

**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

**March 10, 2010
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. January 13, 2010 TAC Meeting Minutes
(Attachment 5)**

A copy of the January 13, 2010 TAC meeting minutes is enclosed as Attachment 5.

TAC Action: Approve minutes of the January 13, 2010 TAC meeting.

**6. February 10, 2010 TAC Meeting Minutes
(Attachment 6)**

A copy of the February 10, 2010 TAC meeting minutes is enclosed as Attachment 6.

TAC Action: Approve minutes of the February 10, 2010 TAC meeting.

**7. FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #13 – STP-DA Funding for the Unified Planning Work Program
(Attachment 7, 7A)**

Ellen Beckmann, LPA Staff

Maricia Brown, LPA Staff

The Amendment to the FY 2009-2010 UPWP and the Draft FY 2010-2011 UPWP require an amendment to the MPO's STP-DA table and FY 2009-2015 MTIP. Attachment 7 is a resolution to amend the FY 2009-2015 MTIP in FY 2010 and 2011 for project U-4727, DCHC Planning Allocation and Unified Work Program. Attachment 7A is a copy of the STP-DA table for FY 2010 through 2015 with the specific changes to U-4727 highlighted. The remainder of the STP-DA table will be approved and the MTIP will be amended within the next few months pending NCDOT review of our draft STP-DA program.

TCC Recommendation: That the TAC approve the Resolution to Modify the FY 2009-2015 Transportation Improvement Program for the DCHC Urban Area.

TAC Action: Approve the Resolution to Modify the FY 2009-2015 Transportation Improvement Program for the DCHC Urban Area.

**8. FY 2009-2010 Unified Planning Work Program – Amendment #1
(Attachment 8, 8A)
Maricia Brown, LPA Staff**

The TAC approved the 2009-2010 UPWP on March 11, 2009. The UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Funds that would not be expended during the current fiscal year (FY 2009-2010) must be de-obligated through an amendment in order for the funds to be available for programming during the next fiscal year (2010-2011). The proposed Amendment #1 is necessary in order to reflect de-obligation of FY10 funds. Attachment 8 is a memo describing Amendment #1 to the 2009-2010 UPWP. Attachment 8A is a resolution.

TCC Recommendation: That the TAC adopts a resolution regarding Amendment #1 to the 2009-2010 UPWP (Attachment 8A).

TAC Action: Adopt a resolution regarding Amendment #1 to the 2009-2010 UPWP (Attachment 8A).

**9. Draft FY 2010-2011 Unified Planning Work Program
(Attachment 9, 9A, 9B, 9C)
Maricia Brown, LPA Staff**

Annually, the DCHC MPO is required by federal regulations to prepare a Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. Funding for the UPWP is provided on an annual basis by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Essentially, the UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Tasks are identified by an alphanumeric task code and description.

Action	Date
TCC recommends draft 2010-2011 UPWP	2/24/10
TAC releases draft 2010-2011 UPWP for public comment	3/10/10
TAC holds public hearing on draft 2010-2011 UPWP	4/14/10
TAC approves final 2010-2011 UPWP	5/12/10

Attachment 9 is a memo summarizing the draft UPWP. Attachment 9A is the draft UPWP. Attachment 9B is a presentation summarizing the draft UPWP. Attachment 9C is a memo on UPWP deadlines.

TCC Recommendation: That the TAC release the draft FY 2010-2011 Unified Planning Work Program for public comment

TAC Action: Release the draft FY 2010-2011 Unified Planning Work Program for public comment.

10. Farrington Road Study

(Attachment 10, 10A)

Andy Henry, LPA Staff

Felix Nwoko, LPA Staff

The goal of the Farrington Road Corridor Study is to identify appropriate future transportation improvements in an area that has great growth potential but is currently rural in character and possesses a large expanse of environmentally-sensitive land. The study was conducted in 2007 and 2008, and the TAC and the Chatham County Board of Commissioners received presentations on the preliminary study results that same year. Staff had anticipated releasing the Farrington Road Corridor Study with the 2035 Long Range Transportation Plan (2035 LRTP), and then later, with the Comprehensive Transportation Plan (CTP) process but in each case was not able to do so.

The TCC recommendation is that the TAC review and release for public comment the transportation improvements and land use scenario results in the draft Farrington Road Corridor Study. Staff recommends releasing the draft study for a 30-day public comment period and conducting a public hearing at the April TAC meeting. The Lead Planning Agency (LPA) will advertise these events. In addition, local staff or governments might want to formally review the draft study, in particular the land use scenario recommendations. The study will be presented for adoption by the TAC at the May 2010 meeting. This schedule could be modified to allow for additional public or local board review if needed.

Attachment 10 is a memorandum that provides additional background information, and Attachment 10A is a copy of the draft Farrington Road Corridor Study.

TCC Recommendation: That the TAC receive the draft Farrington Road Corridor Study and release for public comment.

TAC Action: Receive the draft Farrington Road Corridor Study and release for public comment.

11. Safe Routes to School Infrastructure Grant

(Attachment 11, 11A)

David Bonk, Town of Chapel Hill

The Town of Chapel Hill recently received notice that they will be receiving a Safe Routes to School Grant from NCDOT Division 7 for \$50,000 for a sidewalk improvement to serve Scroggs Elementary, Culbreth Middle, and Carrboro High Schools. A sidewalk is proposed to be constructed on the south-side of Culbreth Road between Cobble Ridge and Rossburn Way. Attachment 11 is a brief description of the project. NCDOT requires that the MPO endorse these grants through a resolution (Attachment 11A).

TCC Recommendation: That the TAC approve the resolution to endorse applications from the Durham-Chapel Hill-Carrboro MPO Area for NCDOT Safe Routes to School Division Infrastructure Awards.

TAC Action: Approve the resolution to endorse applications from the Durham-Chapel Hill-Carrboro MPO Area for NCDOT Safe Routes to School Division Infrastructure Awards.

12. FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #14
(Attachment 12)

Ellen Beckmann, LPA Staff

In January 2010, the NC Board of Transportation approved funding for \$4,000,000 of bridge replacement projects in FY 2010 and FY 2010 and \$100,000 of safety improvements in FY 2010 in each Highway Division. The safety projects are maintenance of effort projects needed to supplement American Recovery and Reinvestment Act funding. The DCHC MPO needs to correspondingly add these projects to the FY 2009-2015 Metropolitan Transportation Improvement Program.

TCC Recommendation: That the TAC approve the Resolution to Modify the FY 2009-2015 Transportation Improvement Program for the DCHC Urban Area.

TAC Action: Approve the Resolution to Modify the FY 2009-2015 Transportation Improvement Program for the DCHC Urban Area.

13. Elizabeth Brady Road - Update
(Attachment 13, 13A)

Ellen Beckmann, LPA Staff

Felix Nwoko, LPA Staff

In January, the TAC endorsed the no build option for U-3808, Elizabeth Brady Road (Attachment 13). In response to a review of the project and comments from citizens, NCDOT responded that they have stopped work on the project (Attachment 13A). The TAC requested that a recommendation be brought back to them on how to proceed with other improvements in Hillsborough. The TCC recommends that the Town of Hillsborough create a task force consisting of staff members from the Town, Orange County, NCDOT, DCHC MPO, TJ COG and TTA to develop a recommendation for how to best address congestion and traffic issues in downtown Hillsborough. Future TIP projects, transit, travel demand management, and

operational improvements to downtown streets and parking are among the options that will be considered.

TAC Action: Receive update on Elizabeth Brady Road.

14. Job Access Reverse Commute and New Freedom – 2010 Call for Projects - Update
(Attachment 14, 14A, 14B)
Maricia Brown, LPA Staff

The MPO receives an annual allocation of Job Access Reverse Commute (JARC) and New Freedom (NF) funds. JARC is targeted for improving transportation for low income populations and NF is targeted at persons with disabilities. The 2010 Call for Projects would allocate the MPO's remaining appropriations – approximately \$72,671 for JARC and \$10,769 for NF. The TCC recommends delaying the FY 2010 Call of Projects until FY 2011.

Attachment 14 is a memo on the 2010 JARC and NF Call for Projects. Attachment 14A is a summary of approved project status and funding. Attachment 14B is a summary of expenditures for the approved projects.

TAC Action: Receive the proposed FY 2010 Call for Projects schedule and the FY 2006 – FY 2009 project status and funding updates.

15. NC 54 Corridor Study - Update
(Attachment 15)
Felix Nwoko, LPA Staff
Leta Huntsinger, LPA Staff

The DCHC MPO has initiated the NC 54 Corridor Study to analyze the issues within the corridor, evaluate mitigation measures, and identify transportation and land use strategies for accommodating current and future transportation needs. A proposed schedule for review and approval is included as Attachment 15.

TAC Action: Receive update on the NC 54 Corridor Study.

REPORTS:

16. Report from the TAC Chair
Mike Woodard, TAC Chair

TAC Action: Receive Report from TAC Chair

17. Report from Staff
(Attachment 17)
Felix Nwoko, LPA Staff

TAC Action: Receive Report from Staff

18. Report from the TCC Chair
Mark Ahrendsen, TCC Chair

TAC Action: Receive Report from TCC Chair

19. NCDOT Report
(Attachment 19)
Wally Bowman, Division 5 – NCDOT
Mike Mills, Division 7 – NCDOT

TAC Action: Receive report of NCDOT

INFORMATIONAL ITEMS

20. Recent News Articles and Updates
(Attachment 20)

21. NCDOT Strategic Prioritization Results
(Attachment 21)

22. Letter from NCDOT re MAB Expansion
(Attachment 22)

23. Letter to State Legislative Delegation re Transportation Equity Formula
(Attachment 23)

24. Letter to NCDOT re Urban Loop Prioritization
(Attachment 24)

25. Letter from NCDOT re Andrews Store Road Improvements
(Attachment 25)

26. ARRA Update
(Attachment 26)

27. Letter from Durham County to NCDOT re State Forest Road Bridge
Memo from NCDOT re State Forest Road Bridge
(Attachment 27, 27A)

28. Letter to NCDOT re FY 2012-2018 TIP Regional Priority List
(Attachment 28)

Adjourn

**Joint TAC meeting: March 31, 2010, 8:30am -10:30am,
RDU Airport Authority Building Room 100A**

Next meeting: April 14, 2010

Dates of Upcoming Transportation-Related Meetings:

3/19/2010, 8:30am Regional Transit Leadership Group @ Triangle Transit
3/25/2010, 4:30pm NCDOT Public Workshop (4:30-6:30pm) and Hearing (7:00pm) on U-0071, East
End Connector @ Holton Career and Resource Center
3/31/2010, 8:30am Capital Area MPO and DCHC MPO Joint TAC Meeting @ RDU Airport
Authority
4/13/2010, 7:30am Regional Transportation Alliance 2010 Transportation Breakfast @ Research
Triangle Park Headquarters
4/16/2010, 10:30am Tri-MAP @ RDU Airport Authority

TAC Directives to Staff

06/11/03 – 12/31/08 (Pending/In Progress/On Going)

01/01/09 – Present (Completed/Pending/In Progress)

Meeting Date	Directive	Status
4/12/06	Investigate use of peer review for Triangle Regional Model (TRM)	<u>In Progress:</u> TRM committee has taken up this project
4/12/06	Address cost splits for TRM tasks	<u>In Progress:</u> TRM Executive Committee has taken up this project.
8/09/06	Follow up with the BPAC and DATA Boards regarding public involvement for MPO activities.	<u>In Progress:</u>
2/14/07	Develop a long-term and short-term strategy for addressing funding needs working with other MPOs and the Metropolitan Coalition	<u>In Progress:</u> See 10/31/07 Joint TAC Agenda.
3/12/08	Provide an update on the state's human services transportation plan	<u>In Progress:</u>
12/10/08	Develop a recommendation for the bridge replacement on State Forest Rd.	<u>In Progress:</u> NCDOT is currently reviewing the issue including meeting with stakeholders.
1/14/09	Re-order projects and respond to the issues raised by the TAC on the draft FY 2011-2017 TIP Regional Priority List.	<u>Completed:</u> See Attachment 7 of 2/11/09 TAC Agenda.
1/14/09	Investigate the relationship between projected transit ridership and revenue	<u>Completed:</u> See Attachment 6 of 2/11/09 TAC Agenda.
2/11/09	Send a letter to the MPO's congressional delegation regarding the urbanized area's 5307 apportionment	<u>Completed:</u> See Attachment 19 of 3/11/09 TAC Agenda.
4/08/09	Send a letter to the MPO's congressional delegation and member jurisdictions regarding S1001/H881	<u>Completed:</u> See Attachment 16 of 5/13/09 TAC Agenda.
5/13/09	Send a letter to Brier Creek shopping center management requesting bus shelters.	<u>In Progress:</u> LPA, CAT, and DATA staff are discussing transit access and passenger amenities.
5/13/09	Send a letter to the Town of Cary and Chatham County regarding trailhead parking areas for the American Tobacco Trail	<u>Completed:</u> See Attachment 15 of 8/12/09 TAC Agenda.
10/14/09	Present to the Durham City Council on the status of the Durham Walks Plan	<u>Completed:</u> Occurred 2/4/2010
10/14/09	Work with NCDOT and Durham City/County Planning to ensure that developers in the Hopson Road project area make contributions to the road improvements	<u>In Progress:</u> See Attachment 6 of 1/13/2010 TAC Agenda.

10/14/09	Present to the Orange County BOCC on MAB expansion	<u>Completed:</u> 11/17/2009
11/11/09	Meet with the Secretary of Transportation to discuss the East End Connector and the urban loop prioritization process	<u>Completed:</u> Meeting occurred 1/8/2010
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> Will be provided by the TAC Chair on an ongoing basis
11/11/09	Provide additional information to the TAC on the Complete Streets policy and legislation.	<u>In Progress:</u>
1/13/10	Send letter to Chatham County BOCC regarding MAB expansion	<u>Completed:</u> See Attachment 19 of 2/10/10 TAC Agenda.
1/13/10	Send letter to NCDOT describing the ranking of multi-modal projects in the DCHC MPO's FY 2012-2018 TIP Regional Priority List	<u>Completed:</u> See Attachment 28 of 3/10/10 TAC Agenda.
2/10/10	Provide a recommendation for how to proceed with programming funding for alternatives to U-3808, Elizabeth Brady Road.	<u>In Progress:</u> See 3/10/10 TAC Agenda.

TRANSPORTATION ADVISORY COMMITTEE**January 13, 2010****MINUTES OF MEETING**

The Transportation Advisory Committee met on January 13, 2010, at 9:00 a.m. in the Council

Committee Room on the second floor of Durham City Hall. The following attended:

9	**William "Bill" V. Bell	City of Durham
10	*Diane Catotti	City of Durham
11	**Alice Gordon	Orange County
12	**Eric Hallman	Town of Hillsborough
13	*Ed Harrison	Town of Chapel Hill
14	**Mark Kleinschmidt	Town of Chapel Hill
15	**Sally Kost	Chatham County
16	**Lydia Lavelle	Town of Carrboro (TAC Vice-Chair)
17	**Ellen Reckhow	Durham County
18	**Chuck Watts	NCDOT Board Member
19	**Mike Woodard	City of Durham (TAC Chair)
20		
21	Mark Ahrendsen	City of Durham – Transportation
22	Ellen Beckmann	City of Durham - Transportation
23	David Bonk	Town of Chapel Hill
24	Jeff Brubaker	Town of Carrboro
25	Stanley Buff	NCDOT – Division 7
26	Melissa Guilbeau	Chatham County
27	Andy Henry	City of Durham - Transportation
28	John Hodges-Copple	Triangle J COG
29	Joey Hopkins	NCDOT – Division 5
30	Tom King	Town of Hillsborough
31	Karen Lincoln	Orange County
32	Patrick McDonough	Triangle Transit
33	Dale McKeel	City of Durham - Transportation
34	Ryan Mickles	Town of Chapel Hill
35	Joe Milazzo	Regional Transportation Alliance
36	Felix Nwoko	City of Durham - Transportation
37	Pierre Osei-Owusu	City of Durham – DATA
38	Jill Stark	FHWA
39		
40	**Voting Member	
41	*Alternate or Non-Voting Member	
42		
43	Mike Woodard, TAC Chair, called the meeting to order at 9:05 a.m. and the Roll Call was	
44	conducted.	

45 **PRELIMINARIES:**

46 **Adjustments to the Agenda**

47 There were no adjustments to the agenda.

48 **Public Comments**

49 There were no public comments.

50 **Directives to Staff (Attachment 4)**

51 The Directives to Staff are attached for review.

52 **ACTION ITEMS:**

53 **December 9, 2009 TAC Meeting Minutes (Attachment 5)**

54 Sally Kost stated that line 126 should read; "Sally Kost stated the use of TAZs wasn't emphasized
55 by the MPO staff at the first meeting with the Board of County Commissioners." Ms. Kost also stated
56 that the motion beginning on line 144 should include "that the TAC Chair will send a letter to the
57 Chatham Board of County Commissioners explaining the logic used" needs to be included in the motion.
58 There was uncertainty over whether this was actually a part of the motion or not, and Mark Ahrendsen
59 stated the clerk will review the recorded minutes and staff will bring the December 2009 meeting
60 minutes back for approval next month after there is clarification on the motion.

61 **U-4716 (Hopson Road Grade Separation, Church Street Crossing Closure and Extension) (Attachments**
62 **6, 6A, 6B, 6C, 6D, and 6E)**

63
64 Andy Henry provided an introduction for U-4716 (Hopson Road Grade Separation, Church Street
65 Crossing Closure and Extension), along with the attachments.

66 Mr. Henry stated this item was tabled in December because there was not an agreement
67 between the developer and the NCDOT. A handout was distributed at the beginning of the meeting
68 from the developer stating that in principal that they agree to pay for the construction of the extension

69 of Keystone Drive and NCDOT would be in charge of the construction plans and purchasing the right-of-
70 way. However, at this time there is not a signed agreement.

71 Joey Hopkins stated there is a design public hearing tomorrow from 4:30 p.m. to 7:30 p.m. at
72 RTP Headquarters on this project.

73 Diane Catotti asked if we can defer another month to get a signed agreement. Joey Hopkins
74 stated it is dependent on the ARRA grant for the project. Joey Hopkins stated it is possible that we will
75 have a signed agreement by next month. Diane Catotti suggested deferring one month or having a
76 conditional approval dependent on the agreement being in place. Mike Woodard suggested, if we did a
77 conditional approval, that the TAC authorize the TAC Chair and TCC Chair to execute the document. If it
78 is not approved by the February TAC meeting, it will be placed on the agenda. Andy Henry stated there
79 is an option to replace the funding source in the amendment with "other" To designate the developer's
80 contribution. Mark Ahrendsen suggested adding another column for "other" funding.

81 A motion was made by Diane Catotti and seconded by Lydia Lavelle for the approval, conditional
82 on the approval of a signed agreement between NCDOT and the developer. The motion carried
83 unanimously.

84 **FY 2012-2018 Transportation Improvement Program – Regional Priority List – Bicycle and Pedestrian**
85 **(Attachments 7 and 7A)**

86
87 Ellen Beckmann provided an introduction for the FY 2012-2018 Transportation Improvement
88 Program – Regional Priority List – Bicycle and Pedestrian, along with the attachments.

89 Ellen Beckmann stated that the NCDOT Bicycle and Pedestrian Division received our original list
90 in October and had some questions. They requested a MPO-wide list, and we had submitted a list
91 separated by division which is how the TAC approved it. The Bicycle and Pedestrian Division has asked
92 that we only submit ten projects for the MPO. They asked that we submit five bicycle and five
93 pedestrian projects. Almost all of our projects are combined bicycle and pedestrian projects. Ellen

94 Beckmann emailed the Bicycle and Pedestrian Division and they were agreeable with staff submitting
95 the projects together which are how they are listed in attachment 7A. The funded projects are not
96 included on the list. Similar to the highway list, the recommendation is based on alternating between
97 the two counties of Durham and Orange County. Chatham County did not submit any bicycle and
98 pedestrian projects to the MPO. The Bicycle and Pedestrian Division needs our list as soon as possible
99 and Ellen Beckmann stated it would be sent as soon as it had been approved by the TAC.

100 Lydia Lavelle stated that Homestead Road wasn't on the original list and it is a project that Ms.
101 Lavelle brings up over and over. Ms. Lavelle asked why the project isn't listed. Ellen Beckmann stated
102 the committee divided projects between modes. Any project that was bicycle/pedestrian, but also
103 included safety improvements like turn lanes or intersection improvements, was put in the highway list
104 because the highway funds are more plentiful than bicycle/pedestrian funds. Staff submitted the
105 Homestead Road project as a highway project.

106 Lydia Lavelle is concerned that there are other projects listed and they don't have as high a
107 priority for bicycle/pedestrian improvements as Homestead Road.

108 Chuck Watts stated that projects like Homestead Road aren't "highway" projects and won't
109 compete well with true highway projects. Joey Hopkins stated projects that were primarily
110 bicycle/pedestrian did not end up in the Division's top 25 projects. They did not get qualitative points
111 from the Division's standpoint speaking only for Division 5. There needs to be better communication
112 between the MPO and the Division. Stanley Buff is going to make a telephone call to see if the
113 Homestead Road project was in their top 25 projects.

114 Ed Harrison stated that the Ephesus Church Road and Homestead Road projects are both on the
115 highway list because they are driven like highways. NC-86 has many safety issues identified by the
116 Highway Safety Research Center. Mr. Harrison thinks that staff's decision may be the right decision.

117 Lydia Lavelle stated the balance needs to be shifted to bicycle/pedestrian improvements. Ms.
118 Lavelle stated there are neighborhoods on both sides of Homestead Road that want to slow down
119 traffic. Ms. Lavelle doesn't want these roads to get the short shrift because they don't fit in either
120 category.

121 Mike Woodard stated that Chuck Watts is our ally at NCDOT. Mr. Watts stated he is concerned
122 that Durham's top projects didn't fit well because they are competing with I-40 and I-85.

123 Ellen Reckhow agrees that there needs to be more communication. Ms. Reckhow stated it
124 seems that it could be useful to discuss this with NCDOT under the Complete Streets framework. The
125 Town of Chapel Hill and the Town of Carrboro have taken a different approach. There needs to be an
126 allowance for flexibility in design. They are the cutting-edge and Durham is not far behind.

127 Alice Gordon stated the highway category has everything in it from I-40 to the local roads.
128 There should be different categories of roads because it is difficult for us to make a headway. Highway
129 funds are more plentiful and bicycle and pedestrian funds are more limited. Chuck Watts stated they
130 are working on a flowchart of how the funds come in.

131 Eric Hallman stated that the Elizabeth Brady Road is an example of disconnect.

132 Mark Kleinschmidt stated the benefits of Chapel Hill's policies extend beyond Chapel Hill.
133 Orange County's lack of highway project requests provides more funds for others. The land use policy is
134 the key; it enhances the quality of life for the region. The sprawling model of growth gets more highway
135 funds. The different model doesn't fit and doesn't get the funds.

136 Chuck Watts stated the reality is the Homestead Road won't compete well with the other
137 projects. They are trying to work to a point where multi-modal projects are considered.

138 Ellen Reckhow stated the problem is there is just a trickle of funds for the bicycle/pedestrian
139 program. There needs to be a way to open the spigot wider for bicycle/pedestrian projects.

140 Stanley Buff returned but was unable to get the answer regarding the Homestead Road project
141 because they were in meetings.

142 Mike Woodard asked if there is a way to get the Homestead Road project on this list. Ellen
143 Beckmann stated the cost for Homestead Road is \$5.5 million for about five miles. Dale McKeel stated
144 the statewide funds for bicycle/pedestrian projects are \$3 million per year. Mark Ahrendsen
145 recommended keeping it on the highway list. Ellen Reckhow suggested leaving the list the way it is and
146 working with Mr. Watts regarding the bigger issue and trying to see if there can be some flexibility to
147 deal with the Homestead Road project. Ms. Reckhow suggested examining the past spending in Orange
148 County using the current formulas. Mark Ahrendsen stated that Mr. Galyon said Orange County makes
149 his job easier by not submitting lots of highway projects.

150 Chuck Watts stated the policy board could change a lot by having a data driven process. Mr.
151 Watts also stated that bicycle/pedestrian projects should be on the bicycle/pedestrian list to help show
152 the need for more funds.

153 Ellen Beckmann stated there are subcategories of the highway funds for the different tiers of
154 roadways and different project goals so Homestead Road won't necessarily be competing against I-40.
155 There have been multi-modal or mostly bicycle/pedestrian projects funded with highway funds in our
156 MPO. For example, the South Columbia Street improvements are being funded with highway funds.

157 Alice Gordon suggested making a case for flexibility to save funds and work with NCDOT to see if
158 there is a way to fund Homestead Road.

159 A motion was made by Lydia Lavelle and seconded by Alice Gordon to keep the lists the way
160 they are and that the TAC Chair write a letter to NCDOT describing our concerns using Homestead Road
161 as an example and see how to fund these projects. The motion carried unanimously.

162 Alice Gordon asked that the TAC give a directive to staff to describe specifically how to change
163 the process to make it work.

164 Lydia Lavelle has been encouraged by recent discussions regarding Smith Level Road.

165 **U-3808 Elizabeth Brady Road Extension (Attachments 8, 8A, and 8B)**

166 Ellen Beckmann provided an update on U-3808 Elizabeth Brady Road Extension, along with the
167 attachments.

168 Eric Hallman appreciates the support of the TAC. There were overwhelming public comments
169 against the project. The Town of Hillsborough met with Secretary Conti and was encouraged by the
170 discussion. An engineering firm has a proposal to improve the traffic on Churton Street. We hope to get
171 the funds in Hillsborough.

172 Alice Gordon stated the Orange County Commissioners are in support of the three different
173 projects that could be constructed in place of the Elizabeth Brady Road extension.

174 A motion was made by Eric Hallman and seconded by Alice Gordon to approve the submittal of
175 a letter to NCDOT on U-3808, Elizabeth Brady Road Extension. The motion carried unanimously.

176 **Federal Rescission (Attachment 9)**

177 Ellen Beckmann provided an update on the federal rescission. No projects will have to be
178 cancelled, but some may need to be moved further out.

179 Mayor Bill Bell asked when we will know; he wants time to review the CMAQ funds for Alston
180 Avenue.

181 Ellen Beckmann stated they hope to bring it back in February. This will provide the TAC two
182 times to review. CMAQ projects post-2009 aren't affected. Mark Ahrendsen also wants to know the
183 CMAQ before the decision is made.

184 **American Recovery and Reinvestment Act of 2009 (Attachments 10 and 10A)**

185 Ellen Beckmann provided an update on the American Recovery and Reinvestment Act of 2009,
186 along with the attachments.

187 Diane Catotti questioned the priority order of the resurfacing projects. Ellen Beckmann stated
188 she believes the top ones are prioritized.

189 **REPORTS:**

190 **Report from the TAC Chair**

191 Mike Woodard and other MPO staff members had a meeting with Secretary Conti on the East
192 End Connector. Secretary Conti acknowledged that the East End Connector was long overdue and was a
193 high priority for the department. His closing comment to everyone was that the department was going
194 to work for us to get the East End Connector completed. Mike Woodard stated that our staff's
195 comments were appreciated on the loop prioritization.

196 The Regional Transit Leadership Group is continuing to meet to work on the challenges. The
197 next meeting is January 22, 2010.

198 Ellen Reckhow stated there is the issue of internet sales and sales taxes because the transit plan
199 relies on the revenue from the taxes.

200 Ed Harrison stated there is a Mayor's meeting on January 22, 2010.

201 **Report from Staff (Attachment 12)**

202 Felix Nwoko stated that Attachment 17 is a summary of the NC-54 Workshop. The Report from
203 Staff is attached for review.

204 **Report from the TCC Chair**

205 Mark Ahrendsen reported that staff will be meeting in Durham and Orange County to make sure
206 transit plans are lining up and consistent within our MPO. NCDOT released the Urban Loop
207 Prioritization Methodology for a second round of comments that are due at the end of February.

208 A task force was set up to implement the NCDOT Complete Streets Policy. Joey Hopkins stated
209 the membership is large. They are hiring a consultant to get the policy implemented and complete by
210 the end of the year. It will take time to make the changes and flexibility will be emphasized. The District

211 Engineers are aware of the policy, but they will have to work to educate each other and the local
212 jurisdictions. NCDOT is going to need help with project teams to help develop guidelines.

213 Diane Catotti suggested requiring a NCDOT employee to get to work without a car one day as it
214 would help them understand the needs.

215 Mark Ahrendsen stated the Environmental Assessment for the East End Connector has been
216 released and a public hearing will be scheduled soon. The environmental justice study has been
217 released for the Alston Avenue widening and there will be a public hearing soon.

218 Due to accidents at railroad crossings, N.C. Operation Lifesaver is having a safety blitz in Durham
219 and Orange counties at the accident locations tomorrow.

220 Dale McKeel provided an update on the American Tobacco Trail project. The Chatham County
221 section is open. The Durham County section from NC-54 to Chatham County has a revised site plan and
222 is being reviewed. The timeline is to get the project out to bid in the June 2010 timeframe, and the
223 construction will take one year.

224 Dale McKeel provided an update on the Old Durham-Chapel Hill Road project. Kimley-Horn and
225 Associates, Inc. is doing the design work and the project is being managed by the NCDOT Division 5
226 office, Mike Kneis. The 25% plans for the project have been completed and they are soliciting
227 comments. They will then prepare 65% plans and then have a public workshop.

228 Dale McKeel provided an update on Weaver Dairy Road between NC-86 and Erwin Road. It will
229 go out to bid in September of 2010.

230 **NCDOT Report (Attachment 14)**

231 Stanley Buff, NCDOT Division 7 Engineer, provided an update on projects. NCDOT has a new
232 Board Member, Mike Fox. Mike Mills would like him to attend a meeting. Something that isn't on the
233 ARRA list is the resurfacing in Orange County on NC 54 (Durham County to US 15-501) and they will also
234 finish the resurfacing on Jones Ferry Road and Orange Grove Road to NC-54.

235 Joey Hopkins, NCDOT Division 5 Engineer, provided an update on projects. Some of the ARRA
236 resurfacing is complete. There is no widening on Hillandale. The TW Alexander widening was let last
237 month. We will open bids this coming month on the I-540/I-40 interchange project where they are
238 adding an extra lane back to Page Road to help with congestion.

239 Joey Hopkins continues to look at the markings/reflectors on the Durham Freeway. The
240 pavement is in good shape. They are measuring the reflectivity to see if it needs something done. Ellen
241 Reckhow stated it is especially bad in the rain. Ed Harrison stated there are sections in Durham County
242 on I-40 where the reflectivity is bad.

243 Mike Woodard thanked Joe Milazzo for setting up the meeting with Secretary Conti,
244 emphasizing the regional nature of the East End Connector.

245 Ed Harrison wants to pin down the date and time of the joint MPO meetings.

246 **INFORMATIONAL ITEMS:**

247 **Recent News Articles and Updates (Attachment 15)**

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

249 **Letter to Governor Perdue re MAB Expansion and Adjustment (Attachment 16)**

250 The letter to Governor Perdue re MAB Expansion and Adjustment is attached for review.

251 **NC-54 Corridor Study Public Workshop #1 Summary (Attachment 17)**

252 The NC 54 Corridor Study Public Workshop #1 Summary is attached for review.

253 **Letter to FTA from TTA re Request for Time Extension on Regional Rail/Major Transit Investments –**
254 **December 30, 2009 (Attachment 18)**

255
256 The letter to FTA from TTA re Request for Time Extension on Regional Rail/Major Transit
257 Investments – December 30, 2009 is attached for review.

258 **Adjournment**

259 There being no further business before the Transportation Advisory Committee, the meeting
260 was adjourned at 11:17 a.m.

1 **TRANSPORTATION ADVISORY COMMITTEE**

2 **February 10, 2010**

3 **MINUTES OF MEETING**

4 The Transportation Advisory Committee met on February 10, 2010, at 9:00 a.m. in the Council

5 Committee Room on the second floor of Durham City Hall. The following attended:

6	**William "Bill" V. Bell	City of Durham
7	**Alice Gordon	Orange County
8	**Eric Hallman	Town of Hillsborough
9	*Ed Harrison	Town of Chapel Hill
10	**Mark Kleinschmidt	Town of Chapel Hill
11	**Lydia Lavelle	Town of Carrboro (TAC Vice-Chair)
12	**Ellen Reckhow	Durham County
13	**Chuck Watts	NCDOT Board Member
14	**Mike Woodard	City of Durham (TAC Chair)
15		
16	Mark Ahrendsen	City of Durham/Transportation
17	Ellen Beckmann	City of Durham/Transportation
18	David Bonk	Town of Chapel Hill
19	Jeff Brubaker	Town of Carrboro
20	Maricia Brown	City of Durham/Transportation
21	Diane Catotti	City of Durham
22	Bonnie Estes	Durham City/County Planning
23	Mike Fox	NCDOT Board Member
24	Melissa Guilbeau	Chatham County
25	Andy Henry	City of Durham/Transportation
26	John Hodges-Copple	Triangle J COG
27	Joey Hopkins	NCDOT – Division 5
28	John Killeen	DCRP – UNC
29	Tom King	Town of Hillsborough
30	Karen Lincoln	Orange County
31	Patrick McDonough	Triangle Transit
32	Ryan Mickles	Town of Chapel Hill
33	Mike Mills	NCDOT – Division 7
34	Felix Nwoko	City of Durham/Transportation
35	Pierre Osei-Owusu	City of Durham – DATA
36	Jill Stark	FHWA
37	Tom Stevens	Mayor, Town of Hillsborough
38	John Sullivan	FHWA
39	David Willauer	IEM, Sr. Freight Planner
40	Jim Wise	News and Observer
41		
42	**Voting Member	
43	*Alternate or Non-Voting Member	

44 Mike Woodard, TAC Chair, called the meeting to order at 9:08 a.m. and the Roll Call was
45 conducted. Mr. Woodard stated that Sally Kost will not be attending the meeting as she is meeting with
46 the District Engineer on a road design issue.

47 **PRELIMINARIES:**

48 **Adjustments to the Agenda**

49 Mark Ahrendsen stated handouts were distributed at the beginning of the meeting which will be
50 addressed during the meeting.

51 Diane Catotti asked about the Hopson Road status. Andy Henry stated staff has made several
52 requests to the Rail Division and staff hasn't heard yet if there is a signed agreement with the local
53 developer Keystone. Joey Hopkins, NCDOT District 5, stated there is not a signed agreement at this
54 time. It will be some time because the developer has concerns with signing the agreement before
55 seeing a more final design on the Church Street Extension. There is a post-hearing meeting on February
56 23, 2010, for the project. Diane Catotti stated in the absence of the signed agreement, what is the
57 status of the project, and Mark Ahrendsen stated the TIP amendment has not been signed because it is
58 pending agreement execution. Diane Catotti asked how this will affect the TIP amendment, and Mark
59 Ahrendsen stated it doesn't move forward. John Hodges-Copple stated there won't be any federal
60 approvals until the MTIP amendment is signed and the air quality conformity is done. Basically,
61 everything is in limbo. It is up to the Rail Division to determine at what point the MTIP amendment
62 becomes an issue. Andy Henry stated the last staff heard is February is okay for approval, as it would
63 not delay the project. Mark Ahrendsen stated they will wait until the MTIP is on the critical path and
64 then will bring it back to the TAC if an agreement is not in place. Diane Catotti stated the ARRA funds
65 have been approved and asked if those funds will be applied toward the project, and Mark Ahrendsen
66 stated yes that is correct.

67 Mike Woodard asked if there is a timeline as to when there will be a design for the Church
68 Street Extension, and Joey Hopkins stated it will be a couple of months.

69 Joey Hopkins stated the problem is that part of the developer's property is very narrow, and,
70 depending on the width of the road and the width of the right-of-way needed, they might not have the
71 setbacks to get their buildings in there to meet their build-out plan. They don't want to sign anything
72 that will tie their hands for future development. They want more detail.

73 Mike Woodard stated he understands their concern, but he doesn't want to jeopardize the TIP
74 and the ARRA funding. Mr. Woodard doesn't want it to come to the TAC at the eleventh hour for
75 approval.

76 **Public Comments**

77 Mike Woodard, TAC Chair, provided an introduction for David Willauer, Sr. Transportation
78 Planner for IEM. IEM is a consulting firm that is relocating its corporate headquarters from Baton
79 Rouge, Louisiana to Durham County.

80 David Willauer spoke regarding IEM. IEM just completed a Hazardous Materials Study for North
81 Carolina Division of Emergency Management. They were interested in shipments of hazardous material.
82 It is the Division of Emergency Management's intention to do studies across the state. IEM looks
83 forward to partnering with them. IEM will have over four hundred jobs in North Carolina within the next
84 six years.

85 Mike Woodard recognized Tom Stevens, Mayor of the Town of Hillsborough.

86 **Directives to Staff (Attachment 4)**

87 The Directives to Staff are attached for review.

88 **ACTION ITEMS:**

89 **December 9, 2009 TAC Meeting Minutes (Attachment 5)**

90 A motion was made by Diane Catotti and seconded by Mark Kleinschmidt to approve the
91 December 9, 2009 TAC Meeting Minutes. The motion carried unanimously.

92 **January 13, 2010 TAC Meeting Minutes (Attachment 6)**

93 Mike Woodard, TAC Chair, stated that the January 13, 2010 TAC Meeting Minutes were just
94 provided to the TAC. Mike Woodard recommended postponing the approval of the January meeting
95 minutes until the March TAC meeting.

96 **Federal Rescission (Attachments 7, 7A, and 7B)**

97 Mark Ahrendsen provided background on the Federal Rescission. John Sullivan with FHWA is
98 here to provide information from the federal perspective. It appears that we can advance all projects
99 previously selected for STP-DA funding; some of the schedules were delayed, but the schedules are now
100 more realistic of when local governments can implement the projects. To accommodate all projects we
101 have taken all reserves out of the program. All the funds are committed. John Sullivan is going to
102 discuss the rescission, the background associated with it, and his perspective on the federal
103 reauthorization.

104 John Sullivan with FHWA provided a Power Point Presentation on the 2009 SAFETEA-LU
105 Rescission. Mr. Sullivan stated that Congressman Price's letter provides background on why the
106 rescission took place. It was required as part of SAFETEA-LU. Mr. Sullivan stated apportionment is really
107 an authorization. An obligation limitation is what FHWA can commit to projects in a given year and that
108 is what NCDOT and the MPOs are using to program projects in the MTIP and STIP. The obligation
109 limitation is not earmarked for individual projects. Apportionments are allocated in that year and are
110 available for three subsequent years. If they aren't used within the four year period, they lapse and are
111 redistributed in subsequent bills. For past rescissions, the state had discretion in which programs were
112 affected. For this rescission, FHWA had to reconcile the rescission through rules prescribed by SAFETEA-

113 LU, rules prescribed by the Energy Independent and Security Act, and by appropriation laws. The intent
114 was for the rescission to be applied proportionately.

115 Mark Ahrendsen stated the proportionate intent wasn't realized since some programs had to
116 make-up for obligations in other programs.

117 Lydia Lavelle asked where the revenues come from and John Sullivan stated they come from the
118 gas tax, diesel/special fuels tax, and heavy vehicle use tax. John Sullivan stated on the website
119 www.fhwa.dot.gov displays the status of the highway trust fund, as well, as travel monitoring trends.

120 Eric Hallman stated the Town of Hillsborough just selected a no-build option on the Elizabeth
121 Brady Road, but they still have a problem with traffic in Hillsborough. They have alternative projects
122 that they would like to replace the Elizabeth Brady Road project, but they need the authority to be able
123 to reprogram funds in the TIP.

124 David Bonk explained that the MPO wants the freedom to program funds in the TIP, not to only
125 be reactionary to NCDOT's TIP. The MPO wants to be able to reprogram funds if a project is not wanted
126 in the MPO. The early test of this was when the Town of Chapel Hill requested that the \$6 million that
127 had been allocated to the Homestead Road widening be reallocated to the town's transit operations
128 center. The Town of Hillsborough wants the ability to reprogram funds from the Elizabeth Brady Road
129 to projects within the MPO, not returned to the big pot of funds to be reallocated to projects by NCDOT.

130 John Sullivan stated the TIP is a negotiated process; both the TAC and the Governor have to
131 approve the TIP.

132 Alice Gordon asked how the TAC follows up. John Sullivan stated the federal government has no
133 role in the process. Mr. Sullivan stated that federal law prescribes the process not the outcome. They
134 hope to help facilitate a resolution.

135 Joey Hopkins stated NCDOT is working on a better process for tracking DA funds. They are
136 trying to make sure we don't lose DA funds. They hope to have a draft report out soon to give all MPOs
137 a better idea of what information is available.

138 John Sullivan stated the TAC would need to agree to reallocate the funds within the TIP to the
139 Town of Hillsborough's projects and then negotiate the process with NCDOT.

140 Mark Ahrendsen stated the TAC can continue to push that issue. The fundamental difference is
141 in how to program the TIP. We have two NCDOT Board of Transportation members here to help the
142 negotiated process.

143 Chuck Watts stated that NCDOT is trying to implement reforms with the MPOs making more
144 decisions.

145 Ed Harrison stated because we have a TIP in the development process couldn't we let the Town
146 of Hillsborough add the projects. Mark Ahrendsen stated we have an approved 2009-2015 TIP in which
147 the Elizabeth Brady Road project is funded and there are other unfunded projects. It would require an
148 amendment to the current TIP or programming in the next TIP.

149 Mike Mills, NCDOT Division 7 Engineer, stated they are under a new process to develop the next
150 TIP. Elizabeth Brady Road is not in the 5-year plan. Programming projects will occur in years six through
151 ten which are being developed now. NCDOT will take the list submitted by the MPO and evaluate it
152 based on the point criteria, and it is possible that the project may make the 6-10 year plan. The first five
153 years are already set.

154 Mike Woodard asked if staff can provide an update on the projects in the Town of Hillsborough
155 and Mark Ahrendsen stated staff can provide it at the March TAC meeting.

156 Tom Stevens, Mayor of the Town of Hillsborough, stated they appreciate the cooperation with
157 both the MPO and NCDOT.

158 John Sullivan stated SAFETEA-LU expired September 30, 2009. They are currently operating
159 under an extension and continuing resolution that expires February 28th. They are looking for an
160 extension of 18 months to allow for debate over major transportation issues. Congressman Oberstar
161 wants a more aggressive schedule for reauthorization. They hope to have an extensive six-year bill in
162 eighteen months.

163 Felix Nwoko asked if the new bill will be retroactive and John Sullivan stated that was done with
164 SAFETEA-LU. It will be considered as part of the deliberations.

165 Ellen Beckmann described Attachment 7B the draft schedule for STP-DA projects for FY 2010
166 through 2015. This is only an information item at this point. Staff hopes to have a final schedule within
167 the next month or two.

168 Diane Catotti asked about the sidewalks on Holloway Street that were originally programmed in
169 2006 and now they are programmed in 2014; why is it so far out because it is a small project of only
170 \$53,000.

171 Ellen Beckmann stated the projects that are programmed in FY2010-11 already have some of
172 the planning complete. The Holloway Street project doesn't have any planning complete and that is
173 why it wasn't programmed in FY2010-11. The MPO is going to be doing a more diligent job of holding
174 everyone to the schedules so we aren't affected by the rescission again.

175 Lydia Lavelle stated the Dry Creek Greenway needs to have the Town of Carrboro removed from
176 the description as Carrboro is not a part of it.

177 Ed Harrison stated this is the third decade of project development for Old Durham-Chapel Hill
178 Road. It is incredible that it takes so long to get a project done.

179 Ellen Reckhow asked if the MPO staff has looked at examples in the state for getting projects
180 done. Mark Ahrendsen stated the resources are critical. Ms. Reckhow stated perhaps we need to re-
181 evaluate what is being done. Ms. Reckhow asked what the other MPOs are doing differently. Mark

182 Ahrendsen stated more than likely they are spending their STP-DA funds on big highway projects. We
183 do it the difficult way by having so many projects which involves more resources. Ms. Reckhow
184 suggested that the TAC bundle projects.

185 Alice Gordon stated we have a multi-modal approach. We should develop tools to help
186 accommodate our needs in the NCDOT process. Ms. Gordon suggested staff prepare a report for the
187 next meeting.

188 Mike Woodard introduced Mike Fox, NCDOT Board of Transportation Division 7 member.

189 Mike Fox is looking forward to working with the MPO and learning about the needs of this MPO.
190 Mr. Fox wants NCDOT to function in a different way than in the past. He has had conversations
191 regarding the local government's wants and needs. He is an attorney in business disputes and land use
192 zoning. He was formerly on the Greensboro Planning Board. Mr. Fox stated the change in approach
193 for the Smith Level Road project in the Town of Carrboro goes along with the new perspective.

194 **FY 2012-2018 TIP – Urban Loop Prioritization Process (Attachments 8, 8A, and 8B)**

195 Ellen Beckmann provided an introduction for the FY 2012-2018 TIP – Urban Loop Prioritization
196 Process, along with the attachments.

197 Mike Woodard reviewed the action for today which is to provide comments and then authorize
198 the staff to work with the TAC Chair to draft the final comments and meet the February 28, 2010
199 deadline.

200 A motion was made by Bill Bell and seconded by Lydia Lavelle to provide comments to the TCC
201 and then authorize the staff to work with the TAC Chair to draft final comments to meet the February
202 28, 2010 deadline. The motion carried unanimously.

203 Ellen Reckhow stated that Person County is interested in the East End Connector because it
204 would help their commuters. Ms. Reckhow asked if there is a way we can capture the quantity of
205 commuting and distance. Ms. Beckmann stated the current methodology doesn't cover this well. Ms.

206 Reckhow stated we need to capture the benefit to local streets like Duke/Gregson as these aren't good
207 parallel routes. Ms. Beckmann stated it will be emphasized.

208 Chuck Watts appreciates the input from staff on this process. Mark Kleinschmidt stated the
209 comments on the economic development are good. However, he suggests more specific comments on
210 the types of jobs around the interchange. Joey Hopkins stated NCDOT has similar concerns. NCDOT is
211 having a webinar on Friday to discuss the economic development criteria specifically.

212 Ellen Reckhow stated under Connectivity, staff needs to add some measure that reflects the
213 Triangle Expressway connection.

214 Ellen Beckmann stated the Secretary can move projects up and down based on other factors not
215 measured by the methodology.

216 **FY 2009-2015 MTIP – Amendment #12 (Attachment 9)**

217 Pierre Osei-Owusu provided an introduction for the FY 2009-2015 MTIP – Amendment #12,
218 along with the attachment.

219 A motion was made by Bill Bell and seconded by Eric Hallman to approve the FY2009-2015 MTIP
220 – Amendment #12. The motion carried unanimously.

221 **Transportation Equity Formula (Attachments 10 and 10A)**

222 Mark Ahrendsen provided an introduction for the Transportation Equity Formula, along with the
223 attachments.

224 Mark Ahrendsen stated this was brought up last year and pursuant to that it was recommended
225 that a resolution of support regarding the equity formula be developed. Reform of the equity formula is
226 consistent with the MPO's position.

227 A motion was made by Bill Bell and seconded by Mark Kleinschmidt to approve the Resolution in
228 Support of Evaluating and Revising the North Carolina Transportation Equity Formula. The motion
229 carried unanimously.

230 **American Recovery and Reinvestment Act of 2009 – Update (Attachments 11, 11A, and 11B)**

231 Ellen Beckmann provided an update on the American Recovery and Reinvestment Act of 2009 –
232 Update, along with the attachments. The ARRA High Speed Rail funding was announced.

233 **REPORTS:**

234 **Reports from the TAC Chair**

235 The transit leadership team made a couple of important decisions. It was decided that they will
236 use the county's revenue projections because they are more realistic. There will be no referendum on
237 the proposed transit sales tax before the fall of 2011 and it must occur on a regular election day. There
238 is a concern with the election timing.

239 Ellen Reckhow stated Wake County is developing an interlocal agreement on transit with a goal
240 of being done by the end of the current year.

241 **Report from Staff (Attachments 13 and 13A)**

242 The Report from Staff is attached for review. Felix Nwoko stated there is a preview of the
243 UPWP attached. Please recommend comments and staff will bring back at the next TAC meeting.

