

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

**June 13, 2012  
9:00 am****Committee Room  
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 9, 2012 TAC Meeting Minutes (9:00-9:05)  
Attachment 5**

A copy of the May 9, 2012 TAC meeting minutes is enclosed as Attachment 5.

**TAC Action:** Approve minutes of the May 9, 2012 TAC meeting.

- 6. Triangle Regional Transit Program – Orange County Bus and Rail Investment Plan (9:05-9:30)**

**Attachment 6, 6A, 6B, 6C**

**Patrick McDonough, Triangle Transit**

**Ellen Beckmann, LPA Staff**

The Orange County Bus and Rail Investment Plan must be adopted by the county, DCHC MPO, Burlington-Graham MPO, and Triangle Transit. The draft Orange County Bus and Rail Investment Plan, dated May 31, 2012, is provided as Attachment 6. This was approved by the Board of Commissioners on June 5, 2012 with minor modifications (Attachment 6B) (updated online on 6/12/2012, handout provided at TAC meeting). A comparison of the regional Durham-Orange transit services in the Orange County Bus and Rail Investment Plan and adopted Durham County Bus and Rail Investment Plan is provided as Attachment 6A. The TCC recommends approval of the plan by the TAC.

The TCC also recommends that the TAC ensure that the Implementation Agreement that is referenced in the plan include specific details on the process for updating the plan and the MPO's role in plan updates. It is anticipated that the Implementation Agreement will be brought to the TAC for approval later this year.

Attachment 6C is a motion recommended by LPA staff that incorporates the Board of Commissioners' action into the TCC's recommendation for approval (updated online on 6/12/2012, handout provided at TAC meeting).

**TCC Recommendation:** That the TAC approve the Orange County Bus and Rail Investment Plan.

**TAC Action:** Approve the Orange County Bus and Rail Investment Plan (see detailed motion in Attachment 6C).

**7. Triangle Regional Transit Program – Durham-Orange County Transit Corridor Locally-Preferred Alternative (9:30-9:40)**

**Attachment 7, 7A, 7B**

**Patrick McDonough, Triangle Transit  
Ellen Beckmann, LPA Staff**

Triangle Transit is preparing the New Starts application for the Durham-Orange County Transit Corridor. The TAC adopted the Locally-Preferred Alternative (LPA) in February 2012 (Attachment 7). Federal Transit Administration officials have expressed concern that the LPA does not exactly match how the project is described in the 2035 LRTP. The relevant excerpt from the 2035 LRTP is included as Attachment 7A. In order to help describe how the adopted LPA relates to the project in the 2035 LRTP, the TCC recommends that the TAC adopt the Resolution to Clarify the Locally-Preferred Alternative for the Durham-Orange County Transit Corridor. This resolution does not change the LPA or amend the 2035 LRTP. It will be sent to FTA staff.

**TCC Recommendation:** That the TAC approve the Resolution to Clarify the Locally-Preferred Alternative for the Durham-Orange County Transit Corridor.

**TAC Action:** Approve the Resolution to Clarify the Locally-Preferred Alternative for the Durham-Orange County Transit Corridor.

**8. Pickett Road (9:40-10:00)**

**Attachment 8 8A, 8B, 8C, 8D, 8E**

**Andy Henry, LPA Staff**

At their August 10, 2011 meeting, the TAC received and discussed a recommendation from the TCC to close the unpaved portion of Pickett Road. The TAC asked that staff meet with citizens from the area affected by the road closing because several local residents spoke against the closing at that meeting. After gathering additional data, the LPA staff conducted a drop-in meeting for citizens on May 1, 2012. Over seventy people attended the meeting and a strong majority of the comments opposed the road closing.

TCC discussion identified benefits on both sides of this issue. Closing Pickett Road would enhance the user experience of the proposed Hollow Rock Preserve and help protect the investment in that park. On the other hand, keeping the road open would avoid diverting vehicle

trips onto Randolph Road where citizens are already experiencing traffic delays and safety issues. The TCC chose to limit the evaluation of the proposed road closing to a transportation perspective using the MPO's Goals and Objectives, and not expand that evaluation to a broader policy view that includes park benefits. As a result, the TCC recommends that the TAC oppose the proposed Pickett Road closing because the closing would reduce roadway connectivity and divert traffic into a residential neighborhood.

Attachments include:

- 8 – Memorandum with additional details and history
- 8A – Traffic counts, travel time and Hollow Rock map (excerpt from Master Plan)
- 8B – Traffic Analysis Report
- 8C – Durham City Council and Durham BOCC approved resolutions, and MPO proposed resolution (from August 2011 TAC meeting)
- 8D – MPO proposed resolution opposing closing of Pickett Road
- Attachment
- 8E – Compilation of comments on proposed closing of Pickett Road (updated online on 6/12/2012, handout provided at TAC meeting)

**TCC Recommendation:** That the TAC approve a resolution that opposes the closing of Pickett Road.

**TAC Action:** Approve a resolution that opposes the closing of Pickett Road.

## **9. 2040 Long Range Transportation Plan and Comprehensive Transportation Plan (10:00-10:10)**

**Attachment 9, 9A, 9B, 9C, 9D, 9E, 9F**  
**Andy Henry, LPA Staff**

The public input period for the Goals and Objectives and Targets was open through May 31, 2012. The LPA staff conducted four public workshops and collected citizen feedback through an online survey. Attachment 9 presents the LPA recommendations. In summary, a few alternative and more aggressive Targets are recommended, but no changes are recommended for the Goals and Objectives. Additional attachments include:

- Attachment 9A – MPO Survey Results and Summary
- Attachment 9B – Chapel Hill Town Council resolution and comments on DCHC MPO Goals, Objectives and Targets
- Attachment 9C – Draft Goals and Objectives
- Attachment 9D – Target Development
- Attachment 9E – Targets
- Attachment 9F – LPA response to Chapel Hill Town Council resolution and recommended changes to Goals and Objectives (updated online on 6/12/2012, handout provided at TAC meeting)

On May 30<sup>th</sup>, the Chapel Hill Town Council approved a resolution that proposed changes to the Goals and Objectives and Targets that mostly originated from four of the Town's advisory boards. TCC was not able to consider and address these proposed changes because the TCC meeting occurred before the Town Council meeting. The LPA staff will forward a document to the TAC before their meeting that identifies how each of these comments can be addressed in the Goals and Objectives and Targets.

**TCC Recommendation:** That the TAC conduct a public hearing on the Goals and Objectives and Targets, and approve the Goals and Objective and Targets.

**TAC Action:** Conduct a public hearing on the Goals and Objectives and Targets, and approve the Goals and Objective and Targets.

#### **10. 2040 Long Range Transportation Plan and Comprehensive Transportation Plan – Socio-Economic Data and Deficiency Analysis (10:10-10:20)**

##### **Attachment 10, 10A**

**Andy Henry, LPA Staff**

At their March meeting, the TAC released draft SE Data for public comments. Since that time, several improvements have been made to the land use model (CommunityViz) that generated that SE Data. The improved model does better at allocating households and employment to the suburban and rural areas, and some site specific concerns have been addressed as well. Attachment 10 is a series of grid maps showing the 2010 to 2040 growth for dwelling units and employment growth in Durham, Orange and Chatham counties.

This most recent model version was used to generate the Deficiency Analysis, which will be used to identify and evaluate transportation projects to be included in the 2040 LRTP and CTP. Attachment 10A is the Deficiency Analysis (updated online on 6/12/2012, handout provided at TAC meeting).

Detailed maps and tables are already available on the MPO's Web site, including: updated SE Data maps; congestion maps (V/C maps); travel time tables and maps; travel isochrones; and, performance measures.

The TAC reviews and comments on the SE Data and Deficiency Analysis but is not required to take any action. It is expected that staff, the TAC, and the public will often refer to various parts of the Deficiency Analysis as the review of the LRTP Alternatives and Preferred Option occur.

**TCC Recommendation:** That the TAC review the updated SE Data and Deficiency Analysis, and provide comments to staff.

**TAC Action:** Review the updated SE Data and Deficiency Analysis, and provide comments to staff.

#### **11. STP-DA Funding Requests (10:20-10:30)**

**Attachment 11, 11A****Ellen Beckmann, LPA Staff**

The Town of Carrboro has requested additional STPDA funding for one project. Attachment 11 is a memo describing this request and other potential STPDA funding requests in the near future. Attachment 11A is a set of tables from the STPDA database showing our unobligated balance and programmed projects.

**TCC Recommendation:** That the TAC direct LPA staff to amend the STPDA database to add \$25,303 federal STPDA to U-4726DC.

**TAC Action:** Direct LPA staff to amend the STPDA database to add \$25,303 federal STPDA to U-4726DC.

**12. FY 2012 UPWP Amendment #5 (10:30-10:35)****Attachment 12****Maricia Brown, LPA Staff**

The DCHC MPO prepared its FY2011-12 Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities, which is based on federal regulations. Funding for the UPWP is provided on an annual basis by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). During the year, as schedules of funding changes and funding needs shift the MPO prepares amendments to the current UPWP. This amendment serves to request a reallocation of the Section 5307 & Section 5303 funds for Durham Area Transit Authority (DATA). Attachment 12 is a resolution & financial tables that details the requested reallocation.

**TCC Recommendation:** That the TAC approve the resolution and supporting documents for the FY 2012 UPWP Amendment #5.

**TAC Action:** Approve the resolution and supporting documents for the FY 2012 UPWP Amendment #5.

**13. Section 5307- FFY12 Partial Apportionment & Split Recommendation (10:35-10:40)****Attachment 13, 13A****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 first partial apportionment (50%) was released by FTA in February 2012 and approved by the TAC in March. A second partial apportionment (75%) has been recently released by FTA.

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 via FTA's

TEAM process. Please reference Attachment 13 for the memo detailing this grant program. Attachment 13A is the letter of recommendation for FTA.

Due to the timing of the partial apportionment, the TCC was not able to review this information and provide a recommendation. TAC action is requested at this time so transit operators can apply for the funding.

**TAC Action:** Endorse a letter to FTA for the split of the FFY12 (partial) Apportionment of Section 5307 funds.

**14. Legislative Update (10:40-10:50)**

**Attachment 14**

**Ellen Beckmann, LPA Staff**

During the short session for the NC General Assembly, several pieces of legislation have been considered that affect transportation funding and MPOs. Attachment 14 provides a summary.

**TAC Action:** Receive update.

**15. Carrboro Downtown Traffic Studies (10:50-11:10)**

**Attachment 15**

**Jeff Brubaker, Town of Carrboro**

DCHC MPO and the Town of Carrboro jointly funded the West Main Street Road Diet and Pavement Marking Study and Oak-Poplar Neighborhood Traffic Circulation Study. Both studies are packaged into a single report, since the road diet segment is adjacent to the Oak-Poplar neighborhood. The full report is posted here [http://townofcarrboro.org/BoA/Agendas/2012/03\\_06\\_2012\\_D1AA.pdf](http://townofcarrboro.org/BoA/Agendas/2012/03_06_2012_D1AA.pdf). The former is a traffic and safety analysis of a classic, "4-to-3" lane reduction on W. Main St. between Hillsborough Rd. and W. Weaver St. The latter recommends traffic calming measures and pedestrian improvements within and around the neighborhood. Attachment 15 is a copy of the presentation.

**TCC Recommendation:** That the TAC receive the presentation.

**TAC Action:** Receive presentation on the Carrboro Downtown Traffic Studies.

**REPORTS:**

**16. Report from the TAC Chair**

**Lydia Lavelle, TAC Chair**

**TAC Action:** Receive Report from TAC Chair

**17. Report from the TCC Chair**

**Mark Ahrendsen, TCC Chair**

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

**18. Report from Staff**

**Attachment 18**

**Felix Nwoko, LPA Staff**

The quarterly STPDA report is provided as Attachment 11A.

**19. NCDOT Report**

**Attachment 19**

**Wally Bowman, Division 5 – NCDOT**

**Mike Mills, Division 7 – NCDOT**

**Julie Bollinger, Transportation Planning Branch – NCDOT**

**David Bender, Public Transportation Division – NCDOT**

**Kelly Becker, Traffic Operations – NCDOT**

**TAC Action:** Receive report of NCDOT

**INFORMATIONAL ITEMS**

**20. Recent News Articles and Updates**

**Attachment 20**

**21. Draft Mobility Fund Project Schedule**

**Attachment 21**

**22. TIP Administrative Modification for June 2012**

**Attachment 22, 22A**

This is an Administrative Modification to the STIP expected to be approved by the NC BOT in June 2012. Administrative Modifications do not require TAC approval. A description of the difference between administrative modifications and amendments is also attached. As a new practice, LPA Staff will include Administrative Modifications as informational items only. Amendments will continue to be presented to the TAC as action items.

**23. Letter from NCDOT re Use of NC 147 by Trucks with Twin Trailers**

**Attachment 23**

**Adjourn**

**Next meeting: August 8, 2012**

DCHC MPO and Capital Area MPO staffs are considering scheduling a Joint TAC meeting on August 29, 2012, from 9 am to noon. Please reserve this date on your calendar.

**Dates of Upcoming Transportation-Related Meetings:**

6/12/2012 Press Conference for Bus-On-Shoulder-System Pilot at District Drive Park-and-Ride Lot (Raleigh), 9:30 am

6/15/2012 Tri-MAP at RDU Authority, 10:30 am

**You can now follow the DCHC MPO on Twitter [www.twitter.com/dchcmpo](http://www.twitter.com/dchcmpo)**

## TAC Directives to Staff

06/11/03 – 12/31/10 (Pending/In Progress/On Going)

01/01/11 – 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.	<u>In Progress</u> : Status provided to TAC, TAC Chair and elected officials on an ongoing basis
3/10/10	Address the issues raised regarding the Farrington Road Corridor Study.	<u>In Progress</u>
2/9/11	Expedite the contract amendment for the NC 54 Corridor Study and direct the consultant to review the land use assumptions.	<u>Completed</u>
3/9/11	Provide a presentation on the NCDOT tier system and funding levels in the TIP.	<u>Completed</u> : See 5/11/11 TAC Agenda.
3/9/11	Improve public outreach and add links to other transportation organizations to the MPO website	<u>In Progress</u> : DCHC MPO is now on Twitter. Website enhancements are in progress.
3/9/11	Provide an update on the implementation of the Greenhouse Gas Plan.	<u>In Progress</u>
3/9/11	Provide an update on the implementation of the Travel Demand Management program.	<u>Completed</u> : See 8/10/11 TAC Agenda
3/9/11 8/10/11	Provide a report on the proposed closing on Pickett Road and prepare a letter/resolution for the TAC's review. Gather more information from park planning staff and meet with citizens regarding their concerns.	<u>In Progress</u> : See 8/10/11 TAC Agenda and 6/13/2012 TAC Agenda Public meeting held 5/1/12, 5-7 pm, Trinity School
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	<u>Completed</u> : Bicycle and pedestrian education has been added.
4/13/11	Send a letter to the General Assembly regarding the proposed state budget	<u>Completed</u> : See 5/11/11 TAC Agenda.
4/13/11 8/10/11	Send a letter to the DCHC MPO federal legislative delegation regarding the federal budget.	<u>Completed</u> : See 9/14/11 TAC Agenda.
8/10/11	Send letters to members of the DCHC MPO state legislative delegation and other state legislators regarding the 2011 session	<u>Completed</u> : See 9/14/11 TAC Agenda.
8/10/11	Develop an approval schedule for the Locally Preferred Alternative that takes into consideration review by local boards and commissions and public involvement.	<u>Completed</u> : See 11/9/11 TAC Agenda.

9/14/11	Send a letter to NCDOT requesting an extension of the deadline for submitting MPO rankings.	<u>Completed:</u> Deadline has been extended to 12/16/2011
10/12/11	Send a letter requesting the free use of the toll road by public buses.	<u>In Progress:</u> MPO and transit staffs have reviewed the relevant state legislation and are considering the legal issues related to allowing free use by transit vehicles.
11/9/11	Schedule a presentation on the state gas tax	<u>Completed:</u> See 12/14/11 TAC Agenda
11/9/11	Invite Paul Morris to a TAC meeting to discuss transit	<u>Completed:</u> See 1/11/12 TAC Agenda
12/14/11	Follow-up with Chatham County regarding participation on the TAC	<u>Completed:</u> A letter was sent on 1/25/12. Chatham County's TAC member has been in contact with LPA staff.
5/9/2012	Refer to the Durham-Wake County transit corridor project as "regional rail" not "commuter rail"	<u>In Progress:</u> The change will be integrated into MPO documents and plan.



42 Mike Woodard indicated that Lydia Lavelle was excused from the meeting and the Vice-  
43 Chair, Ellen Reckhow will be arriving late. Mr. Woodard called the meeting to order at 9:07 a.m. and  
44 the Roll Call was conducted.

45 **PRELIMINARIES:**

46 **Adjustments to the Agenda**

47 There were no adjustments to the agenda. Mark Ahrendsen stated the handouts that were  
48 distributed at the beginning of the TAC meeting will be discussed during the appropriate agenda  
49 item.

50 Diane Catotti congratulated everyone that won their elections. Mark Ahrendsen provided an  
51 introduction for Pam Stewart who is the Chatham County representative on the DCHC MPO TAC.

52 **Public Comments**

53 There were no public comments.

54 **ACTION ITEMS:**

55 **April 11, 2012 TAC Meeting Minutes (Attachment 5)**

56 A motion was made by Diane Catotti and seconded by Bernadette Pelissier to approve the  
57 April 11, 2012 TAC Meeting Minutes. The motion carried unanimously.

58 **FY 2013 UPWP (Attachment 6)**

59 Maricia Brown provided an introduction for the FY 2013 UPWP and the attachment. Mark  
60 Ahrendsen stated the draft was presented to the TAC at the last meeting and a public hearing was  
61 held at the last TCC meeting. There are a series of resolutions in the front that represent the  
62 changes.

63 A motion was made by Diane Catotti and seconded by Bernadette Pelissier to approve the FY  
64 2012-2013 Unified Planning Work Program. The motion carried unanimously.

65 A motion was made by Bernadette Pelissier and seconded by Diane Catotti to approve the FY  
66 2012-2013 Unified Planning Work Program (UPWP) of the DCHC Urban Area/Metropolitan Planning  
67 Organization. The motion carried unanimously.

68 A motion was made by Diane Catotti and seconded by Bernadette Pelissier to approve the  
69 Resolution Certifying the Durham-Chapel Hill- Carrboro (DCHC MPO) Metropolitan Planning  
70 Organization's Transportation Planning Process for FY 2012-2013 (FY 2013). The motion carried  
71 unanimously.

72 **NC 54/I-40 Corridor Study (Attachments 7, 7A, and 7B)**

73 Leta Huntsinger provided an introduction for the NC 54/I-40 Corridor Study, along with the  
74 attachments.

75 Ellen Reckhow asked if the labeling can reflect C2 as the preference because it appears that  
76 C1 is the preference. It needs to reflect "C2-Preferred\*."

77 Diane Catotti asked for discussion on the parking lot at Leigh Village. Leta Huntsinger stated  
78 that revision came through findings that Triangle Transit discovered during their analysis. The  
79 demand for park-n-ride at that location is actually higher (1,300 cars). Ms. Catotti stated it is helpful  
80 to hear the explanation but she is still concerned. Ms. Reckhow doesn't like the wording "over"  
81 1,000 parking spaces. Ms. Reckhow suggested removing the word "over."

82 Patrick McDonough shared Triangle Transit's position on this issue. The size of the parking  
83 deck will not change the demand for parking near the station. The deck may be able to be made  
84 more attractive.

85 Ed Harrison has a concern over the pedestrian crossing of NC 54 from Glen Lennox.

86 Alice Gordon would like to see the information on the demand for parking at the Leigh  
87 Village park-n-ride lot. Mark Ahrendsen stated if we don't provide the spaces, they won't be able to

88 park there. It is a policy choice between conflicting objectives. Ellen Reckhow stated this corridor  
89 has major traffic and she wants staff to develop innovative parking strategies.

90 Patrick McDonough stated the price of parking will influence behavior. Aaron Cain stated  
91 that 1,300 spaces is equivalent to the decks at American Tobacco. At Leigh Village, they could  
92 provide mixed-use development next to the station and place the decks further way. Patrick  
93 McDonough stated that Triangle Transit wants to avoid locking in a limited number of spaces at Leigh  
94 Village. Ellen Reckhow suggested leaving the word "over" but say that effort will be made to reduce  
95 the demand at Leigh Village through park-n-ride efforts at other locations and a creative approach  
96 where we look at surrounding the deck with private development. Mr. McDonough agrees with  
97 having development closer to the station. Diane Catotti suggested noting the preference to locate  
98 the parking facilities further from the station to allow for Transit Oriented Development (TOD). Leta  
99 Huntsinger will work with Aaron Cain and Patrick McDonough to get the language so a citizen will  
100 understand it.

101 Ellen Reckhow stated we are in a position to approve the study. A motion was made by Ed  
102 Harrison and seconded by Diane Catotti to approve the NC 54/I-40 Corridor Study. The motion  
103 carried unanimously.

104 Ellen Reckhow stated she really appreciates all of Leta's work on this project.

105 **FY 2013-2015 Congestion Mitigation Air Quality Projects (Attachments 8, 8A, and 8B)**

106 Ellen Beckmann provided an introduction for the FY 2013-2015 Congestion Mitigation Air  
107 Quality Projects, along with the attachments.

108 A motion was made by Diane Catotti and seconded by Mike Gering to approve the requested  
109 changes from the Town of Hillsborough and DATA, and recommend approval of these changes  
110 through a MTIP amendment. The motion carried unanimously.

111 **FY 2012-2018 MTIP – Amendment #4 (Attachments 9 and 9A)**

112 Ellen Beckmann provided an introduction and review of the projects for the FY 2012-2018  
113 MTIP – Amendment #4, along with the attachments.

114 Alice Gordon asked for clarification on attachment 9A, page 3, and Ellen Beckmann stated  
115 the figures came directly from Triangle Transit based on their financial models. Patrick McDonough  
116 stated it is a hypothetical cash flow model for the Durham-Orange project through 2018.

117 A motion was made by Diane Catotti and seconded by Mike Gering to adopt the resolution to  
118 modify the 2012-2018 Transportation Improvement Program for the Durham-Chapel Hill-Carrboro  
119 Urban Area Amendment #4. The motion carried unanimously.

120 **Triangle Regional Transit Program – Scoping and Orange County Transit Plan (Attachments 10, 10A**  
121 **and 10B)**

122  
123 Patrick McDonough stated there have been scoping meetings and positive feedback from the  
124 public. Citizens really liked the visual element. It is open to for comment until June 18, 2012. Alice  
125 Gordon really liked the use of interactive technology used during the scoping meeting and stated it  
126 would be nice to provide it for the citizens.

127 Mr. McDonough stated the draft Orange Plan has been sent out. There are still details of the  
128 financial plan that need to be finalized between Durham and Orange. Most details are in agreement.  
129 There are some differences in the bus hours of service between Durham and Orange.

130 Ellen Reckhow asked if there would be a park-n-ride lot at the West Durham Station. Mr.  
131 McDonough stated there are 300 parking spaces planned. Ms. Reckhow wants to make sure there is  
132 access from Orange County to commuter rail.

133 Alice Gordon stated route 405 is not included in the Durham Plan. Mr. McDonough stated it  
134 is not a concern for Triangle Transit. Mark Ahrendsen stated there are some unassigned hours in the  
135 Durham plan. Mr. McDonough stated Triangle Transit may be able to incorporate these changes if  
136 DATA adjusts service.

137 Bernadette Pelissier asked what happens if the state doesn't approve the 25% capital  
138 funding. Patrick McDonough stated the state just approved funding for Charlotte. Triangle Transit  
139 has shared the anticipated schedule with NCDOT. Triangle Transit will likely need to borrow funds  
140 with the federal and state money paid later. Chuck Watts, Jr. stated the NCDOT board supports it,  
141 but the allocation has to come from the legislature.

142 Ellen Reckhow stated that the bill that allowed us to levy a half-cent sales tax requires doing  
143 an affordable housing plan prior to the state action. Does that mean before planning or  
144 construction? Patrick McDonough stated that Triangle Transit came to the same conclusion – before  
145 construction, five years before opening day. Ellen Reckhow doesn't want to wait until just before  
146 construction as it may be too late. Durham and Orange should coordinate plans.

147 Aaron Cain stated we are required to do the plan prior to receiving state funding which will  
148 be two to three years down the road. The City's Community Development Department has a  
149 planning process we can use. The plan must be a countywide plan.

150 Alice Gordon asked when we would get state funding. Patrick McDonough stated there is  
151 already state and federal money in the UPWP to support the process. The big money comes through  
152 a full funding grant agreement. The State adds to the STIP and the state budget includes the  
153 legislative appropriation. Aaron Cain stated Durham City/County Planning is doing a station area  
154 strategic infrastructure plan to help determine resources needed at stations. Bernadette Pelissier  
155 stated Orange County needs to coordinate with Chapel Hill on station plans.

156 **Hillsborough Downtown Access Study (Attachment 11)**

157 Margaret Hauth provided a presentation on the Hillsborough Downtown Access Study, along  
158 with the attachment. The Town of Hillsborough has met with NCDOT and they may be able to help  
159 with funding. Diane Catotti stated it is great to hear that NCDOT may fund the improvements and  
160 she supports the bike lane option.

161 Alice Gordon asked what the timeline for the project is, and Ms. Hauth stated they are  
162 waiting on a response from NCDOT on resurfacing Churton Street. This is the first time we have  
163 studied downtown as a whole. We are trying to move traffic while meeting the other needs in  
164 downtown.

165 The plan has been adopted with the understanding that we will consider the Margaret Lane  
166 changes later. The implementation has not been scheduled yet.

167 **2040 Long Range Transportation Plan and Comprehensive Transportation Plan (Attachment 12)**

168 Andy Henry provided an update on the 2040 Long Range Transportation Plan and  
169 Comprehensive Transportation Plan, along with the attachment.

170 The Goals & Objectives, targets, and SE data were released in March 2012. Public workshops  
171 were held and we received over 200 responses to the online survey. The public comment period  
172 ends May 31, 2012. At the June TAC meeting there will be a public hearing where the TAC will be  
173 asked to adopt the items above. Mr. Henry hopes to have a Deficiency Analysis at the June 2012 TAC  
174 meeting. In August, we hope to have the alternatives.

175 Alice Gordon asked when we will have the final 2010, 2040 SE data, and Andy Henry stated it  
176 will not be until the plan is approved in January or February. The update in June will include updated  
177 SE data.

178 **REPORTS:**

179 **Reports from the TAC Chair**

180 Ellen Reckhow stated the Durham County BOCC was very comfortable with the tweaking on  
181 the Durham-Orange cost sharing agreement. It was sent to the Orange County Manager.

182 **Report from the TCC Chair**

183 Ellen Beckmann provided an introduction for the Draft Mobility Fund Project Scores which  
184 was provided at the beginning of the meeting (attachment 18).

1 85 Ellen Reckhow stated project #32 and #33 need to be changed from “commuter rail” to  
1 86 “regional rail.”

1 87 A motion was made by Diana Catotti and seconded by Mike Woodard to move the change to  
1 88 call the projects regional rail and not commuter rail. The motion carried unanimously.

1 89 **Report from Staff (Attachment 15)**

1 90 The report from staff is attached for review. Dale McKeel stated May is Bike month.

1 91 **NCDOT Report (Attachment 16)**

1 92 Joey Hopkins, Division 5, provided an update on projects. In regards to project U-4716, the  
1 93 Hopson Road/Railroad separation, the NC Turnpike Authority has been working with the developer  
1 94 on a utility easement on the east side of the property. The NC Turnpike Authority has agreed to buy  
1 95 the property, and Keystone will not be responsible for the improvements. It has not been approved  
1 96 by the NCDOT board. The T.W. Alexander project is almost done and the Miami Boulevard project is  
1 97 ahead of schedule. The Hillandale Road project is slightly behind schedule. Resurfacing projects are  
1 98 starting and Mr. Hopkins will send a list to the TAC. The NC 55/Lawson intersection project is just  
1 99 getting started.

2 00 Ellen Reckhow stated there needed to be wider shoulders on Cornwallis Road because of the  
2 01 bikers. Joey Hopkins said right of way is a problem.

2 02 Joey Hopkins stated there is a Call for Best Practices for Context Sensitive Solutions which is a  
2 03 national call and is due on June 15, 2012 sponsored by FHWA. They will develop regional  
2 04 workshops sharing projects.

2 05 Patrick Wilson, Division 7, provided an update on projects. In regards to the Hillsborough  
2 06 Study, the Division agrees to help fund probably next year; however we need to resolve the bus  
2 07 pullout issue. The I-40 widening project may be split; NC86 to US15-501 has the most congestion.  
2 08 Andy Henry stated there was a recommendation to widen the westbound lane starting at US 15-501.

209 Mr. Henry asked if there has been anymore consideration of this, and Mr. Wilson stated he does not  
210 have an update. Mr. Wilson stated NCDOT would probably want to do both directions at once.

211 Alice Gordon asked what will be included in the Hillsborough project, and Mr. Wilson stated  
212 NCDOT is looking at stamped crosswalk, narrowing some of the lanes, removing parking and adding  
213 sidewalks.

214 Alice Gordon asked about the status of the Culbreth Road sidewalk project. David Bonk  
215 stated they plan on rebidding the project after review; hopefully 60 days.

216 Ellen Reckhow asked for a report on the Pickett Road project. Andy Henry stated there were  
217 seventy individuals that attended the public meeting. The TCC will discuss it in two weeks and bring  
218 a recommendation to the TAC in June.

219 **INFORMATIONAL ITEMS:**

220 **Recent News Articles and Updates (Attachment 17)**

221 The recent news articles and updates are attached for review.

222 **Adjourned**

223 There being no further business before the Transportation Advisory Committee, the meeting  
224 was adjourned at 11:43 a.m.

# The DRAFT Bus and Rail Investment Plan in Orange County



## The Bus and Rail Investment Plan in Orange County

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# The Bus and Rail Investment Plan in Orange County

## I. INTRODUCTION

Orange County has achieved an enviable quality of life at the end of the first decade of the 21<sup>st</sup> century. Recent accolades include its ranking as the one of the best place to live by *Money Magazine, July 2010*, one of the best places to start a business by *Entrepreneur Magazine, August 2009* and one of the best places in the nation to raise children by *Business Week, December 2010*. Orange County is nationally known for its excellent public education systems. Two districts serve the residents of Orange County: The Chapel Hill-Carrboro City School System and the Orange County School System. 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*.

With these successes comes growth in population and increased pressure on our roads and highways. Since 2004, the Triangle has moved from 46<sup>th</sup> largest metro area in the nation to 40<sup>th</sup> in 2009, and our vehicle demand on freeways is up by 28% over those five years. Recently, our region was named the 3<sup>rd</sup> most sprawling urban area in the country among the 83 areas studied.

In 2009, the Joint Long Range Transportation Plan for 2035, by 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. Orange County population grew by 1.6% a year since 2000 and is projected to grow from the countywide 2010 census of 133,801 to approximately 173,000 by 2030.

The economic costs for 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. Enhanced transportation options need to be created to ensure that Orange County's residents of all income levels have access to job centers and commerce.

Orange County residents and their 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 Metropolitan Planning Organizations (MPOs) fully incorporated the STAC recommendations into a 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 two years, Triangle Transit staff has worked with municipal, Orange 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. These investments would positively impact traffic congestion and air quality, and support local land use policies. This plan is the culmination of that collaboration and proposes crucial public investments and services to maintain our quality of life and economic vitality for the next 25 years.

Extensive public engagement has occurred over the two years in the development of the bus and rail elements of this plan. In 2010 and 2011 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. Since that time, the project Web site, [www.ourtransitfuture.com](http://www.ourtransitfuture.com), was viewed by over 73,000 unique individuals. The Web site houses all of the presentation materials and proposed plan elements.

Additionally, the DCHC MPO held five public workshops to receive input on the proposed plan in 2011. In spring 2012, the Orange County Board of Commissioners held two public hearings and two public workshops to provide opportunities for the public to ask questions and provide feedback on the proposed plan.

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 adopted Durham County Bus and Rail Investment Plan. Additionally, this bus and rail investment plan builds on 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 that have been involved in the development of this plan and will have responsibility to implement the recommendations of the plan upon its approval. Below is a brief description of the transit agencies:

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 Transportation is a county agency that provides community transportation in unincorporated Orange County consisting of demand response service and circulator service within Hillsborough in cooperation with the Town of Hillsborough. Orange County Public Transportation is responsible for providing transportation services to all residents of unincorporated Orange County, the Town of Hillsborough and a portion of the City of Mebane with destinations within and beyond Orange County's borders.

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

#### 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 overall mobility and transportation options 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)

- Enhance existing service
- Maintain existing services
- Maintain level of local funding at no less than the August 1, 2009 spending level

Over the course of the plan, a new half-cent sales tax would enable delivery of a total of 40,950 additional bus hours in Orange County. By comparison, Chapel Hill Transit currently provides 190,000 annual bus hours and Orange Public Transportation provides approximately 13,000 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
- Rural or Non-urban service- new or supplemented bus service in northern and western portions of the County.
- Regional service - service operating in more than one county or between separate urban areas. Note: Costs and expenses for regional bus services traveling between Durham and Orange counties are shared on a 50-50 basis by Durham and Orange counties in this Plan.

**First Five Years following successful sales tax referendum**

An investment that equals about 34,650 bus service hours will be provided during the first five years. Improvements will include:

Improve connectivity

- New regional service connecting Carrboro, Chapel Hill, and Durham
- 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 Triangle Transit Route 800 between Research Triangle Park and Chapel Hill
- Increased peak hour service on 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
- Expanded regional Sunday 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

#### Bus Service Enhancements

- Enhanced rural transit service in unincorporated Orange County

#### Maintain existing services

- Revenues from the County vehicle registration fee of \$7.00 as identified in the plan (see page 21) will be used to support existing bus service
  - Continue weekday hourly service on the in-town Hillsborough circulator
- ❖ Routes provided by Chapel Hill Transit, may or may not, be included in the plan. Chapel Hill Transit and its partners will determine which of the improvements will be included after further public involvement and analysis.

#### **Year six and beyond following successful sales tax referendum**

An additional 6,300 new bus service hours will be provided between year six of the plan implementation through the end of the program (year 2035) bringing the total to 40,950 total new bus hours.

#### **Improvements include:**

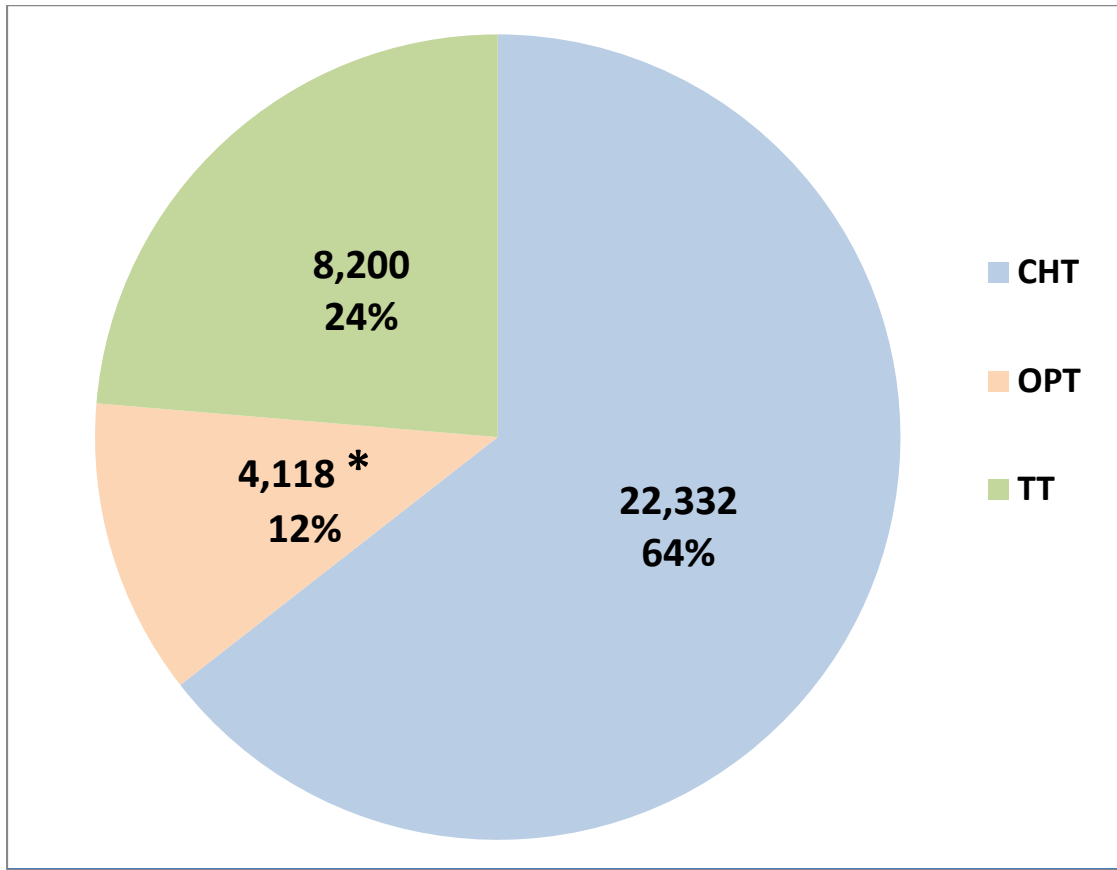
Increase frequency in peak hours

- Increased peak hour service on Pittsboro – Chapel Hill Express
- Increased peak hour service on the existing Triangle Transit Route 800 between Research Triangle Park and Chapel Hill
- Increased peak hour service in Chapel Hill, Carrboro and UNC

#### Service Enhancements

- Continued enhancements to rural transit service in unincorporated Orange County

The following chart depicts how revenue will be appropriated initially to the various transit providers – Chapel Hill Transit, Orange Public Transit, and Triangle Transit.



Provider	Hours	% Share of Revenue
CHT	22,332	64%
OPT	4,118 *	12%
TTA	8,200	24%
<b>Total</b>	<b>34,650</b>	<b>100%</b>

*Operating Cost for TT/ CHT is \$97/ hr; OPT cost is \$58/ hr*

**\* The above chart uses a blended formula for operating costs. Since operating cost for OPT are currently \$58/ hr, the 4,118 hours will result in 6,887 hours at that \$58/hr rate.**

- ❖ See Appendix for more detailed information about specific bus routes and proposals

### C. New Bus Capital Investments

- Park and Ride lots
- Bus shelters in both rural and urban areas of the County
- Real-time passenger information signs and technology
- Bus stop access improvements such as sidewalks

❖ For financial information about these proposed investments please see the Appendix.

### D. Hillsborough Amtrak Station

The plan will provide local funding to support the creation of a passenger rail station in the Town of Hillsborough.

The Rail Station Small Area Plan is a conceptual site and land use plan for the 20-acre tract of land owned by the Town located off of Orange Grove Street. The proposed land uses include a rail station building with space for municipal meetings and a police station; a fire station, and space for a civic arts center. On the eastern portion of the site, high-density commercial and residential land uses are suggested. Phasing options have been considered as well. In addition to the conceptual site plan for the Hillsborough tract, a general transportation network and set of land uses is proposed for the adjacent Collins property.

❖ For financial information about this proposed investment please see the Appendix.

# HILLSBOROUGH STATION

VIEW FROM CHURTON STREET BRIDGE



HILLSBOROUGH - ORANGE COUNTY RAIL STATION TASK FORCE

DESIGNED AND DRAWN BY THOMAS J. CAMPANELLA  
THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL - DEPARTMENT OF CITY AND REGIONAL PLANNING



APRIL 2010

# HILLSBOROUGH STATION



EXISTING SITE

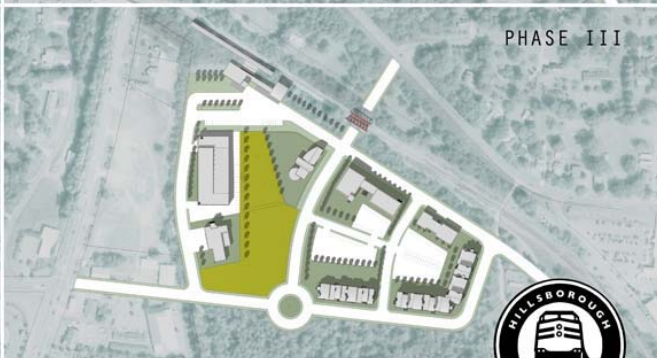


PHASE II



PHASE I

HYAA LITTLE LEAGUE AND TEE-BALL FIELDS



PHASE III

HILLSBOROUGH - ORANGE COUNTY RAIL STATION TASK FORCE

DESIGNED AND DRAWN BY THOMAS J. CAMPANELLA  
THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL - DEPARTMENT OF CITY AND REGIONAL PLANNING



APRIL 2010

## E. New Light Rail Service

The Orange County Bus and Rail Investment plan provides funding for a fixed guideway transit system that would connect Durham and Orange counties using Light Rail technology (LRT). The 17.3-mile alignment extends from the University of North Carolina (UNC) Hospitals to Alston Avenue/NCCU in East Durham. A total of 17 stations have been proposed including a station at Mason Farm Road, Hamilton Road, the UNC Friday Center, as well as a potential station at Woodmont/Hillmont or 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 stations are routinely spaced between ¼ mile and 2 miles apart.

Light Rail vehicles are electrically powered and travel at speeds up to 55 mph. The total travel time for the 17.3-mile alignment is about 35 minutes, including stops. The vehicles are approximately 90 feet long and can operate in both directions. Additional cars can be added as the demand increases. Recent 2035 projections indicate that ridership will exceed approximately 14,000 boardings per day. These projections are subject to change as the demand model is refined and as development, population and employment changes are recognized.

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 17.3-mile alignment includes train frequencies (headways/ e.g. time between each train) of 10 minutes during the morning and evening peak and 20 minutes during the off-peak hours and on weekends. Vehicles will operate on an 18-hour schedule each weekday. Several potential light rail vehicle maintenance facility locations are being evaluated. Detailed alignment and station location decisions will be made at the end of Preliminary Engineering.

The total capital cost for the Durham and Orange Light Rail Project is approximately \$1.378 billion (2011 dollars). Orange County's share is \$316.2 million in 2011 dollars, which is the same as \$418.3 million in Year-Of-Expenditure (YOE) dollars. Operations and Maintenance costs are estimated at \$14.44 million/year (2011 dollars). Orange County's share of the Operations and Maintenance costs are \$3.46 million/year (2011 dollars). For Orange County's share of the capital cost of the Light Rail project the total cost allocation is Orange County 25%, and an assumed State participation of 25% and Federal Participation of 50%.

Cost estimates for the light rail project have been developed with multiple conservative assumptions. Included in the \$1.378 billion total project cost are the following contingencies:

- 30% contingency on all civil engineering construction costs (stations, sitework, track, yard & shop)
- 20% contingency on systems (signals, electricity, communications)

- 10% contingency on vehicles
- Additional contingency on all soft costs (Design/Architectural/Engineering)

Beyond these line-item specific contingencies, there are also two general contingency line items, one that is equal to 5% of construction cost and another that is equal to 5% of the entire project cost.

For financial information about this proposed investment please see the Appendix.

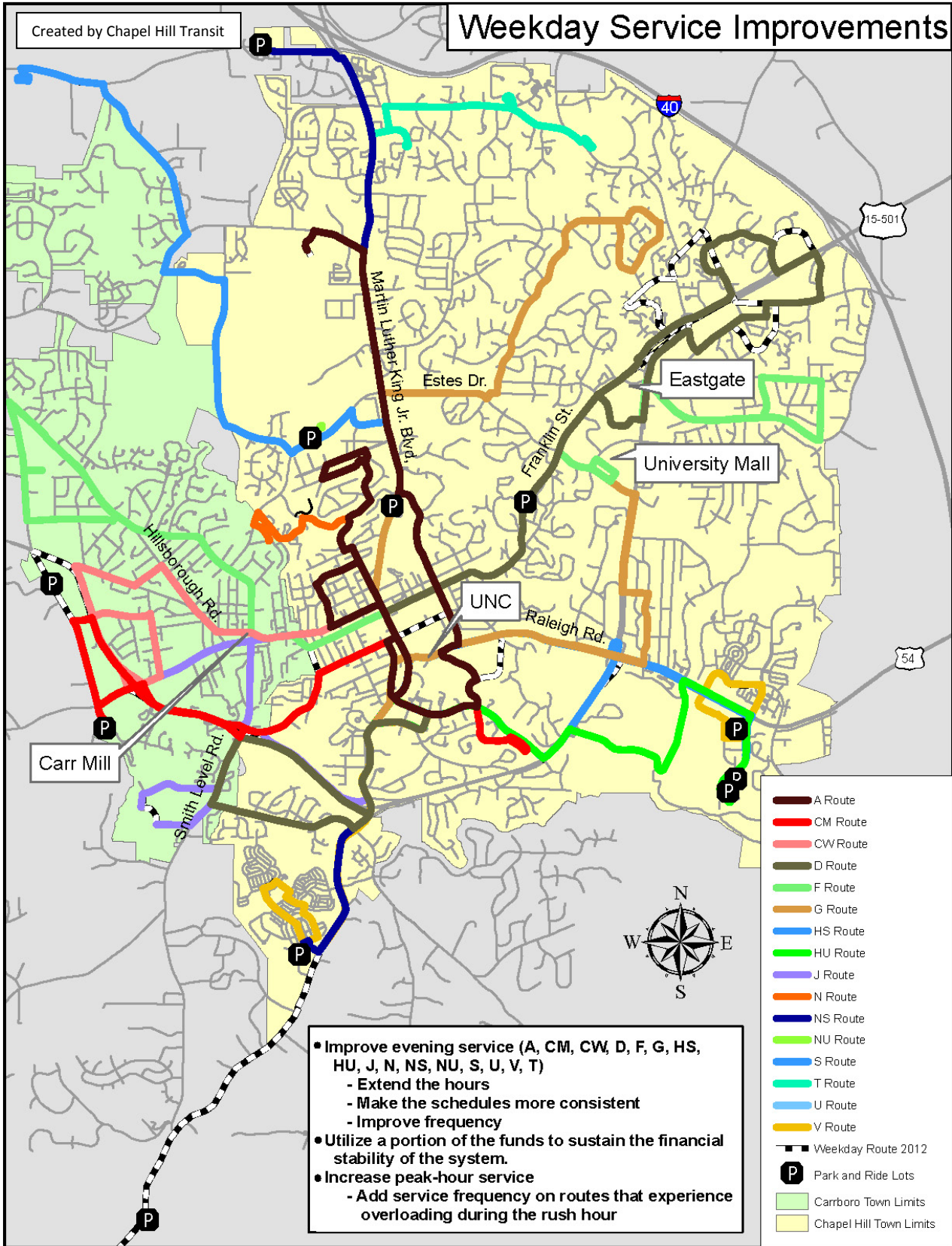
#### F. Martin Luther King Boulevard Bus Lanes and Corridor Improvements

This investment provides for corridor improvements for buses on Martin Luther King (MLK) Boulevard from Interstate 40 to UNC, using a combination of exclusive lanes and other forms of preferential treatment. It will make bus travel times more reliable in peak periods. Existing buses operating in the MLK corridor will be re-routed to take advantage of the enhanced facilities.

Orange County's cost for the bus lanes is anticipated to be \$22 million in \$2011 dollars, which is the same as \$24.5 in YOE dollars – according to staff at Chapel Hill Transit. This project assumes 25% of the funding will come from the State and 50% of the funding will come from the Federal Government. Since the bus lanes will be used by existing services, they do not generate any additional operational costs within the plan.

For financial information about this proposed investment please see the Appendix.

- IV. MAPS:** The series of maps listed below articulate proposed investments in both bus and rail throughout Orange County.
- a. Chapel Hill Transit Weekday Service Improvements
  - b. Chapel Hill/Carrboro: Saturday Service Improvements
  - c. Chapel Hill/Carrboro: Sunday Service Improvements
  - d. Improved Bus Service in US 15/ 501 and NC 54 Corridors
  - e. Orange County Transit Plan: Proposed Regional Bus Service Improvements
  - f. Proposed Hillsborough and Rural Bus Service Improvements
  - g. Durham-Orange Light Rail Transit Project
  - h. Improved Bus service on MLK
  - i. Regional Integration of Orange, Durham, and Wake Transit Plans



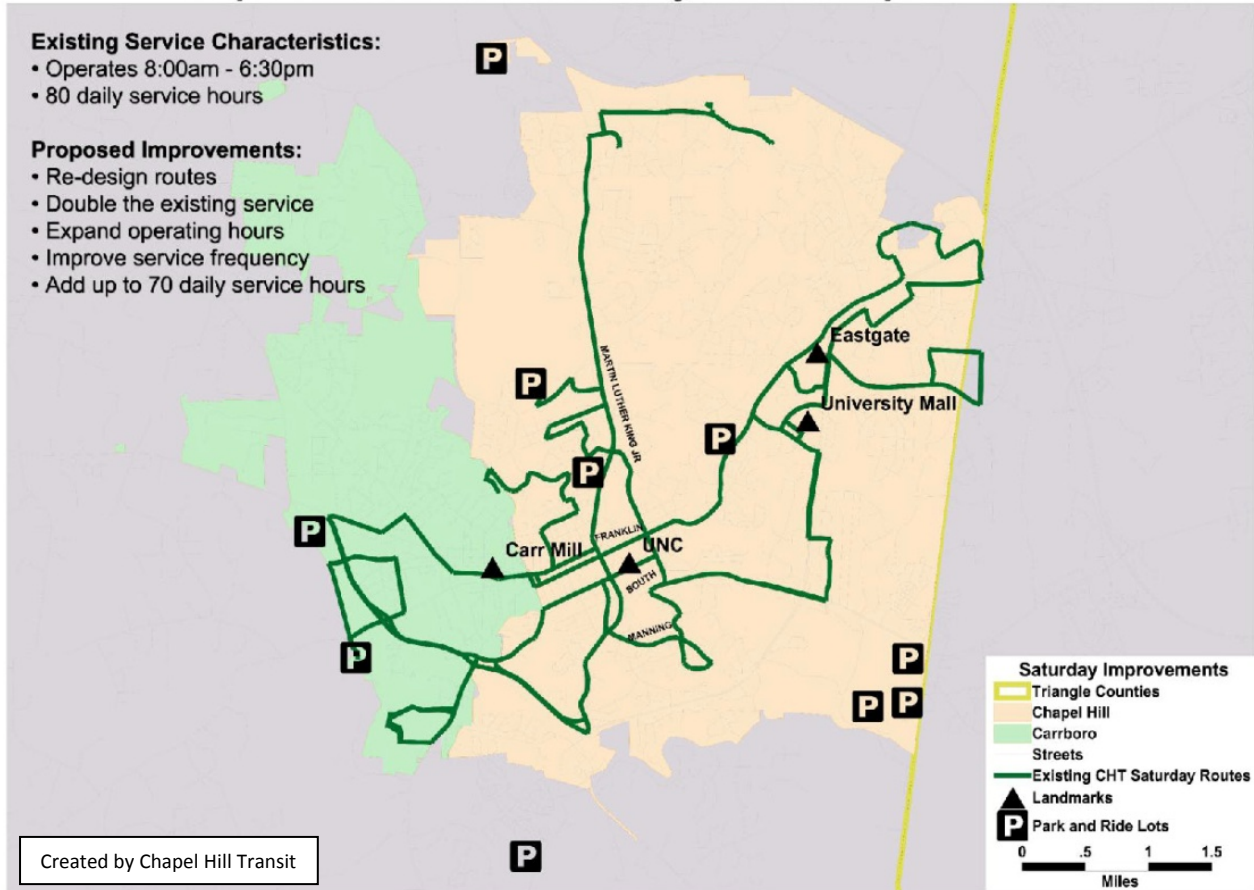
## Chapel Hill/Carrboro: Saturday Service Improvements

**Existing Service Characteristics:**

- Operates 8:00am - 6:30pm
- 80 daily service hours

**Proposed Improvements:**

- Re-design routes
- Double the existing service
- Expand operating hours
- Improve service frequency
- Add up to 70 daily service hours



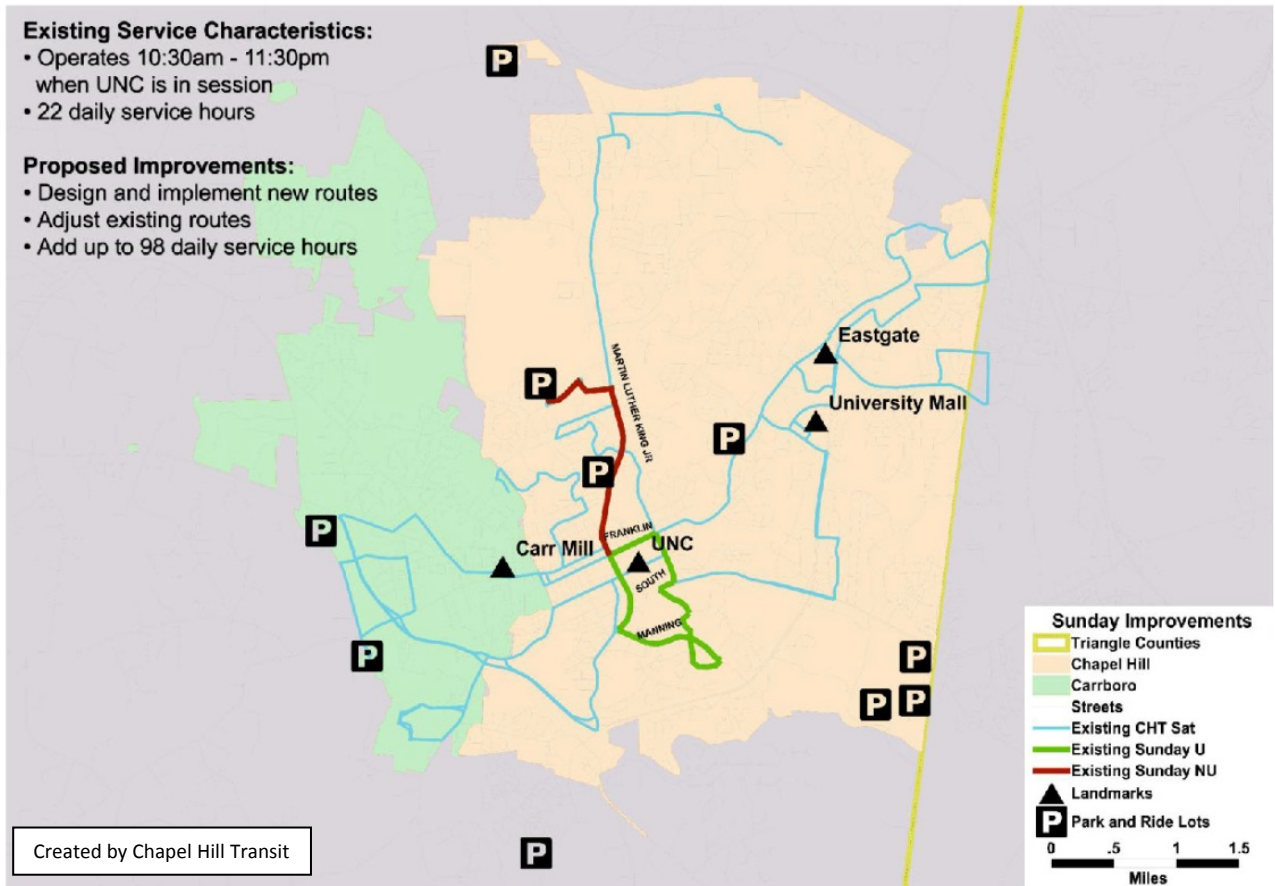
## Chapel Hill/Carrboro: Sunday Service Improvements

**Existing Service Characteristics:**

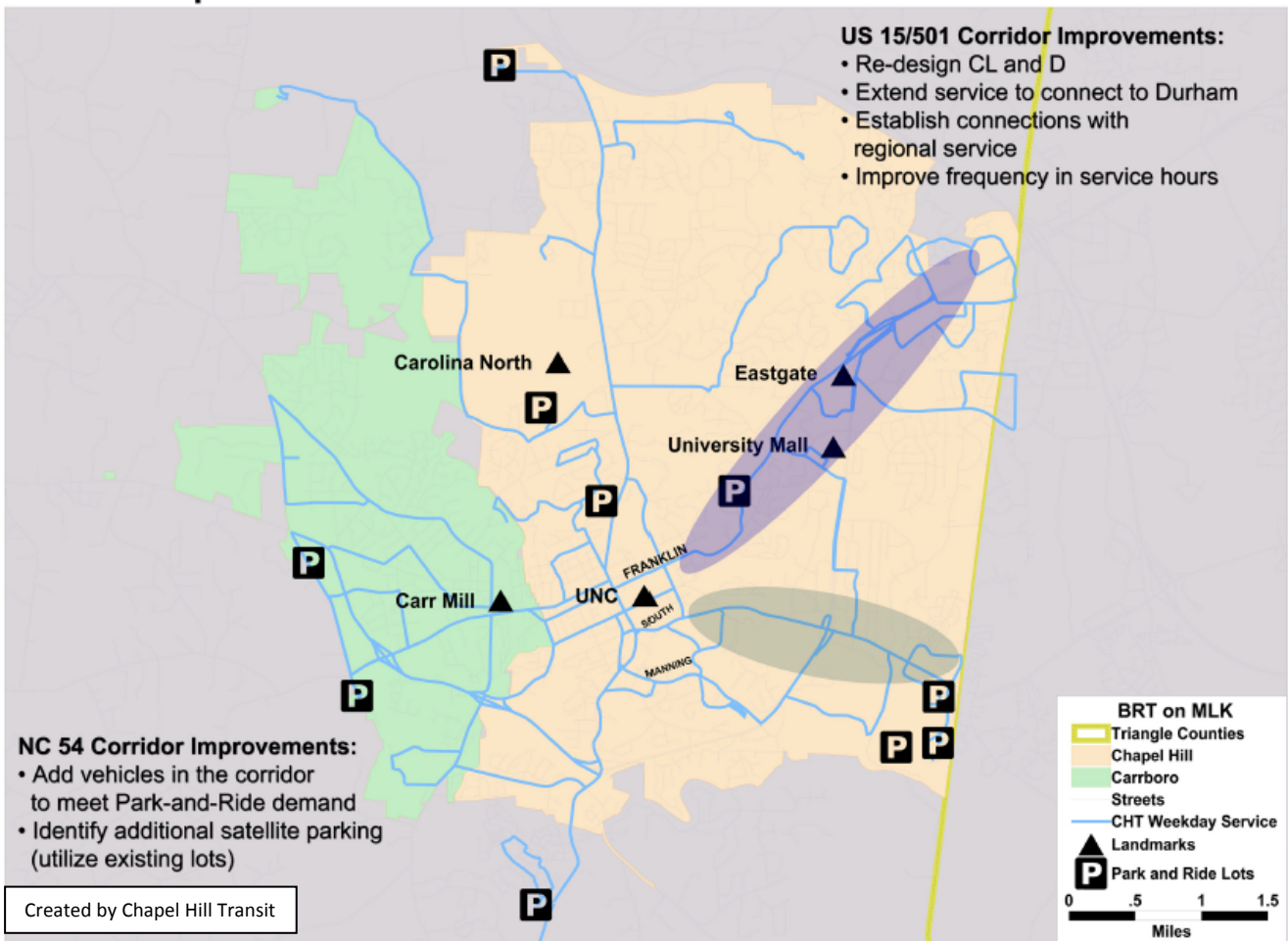
- Operates 10:30am - 11:30pm when UNC is in session
- 22 daily service hours

**Proposed Improvements:**

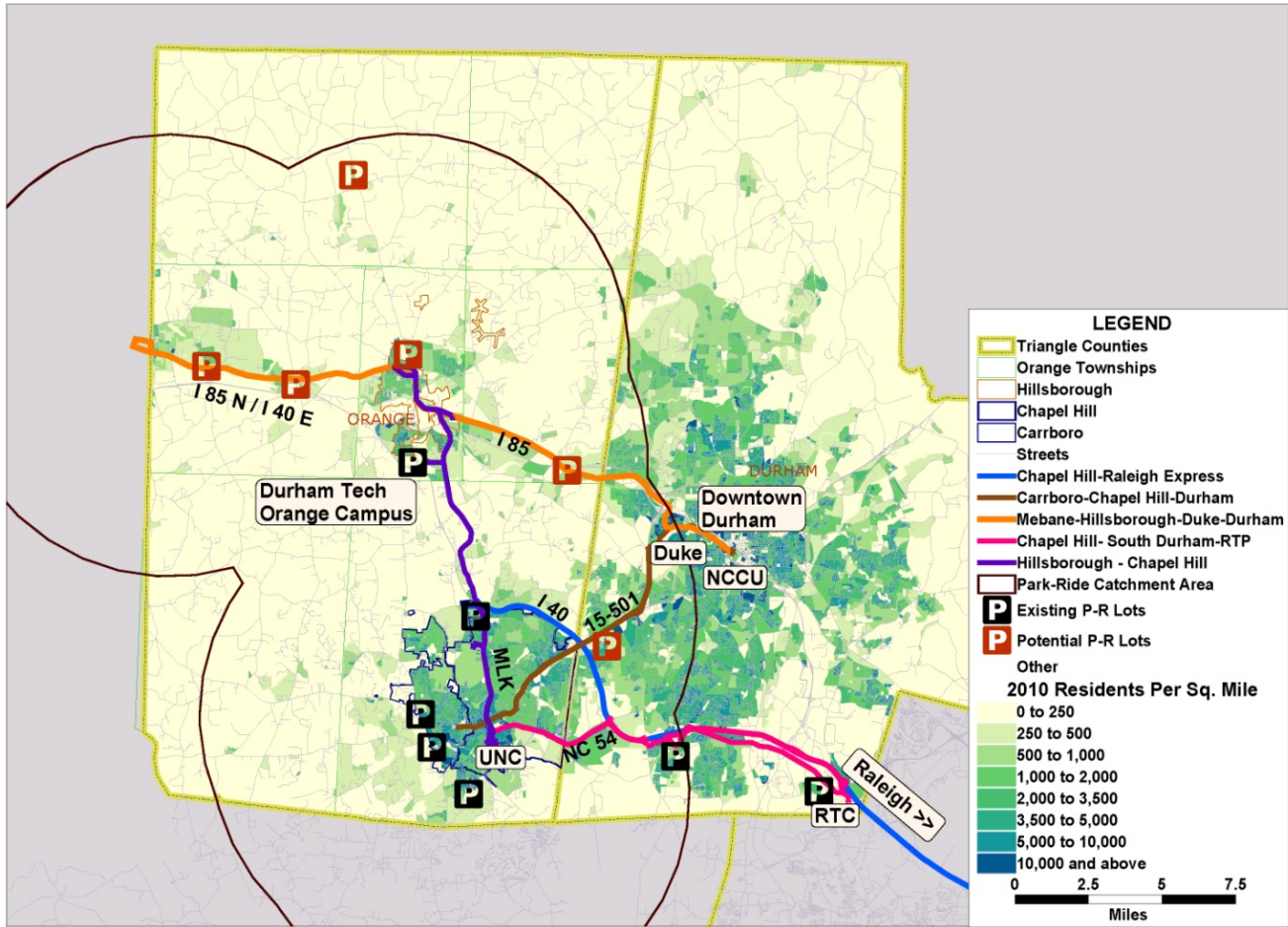
- Design and implement new routes
- Adjust existing routes
- Add up to 98 daily service hours



## Improved Bus Service in US 15/501 and NC 54 Corridors

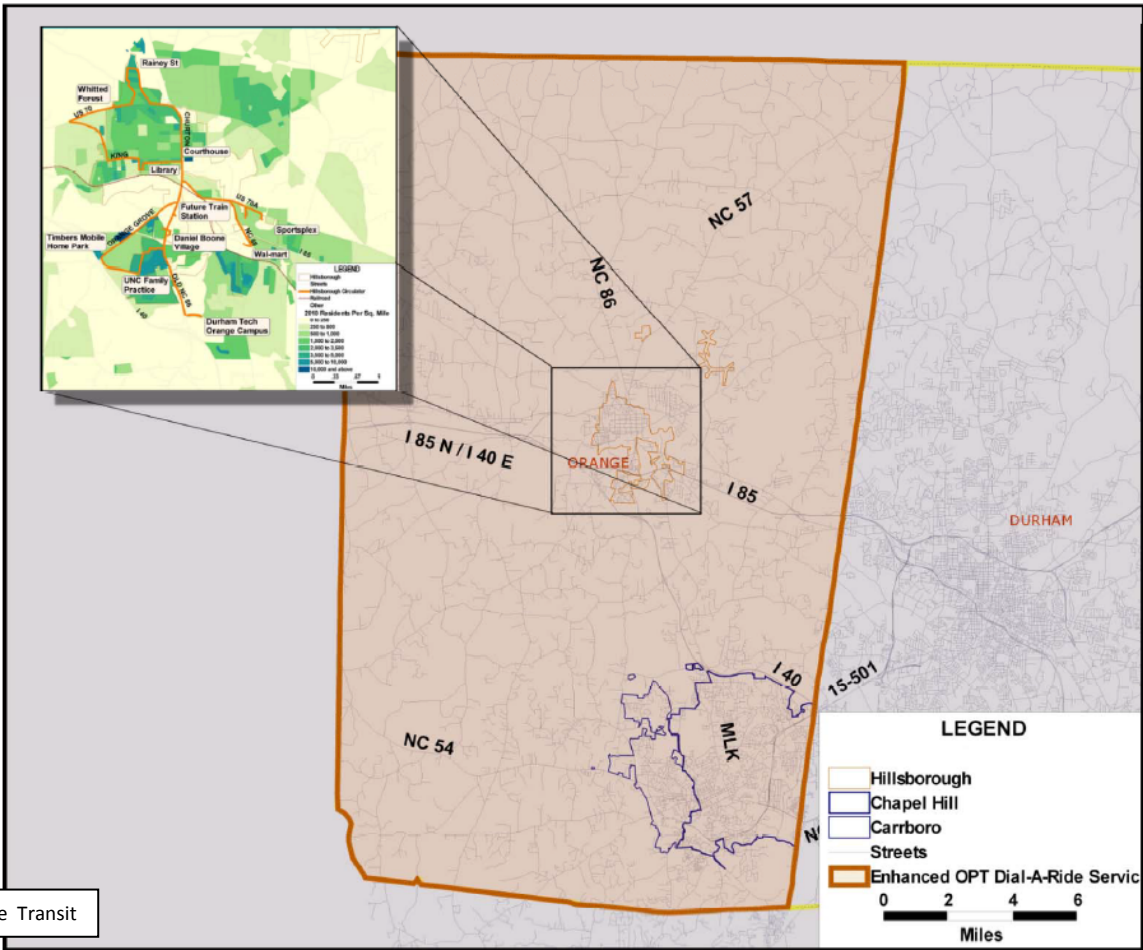


# Orange County Transit Plan: Proposed Regional Bus Service Improvements



Created by Triangle Transit Staff  
 April 23, 2012

### Orange County Transit Plan: Proposed Hillsborough and Rural Bus Service Improvements



Created by Triangle Transit

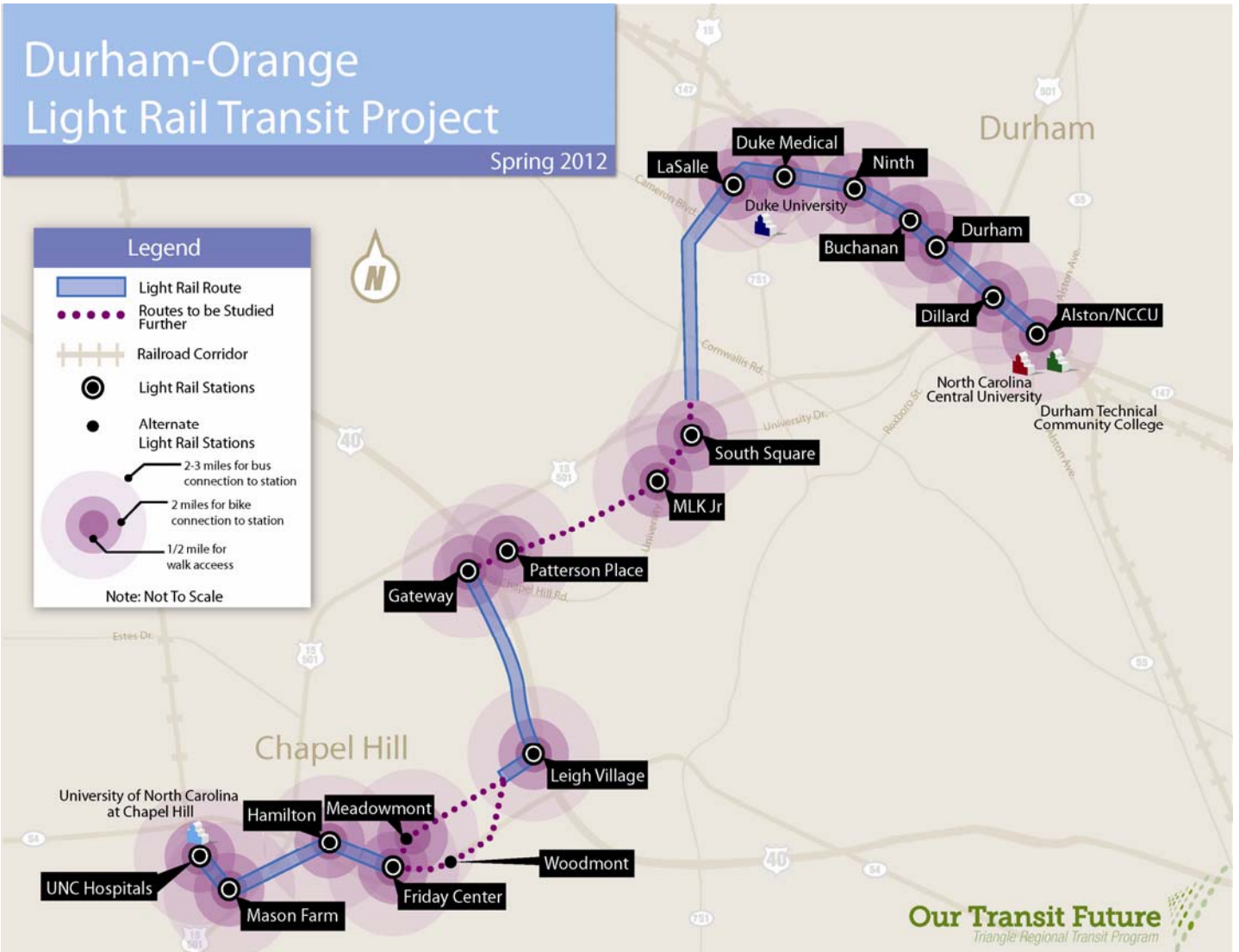
# Durham-Orange Light Rail Transit Project

Spring 2012

**Legend**

- Light Rail Route
- Routes to be Studied Further
- Railroad Corridor
- Light Rail Stations
- Alternate Light Rail Stations
- 2-3 miles for bus connection to station
- 2 miles for bike connection to station
- 1/2 mile for walk access

Note: Not To Scale



**Our Transit Future**  
Triangle Regional Transit Program

## Improved Bus Service on Martin Luther King Jr. Boulevard

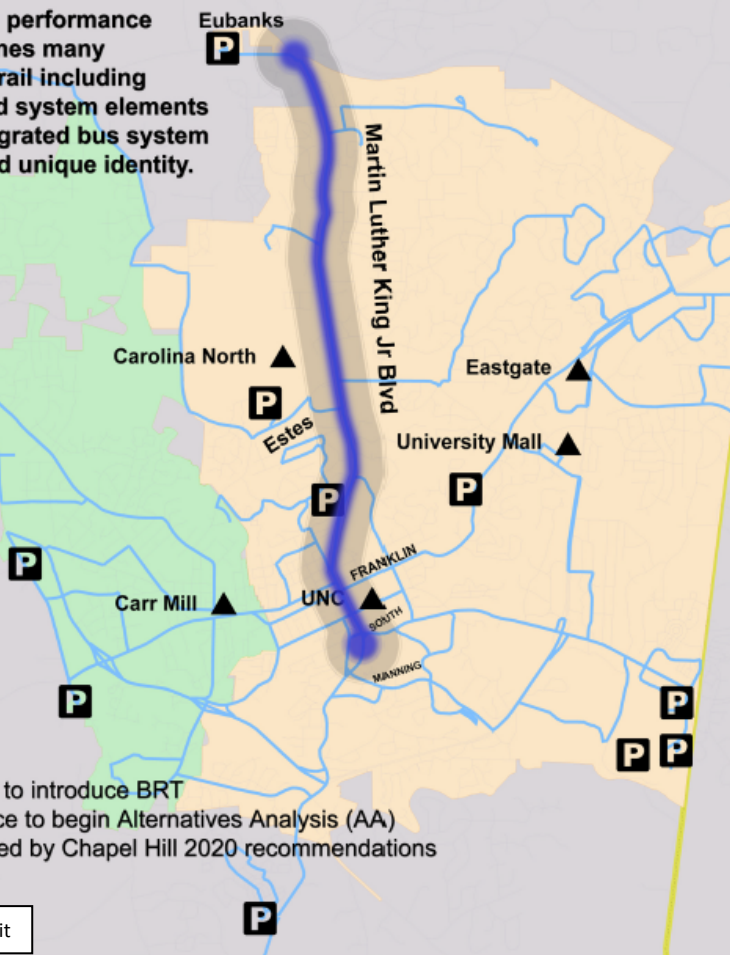
**BRT** is a flexible, high performance bus service that combines many characteristics of light rail including physical, operating, and system elements into a permanently integrated bus system with a quality image and unique identity.

