Trips would run every half-hour between 6 and 8:30 a.m. and 3:30 and 6 p.m. Midday trips would leave Hillsborough at 10 a.m. and 1 p.m. and Chapel Hill at 10:45 a.m. and 1:45 p.m.

Sales tax referendum still possible for this year

The Herald-Sun By Ray Gronberg May 9, 2011

DURHAM -- County Manager Mike Ruffin says he's begun sounding out local business leaders on whether they think this is the right year for his government to call a referendum on a quarter-percent sales-tax surcharge for public transit.

The move is coming at the request of the manager's bosses, the County Commissioners, who have to decide whether to call a vote this year or wait until 2012.

So far, "they have made absolutely no commitment to do anything," Ruffin said. "What they've said is, 'Mr. Manager, get more information.' So that's what we're going to do for them."

Ruffin said he's already "been in discussions" with some of the people the commissioners want to hear from, and over the next couple of weeks will "be doing a good bit of that."

The push is on because commissioners are giving themselves a little more than seven weeks to make the call about whether to put the local-option tax on the ballot this year.

And they want to check in with groups like the Greater Durham Chamber of Commerce because elected officials are counting on business leaders to bankroll any campaign for the levy.

"Before July 1, we'll know," said David King, general manager of Triangle Transit. "From a pragmatic point of view, if the decision is not made by that time, it'll be difficult to form a campaign to inform voters and run a decent campaign."

Officials simultaneously are trying to hone some of the system's route and financial planning before it goes to the voters.

There have been a number of ad-hoc meetings between Durham and Orange county officials in recent weeks. Officials also are

pointing toward a meeting this Wednesday of the cross-county Transportation Advisory Committee as a key decision point.

Uncertainty about the timing of a referendum comes because of a variety of factors, including the state of the economy and the need to establish how far into Durham County, if at all, Orange County would pay to extend its piece of the system.

Wake County commissioners have signaled that they have no intention of scheduling a referendum in their part of the Triangle this year. Their community would host the biggest piece of any regional transit system.

Polling has indicated that passage of the local-option levy this year is no sure thing. A business group in March found support for the idea running in the 59-to-60-percent range in Durham and Orange counties. In Wake it was polling at just 51 percent.

A different, February poll requested by Durham commissioners found only 52 percent support in their county.

Durham's city government is only months removed from passing a street-paving bond -- in years past a popular cause with voters -- with 57 percent support. Councilman Howard Clement, who called that the city's toughest bond campaign in recent memory, isn't keen on going ahead with a transit-tax referendum.

"We're going to have trouble," Clement, a member of the Triangle Transit board, said of its chances in 2011.

But other officials, like Durham County Commissioner Ellen Reckhow, Durham City Councilman Mike Woodard and Chapel Hill Mayor Mark Kleinschmidt, aren't ready to close the door on 2011.

Wednesday's Transportation Advisory Committee meeting should give officials "a better idea of what the landscape looks like," Kleinschmidt said.

Reckhow added that she expects "a very healthy discussion" in that session.

NC to share in extra $2B for high-speed rail

Wral.com via the Associated Press May 9, 2011

WASHINGTON — Amtrak and rail projects in 15 states, including North Carolina, being awarded the $2 billion that Florida lost after the governor canceled plans for high-speed train service, the Department of Transportation said Monday.

The largest share of the money — nearly $800 million — will be used to upgrade train speeds from 135 mph to 160 mph on critical segments of the heavily traveled Northeast corridor, the department said in a statement..

Another $404 million will go to expand high-speed rail service in the Midwest, including newly constructed segments of 110-mph track between Detroit and Chicago that are expected to save passengers 30 minutes in travel time.

Nearly $340 million will go toward state-of-the-art locomotives and rail cars for California and the Midwest. California will also get another $300 million toward trains that will travel up to 220 mph between San Francisco and Los Angeles.

"These projects will put thousands of Americans to work, save hundreds of thousands of hours for American travelers every year, and boost U.S. manufacturing by investing hundreds of millions of dollars in next-generation, American-made locomotives and rail cars," Vice President Joseph Biden said in a statement.

President Barack Obama has sought to make creation a national network of high-speed trains a signature project of his administration. He has said he wants to make fast trains accessible to 80 percent of Americans within 25 years.

The money – initially $2.4 billion – had been awarded to Florida for high-speed trains between Tampa and Orlando. After Gov. Rick Scott canceled the project, the Transportation Department invited other states to bid for the funds. It received 90 applications seeking a total of $10 billion.

North Carolina obtained $4 million of the money, which officials said would pay for an environmental analysis of the route of high-speed trains planned between Raleigh and Richmond, Va.

Scott said he was concerned that the state government would be locked into years of operating subsidies. However, a report by the state's transportation department forecast the rail line would be profitable. The project initially had been approved by Scott's predecessor, Republican-turned-Independent Charlie Crist.

Two other Republican governors elected in November have canceled high-speed train projects in their states. Wisconsin Gov. Scott Walker turned down $810 million to build a Madison-to-Milwaukee high-speed line. Ohio Gov. John Kasich rejected $400 million for a project to connect Cincinnati, Cleveland and Columbus with slower-moving trains. Both the Ohio and Wisconsin projects had been approved by the governors' Democratic predecessors.

Republican members of Congress have also opposed funds for high-speed trains, rescinding $400 million of the money previously awarded Florida as well as other unspent money designated for trains in budget deliberations with the administration.

A bill pending in the North Carolina General Assembly would require the state Department of Transportation of obtain legislative approval before spending any of the rail money awarded to the state last year.

Bill backs left turns

The News and Observer By Bruce Siceloff – Staff Writer Tuesday, May 10, 2011

The Senate is scheduled to vote today on a proposal to rip out part of an Asheville road, and to re-engineer a growing list of highway projects that some legislators don't like.

The projects - four, at last count - all feature new center medians that are designed to limit left turns.

Retailers along these roads want to keep it easy for their customers to come and go. They worry that new restrictions on left turns will be bad for business.

"We can't afford to lose one job around here, much less who knows how many dozens," said Rep. Stephen A. LaRoque, a Kinston Republican who sponsored the bill. "The legislature should have the final say on projects like this before they go through."

The legislation would force the state Department of Transportation to change its plans to widen U.S. 64 in Asheboro and Winstead Road in Rocky Mount. In Kinston, DOT would have to forget about building a new median intended to reduce crashes on U.S. 70.

And in Asheville - where construction is 80 percent finished on a $14.7 million job to widen N.C. 191 - DOT would be required to rip out a new median on nearly one-half mile of the road "and rehabilitate the turn lane area so that it may once again function as a turn lane."

That language was added last week by the Senate Transportation Committee. The committee amended the House-approved bill - which LaRoque had aimed only at the U.S. 70 median in Kinston - to include the other three road projects. If approved by the Senate, the amended bill would go back to the House for concurrence.

The bill puts the legislature in a position of making decisions usually left to DOT engineers. Sen. Clark Jenkins, a Tarboro Democrat, thinks legislators should leave well enough alone.

"I don't think the General Assembly needs to get in the business of planning road design," Jenkins said. "That's the mission of DOT, not the legislature."

Where highway medians block left turns, customers must make U-turns to enter the affected businesses.