244 **Report from the TCC Chair**

245 Mark Ahrendsen stated efforts are underway in the three different counties to work on the
246 development of a plan. Ed Harrison stated we need to keep Board of County Commissioners up to date
247 to ensure the plans mesh into a regional plan. Mark Ahrendsen stated it will be put on the agenda of
248 the Joint City-County Committee. Alice Gordon stated staff needs to get the information out to the
249 elected boards. Because Durham is in the middle, Orange and Wake County may need to contribute to
250 the Durham plan. Lydia Lavelle concurred with keeping everyone updated. Ellen Reckhow suggested
251 having a briefing of this Board in March. Mark Kleinschmidt stated it seems impossible to get an
252 election in Wake County in November 2011 when they aren't used to having an election at that time.

253 Mike Woodard stated it must occur on a regular election, not a special election. Mark
254 Ahrendsen stated it is advantageous to schedule on the same day. Ellen Reckhow stated the one-cent
255 sales tax sunset is scheduled for 7/1/2011 and it may or may not sunset. It could be problematic.

256 Mark Ahrendsen stated there may be a second round of stimulus funds. Everyone needs to get
257 projects ready and be prepared. The timeline for the second round may be much tighter.

258 **NCDOT Report (Attachment 15)**

259 Joey Hopkins, NCDOT Division 5, provided an update on projects. US15-501 is slightly ahead of
260 schedule. The traffic may have already shifted. The T.W. Alexander Drive widening project was
261 awarded and will start in a few weeks.

262 Mike Mills, NCDOT Division 7 Engineer, provided an update on projects. The resurfacing project
263 on Columbia Street was recently authorized. I-40 work in Hillsborough to the Durham County line
264 project will be done at night or possibly close the street if it is in the summer. The Old Fayetteville
265 project was recently let and will begin in March or April.

266 Alice Gordon stated the Elizabeth Brady Road project is listed on the Division 7 project list. Mike
267 Mills stated it is now off the list as this list was prepared prior to it being removed.

268 **INFORMATIONAL ITEMS**

269 Ellen Beckmann stated there will be a Joint TAC Meeting on March 31, 2010 at 8:30 a.m. at RDU
270 Airport Authority.

271 **Recent News Articles and Updates (Attachment 16)**

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

273 **Overview of USDOT FY 2011 Budget (Attachment 17)**

274 The overview of USDOT FY2011 Budget is attached for review.

275 **NCDOT Division 5 Highway Priority List for FY 2012-2018 TIP (Attachment 18)**

276 The NCDOT Division 5 Highway Priority List for FY 2012-2018 TIP is attached for review.

277 **Letter to Chatham County re MAB Expansion – January 29, 2010 (Attachment 19)**

278 The letter to Chatham County re MAB Expansion – January 29, 2010 is attached for review.

279 **Adjournment**

280 There being no further business before the Transportation Advisory Committee, the meeting

281 was adjourned at 11:27 a.m.

**RESOLUTION TO MODIFY THE
2009-2015 TRANSPORTATION IMPROVEMENT PROGRAM
FOR THE DURHAM-CHAPEL HILL-CARRBORO URBAN AREA**

**AMENDMENT #13
March 10, 2010**

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 Metropolitan Transportation Improvement Program (MTIP) is a staged multiple year listing of all federally funded transportation projects scheduled for implementation within the Durham-Chapel Hill-Carrboro Urban Area which have been selected from a priority list of projects; and

WHEREAS, the document provides the mechanism for official endorsement of the program of projects by the Transportation Advisory Committee (TAC); and

WHEREAS, the inclusion of the TIP in the transportation planning process was first mandated by regulations issued jointly by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and no project within the planning area will be approved for funding by these federal agencies unless it appears in the officially adopted TIP; and

WHEREAS, the procedures for developing the MTIP have been modified in accordance with certain provisions of the SAFETEA-LU Federal Transportation Act and guidance provided by the State; and

WHEREAS, projects listed in the MTIP are also included in the State TIP (STIP) and balanced against anticipated revenues as identified in the STIP; and

WHEREAS, the North Carolina Department of Transportation and the Transportation Advisory Committee have determined it to be in the best interest of the Urban Area to amend the FY 2009-2015 Metropolitan Transportation Improvement Program as described in the attached sheet; and

WHEREAS, there has been no change in the MTIP project schedule or project design concept and scope with regard to the air quality conformity finding made by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee on August 13, 2008; and

WHEREAS, the DCHC MPO certifies that this MTIP amendment is consistent with the intent of the DCHC MPO 2035 LRTP; and

BE IT THEREFORE RESOLVED that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee hereby amends the FY 2009-2015 Metropolitan Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the TAC on August 13, 2008, and as described in the "Attachment to

Resolution for Amendment #13 to DCHC 2009-2015 MTIP” provided here on this, the 10th day of March, 2010.

TAC Chair

STATE of: North Carolina
COUNTY of: _____

I, _____, a Notary Public of Durham County, North Carolina do hereby certify that personally J. Michael Woodard appeared before me on the 10th day of March, 2010, to affix his signature to the foregoing document.

Notary Public
My commission expires _____

(Seal)

Attachment to Resolution for Amendment #13 to DCHC 2009-2015 MTIP**Amended Table**

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
U-4727	Durham	Durham-Chapel Hill-Carrboro Urban Area Planning Allocation and Unified Work Program				
	Orange		STPDA	C	\$ 1,627,394	\$ 1,205,109
	Chatham		O	C	\$ 406,849	\$ 301,277

Local Priority #	Jurisdiction	TIP No	Description	2010		2011		2012		2013		2014		2015		Was				
				Cost 100%	Cost 80%	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Total STPDA	Year	Source
1	Carrboro	U-4726	Multi-use Path from Wilson Park to Estes Dr.	\$ 210,855	\$ 168,684	Construction	\$ 168,684									\$ 168,684	2010	Local Discretionary		
2	Carrboro	EL-4994	Bolin Creek Greenway - Carrboro (Homestead to Estes)	\$ 737,500	\$ 590,000			Construction	\$ 590,000							\$ 590,000	2008	Pre-2009		
3	Carrboro	EL-4828	Morgan Creek Greenway - Carrboro	\$ 600,000	\$ 480,000	Planning	\$ 84,000	Construction	\$ 396,000							\$ 480,000	2007	Pre-2009		
4	Carrboro	U-4726	Bolin Creek Greenway (Jones Creek)	\$ 268,375	\$ 214,700			Construction	\$ 214,700							\$ 214,700	2011	Local Discretionary		
5	Carrboro	U-4726	Rogers Road - Sidewalk (Homestead to Meadow Run)	\$ 536,200	\$ 428,960	Planning	\$ 65,000	Construction	\$ 363,960							\$ 428,960	2010	Local Discretionary		
6	Carrboro	U-4726	S. Greensboro St. - Sidewalk	\$ 58,300	\$ 46,640					Construction	\$ 46,640					\$ 46,640	2012	Local Discretionary		
7	Carrboro	U-4726	Bicycle Loop Detectors	\$ 37,500	\$ 30,000			Construction	\$ 30,000							\$ 30,000	2011	Local Discretionary		
8	Carrboro	U-4726	Bel Arbor-Plantation Acres Multi-use Path	\$ 83,750	\$ 67,000					Construction	\$ 67,000					\$ 67,000	2013	Local Discretionary		
1	Chapel Hill	TG-4731	Chapel Hill Transit - Misc. Capital - Tires Purchase	\$ 255,415	\$ 204,332			Capital	\$ 204,332							\$ 592,332	2010	Transit		
2	Chapel Hill	U-4727	Chapel Hill Transit Planning	\$ 891,250	\$ 713,000	UPWP/Plan	\$ 388,000	UPWP/Plan	\$ 325,000									new project		
3	Chapel Hill	U-4727	Intersection & Traffic Study @ RAMS Plaza	\$ 100,000	\$ 80,000	UPWP/Plan	\$ 32,000	UPWP/Plan	\$ 48,000									new project		
4	Chapel Hill	U-4726P	CH - Culbreth Rd: Cobble Ridge to Rosburn sidewalk	\$ 135,000	\$ 108,000	Construction	\$ 108,000									\$ 108,000	2006	Pre-2009		
5	Chapel Hill	U-5119	NC 86/US 15-501 BRT improvements	\$ 625,000	\$ 500,000			UPWP/Plan	\$ 48,000	Construction	\$ 452,000					\$ 500,000	2010-2011	Local Discretionary		
6	Chapel Hill	xxxxxx	FCC Radio Communications (Upgrade fleet)	\$ 1,656,250	\$ 1,325,000			Capital	\$ 1,325,000									new project		
7	Chapel Hill	xxxxxx	Morgan Creek Greenway Phase 2 - Chapel Hill	\$ 700,000	\$ 560,000			Construction	\$ 560,000									new project		
8	Chapel Hill	U-4726IF	Bolin Creek Stairs - Chapel Hill	\$ 125,000	\$ 100,000			Construction	\$ 100,000							\$ 100,000	2010	Local Discretionary		
9	Chapel Hill	U-4726F	CH - Chapel Hill Sidewalks	\$ 400,000	\$ 320,000			Construction	\$ 320,000							\$ 200,000	2007	Pre-2009		
10 and 12	Chapel Hill	U-4726	NC86/other locations Pedestrian Safety Improvements	\$ 375,000	\$ 300,000			Construction	\$ 150,000	Construction	\$ 150,000					\$ 300,000	2009-2010	Local Discretionary		
11	Chapel Hill	U-4727	Greenways/Bike Ped Maps	\$ 30,000	\$ 24,000			Planning	\$ 24,000							\$ 24,000	2009	Annual Reserve		
13	Chapel Hill	U-4726	Bolin Creek Greenway construction	\$ 937,500	\$ 750,000							Capital	\$ 750,000			\$ 750,000	2010	Local Discretionary		
1	Durham	U-4445	NC 147 Bicycle/Pedestrian Bridge - Durham	\$ 500,000	\$ 400,000	Construction	\$ 400,000									\$ 800,000	2009	Local Discretionary		
2	Durham	E-2921E	American Tobacco Trail Phase E - Durham, Durham County	\$ 1,976,250	\$ 1,581,000	Construction	\$ 1,581,000									\$ 1,181,000	2009-2010	Regional Bike/Ped		
3	Durham	U-4726	Barbee Rd. (Orindo to Pearsons town Elem.) Sidewalk	\$ 19,600	\$ 15,680	Construction	\$ 15,680									\$ 15,680	2009	Annual Reserve		
4	Durham	U-4726	DATA Sidewalk	\$ 19,800	\$ 15,840	Construction	\$ 15,840									\$ 15,840	2009	Annual Reserve		
5	Durham	C-4928	Morreene Road - Bike/Ped Facilities (Neal to Erwin)	\$ 1,560,000	\$ 1,248,000	Planning	\$ 317,400	Construction	\$ 930,600							\$ 1,248,000	2010	Local Discretionary		
6	Durham	U-4724	Cornwallis Road - Bike/Ped Facilities (S. Roxboro to University or C.H.)	\$ 2,270,000	\$ 1,816,000	Planning	\$ 340,500	Construction	\$ 1,475,500							\$ 1,816,000	2010	Local Discretionary		
7	Durham	U-4726O	DUR - Carpenter Fletcher RD; Woodcroft- Alston bike impr.	\$ 142,740	\$ 114,192	Planning	\$ 17,129			Construction	\$ 97,063					\$ 114,192	2008	Pre-2009		
7	Durham	U-4726	Carpenter Fletcher - Bike/Ped Facilities (Woodcroft to Alston)	\$ 1,282,976	\$ 1,026,381	Planning	\$ 153,957			Construction	\$ 872,424					\$ 1,026,381	2010	Local Discretionary		
8	Durham	U-4726	Avondale - Sidewalk (Roxboro to Geer)	\$ 515,000	\$ 412,000					Construction	\$ 412,000					\$ 412,000	2011	Local Discretionary		
9	Durham	U-4726	Cheek - Bike/Ped Facilities (Geer to Hardee)	\$ 695,000	\$ 556,000			Planning	\$ 83,400			Construction	\$ 472,600			\$ 556,000	2011	Local Discretionary		
10	Durham	U-4726K	DUR - Hillandale: Club to I-85 5' sidewalk on both sides	\$ 165,484	\$ 132,387			Planning	\$ 19,858			Construction	\$ 112,529			\$ 132,387	2008	Pre-2009		
10	Durham	U-4726	Hillandale - Bike/Ped Facilities (I-85 to Fulton)	\$ 1,150,000	\$ 920,000			Planning	\$ 138,000			Construction	\$ 782,000			\$ 920,000	2011	Local Discretionary		
11	Durham	U-4726G	DUR - Holloway St sidewalks	\$ 67,000	\$ 53,600								Construction	\$ 53,600		\$ 53,600	2006	Pre-2009		
1	LPA	U-4727	UPWP - staff and routine	\$ 5,176,492	\$ 4,141,193	UPWP/Plan	\$ 432,794	UPWP/Plan	\$ 662,709	UPWP/Plan	\$ 883,959	UPWP/Plan	\$ 699,526	UPWP/Plan	\$ 720,370	UPWP/Plan	\$ 741,836	\$ 4,141,193	2009-2015	Staff and Planning
2	LPA	U-4727	UPWP - ITS Deployment Plan Update	\$ 70,000	\$ 56,000	UPWP/Plan	\$ 56,000									\$ 56,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - Bike/Ped (non-motorized trip) Model Development	\$ 175,000	\$ 140,000	UPWP/Plan	\$ 113,500	UPWP/Plan	\$ 26,500							\$ 140,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - GIS Integration and Automation	\$ 200,000	\$ 160,000	UPWP/Plan	\$ 160,000									\$ 160,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - Land Use Model Development	\$ 250,000	\$ 200,000	UPWP/Plan	\$ 200,000									\$ 200,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - MPO Collector Street Plan	\$ 50,000	\$ 40,000	UPWP/Plan	\$ 40,000									\$ 40,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - NC 54 Subarea Study	\$ 250,000	\$ 200,000	UPWP/Plan	\$ 150,000	UPWP/Plan	\$ 50,000							\$ 200,000	2009	Extra Planning		
2	LPA	U-4727	UPWP - Commercial Vehicle Study	\$ 125,000	\$ 100,000	UPWP/Plan	\$ 55,100	UPWP/Plan	\$ 44,900							\$ 100,000	2009	Annual Reserve		
3	LPA	U-4727	UPWP - GIS Integration Phase II	\$ 375,000	\$ 300,000					UPWP/Plan	\$ 150,000	UPWP/Plan	\$ 150,000			\$ 300,000	2010	Extra Planning		
4	LPA	U-4727	UPWP - Parking Study	\$ 125,000	\$ 100,000					UPWP/Plan	\$ 100,000					\$ 100,000	2009	Annual Reserve		
5	LPA	U-4727	UPWP - Transit Studies	\$ 750,000	\$ 600,000					UPWP/Plan	\$ 300,000	UPWP/Plan	\$ 300,000			\$ 600,000	2009	Extra Planning		
1	NCDOT	EB-4707	Old Durham-Chapel Hill Road - Chapel Hill, Durham	\$ 4,639,000	\$ 3,711,200			ROW	\$ 511,200	Construction	\$ 3,200,000					\$ 2,542,000	2009-2010	Regional Bike/Ped		
				\$ 31,312,237	\$ 25,049,789		\$ 4,894,584		\$ 8,641,659		\$ 6,664,086		\$ 3,333,655		\$ 773,970	\$ 741,836				

The Following Projects Have Been Canceled at the Request of the Jurisdiction

cancel	Chapel Hill	TA-4726	Chapel Hill Transit - 5 Replacement Buses													\$ 1,650,000	2010	Transit
cancel	Chapel Hill	U-4726M	CH - Drainage gate replacement (NC 86)													\$ 8,000	2006	Pre-2009
cancel	Chapel Hill	EL-4995	Dry Creek Greenway - Carrboro, Chapel Hill													\$ 560,000	2008	Pre-2009
cancel	Chapel Hill	U-4726	Old Mason Farm Pedestrian Safety Improvements													\$ 120,000	2009	Local Discretionary
cancel	Chapel Hill	U-4726	Ephesus Church Road Sidewalk													\$ 72,232	2010	Local Discretionary

MEMORANDUM

**TO: Transportation Advisory Committee
DCHC MPO**

FROM: DCHC MPO Lead Planning Agency

DATE: February 24, 2010

SUBJECT: 2009-2010 Unified Planning Work Program (UPWP) – Amendment #1.

The TAC approved the 2009-2010 UPWP on March 11, 2009. The proposed amendments are necessary in order to reflect reallocation of funds by the Towns of Chapel Hill, Carrboro, the lead Planning Agency (LPA) and de-obligation of STP-DA and reallocation of PL funds. The UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Funds that would not be expended during the current fiscal year (FY 2009-10) must be de-obligated through an approved amendment in order for the funds to be available (carried forward) for programming during the next fiscal year (2010-11).

Accordingly, the proposed amendment reflects the de-obligation of funds originally programmed for the following UPWP projects: Regional transit project planning and NEPA, Parking Survey and Studies, GIS automation, Commercial vehicle survey, etc. The proposed amendment also reflects the addition of funds for the Town of Chapel Hill to prepare a transportation analysis for the possible redevelopment of properties around the US15-501/Ephesus Church Road area of Chapel Hill. The total project cost is \$100,000, of which they estimate to spend \$40,000 during the last quarter of FY 2010. The remainder of the project will be completed in the 2010-11 UPWP budget year. The proposed revisions are illustrated in the attached amendment #1 tables

RESOLUTION

TO APPROVE AMENDMENT #1 TO THE FY 2009-2010 UNIFIED PLANNING WORK PROGRAM OF THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)

March 10, 2010

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 2009-2010 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 2009-2010.

Now, therefore, be it resolved that the Transportation Advisory Committee hereby endorses Amendment #1 of the Durham-Chapel Hill-Carrboro Urban Area Unified Planning Work Program for the FY 2009-2010 as described in the attached sheets.

I, J. Michael Woodard, Transportation Advisory Committee 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 10th day of March, 2010.

Signature of TAC Chair

Durham-Chapel Hill-Carrboro Metropolitan Planning Organization

STATE OF: North Carolina
COUNTY OF: Durham

I, _____, a Notary Public of _____ County, North Carolina do hereby certify that J. Michael Woodard personally appeared before me on the 10th day of March, 2010 to affix his signature to the foregoing document.

Notary Public

101 City Hall Plaza
Durham, NC 27701

My commission expires: _____

Durham-Chapel Hill-Chapel Hill Urban Area
 UPWP 2009-2010
 Proposed Funding Source Tables
 MPO - Wide

		STP-DA & PL Funds Sec. 133(b)(3)(7) & Section 104 (f)					
		<i>Final</i>		<i>Amendment #1 Increase (Decrease)</i>		<i>TAC Approved March 11, 2009</i>	
Task Description		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%
II-A	Surveillance of Change						
1	Traffic Volume Counts	5,000	20,000	(5,250)	(21,000)	10,250	41,000
9	Travel Time Studies	5,960	23,838	(5,000)	(20,000)	10,960	43,838
10	Mapping	16,500	66,000	4,000	16,000	12,500	50,000
11	Central Area Parking Inventory	1,378	5,510	(3,623)	(14,490)	5,000	20,000
II-B	Long Range Transp. Plan						
1	Collection of Base Year Data	4,063	16,250	(8,438)	(33,750)	12,500	50,000
2	Collection of Network Data	2,416	9,664	(10,084)	(40,336)	12,500	50,000
3	Travel Model Updates	53,085	212,340	(100,000)	(400,000)	153,085	612,340
4	Travel Surveys	639	2,556	(24,361)	(97,444)	25,000	100,000
10	Transit Element of the LRTP	1,625	6,500	(150,000)	(600,000)	151,625	606,500
15	Freight Movement/Mobility Planning	3,750	15,000	(6,250)	(25,000)	10,000	40,000
16	Financial Planning	1,000	4,000	1,000	4,000	0	0
18	Air Qual. Planning/Conformity Anal.	3,750	15,000	1,250	5,000	2,500	10,000
II-C	Short Range Transit Planning	4,500	18,000	(18,000)	(72,000)	22,500	90,000
1	Short Range Transit Planning						
III-B	Transp. Improvement Plan	4,750	19,000	4,250	17,000	500	2,000
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.						
1	Title VI	0	0	(750)	(3,000)	750	3,000
2	Environmental Justice	1,250	5,000	500	2,000	750	3,000
3	Minority Business Enterprise	100	400	(2,400)	(9,600)	2,500	10,000
4	Planning for the Elderly & Disabled	3,500	14,000	1,000	4,000	2,500	10,000
5	Safety/Drug Control Planning	2,250	9,000	1,000	4,000	1,250	5,000
6	Public Involvement	4,584	18,336	584	2,336	4,000	16,000
7	Private Sector Participation	0	0	(750)	(3,000)	750	3,000
III-D	Incidental Plng./Project Dev.						
2	Enviro. Analysis & Pre-TIP Plng.	4,500	18,000	3,750	15,000	750	3,000
3	Special Studies	71,298	285,190	8,000	32,000	63,298	253,190
4	Regional or Statewide Planning	20,360	81,440	(2,700)	(10,800)	23,060	92,240
III-E	Management & Operations						
1	Management & Operations	117,665	470,660	39,925	159,700	77,740	310,960
Totals		344,221	1,376,884	(272,346)	(1,089,384)	616,567	2,466,268

Durham-Chapel Hill-Chapel Hill Urban Area
 UPWP 2009-2010
 Proposed Funding Source Tables
 City of Durham

Task Description		STP-DA Sec. 133(b)(3)(7)					
		<i>Final</i>		<i>Amendment #1 Increase (Decrease)</i>		<i>TAC Approved March 11, 2009</i>	
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%
II-A	Surveillance of Change						
	1 Traffic Volume Counts	5,000	20,000	(5,250)	(21,000)	10,250	41,000
	9 Travel Time Studies	5,960	23,838	(5,000)	(20,000)	10,960	43,838
	11 Central Area Parking Inventory	1,378	5,510	(3,623)	(14,490)	5,000	20,000
II-B	Long Range Transp. Plan						
	1 Collection of Base Year Data	4,063	16,250	(8,438)	(33,750)	12,500	50,000
	2 Collection of Network Data	2,416	9,664	(10,084)	(40,336)	12,500	50,000
	3 Travel Model Updates	53,085	212,340	(100,000)	(400,000)	153,085	612,340
	4 Travel Surveys	639	2,556	(24,361)	(97,444)	25,000	100,000
	10 Transit Element of the LRTP	1,625	6,500	(150,000)	(600,000)	151,625	606,500
	15 Freight Movement/Mobility Planning	3,750	15,000	(6,250)	(25,000)	10,000	40,000
	18 Air Qual. Planning/Conformity Anal.	1,250	5,000	1,250	5,000	-	-
III-B	Transp. Improvement Plan						
		3,750	15,000	3,750	15,000	-	-
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.						
	2 Environmental Justice	1,250	5,000	1,250	5,000	-	-
	6 Public Involvement	4,000	16,000	1,500	6,000	2,500	10,000
III-D	Incidental Plng./Project Dev.						
	2 Enviro. Analysis & Pre-TIP Plng.	4,500	18,000	3,750	15,000	750	3,000
III-E	Management & Operations						
	1 Management & Operations	58,899	235,596	21,159	84,636	37,740	150,960
Totals		151,564	606,254	(280,346)	(1,121,384)	431,910	1,727,638

**Durham-Chapel Hill-Chapel Hill Urban Area
 FY 2009-2010 Unified Planning Work Program
 Proposed Funding Source Tables
 Town of Chapel Hill**

Task Description		STP-DA Section 133(b)(3)(7)					
		Final		Amendment #1 Increase (Decrease)		TAC Approved May 11, 2009	
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%
II-A	Surveillance of Change						
	10 Mapping	6,500	26,000	4,000	16,000	2,500	10,000
II-B	Long Range Transp. Plan						
	16 Financial Planning	1,000	4,000	1,000	4,000	0	0
II-C	Short Range Transit Planning						
	1 Short Range Transit Planning	4,500	18,000	(18,000)	(72,000)	22,500	90,000
III-B	Transp. Improvement Plan						
		1,000	4,000	500	2,000	500	2,000
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.						
	1 Title VI	0	0	(750)	(3,000)	750	3,000
	2 Environmental Justice	0	0	(750)	(3,000)	750	3,000
	3 Minority Business Enterprise	100	400	(2,400)	(9,600)	2,500	10,000
	4 Planning for the Elderly & Disabled	3,500	14,000	1,000	4,000	2,500	10,000
	5 Safety/Drug Control Planning	2,250	9,000	1,000	4,000	1,250	5,000
	6 Public Involvement	584	2,336	(916)	(3,664)	1,500	6,000
	7 Private Sector Participation	0	0	(750)	(3,000)	750	3,000
III-D	Incidental Plng./Project Dev.						
	3 Special Studies	8,000	32,000	8,000	32,000	0	0
	4 Regional or Statewide Planning	10,544	42,174	(2,700)	(10,800)	13,244	52,974
III-E	Management & Operations						
	1 Management & Operations	58,766	235,064	18,766	75,064	40,000	160,000
Totals		96,744	386,974	8,000	32,000	88,744	354,974

Durham-Chapel Hill-Chapel Hill Urban Area
 FY 2009-2010 Unified Planning Work Program

Proposed Funding Source Tables
 Town of Carrboro

		PL Sec. 104(f)					
		Final		Amendment #1 Increase (Decrease)		TAC Approved May 11, 2009	
Task Description		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%
II-B Long Range Transp. Plan							
	Travel Model Updates	0	0	(50)	(200)	50	200
II-C Short Range Transit Planning							
	Short Range Transit Planning	230	918	(71)	(282)	300	1,200
III-C Cvl Rgts. Cmp./Otr .Reg. Reqs.							
	Environmental Justice	136	544	86	344	50	200
	Planning for the Elderly & Disabled	18	72	(42)	(168)	60	240
III-D Incidental Plng./Project Dev.							
	Enviro. Analysis & Pre-TIP Plng.	39	156	(36)	(144)	75	300
	Special Studies	860	3,440	60	240	800	3,200
III-E Management & Operations							
	Management & Operations	2,303	9,210	53	210	2,250	9,000
Totals		3,585	14,340	0	0	3,585	14,340

MEMORANDUM

**TO: Transportation Advisory Committee
DCHC MPO**

FROM: DCHC MPO Lead Planning Agency

DATE: February 24, 2010

SUBJECT: 2010-11 Unified Planning Work Program (UPWP)

This memo presents the Draft 2010-11 Unified Planning Work Program (UPWP) for the Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO).

Annually, the DCHC MPO is required by federal regulations to prepare a Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. Funding for the UPWP is provided on an annual basis by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Essentially, the UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Tasks are identified by an alphanumeric task code and description. A complete narrative description for each task is more completely described in the *Prospectus for Continuing Transportation Planning for the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization*, approved by the TAC on February 13, 2002. The *Prospectus* was developed by NCDOT in cooperation with MPOs throughout the state.

The UPWP also contains supplemental project descriptions for Federal Transit Administration (FTA) projects. FTA project descriptions are provided for transit providers (Chapel Hill Transit, Durham Area Transit, & Triangle Transit Authority). FTA planning project task descriptions, FTA Disadvantaged Businesses Contracting Opportunities forms, and FTA funding source tables are also part of the UPWP document.

The funding source tables reflect available federal planning fund sources and the amounts of non-federal matching funds. The match is provided through either local or state funds or both. Statewide Planning and Research Funds (SPR) are designated for State use only and reflect the amount of those funds to be expended by the N.C. Department of Transportation Statewide Planning Division on DCHC MPO activities. Section 104(f) funds are designated for MPO planning and are sub-allocated to the City of Durham, Town of Carrboro and Town of Chapel Hill. Section 133(b)(3)(7) funds are the portion of STP-DA funds used in MPO planning. The City of Durham uses these funds to support the LPA planning functions. These funds are also used for MPO special projects, such as the congestion Management Systems, Collector Street Plan, Land use model, GIS/Data integration and automation, Regional model update and enhancement, Travel behavior

surveys and update of the ITS deployment plan and regional architecture, support of the Regional Model Service Bureau, NC 54 Corridor Study, Parking Survey/Study, etc.

The main source of funds for transit planning for Chapel Hill Transit (CHT), the Durham Area Transit Authority (DATA), and the Triangle Transit Authority (TTA), is the Federal Transit Administration's Section 5303 (formerly Section 8) funds. These funds are allocated by NCDOT's Public Transportation Division (PTD). Transit agencies can also use portions of their Section 5307 (formerly Section 9) capital and operating funds for planning. These funds must be approved by the TAC as part of the UPWP approval process.

FY 2010-11 UPWP funding levels as well as the descriptions of funding sources is summarized below.

Planning (PL) Section 104(f) – These funds are FHWA funds for urbanized areas, administered by NCDOT. These funds require a 20% match. The PL funding apportionment to the state is distributed to the MPOs through a population-based formula. The proposed Section 104(f) funding level is based on the SAFETEA-LU Section 104(f) allocation as well as new PL distribution approved by NCDOT Board of Transportation in June 2005. The statewide section 104(f) funds are distributed among the 17 MPOs based on the following formula: All MPOs get an equal share of \$130,000 (hold harmless) and the rest of the funds are distributed based on the MPO urbanized area population. The DCHC MPO PL fund allocation for FY 2010-11 is as follows:

Federal (PL funds)	\$ 354,044
Local (20% match)	\$ <u>88,511</u>
Total PL Funds	\$ <u>442,555</u>

STP-DA – These funds are the Direct Attributable Allocation portion of the federal Surface Transportation Program (STP) funds provided to Transportation Management Areas (TMAs are MPOs over 200,000 population). By agreement with the DCHC MPO and NCDOT, a portion of these funds are used for MPO transportation planning activities. STP-DA funds earmarked for programming in the FY 2010-2011 UPWP are shown below, including funds de-obligated from FY 2009-10 UPWP and re-obligated or carried over to FY 2010-11:

Federal (STP-DA)	\$ 1,205,108
Local (20% match)	\$ 301,277
Total	\$ <u>1,506,385</u>

State Planning and Research Funds (SPR Funds) – These are FHWA funds allocated to the Transportation Planning Branch (TPB) of NCDOT. NCDOT determines the allocation of these funds among tasks in the UPWP and is responsible for contributing 20% of non federal matching funds. SPR funds programmed in the 2010-2011 UPWP are as follows:

Federal	\$	57,600
NCDOT-TPB	\$	14,500
Total SPR funds	\$	<u>72,100</u>

FTA Funds -Two types of funds are used for transit planning purposes by the DCHC MPO; Section 5303 (formerly Section 8 Metropolitan Planning) and Section 5307 funds (formerly Section 9) of the Federal Transit Act Amendments of 1991.

Section 5303 funds are grant monies from FTA that provide assistance to urbanized areas for transit planning. Essentially, the funds are earmarked for use in planning and technical studies related to urban public transportation. They are provided from the Federal Transit Administration through the NCDOT-PTD to the MPO transit operators (80% from FTA, 10% from NCDOT-PTD, and 10% local match).

	CHT	DATA	TTA	MPO Total
Federal	\$ 109,341	\$ 113,803	\$ -	\$ 223,144
State	\$ 13,668	\$ 14,225	\$ -	\$ 27,893
Local	\$ 13,668	\$ 14,225	\$ -	\$ 27,893
Total	\$ 136,677	\$ 142,253	\$ -	\$ 278,930
Sect. 5303				

Section 5307 funds can be used for planning as well as other purposes, and are distributed by the formula by FTA. The DATA, CHT, and TTA use Section 5307 funds from the FTA for assistance on a wide range of planning activities. These funds require a 10% local match, which is provided by the City of Durham, the Town of Chapel Hill, and TTA; and 10% State match which is provided by the Public Transportation Division of NCDOT.

	CHT	DATA	TTA	MPO Total
Federal	\$ 88,024	\$ 306,665	\$ 956,000	\$ 1,350,689
State	\$ 11,003	\$ 38,333	\$ 119,500	\$ 168,836
Local	\$ 11,003	\$ 38,333	\$ 119,500	\$ 168,836
Total	\$ 110,030	\$ 383,331	\$ 1,195,000	\$ 1,688,361
Sect. 5307				

DCHC MPO – UPWP Funding Sources (FY 2010-2011)

Funding Type	Federal	State	Local	Total
PL (Sect. 104(f))	\$ 354,044	\$ -	\$ 88,511	\$ 442,555
STP-DA	\$ 1,205,108	\$ -	\$ 301,277	\$ 1,506,385
SPR	\$ 49,200	\$ 12,300	\$ -	\$ 61,500
FTA 5303	\$ 223,144	\$ 27,893	\$ 27,893	\$ 278,930
FTA 5307	\$ 1,350,689	\$ 168,836	\$ 168,836	\$ 1,688,361

Special-Major Project Summary

Introduction

The Main emphases of the current (FY 2009-10) Unified Planning Work Program (UPWP) were the development of the 2035 Long Range Transportation Plan and Air Quality Conformity Determination, model, enhancement, calibration and validation of the Tranplan update of the Triangle Regional Model, the development of the MPO GIS Warehouse/Integration and Automation, the development of the Non-motorized Trip Model, the development of the MPO integrated land-use/transportation model, Intelligent Transportation Systems (ITS) Strategic Deployment Plan, Farrington/ Stagecoach Road Corridor Study, MPO Collector Street Plan, Greenhouse Gas Emission Study, development of the regional transit plan, Chapel Hill Transit Master Plan study, and amendment of the 2030 Long Range Transportation Plan (LRTP). The MPO continued to fulfill State and federal transportation mandates and requirements, mainly the 3-C transportation process. The MPO made significant progress in these areas. Major milestones and accomplishments are summarized as follows:

The accomplishments for the 2009-10 UPWP are summarized as follows:

1. Greenhouse Gas (GHG) Emission Study Implementation: The MPO continues to work on the implementation of the GHG Emissions study, including the formation of an energy Team and providing start support for the Energy Team. One of the first year implementation focus areas is reducing transportation demand mainly SOV and encouraging alternative transportation modes.
2. NC 54/I-40 Corridor Study: The MPO initiated a consultant study for an integrated land use/transportation corridor study for the NC 54 corridor between the I-40 interchange in Durham and the US 15/501 interchange in Chapel Hill. The purpose of the study is to analyze short-term and long-term land use issues and multi-modal transportation problems, evaluate opportunities and challenges, and recommend short and long-range solutions and strategies along the corridor. A critical component of this study is public outreach and public involvement. In addition to traditional methods for obtaining public input the consultant team conducted focus group meetings and “hands-on” public workshops. The focus groups was used to gather information from specific topic areas ranging from policy, bicycle, pedestrian,

transit, neighborhoods, environment, business, development, and commuters. Also the first public workshop was help to collect public input and comments on the alternatives and evaluation measures.

3. 2009-2015 Metropolitan Transportation Improvement Program (MTIP) and air quality conformity analysis: The MPO finalized the development of the 2009-15 MTIP. The DCHC MPO's Transportation Advisory Committee (TAC) approved the Fiscal Year 2009-2015 Metropolitan Transportation Improvement Program (MTIP) at their August 2008 meeting.
4. Administrative Modifications of the 2007-13 MTIP: The MPO processed several administrative modifications to the 2007-13 MTIP and forwarded to NCDOT to be included in the STIP for BOT approval.
5. Revision and enhancement of the MTIP Project Prioritization and Ranking Methodology for the 2011-2017 MTIP: The Lead Planning Agency continued work on the refinements and revision of the 20011-2017 MTIP project prioritization and ranking methodology. Draft methodology was made available to the public and local MPO agencies for review and comments. The project prioritization and ranking methodology was approved by the TAC in September 2008.
6. Development of the SPOT and the 5-year let plan (TIP fiscal constrained plan) and the 10-year SPOT priorities.
7. Stimulus Program (ARRA) Project Selection, monitoring and Reporting: The Lead Planning Agency worked on project selection, monitoring and reporting of the Economic Recovery Stimulus projects (ARRA). Staff coordinating with NCDOT in project selection consistent with the federal guidelines.
8. Triangle Regional Model (TRM) Update and Enhancement: The MPO continues to participate in the update and enhancement of the TRM at ITRE. The MPO is one of the funding partners of the modeling service bureau and continues to provide .5 FTE to ITRE Model Service Bureau..
9. The MPO continued work on several special and major emphasis projects: MPO Land-use model, MPO Non-Motorized Trip model, MPO GIS-T warehouse & Automation, Farrington Road/Stagecoach Road Corridor Study, MPO Collector Street Plan. Significant progress was made during the 2009-10 fiscal year.
10. Alston Avenue Widening & East-End Connector: The LPA worked on the project planning and NEPA for the Alston Avenue and the East End Connector projects. The LPA continued work in helping NCDOT in the public involvement and outreach for the East-End Connector planning and environmental (NEPA) study.
11. Other Project Development Planning and NEPA: the LPA participated on several NCDOT project planning and NEPA for projects within the MPO. These projects are summarized as follows: South Miami, Blvd widening, NC

98, Holloway Street widening, Alexander Drive widening project, Hopson Road grade separation, Alston Avenue, East End Connector, Hillandale widening, NC 98 (Holloway Street) widening, Weaver Dairy Road widening/improvement, South Columbia, Elizabeth Brady Rd, several bridge replacement projects, resurfacing projects, etc

12. ITS Strategic Deployment Plan (SDP). Work continues on the update of the Triangle Regional ITS SDP. The MPO is providing the contractual and administrative management of this project.
13. Farrington/Stagecoach Road study has been completed. Public involvement and recommendations are anticipated to be folded into the Comprehensive Transportation Plan (CTP).
14. The MPO Collector Street Plan is nearly complete. Public involvement and adoption will be streamlined with the CTP.

2010-2011 Proposed Work Program (Work Plan)

The development of the 2040 LRTP, update, improvement and refinement of the Triangle Regional Model and the MPO Congestion Management Process (CMP) will continue to be a top priority for the 2010-2011 UPWP. The MPO will continue to work with the Model Service Bureau in addressing TAC model concerns such as parking, the incorporation of non-motorized trips, link level calibration, better route-level transit ridership forecasts, integration of land-use and transportation,. Other top priorities include the development of the Comprehensive Transportation Plan, the development of the MPO climate change plan, regional transit initiatives, implementation of SAFETEA-LU requirements. The following summarizes proposed new initiatives and special areas for 2010-11 work program.

FY 2011 (FY 2010 - 2011) Transportation Planning Work Plan and Unified Planning Work Program (UPWP)	
Emphasis Transportation Planning Projects/Products	
1	2040 LRTP
2	CTP
3	Development of the MPO CMP
4	Maintenance and update of ITS-SDP
5	Maintenance and update of the IDAS and Dynasmart
6	MPO Data collection and Surveillance of Change
7	TRM Modeling improvements, calibration and validation
8	LPA Policy document and strategic plan
9	Environmental Justice Plan for the DCHC MPO
10	MPO Safety and Security Plan/Integration
11	Freight Plan and integration of freight (urban Goods Movement planning
12	MPO Climate Change Plan/ integration of climate change and Greenhouse gas emission into MPO Planning
13	Bicycle friendly designation for Durham (and Chapel Hill?)
14	Spatial mapping and analysis of bike and pedestrian access to schools - sidewalks/bike access
15	Rail Traffic separation Study
16	Purpose and Need Statements/Indirect & Cumulative Impacts (ICI)
17	Bicycle map for Durham
18	TDM Plan update
19	MPO Policy /Process document - CAMPO organization Study - Charlotte study
20	MPO expansion, MAB expansion - ground for post 2010 analysis
21	Regional transit planning and local revenue option

Continuation of Special Projects	
1	TELUDE - GIS Warehouse/Enterprise & automation
2	NC 54 Corridor Study
3	UrbanSim _Land use Model
4	Non-Motorized trip modeling

On-Going/Core/Routine 3-C Planning Process

1	UPWP development/amendment/maintenance and invoicing
2	TIP development/amendments
3	ARRA-Stimulus projects reporting and audit compliance
4	TAC/TCC Meetings/agenda preparation/directives to staff/follow-ups
5	GIS mappings and geo-database administration/maintenance
6	bicycle -pedestrian planning
7	JARC/New Freedom
8	STP-DA
9	CMAQ
10	Financial management and auditing
11	Public involvement/engagement/outreach
12	MPO website update/maintenance/content management -visualization & interactive capabilities
13	State & Regional Planning and Coordination
14	Civil rights and Title VI compliance and planning
15	CMP monitoring
16	Data inventory monitoring
17	Project planning-NEPA

Unified Planning Work Program (UPWP) Development Process

The development process for the 2010-11 UPWP is presented below. The work program does not contain any new initiative rather continuation of the FY 2009-10 initiatives and emphasis areas. In addition, the schedule provides for opportunity for linking the UPWP development with the local member governments' budget process. Draft 2010-11 UPWP schedule is illustrated in the attached development schedule.

NO.	Date	Descriptions
1	24feb-10	TCC receives the draft 2010-11 UPWP
2	12-Feb-10	Deadline for submitting transit element of the UPWP to NCDO - PTD
3	10-March-10	TAC receives draft 2010-2011 UPWP and releases for public comment. TAC receives FTA memo on Section 5307 distribution between TTA, DATA and CHT
4	24-March-10	TCC recommends Draft 2010-2011 UPWP for TAC approval
5	February-April	Development of Draft 2010-11 UPWP and coordinating with local agencies continues.
6	February-March	TCC coordinates with member jurisdictions budget process for local matching funds
7	14-Apr-10	TAC adopts 2010-2011 UPWP and self certifies MPO planning process. TAC approves FTA memo on Section 5307 distribution between TTA, DATA and CHT
8	1-April-09	NCDOT/FHWA approves 2010-2011 UPWP
9	1-Jul-10	2010-2011 UPWP available July 1

Durham-Chapel Hill-Carrboro Metropolitan Planning Organization



DRAFT

2010-2011
Unified Planning Work Program (UPWP)

January 27, 2010

**Durham-Chapel Hill-Carrboro
Metropolitan Planning Organization**

FY 2010-2011 Unified Planning Work Program

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DRAFT

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

RESOLUTION

Approving the FY 2010-2011 Unified Planning Work Program

April 14, 2010

A motion was made by _____ and seconded by _____
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 projects are effectively allocated to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization; and

Whereas, the City of Durham Department of Transportation has been designated as the recipient of Section 104(f) Planning and Technical Studies Planning grant funds; and

Whereas, members of the Transportation Advisory Committee agree that the Unified Planning Work Program will effectively advance transportation planning for FY 2010-2011.

Now, therefore, be it resolved that the Transportation Advisory Committee hereby endorses the *Durham-Chapel Hill-Carrboro Metropolitan Planning Organization FY 2010-2011 Unified Planning Work Program*.

I, J. Michael Woodard, 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 Transportation Advisory Committee, duly held on the 14th day of April, 2010.

Mike Woodard, TAC Chair

Subscribed and sworn to me this _____ day of _____, 2008.

Notary Public

(Notary seal)

101 City Hall Plaza
Durham, NC 27701

My commission expires _____

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

RESOLUTION (PTD-FTA)

Approving the FY 2010-2011 Unified Planning Work Program (UPWP) of the
DCHC Urban Area/Metropolitan Planning Organization

February 14, 2010

A motion was made by _____ and seconded by _____
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 projects are effectively
allocated to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization;
and

Whereas, the City of Durham Department of Transportation has been designated as the recipient
of Federal Transit Administration (FTA) Metropolitan Planning Program funds; and

Whereas, members of the Transportation Advisory Committee agree that the Unified Planning
Work Program will effectively advance transportation planning for FY 2010-2011.

Now therefore, be it resolved that the Transportation Advisory Committee hereby endorses the
FY 2010-2011 Unified Planning Work Program for the Durham-Chapel Hill-Carrboro
Metropolitan Planning Organization.

I, _____, Chair of the DCHC MPO Transportation Advisory Committee (TAC)
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 Transportation Advisory Committee, duly held on
the 14th day of April, 2010

Mike Woodard
Chairman, Transportation Advisory Committee

Subscribed and sworn to me this _____ day of _____, 2010.

Notary Public

(Notary seal)

101 City Hall Plaza
Durham, NC 27701

My commission expires _____

RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS

RESOLUTION CERTIFYING THE DURHAM-CHAPEL HILL-CARRBORO (DCHC MPO) METROPOLITAN PLANNING ORGANIZATION’S TRANSPORTATION PLANNING PROCESS FOR FY 2010-2011 (FY 2011)

WHEREAS, the Transportation Advisory Committee has found that the Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner in accordance with 23 U.S.C. 134 and 49 U.S.C. 1607;

WHEREAS, the Transportation Advisory Committee has found the transportation planning process to be in compliance with Sections 174 and 176 (c) and (d) of the Clean Air Act (42 U.S.C. 7504, 7506 (c));

WHEREAS, the Transportation Advisory Committee has found the Transportation Planning Process to be in full compliance with Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794;

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Planning Process will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded planning projects (Section 1003(b) of ISTEA of 1991 (Pub. L. 102-240), Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23);

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Planning Process will affect the elderly and the disabled per the provision of the Americans With Disabilities Act of 1990 (Pub. L. 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulations (49 CFR parts 27, 37, and 38);

WHEREAS, the DCHC MPO Metropolitan Transportation Improvement Program is a subset of the currently conforming 2030 Long Range Transportation Plan;

WHEREAS, the Transportation Plan has a planning horizon year of 2035, and meets all the requirements for an adequate Transportation Plan,

NOW THEREFORE, be it resolved that the DCHC Urban Area Transportation Advisory Committee certifies the transportation planning process for the DCHC Metropolitan Planning Organization on this the ____ day of _____, 2010.

Chair, Transportation Advisory Committee

Clerk/Secretary/Planner

Metropolitan Planning Self-Certification Process

CFR 450.334

The State and the MPO shall annually certify to the FHWA and the FTA that the planning process is addressing the major issues facing the area and is being conducted in accordance with all applicable requirements of:

- Section 134 of title 23 U.S.C., section 8 of the Federal Transit Act (49 U.S.C. app. 1607) and;
- Section 174 and 176 (c) and (d) of the Clean Air Act (42 U.S.C. 7504, 7506 (c) and (d));
- Title VI of the Civil Rights Act of 1964 and Title VI assurance executed by each state under 23 U.S.C. 324 and 29 U.S.C. 794;
- Section 103 (b) of the Intermodal Surface Transportation Efficiency Act of 1991 (Public Law 102-240) regarding the involvement of disadvantaged business enterprises in the FHWA and the FTA funded planning projects...; and
- The provisions of the Americans with Disabilities Act of 1990 (Public Law 101-336, 104 Stat. 327, as amended) and U.S. DOT regulations “Transportation for Individuals with Disabilities” (49 CFR parts 27, 37, and 38).

In addition, the following checklist should help guide the MPOs as they review their processes and programs for self-certification.