**Characteristics:**

- High capacity buses
- High frequency service
- Dedicated lanes
- Upgraded shelters
- Technology
- Easy fare payment
- Unique identity

- MLK is a prime corridor to introduce BRT
- CHT has funding in place to begin Alternatives Analysis (AA)
- AA process will be guided by Chapel Hill 2020 recommendations

Created by Chapel Hill Transit



**BRT on MLK**

- Triangle Counties
- Chapel Hill
- Carrboro
- Streets
- CHT Weekday Service
- Landmarks
- Park and Ride Lots

0 .5 1 1.5  
Miles



## 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
- Federal Government contributions

In addition, local funding of current transit services will remain in place.

The initial proceeds for a FULL YEAR of each local revenue stream for Orange County in 2013 for transit are assumed to be:

- |  |               |
|--|---------------|
| • ½-cent sales tax:                      | \$5.0 million |
| • \$7 vehicle registration fee:          | \$788,000     |
| • \$3 vehicle registration fee increase: | \$338,000     |
| • Rental car tax revenue:                | \$582,000     |

Growth rates assumed for each revenue source:

- |  |      |
|--|------|
| • ½-cent sales tax:                      |      |
| ○ Growth rate from 2011 through 2014:    | 1.0% |
| ○ 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% |

A total of \$25 million would be borrowed over the life of the plan. This borrowing would cover for the large capital expenditures which occur for 3 to 4 years of construction of the light rail component of 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 are excluded from the tax.

A one half-cent sales tax in Orange County is estimated to generate \$5.0 million in 2013 if active for the full year. Discussions with the NC Dept of Revenue indicate that in the first year

of the plan, the revenue streams may not be active until April 1<sup>st</sup> instead of January 1<sup>st</sup>. The figures in Appendix G: Revenue reflect the partial first-year levy of both a ½-cent sales tax and a \$10 vehicle registration fee increase. Over the life of the plan to 2035, the sales tax is expected to generate approximately \$163 million in Year-Of-Expenditure (YOE) dollars. This tax can only be levied subsequent to a referendum by the Orange Board of County Commissioners and approval by the voters.

Revenue from the ½-cent sales tax identified in the Bus and Rail Investment Plan for Orange County can be used for financing, constructing, operating and maintain local public transportation systems. The funds can be used to supplement but not supplant or replace existing funds or resources for public transit systems.

#### 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 \$788,000 in 2013 if implemented for a full year. Discussions with the NC Dept of Revenue indicate that in the first year of the plan, the revenue streams may not be active until April 1<sup>st</sup> instead of January 1<sup>st</sup>. The figures in Appendix G: Revenue reflect the partial first-year levy of both a ½-cent sales tax and a \$10 vehicle registration fee increase. Over the life of the plan to 2035, the seven dollar fee is expected to generate \$22.5 million in Year-Of-Expenditure (YOE) dollars. The implementation agreement will articulate how this revenue can be utilized.

#### C. \$3 Vehicle Registration Fee Increase for Triangle Transit 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 be increased to \$8 when the \$3 increase is implemented.

The three dollar (\$3) fee in Orange County is projected to generate \$338,000 in 2013 if implemented for a full year. Discussions with the NC Dept of Revenue indicate that in the first year of the plan, the revenue streams may not be active until April 1<sup>st</sup> instead of January 1<sup>st</sup>. The figures in Appendix G: Revenue reflect the partial first-year levy of both a ½-cent sales tax and a \$10 vehicle registration fee increase. Over the life of the plan to 2035, the three dollar (\$3) fee is expected to generate \$9.7 million in Year-of-Expenditure (YOE) dollars. The implementation agreement will articulate how this revenue can be utilized.

#### 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 the 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 project development in Orange County are estimated to be \$582,000 in 2013. Over the life of the plan to 2035, the rental car tax is expected to generate \$21.3 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 Charlotte's Lynx 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. Over the life of the plan to 2035, the contributions of NCDOT are expected to total \$130.6 million in Year-of-Expenditure (YOE) dollars in Orange County.

#### F. Federal Government Funding

The plan assumes that the Federal Government contributes 50% of the capital cost for the light rail project in Orange County. This was the federal level of participation in the Charlotte Lynx 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. Over the life of the plan to 2035, the contributions of the Federal Government are expected to total \$248 million in Year-of-Expenditure (YOE) dollars in Orange County.

#### G. Transit Fares

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

- Light Rail farebox recovery ratio: 20%
- Triangle Transit bus farebox recovery ratio: 15%
- Chapel Hill Transit bus farebox recovery ratio: 0%
- Orange Public Transportation bus farebox recovery ratio: 3.5%

#### H. FTA Formula Funds

The plan assumes that new bus services will receive partial operating and capital cost contributions through existing formula programs established by the Federal Transit Administration (FTA), and that transit agencies in Orange County will receive those contributions in accordance with historical patterns of funding that existing transit services have received. Over the life of the plan to 2035, FTA Formula funds are expected to total \$70.9 million in Year-Of-Expenditure (YOE) dollars in Orange County.

#### I. Additional Revenue Sources

This draft Bus and Rail Investment Plan does not rely on additional municipal contributions, public or private third party contributions or value capture 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 to 2035. All figures are in Year of Expenditure dollars (YOE) unless otherwise noted.

- Light Rail Capital: \$418.3 million (\$316.2 million in 2011 dollars)
- Light Rail Operations: \$59.1 million
- Bus Capital:
  - MLK Bus Lanes - \$24.5 million
  - Miscellaneous Bus Capital Projects - \$6.7 million
  - Buses purchased - \$17.6 million
- Bus Operations: \$106.8 million
- Hillsborough Intercity Rail Station: \$8.9 million
- Amount of debt service payments made by Triangle Transit through 2035: \$19.2 million
- Amount borrowed by Triangle Transit to execute the plan: \$25 million (this number is larger than the line above because debt payments are over 30-year terms and continue past 2035)

Additional specific financial information on each of these plan elements can be found in the Appendices.

### VII. AGREEMENTS

#### IMPLEMENTATION AGREEMENT: ANNUAL REVIEW AND CHANGES TO THE PLAN

The Bus and Rail Investment Plan in Orange County details the specific elements of local and regional bus service, and Light Rail service to be added in Orange County over a 23-year period. Because of the long time frame for implementation of the Plan and its major capital projects, over time there will 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, and 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) A recognition and preservation of decision making responsibilities 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.

### **COST SHARING AGREEMENT**

The capital and operating costs for the 17.3-mile LRT line will be shared by Orange and Durham counties. Accordingly, a separate cost sharing agreement between Orange County, Durham County and Triangle Transit has been developed. The cost sharing agreement sets forth the respective shares of the capital and operating costs that will be paid by each county for this project that cross both county and municipal borders.

### **TAX LEVY AGREEMENT**

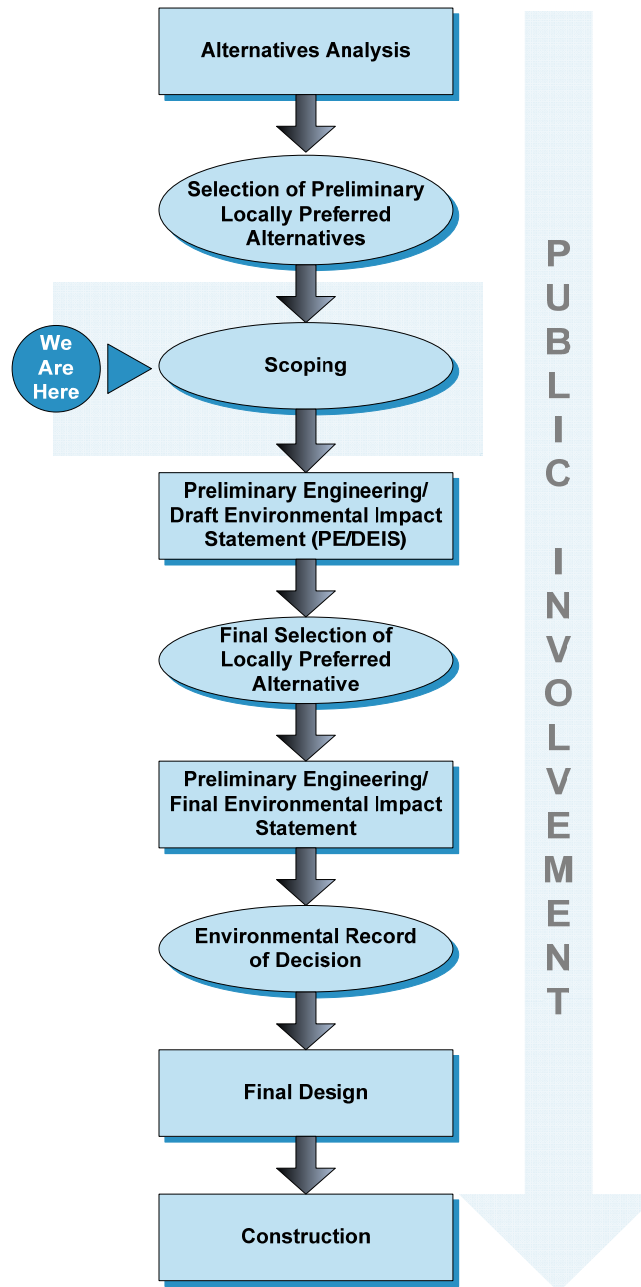
One additional agreement has been developed by Orange County and Triangle Transit relevant to the plan. In this tax levy agreement Triangle Transit agrees not to levy the half-cent transit sales tax for Orange County in the event of a successful referendum vote on the sales tax until after receiving a Resolution from the Orange County Board of County Commissioners requesting that the tax be levied.

## **VIII. NEW STARTS PROCESS**

### **Federal New Starts Funding Process**

It is anticipated that Federal funds assisting in the planning and implementation of the Durham-Orange Light Rail Transit Project would be secured through the Federal Transit Administration's (FTA) discretionary New Starts program.

New Starts is the federal government's primary financial resource for funding transit "guideway" capital investments. Projects seeking New Starts funding – like all federally-funded transportation investments in metropolitan areas – must emerge from a locally-driven, *multimodal* corridor planning process, as depicted graphically in this chart:



Through the jointly adopted 2035 Long Range Transportation plan by the Durham-Chapel Hill-Carrboro MPO (DCHC MPO) and the Capital Area MPO (CAMPO), transportation corridors in greatest need of more detailed planning and analysis were identified. The Alternatives Analysis (AA), completed in 2011, focused on a set of needs and alternative actions to address these needs, and generated information needed to select an option for further engineering and implementation. In February 2012, the DCHC MPO selected a 17.3-mile light rail corridor from East Durham to UNC Hospitals as the locally preferred alternative (LPA). Triangle Transit, as the local project sponsor, will submit to FTA the New Starts project justification

and local financial commitment and request FTA's approval to enter into the preliminary engineering (PE) phase of project development.

During the preliminary engineering phase of project development, local project sponsors refine the design of the proposal, taking into consideration all reasonable design alternatives. Preliminary engineering results in estimates of project costs, benefits, and impacts at a level of detail necessary to complete the federal environmental process.

Preliminary engineering for a New Starts project is considered complete when the FTA has issued a *Record of Decision* (ROD) as required by the National Environmental Policy Act (NEPA). Projects which complete preliminary engineering and whose sponsors are determined by the FTA to have the technical capability to advance further in the project development process must request FTA approval to enter final design and submit updated New Starts information for evaluation.

Final design is the last phase of project development, and includes right-of-way acquisition, utility relocation, and the preparation of final construction plans, detailed specifications, construction cost estimates, and bid documents.

The FTA typically considers a Full Funding Grant Agreement (FFGA) for a New Starts project during the final design phase of the New Starts project development process. A State FFGA will also be requested by the local project sponsor to supplement federal and local funding sources.

With all funding secured, construction on the project will begin.

## **IX. ALTERNATIVE PLAN**

If it is determined that Federal or State funding for the proposed projects are not available, an alternative plan must be developed. Upon this determination, Triangle Transit will work in collaboration with the citizens, elected officials, and stakeholders from Orange County, Chapel Hill Transit, DCHC MPO and Durham County to identify next steps toward the development of a revised plan.

## **X. CLOSING SUMMARY**

The Bus and Rail Investment Plan in Orange County is the result of years of collaborative work among Orange County elected officials and civic 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 population and employment growth that the region is expected to experience in the next 25 years.

The proposed plan addresses the ongoing need to provide more 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 UNC 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 evidenced 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, while allowing more open space to be preserved.

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

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

- ❖ *As directed by NCGS 105-510.6, Triangle Transit drafted and developed this Plan, working in collaboration with the citizens, elected officials, and stakeholders from Orange County, the DCHC MPO, and Chapel Hill Transit.*

# DRAFT Bus and Rail Plan In Orange County

## Appendix A: Master Assumption List

## Assumptions in Orange County and Durham County Financial Plans for Bus and Rail Transit

May 21, 2012

### ASSUMPTIONS

	ORANGE	DURHAM
Sales Tax Growth Rate to 2015	1.00%	2.00%
Sales Tax Growth Rate 2016 and Beyond	3.60%	3.50%
Light Rail Capital Cost Responsibility (Percentage)	22.95%	77.05%
Light Rail Operating Cost Responsibility (Percentage)	23.95%	76.05%
Light Rail Capital Cost Share Based on Current Cost Estimates (\$2011 millions)	\$ 316.2	\$ 1,061.8
Light Rail Operating Cost Share Based on Current Cost Estimates(\$2011 millions)	\$ 3.46	\$ 10.98
MLK Bus Lanes Capital Cost (\$2011 millions)	\$ 22.1	NA
MLK Bus Lanes Operating Cost* (\$2011 millions)	\$ -	NA
Hillsborough Intercity Train Station Capital Cost (\$2011 <u>millions</u> )	\$4.0 - \$8.0	NA
Hillsborough Intercity Train Station Operations Cost **	Not part of plan	
Amount borrowed by Triangle Transit to execute the plan (\$2011 millions)	\$25	\$165
Plan Minimum Cash Balance (\$2011 millions)	\$4.1	\$12.9

### OUTCOMES

New Bus Hours in First Five Years of Plan	34,650	45,000
Total Cumulative New Bus Hours by End of Plan (Year 2035)	40,950	87,500
Opening Year for Hillsborough Intercity Train Station	2015	NA
Opening Year for MLK Bus Lanes	2019	NA
Opening Year for Light Rail	2026	2026
"Rail Dividend" Bus Hours that can be re-directed when Light Rail Opens	30,000-45,000	12,000-35,000
Plan Cash Balance in 2035 (\$2035 millions)	\$45	\$89
Plan Cash Balance in 2035 (\$2011 millions)	\$23	\$46

\*MLK Bus Lanes have no operating costs because existing, already-paid-for bus services will be-re-organized to use the bus lanes

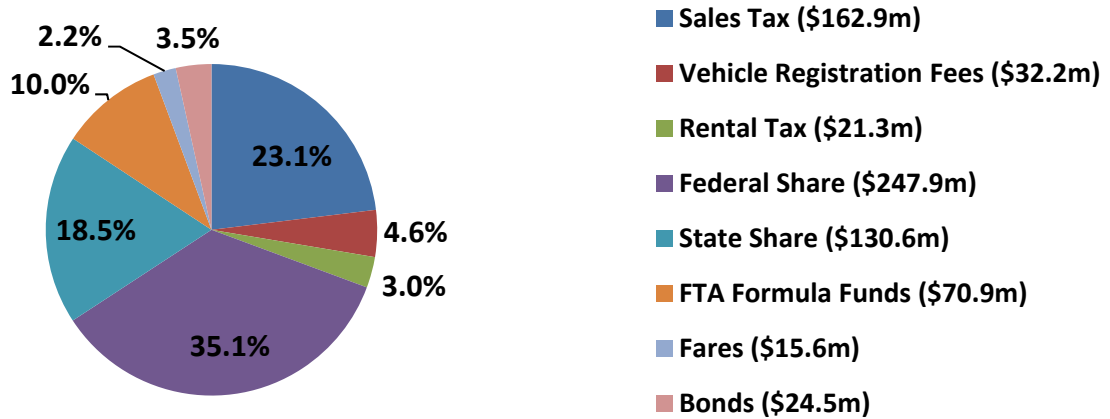
\*\*Operations cost of Intercity Rail Station assumed to be covered in existing station plans by NCDOT Rail Division and Town of Hillsborough. Capital Cost contribution of the Orange County plan is 10% of total capital cost for Hillsborough train station.

Light green indicates updated cell or figure since previous draft

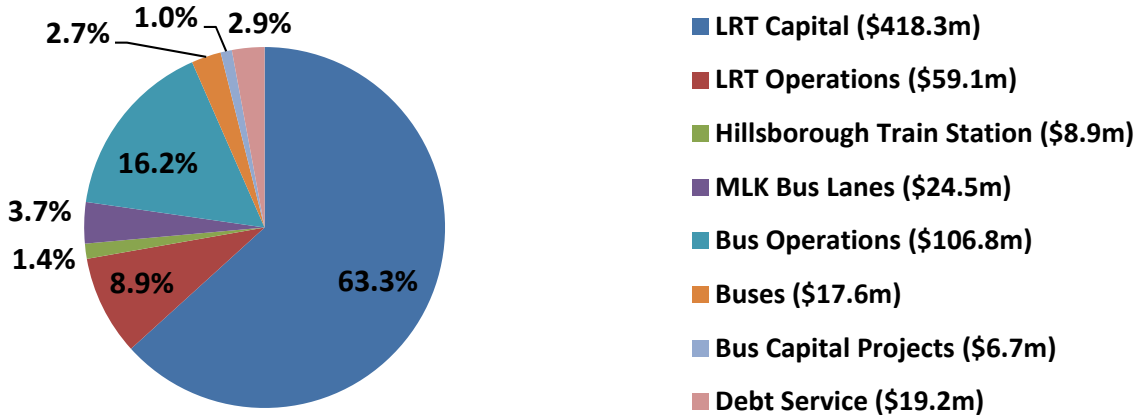
# TOTAL Plan Revenues and Costs to 2035, and LOCAL Costs to 2035:

All Numbers Are in Year-Of-Expenditure (YOE) Dollars

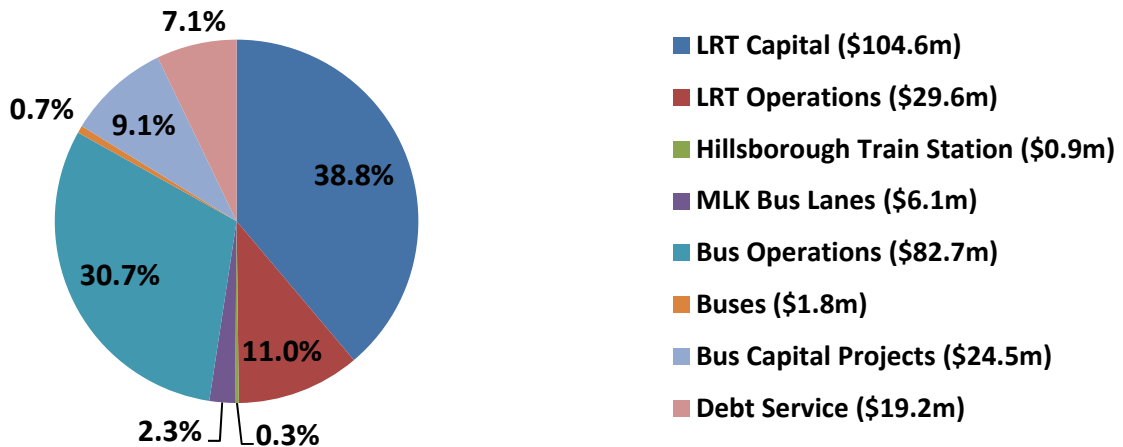
**Orange County Plan Revenue, All Sources to 2035: Total Revenue \$706.0m**



**How ALL Dollars Are Spent to 2035: Total Cost \$661.1m**



**How LOCAL Orange County Dollars Are Spent to 2035: \$268.7m**



Note: small differences and percentages not adding exactly to 100.0% may be due to rounding

# DRAFT Bus and Rail Plan In Orange County

## Appendix B: Proposed Bus Service Enhancements

## ORANGE COUNTY DRAFT BUS PLAN - FUNDED AND FUTURE COMPONENTS

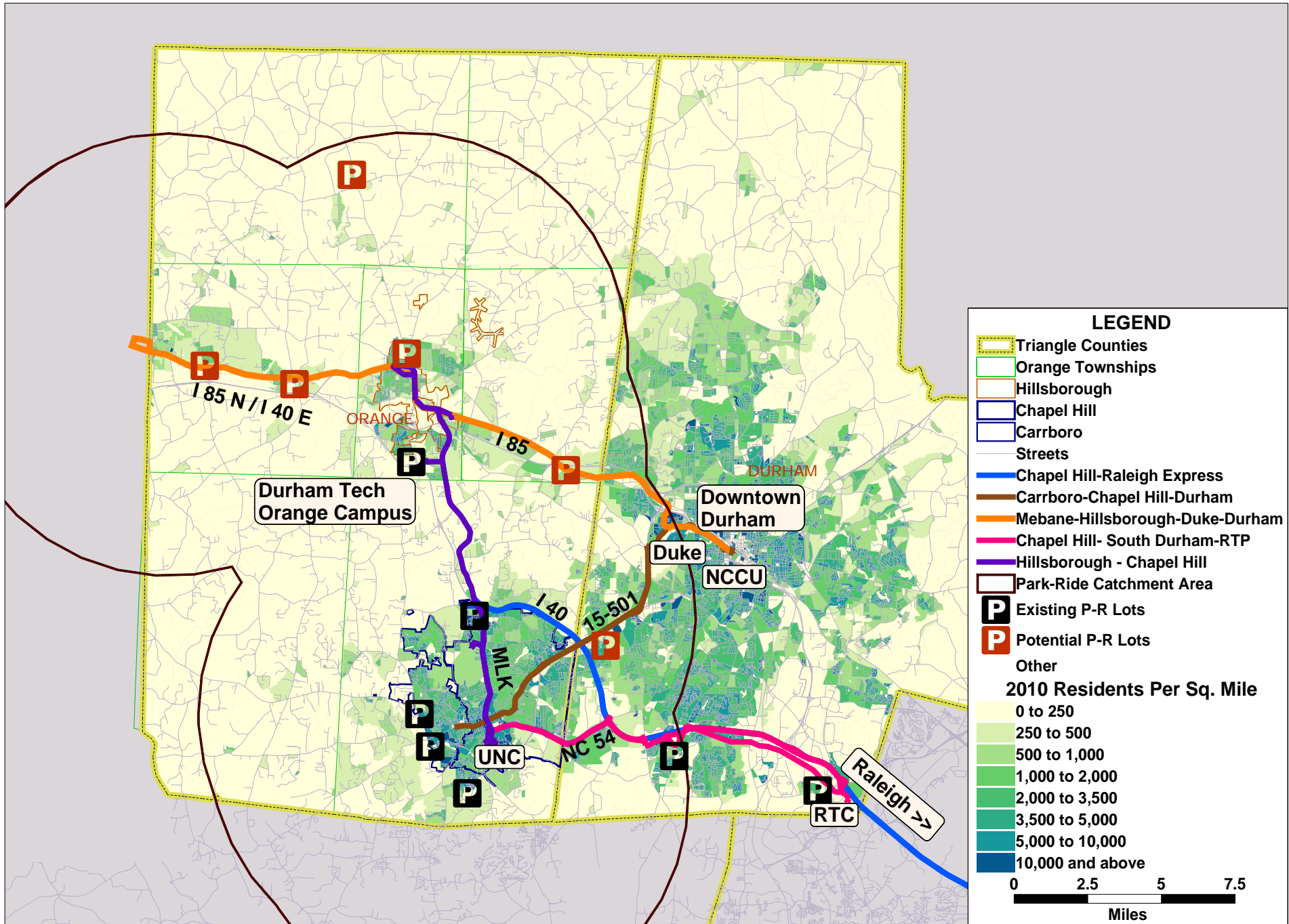
### REGIONAL SERVICES - FUNDED FIRST FIVE YEARS

Service Type	PROJECTS	Enhanced or New	Cumulative New Service Hours	Service Description
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405)	Enhanced	1,506	Increase peak-hour frequency of the express route between Durham and Chapel Hill to 15 minutes during the peak commute, directly serve Downtown Carrboro with rush hour service to Durham.
Regional Exp	Mebane-Hillsborough-Durham Express Introduce Service	New	2,510	Introduce a new express route serving Mebane, Hillsborough, and Durham.
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - mid-day	Enhanced	4,016	Increase frequency of the express route between Durham and Chapel Hill or Carrboro to 30 minutes during the mid-day.
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - Sundays	New	4,640	Introduce Sunday service on route between Durham and Chapel Hill or Carrboro.
Regional	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Sundays	New	5,264	Introduce new Sunday service to the existing TTA route 800.
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - Saturday	Enhanced	5,484	Extend service between Durham and Chapel Hill or Carrboro to 11pm on Saturdays.
Regional	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Saturdays	Enhanced	5,704	Extend service between RTP and Chapel Hill (via Southpoint) to 11pm on Saturdays.
Regional	Route 800-SW Durham (Southpoint)-Chapel Hill peak	Enhanced	7,210	Phase 1 service improvement - increase peak hour frequency on the existing TTA Route 800. Currently the route operates at 30-minute frequency.
Regional Exp	Chapel Hill-Raleigh Express (Route CRX) - peak	Enhanced	7,963	Introduce mid-day service on the express route between Chapel Hill and Raleigh.
Regional	Hillsborough-Chapel Hill (Route 420) - peak: <b>IMPLEMENTED in 2012</b>	Enhanced	7,963	Increase frequency of the regional route between Hillsborough and Chapel Hill to 30 minutes during the peak commute.
Regional	Additional service Hours TBD	Enhanced	8,200	237 additional hours that may augment any of the services above

### REGIONAL SERVICES - UNFUNDED, FUTURE PRIORITIES AFTER YEAR 2020

Service Type	PROJECTS	Enhanced or New	Cumulative New Service Hours	Service Description
Regional Exp	Mebane-Hillsborough-Durham Express Expansion	New	9,204	Increase the frequency on an express route serving Mebane, Hillsborough, and Durham to 30 minutes at peak.
Regional	Hillsborough-Chapel Hill (Route 420) - mid-day	Enhanced	13,722	Increase frequency of the regional route between Hillsborough and Chapel Hill to 30 minutes during the mid-day.
Regional Exp	White Cross to Carrboro to Chapel Hill Express	New	15,228	Phase I - Introduce a new express route serving Alamance County and Chapel Hill (via NC-54) at an hourly frequency.
Regional Exp	White Cross to Carrboro to Chapel Hill Express	New	16,734	Phase II - Introduce a new express route serving Alamance County and Chapel Hill (via NC-54) at a 30-minute frequency .
Regional Exp	Chapel Hill-Raleigh Express (Route CRX) - mid-day	Enhanced	18,366	Introduce mid-day service on the express route between Chapel Hill and Raleigh.
Regional	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - mid-day	Enhanced	19,997	Increase frequency of the regional route between RTP and Chapel Hill (via Southpoint) to 30 minutes during the mid-day.
Regional	Route 800- RTC via SW Durham (Southpoint)-Chapel Hill peak	Enhanced	20,813	Phase 2 service improvement - increase frequency of the existing Route 800 between RTP and Chapel Hill (via Southpoint) to 15 minutes during the peak commute.
Regional	Chapel Hill-Regional Transit Center via Woodcroft (Route 805) - mid-day	Enhanced	21,691	Introduce added mid-day trips to regional route between Woodcroft and Chapel Hill.

# Orange County Transit Plan: Proposed Regional Bus Service Improvements



**LEGEND**

- Triangle Counties
- Orange Townships
- Hillsborough
- Chapel Hill
- Carrboro
- Streets
- Chapel Hill-Raleigh Express
- Carrboro-Chapel Hill-Durham
- Mebane-Hillsborough-Duke-Durham
- Chapel Hill- South Durham-RTP
- Hillsborough - Chapel Hill
- Park-Ride Catchment Area
- P Existing P-R Lots
- P Potential P-R Lots

Other

**2010 Residents Per Sq. Mile**

- 0 to 250
- 250 to 500
- 500 to 1,000
- 1,000 to 2,000
- 2,000 to 3,500
- 3,500 to 5,000
- 5,000 to 10,000
- 10,000 and above

0      2.5      5      7.5  
Miles

# ORANGE COUNTY DRAFT BUS PLAN - FUNDED AND FUTURE COMPONENTS

## HILLSBOROUGH LOCAL AND RURAL ORANGE COUNTY SERVICES - FUNDED FIRST FIVE YEARS

Service Type	PROJECTS	Enhanced or New	Cumulative New Service Hours	Service Description
Local	Hillsborough Circulator	Enhanced	2,008	Operate Hillsborough Circulator Mon-Fri, 8 hours per day
Local	Improve Service in Unincorporated Orange County	Enhanced	4,200	Improve capacity of demand response service to rural areas
Local	Hillsborough Circulator Phase 2	Enhanced	4,702	Add Saturday Service to Hillsborough Circulator
Local	Improve Service in Unincorporated Orange County	Enhanced	6,887	Further improve capacity of demand response service to rural areas

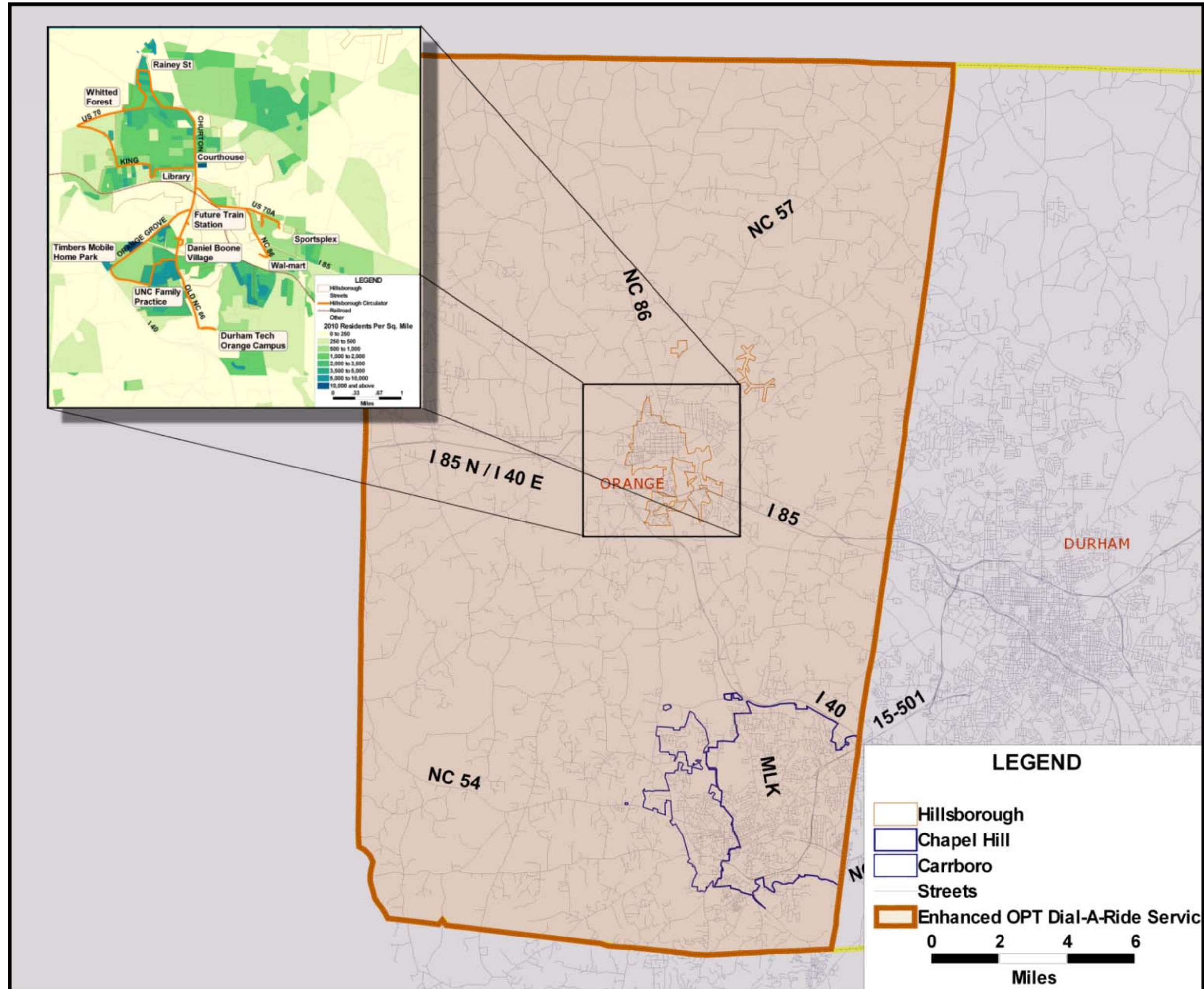
## HILLSBOROUGH LOCAL AND RURAL ORANGE COUNTY SERVICES - UNFUNDED, FUTURE PRIORITIES AFTER YEAR 2020

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NA - All identified needs funded in first five years.

Prepared by Triangle Transit  
 April 23, 2012

# Orange County Transit Plan: Proposed Hillsborough and Rural Bus Service Improvements



## ORANGE COUNTY DRAFT PLAN - FUNDED AND FUTURE COMPONENTS

### CHAPEL HILL TRANSIT BUS SERVICE OPTIONS

Service Type	Project	Enhanced or New	Cumulative New Service Hours
Local	Service Improvements Chapel Hill, Carrboro, UNC in the 15/501 corridor	Enhanced	7,279
Local	54 Corridor Improvements (Orange and Durham Counties)	Enhanced	4,016
Local	Support existing services	Enhanced	6,000
Local	Chapel Hill - Carrboro -UNC Saturday Service	New	5,096
<b>Sub-Total</b>			<b>22,391</b>
Local	Chapel Hill - Carrboro -UNC Sunday Service	New	3,640
Local	Extend evening service in Chapel Hill Carrboro UNC	Enhanced	4,080
Regional	Pittsboro- Chapel Hill Express	Enhanced	816
Local	Improve peak hour frequency Chapel Hill Carrboro UNC	Enhanced	2,209
<b>Total</b>			<b>33,136</b>

This list of service priorities supplied by Chapel Hill Transit exceeds the 22,332 bus hour budget currently expected to be available in the plan for Chapel Hill Transit. Roughly a third of the proposed service hours will not be funded in the plan. Chapel Hill Transit and its partners will make a final determination of service priorities based on extensive public involvement and analysis in order to fit within the approximately 22,000 hour limit called for in the financially constrained plan.

## Bus Operations

### Total Bus Operations and Maintenance Costs by Year

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bus Hours	9,000	15,750	24,750	34,650	34,650	34,650	34,650	34,650	34,650	34,650	34,650	34,650
Cost (\$YOE thousands)	\$ 905	\$ 1,608	\$ 2,565	\$ 3,702	\$ 3,817	\$ 3,935	\$ 4,057	\$ 4,183	\$ 4,313	\$ 4,447	\$ 4,584	\$ 4,727

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Bus Hours	34,650	34,650	34,650	34,650	34,650	34,650	34,650	34,650	34,650	34,650	40,950
Cost (\$YOE thousands)	\$ 4,873	\$ 5,024	\$ 5,180	\$ 5,341	\$ 5,506	\$ 5,677	\$ 5,853	\$ 6,034	\$ 6,221	\$ 6,414	\$ 7,815

### Total Bus Operations \$YOE Cost to Year 2035

\$ 106,782,735

Bus Operations Costs assumed to be split according to following percentages:

Federal	8.9%
State	10.0%
Local	77.6%
Fares	3.5%

# DRAFT Bus and Rail Plan In Orange County

## Appendix C: Bus Capital Enhancements

## Bus Capital and Vehicle (Bus) Purchases/Replacements

### Total Bus Purchases (New and Replacement Buses)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
New Buses Purchased	4	3	4	4	-	-	-	-	-	-	-	-
Replacement Buses Purchased												
Cost (\$YOE thousands)	1,606	1,222	1,654	1,876	-	-	-	-	-	-	-	-

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
New Buses Purchased	-	-	-	-	-	-	-	-	-	-	3
Replacement Buses Purchased	4	3	4	4	-	-	-	-	-	-	-
Cost (\$YOE thousands)	2,245	1,736	2,386	2,706	-	-	-	-	-	-	2,132

### Total Bus Purchases \$YOE Cost to Year 2035

\$ 17,564,162

### Total Bus Capital Project Spending (Amenities, Transit Centers, Park/Ride Lots, Sidewalks, etc)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cost (\$YOE thousands)	656	2,664	3,379	-	-	-	-	-	-	-	-	-

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost (\$YOE thousands)	-	-	-	-	-	-	-	-	-	-	-

### Total Bus Capital Projects \$YOE Cost to Year 2035

\$ 6,699,000

Bus Purchases and Bus Capital projects assumed to be split according to current trend:

Federal	80%
State	10%
Local	10%

# DRAFT Bus and Rail Plan In Orange County

## Appendix D: Hillsborough Train Station Expenditures

## Hillsborough Intercity Rail Station

### Total Rail Station Construction Costs by Year

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cost (\$YOE thousands)	\$ 875	\$ 3,552	\$ 4,506	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost (\$YOE thousands)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Total Hillsborough Intercity Rail Station \$YOE Cost to Year 2035

\$ 8,932,229

Hillsborough Rail Station assumed to be split according to pattern for other NCDOT Rail Division-approved stations

Federal	80%
State	10%
Local	10%

NCDOT Rail Division has studied two possible station designs. The option in the plan includes a permanent station. A modular, temporary station can be built for less money, approximately \$4 million in \$2011 dollars. Examples of the type of station the \$8.9 million YOE dollar investment projected above would build can be found in Cary and Kannapolis.

# DRAFT Bus and Rail Plan In Orange County

## Appendix E: MLK Bus Lanes Expenditures

## MLK Bus Lane Project

### Total MLK Bus Lane Project Costs by Year

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cost (\$YOE thousands)	\$ 694	\$ 704	\$ 4,007	\$ 7,456	\$ 7,892	\$ 3,703	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost (\$YOE thousands)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Total MLK Bus Lane \$YOE Cost to Year 2035

\$ 24,456,259

Project Costs are anticipated to follow the percentages below within the FTA Small Starts program

Federal	50%
State	25%
Local	25%

# DRAFT Bus and Rail Plan In Orange County

## Appendix F: Light Rail Expenditures

## Durham-Orange Light Rail Expenditures: Capital & Operating to 2035

### Total Light Rail Capital Spending

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cost (\$YOE thousands)	\$ 3,258	\$ 3,306	\$ 5,034	\$ 3,460	\$ 3,567	\$ 5,517	\$ 16,757	\$ 28,530	\$ 31,211	\$ 68,984	\$ 120,898	\$ 96,797

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost (\$YOE thousands)	\$ 31,009	-	-	-	-	-	-	-	-	-	-

### Total Bus Purchases \$YOE Cost to Year 2035

\$ 418,327,293

### Total Light Rail Operations Spending

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cost (\$YOE thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost (\$YOE thousands)	-	\$ 5,135	\$ 5,294	\$ 5,458	\$ 5,627	\$ 5,802	\$ 5,982	\$ 6,167	\$ 6,358	\$ 6,555	\$ 6,759

### Total Light Rail Operations \$YOE Cost to Year 2035

\$ 59,136,705

The capital cost of the Durham-Orange Light Rail project is anticipated to be split as follows:

Federal	50%
State	25%
Local	25%

The operating cost of the Durham-Orange Light Rail project is anticipated to be split as follows:

Federal	20%
State	10%
Local	50%
Fares	20%

# DRAFT Bus and Rail Plan In Orange County

## Appendix G: Revenues by Year

## Orange County Plan Revenues

### Total Orange County Revenues by Year (\$YOE millions)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1/2-Cent Sales Tax*	\$ 3.9	\$ 5.0	\$ 5.0	\$ 5.2	\$ 5.4	\$ 5.6	\$ 5.8	\$ 6.0	\$ 6.2	\$ 6.5	\$ 6.7	\$ 6.9
\$7 Vehicle Registration Fee*	\$ 0.6	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 0.9	\$ 1.0	\$ 1.0
\$3 Vehicle Registration Fee*	\$ 0.3	\$ 0.3	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4
Car Rental Tax (existing)	\$ 0.6	\$ 0.6	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.9	\$ 0.9
FTA Formula Funds	\$ 2.3	\$ 2.4	\$ 2.4	\$ 2.5	\$ 2.6	\$ 2.6	\$ 2.7	\$ 2.8	\$ 2.8	\$ 2.9	\$ 3.0	\$ 3.0
Federal Projects Share	\$ 4.5	\$ 8.0	\$ 12.2	\$ 7.0	\$ 5.7	\$ 4.6	\$ 8.4	\$ 14.3	\$ 15.6	\$ 34.5	\$ 60.4	\$ 48.4
State Projects Share	\$ 1.4	\$ 1.9	\$ 3.5	\$ 3.3	\$ 3.2	\$ 2.7	\$ 4.6	\$ 7.6	\$ 8.2	\$ 17.7	\$ 30.7	\$ 24.7
Fares	\$ 0.0	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.2	\$ 0.2	\$ 0.2	\$ 0.2
Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.8	\$ 17.6
<b>Total Revenue By Year</b>	<b>\$ 14.4</b>	<b>\$ 20.2</b>	<b>\$ 26.2</b>	<b>\$ 21.1</b>	<b>\$ 20.2</b>	<b>\$ 18.9</b>	<b>\$ 24.9</b>	<b>\$ 34.1</b>	<b>\$ 36.5</b>	<b>\$ 65.2</b>	<b>\$ 110.4</b>	<b>\$ 104.5</b>

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	TOTAL
1/2-Cent Sales Tax	\$ 7.2	\$ 7.4	\$ 7.7	\$ 8.0	\$ 8.3	\$ 8.6	\$ 8.9	\$ 9.2	\$ 9.5	\$ 9.9	\$ 10.2	\$ 162.9
\$7 Vehicle Registration Fee	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.2	\$ 1.2	\$ 1.2	\$ 22.5
\$3 Vehicle Registration Fee	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 9.7
Car Rental Tax (existing)	\$ 0.9	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.1	\$ 1.1	\$ 1.2	\$ 1.2	\$ 1.3	\$ 1.3	\$ 1.4	\$ 21.3
FTA Formula Funds	\$ 3.1	\$ 3.2	\$ 3.3	\$ 3.4	\$ 3.4	\$ 3.5	\$ 3.6	\$ 3.7	\$ 3.8	\$ 3.9	\$ 4.0	\$ 70.9
Federal Projects Share	\$ 17.3	\$ 1.4	\$ 1.9	\$ 2.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1.7	\$ 247.9
State Projects Share	\$ 8.5	\$ 1.2	\$ 1.3	\$ 1.4	\$ 1.1	\$ 1.1	\$ 1.2	\$ 1.2	\$ 1.3	\$ 1.3	\$ 1.7	\$ 130.6
Fares	\$ 0.2	\$ 1.2	\$ 1.2	\$ 1.3	\$ 1.3	\$ 1.4	\$ 1.4	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.6	\$ 15.6
Bond Proceeds	\$ 1.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24.5
<b>Total Revenue By Year</b>	<b>\$ 41.2</b>	<b>\$ 18.3</b>	<b>\$ 19.4</b>	<b>\$ 20.2</b>	<b>\$ 18.3</b>	<b>\$ 18.9</b>	<b>\$ 19.5</b>	<b>\$ 20.1</b>	<b>\$ 20.7</b>	<b>\$ 21.3</b>	<b>\$ 24.1</b>	<b>\$ 706.0</b>

### Total Orange County Transit Plan \$YOE Revenue to Year 2035

\$ 706,000,000

\*Revenue in first year is 75% of full value because revenue source is anticipated to be active on 4/1/2013, not 1/1/2013

## DURHAM-ORANGE REGIONAL SERVICES - Comparison of Plans

The following comparison was made by MPO staff based on the adopted Durham County plan and a draft of the Orange County plan. Overall, the plans are mostly in agreement on the provision of regional services. The differences are minor and can be explained by changes that have occurred subsequent to the adoption of the Durham plan.

### Triangle Transit Regional Bus Projects - funded first five years

Service Type	PROJECTS	Enhanced or New	Orange Plan Description	Orange Plan Hours	Durham Plan Description	Durham Plan Hours
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405)	Enhanced	Increase peak-hour frequency of the express route between Durham and Chapel Hill to 15 minutes during the peak commute, directly serve Downtown Carrboro with rush hour service to Durham.	1,506	Carrboro-Chapel Hill-Durham Express (Route 405) - 15 minute service during peak hours	1,500
Regional Exp	Mebane-Hillsborough-Durham Express Introduce Service	New	Introduce a new express route serving Mebane, Hillsborough, and Durham.	1,004	Mebane-Hillsborough-Duke/VA Medical Centers E	1,600
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - mid-day	Enhanced	Increase frequency of the express route between Durham and Chapel Hill or Carrboro to 30 minutes during the mid-day.	1,506	Not included.	-
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - Sundays	New	Introduce Sunday service on route between Durham and Chapel Hill or Carrboro.	624	Carrboro-Chapel Hill-Durham Express (Route 405) - Sundays	600
Regional	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Sundays	New	Introduce new Sunday service to the existing TTA route 800.	624	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Sundays	600
Regional Exp	Carrboro-Chapel Hill-Durham Express (Route 405) - Saturday	Enhanced	Extend service between Durham and Chapel Hill or Carrboro to 11pm on Saturdays.	220	Chapel Hill-Durham Express (Route 405) - extend Saturday hours to 11pm	200
Regional	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - Saturdays	Enhanced	Extend service between RTP and Chapel Hill (via Southpoint) to 11pm on Saturdays.	220	Chapel Hill-Regional Transit Center via Southpoint (Route 800) - extend Saturday hours to 11pm	200
Regional	Route 800-SW Durham (Southpoint)-Chapel Hill peak	Enhanced	Phase 1 service improvement - increase peak hour frequency on the existing TTA Route 800. Currently the route operates at 30-minute frequency.	1,506	Chapel Hill-Regional Transit Center via Southpoint (Route 800) 15 minute service during peak hours	1,500
Regional	Additional Service Hours TBD	Enhanced	237 additional hours that may augment any of the services above in the first five years	237	No additional hours for regional services in the first five years	0
Regional or Local	Additional Service Hours TBD	TBD	By 2035 (both regional and local)	6,300	By 2035 (both regional and local)	27,000

### Durham-Orange Corridor Rail Project

The table of Assumptions in Appendix A of the Orange Plan includes some figures that are different from the adopted Durham plan. Since the Durham plan's adoption, cost estimates have changed, the cost sharing agreement has changed, and the opening year for rail had to be pushed back. These are all relatively minor changes. Durham County officials have been informed of the changes and, in the case of the cost sharing agreement, have approved the changes.

#### Opening Date

Durham Plan - opens 2025 (this date is not actually noted anywhere in the text of the plan, but was assumed in the financial analysis)

Orange Plan - opens 2026

#### Capital Cost

Durham Plan - \$1.4 billion total, \$1.05 billion Durham County (2011 \$)

Orange Plan - \$1.378 billion total, \$316.2 million Orange County, \$1,061.8 million Durham County (2011 \$)

#### Operations and Maintenance Cost

Durham Plan - \$15 million/year, \$11.3 million/year Durham County (2011 \$)

Orange Plan - \$14.44 million/year, \$3.46 million Orange County, \$10.98 million Durham County (2011 \$)

#### Local Revenue Share

Durham Plan - "Durham County to fund all rail investment (capital, operations, and maintenance costs) within Durham County with the exception of the light rail investment found within those portions of the Chapel Hill town limit which are inside Durham County"

The percentages are not noted in the text of the plan, but these would be 23.9% Orange County, 76.1% Durham County for both capital and operating costs

Orange Plan - "The capital and operating costs for the 17.3-mile LRT line will be shared by Orange and Durham counties. Accordingly, a separate cost sharing agreement between Orange County, Durham County and Triangle Transit has been developed. The cost sharing agreement sets forth the respective shares of the capital and operating costs that will be paid by each county for this project that cross both county and municipal borders."

22.95% Orange County, 77.05% Durham County for capital costs

23.95% Orange County, 76.05% Durham County for operating costs

Orange County Board of Commissioners Motion at June 5, 2012 Meeting

Move that the Board of County Commissioners (BOCC) approve the Draft Bus and Rail Investment Plan (BRI Plan) in Orange County, contingent on the approval of an Implementation Agreement between Triangle Transit and Orange County, and subject to the following conditions:

A. That the following inconsistent sections in the BRI Plan be addressed, as shown below:

1. The difference in the cost of the Hillsborough rail station on page 25 (Orange Financial Plan Data) and page 31 (Appendix A, Assumptions).

**REVISION:** On page 25, add a Note, referencing the Hillsborough rail station, which states that Orange County will only be responsible for a 10% match.

2. The difference in the number of expenditure categories on page 25 (Orange Financial Plan Data - 9 categories), and page 32 (Appendix A, How All Dollars Are Spent - middle pie chart - 8 categories)

**REVISION:** Change the last bullet, which references the borrowing of \$25 million, into a Note

B. That the language concerning the Implementation Agreement on pages 25 and 26 of the BRI Plan be changed to reflect the actual contents of the agreement, once that agreement is revised.

C. That the Rail Investment Cost Sharing Agreement **with the charts and map be included** as an Appendix to the BRI Plan, in substantially the same form as presented on June 5, and with the dollar amounts verified and corrected, as needed.

*ATTACHMENTS (to be included with the cost sharing agreement):*

*LRT Reference Map (Cost Sharing)*

*Rail Investment Cost Sharing Agreement Charts*

D. That Orange County and Triangle Transit will work together to identify any other inconsistencies, misstatements, or omissions, and to provide the changes to the BOCC before the Implementation Agreement is scheduled for approval by the BOCC.

E. On page 7, under "Maintain existing services," change the first bullet to "Support existing services consistent with State law – Chapter 105, Article 43 of the NC General Statutes."

The BOCC wishes to note that, even though not all of the stipulations in the BOCC transit plan motion of May 15 were addressed, the BOCC wishes to move the BRI Plan forward at this time, in the manner stated above.

LPA Recommendation for TAC Action on the Orange County Bus and Rail Investment Plan

The following motion is suggested by LPA Staff for the TAC. This motion incorporates the changes approved by the Orange County Commission into the TCC's recommendation for approval of the plan. Differences between the Orange County Commission's action and the recommended TAC action are underlined.

**TAC Action:**

Move that the Transportation Advisory Committee (TAC) approve the Draft Bus and Rail Investment Plan (BRI Plan) in Orange County, contingent on the approval of an Implementation Agreement between Triangle Transit, Orange County, and the DCHC MPO and subject to the following conditions:

A. That the following inconsistent sections in the BRI Plan be addressed, as shown below:

1. The difference in the cost of the Hillsborough rail station on page 25 (Orange Financial Plan Data) and page 31 (Appendix A, Assumptions).

**REVISION:** On page 25, add a Note, referencing the Hillsborough rail station, which states that Orange County will only be responsible for a 10% match.

2. The difference in the number of expenditure categories on page 25 (Orange Financial Plan Data - 9 categories), and page 32 (Appendix A, How All Dollars Are Spent - middle pie chart - 8 categories)

**REVISION:** Change the last bullet, which references the borrowing of \$25 million, into a Note

B. That the language concerning the Implementation Agreement on pages 25 and 26 of the BRI Plan be changed to reflect the actual contents of the agreement, once that agreement is revised.

C. That the Rail Investment Cost Sharing Agreement **with the charts and map be included** as an Appendix to the BRI Plan, in substantially the same form as presented on June 5, and with the dollar amounts verified and corrected, as needed.

*ATTACHMENTS (to be included with the cost sharing agreement):*

*LRT Reference Map (Cost Sharing)*

*Rail Investment Cost Sharing Agreement Charts*

D. That Orange County and Triangle Transit will work together to identify any other inconsistencies, misstatements, or omissions, and to provide the changes to the BOCC and the DCHC MPO TAC before the Implementation Agreement is scheduled for approval by the BOCC and the DCHC MPO TAC.

E. On page 7, under "Maintain existing services," change the first bullet to "Support existing services consistent with State law – Chapter 105, Article 43 of the NC General Statutes."

**RESOLUTION TO APPROVE  
THE LOCALLY-PREFERRED ALTERNATIVE (LPA) FOR  
THE DURHAM-ORANGE COUNTY TRANSIT CORRIDOR**

**February 8, 2012**

A motion was made by TAC Member ALICE GORDON and seconded by TAC Member ELEN BECKHOW for the adoption of the following resolution, and upon being put to a vote, was duly adopted.

**WHEREAS**, the Special Transit Advisory Commission (STAC) recommendations in May 2008 included rail transit extending from Raleigh to Durham to Chapel Hill; and

**WHEREAS**, the Durham-Chapel-Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) incorporated the STAC rail transit into the adopted 2035 Long Range Transportation Plan in April 2009; and

**WHEREAS**, the North Carolina General Assembly approved the Congestion Relief/Intermodal Transport bill in August 2009 that enables local areas to fund public transportation through an increase in sales tax, car registration fees and special district property taxes; and

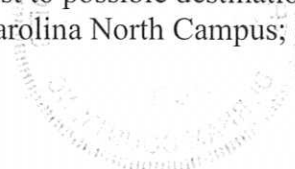
**WHEREAS**, the Triangle Transit Authority (TTA) implemented the Triangle Regional Transit Program in 2010 to study the financial, ridership, environmental and public input aspects of regional bus and rail transit, and subsequently conducted a visioning process and Transitional Analysis to study rail corridors in Durham, Orange, and Wake counties, and

**WHEREAS**, the TTA completed an Alternatives Analysis on the three highest-performing corridors that included the Durham-Orange corridor in July 2011 and issued an Addendum to the "Detailed Definition of Alternatives Technical Report" in August 2011 which clarified that reasonable alternatives to the proposed alignments crossing the Little Creek and New Hope Creek areas will be studied; and

**WHEREAS**, the TTA and the DCHC MPO have both conducted comprehensive public involvement activities, which included public workshops, public hearings and presentations to local elected boards, for the visioning process, Transitional Analysis and Alternatives Analysis; and

**WHEREAS**, light rail transit technology has a greater potential to promote economic growth and focus transit-supportive development around station areas as compared to bus rapid transit technology; and

**WHEREAS**, alignment option A3 in the UNC station area is supported by the Town of Chapel Hill, UNC at Chapel Hill, and UNC Hospitals and would allow for future extension of the alignment to the west to possible destinations such as downtown Chapel Hill, downtown Carrboro and the Carolina North Campus; and



**WHEREAS**, both alignment options C1 and C2 are potentially compatible with the overall vision for the transit corridor; and

**WHEREAS**, the ridership, costs, environmental impacts, community impacts, and impacts on nearby roadway traffic of alignment options C1 and C2 need to be further studied in the Scoping and Preliminary Engineering/Draft Environmental Impact Statement (PE/DEIS) phases before a final decision is made on which alignment should be advanced; and

**WHEREAS**, alignment option D3 in the South Square station area would best promote transit-supportive economic development; and

**WHEREAS**, the adoption of the Locally Preferred Alternative does not include a recommendation for the location of a Rail Operations and Maintenance Facility and the location of this facility will be further studied in the Scoping and PE/DEIS phases; and

**WHEREAS**, the adoption of the Locally Preferred Alternative will be followed by further study of the alignment and station locations in the Scoping and PE/DEIS phases when a final decision is made on the remaining active options; and

**WHEREAS**, the substantive issues identified in public comments on the Alternatives Analysis will be addressed in subsequent development steps such as Scoping and PE/DEIS.

**BE IT THEREFORE RESOLVED** that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee adopts light rail transit technology on the alignment recommended in the “Detailed Definition of Alternatives Technical Report” dated July 2011 with the modification that both the C1 and C2 options be carried forward for further study in the Meadowmont and Hillmont station areas, with a preference for C2, as the Locally Preferred Alternative for the Durham-Orange County Corridor (as illustrated on the attached map), and that the DCHC MPO intends to incorporate this LPA into the forthcoming 2040 Long Range Transportation Plan, provided here on this, the 8<sup>th</sup> day of February, 2012.

*Lydia E. Lavelle*

Lydia E. Lavelle, TAC Chair

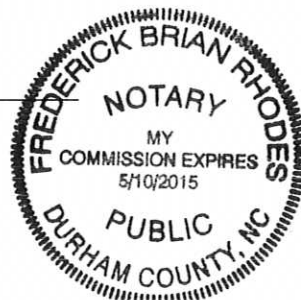
Durham County, North Carolina

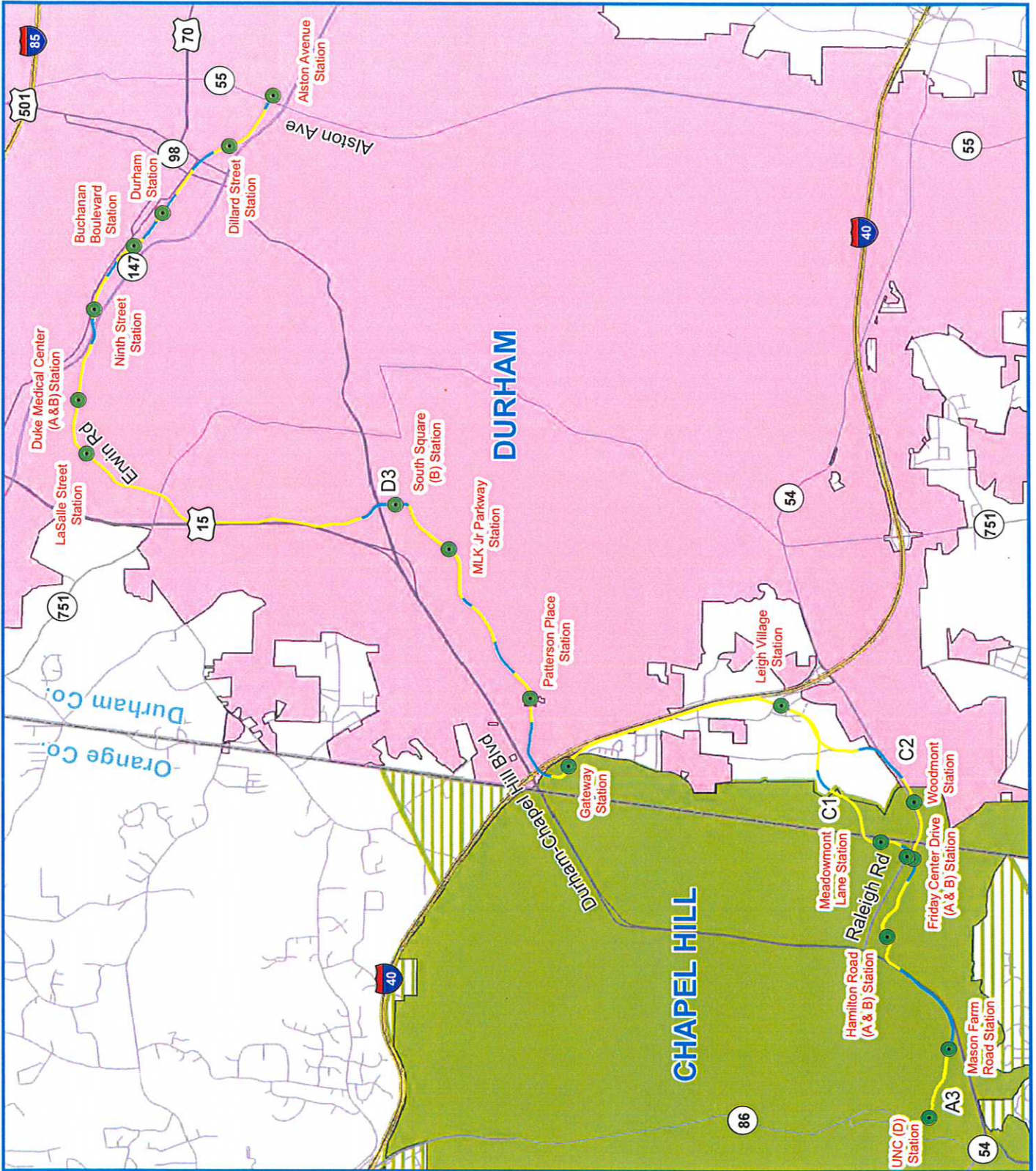
I certify that Lydia E. Lavelle personally appeared before me this day acknowledging to me that she signed the forgoing document.