"They would have to drive down Winstead to one of the busiest intersections in our city, Sunset Avenue, and then make a U-turn," said Lisa Tharrington of Rocky Mount, who has operated Superior Dry Cleaners on Winstead Avenue since 1986. "Then they would have to try to get over to the furthest lane on the outside to be able to get back to our business."

DOT engineers say these medians reduce rear-end collisions and other crashes related to left turns on busy roads. And with fewer cars stopping to turn, they say, traffic flows more smoothly.

"It's all about safety," said Terry Gibson, the state highway administrator. "We're looking at areas where we can correct accidents that are occurring today."

Some studies suggest that these medians do not cause the serious economic problems feared by merchants. The latest one was written by a research team at N.C. State University and UNC-Chapel Hill.

Their report confirmed that traffic flow is improved and accidents are reduced. And in surveys of business people and customers, the researchers found little or no overall economic harm after the no-turn medians were installed.

"It was not what I expected," said Christopher M. Cunningham of NCSU, the lead author. "There were not significant changes between business before and business after."

DOT said it would cost an estimated $797,500 to replace the median with a center turn lane on the Asheville project.

"I don't think it is something we would want to do, because we think our design is the best in terms of providing for safety," Gibson said.

Legislators have approved or considered other DOT restrictions this year. One bill quickly passed and signed by Gov. Bev Perdue forced DOT to stop studying alternate routes for a proposed Wake County turnpike that might threaten sensitive wetlands.

The Senate is considering House proposals to give the legislature veto power over some rail projects, and to make DOT quit serving free coffee on the Amtrak Carolinian.

America's Biggest (And Least) Gas-Guzzling Cities (Forbes)

Forbes.com By Christopher Helman May. 10 2011 - 1:12 pm

High gasoline prices are sure something to complain about. Nationwide the current average price is $3.98 per gallon. That's up more than a buck from a year ago, and within spitting distance of the record $4.11 average set in 2008.

Faced with the prospect of spending $60 to fill up the tank, it's little surprise that AAA says it's getting a lot more calls from motorists who have run out of gas. Yet despite soaring prices, demand for gasoline has stayed strong, down just 2% from a year ago to 382 million gallons-or $1.5 billion-per day.

What I wanted to know was which cities get hurt the most (and least) when gas goes up. To get the answer I called up the Center For Neighborhood Technology, a think tank in Chicago that studies the costs of living and working in cities across the country. (See how your zipcode measures up here.) First insight: It's not enough to look at where gas prices are highest (that would be Hawaii, at $4.60)-what matters most is how many miles you drive.

As explained by Research Director Linda Young, CNT's methodology utilizes data gathered by federal and state surveys that comes straight from the odometers of thousands of cars nationwide. Young says that by excluding the miles driven (and gas burned) by trucks and buses and travelers just passing through on the highway, this data gives the best zipcode-level pictures of how much driving the average household does in a year.

The booby prize for the metropolitan area that suffers the most from rising gas prices goes to North Carolina's Raleigh-Durham-Chapel Hill region. The cities and suburbs of "The Triangle" are close enough that people don't think twice about driving from one to the other. Yet in doing so, the average household racks up 21,800 miles per year. Assuming an average 20.3 miles per gallon, that means burning through 1,074 gallons per year, about $4,200 at current prices.

Full List: *America's 10 Biggest (And 10 Least) Gas-Guzzling Cities*

North Carolina does not fare well in the rankings. Close on the Triangle's (Tar)heels comes the Charlotte-Gastonia-Rock Hill region, with an average household gasoline demand of 1,061 gallons. In sixth place, the average household in North Carolina's Greensboro-Winston Salem-High Point metroplex spends $4,000 for 1,017 gallons per year.

In third place: Atlanta, where drivers burn 35 gallons of gas a year sitting in traffic jams, according to the Texas Transportation Institute's 2010 Urban Mobility Report. The average Atlanta household drives 21,300 miles a year, using 1,050 gallons of gas.

But what about the city that everyone immediately associates with traffic jams and car culture: Los Angeles. Incredibly, the city of angels is among the top gas misers. That's because residents of centrally located areas of L.A. don't have that far to drive to get to work or the beach. As a result, the L.A.-Long Beach area ranks second among the cities that use the least gasoline, just 630 gallons a year per household. As for the No. 1 least driving-est city? That honor goes to New York, where even in the unlikelihood that a household owns a car, they probably still get to work on the subway. The average New York household uses just 481 gallons a year to go 9,800 miles-that's half the gas guzzling of the North Carolinian Triangle.

The suburbs of New York City and L.A. aren't so lucky. New Jersey's Monmouth and Ocean counties, which sit at the northernmost reach of the Jersey shore, ranks fifth in most miles driven. New Jersey's Middlesex-Somerset area ranks seventh. The Riverside-San Bernardino area east of L.A. comes in 10th. Though with California's high gasoline price of $4.27 per gallon, these folks have it almost as bad as those out in Raleigh-Durham.

Linda Young of the Center for Neighborhood Technology explains that the residents of the ex-urbs of major cities are effected the most by rising gas prices. In search of a house they could afford, they looked farther and farther away from the city center. That made sense as long as gas was cheap. But factor in today's elevated gas price and the closer suburbs are looking more affordable. "We should rethink the way people live and work and travel in these regions," says Young. She says North Carolina and Washington, D.C., (ninth on the list of gas guzzlers) are making progress on developing new light rail systems, and population-dense metro areas would benefit from trying to replicate European models. "The European transit system is really quite excellent. They sustain many residents' lifestyle without dependence on automobiles."

Yet if gas prices were really such a pain on Americans' pocket books, you'd think mass transit ridership would be way up. But it's not. In Atlanta, ridership on commuter buses is up 11% this year, and is up 14% in Flint, Michigan.

That's decent growth, but it's from a small base (only 4.7% of U.S. workers take public transportation while 75% drive to work alone), and at a rate not even half the 30% rise in gas prices. Don't expect much. Even in the first half of 2008, as gas prices soared to a record, public transit ridership increased just 4.3% nationwide, according to the American Public Transportation Association.

What gives? In the scheme of things, $4 gasoline is still pretty affordable. And not just relative to the $9 per gallon that those Europeans fork over. Think about it holistically. The U.S. Department of Transportation figures that insurance, license, registration, taxes, depreciation and finance charges on the average car come to $5,600 a year. So even if your household's annual fuel bill goes up 50% from $2,000 to $3,000, that raises your total car cost from $7,600 to $8,600, just a 13% increase. If you already have that much invested in your car, fuel costs are going to have to go up a whole lot more to justify not using it.

Still, it looks like Americans are slowly moving in the right direction when it comes to their transportation decisions. Since 2004, when crude oil prices really started taking off, we've reduced our per capita gasoline use by 8% to 435 gallons per year. Thanks to more efficient cars we're each driving 4% fewer miles per year.

Maybe electric cars like the Chevy Volt or Nissan Leaf will make a difference, but I doubt it. If you're in the market for a Volt it's probably only because you've got your old gas guzzler paid off. Most Americans in these tough economic times would be hard pressed to give up a reliable old gas-guzzler to drop $33,000 on a new Volt. Even in Raleigh-Durham, $33,000 will buy you eight years of good old-fashioned regular unleaded.

Stop sign

The News and Observer Editorial Wednesday, May 11, 2011 Published in: Editorials

If Republican members of the General Assembly are hankering to work on state roads, they could best spend their time mending potholes instead of getting into engineering decisions that should be left to the state Department of Transportation.