Self-Certification Checklist

1. Is the MPO properly designated by agreement between the Governor and 75% of the urbanized area, including the central city, and in accordance in procedures set forth in state and local law (if applicable)? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (a)]
2. Does the policy board include elected officials, major modes of transportation providers and appropriate state officials? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (i)]
3. Does the MPO boundary encompass the existing urbanized area and the contiguous area expected to become urbanized within the 20-yr forecast period? [23 U.S.C. 134 (c), 49 U.S.C. 5303 (d); 23 CFR 450.308 (a)]
4. Is there a currently adopted (Unified) Planning Work Program (U/PWP)? 23 CFR 450.314
 - a. Is there an adopted prospectus? Are work programs consistent with the adopted prospectus?
 - b. Are tasks and products clearly outlined?
 - c. Is the U/PWP consistent with the LRTP?
 - d. Has the UPWP been checked for effectiveness to see if it is further meeting the goals of the LRTP?
 - e. Is UPWP product driven and result oriented?
 - f. Is the work identified in the U/PWP completed in a timely fashion?
5. Does the area have a valid transportation planning process? 23 CFR 450.322
 - a. Is the transportation planning process continuous, cooperative and comprehensive?
 - b. Is there a valid LRTP?
 - c. Did the LRTP have at least a 20-year horizon at the time of adoption?
 - d. Does it address the 8-planning factors?
 - e. Does it include strategies for evaluating effectiveness of Plan goals and targets?
 - f. Does it cover all modes applicable to the area?
 - g. Does it address preservation of existing systems? Is consideration of the preservation of existing systems clearly documented in stand-alone section?
 - h. How is freight considerations incorporated into the LRTP?
 - i. How is safety considerations incorporated in the LRTP? Are safety considerations documented separately (stand-alone)?
 - j. Is it financially constrained?
 - k. Has the MPO demonstrated reasonableness of LRTP Revenue sources? How?
 - l. Does it include funding for the maintenance and operation of the system?
 - m. Does it include environmental mitigation?
 - n. Does it conform to the State Implementation Plan (SIP) (if applicable)?
 - o. Is it updated/reevaluated in a timely fashion (at least every 4 or 5 years)?
6. Is there a valid TIP? 23 CFR 450.324, 326, 328, 332
 - a. Is it consistent with the LRTP?
 - b. Is it fiscally constrained?
 - c. Is it developed cooperatively with the state and local transit operators?
 - d. Is it updated at least every 4-yrs and adopted by the MPO and the Governor?
7. Does the area have a valid CMP? (TMA only) 23 CFR 450.320
 - a. Is it consistent with the LRTP?
 - b. Was it used for the development of the TIP?
 - c. Is it monitored and reevaluated to meet the needs of the area?
8. Does the area have a process for including environmental mitigation discussions in the planning process? (SAFETEA-LU)
 - a. How _____

- b. Why not _____
9. Does the planning process meet the following requirements of 23 CFR 450.316 (2) (3), EO 12898?
- a. Title VI
 - i. Are there procedures in place to address Title VI complaints and does it comply with federal regulation? [23 CFR 200.9 (b)(3)]
 - b. Environmental Justice (Executive Order 12898)
 - i. Has the MPO identified low-income and minority populations within the planning area and considered the effects in the planning process?
 - ii. Has the MPO developed Environmental Justice Policy and Program?
 - iii. Has the MPO involved EJ community in the development of the UPWP?
 - c. ADA
 - i. Are there procedures in place to address ADA complaints of non-compliance and does it comply with federal regulation? [49 CFR 27.13]
 - d. DBE
 - i. Does the MPO have a DBE policy statement that expresses commitment to the DBE program? [49 CFR 26.23]
10. Does the area have an adopted PIP/Public Participation Plan? 23 CRR 450.316 (b)(1)
- a. Did the public participate in the development of the PIP?
 - b. Was the PIP made available for public review for at least 45-days prior to adoption?
 - c. Is adequate notice provided for public meetings?
 - d. Are meetings held at convenient times and at accessible locations?
 - e. Is the public given an opportunity to provide oral and/or written comments on the planning process?
 - f.
 - g. Does the PIP include criteria for measuring the effectiveness of PIP?
 - h. Is the PIP periodically reviewed and updated to ensure its effectiveness?
 - i. Are plans/program documents available in an electronic accessible format, i.e. MPO website?
 - j. Has the MPO employed visualization tools in LRTP, TIP and planning projects?
 - k. Does the PIP include visualization tools?
 - l. Is the EJ community given the adequate and meaningful opportunity to provide comments on the planning process?
11. Does the area have a process for including environmental, state, other transportation, historical, local land use and economic development agencies in the planning process? (SAFETEA-LU)
- a. How _____
 - b. Why not _____
12. Has the UPWP been checked for effectiveness to see if it is further meeting the goals of the LRTP?
13. Does the UPWP meet SAFETEA-LU requirements? If not, what is the timeline to update the UPWP?
14. Do the selected work items reflect the planning priorities facing the MPO?
15. Do the MPO product UPWP reports consistent with agreements and federal regulation? Are UPWP products and accomplishments documented in reports? Are accomplishments consistent with the proposed work programs? Are reports made available to the Policy Board and the Public? How are reports disseminated?
16. How is safety consideration reflected in the MPO planning process?
17. What steps have you taken to incorporate freight concerns in the planning process? Is freight considered in the project selection and prioritization process?

18. Are freight providers included in the MPO's boards, advisory groups, task forces? If no, what steps are being taken to incorporate these groups?
19. Has the MPO developed methodology to measure the impact freight on the transportation system?
20. What process/procedures are used to self-certify the planning process?
 - a. How are the transit authority, State DOT, and others involved?
 - b. What criteria have been established for the self-certification?
 - c. Is there an opportunity for public comment? If so, how are comments addressed?
 - d. How is the self-Certification Process documented?
21. What supporting documentation/information is provided to the MPO policy board when the self-certification is approved?
 - a. Is the policy board provided documentation on what is required in the planning process by various laws? When and how?
 - b. Is support/documentation to support the self-certification provided to the policy board and the public?
22. How is the annual self-certification provided to the Federal agencies—as part of the TIP/STIP or UPWP, or in a separate submittal?
23. Does the MPO have processes, procedures, guidelines, and/or policies that address Title VI, ADA, DBE, lobbying, and other regulatory requirements?
24. How are these documented and applied?
25. Are there any specific strategies in place to reach the Hispanic community?
26. Do you have the following: a Citizens Advisory Committee, and a Transportation Disadvantaged Advisory Committee to make recommendations to the MPO (as the TCC currently does)? If not, are there plans to incorporate these committees?
27. For projects identified in the LRTP, do you develop Purpose & Need Statements? If so, how detailed are these P&N statements?
28. How was the public involved in the development/update of your CMP?
29. Is the CMP current? Does the CMP meet SAFETEA-LU requirements? If not, what is the timeline to update the CMP?

OVERVIEW

Federal legislation (SAFETEA-LU) and implementing regulations mandate that each Metropolitan Planning Organization prepare an annually Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Tasks are identified by an alphanumeric task code and description. A complete narrative description for each task is more completely described in the *Prospectus for Continuing Transportation Planning for the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization*, approved by the TAC on February 13, 2002. The *Prospectus* was developed by NCDOT in cooperation with MPOs throughout the state. The Prospectus is hereby referenced as an element of the UPWP and is available upon request from any member agency of the DCHC MPO.

The UPWP also contains supplemental project descriptions for Federal Transit Administration (FTA) projects. FTA project descriptions are provided for transit providers (Chapel Hill Transit, Durham Area Transit, & Triangle Transit Authority). FTA planning project task descriptions, FTA Disadvantaged Businesses Contracting Opportunities forms, and FTA funding source tables are also included in this work program.

The funding source tables reflect available federal planning fund sources and the amounts of non-federal matching funds. The match is provided through either local or state funds or both. Statewide Planning and Research Funds (SPR) are designated for State use only and reflect the amount of those funds to be expended by the N.C. Department of Transportation Statewide Planning Division on DCHC MPO activities. Federal Highway Administration (FHWA) Section 104(f) funds, FHWA Section 133(b)(3)(7) funds, FTA Section 5303 (formerly Section 8) funds, FTA Section 5307 (formerly Section 9) funds, and FTA Section 5309 (formerly Section 3) funds are designated for MPO use. The Section 5303 and Section 5307 funds have historically been used for transit planning tasks while other MPO transportation planning tasks have been funded with Section 104 (f) and Section 133 (b)(3)(7) funds. The Section 104 (f) and Section 133 (b)(3)(7) funds, also known as Surface Transportation Program-Direct Attributable (STP-DA) funds are set by congressional authorization on an annual basis. With the exception of FTA Section 5307 and 5309 funds, these funds can only be used for MPO transportation planning purposes. FTA Section 5309 funds are used for transit capital expenses, and Section 5307 funds are used for transit capital and operating expenses as reflected in the Transportation Improvement Program (TIP).

As part of the annual UPWP adoption process, the MPO is required to certify that it adheres to a transportation planning process that is continuous, cooperative and comprehensive. The certification resolution was approved as part of the FY 2009-2010 UPWP and is included in this (FY 2011) work program.

INTRODUCTION

The DCHC MPO is required by federal regulations to prepare an annually Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. Funding for the UPWP is provided on an annual basis by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Essentially, the UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Tasks are identified by an alphanumeric task code and description. A complete narrative description for each task is more completely described in the *Prospectus for Continuing Transportation Planning for the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization*, approved by the TAC on February 13, 2002. The *Prospectus* was developed by NCDOT in cooperation with MPOs throughout the state.

The UPWP also contains supplemental project descriptions for Federal Transit Administration (FTA) projects. FTA project descriptions are provided for transit providers (Chapel Hill Transit, Durham Area Transit, & Triangle Transit Authority). FTA planning project task descriptions, FTA Disadvantaged Businesses Contracting Opportunities forms, and FTA funding source tables are also part of the UPWP document.

The funding source tables reflect available federal planning fund sources and the amounts of non-federal matching funds. The match is provided through either local or state funds or both. Statewide Planning and Research Funds (SPR) are designated for State use only and reflect the amount of those funds to be expended by the N.C. Department of Transportation Statewide Planning Division on DCHC MPO activities. Section 104(f) funds are designated for MPO planning and are sub-allocated to the City of Durham, Town of Carrboro and Town of Chapel Hill. Section 133(b)(3)(7) funds are the portion of STP-DA funds used in MPO planning. The City of Durham uses these funds to support the LPA planning functions. These funds are also used for MPO special projects, such as the congestion Management Systems, Collector Street Plan, Land use model, GIS/Data integration and automation, Regional model update and enhancement, Travel behavior surveys and update of the ITS deployment plan and regional architecture, support of the Regional Model Service Bureau, NC 54 Corridor Study, Parking Survey/Study, etc.

The main source of funds for transit planning for Chapel Hill Transit (CHT), the Durham Area Transit Authority (DATA), and the Triangle Transit Authority (TTA), is the Federal Transit Administration's Section 5303 (formerly Section 8) funds. These funds are allocated by NCDOT's Public Transportation Division (PTD). Transit agencies can also use portions of their Section 5307 (formerly Section 9) capital and operating funds for planning. These funds must be approved by the TAC as part of the UPWP approval process.

FY 2009-10 STP-DA Funds will cover special projects and continuation major emphasis projects. These are summarized as follows:

Special Projects

- Follow-up Planning studies for the Special Transit Advisory Commission – STAC
- Commercial vehicle survey and counts for the Triangle Regional Model (TRM)
- Parking survey, inventory and study for the TRM
- NC 54/I40 Corridor/Sub-Area Study
- Initiation of the 2040 LRTP
- MPO Freight planning
- MPO Safety and security Plan

- Model data collection
- MPO Congestion Management Plan and process
- Integration Climate Change in Transportation Planning Process

Continuation of Major Projects

- MPO Integrated Land-use/Transportation Model
- Non-Motorized trip model
- GIS Warehouse/Integration and Automation
- MPO-wide Collector Street Plan
- Farrington/Stagecoach Road Study – Public Involvement
- Intelligent Transportation Systems (ITS) Strategic Deployment Plan

FY 2010-11 UPWP funding levels as well as the descriptions of funding sources is summarized below.

Planning (PL) Section 104(f) – These funds are FHWA funds for urbanized areas, administered by NCDOT. These funds require a 20% match. The PL funding apportionment to the state is distributed to the MPOs through a population-based formula. The proposed Section 104(f) funding level is based on the SAFETEA-LU Section 104(f) allocation as well as new PL distribution approved by NCDOT Board of Transportation in June 2005. The statewide section 104(f) funds are distributed among the 17 MPOs based on the following formula: All MPOs get an equal share of \$130,000 (hold harmless) and the rest of the funds are distributed based on the MPO urbanized area population. The DCHC MPO PL fund allocation for FY 2010-11 is as follows:

Federal (PL funds)	\$ 354,044
Local (20% match)	\$ 88,511
Total PL Funds	\$ 442,555

STP-DA – These funds are the Direct Attributable Allocation portion of the federal Surface Transportation Program (STP) funds provided to Transportation Management Areas (TMAs are MPOs over 200,000 population). By agreement with the DCHC MPO and NCDOT, a portion of these funds are used for MPO transportation planning activities. STP-DA funds earmarked for programming in the FY 2010-2011 UPWP are shown below, including funds de-obligated from FY 2009-10 UPWP and re-obligated or carried over to FY 2010-11:

Federal (STP-DA)	\$ 1,205,108
Local (20% match)	\$ 301,277
Total	\$ 1,506,385

State Planning and Research Funds (SPR Funds) – These are FHWA funds allocated to the Transportation Planning Branch (TPB) of NCDOT. NCDOT determines the allocation of these funds among tasks in the UPWP and is responsible for contributing 20% of non federal matching funds. SPR funds programmed in the 2010-2011 UPWP are as follows:

Federal	\$ 57,600
NCDOT-TPB	\$ 14,500
Total SPR funds	\$ 72,100

FTA Funds -Two types of funds are used for transit planning purposes by the DCHC MPO; Section 5303 (formerly Section 8 Metropolitan Planning) and Section 5307 funds (formerly Section 9) of the Federal Transit Act Amendments of 1991.

Section 5303 funds are grant monies from FTA that provide assistance to urbanized areas for transit planning. Essentially, the funds are earmarked for use in planning and technical studies related to urban public transportation. They are provided from the Federal Transit Administration through the NCDOT-PTD to the MPO transit operators (80% from FTA, 10% from NCDOT-PTD, and 10% local match).

	CHT	DATA	TTA	MPO Total
Federal	\$ 109,341	\$ 113,803	\$ -	\$ 223,144
State	\$ 13,668	\$ 14,225	\$ -	\$ 27,893
Local	\$ 13,668	\$ 14,225	\$ -	\$ 27,893
Total	\$ 136,677	\$ 142,253	\$ -	\$ 278,930
Sect. 5303				

Section 5307 funds can be used for planning as well as other purposes, and are distributed by the formula by FTA. The DATA, CHT, and TTA use Section 5307 funds from the FTA for assistance on a wide range of planning activities. These funds require a 10% local match, which is provided by the City of Durham, the Town of Chapel Hill, and TTA; and 10% State match which is provided by the Public Transportation Division of NCDOT.

	CHT	DATA	TTA	MPO Total
Federal	\$ 88,024	\$ 306,665	\$ 956,000	\$ 1,350,689
State	\$ 11,003	\$ 38,333	\$ 119,500	\$ 168,836
Local	\$ 11,003	\$ 38,333	\$ 119,500	\$ 168,836
Total				
Sect. 5307	\$ 110,030	\$ 383,331	\$ 1,195,000	\$ 1,688,361

DCHC MPO – UPWP Funding Sources Summary Table (FY 2010-2011)

Funding Type	Federal	State	Local	Total
PL (Sect. 104(f))	\$ 354,044	\$ -	\$ 88,511	\$ 442,555
STP-DA	\$ 1,205,108	\$ -	\$ 301,277	\$ 1,506,385
SPR	\$ 57,600	\$ 14,500	\$ -	\$ 72,100
FTA 5303	\$ 223,144	\$ 27,893	\$ 27,893	\$ 278,930
FTA 5307	\$ 1,350,689	\$ 168,836	\$ 168,836	\$ 1,688,361

Special-Major Project Summary

Introduction

The Main emphases of the current (FY 2009-10) Unified Planning Work Program (UPWP) were the development of the 2035 Long Range Transportation Plan and Air Quality Conformity Determination, model, enhancement, calibration and validation of the transportation plan update of the Triangle Regional Model, the development of the MPO GIS Warehouse/Integration and Automation, the development of the Non-motorized Trip Model, the development of the MPO integrated land-use/transportation model, Intelligent Transportation Systems (ITS) Strategic Deployment Plan, Farrington/ Stagecoach Road Corridor Study, MPO Collector Street Plan, Greenhouse Gas Emission Study, development of the regional transit plan, Chapel Hill Transit Master Plan study, and amendment of the 2030 Long Range Transportation Plan (LRTP). The MPO continued to fulfill State and federal transportation mandates and requirements, mainly the 3-C transportation process. The MPO made significant progress in these areas. Major milestones and accomplishments are summarized as follows:

The accomplishments for the 2009-10 UPWP are summarized as follows:

1. **Greenhouse Gas (GHG) Emission Study Implementation:** The MPO continues to work on the implementation of the GHG Emissions study, including the formation of an energy Team and providing start support for the Energy Team. One of the first year implementation focus areas is reducing transportation demand mainly SOV and encouraging alternative transportation modes.
2. **NC 54/I-40 Corridor Study:** The MPO initiated a consultant study for an integrated land use/transportation corridor study for the NC 54 corridor between the I-40 interchange in Durham and the US 15/501 inter-change in Chapel Hill. The purpose of the study is to analyze short-term and long-term land use issues and multi-modal transportation problems, evaluate opportunities and challenges, and recommend short and long-range solutions and strategies along the corridor. A critical component of this study is public outreach and public involvement. In addition to traditional methods for obtaining public input the consultant team conducted focus group meetings and “hands-on” public workshops. The focus groups was used to gather information from specific topic areas ranging from policy, bicycle, pedestrian, transit, neighborhoods, environment, business, development, and commuters. Also the first public workshop was help to collect public input and comments on the alternatives and evaluation measures.
3. **2009-2015 Metropolitan Transportation Improvement Program (MTIP) and air quality conformity analysis:** The MPO finalized the development of the 2009-15 MTIP. The DCHC MPO’s Transportation Advisory Committee (TAC) approved the Fiscal Year 2009-2015 Metropolitan Transportation Improvement Program (MTIP) at their August 2008 meeting.
4. **Administrative Modifications of the 2007-13 MTIP:** The MPO processed several administrative modifications to the 2007-13 MTIP and forwarded to NCDOT to be included in the STIP for BOT approval.

5. Revision and enhancement of the MTIP Project Prioritization and Ranking Methodology for the 2011-2017 MTIP: The Lead Planning Agency continued work on the refinements and revision of the 20011-2017 MTIP project prioritization and ranking methodology. Draft methodology was made available to the public and local MPO agencies for review and comments. The project prioritization and ranking methodology was approved by the TAC in September 2008.
6. Development of the SPOT and the 5-year let plan (TIP fiscal constrained plan) and the 10-year SPOT priorities.
7. Stimulus Program (ARRA) Project Selection, monitoring and Reporting: The Lead Planning Agency worked on project selection, monitoring and reporting of the Economic Recovery Stimulus projects (ARRA). Staff coordinating with NCDOT in project selection consistent with the federal guidelines.
8. Triangle Regional Model (TRM) Update and Enhancement: The MPO continues to participate in the update and enhancement of the TRM at ITRE. The MPO is one of the funding partners of the modeling service bureau and continues to provide .5 FTE to ITRE Model Service Bureau..
9. The MPO continued work on several special and major emphasis projects: MPO Land-use model, MPO Non-Motorized Trip model, MPO GIS-T warehouse & Automation, Farrington Road/Stagecoach Road Corridor Study, MPO Collector Street Plan. Significant progress was made during the 2009-10 fiscal year.
10. Alston Avenue Widening & East-End Connector: The LPA worked on the project planning and NEPA for the Alston Avenue and the East End Connector projects. The LPA continued work in helping NCDOT in the public involvement and outreach for the East-End Connector planning and environmental (NEPA) study.
11. Other Project Development Planning and NEPA: the LPA participated on several NCDOT project planning and NEPA for projects within the MPO. These projects are summarized as follows: South Miami, Blvd widening, NC 98, Holloway Street widening, Alexander Drive widening project, Hopson Road grade separation, Alston Avenue, East End Connector, Hillandale widening, NC 98 (Holloway Street) widening, Weaver Dairy Road widening/improvement, South Columbia, Elizabeth Brady Rd, several bridge replacement projects, resurfacing projects, etc
12. ITS Strategic Deployment Plan (SDP). Work continues on the update of the Triangle Regional ITS SDP. The MPO is providing the contractual and administrative management of this project.
13. Farrington/Stagecoach Road study has been completed. Public involvement and recommendations are anticipated to be folded into the Comprehensive Transportation Plan (CTP).
14. The MPO Collector Street Plan is nearly complete. Public involvement and adoption will be streamlined with the CTP.

2010-2011 Proposed Work Program (Work Plan)

The development of the 2040 LRTP, update, improvement and refinement of the Triangle Regional Model and the MPO Congestion Management Process (CMP) will continue to be a top priority for the 2010-2011 UPWP. The MPO will continue to work with the Model Service Bureau in addressing TAC model concerns such as parking, the incorporation of non-motorized trips, link level calibration, better route-level transit ridership forecasts, integration of land-use and transportation. Other top priorities include the development of the Comprehensive Transportation Plan, the development of the MPO climate change plan, regional transit initiatives, implementation of SAFETEA-LU requirements. The following summarizes proposed new initiatives and special areas for 2010-11 work program.

FY 2011 (FY 2010 - 2011) Transportation Planning Work Plan and Unified Planning Work Program (UPWP)	
Emphasis Transportation Planning Projects/Products	
1	2040 LRTP
2	CTP
3	Development of the MPO CMP
4	Maintenance and update of ITS-SDP
5	Maintenance and update of the IDAS and Dynasmart
6	MPO Data collection and Surveillance of Change
7	TRM Modeling improvements, calibration and validation
8	LPA Policy document and strategic plan
9	Environmental Justice Plan for the DCHC MPO
10	MPO Safety and Security Plan/Integration
11	Freight Plan and integration of freight (urban Goods Movement planning
12	MPO Climate Change Plan/ integration of climate change and Greenhouse gas emission into MPO Planning
13	Bicycle friendly designation for Durham (and Chapel Hill?)
14	Spatial mapping and analysis of bike and pedestrian access to schools - sidewalks/bike access
15	Rail Traffic separation Study
16	Purpose and Need Statements/Indirect & Cumulative Impacts (ICI)
17	Bicycle map for Durham
18	TDM Plan update
19	MPO Policy /Process document - CAMPO organization Study - Charlotte study
20	MPO expansion, MAB expansion - ground for post 2010 analysis
21	Regional transit planning and local revenue option

Continuation of Special Projects

1	TELUDE - GIS Warehouse/Enterprise & automation
2	NC 54 Corridor Study
3	UrbanSim_Land use Model
4	Non-Motorized trip modeling

On-Going/Core/Routine 3-C Planning Process

1	UPWP development/amendment/maintenance and invoicing
2	TIP development/amendments
3	ARRA-Stimulus projects reporting and audit compliance
4	TAC/TCC Meetings/agenda preparation/directives to staff/follow-ups
5	GIS mappings and geo-database administration/maintenance
6	bicycle -pedestrian planning
7	JARC/New Freedom
8	STP-DA
9	CMAQ
10	Financial management and auditing
11	Public involvement/engagement/outreach
12	MPO website update/maintenance/content management -visualization & interactive capabilities
13	State & Regional Planning and Coordination
14	Civil rights and Title VI compliance and planning
15	CMP monitoring
16	Data inventory monitoring
17	Project planning-NEPA

Unified Planning Work Program (UPWP) Development Process

The development process for the 2010-11 UPWP is presented below. The work program does not contain any new initiative rather continuation of the FY 2009-10 initiatives and emphasis areas. In addition, the schedule provides for opportunity for linking the UPWP development with the local member governments' budget process. Draft 2010-11 UPWP schedule is illustrated in the attached development schedule.

NO.	Date	Descriptions
1	24-Feb-10	TCC receives the draft 2010-11 UPWP
2	12-Feb-10	Deadline for submitting transit element of the UPWP to NCDO -PTD
3	10-March-10	TAC receives draft 2010-2011 UPWP and releases for public comment. TAC receives FTA memo on Section 5307 distribution between TTA, DATA and CHT
4	24-March-10	TCC recommends Draft 2010-2011 UPWP for TAC approval
5	February-April	Development of Draft 2010-11 UPWP and coordinating with local agencies continues.
6	February-March	TCC coordinates with member jurisdictions budget process for local matching funds
7	14-Apr-10	TAC adopts 2010-2011 UPWP and self certifies MPO planning process. TAC approves FTA memo on Section 5307 distribution between TTA, DATA and CHT
8	1-April-09	NCDOT/FHWA approves 2010-2011 UPWP
9	1-Jul-10	2010-2011 UPWP available July 1

Durham-Chapel Hill-Carrboro Urban Area
 FY 2010-2011 Unified Planning Work Program
 Detail Funding Source Tables - FHWA/FTA Funds

Task Description	SPR Highway		STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
	NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A Surveillance of Change																			
1 Traffic Volume Counts	0	0	4,725	18,900	90	360	0	0	0	0	0	0	0	0	0	4,815	-	19,260	24,075
2 Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3 Street System Changes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
4 Traffic Accidents	0	0	825	3,300	48	192	0	0	0	0	0	0	0	0	0	873	-	3,492	4,365
5 Transit System Data	0	0	13,750	55,000	0	0	9,731	9,731	77,851	19,320	19,320	154,557	0	0	0	42,801	29,051	287,408	359,260
6 Dwelling Unit, Pop. & Emp. Change	0	0	3,750	15,000	3,313	13,250	0	0	0	0	0	0	0	0	0	7,063	-	28,250	35,313
7 Air Travel	0	0	125	500	325	1,300	0	0	0	0	0	0	0	0	0	450	-	1,800	2,250
8 Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
9 Travel Time Studies	0	0	10,960	43,838	2,385	9,540	625	625	5,000	0	0	0	0	0	0	13,970	625	58,378	72,973
10 Mapping	0	0	5,000	20,000	5,627	22,506	2,500	2,500	20,000	0	0	0	0	0	0	13,127	2,500	62,506	78,133
11 Central Area Parking Inventory	0	0	1,250	5,000	0	0	0	0	0	0	0	0	0	0	0	1,250	-	5,000	6,250
12 Bike & Ped. Facilities Inventory	0	0	1,000	4,000	48	192	0	0	0	0	0	0	0	0	0	1,048	-	4,192	5,240
13 Bike & Ped. Counts	0	0	4,650	18,600	240	960	0	0	0	0	0	0	0	0	0	4,890	-	19,560	24,450
II B Long Range Transp. Plan																			
1 Collection of Base Year Data	0	0	9,000	36,000	2,706	10,824	1,250	1,250	10,000	0	0	0	0	0	0	12,956	1,250	56,824	71,030
2 Collection of Network Data	0	0	1,825	7,300	960	3,840	1,250	1,250	10,000	0	0	0	0	0	0	4,035	1,250	21,140	26,425
3 Travel Model Updates	2,100	8,400	46,610	186,440	5,000	20,000	0	0	0	16,000	16,000	128,000	0	0	0	67,610	18,100	342,840	428,550
4 Travel Surveys	0	0	0	0	0	0	1,200	1,200	9,600	811	811	6,486	0	0	0	2,011	2,011	16,086	20,108
5 Forecast of Data to Horizon year	0	0	3,550	14,200	3,752	15,006	0	0	0	0	0	0	0	0	0	7,302	-	29,206	36,508
6 Community Goals & Objectives	0	0	5,250	21,000	2,998	11,992	0	0	0	0	0	0	0	0	0	8,248	-	32,992	41,240
7 Forecast of Future Travel Patterns	0	0	0	0	250	1,000	625	625	5,000	0	0	0	0	0	0	875	625	6,000	7,500
8 Capacity Deficiency Analysis	0	0	2,450	9,800	0	0	0	0	0	0	0	0	0	0	0	2,450	-	9,800	12,250
9 Highway Element of the LRTP	2,300	9,200	250	1,000	0	0	0	0	0	0	0	0	0	0	0	250	2,300	10,200	12,750
10 Transit Element of the LRTP	1,000	4,000	250	1,000	750	3,000	625	625	5,000	4,500	4,500	36,000	0	0	0	6,125	6,125	49,000	61,250
11 Bicycle & Ped. Element of the LRTP	1,000	4,000	9,500	38,000	2,500	10,000	0	0	0	0	0	0	0	0	0	12,000	1,000	52,000	65,000
12 Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
13 Collector Street Element of LRTP	200	800	750	3,000	0	0	0	0	0	0	0	0	0	0	0	750	200	3,800	4,750
14 Rail, Water or other mode of LRTP	0	0	250	1,000	125	500	0	0	0	0	0	0	0	0	0	375	-	1,500	1,875
15 Freight Movement/Mobility Planning	0	0	3,500	14,000	1,100	4,400	0	0	0	0	0	0	0	0	0	4,600	-	18,400	23,000
16 Financial Planning	0	0	0	0	750	3,000	4,544	4,544	36,352	0	0	0	0	0	0	5,294	4,544	39,352	49,190
17 Congestion Management Strategies	200	800	15,500	62,000	3,558	14,230	0	0	0	1,616	1,616	12,928	0	0	0	20,674	1,816	89,958	112,448
18 Air Qual. Planning/Conformity Anal.	200	800	3,125	12,500	1,675	6,700	0	0	0	0	0	0	0	0	0	4,800	200	20,000	25,000
II C Short Range Transit Planning																			
1 Short Range Transit Planning	0	0	5,500	22,000	460	1,840	0	0	0	70,125	70,125	561,000	0	0	0	76,085	70,125	584,840	731,050
III-A Planning Work Program	400	1,600	1,250	5,000	5,268	21,072	161	161	1,288	2,983	2,983	23,866	0	0	0	9,662	3,544	52,826	66,033
III-B Transp. Improvement Plan	400	1,600	1,250	5,000	8,513	34,050	250	250	2,000	552	552	4,412	0	0	0	10,564	1,202	47,062	58,828
III-C Cvi Rgts. Cmp./Otr. Reg. Reqs.																			
1 Title VI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Environmental Justice	0	0	1,425	5,700	1,650	6,600	0	0	0	500	500	4,000	0	0	0	3,575	500	16,300	20,375
3 Minority Business Enterprise	0	0	3,250	13,000	0	0	0	0	0	0	0	0	0	0	0	3,250	-	13,000	16,250
4 Planning for the Elderly & Disabled	0	0	4,250	17,000	310	1,240	0	0	0	0	0	0	0	0	0	4,560	-	18,240	22,800
5 Safety/Drug Control Planning	0	0	2,750	11,000	0	0	0	0	0	0	0	0	0	0	0	2,750	-	11,000	13,750
6 Public Involvement	0	0	7,850	31,400	3,821	15,284	0	0	0	5,271	5,271	42,165	0	0	0	16,942	5,271	88,849	111,061
7 Private Sector Participation	0	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	1,000	-	4,000	5,000
III-D Incidental Ping./Project Dev.																			
1 Transportation Enhancement Ping.	100	400	0	0	0	0	0	0	0	0	0	0	0	0	0	-	100	400	500
2 Enviro. Analysis & Pre-TIP Ping.	1,000	4,000	13,500	54,000	2,090	8,360	0	0	0	0	0	0	0	0	0	15,590	1,000	66,360	82,950
3 Special Studies	1,000	4,000	26,555	106,220	1,943	7,772	563	563	4,500	13,800	13,800	110,400	0	0	0	42,861	15,363	232,892	291,115
4 Regional or Statewide Planning	500	2,000	19,375	77,500	867	3,468	625	625	5,000	1,316	1,316	10,524	0	0	0	22,183	2,441	98,492	123,115
III-E Management & Operations																			
1 Management & Operations	4,000	16,000	65,478	261,910	25,392	101,566	3,944	3,944	31,553	32,044	32,044	256,351	0	0	0	126,857	39,988	667,380	834,225
Totals	\$14,400	\$57,600	\$301,277	\$1,205,108	\$88,511	\$354,044	\$27,893	\$27,893	\$223,144	\$168,836	\$168,836	\$1,350,689	\$0	\$0	\$0	\$586,517	\$211,129	\$3,190,585	\$3,988,251

**FHWA Planning Funds
MPO PL & STP-DA Total**

**Durham-Chapel Hill-Carrboro Urban Area
FY 2010-2011 Unified Planning Work Program
MPO PL & STP-DA Funding Tables**

Task Description	STP-DA Section 133(b)(3)(7)			PL Section 104(f)			Total FHWA Planning Funds		
	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%
II A Surveillance of Change									
1 Traffic Volume Counts	4,725	18,900	23,625	90	360	450	4,815	19,260	24,075
2 Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0
3 Street System Changes	0	0	0	0	0	0	0	0	0
4 Traffic Accidents	825	3,300	4,125	48	192	240	873	3,492	4,365
5 Transit System Data	13,750	55,000	68,750	0	0	0	13,750	55,000	68,750
6 Dwelling Unit, Pop. & Emp. Change	3,750	15,000	18,750	3,313	13,250	16,563	7,063	28,250	35,313
7 Air Travel	125	500	625	325	1,300	1,625	450	1,800	2,250
8 Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0
9 Travel Time Studies	10,960	43,838	54,798	2,385	9,540	11,925	13,345	53,378	66,723
10 Mapping	5,000	20,000	25,000	5,627	22,506	28,133	10,627	42,506	53,133
11 Central Area Parking Inventory	1,250	5,000	6,250	0	0	0	1,250	5,000	6,250
12 Bike & Ped. Facilities Inventory	1,000	4,000	5,000	48	192	240	1,048	4,192	5,240
13 Bike & Ped. Counts	4,650	18,600	23,250	240	960	1,200	4,890	19,560	24,450
II B Long Range Transp. Plan									
1 Collection of Base Year Data	9,000	36,000	45,000	2,706	10,824	13,530	11,706	46,824	58,530
2 Collection of Network Data	1,825	7,300	9,125	960	3,840	4,800	2,785	11,140	13,925
3 Travel Model Updates	46,610	186,440	233,050	5,000	20,000	25,000	51,610	206,440	258,050
4 Travel Surveys	0	0	0	0	0	0	0	0	0
5 Forecast of Data to Horizon year	3,550	14,200	17,750	3,752	15,006	18,758	7,302	29,206	36,508
6 Community Goals & Objectives	5,250	21,000	26,250	2,998	11,992	14,990	8,248	32,992	41,240
7 Forecast of Future Travel Patterns	0	0	0	250	1,000	1,250	250	1,000	1,250
8 Capacity Deficiency Analysis	2,450	9,800	12,250	0	0	0	2,450	9,800	12,250
9 Highway Element of th LRTP	250	1,000	1,250	0	0	0	250	1,000	1,250
10 Transit Element of the LRTP	250	1,000	1,250	750	3,000	3,750	1,000	4,000	5,000
11 Bicycle & Ped. Element of the LRTP	9,500	38,000	47,500	2,500	10,000	12,500	12,000	48,000	60,000
12 Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0
13 Collector Street Element of LRTP	750	3,000	3,750	0	0	0	750	3,000	3,750
14 Rail, Water or other mode of LRTP	250	1,000	1,250	125	500	625	375	1,500	1,875
15 Freight Movement/Mobility Planning	3,500	14,000	17,500	1,100	4,400	5,500	4,600	18,400	23,000
16 Financial Planning	0	0	0	750	3,000	3,750	750	3,000	3,750
17 Congestion Management Strategies	15,500	62,000	77,500	3,558	14,230	17,788	19,058	76,230	95,288
18 Air Qual. Planning/Conformity Ana	3,125	12,500	15,625	1,675	6,700	8,375	4,800	19,200	24,000
II C Short Range Transit Planning	5,500	22,000	27,500	460	1,840	2,300	5,960	23,840	29,800
III-A Planning Work Program	1,250	5,000	6,250	5,268	21,072	26,340	6,518	26,072	32,590
III-B Transp. Improvement Plan	1,250	5,000	6,250	8,513	34,050	42,563	9,763	39,050	48,813
III-C Cvl Rgts. Cmp./Otr .Reg. Reqs.									
1 Title VI	0	0	0	0	0	0	0	0	0
2 Environmental Justice	1,425	5,700	7,125	1,650	6,600	8,250	3,075	12,300	15,375
3 Minority Business Enterprise	3,250	13,000	16,250	0	0	0	3,250	13,000	16,250
4 Planning for the Elderly & Disabled	4,250	17,000	21,250	310	1,240	1,550	4,560	18,240	22,800
5 Safety/Drug Control Planning	2,750	11,000	13,750	0	0	0	2,750	11,000	13,750
6 Public Involvement	7,850	31,400	39,250	3,821	15,284	19,105	11,671	46,684	58,355
7 Private Sector Participation	1,000	4,000	5,000	0	0	0	1,000	4,000	5,000
III-D Incidental Png./Project Dev.									
1 Transportation Enhancement Png.	0	0	0	0	0	0	0	0	0
2 Enviro. Analysis & Pre-TIP Png.	13,500	54,000	67,500	2,090	8,360	10,450	15,590	62,360	77,950
3 Special Studies	26,555	106,220	132,775	1,943	7,772	9,715	28,498	113,992	142,490
4 Regional or Statewide Planning	19,375	77,500	96,875	867	3,468	4,335	20,242	80,968	101,210
III-E Management & Operations									
1 Management & Operations	65,478	261,910	327,388	25,392	101,566	126,958	90,869	363,476	454,345
Totals	301,277	1,205,108	1,506,385	88,511	354,044	442,555	389,788	1,559,152	1,948,940

Composite Agency Tables
PL/STP-DA

Durham-Chapel Hill-Carrboro Urban Area
FY 2010-2011 Unified Planning Work Program
Composite Agency Tables (PL & STP-DA Funds)

MPO Summary

Task Description	Chapel Hill			Carrboro			Orange			TJCOG			Durham			TTA			MPO			
	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	
II A Surveillance of Change																						
1 Traffic Volume Counts	-	-	-	90	360	450	-	-	-	-	-	-	4,725	18,900	23,625	-	-	-	4,815	19,260	24,075	
2 Vehicle Miles of Travel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3 Street System Changes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4 Traffic Accidents	-	-	-	48	192	240	-	-	-	-	-	-	825	3,300	4,125	-	-	-	873	3,492	4,365	
5 Transit System Data	12,500	50,000	62,500	-	-	-	-	-	-	-	-	-	1,250	5,000	6,250	-	-	-	13,750	55,000	68,750	
6 Dwelling Unit, Pop. & Emp. Chan	-	-	-	-	-	-	-	-	-	-	-	-	7,063	28,250	35,313	-	-	-	7,063	28,250	35,313	
7 Air Travel	-	-	-	-	-	-	-	-	-	-	-	-	450	1,800	2,250	-	-	-	450	1,800	2,250	
8 Vehicle Occupancy Rates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9 Travel Time Studies	-	-	-	60	240	300	-	-	-	-	-	-	13,285	53,138	66,423	-	-	-	13,345	53,378	66,723	
# Mapping	2,500	10,000	12,500	214	856	1,070	-	-	-	-	-	-	7,913	31,650	39,563	-	-	-	10,627	42,506	53,133	
# Central Area Parking Inventory	-	-	-	-	-	-	-	-	-	-	-	-	1,250	5,000	6,250	-	-	-	1,250	5,000	6,250	
# Bike & Ped. Facilities Inventory	-	-	-	48	192	240	-	-	-	-	-	-	1,000	4,000	5,000	-	-	-	1,048	4,192	5,240	
# Bike & Ped. Counts	-	-	-	240	960	1,200	-	-	-	-	-	-	4,650	18,600	23,250	-	-	-	4,890	19,560	24,450	
II B Long Range Transp. Plan																						
1 Collection of Base Year Data	2,500	10,000	12,500	208	824	1,030	-	-	-	-	-	-	9,000	36,000	45,000	-	-	-	11,708	46,824	58,530	
2 Collection of Network Data	750	3,000	3,750	210	840	1,050	-	-	-	-	-	-	1,825	7,300	9,125	-	-	-	2,785	11,140	13,925	
3 Travel Model Updates	-	-	-	-	-	-	-	-	-	-	-	-	51,610	206,440	258,050	-	-	-	51,610	206,440	258,050	
4 Travel Surveys	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5 Forecast of Data to Horizon year	2,500	10,000	12,500	74	296	370	-	-	-	-	-	-	4,728	18,910	23,638	-	-	-	7,302	29,206	36,508	
6 Community Goals & Objectives	500	2,000	2,500	48	192	240	-	-	-	-	-	-	7,700	30,800	38,500	-	-	-	8,248	32,992	41,240	
7 Forecast of Future Travel Pattern	-	-	-	-	-	-	-	-	-	-	-	-	250	1,000	1,250	-	-	-	250	1,000	1,250	
8 Capacity Deficiency Analysis	-	-	-	-	-	-	-	-	-	-	-	-	2,450	9,800	12,250	-	-	-	2,450	9,800	12,250	
9 Highway Element of th LRTP	-	-	-	-	-	-	-	-	-	-	-	-	250	1,000	1,250	-	-	-	250	1,000	1,250	
# Transit Element of the LRTP	750	3,000	3,750	-	-	-	-	-	-	-	-	-	250	1,000	1,250	-	-	-	1,000	4,000	5,000	
# Bicycle & Ped. Element of the LR	-	-	-	-	-	-	-	-	-	-	-	-	12,000	48,000	60,000	-	-	-	12,000	48,000	60,000	
# Airport/Air Travel Element of LRT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
# Collector Street Element of LRTP	-	-	-	-	-	-	-	-	-	-	-	-	750	3,000	3,750	-	-	-	750	3,000	3,750	
# Rail, Water or other mode of LRT	-	-	-	-	-	-	-	-	-	-	-	-	375	1,500	1,875	-	-	-	375	1,500	1,875	
# Freight Movement/Mobility Plann	-	-	-	-	-	-	-	-	-	-	-	-	4,800	18,400	23,000	-	-	-	4,800	18,400	23,000	
# Financial Planning	-	-	-	-	-	-	-	-	-	-	-	-	750	3,000	3,750	-	-	-	750	3,000	3,750	
# Congestion Management Strateg	625	2,500	3,125	240	960	1,200	-	-	-	-	-	-	18,193	72,770	90,963	-	-	-	19,058	76,230	95,288	
# Air Qual. Planning/Conformity An	-	-	-	-	-	-	-	-	-	3,125	12,500	15,625	1,675	6,700	8,375	-	-	-	4,800	19,200	24,000	
III C Short Range Transit Planning																						
1 Short Range Transit Planning	5,750	23,000	28,750	210	840	1,050	-	-	-	-	-	-	-	-	-	-	-	-	5,960	23,840	29,800	
III-A Planning Work Program	1,500	6,000	7,500	268	1,072	1,340	-	-	-	-	-	-	4,750	19,000	23,750	-	-	-	6,518	26,072	32,590	
III-B Transp. Improvement Plan	1,250	5,000	6,250	-	-	-	-	-	-	-	-	-	8,513	34,050	42,563	-	-	-	9,763	39,050	48,813	
III-C Cvl Rqts. Cmp./Otr. Req. Rqs.																						
1 Title VI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2 Environmental Justice	-	-	-	150	600	750	-	-	-	-	-	-	2,925	11,700	14,625	-	-	-	3,075	12,300	15,375	
3 Minority Business Enterprise	3,250	13,000	16,250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,250	13,000	16,250	
4 Planning for the Elderly & Disable	4,250	17,000	21,250	60	240	300	-	-	-	-	-	-	250	1,000	1,250	-	-	-	4,560	18,240	22,800	
5 Safety/Drug Control Planning	2,750	11,000	13,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,750	11,000	13,750	
6 Public Involvement	2,000	8,000	10,000	496	1,984	2,480	-	-	-	-	-	-	9,175	36,700	45,875	-	-	-	11,671	46,684	58,355	
7 Private Sector Participation	1,000	4,000	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,000	4,000	5,000	
III-D Incidental Plng./Project Dev.																						
1 Transportation Enhancement Pln	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2 Enviro. Analysis & Pre-TIP Plng.	12,000	48,000	60,000	90	360	450	-	-	-	-	-	-	3,500	14,000	17,500	-	-	-	15,590	62,360	77,950	
3 Special Studies	12,000	48,000	60,000	718	2,872	3,590	-	-	-	-	-	-	15,780	63,120	78,900	-	-	-	28,498	113,992	142,490	
4 Regional or Statewide Planning	10,617	42,468	53,085	-	-	-	-	-	-	4,375	17,500	21,875	5,250	21,000	26,250	-	-	-	20,242	80,968	101,210	
III E Management & Operations																						
1 Management & Operations	42,000	168,000	210,000	2,208	8,824	11,030	-	-	-	-	-	-	46,663	186,652	233,315	-	-	-	90,869	363,476	454,345	
	120,992	483,968	604,960	5,676	22,704	28,380	-	-	-	7,500	30,000	37,500	255,620	1,022,480	1,278,100	-	-	-	389,788	1,559,152	1,948,940	

Task Descriptions and Summary Narratives FY 2010-2011 UPWP

Task II-A: Surveillance of Change

The MPO is required by federal regulations and the 3C process to perform continuous data monitoring and maintenance. A number of transportation and socio-economic/demographic conditions will be continuously surveyed and compiled annually to determine whether previous projections are still valid or whether plan assumptions need to be changed. Surveillance of Change tasks are described in the following sections and agency responsibilities are summarized. Also, expected work products/deliverables and proposed schedule/accomplishment dates are provided as well.

Task II-A-1: Traffic Volume Counts

Automatic traffic counts and turning movement counts at specified locations. Maintain ADT counts and database for model calibration on arterial, minor arterial, and collector streets. The MPO will continue traffic counts data collection at specific locations. These counts will augment triennial traffic counts collected by NCDOT. Traffic counts will include daily, hourly, vehicle classification, or turning movements. The MPO agencies will be responsible for obtaining counts at specified locations within their jurisdiction and for furnishing the raw daily traffic counts, count information, and location maps to the Lead Planning Agency (LPA).

Task II-A-2: Vehicle Miles of Travel

The MPO will continue to tabulate VMT by functional classification and County. As specified by the Long Range Transportation Plan (LRTP) Goals and Objectives and, Targets, annual VMT growth will be monitored and compared the LRTP Targets. This information will help determine if the Plan targets are being met. VMT will be monitored and compared to the LRTP Targets. This information will help determine if the LRTP targets are being met. In addition, VMT will be used in air quality planning, MPO climate change planning, Greenhouse Gas Plan update, congestion management program monitoring, model validation, Travel Demand Management (TDM) monitoring and performance evaluation, LRTP target measures of effectiveness, etc.

Task II-A-3: Street System Mileage Change

The MPO will update inventory of improvements to municipal street system. Update inventory of signalization on existing major streets to provide accurate inputs for the Triangle Regional Model (TRM). The MPO will monitor changes in street mileage systems from the previous year and summarize inventory by functional classification. The Town of Chapel Hill, the Town of Carrboro, and the City of Durham will obtain from the NCDOT Division 7 and 5 offices and compile in database, improvements to the state highway system, whether planned, underway, or completed. Each municipality will compile and maintain similar records for its municipal street system. The MPO municipalities participating in the Powell Bill Program will certify street mileage

maintained during this fiscal year. The product of this task will feed into the proposed MPO Data Integration/Automation and Management Systems – MPO GIS enterprise/warehouse. The objective is that, periodically or as changes or additions to the major street system occur, street inventory will be updated and current through proposed data automation and management system.

Task II-A-4: Traffic Accidents

The DCHC MPO will collect traffic accident data and prepare summary and analysis of high accident locations. Compare data analysis to previous years' results. Build off of and support the safety work of the NCDOT and MPO municipal governments. The task will feed into the MPO Congestion Management Systems (CMS) and the Mobility Report Card.

Task II-A-5: Transit System Data

Short range transit planning efforts will be conducted by the MPO transit providers, the Durham Area Transit Authority (DATA), Chapel Hill Transit (CHT), and the Triangle Transit Authority (TTA). This will include a short range transit services plan to evaluate transit service performance, development of cross-town route(s), develop universities/college route(s) and consolidate and develop bus stop standards. Transit operators will identify strengths and weaknesses of service by route in order to assess service barriers and future options. Information will be used to monitor service and meet FTA reporting requirements

Task II-A-6: Dwelling Unit / Population and Employment Changes

Maintain inventory of dwelling units and population to determine needed changes in transportation services to meet current and projected demands. Review developments to assess impacts to the 2035 LRTP, the SE data for the 2035 LRTP update, land-use model update, and transportation project development. Changes in dwelling units and employment within the MPO will be identified and evaluated to determine accuracy and consistency with the socio-economic forecast. The MPO will review and tabulate Census data, local parcel, zoning, tax data records, InfoUSA and Employment Security Commission data as part of this monitoring task. The MPO will continue work on the first phase of GIS Automation/Integration and Management System.

Task II-A-7: Air Travel

The MPO will collect travel and passenger data at the Raleigh-Durham International Airport (RDU): Data to be collected and analyzed include but not limited to number of daily flights, number of daily enplaned passengers, and number of deplaned passengers, ground transportation, and tons of cargo activities. This purpose of the data collection and monitoring is to determine the influence of Raleigh-Durham International Airport (RDU), as a special generator, on the regional transportation system as well as to identify needs for additional services.

Task II-A-8: Vehicle Occupancy Rates

No activities proposed, therefore no funds programmed.

Task II-A-9: Travel Time Studies

The MPO will conduct travel-time runs on selected links during peak period to provide accurate inputs for applications such as the travel model update and the CMS.

Task II-A-10: Mapping

This task will include but not limited to mapping of and updates to UPWP transportation planning activities such as the CMS, traffic counts, bicycle and pedestrian counts and inventory, transit routes, land use, traffic analysis zones, socio-economic and demographic trends, and environmental factors. The proposed data and GIS automation/integration will serve as a platform for maintaining and updating of data in GIS format.

Task II-A-11: Central Area Parking Inventory

The MPO will collect, inventory of on- and off- street parking facilities in the Central Business Districts (CBD), major generators and universities. Parking data to be collected include, number of spaces, parking fee rates (hourly daily, and monthly), average weekday costs and demand. Parking information collected will help in the calibration and maintenance of the travel model.