Date: February 8, 2012

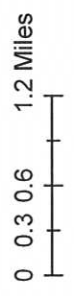
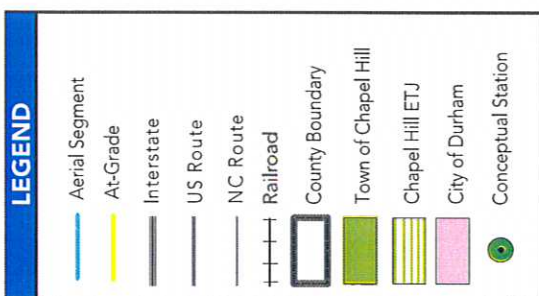
*Frederick Brian Rhodes*

Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2015



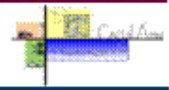


**FIGURE ES-1**  
**DURHAM-ORANGE**  
**LOCALLY PREFERRED**  
**ALTERNATIVE (LRT)**



JUNE 2011





- **CIRCULATORS:** High-frequency (every 10 minutes) short-distance services linking major activity centers to regional and intercity rail services

The STAC emphasized a rapidly expanded bus network in the first years of any transit plan in order to demonstrate quick results to citizens and to link all the municipalities in the Triangle with transit within the first years of expansion.

STAC members also noted that rail service will provide the opportunity to shape the growth that the Triangle will receive in the future. Charlotte has experienced over \$1.9 billion in private sector development along the South Light Rail corridor while carrying several thousand riders more than projected, providing significant mobility benefits in one of the region's most congested corridors. Light rail can provide the similar opportunities in the Triangle.

The STAC developed the circulator concept to form the vital links binding together local and regional transit, major activity centers such as universities, downtowns, hospitals, and the Research Triangle Park and RDU airport. Circulator services will arrive so frequently that schedules will not be needed.

This section and the following section describe the bus and rail components of the LRTPs. There are many similarities to the STAC recommendations, and some differences based on recent information. Additional information on the STAC process and the final report and recommendations are available at the following Web site -- [www.transitblueprint.org](http://www.transitblueprint.org).

The major components of the fixed-guideway investment are presented in Figure 7.3.1, and Figure 7.3.2 is a map of all the fixed-guideway and bus transit services.

### Fixed-Guideway and Premium Transit Services

New light rail transit and commuter rail transit investments are included in the 2035 Capital Area MPO and Durham-Chapel Hill-Carrboro MPO Long Range Transportation Plans. Details on rail technology and services are contained in Appendix 2.

Light rail transit is a departure from past long range plans that focused on passenger rail that had service using Diesel Mobile Units (DMU) technology, which could not be operated outside existing rail corridors because of safety issues.

Light rail transit provides the opportunity for the passenger rail service to depart from rail corridors and operate closer to transit oriented development along roadways. With electric propulsion, light rail can save energy costs and operate without dependence on foreign oil.

Commuter rail service tends to operate at relatively higher speeds in mainline rail corridors, serves stations that are further apart than light rail transit, and only provides service during the peak and noon hours. Thus, commuter rail service allows service to be targeted to transit markets that don't warrant service during the off-peak hours.

The major components of the fixed-guideway investment are presented in Figure 7.3.1. The exact alignment (route) and timing of fixed guideway investments will be decided with more detailed studies. But for transportation modeling and financial planning purposes, the 2035 LRTP assumes light rail service and commuter rail service will be implemented in the phases summarized in Figure 7.3.1, and that the light rail service between Durham, Raleigh and North Raleigh will operate within the existing railroad rights-of-way. Actual implementation phasing and routing might be modified based on the more detailed studies that will be required to secure financing and design the system. Routing light rail transit service outside of the railroad rights-of-way that have been studied previously could result in a longer time needed to design and build the system.

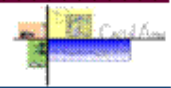


Figure 7.3.1 – Fixed-Guideway Projects by LRTP Period (technical information in Appendix 2)

Rail Segment	Type of Service	LRTP Period
Northwest Cary Station to Spring Forest	Light Rail	by 2025
UNC Hospital to Durham Multimodal Center	Light Rail	by 2025
Triangle Metro Center to Northwest Cary	Light Rail	by 2025
Spring Forest to Triangle Town Center	Light Rail	by 2025
Durham Multimodal Center to Triangle Metro Center	Light Rail	by 2025
Apex to Cary	Light Rail	by 2035
Wake Forest to Downtown Raleigh	Commuter Rail	by 2035
Clayton to Raleigh	Commuter Rail	by 2035

### Rail Corridor Protection and Support

There are additional passenger rail services and assets in the Triangle Region. Currently, Amtrak operates rail service in the Triangle Region to destinations such as Raleigh, Cary, Durham and Hillsborough, and a high speed rail corridor (from Atlanta to Washington, D.C.) is being developed in part of the Triangle Region. The 2035 LRTP assumes support for any passenger rail initiatives that the MPO might designate in the future. As an example, the Town of Hillsborough will likely propose that a train station (platform and station building) be constructed on the current Amtrak line in that Town. In addition, there are several dormant rail corridors that the MPOs have designated for preservation and purchase, should the opportunity present itself. The rail corridors, which represent an invaluable assemblage of right-of-way, can be used for future bicycle paths, commuter rail service, or other transportation facilities. These rail corridors include, but are not limited to, the following:

Rail Corridor Protection		
No.	Service Type	Route Name (Description)
1	Rail protection	NC 55/Apex
2	Rail protection	Durham - Treyburn
3	Rail protection	Durham - Hillsborough/Mebane
4	Rail protection	Chapel Hill (Eubanks) - Hillsborough
5	Rail protection	Durham Beltline

## 7.4 Bus Transit Services

This section summarizes investments in bus transit services in the 2035 Capital Area MPO and Durham-Chapel Hill-Carrboro MPO Long Range Transportation Plans. A full listing of all transit projects including the implementation year and type of service is in Appendix 3. The bus transit investment includes extending current service areas but emphasizes service improvements to the current service areas, which are the core transit markets.

**RESOLUTION TO CLARIFY  
THE LOCALLY-PREFERRED ALTERNATIVE (LPA) FOR  
THE DURHAM-ORANGE COUNTY TRANSIT CORRIDOR**

**June 13, 2012**

A motion was made by TAC Member \_\_\_\_\_ and seconded by TAC Member \_\_\_\_\_ for the adoption of the following resolution, and upon being put to a vote, was duly adopted.

**WHEREAS**, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Transportation Advisory Committee (TAC) adopted the 2035 Long Range Transportation Plan (LRTP) on May 13, 2009, and the U.S. Department of Transportation approved the 2035 LRTP and Air Quality Conformity Determination Report on June 15, 2009; and

**WHEREAS**, the 2035 LRTP was a joint document created in coordination with the NC Capital Area MPO and included both light rail transit (LRT) and commuter rail transit (CRT) projects for the entire Triangle region; and

**WHEREAS**, the 2035 LRTP included LRT projects in both the DCHC MPO and the NC Capital Area MPO and CRT projects only in the NC Capital Area MPO; and

**WHEREAS**, the only rail project in the 2035 LRTP within the DCHC MPO was a 24.6 mile LRT project in Durham and Orange counties from UNC Hospital to Triangle Metro Center; and

**WHEREAS**, this project was listed in the 2035 LRTP as two rail segments, UNC Hospital to Durham Multimodal Center and Durham Multimodal Center to Triangle Metro Center, both with light rail service, which together comprise the LRT project, open by 2025, and

**WHEREAS**, the financially constrained 2035 LRTP fully funded the total \$1.9 billion cost of this project; and

**WHEREAS**, the 2035 LRTP included a statement that “actual implementation phasing and routing might be modified based on the more detailed studies that will be required to secure financing;” and

**WHEREAS**, accordingly, the Triangle Transit Authority (TTA) implemented the Triangle Regional Transit Program in 2010 to study the financial, ridership, environmental and public input aspects of regional bus and rail transit, and completed an Alternatives Analysis on the Durham-Orange County Transit Corridor in July 2011; and

**WHEREAS**, as a result of this more detailed study, the DCHC MPO TAC adopted a “Resolution to Approve the Locally-Preferred Alternative (LPA) for the Durham-Orange County Transit Corridor” on February 8, 2012; and

**WHEREAS**, this resolution adopted a 17.1-mile alignment for LRT service between UNC Hospital in Orange County and Alston Avenue in Durham County and stated that the DCHC MPO intends to incorporate the LPA into the forthcoming 2040 LRTP; and

**WHEREAS**, the extent of the project in the LPA is fully encompassed by the extent of the two segments of the project as described in the 2035 LRTP with minor route variations, and

**WHEREAS**, the cost of the adopted LPA is approximately \$1.4 billion which is less than the \$1.9 billion total cost of the LRT project in the financially constrained 2035 LRTP; and

**WHEREAS**, in November 2011 Durham County held a successful referendum for a half-cent sales tax to support transit and Orange County is considering holding a similar referendum in November 2012; and

**WHEREAS**, with progress made towards securing a local funding source for transit in Durham and Orange counties, the DCHC MPO intends to incorporate the adopted LPA for the Durham-Orange County Transit Corridor in the forthcoming financially constrained 2040 LRTP; and

**WHEREAS**, the portion of the light rail project in the 2035 LRTP that is not included in the LPA for the Durham-Orange County Transit Corridor, Alston Avenue to Triangle Metro Center, has been significantly modified as a result of the Alternatives Analysis process with different termini and technology and will also be considered by the DCHC MPO for inclusion in the forthcoming 2040 LRTP; and

**WHEREAS**, work is well underway for completing a draft of the 2040 LRTP by December 2012 in order to meet the June 15, 2013 deadline for federal approval of the 2040 LRTP, including the Air Quality Conformity Determination Report.

**BE IT THEREFORE RESOLVED** that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee clarifies the Locally-Preferred Alternative for the Durham-Orange County Transit Corridor as it has emerged from the Alternatives Analysis process and its relationship to the light rail project included in the adopted 2035 LRTP, provided here on this, the 13<sup>th</sup> day of June, 2012.

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Lydia E. Lavelle, TAC Chair

Durham County, North Carolina

I certify that Lydia E. Lavelle personally appeared before me this day acknowledging to me that she signed the forgoing document.

Date: June 13, 2012

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2015

**To:** Transportation Advisory Committee

June 13, 2012

**From:** Lead Planning Agency (LPA)

**Subject:** Closing of Pickett Road in Orange County for the Hollow Rock Access Area

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## Summary

The Hollow Rock Access Area Master Plan recommends closing Pickett Road through the park to reduce conflicts between park uses and through vehicle traffic. The Orange County Board of County Commissioners will need to initiate the road closing procedure with the North Carolina Department of Transportation (NCDOT). The Durham City/County Planning staff conducted a meeting for residents in the vicinity of Pickett Road given the road closing impacts on Durham citizens. Approximately 55 people attended, and comments regarding the closing of Pickett Road received at the meeting were mixed. The primary concern of the attendees both in favor and opposed was the need for a traffic signal at the intersection of Randolph and Erwin Roads. City of Durham Transportation subsequently performed a traffic analysis in the area which determined that signal warrants were met at the intersections of Randolph Road and Erwin Road, and Kerley Road and Erwin Road.

The Durham City Council and Board of County Commissioners reviewed this issue and adopted a resolution of support for the road closing at their May 2, 2011 and May 16, 2011, respectively. At their March 9, 2011 meeting, TAC members asked that this issue be brought to the TAC for discussion and a vote at their April 13<sup>th</sup> meeting. The TCC reviewed this item and recommended that the TAC adopt a resolution in support of closing Pickett Road in Orange County, subject to several stipulations that included a traffic signal being installed at the intersection of Erwin Road and Randolph Road.

The TAC addressed this item at their August 8, 2011 meeting and asked that staff meet with citizens from the area affected by the road closing because several local residents spoke against the closing at that TAC meeting. On May 1, 2012, MPO staff conducted a drop-in meeting for citizens. Over seventy people attended the meeting and a strong majority of the comments opposed the road closing.

## Recommendation

Earlier in this process, the Durham City Council and Durham Board of County Commissioners supported the closing of Pickett Road, and the TCC recommended that the TAC support that closing, as well. Since that time, the opinion of citizens who have expressed an opinion on the issue has shifted to oppose the road closing. In addition, there is no guarantee that devices can be installed to mitigate the expected shift of traffic from the unpaved portion of Pickett Road to Randolph Road. There is no funding for a traffic signal at the intersection of Erwin Road and Pickett Road, and traffic calming facilities cannot be installed on Randolph Road because it is a state maintained road.

TCC discussion identified benefits on both sides of this issue. Closing Pickett Road would enhance the user experience of the proposed Hollow Rock Preserve and help protect the investment in that park. On the other hand, keeping the road open would avoid diverting vehicle trips onto Randolph Road where citizens are already experiencing traffic delays and safety issues. The TCC chose to limit the evaluation of the proposed road closing to a transportation perspective using the MPO's Goals and Objectives, and not expand that evaluation to a broader policy view that includes park benefits, for example. As a result, the TCC recommends that the TAC oppose the proposed Pickett Road closing because the closing would reduce roadway connectivity and divert traffic into a residential neighborhood.

## Attachments

- 8 – Memorandum
- 8A – Traffic counts and travel time maps, and Hollow Rock map (excerpt from Master Plan)
- 8B – Traffic Analysis Report
- 8C – Durham City Council and Durham BOCC approved resolutions, and MPO proposed resolution (from August 2011 TAC meeting)
- 8D – MPO resolution opposing closing of Pickett Road

## Background

The Master Plan for the Hollow Rock Access Area was developed as a partnership between the City of Durham, Durham County, Orange County and the Town of Chapel Hill. The future parkland is bisected by Pickett Road, which the master plan recommended closing in Phase II of the park development to provide better pedestrian connectivity and allow for parking. It is understood that the road will be closed by placing a gate across the road on the Orange County section. Attachment 8A has a one-page map of the Master plan, and the following link is a copy of the Hollow Rock Park Master Plan Final Report:

<http://www.rtpnet.org/newhope/preserve/Hollow%20Rock%20Park%20Master%20Plan%20report%20%28Final%209-23-09%29-2.pdf>

The section of Pickett Road to be closed is designated as a minor thoroughfare on the Durham-Chapel Hill-Carrboro Urban Area Thoroughfare Plan. The DCHC MPO will complete a Comprehensive Transportation Plan (CTP) within the next year that will supersede the 1991 Thoroughfare Plan. The road is currently unpaved west of the Trinity School and no improvements are proposed or funded.

The unpaved portion of Pickett Road, and Erwin Road and Randolph Road are outside the limits of the City of Durham and therefore are state maintained. The NCDOT policy prohibits the installation of traffic calming facilities such as speed humps. The NCDOT does not own the right-of-way for the unpaved section of Pickett Road, and so apparently maintains the road through an implied easement.

The portion of Pickett Road proposed for closure is entirely within Orange County. In order to close the road, the State Board of Transportation must vote to remove it from the State system, and a street closing petition must be approved by the Orange County Board of Commissioners. While the street closing is not within Durham's jurisdiction, Orange County has requested that the Durham City Council and Durham County Board of Commissioners adopt resolutions of support to be forwarded to Orange County.

In June of 2010, Durham Planning staff organized and conducted a community meeting to receive public input about the potential closure of Pickett Road. Approximately 55 people attended and comments voiced by the attendees at the meeting itself were generally mixed. The most frequent comment from both supporters and opponents was that a traffic light was needed at the intersection of Erwin Road and Randolph Road. The Durham Bicycle and Pedestrian Advisory Commission (BPAC) wrote a letter requesting that the road alignment continue to be open to bicycle and pedestrian access in the event of a closing to vehicle traffic.

In the fall of 2010, the City Transportation Department performed a traffic analysis at three intersections in the vicinity of Pickett Road: Erwin Road at Randolph Road, Erwin Road at Kerley Road, and Pickett Road at Randolph Road. The study concluded that the first two intersections already meet signal warrants based on travel delays, regardless of whether or not Pickett Road is closed. The intersection of Pickett Road and Randolph Road does not meet signal warrants in either case. Due to insufficient space, traffic signals cannot be placed at both the Erwin/Randolph and the Erwin/Kerley intersections. As a result, the

study recommends that a roundabout be placed at the Erwin/Kerley intersection instead. Attachment 8B is a copy of the Traffic Report.

The results of this study and the traffic signal warrant information has been forwarded to the North Carolina Department of Transportation (NCDOT). Installation of a traffic signal or roundabout at these intersections would be at the discretion of the NCDOT.

It should be noted that even if Pickett Road is closed, the former roadway will serve as a driveway for Hollow Rock Access Area. Thus, any safety issues at this intersection would continue, but there would likely be reduced exposure because the driveway would attract fewer trips.

The TCC reviewed the proposed Pickett Road closing at their March 23<sup>rd</sup> meeting and had the following issues:

1. Clarity on who receives ownership of ceded right-of-way, and if it is the adjacent property owners, how will bicycle and pedestrian access be maintained on private property.
2. How will automobiles and maintenance vehicles turn around on the closed end of the Durham side?
3. NCDOT has experienced lots of dumping (refrigerators, trash, etc.) at dead end roads. Who will be responsible for clean up?
4. NCDOT might prefer that part of the Durham County portion be closed and that the gate be located further east in the Durham side to reduce the incidence of dumping, i.e., the closely located houses and school will discourage dumping.
5. The park master plan shows vehicular access to the park from both Erwin and Pickett Road. Will the proposed closing of the road provide / allow for what is shown on the master plan?
6. What portion of the unpaved portion of Pickett is actually being proposed to be closed?
7. There are limited connectivity between Erwin Road and Pickett Road in this area. Can the closing be accomplished in such a way that the unpaved section of Pickett would remain available as an emergency connection (for instance, if a tree fell across Randolph Road in a hurricane)?

The TCC recommended closing Pickett Road subject to several contingencies including the installation of a traffic signal at the Erwin Road and Randolph Road intersection. The TAC addressed this item at their August 8, 2011 meeting and asked that staff meet with citizens from the area affected by the road closing because several local residents spoke against the closing at that TAC meeting. After gathering additional data, the MPO staff conducted a drop-in meeting for citizens on May 1, 2012. Over seventy people attended the meeting and a strong majority of the comments were against the road closing.

In the interim, some additional data has been gathered to inform the discussion, including:

- In January 2012, the traffic counts for the roads in the Pickett Road area were taken again and the results were similar to those counts from October 2009. Attachment 8A includes the new traffic counts.
- A travel time study was conducted showing that the travel time from Chapel Hill to Trinity School would increase 1 ½ minutes if motorists used Randolph Road instead of the unpaved section of Pickett Road. Attachment 8A presents the findings of the travel time study.
- A crash analysis of the Erwin Road and Pickett Road intersection shows only one crash in the last ten years (2/28/2002 through 2/28/2012), and there were no fatalities or injuries in that crash.

- The Durham Fire Department (DFD) does not believe the road closing will affect their response time, but will affect the mutual aid response received from the New Hope Volunteer Fire Department (VFD).
- The New Hope VFD states that the closure will not pose any real problems but a slight delay in response time.
- The Durham County Sheriff's Department did not see any issue with their emergency response time.
- The NCDOT Division 5 office is aware that the Erwin Road and Kerley Road intersection and the Erwin Road and Randolph Road intersection meet signal warrants but does not currently have a funding source for a traffic signal. The DCHC MPO has eligible funding for traffic signals but the project would have to compete against other MPO priorities and needs.
- The NCDOT recently completed landscaping work at the intersection of Erwin Road and Pickett Road that improved the sight distance for Pickett Road motorists. However, it is fair to say that the sight distance conditions at that intersection are still not ideal.
- The NCDOT does not have any precedent or procedure to delay an approved road closing until some other action is completed such as a traffic signal installation.
- There have been delays in getting Phase I funding commitments for the Hollow Rock Access Area. The master plan recommends that Pickett Road be closed for Phase II.

### **Issues and Analysis**

The closing of Pickett Road could have an impact on Durham residents, particularly those who live on Randolph Road. However, leaving the road open could undermine the public and private investment in the Hollow Rock Access Area.

The City of Durham Comprehensive Plan, chapter 8, calls for a "continuous and comprehensible street network" and the unified development ordinance rates new developments on a connectivity ratio. The proposed street closing runs counter to the connectivity objectives of the Plan.

The subject section of Pickett Road had 610 daily trips in 2012, compared to 4,082 on Randolph Road. It is reasonable to assume that many of the Pickett Road trips would be diverted to Randolph Road, as the closest alternative route, and Randolph Road has enough excess capacity to handle these trips. However, many local residents state that the long queues at the Erwin Road and Pickett Road intersections pose a safety hazard and the intersection study shows that the Erwin Road intersection meets warrants for a traffic signal based on traffic delays. The diverted traffic would exacerbate the existing intersection delays.

The provision of a traffic signal at the intersection of Randolph Road and Erwin Road would address present circulation problems at that location and could help alleviate the impacts of the additional traffic. While a roundabout is warranted by current conditions at the intersection of Kerley Road and Erwin Road, that location would be less impacted by the closure of Pickett Road and could be cost prohibitive. The NCDOT does not currently have funding to install the traffic signal and there doesn't appear to be a mechanism to guarantee the installation of a signal if Pickett Road is closed.

In June 2010, the Durham City/County Planning Department conducted a community meeting and opinions were mixed on the proposed road closing. At the MPO community meeting in May 2012, opinion had decidedly shifted and a strong majority of participants opposed the proposed closing.

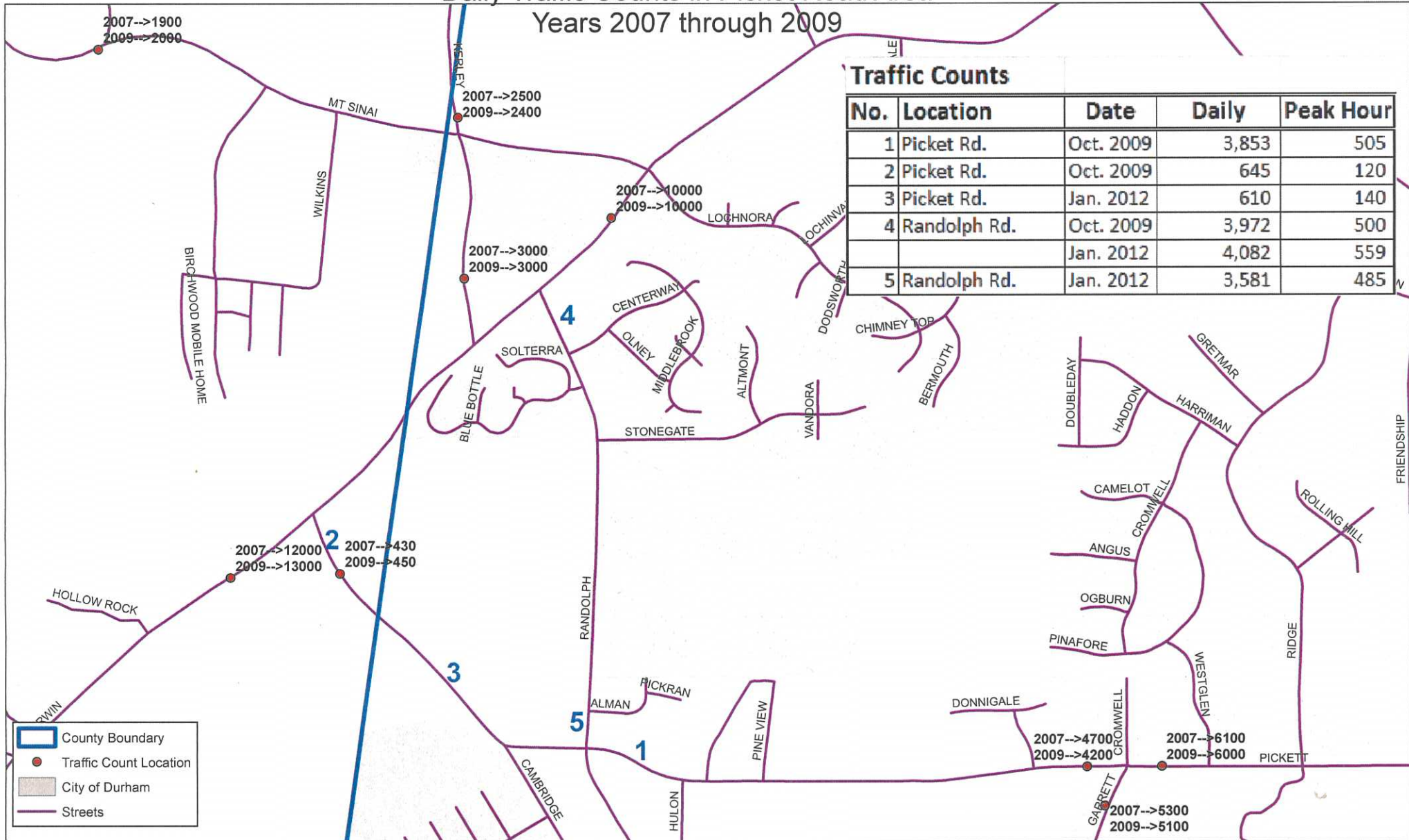
At the May 2012 TCC meeting, some members believed that taking a position on the road closing was not an MPO matter because it involved broad policy issues that were seemingly outside the realm of the

MPO, i.e., weighing the park benefits of eliminating cut through traffic and of creating roadside parking against the costs of diverting traffic to the Randolph Road neighborhood. There was a consensus that if the MPO is to take a position, then consideration should be limited to transportation technical matters.

The TCC also discussed the possibility of not closing Pickett Road and having Orange County, or another entity, take over road maintenance from the NCDOT. This maintenance change would allow traffic calming measures to be installed on the unpaved portion of Pickett Road to support safety for park users.

If Pickett Road is closed, the TCC believes that the MPO should recommend that the Orange Board of County Commissioners not begin the road closing process until a traffic signal is installed at the Erwin Road and Randolph Road intersection. The MPO and NCDOT will want to ensure that private vehicles have an adequate facility for turning around at the end of the state maintained section of the roadway, and that official vehicles can pass through in case of an emergency. In addition, the MPO will want to ensure that bicyclists and pedestrians are able to go around the gate and continue using the road alignment for through access.

## Daily Traffic Counts in Picket Road Area Years 2007 through 2009



**Traffic Counts**

No.	Location	Date	Daily	Peak Hour
1	Picket Rd.	Oct. 2009	3,853	505
2	Picket Rd.	Oct. 2009	645	120
3	Picket Rd.	Jan. 2012	610	140
4	Randolph Rd.	Oct. 2009	3,972	500
		Jan. 2012	4,082	559
5	Randolph Rd.	Jan. 2012	3,581	485

- County Boundary
- Traffic Count Location
- City of Durham
- Streets

# Pickett Road Area

## Current:

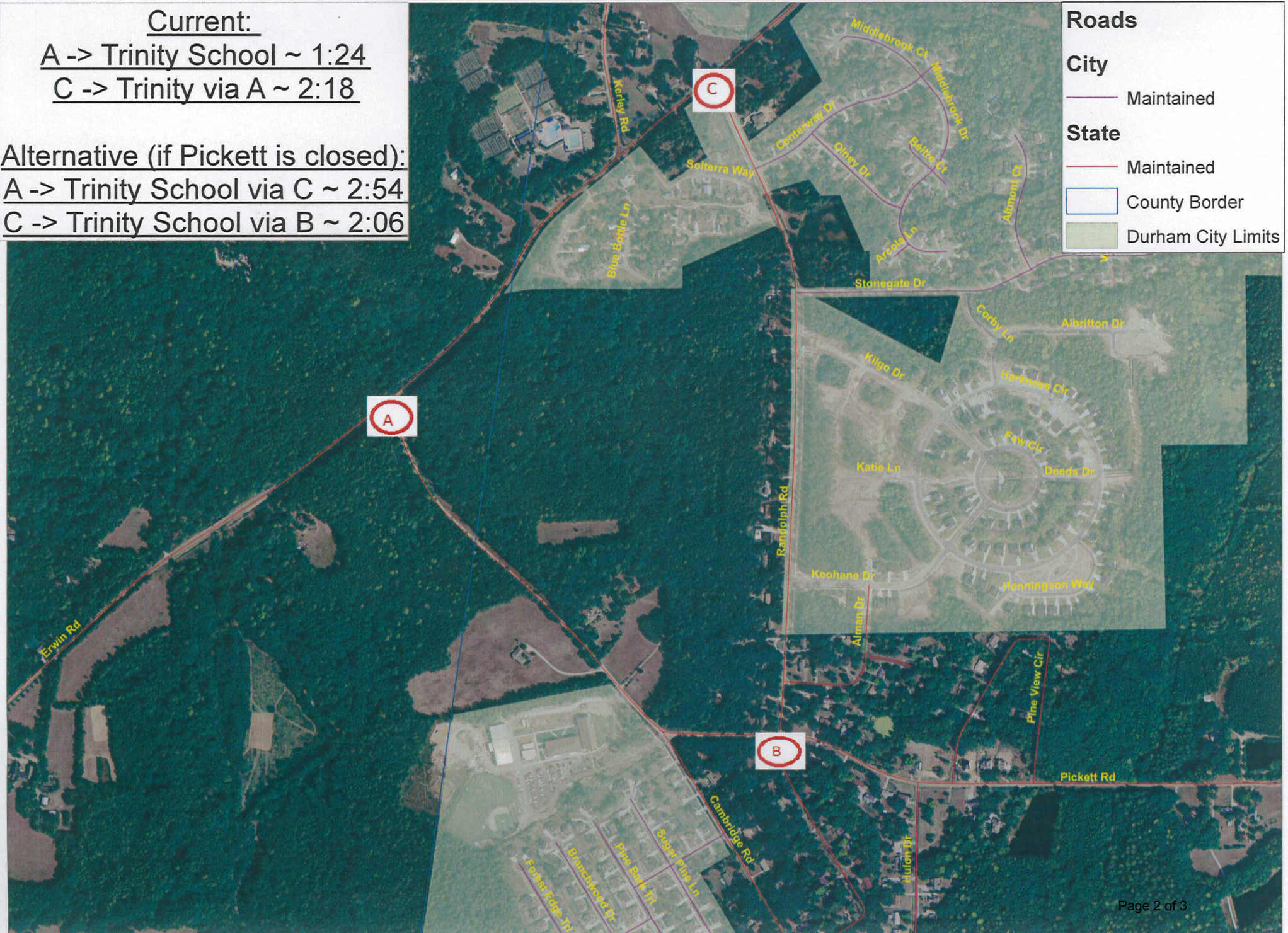
A -> Trinity School ~ 1:24

C -> Trinity via A ~ 2:18

## Alternative (if Pickett is closed):

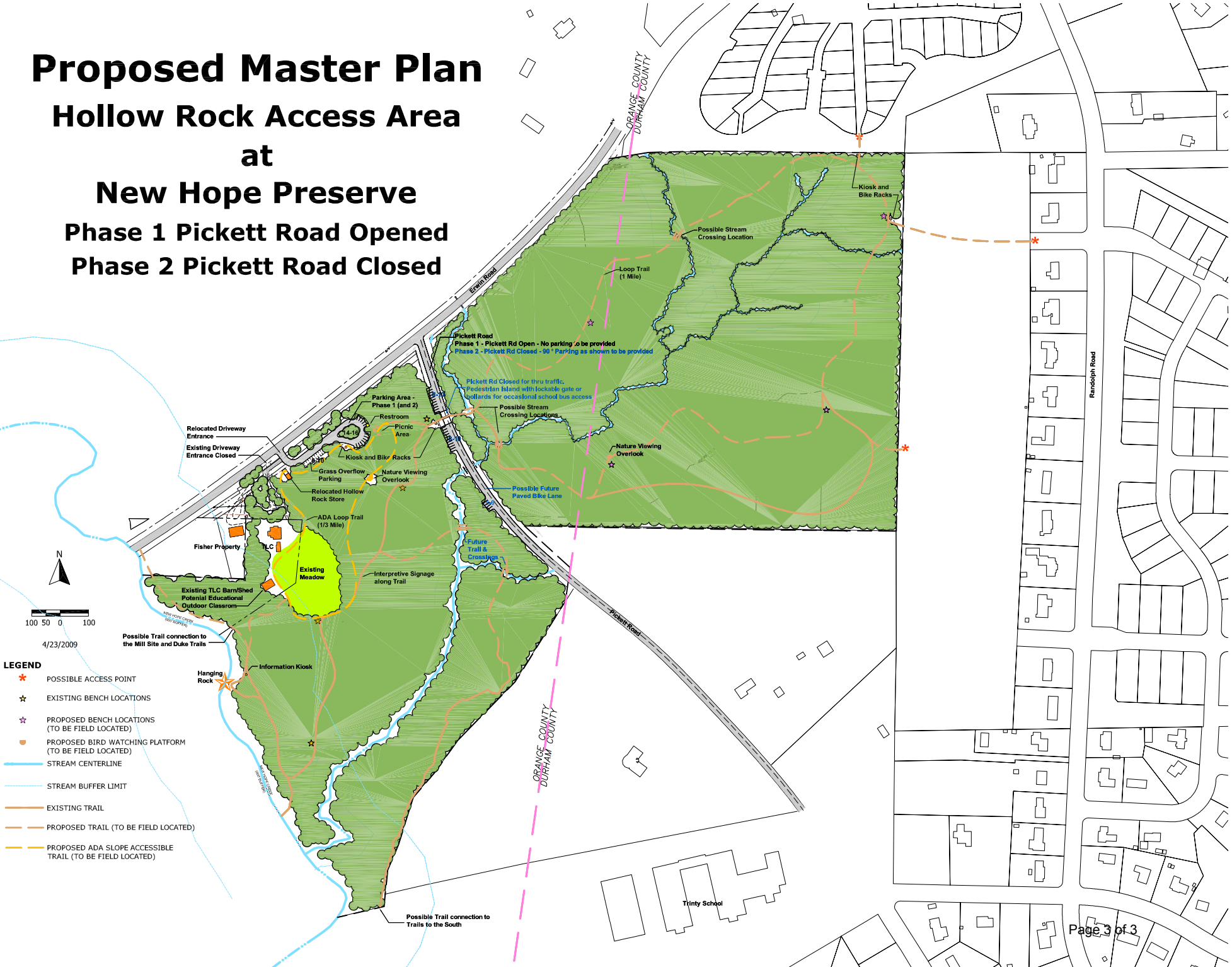
A -> Trinity School via C ~ 2:54

C -> Trinity School via B ~ 2:06



# Proposed Master Plan Hollow Rock Access Area at New Hope Preserve

Phase 1 Pickett Road Opened  
Phase 2 Pickett Road Closed



- LEGEND**
- ★ POSSIBLE ACCESS POINT
  - ☆ EXISTING BENCH LOCATIONS
  - ☆ PROPOSED BENCH LOCATIONS (TO BE FIELD LOCATED)
  - PROPOSED BIRD WATCHING PLATFORM (TO BE FIELD LOCATED)
  - STREAM CENTERLINE
  - STREAM BUFFER LIMIT
  - EXISTING TRAIL
  - PROPOSED TRAIL (TO BE FIELD LOCATED)
  - PROPOSED ADA SLOPE ACCESSIBLE TRAIL (TO BE FIELD LOCATED)



4/23/2009

## Traffic Analysis Report

### INTRODUCTION:

This report summarizes the findings of existing road conditions and the anticipated impact of the proposed closure of Pickett Road associated with the Hollow Rock Access Area Master Plan (<http://www.co.orange.nc.us/ercd/parks/HollowRockAccessArea.asp>).

The scope of this study is to assess if proper traffic control measures are currently in place on the surrounding roadway network and to determine the impact of the traffic redistribution by the proposed closing of Pickett Road at Erwin Road. It was determined that the following traffic conditions would need to be studied in order to accomplish this objective.

- Existing (2010) traffic conditions
- After (with closure of Pickett Road) traffic conditions

### STUDY AREA:

The site (New Hope Preserve) is located on the southeast side of Erwin Road (SR 1306) just south of the intersections of Kerley Road (SR 1304) and Randolph Road (SR 1302). This report focuses on the following intersections:

- 1) Pickett Road (SR 1303) and Randolph Road (SR 1302)
- 2) Erwin Road (SR 1306) and Randolph Road (SR 1302)
- 3) Erwin Road (SR 1306) and Kerley Road (SR 1304)

### ANALYSIS PROCEDURE:

Study intersections were analyzed using the Traffic Control Signal Warrants as outlined in the 2003 Manual on Uniform Traffic Control Devices (MUTCD) published by the U.S. Department of Transportation. As outlined in this manual a comprehensive investigation of the physical characteristics of the above referenced intersections, as well as the surrounding road grid network was completed. In addition, we collected the daily traffic volume for one week, collected speed data, and examined the individual accident history reports for the respective intersections.

For evaluation of existing conditions, the highest daily volume for each approach was selected for analysis purposes. For the proposed closing of Pickett Road, traffic counts that were previously collected (2009) at the proposed closure point were factored into the existing conditions.

Existing and proposed conditions were evaluated utilizing the 2006 PC-Warrants for Windows software, published by JAMAR Technologies, Incorporated.

**ANALYSIS:****Pickett Road and Randolph Road**

The intersection was analyzed for signalization under existing and proposed conditions (closure of Pickett Road) with the following roadway characteristics. Copies of the signal warrant analysis and accident history report are attached.

**Existing Conditions:**

- Four-way intersection with a single lane approach for all directions
- Unsignalized with stop sign control on Randolph Road
- Stop ahead sign approaching intersection on Randolph Road (NB)
- Intersection ahead warning sign on Pickett Road approaching Randolph (WB)
- Adjacent land use is residential
- School Zone west of intersection
- Axle Weight Limit of 6.5 tons east of Randolph Road on Pickett Road
- No overhead lighting at the intersection proper
- No sight distance obstructions observed
- Posted speed limit:
  - South of Pickett Road on Randolph Road 25 mph
  - North of Pickett Road on Randolph Road 35 mph
  - Pickett Road 35 mph east and west of Randolph Road

**Findings: (Existing Conditions)**

No signal warrants were met and no deficiencies were identified from a pavement marking or signing standpoint. The accident history report, for the last five years, revealed three correctable type accidents. There were no correctable accidents reported over the last year. In summary, the intersection does not meet the threshold for crash experience as outlined in the signal warrants.

**Findings: (Proposed Conditions)**

No signal warrants were met with the proposed closure of Pickett Road.

## **Erwin Road and Randolph Road**

The intersection was analyzed for signalization under existing and proposed conditions (closure of Pickett Road) with the following roadway characteristics. Copies of the signal warrant analysis and accident history report are attached.

### **Existing Conditions:**

- Tee intersection with single lane approach eastbound on Erwin Road
- Two lane approach (1 TH, 1 LT) westbound Erwin Road
- Two lane approach (1 LT, 1 RT) northbound Randolph Road
- Unsignalized with stop sign control on Randolph Road
- Stop ahead sign approaching intersection on Randolph Road (NB)
- Intersection ahead warning sign on Erwin Road (EB) & (WB)
- Adjacent land use is primarily vacant with some residential
- School Zone east of intersection
- No overhead lighting at the intersection proper
- No sight distance obstructions observed
- Posted speed limit:
  - Randolph Road 35 mph
  - Erwin Road 45 mph

### **Findings: (Existing Conditions)**

Signal warrants #1, #2, #3, and #8 were met. No deficiencies were identified from a pavement marking or signing standpoint. The accident history reports, for the last five years, revealed one rear-end type accident. No accident patterns or concerns from a safety standpoint were identified.

### **Findings: (Proposed Conditions)**

Signal warrants #1, #2, #3, and #8 were met. No additional warrants were met with the proposed closure of Pickett Road factored in; however, an additional condition was met under warrant #1. In addition, the number of hours exceeding the thresholds increased under multiple conditions within the individual warrant summaries. The proposed closure of Pickett Road further signifies the need for additional traffic control at this intersection.

## **Erwin Road and Kerley Road**

The intersection was analyzed for signalization under existing and proposed conditions (closure of Pickett Road) with the following roadway characteristics. Copies of the signal warrant analysis and accident history report are attached.

### **Existing Conditions:**

- Tee intersection with single lane approach for all directions
- Unsignalized with stop sign control on Kerley Road
- Stop ahead sign approaching intersection on Kerley Road (SB)
- Intersection ahead warning sign on Erwin Road (WB)
- Adjacent land use is residential and commercial
- School Zone north of intersection
- Overhead street lighting on one corner of the intersection
- No sight distance obstructions observed
- Posted speed limit:
  - Kerley Road 45 mph
  - Erwin Road 45 mph

### **Findings: (Existing Conditions)**

Signal warrants #1, #2, #3, and #8 were met. No deficiencies were identified from a pavement marking or signing standpoint. The accident history reports revealed that there were a total of 6 accidents over the last 5-year period resulting in 2 injuries with total property damage of \$37,600. Of the 6 reported accidents, 2 were of the correctable nature. The severity index was 11.83. There were no correctable accidents reported over the last year. In summary, the intersection does not meet the threshold for crash experience as outlined in the signal warrants.

### **Findings: (Proposed Conditions)**

Signal warrants #1, #2, #3, and #8 were met. No additional warrants were met with the proposed closure of Pickett Road factored in; however, an additional condition was met under warrant #1. In addition, the number of hours exceeding the thresholds increased under multiple conditions within the individual warrant summaries. The proposed closure of Pickett Road further signifies the need for additional traffic control at this intersection.

## CONCLUSIONS:

This study revealed the need for additional traffic control at two of the focus intersections. The proposed closure of Pickett Road further solidifies this need.

As noted in this report, currently Warrants #1, #2, #3, and #8 are solidly met at the intersections of Randolph Road/Erwin Road and Kerley Road/Erwin Road. The accident history report did not reveal any existing patterns of concern at either intersection; however, past experience suggests that the crash experience will likely increase when undue delay occurs.

Warrant #3 is the best indicator for undue delay on the minor-street and there are now 5 periods (hours) that are plotting above the minimum threshold for both intersections. This coupled with a posted speed limit of 45 mph on Erwin Road, suggests that there is an increased risk for more severe crashes. We believe appropriate applied traffic control measures can mitigate the potential for such an occurrence. In summary, with 4 significant warrants being met and a potential for severe crashes going forward, we believe there is sufficient justification for immediate action.

The City of Durham recommends signalization at one of the intersections and a roundabout at the other. Signalization is warranted at both intersections, but due to other factors and the unique characteristics of each intersection, signalizing both is not desirable. The main issue, for not signalizing both locations, is the close proximity of the intersections. These two intersections are within 750' of one another. Other determining factors are related to the physical layout of the respective intersections.

The leading factor for selecting Randolph Road and Erwin Road for signalization is for efficiency and operational reasons. Operational reliability will likely translate into a desirable safety performance. Operationally, a signal here will enhance the movement of vehicles due to the spacing with the adjacent existing signal at Lochnora Parkway/Mt. Sinai Road/Erwin Road. The approximate spacing is 1500' and is a desirable distance to maintain vehicular progression for motorists traveling this segment of roadway. Other important factors were carefully evaluated. This intersection is more conducive to adding signalization because of the physical layout. The geometric alignment is advantageous consisting of the classic 90 degree aligned tee intersection with excellent sight lines. Proper channelization, including paved turn lanes are in place and there are no utility conflicts with poles, cabinet, wires, and signal head installations.

The intersection of Kerley Road and Erwin Road is better suited for a roundabout installation. As noted in the MUTCD, signal installation is not the panacea for all traffic problems at intersections. There are other alternatives and in some cases better treatments for addressing the problems associated with signal warrant indicators. One treatment gaining popularity in the United States is the roundabout installation. Unfortunately, the rapid expansion of the use of roundabouts is currently not controlled by any real warrants. However, it has been proven that roundabouts are effective in moving vehicles with decreased delay and greater efficiency than traffic signals in some instances.

Although this intersection does not meet the crash experience warrant for a signal, the severity index is somewhat elevated. Our recommendation for a roundabout is an excellent treatment to

address the high severity indicator. Roundabouts are not only popular for their operational benefits, but are proven to be useful enhancements for traffic calming and safety. A roundabout effectively decreases driving speeds to 30 mph or less and significantly reduces the number of vehicular conflict points. Both characteristics will likely improve the high severity index at this intersection. Another factor supporting a roundabout installation is the close proximity to the intersection of Randolph Road and Erwin Road. While 750' is less than attractive for two adjacent signal installations, this spacing is workable for a roundabout. Lastly, the skewed alignment of Kerley Road with Erwin Road points to a roundabout as a fitting treatment.

### **RECOMMENDATIONS:**

The following are roadway improvements recommended under current conditions:

#### **Pickett Road and Randolph Road**

- No improvements are recommended at this intersection

#### **Erwin Road and Randolph Road**

- Signal installation is recommended

#### **Erwin Road and Kerley Road**

- Roundabout installation is recommended

RESOLUTION #9762

**CITY OF DURHAM  
RESOLUTION IN SUPPORT OF THE CLOSURE OF A PORTION OF PICKETT ROAD IN  
ORANGE COUNTY**

**WHEREAS**, the citizens of Durham and Orange Counties have made significant investments in Hollow Rock Park; and

**WHEREAS**, The Master Plan for the Hollow Rock Access Area of the New Hope Preserve was adopted by the City Council on November 16, 2009; and

**WHEREAS**, through traffic on Pickett Road may be detrimental to the success of the Park; and

**WHEREAS**, the current average daily traffic volume on the subject portion of Pickett Road is modest (645 vehicles per day); and

**WHEREAS**, a traffic analysis performed by the City Transportation Department determined signal warrants are met at the intersections of Erwin Road and Randolph Road and Erwin Road and Kerley Road.

**NOW, THEREFORE BE IT RESOLVED**, the City Council of the City of Durham supports the permanent closure of Pickett Road in Orange County, from the Durham County line to Erwin Road, provided:

1. A traffic signal is installed at the intersection of Erwin Road and Randolph Road prior to the closure of Pickett Road; and
2. An easement shall be retained providing for public pedestrian and bicycle ingress, egress, and regress.

This being the 2<sup>nd</sup> day of May.

**APPROVED BY  
CITY COUNCIL**

MAY 2 2011

**CITY CLERK**

*D. Ann Gray*

**DURHAM COUNTY  
RESOLUTION IN SUPPORT OF THE CLOSURE OF A PORTION OF PICKETT ROAD IN  
ORANGE COUNTY**

**WHEREAS**, the citizens of Durham and Orange Counties have made significant investments in Hollow Rock Park; and

**WHEREAS**, The Master Plan for the Hollow Rock Access Area of the New Hope Preserve was adopted by the Durham County Board of Commissioners on December 14, 2009; and

**WHEREAS**, through traffic on Pickett Road may be detrimental to the success of the Park; and

**WHEREAS**, the current average daily traffic volume on the subject portion of Pickett Road is modest (645 vehicles per day); and

**WHEREAS**, a traffic analysis performed by the City Transportation Department determined signal warrants are met at the intersections of Erwin Road and Randolph Road and Erwin Road and Kerley Road.

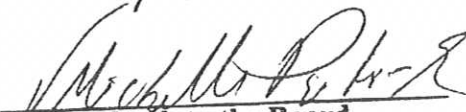
**NOW, THEREFORE BE IT RESOLVED**, the Durham County Board of Commissioners does support the permanent closure of Pickett Road in Orange County, from the Durham County line to Erwin Road, provided:

1. A traffic signal is installed at the intersection of Erwin Road and Randolph Road prior to the closure of Pickett Road; and
2. An easement shall be retained providing for public pedestrian and bicycle ingress, egress, and regress.

This being the 9<sup>th</sup> day of May.

**Approved By The  
Board of County Commissioners**

*May 9, 2011*

  
**Clerk to the Board**

**DURHAM-CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)  
RESOLUTION IN SUPPORT OF THE CLOSURE OF A PORTION OF PICKETT ROAD IN  
ORANGE COUNTY**

**August 10, 2011**

A motion was made by TAC Member \_\_\_\_\_ and seconded by TAC Member \_\_\_\_\_ for the adoption of the following resolution, and upon being put to a vote, was duly adopted.

**WHEREAS**, the citizens of Durham and Orange Counties have made significant investments in Hollow Rock Park; and

**WHEREAS**, The Master Plan for the Hollow Rock Access Area of the New Hope Preserve was adopted by the Durham City Council on November 16, 2009; and

**WHEREAS**, through traffic on Picket Road may be detrimental to the success of the Park; and

**WHEREAS**, the current average daily traffic volume on the subject portion of Pickett Road is only 645 vehicles per day; and

**WHEREAS**, a traffic analysis performed by the City Transportation Department determined signal warrants are met at the intersections of Erwin Road and Randolph Road and Erwin Road and Kerley Road.

**NOW, THEREFORE BE IT RESOLVED**, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization does support the permanent closure of Pickett Road in Orange County, in area between the Durham County line and Erwin Road, provided:

1. A traffic signal is installed at the intersection of Erwin Road and Randolph Road, and,
2. Retain public access for bicyclist and pedestrians to use the approximate former roadway alignment of Pickett Road thereby allowing interconnection from the remaining Pickett Road segment and Erwin Road, and,
3. Adequate vehicle turn around facilities be provided at the end of the state maintenance section of Pickett Road; and,
4. There be a process to permit vehicles to travel on Pickett Road between Randolph Road and Erwin Road in the case of an emergency.

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Lydia E. Lavelle, TAC Chair

Durham County, North Carolina

I certify that Lydia E. Lavelle personally appeared before me this day acknowledging to me that she signed the forgoing document.

Date: August 10, 2011

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2015

**DURHAM-CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)  
RESOLUTION TO OPPOSE THE CLOSURE OF A PORTION OF PICKETT ROAD IN  
ORANGE COUNTY**

**June 13, 2012**

A motion was made by TAC Member \_\_\_\_\_ and seconded by TAC Member \_\_\_\_\_ for the adoption of the following resolution, and upon being put to a vote, was duly adopted.

**WHEREAS**, The Master Plan for the Hollow Rock Access Area of the New Hope Preserve has recommended closing the unpaved portion of Pickett Road in Orange County to eliminate through traffic and ensure success of the park; and

**WHEREAS**, a traffic analysis performed by the City Transportation Department determined signal warrants are met at the intersections of Erwin Road/Randolph Road and Erwin Road/Kerley Road; and,

**WHEREAS**, many citizens who participated in the MPO-sponsored community meeting (May 1, 2012) expressed a concern that Randolph Road and the intersections at Erwin Road/Randolph Road and Pickett Road/Randolph Road are unsafe and experience long delays during peak traffic periods; and,

**WHEREAS**, the unpaved portion of Pickett Road has approximately 600 vehicles per day and Randolph Road has approximately 4,100 vehicles per day; and,

**WHEREAS**, closing Pickett Road will likely divert traffic to the Randolph Road neighborhood and exacerbate existing traffic safety and delay problems there; and,

**WHEREAS**, closing Pickett Road will reduce the transportation network connectivity and result in longer vehicle trips and vehicle miles traveled; and,

**WHEREAS**, these consequences do not support the following DCHC MPO Goals and Objectives –

- “create multimodal street patterns that... ensure connectivity”
- “minimize(e) traffic intrusion in residential neighborhoods”
- “reduce the rate of growth in vehicle miles traveled (VMT).”

**NOW, THEREFORE BE IT RESOLVED**, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization opposes the permanent closure of the unpaved portion of Pickett Road in Orange County.

\_\_\_\_\_  
Lydia E. Lavelle, TAC Chair

Durham County, North Carolina

I certify that Lydia E. Lavelle personally appeared before me this day acknowledging to me that she signed the forgoing document.

Date: August 10, 2011

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2015

# Proposed Pickett Road Closing

## *Compilation of Public Comments*

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### **Background**

This document compiles all the comments that have been received concerning the proposed Pickett Road closing as part of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) public input process. These comments were received by email and from the comment forms that citizens completed at the May 1, 2012 public input meeting at Trinity School.

### **Organization of Document**

This document presents the comments in three sections:

- No direct opinion was expressed on the closing of Pickett Road – *Page 1 to 3*
- Support closing Pickett Road – *Page 3 to 6*
- Oppose closing Pickett Road – *Page 7 to 17*

### **No Direct Opinion Expressed**

Absolutely essential to have a stop light at the Erwin and Randolph intersection!

-Richard A. Oline

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I spoke with Al Grandy (Traffic Dept.) in Durham. He said left-hand lane turn lane going into Winstead will be removed by the end of April. This is May 1<sup>st</sup>. Hope this change takes place shortly. I called 3 times. On closing Pickett Road, this should NOT happen until a traffic signal is placed on Erwin and Randolph Roads. There is too much traffic already on Erwin and Randolph—very difficult to get onto Erwin from Randolph. Closing Pickett Road would only exacerbate this already terrible traffic problem. We need a traffic signal @ Erwin and Randolph Roads.

Betty J. Phillips

Board of Directors

Winstead Home Association

[Bphillips17@gmail.com](mailto:Bphillips17@gmail.com)

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Before you close Pickett Road, there should be a signal installed at Randolph and Erwin. The extra traffic from closing of Pickett Road would make it dangerous and impact traffic flow on Erwin and Randolph. There have been many accidents recently because of the new homes at Carillon Forest and Carillon Woods.

Francine & Morgan Feldman

[mfeldman@nc.rr.com](mailto:mfeldman@nc.rr.com)

Winstead Homeowners Association

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If Pickett is closed then Randolph and Erwin needs a traffic light, period.

Margaret Sapp 4206 Pine Bark Trail Durham, NC 27705

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If Pickett is closed (or even if it isn't) a light needs to be installed at Randolph and Erwin. It can be on flashing red/yellow during off peak times. Two serious accidents, luckily w/o fatalities, have occurred here in recent months, and trying to turn Left onto Erwin from Randolph can take an extended time during "rush hour".

Sue Anderson

148 Solterra Way, Durham, NC 27705

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We need a traffic light at Randolph and Erwin Roads!!

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Put a light at Erwin and Randolph and then close Pickett Road.

Solterra Resident.

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The closure of Pickett Road will likely increase the traffic on Randolph. Are there any plans to put a light

at Randolph and Pickett?

Judith Clarkson, Solterra resident

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Dear Mr Henry,

As a resident on Randolph Rd.,and having attended the first meeting months ago to discuss the closing of the Pickett dirt road, I, for the record again, am against this closing. Traffic on Randolph is already heavy and at times dangerous with fast speeding cars, trucks, and motorcycles. The congestion problems on the Pickett/Randolph end have already been noted by other opponents of this proposal, citing additional traffic to Trinity School and homeowners along the area having difficulty exiting their driveways at peak traffic times during the day and early evening.

DOT has been cooperative in making safer the Pickett and Erwin Roads intersection, and hopefully will continue to make improvements to slow traffic at that point and keep clearing the sight line for drivers. Surely reasonable discussions and workable solutions can be found to satisfy all parties involved.

May I suggest that if the Pickett Rd. area is closed, that speed bumps be placed along Randolph Road to slow the speeding drivers. (Has anyone monitored over a period of time, the speeding traffic on Randolph? If not, may I suggest that it be done.) So many of the Randolph Rd. residents are elderly, and need safe passage from their driveways to mailboxes and just exiting onto Randolph. Our road can be very hazardous at times almost every day of the week!

One other concern...garbage is thrown onto our lawns with some frequency..another issue to be addressed and managed. Are there measures to curb this from happening even now?

Thank you for your time and consideration of this important issue.

Donna and Harmon Smith

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### **Support Closing Pickett Road**

- 1) Please close Pickett Road.
- 2) Please put a traffic light at Erwin and Randolph. I sit there daily at rush hour for a long time now for 13 years.
- 3) The Durham side of Pickett Road is a headwaters area for the New Hope Creek. It is an important area for clean water that flows west into the Orange County side of the preserve. I have been a creek steward for both sides for 13 years. I clean up weekly, Pickett Road has been a dumping ground for large appliances for many years. The park will connect the Durham and Orange County tracts, which for the eco-system is one wildlife area. Keep the cars off of Pickett Road for the sake of the wildlife corridor that will need a protected area, both for water quality, use of the unique ecosystem and unification of the Durham and Orange County tracts.

These counties are developing as we speak. The corridors that Hildegard Ryals identified in the early 90's, tracts of land that would provide a wildlife corridor to Jordan Lake, one bought now (identified). Closing Pickett road would "complete the puzzle" that Durham County commissioners identified 20 years ago, that was lost in paper work as development took front row. The argument that teenagers will not have easy access to a newly expanded Trinity pales in comparison to a park that is safe for 1.) water 2.) animals and humans is not a good argument.

Sandy Leesdee

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Close Pickett Road. The park should be established with parking and not a thru-way. The park should have that quiet. Close Pickett Road to protect the ecosystem. Closing is a long-range consideration. To accommodate any one entity that could come and go (school) is not in the best interest of a natural resource that cannot ever be replaced.

The dumping that has occurred over the years on Pickett has been an eyesore and a cost in time and money to those who live nearby and help pick up and cart off the refuse. With a school nearby, the danger to team drivers is exacerbated; the road is slippery with loose gravel, has a blind hill, invites speedsters, and endanger those who already walk along its beauty. On an ancillary subject, please place rumble strips on Cambridge.

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Close it.

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The dirt road should be closed. The turn from Pickett onto Erwin is dangerous. The people who use the dirt road frequently speed. The road causes a lot of dust. Driving down Randolph to get to Trinity School is just as fast as taking the dirt road. If the dirt road is not closed and the park opens pedestrians will be at risk from these speeders. If there is not enough parking for the park people may park in my neighborhood. I realize that closing the road will add traffic to Randolph, but I think the added traffic will be worth it-Randolph needs a traffic light.

Susan and Chris Walsh

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- 1.) I favor as soon as possible to put a stop light at Randolph Rd and Erwin Road. It is very hard to make a left turn from Randolph onto Erwin at rush hour. If you're in the left hand turn lane, someone pulls up beside you to turn right and it's impossible to see traffic from both ways so you just sit there and back up traffic until it is safe.
  - 2.) I favor closing Pickett Road (gravel). I live in this area. There have been car jackings there and also drugs get passed there. During rush hour it is very hard to make a left turn from Pickett onto Erwin because of the incline. Pickett Road will always be a gravel road, so closing makes sense.
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I suggest you carry out the closing of Pickett Road asap. Before that I suggest a light at the point where Randolph meets Erwin Road.

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There has been substantial thought and planning that has gone into the proposal to close Pickett Road in order to provide the best possible scenario for development of the New Hope Preserve Park. The efforts by Orange County, Durham County, Chapel Hill and Durham, as well as many private citizens have resulted in a unique opportunity for this area of Durham and Orange Counties. Concerns about traffic seem to be the most prevalent obstacles to full development of the park. However, Pickett road is gravel and will not be paved. And the installation of a traffic signal at Randolph and Erwin roads will result in a much safer alternative to entrance onto Erwin from Pickett. We support the closure of Pickett Road.

Judson and Mary Edeburn

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I am for the proposed closing of Pickett Road and hope for a traffic light to be installed at Erwin and Randolph road intersection.

Alicia G. Myers 102 Solterra Way, Durham, NC 27705

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I fully support the closing of Pickett Road in order to support the New Hope Creek Preserve.

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I support closing the gravel road only if there is a light at Randolph-Erwin intersection and some form of traffic control at Randolph/Pickett. Pickett-Randolph-Erwin is now a major thoroughfare. The gravel road is dangerous as people drive way too fast. Also, GPS units route people through this road by default- if this could be changed that would help. I am concerned though that closing this road may create a location that is too "off-the beaten path" and may become a location for youth underage drinking and drug use, and walkers/hikers/visitors may be at risk. Either with or without closing the Randolph-Erwin intersection needs a light and traffic control at Randolph-Pickett is also needed-especially in the mornings.

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I agree that Pickett Road access to Erwin should be closed to allow for full use of the property for the park and it's a dangerous place to get onto Erwin anyway.

June Norton

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I strongly urge NC DOT to close Pickett Road (The dirt section) because:

- 1.) It is a vector for crime and dumping trash. I live beside the road (682 Erwin Road) and I've observed the trash for years, and I've had several break-ins, at least one coming from people parking on that road. It is secluded and welcomes such behavior.

- 2.) It is unsafe. People try out their “Dukes of Hazard” driving skills on the road. Cars have had accidents and even flipped in the past.
- 3.) I have hosted children groups to walk in the preserve and each time, traffic has flown by, almost hitting kids.
- 4.) Park continuity- the two sides of that section of Pickett Road are either public or protected with conservation easement. The road should be closed, and integrated into the park.
- 5.) As you pull onto Erwin road, it is very unsafe. Closing the road would address that, or at least minimize the use of the road to park traffic.

Jeff Fisher

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I am okay with the closing of Pickett Road, but there must be a traffic light at the intersection of Randolph and Erwin. Without this light in place, traffic will be a mess and it will take forever to take a left onto Erwin. There are already problems here and this will be escalated with the closing of Pickett Road.

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I was at the “**Drop In**” public meeting at Trinity School on May 1. My house is at the corner of Randolph Road and Pickett Road where we have lived for over fifty years. I am well aware that traffic on this corner will increase somewhat if Pickett Road is closed; however there is not an excessive amount of traffic on Pickett Road. The distance from Randolph Road to Cambridge Road where Pickett Road turns is approximately 400 feet (the extra distance the neighborhoods on Cambridge Road would have to travel). **I am in favor of closing Pickett Road.**

We know about the speeding, the accidents and the lack of visibility on Erwin Road at the exit from Pickett Road.

The long term view is that we will have an exceptional natural park to be used by many schoolchildren as well as residents without having to worry about traffic problems. The proximity to New Hope Creek makes it a unique and valuable source for nature study. Can you imagine this idyllic spot being split in the middle by cars zipping by on the dusty dirt road, often exceeding the speed limit?

Many people have worked for years and made contributions in donations of time and money and land for the success of this park. I would hope there would be consideration for all the work and planning that has been done to date. I have talked to neighbors who have signed a petition to not close Pickett but they were not given complete information of what was involved.

Consider the future. We will have fewer and fewer opportunities to have a park of this caliber. **Close Pickett Road.**

Jan Gregg

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I support closing the gravel section of Pickett Road to vehicular traffic but certainly not as far as Randolph as stated in your e-mail of April 9<sup>th</sup>. It is important that the park be safe for pedestrians and there will be a need for parking for visitors. I am glad that there will be a traffic light at the junction of Pickett and Erwin Roads. I certainly intend to use the New Hope Preserve Park.

Margaret Wainwright

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### **Parking lot needed near New Hope Creek** (*Letter to Durham Herald-Sun*)

We are writing in support of making Pickett Road into a parking lot, by the trail into New Hope Creek.

We think it should be a parking lot instead of a dirt road because we don't want pollution from the cars to go to the creek. We are worried that pollution will hurt the animals and plants will stop growing. We feel it is important for the animals to breathe clean air around New Hope Creek.

Building a parking lot will benefit the community because more people can use the creek and it will be a better place. Elderly people will go the creek if there is a parking lot, older people can exercise on the trails and if they have trouble walking they will be close to the trail and won't have to travel far.

It will also help kids learn science by learning about life cycles and animal print tracking. When we go, many kids will get to see and explore and experience the changes in the plants and the trees. Families will be able to use the parking lot to get to New Hope Creek and maybe can go and have a picnic together. Some families may go hiking to have fun together.

We think Forest View Elementary could have a fundraiser to help raise money to build the parking lot. It's important because we take field trips to the creek and we care about the creek.

**Ms. DeWalt's fourth-grade class,**

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## Oppose Closing Pickett Road

Dear Mr. Henry:

I live on Randolph Road and I oppose the proposed Pickett Road closing.

The traffic on Randolph Road is already excessive, particularly at peak traffic times of day. I live near the intersection of Pickett and Randolph and can tell you that this intersection is already heavily congested, particularly due to Trinity School traffic.

It is already difficult to leave driveways and cross our street safely due to many people using Randolph as a cut-through from Erwin to 15-501.

It is unreasonable to push additional traffic onto Randolph Rd. from Pickett Road. Pickett Road should remain open to through traffic.

Sincerely,

Cornell Jones

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I think Pickett Road should stay open. Randolph Road is already pretty busy, especially during peak times (School drop-off times). Plus, we need to think of the future- the area is going to get more busy as more houses are built, not just in the immediate area, but further east along Pickett Road.

We really need sidewalks on Randolph, so that people can walk safely- Randolph is only 2 lanes mostly and there is no room to maneuver. Also, we need traffic lights on the intersection of Randolph and Erwin. I can't tell you how many near misses I have witnessed there, and it is difficult to make even a right turn there at peak times.