In the name of being "business-friendly," some GOP lawmakers are seeking changes in long-planned projects, right down to the specifics of where to put, and not to put, medians and left-turn lanes. The projects in question, some business owners on the roads involved say, hurt them because medians force people to drive past businesses and turn around instead of just making a left turn into a parking lot.

The inconvenience, their argument goes, drives people away. So to speak.

So now Republicans want to get down to specific directions to the DOT: tear up a new median in Asheville on N.C. 191, do away with plans for a U.S. 70 median in Kinston designed to reduce accidents, change plans to widen U.S. 64 in Asheboro and Winstead Road in Rocky Mount. And there's no telling, of course, what other projects will be included in addition to these brainstorms already on paper.

The effort began in the House, where the proposed median on U.S. 70 was an annoyance for businesses that count on convenient left turns for returning beach-goers. Said Rep. Stephen A. LaRoque, a Kinston Republican: "The legislature should have the final say on projects like this before they go through."

With all due respect, no. And in the Senate, where the effort had begun to snowball, members yesterday sensibly decided that it needed further review in a committee.

The DOT puts projects through a wringer of study, revision and public review, and employs an army of engineers to plan the last detail. Such projects get on the drawing board to begin with because of traffic patterns, convenience and yes, safety.

Almost every motorist on North Carolina's highways and byways today would acknowledge that turning left into a commercial area large or small on a busy street can be hazardous to the nerves if not the health: Can I make it? Is

someone going to turn right into the lanes I'm crossing? Are there cars coming over a hill that I can't see? Will the oncoming drivers see me attempting to turn?

It may not be in the DOT handbook, but the truth is, the fewer left turns across traffic the better.

As to politics and the interference of lawmakers: It's fair enough for a legislator to raise questions with DOT if he or she knows that there will be a problem with a project in their district. But DOT also has a board with members from different regions of the state who can advise the department. And there is a big difference between a senator or representative calling DOT to raise a question and writing road-building specifics into legislation. That's preachin' gone to meddlin'.

DOT, after all, has had a history of conflicts between transportation professionals and politicians. The DOT board, always a coveted reward for political supporters, has had its influence reduced and rightly so under Gov. Beverly Perdue. Prior to that, however, board members were known to skip the preachin' entirely and go right to insisting, for example, that roads be built in their home towns in certain places, sometimes for the convenience of their friends.

The days of arm-twisting by board members are gone, everyone hopes. But legislating specific projects from Jones Street would be no better.

Public transit tax vote possible

The Herald-Sun By Ray Gronberg May 12, 2011

DURHAM -- Elected officials from Durham and Orange counties on Wednesday took the first step in what could turn into a 2011 campaign for passage of a local-option sales tax surcharge for expanded public transit.

Members of the cross-county Transportation Advisory Committee agreed to send local governments a financial plan for the network that would use money from the levy to increase service hours on the Chapel Hill and Durham bus systems within three years by around 25 percent.

The increase would enable both systems to add new routes, including more connections between the two communities.

"Just the bus component of this plan is a huge, huge win" for area residents, Carrboro Mayor Mark Chilton said, voicing enthusiasm for the expansion prospects.

The levy would also give local governments and Triangle Transit the financing necessary to begin work on two different types of rail service that would ultimately connect Chapel Hill, Durham, Cary, Raleigh, Garner and eastern Wake County.

Those projects would have an estimated front-end cost of about $1.7 billion, according to figures Triangle Transit General Manager David King gave the committee. King's organization would borrow that, and use revenue from the sales tax and other sources to pay back the loan.

The key question elected officials now face is whether to call a referendum on the half-percent sales surcharge this fall, or wait until at least sometime in 2012.

King said Durham and Orange officials have agreed they'll hold transit-tax referendums "together or not at all." The decision on timing is up to the County Commissioners in each county.

Durham County Manager Mike Ruffin later on Wednesday signaled that he intends to recommend to his commissioners that they call a vote this year. He will formally announce his advice on May 23, when he presents his fiscal 2011-12 budget request.

Ruffin wants to meet next week with Greater Durham Chamber of Commerce President Casey Steinbacher, Mayor Bill Bell, Commissioners Chairman Michael Page and other key officials to make sure they're all "on the same page" about the referendum.

Durham County Commissioner Ellen Reckhow said Ruffin also intends to recommend a referendum on an additional, quarter-percent surcharge, to raise money for the Durham Public Schools.

Orange commissioners have already called for a vote on a quarter-percent surcharge on their side of the line to raise money for schools and economic development.

Elected officials from both counties in private talks recently have also agreed that money from any Orange levy will pay for any work on the rail system that occurs within Chapel Hill's town limits.

As Chapel Hill's limits cross the county line into Durham, that means some of Orange's money would pay for track and stations on the Durham side of the line, Reckhow and Durham City Councilman Mike Woodard said.

Polling in both counties has indicated that the idea of a sales surcharge for transit enjoys majority but not overwhelming support. That and the continued slack in the economy left some officials skeptical that 2011 is the right year for a vote. Others worry that business groups like the chamber will have trouble raising money to pay for the pro-levy campaign. And Wake County officials have signaled that they won't call for a vote until next year at the earliest.

But a two-county referendum this fall would coincide with municipal elections in Durham, Chapel Hill, Carrboro and Hillsborough, elections likely to attract relatively large numbers of town and city dwellers and fewer rural, more conservative voters.

Chilton alluded to that in Wednesday's discussion, saying that this November officials know "we will have the people turning up at the polls who are really interested" in city planning issues.

He said that at least in Orange County, transit advocates would be able to mobilize a large cadre of volunteers to campaign for the levy door-to-door.

Personally, if the counties schedule a transit vote this fall "I'm going to spend more time campaigning for this referendum than I'm going to campaigning for re-election," Chilton added.

GOP senators would slash rail transit and toll road projects, but they might not cap gas tax

The News and Observer By Bruce Siceloff – Staff Writer Tuesday, May 24, 2011

Senate Republican leaders said today they want to spend much more money on bridge repair and highway maintenance -- and to slash state spending for transit and turnpike projects.

But, while both the House and Senate budgets would reduce other taxes in several areas, Senate leaders said they had not decided whether to take action to prevent a sharp increase in the state gas tax scheduled to take effect in July.

The Senate Transportation Appropriations Subcommittee today received, but was not allowed to vote on, a proposed two-year transportation budget (see documents attached to this post) that would make some big changes in budget proposals offered by Gov. Bev Perdue and the House of Representatives.

The Senate would:

> • Kill the $660 million Mid-Currituck Bridge toll project for the Currituck Outer Banks and the $870 million Garden Parkway in Gaston and Mecklenburg counties.
>
> "They're not really viable projects," said Sen. Bill Rabon, a Brunswick County Republican who helped write the transportation budget. "And I'm not sure that either one should ever have been there in the first place."
>
> If the House and Perdue agree, this would free a combined $50 million in annual appropriations intended to cover the gap between costs and expected toll collections. The money would be diverted to purchase replacement school buses and help build urban loop highways.
>
> • Kill $41.4 million in funds earmarked over the next two years for urban transit including a project to extend Charlotte's Blue Line light-rail service to the UNC-Charlotte campus -- leaving that project "dead in the water," according to a Charlotte lobbyist. The state Department of Transportation also would be barred from

helping Charlotte with its proposed Red Line / North Corridor commuter train on any plans that would include a future commitment of state funds.