Task II-A-12: Bike & Pedestrian. Facilities Inventory

The MPO will conduct inventory of bicycle and pedestrian facilities as part of the CMP. The proposed inventory will to provide accurate inputs for the travel model update as well as help identify future sidewalk project needs, guide pedestrian improvement planning, and to support specific projects, such as the Comprehensive Bicycle Plan and Comprehensive Pedestrian Plan.

Task II-A-13: Bicycle and Pedestrian Counts

An inventory of bicycle and pedestrian counts will be conducted as part of the CMS/Mobility Report Card. The proposed inventory will guide pedestrian improvement planning, and to support specific projects, such as the Comprehensive Bicycle Plan and Comprehensive Pedestrian Plan

Task II-A: Long Range Transportation Plan Activities

Federal Law (as updated by SAFETEA_LU) and USDOT's Metropolitan Planning Regulations, require the MPO to have a Long-Range Transportation Plan (LRTP) that is: multi-modal, financially constrained, has a minimum 20 year horizon, adhere to the MPO's adopted Public

Involvement Policy (PIP), have growth forecasts consistent with latest planning assumptions and local land use plan, meet air quality conformity and be approved by the Transportation Advisory Committee. The LRTP must be updated and reaffirmed every 4 years. The DCHC will continue tasks associated with the development of the 2040 LRTP air quality and the Comprehensive Transportation Plan as well as commence data collection for the 2010 model base year.

Task II-B-1: Collection of Base Year Data

The MPO will collect and estimate new socio-economic and demographic data for the 2010 model base year and the 2040 LRTP. Proposed work activities will include inventory, collection and estimation of the following variables for existing conditions, tabulated by traffic analysis zone, is required: (1) population; (2) dwelling units; (3) households; (4) employment by type (number of jobs and establishments) including number of commercial vehicles at business locations; (5) school enrollment; (6) number of university dormitory beds; and (7) median income. It is expected that these variables will be linked to the proposed data automation projects and a GIS database and management system will be used to maintain the aforementioned socio-economic and land use information. An integral part of this task will be data verification, reconciliation, and quality and error checks.

Task II-B-2: Collection of Network Data

The MPO will collect transportation network data necessary to build the 2010 base year TRM network. The proposed work activities will include collection of the following transportation network variables and attributes:

A-Highways : 1) posted speed limit; 2) number of lanes; 3) segment length; 4) turn pockets; 5) parking conditions; 6) traffic signal locations and stop conditions; 7) signal density; 8). access control and driveway conditions; 9) land use and area type; and 10) facility type and functional classification.

B-Transit: 1) headways; 2) speed; 3) hours of operation; 4) services miles; 5) fare structure; 6) transfer information; 7) schedule information; and 8) route information and service characteristics for each route.

C-Bicycle and Pedestrian: 1) mileage; 2) activity density; 3) neighborhood characteristics; 4) environment/friendliness factors/indices; and 5) connectivity

Task II-B-3: Travel Model Updates

This task essentially involves the update and calibration and validation for the model to support the development of the 2040 LRTP. Update of the Triangle Regional Model (TRM) including improvements, enhancements and major updates. Proposed tasks include model sub-area enhancement, other improvements identified during the development of the 2035 LRTP, such capacities revision, parking enhancement, performance measures automation, peak hour highway and transit demand forecasts, non-motorized trip incorporation, etc. The MPO will continue

work on the development of the Land-use/transportation model integration and the non-motorized trip model. The MPO will carry out other tasks needed to support the Triangle Regional Model updates, including providing the MPO's share of the Service Bureau funding and 50% FTE.

Task II-B-4: Travel Surveys

The MPO will provide its share of funding for the collection travel surveys proposed for the Triangle region. The central purpose of the survey is to collect information on origins and destinations, traveler behavior, transit ridership, commercial vehicle usage, work place commuting, freight movement, etc. which would provide accurate inputs for the travel model update. The MPO will be conducting following travel surveys for the TRM update: (1) travel time/speed survey (2) parking survey; and (3) commercial vehicle (freight)travel time/speed survey; (4).

Task II-B-5: Forecast of Data to Horizon Year

The LPA will project base year demographic and socio-economic data-1 into plan horizon year and air quality intermediate years (LRTP horizon year is 2040 and intermediate years for air quality analyses are 2010, 2011, 2017, 2020 2025, 2030, 2035). Forecasts will be generated for County control totals and traffic analysis zones. Forecasts will be made consistent with local land use plans and in corporation with local Planning departments.

Task II-B-6: Community Goals and Objectives

The MPO will re-evaluate community goals and objectives for the 2040 Long range Transportation Plan (LRTP) and the Comprehensive Transportation Plan (CTP). The process of formulating and re-evaluating goals will begin with visioning exercise. The MPO will conduct public meetings to assess community vision in terms of transportation, land use, growth, quality of life, etc. The expected work products will be adopted goals and objectives, and targets and policy framework for achieving goals.

Task II-B-7: Forecast of Future Travel Patterns

MPO will generate travel demand forecasts for future years including the LRTP horizon and air quality intermediate years. The forecast of travel patterns will include a review of these factors and comparison to community goals and objectives to determine if changes in assumptions are warranted.

Task II-B-8: Capacity Deficiency Analysis

The MPO will conduct a capacity deficiency analysis as part of the 2040 LRTP and CMP. The analysis will be made to determine existing and existing-plus-committed deficiencies. Volume-to-capacity ration maps will be produced for the 2010 base year, E+C year, and other LRTP and CTP years. Essentially this task encompasses application of the Triangle Regional Model and other modeling tools to analyze deficiencies in the existing transportation system relative to anticipated future travel demand

Task II-B-9: Highway Element of the LRTP

The MPO will continue with the evaluation of highway elements of the Comprehensive Transportation Plan and the 2035 LRTP. Performance measures will be established for evaluating highway alternatives.

Task II-B-10: Transit Element of the LRTP

The MPO will continue with the evaluation of transit elements of the Comprehensive Transportation Plan and the 2035 LRTP. Transit evaluate will include fixed-route bus service, fixed-guideway transit, highway capacity transit and demand responsive transit. Using travel behavior, ridership forecasts and other analysis, evaluation of transit element will look at unmet needs, new services areas and potential markets. Performance measures will be established for evaluating transit alternatives.

The MPO will continue the work of the Special Transit Advisory Commission related to the development of the regional transit plan. Specifically, the MPO will conduct planning and studies for highway capacity transit and circulator transit and other planning work necessary for the preparation of the FTA Small-Smart project. It is anticipated that this work will be accomplished with the help of consulting services.

Task II-B-11: Bicycle & Pedestrian Element of the LRTP

The MPO will continue with the evaluation of bicycle and pedestrian elements of the Comprehensive Transportation Plan and the 2035 LRTP. The MPO will continue work on the Durham Comprehensive pedestrian Plan and the Old Durham-Chapel Hill Road bicycle and pedestrian feasibility study. Work will commence on the development of the Durham Comprehensive Bicycle Plan. The MPO will solicit consulting help in the development of the MPO bicycle and pedestrian educational brochures and pamphlets as well as Durham County bike map.

Task II-B-12: Airport/Air Travel Element of LRTP

The MPO will continue with the evaluation of Airport/air travel element of the 2035 LRTP, including inter-modal connection and access/ground transportation.

Task II-B-13: Collector Street Element of LRTP

The MPO will continuation of the development of an MPO wide Collector Street Plan and circulation study. This is envisioned to involve the identification of future collector street connectivity needs, provisions for local street connectivity, development ordinance implementation provisions, additional local government consultation, and public involvement.

Task II-B-14: Rail, Water, or other mode of LRTP

No activities proposed, therefore no funds programmed.

Task II-B-15: Freight Movement/Mobility Planning

MPO will undertake tasks associated with urban goods movement, specifically freight accessibility and mobility. Tasks to be undertaken include survey of freight carriers, recommendations for improving truck mobility or train/truck intermodal movements, and identifying acceptable truck routes.

Task II-B-16: Financial Planning

The MPO, on an as-needed basis, will examine financial options for funding proposed transportation projects and programs, including review the financial planning assumptions/projections in the 2030 LRTP and refinement of cost estimates as necessary. The Lead Planning Agency (LPA) will participate in regional efforts geared toward identifying new and alternative funding sources, including new taxing strategies, impact fees, and public-private partnerships.

Task II-B-17: Congestion Management Systems Strategies

The MPO will work to implement and monitor the Congestion Management System (CMS) in accordance with the provisions of 23 U.S.C. and 23 CFR. Specifically, the MPO will continue on the update and monitoring of CMS strategies and State of the Systems Report.

Task II-B-18: Air Quality Planning/Conformity Analysis

The DCHC MPO (the Transportation Advisory Committee) is responsible in making a determination as to whether or not transportation plans, programs, and projects (LRTP and TIP) conform to air quality standards and the intent of the SIP. The LPA will continue to provide technical support to the TAC and TCC regarding air quality planning. In addition the LPA will continue participation in the development and application of State Implementation Plans for air quality, participation in the statewide interagency consultation, and providing assistance to NCDENR in developing and maintaining mobile source emission inventories.

Task II-C: Short Range Transit Planning

The MPO transit operators will continue activities related to short range transit planning. This includes continuous evaluation of their respective transit development plans and service performance.

Task III-A: Planning Work Program

Administer the FY 2010-2011 UPWP and prepare and process amendments as needed. Evaluate transportation planning work needs and emphasis areas and prepare the FY 2010-2011 UPWP. To prepare and continually maintain a Unified Planning Work Program (UPWP) that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for the FY 2010-2011. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

Task III-B: Transportation Improvement Program (TIP)

Amend FY 2009-2015 MTIP as needed. Commence work on the development of the 2011 – 2017 TIP Regional Priority List. This includes the refinement of the MPO Priority Needs and the identification of the transportation projects, programs, and services towards which the MPO will direct STP DA funds. As the Lead Planning Agency (LPA) of the DCHC MPO, the City of Durham, Transportation Division is responsible for annually developing, amending, adjusting and maintaining the Transportation Improvement Program (TIP) for the metropolitan area. Under this activity, the LPA will update and amend the current, seven-year program of transportation improvement projects (MTIP) that is consistent with the 2030 Long-Range Transportation Plan, STIP, the State Implementation Plan (SIP), EPA Air Quality Conformity Regulations and FHWA/FTA Planning Regulations.

Task III-C-1: Title VI

The federal legislation and regulations requires that the MPO comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (78 Stat. 252), 49 U.S.C. 2000D TO 2000-D-4; the Regulations of DOT issued thereafter in the Code of Federal Regulations (commonly and herein referred to as CFR) Title 49, Subtitle A, Part 21), and the assurance by the MPO pursuant thereto. Accordingly, the MPO will continue to provide an update of Civil Rights statistics report to determine MPO compliance to civil rights provisions.

Task III-C-2: Environmental Justice (EJ)

In accordance with Federal Action (Executive Order 12898), the will develop an Environmental Justice Plan which will focus on complying with the Executive Order and the three basic principles of Environmental Justice: 1) Ensure adequate public involvement of low-income and minority groups in decision-making; 2) Prevent disproportionately high and adverse impacts to low-income and minority groups resulting from transportation and environmental decisions made by the MPO; and 3) Assure that low-income and minority groups receive a proportionate share of benefits resulting from transportation decisions made by the MPO. Tasks include:

1. Develop MPO Environmental Justice Plan, including establishment of Environmental Justice Advisory Board
2. Update demographic profiles based on Census CTPP and PUMS as well as MPO SE data forecasts - maps to identify areas of low-income, minority and elderly populations, job accessibility, and overlay of major employers, fixed route transit systems, and major shopping areas.
3. Provide increased opportunities for under-served populations to be represented in the transportation planning process.
4. Define target areas through the use of Census Block Group data from the 2000 Census.
5. Analyze the mobility of target area populations to jobs, childcare, and transit routes.
6. Review existing public outreach and involvement plan.
7. Develop a protocol for responding to issues and concerns regarding Environmental Justices in general and Hispanic population in particular.
8. Conduct analysis as needed regarding equitable distribution of transportation system benefits and costs among all socio-economic groups throughout the MPO area

Task III-C-3: Minority Business Enterprise

The MPO will continue to address and monitor the Minority Business Enterprise (MBE) program as a part of the planning and programming phases of project development. The MPO will monitor transportation projects and programs to ensure that meaningful and full consideration are given to MBEs. The LPA will review and summarize transit operators MBE program and utilization.

Task III-C-4: Planning for the Elderly & Disabled

The MPO will continue to emphasize planning and provision of transportation facilities and services for the elderly and disabled. Specifically, the MPO will update inventory of locations and needs of elderly and disabled persons. The MPO will work with transit operators in the planning and evaluation of Para-transit services.

Task III-C-5: Safety/Drug Control Planning

No funds programmed.

Task III-C-6: Public Involvement

The MPO will continue to provide an early, proactive and a meaningful public participation and input throughout the transportation planning process, including providing for open exchange of information and ideas between the public and transportation decision-makers. To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process. To assess the effectiveness of the current Public Involvement Process as required by the federal Certification Team, and to develop and enhance the process of public dissemination of information.

Task III-C-7: Private Sector Participation

No funds programmed.

Task III-D Incidental Planning/Project Development

No funds programmed.

Task III-D-1: Transportation Enhancement Planning

No funds programmed

Task III-D-2: Environmental Analysis & Pre-TIP Planning

The LPA will continue to participate regularly and consistently in the TIP project planning & development process, including submission of comments, attending public meetings, attending scoping meetings, attending NEPA 404 merger meetings, and participating in field inspections.

The LPA will be involved in the East End Connector NEPA process including taking the lead in the public involvement process. The MPO will continue to support and be involved in NCDOT efforts to link NEPA process in the MPO systems planning process.

Task III-D-3 Special Studies

The MPO will continue with wide range of studies which are being conducted to meet the transportation planning needs of the area. These studies include NC 54/I40 corridor and sub-area study, ITS deployment plan update and the continuation of the Farrington/Stagecoach Road study, MPO collector street plan, GIS warehouse and automation, MPO parking study, etc.

Task III-D-4: Regional or Statewide Planning

The MPO will continue to coordinate with CAMPO, TTA, NCDOT, DENR, FHWA, FTA, EPA, and other State and regional agencies in regional transportation. This includes participation in the DCHC-CAMPO joint TAC meetings, TTA Board Meetings, Durham-Chapel Hill-Orange County Work Group, and a wide range of regional transportation planning working groups and committees. Examples include the Model Team, the Executive Committee, and the regional transit planning/operation coordination.

Statewide planning includes participation in various statewide planning initiatives such as CMAQ Committee, Indirect and Cumulative Impacts of Transportation Projects in North Carolina, the State Transportation Plan process, and the Comprehensive Transportation Plan.

Task III-E: Management and Operations

This work element encompasses the administration and support of the 3-C transportation planning process as mandated and required by federal regulations. The continuing transportation planning process requires considerable administrative time for attending monthly committee meetings, preparing agendas and minutes to these meetings, training, preparing quarterly progress reports, documenting expenditures for the various planning work items, and filing for reimbursement of expenditures from the PL and STP-DA funds account and other Federal Funds. To assist, support, and facilitate an open Comprehensive, Cooperative, and Continuing (3C) transportation planning and programming process at all levels of government in conformance with applicable federal and state requirements and guidelines as described in the 3C Memorandum of Understanding. Proposed tasks include but not limited to:

1. Provide liaisons between DCHC MPO member agencies, transit providers, CAMPO, NCDOT, DENR, TJCOG, and other organizations at the local, regional, state, and federal levels on transportation related matters, issues and actions.
2. Work with the Capital Area Metropolitan Planning Organization (CAMPO) on regional issues. Prepare Regional Priority lists and MTIP and amend as necessary, Update transportation plans, travel demand model, and monitor data changes. Evaluate transportation planning programs developed through the 3C public participation process for appropriate MPO action.
3. Provide technical assistance to the Transportation Advisory Committee (TAC) and other

member jurisdictions policy bodies.

4. Participate in Joint CAMPO/DCHC TCC and TAC meetings as a means to continually improve the quality and operation of the transportation planning process and decision making in the Triangle Region.
5. Review and comment on federal and state transportation-related plans, programs, regulations and guidelines.
6. Prepare and distribute TAC and TCC meeting agendas Attend TAC, TCC and other meetings associated with MPO planning activities.

Three new positions are filled during FY 2009. These position will help the MPO fulfill federal (SAFETEA-LU) and state transportation requirements.

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DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
1	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring
1.1	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal
1.2	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring
1.3	Street System Changes update	Street System Changes update	Street System Changes update	Street System Changes update	Street System Changes update
1.4	Traffic accidents data	Traffic accidents data	Traffic accidents data	Traffic accidents data	Traffic accidents data
1.5	Transit system data	Transit system data	Transit system data	Transit system data	Transit system data
1.6	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data
1.7	Air travel	Air travel	Air travel	Air travel	Air travel
1.8			VOC	VOC	VOC
1.9	Travel Time	Travel Time	Travel Time	Travel Time	Travel Time
1.10	Mapping	Mapping	Mapping	Mapping	Mapping
1.11		Parking inventory	Parking inventory		Parking inventory
1.12	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv
1.13	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts
2	Unified Planning Work Program (UPWP)	Unified Planning Work Program (UPWP)	Unified Planning Work Program (UPWP)	Unified Planning Work Program (UPWP)	Unified Planning Work Program (UPWP)
2.1	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary
2.2	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports
2.3	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation
2.4	Develop FY 2011 UPWP	Develop FY 2012 UPWP	Develop FY 2013 UPWP	Develop FY 2014 UPWP	Develop FY 2015 UPWP
2.5	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management
	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit
2.6	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
3	Long-Range Transportation Plan (LRTP)	Long-Range Transportation Plan (LRTP)	Long-Range Transportation Plan (LRTP)	Long-Range Transportation Plan (LRTP)	Long-Range Transportation Plan (LRTP)
3.1	Amendment of the 2035 LRTP for AQ analysis and conformity as necessary	Land-use Scenario analysis	Approval of the 2040 LRTP for AQ analysis and conformity	Amendment of the 2040 LRTP for AQ analysis and conformity as necessary	Goals, Objectives and targets for 2045 LRTP
3.2	CTP components- Highway, transit, bicycle and pedestrian vision plans	Deficiency Analysis	CTP components- Highway, transit, bicycle and pedestrian vision plans	Model Update for LRTP analysis	SE data collection and Forecasts for 2045 LRTP
3.3	Inter-Agency Consultation process	Alternative analysis	AQ analysis and conformity determination process	Inter-Agency Consultation process	Land-use Scenario analysis
3.4	SE data collection and Forecasts for 2040 LRTP	Development of Preferred Option	Inter-Agency Consultation process	CTP update	
3.5	Goals, Objectives and targets for 2040 LRTP		Draft LRTP AQ Conformity Jan 2013 & approval in March 2013	Land-use Scenario analysis	
3.6	Model Update for LRTP analysis				
3.7			LRTP conformity lapses June 15 2013		
3.8					
3.9					
3.10					
4	Travel Demand Model Development and Update	Travel Demand Model Development and Update	Travel Demand Model Development and Update	Travel Demand Model Development and Update	Travel Demand Model Development and Update
4.1	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities
4.2	Model validation refinement. Calibration of 2005 model and validation of 2010 base year.	Collection of 2010 base year survey data, Census, ACS augment, onboard transit, commercial vehicle, etc	Collection of 2013 base year data- traffic counts, transit, etc		
4.3	Collection of 2010 base year survey data, Census, ACS augment, onboard transit, commercial vehicle, etc	2010 Census TAZ Delineation	Collection & development of 2013 networks		
4.4	Update of project prioritization and performance measures methodologies.	Re-specification of the the model TRM V6	Socio-economic and demographic data collection and forecasts		
4.5	Evaluate pros and cons for converting Fortran programs to Transcad GISDK scripts				
4.6	Analysis of b				

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
5	Bicycle & Pedestrian	Bicycle & Pedestrian	Bicycle & Pedestrian	Bicycle & Pedestrian	Bicycle & Pedestrian
5.1	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy
5.2	Update of the Comprehensive Pedestrian Plan	Update of the Comprehensive Bicycle Plan. Update of the Regional Bike Plan		Update of the Comprehensive Pedestrian Plan	Update of the Comprehensive Bicycle Plan. Update of the Regional Bike Plan
5.3					
6	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan	Short-Range Transit Plan
6.1	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process
6.2	Transit Development Plan (TDP) Triangle Transit and CHT	Transit Development Plan (TDP) DATA	Transit Development Plan (TDP) TTA		Transit Development Plan (TDP) CHT & TTA
7	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)
7.1					
7.2	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness
7.3	Data collection & analysis for MPO CMS Update	Establishment of Area of application & reevaluation of definition of congestion		Establishment of Area of application & reevaluation of definition of congestion	
7.4	Update of CMP work plan	Transportation system definition (modes & networks)		Transportation system definition (modes & networks)	
7.5		Transportation system definition (modes & networks)		Transportation system definition (modes & networks)	
7.6		Data collection & analysis for MPO CMS Update		Data collection & analysis for MPO CMS Update	

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
7	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)	Congestion Management Process (CMS/CMP)
7.7		Develop Performance monitoring Plan		Develop Performance monitoring Plan	
7.8		Identification and evaluation of strategies.		Identification and evaluation of strategies.	
7.9		Action plan for monitoring effectiveness of strategies		Action plan for monitoring effectiveness of strategies	
7.10		Public comment and adoption of the MPO CMS		Public comment and adoption of the MPO CMS	
8	TIP	TIP	TIP	TIP	TIP
	Reconcile 2009-15 MTIP and STIP			Develop final draft 2013-2019 MTIP . TIP conformity determination	
	Federal Approval of conforming 2009-15 MTIP, Oct 1 2008	Reconcile 2011-17 MTIP and STIP		TAC Approves 2013-2019 MTIP	
	Development 2011-2017 MTIP . Public input and comment process.		Development 2013-2019 MTIP . Public input and comment process.		Development 2015-2021 MTIP . Public input and comment process.
	Process MTIP amendments as needed	Process MTIP amendments as needed	Process MTIP amendments as needed	Process MTIP amendments as needed	Process MTIP amendments as needed
	Annual TIP project Listing	Annual TIP project Listing	Annual TIP project Listing	Annual TIP project Listing	Annual TIP project Listing

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
9	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ	Title VI/Civil Rights/EJ
		Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts		Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts	
	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list
	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program
	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed
	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database
10	Public Involvement Participation Plan (PIP/PPP)	Public Involvement Participation Plan (PIP/PPP)	Public Involvement Participation Plan (PIP/PPP)	Public Involvement Participation Plan (PIP/PPP)	Public Involvement Participation Plan (PIP/PPP)
	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process
	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management
11	Project Development & Incidental Planning	Project Development & Incidental Planning	Project Development & Incidental Planning	Project Development & Incidental Planning	Project Development & Incidental Planning
	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process
	Northern Durham Parkway/US 70 NEPA study	Northern Durham Parkway/US 70 NEAP study	Northern Durham Parkway/US 70 NEAP study		
12	Land-use & Transportation integration	Land-use & Transportation integration	Land-use & Transportation integration	Land-use & Transportation integration	Land-use & Transportation integration
	MPO integrated land use model & integration with TRM				
	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
13	Intelligent Transportation System Planning	Intelligent Transportation System Planning	Intelligent Transportation System Planning	Intelligent Transportation System Planning	Intelligent Transportation System Planning
	Update of the ITS deployment Plan & Regional Architecture				
	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring
14	Safety Planning	Safety Planning	Safety Planning	Safety Planning	Safety Planning
	Develop MPO safety planning initiatives	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.
	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process
15	Freight Planning	Freight Planning	Freight Planning	Freight Planning	Freight Planning
	Develop MPO freight plan and truck circulation map				
	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination
	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies
		Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps
16	Transportation System Preservation	Transportation System Preservation	Transportation System Preservation	Transportation System Preservation	Transportation System Preservation
	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation
17	GIS Development	GIS Development	GIS Development	GIS Development	GIS Development
	Maintain Databases; upgrade hardware and software as necessary	Maintain Databases	Maintain Databases	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software
	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers
	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data
	Develop "Green Print" maps	Update green print maps	Update green print maps	Update green print maps	Update green print maps
18	Management and Operations	Management and Operations	Management and Operations	Management and Operations	Management and Operations
	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process
	TAC directives	TAC directives	TAC directives	TAC directives	TAC directives

DCHC MPO 5-Year Unified Planning Work Program : July 1, 2010 to June 30, 2015

	1	2	3	4	5
FY	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Period	2010-11	2011-12	2012-13	2013-14	2014-15
	July 1, 2010-June 30, 2011	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015
19	Special Studies/State & Regional Planning	Special Studies/State & Regional Planning	Special Studies/State & Regional Planning	Special Studies/State & Regional Planning	Special Studies/State & Regional Planning
	As Needed	As Needed	As Needed	As Needed	As Needed
	NC54/140/US 15-501 Sub-area study				

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*Appendices Agency Project
Descriptions
and
Funding Source Tables*

City of Durham/LPA

**Durham-Chapel Hill-Carrboro Urban Area
FY 2010-2011 Unified Planning Work Program
Proposed Funding Source Tables**

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Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
II A Surveillance of Change														
1 Traffic Volume Counts	4,725	18,900	0	0	0	0	0	0	0	0	4,725	-	18,900	23,625
2 Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3 Street System Changes	0	0	0	0	0	0	0	0	0	0	-	-	-	-
4 Traffic Accidents	825	3,300	0	0	0	0	0	0	0	0	825	-	3,300	4,125
5 Transit System Data	1,250	5,000	0	0	8,481	8,481	67,851	1,120	1,120	8,957	10,851	9,601	81,808	102,260
6 Dwelling Unit, Pop. & Emp. Change	3,750	15,000	3,313	13,250	0	0	0	0	0	0	7,063	-	28,250	35,313
7 Air Travel	125	500	325	1,300	0	0	0	0	0	0	450	-	1,800	2,250
8 Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	-	-	-	-
9 Travel Time Studies	10,960	43,838	2,325	9,300	0	0	0	0	0	0	13,285	-	53,138	66,423
10 Mapping	5,000	20,000	2,913	11,650	0	0	0	0	0	0	7,913	-	31,650	39,563
11 Central Area Parking Inventory	1,250	5,000	0	0	0	0	0	0	0	0	1,250	-	5,000	6,250
12 Bike & Ped. Facilities Inventory	1,000	4,000	0	0	0	0	0	0	0	0	1,000	-	4,000	5,000
13 Bike & Ped. Counts	4,650	18,600	0	0	0	0	0	0	0	0	4,650	-	18,600	23,250
II B Long Range Transp. Plan														
1 Collection of Base Year Data	9,000	36,000	0	0	0	0	0	0	0	0	9,000	-	36,000	45,000
2 Collection of Network Data	1,825	7,300	0	0	0	0	0	0	0	0	1,825	-	7,300	9,125
3 Travel Model Updates	46,610	186,440	5,000	20,000	0	0	0	0	0	0	51,610	-	206,440	258,050
4 Travel Surveys	0	0	0	0	1,200	1,200	9,600	811	811	6,486	2,011	2,011	16,086	20,108
5 Forecast of Data to Horizon year	3,550	14,200	1,178	4,710	0	0	0	0	0	0	4,728	-	18,910	23,638
6 Community Goals & Objectives	5,250	21,000	2,450	9,800	0	0	0	0	0	0	7,700	-	30,800	38,500
7 Forecast of Future Travel Patterns	0	0	250	1,000	0	0	0	0	0	0	250	-	1,000	1,250
8 Capacity Deficiency Analysis	2,450	9,800	0	0	0	0	0	0	0	0	2,450	-	9,800	12,250
9 Highway Element of th LRTP	250	1,000	0	0	0	0	0	0	0	0	250	-	1,000	1,250
10 Transit Element of the LRTP	250	1,000	0	0	0	0	0	0	0	0	250	-	1,000	1,250
11 Bicycle & Ped. Element of the LRTP	9,500	38,000	2,500	10,000	0	0	0	0	0	0	12,000	-	48,000	60,000
12 Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-
13 Collector Street Element of LRTP	750	3,000	0	0	0	0	0	0	0	0	750	-	3,000	3,750
14 Rail, Water or other mode of LRTP	250	1,000	125	500	0	0	0	0	0	0	375	-	1,500	1,875
15 Freight Movement/Mobility Planning	3,500	14,000	1,100	4,400	0	0	0	0	0	0	4,600	-	18,400	23,000
16 Financial Planning	0	0	750	3,000	4,544	4,544	36,352	0	0	0	5,294	4,544	39,352	49,190
17 Congestion Management Strategies	15,500	62,000	2,693	10,770	0	0	0	1,616	1,616	12,928	19,809	1,616	85,698	107,123
18 Air Qual. Planning/Conformity Anal.	0	0	1,675	6,700	0	0	0	0	0	0	1,675	-	6,700	8,375
II-C Short Range Transit Planning	0	0	0	0	0	0	0	0	0	0	-	-	-	-
III-A Planning Work Program	0	0	4,750	19,000	0	0	0	2,983	2,983	23,866	7,733	2,983	42,866	53,583
III-B Transp. Improvement Plan	0	0	8,513	34,050	0	0	0	239	239	1,912	8,752	239	35,962	44,953
III-C Cvl Rgts. Cmp./Otr .Reg. Reqs.														
1 Title VI	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Environmental Justice	1,425	5,700	1,500	6,000	0	0	0	500	500	4,000	3,425	500	15,700	19,625
3 Minority Business Enterprise	0	0	0	0	0	0	0	0	0	0	-	-	-	-
4 Planning for the Elderly & Disabled	0	0	250	1,000	0	0	0	0	0	0	250	-	1,000	1,250
5 Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0	0	-	-	-	-
6 Public Involvement	5,850	23,400	3,325	13,300	0	0	0	5,271	5,271	42,165	14,446	5,271	78,865	98,581
7 Private Sector Participation	0	0	0	0	0	0	0	0	0	0	-	-	-	-
III-D Incidental Plng./Project Dev.														
1 Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2 Enviro. Analysis & Pre-TIP Plng.	1,500	6,000	2,000	8,000	0	0	0	0	0	0	3,500	-	14,000	17,500
3 Special Studies	14,555	58,220	1,225	4,900	0	0	0	0	0	0	15,780	-	63,120	78,900
4 Regional or Statewide Planning	5,000	20,000	250	1,000	0	0	0	0	0	0	5,250	-	21,000	26,250
III-E Management & Operations														
1 Management & Operations	27,978	111,910	18,686	74,742	0	0	0	25,794	25,794	206,351	72,457	25,794	393,003	491,254
Totals	\$188,527	\$754,108	\$67,093	\$268,372	\$14,225	\$14,225	\$113,803	\$38,333	\$38,333	\$306,665	\$308,179	\$52,559	\$1,442,948	\$1,803,685

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Task II-A: Surveillance of Change

The MPO is required by federal regulations and the 3C process to perform continuous data monitoring and maintenance. A number of transportation and socio-economic/demographic conditions will be continuously surveyed and compiled annually to determine whether previous projections are still valid or whether plan assumptions need to be changed. Surveillance of Change tasks are described in the following sections and agency responsibilities are summarized. Also, expected work products/deliverables and proposed schedule/accomplishment dates are provided as well.

Task II-A-1: Traffic Volume Counts

The MPO will continue traffic counts data collection at specific locations. These counts will augment triennial traffic counts collected by NCDOT. Traffic counts will include daily, hourly, vehicle classification, or turning movements. The MPO agencies will be responsible for obtaining counts at specified locations within their jurisdiction and for furnishing the raw daily traffic counts, count information, and location maps to the Lead Planning Agency (LPA).

Traffic counts are vital and important in various studies, projects and model validation. NCDOT count program is insufficient and inadequate in meeting demands for counts. Thus the MPO count program which will augment NCDOT counts with the MPO ADT, TMC, classification and seasonal counts will provide timely data for various on-going and special emphasis projects and studies. The LPA plans to take approximately 120 traffic counts and 350 turning movement counts at locations that will be representative of the street system as a whole. The traffic volume counts will be at 15-minute intervals, bi-directional, and collected for a minimum of 48 hours so they can be used to determine peak hour spreading.

Objectives:

1. Maintain update and recent traffic counts within the MPO,
2. Have consistent traffic count for various MPO analyses, development reviews, studies and projects,
3. Maintain accurate count for monitoring traffic congestion and evaluating mitigation;
4. Maintain data to evaluate impact of season traffic around universities and other major generators;
5. Collect data for model validation
6. Collect count data for freight
7. Collect count to fed into MPO count program
8. To collect traffic counts and turning movements throughout the planning area; and,
9. To monitor traffic growth and provide continuous updates.

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Previous Work:

1. 2009 traffic counts collected as part of the Surveillance of Change and studies (traffic, corridor, project planning, etc);
2. Turning movement counts 2009;
3. Screenline counts for the 2005 TRM update;
4. ADT counts, 2008-2009;
5. NCDOT triennial counts and ADT maps;
6. Updated the DCHC traffic count library by supplementing the NCDOT count locations in the region and performing traffic counts for communities on a limited request basis;
7. Update and maintain the DCHC traffic count database; and
8. Continue to expand the DCHC traffic count database to include the hourly breakdown of traffic counts.

Proposed Activities:

1. Collect 48-hour traffic count for surveillance of change;
2. Collect turning movement counts;
3. Develop the DCHC traffic count library by supplementing the NCDOT count locations within the metropolitan area;
4. Develop MPO Count database/GIS and mapping; and,
5. Conduct four monthly traffic counts to collect seasonal traffic information which will assist in the development of adjustment factors and growth rates.

Products/Deliverables:

1. 2010-2011 ADT count, Turning Movement Counts (TMC) and classification counts
2. Summary reports of daily traffic count information for the MPO;
3. Compilation of peak period turning movement counts; and,
4. Seasonal adjustment factors and growth rates specific to the DCHC region.

Completion Date:

On-going/June 2011. Traffic counts for CMS will be conducted during fall of 2005 and spring of 2006. Seasonal counts will be conducted during the 1st, 2nd, 3rd, and 4th quarters

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will largely be undertaken with interns and temporary staffing. MPO staff will oversee project, provide project management and review work products. Traffic counts will be conducted when schools are in session. Anticipated completion date is June 2011.

Funding Commitments from Other Entities:

None. The cost of bi-annual ADT counts within the MPO is borne by NCDOT. University of North Carolina (UNC) will provide traffic counts within the university.

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Task II-A-2: Vehicle Miles of Travel

The MPO will continue to tabulate VMT by functional classification and by county. As specified by the Long Range Transportation Plan (LRTP) Goals and Objectives, annual VMT growth will be established as a performance measure. The LPA will collect and summarized VMT data from the NCDOT universal file and HPMS. VMT will be monitored and compared to the LRTP Targets. This information will help determine if the LRTP targets are being met. In addition, VMT will be used in air quality planning. MPO climate change planning, Greenhouse Gas Plan update, congestion management program monitoring, model validation, Travel Demand Management (TDM) monitoring and performance evaluation, LRTP target measures of effectiveness, etc.

Objectives:

1. Monitor the growth of VMT in the metropolitan planning area;
2. To monitor traffic growth and provide continuous updates;
3. Evaluate trends of VMT; and
4. Perform analyses for TRM, special studies and LRTP

Previous Work:

1. VMT data monitoring in 2008
2. VMT analysis for the 2030 and 2035 LRTP and air quality analysis; and
3. VMT analyses for special studies.

Proposed Activities:

1. Collect VMT from NCDOT.
2. VMT analysis from the TRM
3. Summarize and tabulate VMT by county, area type and functional classification.
4. Develop historic trends of VMT in the DCHC metropolitan planning area
5. Prepare comparative analysis of VMT with model VMT results
6. Perform adjustments as necessary.

Products/Deliverables:

1. Summary reports of VMT information for the MPO Surveillance of Change Report.
2. VMT per capita
3. Evaluation VMT targets for the 2035 LRTP
4. VMT performance measures for the 2040 LRTP Goals, Objectives and Targets

Relationship to Other Plans and MPO Activities:

VMT data will be used in various stages of the CTP and the 20405 LRTP update. VMT data analyses and tabulation will be performed as part of the MPO Congestion Management Process (CMP). Also, VMT analysis is an essential validation data for the model update. This data will be used in air quality analysis and the MPO climate change Greenhouse Gas Emissions planning.

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Completion Date:

June 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will largely be undertaken by LPA staff with the temporary staffing help.

Funding Commitments from Other Entities:

None.

Task II-A-4: Traffic Accidents

The DCHC MPO will collect traffic accident data and prepare summary and analysis of high accident locations. Traffic accident data will be generated from NCDOT Traffic Engineering Accident Analysis System (TEAAS). Accidents information to be collected from TEAAS include but not limited to: number of accidents, accidents per capita, accident for ADT range, accidents and historic accidents, accidents at intersections, segments, citywide, countywide, etc. Data will be compared to previous years' results. This task will build from and support the safety work of the NCDOT and MPO municipal governments. The task will feed into the MPO Congestion Management Systems (CMS), Safety Plan development, safety and security planning and the Mobility Report Card.

Objectives:

1. To improve safety criterion measure, analysis and evaluation for MTIP prioritization, SPOT and LRTP alternatives.
2. To monitor accident trends.
3. Reduce accidents and exposure to accidents
4. To improve the safety of the transportation system; and,
5. To integrate accident analysis into MPO planning activities.

Previous Work:

1. 2007 accident data.
2. Accident data for the NC 54/I40 Corridor Study
3. Accident data analysis for the Metropolitan Transportation Improvement Program (MTIP)
4. Accident data for CMS and Mobility Report Card.

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Proposed Activities:

1. Collect traffic accident data from NCDOT's Traffic Engineering Accident;
2. Summarize accident data from Analysis System (TEAAS) program and municipal governments;
3. Prepare a summary and analysis of high accident locations;
4. Compare traffic accident data to previous years; and,
5. Integrate traffic accident analyses into other MPO planning activities.

Products/Deliverables:

1. Historic accidents tables and graphs
2. Summary reports of high accident locations; and,
3. Customized data and analysis information for other MPO planning activities.
4. Surveillance of Change report

Relationship to Other Plans and MPO Activities:

Traffic accident data will be used in the analysis for the Congestion Management System (CMS), Mobility Report Card, Regional Priority List ranking analysis and project level analyses. Accident information will be used in the MPO safety planning and congestion management process mitigation and monitoring.

Completion Date:

June 2010.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

NCDOT maintains the TEAAS program that will be used in this task.

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Task II-A-5: Transit System Data

Short range transit planning efforts will be conducted by the MPO transit providers, the Durham Area Transit Authority (DATA), Chapel Hill Transit (CHT), and the Triangle Transit Authority (TTA). This will include a short range transit services plan to evaluate transit service performance, development of cross-town route(s), developing universities/college route(s) and consolidate and develop bus stop standards. Transit operators will identify strengths and weaknesses of service by route in order to assess service barriers and future options. Information will be used to monitor service and meet FTA reporting requirements.

Objectives:

1. Maintain transit system data for MPO transit planning
2. Maintain update information for model update/validate, evaluation of JARC/New Freedom programs, MTIP project prioritization, etc
3. To evaluate and monitor transit services; and,
4. To fulfill FTA reporting requirements, (NTD or Section 15).

Previous Work:

1. The three transit systems continuously compile data and evaluate system performance.
2. 2009 Section 15 transit data.
3. Boarding and alighting counts
4. 2007 Transit system data for CMS and Mobility Report Card
5. Transit systems data for modeling enhancement and validation

Proposed Activities:

1. Create a short range transit services plan;
2. Develop new routes to serve cross-town and university travel demand;
3. Consolidate and develop bus stop standards;
4. Create reports on system performance by route; and,
5. Prepare reports to fulfill FTA requirements.
6. Maintain transit database and GIS information
7. Collect transit performance indicators.

Products/Deliverables:

1. Summary reports of transit system performance; and,
2. Reports to fulfill FTA requirements
3. MPO transit GIS layer
4. Surveillance of Change report

Relationship to Other Plans and MPO Activities:

Transit system data will be used to influence route changes and service expansions. Transit system data will also be used in the development of the Long Range Transportation Plan, Regional transit vision plan, and transit master plan.

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Completion Date:

Transit system data will be compiled continuously. Reports for specific projects and initiatives will be created on an as-needed basis. Reports for the FTA will be completed to fulfill requirements and meet deadlines throughout the year.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will largely be undertaken by the MPO transit operators; Chapel Hill Transit (CHT), the Durham Area Transit Authority (DATA) and the Triangle Transit Authority (TTA). The LPA will tabulate and summarize data as well as maintain database information.

Funding Commitments from Other Entities:

This task is funded largely from transit Section 5303 and Section 5307 and partly from the STP-DA. Local matching funds are provided by the City of Durham, Town of Chapel Hill, Triangle Transit and the North Carolina Department of Transportation, Public Transportation Division (NCDOT-PTD)

Task II-A-6: Dwelling Unit, Population, and Employment Change

LPA and municipal planning staff will maintain an inventory of dwelling units, population, and employment to determine needed changes in transportation services to meet current and projected demands. Staff will review new developments to assess impacts to the 2035 LRTP, the model update, and transportation project development. Changes in dwelling units and employment within the MPO will be identified and evaluated to determine accuracy and consistency with the socio-economic forecast. The MPO will review and tabulate building permit data, Census data (including American Community Survey and CTPP), local parcel, zoning, tax data records, and InfoUSA, Duns & Bradstreet and Employment Security Commission data as part of this monitoring task. The MPO will continue the first phase of the MPO Data Automation/Integration and Management System - GIS enterprise/warehouse development.

Objectives:

1. Check consistency between development proposal and socio-economic/ Demographic forecasts.
2. Maintain up-to-date socio-economic and demographic spatial data
3. Monitor development reviews and proposal consistent with the TAC directives and resolution.
4. To monitor changes in dwelling units, population, and employment change; and,
5. To provide current data for MPO planning activities.

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Previous Work:

Previous work includes but not limited to dwelling unit, population, development data and employment data gathering and monitoring. These pieces of data are integral to many planning and modeling activities.

Proposed Activities:

1. Review new developments and certificates of occupancy for dwelling unit, population, and employment changes;
2. Obtain data from the Census, InfoUSA, ESC, and local governments;
3. Compare changes to the socio-economic forecast; and,
4. Develop the Data Automation/Integration and Management System to streamline this task.

Products/Deliverables:

1. Summary reports of socio-economic data;
2. Updated socio-economic data for use in the Triangle Regional Model and other MPO planning activities; and,
3. Data Automation/Integration and Management System.

Relationship to Other Plans and MPO Activities:

Dwelling unit, population, and employment change data will be used in the Triangle Regional Model. The Triangle Regional Model is used in many MPO planning activities including the Long Range Transportation Plan, the Congestion Management System and Mobility Report Card.

Completion Date:

Dwelling unit, population, and employment data will be compiled on a continual basis.

Proposed Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

None.

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Task II-A-7: Air Travel

The MPO will collect travel and passenger data at the Raleigh-Durham International Airport (RDU): Data to be collected and analyzed include but not limited to number of daily flights, number of daily enplaned passengers, number of deplaned passengers, ground transportation, and tons of cargo activities. This purpose of the data collection and monitoring is to determine the influence of Raleigh-Durham International Airport (RDU), as a special generator, on the regional transportation system as well as to identify needs for additional services.

Task II-A-8: Vehicle Occupancy Rates

No activities proposed, therefore no funds programmed.

Task II-A-9: Travel Time Studies

The MPO will conduct travel-time runs on selected links during peak period to provide accurate inputs for applications such as the travel model update and the Congestion Management Process (CMP).

Task II-A-10: Mapping

This task will include but not limited to mapping of and updates to UPWP transportation planning activities such as the CMP, traffic counts, bicycle and pedestrian counts and inventory, transit routes, land use, traffic analysis zones, socio-economic and demographic trends, and environmental factors. The proposed data and GIS Automation/Integration will serve as a platform for maintaining and updating of data in GIS format.

Objectives:

1. To provide maps for use in various MPO planning activities; and,
2. To maintain updated geospatial information for transportation analyses.

Previous Work:

The LPA has prepared mapping for various MPO activities such as the 2035 LRTP, MTIP Regional Priority project Lists, 2009-15 MTIP, functional classification based on the 2000 Census, MPO urbanized area maps, MAB, etc.

Proposed Activities:

1. Collect updated geospatial information from local governments;
2. Integrate local government geospatial information into region-wide geospatial information;
3. Create files and maps containing MPO transportation information; and,
4. Develop the Data Automation/Integration and Management System to streamline this task.

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Products/Deliverables:

1. Maps for various MPO planning activities;
2. Region-wide GIS files; and,
3. Data Automation/Integration and Management System.

Relationship to Other Plans and MPO Activities:

GIS data will be used in many MPO activities such as the Triangle Regional Model, Long Range Transportation Plan, the Congestion Management System, and Mobility Report Card, Functional classification update, TIP Regional Priority List, MTIP development, NCDOT SPOT, MPO climate change/Greenhouse Gas emission planning, and other MPO transportation planning activities.

Completion Date:

GIS data will be compiled on a continual basis. Mapping will be completed as needed for various projects.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

None.

Task II-A-11: Central Area Parking Inventory

The MPO will inventory of on- and off-street parking facilities in the Central Business Districts (CBD) and universities as part of the Congestion Management System and Mobility Report Card. Parking data to be collected include, number of spaces, parking fee rates (hourly daily, and monthly), average weekday costs and demand/occupancy. Parking information collected will help in the calibration and maintenance of the travel model.

Objectives:

1. To provide parking information for use in the Triangle Regional Model, Congestion Management Process.
2. Improvement ridership forecasting
3. Parking cost model to improve model mode choice model
4. Provide linkage between CBD parking and Travel Demand Management (TDM)

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Previous Work:

2009 parking data collection at Durham and Chapel Hill Central Business Districts and MPO universities.

Proposed Activities:

1. Inventory on- and off-street parking facilities in the Central Business Districts and at universities; and,
2. Integrate and customize parking data for use in MPO planning activities and the Triangle Regional Model.

Products/Deliverables:

1. Database of parking facilities;
2. Region-wide GIS files containing parking data; and,
3. Reports on parking facilities for use in MPO planning activities.

Relationship to Other Plans and MPO Activities:

Parking data will be used in the Triangle Regional Model, the Congestion Management Process and Mobility Report Card.

Completion Date:

This is will be a continual effort as part of data surveillance of change, model improvements and validations and also as part of the required MPO CMP monitoring..

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

City of Durham and Durham County.

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Task II-A-12: Bicycle and Pedestrian Facilities Inventory

The MPO will conduct inventories of bicycle and pedestrian facilities as part of various regional planning activities. The proposed inventory will provide accurate inputs for the travel model update as well as help identify future bicycle and sidewalk project needs, guide bicycle and pedestrian improvement planning, and support specific bike and sidewalks projects. In addition, this work will help Lead Planning Agency staff when processing materials for state/federal grant applications and identifying facility improvement requests.

Objectives:

1. To collect information on existing and proposed bicycle and pedestrian facilities throughout the MPO area;
2. To monitor traffic growth and provide continuous updates on potential bicycle and pedestrian facilities;
3. To monitor NCDOT, MPO and local project work for opportunities for improvements to bicycle and pedestrian facilities, e.g. spot improvements, street resurfacings, etc.; and,
4. To ensure that bicycle and pedestrian facility implementation occurs in compliance with local, state and federal guidelines.

Previous Work:

1. Collected bicycle and pedestrian facility information for CMAQ, TE and STP-DA grant processes;
2. Collected bicycle and pedestrian facility information for planning studies, such as the Old Durham-Chapel Hill Rd Bicycle/Pedestrian Feasibility Study; and,
3. Coordinated with NCDOT and other agencies regarding potential bicycle and pedestrian facility improvements, as incidental or independent projects.

Proposed Activities:

1. To collect digital images of various planned bicycle and pedestrian routes;
2. Collect bicycle and pedestrian facility information for CMAQ, TE and STP-DA grant processes;
3. Collect bicycle and pedestrian facility information for regional planning studies; and,
4. Coordinate with NCDOT and other agencies on potential bicycle and pedestrian facility improvements, as incidental or independent projects.

Products/Deliverables:

Work products will include digital images, maps and other visual representations of facilities, as well as indirect products related to plans, communications, and project applications.

Relationship to Other Plans and MPO Activities:

The facility inventory will be used for regional planning efforts, grant application processes, and other regionally coordinated activities.