Also, it would be good to have some traffic calming on Randolph-e.g. Speed bumps.

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I feel this proposal should NOT be accepted! Plain A to the point! Has it been proven that a large amount of people will be using this road as a cross over to the other side? Randolph Road is busy now- what will it be like if they close Pickett? I have made it clear and to the point, adjectives are not needed- DO NOT close this road!!

Thank you for listening to the homeowners of the neighborhood.

Sarah Rodgers

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I oppose adding additional traffic to Randolph. Most residents are elderly and need to cross the road @ least 1x/day to get mail. There are several bikers (cyclist) who currently use Randolph. Any significant volume increase could be more hazardous. If the road must be closed then a signal should be placed at Randolph and Erwin.

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- 1.) This is not a good idea. The increase in traffic 600 + cars/day on Randolph is not an appropriate solution to an issue which is obvious in the first place.
- 2.) The traffic counts on the road do not consider the flow/hour rather the flow per day.
- 3.) It is unwise to close the road before there are funds to develop the wetlands area. Why make a decision when the situation may change and it would have been prudent to keep the road open.
- 4.) Most as the neighbors on Randolph road have signed a petition opposing the road closure. This has not changed and more people have signed.

- 5.) When the proposal to preserve the wetlands was made several years ago. The neighbors had no opposition to phase I. When Phase II was proposed with road closure there was opposition. Why not just do Phase I, keep the road open and everyone happy.
- 6.) The safety issues on the dirt road could be addressed by paving. I know the issues involved, but I think simply delaying the closure will afford the local government time to acquire enough land on both sides of the road to pave it. This will have to wait until the current owners have changed their mind- or the property is in the hands of their heirs; but there is no rush- just wait.
- 7.) The dirt road has historical value and is part of the original trail through Durham. This should not be ignored.
- 8.) There are numerous elderly people who live on Randolph. They have to cross the road to get to their mail boxes. Not good to increase traffic.
- 9.) I live on Randolph and have supported the developments of Carillion Forest at Hope Creek. But they have increased traffic. I live here peacefully among more neighbors. I don't think keeping the road open is too much to ask.
- 10.) Personally, I would have rather seen the wetland developed to increase the tax base and heir more teachers for local schools.

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I am an Orange County resident and I own property on the corner of Pickett and Randolph. My daughter lives in the house on this property at 3820 Pickett Road. I am totally opposed to closing Pickett Road. It should be paved and have speed tables installed instead. This works in many parks all over the country. Example Murray Avenue by Museum of Life and Science. Closing Pickett will increase emergency response times from the Orange County side. Additionally, the traffic will have to shift onto Randolph. Randolph and traffic during morning rush hour is already at unsafe levels. You cannot exit our driveway safely already. More traffic would make an already bad and unsafe situation absolutely unsafe and intolerable. I have been told multiple times by multiple officials (including today at this meeting) that one man, Mr. Penny, is unwilling to give right of way and thus, the road cannot be paved. I find it incomprehensible that one person can cause the road to remain unpaved. So, politics are more important than public safety.

Additionally, I am concerned that notice of this and other meetings is not reliable. I received a card in the mail from Andrew Henry. It was addressed to : Kitty B. Stockton 4819 Renfrew Drive, Durham, NC 27705. My name is Laura Sikes and I have lived at 4819 Renfrew Drive for almost 40 years. It was only by accident I noticed what the meeting was about and realized that you incorrectly addressed my card. Please correct the address. Additionally, my daughter Debbie Lee, lives at 3820 Pickett Road. She received no notice at all.

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- No rational reasons given to close this road
  - Trinity school looking to double in size with HS which means HS students driving to school so significantly more traffic
  - With separate parking lot for park, not need to close the road
  - Can put bridge for walkway over the top

- Don't need to add more traffic to Randolph Rd
- Dirt Rd is access road to 3 subdivisions (Garrett Farms, Pickett Crossing and\_\_\_\_)
- Keeping road open will give better traffic flow for groups/buses coming to the park
- Fire department pointed out closing road would delay response time for EMS calls— would not want that!
- Main entrance should be on Pickett-not Erwin where traffic flies by.

Barbara Taylor

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I'd like to keep Pickett Road open, but appreciate the park going in. It would be nice to widen slightly and pave for safety.

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I would like to keep the road open to avoid traffic delays along Randolph and Pickett Road. Excited for park and trails.

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Removing Pickett Road (SR 1734) for a park is not in the best interest of those living in the region of Randolph Road, Pickett Road, and feeder communities. It will add 1 mile to Fire Department and dump extra traffic onto Randolph Road. If Road work would be required in future at Randolph and Pickett intersection, the citizens and individuals going to Trinity would be required to drive through Garrett Farms community.

If the road is going to be still used for the park to access parking and will be blocked in one place, then the purpose of closing the road confounds me. If one is worried about children crossing the road and being in danger, the entire road should be abandoned and a parking lot only be open from Erwin road. It only takes one car and one child.

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To whom it concerns,

I have lived on Randolph road for 50 years, I am now 60 years old, so I have seen all the changes in this area over the years. Some I thought were done very well and others not well at all. I know things change and areas must expand to grow, but please do this with making Roads better, not worse. I have seen many homes, schools, developments, the Preserve but, why have you not made the roads better. When Carillon Woods was started my driveway and yard was destroyed, and never repaired properly. I complained many times and was promised many times. Well that was about it and I was left with the mess and to spend my money to complete their job. We have enough traffic on Randolph road already, and it's not enough road for more. We have all the cut-thru traffic from people going to Chapel Hill/Orange County and school, we don't need more!!! You need to pave Pickett Road Ext. and make it traffic friendly so more people would use it as a main route. Speeders are a big problem on Randolph Road, and the speeds are easily 60-80 mph. I know (I live and see this all the time)))) Do Something about that )!!! New Hope Fire Dept. needs Pickett Rd so they could use if need also. I dare you say that closing Pickett Road is a good thing. Do the right thing and make Pickett Rd Better for everybody.

P.S. The value of my home is at stake also!!!

Tim High 3530 Randolph Rd., Durham, NC 27705

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-Closure of this portion of Pickett Road will delay the response of emergency services to communities along Cambridge road and surrounding areas.

-Will heavily increase traffic issues on Randolph Rd.

Cameron Leedy

New Hope Fire Department

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I strongly oppose the closing of Pickett Road to thru traffic for the following reasons:

- Traffic on Randolph Rad is already bad a certain times of the day
  - Closing Pickett will only make it much worse
  - I have trouble getting out of my driveway during these times as well as crossing Randolph to get the mail.
- Response times for the New Hope Fire dept. will be increased significantly for anything in the Trinity school area and beyond.
- This is not really necessary-no legitimate reason for closing this road.

David Washburn 3618 Randolph Rd., Durham, NC 27705

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Closing Pickett Road will increase traffic on Randolph Road. There are many homeowners on Randolph that are elderly. They have to cross Randolph to get to their mail boxes. There is a lovely neighborhood, and makes for a wonderful walk. The sidewalk on Randolph is great, but I do have to cross the road to access it. I see many cyclists and increased traffic is dangerous to them.

Muriel Coffey 3612 Randolph Rd.

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I am totally in support of the park- but am totally opposed to the closing of Pickett Road for seasons of safety. Living on Randolph Rd- 3622 I cannot get out of my driveway at times. When the park was created there was not a recommendation for closing Pickett Road. We need the connectivity, the fire department needs the connectivity. Trinity School is growing and need the access to their school. A new private school (Montessori) is going in on Pickett which will increase traffic on Randolph Rd. There is not enough foot traffic in the park to justify closing the road. I walk the trails all the time and never have any problem crossing the road. The school needs Pickett Rd open for fire safety. Thank you for this opportunity- Glaeshia O'Rourke

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I live at the corner of Pickett and Randolph and have trouble currently getting out of my driveway, getting my mail, and turning into my driveway. It is dangerous for me to turn into my driveway because the cars come from Pickett to Randolph and turn very quickly0 I have to speed up to avoid being rear ended. The amount of traffic that comes thru already makes it very difficult for me to turnout of my driveway sometimes I sit waiting for ten minutes. I am against the proposed closing of Pickett Road because of the amount of additional traffic that will come through. Thank You! \*I was not notified of this meeting. Please add me to the email and mailing Lists. [Dlee1606@nc.rr.com](mailto:Dlee1606@nc.rr.com)

Debbie Lee

3820 Pickett Road, Durham, NC 27705

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This is not the regional park plan I fundraised for and lobbied the county commissioners for. I don't understand why the original plan with parking at the Pickett and Erwin road intersection isn't acceptable. Closing off Pickett would make the bad traffic situation on Randolph worse. I

can't get out of my driveway at 3622 Randolph for an hour every morning. Making this situation worse is not acceptable.

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I do not feel that Pickett Road should be closed! If anything it should be paved. It is a much used throughfare, even though it is so dusty. I drive to and from work on Erwin Rd and several times have been stuck by the swim and tennis club, unable to move forward due to traffic, or in one instance a broken down car, and could not turn around because the sides of the road make it impossible to go around. I have used Pickett Road many times as I live at the far end of Randolph Road. If Pickett was closed the increased traffic on Randolph would make it overused and more dangerous than it already is. The people trying to get home or to work using Randolph already drive too fast and would use it as a straight-away to get home. It would also be inconvenient for people going to and from school. Over 600 people use that section of road a day! After talking with many neighbors, we feel closing this road would be a detriment to the welfare of this community!

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I am adamantly opposed to the proposed road closure- due to the negative impact it would have on the safety and well-being (noise, pollution, volume of traffic) of residents living on Randolph Rd- as well as on the residents living near 2 affected intersections-especially the intersection of Pickett and Randolph. Randolph Road already bears the brunt of high traffic in this area- including that derived from 4 schools on Pickett –plus Forest View on Erwin and Cresset Academy on Garrett. Many citizens use Pickett (gravel portion) and Randolph to cut through between Erwin and 15-501. Pushing Pickett's traffic on Randolph is not acceptable. The safety of residents living on Randolph Road Is equally important to that of park users needing to look both ways before crossing Pickett. Please see results of petition on other side.

Signed Petition of Opposition 8/2011

95% (20/21) Randolph Rd residents contacted

83% (20/24) of Randolph Rd. residents, contacted and not

100% (11/11) Alman Drive and Pickran Circle Residents

Various Residents, also, from Carillon Woods and Carillon Forest

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Right @ Randolph and Erwin ASAP! Very dangerous corner

-Do not close Pickett-please pave!

Michelle Simpkins

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We would like to see Pickett Road left open and/or build a walk way for people who want to use the park. We live on the corner of Randolph and Erwin and traffic is lined up at peak hours on Randolph to get on to Erwin left and right. School (Forest View) causes back up morning and afternoons. If we come down Randolph to Pickett It's backed up there too. We don't need anything to make it worse.

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I will be out of town on May 1st and unable to attend the meeting at Trinity School

As a resident of Randolph Road, I am VERY concerned about the additional traffic the closing of Pickett road will drive to Randolph road. We have seen a dramatic increase in traffic with the increased housing development in the area, and this will only make it worse.

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I do not understand the reasons to close Pickett. It appears to me that there is a small population of people that want to close the road and it is not in the best interest of the entire neighborhood.

If you can clarify the reasons, I would love to hear them.

Any chance you can do that by email?

Otherwise, I will vote and emphatic NO to the proposal to close the road. In fact, I would like to see Pickett Road paved out to Old Erwin Road and used even more!

Respectfully,  
David Chandler

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I would like a little more information about the proposed closing of Pickett Rd. between Randolph and Erwin. Has anything been mentioned in the newspaper or via any other means about this? If so, we haven't seen it. And the postcard we received yesterday as notice of a meeting about the closing was sent to some person who has never lived at our address. In fact, the neighbors I've discussed this with today all had the same experience. At least one of my neighbors returned his notice without reading it as the addressee name was unknown to him. He has lived in his house since it was built many years ago. Our notice was addressed to a person unknown to us. We have lived in this house for over 20 years and the people we bought it from lived here 11 years. Neighbors who have lived here since the neighborhood was formed have never heard of the person our notice was addressed to. The name on our notice was suspiciously close in alphabetic order to that received by our next door neighbor, and none of the names remotely resemble names of anyone who has ever resided on our block.

Also, I don't see this public meeting even posted on your agency's online calendar. How are people supposed to learn of it?

I might not have even talked to my neighbors about the project if the notice did not indicate that the block of Pickett between Randolph and Cambridge would be included in closed portion of Pickett. If this were done, parents dropping students off at Trinity School would have to drive to the end of Randolph Road, turn right on Haven and right again on Cambridge, and drive back toward Pickett for two blocks. Then they would have to do the same in reverse. This would be repeated when they came to pick up the children after school. Of course, some people use Pickett Road between Erwin and Cambridge when they drop off and pick up students. Thus, all vehicles from that side of town would be forced to make much longer trips each day, which seems nonsensical in this time of high gas prices and efforts to conserve fuel.

Rather than closing off Pickett, my suggestion is to pave the unpaved section of Pickett from

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Cambridge to Erwin Rd., thus giving better access to Trinity School patrons as well as to the subdivisions off Cambridge and then into Garrett Farms. Who would benefit from closing this area of Pickett except for the one or two houses along the unpaved section? Whereas many would benefit from paving that part of the road.

Hank Macknee

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Carl and Louise Allen contacted Andy Henry by telephone to say that they don't want any more traffic diverted down Randolph Road by closing Pickett Road. They have a hard time crossing the road to get to their mailbox and pulling their car of the driveway.

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Dear Mr. Henry,

Thank you for the opportunity to speak with you on Tuesday evening regarding my concerns about the proposed Pickett Road Closure. I live at 3617 Alman Drive which is off of Randolph Road, and very close to the intersection of Randolph and Pickett Roads. I want to highlight my concerns related to the closure.

- In the event that Pickett Road is closed, the traffic study completed in 2009 indicated that Pickett Road has 645 trips compared to 3972 for Randolph. If Pickett is closed, these cars will use Randolph resulting in + 16% increase in cars. It may sound negligible, but it is not since most of these cars will be at peak times when the surrounding schools, in particular Trinity School on Pickett Road, are beginning and ending for the day. In the a.m., this rush coincides with the work rush. From Alman, I turn left onto both Randolph and then take another left onto Pickett for my morning commute. Cars back up (queue) at the intersection of Pickett and Randolph making it difficult to make a left onto Randolph from Alman. Having Pickett Road creates a release valve for cars to avoid some of the heavy traffic. Additionally, this traffic study is 3 years old at this point, making me question the accuracy of daily trips of either road.
- A traffic light at the intersection of Randolph and Erwin will only result in more people using Randolph as a thoroughfare. It is already difficult for residents of Randolph to use their driveways, get their mail across the street, etc. There are real safety concerns with increased traffic.
- Walking, jogging, and biking along Randolph is already difficult since the sidewalk is only present at Carillion Forest.
- Closing Pickett will lead to reduced connectivity to the area which can be a concern for emergency vehicles who would have to unlock a gate.
- Safety to the residents on and adjacent to Randolph Road is not mutually exclusive to the park

For an anecdote, I have live at my home for 13 years. Before Carillion Forest and Trinity school were built, I used to walk my dog across Randolph and down Pickett Road to the neighborhood on the other side of Pickett and Randolph. With Trinity school, traffic increased immensely without the addition of a sidewalk. Walking across Randolph and down Pickett is trecherous

with ditches on either side, and cars flying down Pickett. Since Carillion Forest was built, I now walk in that subdivision because of the safety concerns.

Please let me know if you have any question. My daytime number is 919-890-1322.

Sincerely yours,

Deana Fleming Schwatka

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Dear Mr. Henry:

I was out of town for the May 1 meeting on the issue in my subject line; but I feel very strongly about this and want to get in my two cents (which I have already delivered at past meetings, one at the Trinity School and one downtown).

I have no objections to the planned park in this area—that's probably a very good thing. But I have strong objections to a closing of the currently unpaved portion of Pickett Road. Currently this road serves as an alternative approach to Pickett for those driving on Erwin, especially from Chapel Hill or from Kerley Road. Closing it off would increase the traffic dramatically on Randolph Road, causing increased congestion and slow downs. With all the developments along Randolph—and they are still building in Carillon Forest/Woods—the number of cars utilizing Randolph is already great and increasing. Closing off Pickett Road will make matters much worse. . . not just on Randolph but on Erwin as well, if drivers need to proceed to Randolph to make a turn toward Pickett. I understand there will be a traffic light at Randolph and Erwin, which suggests to me that traffic will be backed up even more.

As one who lives on Alman Drive, I have to wait a long time at certain times of the day to make a left out of my road onto Randolph in order to get onto Pickett. I can't imagine what that will be like if traffic were increased on Randolph due to a closing off of Pickett from the Trinity School to Erwin.

If I had my druthers, Pickett Road would be **\*paved\***--barring that, I strongly urge the powers-that-be to resist closing it! Surely there are parks in our area that are bounded by open roads; I do not see the necessity for considering this proposal for closing a road that relieves pressure on other, heavily-traveled routes.

Thank you for considering my feedback.

Sincerely,

Judith Ruderman

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I was planning on coming to last night's meeting at Trinity School, but it turned out I could not make it. I wanted to express my thoughts on this issue and would appreciate you forwarding this email to any public officials for which it would be appropriate.

I think it would be wrong to close the unpaved section of Pickett Rd. In fact, it would be sensible to pave this portion of Pickett Rd.

- Clearly the unpaved portion of Pickett Rd serves the purpose of providing direct access to the closest major road (Erwin Rd) for Trinity School and for the Cambridge development. There is no better access.
- Forcing this access to be made via Randolph Rd puts too much traffic on this residential road. Randolph Rd is a very well-used route for access to Forest View Elementary as well as general access between Durham-Chapel Hill Blvd and Erwin Rd (via Garrett and Pickett). An open (and properly designed) Pickett Rd opens up this access and spreads out the traffic.
- Sensible roads and access are a necessity for a developed and developing region. Whether unfortunate or not, this area is part of the Triangle metropolitan area, people live and work here, and more people are coming. SENSIBLE development is required, not catering to emotional nor personal desires or preferences.
- It is very nice that the Penny family wants to keep their land (present and former) undeveloped and that land in this area has been set up as natural area. However, roads do run through and adjacent to natural areas. This portion of Pickett Rd is a useful and sensible road.
- Trinity School and the Cambridge development are already there. These places should have appropriate access. The unpaved portion of Pickett Rd provides the access. Paving this road would provide appropriate access for personal vehicles.
- If this road were paved, it would be used by more people. This is not an argument against keeping the road open or paving it. It simply demonstrates that it would be reasonable and sensible to do so.
- A properly graded and paved road would be safer for the people using this road (primarily families, parents, teachers, and students).

Michael King

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To: Durham Chapel Hill Carrboro Metropolitan Planning Organization From: Bill Hall Date: May 1, 2012 Subject: Comments on Proposal to Close Pickett Road Between Randolph Road and Erwin Road

The closing of Pickett Road to through traffic has been proposed as part of the development of the Hollow Rock Access Area at New Hope Preserve. Following below are comments that I would like to leave with the Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC-MPO) regarding this proposal.

At the August meeting of the Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC-MPO), a petition signed by concerned residents of Randolph Road residents and users was presented to the DCHC-MPO. Those of us who were at that meeting and who signed the petition were pleased that a motion was made and carried unanimously to defer action and to gather more information on the park and meet with citizens to address their concerns. Those of us who would most be affected by the increased traffic on Randolph Road appreciate this recognition that the closure of Pickett to through traffic is not as “cut and dried” as supporters of closure would have us believe.

Park and road closure supporters contend that citizens have been given ample opportunity to provide input into park planning and express concerns related to closing Pickett road. As is in the minutes from the August 2011 DCHC-MPO meeting, “Ellen Reckhow stated they had many citizens attend the meetings prior to the adoption of the park plan.” I believe this is misrepresenting the opportunities to comment on the possible road closures. Yes, there were two public meetings held on February 28, 2008 and on December 3, 2008 at the New Hope Improvement Center, but these were advertised as being for those who wanted input into planning the park, and there was never - to my knowledge - any announcements publicizing the potential option to close Pickett to through traffic. There were many meetings of park supporters and planners and it was out of these meetings that the proposal to close Pickett to through traffic came into being and was included in the September 2009 “Proposed Master Plan Hollow Rock Access Area to the New Hope Preserve.” It appears to be the case that it was only because the Orange County Commissioners wanted to get feedback from Durham residents that the initial public meeting specifically about this proposal was held at Trinity school in August 2010.

Park and road closure supporters seem to contend that the safety of park users and allowing through traffic are mutually exclusive. This is not the case - you can have both with careful planning. In the minutes of the August 2011 DCHC-MPO meeting, “Mark Kleinschmidt asked what the argument for the closing of Pickett Road is. The Town of Chapel Hill has a road through Southern Community Park and they added traffic calming to address the safety issues.” In answer to Mayor Kleinschmidt’s question, “Ellen Reckhow stated the concern is that the intersection of Pickett and Erwin Road is not safe.” It is evident that NC DOT has been taking a look at the the Pickett and Erwin intersection and has already made improvements to the intersection by clearing the sight-line for drivers entering Erwin from Pickett and placing warning signs on Erwin. It appears that DOT has already made it safer. Much of the discussion on the possible closure of Pickett to through traffic focuses on the intersection of Randolph and Erwin. Park supporters agree that a light would be needed there if Pickett is closed. The 2010 traffic study that was conducted in this area indicated that a light was already warranted at the Randolph and Erwin intersection regardless of whether or not Pickett is closed.

Perhaps most important, the other end of Randolph is of greater concern. The Pickett and Randolph intersection is already congested with a long queue of traffic backed up on Randolph in the mornings. Closing Pickett to through traffic from Erwing Road would likely add hundreds more Trinity school related vehicles going through the Pickett and Randolph intersection and there is no room for that intersection to be modified to handle the increased traffic.

Finally, it has been a year and a half since that initial meeting at the school when we were first informed of this proposal to close Pickett Road to through traffic and longer since the 2010 traffic study. Since then, many more homes have been built in Carillon Forest/Woods development which means that the number of residents dependent on Randolph Road for

traveling anywhere out of their neighborhood has already increased substantially.

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Nancy and Warren Watkins, 3518 Randolph Rd. are against the closing of Pickett Rd. Thank you for your attention to this matter.

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## DCHC MPO -- Goals, Objectives and Targets

### Recommendations

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#### Process

The following activities are to take place to review the MPO's Goals, Objectives and Targets for use in developing the 2040 Long Range Transportation Plan (2040 LRTP):

- The TAC released the Goals, Objectives and Targets for public comment at their March meeting. The Goals and Objectives were the same as those used for the 2035 LRTP, but the Targets had been updated from the 2035 LRTP set.
- The MPO conducted four public workshops, including:
  - Chapel Hill/Carrboro, 4/10/12;
  - Hillsborough, 4/12/12;
  - Pittsboro, 4/24/12; and
  - Durham, 4/26/12.
- The MPO created an online survey to assess citizen's values in transportation investments and policies.
- The TAC will conduct a public hearing at their June 13, 2012 meeting.
- The TAC can choose to adopt the Goals, Objectives and Targets at their June 13, 2012 meeting.

#### Related Documents

The review of the MPO's Goals, Objectives and Targets includes the following documents:

1. Attachment 6A – MPO Survey Results and Summary
2. Attachment 6B – Chapel Hill Town Council resolution and comments on DCHC MPO Goals, Objectives and Targets
3. Attachment 6C – Draft Goals and Objectives
4. Attachment 6D – Target Development
5. Attachment 6E – Targets

#### Analysis and Recommendation – Goals and Objectives

The TCC did not recommend making any changes to the Goals and Objectives. The Goals and Objectives provide strong support for the values and concerns expressed in comments received directly from the public or through the transportation survey.

The DCHC MPO has developed a comprehensive, well thought out set of Goals and Objectives and updated them several times over the last decade. The most recent update occurred in August 2007. Respondents in the recent survey supported alternative modes of transportation

such as rail transit, bus transit, bicycling and walking, and were concerned about the transportation impact on neighborhoods and the land use impact on transportation. These items already have strong support in the Goals and Objectives. The citizen comments want walkable communities and alternative transportation modes, which have ample support in the Goals and Objectives. They also asked for more depth and specifics in the environmental Goals and Objectives. Goal #6, “Protection of Natural Environment and Social Systems,” and the eight underlying Objectives address environmental concerns, and Goal #1, “Overall Transportation System,” also supports the natural resources and the environment.

Staff does not recommend adding specific environmental Objectives. A more specific objective such as “no construction or development will occur in areas designated as Significant Natural Heritage Areas,” might take away any latitude the MPO’s policy board (the Transportation Advisory Committee – TAC) has in making decisions in which multiple environmental and natural resource concerns are involved.

Many of the comments related to the environment were from citizens who are concerned that the proposed Southwest Durham Drive in the 2035 Long Range Transportation Plan (LRTP) will cause unreasonable environmental damage to the Little Creek area. Staff is aware of this concern and has begun a process to get an early review of proposed 2040 LRTP projects by environmental and natural resource agencies.

On May 30<sup>th</sup>, the Chapel Hill Town Council approved a resolution that proposed changes to the Goals and Objectives and Targets that mostly originated from four of the Town’s advisory boards. The TCC meeting occurred before the Town Council meeting and therefore the TCC was not able to consider and address the proposed changes in the resolution. The LPA staff will forward a document to the TAC before their meeting that identifies how each of these comments can be addressed in the Goals and Objectives and Targets.

### **Analysis and Recommendation – Targets**

As suggested when the Targets were released for public input, the MPO staff recommends:

- Replacing Target #2 (Percent of Peak Period VMT at Congestion) with #2A (Percent of population whose average trip time is greater than 15 minutes). The new Target represents data from the regional travel demand model that is more easily comprehended; and,
- Replacing Target #7 (Greenhouse Gas Change) with Target #7A (Greenhouse Gas : annual per capita emissions from transportation sector [in tons]). The new Target accounts for the growing population in the region.

- Changing Target #8 (Cost of Congestion). The growing population will likely increase this value even if the level of service improves. It would be better to use a “per capita” value for this Target.

Staff also recommends making the following Target more aggressive:

- Transit Mode Share – The values released for public comment were 3%, 5% and 7%. The new values in the table are 5%, 7% and 10%.

## Goals, Objectives and Targets

05/16/12

### Survey Results and Summary

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#### Background

- This survey, conducted by The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), will be used to help design the *2040 Long-Range Transportation Plan (LRTP)*.
- Survey was designed in Survey Monkey and made available online and in printed form.
- The survey will be accessible until May 31<sup>st</sup>.
- This document presents the results up to 6/15/12.

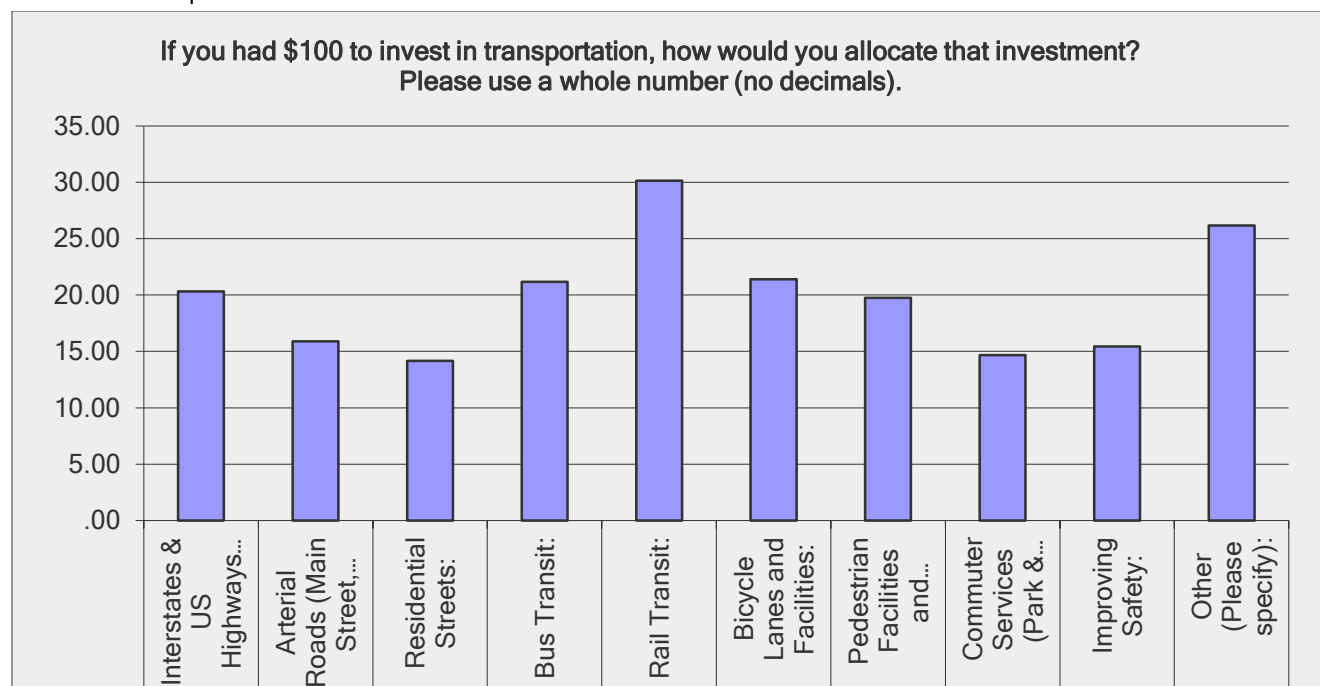
#### Results

The following sections present the results by each survey question.

##### Transportation Investment:

In order to gain input on how individuals would allocate transportation funds, we presented a question that “gave” them \$100 to invest in transportation as they saw fit. *Rail Transit* received the highest response average of **30**, while *Bus Transit* and *Bicycle Lanes and Facilities* trailed at **21** each, and *Interstates and US Highways* at **20**.

\*Note: As an oversight, there was no room provided for survey takers to specify what they would have rather had as the “Other” option.



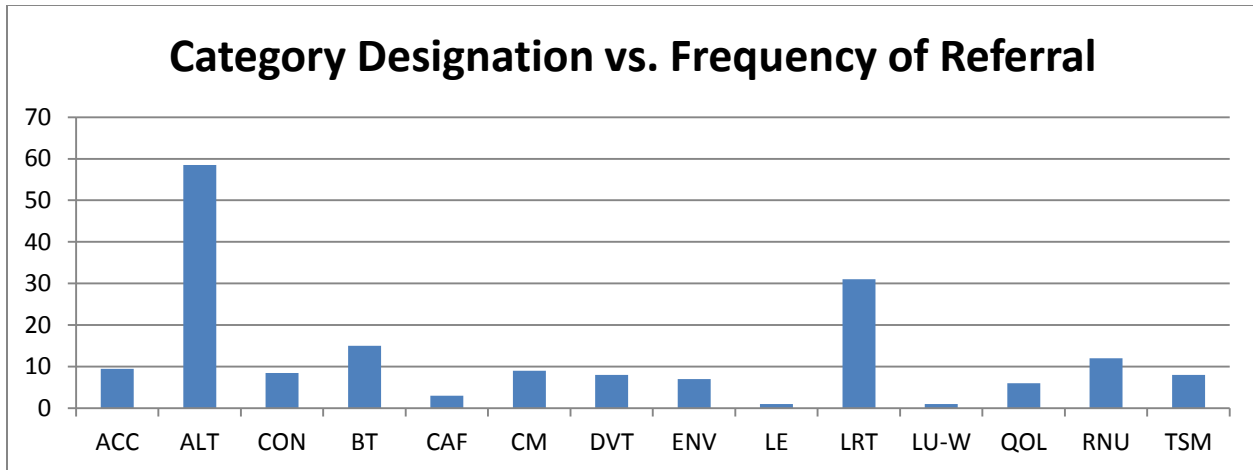
Policy and Investment Decisions:

We had survey takers rank in order of importance (1 being most important, 10 being least important) the following transportation policies in our investment decisions. Since 1 was the HIGHEST designation, the LOWER the Rating Average, the MORE IMPORTANT the category was to the public. Therefore, *Impact on Neighborhoods and Livability*, *Preservation*, and *Transportation Choices* were the three MOST IMPORTANT policies. *Congestion and Travel Time* and *Economic Development* were the two LEAST IMPORTANT. There was not a large spread in the total score between the policy choices, signifying that all the policies appear to have some support from the respondents.

Air Quality	5.08
Economic Development	6.73
<b>Preservation</b>	<b>4.92</b>
Connectivity and Convenience to Destinations	5.43
Congestion and Travel Time	6.16
<b>Impact on Neighborhoods and Livability</b>	<b>4.59</b>
Efficiency ("Bang for Your Buck")	5.99
Energy Use	5.33
<b>Transportation Choices</b>	<b>5.19</b>
Safety	5.48

Important Transportation Option:

*Alternate Transportation (ALT)* was designated the "Most Important" aspect of the transportation that needs improvement, with **33%** of the survey population agreeing. We categorized answers into the *Alternate Transportation* category if they included more than one transportation mode that was not the dominant highway mode (i.e., bus transit and bicycle/pedestrian). Further, we had categories for those who answered just one mode. The "Most Important" designations were **BT- Bus Transit** and **LRT-Light Rail Transit**.



LEGEND:	
<b>ACC:</b> Accessibility	<b>ALT:</b> Alternate Transportation (Bike/ped, bus, rail, etc.)
<b>CON:</b> Connectivity	<b>CM:</b> Congestion Management
<b>BT:</b> Bus Transit	<b>DVT:</b> Development
<b>CAF:</b> Costs and Funding	<b>ENV:</b> Environment
<b>LE:</b> Law Enforcement	<b>QOL:</b> Quality-of-Life
<b>LRT:</b> Light Rail Transit	<b>RNU:</b> Road Network Update
<b>LU-W:</b> Land Use-	<b>TSM:</b> Transportation System Management

#### How to Accommodate Future Growth:

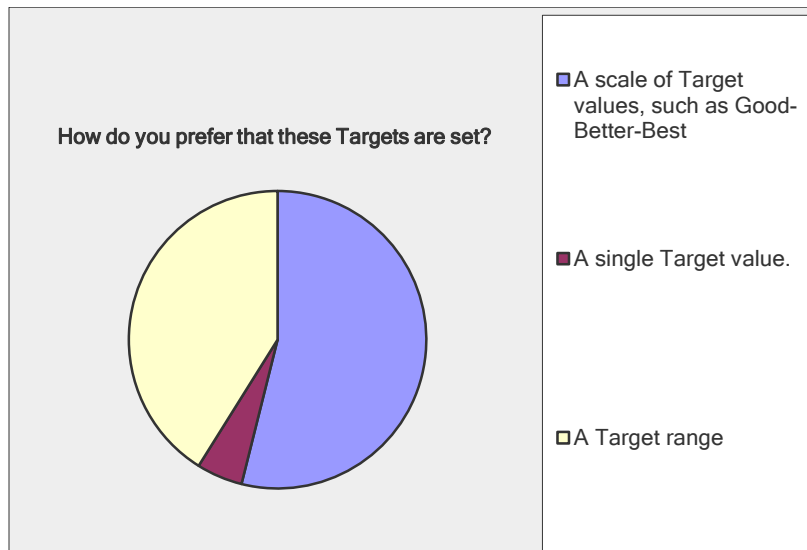
After explaining that the Triangle Area is expected to grow by nearly 1 million new residents over the next 30 years, we had respondents rank in order of importance (1 being most important, 10 being least important) the following policies to address the growing population's needs. Since 1 was the HIGHEST designation, the LOWER the Rating Average, the MORE IMPORTANT the category was to the public. The three MOST IMPORTANT policies are in bold in the following table. Those policies relate to land use, alternative transportation and transit. Policies related to highway improvements and highway funding (i.e., motor fuels tax) were the LEAST IMPORTANT.

Category	Rating Average
<i>Leveraging:</i> Leveraging private and public investment (private investment in roads, toll roads, etc.)	6.4
<i>Raise the motor fuels tax</i> to increase revenue	5.38
Encourage the use of <i>more fuel efficient vehicles</i> and <i>discourage driving.</i>	4.88
Land use changes that implement <i>more mixed-use and denser developments</i> to reduce trip lengths.	4.86
Focus on <i>increasing road capacity</i> and <i>reduce spending on bicycle, pedestrian and transit.</i>	7.54

Category	Rating Average
Permit land use design elements that support alternative transportation modes such as <i>sidewalks and grid street patterns with shorter block lengths.</i>	4.61
Support infrastructure that creates incentives to carpool and take transit.	4.62
Permit <i>more concentrated residential and employment development along key travel corridors</i> to reduce trip lengths and make transit more efficient.	5.29
<b>Increase transit capacity and investment.</b>	<b>4.81</b>
Create local ordinances that <i>require major employers to develop strategies that reduce congestion and increase transportation efficiency.</i>	5.85

### Transportation System Targets:

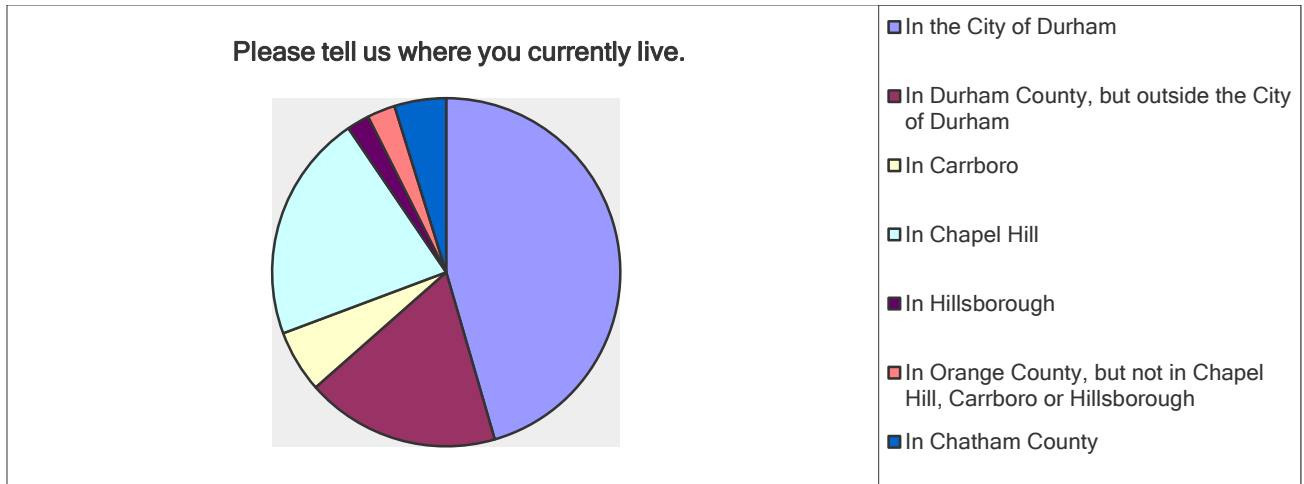
When asked about the preference of a target system for our transportation system, the majority of the survey population (**53.9%**) reported wanting “A scale of Target values, such as Good-Better-Best”, while **41.1%** reported wanting “A Target range.”



### Survey Population:

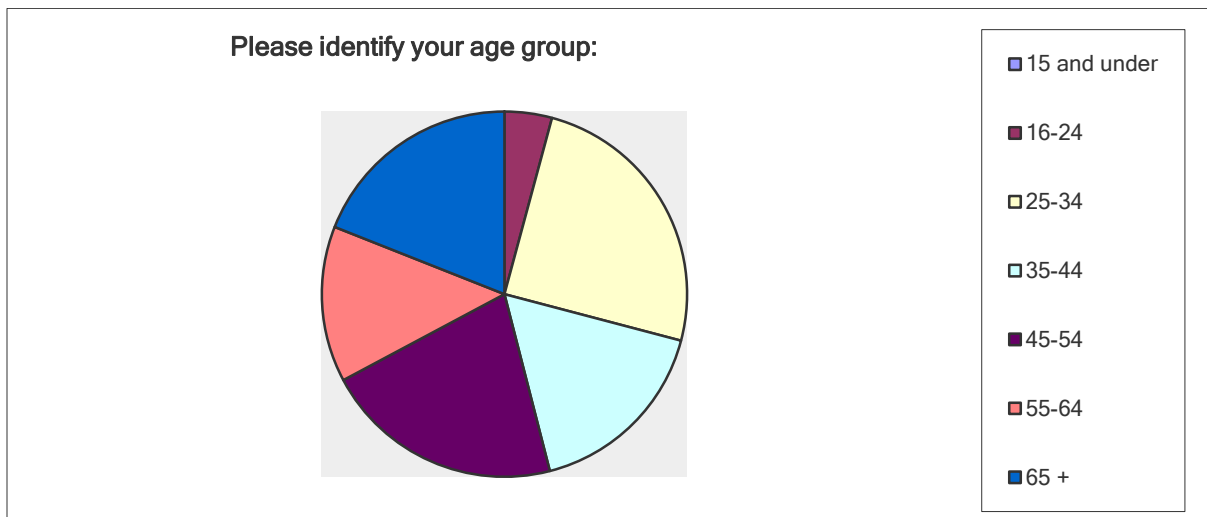
#### **RESIDENCE**

The majority of our survey population reported residing in Durham County (**63.5%**). **45.5%** of our survey population indicated residing in the City of Durham, **21.2%** reported living in Chapel Hill, and **18%** reported living in Durham County, but outside the City of Durham.



**AGE**

The age of our survey population was evenly distributed among the age categories above 25 years old. To date, we have not had any survey takers report that they were under the age of 15.



# DCHC MPO -- Goals, Objectives and Targets

## Comments

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### **Background**

The TAC released the Goals, Objectives and Targets for public comment at their March meeting. Up to this point, the public input process included four public workshops, an online survey and email comments from citizens. In addition, TAC members and local government staff have provided comments. This document provides a compilation of the comments received in time for review at the May TCC meeting. The Chapel Hill Town Council approved a resolution with proposed changes to the Goals, Objectives and Targets. A copy of the three-page resolution begins on page 5 of this document.

### **Summary and Compilation**

This section provides the complete text of all the comments received. A line separates the individual comments. In summary, the comments:

- Ask for more depth in the environmental Goals and Objectives;
- Question how Southwest Durham Drive abides by the environmental, neighborhood and disadvantaged population Objectives;
- Support walkable communities and transportation alternatives; and,
- Request specific transportation facilities.

The Chapel Hill Town Council resolution suggests additional modifications.

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#### Comment #1

1. In general I support the stated goals and objectives. However some of them, like "Protect the Environment" have such broad meaning that they lose any applicable value. They should be more specific like: "No construction or development will occur in areas designated as Significant Natural Heritage Areas"

2. Goal 6c: "Identify and protect environmental sensitive areas early in the process." It appears this did not occur in the earlier versions of the LRTP and was also omitted in the Light Rail study. It is imperative that this is done and an (preliminary) environmental impact identification is made. There will be alternatives identified in the draft proposals and an informed choice of the preferred alternative can only be made if the environmental impact is taken into consideration.

3. Goal 6a: Establish performance standards and report impacts on public health, natural environment, cultural resources and social systems.” No mention was made when and how these standards will be established.
4. I would like to suggest an additional objective: “Bike lanes on arterial roads will be separated from (adjacent to) the road-deck.”
5. Table 2 - Proposed targets for the 2040 LRTP.
  1. “VMT per Capita”. 31 in 2010. Proposed 31 in 2040. 30 would be considered good. This does not appear “good” to me.
  4. “Transit Mode share all trips”. In 2010 2.8%. Projected in 2040 2.6%. A target of 3% considered good.

If that is all we are going to get for spending 1.4 billion dollars on a Rail connection, we have to do some more thinking. My suggestion would be to replace the word “good” with “conservative” and the word “best” with “aggressive”. Leave out the column “better” as it is exactly in the middle and therefore meaningless.

Hank Rodenburg

Comment #2

April 29, 2012

Chapel Hill, N.C.

Dear Andrew Henry:

I just wanted to reiterate and share for the record some of the points made and discussed at the workshop you hosted at the Carrboro Town Hall some weeks back. These community concerns relate specifically to the LRTP Goals and Objectives, namely the following:

- Consistent with community goals and cost effective.
- Conserve natural resources.
- Encourage safe pedestrian, bicycle and vehicular travel.
- Minimize traffic intrusion in residential neighborhoods.
- Establish performance standards and report impacts on public health, natural environment, cultural resources and social systems.
- Identify and protect environmentally sensitive areas early in the planning process.
- Ensure that transportation facilities do not negatively affect disadvantaged populations disproportionately.

For starters, these goals and objectives currently have little if any depth or detail, and for them to be actionable and objective-to gain and receive community support, they require a significant degree of fleshing out and stakeholder engagement.

Since C2 for example is the preferred alternative for the LRT, I'm confused how Southwest Durham Drive (SWDD) going thru the Little Creek, a Significant Natural Heritage Area and currently following the same route as C1, would satisfy and be consistent with a "community goal, "conserve natural resources" or "identify and protect environmentally sensitive areas early in the planning process." Moving on, I'm uncertain also how SWDD going down Meadowmont Lane would fulfill the "encourage safe pedestrian...travel" or " minimize traffic intrusion in residential neighborhoods" goals, especially with an elementary school located and a residential area in its proposed path. Another concern is that what was in existence when the plans were proposed or even discussed, is not currently the situation on the ground, and this entire process must be informed by the current scope of reality, namely, the facts as they are today.

How also does SWDD going down Meadowmont Lane, in terms of the Cedar's community, "not negatively affect disadvantaged populations disproportionately"? In fact, it would affect this population disproportionately, and for that reason alone this goal does not appear informed in fact by the reality on the ground as it exists today.

These are just a few examples of how and why the goals and objectives outlined during the workshop- and the process by which they would inform the project require being far more fully informed by community and environmental realities, which, until now, does not appear part of the process.

As with all principles, procedures, goals, targets and objectives for such projects, we the community, hope and trust that the process for which the LRTP follows will be fully informed by and integrally influenced at each step of the process by detailed community and environmentally-based inputs based on today's reality. This is especially the case having gone through the process around the LRT, C1, and the Little Creek and the SNHA, which, to say the least was not fully informed by such worthy goals. What is essential is that the process be informed upstream- and eventually downstream -by well-informed, community and stakeholder-based inputs, like N.C. Department of Natural Resources, the Army Corp of Engineers, just a few examples of those who need to be at the table before such goals and objectives can be said to be more fully-informed and comprehensive.

Many thanks again for your concern and interest in community feedback.

Sincerely,  
Geoffrey D. Geist

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This section is a compilation of the comments received on the comment forms.

- Need access from East of Hillsborough for bikes and pedestrians- accessible to Orange High School Rd? St. Mary's is too busy, narrow and hilly-i.e., too dangerous. See Holly Reid.
- The way the SE Data is displayed using TAZ's that seem a little awkward/confusing based on the boundaries used. I recommend getting feedback on the known and potential development in Pittsboro from the town's planning staff. They will be able to provide more realistic information on prospects for new residential and commercial employment.
- In my opinion, creating opportunities for residents to live and work within a walkable community ought to be the 1st priority. Secondary to that, providing different options for residents to get to work should be the second most expensive item in a holistic transportation/transit budget. While this is currently needed for those who live in Durham (Triangle) now, providing these two options to the expected 1.3 million coming will be. I feel that in the mix of people moving to the Triangle very soon, a fairly significant percentage will be families from other economically challenged areas for jobs. It makes sense to me that this majority will not be bringing a lot of resources. They may have suffered from an extended period of unemployment, mortgage failures and/or environmental disasters. These circumstances will be the biggest challenge for the MPO to deal with. People with resources will find a way themselves. For the 1st folks, we need to provide planning for housing, municipal infrastructures and a place to work. Providing these close together has to be high on our list of priorities.
- Target and Sam's Club: There are bushes between bus stop and the stores. Sometimes, the driver has to use alternate stops for a female rider in a wheelchair
- Durham Station: Needs button to open bathroom doors for handicap accessibility
- Southpoint → REI Side: Big hole on sidewalk at bus stop
- Megabus needs to stop at regular bus bays
- Can't get from Durham Station to Amtrak Station in a wheelchair

*(Editor's note: this set of transit related comments were immediately forwarded to the appropriate transit staff)*

**A RESOLUTION PROVIDING THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE WITH RECOMMENDATIONS ON THE DRAFT 2040 LONG RANGE TRANSPORTATION PLAN GOALS AND OBJECTIVES AND PERFORMANCE TARGETS (2012-05-30/R-7)**

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization has begun the process for preparing the 2040 Long Range Transportation Plan; and

WHEREAS, the development and adoption of goals and objectives and performance targets will guide the development of the final 2040 Long Range Transportation Plan; and

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization has released draft 2040 Goals and Objectives and Performance Targets for public comment; and

WHEREAS, the Chapel Hill Town Council and Town Advisory Boards have reviewed the draft 2040 Goals and Objectives and Performance Targets; and

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee is expected to approve the 2040 Goals and Objectives and Performance Targets on June 13, 2012.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the Town of Chapel Hill that the Council recommends the Transportation Advisory Committee approve the draft 2040 Goals and Objectives and Performance Targets with the following modifications:

- Include consideration of how to accommodate slower moving vehicles like scooters and electric bicycles
- Include expectation that all transit vehicles can accommodate bicycles
- Provide for ongoing monitoring of bicycle and pedestrian usage.
- The overall Goals and Objectives should be developed to include specific strategies for each of the objectives.
- Goal #2: Pedestrian and Bicycle Systems should emphasize the provision of off road bicycle facilities and bike lanes.
- Goal #5: Integration of Land Use should be expanded to provide more guidance on land use patterns that support transportation choices. This section should also associate transportation funding decisions with appropriate land use plans including implementation of suggested policies for integrating land use and transit.

- Goal #6: Protection of Natural Environment and Social Systems should include an objective to evaluate environmental considerations early in project planning and development phases. This may include a form of limited Environmental Impact Statement that will assist decision makers.
- Goal #7: Public Involvement should include expanded outreach efforts to engage a broader cross section of the community during all phases of Long Range Plan development.
- Goal #9: Freight Transportation and Urban Goods movement should develop policies for freight delivery within urban centers and proposed TOD's to minimize congestion on urban streets.
- Goal 1, Overall Transportation System should include a reference to addressing the impact of changing demographics, particularly an increase in the elderly population.
- Goal 1, Overall Transportation should include expanding accessibility in addition to increased mobility.
- Objectives 3b Public Transportation and 4b Pedestrian and Bicycle should include a reference to compliance with the Americans with Disability Act.
- Goal 4, Pedestrian and Bicycle System, should emphasize community building through improved connectivity.
- Objective 4e, Pedestrian and Bicycle System should also include a reference to retrofitting existing facilities in addition to design of new facilities.
- Goal 5, Integration of Land Use and Transportation should include a definition of effective mixed use design.
- Goal 7d, Public Involvement should be revised to better define how the information will be used. The information should be reflected in the planning process and used to allocate resources.
- Goal 9, Freight Transportation should include expanded use of rail transportation.
- The Performance Targets should provide information at the county and municipal level.

- The Performance Targets should focus on selected transportation corridors to better assess the impact of public transit, bicycle and pedestrian improvements.
- Data/numerical targets for VMT, congestion, drive times, etc., should reflect the distribution of impacts rather than just dealing with averages, so that it is possible to understand better the impact of changes.
- Primary and secondary environmental impacts should be included in Section 6, Protection of Natural Environment.
- Protection of neighborhoods should be included in Section 1, Overall Transportation System.
- Section 4, Pedestrian and Bicycle System should include reference to schools and transportation
- Section 5, Integration of Land Use and Transportation should include reference between housing affordability and transit. Section should also include standards for transit oriented development.
- Section 4, Pedestrian and Bicycle System should include bicycle education.
- The Goals and Objectives section should include a discussion of how goals and objectives are balanced during decision making.
- Data for Vehicle Miles Traveled should be broken down by County and jurisdiction.
- More children walking or riding bicycle to school should be identified as a method of reducing peak congestion.
- The Metropolitan Planning Organization should analyze the impact of providing a bonus for development of brownfield sites rather than greenfield locations.

This the 30<sup>th</sup> day of May, 2012.

## Goals and Objectives.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization's goals and objectives are:

### 1. Overall Transportation System

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

Objectives:

- a) Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services, activities, and destinations.
- b) Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.
- c) Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.
- d) Promote non-automobile transportation alternatives and create efficient connections between all transportation modes.
- e) Conserve natural resources and reduce the rate of energy consumption.
- f) Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.
- g) Use transportation funds based on the priority needs of the urban area, in keeping with community values.
- h) Seek additional funding and funding sources to ensure implementation of the long range plan.
- i) Monitor the implementation of the Plan and the targets through the biannual TIP process.
- j) Ensure that the transportation needs are met for all populations, especially for the youth and elderly, the mobility impaired, and the economically disadvantaged.
- k) Work cooperatively with the North Carolina Department of Transportation, neighboring Metropolitan Planning Organizations and Rural Planning Organizations and other transportation-related organizations to address the transportation issues of the broader region.

### 2. Multi-Modal Street and Highway System

Goal: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system.
- b) Create multi-modal street patterns that: encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity.
- c) Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.

- d) Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods.
- e) Identify and recommend design standards that: establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system.

### 3. Public Transportation System

**Goal:** A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the public transportation system.
- b) Increase public transit ridership by enlarging the service area and increasing the frequency of service within the urban area.
- c) Coordinate transit service within the urban area by promoting high quality, seamless, integrated, and customer-friendly service.
- d) Expand ridesharing, carpool, and vanpool services and opportunities.
- e) Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.
- f) Develop and implement the Regional Transit Plan.
- g) Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing.

### 4. Pedestrian and Bicycle System

**Goal:** A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes off-road trails

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.
- b) Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.
- c) Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs.
- d) Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit.
- e) Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of every roadway and development project, including the connection to external transportation facilities, in accordance with bicycle and pedestrian plans and local ordinances.
- f) Increase education about the benefits of pedestrian and bicycle alternatives.
- g) Support the enforcement of pedestrian and bicycle regulations.
- h) Pursue strong funding commitment for building both pedestrian and bicycle facilities.
- i) Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.

- j) Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs.

## 5. Integration of Land Use and Transportation

**Goal:** A Transportation Plan that is integrated with local land use plans and development policies.

**Objectives:**

- a) Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies.
- b) Create transportation systems that enhance the livability of all communities.
- c) Identify the impacts of different land use patterns and site designs on travel behavior.
- d) Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities.
- e) Identify and recommend land use patterns, parking requirements and development policies that increase overall mobility and that improve and support transportation efficiency, and compact, mixed-use, transit-friendly, and walkable development

## 6. Protection of Natural Environment and Social Systems

**Goal:** A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.

**Objectives:**

- a) Establish performance standards and report on transportation impacts on the public health, natural environment, cultural resources, and social systems.
- b) Protect and preserve archaeological, historic, and culturally valuable areas.
- c) Identify and protect environmentally sensitive areas early in the planning process.
- d) Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT).
- e) Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation.
- f) Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area.
- g) Ensure that transportation facilities do not negatively affect disadvantaged populations disproportionately.
- h) Develop and implement a transportation system that supports the reduction of greenhouse gases and carbon production and is coordinated with local greenhouse gas and carbon reduction plans.

## 7. Public Involvement

**Goal:** An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.

**Objective:**

- a) Establish performance standards and report on the effectiveness of the public involvement element of the Transportation Plan.

- b) Encourage a broad cross section of citizens to take a proactive role in the transportation policy and planning process.
- c) Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.
- d) Determine the public's knowledge of the metropolitan transportation system, and public values, attitudes and concerns regarding transportation.
- e) Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle.

## 8. Safety and Security

Goal: Continue to improve transportation safety and ensure the security of the transportation system.

Objective:

- a) Reduce fatality, injury, and crash/incident rates on all modes.
- b) Reduce vulnerability of transportation facilities/users to terrorists, natural disasters and risks by implementing and monitoring an evacuation plan, and working with the regional emergency management team.
- c) Reduce economic losses due to transportation crashes and incidents.
- d) Improve the ability to identify high accident locations, and evaluate their impacts in TIP project prioritization.
- e) Provide a safe environment for transportation users through the "3 Es" (Engineering, Enforcement and Education).
- f) Increase transit safety and security for riders and employees.

## 9. Freight Transportation and Urban Goods Movement

Goal: Improve mobility and accessibility of freight and urban goods movement.

Objective:

- a) Relieve congestion on heavily-traveled truck routes.
- b) Improve mobility and access to intermodal operations and facilities.
- c) Establish and designate truck routes consistent with federal, state and local regulations.

## Development of Performance Targets

As part of the same process for creating the Goals and Objectives, the DCHC MPO develops a set of performance targets to provide a set of broadly based quantitative measures that evaluate the transportation plan from several different perspectives. The targets mostly use measurements from the Triangle Regional Model (the region's travel demand model), such as the miles traveled, trips taken, congestion levels, and mode split (between automobiles, transit, bicycling and walking).

The targets that the MPO seeks to achieve with its transportation investments are shown in the tables below. Table 1 shows the measures and targets from the 2035 LRTP report and Table 2 has the proposed targets for the 2040 LRTP. The final measures from the adopted 2040 LRTP will be compared to these targets in the final 2040 LRTP report.

The values in the tables are used as follows:

Comparison Data – this information provides contextual values for comparing the 2040 LRTP and Target values:

- 2005 and 2010 – This is the current condition. It is the 2005 or 2010 population and employment using the 2005 or 2010 transportation network (e.g., highways and transit service).
- 2035 E+C and 2040 E+C – This is the no-build condition, or “Existing plus Committed” (E+C). It is the 2035 and 2040 SE Data using the existing transportation network.
- 2035 LRTP and 2040 – This is the 2035 and 2040 SE Data using the 2035 LRTP network. In the first table, these are the values from the final 2035 LRTP report. In the second table, it is the 2035 SE Data adjusted with a five-year growth cycle to reflect the 2040 horizon year.

Targets – There are three Target values, Good, Better and Best. The use of more than one Target value helps to set a range of values that can be used for comparison.

Table 1 – Targets from 2035 LRTP

No.	Mobility Targets	Comparison Data		2035 LRTP	Targets		
		2005	2035 E+C		Good	Better	Best
1	VMT Per Capita (daily miles)	28.5	31.6	32.0	29.1	27.5	24.5
2	Percent of Peak Period VMT at Congestion (V/C > 1)	3.0%	10.4%	3.7%	12%	8%	4%
3	Average Travel Time: all peak trips (daily minutes)	16.6	20.5	18.3	19	17	15
4	Transit Mode Share: all trips	2.4%	2.3%	3.3%	3.0%	5.0%	8.0%
5	Percent SOV Trip Share: work trips	81.8%	82.3%	81.2%	78.4%	74.3%	66.0%
6	Percent Non-motorized Trip Share: all trips	7.1%	6.8%	6.8%	9%	11%	15%
7	Greenhouse Gas Change (community target)			+49%	-10%	-20%	-30%
8	Cost of Congestion (in million \$)	\$351	\$1,211	\$496	1,030	848	666
9	Percent of EJ Population within 1/4 mile of transit	58%	59%	85%	65%	75%	85%

In Table 2 below, several measures will likely change as staff has time to run additional travel demand models and receives feedback from the TAC and public:

- Percent of Peak Period VMT at Congestion – The precipitous climb from 2010 (3%) to 2040E+C (24%) appears too large when compared with changes among the other Targets in the table. Therefore an alternative is suggested that uses a more reliable measure – Percent of population whose average trip time is greater than fifteen minutes (all trips).
- Average Travel Time – The very slight increase from 2010 (14.3) to 2035 (14.1) runs counter to the large increase in congestion, and does not match the increase in the 2035 LRTP table.
- Transit Mode Share – The values released for public comment were 3%, 5% and 7%. The new values in the table below are more aggressive.
- Greenhouse Gas Change – The community target for the Durham Greenhouse Gas Local Action Plan, adopted in 2007, is to reduce emissions by 30% from 2005 by 2030. This was proposed to be achieved through a combination of local, state, and federal actions. For transportation, many of the most effective measures are state and federal actions (vehicle technology and fuel efficiency standards for example). With no action, emissions from transportation were projected to increase by 56% from 2005 to 2030. This is a significant increase and it is important to note that it is based on total emissions (not per capita). In the 2007 Durham plan, three scenarios (good, better, and best) were proposed that showed what could be achieved through local action alone. These scenarios showed a 48% increase (good), a 41% increase (better), and a 34% increase (best). The analysis of the 2035 LRTP showed that we increased emissions by 49% from 2005 to 2035. MPO staff proposes using the targets established in the 2007 Durham plan that can be achieved through local action alone. While these targets are not as inspiring as the -10%, -20%, and -30% targets proposed for the 2035 LRTP, they are more realistic for what can be achieved through the LRTP such as through changes in the transportation network, land use patterns, and pricing/tolling.

An alternative is proposed to the measure explained in the preceding paragraph; the alternative measure is “annual per capita emissions from transportation sector (in tons).” This measure helps to control for the growing population and employment base and focuses on a sector that can be influenced by MPO policy, i.e., the transportation sector.

- Cost of Congestion – The growing population will likely increase this value even if the level of service improves. It would be better to use a “per capita” value for this Target.
- Percent of Minority and Low-Income Population within 1/4 mile of transit – The 2010 U.S. Census did not use a so-called long form, and as a result, income data is only available through the American Community Survey (ACS) process from which staff is not able to create a single Target. Thus this Target has been split into a minority measure and a low-income measure.

Table 2 – Proposed Targets for 2040 LRTP

No.	Mobility Targets	Comparison Data			Targets		
		2010	2040 E+C	2040	Good	Better	Best
1	VMT Per Capita (daily miles)	31	31	31	30	29	28
2	Percent of Peak Period VMT at Congestion (V/C > 1)	3%	24%	10%	9%	7%	5%
2 alt.	Percent of population whose avg trip time is greater than 15 minutes (all trips)	27%	44%	28%	25%	22%	20%
3	Average Travel Time: all peak trips (daily minutes)	15	16	15	14	13	12
4	Transit Mode Share: all trips	2.8%	2.2%	2.6%	5%	7%	10%
5	Percent SOV Trip Share: work trips	81%	80%	79%	78%	75%	72%
6	Percent Non-motorized Trip Share: all trips	10%	11%	12%	13%	14%	16%
7	Greenhouse Gas Change (community target)			49%*	48.0%	41%	34%
7 alt.	Greenhouse Gas : annual per capita emissions from transportation sector (in tons)	9.6	9.5		9.0	8.6	8.1
8	Cost of Congestion (daily; in million \$)	\$0.62	\$3.2	\$1.9	\$1.8	\$1.5	\$1.2
9	Percent of Minority/Low Income Population within 1/4 mile of transit	64%/67%	64%/67%	78%/78%	80%	85%	90%

\*49% represents the increase in emissions from 2005 to 2035 from the evaluation of the 2035 LRTP. An analysis of the 2040 modeling results has not been done. However, it is likely similar to the 2035 LRTP results.

# Durham-Chapel Hill-Carrboro Metropolitan Planning Organization

## Key Targets for the 2040 LRTP

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### What is the 2040 LRTP?

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) performs the long-range transportation planning for Durham County and parts of Orange County and Chatham County. The DCHC MPO is developing their 2040 Long Range Transportation Plan (2040 LRTP) which will identify the highway, transit, pedestrian and other transportation projects to be implemented, maintained and operated over the next twenty-nine years in the MPO's planning area.

### What are the Targets?

The DCHC MPO has identified a list of Targets that will be used to evaluate the extent to which the adopted 2040 LRTP meets the MPO's goals and objectives. These Targets use measurements from the Triangle Regional Model (a travel demand model), such as the miles traveled, trips taken, congestion levels, and mode split (between automobiles, transit, bicycling and walking), to compare the Target value and the value generated by the 2040 LRTP.

### What are the Key Targets?

The Key Targets are a subset of a larger table of Targets. These nine Key Targets represent a broad spectrum of the various types of measurements and provide a general overview of the represented measurement. In addition, this Key Targets document identifies the reasons the Target is important and what changes need to be made in land use, transportation and other policies to meet the Target. This presentation is intended for the citizens, public officials and staff who are interested in transportation issues but do not need the details of the complete table.

### What is the Guide Data?

The Targets have Guide Data for two scenarios to help set the Target values:

- 2010 – This is the current condition. It is the 2010 population and employment using the 2010 transportation network (e.g., highways and transit service). This is the 2010 column and value in the charts.
- 2040e+c – This is the 2040 population and employment using the existing transportation network plus any projects that are committed to being completed. This is the 2040e+c column and value in the charts.
- 2035 – This shows how a major transportation investment might affect the Target value. It is the 2040 population and employment using the 2035 transportation network, which is budgeted at over \$8 billion and includes light rail and High Occupancy Vehicle (HOV) lanes. This is the 2035 column and value in the charts.

## **What is the Target Range?**

There are three Target values -- Good, Better and Best. The use of more than one Target value helps to set a range of values that can be used for comparison.

## **Additional Information**

Additional information, including a table of the complete list of Targets, is available at the DCHC MPO's Web site – [www.dhcmpo.org](http://www.dhcmpo.org).