"We wanted to target more dollars to maintaining the system we have – as opposed to building new roads, new bridges, new parts of the system," said Sen. Phil Berger, the Senate president pro tem.

• Direct DOT to start collecting tolls on each of the four ferry routes that are toll-free now – including the Ocracoke-Hatteras and Currituck-Knotts Island ferries, which were exempted from tolls in the House budget.

But the Senate would lower the amount of new toll revenues DOT must collect on these ferries and by raising rates on the three routes that have tolls now. Toll revenues would have to be increased by $2.5 million in fiscal 2011-2012, which begins July 1, and by $5 million the next year (instead of $5 million and $7.5 million, respectively, as proposed in the House).

Ocracokers have lobbied to keep the busy Hatteras ferry toll-free as a service to Outer Banks tourists who feed the summer economy, and to year-round residents who rely on the ferry for routine travel.

"It's fair for everyone to pay something," Rabon said. "Those ferries are extremely expensive. They are used over 50 percent by out-of-state people for tourism."

• Eliminate an $8 million spending cut, proposed by the House, that would force many high school students to pay fees of up to $75 apiece for driver's education classes.

• Ease but not eliminate legislative controls, proposed by the House, on DOT's freedom to accept federal rail improvement grants. The Senate would require legislative approval for any federal grants that obligate the state to spend more than $20 million in matching capital funds or in annual maintenance and operation costs.

A top transportation priority for Republican leaders in both chambers is to ramp up state spending to replace substandard bridges. A legislative fiscal analyst said the House budget would reduce the number of bridges now listed as structurally deficient by 24 percent over the next two years, and the Senate budget would reduce the number by 36 percent.

The state gas tax, now 32.5 cents a gallon, is expected to rise on July 1 to 35 or 35.1 cents under a legislative formula that reflects changes in wholesale gas prices. Both the House and the Senate budgets rely on revenue estimates from Perdue's budget, which included an estimated 34.2 tax rate for the coming year.

Republican legislators said earlier this spring that they probably would take steps to prevent the tax from rising above 32.5 cents, but they have not acted on bills that would cap or reduce the gas tax.

Senate leaders said today that they have not decided what to do about the gas tax rate.

Median debate takes a turn

The News and Observer By Bruce Siceloff – Staff Writer Tuesday, May 24, 2011 Published in: Road Worrier

After some legislators were stymied in their push to redesign road projects they didn't like, there were jokes about how the state should prosecute the pols for engineering without a license.

Now a North Raleigh man who made news when he faced that rap - and beat it - is ready to lend his amateur expertise to a new cause.

David N. Cox offers ammunition for politicians and residents who oppose a particular trend in traffic engineering: the construction of raised medians in place of center turn lanes on four-lane roads.

The medians restrict left turns, and merchants say they're bad for business. The Department of Transportation and professional traffic engineers maintain that studies prove the medians reduce congestion and cut crashes on busy roads.

But Cox and other citizen-engineers are stepping up with contrary interpretations of these same studies.

Reading through a 2005 N.C. State University analysis that endorsed medians, they have plucked out some numbers to back their argument for center, two-way turn lanes.

"The assumption that medians are safer than center turn lanes doesn't hold up when examined more closely," Cox said in email to the Road Worrier. "Indeed, the evidence that we found demonstrates that the opposite is more often the case."

Joe Hummer, an NCSU engineering professor who conducted the 2005 study, stands by his conclusions.

"They are in concert with worldwide professional opinion," Hummer said by email from Nanjing, China, where he was giving lectures. "Every study done with a decent methodology on this subject that I have seen comes to the same conclusion, that medians save collisions."

A fight over signals

Rush Limbaugh and others ridiculed DOT a few months ago after the department's chief traffic engineer accused Cox of practicing engineering without having a professional license, as required by law.

Cox had circulated a sophisticated-looking critique of an engineering study that had undercut his push for more stop lights on a Falls of Neuse Road widening project. After he refused to identify the authors, a professional licensing board dropped DOT's charge against him.

Before losing that fight with DOT over traffic signals, Cox and some of his neighbors had fought unsuccessfully in 2008 to block plans for raised medians on Falls of Neuse Road. They conducted their own examination of other Raleigh roads, and they cited parts of the NCSU study to back their claim.

Cox revived his median argument this month, after the Senate shelved a bill to veto medians planned on a few North Carolina roads where merchants complained.

He brought up Hummer's NCSU study again - and so did Clifton Bryan of Blowing Rock, who works for a hotel that would be affected by a planned median on U.S. 321.

"With the results of this study brought to bear ... legislators might give communities a choice," Bryan said by email. "Perhaps a second effort could be successful."

What an engineer says

Jim Dunlop, a DOT congestion management engineer, said studies show medians are safer than turn lanes - except on four-lane roads with few driveways and very light traffic. He said Cox and other critics bolstered their arguments with skewed interpretations of the research.

"They pulled out snippets from a report that said raised medians were far superior," Dunlop said.

"Ultimately, they're concerned about their community, and they want the safest possible roads. However, in my opinion, they have misinterpreted a number of reports."

Kane studying feasibility of North Hills rail

Triangle Business Journal - by Olivia Barrow Posted Wednesday, May 25, 2011, 10:46am EDT


A rendering presented Wednesday shows a system, modeled after an internal rail system in London's Heathrow Airport, making a figure eight track between Six Forks Road and Wake Forest Road.

Kane Realty Corporation, the management company for North Hills, announced Wednesday the start of a study to determine the feasibility of bringing a rapid transit system to the mixed-use development.

Ultra PRT, the personal rapid transit company partnering with Kane to conduct the study, said the area is promising because of its high density.

"We have always envisioned rapid transit of some sort at North Hills. Such transit is a natural evolution of the continued growth of North Hills, where people are looking for an efficient way to move around without continually moving their car," said John Kane, CEO and chairman of Kane Realty Corp.

Carrboro calls for tax to fund rail, bus

The Carrboro Citizen By Susan Dickson, Staff Writer May 26, 2011

CARRBORO – The Carrboro Board of Aldermen voted unanimously Tuesday to support a measure paying for public transit – including local bus service improvements and light rail between UNC and Durham – through a half-cent sales tax.

Under a 2009 bill approved by the N.C. General Assembly, the Orange County Board of Commissioners could choose to put a half-cent sales tax on the November ballot to pay for public transit service. In addition, the bill authorized a $10 increase in vehicle registration fees to further support public transit.

Elected officials have developed a draft plan for transit changes, including bus service expansion and improvements and light rail connecting UNC and Durham – which could be completed as early as 2025.

Costs for the light rail would be shared between Orange and Durham counties, with Orange County's share projected to be about $3.2 million annually for operations and $330 million for construction.

However, board members said they were concerned that county commissioners might hold off on the referendum, given that a quarter-cent sales tax to fund economic development and schools is already on the November ballot. Board member Joal Hall Broun said she felt that the commissioners were concerned about asking for another tax increase given the current economic climate.

"I really disagree with the way that the county commissioners are looking at this right now,"
Mayor Mark Chilton said. "I think it's pretty clear that they feel that the quarter-cent sales-tax proposal that they're already planning on having on the ballot in November is very important to the Orange County budget and they don't want to do anything that they perceive jeopardizes the quarter-cent sales tax passing."