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Completion Date:

Facility inventory to be conducted as needed on a year round basis.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will largely be undertaken by regular full-time staff, as needed throughout the year. MPO staff will provide project management and review work products, as related to various regional plans undertaken by the MPO.

Funding Commitments from Other Entities:

None

Task II-A-13: Bike & Ped Counts

An inventory of bicycle and pedestrian counts will be conducted as part of the CMP. The proposed inventory will guide bicycle and pedestrian improvement planning, and to support specific projects such as the Comprehensive Bicycle Plan and Comprehensive Pedestrian Plan updates.

Objectives:

1. To collect data on current bicycle and pedestrian facility use; and,
2. To monitor traffic growth and provide continuous updates on bicycle and pedestrian latent demand.

Previous Work:

Collected bicycle and pedestrian facility information for various local and regional projects and planning activities.

Proposed Activities:

1. Collect 48-hour traffic count as part of CMS and Mobility Report Card;
2. Collect turning movement counts as part of the CMS;
3. Develop the DCHC traffic count library by supplementing the NCDOT count locations within the metropolitan area;
4. Develop MPO Count database/GIS and mapping; and,
5. Conduct four monthly traffic counts to collect seasonal traffic information, which will assist in the development of adjustment factors and growth rates.

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Products/Deliverables:

1. Summary reports of daily traffic count information for the MPO;
2. Compilation of peak period turning movement counts; and,
3. Seasonal adjustment factors and growth rates specific to the DCHC region.

Relationship to Other Plans and MPO Activities:

Bicycle and pedestrian count data to be used for model validation, model analysis, CMS, air quality analysis, etc.

Completion Date:

On-going.

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will largely be undertaken with temporary staffing. The LPA staff will oversee project, provide project management and review work products. Inventory and counts will be conducted when schools are in session. Anticipated completion date is June 2011.

Funding Commitments from Other Entities:

None

Task II-A: Long Range Transportation Plan Activities

Federal Law (as updated by SAFETEA_LU) and USDOT's Metropolitan Planning Regulations, require the MPO to have a Long-Range Transportation Plan (LRTP) that is: multi-modal, financially constrained, has a minimum 20 year horizon, adhere to the MPO's adopted Public Involvement Policy (PIP), have growth forecasts consistent with latest planning assumptions and local land use plan, meet air quality conformity and be approved by the Transportation Advisory Committee. The LRTP must be updated and reaffirmed every 4 years. The DCHC will continue tasks associated with the development of the 2035 LRTP air quality and the Comprehensive Transportation Plan as well as commence data collection for the 2010 model base year.

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Task II-B-1: Collection of Base Year Data

The MPO will collect and estimate new socio-economic and demographic data for the 2010 base year. Proposed work activities will include inventory, collection and estimation of the following variables for existing conditions, tabulated by traffic analysis zone, is required: (1) population; (2) dwelling units; (3) households; (4) employment by type (number of jobs and establishments) including number of commercial vehicles at business locations; (5) school enrollment; (6) number of university dormitory beds; and (7) median income. It is expected that these variables will be linked to the on-going MPO data automation and a GIS warehouse. The warehouse and management system will be used to maintain the aforementioned socio-economic and land use information. An integral part of this task will be data verification, reconciliation, quality and error checks.

Task II-B-2: Collection of Network Data

The MPO will collect transportation network data necessary to build the 2010 base year TRM network. The proposed work activities will include collection of the following transportation network variables and attributes:

A-Highways : 1) posted speed limit; 2) number of lanes; 3) segment length; 4) turn pockets; 5) parking conditions; 6) traffic signal locations and stop conditions; 7) signal density; 8). access control and driveway conditions; 9) land use and area type; and 10) facility type and functional classification.

B-Transit: 1) headways; 2) speed; 3) hours of operation; 4) services miles; 5) fare structure; 6) transfer information; 7) schedule information; and 8) route information and service characteristics for each route.

C-Bicycle and Pedestrian: 1) mileage; 2) activity density; 3) neighborhood characteristics; 4) environment/friendliness factors/indices; and 5) connectivity

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Task II-B-3: Travel Model Updates:

Update of the Triangle Regional Model (TRM) including conversion and full implementation of model from Tranplan to TransCad. The LPA modeling staff will continue to work with the TRM Service Bureau at ITRE to ensure that MPO model objectives (link level validation, improved transit ridership forecasts, parking enhancement, improvement of the model sensitivity, enhancement of the model capability in addressing policy questions, etc) are met. Proposed tasks include model improvements and enhancements, work associated with the calibration of the 2005 model, validation of 2010 base year model, commencement of TRM V-6 model development, continuation of the land use model and non-motorized trip models. The MPO will carry out other tasks needed to support the Triangle Regional Model updates, including providing the MPO's share of the Service Bureau funding and 50% FTE.

Objectives:

To ensure that DCHC MPO policymakers and the MPO member agencies have modeling tools at their disposal to support analysis of non-motorized (bicycling and walking) travel impacts of project and policy alternatives. In particular, the model should be sensitive to demographic and land use changes that might increase or decrease the number and location of non-motorized trips, as well as to other factors such as the impact of facility changes and improvements, pricing, university/CDB parking, freight, travel demand management programs, and other factors that have been demonstrated to have an effect on non-motorized travel.

Previous Work:

1. 2002 model calibration and validation
2. Model support for the 2035 LRTP
3. 2005 model update TRM V-4
4. A framework for identifying non-motorized travel has been part of the Triangle Regional Model since its inception; and,
5. The recent model update commissioned by TTA for its New Starts application, and currently being built into the Triangle Regional Model includes trip generation improvements that relate the propensity for non-motorized trips to demographic and land use characteristics.

Proposed Activities:

1. Model development for TRM version 6
2. Incorporation of non-motorized trip model and greater parking sensitivity in the model;
3. Develop a non-motorized trip destination component to complement the work already undertaken on trip generation in time for use in the 2040 LRTP analyses;
4. Develop a work program for the TRM version 6 model development;
5. Model support for the 2040 LRTP;

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6. Implement the TRM improvements and travel enhancements, including model implementation parking and park-n-ride components;
7. Continuation of the Urbanism land use model development.
8. Work on the 2005 TRM update and validation.
9. Work on the model work associated with the regional transit initiatives
10. MPO model enhancements – sub-area analysis, select analysis, LRTP and air quality interface and scripts
11. Performance measures, sensitivity testing and elasticity for 2040 LRTP alternative analysis and NEPA/project development.

Products/Deliverables:

1. Non-motorized modeling extensions for the trip generation and trip distribution steps in the TRM for use in LRTP alternative analysis
2. Additional non-motorized modeling extensions as part of the TRM Major Model Update. These extensions may entail internal modifications to the TRM, as well as new data requirements.
3. MPO model enhancement: sub-area analysis capability, select link analysis, user interface and scripts for LRTP and air quality.
4. Validation of the 2010 model update to be used in the LRTP, CTP and other technical analyses.
5. Statistical analysis of survey results and the development of the major model update intermediate specification and parameters.
6. Performance measures scripts for 2040 alternative analysis and land-use scenario planning.

Relationship to Other Plans and MPO Activities:

Modeling supports various regional and MPO activities such LRTP, MTIP, NEPA/ environmental analyses, project traffic forecasts. Development of model extensions is essential to the development of the LRTP, Air Quality Conformity Determination, and in various special studies.

Completion Date:

1. Non-motorized modeling extensions will be complete along with the TRM update; and,
2. TRM calibration and validation will be done fall of 2010 but improvements and updates will be continual effort.
3. TRM version 6 efforts will commence but calibration and validation work will continue through subsequent years.

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Proposed Budget and Level of Effort (Staff or Consulting):

Work will be done largely by MPO modeling staff, TRM Service Bureau and consulting/temporary staffing. Consultants are retained by DCHC MPO for assistance in the development of the non-motorized model components, MPO model enhancements and land use model.

Funding Commitments from Other Entities:

CAMPO, NCDOT and TTA are participants of the Triangle Regional Model development, update and maintenance. Each participant is contributing funds for the model Service Bureau functions as well as funds for the TRM update.

Task II-B-4: Travel Surveys

The MPO transit agencies will conduct surveys of transit users. The MPO will provide its share of funding for the collection travel surveys proposed for the Triangle region. The central purpose of the survey is to collect information on origins and destinations, traveler behavior, transit ridership, commercial vehicle usage, work place commuting, freight movement, etc. which would provide accurate inputs for the travel model update. The Service Bureau will be conducting analyses following travel surveys for the TRM update: (1) External station/external-internal trip; (2) transit onboard survey; (3) travel time/speed survey; (4) special generators (including universities) survey.

Objectives:

The MPO will participate in regional data collection for the Triangle Regional Model and other transportation planning purposes. The following surveys are proposed for 2010-2011:

1. Transit Survey;
2. Commercial vehicle/Freight survey
3. Parking survey; and,
4. Travel Time and Speed Survey.

Each of these surveys will produce vital information for calibrating the Triangle Regional Model and validating its performance, and provide some supplemental information for developing transit plans and for the Congestion Management Process (CMP).

Previous Work:

A major data collection effort was started in 2005 in order to support the Triangle Regional Model Major Update, and to improve the validation of the model that will be used for the 2035 LRTP analysis starting in fall 2006. A twelve-county household travel survey covering the Triangle and adjacent counties is underway in spring 2006, and a transit boarding and alighting survey was conducted for all regional transit agencies in fall 2005. In addition, NCDOT has performed special counts at approximately 400 additional locations in the Triangle along with their regular biennial traffic counts.

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Proposed Activities:

The Transit On-Board survey will collect complete information on origins, destinations and travel path for a statistically significant number of trips on every transit route in the triangle (approximately 7000 trip records). In addition, transit operators will collect ridership and service characteristic information to help improve transit services. The Travel Time and Speed Survey will comprehensively assess travel speed characteristics on different roadway facility types, free-flow and congested travel times between important destinations and along significant travel corridors, and bus speeds and travel times in relation to traffic congestion. The Travel Time and Speed Survey is important for trustworthy future forecasts since it will provide data about how travelers in the Triangle area respond to changes in levels of congestion, as well as providing data about speeds and travel times that are used in calibrating the model.

Products/Deliverables:

1. Transit onboard surveys for DATA, Chapel Hill Transit, Duke University, and the TTA.
2. Report of survey statistical and modeling analyses and summarization.
3. Commercial vehicle survey tabulation and summary statistics
4. Travel time summary statistics

Relationship to Other Plans and MPO Activities:

These surveys provide some of the fundamental ground counts necessary to ensure that the Triangle Regional Model performs correctly, both in reproducing observed travel patterns and in forecasting future activity. Survey data will provide valuable information for transit planning, MPO CMP, LRTP MTIP prioritization, etc

Completion Date:

These surveys will be complete by spring 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Consulting/temporary Staffing and MPO technical staff time –All work collecting and collating data for these surveys will be undertaken by

Funding Commitments from Other Entities:

Each of the four TRM stakeholders (DCHC MPO, CAMPO, NCDOT, and TTA) is participating at various levels in these surveys.

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Task II-B-5: Forecast of Data to Horizon Year

The LPA will project base year demographic and socio-economic data-1 into plan horizon year and air quality intermediate years (LRTP horizon year is 2040 and intermediate years for air quality analyses are 2010, 2011, 2017, 2020 2025, 2030, 2035). Forecasts will be generated for County control totals and traffic analysis zones. Forecasts will be made consistent with local land use plans and in corporation with local Planning departments.

Objectives:

1. To develop regionally consistent forecasts of future year socio-economic data.
2. Develop future forecast for population, dwelling units, households, income, vehicle ownership, university beds, counts, etc

Previous Work:

1. Work has been ongoing by LPA staff, staff at DCHC MPO member agencies, and others throughout 2008-2009 to develop a consistent regional methodology for constructing future year land use and socio-economic forecasts; and,
2. Preliminary forecasts were finalized in early summer 2007

Proposed Activities:

1. Continue to work with LPA partners to collect future land use information and to develop and check future year forecasts;
2. Acquire benchmark data for evaluating correctness of future year forecasts, and perform the evaluation;
3. Develop maps, tables and other presentation materials for review of the forecasts by elected officials and the public in local jurisdictions and also at the MPO level; and,
4. Coordinate public review of the future year forecasts and seek formal adoption of the forecasts by the DCHC MPO TAC.

Products/Deliverables:

1. Forecasts of land use and socio-economic data for use in the 2040 LRTP; and,
2. Presentation materials based on those forecasts for public review.

Relationship to Other Plans and MPO Activities:

1. Future year forecasts are an essential element in preparing analyses of alternatives for the 2040 LRTP and for all land use and transportation modeling activities.

Completion Date:

1. Forecasts for use in developing the 2040 LRTP are anticipated to be adopted by the TAC in fall 2010 or spring of 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Work will largely be accomplished by the lead Planning Agency (LPA) MPO technical staff and temporary help.

Funding Commitments from Other Entities:

Parallel efforts are underway in CAMPO, and joint staff work has been undertaken to ensure consistency of results. However each MPO is funding its own work.

Task II-B-6: Community Goals and Objectives

The MPO will re-evaluate community goals and objectives for the 2040 Long range Transportation Plan (LRTP). The process of formulating and re-evaluating goals will begin with visioning exercise. The MPO will conduct public meetings to assess community vision in terms of transportation, land use, growth, quality of life, etc. In addition, the MPO will establish performance targets that will likely be related to mobility, transit use, TDM use, air quality, financial and economic concerns, environmental justice, and land use. The expected work products will be adopted goals and objectives and targets, and a policy framework for achieving the goals.

Objectives:

1. To develop updated set of Goals/Objectives and measures, and targets; and,
2. To involve citizens in a visioning process help update the Goals and Objectives, and targets.
3. Develop policy statements for the LRTP and CTP
4. Develop measures for measuring how goals, objectives and targets are met.

Previous Work:

1. Goals and Objectives and targets in 2035 LRTP; and,
2. List of citizens and leaders who might be interested in participating in the process to update the Goals and Objectives and targets.

Proposed Activities:

1. Conduct public workshops to complete citizen visioning process;
2. Develop community visions
3. Re-evaluate Goals, Objectives and Targets and develop draft goals, objectives, measures and targets
4. Conduct public workshops, meetings and hearing to receive input on proposed Goals and Objectives and targets; and,
5. Recommend and adopt Goals and Objectives, measures and targets.

Products/Deliverables:

1. Citizen transportation vision; and,
2. Updated Goals and Objectives and targets.

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Relationship to Other Plans and MPO Activities:

Updating the Goals and Objectives and targets will be the first public step in developing the 2040 LRTP. Goals, objectives and targets will guide other MPO planning processes such as CMP, JARC/New Freedom, MTIP, TDM, CMAQ, etc.

Completion Date:

The citizen vision process will begin fall 2010, and the update Goals and Objectives and targets will be adopted winter 2010/2011.

Proposed Budget and Level of Effort (Staff or Consulting):

LPA and local government staff will manage and implement the process to complete a citizen vision and update the Goals and Objectives and targets.

Funding Commitments from Other Entities:

None.

Task II-B-7: Forecast of Future Travel Patterns

MPO will generate travel demand forecasts for future years including the LRTP horizon and air quality intermediate years. The forecast of travel patterns will include a review of these factors and comparison to community goals and objectives to determine if changes in assumptions are warranted. Essentially, this task encompasses application of the Triangle Regional Model and other modeling tools to forecast future travel patterns (distribution of trips, volume of travel, vehicle miles traveled, levels of congestion, etc.).

Objectives:

1. Produce model runs as required to support the MPO planning process and development of the Long Range Transportation Plan.

Previous Work:

1. Travel demand forecasts for the 2040 LRTP and air quality conformity determination.
2. Travel demand forecasts for various project level analyses; NEPA, transit forecasting, etc.

Proposed Activities:

1. Run Triangle Regional Model and other modeling tools to develop future year forecasts (summary tables, maps, etc.):
 - a. Run model to evaluate performance and suitability of model to be delivered by TRM Service Bureau;

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- b. Develop future year model setups as required for Long Range Transportation Plan alternative analysis, Air Quality Conformity and other needs; and,
- c. Run model for LRTP alternative analysis.

Products/Deliverables:

1. Confirmation of suitability of Triangle Regional Model for LRTP Analysis; and,
2. Long Range Transportation Plan Alternative Analysis (summary tables, maps, etc.)

Relationship to Other Plans and MPO Activities:

This is a core task for preparing the Long Range Transportation Plan.

Completion Date:

The specific proposed activities in this UPWP will be completed during FY 2010-2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Work on this project will be completed by LPA modeling staff.

Funding Commitments from Other Entities:

None.

Task II-B-8: Capacity Deficiency Analysis

The MPO will conduct a capacity deficiency analysis as part of the 2040 LRTP, CTP and CMS. The analysis will be made to determine existing and existing-plus-committed deficiencies. Volume-to-capacity ration maps will be produced for the 2010 base year, E+C year, and other LRTP and CTP years. Essentially this task encompasses application of the Triangle Regional Model and other modeling tools to analyze deficiencies in the existing transportation system relative to anticipated future travel demand.

Objectives:

Produce model setups and output runs as required evaluating deficiencies in the existing transportation system in the DCHC MPO planning area.

Previous Work:

1. Deficiency analyses for the 2035 LRTP
2. Capacity deficiencies for the CMS, Mobility Report Card and other technical studies.

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Proposed Activities:

- Run Triangle Regional Model and other modeling tools to develop forecasts of travel deficiencies (summary tables, maps, etc.):
- a. Develop model setups as required for deficiency analysis (existing+committed network with future year socio-economic data); and,
 - b. Run model for and prepare output files

Products/Deliverables:

1. Long Range Transportation Plan Deficiency Analysis reports, maps and performance indicators by region, MPO area, county, district, etc (summary tables, maps, etc.)

Relationship to Other Plans and MPO Activities:

This is a core task for preparing the Long Range Transportation Plan.

Completion Date:

The specific proposed activities in this UPWP will be completed during FY 2010-2011

Proposed Budget and Level of Effort (Staff or Consulting):

Work on this project will be completed by LPA staff.

Funding Commitments from Other Entities:

None.

Task II-B-9: Highway Element of LRTP and CTP

The MPO will begin evaluation of highway elements of the Comprehensive Transportation Plan. Performance measures will be established for evaluating highway alternatives. An extensive roster of highway projects will be identified based on the current 2030 LRTP, congestion management system, travel demand forecast and capacity deficiency analysis. Different combinations of these projects will produce a variety of highway alternatives that will be analyzed to find the alternative that best meets the LRTP Goals and Objectives and targets, and meets the fiscal constraint requirement. Each alternative will characterize a one or more emphasis area such as new roadways, transit, etc. The highway element of the Comprehensive Transportation Plan (CTP) will be developed in parallel with the LRTP, but will likely have a different set of constraints (e.g., no fiscal constraint).

Objectives:

1. To identify a list of highway projects based on travel demand and deficiencies;
2. To develop a series of highway alternatives (i.e., set of highway projects with a distinct objective); and,
3. To develop key data for each highway project such as capacity, length, alignment, cost, implementation year, etc.

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Previous Work:

1. 2030 and 2035 LRTPs;
2. Congestion Management System/Mobility Report Card;
3. Triangle Regional Model;
4. Travel demand forecast; and,
5. Capacity Deficiency Analysis.

Proposed Activities:

1. Establish evaluation criteria;
2. Develop key data for highway projects;
3. Re-evaluation of 2035 highway element
4. Generate highway projects and alternatives;
5. Evaluate highway projects and alternatives; and,
6. TAC comments on alternatives.

Products/Deliverables:

1. Preferred highway element option; and,
2. Key data for highway projects

Relationship to Other Plans and MPO Activities:

Before the highway element can be developed, several other tasks must be successfully completed including: TRM update and surveys; travel demand forecasts; capacity deficiency analysis. In addition, the Congestion Management System and 2035 LRTP will be important input to this task.

Completion Date:

Analysis associated with the highway elements of LRTP and CTP will commence in 2010.

Proposed Budget and Level of Effort (Staff or Consulting):

LPA and local government staff will manage and implement the highway element of the LRTP and CTP.

Funding Commitments from Other Entities:

None.

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Task II-B-10: Transit Element of LRTP and CTP

The MPO will begin evaluation of transit elements of the Comprehensive Transportation Plan and the 2040 LRTP. Transit evaluate will include fixed-route bus service, fixed-guideway transit, highway capacity transit and demand responsive transit. Using travel behavior, ridership forecasts and other analysis, evaluation of transit element will look at unmet needs, new services areas and potential markets. Performance measures will be established for evaluating transit alternatives. An extensive roster of transit routes, projects and services will be identified based on the current 2035 LRTP, transit feasibility studies, transit 5-year and master plans, travel demand forecast and capacity deficiency analysis. Different combinations of these services will produce a variety of transit alternatives that will be analyzed to find the alternative that best meets the LRTP Goals and Objectives and targets, and meets the fiscal constraint requirement. Each alternative will characterize a one or more emphasis area such as new roadways, transit intensive, etc. The transit element of the Comprehensive Transportation Plan (CTP) will be developed in parallel with the LRTP, but will likely have a different set of constraints (e.g., no fiscal constraint).

Objectives:

1. To identify a list of transit routes, projects and services based on completed transit studies, travel demand and deficiencies;
2. To develop a series of transit alternatives (i.e., set of transit routes, projects and services with a distinct objective); and,
3. To develop key data for each transit project such as route, ridership capacity (e.g., load capacity and headway), service hours, cost, implementation year, etc.

Previous Work:

1. 2030 and 2035 LRTPs;
2. Feasibility studies (regional transit plans , STAC, US 15-501 Transit Corridor and I-40/NC 54 Transit Corridor, Chapel Hill Transit Master Plan, etc);
3. Transit 5-year TDP and master plans;
4. Travel demand forecast; and,
5. Capacity deficiency analysis.

Proposed Activities:

1. Establish evaluation criteria;
2. Develop key data for transit services;
3. Generate transit projects and alternatives;
4. Evaluate transit projects and alternatives; and,
5. TAC comments on alternatives.

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Products/Deliverables:

1. Preferred transit element option; and,
2. Key data for transit projects.

Relationship to Other Plans and MPO Activities:

Before the transit element can be developed, several other tasks must be successfully completed including: TRM update and surveys; travel demand forecasts; capacity deficiency analysis. In addition, transit plans and feasibility studies, the Congestion Management System and 2035 LRTP will be important input to this task.

Completion Date:

Analysis and studies associated with the transit elements of the LRTP and CTP will commence in fall of 2010.

Proposed Budget and Level of Effort (Staff or Consulting):

LPA and local government staff will manage and implement the transit element of the LRTP and CTP.

Funding Commitments from Other Entities:

None.

Task II-B-11: Bicycle and Pedestrian Element of the LRTP and CTP

The MPO will begin evaluation of bicycle and pedestrian elements of the Comprehensive Transportation Plan and the 2040 LRTP. The MPO will continue work on the Durham Comprehensive pedestrian Plan and the Old Durham-Chapel Hill Road bicycle and pedestrian feasibility study. Work will commence on the update of the Regional Bicycle plan, Durham Comprehensive Bicycle Plan and Durham Pedestrian Plan.

Objectives:

1. Update the LRTP Bicycle and Pedestrian elements, project descriptions and cost information;
2. Collect public input on bicycle and pedestrian facilities and programs to be included in the LRTP;
3. Update the LRTP ancillary planning and program information.
4. Coordinate existing local and regional plans and projects with LRTP bicycle and pedestrian element;
5. Update LRTP Bicycle and Pedestrian Element maps; and,
6. Work with local communities on Regional Priority Lists, in order to implement LRTP Bicycle and Pedestrian elements through the TIP.

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Previous Work:

1. Preparation of the Bicycle and Pedestrian elements of the 2035 LRTP.
2. Durham Comprehensive Bicycle Plan
3. Durham Comprehensive Pedestrian Plan
4. Carrboro Bicycle plan
5. Chapel Hill bike and pedestrian plan

Proposed Activities:

1. Collect planned and proposed bicycle and pedestrian project information from local and regional plans and forums for inclusion in the LRTP;
2. Create and update bicycle and pedestrian facility maps;
3. Create and update bicycle and pedestrian demand analysis;
4. Coordinate planning activities between local and regional agencies for bicycle, and pedestrian, trail/greenway and TDM initiatives.

Products/Deliverables:

Bicycle and Pedestrian elements of the LRTP and CTP will include project descriptions and demand analysis, assessment of need, maps of regional projects, etc.

Relationship to Other Plans and MPO Activities:

Planning activities for the LRTP Bicycle and Pedestrian Element should be coordinated with local and regional bicycle, pedestrian, greenway and TDM Plans, in order to capture all proposed projects within the MPO.

Completion Date:

Continuous – on-going.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will largely be undertaken by LPA staff along with MPO member agencies

Funding Commitments from Other Entities:

None

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Task II-B-13: Collector Street Plan of LRTP

Work will continue on the update and implementation of the MPO-wide Collector Street Plan and circulation study and the Southwest Durham/Northeast Chapel Hill Collector Street Plan. This is envisioned to involve the identification of future collector street connectivity needs, provisions for local street connectivity, development ordinance implementation provisions, additional local government consultation, and public involvement.

Objectives:

1. To create an efficient and effective transportation network, especially that part of the network not addressed in the MPO's long-range transportation plan;
2. To develop criteria for delineating function classification and facility classification
3. To develop a plan that the development community, planners and citizens can easily understand and use for creating this ideal transportation network; and,
4. To ensure coordination of the collector street network among the various jurisdictions and transportation plans in the MPO planning area.

Previous Work:

1. Southwest Durham/Southeast Chapel Hill Collector Street Plan;
2. Wake-Durham Comprehensive Street System Plan;
3. Center of the Region Enterprise (CORE) Collector Street Plan;
4. Southwest Durham Collector Street Plan;
5. Farrington/Stagecoach Rd Corridor Study
6. GIS map layers for street networks, parcels, land use, and environmental features; and,
7. 2030 and 2035 Long Range Transportation Plans.

Proposed Activities:

1. Update criteria for functional classification and facility classification;
2. Collect GIS data layers and produce maps of existing conditions;
3. Conduct series of three workshops in five different geographic areas;
4. Update collector street networks strategies and maps; and,
5. Implement collector street and neighborhood traffic circulation strategies.

Products/Deliverables:

1. Map of collector street network; and,
2. Updated Collector Street reports that includes existing conditions maps, factors considered in developing collector street network, proposed collector street network, and street design considerations.
3. Functional classification and facility classification
4. Traffic circulation strategies

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Relationship to Other Plans and MPO Activities

The process and product of the MPO-wide collector street plan will be based on the Southwest Durham/Southeast Chapel Hill Collector Street Plan. It will be coordinated with the any updates of the CORE and Wake/Durham collector street plans, and the will complement the arterial street network envisioned in the CTP, model networks, CMP networks and 2040 LRTP.

Completion Date:

During the 2010-11 UPWP planning period.

Proposed Budget and Level of Effort (Staff and/or Consulting):

MPO staff will conduct most of the tasks for this project, and a private consultant will assist with some technical tasks.

Funding Commitments from Other Entities:

None.

Task II-B-15: Freight Movement and Mobility Planning

MPO will undertake tasks associated with urban goods movement, specifically freight accessibility and mobility. Tasks to be undertaken include survey of freight carriers, recommendations for improving truck mobility or train/truck intermodal movements, and integrating freight into MPO planning process.

Objectives:

1. To include freight movement data is included in the Triangle Regional Model (TRM); and,
2. To include freight movement data in the project evaluation phase of the 2040 LRTP.
3. Development of a Freight plan, including stakeholder involvement
4. Integration freights and urban goods movement into MPO planning process.

Previous Work:

1. 2030 and 2035 LRTP freight planning; and,
2. Triangle Regional Model commercial vehicles sub-model.

Proposed Activities:

1. Gather Triangle Region freight movement data;
2. Incorporate the freight movement data into the Triangle Regional Model; and
3. Incorporate the freight movement data and planning into the 2040 LRTP development process.

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Products/Deliverables:

1. Freight movement level in Triangle Regional Model (TRM); and,
2. Highway alternatives in 2040 LRTP development process that consider the needs of freight movement.

Relationship to Other Plans and MPO Activities

This task will be coordinated with the Triangle Regional Model (TRM) and be input data into the 2040 LRTP development.

Completion Date:

On-going, preparatory work and stakeholder involvement plan to be completed in summer 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

LPA staff will complete these tasks.

Funding Commitments from Other Entities:

Much of this task will be coordinated with the North Carolina Department of Transportation (NCDOT), RDU and freight and logistics companies

Task II-B-16: Financial Planning

The MPO will examine financial options for funding proposed transportation projects and programs on an as-needed basis. These tasks will include reviewing the financial planning assumptions/projections in the 2035 LRTP to refine cost estimates, and providing support regional efforts geared toward identifying new and alternative funding sources.

Objectives:

1. To ensure that sound financial information is available for project evaluation; and,
2. To support efforts to identify new transportation funding sources

Previous Work:

1. 2030 and 2035 LRTP financial plan and revenue forecasting
2. STAC financial analysis;
3. FY 2009-2015 TIP; and,
4. Various local plans for roadways, transit, bicycles, pedestrian facilities, and Intelligent Transportation Systems (ITS).

Proposed Activities:

1. Refine project costs estimates, as needed;
2. Coordinate and support regional efforts to identify new transportation sources such as the joint TAC finance committee meeting for DCHC/CAMPO, mayors' meetings, North

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3. Carolina Metropolitan Coalition (League of Municipalities), and Regional Transportation Alliance; and,
4. Investigate technical aspects of potential funding sources such as taxing strategies, impact fees and private/public partnerships.

Products/Deliverables:

1. Update of LRTP financial assumption and financial plan;
2. Update of LRTP costs and revenue; and,
3. Development of local revenue options and non-traditional revenue mechanism.

Relationship to Other Plans and MPO Activities

The success in identifying new or modified funding sources will directly affect the 2040 LRTP.

Completion Date:

These tasks will be ongoing.

Proposed Budget and Level of Effort (Staff or Consulting):

MPO LPA staff along with regional technical agencies will complete these tasks.

Funding Commitments from Other Entities:

None.

Task II-B-17: Congestion Management System

The MPO plans to develop and implement a Congestion Management Process (CMP) to address the growing traffic congestion in the region. Besides being a sensible practice, the CMP is a federal transportation planning requirement under the provisions of 23 U.S.C. and 23 CFR. The CMP will identify areas of traffic congestion, investigate the causes of congestion, evaluate alternatives for alleviating congestion, identify strategies for the implementation of those alternatives, and assess financial and economic impacts of those strategies. The Town of Chapel Hill and the Town of Carrboro have already completed several Mobility Report Cards, which contain much of the traffic data and congestion identification inherent in a CMS. The most recent Mobility Report Cards for these towns have been integrated into the MPO CMP.

This task also includes management, operation and administration of the of the MPO TDM programs.

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Objectives:

Update MPO CMP, including CMP work plan, strategies, congestion mitigation measures and monitoring system
 Implementation and monitoring of TDM program and MPO TDM hot spots
 Development of a multi MPO modal Congestion Plan
 Linkage of CMP with LRTP; and,
 Linkage of CMS with operation and MTIP prioritization.

Previous Work:

1. DCHC MPO Congestion Management System Report;
2. Town of Chapel Hill Mobility Report Card;
3. Town of Carrboro Mobility Report Card;
4. Turning movement counts (i.e., intersection traffic counts);
5. ADT counts (traffic volume counts);
6. Screenline counts for the TRM;
7. AADT counts from NCDOT (traffic volume counts);
8. Bicycle counts from bicycle plans;
9. Pedestrian counts from pedestrian plans; and,
10. Transit ridership data from transit operators.

Proposed Activities:

Develop performance measures for evaluating congestion that are appropriate for the MPO;
 Collect data and apply models to identify causes and locations of traffic bottlenecks (data will include different modes);
 Provide a central database and a graphical user-interface to allow for area- facility-based and intersection-based congestion mitigation planning;
 Define Transportation Improvement Projects (TIP) and other projects to mitigate the congestion, and their implementation priorities; and,
 Document the study results in a State of the Systems report.

Products/Deliverables:

1. MPO CMP work plan as required by federal regulations
2. MPO CMP Plan
3. CMP state of System report
4. Reports for system components, including performance measures, congestion definition, transportation data and congestion identification, proposed congestion mitigation measures and policies, and a State of the System Report; and,
5. Database and user interface.

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Relationship to Other Plans and MPO Activities

The MPO CMP will be linked to the CMAQ project selection, STP-DA and TIP project prioritization, the Triangle Regional Model (TRM) and several tasks that support the Surveillance of Change.

Completion Date:

Pre- data collection tasks will occur in the summer 2010. Traffic and other modal counts for CMP will be conducted during fall 2010 and spring 2011. The complete system and report will be finished by fall of 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will largely be undertaken by LPA staff with consulting help and temporary staffing. MPO staff will oversee project, provide project management and review work products done by MPO agencies. Traffic counts will be conducted when schools are in session.

Funding Commitments from Other Entities:

None.

Task II-B-18: Air Quality Planning and Conformity Analysis

The DCHC MPO (the Transportation Advisory Committee) is responsible in making a determination as to whether or not transportation plans, programs, and projects (e.g., LRTP and MTIP) conform to air quality standards and the intent of the State Implementation Plan (SIP). The LPA will continue to provide technical support to the TAC and TCC regarding air quality planning. In addition the LPA will continue participation in the development and application of State Implementation Plans for air quality, participation in the Statewide Interagency Consultation Meetings, and providing assistance to NCDENR in developing and maintaining mobile source emission inventories.

Objectives:

1. To ensure that the plans, programs and projects in the DCHC MPO meet air quality conformity standards; and,
2. To ensure that partner agencies, which affect an air quality conformity lapse in the DCHC MPO planning area, meet air quality conformity standards.

Previous Work:

1. 2030 LRTP;
2. FY 2006-2007 TIP;
3. Triangle Regional Model (TRM) and TRM updates; and,
4. TRM data such as VMT and speeds for each analysis year.

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Proposed Activities:

1. Participate in State Interagency Consultation Meetings to make decisions on schedule, model version use, analysis years, potential SIP revisions, MOBILE6.2 modeling parameters, etc.; and,
2. Coordinate State Interagency Consultation Meetings requirements with MPO activities such as TRM enhancements, FY 2007-2013 TIP, Socio-economic data update for 2035 LRTP.

Products/Deliverables:

1. State Interagency Consultation Meetings policy that considers needs of DCHC MPO; and,
2. Air quality conformity coordination with State Interagency Consultation Meetings, CAMPO, NCDOT, etc.

Relationship to Other Plans and MPO Activities

Coordination between the State Interagency Consultation Meetings policies and the needs of the DCHC MPO's 2035 LRTP and FY 2007-2013 TIP are critical for ensuring air quality conformity.

Completion Date:

These tasks will be ongoing.

Proposed Budget and Level of Effort (Staff or Consulting):

MPO staff will complete these tasks.
Staff effort – 176 person hours.

Funding Commitments from Other Entities:

Air quality inter agencies – CAMPO, NCDOT, DENR-DAQ and EPA – contribute staff hours to the air SIP development and air quality non- attainment demonstration.

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Task III-A-: Planning Work Program

This task will be to administer the FY 2009-2010 UPWP and prepare and process amendments as needed. Evaluate transportation planning work needs and emphasis areas and prepare the FY 2010-2011 UPWP. To prepare and continually maintain a Unified Planning Work Program (UPWP) that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for the FY 2007-2008. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

Objectives:

1. To prepare and continually maintain a Unified Planning Work Program (UPWP) that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for FY 2010-2011;
2. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines; and,
3. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

Previous Work:

1. FY 2009-10 UPWP; and,
2. Amendment of the UPWP as requested by member agencies.
3. Prepare quality invoices and reports
4. Prepare annual report
5. Prepare financial and audit management

Proposed Activities:

1. Review and amend relevant portions of the UPWP in order to meet new planning requirements and/or circumstances pertinent to the MPO emphasis and transportation planning objectives;
2. Develop a new UPWP for the DCHC planning area covering the next program year. The development of a new UPWP will be prepared in cooperation with NCDOT and subject to the development and public involvement process; and,
3. Amend the UPWP, as needed (the amendment process commonly occurs in January/February of each year).

**CITY OF DURHAM/LPA
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Products/Deliverables:

1. Prepare quality invoices and reports
2. Prepare financial and audit management
3. Management and operation and Administration of the 3C process
4. Amendments to the FY 2009-2010 UPWP, as needed; and,
5. Development of the FY 2010-2011 UPWP.

Relationship to Other Plans and MPO Activities

The UPWP funds the MPO's planning activities, including many critical programs such as the long-range transportation plan, Transportation Improvement Program (TIP) and air quality conformity.

Completion Date:

These tasks will be ongoing.

Proposed Budget and Level of Effort (Staff or Consulting):

MPO staff will complete these tasks.

Funding Commitments from Other Entities:

The Towns of Chapel Hill and Carrboro are proposing funding for UPWP task item.

Task III-B-Transportation Improvement Program

The LPA will perform tasks associated with the amendment of the FY 2006-2012 MTIP. The LPA staff will continue to develop FY 2007 – 2013 MTIP. This includes the refinement of the MPO Priority Needs and the identification of the transportation projects, programs, and services towards which the MPO will direct STP DA funds. As the Lead Planning Agency (LPA) of the DCHC MPO, the City of Durham, Transportation Division is responsible for annually developing, amending, adjusting and maintaining the Transportation Improvement Program (TIP) for the metropolitan area. Under this activity, the LPA will update and amend the current, seven-year program of transportation improvement projects (MTIP) that is consistent with the 2025 Long-Range Transportation Plan, STIP, the State Implementation Plan (SIP), EPA Air Quality Conformity Regulations and FHWA/FTA Planning Regulations.

Objectives:

1. To develop and adopt the FY 2009-2015 MTIP to support MPO goals; and,
2. To appropriately amend the FY 2009-2015 MTIP, as needed.

Previous Work:

1. FY 2007-2013 MTIP; and,
2. FY 2007-2013 MTIP Regional Priority Project List

**CITY OF DURHAM/LPA
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FY 2010-2011 UPWP**

Proposed Activities:

1. Continue monitoring of ARRA- Stimulus projects
2. Reporting and oversight of Stimulus projects
3. Project selection and management of any new Stimulus projects
4. Draft FY 2011-2021 MTIP;
5. Develop MPO SPOT project priorities
6. Develop Regional Project Priorities
7. Conduct public involvement activities for Draft FY 2011-2021 MTIP;
8. Analyze Draft FY 2011-2021 State Transportation Improvement Program (STIP) and develop support documents for negotiations);
9. Negotiate MTIP and STIP project reconciliation with NCDOT; and,
10. Adopt FY 2011-2021 MTIP.

Products/Deliverables:

1. Draft FY 2011-2021 MTIP and full report (including financial and project analysis);
2. Flagged Issues;
3. Meetings with NCDOT (and meeting materials); and,
4. Adopted FY 2011-2011 MTIP.

Relationship to Other Plans and MPO Activities

The MTIP Regional Project Priority List will provide information for the development of the MTIP, STIP and SPOT.

Completion Date:

On-going.

Proposed Budget and Level of Effort (Staff and/or Consulting):

MPO staff will complete these tasks.

Funding Commitments from Other Entities:

None

**CITY OF DURHAM/LPA
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C-2: Environmental Justice

In accordance with Federal Action (Executive Order 12898), the MPO will develop an Environmental Justice Plan which will focus on complying with the Executive Order and the three basic principles of Environmental Justice:

1. Ensure adequate public involvement of low-income and minority groups in decision-making;
2. Prevent disproportionately high and adverse impacts to low-income and minority groups resulting from transportation and environmental decisions made by the MPO; and
3. Assure that low-income and minority groups receive a proportionate share of benefits resulting from transportation decisions made by the MPO.

Objectives:

To ensure that minority and low-income communities are:

1. Not adversely affected by transportation projects and policies;
2. Treated equitably in the provision of transportation services and projects; and
3. Provided full opportunity for participation in MPO transportation planning and decision-making process.

Previous Work:

1. Demographic profiles based on 2000 Census
2. Maps to identify areas of low-income, minority and elderly populations, job accessibility, and overlay of major employers, fixed route transit systems, and major shopping areas.

Proposed Activities:

1. Develop MPO Environmental Justice Plan, including establishment of an Environmental Justice Advisory Board;
2. Update demographic profiles based on 2010 Census and MPO 2010 base year data - maps to identify areas of low-income, minority and elderly populations, job accessibility, and overlay of major employers, fixed route transit systems, and major shopping areas;
3. Provide increased opportunities for under-served populations to be represented in the transportation planning process;
4. Define target areas through the use of Census Block Group data from the 2000 Census;
5. Analyze the mobility of target area populations to jobs, childcare, and transit routes;
6. Review existing public outreach and involvement plan;
7. Develop a protocol for responding to issues and concerns regarding Environmental Justices in general and Hispanic population in particular; and,
8. Conduct analysis as needed regarding equitable distribution of transportation system benefits and costs among all socio-economic groups throughout the MPO area.

**CITY OF DURHAM/LPA
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FY 2010-2011 UPWP**

Products/Deliverables:

1. Updated maps utilizing information from the 2010 Census and 2010 base year data;
2. Increased involvement of low-income and minority populations in the transportation planning process;
3. Technical assistance memoranda, reports, and workshops as needed;
4. Protocol for responding to issues and concerns regarding Environmental Justice; and,
5. MPO Environmental Justice plan.

Relationship to Other Plans and MPO Activities:

All MPO planning activities involving public outreach will be affected by the recommendations of this plan – including the public involvement for the East End Connector and Alston Avenue environment analyses. Project selection and evaluation for the Long Range Transportation Plan will include an environmental justice component. The Environmental Justice Advisory Board will be consulted on various MPO planning activities.

Completion Date:

Environmental justice activities will be on-going.

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will be undertaken by LPA staff.

Funding Commitments from Other Entities:

None.

Task III-C-4: Planning for the Elderly and Disabled

The MPO will emphasize planning and provision of transportation facilities and services for the elderly and disabled, especially in the development of the 2035 Long Range Transportation Plan (LRTP). The MPO will update inventory of locations and needs of elderly and disabled persons and ensure that the proposed highway, transit and pedestrian plans integrate this information in the planning process.

Objectives:

To ensure that the elderly and disabled population is not adversely affected by transportation projects and policies; are treated equitably in the provision of transportation services and projects; and are provided full opportunity for participation in MPO transportation planning and decision-making process.

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FY 2010-2011 UPWP**

Previous Work:

Demographic profiles based on 2010 Census; and,
 Maps to identify areas of elderly and disabled population in relationship to services and other destinations;
 Local transit and pedestrian plans that have integrated the elderly and disabled population into the planning process; and,
 Transit operator plans and grant applications.

Proposed Activities:

1. Update demographic profiles and define target areas based on 2000 Census and MPO 2010 base year data;
2. Provide increased opportunities for under-served populations to be represented in the transportation planning process; and,
3. Integrate this data into the 2040 LRTP planning process and transit operator plans.

Products/Deliverables:

Updated maps utilizing information from the 2010 Census and 2010 base year data;
 Increased involvement of the elderly and disabled population;
 Specific tasks in the 2040 LRTP that address the needs of the elderly and disabled; and,
 Major tasks in the transit plans and grant applications of the local and regional transit operators that specifically address the service needs of the elderly and disabled.

Relationship to Other Plans and MPO Activities:

The needs of the elderly and disabled will be addressed in all MPO planning activities involving public outreach and service and project planning.

Completion Date:

All the transit and MPO planning efforts will contain an element addressing the needs of the elderly and disabled.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA staff and transit operators.

Funding Commitments from Other Entities:

None.

**CITY OF DURHAM/LPA
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C-6: Public Involvement

The MPO will continue to provide an early, proactive and a meaningful public participation and input throughout the transportation planning process, including providing for open exchange of information and ideas between the public and transportation decision-makers.

Objectives:

1. To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process;
2. To assess the effectiveness of the current Public Involvement Process as required by the federal certification team; and,
3. To develop and enhance the process of public dissemination of information.

Previous Work:

1. MPO Public Involvement Process;
2. MPO website;
3. Newsletters;
4. Stakeholder address database; and,
5. Newspaper advertisements.

Proposed Activities:

1. Refine the current Public Involvement Process as needed;
2. Apply the Public Involvement Process to transportation programs and tasks; and,
3. Public meetings, workshops, and outreach programs to increase public participation, information dissemination, and education.

Products/Deliverables:

1. Update and maintenance of website;
2. Update and maintenance of mailing list database;
3. Quarterly MPO newsletters, and project specific news letters; and,
4. Support of Citizen Advisory Committee

Relationship to Other Plans and MPO Activities:

Public involvement is essential to all MPO planning activities. The Public Involvement Process should inform and guide all outreach initiatives.

Completion Date:

Public involvement will occur on a continual basis. The website emails, and mailings will occur regularly throughout the year.

**CITY OF DURHAM/LPA
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

None.

Task III-D-2: Environmental Analysis & Pre-TIP Planning

The LPA will continue to participate regularly and consistently in the TIP project planning & development process, including submission of comments, attending public meetings, attending scoping meetings, attending NEPA 404 merger meetings, and participating in field inspections. The LPA will be involved in the East End Connector NEPA process including taking the lead in the public involvement process. The MPO will continue to support and be involved in NCDOT efforts to link NEPA process in the MPO systems planning process.

Objectives:

1. To ensure that the goals, objectives and needs of the DCHC MPO are integrated in the environmental planning process of transportation projects; and,
2. To ensure the needs of the citizens in the DCHC MPO planning area are considered in the project planning process.

Previous Work:

Regular project scoping, environmental study and public meetings, especially those conducted by the NCDOT.

Proposed Activities:

Regular participation at project scoping, environmental study and public meetings, especially those conducted by the NCDOT;

Review and comment on project scoping and environmental documents;

LPA participation in NEPA process for the East End Connector; and,

LPA leadership in the public involvement process for the East End Connector.

Products/Deliverables:

Written comments on project scoping and environmental studies, activities and documents;

Relationship to Other Plans and MPO Activities:

The activities of this task are directly related to transportation projects in the long-range transportation plan and to projects that are being considered for TIP funding.

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Completion Date:

These activities are provided as needed.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by LPA and municipal staff.

Funding Commitments from Other Entities:

None.

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**CITY OF DURHAM – DURHAM AREA TRANSIT AUTHORITY (DATA)
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A5: Transit System DATA

DATA will continue to conduct on-going FTA-required data collection and analysis for the fixed route and Paratransit systems. The data collection will include system-wide surveys and daily ridership counts by route for compilation into monthly ridership summaries to be reported to NCDOT and to the NTD. Also, one month during fall, ridership data will be collected by route and segregated by peak and off peak and average weekend counts for the purpose of LRTP update.

Objectives:

1. To collect daily ridership information, analyze and if necessary amend service in line with established service and route performance standards to ensure service effectiveness and efficiency.
2. To provide service reports to the DATA Board of Trustees, NCDOT, and to the MPO for LRTP support.

Previous Work:

This service continues to be performed on daily, monthly and an annual basis for reporting to the FTA via the NTD, also to the DATA Board of Trustees and to NCDOT (PTD). Information is used internally to monitor and amend services on an ongoing basis.

Proposed Activities:

1. Collect daily ridership count using farebox counts and also Automatic Passenger Counters (APC).
2. Compile daily ridership counts into monthly ridership reports for detailed analysis
3. Provide compiled ridership information to the DATA Board of Trustees, the FTA and the NCDOT, the MPO for LRTP update
4. Make necessary route and service changes to promote service efficiency and effectiveness.

Products:

1. Daily Ridership summaries
2. Monthly ridership summaries for in-house review
3. FTA monthly ridership report including annual NTD reports
4. Monthly Board of Trustees and NCDOT reports
5. Short Range Transportation Plan

Relationship to Other Plans and MPO Activities:

Long Range Transportation Plan –Transit Element

**CITY OF DURHAM – DURHAM AREA TRANSIT AUTHORITY (DATA)
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Completion Date:

The expected completion date for this project is June 30, 2011.

Proposed Budget and Level of Effort (Staff or Consulting)

Tasks will be performed by existing DATA staff

Funding Commitments from Other Entities:

The City of Durham and NCDOT (public Transportation Division) will each provide a 10% match to the federal 80% portion of the grant fund.