You can also contact:

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Durham, NC 27701

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[andrew.henry@durhamnc.gov](mailto:andrew.henry@durhamnc.gov)

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## 2040 LRTP and CTP Targets

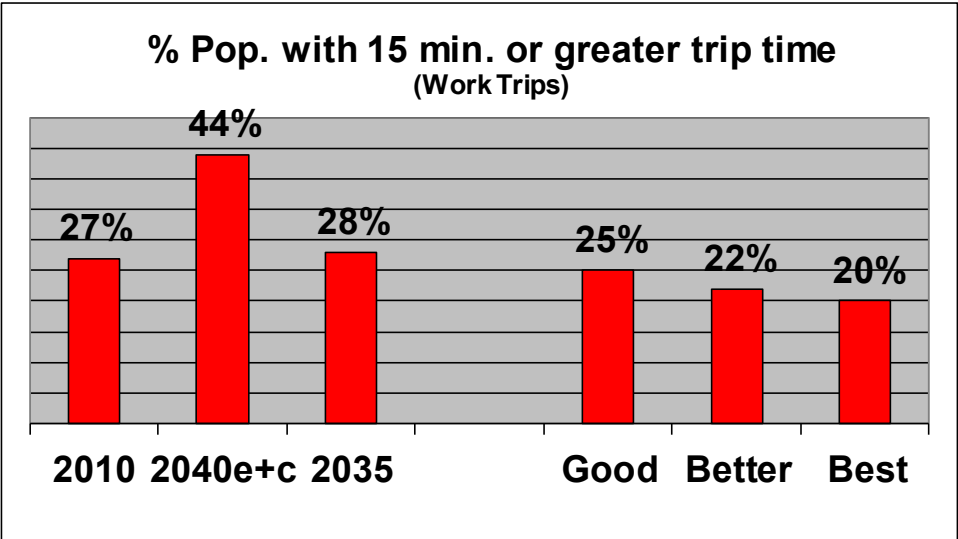
### ↓ Reduce Vehicle Miles Traveled (VMT)

Why Reduce VMT?	How to Reduce VMT?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce pollutant emissions</u> – Triangle Region is on federal non-attainment and maintenance plan for ozone and carbon monoxide, respectively.</li> <li>▪ <u>Minimize congestion</u> – Bi-annual mobility report lists Triangle Region among those areas with the fastest growing traffic congestion.</li> <li>▪ <u>Relieve transportation demand</u> – NCDOT study concludes that Triangle Region transportation needs will outpace revenues by several billion dollars over next few decades.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Encourage transit use, carpooling, walking and bicycling.</li> <li>▪ <u>Land Use</u> – Permit more concentrated residential and employment development along key travel corridors.</li> <li>▪ <u>Land Use</u> – Permit more mixed-use development.</li> </ul>	<div style="text-align: center;"> <h4>Vehicle Miles Traveled (Daily per capita)</h4> <table border="1" style="margin: 0 auto; border-collapse: collapse;"> <thead> <tr> <th>Year/Scenario</th> <th>Vehicle Miles Traveled (Daily per capita)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>31</td> </tr> <tr> <td>2040e+c</td> <td>31</td> </tr> <tr> <td>2035</td> <td>31</td> </tr> <tr> <td>Good</td> <td>30</td> </tr> <tr> <td>Better</td> <td>29</td> </tr> <tr> <td>Best</td> <td>28</td> </tr> </tbody> </table> </div>	Year/Scenario	Vehicle Miles Traveled (Daily per capita)	2010	31	2040e+c	31	2035	31	Good	30	Better	29	Best	28
Year/Scenario	Vehicle Miles Traveled (Daily per capita)															
2010	31															
2040e+c	31															
2035	31															
Good	30															
Better	29															
Best	28															

Method: From the Triangle Regional Model (TRM), the total daily vehicle miles are divided by the total population of the TRM area.

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**↓ Reduce Congestion (Percent of Population with 15 minute or greater trip time)**

Why Reduce Congestion?	How to Reduce Congestion?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce Travel Costs</u> – Mobility Report concludes annual congestion cost is \$537 per commuter in Triangle.</li> <li>▪ <u>Reduce Travel Time</u> – Mobility Report estimates 25 hours of annual delay per commuter in Triangle.</li> <li>▪ <u>Reduce Pollution</u> – Congestion reduces travel speed and increases pollution.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Encourage transit use, carpooling, walking and bicycling.</li> <li>▪ <u>Transportation</u> – Implement Congestion Management Program practices such as traffic signal synchronization and spot improvements at traffic bottlenecks.</li> <li>▪ <u>Transportation</u> – Increase highway, transit and other transportation mode capacity, especially along critical corridors.</li> <li>▪ <u>Land Use</u> – Permit more mixed-use development.</li> <li>▪ <u>Design</u> – Permit design elements that support alternative transportation modes such as sidewalks and grid street patterns with shorter block lengths.</li> </ul>	<div style="text-align: center;"> <p><b>% Pop. with 15 min. or greater trip time (Work Trips)</b></p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Data for % Pop. with 15 min. or greater trip time (Work Trips)</caption> <thead> <tr> <th>Year/Target</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>27%</td> </tr> <tr> <td>2040e+c</td> <td>44%</td> </tr> <tr> <td>2035</td> <td>28%</td> </tr> <tr> <td>Good</td> <td>25%</td> </tr> <tr> <td>Better</td> <td>22%</td> </tr> <tr> <td>Best</td> <td>20%</td> </tr> </tbody> </table> </div>	Year/Target	Percentage	2010	27%	2040e+c	44%	2035	28%	Good	25%	Better	22%	Best	20%
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Method: From the Triangle Regional Model (TRM), the vehicle miles traveled during peak periods that are on roadway links with a volume-to-capacity ratio that exceeds “1” (i.e., traffic exceeds the roadway capacity) is divided by the total vehicle miles traveled in peak periods.

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**Reduce Cost of Congestion**

Why Reduce Congestion Cost?	How to Reduce Congestion Cost?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce Travel Costs</u> – Mobility Report concludes annual congestion cost is \$537 per peak hour traveler in Triangle.</li> <li>▪ <u>Reduce Travel Time</u> – Mobility Report estimates 25 hours of annual delay per peak traveler in Triangle</li> <li>▪ <u>Reduce Pollution</u> -- Congestion reduces travel speed and increases pollution.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Encourage transit use, carpooling, walking and bicycling.</li> <li>▪ <u>Transportation</u> – Implement Congestion Management Program practices such as traffic signal synchronization and spot improvements at traffic bottlenecks.</li> <li>▪ <u>Transportation</u> – Increase highway, transit and other transportation mode capacity, especially along critical corridors.</li> <li>▪ <u>Land Use</u> – Permit more mixed-use development.</li> <li>▪ <u>Design</u> – Permit design elements that support alternative transportation modes such as sidewalks and grid street patterns with shorter block lengths.</li> </ul>	<div style="text-align: center;"> <p><b>Cost of Congestion (daily, in \$ millions)</b></p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th>Year/Scenario</th> <th>Cost (\$ millions)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>\$0.6</td> </tr> <tr> <td>2040e+c</td> <td>\$3.2</td> </tr> <tr> <td>2035</td> <td>\$1.9</td> </tr> <tr> <td>Good</td> <td>\$1.8</td> </tr> <tr> <td>Better</td> <td>\$1.5</td> </tr> <tr> <td>Best</td> <td>\$1.2</td> </tr> </tbody> </table> </div>	Year/Scenario	Cost (\$ millions)	2010	\$0.6	2040e+c	\$3.2	2035	\$1.9	Good	\$1.8	Better	\$1.5	Best	\$1.2
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Method: From the Triangle Regional Model (TRM), the total daily hours of vehicle and truck delay is multiplied by the cost of time, which is \$16.30 and \$88.12, respectively (from Texas Transportation Institute -- TTI). A vehicle occupancy factor accounts for multiple persons per vehicle and a TTI method accounts for wasted gas consumption.

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**↓ Reduce Travel Time (Average Peak Travel Time)**

Why Reduce Travel Time?	How to Reduce Travel Time?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce In-Vehicle Time</u> – Travel model estimates that the average peak-hour travel time in the western Triangle will increase 22% from 2005 to 2035.</li> <li>▪ <u>Reduce Greenhouse Gases</u> – Longer vehicle trips produce greater amounts of greenhouse gases that contribute to global warming.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Implement Congestion Management Program practices such as traffic signal synchronization and spot improvements at traffic bottlenecks.</li> <li>▪ <u>Transportation</u> – Increase highway, transit and other transportation mode capacity.</li> <li>▪ <u>Land Use</u> – Permit more mixed-use development.</li> </ul>	<div style="text-align: center;"> <p><b>Average Peak Travel Time (minutes)</b></p> <table border="1" style="margin: 0 auto; border-collapse: collapse;"> <thead> <tr> <th>Year/Target</th> <th>Average Peak Travel Time (minutes)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>15</td> </tr> <tr> <td>2040e+c</td> <td>16</td> </tr> <tr> <td>2035</td> <td>15</td> </tr> <tr> <td>Good</td> <td>14</td> </tr> <tr> <td>Better</td> <td>13</td> </tr> <tr> <td>Best</td> <td>12</td> </tr> </tbody> </table> </div>	Year/Target	Average Peak Travel Time (minutes)	2010	15	2040e+c	16	2035	15	Good	14	Better	13	Best	12
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Method: From the Triangle Regional Model (TRM), the average travel time for trips in the peak period is calculated.

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**Reduce Single-Occupied Vehicle (SOV) Share (Work Trips)**

Why Decrease SOV Share?	How to Decrease SOV Share?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce Congestion</u> – SOV contributes to congestion, which wastes time, fuel and money.</li> <li>▪ <u>Reduce Pollution</u> – SOV contributes to air pollutants. Triangle Region is on federal maintenance plan for carbon monoxide and ozone.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Increase support for Transportation Demand Management programs such as carpooling, vanpooling, and company-based rideshare efforts.</li> <li>▪ <u>Transportation</u> – Support infrastructure that creates incentives to rideshare such as HOT (high occupancy vehicle/toll) and park-and-ride facilities.</li> <li>▪ <u>Ordinance</u> – Create local ordinances that support ridesharing.</li> <li>▪ <u>Land Use</u> – Permit more concentrated employment development that enables easier ride matching.</li> <li>▪ <u>Design</u> – Permit design elements that support ridesharing such as convenient drop off points.</li> </ul>	<div style="text-align: center;"> <p><b>SOV Mode Share (Work Trips)</b></p> <table border="1" style="margin: 0 auto; border-collapse: collapse;"> <thead> <tr> <th>Scenario</th> <th>SOV Mode Share (%)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>81%</td> </tr> <tr> <td>2040e+c</td> <td>80%</td> </tr> <tr> <td>2035</td> <td>79%</td> </tr> <tr> <td>Good</td> <td>78%</td> </tr> <tr> <td>Better</td> <td>75%</td> </tr> <tr> <td>Best</td> <td>72%</td> </tr> </tbody> </table> </div>	Scenario	SOV Mode Share (%)	2010	81%	2040e+c	80%	2035	79%	Good	78%	Better	75%	Best	72%
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Better	75%															
Best	72%															

Method: From the Triangle Regional Model (TRM), work trips in single-occupied vehicles are divided by all work trips.

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**↑ Increase Percent Non-Motorized Trip Share (All Trips)**

Why Increase Non-Motorized Share?	How to Increase Non-Motorized Share?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Reduce Pollution</u> – Motorized vehicles are major emitters of carbon monoxide, nitrogen oxides (ozone precursor), carbon dioxide (greenhouse gas), particulate matter and several other toxics that are linked to increased health ailments and global warming.</li> <li>▪ <u>Reduce Congestion</u> – The percent of congested peak travel miles in the Triangle has risen from 13% to 49%, between 1982 and 2010. Bicycle and walking trips can replace vehicle trips to help abate the growing vehicle congestion problem.</li> <li>▪ <u>Support Personal Health</u> – Lack of exercise is a leading contributor to the obesity epidemic in the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Increase investment in bicycle and pedestrian facilities and programs.</li> <li>▪ <u>Transportation</u> – Require bicycle and pedestrian facilities on new and improved roadways, as appropriate.</li> <li>▪ <u>Ordinance</u> – Require bicycle and pedestrian facilities and supportive design in new and renovated developments.</li> <li>▪ <u>Land Use</u> – Permit more concentrated residential and employment development along key travel corridors.</li> <li>▪ <u>Land Use</u> – Permit more mixed-use development.</li> <li>▪ <u>Land Use</u> – Encourage shorter block lengths and greater roadway connectivity.</li> </ul> <p><small><u>Method:</u> From Triangle Regional Model (TRM), total bicycle and pedestrian trips divided total trips for all modes.</small></p>	<div style="text-align: center;"> <p><b>Non-Motorized Trip Share (All Trips)</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Non-Motorized Trip Share (All Trips) Data</caption> <thead> <tr> <th>Year/Scenario</th> <th>Share (%)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>10%</td> </tr> <tr> <td>2040e+c</td> <td>11%</td> </tr> <tr> <td>2035</td> <td>12%</td> </tr> <tr> <td>Good</td> <td>13%</td> </tr> <tr> <td>Better</td> <td>14%</td> </tr> <tr> <td>Best</td> <td>16%</td> </tr> </tbody> </table> </div>	Year/Scenario	Share (%)	2010	10%	2040e+c	11%	2035	12%	Good	13%	Better	14%	Best	16%
Year/Scenario	Share (%)															
2010	10%															
2040e+c	11%															
2035	12%															
Good	13%															
Better	14%															
Best	16%															

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**↑ Increase Transit Mode Share (All Trips)**

Why Increase Transit Mode Share?	How to Increase Transit Mode Share?	Trends and Targets														
<ul style="list-style-type: none"> <li>▪ <u>Provide Transportation Alternatives</u> – Approximately 6% of households do not own a vehicle, and carless households have increased at twice the rate of other households.</li> <li>▪ <u>Reduce Congestion</u> – Congestion wastes time, fuel and money.</li> <li>▪ <u>Reduce Pollution</u> – Triangle Region has difficulty meeting carbon monoxide, ozone, and greenhouse gases standards. Using transit instead of driving a single-occupied-vehicle reduces overall pollution emissions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Increase transit capacity and investment.</li> <li>▪ <u>Land Use</u> – Permit more concentrated residential and employment development along key travel corridors that have transit and adjacent to proposed transit station areas.</li> <li>▪ <u>Design</u> – Encourage the type of scale, building orientation, connections, public spaces, parking, amenities and other design elements that support transit.</li> </ul>	<div style="text-align: center;"> <p><b>Transit Mode Share (All Trips)</b></p> <table border="1" style="margin: 0 auto; border-collapse: collapse;"> <thead> <tr> <th>Year/Target</th> <th>Transit Mode Share (%)</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>2.8%</td> </tr> <tr> <td>2040e+c</td> <td>2.2%</td> </tr> <tr> <td>2035</td> <td>2.6%</td> </tr> <tr> <td>Good</td> <td>5.0%</td> </tr> <tr> <td>Better</td> <td>7.0%</td> </tr> <tr> <td>Best</td> <td>10.0%</td> </tr> </tbody> </table> </div>	Year/Target	Transit Mode Share (%)	2010	2.8%	2040e+c	2.2%	2035	2.6%	Good	5.0%	Better	7.0%	Best	10.0%
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Method: From the Triangle Regional Model (TRM), total transit trips are divided by total trips for all modes.

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# ↑ Increase Percent of Minority and Low Income Population within One-Quarter Mile of Transit

Why Increase Transit Access?	How to Increase Transit Access?	Trends and Targets																												
<ul style="list-style-type: none"> <li>▪ <u>Provide opportunity</u> – Approximately 6% of households do not own a vehicle, and carless households have increased at twice the rate of other households.</li> <li>▪ <u>Reduce Congestion</u> – Congestion wastes time, fuel and money, and contributes to air pollutants. Transit use can help reduce roadway congestion.</li> <li>▪ <u>Support Personal Health</u> – Lack of exercise is a leading contributor to the obesity epidemic in the U.S. Transit use has shown to induce bicycling and walking trips.</li> <li>▪ <u>Reverse Transit Disinvestment</u> – Triangle transit investment lags behind comparable regions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Transportation</u> – Increase transit routes and service levels.</li> <li>▪ <u>Transportation</u> – Increase transit investment.</li> <li>▪ <u>Land Use</u> – Permit more concentrated residential and employment development along key travel corridors that best support transit.</li> <li>▪ <u>Design</u> – Encourage transit-supportive scale, building orientation, connections, public spaces, parking, amenities and other design elements along transit corridors and station areas.</li> </ul> <p><u>Method:</u> Using geographic information software, U.S. Census data (block group level) of minority and low-income households is compared to the current and planned (2035 LRTP) transit network.</p>	<div style="text-align: center;"> <h3>Percent of Minority &amp; Low Income Within 1/4 Mile of Transit</h3> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Percent of Minority &amp; Low Income Within 1/4 Mile of Transit</caption> <thead> <tr> <th>Year</th> <th>Good</th> <th>Better</th> <th>Best</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>64%</td> <td>67%</td> <td>67%</td> </tr> <tr> <td>2040e+c</td> <td>64%</td> <td>67%</td> <td>67%</td> </tr> <tr> <td>2035</td> <td>78%</td> <td>78%</td> <td>78%</td> </tr> <tr> <td>Good</td> <td>80%</td> <td>80%</td> <td>80%</td> </tr> <tr> <td>Better</td> <td>85%</td> <td>85%</td> <td>85%</td> </tr> <tr> <td>Best</td> <td>90%</td> <td>90%</td> <td>90%</td> </tr> </tbody> </table> </div>	Year	Good	Better	Best	2010	64%	67%	67%	2040e+c	64%	67%	67%	2035	78%	78%	78%	Good	80%	80%	80%	Better	85%	85%	85%	Best	90%	90%	90%
Year	Good	Better	Best																											
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Better	85%	85%	85%																											
Best	90%	90%	90%																											

Draft

**↓ Reduce Greenhouse Gases (annual per capita emissions from transportation sector – in tons)**

Why Reduce Greenhouse Gases?	How to Reduce Greenhouse Gases?	Trends and Targets												
<ul style="list-style-type: none"> <li>▪ <b>Support Environment</b> – Greenhouse gases are causing global warming. An estimated 39% of the greenhouse gases in Durham County are from the vehicle emissions.</li> <li>▪ <b>Reduce Pollution</b> – Greenhouse gas emissions are accompanied by other pollutants such as carbon monoxide, nitrogen oxides (ozone precursor), and particulate matter that are linked to increased health ailments.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Local Initiative</b> – Support efforts of Durham greenhouse gas local action plan.</li> <li>▪ <b>Land Use</b> – Permit more concentrated residential and employment development along key travel corridors. Study concludes that 10% density increase results in 4.3% emissions reduction in urban areas.</li> <li>▪ <b>Land Use</b> – Permit more mixed-use development.</li> <li>▪ <b>Transportation</b> – Increase investment and ordinance support for bicycle and pedestrian facilities and programs.</li> </ul>	<div style="text-align: center;"> <p><b>Greenhouse Gas Change</b> (annual per capita emissions from transportation sector - in tons)</p> <table border="1" style="margin: 0 auto; border-collapse: collapse;"> <thead> <tr> <th>Year</th> <th>2010</th> <th>2040e+c 2035</th> <th>Good</th> <th>Better</th> <th>Best</th> </tr> </thead> <tbody> <tr> <td>Annual per capita emissions (tons)</td> <td>9.6</td> <td>9.5</td> <td>9.0</td> <td>8.6</td> <td>8.1</td> </tr> </tbody> </table> </div>	Year	2010	2040e+c 2035	Good	Better	Best	Annual per capita emissions (tons)	9.6	9.5	9.0	8.6	8.1
Year	2010	2040e+c 2035	Good	Better	Best									
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Method: These goals are based on the portion of greenhouse gas emitted from the transportation section and under the control of the locality.

## **DCHC MPO Goals and Objectives**

### **Chapel Hill Town Council Resolution**

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The Chapel Hill Town Council adopted a resolution at their meeting on May 30, 2012 to provide feedback to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) on the MPO's draft Goals and Objectives. This document presents each of the bullet points from the resolution and an indented note describes how the MPO staff proposes to address each one. Staff has added the numbering system to facilitate referencing.

In many cases, the suggested point is a specific policy or action that is already included in the Goals and Objectives by a more general statement. Staff believes that the relatively more general statements of the Goals and Objectives helps to maintain the decision-making of the MPO's policy board and the flexibility to address transportation challenges on a case-by-case basis.

1. Include consideration of how to accommodate slower moving vehicles like scooters and electric bicycles.

No changes to Goals and Objectives are recommended. These modes are already included in 1c "maintain multimodal regional transportation," Objective 1d "promote non-automobile transportation," Objective 2b "create multimodal street patterns," and Objective 2e "recommend design standards that... increase bicycle usage."

2. Include expectation that all transit vehicles can accommodate bicycles.

No changes to Goals and Objectives are recommended. This suggestion is already included in 1d "create efficient connections between all transportation modes," and Objective 4d "develop a regional bicycle and pedestrian policy that... provides for access to public transit."

3. Provide for ongoing monitoring of bicycle and pedestrian usage.

No changes to Goals and Objectives are recommended. This suggestion is already included in 4a "Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system."

4. The overall Goals and Objectives should be developed to include specific strategies for each of the objectives.

The inclusion of specific strategies is beyond the scope of the Goals and Objectives, and therefore no changes are recommended.

5. Goal #4: Pedestrian and Bicycle Systems should emphasize the provision of off road bicycle facilities and bike lanes.

No changes to Goals and Objectives are recommended. Goal #4 specifically states that references to bicycle facilities “includes off-road trails,” and the Goals and Objectives does not identify any specific mode as a priority over other modes.

6. Goal #4g should include enforcement of regulations for motor vehicles in addition to pedestrians and bicyclists.

Change Objective 4g to read as follows (addition is underlined) – “Support the enforcement of motor vehicle, pedestrian and bicycle regulations.”

7. Goal #5: Integration of Land Use should be expanded to provide more guidance on land use patterns that support transportation choices. This section should also associate transportation funding decisions with appropriate land use plans including implementation of suggested policies for integrating land use and transit.

No changes are recommended. Objective 5e already encompasses guidance on land uses that support transportation choices. The Objective reads, “identify and recommend land use patterns, parking requirements and development policies that increase overall mobility and that improve and support transportation efficiency, and compact, mixed-use, transit-friendly, and walkable development.”

8. Goal #6: Protection of Natural Environment and Social Systems should include an objective to evaluate environmental considerations early in project planning and development phases. This may include a form of limited Environmental Impact Statement that will assist decision makers.

No changes to Goals and Objectives are recommended. Objective 6c already states “identify and protect environmentally sensitive areas early in the planning process.” In addition, the MPO abides by federal regulations that require coordination with environmental, wildlife and resources agencies in the planning process. Staff does not recommend requiring a separate MPO environmental process.

9. Goal #7: Public Involvement should include expanded outreach efforts to engage a broader cross section of the community during all phases of Long Range Plan development.

No changes to Goals and Objectives are recommended. Objective 7b already states “encourage a broad cross section of citizens to take a proactive role in the transportation policy and planning process.”

10. Goal #9: Freight Transportation and Urban Goods movement should develop policies for freight delivery within urban centers and proposed TOD’s to minimize congestion on urban streets.

No changes are recommended. The Goal already states, “improve mobility and accessibility of freight and urban goods movement.”

11. Goal 1, Overall Transportation System should include a reference to addressing the impact of changing demographics, particularly an increase in the elderly population.

No changes to Goals and Objectives are recommended. Objective 1j already states “ensure that transportation needs are met for all populations, especially... [for the] elderly.”

12. Goal 1, Overall Transportation should include expanding accessibility in addition to increased mobility.

Add access to Goal #1. The Goal would then read “... maintains mobility and access; protects...” This is the only change needed because the term “accessibility” appears eight other times in the Goals and Objectives.

13. Objectives 3b Public Transportation and 4b Pedestrian and Bicycle should include a reference to compliance with the Americans with Disability Act.

No changes to Goals and Objectives are recommended. The MPO abides by many laws, acts and regulations in carrying out its long range planning responsibilities but these items do not need to be identified at the level of the Goals and Objectives.

14. Goal 4, Pedestrian and Bicycle System, should emphasize community building through improved connectivity.

No changes to Goals and Objectives are recommended. Objective 2b already states “create multimodal street patterns that... ensure connectivity.”

15. Objective 4e, Pedestrian and Bicycle System should also include a reference to retrofitting existing facilities in addition to design of new facilities.

No changes to Goals and Objectives are recommended. Objective 4e states “ensure that bicycle and pedestrian facilities are included... in every roadway and development project.” This Objective applies to both new and existing development and roadway, thus no further distinction is needed. In fact, the great majority of MPO roadway projects are for existing roadways.

16. Goal 5, Integration of Land Use and Transportation should include a definition of effective mixed use design.

No changes to Goals and Objectives are recommended. Staff believes including definitions is too specific for the Goals and Objectives.

17. Goal 7d, Public Involvement should be revised to better define how the information will be used. The information should be reflected in the planning process and used to allocate resources.

No changes to Goals and Objectives are recommended. Goal #7 implies that citizen involvement is to include their input into the planning process. Goal #7 reads, “an ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.”

18. Goal 9, Freight Transportation should include expanded use of rail transportation.

Change Objective 9a to read as follows (addition is in underline) – Relieve congestion on heavily-traveled truck routes, including through the encouragement of expanded rail transportation.

19. The Performance Targets should provide information at the county and municipal level.

Staff can develop Performance Targets at the municipal and county level for the Preferred Option of the 2040 Long Range Transportation Plan (2040 LRTP). The MPO's Deficiency Analysis Web page provides Performance Measures, which includes several dozen specific measurements, by county.

20. The Performance Targets should focus on selected transportation corridors to better assess the impact of public transit, bicycle and pedestrian improvements.

Staff can develop Performance Target values on a corridor level for the Preferred Option of the 2040 LRTP.

21. Data/numerical targets for VMT, congestion, drive times, etc., should reflect the distribution of impacts rather than just dealing with averages, so that it is possible to understand better the impact of changes.

The Performance Measures already break down several dozen measurements by MPO, county, trip time and trip purpose. Staff will consider any additional break downs (i.e., distributions) requested by local staff, the public or TAC.

22. Primary and secondary environmental impacts should be included in Section 6, Protection of Natural Environment.

Staff does not believe it is necessary to specify the various levels of impacts. Objective 6a requires standards and reporting for transportation impacts on the environments.

23. Protection of neighborhoods should be included in Section 1, Overall Transportation System.

No changes to Goals and Objectives are recommended. The Goal already states "... a transportation system that... protects the environment and neighborhoods.

24. Section 4, Pedestrian and Bicycle System should include reference to schools and transportation

No changes to Goals and Objectives are recommended. Objective 4d already calls for policy that establishes links between "activity centers," which includes schools.

25. Section 5, Integration of Land Use and Transportation should include reference between housing affordability and transit. Section should also include standards for transit oriented development.

No changes to Goals and Objectives are recommended. Objective 5d reads "evaluate the changes in land use brought about by the expansion of existing transportation facilities and the

construction of new facilities.” This item would include housing affordability, as necessary. In terms of Transit Oriented Developed (TOD), the inclusion of TOD standards is beyond the scope of the Goals and Objectives.

26. Section 4, Pedestrian and Bicycle System should include bicycle education.

Staff recommends modifying Objective 4f to read as follows (addition is underlined), “Increase education about bicycling and walking, especially concerning the benefits of pedestrian and bicycle alternatives.”

27. The Goals and Objectives section should include a discussion of how goals and objectives are balanced during decision making.

This recommendation is too specific for the level of the Goals and Objectives. The MPO does not have a written policy or process for balancing Goals and Objectives. In practice this balancing is done through analysis reports, meeting discussions and the MPO’s project prioritization process, to name but a few of the processes.

28. Data for Vehicle Miles Traveled should be broken down by County and jurisdiction.

Staff can break down the Performance Measures at the municipal and county level, and provide this break down on subsequent issuances of the Performance Measures.

29. More children walking or riding bicycle to school should be identified as a method of reducing peak congestion.

Although this method would likely receive support among MPO staff and board members, it is too specific for inclusion in the Goals and Objectives.

30. The Metropolitan Planning Organization should analyze the impact of providing a bonus for development of brownfield sites rather than greenfield locations.

Analysis of this policy is best left to the local governments that directly control land use.

## Goals and Objectives.

Proposed changes are in **bold underline**.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization's goals and objectives are:

### 1. Overall Transportation System

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

Objectives:

- a) Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services, activities, and destinations.
- b) Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.
- c) Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.
- d) Promote non-automobile transportation alternatives and create efficient connections between all transportation modes.
- e) Conserve natural resources and reduce the rate of energy consumption.
- f) Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.
- g) Use transportation funds based on the priority needs of the urban area, in keeping with community values.
- h) Seek additional funding and funding sources to ensure implementation of the long range plan.
- i) Monitor the implementation of the Plan and the targets through the biannual TIP process.
- j) Ensure that the transportation needs are met for all populations, especially for the youth and elderly, the mobility impaired, and the economically disadvantaged.
- k) Work cooperatively with the North Carolina Department of Transportation, neighboring Metropolitan Planning Organizations and Rural Planning Organizations and other transportation-related organizations to address the transportation issues of the broader region.

### 2. Multi-Modal Street and Highway System

Goal: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system.
- b) Create multi-modal street patterns that: encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity.
- c) Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.

- d) Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods.
- e) Identify and recommend design standards that: establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system.

### 3. Public Transportation System

Goal: A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the public transportation system.
- b) Increase public transit ridership by enlarging the service area and increasing the frequency of service within the urban area.
- c) Coordinate transit service within the urban area by promoting high quality, seamless, integrated, and customer-friendly service.
- d) Expand ridesharing, carpool, and vanpool services and opportunities.
- e) Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.
- f) Develop and implement the Regional Transit Plan.
- g) Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing.

### 4. Pedestrian and Bicycle System

Goal: A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes off-road trails

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.
- b) Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.
- c) Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs.
- d) Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit.
- e) Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of every roadway and development project, including the connection to external transportation facilities, in accordance with bicycle and pedestrian plans and local ordinances.
- f) Increase education about **bicycling and walking, especially concerning** the benefits of pedestrian and bicycle alternatives.
- g) Support the enforcement of **motor vehicle**, pedestrian and bicycle regulations.
- h) Pursue strong funding commitment for building both pedestrian and bicycle facilities.

- i) Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.
- j) Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs.

## 5. Integration of Land Use and Transportation

Goal: A Transportation Plan that is integrated with local land use plans and development policies.

Objectives:

- a) Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies.
- b) Create transportation systems that enhance the livability of all communities.
- c) Identify the impacts of different land use patterns and site designs on travel behavior.
- d) Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities.
- e) Identify and recommend land use patterns, parking requirements and development policies that increase overall mobility and that improve and support transportation efficiency, and compact, mixed-use, transit-friendly, and walkable development

## 6. Protection of Natural Environment and Social Systems

Goal: A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.

Objectives:

- a) Establish performance standards and report on transportation impacts on the public health, natural environment, cultural resources, and social systems.
- b) Protect and preserve archaeological, historic, and culturally valuable areas.
- c) Identify and protect environmentally sensitive areas early in the planning process.
- d) Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT).
- e) Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation.
- f) Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area.
- g) Ensure that transportation facilities do not negatively affect disadvantaged populations disproportionately.
- h) Develop and implement a transportation system that supports the reduction of greenhouse gases and carbon production and is coordinated with local greenhouse gas and carbon reduction plans.

## 7. Public Involvement

Goal: An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.

Objective:

- a) Establish performance standards and report on the effectiveness of the public involvement element of the Transportation Plan.
- b) Encourage a broad cross section of citizens to take a proactive role in the transportation policy and planning process.
- c) Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.
- d) Determine the public's knowledge of the metropolitan transportation system, and public values, attitudes and concerns regarding transportation.
- e) Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle.

## 8. Safety and Security

Goal: Continue to improve transportation safety and ensure the security of the transportation system.

Objective:

- a) Reduce fatality, injury, and crash/incident rates on all modes.
- b) Reduce vulnerability of transportation facilities/users to terrorists, natural disasters and risks by implementing and monitoring an evacuation plan, and working with the regional emergency management team.
- c) Reduce economic losses due to transportation crashes and incidents.
- d) Improve the ability to identify high accident locations, and evaluate their impacts in TIP project prioritization.
- e) Provide a safe environment for transportation users through the "3 Es" (Engineering, Enforcement and Education).
- f) Increase transit safety and security for riders and employees.

## 9. Freight Transportation and Urban Goods Movement

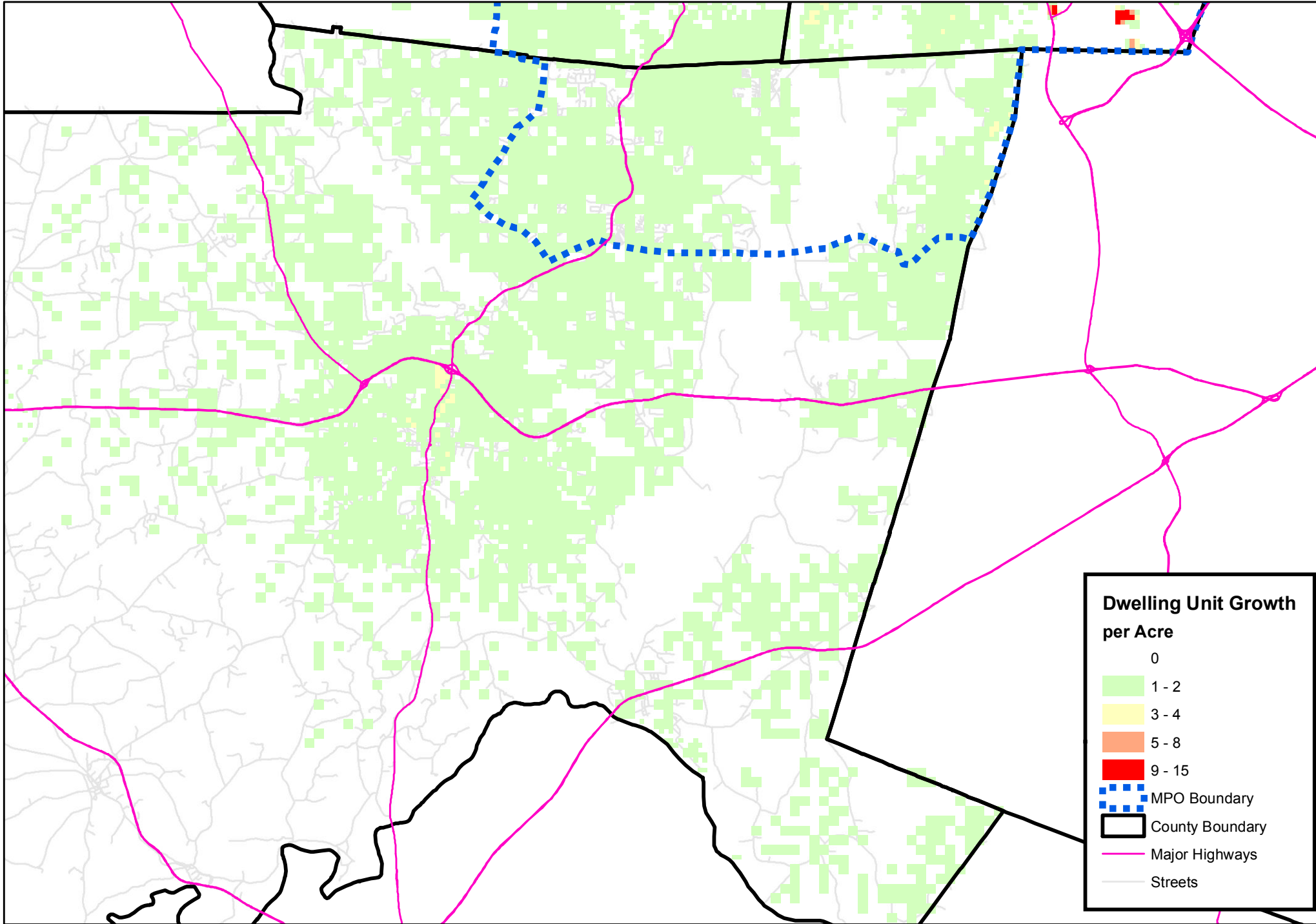
Goal: Improve mobility and accessibility of freight and urban goods movement.

Objective:

- a) Relieve congestion on heavily-traveled truck routes, **including through the encouragement of expanded rail transportation.**
- b) Improve mobility and access to intermodal operations and facilities.
- c) Establish and designate truck routes consistent with federal, state and local regulations.

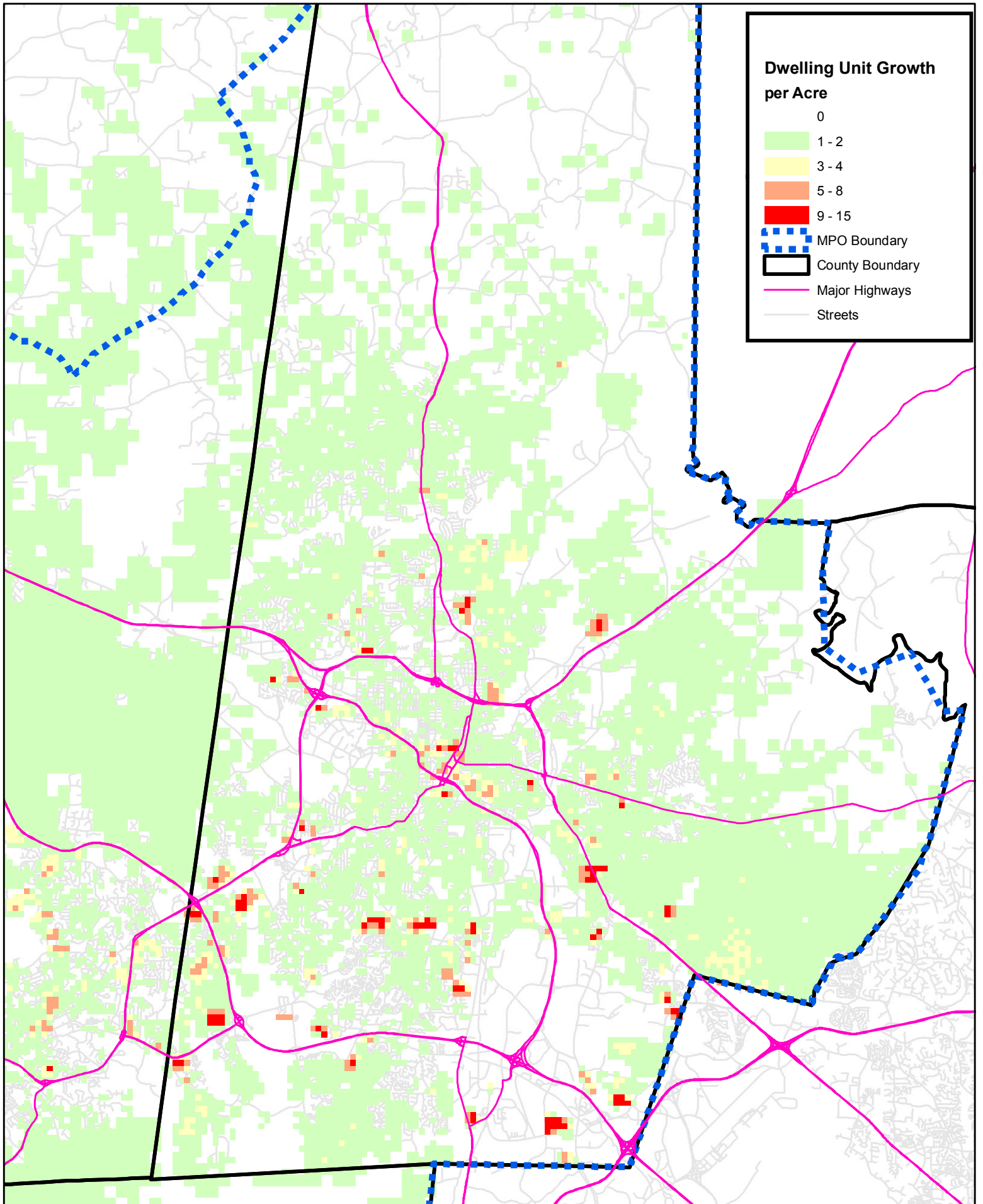
# Chatham County SE Data-- Dwelling Unit Growth per Acre

TAC 6/13/2012 Attachment 10



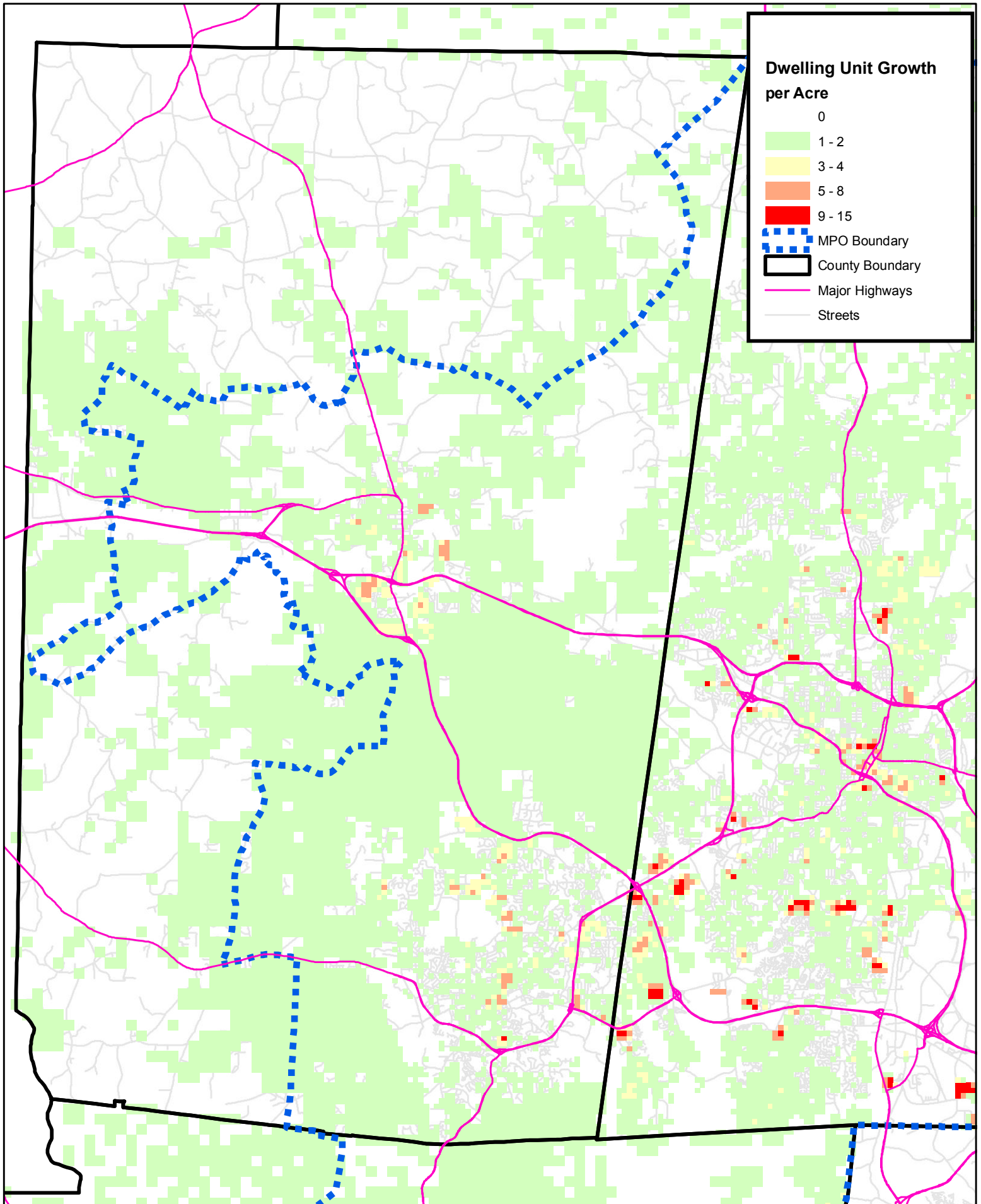
# Durham County SE Data-- Dwelling Unit Growth per Acre

TAC 6/13/2012 Attachment 10



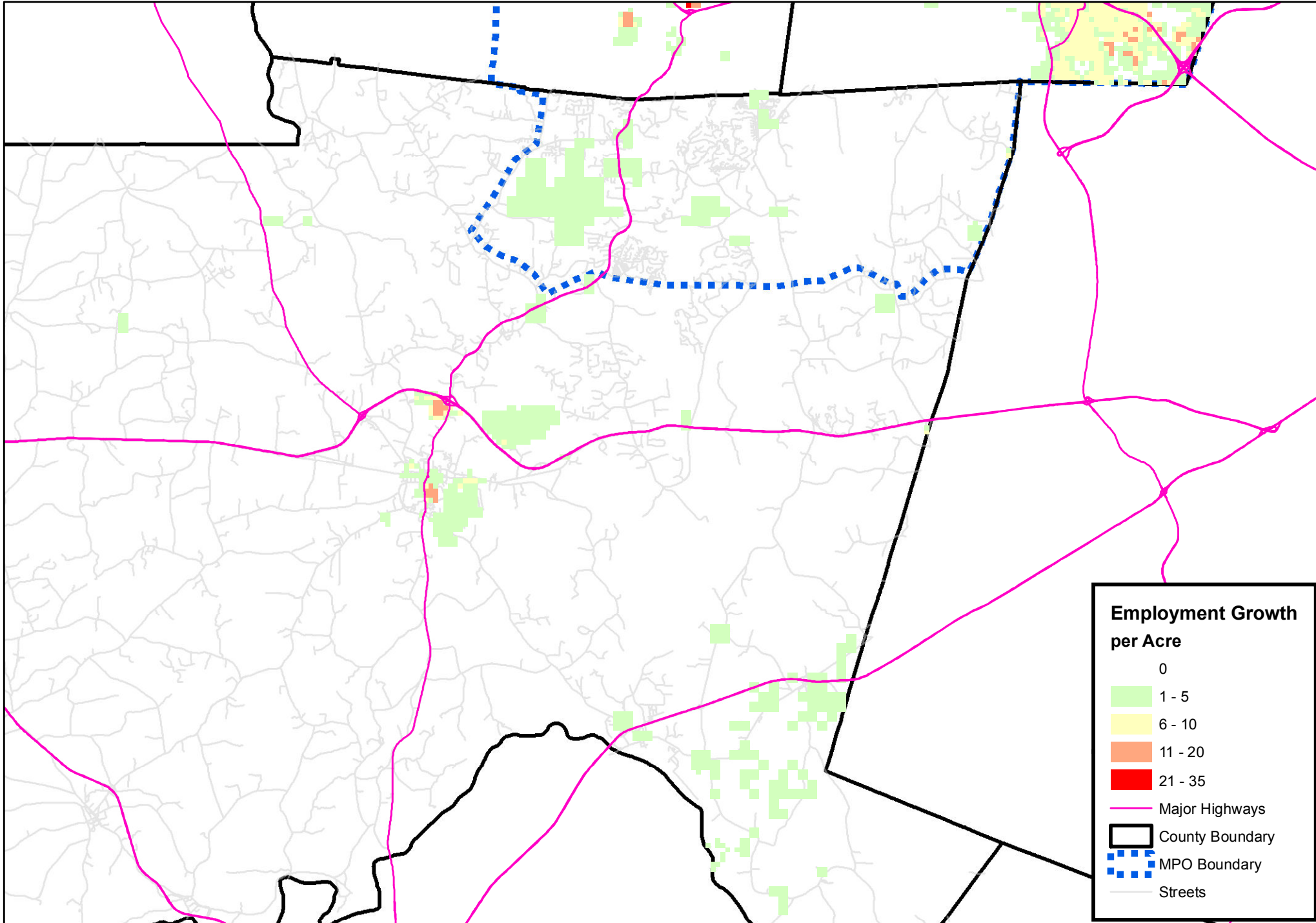
# Orange County SE Data-- Dwelling Unit Growth per Acre

TAC 6/13/2012 Attachment 10

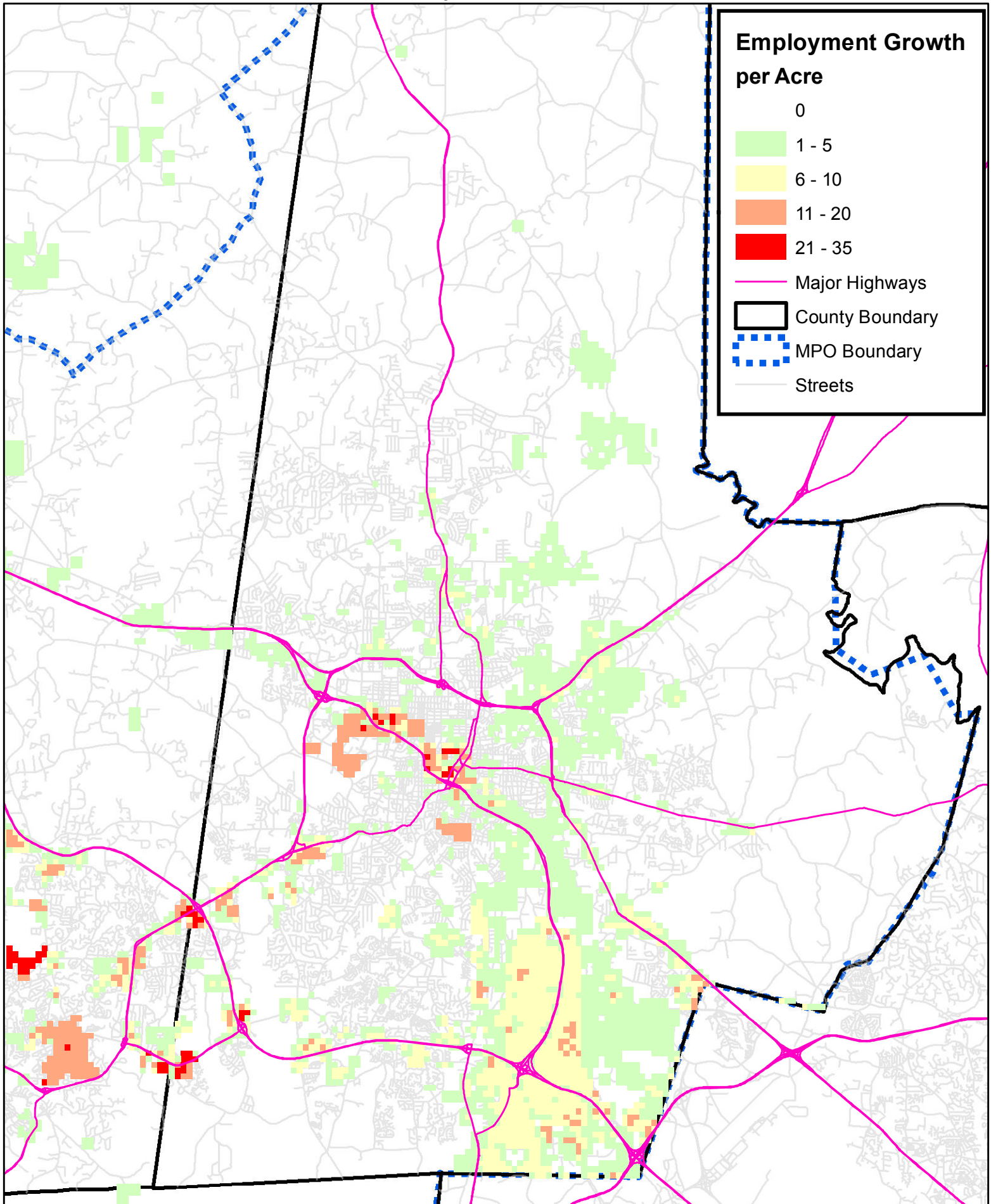


# Chatham County SE Data-- Employment Growth per Acre

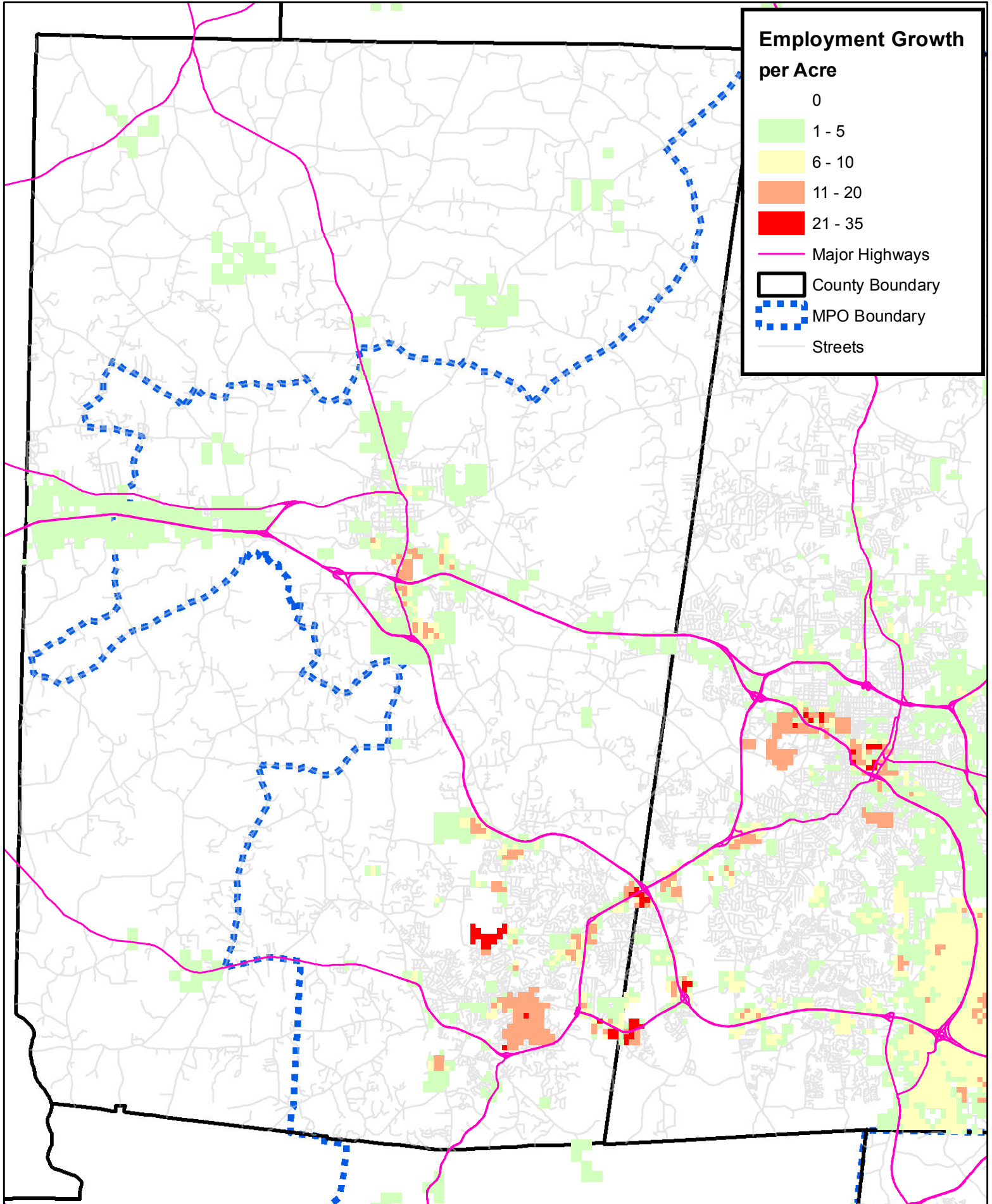
TAC 6/13/2012 Attachment 10



## SE Data-- Employment Growth per Acre



SE Data-- Employment Growth per Acre



# 2040 Long Range Transportation Plan (LRTP) and Comprehensive Transportation Plan (CTP)

## Deficiency Analysis and Need Assessment

Transportation Advisory Committee

June 13, 2012





# Presentation Purpose

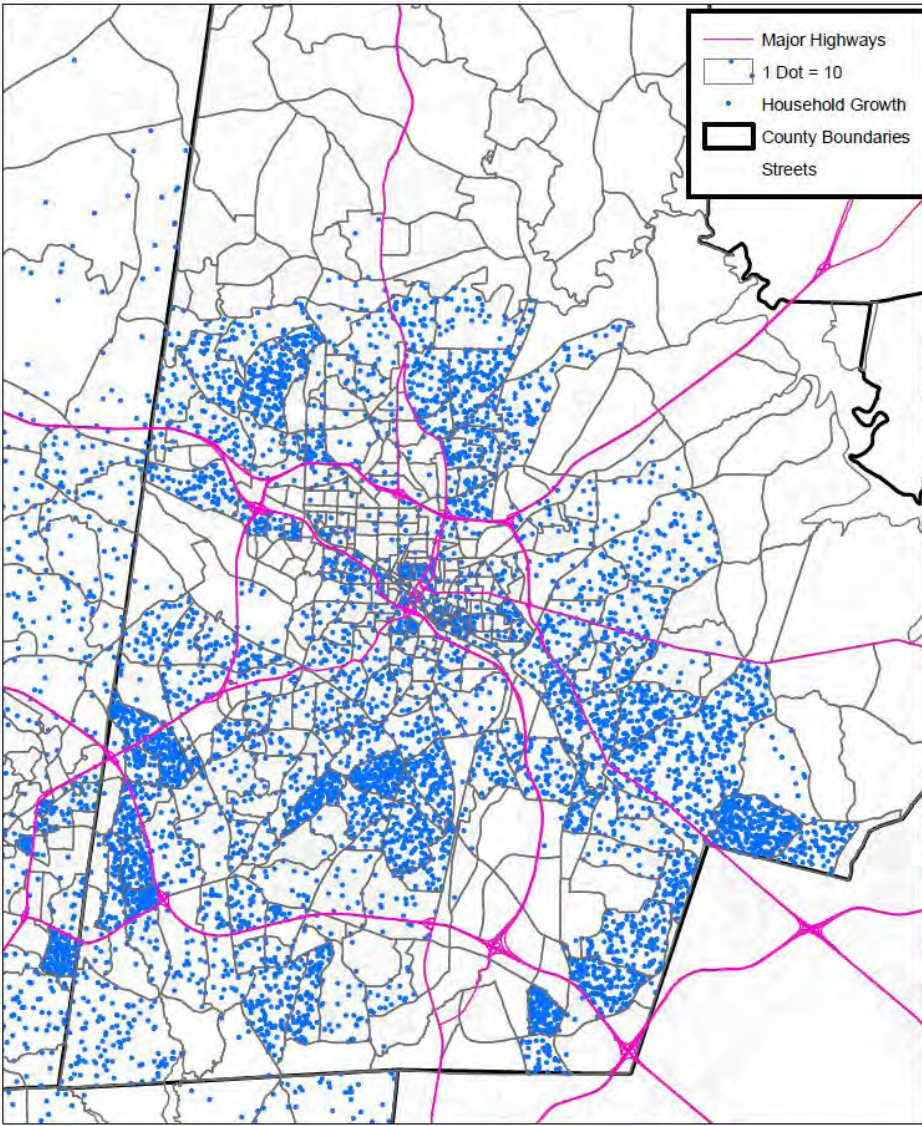
- Purpose: staff, public and TAC familiar with deficiencies.
- Today's presentation has highlights.
- Full complement of tables and maps on Web site:
  - Close up maps
  - Breakdown by county and MPOs
- We will often reference deficiency maps and documents through LRTP development.
- Receive comments – no TAC action required.