David King, CEO and general manager of Triangle Transit, pointed out that the Triangle was just identified as the nation's top gas-guzzling region per household by Forbes.

"When [gas] prices go up, we suffer disproportionately," he said. "Whereas it may be pleasant to have that sort of spread-out demographic we've got, there's a cost associated with it."

Planning for transportation alternatives, such as light rail and bus, is crucial, he said.

"It's a way to assimilate the 1.2 million people that we're all told are coming our way, without it destroying us," he said.

Chilton said if gas prices continue to rise, transit changes become increasingly needed.

"This is what I got involved in local government to do 20 years ago – to make this kind of transformation in our public transit system," Chilton said. "When ordinary working people can't afford … to fill up their gas tank, I think people are going to look at us and say, 'What were you doing? Why has this taken so long? We need this now.'"

North Carolina Becoming One of Nation's Most Auto Dependent States

AAA Carolinas News Release Friday, May 27, 2011

The combination of limited public transportation options and a population that increased by more than one million in the last decade has led to sprawling metro areas throughout North Carolina, making it one of the nation's most auto dependent states, according to AAA Carolinas.

An analysis of more than half a dozen studies highlights the state's auto dependency. The studies found:

- Three NC cities ranked in the top ten most gas guzzling urban areas in the nation.
- The same metro areas, Charlotte, Triad and Triangle rank 75th, 74th and 65th worst respectively, in access to public transportation, out of the 100 largest metro areas.
- Charlotte area motorists spent 40 hours and consumed 27 gallons of fuel annually sitting in traffic in 2007. In the Raleigh area, the delay in traffic was 34 hours, burning up 22 gallons of fuel annually. Traffic congestion is worse today in both cities.
- North Carolina spends the third least amount of money per mile nationally on maintenance and repair of state-maintained roads.
- One fourth of the state's roads are ranked poor or mediocre and 29 percent of the state's bridges are rated substandard.
- North Carolina had the fourth highest number of traffic fatalities in the nation in 2009 and was ranked sixth in the nation for the highest cost of crash-related deaths at $1.5 billion in 2005.
- North Carolina's fatality rate is 1.4 deaths per 100 million vehicle miles traveled, the 33rd worst among the 50 states. The national fatality rate is 1.26.
- The state's population grew from 8 million to 9.5 million between 2000 and 2010.

"These study results highlight the need for increased funding for the Department of Transportation," said David E. Parsons, president and CEO of AAA Carolinas. "Our state needs improved maintenance of our roads and bridges and to consider more innovative public transportation solutions, such as rail, bicycle paths, car pool lanes, etc. to improve the mobility of North Carolina's growing population."

The three largest metropolitan areas in the state - Raleigh-Durham (1st), Charlotte-Gastonia-Rock Hill (2nd) and Greensboro-Winston Salem-High Point (6th) - are ranked among the top 10 metro areas in the nation in average number of miles driven (21,000) per resident, according to a 2011 study done by the Center for Neighborhood Technology. North Carolina was the only state to have three cities in the study's top ten.

The same three cities rank in the bottom half of the nation's top 100 cities for access to public transportation. Charlotte was 75th, the Triad 74th and the Triangle 65th, according to a 2011 report by the Brookings Institute that compared public transportation coverage, frequency and access to jobs.

North Carolina has more than 500 miles of rail transit and nine miles of light rail transit to service a state covering

53,000 square miles.

By comparison, New Jersey, a state with a similarly sized but a much denser population across 8,700 square miles, has a public transportation system covering more than 500 miles of rail transit and 100 miles of light rail transit.

Limited public transportation contributes to more on-road congestion. The 2007 Urban Mobility Report found Charlotte area motorists spent 40 hours and consumed 27 gallons of fuel annually on congested roads and Raleigh-Durham motorists spent 34 hours and burned 22 gallons of fuel.

The cost in lost time and fuel: Charlotte $525 million and Raleigh $421 million annually.

Traffic in both cities has increased along with the state's population gains. North Carolina gained 1.5 million residents in the last ten years. North Carolina residents logged 101,463,000 vehicle miles in 2008, compared with 89 million vehicle miles traveled in 2000.

"The state can reduce wasted time and fuel through infrastructure improvements, widening roads and making public transportation options more attractive and easier to use," Parsons said.

North Carolina spends $43,000 per mile – third least in the nation - on state-maintained roads, according to the Reason Foundation's 19th Annual Highway Report (2011 release).

North Carolina has one of the largest state-maintained roadway systems in the nation with 76 percent, or 80,000 miles, of roads maintained by the state, the fourth largest percentage in the nation.

One fourth of North Carolina's major roads are ranked poor or mediocre by the Federal Highway Administration (FHWA), 37th worst nationally according to a 2010 study by The Road Information Program (TRIP). Only four of every ten miles are rated in "Good" condition, by the FHWA.

AAA Carolinas 2011 substandard bridge report found that 29 percent of the state's bridges are rated substandard, 34th worst in the nation for percentage of bridges rated substandard.

A system of roads that are not adequately maintained harms North Carolina's ability to attract new business to the state and endangers the safety of all motorists, said Parsons.

North Carolina has the 10th largest population in the nation, but suffered the 4th highest number of traffic fatalities in 2009. More than 7,500 people died on North Carolina roads between 2005 and 2009.

The state ranks 6th in the nation for highest annual cost of crash-related deaths, according to a study released in 2011 by the Center for Disease Control and Prevention.

The study estimates that traffic fatalities cost North Carolina society $1.5 billion in 2005, the latest year for which full statistics were available. Traffic deaths accounted for $18 million in medical costs and $1.48 billion in work loss costs.

The costs are more than double those of New Jersey, a state equal to North Carolina in population, but benefiting from the nation's largest statewide public transit system and some of the most progressive traffic safety laws in the nation.

For example, New Jersey's graduated license law is the most stringent in the nation with full licensure at age 18 after two years of permit and provisional license experience. New Jersey also bans use of hand-held cell phones while driving.

In 2008, North Carolina's fatality rate was 1.4 deaths per 100 million vehicle miles traveled (33rd worst) while New Jersey's was 0.8 deaths per 100 million vehicle miles traveled (4th best), according to the Fatality Analysis Reporting System Encyclopedia's latest data.

"North Carolina's booming population, poor public transportation and gas-guzzling ethos, combined with low highway spending will lead to increasingly poor road conditions, spreading congestion and more highway deaths for our citizens," said Parsons.

AAA Carolinas, an affiliate of the American Automobile Association, is a not-for-profit organization that serves more than 1.8 million members with travel, automobile and insurance services while being an advocate for the safety and security of all travelers.

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Pouring rain, hail, American Tobacco Trail out to bid: all signs Harold Camping was one week off on rapture pick

Bull City Rising May 27, 2011

The pouring, dousing, heavy rain outside with hail bits flying, and flooding on local roads like University Dr., Alston Ave. and the like?

By itself, nothing to worry about. An isolated moment of nature's fury, nothing more.

Add to that breaking news today that the American Tobacco Trail's Phase E is going out to bid on Tuesday, May 31?

Truly, taking this news in toto: a sign of the apocalypse!