Task II-B: Travel Surveys (LRTP Project)

DATA will work with the DCHC-MPO to conduct Transit Surveys related to the MPO's LRTP-Transit information update. The survey will comprise of Boarding and Alighting counts at designated stops and route segments. It will also include on-board passenger attitudinal surveys during AM Peak and PM peak periods for a period of one month during fall. The data collected will be compiled and reported to the Lead Planning agency for further analysis and finally for inclusion in the DCHC MPO's Long Range Transportation Plan.

Objectives:

1. To collect daily (AM and PM Peak) ridership information by route and at the stop level as required by the LRTP data analysis process.
2. To conduct passenger onboard survey and compile survey report for inclusion in the LRTP update.

Previous Work:

DATA has in the past provided on-going transit data collection and compilation reports to the MPO for inclusion in the Transit Element portion of the LRTP document.

Proposed Activities:

1. Collect daily ridership counts using surveyors and farebox Automatic Passenger Counters
2. Compile daily ridership counts into monthly reports for detailed analysis
3. Provide compiled ridership information to the MPO for LRTP update
4. Use surveyors to conduct on-board passenger counts showing trip origins and destinations

**CITY OF DURHAM – DURHAM AREA TRANSIT AUTHORITY (DATA)
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Products:

1. Daily (AM & PM peak) Ridership summaries
2. Monthly ridership summaries
3. Daily on-board counts including summaries of trip characteristics
4. Short Range Transportation Plan Updates

Relationship to Other Plans and MPO Activities:

Long Range Transportation Plan –Transit Element

Completion Date:

The expected completion date for this project is June 30, 2011.

Proposed Budget and Level of Effort (Staff or Consulting)

Tasks will be performed by existing DATA staff and hired surveyors

Funding Commitments from Other Entities:

The City of Durham and NCDOT (public Transportation Division) will each provide a 10% match to the federal 80% portion of the grant fund.

Task II-B-16: Financial Planning

DATA staff will prepare and monitor fiscal programs for the City of Durham, the FTA, and the State of North Carolina to ensure compliance with pertinent financial procedures as established by the FTA and State of North Carolina and the City of Durham's accounting, purchasing and finance departments.

Objectives:

1. To monitor the monthly expenditure reports for all budget sections for appropriations, discrepancies and encumbrances by journal entry.
2. Prepare and submit monthly grant reports to the FTA, and appropriate City and State Departments
3. Prepare and monitor contracts that are for the transit authority.
4. Maintain and monitor all transit program funds
5. Setup and monitor project accounts as requested or needed

Previous Work:

On-going by transit staff

**CITY OF DURHAM – DURHAM AREA TRANSIT AUTHORITY (DATA)
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Proposed Activities:

1. Prepare quarterly and end of year reports for federal funds
2. Prepare revenue and expenditure estimates for the transit program's annual budget
3. Ensure compliance with all financial programs and procedures established by the FTA, the City and the State
4. Reviews and signs requisitions, purchase orders, receiving reports, and make appropriate transfers
5. Setup and monitor new and existing accounts when ns requested

Products:

1. Monthly grant reports to FTA
2. Quarterly grant and project reports to the FTA, MPO and the State
3. Signed requisitions and purchase orders
4. Annual financial statements as required by the NTD financial reporting procedure
5. Established project accounts and annual budgets
6. Monthly invoices, expenditures reconciliation
7. Contracts signed by the transit authority

Relationship to Other Plans and MPO Activities:

Establish financial and accounting procedures for projects and grants that have MPO oversight

Completion Date:

The expected completion date for this project is June 30, 2011.

Proposed Budget and Level of Effort (Staff or Consulting)

Tasks will be performed by existing DATA staff and hired surveyors

Funding Commitments from Other Entities:

The City of Durham and NCDOT (public Transportation Division) will each provide a 10% match to the federal 80% portion of the grant fund.

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442400
3- Task Code	II-A-5
4- Title	<i>Transit System Data</i>
5- Task Objective	To conduct FTA required passenger counts. Continue to conduct system-wide surveys and studies including daily ridership count by route for one month during the fall of 2010, data segregated by peak and off peak and average weekend count for the purpose of service improvement, and LRTP update
6- Tangible Product Expected	Daily Ridership by route, by Peak and off-peak in GIS spatial data format, route recommendation report.
7- Expected Completion Date of Products	Jun-2011
8- Previous Work	FTA passenger counts are required every 3 years. This data will be collected for 2008.
9- Prior FTA Funds (2010)	(5303) \$67,851, (5307) \$8,957
10- Relationship	Data retrieved is used to disseminate performance information to the Board under task III-E
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303-FY11 Local 10%	\$ 8,431
17- Section 5303-FY11 NCDOT 10%	\$ 8,431
18- Section 5303-FY11 FTA 80%	\$ 67,851
19- Section 5307 Transit - Local 10%	\$ 1,120
20- Section 5307 Transit - NCDOT 10%	\$ 1,120
2 1- Section 5307 Transit - FTA 80%	\$ 8,957
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442301
3- Task Code	II-B-4
4- Title	<i>Travel Surveys</i>
5- Task Objective	Transit survey (Boarding and Alighting .On-Board Surveys). Input at the TCC level on matters related to the transit element of the LRTP.
6- Tangible Product Expected	Transit on-board and transit boarding and alighting survey results. Boarding and alighting by route (one day sample of each route) tabulated in GIS spatial format.
7- Expected Completion Date of Products	Jun-2011
8- Previous Work	O- board surveys conducted on regular basis.
9- Prior FTA Funds	\$7,682
10- Relationship	
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307-FY 11 Transit - Local 10%	\$ 1,200
20- Section 5307-FY11 Transit - NCDOT 10%	\$ 1,200
21- Section 5307-FY11 Transit - FTA 80%	\$ 9,600

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442100
3- Task Code	II-B-10
4- Title	<i>Transit Element of the LRTP</i>
5- Task Objective	To provide needed Transit support for the MPO's LRTP updates
6- Tangible Product Expected	Annual Planning Work program outline and costs associated with them.
7- Expected Completion Date of Products	June-2011
8- Previous Work	2009-10 Planning Work Program.
9- Prior (2010) FTA Funds	\$6,486
10- Relationship	The Planning Work Program is intended to support various MPO planning efforts toward the update of the LRTP
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit (2011) - Local 10%	\$ 811
20- Section 5307 Transit (2011) - NCDOT 10%	\$ 811
2 1- Section 5307 Transit (2011) -FTA 80%	\$ 6,486
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442400
3- Task Code	II-B-16
4- Title	<i>Financial Planning</i>
5- Task Objective	To prepare and monitor fiscal programs for the City the FTA and the State of North Carolina and ensuring compliance with all financial procedures as well as monitor contracts , grants and invoices
6- Tangible Product Expected	Quarterly and annual financial reports, reports on processed invoices and purchase orders as well as contract payments.
7- Expected Completion Date of Products	June-2011
8- Previous Work	None
9- Prior FTA Funds	None
10- Relationship	
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303-FY11 Local 10%	\$ 4,544
17- Section 5303-FY11 NCDOT 10%	\$ 4,544
18- Section 5303-FY11FTA 80%	\$ 36,352
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442500
3- Task Code	II-B-17
4- Title	<i>Congestion Management</i>
5- Task Objective	To assist the MPO in its congestion management strategies by collecting and providing transit-related data.
6- Tangible Product Expected	Work plan and transit related data in GIS format
7- Expected Completion Date of Products	June-2011
8- Previous Work	Short Range Transportation Development Plan.
9- Prior(2010) FTA Funds	\$12,928
10- Relationship	These activities support local MPO transportation planning effort.
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307(2011) Transit - Local 10%	\$ 1,616
20- Section 5307(2011) Transit - NCDOT 10%	\$ 1,616
21- Section 5307(2011) Transit - FTA 80%	\$12,928
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442500
3- Task Code	III-A
4- Title	<i>Planning Work Program</i>
5- Task Objective	To identify task areas and staff hours needed to complete each task.
6- Tangible Product Expected	Annual Planning Work Program outline and costs associated with them
7- Expected Completion Date of Products	June-2011
8- Previous Work	Planning Work Program.
9- Prior (2010) FTA Funds	\$23,866
10- Relationship	The MPO Work Program is intended to support various planning efforts throughout the City of Durham's Transit System.
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307(2011) Transit - Local 10%	\$ 2,983
20- Section 5307(2011) Transit - NCDOT 10%	\$ 2,983
21- Section 5307(2011) Transit - FTA 80%	\$ 23,866
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442500
3- Task Code	III-B
4- Title	<i>Transportation Improvement</i>
5- Task Objective	To continue the program of developing plans for improving transit service and transportation in general locally.
6- Tangible Product Expected	More efficient plans for improving service and routes locally
7- Expected Completion Date of Products	June-2011
8- Previous Work	Short Range Transportation Development Plan.
9- Prior (2010) FTA Funds	\$1,912
10- Relationship	These activities support local MPO transportation planning effort.
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 FY11 Transit - Local 10%	\$ 239
20- Section 5307 FY11 Transit - NCDOT 10%	\$ 239
21- Section 5307 FY11 Transit - FTA 80%	\$ 1,912
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442500
3- Task Code	III-C-2
4- Title	<i>Environmental Justice (EJ)</i>
5- Task Objective	To assist the MPO in its transportation outreach to Minorities and those with Limited English Proficiency by updating existing EJ mailing list and providing transit-related data.
6- Tangible Product Expected	Work plan and transit related EJ data
7- Expected Completion Date of Products	June-2011
8- Previous Work	Transportation Improvement Program.
9- Prior (2010) FTA Funds	None
10- Relationship	These activities support local MPO transportation planning effort.
11- Agency	City of Durham, Transportation Department
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 FY11 Transit - Local 10%	\$ 500
20- Section 5307 FY11 Transit - NCDOT 10%	\$ 500
21- Section 5307 FY11 Transit - FTA 80%	\$ 4,000
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442100
3- Task Code	III-C-6
4- Title	<i>Public Involvement</i>
5- Task Objective	To seek out untapped ridership through aggressive marketing tactics. Conduct market surveys and seek new advertising mediums.
6- Tangible Product Expected	Positive customer view of the transit system and increased ridership from nontraditional users.
7- Expected Completion Date of Products	June-2011
8- Previous Work	Significant marketing efforts have been undertaken to improve service and the dissemination of information to the public.
9- Prior FTA Funds	\$42,165
10- Relationship	This information is used in conjunction with Task III-A.
11- Agency	City of Durham, Public Works Department (Transportation)
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 FY11 Transit - Local 10%	\$ 5,271
20- Section 5307 FY11 Transit - NCDOT 10%	\$ 5,271
21- Section 5307 FY11 Transit - FTA 80%	\$ 42,165
22- Additional Funds - Local 100%	

**DURHAM AREA TRANSIT AUTHORITY (DATA)
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	City of Durham
2- FTA Code	442100
3- Task Code	III-E
4- Title	<i>Management and Operations</i>
5- Task Objective	To prepare all required reports, to attend technical meetings and to continue oversight of the Transit operation.
6- Tangible Product Expected	To remain in compliance with all reporting requirements, to ensure the efficient operation of the transit system and to ensure that public funds are spent in a responsible manner.
7- Expected Completion Date of Products	June-2011
8- Previous Work	Creation of internal procedures to monitor and report transit data and new procedures to monitor financial operations.
9- Prior FTA Funds	\$206,351
10- Relationship	Data retrieved from Transit System Data task II-A-5 also relevant to this task.
11- Agency	City of Durham, Public Works Department (Transportation)
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - F11WA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 FY11 Transit - Local 10%	\$ 25,794
20- Section 5307 FY11 Transit - NCDOT 10%	\$ 25,794
21- Section 5307 FY11 Transit - FTA 80%	\$ 206,351
22- Additional Funds - Local 100%	

CITY OF DURHAM
Anticipated DBE Contracting Opportunities for FY11

Name of MPO: CITY OF DURHAM

Person Completing Form: Felix Nwoko

Telephone Number: 919-560-4366 ext. 36424

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out

Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note “No contracting opportunities” on the table if you do not anticipate having any contracting opportunities.

**Durham-Chapel Hill-Carrboro Urban Area
FY 2010-2011 Unified Planning Work Program
Proposed Funding Source Tables**

Town of Carrboro

2/25/2010 14:45

Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II A Surveillance of Change														
1 Traffic Volume Counts	0	0	90	360							90	-	360	450
2 Vehicle Miles of Travel	0	0	0	0							-	-	-	-
3 Street System Changes	0	0	0	0							-	-	-	-
4 Traffic Accidents	0	0	48	192							48	-	192	240
5 Transit System Data	0	0	0	0							-	-	-	-
6 Dwelling Unit, Pop. & Emp. Change	0	0	0	0							-	-	-	-
7 Air Travel	0	0	0	0							-	-	-	-
8 Vehicle Occupancy Rates	0	0	0	0							-	-	-	-
9 Travel Time Studies	0	0	60	240							60	-	240	300
10 Mapping	0	0	214	856							214	-	856	1,070
11 Central Area Parking Inventory	0	0	0	0							-	-	-	-
12 Bike & Ped. Facilities Inventory	0	0	48	192							48	-	192	240
13 Bike & Ped. Counts	0	0	240	960							240	-	960	1,200
II B Long Range Transp. Plan														
1 Collection of Base Year Data	0	0	206	824							206	-	824	1,030
2 Collection of Network Data	0	0	210	840							210	-	840	1,050
3 Travel Model Updates	0	0	0	0							-	-	-	-
4 Travel Surveys	0	0	0	0							-	-	-	-
5 Forecast of Data to Horizon year	0	0	74	296							74	-	296	370
6 Community Goals & Objectives	0	0	48	192							48	-	192	240
7 Forecast of Future Travel Patterns	0	0	0	0							-	-	-	-
8 Capacity Deficiency Analysis	0	0	0	0							-	-	-	-
9 Highway Element of th L RTP	0	0	0	0							-	-	-	-
10 Transit Element of the L RTP	0	0	0	0							-	-	-	-
11 Bicycle & Ped. Element of the L RTP	0	0	0	0							-	-	-	-
12 Airport/Air Travel Element of L RTP	0	0	0	0							-	-	-	-
13 Collector Street Element of L RTP	0	0	0	0							-	-	-	-
14 Rail, Water or other mode of L RTP	0	0	0	0							-	-	-	-
15 Freight Movement/Mobility Planning	0	0	0	0							-	-	-	-
16 Financial Planning	0	0	0	0							-	-	-	-
17 Congestion Management Strategies	0	0	240	960							240	-	960	1,200
18 Air Qual. Planning/Conformity Anal.	0	0	0	0							-	-	-	-
II C Short Range Transit Planning														
1 Short Range Transit Planning	0	0	210	840							210	-	840	1,050
III-A Planning Work Program														
	0	0	268	1,072							268	-	1,072	1,340
III-B Transp. Improvement Plan														
	0	0	0	0							-	-	-	-
III-C Cvi Rgts. Cmp./Otr. Reg. Rqqs.														
1 Title VI	0	0	0	0							-	-	-	-
2 Environmental Justice	0	0	150	600							150	-	600	750
3 Minority Business Enterprise	0	0	0	0							-	-	-	-
4 Planning for the Elderly & Disabled	0	0	60	240							60	-	240	300
5 Safety/Drug Control Planning	0	0	0	0							-	-	-	-
6 Public Involvement	0	0	496	1,984							496	-	1,984	2,480
7 Private Sector Participation	0	0	0	0							-	-	-	-
III-D Incidental Ping./Project Dev.														
1 Transportation Enhancement Ping.	0	0	0	0							-	-	-	-
2 Enviro. Analysis & Pre-TIP Ping.	0	0	90	360							90	-	360	450
3 Special Studies	0	0	718	2,872							718	-	2,872	3,590
4 Regional or Statewide Planning	0	0	0	0							-	-	-	-
III-E Management & Operations														
1 Management & Operations	0	0	2,206	8,824							2,206	-	8,824	11,030
Totals	\$0	\$0	\$5,676	\$22,704	\$0	\$0	\$0	\$0	\$0	\$0	\$5,676	\$0	\$22,704	\$28,380

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Task II-A-1. Traffic Volume Counts

The Town will provide local traffic count data, collected for various local planning purposes, which are relevant to the Congestion Management System and the Triangle Regional Model update. The Town will also conduct additional traffic counts, as needed, specifically for the CMS and TRM update.

Objectives

1. To provide necessary local traffic data for the CMS
2. To provide necessary local traffic data for the TRM update

Previous work

The Town has conducted traffic counts for fulfilling a variety of local planning purposes, such as evaluating traffic calming solutions. Traffic impact analyses and traffic signal warrant studies are two other sources of traffic volume data. Two Mobility Report Cards (2003 and 2005) report vehicular traffic and congestion, as well as pedestrian and bicycle traffic. The 2009 Comprehensive Bicycle Transportation Plan collected bicycle use data through a survey.

Proposed activities

1. Collect traffic data using the Town's pneumatic tube counters.
2. Provide data collected through other planning processes (e.g. traffic impact assessments) to the MPO as needed.

Products

1. Traffic volume data from 2010 or as recent a year as possible.

Relationship to other plans and MPO activities

Data will be used for both the CMS and TRM projects. Counts may be helpful in determining focus areas for TDM strategies. Applications for other planning activities will be determined at a future time.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 15 hours

	Local	FHWA	Total
Traffic counts	\$90	\$360	\$450

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Task II-A-4. Traffic Accidents

Consistent with accident data collection capacity, the Town will provide local data as needed on accidents for the congestion management system.

Objectives

1. Provide local accident data for the CMS.

Previous work

The 2005 Mobility Report Card collected data on pedestrian and bicyclist safety. The 2009 Comprehensive Bicycle Transportation Plan includes data on bicycle crashes from the NCDOT Traffic Safety Unit.

Proposed activities

1. Submit traffic accident data to the MPO for the CMS.

Products

1. Up-to-date traffic accident data.

Relationship to other plans and MPO activities

Accident data may be relevant for the MPO Safety and Security Plan when it is underway.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 8 hours

	Local	FHWA	Total
Traffic accidents	\$48	\$192	\$240

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Task II-A-9. Travel Time Studies

The Town will contribute to travel time studies on selected links to contribute information to the CMS and TRM update. Where the Town has conducted local travel time estimates relevant to MPO activities, the Town will share that information as needed.

Objectives

1. To contribute to travel time estimates for the CMS and TRM update.
2. Share results of local travel time estimates with the MPO as needed.

Previous work

Previous LRTP processes have included travel time surveys that collected data to input into the TRM. Locally, the Town has analyzed travel time on selected corridors through two Mobility Report Cards in 2003 and 2005.

Proposed activities

1. Travel time studies (conducted by the MPO)
2. Submission of local travel time estimates through GIS Network Analyst if needed for MPO planning processes.

Products

1. Funding for regional travel time studies for the CMS and TRM update.
2. As needed, local travel time data relevant to MPO activities

Relationship to other plans and MPO activities

Travel time data will be available as needed for other MPO activities.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 10 hours

	Local	FHWA	Total
Traffic accidents	\$60	\$240	\$300

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Task II-A-10. Mapping

The Town's GIS specialist, along with other planning staff, will assist in developing base maps, GIS layers, and databases that are an integral part of the 2040 LRTP analysis and public display. They will provide, as needed, GIS layers for highway, transit, bike, and pedestrian networks as well as parcel and zonal spatial information.

Objectives

1. To provide GIS data as needed for the 2040 LRTP planning process and the GIS Warehouse Integration and Automation project.
2. To maintain and update transportation-related GIS data for the Town

Previous work

Throughout the year the Town's GIS specialist updates the transportation layers and shape files as new developments are built, modifications to the existing network are made, and plan for the transportation network progress. The Town has contributed to the GIS Warehouse/Integration and Automation project.

Proposed activities

1. GIS data updates on an as-needed basis

Products

1. Up-to-date GIS data

Relationship to other plans and MPO activities

Local GIS data will be submitted as needed for both the 2040 LRTP and GIS Warehouse projects.

Proposed budget and level of effort

Tasks will primarily be completed by the Town's GIS specialist, coordinating with the Town's transportation planner, with possible contributions by other planning staff.

Local staff hours: 30 hours

	Local	FHWA	Total
Mapping	\$214	\$856	\$1,070

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A-12. Bike and Ped Facilities Inventory

The Town will contribute bicycle and pedestrian facility data to the MPO for the 2040 LRTP.

Objectives

1. To enhance the 2040 LRTP's ability to accurately account for bicycle and pedestrian travel by providing up-to-date information on local bike-ped facilities.

Previous work

The Town has collected bicycle and pedestrian facility data from a number of planning processes, including the 2009 Comprehensive Bicycle Transportation Plan, the sidewalk bond program, and two Mobility Report Cards. This should make it relatively straightforward to provide the MPO with accurate data on these facilities.

Proposed activities

1. Submit bicycle and pedestrian facility data to the MPO when needed.

Products

2. Bike-ped facility data.

Relationship to other plans and MPO activities

This information is useful for not only the 2040 LRTP, but also the CTP and CMP processes. It would also be an essential element of a Comprehensive Bicycle/Pedestrian Plan for the MPO. As bicycling and walking are an essential part of Carrboro's transportation system, this information is always relevant for a number of local planning processes.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 8 hours

	Local	FHWA	Total
Bike and Ped Facilities Inventory	\$48	\$192	\$240

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A-13. Bike and Ped Counts

The Town will contribute existing bicycle and pedestrian traffic information for the 2040 LRTP and other planning processes as needed. Where more recent data would be helpful, the Town will arrange to conduct additional bicycle and pedestrian counts.

Objectives

1. To enhance the 2040 LRTP's ability to accurately account for bicycle and pedestrian travel by providing up-to-date information on local bike-ped traffic.

Previous work

The Town has collected bicycle and pedestrian traffic data from a number of planning processes, including the 2009 Comprehensive Bicycle Transportation Plan and two Mobility Report Cards.

Proposed activities

1. Submit bicycle and pedestrian traffic data to the MPO when needed.
2. Conduct additional bike-ped counts where relevant.

Products

1. Bike-ped traffic data.

Relationship to other plans and MPO activities

This information is useful for not only the 2040 LRTP, but also the CTP and CMP processes. It would also be an essential element of a Comprehensive Bicycle/Pedestrian Plan for the MPO. As bicycling and walking are an essential part of Carrboro's transportation system, this information is always relevant for a number of local planning processes.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 40 hours

	Local	FHWA	Total
Bike and Ped Counts	\$240	\$960	\$1,200

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-1. Collection of Base Year Data

The Town will update local base year data and collect any additional data as needed for the 2040 LRTP process.

Objectives

1. To provide up-to-date base year data for the 2040 LRTP process.

Previous Work

This project was included in the 2009-2010 UPWP and is ongoing.

Proposed Activities

1. Update and quality checking of 2005 Base Year calibration data (dwelling units, employment by categories, income, etc).
2. Update, error checking, and verification of 2010 InfoUSA employment and Geocoder
3. Tabulation and quality check of 2010 Validation Year SE data

Products

1. Updated socioeconomic and demographic data for estimating TAZ-level trip generation and attraction, including population; dwelling units; households; employment by type (number of jobs and establishments); and median income.

Relationship to other plans and MPO activities

Data may be linked with the GIS integration/automation project, the land use model, the non-motorized component of the TRM, and other activities.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 30 hours

	Local	FHWA	Total
Collection of Base Year Data	\$206	\$824	\$1,030

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-2. Collection of Network Data

The Town will provide local capacity information on bicycle and pedestrian facilities and highways for the 2040 LRTP.

Objectives

1. To provide up-to-date network data for the 2040 LRTP process.

Previous work

This project was included in the 2009-2010 UPWP and is ongoing.

Proposed activities

1. Highway network update – include GIS layers and database update of base year, validation year and alternative scenarios.
2. Bicycle and sidewalk networks – include GIS layers and database update of base year, vision and horizon year.

Products

1. Updated bicycle and pedestrian and highway network data as needed.

Relationship to other plans and MPO activities

Data may be linked with the GIS integration/automation project, the land use model, the non-motorized component of the TRM, and other activities.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 35 hours

	Local	FHWA	Total
Collection of Network Data	\$210	\$840	\$1,050

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-5. Forecast of Data to Horizon Year

The Town will contribute to preparatory work at the MPO level on forecasting and scenario planning.

Objectives

1. To prepare for 2040 LRTP forecasting of travel demand.
2. To ensure that forecasts are consistent with local land use plans and zoning

Previous work

Forecasts have been conducted as an essential part of alternatives analyses for previous LRTPs.

Proposed activities

1. At the MPO level, use the Triangle Regional Model to begin the forecasting and scenario planning process for the 2040 horizon year
2. On the local level, provide information as needed to the MPO on local land use plans and other local policies that can be used to validate forecasts for the horizon year

Products

1. GIS layers with socioeconomic and demographic data for the horizon year (2040)

Relationship to other plans and MPO activities

Builds on other LRTP-related tasks, such as base year and network data collection.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 10 hours

	Local	FHWA	Total
Forecast of Data to Horizon Year	\$74	\$296	\$370

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-6. Community Goals

The Town will contribute to MPO-wide community visioning and update of goals, objectives and targets in order to guide the recommendations of the 2040 LRTP and other planning processes.

Objectives

1. To establish goals, objectives, and targets based on sound planning performance measures, public input, and addressing the complex transportation challenges faced by metropolitan regions.

Previous work

Goals, objectives, and targets have guided previous transportation plans and other MPO activities.

Proposed activities

1. Provide input in re-evaluating existing goals and objectives.
2. Contribute to community visioning meetings and other opportunities for public input.
3. Gather local community input on transportation-related topics and relay that input to the MPO.

Products

1. Updated, comprehensive, and forward-thinking goals, objectives, and targets.

Relationship to other plans and MPO activities

Community goals, objectives, and targets are especially relevant to the LRTP, but should be considered in all MPO activities.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 8 hours

	Local	FHWA	Total
Community Goals	\$48	\$192	\$240

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-17. Congestion Management Strategies

The MPO will develop a work plan and data collection strategies for the MPO-wide CMS. The Town will contribute funding as needed for moving this process forward. The Town will also continue to promote TDM strategies and collaborate with Chapel Hill on joint TDM projects.

Objectives

1. To participate in MPO CMS activities.
2. To continue to promote TDM as a congestion management strategy and collaborate with Chapel Hill and the region on TDM.

Previous work

The CMS project has been ongoing. Carrboro has partnered in the past with Chapel Hill and regional groups to hold TDM events.

Proposed activities

1. Contribute to MPO CMS meetings
2. Participate in regional TDM events, such as the SmartCommute challenge and Bike to Work Week.
3. Conduct additional outreach to local business owners regarding TDM.
4. Assess the feasibility of holding carfree periods on selected streets on a regular basis.

Products

1. TDM events.
2. Data and input from local businesses.

Relationship to other plans and MPO activities

Congestion management is an important element in the LRTP process. Connections to local planning processes include the Safe Routes to School Action plan and associated Walk to School Days.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 40 hours

	Local	FHWA	Total
Congestion Management Strategies	\$240	\$960	\$1,200

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-C-1. Short Range Transit Planning.

The Town will participate in short-range transit planning for the Carrboro-Chapel Hill area. Through the Transit Partners Committee, the Town will provide input on the Chapel Hill Transit Short Range Transit Plan. The Town will collaborate with Triangle Transit where necessary and with the Town of Chapel Hill in coordinating the annual Transit Forum.

Objectives

1. To ensure that Carrboro's transit interests are represented in Chapel Hill Transit planning, capital investment, and operations.
2. To continue to work with Chapel Hill Transit on new initiatives, short range planning, and troubleshooting.

Previous work

Carrboro staff attends the monthly meetings for Chapel Hill Transit as well as other local transit meetings as needed. Carrboro staff works with Chapel Hill Transit staff to address Carrboro transit riders' interests. In late 2009/early 2010, Carrboro and Chapel Hill held concurrent public review processes for the 2035 Long Range Transit Plan. In 2008, Carrboro hosted the annual transit forum.

Proposed activities

1. Participate in monthly transit meetings
2. Continue to communicate with the Transit Partners Committee and Chapel Hill Transit staff on relevant issues.
3. Participate in the development of the Short Range Transit Plan.

Products

N/A

Relationship to other plans and MPO activities

Data collected during the short range transit planning process may inform the 2040 LRTP.

Proposed budget and level of effort:

All work to be completed by Transportation Planner.

Local staff hours: 35 hours

	Local	FHWA	Total
Short Range Transit Planning	\$210	\$840	\$1,050

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-A. Planning Work Program

The Town will administer the FY 2010-2011 UPWP and prepare and process amendments as needed. It will evaluate transportation planning work needed and emphasis areas and prepare the FY 2011-2012 UPWP.

Objectives

1. To implement Carrboro's 2010-2011 UPWP activities
2. To be ready for amendments to the UPWP if necessary
3. To submit the 2011-2012 UPWP to the MPO

Previous work

Town staff have prepared UPWPs each year and tracked the completion of UPWP tasks with quarterly progress reports. Progress reports have made clear how much funding remains for tasks in the fiscal year, guiding whether or not amendments are necessary.

Proposed activities

1. Evaluate progress on implementing the 2010-2011 UPWP
2. Prepare Carrboro's 2011-2012 UPWP documents and budget

Products

1. Quarterly progress reports and invoices to the MPO on UPWP activities
2. Carrboro's 2011-2012 UPWP activities narrative and budget

Relationship to other plans and MPO activities

The UPWP is a way to plan the amount and nature of work to be undertaken for various planning tasks and track progress toward achieving planning goals.

Proposed budget and level of effort

All work to be completed by Transportation Planner.

Local staff hours: 45 hours

	Local	FHWA	Total
Planning Work Program	\$268	\$1,072	\$1,340

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C-2. Environmental Justice (EJ) and Limited English Proficiency

The Town will conduct outreach to disadvantaged groups and residents with limited English proficiency. It will update demographic data as needed so that up-to-date information can inform planning processes.

Objectives

1. Ensure adequate public involvement of low-income and minority groups in decision-making
2. Prevent disproportionately high and adverse impacts to low-income and minority groups resulting from transportation decisions
3. Assure that low-income and minority groups receive a proportionate share of benefits resulting from transportation decisions made by the MPO
4. Support progress toward the development of a regional Environmental Justice Plan.

Previous work

The Town has incorporated environmental justice principles into recent and ongoing planning processes. For example, development of the Town's Comprehensive Bicycle Transportation Plan included translated public workshop advertising materials.

Proposed activities

1. Ensure that environmental justice principles inform any planning process related to disadvantaged or limited-English-proficiency citizens.
2. Provide demographic data necessary for MPO-level environmental justice activities.
3. Conduct a public input process via one or more community meetings with predominantly lower-income, minority residents near Estes Dr. Ext. to gauge their ideas for improved bicycle and pedestrian access to important destinations.
4. Continue planning process

Products

1. Demographic data as needed for MPO-level environmental justice activities
2. Recommendations to local elected officials for access improvements for predominantly lower-income, minority residents near Estes Dr. Ext.

Relationship to other plans and MPO activities

Environmental justice should be considered in all activities that are deemed to have a potential effect on disadvantaged/minority communities.

Proposed budget and level of effort

Tasks will primarily be completed by the Transportation Planner with possible contributions by other planning staff.

Local staff hours: 25 hours

	Local	FHWA	Total
Environmental Justice	\$150	\$600	\$750

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C-4. Planning for the Elderly and Disabled

The Town will continue efforts to emphasize the planning, development, evaluation, and reevaluation of transportation facilities and services for the elderly and disabled.

Objectives

1. Continue efforts to emphasize the planning, development, evaluation, and reevaluation of transportation facilities and services for the elderly and disabled.

Previous Work

Throughout the year staff responds to disabled and elderly citizen concerns regarding the transportation system, primarily related to paratransit and accessibility of infrastructure.

Proposed activities

1. Continue to address transportation concerns of elderly and disabled.
2. Make planning information more accessible to elderly and disabled residents.

Products

N/A

Proposed budget and level of effort

Tasks will be completed primarily by the Transportation Planner with possible contributions by other planning staff.

Local staff hours: 10 hours

	Local	FHWA	Total
Planning for the Elderly and Disabled	\$60	\$240	\$300

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C-6. Public Involvement

The Town will continue to provide for an open exchange of information and ideas between the public and transportation decision-makers. The Town will work to increase public participation in transportation planning issues at the local and regional (MPO) levels.

Objectives

1. To provide opportunities for the public to contribute to the planning of local and regional transportation facilities.

Previous work

In 2009-2010, the Town held two greenways workshops – one for the Bolin Creek Greenway and another for the Morgan Creek Greenway. The Town also facilitated a public input process – including a public meeting with advisory boards – to review the Chapel Hill and Carrboro 2035 Long Range Transit Plan. Finally, the Town held a kickoff meeting for its Safe Routes to School Action Plan development.

Proposed activities

1. Annual transit forum
2. Continued public input process for the Bolin Creek Greenway
3. Safe Routes to School Action Plan committee review meeting and plan adoption
4. Community meetings on Estes Dr. ped-bike access and Old Carrboro traffic circulation planning (these meetings may occur in FY 2010).
5. Public input processes associated with MPO activities such as the 2040 LRTP, etc.

Products

1. Summaries from all public input workshops

Relationship to other plans and MPO activities

Public involvement is a key to most MPO activities and local planning processes.

Proposed budget and level of effort

Tasks will be completed by the Transportation Planner and Planning Administrator, with possible contributions by other planning staff.

Local staff hours: 72 hours

	Local	FHWA	Total
Public Involvement	\$496	\$1,984	\$2,480

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-D-2. Environmental Analysis & Pre-TIP Planning

The Town will complete environmental documentation for several transportation projects. This may include public comments, public meetings, scoping meetings, site visits, and related activities.

Objectives

1. To complete, commence, and-or assist with necessary environmental impact documentation for several transportation projects expected to be underway in FY 2011.

Previous work

The Town has participated in reviewing the community impact assessments for various TIP projects.

Proposed activities

1. Complete, commence, and-or assist with environmental documentation for the Wilson Park Multi-use Path (STP-DA), Rogers Rd. sidewalk (STP-DA), the Morgan Creek Greenway, and (if in FY2011) a section of the Bolin Creek Greenway.
2. Participate in any state-level environmental analysis processes related to Carrboro transportation projects that occur in FY 2011.

Products

1. Environmental documentation (i.e. CE or EA).

Relationship to other plans and MPO activities

N/A

Proposed budget and level of effort

Tasks will be completed primarily by the Transportation Planner with possible contributions by other planning staff.

Local staff hours: 15 hours

	Local	FHWA	Total
Environmental Analysis & Pre-TIP Planning	\$90	\$360	\$450

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-D-3. Special Studies

Town staff will continue to conduct and-or refine studies – started or expected to start in FY2010 or earlier – related to local transportation issues, such as traffic circulation in the Old Carrboro neighborhood, Safe Routes to School, and the Bolin Creek Greenway. The Town will contribute as appropriate to MPO-level special studies.

Objectives

1. To coordinate an inclusive and comprehensive public input process on Phases 3 and 4 of the Bolin Creek Greenway, as identified in the Bolin Creek Greenway Conceptual Master Plan.
2. To ensure that new studies reflect public input to the extent practicable and that they inform future planning processes.

Previous work

Consultants completed conceptual plans for the greenways in FY2010. They serve as a basis for phased implementation of the greenways.

Proposed activities

1. Coordinate a public input process for Phases 3 and 4 of the Bolin Creek Greenway, as identified in the Bolin Creek Greenway Conceptual Master Plan.
2. Continue planning for the Old Carrboro traffic circulation plan. This planning is expected to be done in-house with the potential for an external facilitator for a public meeting.
3. Work with the Safe Routes to School Action Plan Team to progress toward the adoption of an action plan in the fall.

Products:

1. Safe Routes to School Action Plan
2. Old Carrboro/Oak Ave. traffic circulation plan
3. Summaries of public meetings on the Bolin Creek Greenway and Estes Dr. bike-ped access
4. Contribution toward MPO-level special studies as necessary

Relationship to other plans and MPO activities

Some data may be shared between planning processes.

Proposed budget and level of effort

Tasks will be completed primarily by the Transportation Planner with possible contributions by other planning staff.

Local staff hours: 115 hours

	Local	FHWA	Total
Special Studies	\$718	\$2,872	\$3,590

**TOWN OF CARRBORO
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-E. Management and Operations

Administrative tasks necessary to maintaining the 3C planning process will be completed.

Objectives

1. To participate and contribute to MPO-related meetings
2. To adhere to the goals and tasks laid out in the Unified Planning Work Program
3. To ensure that elected officials have adequate information to make informed decisions on local and regional transportation issues
4. To ensure the local transportation advisory board has the information it needs to develop sound recommendations on local and regional transportation issues
5. To improve staff efficiency and knowledge through training sessions and educational materials

Previous work

Similar to proposed activities described below

Proposed activities

1. Attend and participate in TAC and TCC meetings
2. Preparing quarterly progress reports/invoices and documenting expenditures for planning work items
3. Staff development through professional training courses, seminars, and conferences
4. Subscriptions to professional publications and professional organizational dues
5. Acquire needed software, books, and other materials
6. Facilitate local transportation advisory board meetings by creating agendas, minutes, and staff reports
7. Prepare materials and present to the local elected officials related to local and regional transportation planning topics
8. Attend and participate in MPO subcommittee meetings

Products

1. Staff reports for Board of Aldermen and advisory board meetings

Relationship to other plans and MPO activities

See objectives and proposed activities.

Proposed budget and level of effort

Tasks will be completed by the Transportation Planner and Planning Administrator, with possible contributions by other planning staff.

Local staff hours: 345 hours

	Local	FHWA	Total
Management and Operations	\$2,206	\$8,824	\$11,030

Town of Chapel Hill

 Durham-Chapel Hill-Carrboro Urban Area
 FY 2010-2011 Unified Planning Work Program
 Proposed Funding Source Tables

2/25/2010 12:11

Task Description	STP-DA 133(b)(3)(7)		PL Sec. 104(f)		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
II - A Surveillance of Change															
1 Traffic Volume Counts	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
2 Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
3 Street System Changes	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
4 Traffic Accidents	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
5 Transit System Data	12,500	50,000	0	0	1,250	1,250	10,000	0	0	0	13,750	1,250	60,000	75,000	
6 Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
7 Air Travel	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
8 Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
9 Travel Time Studies	0	0	0	0	625	625	5,000	0	0	0	625	625	5,000	6,250	
10 Mapping	0	0	2,500	10,000	2,500	2,500	20,000	0	0	0	5,000	2,500	30,000	37,500	
11 Central Area Parking Inventory	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
12 Bike & Ped. Facilities Inventory	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
13 Bike & Ped. Counts	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
II - B Long Range Transp. Plan															
1 Collection of Base Year Data	0	0	2,500	10,000	1,250	1,250	10,000	0	0	0	3,750	1,250	20,000	25,000	
2 Collection of Network Data	0	0	750	3,000	1,250	1,250	10,000	0	0	0	2,000	1,250	13,000	16,250	
3 Travel Model Updates	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
4 Travel Surveys	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
5 Forecast of Data to Horizon year	0	0	2,500	10,000	0	0	0	0	0	0	2,500	-	10,000	12,500	
6 Community Goals & Objectives	0	0	500	2,000	0	0	0	0	0	0	500	-	2,000	2,500	
7 Forecast of Future Travel Patterns	0	0	0	0	625	625	5,000	0	0	0	625	625	5,000	6,250	
8 Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
9 Highway Element of th LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
10 Transit Element of the LRTP	0	0	750	3,000	625	625	5,000	0	0	0	1,375	625	8,000	10,000	
11 Bicycle & Ped. Element of the LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
12 Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
13 Collector Street Element of LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
14 Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
15 Freight Movement/Mobility Planning	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
16 Financial Planning	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
17 Congestion Management Strategies	0	0	625	2,500	0	0	0	0	0	0	625	-	2,500	3,125	
18 Air Qual. Planning/Conformity Anal.	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
II - C Short Range Transit Planning	5,500	22,000	250	1,000	0	0	0	3,125	3,125	25,000	8,875	3,125	48,000	60,000	
III-A Planning Work Program	1,250	5,000	250	1,000	161	161	1,288	0	0	0	1,661	161	7,288	9,110	
III-B Transp. Improvement Plan	1,250	5,000	0	0	250	250	2,000	313	313	2,500	1,813	563	9,500	11,875	
III-C Cvl Rgts. Cmp./Otr. Reg. Reqs.															
1 Title VI	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
2 Environmental Justice	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
3 Minority Business Enterprise	3,250	13,000	0	0	0	0	0	0	0	0	3,250	-	13,000	16,250	
4 Planning for the Elderly & Disabled	4,250	17,000	0	0	0	0	0	0	0	0	4,250	-	17,000	21,250	
5 Safety/Drug Control Planning	2,750	11,000	0	0	0	0	0	0	0	0	2,750	-	11,000	13,750	
6 Public Involvement	2,000	8,000	0	0	0	0	0	0	0	0	2,000	-	8,000	10,000	
7 Private Sector Participation	1,000	4,000	0	0	0	0	0	0	0	0	1,000	-	4,000	5,000	
III-D Incidental Plng./Project Dev.															
1 Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
2 Enviro. Analysis & Pre-TIP Plng.	12,000	48,000	0	0	0	0	0	0	0	0	12,000	-	48,000	60,000	
3 Special Studies	12,000	48,000	0	0	563	563	4,500	0	0	0	12,563	563	52,500	65,625	
4 Regional or Statewide Planning	10,000	40,000	617	2,468	625	625	5,000	1,316	1,316	10,524	12,558	1,941	57,992	72,490	
III-E Management & Operations															
1 Management & Operations	37,500	150,000	4,500	18,000	3,944	3,944	31,553	6,250	6,250	50,000	52,194	10,194	249,553	311,941	
Totals	\$105,250	\$421,000	\$15,742	\$62,968	\$13,668	\$13,668	\$109,341	\$11,003	\$11,003	\$88,024	\$145,663	\$24,671	\$681,333	\$851,666	

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A-5: Transit System Data

To collect and analyze transit ridership data for the Chapel Hill Transit system for use in the development of the 2040 Long Range Transportation Plan. To maintain and modify maps of Chapel Hill Transit routes using GIS technology. Chapel Hill Transit will use GIS maps to analyze ridership and travel data and mapping to provide public information.

Objectives:

10. Identify strengths and weaknesses of service by route routes; prepare route schedules; and
11. Analyze ridership and travel data,

Previous Work:

9. Collection and analysis of transit system ridership and operating information.

Proposed Activities:

6. Monitoring of information collected from transit system APCs and Nextbus.

Products:

5. Ridership data and route analysis.

Completion Date:

June 2011.

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will be completed by Chapel Hill Planning and Transit staff.
Staff effort – 1,660 person hours

FHWA Funds

FTA Transit/Highway Funds

STP-DA Funds

	Federal	Local	Total
Chapel Hill	0	0	0
Total	0	0	0

	Federal	State	Local	Total
Chapel Hill	10,000	1,250	1,250	12,500
Total	10,000	1,250	1,250	12,500

	Federal	Local	Total
Chapel Hill	50,000	12,500	62,500
Total	50,000	12,500	62,500

Funding Commitments from Other Entities:

None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A-9: Travel Time Studies

To collect information on transportation travel times along specific corridors in Chapel Hill. This information will be used to support the development of the 2040 Long Range Transit Plan.

Objectives:

5. Collect and analyze travel time information.
6. Provide information for use in the Triangle Regional Model.

Previous Work:

4. Collection of travel time information for 2007 Mobility Report Card

Proposed Activities:

7. Collect travel time information along specific transportation corridors
8. Review information and submit to DCHC MPO

Products:

5. Travel time data for use in the TRM.

Relationship to Other Plans and MPO Activities:

This information will support the development of the 2040 Long Range Transportation Plan and the Chapel Hill Transit Short Range Transit Plan.

Completion Date:

June 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be completed by Chapel Hill Planning and Transit staff.
Staff effort – 140 person hours

FHWA Funds			
	Federal	Local	Total
Chapel Hill	0	0	0
Total	0	0	0

FTA Transit/Highway Funds				
	Federal	State	Local	Total
Chapel Hill	5,000	625	625	6,250
Total	5,000	625	625	6,500

STP-DA Funds			
	Federal	Local	Total
Chapel Hill	0	0	0
Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-A-10: Mapping

To prepare, modify and maintain maps related to the Chapel Hill transportation network. Chapel Hill will use GIS technology to collect and analyze information on transportation facilities and system usage. The mapping will support local and regional transportation planning, including CMS and the development of the 2040 LRTP.

The Town will continue to update GIS mapping databases and prepare maps for various initiatives. The mapping will include highway, transit, bicycle and pedestrian data.

Objectives:

1. Maintain existing GIS databases
2. Provide information for development of CMS and 2040 plans
7. Improve transit routes and scheduling; and

Previous Work:

1. Mapping related to development of 2035 DCHC LRTP
2. Preparation of mapping for Chapel Hill Transit
3. Maps for various local and regional projects

Proposed Activities:

1. Update transit system maps.
2. Update GIS database.
3. Prepare maps as necessary.

Products:

1. Updated transportation system maps.
2. New mapping for local and regional projects.

Relationship to Other Plans and MPO Activities:

This mapping will be used to support the recommendations of the 2035 Long Range Transportation Plan, development of the 2010 CMS, Chapel Hill Transit Short Range Transit Plan and 2040 Long Range Transit Plan.

Completion Date:

June 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be completed by Chapel Hill Planning and Transit staff.

Staff effort – 830 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	10,000	2,500	12,500	Chapel Hill	20,000	2,500	2,500	25,000	Chapel Hill			

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-1: Collection of Base Year Data

The Town will collect and analyze 2010 base year socio economic and transportation data for use in the 2040 Long Range Transit Plan.

Objectives:

1. Provide socio economic data for use in the 2040 LRTP.
2. Confirm accuracy of housing and employment information

Previous Work:

1. Development of 2035 LRTP transit element.
2. Development of Chapel Hill Long Range Transit Plan
3. Staff assistance to STAC

Proposed Activities:

1. Coordinate with MPO to review and revise employment data
2. Expand housing data to new 2010 base year

Products:

1. 2010 base year socio economic data

Relationship to Other Plans and MPO Activities:

CMS and 2040 LRTP

Completion Date:

January, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill planning staff.
Staff effort – 550 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	10,000	2,500	12,500	Chapel Hill	10,000	1,250	1,250	12,500	Chapel Hill	0	0	0
Total	10,000	2,500	12,500	Total	10,000	1,250	1,250	12,500	Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-2: Collection of Network Data

The Town will undertake the collection of information on the transportation system, including traffic counts, transit ridership and performance information, bicycle and pedestrian activity.

Objectives:

1. Update transportation information for use in the 2040 LRTP and CMS

Previous Work:

1. Preparation of network data for 2035 LRTP

Proposed Activities:

1. Work with the MPO to identify data required
2. Work with Town Engineering and Transit staff to collect necessary data
3. Revise networks as necessary

Products:

1. Revised transportation networks for use in 2040 LRTP and CMS

Relationship to Other Plans and MPO Activities:

2040 LRTP and 2010 CMS

Completion Date:

January, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill planning and transit staff.

Staff effort – 360 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	3,000	750	3,750	Chapel Hill	10,000	1,250	1,250	12,500	Chapel Hill	0	0	0
Total	3,000	750	3,750	Total	10,000	1,250	1,250	12,500	Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-5: Forecast Data to Horizon Year

The Town will prepare forecast of socio economic data to 2040 for use in the development of the 2040 LRTP.

Objectives:

1. Prepare 2040 projections of housing and employment.

Previous Work:

1. Preparation of projections for 2035 LRTP

Proposed Activities:

1. Work with the MPO to identify data required
2. Work with Town Engineering and Transit staff to collect necessary data
3. Revise networks as necessary

Products:

2. Revised transportation networks for use in 2040 LRTP and CMS

Relationship to Other Plans and MPO Activities:

2040 LRTP and 2010 CMS

Completion Date:

January, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill planning and transit staff.
Staff effort – 415 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	10,000	2,500	12,500	Chapel Hill	5,000	625	625	6,250	Chapel Hill	0	0	0
Total	10,000	2,500	12,500	Total	5,000	625	625	6,250	Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-6: Community Goals and Objectives

The Town will review and adopt community goals and objectives to guide the development of the 2040 LRTP.

Objectives:

- 1. Prepare 2040 goals and objectives.

Previous Work:

- 1. Preparation of 2035 goals and objectives

Proposed Activities:

- 1. Review 2035 goals and objectives and prepare modifications
- 2. Coordinate with MPO staff on regional goals and objectives

Products:

- 1. Revised 2040 goals and objectives
- 2.