- Released draft 2040 SE Data in March for public comment.
- Residential and employment growth (2010 to 2040) appeared too concentrated in urban and town centers (strict order allocation).
- Made adjustments to CommunityViz land use model (probability allocation).
- Expect only minor adjustments to baseline SE Data
- Two land use scenarios for Alternatives Analysis:
  - All-in-Transit – additional rail stations and transit emphasis
  - Managed Growth – emphasis on water and sewer service areas

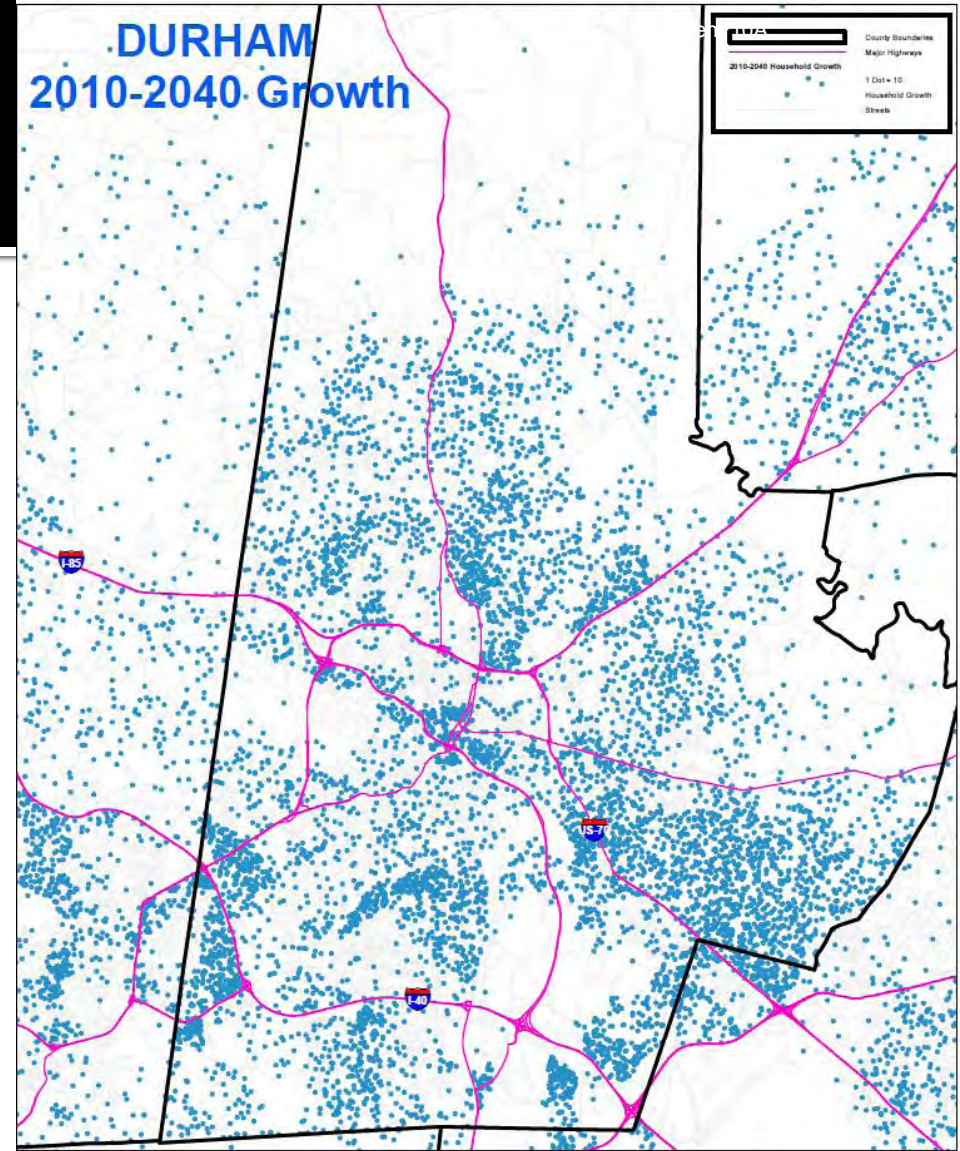
March 2012

Durham County  
Community Plan--Household Growth 2010-2040



# SE Data--Household

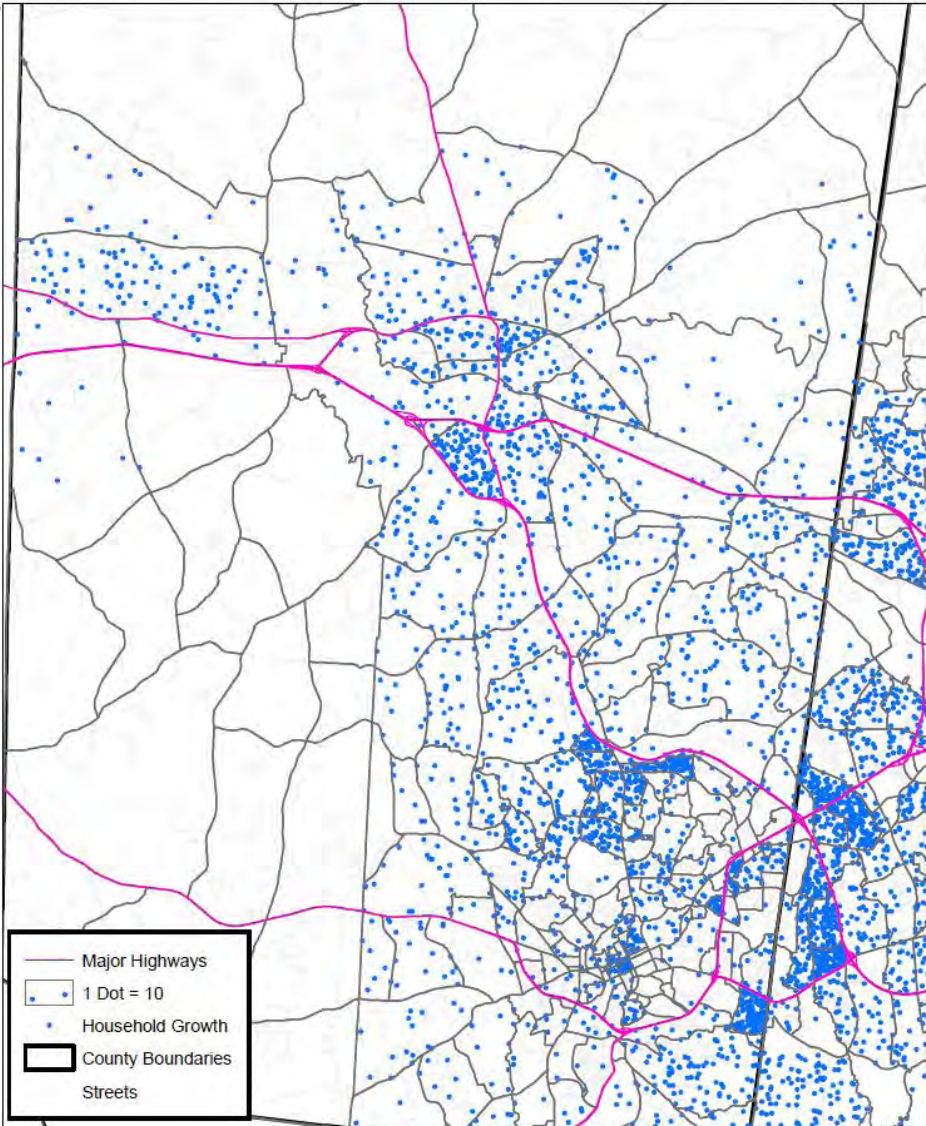
## DURHAM 2010-2040 Growth



Updated – June 2012

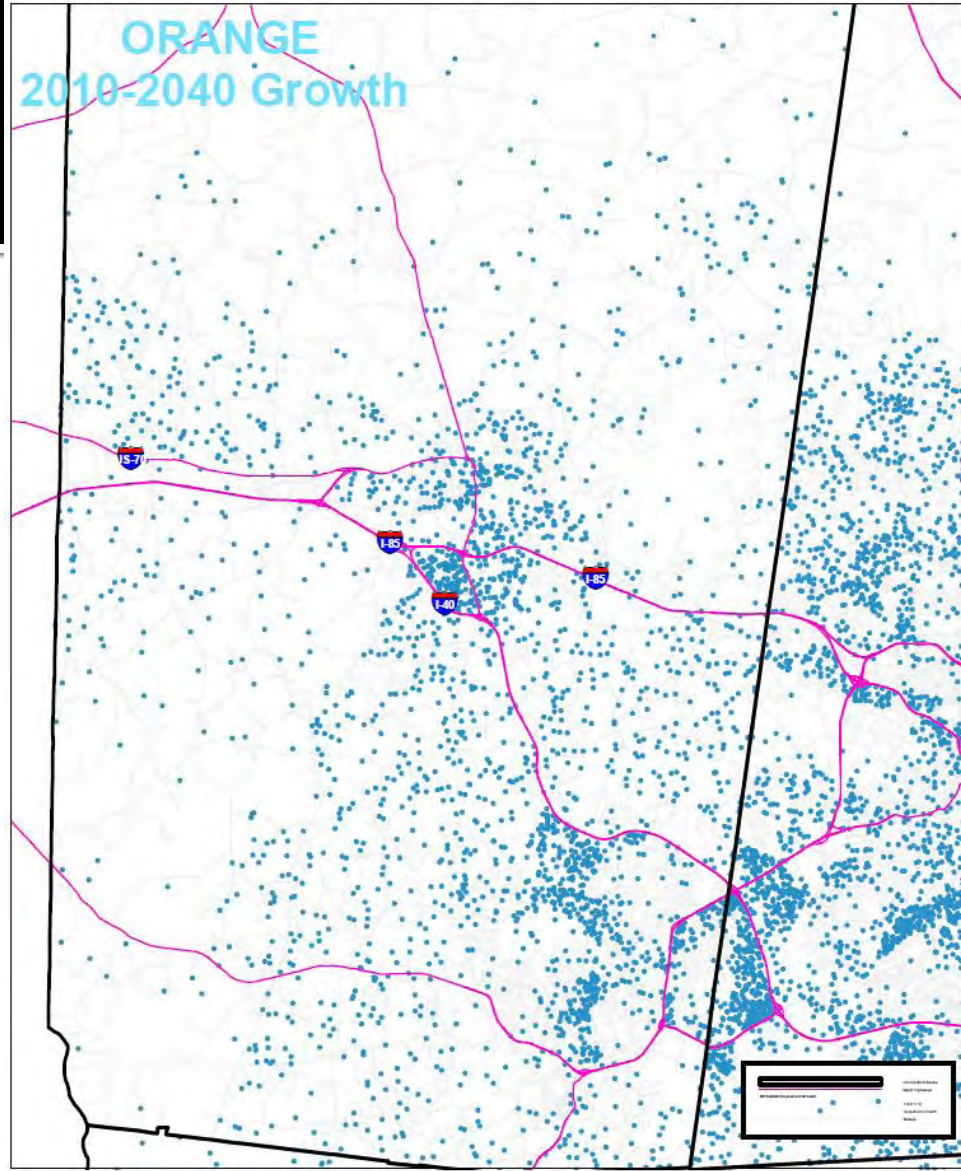
March 2012

Orange County  
Community Plan--Household Growth 2010-2040



SE Data--Household

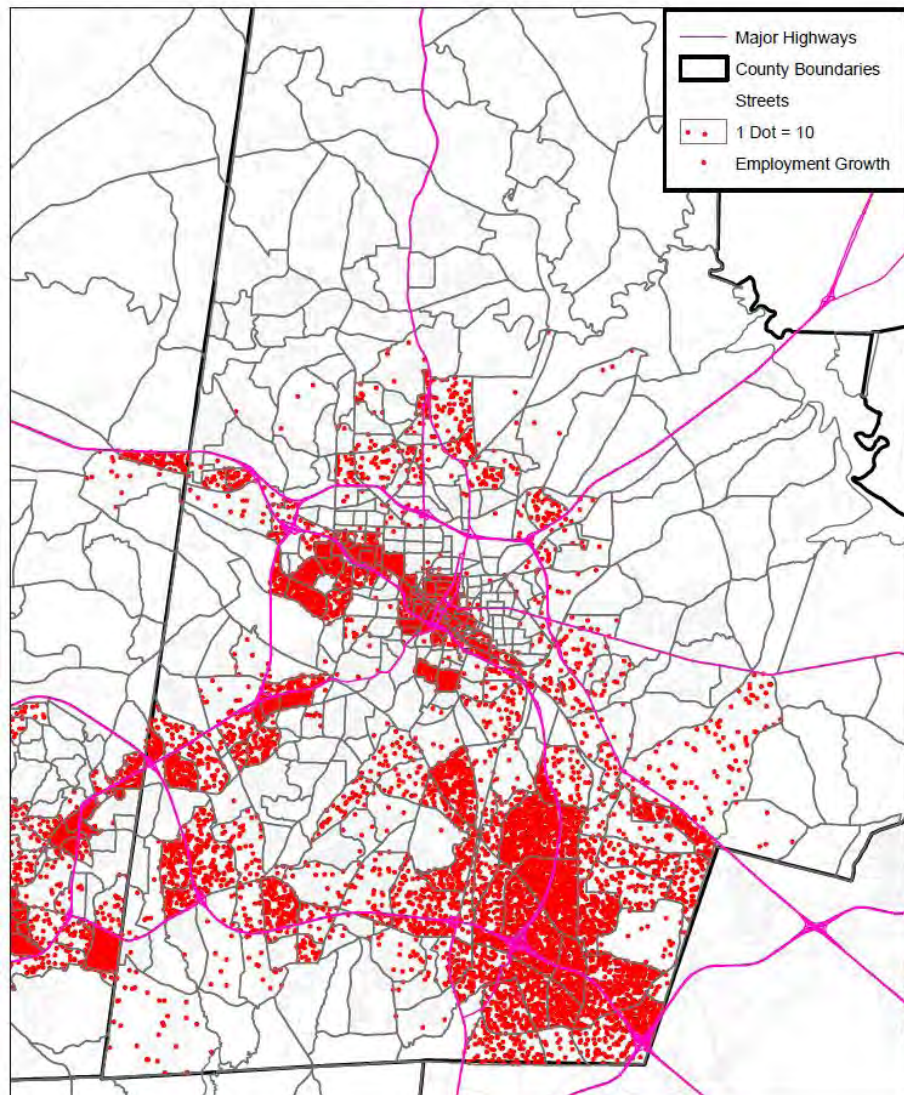
ORANGE  
2010-2040 Growth



Updated – June 2012

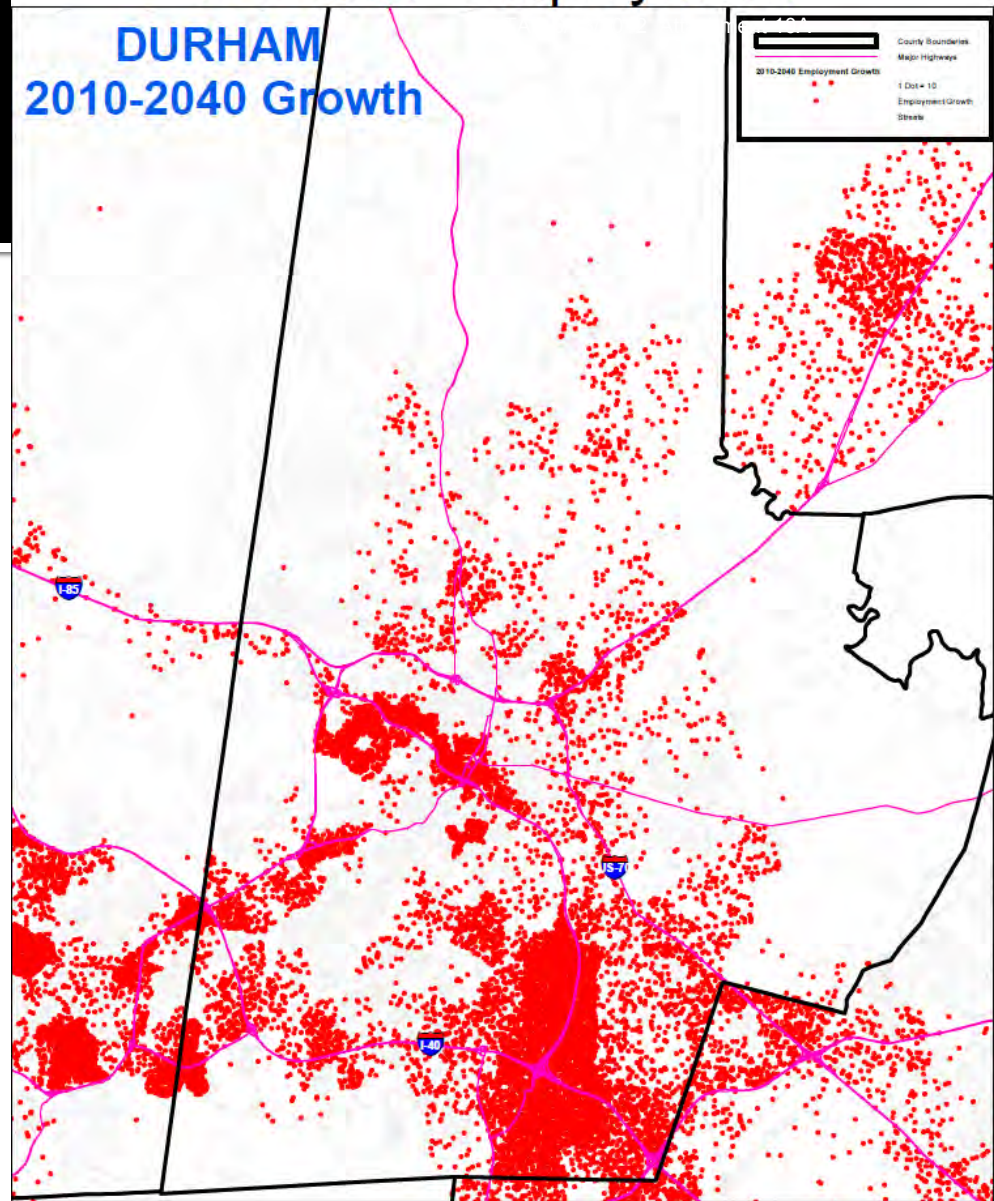
March 2012

### Durham County Community Plan--Employment Growth 2010-2040



## SE Data--Employment

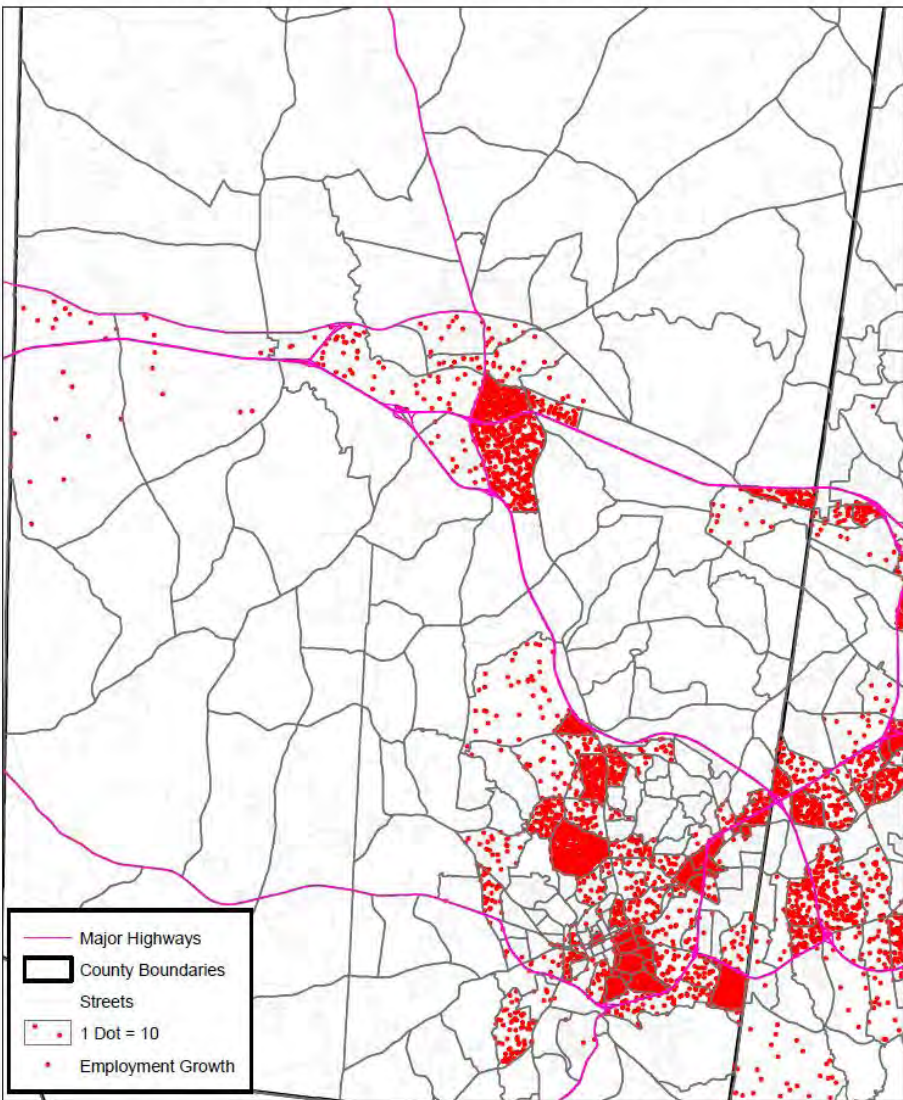
### DURHAM 2010-2040 Growth



Updated – June 2012

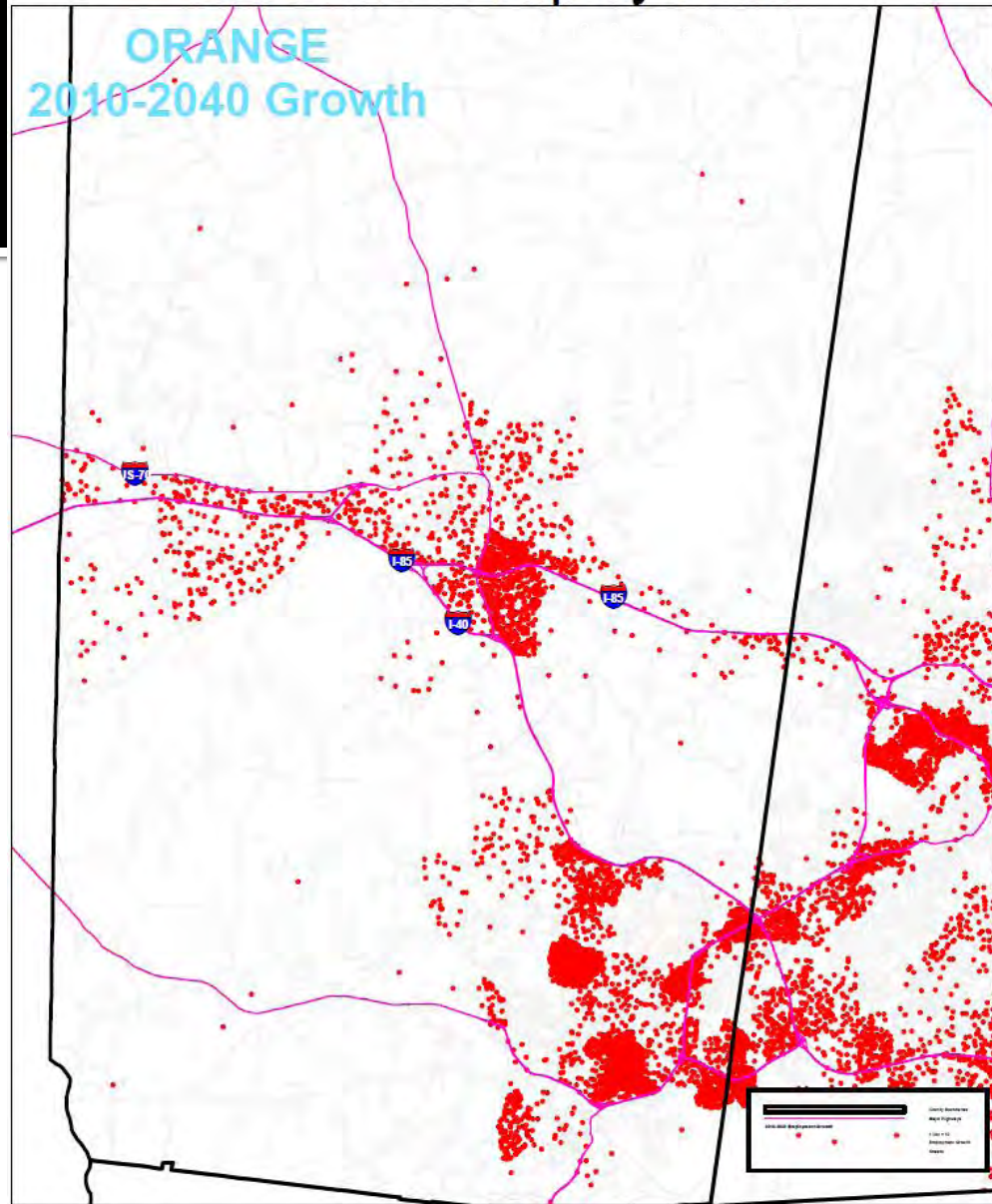
March 2012

### Orange County Community Plan--Employment Growth 2010-2040



## SE Data--Employment

ORANGE  
2010-2040 Growth





# Performance Measures Background

- General indicators of overall system:
  - Mobility Performance (e.g., travel time)
  - Mode Choice
  - Travel volume (e.g., VMT, VHT)
- Not specific to corridor or project.
- Useful for overall comparison of LRTP Alternatives



# Performance Measures

## Vehicle Miles Traveled (VMT) & Vehicle Hours Traveled (VHT)

		2010	2040	2040	2010 to 2040 E+C	2040 E+C to 2035
		2010	E+C	2035	Change	Change
<b>1</b>	<b>Performance Measures</b>					
1.1.1	Total Vehicle Miles Traveled (VMT-daily)	13,217,550	20,368,697	20,581,822	54%	1%
1.1.1a	Total Vehicle Miles Traveled (VMT-per capita)	33	32	33	-2%	1%
1.2.1	Total Vehicle Hours Traveled (VHT-daily)	312,669	581,776	536,746	86%	-8%
1.2.1a	Total Vehicle Hours Traveled (VHT-per capita)	0.77	0.92	0.85	19%	-8%

VMT and VHT will dramatically increase in the Existing-plus-Committed (E+C) scenario. VHT growth outpaces VMT growth.

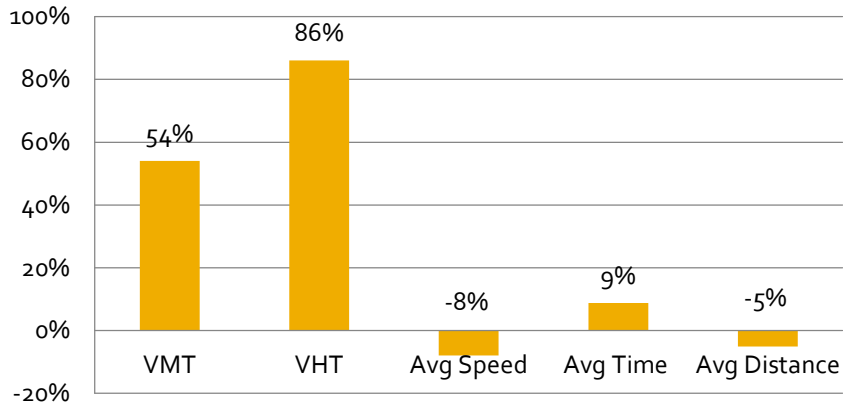
- VMT growth persists with the implementation of the 2035 LRTP network.
- VMT driven by population (57% pop increase)



# Performance Measures

## Changes in Mobility Measures

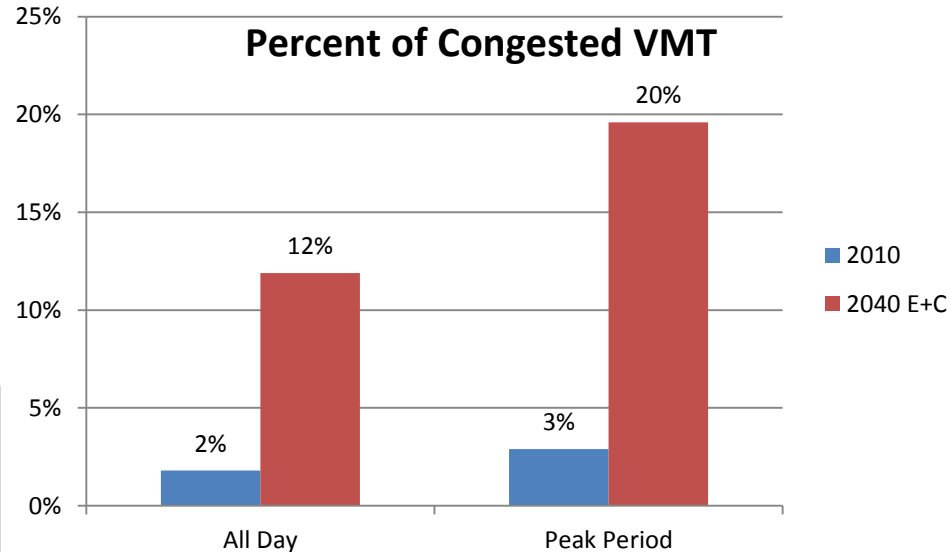
**Percent Change: 2010 to 2040 E+C**



- Speed and distance decline.
- Travel time increases.

- Large increase in congested VMT

**Percent of Congested VMT**





# Performance Measures

## Transit Ridership

		2010	2040	2040	2010 to 2040 E+C	2040 E+C to 2035
SE Data		2010	2040	2040	2010 to 2040 E+C	2040 E+C to 2035
Transportation Network		2010	E+C	2035	Change	Change
<b>3</b>	<b>Transit Measures</b>					
3.1	Transit System Ridership (regionwide)			Total		
3.1.1	- TTA (rail not included in 2010 and E+C)	5,362	8,571	52,702	60%	515%
3.1.2	- CAT	16,639	23,080	40,227	39%	74%
3.1.3	- CHT	26,788	38,258	46,756	43%	22%
3.1.4	- DATA	17,637	25,977	57,749	47%	122%
3.1.5	- NCSU	12,147	21,366	14,885	76%	-30%
3.1.6	- DUKE	14,007	17,381	14,108	24%	-19%
3.1.7	- OPT	N/A	N/A	N/A		
3.1.8	- CARY	1,412	2,139	9,491	51%	344%
3.1.9	Total	93,988	136,768	235,915	46%	72%

■ As population increases, transit ridership increases.

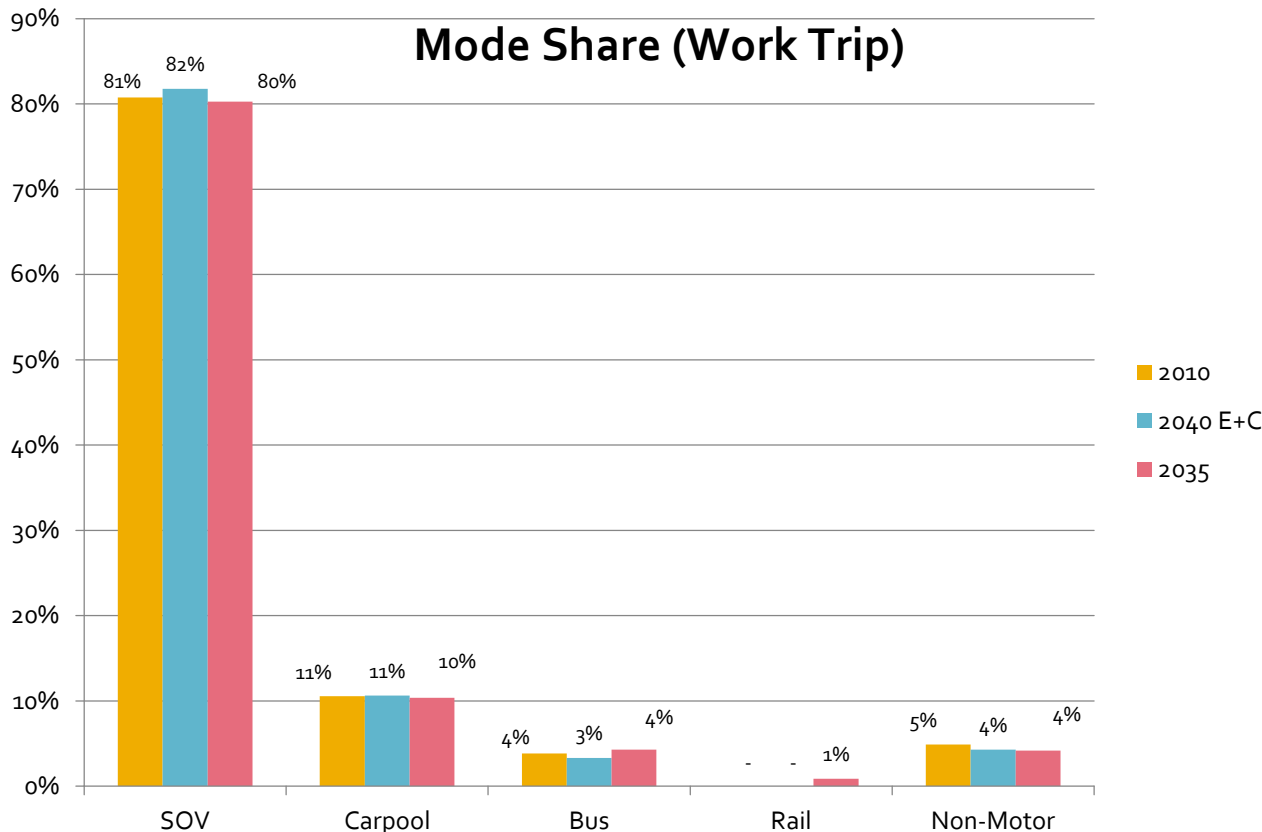
■ 2035 transit improvements substantially increases ridership.



# Performance Measures

## Mode Share

Mode Share (Work Trip)



- For Mode Choice, the travel model is fairly insensitive to changes in population and employment, and network (E+C and 2030 LRTP scenarios)



# Travel Isochrones

## Background

- More specific than Performance Measures – can start to see corridor mobility.
- Based on afternoon commute from four selected centers:
  - Downtown Durham
  - Chapel Hill/Carrboro
  - RTP
  - Downtown Raleigh
- Map illustrates “contours” for 15-, 30-, 45-minute, etc. commutes from the centers.
- Two maps for each center:
  - 2010
  - E+C (2040 SE Data using E+C network)
- This presentation shows RTP. Other centers on Web site.





# Travel Time

## Background

- Shows mobility forecasts to/from regional centers.
- Based on commute to/from six selected centers:
  - Downtown Durham
  - Chapel Hill/Carrboro
  - RTP
  - Hillsborough
  - Pittsboro
  - Downtown Raleigh
- Presented two ways 2010 and E+C:
  - Tables with morning and afternoon peak
  - Map of afternoon peak
- Full set of tables on Web site.



# Travel Time

## 2010 and E+C Travel Time Table

**2010 PM Peak Travel time (minutes)**

		<u>To</u>						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
<b>From</b>	Durham		14	35	24	22	28	48
	RTP	16		27	16	30	29	43
	Raleigh	35	25		26	50	46	46
	RDU	23	14	27		38	34	44
	Chapel Hill	22	28	49	38		24	45
	Hillsborough	29	27	46	34	25		31
	Pittsboro	48	39	44	42	44	29	

**E+C PM Peak Travel time (minutes)**

		<u>To</u>						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
<b>From</b>	Durham		17	54	30	27	33	56
	RTP	20		43	20	39	37	48
	Raleigh	43	29		30	62	57	56
	RDU	28	15	40		47	43	47
	Chapel Hill	26	35	72	48		28	50
	Hillsborough	40	40	73	50	35		41
	Pittsboro	51	39	56	43	46	31	

Raleigh-Durham afternoon commute increases, especially commute to Raleigh.



# Travel Time

## Travel Time Percent Increase

Hotter the color = larger % increase

Compare 2010 and E+C: PM Peak Travel time (percent increase)

	<u>To</u>						
	Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
<u>From</u>	Durham	23%	54%	28%	20%	16%	17%
RTP	27%		58%	23%	29%	27%	11%
Raleigh	23%	15%		14%	25%	24%	22%
RDU	22%	8%	49%		26%	24%	6%
Chapel Hill	18%	26%	47%	29%		18%	12%
Hillsborough	39%	49%	60%	45%	41%		34%
Pittsboro	8%	-1%	28%	1%	4%	6%	

Commutes toward Raleigh and Hillsborough have largest increases in travel time.

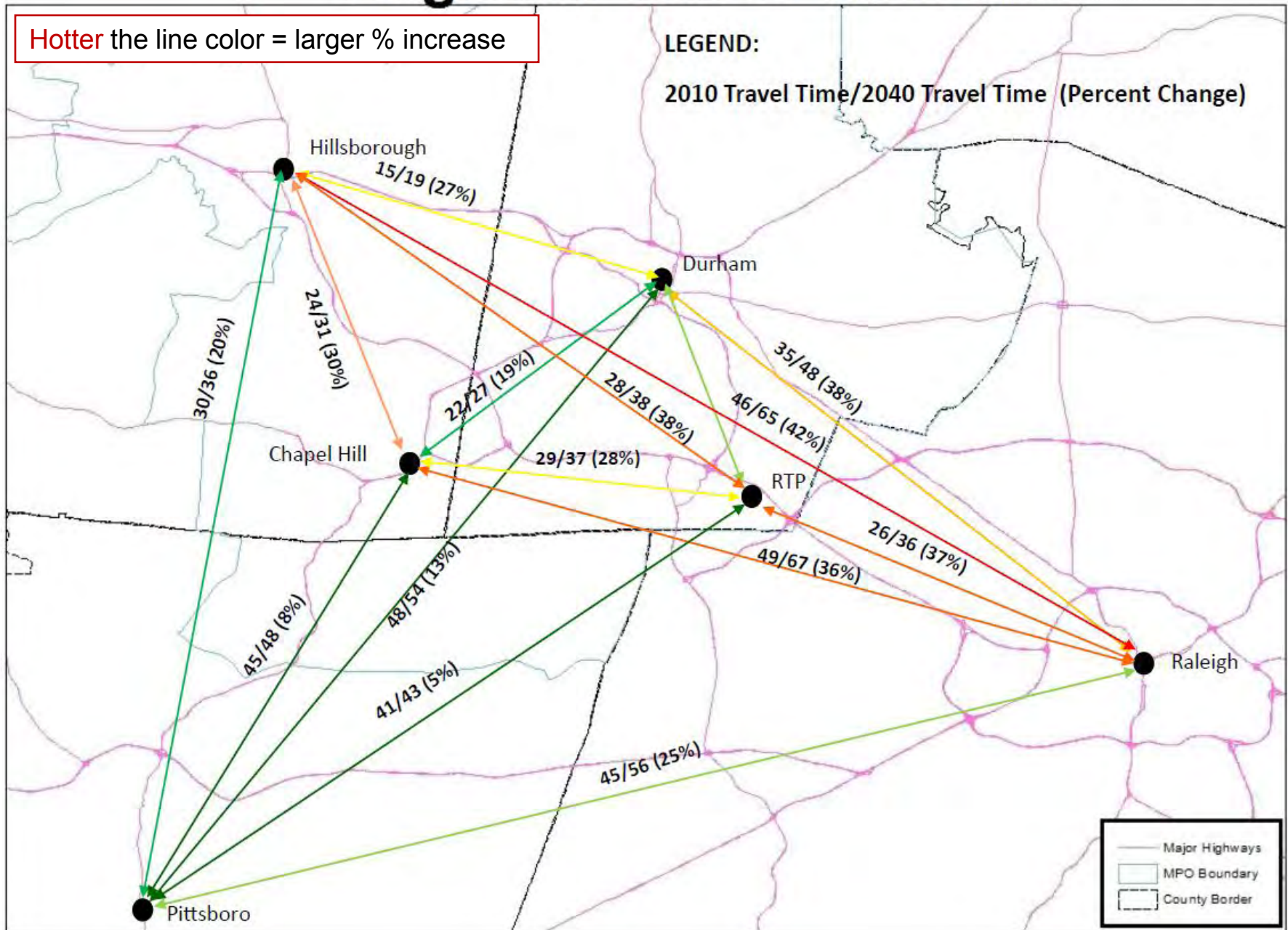
# Regional Travel Time

In Minutes

Hotter the line color = larger % increase

LEGEND:

2010 Travel Time/2040 Travel Time (Percent Change)



(based on afternoon peak travel time)

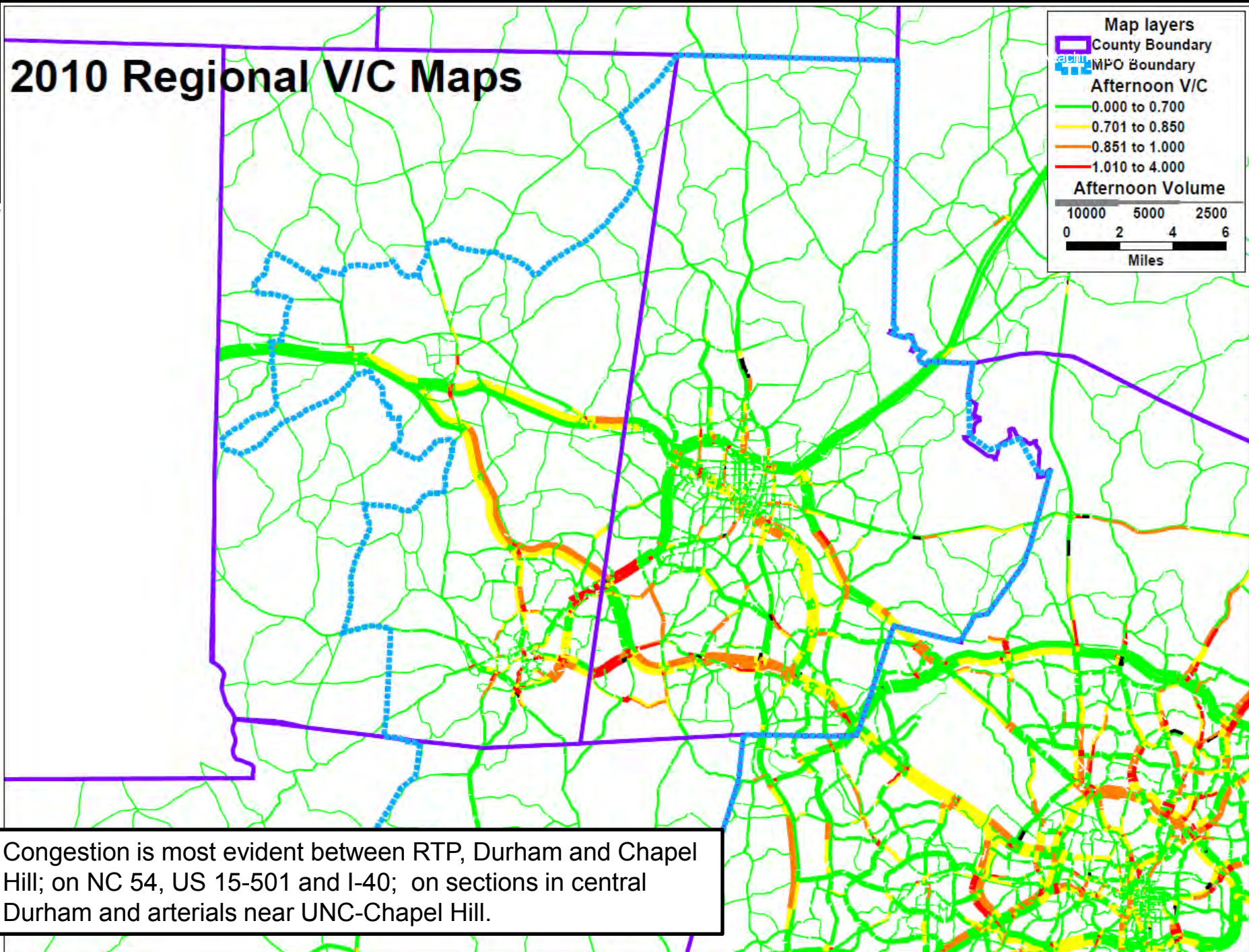


# Congestion Maps (V/C)

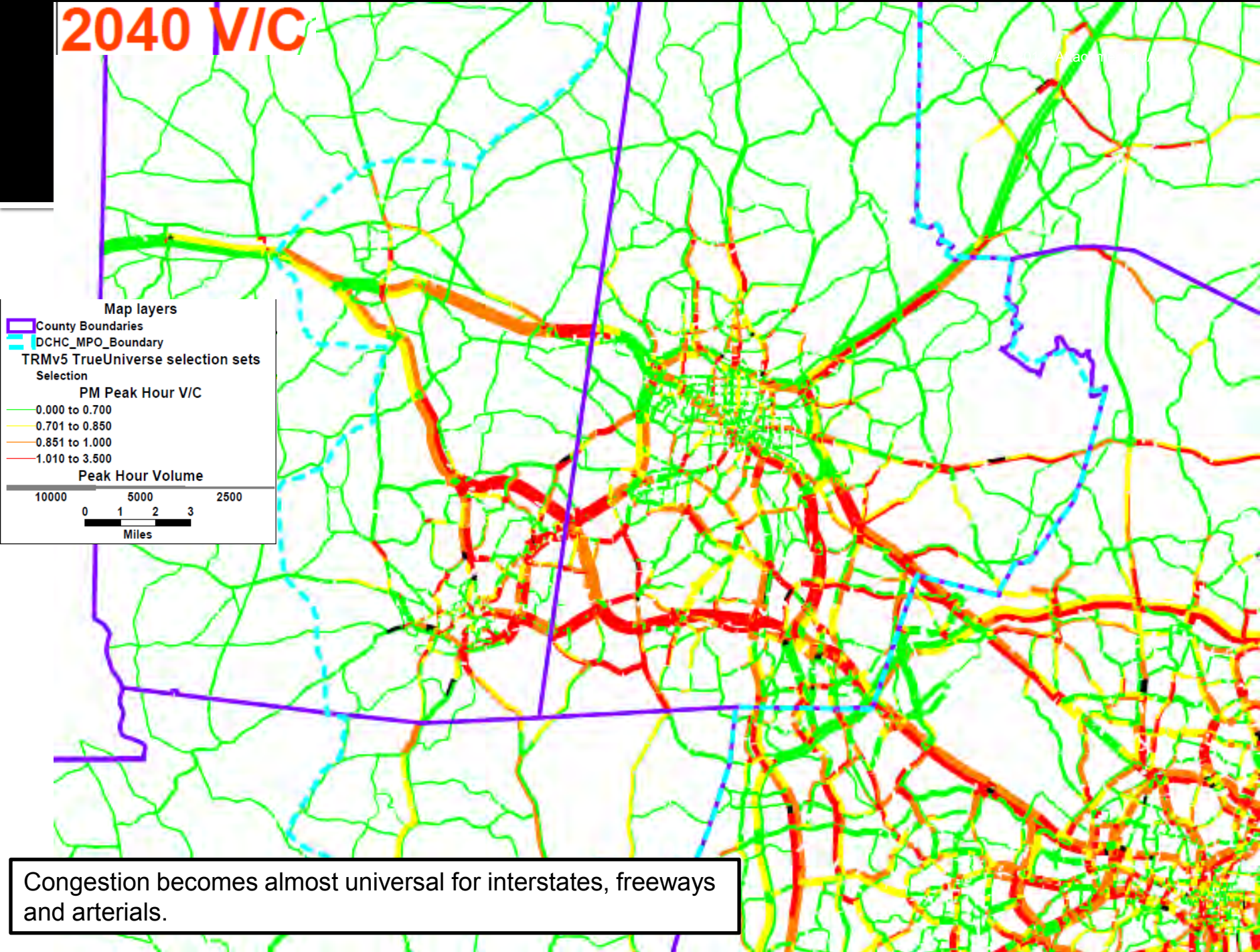
## Background

- Maps show the current and forecasted congestion on specific road segments based on the afternoon peak hour.
- "V/C" means the traffic volume divided by the traffic capacity of the road segment. For example, a volume of 9,000 vehicles on a road that is capable of carrying 10,000 vehicles will produce a V/C of 0.9.
- A V/C of 1.0 is equal to a Level of Service (LOS) of "E", which can be described as:
  - Limit of acceptable delay, unstable flow, poor signal progression, traffic near roadway capacity, frequent cycle failures.
- The width of the line showing the roadway also indicates the relative traffic volume on that roadway.
- Web sit has county-level and close-up map views.

# 2010 Regional V/C Maps



# 2040 V/C



Congestion becomes almost universal for interstates, freeways and arterials.



# Additional Challenges

- Loss of purchasing power -- Highway and transit costs rise faster than revenues.
- Relatively static funding – e.g., state cap on gas tax.
- Many unknowns – e.g., federal transportation legislation (SAFETEA-LU) on continuing resolution for over two years.
- Transit dependent population growing -- Proportion of minority, Hispanic and senior population will increase.



# Wrap Up

- TAC comments and questions today?
- Next Steps (August TAC meeting)
  - Draft LRTP Alternatives based on these Deficiencies and Needs.

## DCHC MPO -- Transportation Performance Measures

		2010	2040	2040	2010 to	2040 E+C
SE Data		2010	2040	2040	2040 E+C	to 2035
Transportation Network		2010	E+C	2035	Change	Change
<b>1</b>	<b>Performance Measures</b>					
1.1.1	Total Vehicle Miles Traveled (VMT-daily)	13,217,550	20,368,697	20,581,822	54%	1%
1.1.1a	Total Vehicle Miles Traveled (VMT-per capita)	33	32	33	-2%	1%
1.1.2	Total Vehicle Miles Traveled (No local roads)	12,430,435	18,947,415	19,171,237	52%	1%
1.2.1	Total Vehicle Hours Traveled (VHT-daily)	312,669	581,776	536,746	86%	-8%
1.2.1a	Total Vehicle Hours Traveled (VHT-per capita)	0.77	0.92	0.85	19%	-8%
1.2.2	Total Vehicle Hours Traveled (No local roads)	260,012	486,499	443,021	87%	-9%
1.3	Average Speed by Facility (miles/hour)					
1.3.1	- Freeway	63	57	61	-10%	8%
1.3.2	- Arterial	42	38	39	-10%	3%
1.3.3	- All Facility	51	47	50	-8%	8%
1.4	Peak Average Speed by Facility (miles/hour)					
1.4.1	- Freeway	62	54	59	-13%	10%
1.4.2	- Arterial	41	35	37	-13%	5%
1.4.3	- All Facility	49	44	48	-11%	10%
1.5	Daily Average Travel Length - All Person Trips					
1.5.1	- Travel Time (minutes)	14.0	15.3	14.6	9%	-4%
1.5.2	- Travel Distance (miles)	6.3	6.0	6.1	-5%	2%
1.6	Daily Average Travel Length - Work Trips					
1.6.1	- Travel Time	17.7	19.2	18.1	9%	-6%
1.6.2	- Travel Distance - Work Trips	9.1	8.1	8.4	-11%	4%
1.7	Peak Average Travel Length - All Person Trips					
1.7.1	- Peak Travel Time	14.8	16.6	15.6	12%	-6%
1.7.2	- Peak Travel Distance	6.7	6.2	6.4	-8%	4%
1.8	Daily Average Travel Length - All CV Trips					
1.8.1	- Travel Time	15.0	17.0	15.9	13%	-6%
1.8.2	- Travel Distance	8.3	8.6	8.5	3%	-1%
1.9	Daily Average Travel Length - Truck Trips					
1.9.1	- Travel Time	15.3	17.3	16.2	13%	-6%
1.9.2	- Travel Distance	8.5	8.8	8.7	3%	-1%
1.10	Hours of Delay (daily)	27,629	123,948	77,916	349%	-37%
1.10.1	Truck Hours of Delay (daily)	1,097	4,306	2,712	293%	-37%
1.11	Percent of Congested VMT (volume > capacity) - All Day					
1.11.1	- Freeway	2%	14%	5%	718%	-68%
1.11.2	- Arterial	3%	14%	9%	318%	-36%
1.11.3	- All Facility	2%	12%	5%	561%	-55%
1.12	Percent of Congested VMT (volume > capacity) - Peak					
1.12.1	- Freeway	3%	25%	8%	727%	-69%
1.12.2	- Arterial	5%	22%	14%	332%	-34%
1.12.3	- All Facility	3%	20%	9%	576%	-55%
1.12.4	- Designated truck routes	5%	16%	9%	226%	-48%
1.12.5	- Facilities w/bus routes	4%	19%	6%	403%	-68%
<b>2</b>	<b>Mode Share Measures</b>					
2.1	All Trips - Daily					
2.1.1	- Drive alone (single occupant vehicle -SOV)	864,965	1,536,817	1,529,779	78%	0%

## DCHC MPO -- Transportation Performance Measures

		2010	2040	2040	2010 to	2040 E+C
SE Data		2010	2040	2040	2040 E+C	to 2035
Transportation Network		2010	E+C	2035	Change	Change
2.1.2	- Carpool (Share ride)	683,083	1,186,219	1,189,785	74%	0%
2.1.3	- Bus	50,579	71,752	88,056	42%	23%
2.1.4	- Rail	-	-	15,340	N/A	N/A
2.1.5	- Non-Motorized (Bike and Walk)	176,554	280,395	278,360	59%	-1%
2.2	Work Trips - Daily					
2.2.1	- Drive alone (single occupant vehicle -SOV)	270,716	474,139	469,622	75%	-1%
2.2.2	- Carpool (Share ride)	35,360	61,574	60,692	74%	-1%
2.2.3	- Bus	12,852	19,167	25,136	49%	31%
2.2.4	- Rail	-	-	5,190	N/A	N/A
2.2.5	- Non-Motorized (Bike and Walk)	16,343	24,928	24,399	53%	-2%
2.2a	Work Trips - Mode Share					
2.2.1a	- Drive alone (single occupant vehicle -SOV)	81%	82%	80%	1%	-2%
2.2.2a	- Carpool (Share ride)	11%	11%	10%	1%	-2%
2.2.3a	- Bus	4%	3%	4%	-14%	30%
2.2.4a	- Rail	-	-	1%	N/A	N/A
2.2.5a	- Non-Motorized (Bike and Walk)	5%	4%	4%	-12%	-3%
2.3	All Trips - Peak Hours (per day)					
2.3.1	- Drive alone (single occupant vehicle -SOV)	483,159	847,246	849,522	75%	0%
2.3.2	- Carpool (Share ride)	411,958	706,253	715,014	71%	1%
2.3.3	- Bus	25,416	34,895	42,893	37%	23%
2.3.4	- Rail	-	-	8,686	N/A	N/A
2.3.5	- Non-Motorized (Bike and Walk)	101,821	164,441	160,870	62%	-2%
<b>3</b>	<b>Transit Measures</b>					
3.1	Transit System Ridership (regionwide)			Total		
3.1.1	- TTA (rail not included in 2010 and E+C)	5,362	8,571	52,702	60%	515%
3.1.2	- CAT	16,639	23,080	40,227	39%	74%
3.1.3	- CHT	26,788	38,258	46,756	43%	22%
3.1.4	- DATA	17,637	25,977	57,749	47%	122%
3.1.5	- NCSU	12,147	21,366	14,885	76%	-30%
3.1.6	- DUKE	14,007	17,381	14,108	24%	-19%
3.1.7	- OPT	N/A	N/A	N/A		
3.1.8	- CARY	1,412	2,139	9,491	51%	344%
3.1.9	Total	93,988	136,768	235,915	46%	72%
3.2	Ridership by Area					
3.2.1	Daily in DCHC MPO (counted from residential side)	61,446	86,353	135,220	41%	57%
3.2	Rail Ridership in Region (DCHC MPO, CAMPO)			37,628	N/A	N/A
<b>4</b>	<b>Demographics Measures</b>					
4.1	Population	403,494	632,102	632,102	57%	0%
4.2	Employment	261,566	427,876	427,876	64%	0%
4.3	Total Daily Person Trips	1,775,182	3,075,184	3,101,321	73%	1%
4.3.1	Work Person Trips	335,271	579,809	585,041	73%	1%
4.4	Total Daily CV Trips	137,279	211,324	211,324	54%	0%
4.4.1	Daily Truck Trips	57,715	85,991	85,991	49%	0%

This series of tables compares the 2010 and 2040 E+C travel times between key destinations. The 2040 E+C includes the 2040 population and employment with no improvements to the transportation system.

The comparison table (3rd table) shows the percent increase in travel time from 2010 to 2040, and shades cells with an increasingly hot color as the percentage increases. Trips involving Raleigh and Hillsborough would experience the greatest increase in trip time, while Pittsboro trips would experience the smallest percentage increase.

**2010 PM Peak Travel time (minutes)**

		<u>To</u>							
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro	
<u>From</u>	Durham			14	35	24	22	28	48
	RTP	16		27	16	30	29	43	
	Raleigh	35	25		26	50	46	46	
	RDU	23	14	27		38	34	44	
	Chapel Hill	22	28	49	38		24	45	
	Hillsborough	29	27	46	34	25		31	
	Pittsboro	48	39	44	42	44	29		

**E+C PM Peak Travel time (minutes)**

		<u>To</u>							
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro	
<u>From</u>	Durham			17	54	30	27	33	56
	RTP	20		43	20	39	37	48	
	Raleigh	43	29		30	62	57	56	
	RDU	28	15	40		47	43	47	
	Chapel Hill	26	35	72	48		28	50	
	Hillsborough	40	40	73	50	35		41	
	Pittsboro	51	39	56	43	46	31		

**Compare 2010 and E+C: PM Peak Travel time (percent increase)**

		<u>To</u>						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
<u>From</u>	Durham		23%	54%	28%	20%	16%	17%
	RTP	27%		58%	23%	29%	27%	11%
	Raleigh	23%	15%		14%	25%	24%	22%
	RDU	22%	8%	49%		26%	24%	6%
	Chapel Hill	18%	26%	47%	29%		18%	12%
	Hillsborough	39%	49%	60%	45%	41%		34%
	Pittsboro	8%	-1%	28%	1%	4%	6%	

**MEMORANDUM**

**To:** Transportation Advisory Committee  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** June 13, 2012

**Subject:** **STP-DA Funding Request**

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LPA staff have received requests for additional STPDA funding for several projects recently. The last STPDA Call for Projects was done in 2009, and allocated estimated funding through 2015. However, some funding was held in reserve for future programming. In late 2011, some of these reserved funds were allocated to the American Tobacco Trail cost over-run. While LPA staff prefer to hold a general Call for Projects for STPDA funding in 2014 or 2015 for projects to be obligated in FY 2016 and 2017 and include revisions to our STPDA allocation formula at that time, LPA staff also want to provide a response to the current requests for funding and allow these projects to move forward. The TCC recommends that the TAC approve Carrboro's STPDA request at this time. Future STPDA requests will be brought forward to the TAC as needed.

Carrboro Request

The Town of Carrboro has requested an additional 15 percent, or \$25,303, for U-4726DC, Multi-use Path from Wilson Park to Estes Drive. This project is funded for \$16,868 federal STPDA for planning in FY 2010 and \$151,816 federal STPDA in FY 2012 (\$168,684 total). All of this funding has been obligated. The Town of Carrboro offers the following explanation for the additional funding request.

“The initial cost estimate for the project was completed in 2007 for the 2009-2015 STP-DA Call for Projects, using a simple cost-per-linear foot estimate and based on a shorter facility that climbed a steeper hill. Since that time, a concept plan was completed that recommended a longer facility traversing a more gentle grade and a path intersection at Estes Dr. Additionally, the initial estimate did not seem to factor in Construction Engineering and Inspection services. It also underestimated the cost of PE. Furthermore, inflation since that time has also served to increase construction costs. Updated Davis-Bacon wage determinations also may play a role.

For your info, here is the current financial picture for the project. The table shows more federal STP-DA used for PE, due to cost, and less allocated to construction (total is still \$168,684). The Town also has a federal RTP [Recreational Trails Program] grant contributing to the project, with a separate required local match.”

Project	Flow	Category	Cost	Federal	Local	Total
Wilson Path	Cost	PE	\$(49,066)			\$ (49,066)
Wilson Path	Cost	Construction (OPCC 4-25-12)	\$(249,218)			\$(249,218)
Wilson Path	Cost	10% Construction Contingency	\$(24,922)			\$(24,922)
Wilson Path	Cost	CE	\$(37,383)			\$(37,383)
Wilson Path	Rev	Federal STP-DA - PE		\$39,253		\$39,253
Wilson Path	Rev	Local Bond - PE - 20% local STP-DA match			\$9,813	\$9,813
Wilson Path	Rev	Federal STP-DA - Construction		\$129,431		\$129,431
Wilson Path	Rev	Local Bond - 20% local STP-DA match - Construction			\$32,358	\$32,358
Wilson Path	Rev	Federal RTP grant		\$75,000		\$75,000
Wilson Path	Rev	Local Bond - 25% local RTP grant match			\$18,751	\$18,751
<b>Wilson Path</b>	<b>Rev</b>	<b>Federal STP-DA - Construction - 15% additional</b>		<b>\$25,303</b>		<b>\$25,303</b>
<b>Wilson Path</b>	<b>Rev</b>	<b>Local Bond - 20% local STP-DA match add'l - Constr.</b>			<b>\$6,326</b>	<b>\$6,326</b>
Wilson Path	Rev	Local Bond - Contingency			\$24,354	\$24,354
<b>Wilson Path Total</b>			<b>\$(360,589)</b>	<b>\$268,987</b>	<b>\$91,602</b>	<b>\$0</b>

The MPO's current policy for STPDA funding would require that Carrboro find the funding to cover the cost over-run from their other future programmed projects or through a request from the MPO's annual reserve. Carrboro's other future programmed projects include Rogers Road Sidewalk, the Bolin Creek Greenway (Homestead to Meadow Run), Bicycle Loop Detectors (partially obligated), the Bolin Creek Greenway (Jones Creek), the S. Greensboro St. sidewalk, the Morgan Creek Greenway, and the Bel Arbor-Plantation Acres Multi-use Path. The MPO has not been allocating funding from the annual reserve since 2009. Initially, this was cancelled due to the rescission. Since the rescission was restored, we have not allocated funding from the annual reserve because local governments no longer expressed a desire for small projects due to the burdensome local programs management process. A portion of the reserved funds have been allocated to the American Tobacco Trail cost over-run.

In our preliminary discussions about changes for the next STPDA Call for Projects, LPA staff have suggested, as a rule, allowing and additional allocation of up to 15 percent for any project with a cost over-run. The reasoning for this was that it would be a replacement for the 15 percent annual reserve set-aside, that it would allow projects ready to be obligated to proceed without requiring time for TCC

and TAC review and approval, that it would over-program our funding helping to protect us against carrying a high unobligated balance if some projects fall behind schedule, and that it would not require an MTIP amendment (NCDOT considers minor cost increases that do not exceed \$2 million and 25% of the original project cost to be TIP administrative modifications, not amendments). While this is not an official MPO policy yet, Carrboro's request would fall under this criterion and LPA staff believe this is a reasonable request that can be accommodated by the MPO's current unobligated balance.

The TCC recommends approving Carrboro's request for an additional \$25,303 federal CMAQ funding through an amendment of the STPDA database and a TIP administrative modification.

### Future Durham Requests

The City of Durham has three upcoming NCDOT-managed TIP projects that will need a local contribution for sidewalk and other project upgrades that NCDOT will not fund through traditional funding sources. NCDOT's current policies require that the municipality partially pay for sidewalks based on their population and pay for the cost to upgrade materials used in fencing, noisewalls, etc. The City of Durham's population requires a 50 percent local share/50 percent state share for sidewalks. The City is considering requesting STPDA funding for these sidewalks and upgrades which would allow 80 percent federal funding and 20 percent local funding.

U-4716B, Hopson Road Grade Separation and railroad improvements, will likely go out to bid later this year. Part of this project is the extension of Church Street (Keystone Park Drive) to Hopson Road. The Keystone developer was originally expected to be responsible for participating in the cost of constructing this road extension. However, NCDOT and the NC Turnpike Authority have bought the entire property from the developer. As such, NCDOT's current sidewalk policy now applies. Sidewalks on Church Street are estimated at \$35,000. A more precise estimate will be completed before the project goes out to bid. NCDOT has requested a signed municipal agreement by the end of August 2012. Since the TAC may not act before August, the City may enter the agreement with a clause describing an alternative funding agreement if STPDA funding were approved by the MPO.

U-3308, Alston Avenue widening, is scheduled for construction in FY 2015-2016. The City anticipates that funding will be needed for some of the elements of the project such as wider sidewalks, retaining wall or fencing material upgrades, etc. The specific amount of STPDA that will be requested by the City is not known at this time.

U-0071, the East End Connector, is scheduled for construction in FY 2014-2017. The City anticipates that funding will be needed for some of the elements of the project such as sidewalks on local streets, upgrades in noisewall and fencing materials, etc. The specific amount of STPDA that will be requested by the City is not known at this time. However, due to the large size of this project it is likely to be a significant amount.

Similar to Carrboro's request, the MPO's current policy for the programming of STPDA funding would require that Durham find the funding to cover these sidewalks and upgrades from their other future programmed projects or through a request from the MPO's annual reserve. Durham's other future programmed projects include Fayetteville Road bicycle lanes and sidewalks, Barbee Road sidewalk, DATA sidewalk, Avondale sidewalk, Cheek Road bicycle and pedestrian facilities, Morreene Road bicycle and pedestrian facilities, Cornwallis Road bicycle and pedestrian facilities, Hillandale Road bicycle and pedestrian facilities, Carpenter Fletcher Road bicycle and pedestrian facilities, and Holloway Street sidewalks. The MPO has not been allocating funding from the annual reserve since 2009. Initially, this was cancelled due to the rescission. Since the rescission has been restored, we have not allocated funding from the annual reserve because local governments no longer expressed a desire for small projects due to the burdensome local programs management process. A portion of the reserved funds have been allocated to the American Tobacco Trail cost over-run.

LPA staff consider enhancements for NCDOT-managed projects to be a high priority for the use of STPDA funds. Using STPDA considerably helps the local government afford the cost of sidewalks and project upgrades. It is certainly appropriate to use federal STPDA funding on these larger scale projects that are already being primarily funded with federal and state money. In addition, these are NCDOT-managed projects so NCDOT will be responsible for getting federal authorization.

#### Old Durham-Chapel Hill Road

EB-4707, Old Durham-Chapel Hill Road, will require additional funding due to cost increases. Currently, the estimated additional funding request is around \$5.5 million federal STPDA. The Town of Chapel Hill is currently considering how it wishes to proceed with this project. LPA staff plan to bring this back to the TCC and TAC with more details and a recommended action at a future meeting. However, we wanted to make sure that the TCC and TAC were aware that this project will also likely require additional STPDA funding when they consider these other requests.

#### Effect on STPDA Unobligated Balance and Future STPDA Call for Projects

The MPO currently has an unobligated STPDA balance of \$7,415,648 and we expect to receive approximately \$4.47 million annually in STPDA. While the MPO has already programmed much of our STPDA funding through FY 2015, there are some funds that are unprogrammed due to the restoration of the 2009 rescission. Some of these funds were allocated to the American Tobacco Trail in late 2011. LPA staff estimate that approximately \$3 million of the restored funding is currently unprogrammed. This is an approximate amount since the programming of funds is done based on estimated costs and estimated STPDA allocations. The unobligated balance is a more accurate accounting of how much STPDA funding is currently available and is based on actual obligations and allocations.

The MPO can obligate the Carrboro request without affecting the schedule of other projects. The other impending STPDA requests for Hopson Road, Alston Avenue, the East End Connector, and Old Durham-Chapel Hill Road, if approved, would require that the MPO over-program and over-obligate funding.

NCDOT staff says that we are allowed to over-program and over-obligate STPDA funding since they can “cash flow” the funding over several years. Before the TAC takes action, we will allow NCDOT’s Program Management Office to review the proposal.

While we can allocate these funds, it is important to understand that obligating the additional funds for any of these projects will affect the amount of funds available for a future STPDA Call for Projects. Typically, the MPO programs STPDA for a set number of future years (last time it was for FY 2009-2015) based on our unobligated balance and estimated future allocations. If the MPO obligates more funding now, the unobligated balance will decrease and thus there will be fewer funds to allocate to future projects. Our unobligated balance may in fact end up being negative at the time we hold our Call for Projects if projects stay on schedule meaning we are borrowing against our future anticipated STPDA allocations. Based on our adopted STPDA distribution formula, the impact will be distributed proportionately across all funding categories and jurisdictions.

While LPA Staff have previously discussed holding our call for projects for FY 2016 through 2020 in the spring of 2012, we are now recommending that we delay this until potentially 2014. The MPO has 26 projects programmed for obligation in FY 2012 through 2015. Nine of these projects have been delayed one year, and six of these projects have been delayed more than one year. With so many projects currently behind schedule, the MPO would like our member jurisdictions to focus on obligating projects over the next couple of years before we start to program future funding. By 2014, the MPO will have a better idea of which projects have been able to move forward and which projects may need to be cancelled due to inactivity. In addition, with the changes in the local programs management process, member jurisdictions are learning which projects are best to pursue with federal funding and which are better done with local funds. Delaying the call for projects will allow local jurisdictions more time to consider which of their priorities are better suited for federal funding and which are better done with local funding.

Furthermore, an issue with the current STPDA program and allocation process is that local jurisdictions have difficulty anticipating their needs far out into the future. This has resulted in many projects being delayed, cancelled, or funding reassigned. It increases the amount of TIP amendments necessary and LPA Staff oversight to track funding. For the next call for projects, the MPO may want to limit the allocation to a shorter, more immediate time period (maybe two years only) so jurisdictions only program projects that are able to meet their anticipated schedules. Similarly, some STPDA funding is allocated to routine and special planning projects. The LPA is also better able to anticipate our planning needs on a shorter term basis.

**TCC Recommendation:** That the TAC direct LPA staff to amend the STPDA database to add \$25,303 federal STPDA to U-4726DC.