Yes, the long, long, long delayed "missing link" in the ATT -- which will connect from the trail's current end at NC 54 down to I-40, cross I-40 at the Streets of Southpoint Mall with a pedestrian bridge, and then provide a smooth surface to the Durham-Chatham Co. line, joining up eventually with regional trails all the way to Cary and Raleigh -- is moving forward after nearly a decade's time has passed since the first segment opened.

The initial American Tobacco Trail segment through Durham was the first part of the rail-trail project to be built; now, as Wake and Chatham have moved forward, Durham's final segment will be one of the last.

The move comes after the completion of a number of environmental permit reviews.

Technically, the project is expected to be let for bid on May 31. A pre-bid meeting with contractors follows, with the City opening bids at the end of June. NCDOT will then review the bid -- one of the priciest segment of the work, after all, is the pedestrian bridge crossing the Interstate -- before construction gets underway this fall.

The project is set to be complete sometime in 2012 -- just in time, naturally, for the Mayan apocalypse.

It's great news that the project is moving forward, and kudos to the City and other governmental entities for helping to move the ATT onward to completion.

Even if it's a project that you thought would only get done when pigs fly.

Hey, wait. Today's the day that Durham officials auctioned off some pigs**...** pigs that flew off the back of a truck on I-540, and who today are "flying" down to a Florida animal rights activist.

Well, I guess it did happen when pigs flew, huh?

Fatal crash, dismal record led to feds' decision to park Sky Express

The News and Observer By BruceSiceloff on 06/01/2011 - 06:52

A federal order Tuesday evening that shut down Charlotte-based Sky Express Inc. came after a crash that killed four riders and injured more than 50 others -- a crash that appeared horribly consistent with Sky Express's documented history of driver-safety violations.

Inspectors for the Federal Motor Carrier Safety Administration already had given Sky Express one of the nation's worst records for driver-safety violations.

After 109 inspections over two years, Sky Express ranked worse than 99.7 percent of the nation's interstate bus companies in driver fitness violations, where drivers did not have the required license, experience, medical qualifications or English-language skills. *(See N&O story about May 5 inspections in Durham that caught Sky Express violations, and photo of FMCSA inspector Beth Evans explaining violations to Sky Express manager David Wong.)*

Sky Express was worse than 62.9 percent in driver safety violations -- tickets for speeding, following too closely and other infractions. And worse than 82.9 percent of all bus companies for driver fatigue violations -- drivers behind the wheel more than 10 out of the past 15 hours, or unable to produce valid logbooks to certify that they had taken the required safety breaks.

Tuesday's crash north of Richmond sent injured passengers to 11 hospitals and closed northbound Interstate 95 for seven hours. The cause, according to the Virginia State Police, was driver fatigue.

Transit planners weigh revenue options

The Herald-Sun By Ray Gronberg June 3, 2011

DURHAM -- Planners say they would reinforce nine of the Durham Area Transit Authority's 17 routes and boost five Triangle Transit routes within three years if Durham voters approve a half-percent sales-tax surcharge.

Revenue from the levy would also pay for new bus routes linking New Hope Commons to downtown, and the Southpoint, central Orange County and Rougemont areas to the Duke Medical Center.

That's in addition to the money the surcharge and increases in vehicle-registration fees would generate to help build future rail connections between Chapel Hill, Durham, Cary and Raleigh.

Officials are planning a June 13 hearing on the draft Durham County transit plan.

Supporters are stressing that the county-level plans emerging in Durham, Orange and Wake counties are designed to link the region's communities, not just improve service within them.

Across the Triangle, "people are not thinking twice about living in one county and working in another," Triangle Transit General Manager David King told Chapel Hill's Town Council late last month. "But people are learning every time they go to the gas pump it's expensive to have a demographic pattern like that."

The Durham plan, however, mixes local and regional bus service.

Reinforcements on the five Triangle Transit routes targeted in the plan would target the U.S. 15-501, U.S. 54 and Durham Freeway corridors.

The additions to DATA's routes among other things would add more buses to routes serving Brier Creek, Southern High School, Northgate Mall, Durham Tech and Duke, and send more down the Holloway Street, N.C. 55 and Fayetteville Street corridors.

Planners also are figuring they'll have to beef up the Durham bus system with about $15 million in capital improvements.

They would include the establishment of park-and-ride lots at or near Rougemont, Durham Regional Hospital, the Streets at Southpoint, Patterson Place or the South Square area, and the Woodcroft Shopping Center.

The plan also counts on needing four small bus stations, near the edges of the city at each point of the compass, along with upgrades to Durham's 200 most-used bus stops.

Officials are figuring a half-percent sales surcharge in Durham would generate $17.3 million a year starting out, with revenue growing year to year as the economy picks back up.

Increases to vehicle-registration fees and an extra tax on rental cars would account for another $3.3 million in revenue.

The short-term additions to the DATA and Triangle Transit bus systems in Durham would cost about $4.3 million a year to operate, on top of what those systems are already paying for their existing routes.

A second round of improvements to follow in later years appears likely to add another $6.5 million in annual operating costs.

Revenue over and above that devoted to bus service would go to preparing the way for future rail connections. Federal and state subsidies in theory would pay three-quarters of the $1.7 billion it would take to establish rail service.

The June 13 hearing will set the stage for County Commissioners to decide whether to take County Manager Mike Ruffin's advice and schedule a referendum on the levy this fall.

Doing so could well make Durham the first of the metro Triangle's three counties to vote on the issue, and perhaps the only one to do so this year.

Wake County Commissioners have already signaled they won't call for a 2011 referendum, and Orange County Commissioners appear likely to join them.

Orange Commissioner Barry Jacobs said he and his colleagues are leaning against a 2011 transit referendum in part because they want to give priority to a separate, quarter-percent surcharge that's supposed to raise money for schools and economic development.

Also, a majority of the Orange board's members are only in their first term and aren't "necessarily familiar with the [regional transit] plan or comfortable with it," Jacobs said.

Carrboro's aldermen have signaled that they want Orange commissioners to call a transit referendum this fall, but Chapel Hill's Town Council declined recently to follow suit.

Free bus ridership falling short

The Herald-Sun By Ray Gronberg June 3, 2011

DURHAM -- Ridership on the Durham Area Transit Authority's downtown-to-Duke free shuttle service has settled into a weekday average in the 1,400-to-1,500 range, short of the expectations backers had for it going in.

The numbers have Durham officials looking for ways to better market the Bull City Connector, particularly to folks at Duke University and to people who visit downtown on nights and weekends.

"The positive is that [the average count] appears to be very stable," city Transportation Director Mark Ahrendsen said. "Our charge is to try to make more people aware of how they can use the service."

Officials launched the connector -- which links Duke, downtown and the Golden Belt business center -- last August with heavy fanfare.

The idea is that riders can count on seeing one of the cantaloupe-colored buses pass any given stop along the Main Street corridor every 15 minutes on weekdays and every 20 minutes nights and Saturdays.

Grant money, subsidies from Duke University and revenue from vehicle-registration fees are helping pay the shuttle's annual operating expenses.

When they launched it last August, officials said they were hoping the connector would be serving 1,125 riders a day after a month, 1,575 riders a day after six months and 2,035 riders a day after a year.

Ridership growth met the one-month target, but it fell short of the six-month mark and as of mid-May wasn't on track to hit the one-year goal.