Relationship to Other Plans and MPO Activities:

2040 LRTP and 2010 CMS

Completion Date:

January, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill planning and transit staff.
Staff effort – 60 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	2,000	500	2,500	Chapel Hill					Chapel Hill	0	0	0
Total	2,000	500	2,500	Total					Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-10: Transit Element of Long Range Transit Plan

The Town will work with the DCHC MPO and Triangle Transit to develop a revised transit element for the 2040 LRTP. The Town will also work to implement the transit elements of the adopted 2035 LRTP.

Objectives:

6. Prepare revised transit element for 2040 LRTP
7. Implement adopted 2035 LRTP transit element

Previous Work:

5. Development of 2035 transit element
6. Development of STAC Plan
7. Development of Orange County Transit Plan

Proposed Activities:

6. Coordinate with DCHC MPO and Triangle Transit to review adopted 2035 transit element and revise as necessary for incorporation into 2040 LRTP.
7. Continue coordination with Triangle Transit on Orange County Transit Plan

Products:

5. Revised transit element for incorporation into 2040 LRTP

Relationship to Other Plans and MPO Activities:

Transit plan will support development of NC54 Corridor Study.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.
Staff effort – 225 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	3,000	750	3,750	Chapel Hill	5,000	625	625	6,250	Chapel Hill	0	0	0
Total	3,000	750	3,750	Total	5,000	625	625	6,250	Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-B-17: Congestion Management Strategies

The Town will work with the DCHC MPO to prepare a DCHC 2010 congestion management study analysis and recommendations.

Objectives:

1. Coordinate the preparation of the Chapel Hill/Orange County portion of the DCHC 2010 Congestion Management Study.

Previous Work:

1. Chapel Hill Carrboro Mobility Report Cards

Proposed Activities:

1. Coordinate with DCHC MPO staff to collect base and analyze base transportation data and develop recommendations.

Products:

1. 2010 DCHC CMS

Relationship to Other Plans and MPO Activities:

2010 CMS will provide information to be used in the development of the 2040 LRTP and implementation of elements of the adopted 2035 LRTP.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.
Staff effort – 135 person hours

FHWA Funds			
	Federal	Local	Total
Chapel Hill	2,500	625	3,125
Total	2,500	625	3,125

FTA Transit/Highway Funds				
	Federal	State	Local	Total
Chapel Hill				
Total				

STP-DA Funds			
	Federal	Local	Total
Chapel Hill	0	0	0
Total	0	0	0

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task II-C-1: Short Range Transit Plan

To develop and monitor the annual planning work program. To gather system performance data, conduct and analyze system development of a 5-7 year plan in consideration with the Long Range Transit Plan, including financial and capital projections.

Various internal management studies will be performed throughout the year to guide CHT in efficiently managing the transit system and increasing ridership.

Objectives:

1. To support various regional planning efforts, and
2. To develop financial and capital projections.

Previous Work:

1. Annual gathering of system performance data.

Proposed Activities:

1. Annual service and route evaluation.
2. Provide staff support for the implementation of transit capital projects.
3. To provide continued staff support for ongoing TIP and the LRTP.

Products:

1. 2010-2011 Planning Work Program.
2. Short Range Transit Plan.

Relationship to Other Plans and MPO Activities:

The Planning Work Program supports various regional planning efforts.

Completion Date:

June 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

The task will be undertaken by CHT staff.
Staff effort – 2,400 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	0	0	0	Chapel Hill	64,000	8,000	8,000	80,000	Chapel Hill	22,000	5,500	27,500
Total	0	0	0	Total	64,000	8,000	8,000	80,000	Total	22,000	5,500	27,500

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-A: Planning Work Program

Town staff will monitor implementation of the adopted Planning Work Program and prepare the 2010-2011 Planning Work Program.

Objectives:

4. To monitor implementation of the adopted Planning Work Program;

Previous Work:

6. Development of the 2011-12 PWP.

Proposed Activities:

4. Monitor elements of the adopted 2010-11 PWP.
5. Prepare 2011-12 PWP.

Products:

6. 2011-12 PWP.

Relationship to Other Plans and MPO Activities

Support all other planning activities.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.
Staff effort – 200 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	1,000	250	1,250	Chapel Hill	1,288	161	161	1,610	Chapel Hill	5,000	1,250	6,250
Total	1,000	250	1,250	Total	1,288	161	161	1,610	Total	5,000	1,250	6,250

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-B-Transportation Improvement Program

Chapel Hill will monitor the implementation of the 2011-2017 TIP and prepare a revised 5 year Transit Capital Program.

Objectives:

3. To monitor implementation of 2011-2017 TIP
4. Prepare amendments to the adopted TIP as necessary
5. Prepare revised five year Transit Capital Program

Previous Work:

1. Development of the 2011-2017 TIP.

Proposed Activities:

5. Prepare TIP amendments
6. Develop revised five year Transit Capital Program.

Products:

4. Revised five year Transit Capital Program

Relationship to Other Plans and MPO Activities:

The TIP supports the implementation of the adopted 2035 Long Range Transportation Plan.

Completion Date:

June, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.
Staff effort – 220 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	1,000	250	1,250	Chapel Hill	2,000	250	250	2,500	Chapel Hill	5,000	1,250	6,250
Total	1,000	250	1,250	Total	2,000	250	250	2,500	Total	5,000	1,250	6,250

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-C: Civil Rights Compliance/Other Regulations and Requirements

Chapel Hill will work to improve its relationships with disadvantaged businesses, improve transit services for the elderly and handicapped populations, and continue monitoring of drug control programs and transit safety.

Objectives:

4. To continually review certification procedures for the EZ Rider service;
5. Review No Show and Cancellation policies for possible changes;
6. Evaluate minority business enterprise regulations;
7. Review service levels and identify need for additional service for the elderly and disabled; and
8. Evaluate drug control programs and monitor transit safety efforts.

Previous Work:

3. Completion of Title VI update.
4. Continuing review of certification procedures.
5. Hiring of a Mobility Manager to manage demand response services.
6. Continued work with the EZ Rider Committee.

Proposed Activities:

9. Determine compliance with minority business enterprise regulations.
10. Identify opportunities for minority business participation.
11. Evaluate transit safety programs.
12. Review existing public outreach and involvement plan;
13. Conduct analysis as needed regarding equitable distribution of transportation system benefits and costs among all socio-economic groups throughout the CH service area.

Products:

6. Update existing MBE Program.
7. Upgrade of phone system to allow recording and monitoring of calls.

Relationship to Other Plans and MPO Activities:

Ongoing program requirements.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff and/or Consulting):

Tasks will be undertaken by Chapel Hill staff.

Staff effort – 1,475 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	0	0	0	Chapel Hill	0	0	0	0	Chapel Hill	53,000	13,250	66,250
Total	0	0	0	Total	0	0	0	0	Total	53,000	13,250	66,250

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-D-2: Environmental Analysis/Pre TIP Planning

Chapel Hill will prepare a feasibility study for the implementation of public transit vehicle signal priority improvements along the Martin Luther King Jr. Blvd corridor.

Objectives:

1. Prepare transit vehicle signal priority feasibility study along Martin Luther King Jr. Blvd.

Previous Work:

1. Chapel Hill-Carrboro Long Range Transit Plan

Proposed Activities:

3. Prepare signal priority feasibility study.

Products:

1. Martin Luther King Jr. Blvd transit signal priority feasibility study

Relationship to Other Plans and MPO Activities

Chapel Hill-Carrboro Long Range Transit Plan, 2035 DCHC LRTP, 2010 DCHC CMS

Completion Date:

January, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by consultant in coordination with Chapel Hill staff.

Staff effort – 1,300 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill				Chapel Hill					Chapel Hill	48,000	12,000	60,000
Total				Total					Total	48,000	12,000	60,000

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-D-3: Special Studies

Chapel Hill will continue the development of the Rams Plaza Transportation study. This study, begun in fiscal year 2009-2010, will evaluate potential redevelopment the area around the Rams Plaza shopping center and develop a set of transportation improvements to improve access for all modes.

Objectives:

- 1 Complete Rams Plaza Transportation Study

Previous Work:

- 1 Rams Plaza Transportation Study begun in FY 2009-2010

Proposed Activities:

- 1 Complete ongoing study.

Products:

- 1 Final Rams Plaza Transportation Study

Relationship to Other Plans and MPO Activities

Chapel Hill-Carrboro Long Range Transit Plan, 2035 DCHC LRTP, 2010 DCHC CMS

Completion Date:

January, 2011

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by consultant in coordination with Chapel Hill staff.

Staff effort – 1,450 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill				Chapel Hill	4,500	563	563	5,626	Chapel Hill	48,000	12,000	60,000
Total				Total	4,500	563	563	5,626	Total	48,000	12,000	60,000

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

TASK III-D-4: Regional or Statewide Planning

Chapel Hill will support various regional planning initiatives, including the development of the Orange County Transit Plan, NC54 Corridor Study, implementation of the Chapel Hill Long Range Transit Plan and DCHC 2035.

Objectives:

1. To provide information and staff support to the development of various regional planning projects.

Previous Work:

1. Support to STAC.

Proposed Activities:

- 1 Support review and approval of final NC54 Corridor Study
- 2 Support development of final Orange County Transit Plan
- 3 Support implementation of elements of adopted 2035 LRTP.

Products:

NC 54 Corridor Study
Orange County Transit Plan

Relationship to Other Plans and MPO Activities

Support all other planning activities.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.

Staff effort – 1,320 person hours

FHWA Funds				FTA Transit/Highway Funds					STP-DA Funds			
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	2,468	617	3,085	Chapel Hill	5,000	625	625	6,250	Chapel Hill	40,000	10,000	50,000
Total	2,468	617	3,085	Total	5,000	625	625	6,250	Total	40,000	10,000	50,000

Funding Commitments from Other Entities: None.

**CHAPEL HILL
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2011 UPWP**

Task III-E: Management and Operations

Chapel Hill will continue to assist, support and facilitate an open comprehensive, cooperative and continuing transportation planning and programming process at all levels of government in conformance with application federal and state requirements and guidelines.

Objectives:

1. To support various regional planning projects.
2. Management of PL fund account and other federal funds.

Previous Work:

1. Attend TAC, TCC and related regional committee meetings.
2. Provide staff support to regional task forces and subcommittees.
3. Preparing quarterly progress reports.
4. Documenting expenditures for various planning work tasks.
5. Filing for reimbursement of expenditures from the PL fund account.
6. Filing for reimbursement and management of State and federal funds.
7. Coordination with NCDOT and other agencies.

Proposed Activities:

1. Attend TAC, TCC and related regional committee meetings
2. Provide staff support to regional task forces and subcommittees.
3. Preparing quarterly progress reports.
4. Documenting expenditures for various planning work tasks.
5. Filing for reimbursement of expenditures from the PL fund account.
6. Filing for reimbursement and management of State and federal funds.
7. Coordination with NCDOT and other agencies.

Products:

1. State and federal quarterly reports.
2. Reimbursement requests to the State and federal agencies.
3. Operating Statistics report.
4. NTD annual report.

Relationship to Other Plans and MPO Activities

Support all other planning activities.

Completion Date:

June, 2011.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by Chapel Hill staff.

Staff effort – 6,200 person hours

FHWA Funds				FTA Transit/Highway Funds				STP-DA Funds				
	Federal	Local	Total		Federal	State	Local	Total		Federal	Local	Total
Chapel Hill	18,000	4,500	22,500	Chapel Hill	55,577	6,947	6,947	69,471	Chapel Hill	150,000	37,500	187,500
Total	18,000	4,500	22,500	Total	55,577	6,947	6,947	69,471	Total	150,000	37,500	187,500

Funding Commitments from Other Entities: None.

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442400
3- Task Code	II-A-5
4- Title	<i>Transit System Data</i>
5- Task Objective	Collection and analysis of transit ridership and operating information.
6- Tangible Product Expected	Ridership data and route analysis
7- Expected Completion Date of Products	June 2011
8- Previous Work	Monitored and reviewed operating statistics of new and existing services.
9- Prior FTA Funds	\$20,000
10- Relationship	Ongoing statistics analysis including ridership, revenue miles and hours, system-wide cost analysis
11- Agency	Town of Chapel Hill
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	
15- Section 104 (f) PL FHWA 80%	
16- Section 5303 Local 10%	\$ 1,250
17- Section 5303 NCDOT 10%	\$ 1,250
18- Section 5303 FTA 80%	\$10,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442400
3- Task Code	II-A-9
4- Title	<i>Travel Time Studies</i>
5- Task Objective	Collection and analysis of transit ridership and operating information.
6- Tangible Product Expected	Ridership data and route analysis
7- Expected Completion Date of Products	June 2011
8- Previous Work	Monitored and reviewed operating statistics of new and existing services.
9- Prior FTA Funds	\$0
10- Relationship	Ongoing statistics analysis including ridership, revenue miles and hours, system-wide cost analysis
11- Agency	Town of Chapel Hill
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	
15- Section 104 (f) PL FHWA 80%	
16- Section 5303 Local 10%	\$ 625
17- Section 5303 NCDOT 10%	\$ 625
18- Section 5303 FTA 80%	\$5,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-A-10
4- Title	<i>Mapping</i>
5- Task Objective	To maintain and modify maps of Chapel Hill Transit routes using GIS technology.
6- Tangible Product Expected	Updated transit system maps. Mapping for local and regional projects.
7- Expected Completion Date of Products	June-2011
8- Previous Work	Preparation of mapping.
9- Prior FTA Funds	\$30,000
10- Relationship	Chapel Hill Transit will use GIS maps to analyze ridership and travel data and mapping to provide public information. To support implementation of DCHC Long Range Transportation Plan and develop Congestion Management Plan.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 2,500
15- Section 104 (f) PL FHWA 80%	\$ 10,000
16- Section 5303 Local 10%	\$ 2,500
17- Section 5303 NCDOT 10%	\$ 2,500
18- Section 5303 FTA 80%	\$ 20,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-1
4- Title	<i>Collection of Base Year Data</i>
5- Task Objective	To collect 2010 base year housing and employment data for use in the development of the 2040 LRTP.
6- Tangible Product Expected	2010 base year data.
7- Expected Completion Date of Products	January, 2011
8- Previous Work	Development of the 2035 LRTP projections
9- Prior FTA Funds	\$0
10- Relationship	Input to 2040 LRTP.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 2,500
15- Section 104 (f) PL FHWA 80%	\$ 10,000
16- Section 5303 Local 10%	\$ 1,250
17- Section 5303 NCDOT 10%	\$ 1,250
18- Section 5303 FTA 80%	\$ 10,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-2
4- Title	<i>Collection of Network Data</i>
5- Task Objective	To collect information about the existing transportation network to update 2010 TRM.
6- Tangible Product Expected	Revised transportation networks.
7- Expected Completion Date of Products	June, 2011
8- Previous Work	Networks for 2035 LRTP
9- Prior FTA Funds	\$0
10- Relationship	Input to 2040 LRTP
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 750
15- Section 104 (f) PL FHWA 80%	\$ 3,000
16- Section 5303 Local 10%	\$ 1,250
17- Section 5303 NCDOT 10%	\$ 1,250
18- Section 5303 FTA 80%	\$ 10,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-5
4- Title	<i>Forecast of Data to Horizon Year</i>
5- Task Objective	To prepare forecasts of housing and employment for use in the development of the 2040 LRTP.
6- Tangible Product Expected	Revised 2040 projections.
7- Expected Completion Date of Products	June 2011
8- Previous Work	Development of the 2035 projections.
9- Prior FTA Funds	\$0
10- Relationship	Input to 2040 LRTP
11- Agency	Town of Chapel Hill's Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 2,500
15- Section 104 (f) PL FHWA 80%	\$ 10,000
16- Section 5303 Local 10%	\$ 625
17- Section 5303 NCDOT 10%	\$ 625
18- Section 5303 FTA 80%	\$ 5,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-6
4- Title	<i>Community Goals & Objectives</i>
5- Task Objective	To review and revise community goals and objectives for use in the development of the 2040 LRTP.
6- Tangible Product Expected	Chapel Hill endorsement of 2040 LRTP goals and objectives
7- Expected Completion Date of Products	June 2011
8- Previous Work	Development of the 2035 LRTP goals and objectives.
9- Prior FTA Funds	\$0
10- Relationship	Input to 2040 LRTP
11- Agency	Town of Chapel Hill's Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 500
15- Section 104 (f) PL FHWA 80%	\$ 2,000
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-10
4- Title	<i>Transit Element of the Long Range Plan</i>
5- Task Objective	To continue implementation of the adopted 2035 transit element and prepare 2040 transit element.
6- Tangible Product Expected	2040 LRTP transit element
7- Expected Completion Date of Products	June 2011
8- Previous Work	2035 LRTP transit element
9- Prior FTA Funds	\$7,000
10- Relationship	The LRTP transit element supports the Chapel Hill-Carrboro Long Range Transit Plan and Orange County Transit Plan
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 750
15- Section 104 (f) PL FHWA 80%	\$ 3,000
16- Section 5303 Local 10%	\$ 625
17- Section 5303 NCDOT 10%	\$ 625
18- Section 5303 FTA 80%	\$ 5,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	II-B-17
4- Title	<i>Congestion Management Strategies</i>
5- Task Objective	The DCHC MPO will begin work to develop a MPO-wide Congestion Management Plan. Chapel Hill will work with the MPO staff to develop a scope of work for this Plan, provide ongoing project support and related data. The Town will also continue to support the development and implementation of regional TDM activities.
6- Tangible Product Expected	2010 CMS
7- Expected Completion Date of Products	June 2011
8- Previous Work	2005 Chapel Hill/Carrboro Mobility Report Card and 2007 Chapel Hill Transportation Management Plan Survey.
9- Prior FTA Funds	\$20,000
10- Relationship	The CMS Plan supports the implementation of the 2035 DCHC LRTP, Chapel Hill Long Range Transit Plan and other local plans. These activities will also support regional TDM implementation.
11- Agency	Town of Chapel Hill's Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 625
15- Section 104 (f) PL FHWA 80%	\$ 2,500
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442301
3- Task Code	III-C
4- Title	<i>Short Range Transit Plan</i>
5- Task Objective	To implement the recommendations of the STAC, 2035 DCHC Long Range Transportation Plan and Chapel Hill Transit Plan, including a Comprehensive Operation Analysis to implement expanded transit services.
6- Tangible Product Expected	Revised ridership projections and implementation plan for BRT and LRT.
7- Expected Completion Date of Products	June 2011
8- Previous Work	Development of the 2035 LRTP transit element, development of Chapel Hill Long Range Transit Plan and staff assistance to STAC.
9- Prior FTA Funds	\$15,000
10- Relationship	Additional planning will be necessary to implement higher capacity transit services such as bus rapid transit and light rail.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	
15- Section 104 (f) PL FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	\$ 8,000
20- Section 5307 Transit - NCDOT 10%	\$ 8,000
21- Section 5307 Transit - FTA 80%	\$ 64,000
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442100
3- Task Code	III-A
4- Title	<i>Planning Work Program</i>
5- Task Objective	To develop and monitor the annual planning work program.
6- Tangible Product Expected	2011-12 Planning Work Program.
7- Expected Completion Date of Products	June 2011
8- Previous Work	Development of the 2010-11 Planning Work Program.
9- Prior FTA Funds	\$1,288
10- Relationship	The Planning Work Program supports various regional planning efforts
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 250
15- Section 104 (f) PL FHWA 80%	\$ 1,000
16- Section 5303 Local 10%	\$ 161
17- Section 5303 NCDOT 10%	\$ 161
18- Section 5303 FTA 80%	\$ 1,288
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442500
3- Task Code	III-B
4- Title	<i>Transportation Improvement Program</i>
5- Task Objective	Development of the 2011-2017 TIP.
6- Tangible Product Expected	Development of final 2011-2017 TIP.
7- Expected Completion Date of Products	June 2011
8- Previous Work	Development of the 2009-2015 TIP.
9- Prior FTA Funds	\$2,000
10- Relationship	The TIP will be used to continue implementation of the 2035 LRTP, STAC Plan and Chapel Hill Long Range Transit Plan.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 250
15- Section 104 (f) PL FHWA 80%	\$ 1,000
16- Section 5303 Local 10%	\$ 250
17- Section 5303 NCDOT 10%	\$ 250
18- Section 5303 FTA 80%	\$ 2,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442700
3- Task Code	III-D-3
4- Title	<i>Special Studies</i>
5- Task Objective	To complete the Rams Plaza Transportation Analysis
6- Tangible Product Expected	Rams Plaza Transportation Analysis.
7- Expected Completion Date of Products	June 2011
8- Previous Work	None.
9- Prior FTA Funds	\$0
10- Relationship	This project supports the implementation of the 2035 LRTP.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	
15- Section 104 (f) PL FHWA 80%	
16- Section 5303 Local 10%	\$ 563
17- Section 5303 NCDOT 10%	\$ 563
18- Section 5303 FTA 80%	\$ 4,500
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442200
3- Task Code	III-D-4
4- Title	<i>Regional or Statewide Planning</i>
5- Task Objective	To support regional and statewide planning projects.
6- Tangible Product Expected	Long Range Transportation Plan
7- Expected Completion Date of Products	June 2011
8- Previous Work	STAC process
9- Prior FTA Funds	\$10,000
10- Relationship	This project supports the implementation of the 2035 Regional Plan, STAC recommendations and Chapel Hill Long Range Transit Plan.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 617
15- Section 104 (f) PL FHWA 80%	\$ 2,468
16- Section 5303 Local 10%	\$ 625
17- Section 5303 NCDOT 10%	\$ 625
18- Section 5303 FTA 80%	\$ 5,000
19- Section 5307 Transit - Local 10%	
20- Section 5307 Transit - NCDOT 10%	
21- Section 5307 Transit - FTA 80%	
22- Additional Funds - Local 100%	

**CHAPEL HILL TRANSIT
FTA TASK NARRATIVE TABLE
FY2010-2011 (FY 2011) UPWP**

1- MPO	Town of Chapel Hill
2- FTA Code	442100
3- Task Code	III-E
4- Title	<i>Management and Operations</i>
5- Task Objective	To support various transit planning activities.
6- Tangible Product Expected	Ongoing.
7- Expected Completion Date of Products	June 2011
8- Previous Work	Management and operation of transit planning program.
9- Prior FTA Funds	\$31,553
10- Relationship	Supports all other transit planning activities.
11- Agency	Town of Chapel Hill's Transit and Planning Departments
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PL Local 20%	\$ 4,500
15- Section 104 (f) PL FHWA 80%	\$ 18,000
16- Section 5303 Local 10%	\$ 3,944
17- Section 5303 NCDOT 10%	\$ 3,944
18- Section 5303 FTA 80%	\$ 31,553
19- Section 5307 Transit - Local 10%	\$ 3,003
20- Section 5307 Transit - NCDOT 10%	\$ 3,003
21- Section 5307 Transit - FTA 80%	\$ 24,024
22- Additional Funds - Local 100%	

CHAPEL HILL Anticipated DBE Contracting Opportunities for FY11

Name of MPO: Town of Chapel Hill

Person Completing Form: David Bonk/Carmen Cole

Telephone Number: 919-969-4911

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
THERE ARE CURRENTLY NO ANTICIPATED DBE CONTRACTING OPPORTUNITIES.					

Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note “No contracting opportunities” on the table if you do not anticipate having any contracting opportunities.

NCDOT

Durham-Chapel Hill-Carrboro Urban Area
 FY 2010-2011 Unified Planning Work Program
 Proposed Funding Source Tables

NCDOT
 3/2/2010 11:01

	Task Description	SPR Highway		Sec. 104(f) & 133(b)(3)(7)		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
II A	Surveillance of Change															
1	Traffic Volume Counts	0	0										-	-	-	-
2	Vehicle Miles of Travel	0	0										-	-	-	-
3	Street System Changes	0	0										-	-	-	-
4	Traffic Accidents	0	0										-	-	-	-
5	Transit System Data	0	0						0	0			-	-	-	-
6	Dwelling Unit, Pop. & Emp. Change	0	0										-	-	-	-
7	Air Travel	0	0										-	-	-	-
8	Vehicle Occupancy Rates	0	0										-	-	-	-
9	Travel Time Studies	0	0										-	-	-	-
10	Mapping	0	0										-	-	-	-
11	Central Area Parking Inventory	0	0										-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0										-	-	-	-
13	Bike & Ped. Counts	0	0										-	-	-	-
II B	Long Range Transp. Plan															
1	Collection of Base Year Data	0	0										-	-	-	-
2	Collection of Network Data	0	0										-	-	-	-
3	Travel Model Updates	2,100	8,400										-	2,100	8,400	10,500
4	Travel Surveys	0	0										-	-	-	-
5	Forecast of Data to Horizon year	0	0										-	-	-	-
6	Community Goals & Objectives	0	0										-	-	-	-
7	Forecast of Future Travel Patterns	0	0										-	-	-	-
8	Capacity Deficiency Analysis	0	0										-	-	-	-
9	Highway Element of the L RTP	2,300	9,200										-	2,300	9,200	11,500
10	Transit Element of the L RTP	1,000	4,000										-	1,000	4,000	5,000
11	Bicycle & Ped. Element of the L RTP	1,000	4,000										-	1,000	4,000	5,000
12	Airport/Air Travel Element of L RTP	0	0										-	-	-	-
13	Collector Street Element of L RTP	200	800										-	200	800	1,000
14	Rail, Water or other mode of L RTP	0	0										-	-	-	-
15	Freight Movement/Mobility Planning	0	0										-	-	-	-
16	Financial Planning	0	0										-	-	-	-
17	Congestion Management Strategies	200	800										-	200	800	1,000
18	Air Qual. Planning/Conformity Anal.	200	800										-	200	800	1,000
II C	Short Range Transit Planning															
1	Short Range Transit Planning	0	0										-	-	-	-
III-A	Planning Work Program	400	1,600										-	400	1,600	2,000
III-B	Transp. Improvement Plan	400	1,600										-	400	1,600	2,000
III-C	Civil Rgts. Cmp./Otr. Reg. Reqs.															
1	Title VI	0	0										-	-	-	-
2	Environmental Justice	0	0										-	-	-	-
3	Minority Business Enterprise	0	0										-	-	-	-
4	Planning for the Elderly & Disabled	0	0										-	-	-	-
5	Safety/Drug Control Planning	0	0										-	-	-	-
6	Public Involvement	0	0										-	-	-	-
7	Private Sector Participation	0	0										-	-	-	-
III-D	Incidental Ping./Project Dev.															
1	Transportation Enhancement Ping.	100	400										-	100	400	500
2	Enviro. Analysis & Pre-TIP Ping.	1,000	4,000										-	1,000	4,000	5,000
3	Special Studies	1,000	4,000										-	1,000	4,000	5,000
4	Regional or Statewide Planning	500	2,000										-	500	2,000	2,500
III-E	Management & Operations															
1	Management & Operations	4,000	16,000										-	4,000	16,000	20,000
Totals		\$14,400	\$57,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,400	\$57,600	\$72,000

Triangle Transit Authority (TTA)

Durham-Chapel Hill-Carrboro Urban Area
 FY 2010-2011 Unified Planning Work Program
 Proposed Funding Source Tables

2/25/2010 15:33

Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II-A Surveillance of Change														
1 Traffic Volume Counts								0	0	0	-	-	-	-
2 Vehicle Miles of Travel								0	0	0	-	-	-	-
3 Street System Changes								0	0	0	-	-	-	-
4 Traffic Accidents								0	0	0	-	-	-	-
5 Transit System Data								18,200	18,200	145,600	18,200	18,200	145,600	182,000
6 Dwelling Unit, Pop. & Emp. Change								0	0	0	-	-	-	-
7 Air Travel								0	0	0	-	-	-	-
8 Vehicle Occupancy Rates								0	0	0	-	-	-	-
9 Travel Time Studies								0	0	0	-	-	-	-
10 Mapping								0	0	0	-	-	-	-
11 Central Area Parking Inventory								0	0	0	-	-	-	-
12 Bike & Ped. Facilities Inventory								0	0	0	-	-	-	-
13 Bike & Ped. Counts								0	0	0	-	-	-	-
II-B Long Range Transp. Plan														
1 Collection of Base Year Data								0	0	0	-	-	-	-
2 Collection of Network Data								0	0	0	-	-	-	-
3 Travel Model Updates								16,000	16,000	128,000	16,000	16,000	128,000	160,000
4 Travel Surveys								0	0	0	-	-	-	-
5 Forecast of Data to Horizon year								0	0	0	-	-	-	-
6 Community Goals & Objectives								0	0	0	-	-	-	-
7 Forecast of Future Travel Patterns								0	0	0	-	-	-	-
8 Capacity Deficiency Analysis								0	0	0	-	-	-	-
9 Highway Element of th LRTP								0	0	0	-	-	-	-
10 Transit Element of the LRTP								4,500	4,500	36,000	4,500	4,500	36,000	45,000
11 Bicycle & Ped. Element of the LRTP								0	0	0	-	-	-	-
12 Airport/Air Travel Element of LRTP								0	0	0	-	-	-	-
13 Collector Street Element of LRTP								0	0	0	-	-	-	-
14 Rail, Water or other mode of LRTP								0	0	0	-	-	-	-
15 Freight Movement/Mobility Planning								0	0	0	-	-	-	-
16 Financial Planning								0	0	0	-	-	-	-
17 Congestion Management Strategies								0	0	0	-	-	-	-
18 Air Qual. Planning/Conformity Anal.								0	0	0	-	-	-	-
II-C Short Range Transit Planning								67,000	67,000	536,000	67,000	67,000	536,000	670,000
III-A Planning Work Program								0	0	0	-	-	-	-
III-B Transp. Improvement Plan								0	0	0	-	-	-	-
III-C Cvl Rgts. Cmp./Otr .Reg. Reqs.														
1 Title VI								0	0	0	-	-	-	-
2 Environmental Justice								0	0	0	-	-	-	-
3 Minority Business Enterprise								0	0	0	-	-	-	-
4 Planning for the Elderly & Disabled								0	0	0	-	-	-	-
5 Safety/Drug Control Planning								0	0	0	-	-	-	-
6 Public Involvement								0	0	0	-	-	-	-
7 Private Sector Participation								0	0	0	-	-	-	-
III-D Incidental Plng./Project Dev.														
1 Transportation Enhancement Plng.								0	0	0	-	-	-	-
2 Enviro. Analysis & Pre-TIP Plng.								0	0	0	-	-	-	-
3 Special Studies								13,800	13,800	110,400	13,800	13,800	110,400	138,000
4 Regional or Statewide Planning								0	0	0	-	-	-	-
III-E Management & Operations														
1 Management & Operations								0	0	0	-	-	-	-
Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$119,500	\$119,500	\$956,000	\$119,500	\$119,500	\$956,000	\$1,195,000

**TRIANGLE TRANSIT AUTHORITY
FTA TASK NARRATIVE TABLE
FY 2010-2011 (FY 2011) UPWP**

I- MPO	Durham Chapel Hill Carrboro MPO
2- FTA Code	442400
3- Task Code	II-A-5
4- Title	<i>Transit System Data</i>
5- Task Objective	To collect route patronage, on-time performance data, and passenger amenity data and customer preferences for service improvements.
6- Tangible Product Expected	Route planning changes and recommendations from both staff and hired consultants
7- Expected Completion Date of Products	June-11
8- Previous Work	Initial analysis of amenities and on-time performance
9- Prior FTA Funds	\$20,000
10- Relationship	APC data can be used to calibrate the travel times in the regional model. Data will inform route planning decisions.
11- Agency	Triangle Transit
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	\$ 18,200
20- Section 5307 Transit - NCDOT 10%	\$ 18,200
21- Section 5307 Transit - FTA 80%	\$ 145,600
22- Additional Funds - Local 100%	

**TRIANGLE TRANSIT AUTHORITY
FTA TASK NARRATIVE TABLE
FY 2010-2011 (FY 2011) UPWP**

I- MPO	Durham Chapel Hill Carrboro MPO
2- FTA Code	442301
3- Task Code	II-B-3
4- Title	<i>Travel Model Updates</i>
5- Task Objective	Ongoing support of TRM service bureau
6- Tangible Product Expected	Updated Triangle Regional Model
7- Expected Completion Date of Products	June-11
8- Previous Work	Ongoing support of TRM service bureau
9- Prior FTA Funds	\$0
10- Relationship	Supports the regional travel model utilized for the LRTP and other transit and highway planning purposes.
11- Agency	Service Bureau/ITRE responsible for task – Triangle Transit is a funding partner
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	\$ 16,000
20- Section 5307 Transit - NCDOT 10%	\$ 16,000
21- Section 5307 Transit - FTA 80%	\$ 128,000
22- Additional Funds - Local 100%	

**TRIANGLE TRANSIT AUTHORITY
FTA TASK NARRATIVE TABLE
FY 2010-2011 (FY 2011) UPWP**

I- MPO	Durham Chapel Hill Carrboro MPO	
2- FTA Code	442301	
3- Task Code	II-B-10	
4- Title	<i>Transit Element of the LRTP</i>	
5- Task Objective	To provide travel market analysis and cost information for development of transit investments for the LRTP; and to acquire GIS support services from TJCOG	
6- Tangible Product Expected	Technical planning report provided to regional leaders and the MPO; other GIS service needs as required.	
7- Expected Completion Date of Products	June-11	
8- Previous Work	Continued and ongoing regional corridor analysis for LRTP and other projects	
9- Prior FTA Funds	\$0	
10- Relationship	This supports regional transit planning for capital investments.	
11- Agency	Triangle Transit (with joint sponsorship by TJCOG and MPOs, NCDOT)	
12- HPR - Highway - NCDOT 20%		
13- HPR - Highway - FHWA 80%		
14- Section 104 (f) PI, Local 20%		
15- Section 104 (f) P I FHWA 80%		
16- Section 5303 Local 10%		
17- Section 5303 NCDOT 10%		
18- Section 5303 FTA 80%		
19- Section 5307 Transit - Local 10%	\$	4,500
20- Section 5307 Transit - NCDOT 10%	\$	4,500
21- Section 5307 Transit - FTA 80%	\$	36,000
22- Additional Funds - Local 100%		

**TRIANGLE TRANSITY AUTHORITY
FTA TASK NARRATIVE TABLE
FY 2010-2011 (FY 2011) UPWP**

1- MPO	Durham Chapel Hill Carrboro MPO
2- FTA Code	442400
3- Task Code	II-C-1
4- Title	<i>Short Range Transit Planning</i>
5- Task Objective	This covers a portion of staff salaries in the Departments of Commuter Resources and Capital Development related to TTA's short-range transit service and facility planning
6- Tangible Product Expected	On-going staff salaries
7- Expected Completion Date of Products	June-11
8- Previous Work	Ongoing staff salaries
9- Prior FTA Funds	\$0
10- Relationship	Provides staff support to carry out TTA planning activities related to service planning and capital development
11- Agency	Triangle Transit
12- HPR - Highway - NCDOT 20%	
13- HPR - Highway - FHWA 80%	
14- Section 104 (f) PI, Local 20%	
15- Section 104 (f) P I FHWA 80%	
16- Section 5303 Local 10%	
17- Section 5303 NCDOT 10%	
18- Section 5303 FTA 80%	
19- Section 5307 Transit - Local 10%	\$ 67,000
20- Section 5307 Transit - NCDOT 10%	\$ 67,000
21- Section 5307 Transit - FTA 80%	\$ 536,000
22- Additional Funds - Local 100%	

**TRIANGLE TRANSIT AUTHORITY
FTA TASK NARRATIVE TABLE
FY 2010-2011 (FY 2011) UPWP**

1- MPO	Durham Chapel Hill Carrboro MPO	
2- FTA Code	442302	
3- Task Code	III-D-3	
4- Title	<i>Special Studies</i>	
5- Task Objective	Studies may be conducted for corridors that show promise during the course of the development of the transit element of the LRTP, including capital cost estimation, financial planning, and transit expert studies for corridors and alignments	
6- Tangible Product Expected	RFP and/or Technical Report	
7- Expected Completion Date of Products	June-11	
8- Previous Work	Rail corridor schedule report from Parsons Brinkerhoff	
9- Prior FTA Funds	\$57,000	
10- Relationship	This task will follow from the transit infrastructure planning conducted for the LRTP.	
11- Agency	Triangle Transit	
12- HPR - Highway - NCDOT 20%		
13- HPR - Highway - FHWA 80%		
14- Section 104 (f) PI, Local 20%		
15- Section 104 (f) P I FHWA 80%		
16- Section 5303 Local 10%		
17- Section 5303 NCDOT 10%		
18- Section 5303 FTA 80%		
19- Section 5307 Transit - Local 10%	\$	13,800
20- Section 5307 Transit - NCDOT 10%	\$	13,800
21- Section 5307 Transit - FTA 80%	\$	110,400
22- Additional Funds - Local 100%		

Attachment # 7 Anticipated DBE Contracting Opportunities for FY11

Name of MPO: Durham Chapel Hill Carrboro – Triangle Transit Authority

Person Completing Form: Patrick McDonough

Telephone Number: (919) 485-7485

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
III-D-3	Special Studies	Triangle Transit	Consultant	\$138,000	\$138,000
II-A-5	Transit System Data	Triangle Transit	Consultant	Zero to \$182,000	Zero to \$182,000

Sample Entry:

II-C-11	Transit Plan Evaluation	Big City Planning Department	Consultant	\$48,000	\$60,000
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Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note “No contracting opportunities” on the table if you do not anticipate having any contracting opportunities.

Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
II A Surveillance of Change														
1 Traffic Volume Counts														
2 Vehicle Miles of Travel														
3 Street System Changes														
4 Traffic Accidents														
5 Transit System Data														
6 Dwelling Unit, Pop. & Emp. Change														
7 Air Travel														
8 Vehicle Occupancy Rates														
9 Travel Time Studies														
10 Mapping														
11 Central Area Parking Inventory														
12 Bike & Ped. Facilities Inventory														
13 Bike & Ped. Counts														
II B Long Range Transp. Plan														
1 Collection of Base Year Data														
2 Collection of Network Data														
3 Travel Model Updates														
4 Travel Surveys	0	0	0	0										
5 Forecast of Data to Horizon year	0	0	0	0										
6 Community Goals & Objectives														
7 Forecast of Future Travel Patterns														
8 Capacity Deficiency Analysis														
9 Highway Element of th LRTP														
10 Transit Element of the LRTP	0		0	0										
11 Bicycle & Ped. Element of the LRTP	0	0	0	0										
12 Airport/Air Travel Element of LRTP														
13 Collector Street Element of LRTP			0	0										
14 Rail, Water or other mode of LRTP														
15 Freight Movement/Mobility Planning														
16 Financial Planning														
17 Congestion Management Strategies														
18 Air Qual. Planning Conformity Anal.	3,125	12,500	0	0								3,125	12,500	15,625
II - C Short Range Transit Planning														
III-A Planning Work Program														
III-B Transp. Improvement Plan														
III-C Cvl Rgts. Cmp./Otr. Reg. Reqs.														
1 Title VI														
2 Environmental Justice														
3 Minority Business Enterprise														
4 Planning for the Elderly & Disabled														
5 Safety/Drug Control Planning														
6 Public Involvement														
7 Private Sector Participation														
III-D Incidental Plng./Project Dev.														
1 Transportation Enhancement Plng.														
2 Enviro. Analysis & Pre-TIP Plng.														
3 Special Studies	0	0	0	0										
4 Regional or Statewide Planning	4,375	17,500	0	0								4,375	17,500	21,875
III-E Management & Operations														
1 Management & Operations	0	0												
Totals	\$7,500	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$30,000	\$37,500

**TRIANGLE J COUNCIL OF GOVERNMENTS
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Task II-B-18: Air Quality Planning

TJCOG will continue to work with DCHC MPO, CAMPO, NCDOT, ITRE, FHWA, RPOs and DENR on air quality related issues, focusing on TIP and LRTP conformity and the development of SIP emissions budget for the forthcoming revision to the national ozone standard and subsequent redesignation of the Triangle as an ozone non-attainment area.

Objectives:

1. To ensure a consistent and coordinated regional approach to air quality requirements across geographic and institutional boundaries.
2. To provide information and support on air quality issues.

Previous Work:

1. Unified conformity reports for the currently designated Ozone Maintenance area covering all or portions of 3 MPOs and 3 RPOs were prepared for the 2030 LRTPs, 2004-10 TIP, 2006-12 TIP, amended 2030 LRTPs, 2007-13 TIP, 2009-15 TIP, 2035 LRTPs and Hopson Road amendment to the 2035 LRTP (in process).
2. Information was provided to all partners on the framework for the previous round of development of SIP motor vehicle emission budgets.
3. The www.triangleair.org website was created as a vehicle to share technical documents.

Proposed Activities:

1. Oversee the Conformity Process associated with the 2012-18 TIP.
2. Collect and disseminate information on air quality issues and ensure that conformity concerns are represented in transportation planning and modeling efforts.
3. Work with MPOs on responding to proposals for revised federal ozone standard and development of the Ozone SIP for the subsequent Triangle non-attainment area.
4. Prepare memos and reports documenting activities.
5. Work with individual MPO members as needed on regional-scale air quality issues.

Products:

1. Conformity Reports for any LRTP or TIP amendments, including all related materials such as schedule/responsibility spreadsheet and Pre-Analysis Consensus Plan.
2. Memos or reports, as needed, addressing MPO concerns and options in the development of new SIP Motor Vehicle Emission Budgets.
3. Clear documentation of all methods, assumptions and data.

**TRIANGLE J COUNCIL OF GOVERNMENTS
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Relationship to Other Plans and MPO Activities:

Air quality conformity is a requirement for TIPs and LRTPs.

Completion Date:

Air quality work schedules are determined by the timing of TIP and LRTP amendments and can overlap MPO fiscal years. Air quality work associated with SIP development is determined by federal and state schedules and can overlap MPO fiscal years.

Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by existing TJCOG staff.

Funding Commitments from Other Entities:

This is a cooperative project with CAMPO, which is also providing funding. TARPO funding for TJCOG staff time is also allocated to this task.

Task III-D-4: Regional and Statewide Planning

TJCOG will continue to work with DCHC MPO, CAMPO, NCDOT, ITRE, TTA and RPOs in the region on critical coordination issues addressing the intersection of land use development and transportation investments and on related regional-scale efforts, including coordination issues related to the use and improvement of the Triangle Regional Model.

Objectives:

1. To promote consistency and coordination in matching land use decisions with transportation investments; especially investments that transcend MPO boundaries.
2. To provide information and support on the relationships between land use and transportation.
3. To assist the MPOs and their members with SE data development and tracking.

Previous Work:

1. Working with the MPOs on a single, consistent 2035 LRTP document.
2. Helping in the development of Chatham County SE data.
3. Working on regional transportation planning efforts, including the Special Transit Advisory Commission.
4. Provided facilitation of the quarterly meetings of the TRM Executive Committee.
5. Manage and provide technical support and GIS services for MPO planning efforts.

**TRIANGLE J COUNCIL OF GOVERNMENTS
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**

Proposed Activities:

1. Work with partners on updating land use and socioeconomic data to better model land use for the 2040 LRTP, especially in transit corridors and activity centers and around proposed transit stations.
2. Collect and disseminate information on land use and development issues and ensure that land use concerns are represented in transportation planning and modeling efforts.
3. Continue facilitation of ITRE Model Service Bureau Executive Committee and support coordination between the service bureau and users of the TRM.
4. Work with the MPO, member communities, TTA and other organizations on matching land use decisions to proposed transit investments.
5. Continue to participate in regional and statewide transportation planning efforts such as Joint MPO TAC, TriMAP, the DCHC land use model, the development of transit financial plans, TTA projects, the NC54/I-40 plan and any transit planning efforts for the RTP/RDU area.
6. Prepare memos and reports documenting activities.
7. Work with individual MPO members as needed on regional-scale land use and transportation issues.

Products:

1. Memos and reports, as needed, related to land use and land use scenarios, SE data and project-level consistency across boundaries.
2. Reports, analysis and visualizations designed to promote transit oriented development in appropriate transit corridors.
3. GIS data layers related to land use, SE data and transportation projects, including related natural resource conditions and governmental boundaries.
4. ITRE TRM service bureau executive committee meeting summaries, and any related material.
5. Clear documentation of all methods, assumptions and data.

Relationship to Other Plans and MPO Activities:

Land use projections are requirements for TIPs and LRTPs; consistency on land use, fiscal constraint and transportation projects that cross boundaries are important considerations in developing high-quality plans and programs.

Completion Date:

This phase of work will be completed during the FY10-11 fiscal year, although some tasks may carry over into FY11-12 depending on schedules set by other partners.

**TRIANGLE J COUNCIL OF GOVERNMENTS
TASK DESCRIPTIONS & NARRATIVES
FY 2010-2010 UPWP**


Proposed Budget and Level of Effort (Staff or Consulting):

Tasks will be undertaken by existing TJCOG staff.

Funding Commitments from Other Entities:

This is a cooperative project with CAMPO and TTA, which are also providing funding. TARPO funding for TJCOG staff time may also allocated to this task.

End of Document.



DRAFT FY 2010-2011 UNIFIED PLANNING WORK PROGRAM (UPWP) FOR THE DCHC MPO

**TCC Meeting
February 24, 2010**

FY 2010-11 UPWP OVERVIEW

- Federal regulations mandate that the MPO develop an annual work program known as the Unified Planning Work Program (UPWP).
- The annual program must identify transportation planning tasks to be undertaken with the use of federal transportation funds during the upcoming fiscal year.
- The UPWP must detail technical work program for continuing, cooperative and comprehensive (3C) transportation planning in the DCHC MPO.

2

FY 2010-11 UPWP FUNDING SOURCES

- USDOT has not allocated planning funds for FY2011. The MPO has been directed to use last year's allocation in developing the draft. Revision or amendments will be made subsequent to notification of the final FY 2011 funding allocation.
- Federal Highway Administration –FHWA (80%)
 - Section 104(f) Planning : \$354,044
 - Section 133(b)(3)(7) –STP-DA : \$1,205,108 (*this number does not include any carry-over funds or local discretionary funds to be flexed to planning*)

3

FY 2010-11 UPWP FUNDING SOURCES

- Federal Transit Administration – FTA (80%)
 - Section 5303: \$ 223,144
 - Section 5307: \$1,350,689
- North Carolina DOT - NCDOT (10%)
 - Section 5303: \$ 27,893
 - Section 5307: \$ 168,836
- Local Matching Funds
 - 10% local match for transit planning
 - 20% local match for FHWA funds

4

FY 2010-11 UPWP

- Funding tasks are derived from the approved *Prospectus* by NCDOT and MPOs statewide.
 - Prospectus broad task areas
 - Surveillance of change – data monitoring
 - Long range transportation plan activities
 - Short range transit planning
 - Planning work program
 - Transportation Improvement Program
 - Civil rights
 - Administration

5

FY 2010-11 UPWP FUNDING BROAD AREAS

- General/On-Going/Core/Routine 3-C Planning Process
- Emphasis Transportation Planning Projects/Products.
- Continuation of Special Projects
- New Initiatives – No new initiatives proposed for 2010-11 UPWP (Maybe Parking Survey/Study ???).

6

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- TCC/TAC meetings/agenda preparation/directives to staff/follow-ups
- MTIP/STIP development including priority lists
- TIP amendments
- Stimulus projects oversight, reporting and audit compliance
- UPWP development and amendments
- Transit planning
- Data collection, monitoring & maintenance
- GIS mapping/maintenance/administration
- Bike/pedestrian planning

7

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- Management and operation of transportation planning process
- JARC/New Freedom programming & administration
- STP-DA Programming, monitoring & administration
- CMAQ Programming, monitoring & administration
- Air quality planning & conformity
- Project planning & development
- Environmental justice involvement / limited English proficiency planning
- State & regional planning coordination

8

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- Financial management and auditing
- Public involvement/outreach
- MPO website maintenance/content management, visualization and interactive capabilities
- Civil rights/Title VI planning compliance
- Congestion management monitoring
- Data inventory monitoring

9

EMPHASIS PLANNING PROJECTS/PROGRAMS

- Development of the 2040 Long Range Transportation Plan - LRTP
- Comprehensive Transportation Plan – CTP
- Development & update of the MPO Congestion Management Process (CMP)
- Maintenance and update of the regional Intelligent Transportation System (ITS)
- Maintenance and update of IDAS & DynaSmart

10

EMPHASIS PLANNING PROJECTS/PROGRAMS

- MPO data collection and surveillance of change
- Triangle Regional Model (TRM) update, improvements, calibration and validation
- DCHC MPO policy document and strategic plan
- Environmental justice /limited English proficiency plan update & integration

11

EMPHASIS PLANNING PROJECTS/PROGRAMS

- MPO climate change plan/integration of climate change/greenhouse gas into MPO planning processes
- Bicycle friendly designation for Durham and Chapel Hill
- Spatial mapping and analysis of bike and pedestrian access to schools
- Rail traffic separation study (high speed rail)
- Freight/urban goods movement planning

12

EMPHASIS PLANNING PROJECTS/PROGRAMS

- Purpose and need statement, indirect & cumulative impacts (ICI) analysis/plan for DCHC MPO
- Preparation of bicycle map
- TDM plan update and monitoring
- MPO policy/process document coordination with CAMPO, organizational study & regional efficiency study (similar to Charlotte area MPOs)
- MPO/MAB expansion prep work for Census

13

FY 2010-11 UPWP CONTINUATION OF SPECIAL PROJECTS

- NC 54/I40 corridor study
- MPO integrated land use/transportation model development
- MPO land use scenario planning tool
- Development of the non-motorized trip model
- MPO GIS warehouse (enterprise)/ automation

14

FY 2010-11 UPWP NEW INITIATIVES

- None proposed.
- Except parking survey and survey to support transit planning and travel demand forecasting (especially in Chapel Hill, Duke, downtowns and RTP).
- Need matching funds contribution from MPO member agencies .