**TAC Action:** Direct LPA staff to amend the STPDA database to add \$25,303 federal STPDA to U-4726DC.

**FFY 2012  
DCHC MPO Surface Transportation-Direct Attributable  
Federal Funding Levels Report**

TAC 6/13/2012 Attachment 11A

**Funding Availability (Adjusted to Obligational Limitation)**

DCHC MPO- STPDA	COLUMN A	COLUMN B	(COLUMN A + COLUMN B) COLUMN C	(COLUMN C x 87%) COLUMN D	COLUMN E	(COLUMN D - COLUMN E) COLUMN F
	2011 CFY Carry Forward	CY 2012 Appropriations	Total Appropriations	Net Available Funding	YTD Obligation	Net Available Balance
<b>TOTALS</b>	\$6,526,600	\$2,374,511	\$8,901,111	\$7,743,967	\$328,319	\$7,415,648

**Project Specific Obligation List**

Date	WBS TIP Sub Num	Project Desc	WBS element	Phase ID	Authorization date	System Status	WBS Closed Date	County Code	Fund	Obligated Amount	Expenditure Amount	Program Specific Obligated Amount	Program Specific Expenditure Amount
12/15/2011	U-4726DC	CARRBORO - WILSON PARK MULTI-USE PATH	36268.3.4	U-4726DC - CON - CARRBORO	Construction	11/21/11	REL	#	ORANGE 1500/273 1L23ED	\$ 151,816	\$ -	\$ 151,816	0.00
1/3/2012	EL-4995	CHAPEL HILL - DRY CREEK GREENWAY FROM PERRY CREEK ROAD TO PR	40764.1.1	CLOSED EL-4995 - PE - DRY CREEK GREENWA	Prel Engr	11/27/07	CLSD ACPT	1/3/12	ORANGE 1500/273 1H230D	\$ 35,879	\$ 35,879	\$ (28,121)	35,879.00
1/26/2012	SR-5001AR	CHAPEL HILL - SAFE ROUTES TO SCHOOL CONSTRUCT SIDEWALKS ALON	40924.3.43	SR-5001AR - CON - CHAPEL HILL	Construction	12/14/2011	REL	#	ORANGE 1500/273 1L23ED	\$ 86,400	\$ -	\$ 86,400	\$ -
1/26/2012	U-4726DF	CARRBORO - BICYCLE DETECTION AT SIGNALIZED INTERSECTIONS	36268.1.27	U-4726DF - PE - CARRBORO	Prel Engr	01/24/2012	REL	#	ORANGE 1500/273 1L23ED	\$ 6,000	\$ -	\$ 6,000	\$ -
2/9/2012: adjusted 2/23/2012	EB-4707	DURHAM - SR 1838/SR 2220 (OLD DURHAM/CHAPEL HILL ROAD)FROM S	38664.1.1	EB-4707 - PE - BICYCLE IMPROVEMENTS	Prel Engr	06/13/2008	REL ACPT	#	DURHAM 1500/273 1L23ED	112,224	52,629	112,224	52,629

**Total Obligated YTD: \$ 328,319**

## DURHAM-CHAPEL HILL-CARRBORO (DCHC) MPO STPDA Programming Database

Original Fund Type	STP-DA
Extended Program Year	2015

Sum of Programmed Funds					
TIP No	Jurisdiction	TIP No2	Project Phase/Type	Project Description	Total
U-4727	DCHC MPO	(blank)	UPWP	FY 2015 UPWP	\$ 741,836
		(blank) Total			\$ 741,836
U-4727 Total					\$ 741,836
Grand Total					\$ 741,836

## DURHAM-CHAPEL HILL-CARRBORO (DCHC) MPO STPDA Programming Database

Original Fund Type	STP-DA
Extended Program Year	2014

Sum of Programmed Funds					
TIP No	Jurisdiction	TIP No2	Project Phase/Type	Project Description	Total
C-4928	Durham	(blank)	Construction	Morreene Road-Bike/Ped Facilities (Neal to Erwin)	\$ 1,148,000
		(blank) Total			\$ 1,148,000
<b>C-4928 Total</b>					<b>\$ 1,148,000</b>
U-4724	Durham	(blank)	Construction	Cornwallis Road - Bike/Ped Facilities (S. Roxboro to University or C. H.)	\$ 1,661,000
			Planning/Design	Cornwallis Road - Bike/Ped Facilities (S. Roxboro to University or C. H.)	\$ 255,000
				Cornwallis Road - Bike/Ped Facilities (S. Roxboro to University or C. H.)-move to UPWP- U4727 FY12	\$ (190,800)
		(blank) Total			\$ 1,725,200
<b>U-4724 Total</b>					<b>\$ 1,725,200</b>
U-4726	Durham	HK	Construction	Hillandale-Bike/Ped Facilities (I-85 to Fulton)	\$ 894,529
			Planning/Design	Hillandale-Bike/Ped Facilities (I-85 to Fulton)	\$ 157,858
				Hillandale-Bike/Ped Facilities (I-85 to Fulton)-move to UPWP - U4727 FY12	\$ (96,000)
		HK Total			\$ 956,387
		HO	Construction	Carpenter Fletcher-Bike/Ped Facilities (Woodcroft to Alston)	\$ 684,773
			Planning/Design	Carpenter Fletcher-Bike/Ped Facilities (Woodcroft to Alston)	\$ 255,000
				Carpenter Fletcher-Bike/Ped Facilities (Woodcroft to Alston)-move to UPWP FY12	\$ (76,000)
		HO Total			\$ 863,773
		Hx	Construction	Holloway Street Sidewalks	\$ 125,685
		Hx Total			\$ 125,685
<b>U-4726 Total</b>					<b>\$ 1,945,845</b>
U-4727	DCHC MPO	(blank)	UPWP	FY 2014 UPWP	\$ 720,370
		(blank) Total			\$ 720,370
<b>U-4727 Total</b>					<b>\$ 720,370</b>
<b>Grand Total</b>					<b>\$ 5,539,415</b>

## DURHAM-CHAPEL HILL-CARRBORO (DCHC) MPO STPDA Programming Database

Original Fund Type	STP-DA
Extended Program Year	2013

Sum of Programmed Funds						
TIP No	Jurisdiction	TIP No2	Project Phase/Type	Project Description		Total
EB-4707	NCDOT	(blank)	Construction	Old Durham-Chapel Hill Road-Chapel, Durham		\$ 3,200,000
			Preliminary Engineering	Old Durham-Chapel Hill Road-Chapel, Durham-partial obligation		\$ -
		(blank) Total				
EB-4707 Total						\$ 3,200,000
U-4726	Carrboro	Dx	Construction	Bel Arbor-Plantation Acres Multi-use Path		\$ 67,000
		Dx Total				\$ 67,000
	Chapel Hill	IF	Construction	Bolin Creek Stairs - Chapel Hill		\$ 100,000
				Bolin Creek Stairs - Chapel Hill-move Morgan Creek Greenway		\$ (100,000)
		IF Total				\$ -
	IG	Construction	Morgan Creek Greenway - Chapel Hill		\$ 560,000	
			Morgan Creek Greenway Phase 2 - Chapel Hill -moved from Bolin Creek Greenway		\$ 850,000	
			IG Total			\$ 1,410,000
Ix	Construction	NC86/other locations of Pedestrian Safety Improvements			\$ 150,000	
		Ix Total			\$ 150,000	
U-4726 Total						\$ 1,627,000
U-4727	DCHC MPO	(blank)	UPWP	FY 2013 UPWP		\$ 1,577,051
				FY 2013 UPWP-add planning/design for Durham construction projects		\$ 412,800
		(blank) Total				\$ 1,989,851
U-4727 Total						\$ 1,989,851
Grand Total						\$ 6,816,851

## DURHAM-CHAPEL HILL-CARRBORO (DCHC) MPO STPDA Programming Database

Original Fund Type	STP-DA
Extended Program Year	2012

Sum of Programmed Funds					
TIP No	Jurisdiction	TIP No2	Project Phase/Type	Project Description	Total
E-2921e	Durham	(blank)	Construction	American Tobacco Trail Phase E - Durham, Durham County	\$ 4,135,377
		(blank) Total			\$ 4,135,377
E-2921e Total					\$ 4,135,377
EB-4707	NCDOT	(blank)	ROW	Old Durham-Chapel Hill Road-Chapel, Durham	\$ 511,200
		(blank) Total			\$ 511,200
EB-4707 Total					\$ 511,200
EL-4828	Carrboro	(blank)	Construction	Morgan Creek Greenway - Carrboro	\$ 374,120
		(blank) Total			\$ 374,120
EL-4828 Total					\$ 374,120
SR-5001	Chapel Hill	AR	Construction	CH-Culbreth Rd: Cobble Ridge to Rossburn sidewalk	\$ 108,000
		AR Total			\$ 108,000
	Durham	C	Construction	Fayetteville Road (Cornwallis to Nelson) bicycle lanes and sidewalks	\$ 200,800
		C Total			\$ 200,800
SR-5001 Total					\$ 308,800
U-4726	Carrboro	DC	Construction	Multi-use path from Wilson Park to Estes Drive	\$ 151,816
		DC Total			\$ 151,816
		DD	Construction	Rogers Road - Sidewalk (Homestead to Meadow Run)	\$ 363,960
		DD Total			\$ 363,960
		DE	Construction	Bolin Creek Greenway - Carrboro (Homestead to Chapel Hill HS Greenway	\$ 531,000
		DE Total			\$ 531,000
		DF	Construction	Bicycle Loop Detectors	\$ 30,000
		DF Total			\$ 30,000
		Dx	Construction	Bolin Creek Greenway (Jones Creek)	\$ 214,700
				S. Greensboro St. - Sidewalk	\$ 46,640
		Dx Total			\$ 261,340
	Chapel Hill	Ix	Construction	Bolin Creek Greenway - Chapel Hill	\$ 750,000
				Bolin Creek Greenway -funds moved for Morgan Creek Greenway	\$ (750,000)
				CH-Chapel Hill Sidewalks	\$ 320,000
				NC86/other locations of Pedestrian Safety Improvements	\$ 150,000
		Ix Total			\$ 470,000
	Durham	HL	Construction	Barbee Rd. (Orindo to Pearstown Elementary) Sidewalk	\$ 15,680
				DATA Sidewalk	\$ 15,840
		HL Total			\$ 31,520
		Hx	Construction	Avondale - Sidewalk (I-85 to Geer)	\$ 412,000
				Cheek - Bike/Ped Facilities (Geer to Hardee)	\$ 556,000

## DURHAM-CHAPEL HILL-CARRBORO (DCHC) MPO STPDA Programming Database

U-4726	Durham	Hx Total			\$ 968,000	
U-4726 Total					\$ 2,807,636	
U-4727	Chapel Hill	(blank)	UPWP Amend.	FY 2012 UPWP Amend. #3	\$ 30,000	
		(blank) Total			\$ 30,000	
	DCHC MPO	(blank)	UPWP		FY 2012 UPWP	\$ 1,533,665
			UPWP Amend.		FY 2012 UPWP Amend. #1-Add planning/design for Durham construction projects	\$ 412,800
					FY 2012 UPWP Amend. #4	\$ (499,317)
					FY 2012 UPWP Amend. #4 move to FY13	\$ (412,800)
	(blank) Total			\$ 1,034,348		
	Triangle J COG	(blank)	UPWP		FY 2012 UPWP	\$ 55,200
			FY 2012 UPWP-Amendment #2 -deobligation	\$ (20,000)		
(blank) Total			\$ 35,200			
U-4727 Total					\$ 1,099,548	
U-5119	Chapel Hill Trans	(blank)	Construction	NC-86/US 15-501 BRT improvements	\$ 452,000	
		(blank) Total			\$ 452,000	
U-5119 Total					\$ 452,000	
Grand Total					\$ 9,688,681	

**RESOLUTION**

**TO APPROVE AMENDMENT #5 TO THE FY 2011-2012 UNIFIED PLANNING WORK PROGRAM OF THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)**

**June 13, 2012**

A motion was made by TAC Member \_\_\_\_\_, and seconded by TAC Member \_\_\_\_\_ for the adoption of the following resolution, and upon being put to a vote was duly adopted.

**WHEREAS**, A comprehensive and continuing transportation planning program must be carried out cooperatively in order to ensure that funds for transportation planning projects are effectively allocated to the DCHC MPO; and

**WHEREAS**, The Durham-Chapel Hill-Carrboro MPO requests an amendment to the 2011-2012 UPWP as outlined on the attached tables; and

**WHEREAS**, Members of the Transportation Advisory Committee agree that the Unified Planning Work Program amendment effectively advances transportation planning for 2011-2012.

**Now, therefore, be it resolved that the Transportation Advisory Committee hereby endorses Amendment #5 of the Durham-Chapel Hill-Carrboro Urban Area Unified Planning Work Program for the FY 2011-2012 as described in the attached sheets.**

I, Lydia E. Lavelle, TAC Chair, do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Durham-Chapel Hill- Carrboro Urban Area Transportation Advisory Committee, duly held on the \_\_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_  
Lydia E. Lavelle, TAC Chair

Durham County, North Carolina

I certify that Lydia E. Lavelle personally appeared before me on this day acknowledging to me she signed the foregoing document.

Date: June 13<sup>th</sup>, 2012

\_\_\_\_\_  
Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2015

Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Proposed Funding Source Tables

**Durham Area Transit Authority  
 (DATA)**

FIGURES  
 Approved  
 May 11, 2011

TASK DESCRIPTION	TRANSIT FUNDS					Total
	STP-DA 100%	PL 100%	Section 5303 100%	Section 5307 100%	Section 5309 100%	
<b>II-A</b>	<b>Surveillance of Change</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ 88,186	\$ 14,862	\$ -	\$ 103,048
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>II-B</b>	<b>Long Range Transp. Plan</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ 10,762	\$ -	\$ 10,762
11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	\$ -	\$ -	\$ -	\$ 63,342	\$ -	\$ 63,342
17	\$ -	\$ -	\$ -	\$ 21,450	\$ -	\$ 21,450
18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>II-C</b>	<b>Short Range Transit Planning</b>					
1	\$ -	\$ -	\$ -	\$ 96,250	\$ -	\$ 96,250
<b>III-A</b>	<b>Planning Work Program</b>					
1	\$ -	\$ -	\$ 32,383	\$ -	\$ -	\$ 32,383
<b>III-B</b>	<b>Transp. Improvement Plan</b>					
1	\$ -	\$ -	\$ 2,594	\$ -	\$ -	\$ 2,594
<b>III-C</b>	<b>Civil Right Compliance /Other Regulation Requirements</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ 6,637	\$ -	\$ 6,637
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ 16,822	\$ 81,475	\$ -	\$ 98,297
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-D</b>	<b>Incidental Planning/Project Development</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-E</b>	<b>Management &amp; Operations</b>					
1	\$ -	\$ -	\$ -	\$ 342,377	\$ -	\$ 342,377
<b>TOTALS</b>			\$ 139,985	\$ 637,155	\$ -	\$ 777,140

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Proposed Funding Source Tables**

**Durham Area Transit Authority  
(DATA)**

Proposed Changes - UPWP Amendment#5							
TASK DESCRIPTION	TRANSIT FUNDS					Total	
	STP-DA 100%	PL 100%	Section 5303 100%	Section 5307 100%	Section 5309 100%		
<b>II-A</b>	<b>Surveillance of Change</b>						
1	-	-	-	-	-	-	
2	-	-	-	-	-	-	
3	-	-	-	-	-	-	
4	-	-	-	-	-	-	
5	-	-	(22,177.00)	13,428.00	-	(8,749.00)	
6	-	-	-	-	-	-	
7	-	-	-	-	-	-	
8	-	-	-	-	-	-	
9	-	-	-	-	-	-	
10	-	-	-	-	-	-	
11	-	-	-	-	-	-	
12	-	-	-	-	-	-	
13	-	-	-	-	-	-	
<b>II-B</b>	<b>Long Range Transp. Plan</b>						
1	-	-	-	-	-	-	
2	-	-	-	-	-	-	
3	-	-	-	-	-	-	
4	-	-	-	-	-	-	
5	-	-	-	-	-	-	
6	-	-	-	-	-	-	
7	-	-	-	-	-	-	
8	-	-	-	-	-	-	
9	-	-	-	-	-	-	
10	-	-	-	(10,762.00)	-	(10,762.00)	
11	-	-	-	-	-	-	
12	-	-	-	-	-	-	
13	-	-	-	-	-	-	
14	-	-	-	-	-	-	
15	-	-	-	-	-	-	
16	-	-	-	-	-	-	
17	-	-	-	(21,450.00)	-	(21,450.00)	
18	-	-	-	-	-	-	
<b>II-C</b>	<b>Short Range Transit Planning</b>						
1	-	-	-	(96,250.00)	-	(96,250.00)	
<b>III-A</b>	<b>Planning Work Program</b>						
1	-	-	(32,383.00)	-	-	(32,383.00)	
<b>III-B</b>	<b>Transp. Improvement Plan</b>						
1	-	-	(2,594.00)	-	-	(2,594.00)	
<b>III-C</b>	<b>Civil Right Compliance /Other Regulation Requirements</b>						
1	-	-	-	-	-	-	
2	-	-	-	(6,637.00)	-	(6,637.00)	
3	-	-	-	-	-	-	
4	-	-	-	-	-	-	
5	-	-	-	-	-	-	
6	-	-	(16,822.00)	(81,475.00)	-	(98,297.00)	
7	-	-	-	-	-	-	
<b>III-D</b>	<b>Incidental Planning/Project Development</b>						
1	-	-	-	-	-	-	
2	-	-	-	-	-	-	
3	-	-	-	-	-	-	
4	-	-	-	-	-	-	
<b>III-E</b>	<b>Management &amp; Operations</b>						
1	\$0.00	\$0.00	73,976.00	195,870.00	-	269,846.00	
<b>TOTALS</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>(7,276.00)</b>	<b>\$0.00</b>	<b>(7,276.00)</b>

Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Proposed Funding Source Tables

**Durham Area Transit Authority  
 (DATA)**

FINAL FIGURES  
 AFTER UPWP  
 AMENDMENT #5

TASK DESCRIPTION	TRANSIT FUNDS					Total
	STP-DA 100%	PL 100%	Section 5303 100%	Section 5307 100%	Section 5309 100%	
<b>II-A</b>	<b>Surveillance of Change</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ 66,009	\$ 28,290	\$ -	\$ 94,299
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>II-B</b>	<b>Long Range Transp. Plan</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	\$ -	\$ -	\$ -	\$ 63,342	\$ -	\$ 63,342
17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>II-C</b>	<b>Short Range Transit Planning</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-A</b>	<b>Planning Work Program</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-B</b>	<b>Transp. Improvement Plan</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-C</b>	<b>Civil Right Compliance /Other Regulation Requirements</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-D</b>	<b>Incidental Planning/Project Development</b>					
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>III-E</b>	<b>Management &amp; Operations</b>					
1	\$ -	\$ -	\$ 73,976	\$ 538,247	\$ -	\$ 612,223
<b>TOTALS</b>			\$ 139,985	\$ 629,879	\$ -	\$ 769,864

## MEMORANDUM

**TO: Transportation Advisory Committee  
DCHC MPO**

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

**DATE: June 13, 2012**

**SUBJECT: FFY 2012 Section 5307/5340 Apportionment#2 for Durham NC UZA**

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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 49 USC 5307(a)(2). Generally, a transportation management area (tma) 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 a second (#2) partial FFY2012 Apportionment and has 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.

Please reference attachment to this agenda item.

**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 13, 2012

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 2012 Section 5307/5340 (Partial Update) Apportionment for Durham NC UZA

Dear Regional Administrator:

We have been advised that the FFY 2012 apportionment for the Durham-Chapel Hill-Carrboro Urbanized Area includes both 5307 and 5340 funds has now been updated with a second amount \$5,204,450. Distribution of the FFY 2012 Section 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.

	FFY 2012 Partial (updated May 9, 2012) Apportionment	Transit Enhancement 1%	Safety & Security 1%	Net Available for Transit Expenditures
Chapel Hill	\$ 1,454,916	\$ 14,549	\$ 14,549	\$ 1,425,818
DATA	\$ 2,777,685	\$ 27,777	\$ 27,777	\$ 2,722,131
TTA	\$ 971,849	\$ 9,718	\$ 9,718	\$ 952,412
	<u>\$ 5,204,450</u>	<u>\$ 37,495</u>	<u>\$ 37,495</u>	<u>\$ 5,100,361</u>

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 2012 FTA Section 5307/5340 grant application in accordance with the amounts apportioned.

Page 2 of 2  
June 13, 2012

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](mailto:Felix.Nwoko@Durhamnc.gov)) or Maricia Brown, ([Maricia.brown@Durhamnc.gov](mailto: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

**MEMORANDUM**

**To:** Transportation Advisory Committee  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** June 13, 2012

**Subject:** **Legislative Update**

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The NC General Assembly is currently in the 2012 short session. They have considered several bills that affect transportation and MPOs. Much of the information in this memo is taken from emails and tweets that Julie White from the NC Metropolitan Mayors Coalition has sent over the past few weeks and recent news articles.

The following is a summary of transportation-related legislation that most directly affects the DCHC MPO and its jurisdictions.

**State Budget**

The House has passed the budget and the Senate is in the process of finalizing their version of the budget (as of 6/6/2012). The House budget initially included a 15% (\$9 million) cut to public transportation grants. This was changed to a 4% (\$2.5 million) cut by reducing funding for secondary road construction (paving gravel roads). A News & Observer article on the secondary road construction program is included in the news articles.

Rep. Blust from Guilford County ran an amendment to the budget that requires NCDOT to only plan for a 35 cent gas tax starting in FY 2013-2014, rather than the 37.5 cent cap that the General Assembly is likely to pass (see H142 below). The effect of this amendment is that NCDOT will not be able to show the public and legislators what the effect of the gas tax cap is on projects and programs making it politically easier to lower the cap to 35 cents next year. It also lessens the pressure to address shrinking transportation revenues as a part of tax reform.

The budget includes funding for the Mobility Fund, which had been held in reserve. The criteria and scoring formula for the Mobility Fund has also been codified by the General Assembly. The proposed schedule for Mobility Fund projects is included in the informational items.

**H142 – Economic Development and Finance Changes (Gas Tax Cap)**

Among other changes, H142 would cap the gas tax at 37.5 cents for FY 2012-2013. The cap would sunset in July 2013.

### **S851 – Boards and Commissions Efficiency Act of 2012**

S851 reorganizes many state boards and commissions. Among the changes is a proposal to significantly alter the membership of the NC Geographic Coordinating Council, removing all local government participation, and moving the commission from the State Chief Information Officer's Office to the Office of Geospatial and Technology Management, Division of Emergency Management, Department of Public Safety. There is concern that this change would decrease the quality of state GIS services that are used by government and decrease coordination of GIS data among state agencies.

### **S886/S887 - Strengthen Board of Transportation Ethics Policy**

S886/S887 codifies the additional ethics requirements for the BOT enacted after Executive Order #2.

### **S888 – Ethics Requirements for MPOs/RPOs**

S888 would require that MPOs and RPOs are subject to the State Government Ethics Act which would mean that covered persons would be required to annually file a Statement of Economic Interest form, attend periodic ethics training seminars, and be subject to certain gift and favoritism restrictions. More information about these requirements is on the State Ethics Commission website <http://www.ethicscommission.nc.gov/default.aspx>. The Statement of Economic Interest form must be filed by April 15, 2013.

The intent seems to be to include only members of the TAC as covered persons. However, the language of the bill is not specific. LPA Staff is concerned that LPA staff and TCC members may also be subject to these requirements. The State Ethics Act is different from the local government ethics requirements for elected officials so it will require additional forms and training for TAC members. LPA Staff is also concerned about how compliance with this legislation will be monitored and enforced.

### **S890 - Secretary of Transportation Project Approval**

S890 codifies the provisions of Executive Order #2 that delegate the authority to approve highway construction projects and plans and to award highway construction contracts to the Secretary of Transportation.

### **S892 – Require DOT Strategic Prioritization Process**

S892 would require NCDOT to continue using the strategic prioritization process (SPOT) for selecting TIP projects. It requires that the process include a combination of quantitative data, qualitative input, and multimodal characteristics, and should include local input. It also requires NCDOT to develop a process of standardizing or approving local methodology used in MPO and RPO prioritization.

MPO staffs have voiced concern that the bill would standardize or require NCDOT approval of the local methodology used to develop the MPOs' local priority lists. The MPO priority list should be developed locally reflecting local values and should not be subject to NCDOT approval. While some MPOs and RPOs in the state may not be using a methodology that includes quantitative and qualitative data and may need assistance to improve their methodologies, the DCHC MPO has been using a comprehensive data-based methodology for many years and we feel that NCDOT approval is unnecessary.

Consideration is being given to changing the language of the bill to remove the requirement that NCDOT standardize or approve local methodologies and simply require that MPOs and RPOs use a methodology that includes quantitative data, qualitative input, and multimodal characteristics. This change is supported by LPA staff.

#### **S893 – Privacy of Turnpike Authority Toll Data**

S893 requires the NCTA to maintain the confidentiality of toll data and states that toll data is not public record. Account holders may examine their own account information and a party, by authority of proper court order or subpoena, may inspect and examine account information.

#### **S902 – DOT to Study Tolls on Interstate 95**

S902 requires NCDOT to study the impact of tolling Interstate 95 on the corridor and surrounding areas, including the economic impact and the impact on alternate routes. S902 also requires NCDOT to get the General Assembly's approval before implementing tolls. According to recent news articles, the many state legislators do not support tolling I-95. However, without tolling, there is not adequate revenue to widen and improve the interstate. While this project is not in the DCHC MPO, the resolution of this issue may impact statewide transportation funding.



# Oak-Poplar Traffic Study

Public Hearing

March 27, 2012



**MARTIN  
ALEXIOU  
BRYSON**

# Study Objectives

- Develop pavement marking plan for West Main Street “Road Diet”
- Identify circulation and safety issues in Oak-Poplar neighborhood

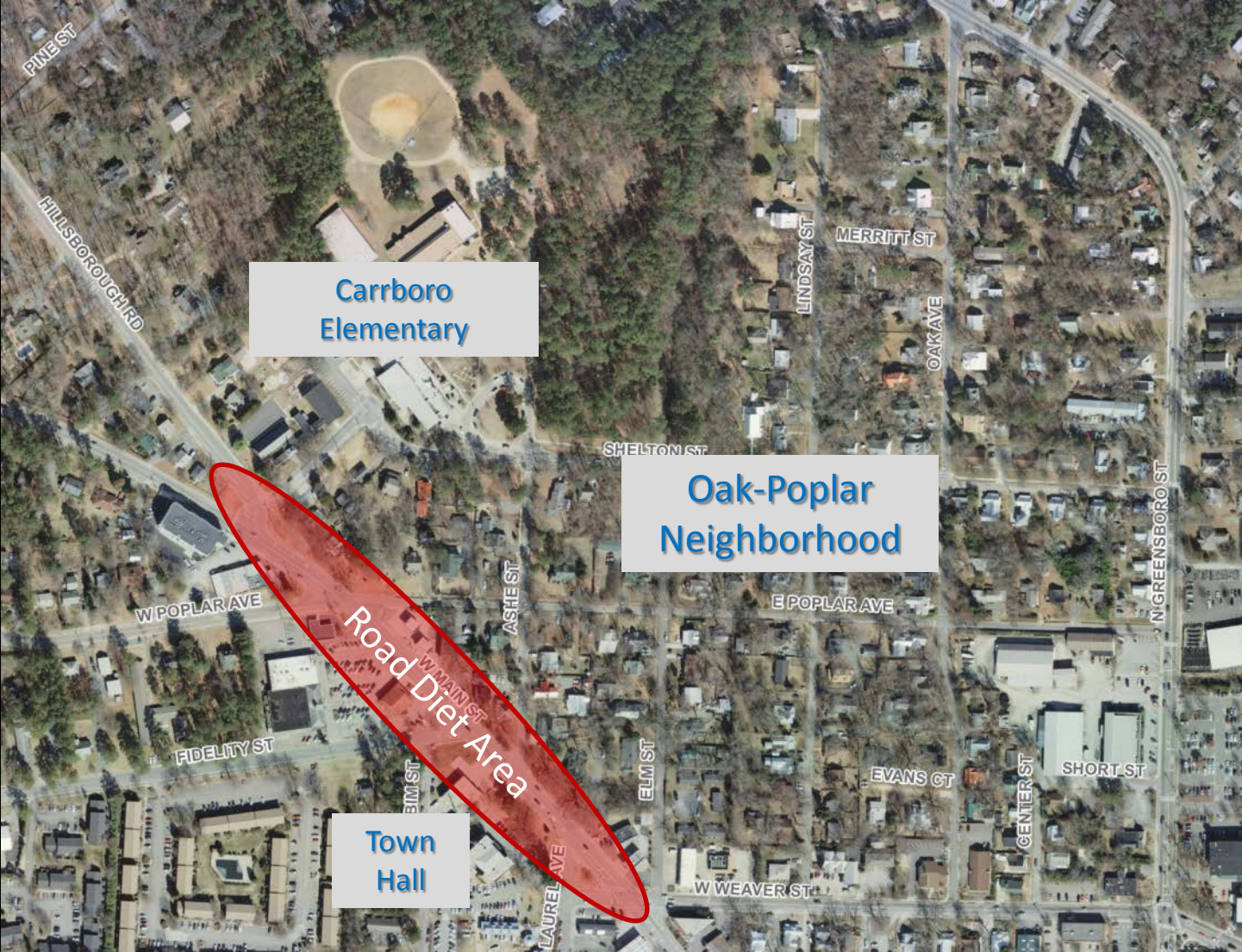


# Input and Data Collection

- Neighborhood Walk (Nov 3)
- Field observations
- Traffic counts
- Community Meeting (Dec 5)
- Town and MPO staff



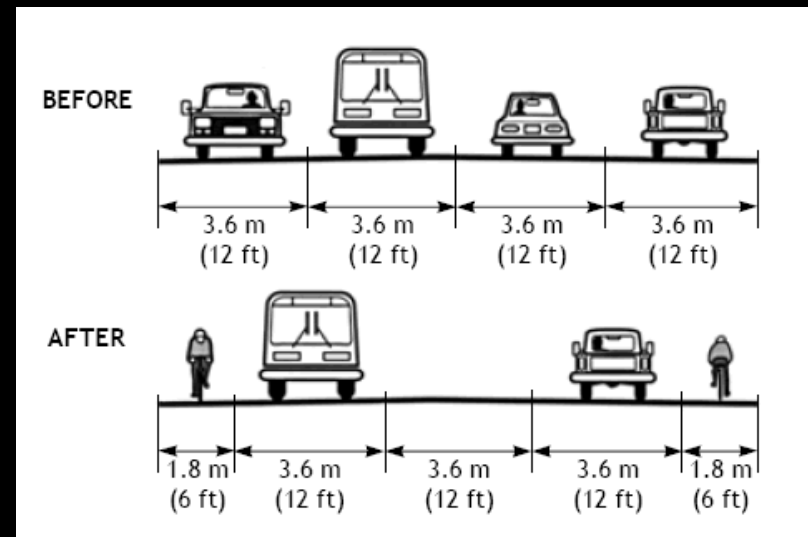
# Study Area



# West Main St Road Diet

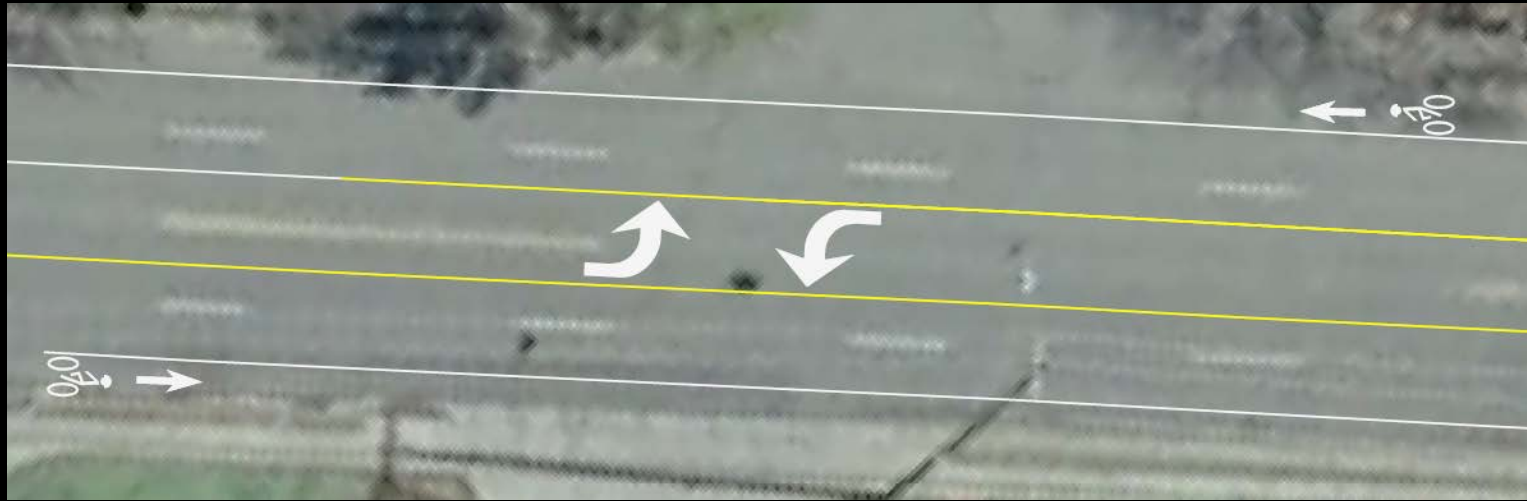
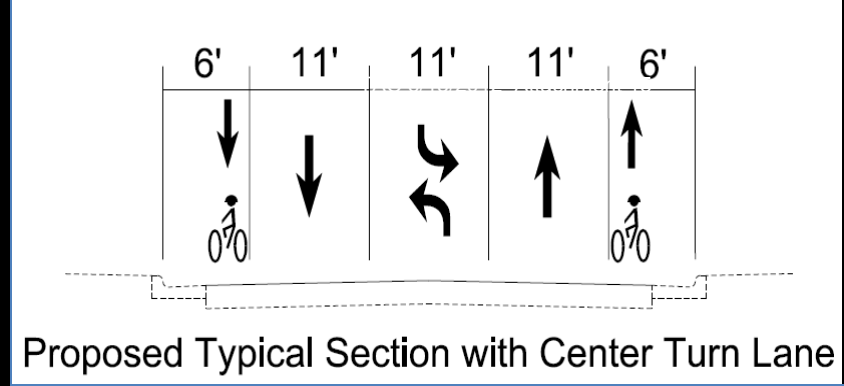
# What is a “Road Diet”?

- Reduce number (and sometimes width) of vehicular travel lanes
  - Enhance safety for bicycles and pedestrians
  - Add bicycle and pedestrian facilities/amenities
- Create a multimodal street

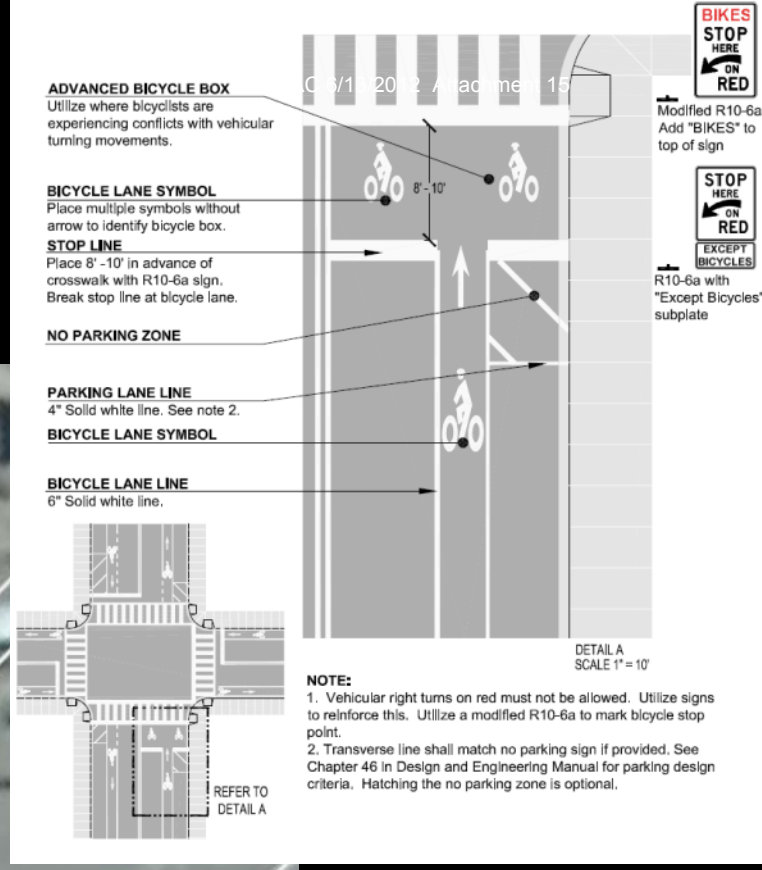
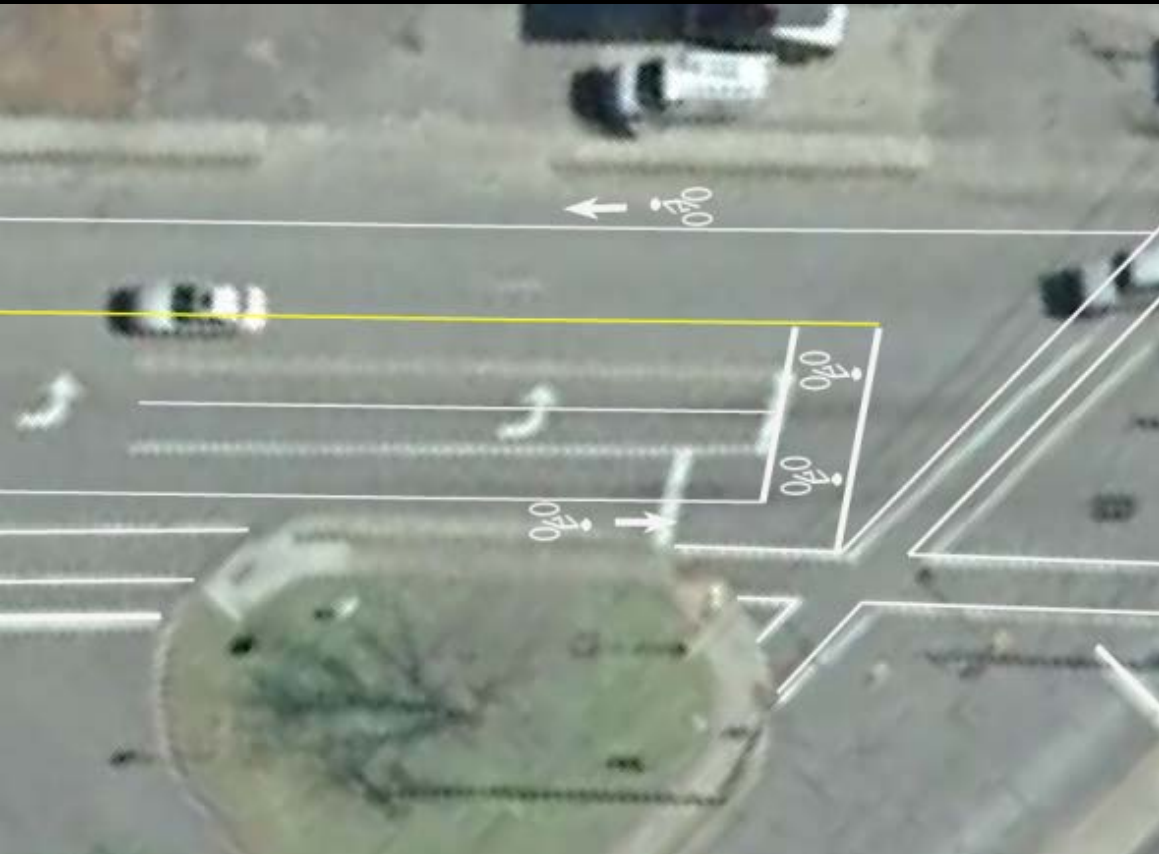


Source: FHWA

# Road Diet



# Bike Box Concept



# Traffic Data

# Level of Service Analysis

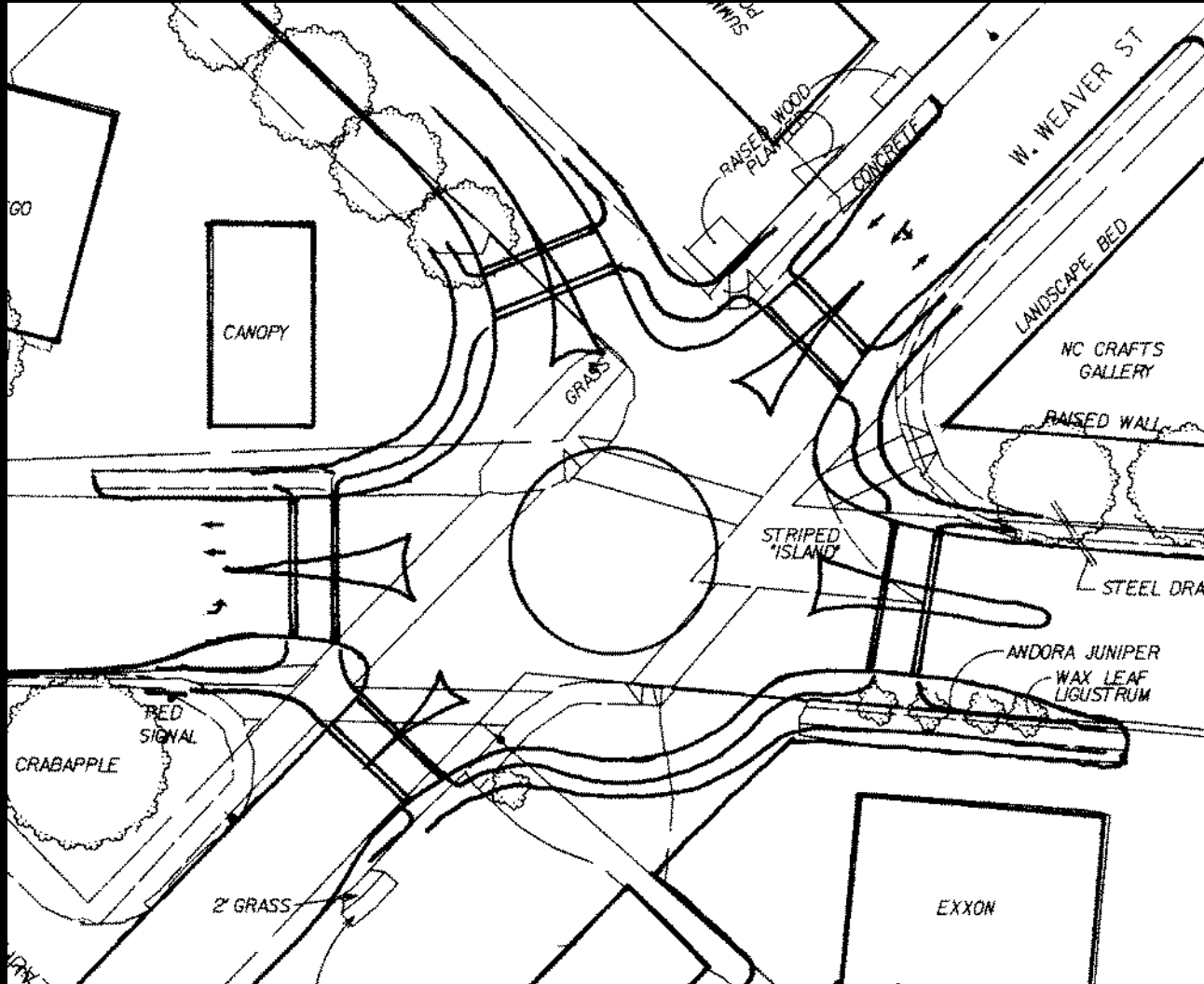


# Level of Service

West Main Street Intersection	Traffic Control	Existing (2011)		Road Diet (2011)	
		AM	PM	AM	PM
Hillsborough Road	Unsignalized	(WB-B)	(WB-B)	(WB-B)	(WB-B)
Poplar Avenue	Unsignalized	(EB-B)	(EB-B)	(EB-B)	(EB-B)
Fidelity Street	Unsignalized	(EB-B)	(EB-B)	(EB-B)	(EB-B)
Ashe Street	Unsignalized	(SB-A)	(WB-A)	(WB-A)	(WB-B)
Weaver Street	Signalized	B (SB-B)	B (NB-B)	B (SB-B)	B (NB-B)
Elm Street	Unsignalized	(SB-A)	(SB-B)	(SB-A)	(SB-B)
Weaver Street/Elm Street Roundabout	Roundabout	-	-	A (SB-A)	A (SB-A)

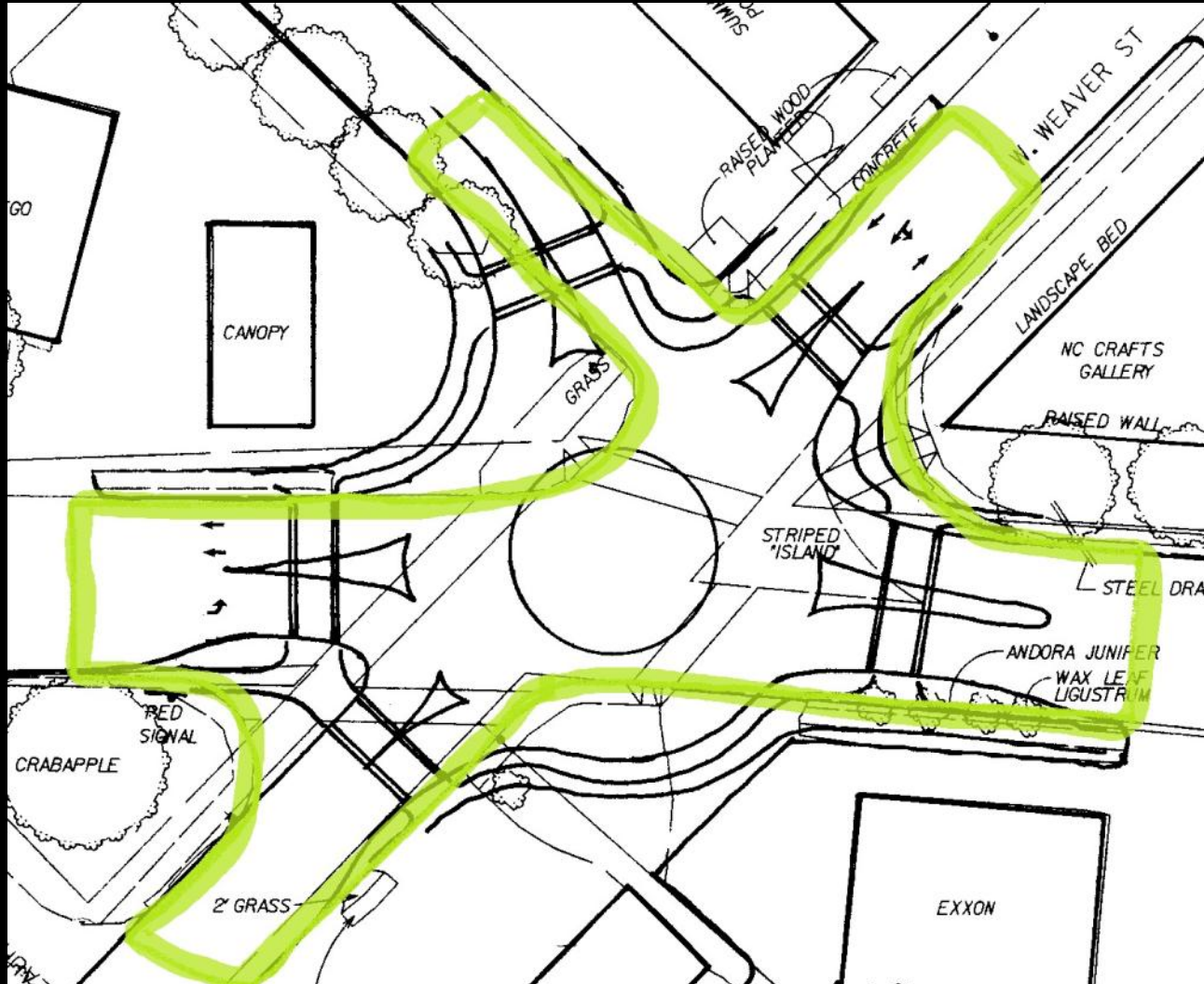
Legend: X (X-X) = overall intersection LOS for signalized intersection (worst approach – worst approach LOS)  
 X = Worst LOS for uncontrolled approach at unsignalized intersection

# Roundabout



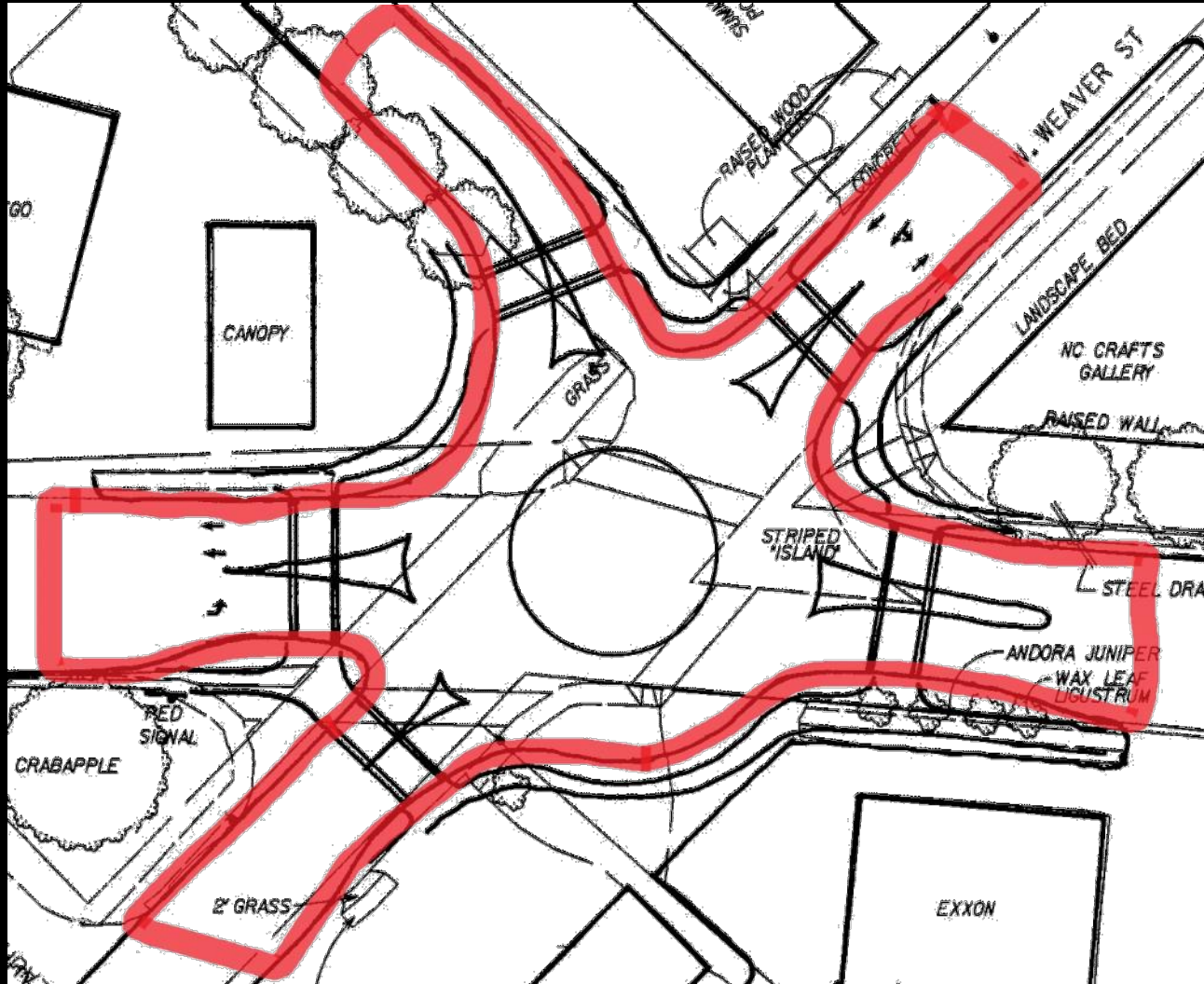
- Impacts private property
- Impacts access to adjacent properties
- NCDOT typically requires 25-year service life analysis

# Roundabout



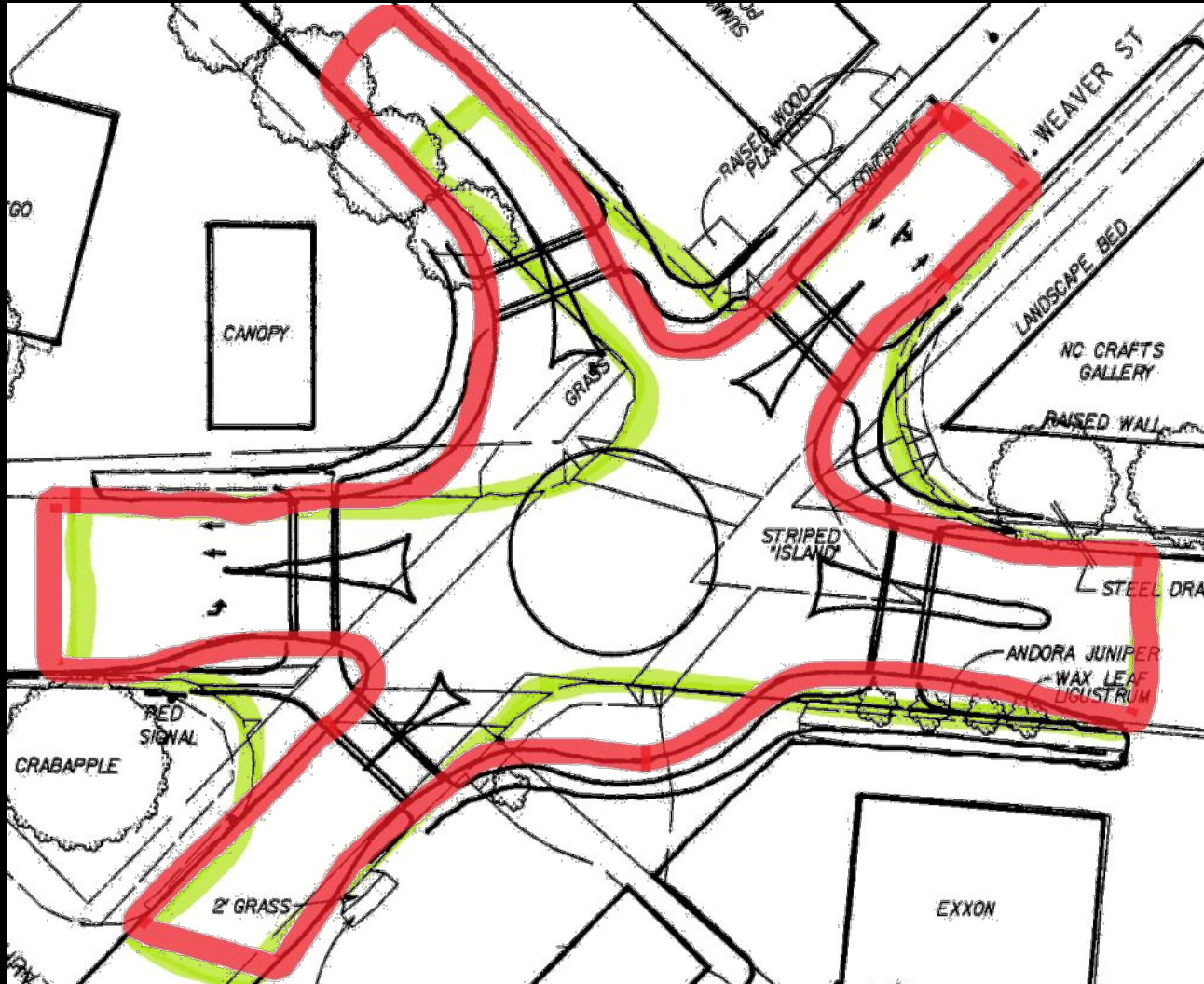
- Impacts private property
- Impacts access to adjacent properties
- NCDOT typically requires 25-year service life analysis

# Roundabout



- Impacts private property
- Impacts access to adjacent properties
- NCDOT typically requires 25-year service life analysis

# Roundabout



- Impacts private property
- Impacts access to adjacent properties
- NCDOT typically requires 25-year service life analysis

# Preliminary Traffic Findings

- Road Diet not expected to have significant negative impact on congestion in the area
- Roundabout may be feasible but further analyses are necessary

# Oak-Poplar Neighborhood Circulation and Safety Issues

# Pedestrian Issues



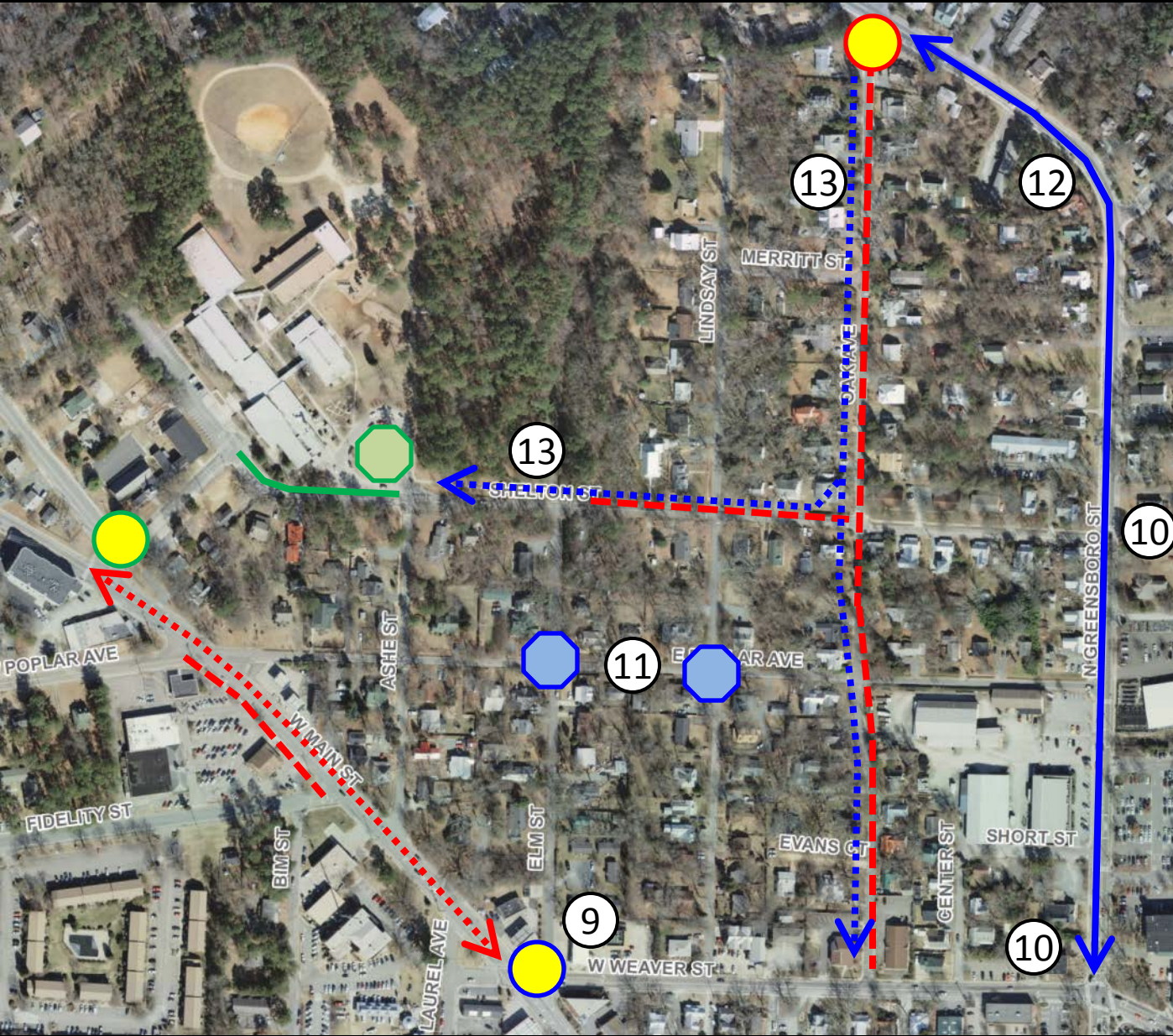
- ① No sidewalk/  
narrow street  
on Oak and  
Shelton
- ② Gap in sidewalk  
on west side of  
W Main St
- ③ Lack of  
crosswalks on  
W Main St
- ④ Oak/Greensboro  
intersection  
crossing  
concerns

# School Circulation Issues



- 5 No stop sign or traffic control at drop-off circle
- 6 Solid white line on Shelton confusing
- 7 Two left turn lanes become one lane on Shelton
- 8 Main/Hillsborough/Shelton intersection difficult

# Neighborhood Circulation Issues



- 9 Elm / Weaver / Main intersection
- 10 Impacts of potential new development
- 11 Stop sign compliance
- 12 Greensboro traffic
- 13 Cut-through traffic

# Potential Solutions

Potential Solution	Affordability	Feasibility	Effectiveness	Next Steps
Oak Avenue one-way	++	+	++	Detailed Traffic Impact Analysis report
Traffic calming: traffic humps or speed tables on Oak Avenue	++	++	++	Detailed engineering study on possible locations
Traffic calming: chicanes or traffic circles on Shelton Street	+	+	++	Detailed treatment location / traffic impact study
Raised pedestrian islands at the North Greensboro Street and Oak Avenue intersection and the West Main Street and Weaver Street intersection	++	+++	++	Town and NCDOT approval
Close Elm Street and Weaver Street intersection to vehicle traffic	++	+	++	Traffic Impact Analysis report
Reconstruct Shelton Street / Hillsborough Road / West Main Street intersection	+	+	+++	Planning and engineering study of traffic impacts, capital costs, new road alignments, and new traffic patterns.
Construct sidewalks on Oak Avenue, Shelton Street, and/or Elm Street	+	++	+++	Detailed sidewalk layout study to determine sidewalk alignments and impacts on properties, right-of-way, trees, and utilities.
Marked pedestrian crossings on West Main Street (likely with raised, pedestrian refuge islands)	+++ (++ if raised refuge islands are used)	+++	+++	Location study and NCDOT approval

# Questions and Comments?

## MEMORANDUM

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

**From:** DCHC MPO Lead Planning Agency

**Date:** June 13, 2012

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

---

This memorandum provides a summary status of tasks for projects in the FY 2011-2012 Unified Planning Work Program.