The average boarding counts grew steadily from the connector's Aug. 16 launch until just before Thanksgiving, when they slumped. The numbers stayed down through the holidays, only beginning to climb again after the start of the new year.

But it took until late January and early February for the average to make up for the lost ground. Since then, it's held fairly steady around the 1,400-a-day mark, though the general trend remains modestly upward.

From talking to riders, it seems clear that there's a disconnect between general awareness that DATA operates the connector and specific knowledge of how the shuttle works, Durham Public Affairs Director Beverly Thompson said.

"There are some people who don't know it's free, they don't know what the schedules are, or where it takes them exactly," she said. "People know there's a Bull City Connector, but they're not sure what it does or what the service is. We have to figure out how to bridge that."

Saturday ridership is more prone to fluctuations than the weekday average, but usually runs somewhere between 40 and 50 percent of the weekday count. Ahrendsen said the Saturday highs tend to coincide with special events at Duke and in downtown.

The single-day peak for boardings on the connector came on April 14, a Thursday, when drivers reported serving 1,892 riders.

The spring run-up in gasoline prices didn't seem to have any drastic impact on the numbers, at least none clearly different from the changes that came after the holidays as people got back into their normal routines.

Other transit providers in the area, Triangle Transit most notably, have reported increases in ridership this spring that they think were a response to the rise in gas prices.

The ridership numbers were current as of May 14. Ahrendsen's staff keeps track of the counts and from time to time forwards a spreadsheet containing them to higher-ups in city government.

The connector all told had served 267,490 riders from Aug. 16 to May 14.

Ahrendsen said officials "are comfortable with the service in how it's currently provided," meaning that they think its routing and schedule are right.

City officials are convinced they can secure more riders among Duke faculty, staff and students, in part because parking on campus is both limited and costly. They also think their counterparts at Duke will help with marketing because the school long-term would like to avoid the costs associated with building more parking decks.

The shuttle helps link the campus to Duke operations based downtown.

The other growth opportunity city officials see is in convincing more residents and visitors to Durham to use the service to get to restaurants, clubs and other social hotspots downtown.

Thompson said her staff will work with officials at Duke and Triangle Transit to plan the revised marketing effort. They hope to have a plan together in a month, so they can be ready when most students at Duke and N.C. Central University return in August.

City wants tax linked to neighbors

The Herald-Sun By Ray Gronberg June 7, 2011

DURHAM -- At Mayor Bill Bell's urging, a unanimous City Council on Monday said Durham should give two neighboring counties a veto on whether it uses new taxes to start expanding its own public transit system.

The non-binding resolution, approved unanimously, supported a draft expansion plan for the system. But it also said that if County Commissioners call a referendum this year on a local-option sales tax surcharge to help pay for it, they should do so with the promise of a delayed implementation.

The surcharge and related levies should only go into effect in Durham if voters in either Orange County or Wake County pass a

transit tax of their own, council members agreed.

Bell said the tie-in would ensure that the bus and rail system that emerges with the help of the money will serve the Triangle, not merely one of its legs.

"From the start, I've said that my support is for a regional system," Bell told other council members. "It's not for a system just for Durham, just for Orange or just for Wake, it's for a regional system."

But council members acknowledged that the idea, if embraced by County Commissioners, would mean postponing the short-term implementation of new bus service in Durham that would represent a down payment on an expanded transit network.

Wake County officials have signaled they're not going to call a transit-related tax referendum this year, and Orange County Commissioners appear to be leaning toward a delay too.

But Durham County Manager Mike Ruffin has urged commissioners here to call a referendum this fall. They are the sole decision-makers as to the timing of a vote in Durham, under the terms of a transit-funding bill the state General Assembly passed in 2009.

Monday's City Council resolution, like one Chapel Hill's Town Council approved last month to help shape the debate in Orange, stopped short of actually recommending that commissioners take the issue to voters in 2011.

So far, of the town and city governments on the western side of the Triangle, only Carrboro's is on the record in favor of a referendum this fall.

The no-taxation-without-partners language Bell suggested was a Durham twist, one that drew skepticism from City Councilwoman Diane Catotti.

"I don't want to have our hands tied by what Orange and Wake do," she said. "There are significant advantages to the increased bus hours, prior to rail coming on line."

The Durham portion of the transit plan calls for about a 28-percent increase in the county's bus service, compared to how the Durham Area Transit Authority is operating now.

Rail transit -- in the form of mainline-bound commuter trains connecting Durham to the far reaches of the Triangle and a light-rail system linking it to Chapel Hill -- would follow some years later.

The pace of development of the light-rail connection in particular would depend on how successful local officials are in obtaining state and federal subsidies for it.

But the region's governments could implement bus-service expansions and the commuter trains without state and federal help, assuming local taxes are in place, Triangle Transit General Manager David King told Durham County Commissioners on Monday.

Bell's preference, however, is to do nothing until at least two counties are on board.

The wording he added to the City Council's resolution urges Durham County Commissioners to foreswear even the implementation of higher vehicle-registration fees -- a state-authorized funding move that doesn't require a referendum -- until either Orange or Wake voters agree to a sales-tax surcharge.

Bell said local businesses are worried that if Durham County implements the added half-cent sales tax by itself, "it'll put them in a non-competitive position" relative to other communities in the region.

He also argued that a go-it-alone approach wouldn't help the community sell federal officials on the rail system, although no one has proposed building a single-county rail system, at least on the western side of the Triangle.

County rejects half-cent transit tax

The Carrboro Citizen By Joshua Lucas, Staff Writer June 9, 2011

HILLSBOROUGH — The Orange County Board of Commissioners unanimously rejected a half-cent sales tax increase to pay for regional transit improvements Tuesday night, despite offering support for the idea of a comprehensive regional transportation system.

The vote, taken after a presentation by planners from Triangle Transit and the county's own transportation officials, means county voters won't vote on the sales-tax increase at the polls in November.

Commissioners have yet to vote on the plan itself, which proposes spending hundreds of millions of dollars on regional rail and bus service. But a key financing provision, the half-cent increase in the county's sales tax, proved too much for the commissioners to swallow in tight economic times.

"I have to be a little more realistic with what the economy's doing," Commissioner Pam Hemminger said. "I'm not ready to move forward this fall given the circumstances going on in our community."

The plan, which aims to link Orange, Durham and Wake counties in an extensive network of commuter rail, buses and point-to-point services, depends in large part on funding from state and federal government that hasn't been procured yet.

"It presumes that money would be coming from other sources," board Chair Bernadette Pelissier said.

It was that funding model that left commissioners worried. But Triangle Transit planners stressed the plan took into account worst-case projections and allowed for plenty of elbow room for unexpected costs and changes.

"We think these are ways to deliver conservatism in multiple directions," TT transportation planner Patrick McDonough said. The debt plan, for instance, presumes at worst case a significant reserve of at least $3 million, he said.

But the combination of heavy reliance on state and federal funding and increased sales taxes proved too much for commissioners.

"This is a little overwhelming," said board Vice Chair Steve Yuhasz. "Is there a Plan B?"

It's unclear how the plan could move forward without the sales-tax increase, since the plan calls for much of the county's contribution to the plan – $180 million over the life of the plan – to come from the sales-tax increase. The plan calls for at least $330 million in additional capital costs for the county over the decades-long life of the plan.