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

### **FY 2011- 2012 Unified Planning Work Program (UPWP) – Projects**

#### **Town of Carrboro Transportation Study/Main Street Road Diet**

- ✓ Consultant selected
- ✓ Scope development/contract negotiation complete
- ✓ Data Collection to commence in September 2011 – Analysis Underway

#### **Town of Hillsborough Downtown Transportation Study**

- ✓ Consultant selected
- ✓ Scope development/contract negotiation complete
- ✓ Data Collection to commence in September 2011 – Analysis 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 – March/April/May 2012
- ✓ LRTP Goals and Objectives – March/April/May 2012
- ✓ Approval of LRTP Targets - March/April/May 2012
- ✓ Deficiency Analysis – June 2012
- Socio-economic Forecasts – June 2012
- Land use Scenario – August 2012
- Alternative Analysis – May –July 2012
- 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 –Depends on NCDOT Schedule
- Public Input

- Recommended CTP
- Adopted CTP - September 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 – Draft plan completed
- ✓ 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
  - ✓ 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 2012
- Evaluation of effective of CMP projects and funded projects - ongoing

**MPO Safety and Security Plan**

- ✓ Action Plan and schedule to be completed in September 2011

**Update of the MPO Public Involvement consistent with Federal Certification Review**

- ✓ Action Plan and schedule completed in September 2011

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

- ✓ Action Plan and schedule completed in September 2011

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

- ✓ Action Plan and schedule completed in September 2011

**MPO Freight Plan and Integration**

- ✓ Action Plan and schedule completed in September 2011

**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:** GELDER AND ASSOCIATES, INC.  
**Contract Amount:** \$6,502,648.68 **Cost Overrun/Underrun:** 11.63%  
**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:** 6/15/2012  
**Last Estimate Thru:** 4/30/2012 **Scheduled Progress:** 100%  
**Last Estimate Paid:** 5/9/2012 **Actual Progress:** 95.63%

**Contract Number:** C202164 **Route:** SR-1959  
**Physical Division:** 5 **County:** Durham  
**Administrative Division:** 5 **TIP Number:** U-4011  
**Length:** 0.767 miles **Federal Aid Number:** STP-1959(3)  
**Resident Engineer:** Mark W. Luther, PE **RE Phone Number:** (919)220-4680  
**Location Description:** SR-1959 (S MIAMI BLVD) FROM SOUTH OF SR-2112 (METHODIST ST) TO NORTH OF SR-1960 (BETHESDA AVE).  
**Type of Work:** GRADING, DRAINAGE, PAVING & SIGNALS.  
**Contractor Name:** TRIANGLE GRADING & PAVING, INC  
**Contract Amount:** \$4,666,751.41 **Cost Overrun/Underrun:** 3.23%  
**Availability Date:** 6/27/2011 **Letting Date:** 5/17/2011  
**Completion Date:** 7/13/2012 **Work Began:** 7/13/2011  
**Revised Completion Date:** **Estimated Completion:** 7/13/2012  
**Last Estimate Thru:** 5/15/2012 **Scheduled Progress:** 66.79%  
**Last Estimate Paid:** 5/22/2012 **Actual Progress:** 66.75%

**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:** Mark W. Luther, PE **RE Phone Number:** (919)220-4680  
**Location Description:** SR-1321 (HILLDALE 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:** 17.93%  
**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:** 9/15/2012  
**Last Estimate Thru:** 5/7/2012 **Scheduled Progress:** 87.12%  
**Last Estimate Paid:** 5/11/2012 **Actual Progress:** 68.02%

**Contract Number:** C202507 **Route:** I-540  
**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. <b>Type of Work:</b> DESIGN-BUILD LANDSCAPING. <b>Contractor Name:</b> SOUTHERN GARDEN, INC. <b>Contract Amount:</b> \$4,800,000.00 <b>Cost Overrun/Underrun:</b> <b>Availability Date:</b> 8/15/2011 <b>Letting Date:</b> 4/21/2011 <b>Completion Date:</b> 7/1/2015 <b>Work Began:</b> <b>Revised Completion Date:</b> <b>Estimated Completion:</b> <b>Last Estimate Thru:</b> <b>Scheduled Progress:</b> <b>Last Estimate Paid:</b> <b>Actual Progress:</b>	
<b>Contract Number:</b> C202538 <b>Route:</b> 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 <b>Physical Division:</b> 5 <b>County:</b> Durham <b>Administrative Division:</b> 5 <b>TIP Number:</b> <b>Length:</b> 22.96 miles <b>Federal Aid Number:</b> <b>Resident Engineer:</b> Cadmus Capehart, PE <b>RE Phone Number:</b> (919)840-0914 <b>Location Description:</b> 1 SECTION OF US-70, 1 SECTION OF NC-55, 1 SECTION OF NC-751 & 13 SECTIONS OF SECONDARY ROADS. <b>Type of Work:</b> MILLING, RESURFACING & SHOULDER RECONSTRUCTION. <b>Contractor Name:</b> TRIANGLE GRADING & PAVING, INC <b>Contract Amount:</b> \$4,474,348.51 <b>Cost Overrun/Underrun:</b> 1.58% <b>Availability Date:</b> 3/15/2010 <b>Letting Date:</b> 1/19/2010 <b>Completion Date:</b> 12/16/2010 <b>Work Began:</b> 4/5/2010 <b>Revised Completion Date:</b> <b>Estimated Completion:</b> 3/30/2012 <b>Last Estimate Thru:</b> 6/22/2011 <b>Scheduled Progress:</b> 100% <b>Last Estimate Paid:</b> 7/7/2011 <b>Actual Progress:</b> 98.01%	
<b>Contract Number:</b> C202610 <b>Route:</b> NC-147 <b>Physical Division:</b> 5 <b>County:</b> Durham <b>Administrative Division:</b> 5 <b>TIP Number:</b> R-5164D <b>Length:</b> 6.8 miles <b>Federal Aid Number:</b> STM-0147(3) <b>Resident Engineer:</b> Cadmus Capehart, PE <b>RE Phone Number:</b> (919)840-0914 <b>Location Description:</b> NC-147 FROM NORTH OF SR-1322 (BROAD ST) TO NORTH OF SR-2028 (TW ALEXANDER BLVD). <b>Type of Work:</b> DIAMOND GRINDING, CONC PVT SLAB REMOVAL & SHOULDER RECONST. <b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY <b>Contract Amount:</b> \$4,274,880.20 <b>Cost Overrun/Underrun:</b> 31.52% <b>Availability Date:</b> 3/15/2011 <b>Letting Date:</b> 9/21/2010 <b>Completion Date:</b> 11/1/2011 <b>Work Began:</b> 3/15/2011 <b>Revised Completion Date:</b> <b>Estimated Completion:</b> 6/15/2012 <b>Last Estimate Thru:</b> 5/7/2012 <b>Scheduled Progress:</b> 100% <b>Last Estimate Paid:</b> 5/11/2012 <b>Actual Progress:</b> 89.57%	
<b>Contract Number:</b> C202620 <b>Route:</b> I-85 <b>Physical Division:</b> 5 <b>County:</b> Durham <b>Administrative Division:</b> 5 <b>TIP Number:</b> I-5145 <b>Length:</b> 12.6 miles <b>Federal Aid Number:</b> IMS-085-4(118)178 <b>Resident Engineer:</b> Cadmus Capehart, PE <b>RE Phone Number:</b> (919)840-0914 <b>Location Description:</b> I-85 FROM NORTH OF US-70 IN DURHAM COUNTY TO NORTH OF NC-56 IN GRANVILLE COUNTY. <b>Type of Work:</b> PAVEMENT REHABILITATION AND BRIDGE REPAIR OVERLAYS. <b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY <b>Contract Amount:</b> \$8,098,211.15 <b>Cost Overrun/Underrun:</b> 5.84% <b>Availability Date:</b> 6/1/2011 <b>Letting Date:</b> 4/19/2011 <b>Completion Date:</b> 7/15/2012 <b>Work Began:</b> 6/10/2011 <b>Revised Completion Date:</b> <b>Estimated Completion:</b> 7/15/2012 <b>Last Estimate Thru:</b> 5/15/2012 <b>Scheduled Progress:</b> 85% <b>Last Estimate Paid:</b> 5/21/2012 <b>Actual Progress:</b> 89.26%	
<b>Contract Number:</b> C202875 <b>Route:</b> I-540 <b>Physical Division:</b> 5 <b>County:</b> Durham <b>Administrative Division:</b> 5 <b>TIP Number:</b> I-5307, I-5310 <b>Length:</b> 17.133 miles <b>Federal Aid Number:</b> IM-0540(23) <b>Resident Engineer:</b> Cadmus Capehart, PE <b>RE Phone Number:</b> (919)840-0914 <b>Location Description:</b> I-540 FROM I-40 OVERPASS TO TRIANGLE TOWN BLVD, AND TRIANGLE TOWN	



<p><b>Contract Amount:</b> \$615,467.55  <b>Availability Date:</b> 5/1/2012  <b>Completion Date:</b> 8/1/2012  <b>Revised Completion Date:</b>  <b>Last Estimate Thru:</b>  <b>Last Estimate Paid:</b></p>	<p><b>Cost Overrun/Underrun:</b>  <b>Letting Date:</b> 3/28/2012  <b>Work Began:</b> 5/1/2012  <b>Estimated Completion:</b>  <b>Scheduled Progress:</b>  <b>Actual Progress:</b></p>
<p><b>Contract Number:</b> DO00069  <b>Physical Division:</b> 5  <b>Administrative Division:</b> 5  <b>Length:</b> 0 miles  <b>Resident Engineer:</b> Cadmus Capehart, PE  <b>Location Description:</b> BRIDGES #12, 71, 137, 154, 156, AND 169 ON NC-147.  <b>Type of Work:</b> BRIDGE PAINTING.  <b>Contractor Name:</b> S &amp; D INDUSTRIAL PAINTING, INC.  <b>Contract Amount:</b> \$922,562.15  <b>Availability Date:</b> 7/11/2011  <b>Completion Date:</b> 11/7/2011  <b>Revised Completion Date:</b> 8/28/2012  <b>Last Estimate Thru:</b>  <b>Last Estimate Paid:</b></p>	<p><b>Route:</b> NC-147  <b>County:</b> Durham  <b>TIP Number:</b> BK-5102G  <b>Federal Aid Number:</b> BRNHS-0147(4)  <b>RE Phone Number:</b> (919)840-0914  <b>Cost Overrun/Underrun:</b>  <b>Letting Date:</b> 8/19/2010  <b>Work Began:</b> 7/11/2011  <b>Estimated Completion:</b>  <b>Scheduled Progress:</b>  <b>Actual Progress:</b></p>

**ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO- ARRA**

County	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
Orange	ER-5100 GE	Landscape planting on US 15-501@ SR 1734 (Erwin Rd./Europa Dr.)	11/24/2009	4/30/2012	pending final inspection	\$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	on schedule	\$13.4 million	ARRA
Orange	U-4704	Computerized Traffic Signal System for Chapel Hill-Carrboro	9/15/2009	Revised completion 9/30/12	behind schedule	\$5.175 million	ARRA
<b>NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST</b>							
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	TBD	Work delayed; numerous utilities interfere with boring under road; contractor has requested meeting to resolve; <b>Town has agreed to participate in added costs</b>	\$140,000.00	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		Bike racks installed and reimbursed ; bus shelter installed; <b>Field inspection 5/23/12 and punchlist sent to</b>	\$20,275	CMAQ
Orange	ER-2971 G 3607.3.09	Widen roadway, install curb and gutter and construct sidewalk along SR 1750 (Estes Drive) between Burlage Circle and SR 1010 (Franklin Street)		10/3/2012	MA with Town executed; <b>plans &amp; proposal received 5/31/12</b>	\$200,000.00	Small Construction/ STP-Division Enhancement
Orange	ER-2973 G 3707.3.16	Rehabilitation of landscape plantings on I-40/I-85 at SR 1114 (Buckhorn Rd.) and installation of landscape plantings at the Hillsborough Maintenance Yard on SR 1009 (Old NC 86)	10/13/2011	3/15/2012	installation complete	\$137,500.00	STP-Division Enhancement
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; program underway	\$12,865	Safe Routes to Schools
Orange	SR-5001 AE	Construct 870 linear feet of 5' sidewalk on Elm Street from existing sidewalk near Weaver Street to Shelton Street in Carrboro	2/21/2012	120 days after Notice to Proceed	<b>Const. pending; CEI proposal under review</b>	\$300,000.00	SRTS
Orange	SR-5001 AR	Construct 320' of 5' sidewalk on Culbreth Road between Cobleridge Rd. in Chapel Hill and Rossburn Rd. in Carrboro	4/12/2012	8/10/2012	<b>Town rejected bids from 4/12/12 and is evaluating bids from 5/31/12</b>	\$50,000 SRTS/\$108,00 STPDA; <b>+\$27,000 STPDA pending</b>	SRTS/STP-DA

**ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA**

TAC 6/13/2012 Attachment 19

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)	N/A	<b>Revised to 7/1/2012</b>	FA construction <b>=70% complete</b>	\$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.)	R/W/U 7/20/12	Let 12/20/12	Consultant design underway	\$198,000	Spot Safety-State
Orange	SS-4907 AM 43504.1.1 <b>43504.3.1</b>	Install near-side supplemental signal heads on NC 54 @ SR 1010 (W. Main St.)		<b>4/27/2012</b>	<b>100% complete</b>	\$1500 PE/ <b>\$2000 C</b>	Spot Safety-State
Orange	U-4726 DC	Wilson Park Multi-Use Path	3/13/2012	6/30/2012	Municipal Agreement with Town of Carrboro; CEI RFQ underway; <b>Town rejected bids from 3/13/12; bid opening 6/7/12</b>	\$39,262.65 PE \$129,431.35 C	STPDA
Orange	U-4726 DD	Construct sidewalk on Rogers Road from Homestead Road to Meadowrun Ct.	6/20/2012		Municipal Agreement with Town of Carrboro; Design underway- <b>need to coordinate with District for developer project at Purefoy Rd.</b>	\$67,025 PE \$469,175 C	STPDA
Orange	U-4726 DE	Construct Bolin Creek Multi-use Path from Homestead Road to Chapel Hill High School	6/20/2012		Municipal Agreement with Town of Carrboro for construction (replaces EL-4994) Design underway	\$59,000 PE	STPDA
Orange	U-4726 DF	Bicycle detection at Signalized Intersections	10/18/2012	FFY 2013	Municipal Agreement with Town of Carrboro	\$36,000	STP-DA

**ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA**

Orange	U-4726 IF	Design and install stairs from the sidewalk on the north side of Franklin St. to the Bolin Creek Trail	N/A	N/A	Supplemental agreement to remove construction; Town to pay for construction	\$20,000 PE	STPDA
Orange	U-4726 IG	Construct 10' wide greenway from existing Fan Branch Trail near Culbreth Rd. and US 15/501 to Phase I	6/20/2012-to be revised		Municipal Agreement with Town of Chapel Hill; <b>requested construction funds 5/25/12</b> ; Supplemental to add \$100,000 pending	\$1,310,000	STPDA
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	Revised to 8/2012	12/31/2012- to be revised	Consultant design-R/W funding <b>approved</b>	\$450,000	High Hazard Safety
<b>NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST</b>							
County	TIP #	Location Description	Est. Let Date	Completion Date	Status	Cost	Comments
Durham/ Orange	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 in Orange County				\$4.0 million	Delayed R/W to 3/12 and Construction to 5/13 to allow City to secure increased funding
Orange	U-0624	Corridor upgrade on NC 86 (S. Columbia St.)including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	10/16/2012			\$4.2 million	STP
Orange	U-2803	Widening of SR 1919 (Smith Level Road) from Rock Haven Road to Bridge# 88 over Morgan Creek	12/18/2012			\$3,7 million	
Orange	W-5318	GRADE, DRAIN, AND PAVE NC 86 FROM NC 57 TO CASWELL COUNTY LINE GEOMETRIC IMPROVEMENT, PAVED SHOULDERS AND RUMBLE STRIPS; Resurfacing	1/15/2013			\$4.75 million	<b>Remove centerline rumble strpes per JMM</b>
ALAMANCE, ORANGE	17BP.7.P.2	BRIDGE PRESERVATION - BRIDGES 38, 41, 51, 52, 121, AND 293 IN ALAMANCE COUNTY; BRIDGES 6, 59, 81, AND 82 IN ORANGE COUNTY	5/15/2012			\$2.3 million	

## Residents should have confidence in N.C. 54/I-40 plan

The Herald-Sun By Ed Harrison, guest columnist Published: May 6, 2012

In his profile of candidates for Durham County Commissioner, Ray Gronberg makes a strange juxtaposition concerning Ellen Reckhow's views on complying with the 2005 city-county Comprehensive Plan, and her views on the earliest public draft of the unadopted N.C. 54/Interstate 40 blueprint plan.

My viewpoint is based not only on having been part of the in-depth policy discussions of the 54/40 blueprint going back several years, but also on being part of land-use planning processes for more than 25 years.

Gronberg attempts to contrast her arguing for compliance with the 2005 city-county land-use plan in the case of 751 South and other zoning disputes, with the assertion that nonetheless, she helped pressure city Transportation Department officials to scale back plans for a massive park-and-ride deck on the western edge of Durham that's supposed to support an eventual light rail link between Durham and Chapel Hill.

As someone who was at the table with Reckhow and others for the latter discussions which is what they were -- in late summer and fall 2010, it's the nonetheless and pressure that strike me as off the mark.

This reporter is lumping the apple of the adopted land-use plan with the orange of the now multiple-version NC 54/I-40 transportation/land use study. There's no nonetheless in the picture.

In 2010, those of us on the regional Transportation Advisory Committee (TAC) received a strong request from staff to critique the first public draft of the 54/40 blueprint. We set out to do that, and it took many meetings and many iterations of the study.

Gronberg apparently missed the publicly announced special meeting in October 2010 which discussed only park and ride issues in the NC 54/I-40 plan.

Durham Councilwoman Diane Catotti, Orange Commissioner Alice Gordon and myself were among those at the gathering, in addition to Reckhow.

The consensus that emerged then, some 18 months ago, was that TAC staff needed to develop an alternative to loading most of the N.C. 54 corridor's park-and-ride facilities into one location, instead dispersing them.

Reckhow was not the only one who put that pressure on we all did. Her notable contribution was to ask for far more analysis of Duke's role in the area.

In his article from this spring, Gronberg highlights this: the new plan disperses park-and-ride lots more widely than did the first version, which placed many of them at Leigh Village, a potential light-rail station off Farrington Road a third of a mile or so north of N.C. 54.

Rather than putting 2,000 or so spaces in a deck at a Leigh Village station, planners think local governments should settle for building 500 spaces there.

That conclusion came from long and careful analysis by planning professionals, and much comment from the public and elected official, and not due to singular pressure from Reckhow or any officeholder.

The latest version of the N.C. 54/I-40 plan returns yet again to the TAC this coming Wednesday morning, possibly for a vote. It may or may not be deemed ready for that step.

As important community plans such as the N.C. 54/I-40 document head toward eventual finalization, citizens should have confidence that the complicated process of developing them is carried out in a way that includes full public input, good information, and competent professional analysis.

I believe that those of us who sit on the TAC, Reckhow included, have done our best for our part of that process.

Ed Harrison is a Durham County resident, Mayor Pro Tem of Chapel Hill, and a member of the Durham-Chapel Hill-Carrboro Transportation Advisory Committee.

## **Gov. Bev Perdue and GOP agree on gas tax**

The News and Observer By Lynn Bonner and Bruce Sicheloff May 11, 2012

Surprise. Democratic Gov. Bev Perdue and Republican legislators agree on something.

House Republicans said last week they want to cap the state gas tax. Gov. Bev Perdue said Thursday she wants to do the same.

The tax rate is expected to fall July 1 from 38.9 cents to about 37.7 cents, because part of the tax is tied to wholesale fuel prices and fluctuates as they do..

And now that it's falling anyway, Perdue and the House Republicans say they want to prevent it from rising. They agree on a cap of 37.5 cents. Perdue says this would save motorists \$63 million in gas taxes, a tiny sliver of the \$1.88 billion the state expects to rake in. Last fall, the House and Senate could not agree on whether to cap the gas tax, but Senate leader Phil Berger said he wants to freeze the tax during the short session that begins next week.

The gas tax may be one of the few points of agreement in what are expected to be drastically different ideas on what the state should pay for next year.

Perdue's budget, which she released Thursday, has raises for all state employees, a sales tax increase, and \$785 million more for education.

House budget writers are set to release their proposal next week, but it will not include the 3/4-cent sales tax hike fueling much of the increase in Perdue's proposed \$20.9 billion plan.

The tax increase would raise about \$760 million over 11 months, or \$850 million a year. She proposes to keep the sales tax increase for two years.

Perdue's proposal is about \$1.2 billion more than the current budget.

Legislative Republicans have been clear they will not go for a tax increase. They disregarded Perdue's last budget proposal, which sought to keep in place a portion of a sales tax set to expire.

"I'm hopeful that they will not consider this budget to be dead on arrival," Perdue said at a news conference Thursday morning. "I've offered up one set of solutions paid for in a certain way. Let them find another revenue source. I'm not beholden to the sales tax, but we have to have revenue to do what we need to do."

Responses to Perdue's proposal fell along predictable lines.

Legislative leaders bashed it for the proposed tax increase.

"Gov. Perdue's budget proposal is, disappointingly, more of the same failed approach that led to the fiscal mess the Republican legislative majority inherited," House Speaker Thom Tillis said in a statement. "The Governor proposes to raise almost a billion dollars in taxes on every citizen and small business."

Dr. Olson Huff, chairman of the Smart Start state governing board, praised Perdue for increasing Smart Start and N.C. Pre-K budgets.

"Her budget reflects her ongoing commitment to ensuring that children have the opportunities that they need to succeed in school and in life," he said in a statement.

Perdue angered legislators in February when she refused to start collecting new tolls on two toll-free ferry routes, and higher rates on three toll routes, as ordered in the state budget last year. She cited economic hardship in ferry-dependent coastal communities. Republicans sharply criticized Perdue but shied away from fighting her on it. Both budget drafts, theirs and now hers, would put off the new tolls until July 2013.

But there's a difference here: What to do about the additional \$2.5 million in toll collections that had been expected in the budget? Republicans say DOT should make up for it with unspecified spending cuts. Perdue says the legislature should make up for it by giving the ferry division an extra \$2.5 million in tax money.

Meanwhile, House Republicans want to eliminate about 100 DOT staff positions – most of them vacant – while Perdue proposes to hire 99 new workers. Most of these new employees would go to the Division of Motor Vehicles to implement a new statewide system linking car registrations with county property taxes, to start in July 2013.

## **Regional Transportation Alliance spring 2012 Transit Poll Results Released**

Nearly 60% of Orange County voters support sales tax; Wake County numbers remain above 50%

Press Release from the Regional Transportation Alliance May 15, 2012

RESEARCH TRIANGLE REGION, NC -- The Regional Transportation Alliance released the results of its most recent spring transit poll this afternoon.

"Nearly 60% of voters in Orange County would be willing to support a half-cent sales tax to improve transit offerings," said Paul Fallon of Fallon Research and Communications, Inc. "This is the third year in a row with support between 59% and 61%, and this year the number of respondents opposing the measure fell to its lowest level ever. In addition, almost 50% of Orange County voters report using transit at least occasionally."

"While Wake County support has dropped slightly since 2010, support for the sales tax continues to stay above 50%," Fallon noted. "In addition, more than 70% of respondents believe they would benefit from improved public transit whether or not they expect to use it. However, Wake County voters have less experience with transit than their Orange County counterparts, with more than 75% of voters reporting that they never use the service."

Joe Milazzo II, PE, RTA Executive Director, stated that “Orange County’s level of support continues to remain very high. While the decision to proceed with a referendum this fall in Orange County is up to the County Commissioners, the sustained level of strong support is indicative of a community that is ready to join their neighbors in Durham County and take the next step for investing in its transit future.”

“In Wake County, support has remained positive but has not grown to the level where a clear consensus has developed,” noted RTA chair Clymer Cease. “The RTA encourages the County to continue informing the community about the benefits of transit and to evaluate the proposed transit plans through sustained, broad outreach. Wake County continues to grow rapidly and the benefits of transit will only increase over time.”

The RTA has conducted a poll on transit each spring since the approval of long-range transit plans by our region’s two metropolitan planning organizations for transportation in 2009. Area chambers of commerce provided significant funding for this cooperative poll on public transit supervised by Fallon Research and Communications, Inc. of Columbus, Ohio.

See the table below for a comparison of support for a sales tax for transit since 2010. For more information on this poll or past spring polls, visit [letsgetmoving.org/poll](http://letsgetmoving.org/poll). The RTA will work in concert with transportation and chamber partners on a series of community feedback initiatives as the community explores transit options.

### **Support for 1/2c sales tax for transit in Triangle: Results since 2010**

#### **Orange County**

2012 59.6 For, 32.5 Against, 7.9 Unsure  
 2011 59.2 For, 37.6 Against, 3.2 Unsure  
 2010 61 For, 35 Against, 4 Unsure

*NOTE: 2012 Margin of error: +/- 5.6% (n=302)*

#### **Wake County**

2012 50.2 For, 43 Against, 6.8 Unsure  
 2011 51.0 For, 45.1 Against, 3.9 Unsure  
 2010 55 For, 41 Against, 4 Unsure

*NOTE: 2012 Margin of error: +/- 4.4% (n=501)*

### **About the Regional Transportation Alliance**

RTA is the business leadership group that provides a strategic, action-oriented focus and a powerful, collaborative voice to advance regional transportation solutions that will attract top talent, grow our prosperity, and sustain the quality of life for our families and our region. The Alliance is a regional program of the Greater Raleigh Chamber of Commerce that is spearheaded by more than 100 leading companies and anchored by 23 chambers of commerce in 10 counties. For other information about the RTA or transit in the Triangle, visit the RTA Web site at [letsgetmoving.org](http://letsgetmoving.org).

## (Orange) BoCC Narrowly Approves Transit Plan

Chapelboro.com By Elizabeth Friend Reporting May 16, 2012

CHAPEL HILL- By a 4-3 vote, county commissioners adopted the Orange County Transit Plan on Tuesday, but not without several hours of heated debate.

Commissioners staked out their positions even before transit planners presented the details, but by the end of the night, one of the plan's staunchest supporters said she was forced to vote against it.

"In the interests of transparency and getting it right for years to come, if we insist on voting on this tonight, I will have to vote against this," said Commissioner Alice Gordon. "Even after the years that I have worked on this, and how much I want to put a transit referendum on the ballot, I will have to vote against it."

Commissioners have spent the past year hashing out the details of a local and regional transit plan that would expand bus service throughout the county, bring a train station to Hillsborough, and link Chapel Hill to Durham via light rail.

However, the board didn't receive the latest draft of the plan from Triangle Transit Authority until Monday afternoon, leading Commissioner Earl McKee to urge his peers to delay a vote to allow the board to review the plan further.

"If we do not look at it seriously and consider it, whether it takes us another two days or another two years, we are doing a disservice to the citizens of Orange County, in obligating them to a tax that will not stop," argued McKee. "And if we are obligating them to that tax, then we need to make sure we absolutely understand what we're doing. At this point we don't understand what we're doing."

But Commissioner Valerie Foushee countered that the debate has gone on long enough.

"It's crucial to this region that we are ready for the growth that is coming," said Foushee. "We've asked questions, the questions have been answered. I just don't know how much longer we can continue to delay. We need to do this sooner rather than later, if we're going to do it at all."

The board peppered TTA officials with questions for two hours, trying to verify cost projections and nail down the details of a funding agreement with Durham.

As proposed, the regional transit plan linking Orange, Durham and Wake counties would be funded by a combination of state, federal and local dollars. Orange County's portion would come from a half -cent sales tax that voters would need to approve in November.

Durham approved the tax last year, while Wake and Orange officials have not yet decided to put it to a vote.

Triangle Transit's General Manager David King told the board that much of the plan is based on long-term projections, making it difficult to pinpoint specifics.

"This is a twenty-five year look into the future. We make the best conservative assumption that we can today, but we should do so with a great deal of humility," said King.

In the end, Commissioner Barry Jacobs suggested a compromise, of sorts.

"I'm going to make a motion that we approve the plan in principle," said Jacobs. "That we ask all the staff to come back to us with the changes identified [...], but that we at least start making some progress on forward motion and embracing the general principles and general details of the plan."

The measure passed 4-3, with Commissioners Alice Gordon, Steve Yuhasz and Earl McKee opposing.

Commissioners also approved a cost-sharing agreement with Durham and agreed to hash out an implementing agreement with TTA officials.

Orange County commissioners will vote on the transit tax referendum, and finalize the transit plan, on June 5.

## **Statement by Marc Finlayson, NC Go! Co-Chairman, on Motor Fuels Tax Cap** *Jobs, safety and critical projects at stake*

**NC Go! For Immediate Release** May 21, 2012

Raleigh, N.C. – In her proposed 2012-2013 budget, Governor Bev Perdue has included a provision to cap the state’s motor fuels tax at 37.5 cents, in order to provide relief to North Carolinians struggling with high gas prices at the pump. While NC Go! supports relief for drivers, capping the tax must be a temporary measure and the cap must be allowed to “sunset” or expire after July 1, 2013. Failure to do so will do far more harm than good to North Carolina’s transportation system, and ultimately to citizens, businesses and our state’s economic climate. As the legislature weighs budget decisions, *NC Go!* urges them to consider the effects of any long-term cap to the motor fuels tax.

A variable portion of the tax adjusts as price goes up and down, to balance increases or decreases in gas sales. Doing so allows the state to plan accordingly and forecast revenue, even when prices rise and fall and consumers’ purchasing decisions change. Capping the tax, which is our state’s primary transportation funding source, could cause long term harm to our state’s transportation infrastructure, to safety and to our economic climate. Without adequate investment in our roads and bridges, North Carolina faces highways that become more congested and less safe over time. Access to an adequate and efficient transportation system is a key factor in where businesses choose to locate. That’s why the gas tax and other transportation funding must be part of a comprehensive discussion about North Carolina’s tax structure that we urge the General Assembly to tackle in 2013.

Capping the gas tax long-term – and limiting transportation funding - would be bad news for our ability to attract and retain businesses, which hurts all citizens due to missed job opportunities and lost tax revenue for the state and counties. Inadequate transportation investment results in less road and bridge repair and increased maintenance costs, which impacts drivers more directly. In 2010, TRIP, a national transportation research group, found that poor road conditions directly impact vehicle repairs and maintenance, costing North Carolina drivers an additional \$1.6 billion.

Inadequate transportation investment also means our roads will continue to become more congested as our aging roads fail to safely and adequately accommodate a growing number of vehicles traveling in our state. In 2010, TRIP estimated traffic congestion costs North Carolina’s drivers a total of \$1.2 billion annually in lost time and wasted fuel.

Capping the gas tax will result in a \$100 million loss in transportation revenue for North Carolina in 2013. On top of that, drivers in our state are driving less which means less gas purchased and less gas tax revenue. And, given an expected reduction in federal funding, these two factors will result in an additional loss of \$100 million, meaning North Carolina could face a \$200 million drop in transportation funds in 2013.

In the end, capping the gas tax would only save drivers about \$25/year, while costing North Carolina millions in revenue used to build roads and bridges – projects that put workers in construction, engineering and related transportation industries back to work. And, because the market drives the price of gas, drivers are unlikely to see a break. While NC’s gas tax increased by only 3.9 cents on January 1, 2012, we’re now paying around \$3.60; that’s 30 cents more than the day the tax increased.

And while North Carolina does have a higher gas tax than our neighboring states, citizens in those states often also pay additional or higher local fees, sales and property taxes to maintain their roads. Not so in North Carolina, where the state maintains the majority of the roads. Before heaping blame our gas tax, drivers should compare the additional ways citizens in other states pay for roads – beyond their state’s gas tax. When tallied up, drivers in nearby

states often pay from combined sources what we pay to maintain our highways and bridges.

The current funding system we have, which relies almost solely on the gas tax, needs to adapt to changing times. Created in the first half of the twentieth century, taxing motor fuels as a means to maintain and build new transportation infrastructure – and to gauge one’s use of roads, bridges, etc. – is outdated. Fuel efficient gasoline vehicles, Hybrids and now electric cars, make it nearly impossible to measure a driver’s consumption of roads and highways.

The time has come to consider any and all ideas for funding our transportation system. If we fail to meet this challenge, we will have roads that are less safe and more congested, which is bad for businesses and citizens of the state. But until we can determine the most appropriate long term and sustainable revenue sources for transportation, we need to protect the sources that are in place, especially the motor fuels tax, because funding transportation infrastructure is a driver of jobs creation and retention both in the short and long term.

Blaming the gas tax is an easy excuse and sound byte. But doing so fails to honestly explain how our gas tax is collected, used and all that it pays for. Most importantly, a long-term cap on the gas tax deprives North Carolina of safe, dependable roads our growing state relies on to keep moving forward. Let’s be sure that any cap enacted expires before it does long-term harm.

## **Transit levy polls at nearly 60 percent support in Orange**

The Herald-Sun By Ray Gronberg May 21, 2012

DURHAM – An annual poll has found that 59.6 percent of the Orange County residents it surveyed would vote for a half-percent sales-tax surcharge to pay for new or expanded public transit.

Commissioned by the Regional Transportation Alliance, a business group, the survey’s finding on the sales-tax question all but mirrored the numbers from a year ago, when 59.2 percent of Orange voters polled said they favored the surcharge.

Such consistency “is indicative of a community that is ready to join their neighbors in Durham County” by approving the levy in a referendum, said Joe Milazzo, the alliance’s executive director.

The alliance’s 2011 survey – conducted by the same pollster, Paul Fallon, who spearheaded this year’s – reported that 59.7 percent of the Durham voters it asked about the issue favored a transit-related sales-tax surcharge.

The Durham levy passed a referendum last November with 60.1 percent support.

Fallon’s 2012 Orange survey targeted 302 “general election voters” and had a margin of error of plus or minus 5.6 percent.

Despite the results, transit advocates complained about Fallon’s methods.

They singled out his decision to conduct the poll from May 9 to May 11 – two months later than usual and at a time, critic Gerry Cohen said, when “most [UNC Chapel Hill] students were long gone” for their summer break.

Cohen argued in a blog posting that the results likely understate how much support the levy would receive if the Orange County Commissioners choose to add a referendum to this year’s general election ballot.

“Their methodology is fine for a low-turnout municipal election in a college town,” he said, alluding to last year’s Durham vote, which coincided with mayoral and City Council elections where all the incumbents won by margins of two-to-one or better. “But [it’s] all wrong for a presidential election in a college town.”

Milazzo’s group also released numbers for a parallel survey of Wake County voters.

There, Fallon and his staff found only 50.2 percent support for passage of a half-percent surcharge for transit. They polled 501 voters and reported a 4.4 percent margin of error.

The bare-majority support in Wake was with one exception consistent with Fallon's findings in previous years. The tax proposal received 51 percent support there in 2011, 55 percent support in 2010 and 50.5 percent support in 2009.

Regional Transportation Alliance Chairman Clymer Cease acknowledged that voter support in Wake for a transit levy "has not grown to a level where a clear consensus has developed."

Wake's Republican-majority Board of County Commissioners has shown little interest in scheduling a referendum in 2012. But Orange's board has been pondering the issue and could decide next month whether it will call a vote.

Orange commissioners partially cleared the decks last Tuesday for that debate by tentatively approving financial plans for expanded or new bus and rail service in their county. They also OK'd formal agreements with Durham County and Triangle Transit that will govern the use of any tax revenue.

But those decisions all came on split votes, with opposition to the agreement with Durham coming from commissioners Earl McKee and Steve Yuhasz.

The Orange-Durham deal altered a previous, informal understanding that Orange would pay from its revenue to install any railroad tracks needed to reach from the county line to a station in the Farrington Road area of Durham.

Officials replaced it with a straight cost split, with revenue from larger and more retail-heavy Durham earmarked to pay 77 percent of the local share for constructing a Durham-to-Chapel Hill rail line. Orange would pay about 23 percent.

Triangle Transit officials believe the new deal in practical terms won't mean much change in the eventual division of costs. They pushed for it in hopes of inducing the Orange commissioners to go ahead with a referendum. Durham commissioners have also agreed to the change.

But the Orange commissioners' vote on the financial plan signaled that it's no sure thing they'll schedule a referendum.

McKee and Yuhasz voted against the plan it largely because they don't like its rail component. And nominally pro-rail Commissioner Alice Gordon also voted against it, arguing that the document wasn't ready for prime time.

Durham officials have said they don't want allow Triangle Transit to implement a transit sales-tax surcharge in their county until Orange or Wake pass a referendum.

## **Some Triangle Transit buses will start skirting congestion on I-40 shoulder, in July**

The News and Observer - Crosstown Traffic by BruceSiceloff 05/25/2012 - 14:57

North Carolina's "bus-on-shoulder" pilot program is scheduled to start July 16, giving commuters on a few Triangle Transit routes the option to bypass rush-hour congestion by rolling on the Interstate 40 shoulder.

When traffic stops or crawls as slowly as 35mph, bus drivers on I-40 will be able to drive slowly on the shoulder, something that will continue to be illegal for other drivers. The initial program will be in effect for a 10-mile section of I-40 in both directions between U.S. 15-501 and N.C. 147 (the Durham Freeway and Triangle Expressway), and in the eastbound direction for two miles from N.C. 147 to Page Road.

That stretch of I-40 is traversed only by a handful of Triangle Transit routes:

- \* CRX - Chapel Hill - Raleigh Express, the only route that uses this entire portion of I-40
- \* 800 - Chapel Hill to Regional Transit Center via Southpoint
- \* 700 - Durham to Regional Transit Center (southbound only - eastbound on I-40)

\* 42 - Shuttle between IBM and Regional Transit Center (southbound only - eastbound on I-40)

Transit agencies in other states say the bus-on-shoulder option (local folks like to call it the Bus On Shoulder System, just so they can give it a macho acronym) helps them stay on schedule during rush hour. If it works well here, NCDOT hopes to implement on busy freeways in other parts of the state.

According to a schedule provided by Meredith McDiarmid, an NCDOT engineer in charge of the project, a public education program for BOSS will start June 12. By the end of June, Triangle Transit drivers will be trained and new signs will be planted along the I-40 shoulder. Bus drivers start taking their chances on the shoulder July 16.

## North Carolina spending a lot to pave its last dirt roads

The News and Observer By J. Andrew Curliss and Bruce Sicehoff May 27, 2012

Mark Teague Road near Pittsboro in rural Chatham County is a half-mile-long strip of gravel that cuts through some woods and then dead-ends at a vacant brick ranch house surrounded by farmland.

The state road looks more like a driveway for Elizabeth Hopp, whose family lives in one of three houses off the lane. When crews showed up recently to widen the road bed, build erosion control for a pond and get ready to pave the road with asphalt, she wondered why the state was upgrading a road that goes nowhere. The cost to taxpayers: \$225,000.

"I don't really see the need for this," Hopp said. "Maybe this is some kind of progress, but it seems sort of strange to me."

The state's deputy chief roads engineer, Jon Nance, said the Department of Transportation is just following orders from the General Assembly.

Indeed, DOT will spend millions this year in an ongoing mission, launched in 1989 by lawmakers and then-Gov. Jim Martin, to improve and pave every state-maintained dirt and gravel road in North Carolina.

The state has spent hundreds of millions in the past two decades to blacktop 13,000 miles of roads, bringing asphalt to the driveways of nearly 200,000 homes, DOT records show.

Crews are still at it and now are reaching the bottom of the list, with only 1,842 miles still eligible for paving. They are working in the most rural and least populated spots, such as Mark Teague Road, and in hard-to-pave, mountainous terrain in the west, such as at Lower North Fork Road in Jackson County near the Tennessee border.

Crews there have nearly finished widening work and are preparing to pave a 2.5-mile dead-end road that climbs up the side of a mountain. It has about 30 houses, half of them considered "part-time" or second homes. There are no churches and, except for a bed-and-breakfast, no businesses.

Taxpayers are spending nearly \$3.8 million on the project.

Betty Dyer, whose family has lived for 55 years on what locals call "North Fork," said she can't wait.

"The dust is so bad," Dyer said. "You have to hose the house and everything off to sit out on the porch. We have waited years and years and years and years for this."

Lawmakers who oversee pinched budgets have not taken a hard look at the unpaved road program in several years, but they have reduced funding for it.

Last year they siphoned off some of the paving money to beef up bridge repair and road maintenance. Last week, House budget writers proposed to cut \$40 million from the rural paving budget in order to minimize spending reductions for popular rural and urban transit programs.

Still, the money flows. In DOT's current work plan, which extends through the next two years, more than \$130 million will be spent to pave 325 miles of roads that serve a combined 2,488 homes.

### **Something for everybody**

North Carolina's commitment to leave no road unpaved is the result of a classic political compromise.

Martin, the Republican governor, and the legislature, controlled by Democrats, devised a big transportation package in 1989 that had something for everybody: urban loops for the cities, a greatly expanded network of four-lane highways for the entire state – and a layer of asphalt for every dirt and gravel road across North Carolina.

After 23 years, the state has seen mixed progress toward the goals set out in the Highway Trust Fund Act. DOT has built 78 percent of its planned four-lane intrastate highway system, but only 42 percent of the planned urban loops.

By comparison, the campaign to pave gravel roads is a resounding success.

DOT lists 1,927 miles of roads that are not eligible for paving because of environmental issues or because landowners have refused to donate the necessary right of way. With only 1,842 miles left on the work list, that means North Carolina has blacktopped nine of every 10 unpaved miles that are available for paving.

"I know there are some areas of the country – Michigan, for example – where they're actually letting paved roads go back to gravel because they can't afford to keep them up," said Gene Conti, the DOT secretary. "I don't think we want to go in that direction."

Other states have joined North Carolina in paving their dirt and gravel roads. The Federal Highway Administration says the nation's unpaved road inventory fell from 1.5 million miles in 1998 to 1.3 million miles a decade later.

Rep. Phil Shepard, a Republican from Jacksonville, persuaded House budget writers Thursday to ease planned reductions in public transportation grants and instead to cut an additional \$6 million from funds for paving gravel roads.

"We have paved most everything that is eligible for pavement," Shepard said. "I'm not aware of many that haven't been paved."

That's true in Shepard's Onslow County near the coast, where all but 2 percent of the secondary roads are covered in asphalt. Most of North Carolina's remaining unpaved roads are in the mountains, and political leaders there have championed the state's paving campaign.

In the 25 counties that make up DOT Divisions 11, 13 and 14 along the state's western border, 14 percent of all secondary roads are still dirt and gravel – many of them just one lane wide.

"There's still more to be paved," said Rep. Ray Rapp, a Mars Hill Democrat. "The job is not done. Let's not declare victory, because it's not over."

Residents whose roads are paved talk of smooth rides, safer travel, cleaner air and improved property values.

But even after the initial cost of turning a narrow gravel path into a two-lane asphalt road, paved roads are more expensive to maintain. Potholes form. The asphalt wears out. Resurfacing is needed every decade or so.

“The maintenance cost is higher due to the machinery needed and the materials used,” Nance said.

### **Diminishing returns**

The program costs have increased sharply over the past 23 years, and the benefits have diminished.

More miles were paved, on roads serving more houses, before 1997 than during all the years since, according to DOT figures. During those first eight years, the paving program served 18 homes for every mile of asphalt. DOT’s upcoming two-year work plan calls for paving roads that average 8 homes per mile.

Fast-rising prices for fuel and asphalt have pushed up construction costs for all kinds of road projects. DOT’s average cost for paving gravel roads has increased from \$250,000 per mile in 2007 to \$350,000 today. At that price, it would cost the state \$644 million to pave those remaining miles.

All that money and effort have led to questions over the years about North Carolina’s transportation spending priorities.

In 2005, lawmakers gave DOT new flexibility to use some of this money to widen and improve existing rural paved roads, instead of just building new ones.

In 2008, a statewide study commission on transportation funding made a number of recommendations that were quickly adopted – and two that fell flat. Commission members wanted the legislature to borrow money to finish urban loops, upgrade interstates and fix bridges. And all that money no longer needed for paving dirt roads could be used instead to cover the debt payments, they said.

Doug Galyon of Greensboro, then chairman of the DOT board, replied that more study was needed on whether the borrowing was a good idea. He was clear, though, in his determination to protect the rural paving program.

“We do not support the proposal to use the existing Secondary Roads Program funding to pay debt service,” Galyon wrote in a May 2008 letter.

Last year, lawmakers shifted money away from dirt roads amid budget tightening. Sen. Kathy Harrington, a Republican from Gastonia who is co-chairwoman of the Senate’s transportation appropriations committee, said in an interview that she wants to cut more.

“I do not subscribe to the theory that every dirt road in North Carolina needs to be paved,” Harrington said.

Rep. Ric Killian, a Charlotte Republican who co-chairs the House transportation appropriations subcommittee, said it might be time to reassess the unpaved road program.

“That is something we need to look at further,” Killian said. “At what point do we declare victory and say that’s over, if we’re doing more than is needed?”

Mountain legislators are not alone in defending the program. Road-building contractors, from asphalt companies to erosion control specialists, also form a powerful special interest that represent jobs and have clout.

So far, road builders have taken a cautious approach to any talk of possible cuts. Mostly, that’s because any reductions probably would simply shift money to other road-building efforts, such as widening and congestion-relief in

urban areas, said Berry Jenkins, a lobbyist for Carolinas Associated General Contractors, which represents road builders.

He said the rural paving program has been good for many small businesses.

"If we had our preference, we'd like to see it continue," Jenkins said.

### **'Pure-T ridiculous'**

In the DOT's current funding plan, there are 478 roads on the list to get work in the next two years.

That includes Sand Road near Hatteras – a road with 13 houses that dead-ends into a beach dune. Taxpayers will pay to pave the tenth of a mile at a cost of \$49,000.

The list includes the top of Wesley Creek Road in the Haywood County mountains west of Asheville, a stretch that runs for 1.8 miles into a national forest. At DOT's last count, it had four homes on it. The cost to pave: \$2.5 million.

"It does get some use by hunters going to the forest," said Jonathan Woodard, the DOT engineer for that area. "I do think there might be some more development up there, or coming in."

Residents and real estate brokers in that area said two developments are planned along the unpaved part of Wesley Creek Road, both in the works for years and already subdivided. One, Wolf Creek Ranch, is described as a "gated equestrian community" where one- to 11-acre plots are listed at \$78,000 to \$395,000.

DOT's list is replete with short stubs that are dead-end roads serving one or two homes.

One of them is Cub Road near Benson in Johnston County. Crews recently showed up on the L-shaped, half-mile lane that splits two farm fields and ends alongside Interstate 95.

Dale Norris has the only home on the road. He is "tickled to death they got to me," saying he won't miss the dirt and grime at all. Paving his road will cost taxpayers \$80,000.

Norris also sees reason for concern. Cub Road doesn't connect to anywhere and is used only by himself and his family – and perhaps some tractors; even the mail is delivered on a nearby road. He wonders why the entire road is being paved, when his home is only one-tenth of a mile from the adjoining asphalt road.

"Some of what they're doing here is pure-T ridiculous," Norris said. "But let me tell you, I am going to be glad to see it right here."

### **From gravel to asphalt**

If the legislature provides enough money, DOT has big plans over the next two years for covering unpaved roads with asphalt. In seven Triangle-area counties, 30 miles of gravel roads with 334 houses are to be paved.

County	Roads	Miles	Homes	Daily traffic	Cost
Wake	8	5.4	60	766	\$1.91 million
Durham	3	1.2	23	130	\$542,000

Johnston	5	1.8	5	178	\$425,000
Franklin	4	2.0	39	279	\$761,000
Chatham	14	8.5	56	605	\$3.61 million
Harnett	14	6.2	121	871	\$1.48 million
Granville	6	5.3	30	408	\$1.71 million

Source: N.C. Department of Transportation

## New highway fund could speed area road projects

WRAL.com By Brian Shrader May 28, 2012 Posted: 3:21 p.m.

Trips to the beach or around the Triangle might get a bit easier in the coming years, thanks to a new pot of state money for road projects.

Gov. Beverly Perdue proposed the Mobility Fund two years ago to generate more money for projects that ease congestion or make the state's transportation system more efficient. Lawmakers will set aside \$45 million in the 2012-13 budget for the fund and \$58 million a year in subsequent years.

Ninety-five projects, totaling \$7.5 billion, were submitted for Mobility Fund dollars, and the state Department of Transportation scored them to determine which would get funding first.

"We'll be ready to fund (some of) these projects as early as this summer," said Don Voelker, director of strategic planning for the DOT.

The first project under the fund will allow buses in the Triangle to use shoulders on major highways during rush hour to bypass congestion.

An \$82 million project to widen I-40 to six lanes between U.S. Highway 70 in Garner and the Clayton Bypass ranks high on the Mobility Fund list.

Lee Hargis, who has lived near the N.C. Highway 42 interchange off I-40 all of his life, said commuting on the interstate requires patience and planning.

"Friday afternoon in the summer, it's kind of rough. If you get off at 5, you want to leave around 3 because it's hard to get home," Hargis said. "I changed my hours. I leave at 6 in the morning just so I can get to work."

Other projects to score high on the Mobility Fund list include the following:

- Upgrade the intersection at Hillsborough Street and Blue Ridge Road in Raleigh
- Widen Interstate 440 between Interstate 40 and Wade Avenue in Raleigh to six lanes
- Widen both I-40 and Interstate 85 in Orange County to six lanes each
- Add lanes and interchanges to Capital Boulevard from Interstate 540 to Thornton Road in Raleigh to make it a highway
- Provide 25 percent of the \$650 million cost of commuter rail from Durham through Garner

- Widen N.C. Highway 54 to six lanes between I-40 and Barbee Chapel Road in Durham
- Widen Glenwood Avenue to six lanes from west of Duraleigh Road to west of Triangle Drive in Raleigh and add an interchange at Lynn Road

Some projects remain years off, but Voelker said the Mobility Fund will allow them to be completed earlier than if the state waited for money from other sources to fund them.

## Republicans want to make Perdue's DOT changes permanent

By: Bruce Sicehoff | McClatchy-Tribune Published: May 31, 2012 Updated: May 31, 2012 - 7:03 AM

**RALEIGH** -- They are loath to praise her by name, but Republican legislators really do like what Democratic Gov. Bev Perdue has done with the state Department of Transportation.

So they are enshrining in state law a number of Perdue changes that have been credited with making DOT more open and less political.

Public trust in DOT had ebbed when Perdue took office three years ago after ethical abuses by Democratic transportation board members. Two had been forced to resign – one after influencing road-improvement decisions that benefited his family's business interests, another after mingling his DOT duties with his role as a Perdue campaign fundraiser.

Perdue issued an executive order in early 2009 that beefed up ethics standards for board members and stripped away their authority to award contracts and make spending decisions. These powers were shifted to the DOT secretary, who is appointed by the governor.

Perdue decreed that DOT would start using clear, objective criteria for deciding how road money should be spent and which projects would be built first, and that local leaders would get a new say in the process.

Her executive order made changes that easily could be reversed by the next governor. Three bills that have sailed through two committees without dissent in the past week would make that less likely, by turning Perdue's changes into law. The measures are expected to pass both chambers easily.

Two Republican senators echoed Perdue's statements from 2009 Wednesday, but they balked at referring directly to her role in the DOT reforms.

"I think they're great ideas," said Sen. Bill Rabon of Southport, the transportation co-chairman, after his committee approved the changes. "What we're trying to do is get the politics out of transportation."

Sen. Kathy Harrington of Gastonia, vice chairman of the transportation committee, also focused her comments on the ideas – and not their origins.

"I support a transparent, data-driven process," Harrington said. "I think DOT should be allowed to prioritize projects based on their criteria."

Joe Bryan of Knightdale, a Republican Wake County commissioner who served last year as president of the N.C. Association of County Commissioners, has been less restrained in the past three years about praising Perdue for her DOT reforms, and DOT officials for building new relationships with local leaders.

"It does appear to me that with the current administration, DOT has gone to a realistic, transparent, data-driven process to make the limited resources go as far as possible, and to see local governments as true partners," Bryan said Wednesday.

Jim Trogdon, DOT's chief operating officer, said Perdue directed DOT leaders in 2009 to restore trust in the agency, use public money more efficiently, and involve local communities in developing a vision for the state's approach to transportation.

"And it was clear this should not be a DOT plan, but it should be a state of North Carolina plan," Trogdon said. "In the end, we have a system that takes the back-room negotiations out and says here's a system where everyone is treated fairly, and projects are evaluated objectively."

## **NCDOT contracts will replace, preserve bridges**

The Herald-Sun From Staff Reports June 5, 2012

RALEIGH — The N.C. Department of Transportation has awarded a \$2.9 million design-build contract to Mountain Creek Contractors Inc. of Charleston, S.C., to replace seven bridges in Alamance, Orange and Rockingham counties. NCDOT also has awarded a \$2.6 million contract to Taylor and Murphy Construction Co. of Asheville to preserve 10 bridges in Alamance and Orange counties.

Work on bridge replacement can begin as early as June 25 and is scheduled for completion by Nov. 15, 2014.

The contract is to replace the following bridges:

- The bridge on Ivey Street just west of N.C. 54 in Alamance County;
- The bridge over a branch of Little River on Sneed Road in Orange County;
- The bridge over Troublesome Creek on Irvin Farm Road in Rockingham County;
- The bridge over a branch of Bushy Creek on Honeysuckle Road in Rockingham County;
- The bridge on Quesinberry Road just north of Town Creek Road in Rockingham County;
- The bridge over a branch of Beaver Creek on Ayersville Road in Rockingham County; and
- The bridge over QuaQua Creek on Boaz Road in Rockingham County.

These bridges are considered to be structurally deficient or functionally obsolete and have reached the end of their life cycle. This does not mean the bridges are unsafe, but there are elements of the bridges that need to be monitored to maintain structural integrity, according to a DOT release.

Many of these bridges have weight limits that do not allow school buses and some emergency vehicles to cross.

Work on bridge preservation also can begin as early as June 25 and is scheduled for completion by June 30, 2013.

The contract includes the following bridges in Alamance County:

- The bridges across Stoney Creek on Sartin Road, Alatomahaw Union Ridge Road and Caroline Mill Road;
- The bridge across the Haw River on Hopedale Road;
- The bridge across Stinking Quarter Creek on Belmont-Mount Hermon Road; and
- The bridge across Back Creek on Cherry Lane Road.

The contract also includes the following bridges in Orange County:

- The bridge across the Eno River on U.S. 70 Business;
- The bridge across I-85 on N.C. 86; and
- The bridges across Orange Grove Road on I-85.

These bridges will be rehabilitated using a new resurfacing technique called hydro-demolition. During this resurfacing process, the deteriorated concrete on the bridge deck will be removed in part using high-pressured water and the bridge will be resurfaced using high-strength concrete.

Hydro-demolition is more precise than traditional pavement removal with a jackhammer, and it reduces the potential for damage to the bridges, according to the DOT release. In addition, hydro-demolition is safer and faster than traditional demolition methods and minimizes the impact to traffic.

## **Orange County calls transit-tax referendum**

The Herald-Sun By Ray Gronberg June 6, 2012

DURHAM – Orange County Commissioners on a divided, 5-2 vote agreed this week to call a November referendum on whether their community should have a half-percent sales-tax surcharge to support public transit.

Tuesday's decision came a bit less than a year after their Durham counterparts called the Triangle's first transit referendum. Durham voters subsequently approved the levy, with 60.1 percent of those who cast ballots supporting it.

"We owe it to the voters to let the voters decide," Orange Commissioners Chairwoman Bernadette Pelissier said after her colleagues decided to follow Durham's example.

Durham officials closely watched the debate in Orange because they've said they won't actually implement their own sales surcharge until they see whether voters in Orange or Wake county follow suit.

Proceeds from the tax are supposed to help pay for the development of light-rail systems and the expansion of bus service.

Polls in Orange County over the years have shown consistent support for the idea of a transit-related surcharge.

The longest-running, an annual survey conducted on behalf of the business-sponsored Regional Transportation Alliance, found 59.6 percent support for the idea among Orange voters.

That was about in line with results in Orange from the year before, and with the numbers from a 2011 survey for the alliance found in Durham.

But the Orange commissioner nonetheless found it much harder than the Durham County Commissioners did last year to get behind the idea of calling a referendum. And two, Earl McKee and Steve Yuhasz, opposed it entirely.

McKee said that while he favors bus-service expansion and believes the region will eventually get a light-rail system, he doesn't favor the plan because Orange doesn't need rail now.

He predicted that the need would arrive "sometime in the 2050 [or] 2060 time frame, long after I'm gone and long after most of us are gone."

The Orange debate had a pronounced rural-urban split, as McKee and Yuhasz represent the rural positions of the county and the town of Hillsborough, Orange's smallest.

Critics of the rail plan said it's geared toward Chapel Hill and even more specifically to the needs of people who need to travel between UNC Chapel Hill and Duke University.

Chris Weaver, a Republican who's running for the seat Yuhasz, a Democrat, will vacate in December for having lost a party primary, faulted the board for listening to "many woeful stories" about transportation problems "from transient student voters [who] were all carrying \$1,000 laptops."

He added that rural residents were being asked to shoulder an unfair financial burden.

But Hillsborough attorney David Neal said rural residents will benefit from the reduction in suburban sprawl associated with transit construction.

"Investing in transit encourages more density in the already dense portions of the county and preserves the rural character of the rural portions of Orange County," he said.

There was also some opposition to the plan from Chapel Hill interests, as former Town Councilwoman Julie McClintock spoke against the idea of basing the plan on light rail.

"The technology, I believe, is not suited for us," she said, echoing County Manager Frank Clifton's over-winter diagnosis that Durham was better-positioned than Orange to reap the benefits of transit-inspired redevelopment.

She added that she would have "serious reservations" about supporting a sales-tax referendum that includes rail.

McClintock has long been a rail skeptic. She's preferred "bus rapid transit" technology that mimics rail for running on fixed routes, but that uses buses instead.

**Mobility Fund Project Scores and DRAFT Schedule - SUBJECT TO CHANGE**  
Projects Listed by Total Score in Descending Order

Project	County(s)	Total Score	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Comments
I-85 Yadkin River Bridge - Phase II	Davidson	--	\$5.3M										Under Construction - Final payment funds
Triangle Bus-on-Shoulder-System	Wake, Durham	496.32	\$0.2M										New Project
I-77 HOT Lanes from I-277 to NC 150	Mecklenburg, Iredell	108.18		\$27.6M (\$485.9M Other)									FY 14 is the earliest date to complete pre-construction activities
NC 54 (Hillsborough Street) / Blue Ridge Road / NCRR Grade Separation	Wake	101.07		\$8.6M (\$35.8M Other)									FY 14 is the earliest date to complete pre-construction activities
CSX and Norfolk Southern Grade Separation	Mecklenburg	89.23			\$10.1M (\$130M Other)	\$10.1M							FY 15 is the earliest date to complete pre-construction activities
I-440 (Beltline) Widening from I-40 to Wade Avenue	Wake	73.54						\$20.3M (\$72M Other)					Other funds are not available until FY 18
US 501 (Roxboro Road) / Latta/Infinity Road Intersection Improvements	Durham	63.56		\$2.1M (\$2M Other)									New Project
I-485 HOT Lanes from I-77 to US 74	Mecklenburg	58.68					\$21.6M (\$134.5 Other)	\$21.6M	\$21.6M	\$21.6M			FY 17 is the earliest date to complete pre-construction activities
I-40 Widening from US 15-501 to I-85	Orange	52.61					\$4.1M	\$4.1M (\$60M Other)	\$4.1M				FY 17 is the earliest date to complete pre-construction activities
NC 54 / Farrington Road / I-40 Intersection Improvements	Durham	52.58		\$1.6M									New Project
NCVA Railroad Mainline Track Improvements	Northampton, Bertie, Hertford	50.75			\$10.7M (\$2.3M Other)								New Project
Pembroke Northeast Rail Connector	Robeson	47.88		\$13.4M									
US 70 / Brier Creek Parkway Interchange	Wake	47.87					\$13.4M						New Project - FY 17 is the earliest date to complete pre-construction activities
I-40 / Aviation Parkway Interchange Improvements	Wake	42.75				\$3.6M							New Project
I-295 (Fayetteville Outer Loop) from Yadkin Road to Cliffdale Road	Cumberland	40.67		\$18.2M (\$50M Other)	\$18.2M	\$18.2M							Ready to be let in FY 14
NC 54 Widening from I-40 to Barbee Chapel Road	Durham, Orange	39.18										\$9.1M	New Project
US 70 / Slocum Road Intersection Improvements	Craven	36.27			\$10.5M (\$10M Other)								Ready to be let in FY 15
US 74 (Independence Blvd) Upgrade from NC 27 (Albemarle Road) to Idlewild Road	Mecklenburg	35.92		\$14M (\$20.8M Other)	\$14M	\$14M							Ready to be let in FY 13
I-40 Widening from US 70 Business to US 70 (Clayton Bypass)	Wake	34.57						\$12.2M (\$70 Other)					Other funds are not available until FY 18
Wallace to Castle Hayne Rail Improvements	Duplin, Pender, New Hanover	34.46								\$57M	\$57M	\$57M	New Project
US 70 (Glenwood Avenue) Widening from Duraleigh Road to Triangle Drive	Wake	33.02								\$10.6			Contigent upon availability of Wallace to Castle Hayne Rail project

REVISIONS TO THE 2012-2020 STIP

HIGHWAY PROGRAM

STIP MODIFICATIONS

**DIVISION 5**

U-3308	NC 55 (ALSTON AVENUE), NC 147 (I. L. "BUCK" DEAN	RIGHT-OF-WAY	FY 2013 -	\$800,000	(STP)
DURHAM	FREEWAY) TO US 70 BUSINESS-NC 98 (HOLLOWAY	MITIGATION	FY 2014 -	\$28,000	(STP)
	STREET) IN DURHAM. WIDEN TO FOUR LANE DIVIDED	CONSTRUCTION	FY 2015 -	\$13,800,000	(STP)
	FACILITY AND REPLACE NORFOLK-SOUTHERN		FY 2016 -	\$13,800,000	(STP)
	RAILROAD BRIDGES.			\$28,428,000	

**DELAY RIGHT OF WAY FROM FY 12 TO FY 13 TO  
ALLOW ADDITIONAL TIME FOR DESIGN  
MODIFICATIONS REQUESTED BY CITY OF DURHAM.**

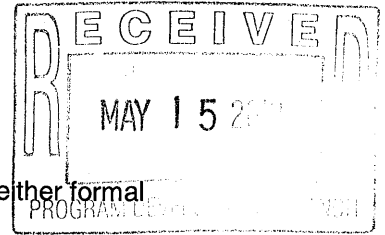
**STATEWIDE**

K-4704	VARIOUS, REST AREA SYSTEM PRESERVATION.	CONSTRUCTION	FY 2012 -	\$100,000	(IMPM)
STATEWIDE	PAVEMENT, PAVEMENT MARKING, CURB AND GUTTER,		FY 2012 -	\$300,000	(STP)
	SIDEWALKS AND OTHER REHABILITATION ITEMS.		FY 2013 -	\$300,000	(IMPM)
	<b><u>MODIFY DESCRIPTION TO ALLOW FOR</u></b>		FY 2013 -	\$100,000	(STP)
	<b><u>IMPROVEMENTS TO REST AREAS LOCATED OFF OF</u></b>		FY 2014 -	\$300,000	(IMPM)
	<b><u>THE INTERSTATE AND INCLUDE APPROPRIATE</u></b>		FY 2014 -	\$100,000	(STP)
	<b><u>FUNDING FOR THIS LOCATIONS.</u></b>		FY 2015 -	\$300,000	(IMPM)
			FY 2015 -	\$100,000	(STP)
			FY 2016 -	\$300,000	(IMPM)
			FY 2016 -	\$100,000	(STP)
			FY 2017 -	\$300,000	(IMPM)
			FY 2017 -	\$100,000	(STP)
			FY 2018 -	\$300,000	(IMPM)
			FY 2018 -	\$100,000	(STP)
			FY 2019 -	\$300,000	(IMPM)
			FY 2019 -	\$100,000	(STP)
			FY 2020 -	\$300,000	(IMPM)
			FY 2020 -	\$100,000	(STP)
				\$3,600,000	

* Y-5500	VARIOUS, TRAFFIC SEPARATION STUDY	RIGHT-OF-WAY	FY 2012 -	\$150,000	(RR)
STATEWIDE	IMPLEMENTATION AND CLOSURES.		FY 2013 -	\$500,000	(RR)
	<b><u>ADD RIGHT OF WAY AND CONSTRUCTION IN FY 13</u></b>	CONSTRUCTION	FY 2012 -	\$250,000	(RR)
	<b><u>NOT PREVIOUSLY PROGRAMMED.</u></b>		FY 2013 -	\$2,500,000	(RR)
				\$3,400,000	

* Z-5400	VARIOUS, HIGHWAY-RAIL GRADE CROSSING SAFETY	RIGHT OF WAY	FY 2013 -	\$500,000	(RR)
STATEWIDE	IMPROVEMENTS.	CONSTRUCTION	FY 2012 -	\$12,309,000	(RR)
	<b><u>ADD RIGHT OF WAY AND CONSTRUCTION IN FY 13</u></b>		FY 2013 -	\$3,000,000	(RR)
	<b><u>NOT PREVIOUSLY PROGRAMMED.</u></b>			\$15,809,000	

\* INDICATES FEDERAL AMENDMENT



## STIP AMENDMENT AND MODIFICATION GUIDELINES

Changes may be made to the State Transportation Improvement Program (STIP) by either formal amendment or administrative modification.

Formal **Amendments** are required when changes cause: addition or deletion of a project, changes in project cost beyond a predetermined threshold, project phase initiation dates to move into or out of the 4 year STIP time window, changes in funding sources involving non-traditional funding sources (including GARVEE bonds), or major changes in design concept or scope; an example of a "major" scope change might be - changing the project termini or number of through travel lanes or significantly altering the proposed transit coverage area.

### Examples of Amendments:

- Change in project cost beyond a predetermined threshold; increases in highway projects that exceed both \$ 2 million and 25% of the original cost and may affect fiscal constraint and changes (increases or decreases) in transit projects that exceed either \$1 million or 25% of the original project cost;
- Any addition or deletion of a federally funded project to the first 4 years of the Program;
- Addition or deletion of any state funded regionally significant project into the first 4 years of the Program;
- Change in project design or scope<sup>1</sup> that significantly changes; the termini or project type, purpose, or number of through lanes on a non-exempt (for transportation conformity purposes) project;
- Any addition, deletion or significant modification of non-traditional funding source to a project (traditional sources of revenue include federal, state, or local government tax revenues. Non-traditional sources include state bonding and/or private participation);
- Project schedule shifts that move ROW, major capital acquisitions, or construction authorization dates either into or out of the 4 year STIP time window;
- Project schedule shifts in years 1 through 4 that move project completion dates across Horizon Years as determined by the local Long Range Transportation plan;
- Project schedule shifts to incorporate the project from an out-year into the current (four-year) STIP.

Note: Amendments do require documentation of public review and comment opportunity, and may require re-demonstration of fiscal constraint and local transportation conformity determination. Fiscal constraint may be shown by either the project cost impact being less than 5% of the expected annual budget or by showing other cost reductions and/or revenue increases within the affected fiscal year(s).

Note: on Program Date field in the FTA Transportation Electronic Award and Management (TEAM) system applications – the transit grant applications asks for the STIP amendment approval dates; however the correct entry in the TEAM application is the date FTA endorses the BOT approved STIP amendment, e.g. the effective STIP approval date is the date FTA concurs with the amendment to the STIP.

<sup>1</sup> Note: alteration to earmarks described in the Congressional Report may jeopardize project eligibility for federal (FTA) funding under the discretionary capital program (Section 5309).

**Administrative Modifications** can be made to previously included projects when; change in project costs are below the predetermined thresholds, movement of project phase initiation dates are within the 4 year STIP time window, change to project scope or description do not significantly diminish the ability to achieve the original project intent, and change in traditional funding sources occur.

Administrative modification is a streamlining process recommended in the FHWA/FTA/NCDOT Joint STIP Review of December 2011. Administrative Modifications do not require documentation of public review or comment, redemonstration of fiscal constraint, or a local transportation conformity determination.

Examples of Administrative Modifications:

- Any change to projects in years 5 or later;
- Minor change to project descriptions, scopes, sponsor funding;
- Minor cost increases in highway projects that do not exceed both \$ 2 million and 25% of the original project cost;
- Minor cost change (increase or decrease) in transit projects that do not exceed either \$1 million or 25% of the original project cost;
- Schedule changes that move project authorization dates within the first 4 year STIP time window and do not affect local air quality conformity findings;
- Funding source changes between traditional funding sources (i.e. substituting available Congestion Mitigation Air Quality (CMAQ) funds for FTA section 5307 formula transit funds);
- Projects approved for Emergency Relief funds do not generally have to be included in the STIP, so any changes made for emergency projects may be considered minor modifications.

**State funded projects** are amended when the fiscal year changes or when there is a significant change in the project description. Unless the project is determined to be regionally significant for transportation conformity purposes, these amendments are approved solely by the State Board of Transportation. Local approval of these changes is desired but not legally required. MPO's may treat these as Administrative modifications if they wish. If there is a change to a state funded project that is regionally significant, this requires a new transportation conformity determination, this determination must be made before the amendment can be processed. The state public notification process will be the same for state funded projects as it is for federal-aid projects.

**PUBLIC INVOLVEMENT PROCEDURES:**

The NCDOT will make all proposed STIP amendments available to the public for comment on its website at least 25 days prior to adoption action by the Board of Transportation. Exception may be made for response to declared disasters.

The NCDOT will make all proposed STIP amendments available to staff of MPOs and RPOs for comment at least 25 days prior to adoption action by the Board of Transportation. Exception may be made for response to declared disasters.

All amendments to the transit portion of the STIP will be submitted to FTA Region IV for formal endorsement. The request letter for FTA endorsement of STIP amendments will include assurances that public involvement processes were followed, in accordance with the federally approved state or local Participation Plans. Administrative modifications to the transit portion of the STIP will be posted on the Public Transportation Division website for informational purposes within 5 days of the changes being processed at NCDOT.

Established public involvement procedures at the local level shall be followed. Any significant negative reaction will result in either the Board being notified of the reaction prior to voting, or withdrawal of the proposal for further review.

## Attachment 1

## Federal Definitions according to 23 CFR 450.104

*Administrative modification* means a minor revision to a long-range statewide or metropolitan transportation plan, Transportation Improvement Program (TIP), or Statewide Transportation Improvement Program (STIP) that includes minor changes to project/project phase costs, minor changes to funding sources of previously-included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, redemonstration of fiscal constraint, or a conformity determination (in nonattainment and maintenance areas).

*Amendment* means a revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes). Change to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment, redemonstration of fiscal constraint, or a conformity determination (for metropolitan transportation plans and TIPs involving "non-exempt" projects in nonattainment and maintenance areas). In the context of a long-range statewide transportation plan, an amendment is a revision approved by the State in accordance with its public involvement process.

**STIP AMENDMENT AND MODIFICATION GUIDELINES APPROVAL:**

4/5/12 Robert A. Collier Jr.  
Date Judge Robert A. Collier Jr.  
Chairman, NC Board of Transportation

4/18/12 John F. Sullivan, III  
Date <sup>for</sup> John F. Sullivan, III, P.E.  
Division Administrator, Federal Highway Administration

5-9-12 Yvette G. Taylor  
Date Dr. Yvette G. Taylor  
Regional Administrator, Federal Transit Administration



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

May 8, 2012

In Reply Refer To  
Application D-12-1

Mr. Felix Nwoko, PhD  
Transportation Planning Manager – MPO Administrator  
DCHC MPO  
101 City Hall Plaza, 4<sup>th</sup> Floor  
Durham, NC 27701

Dear Mr. Nwoko:

The North Carolina Department of Transportation is in the process of designating NC 147 between SR 2028 (T.W. Alexander Drive) in Durham County and NC 540 in Wake County for use by trucks with twin trailers. If the Department designates this route for use by these vehicles, public hearings, or the opportunity for such, will be provided in each of the affected counties. The North Carolina Board of Transportation will render a final decision on designation at a later date.

Please provide any comments you may have by August 6, 2012. If you have any questions or need additional information, you may contact me at (919) 773-2893 or [lavery@ncdot.gov](mailto:lavery@ncdot.gov).

Sincerely,

Lisa N. Avery  
Traffic Safety Project Engineer

LNA:lna

cc: Chuck Watts, Board of Transportation Member  
Eugene A. Conti, Jr., Secretary of Transportation  
T. R. Gibson, P.E., State Highway Administrator  
J. Nance, P.E., Chief Engineer - Operations  
J. K. Lacy, P.E., State Traffic Engineer  
J. W. Bowman, P.E., Division Five Engineer  
A. B. Whitley, IV, P.E., Division Five Operations Engineer  
T. M. Hopkins, P.E., State Traffic Safety Engineer  
A. D. Wyatt, P.E., PTOE, Central Regional Field Operations Engineer  
K. L. Becker, P.E., Capital Regional Traffic Engineer  
A. Grandy, Division Five Traffic Engineer  
B. Mayhew, P.E., Traffic Safety Systems Engineer  
S. Lowry, P.E., Highway Safety Improvement Program Engineer