In 2009 the General Assembly approved letting the three Triangle counties vote on increasing the sales tax for transit improvements. Over the past eight months, regional governments and leaders have worked to develop the plan, which would require approval from all three counties' governments.

But Wake County has declined to put a sales-tax increase on the ballot in the fall, prompting Commissioner Earl McKee to ponder whether the plan was really all it set out to be.

"A regional plan is not a regional plan unless the largest player is in it," he said.

But commissioners said they wanted to find a way to move forward with the plan. Commissioner Alice Gordon, who has worked with the planners, stressed that the plan could survive a delayed vote on the sales tax.

"It's important to move this along," she said.

Commissioners will discuss the rest of the plan at their June 21 meeting.

Transit plans focus on buses now, trains later

The News and Observer By BruceSiceloff on 06/13/2011 – modified 3:24 pm

The old Triangle plan for a regional transit network was all about sleek trains and federal money. It flopped.

The new transit plan starts with a more down-to-earth emphasis: local money first, and more buses right away.

Orange and Durham county officials this month are weighing new financial plans for beefing up their bus routes and building new rail transit lines across the Triangle over the next 25 years.

Public information sessions are planned this week. The Durham commissioners will receive residents' comments at a hearing tonight.

Bus riders in the two counties would get a boost of nearly 25 percent - an added 94,000 hours of local and regional bus service each year - within three years after voters approved a proposed half-cent sales tax for public transit, according to the Orange and Durham plans.

"It's important, when you pass the sales tax message to the public, that you've got something concrete to show them," said Bernadette Pelissier, chairman of the Orange County commissioners. "If you're building up the bus service, they get something for those dollars right away."

Durham commissioners this month will consider putting a transit sales tax referendum on the November ballot. The Orange and Wake commissioners have decided they won't think about scheduling a referendum before next spring.

Wake County's bus and rail investment plan won't be out until October or November. It is expected to reflect the same political and practical philosophy that shaped the Durham and Orange plans.

New express bus routes, more frequent local runs, and longer night and weekend hours top the list of bus improvements proposed for the two western Triangle counties. New lines would reach Rougemont in northern Durham County and Mebane in western Orange.

Park-and-ride lots and satellite transit hubs would help rural and suburban commuters catch the bus to work centers such as the Duke and Veterans Affairs hospitals in West Durham. And the busiest 250 bus stops across two counties would get major make overs, sharing $2.5 million in amenities.

The trains come much later.

Trains in the future

Trains would form the transit backbone for a region expected to add nearly 1 million residents by 2035. Some bus routes would be realigned to serve rail stops.

Rush-hour commuter trains from Duke to East Garner could start rolling by 2018. A light-rail line between UNC-Chapel Hill and East Durham might get moving as soon as 2025, if everything worked out.

The capital costs for the proposed Orange and Durham county improvements are pegged at $2.1 billion for rail and $88 million for buses over the next 25 years.

The bus plans count on federal money for most of the cost of new buses, and on state and federal money for most of the rail construction. Annual revenues from the proposed half-cent sales tax are projected at $17.3 million in Durham County and $5.1 million in Orange County.

Triangle Transit's first proposal for a regional rail network died in 2006 because federal officials concluded that the trains would not serve enough riders to justify the expense, and because local political and financial support was weak.

Several Orange County commissioners worried at a meeting last week about committing local tax dollars for transit before the matching state and federal funds are guaranteed. Transit advocates have argued in the opposite direction, that Triangle counties won't get those federal dollars unless they spend local money first.

Some local officials draw encouragement from Charlotte's success with the transit sales tax, which was endorsed by voters in 1998 and 2007. Most of the proceeds were poured into bus improvements before Charlotte's first light-rail line opened in 2007.

"Charlotte expanded bus service quickly and found that it built ridership and built more support," said Ellen Reckhow, a Durham County commissioner. "So we're following a winning formula."

Key to getting support

That bus-now, train-later formula could be important for rail boosters who will need the support of bus riders in a referendum - if one is ever scheduled - on the half-cent transit sales tax.

James Chavis, 57, a DATA bus rider, showed up for a public information session on Durham transit plans last week at the Holton Career and Resource Center on North Driver Street in East Durham.

He complained to Triangle Transit and Durham city officials about gaps in bus service, old grievances and mistrust among low-income residents who depend on public transportation. Don't think about building a new rail network until the old bus system is running much better, he said.

"You're going to try to get us to invest in a rail system?" Chavis asked. "You'd better try to make the bus system work, and show people that it will work - and then bring in the other one. We don't want two things not working."

Board talks transit tax for buses

The Herald-Sun By Ray Gronberg June 14, 2011

DURHAM -- A Durham County commissioner signaled on Monday that he's dubious of allotting money from a transit-funding sales-tax surcharge for expanded bus service for fear of siphoning money away from plans for a rail system.

"I would like to see this money used for regional transportation," Commissioner Joe Bowser said. "If you end up splitting it up with the local bus system, you're not going to end up with the money you need to do it."

Bowser's comments came during the commissioners' hearing on the Durham component of an emerging regional transit plan that combined expanded bus service with two variants of a rail system.

Officials figure on paying for it in part with the annual proceeds of a half-percent, local-option sales tax. Commissioners have to decide whether to call a referendum on that idea, and along the way settle debate on whether to go for a vote this year or wait until 2012 at least.

Estimates suggest the surcharge would generate $17.3 million a year to start.

The plan calls for using about $4.3 million a year to reinforce existing Durham Area Transit Authority and Triangle Transit bus routes, and add new ones.

Rail service would come later on, most likely if supporters can use the levy's approval and the consequent certainty of a local contribution to convince federal and state officials to fund three-quarters of the system's $1.7 billion front-end cost.

Planners all along have assumed an expansion of bus service would be a selling point for voters, one guaranteeing them an early return on their money.

The new and expanded routes would also serve as feeders for the rail line, which would link Chapel Hill, Durham, Cary and Raleigh.

"While the rail system is really important, it runs through one part of Durham," Commissioner Ellen Reckhow said. "To really service the full county, the new bus routes help."

But Bowser made it clear he disagrees with what until now has been a fundamental assumption of the planning that's gone on to date. He indicated that he thinks expanding local bus service should be a city responsibility.

"The local bus system should be supported by other revenue," he said.

Former school board member and City Councilwoman Jackie Wagstaff during the public-comment phase of the hearing went further, denouncing the draft as "a poor-peoples' bus rides plan."

Commissioners Chairman Michael Page said the possibility that the allotment of money to buses could hurt the rail plan had occurred to him as well. He asked Triangle Transit General Manager David King for reassurance.

King noted that elected officials not only have to sign off on the plan, but on any long-term changes to it.

"We don't have the ability as the implementing agency to get creative," King said. "We do what we're told."

Commissioner Becky Heron, meanwhile, signaled that she's not sold on the idea of Durham's going it alone with a referendum this fall when Wake County and Orange County have decided they won't call for a vote in 2011.

"We put this referendum on at the same time, [we] show that our transportation can be coordinated," she said.

But Durham Committee on the Affairs of Black People Chairwoman Lavonia Allison -- head of one of the city's big-three political-action groups -- on Monday signaled support for going ahead.

"This is an opportunity for Durham to lead," she said, adding that officials also need to demonstrate confidence in the plan so people don't "believe that you're continually prevaricating."