15

FY 2009-10 UPWP HIGHLIGHTS OF PLANNING ACTIVITIES

- Environmental project planning/NEPA – staff involvement in project development, engineering and environmental process (e.g., East End Connector, Hillandale Road, South Columbia, Elizabeth Brady Road, etc)
- State and regional coordination (regional transit projects, Intelligent Transportation Systems, I-40 HOV, Triangle Parkway toll projects, etc)

16

FY 2009-10 UPWP

- TCC Action:
Recommend TAC release the Draft
FY2010-11 UPWP for public comment

MEMORANDUM

**TO: Technical Coordinating Committee
DCHC MPO**

FROM: DCHC MPO Lead Planning Agency

DATE: February 24th, 2010

SUBJECT: MPO Deadlines for UPWP Submittals, Reporting, & Supporting Documentation

The UPWP reporting and grant administration is a very complex process that is streamlined and developed through the assistance and cooperation of the LPA staff and all participating agencies. As we all know, working to be compliant in a comprehensive Federal Grant program environment, takes team-work. The MPO has been experiencing late submittals on quarterly invoices, UPWP amendment & UPWP budget development requests. The MPO staff is working diligently to be intentionally timely and compliant with NCDOT, FHWA & FTA deadlines. All of these agencies rely on our timeliness of reporting, billing, invoices and narrative project status updates to keep federal funds current. In efforts to reiterate the new FY10 financial reporting processes, implemented in June of 2009, we are asking member agencies to please be more diligent about meeting deadlines. This memo also serves to implement an additional requirement listed in Section B below.

Section A. Deadlines for Quarterly UPWP Submittal of Reports & Backup Documentation:

First Quarter: October 15th

Second Quarter: January 15th

Third Quarter: April 15th

Fourth Quarter: July 15th

Reporting packages *must be* submitted on time with complete documentation. Complete documentation includes the following, --Invoice cover letter, --UPWP check list, --Quarterly Narrative (project status) report, --Expenditure report, --Composite report & --All supporting documentation (timesheets, etc.). MPO Agency representatives are individually responsible for putting all necessary documentation together, with accuracy and submitting it on a timely basis.

Section B. If you cannot meet this deadline, a letter will be required no later than 5 days prior to the deadline indicating the reason this information cannot be provided in a timely manner (as outlined above and understood to by the parties involved). A quarterly narrative is required whether a letter is submitted or not.

Section C. Annual UPWP deadlines vary throughout the year, but should be adhered to as requested. Any missed deadlines, without timely communication, will be at risk of being denied.

Section D. All questions and correspondence regarding UPWP should be sent to Maricia Brown and Felix Nwoko.

Farrington Road Corridor Study

Draft Report

Background

The goal of the Farrington Road Corridor Study is to identify appropriate future transportation improvements in an area that has great growth potential but is currently rural in character and possesses a large expanse of environmentally-sensitive land. The Study was conducted in 2007 and 2008, and the TAC received a preliminary Study presentation at their June 11, 2008 meeting that covered the issues, analysis, scenario planning and preliminary recommendations. The TAC referred the matter to staff. The Chatham County Board of Commissioners received a similar presentation on September 15, 2008.

The preliminary Farrington Road Corridor Study recommendations were incorporated into the draft 2035 Long Range Transportation Plan (2035 LRTP), however several TAC members asked that the road widening in the rural and environmentally-sensitive areas be removed from the 2035 LRTP. The final 2035 LRTP notably included transportation system management (TSM) solutions, such as intersection improvements and roundabouts, in lieu of the roadway widenings.

Process Delayed

At that time, staff anticipated releasing the Farrington Road Corridor Study with the 2035 Long Range Transportation Plan (2035 LRTP) for public review. However, the 2035 LRTP process required significant staff resources and was under a critical deadline, and therefore staff focused on the 2035 LRTP and decided to release the Farrington Study with the approaching Comprehensive Transportation Plan (CTP) process. The CTP process has been delayed, and staff recommends moving the Farrington Road Study forward with a public release and review.

Finishing the Process

Although the Study has been delayed, staff believes the TAC and local governments will benefit from reviewing and accepting the recommended transportation improvements that are summarized in Figure 31 map (on page 100) and the land use scenario results summarized in Table 9 and Table 10 (on pages 71 and 72). The scenario results describe the transportation impacts, such as reduced vehicle trips and increased conservation acreage, of implementing more compact or constrained land use development in the study area.

Attachment 10A is a copy of the draft Farrington Road Corridor Study.

Draft Report

The following changes were made to the preliminary Farrington Road Corridor Study to produce the draft Study:

1. Road Widenings -- The recommended road widening in environmentally-sensitive areas have been removed based on concerns about the impact to wetlands and water quality. The study added recommendations for intersection improvements and roundabouts to address anticipated congestion in these corridors.
2. Executive Summary -- An Executive Summary has been added to the front of the document.
3. Land Use Scenarios -- The land use scenario planning section has been improved with more detailed descriptions of the scenarios, results and recommendations.
4. Recommendations -- The transportation recommendations are more closely tied to deficiencies and divided into short- and long-term recommendations. Also, the report clearly designates whether they are included in the 2035 Long Range Transportation Plan (2035 LRTP).

Public Review Process

Staff recommends releasing the draft Farrington Road Corridor Study for public comment and conducting a public hearing at the April TAC meeting. The Lead Planning Agency (LPA) will advertise these events. In addition, local staff or governments might want to formally review the Study. Local elected bodies within the DCHC MPO planning area that might have an interest in reviewing the draft Study would include:

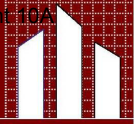
- City of Durham;
- Durham Board of County Commissioners;
- Town of Chapel Hill;
- Orange County Board of County Commissioners; and,
- Chatham County Board of County Commissioners.

Recommendation and Action

TCC Recommendation: That the TAC receive the draft Farrington Road Corridor Study and release for public comment.

TAC Action: Receive the draft Farrington Road Corridor Study and release for public comment.

DCHC



Durham-Chapel Hill-Carrboro

METROPOLITAN
Planning Organization

FARRINGTON ROAD CORRIDOR STUDY

Prepared for:

DURHAM · CHAPEL HILL · CARRBORO
METROPOLITAN PLANNING ORGANIZATION

Prepared by:



Kimley-Horn and Associates, Inc.



URBAN RESOURCE GROUP
A DIVISION OF KIMLEY-HORN AND ASSOCIATES, INC.

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acknowledgements

DCHC MPO

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Felix Nwoko
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City of Durham

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- Urban Form & Travel Behavior
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- Plans, Policies, and Regulatory Tools

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- Growth Allocation Model: Three Step Process
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- Scenario Planning Results
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Roadway Recommendations
Land Use Recommendations

Chapter 6 — Recommendations

Roadway
Intersection Improvements
Land Use

Appendix

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executive summary

The Research Triangle area experienced considerable growth over the past three decades which is expected to continue. Growth is forecasted to occur in undeveloped areas of the region that have large tracts of vacant land that are in close proximity to employment centers -- including areas influencing the Farrington Road Corridor. **The focus of the Farrington Road Corridor Study is to identify the type and extent of growth patterns and development intensities anticipated for the area, and the associated traffic impacts likely to result.**

The study area for the Farrington Road Corridor Study focuses on the potential high-growth area emerging at the convergence of four counties — Chatham, Durham, Orange, and Wake — and three cities — Cary, Chapel Hill, and Durham — immediately south and west of Research Triangle Park. See **Figure 31** on the last page of this Executive Summary for a depiction of the study area. This study seeks to offer recommendations that will address the future transportation and land use concerns while respecting and preserving the natural environment within the area. Extensive environmental, transportation, and land use analysis was conducted to understand the needs and conditions of the area.

Existing Analysis

Analysis of the existing transportation conditions included corridor Level-of-Service (LOS) analysis, intersection LOS analysis, cordon survey flows, select link analysis, and district flow analysis. It was determined that all of the studied corridors and intersections are operating at an acceptable LOS. In addition, it was found that the majority of the trips are local in nature and that trips from outside the area are not expected to create significant demand on the Farrington Road Corridor.

Natural Environment

Environmental features in the study area have a significant impact on development patterns, and constrain additions to the built environment and to roadway facilities. The following features of the natural environment were considered:

- Wetlands
- Federally Threatened and Endangered Species
- Nutrient Sensitive Waters
- Water Supply Watersheds
- Floodplain/Floodway Zones

Scenario Planning













The scenario analysis effort demonstrated that a new trend toward compact development centers would result in a more efficient transportation network, reduce overall infrastructure costs and conserve land. Scenario planning allows communities to

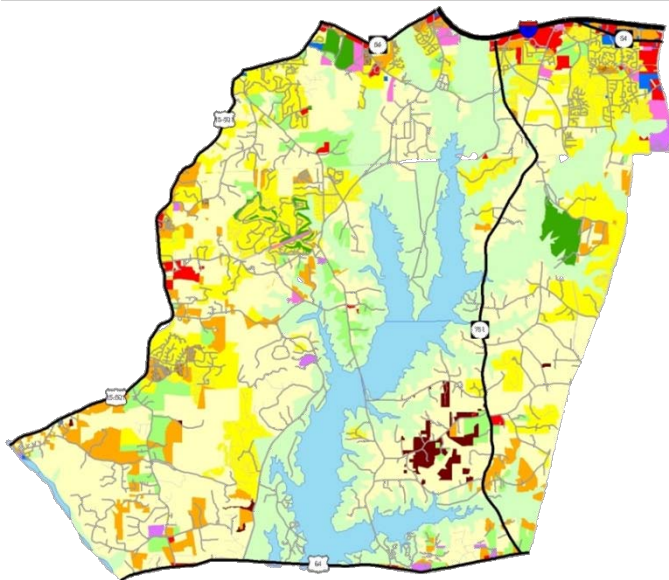
executive summary

evaluate the influence of land use, design and environmental features on the efficiency of the surrounding transportation. CommunityViz® Scenario 360® (scenario analysis software) evaluated impacts on the transportation system by three distinct future year development scenarios (year 2035): business-as-usual; compact development centers; and constrained growth projections.

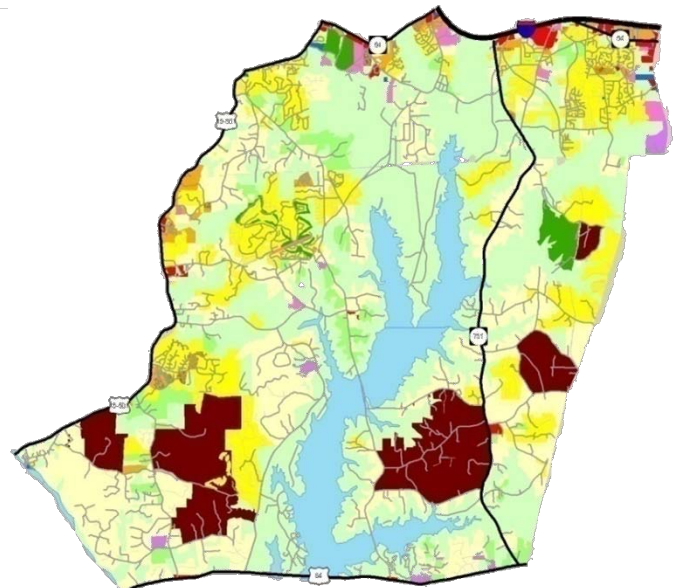
The two maps below and the table on the next page show the different development patterns and densities for the three scenarios. Although the business-as-usual and compact development centers accommodate the same level of employment and population, the compact development centers scenario allows approximately 9,000 more acres to remain in permanent conservation.

Development Scenario Maps

	Rural Residential		Civic / Institutional		Agriculture
	Low Density Residential		Commercial		Conservation
	Medium Density Residential		Light Industrial		Parks / Recreation
	High Density Residential		General Office		Compact Dev. Center



Business-as-Usual



Compact Development Centers

executive summary

Land Use Profile by Scenario

General Land Use Category	Business As Usual		Compact Development Centers		Constrained Growth Projection	
	Acreage	Percent	Acreage	Percent	Acreage	Percent
Agriculture	2,989.95	4.20%	2,614.06	3.67%	2,989.95	4.20%
Civic / Institutional	519.48	0.73%	519.48	0.73%	519.48	0.73%
Commercial	1,046.66	1.47%	599.62	0.84%	1,046.66	1.47%
General Office	227.81	0.32%	123.87	0.17%	227.81	0.32%
High Density Residential	166.63	0.23%	166.63	0.23%	166.63	0.23%
Low Density Residential	10,656.32	14.96%	9,604.48	13.48%	10,656.32	14.96%
Light Industrial	335.03	0.47%	335.03	0.47%	335.03	0.47%
Medium Density Residential	3,846.39	5.40%	916.33	1.29%	3,846.39	5.40%
Permanent Conservation	24,669.52	34.63%	33,494.36	47.02%	24,669.52	34.63%
Parks & Recreation	923.14	1.30%	917.71	1.29%	923.14	1.30%
Rural Residential	25,209.14	35.39%	15,416.21	21.64%	25,209.14	35.39%
Compact Development Center	650.07	0.91%	6,532.37	9.17%	650.07	0.91%
Total	71,240.15	100.00%	71,240.15	100.00%	71,240.15	100.00%

(Business as Usual and Compact Development assume the same employment and population levels. Constrained Growth represents a 15% reduction in employment and population)

The compact development centers scenario also provides travel advantages. The table below presents measures of effectiveness (MOEs) for comparing the three land use scenarios. The per-capita level of trips, travel miles and travel minutes are lower when comparing the business-as-usual and compact development centers scenarios, resulting in an approximately 5% reduction in vehicle miles traveled (VMT) for the compact development center scenario.

Measures of Effectiveness from the Triangle Research Model (TRM)

	Scenario			Percent Difference	
	Business-as-Usual (BAU)	Compact Development Centers (CDC)	Constrained Growth Projection (CGP)	BAU-CDC	BAU-CGP
Study Area Population	22,789	22,789	19,367	0%	-15%
Households	10,457	10,457	8,888	0%	-15%
Vehicle Trips	95,116	76,330	71,895	-19.75%	-24.41%
Vehicle Trips/Person	4.17	3.35	3.71	-19.75%	-11.03%
VMT	526,106	501,041	466,130	4.76%	-11.40%
VMT/ Person	23.09	21.99	24.1	-4.76%	4.4%
VHT	795,316	752,541	694,950	-5.38%	-12.62%
VHT/ Person (hours)	0.58	0.55	.60	-5.38%	3.4%
VHT/ Person (minutes)	34.90	33.02	35.88	-5.38%	3.4%
Average AM Speed	41.11	41.36	41.03	0.61%	-0.80%
Percent VMT over Capacity	5.32%	4.66%	4.41%	NA	NA

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Future Analysis

Analysis of future transportation conditions indicated that many transportation facilities within the study area will experience significant traffic volumes. The impacts will be five roadway sections that experience a LOS F, including NC 751, Farrington Road, Old Farrington Point Road, Barbee Chapel Road, and Stagecoach Road, and two intersections at LOS F, including NC 751/Hope Valley Road and NC 751/Fayetteville Road. In addition, several road segments and intersections will operate at LOS E. The majority of the traffic demand in the study area will remain local.

Recommendations

Roadway and Intersection Recommendations

Recommendations for roadway and intersection improvements are listed below and have been designated as short- or long-term solutions. There is no priority order for these recommendations and it is assumed that private developers might build some projects to mitigate the traffic impacts of a particular development. **Figure 31** is a map showing the location of the proposed recommendations.

It is expected that several roadways within the Farrington Road area will require significantly increased capacity given an expected LOS of E or F. Increasing capacity is typically accomplished through widening, i.e., the addition of travel lanes. However, the DCHC MPO applies a heavy weight to environmental considerations such as wetland preservation and water quality when evaluating projects. Alternative improvements including intersection upgrades and roundabouts are recommended for these roadways to avoid the environmental impacts of road widenings. Construction of a roundabout would be in lieu of adding turn lanes and traffic signals.

US 15-501 and Jack Bennett Road

- **Short-term:** Lengthen the existing westbound left-turn lane on Jack Bennett Road to provide 250 feet of full-width storage.

Old Farrington Point Road and Lystra Road

- **Short-term:** Construct an additional eastbound left-turn lane on Lystra Road with 425 feet of full-width storage, and corresponding receiving lane on northbound Old Farrington Point Rd.
- **Long-term:** Construct an exclusive southbound right-turn lane on Old Farrington Point Road with 300 feet of full-width storage.

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- Long-term: In lieu of constructing turn lanes, consider conversion of traffic signal to a roundabout configuration.

Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road

- Long-term: Construct an exclusive westbound right-turn turn lane on Farrington Point Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive northbound right-turn lane on Old Farrington Point Road with 225 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn turn lane on Mt. Carmel Road with 125 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Mill Road/Farrington Point Road and Barbee-Chapel Road

- Long-term: Construct an exclusive eastbound right-turn turn lane on Barbee-Chapel Road with 125 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Farrington Point Road with 700 feet of full-width storage.
- Long-term: Construct an exclusive northbound left-turn lane on Farrington Point Road to provide 225 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Road and Stagecoach Road

- Short-term: Construct an exclusive northbound right-turn turn lane on Farrington Road with 200 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn lane on Farrington Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Stagecoach Road with 100 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Stagecoach Road and Hope Valley Road (751)

- Short-term: Construct an additional eastbound left-turn lane on Stagecoach Road with 250 feet of full-width storage.

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- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Construct an exclusive northbound left-turn lane on Hope Valley Road with 400 feet of full-width storage.
- Long-term: Construct an exclusive southbound right-turn lane on Hope Valley Road with 200 feet of full-width storage.

Hope Valley Road (751) and Fayetteville Road

- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Lengthen the existing northbound right-turn lane on Hope Valley Road to provide 350 feet of full-width storage.
- Long-term: Construct an additional westbound left-turn lane Fayetteville Road with 100 feet of full-width storage
- Long-term: Lengthen the existing westbound right-turn lane on Fayetteville Road to provide 175 feet of full-width storage.

NC 55 and T.W. Alexander Drive

- Short-term: Lengthen the existing westbound right-turn lane on T.W. Alexander Drive to provide 400 feet of full-width storage.
- Long-term: Provide a free flow northbound right-turn lane.

Transit Recommendations

The only transit service provided in the study area was along the study area borders such as NC 54 and US 15-501. However, the land use recommendation identifies six compact development centers that might create densities at a threshold that make transit service feasible in the area. Providing transit service, both local service and express service to UNC-CH (University of North Carolina at Chapel Hill) and the RTP (Research Triangle Park), should be considered if more transit-friendly land use patterns are realized in the future.

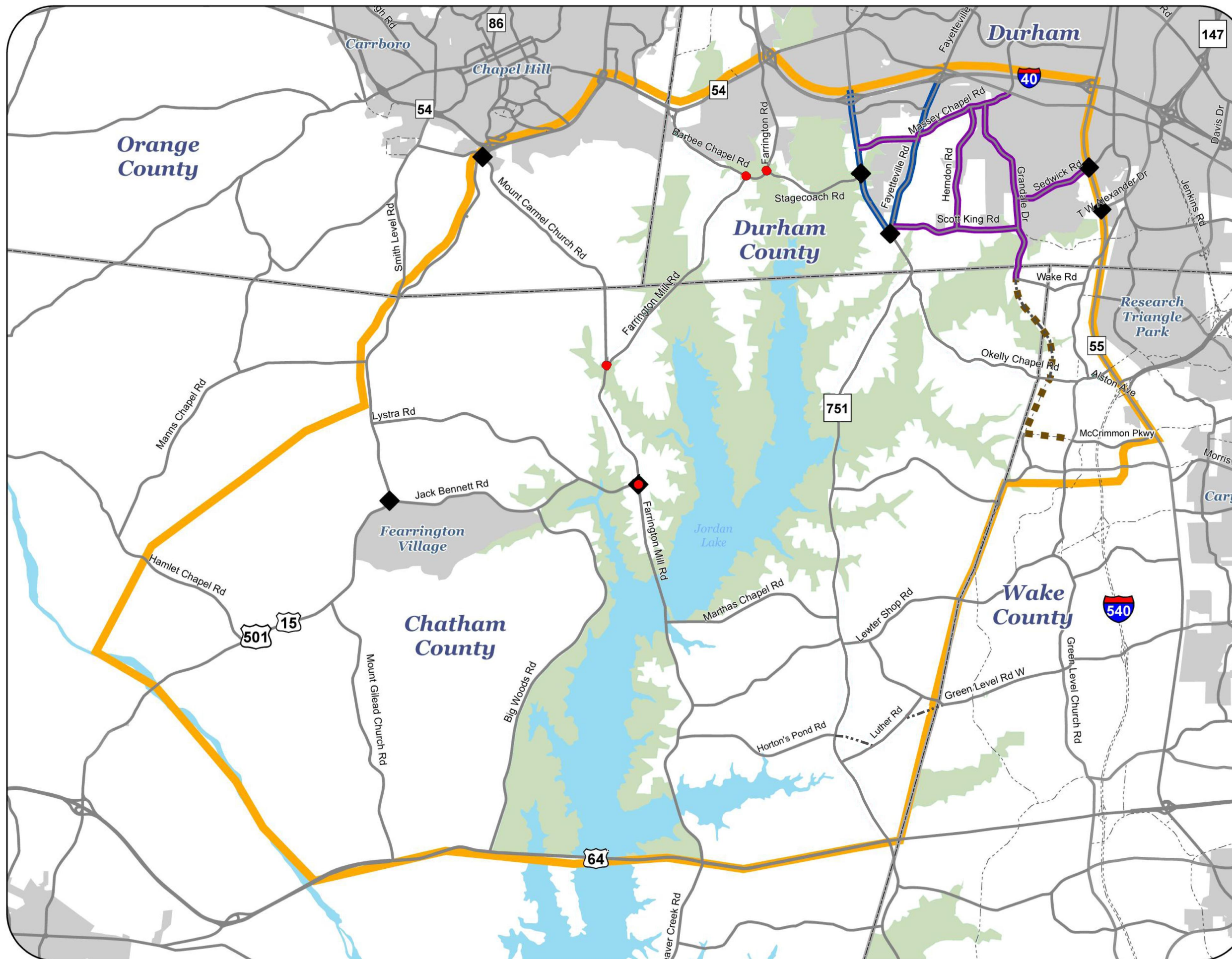
Land Use Recommendations

It is recommended that local jurisdictions consider land use changes as well as strengthening development policies and/or land development controls to encourage a compact, nodal development pattern within the study area.

Farrington Road Corridor Study

Figure 31

Recommended Transportation Improvements



- Recommendations**
- Roundabout Conversion
 - ◆ Intersection Improvement
 - Access Management
 - Operational Management
 - - - New Roadway
 - - - New Roads
 - ▭ Counties
 - ▭ Study Area
 - ▭ Municipalities
 - ▭ Lakes
 - ▭ Corps of Engineers Land

November 25, 2008



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introduction

The Raleigh-Durham-Chapel Hill “Research Triangle” area, with its favorable weather, affordable housing, great schools and universities, and presence of high tech jobs, has long been a desirable place to live and work in the region. The metropolitan area is one of the fastest growing areas in the country, expanding from a 1970 population of 537,000 to a 2006 population of 1,400,000.

Growth in the Triangle has spread from the traditional urban centers in Raleigh, Durham, and Chapel Hill to neighboring municipalities including Cary and Hillsborough, and beyond into rural areas of Chatham, Durham, Orange, and Wake Counties. Large tracts of rural, undeveloped land, combined with proximity to the Research Triangle area and Research Triangle Park make land surrounding Jordan Lake particularly desirable for another wave of new development. The focus of the Farrington Road Corridor Study is to identify the type and extent of growth patterns and development intensities anticipated for the area, and the associated traffic impacts likely to result.

The DCHC MPO staff will consider the recommended improvements from the Corridor Study while preparing the most recent Long Range Transportation Plan. Member jurisdictions represented in the study area are encouraged to act collaboratively on opportunities to improve land use, urban design, and transportation decision-making discussed in this report; highlighting the demand factors (i.e., trip generation, trip length, and travel mode) influenced by local land use decisions to improve the safety and efficiency of the proposed transportation system.

Building the Case for Urgency

The Research Triangle area experienced considerable growth in housing and employment over the past three decades. Demographers forecast a continuation of this trend for the foreseeable future. Much of the growth is forecasted to occur in undeveloped areas of the region that have large tracts of vacant, unprotected land available for development — including areas influencing the Farrington Road Corridor.

As a result of population growth and development pressures, traffic congestion steadily increased in the area over the past ten years. A recent report from the Texas Transportation Institute indicated the amount of time an average commuter spends in congestion for the

introduction

Research Triangle area increased from 26 hours to 35 hours per year, an increase of 35 percent over the past ten years. Congested automobile travel increased from 34 percent to 47 percent for all peak period trips.

The majority of observed congestion in the study area is on freeways and major arterials; however, as development continues to expand outward into rural areas surrounding Jordan Lake, traffic on the rural road network is also expected to increase. These traffic volumes will increase both as a result of development in the immediate area and as travelers from outside of the study area look for ways to access Durham, Chapel Hill, and Research Triangle Park by circumventing larger, more congested freeways and arterials. Future year forecasts in the 2035 Triangle Area Regional Travel Demand Model predict that increased congestion will continue to degrade the rural road system if changes are not made to better integrate land use, urban design, and transportation decision-making.

Study Area

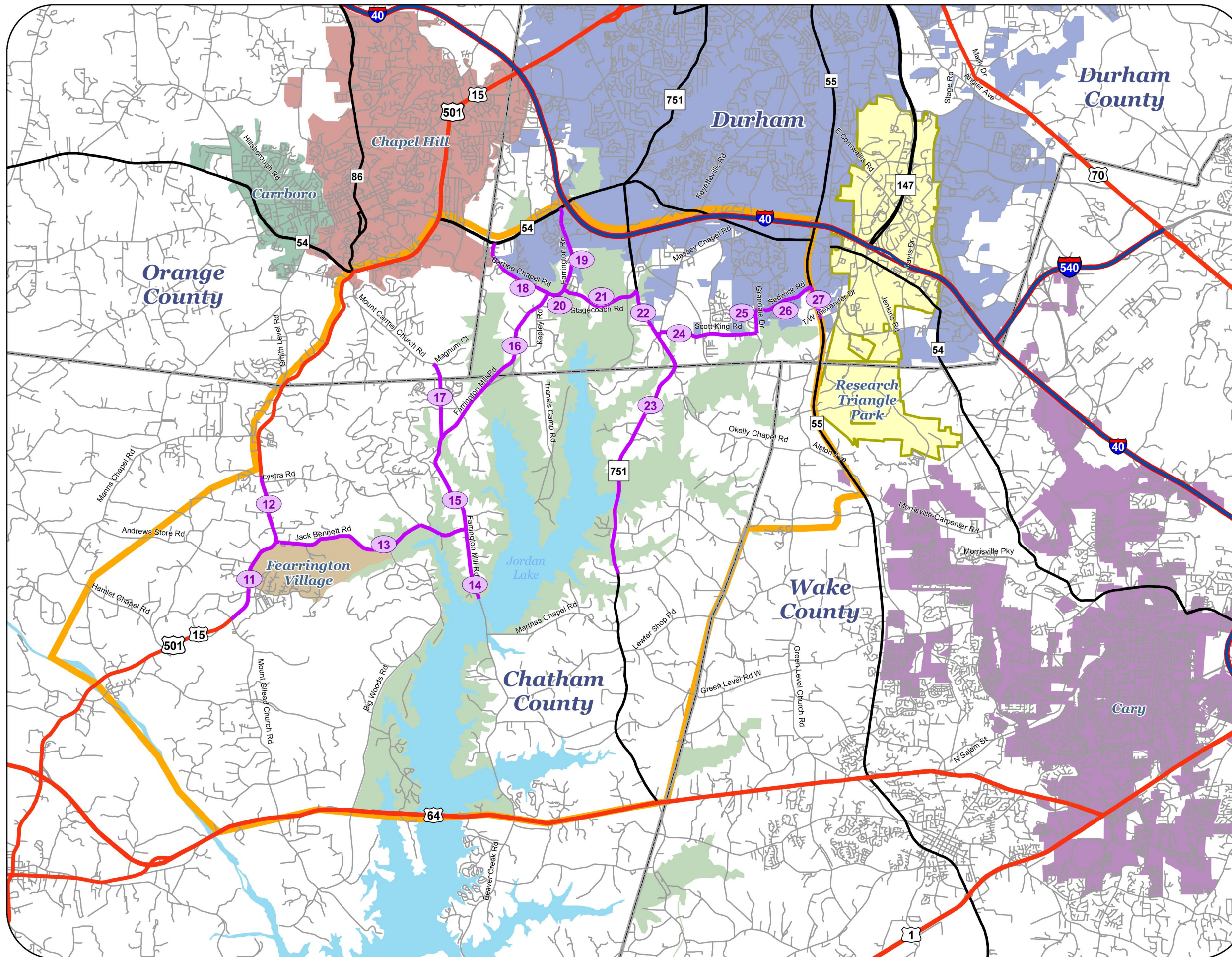
The study area for the Farrington Road Corridor Study focuses on the potential high-growth area emerging at the convergence of four counties — Chatham, Durham, Orange, and Wake — and three cities — Cary, Chapel Hill, and Durham — immediately south and west of Research Triangle Park (see **Figure 1**). B. Everett Jordan Reservoir (Jordan Lake) and surrounding environmentally-sensitive lands occupy a significant portion of the study area and help define its uniqueness within the region. Recent growth pressures highlight the strain on communities to manage sometimes conflicting goals related to growing population and employment centers, rural preservation initiatives, environmental stewardship, and regional transportation mobility.

Regional mobility in the study area is limited to a sparse network of federal and state highways. US 15-501, NC 55, and NC 751 run north to south. US 64 and NC 54 run east to west. Other major roads serving the study area include Farrington Road, Farrington Point Road, Old Farrington Point Road, Grande Drive, Jack Bennett Road, and Scott King Road. Connections between roads in the study area are limited by the presence of Jordan Lake.

Farrington Road Corridor Study

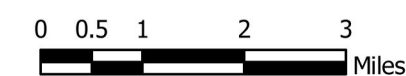
Figure 1

Study Area



- 99 Corridor Section ID
- Study Area
- Interstates
- US Highways
- State Highways
- State Roads
- Lakes
- Durham
- Chapel Hill
- Farrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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introduction

Working farms, residential homes, businesses, and permanent conservation areas are all present in the study area. A concentration of businesses and high-density residential uses in the northeastern portion of the study area have resulted in the emergence of a regional activity center anchored by a 1.3-million square foot regional shopping mall (i.e., Streets at South Point) and supporting residential and non-residential uses. Critical watershed areas and other environmentally-sensitive lands observed in the study area make it unique in terms of the quantity and quality of development that should be expected.

Vision Statement

The Farrington Road corridor is uniquely situated at the intersection of Wake, Chatham, Orange, and Durham counties. The characteristics of this location are a composite of those in the greater region. As such, the vision for this corridor is drawn from the goals of the plans and policies that govern the region's land use and transportation:

To celebrate rural and environmentally-sensitive lands unique to this emerging growth area, and support local smart growth initiatives underway by local governments, by recommending appropriate future transportation improvements to the regional transportation system.

Guiding Principles

The consultant team prepared a set of guiding principles for the corridor study based on a review of locally adopted plans, programs, and policies administered in the study area. These principles generally support, encourage, and implement a vision that celebrates protection of rural and environmentally-sensitive lands unique to the study area while recommending necessary and appropriate improvements to the regional transportation system.

Guiding principles for the corridor study include:

- Protect environmentally-sensitive lands in the study area from encroaching development.
- Prepare for future growth anticipated for the study area following the principles of smart growth, favoring compact

introduction

development nodes over continued single-use, suburban sprawl development patterns.

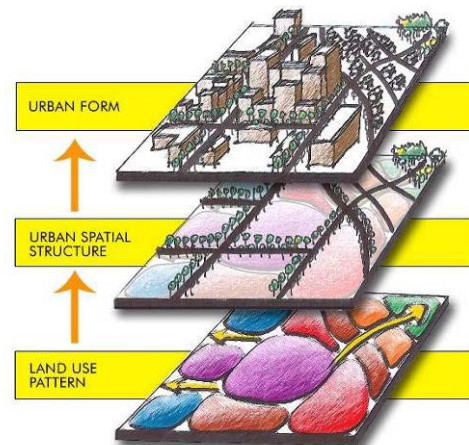
- Identify improvements to the transportation system that balance regional mobility with community livability, highlighting corridor (road-widening) improvements, intersection treatments, and opportunities to promote non-vehicular travel.
- Protect expensive transportation investments in the study area with locally-adopted development controls, such as access management standards or corridor protection ordinances that better coordinate future land use and transportation decisions.

transportation/land use connection

In recent years, planners and community leaders across the country have observed increased public interest for reducing or reversing the trend of suburban sprawl and its consequences. These efforts are largely motivated by the impacts associated with suburban development patterns: consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion. In emerging suburban development centers, the physical distance between complementary land uses (e.g., between home and work, home and school, or home and shopping) and a lack of overall street connectivity leads to increased vehicle miles traveled and energy consumption, longer commute times, increased air pollution, heightened infrastructure and public service costs, and decreased resource lands. Future year forecasts in the 2035 Triangle Regional Model (TRM) predict that these unintended consequences will continue for the region if changes are not made to better integrate land use, urban design, and transportation decision-making.

Land Use & Urban Form

Land use serves as the foundation of the built environment. It defines the type, mix, and general location of uses within communities, and ultimately defines the boundaries for neighborhoods, commercial nodes, and employment centers. Communities make efforts to influence patterns of land use when they develop a future land use map or goals, objectives, and policies within a comprehensive plan. (See **Chapter 3** of this report for an overview of comprehensive plans administered by local governments in the study area).



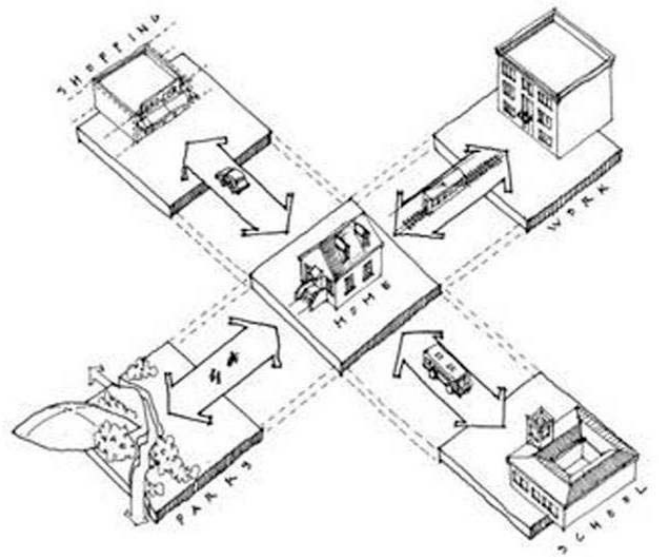
Typically, a comprehensive plan represents the community's vision for how to promote local growth and prosperity. Urban form is the land use vision as it becomes reality in the physical world. It is commonly measured by street patterns, block lengths, building heights, building setbacks, average residential density, and average non-residential intensity. Putting these design elements in categories allows for the

transportation/land use connection

region's form to be measured, and identifies a natural progression from rural to suburban to urban areas. The components of urban form are traditionally regulated through the community's zoning ordinance, subdivision ordinance, engineering specifications, or architectural design standards.

Urban Form & Travel Behavior

These physical elements of urban form can influence the comfort, speed, cost, convenience, attractiveness, and safety of movement between complementary land uses. Elements of the transportation system — including road, pedestrian, bicycle, and transit facilities — impact how land is developed in terms of size, shape, density, and mix of land uses. Where land uses fall and how they are designed (i.e., urban form) can favor one mode of travel over others, and may influence overall travel behavior by changing the ease of use or accessibility of various modes of travel for meeting daily needs. For example, if low-density development is spread out, the residents of such areas must rely almost entirely on automobiles to get from one location or land use to another. On the other hand, denser urban centers that combine complementary land uses near each other enable greater choice in transportation.



Bringing It All Together

Evaluating the relationship between land use, urban design, and regional travel behavior produces several benefits. When considered together, decisions and investments regarding all three elements could have a significant bearing on the DCHC MPO and its member jurisdictions represented in the study area:

- The impacts to sensitive land uses (such as environmentally-sensitive areas) can be minimized when facilities identified for transportation investments are

transportation/land use connection

located *after* considering appropriate land use patterns and development intensities for the area.

- Development can be stimulated in prime locations if transportation investments consider available capacity or appropriate mobility options.
- Complementary activities can be placed next to existing or planned transportation infrastructure, making the most of land use opportunities and dedicated transportation investments.
- The quantity and location of travel demand can be influenced by land use decisions, highlighting the factors (i.e., trip generation, trip length, and travel mode) that influence the efficiency of a proposed transportation system.
- Context-sensitive design elements can transform transportation corridors from vehicle-dominated thoroughfares into community-oriented streets that safely and conveniently accommodate all modes of travel.

existing conditions

This section represents a comprehensive inventory and assessment of transportation conditions, the built environment, and the natural environment in the study area. It communicates how land is organized, used, and supported by the regional transportation system. A review of plans, programs, and policies administered in the study area acknowledges the forces that could affect the planning process or resulting recommendations for the Farrington Road Corridor Study.

Transportation

This section of the report inventories existing roads in the study area and current operational characteristics. As part of this assessment, the current roadway facilities were categorized in terms of operational characteristics and functional classification designation. Transit route, bicycle route, and available pedestrian information for these roads are also presented. The results of this task are presented in a series of maps that were used to identify operational capacities.

Existing Facilities

Portions of the following roads were inside the study area and were analyzed for this corridor study.

1. NC 55
2. US 15-501
3. Barbee Chapel Road
4. Farrington Road
5. Farrington Mill Road
6. Farrington Point Road
7. Grandale Drive
8. Hope Valley Road (NC 751)
9. Jack Bennett Road
10. Mount Carmel Church Road
11. Scott King Road
12. Sedwick Road
13. Stagecoach Road

existing conditions

Operational Characteristics

Operational characteristics included in this study are the functional classification, roadway attributes, and non-motorized facilities. These characteristics are briefly described in the sections below.

Functional Classification

Roadways are categorized into functional classification groups according to the character of service they provide. The four functional classification groups for urbanizing areas are principal arterials, minor arterials, collectors, and local streets. The length of the segment and degree of access control is a significant factor in defining the functional classification of a roadway. Regulated access (or limited access) is necessary on arterials to enhance their primary function of mobility, while the primary function of local streets is to provide access to adjacent land uses.

The functional classification of roads inside the study area was assigned using information available from the Triangle Regional Model (TRM).

Figure 2 shows the federal functional classification for facilities in the corridor analysis.

Roadway Attributes

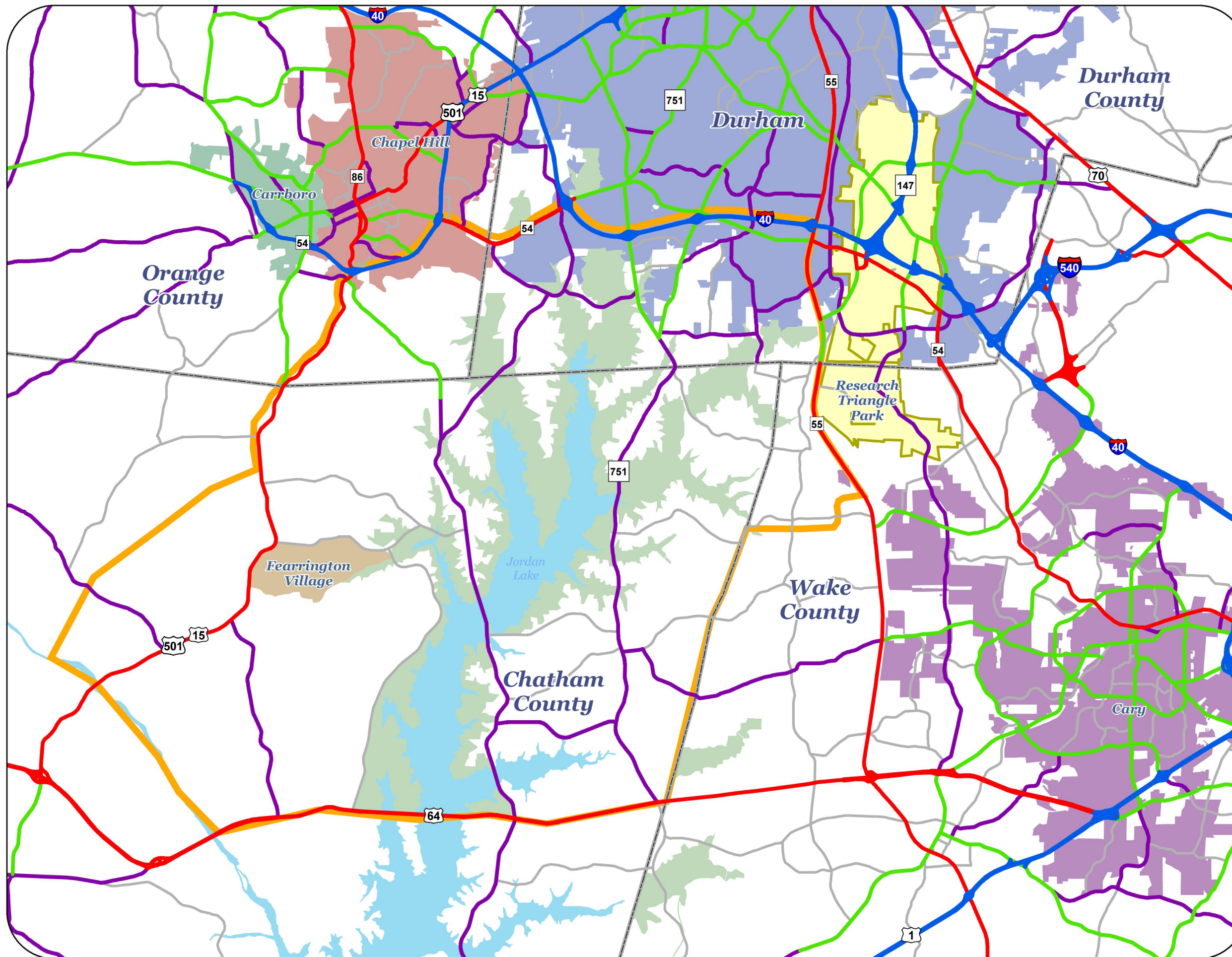
The Triangle Regional Model (TRM) was used to determine major roadway attributes for facilities within the study area. These attributes include the number of lanes, speed limit, and median type. The model also accounts for 2005 NCDOT Average Annual Daily Traffic (AADT) counts. These attributes are shown in **Figures 3 – 6**.

Farrington Road Corridor Study

Figure 2

Triangle Model Attributes

Functional Classification



Functional Classification

- Interstate/Freeway
- Principal Arterial
- Minor Arterial
- Collector
- Local
- Study Area
- Lakes
- Durham
- Chapel Hill
- Fearington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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Farrington Road Corridor Study

Figure 3

Triangle Model Attributes

Number of Lanes Per Direction

Lanes Per Direction

- 1 Lane per Direction
- 2 Lanes per Direction
- 3 Lanes per Direction
- 4 Lanes per Direction

- Study Area
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

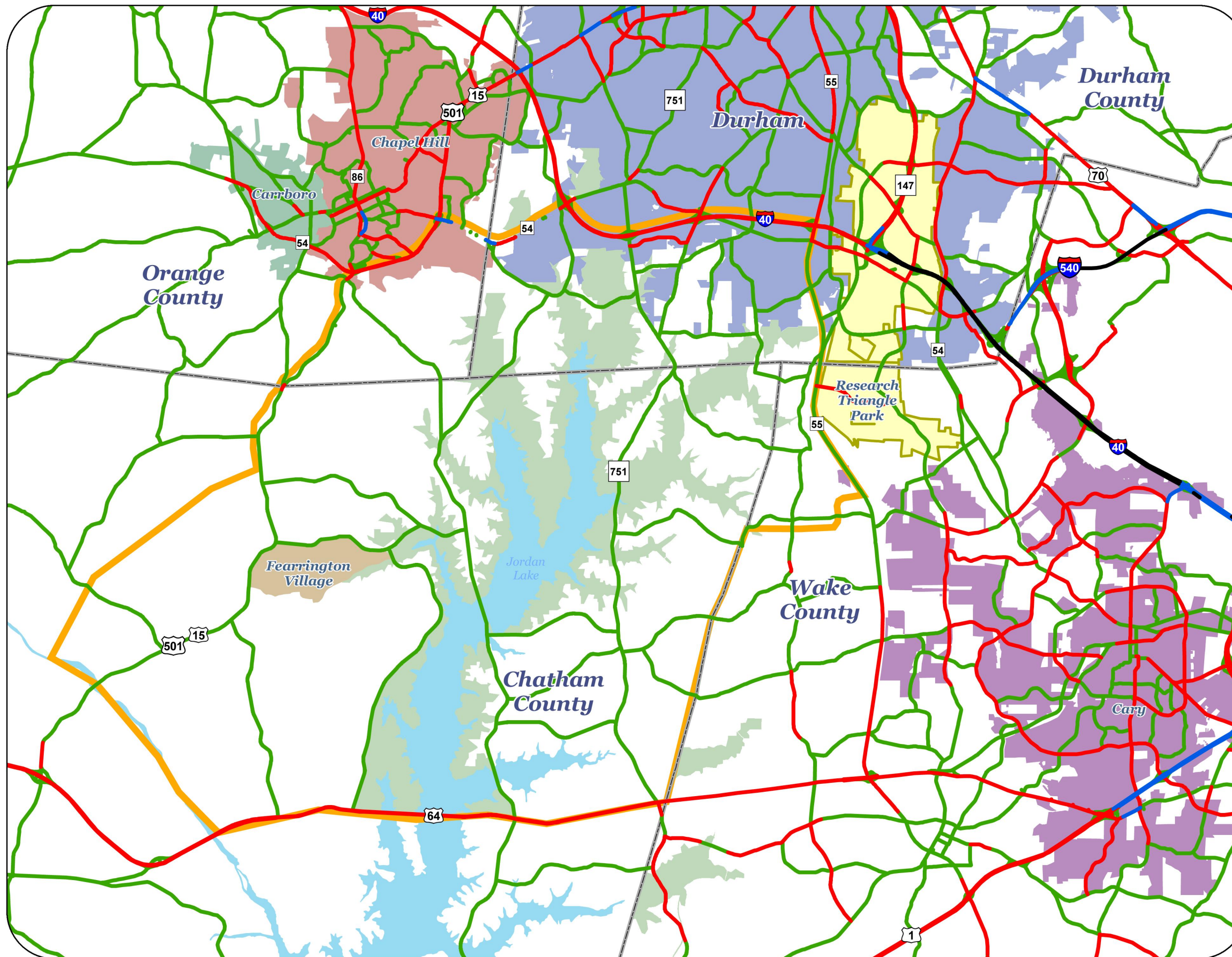
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0 0.5 1 2 3 Miles



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Farrington Road Corridor Study

Figure 4

Triangle Model Attributes

Posted Speeds

Posted Speed (MPH)

- 25
- 35
- 45
- 55
- 65
- Study Area
- Lakes
- Durham
- Chapel Hill
- Farrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

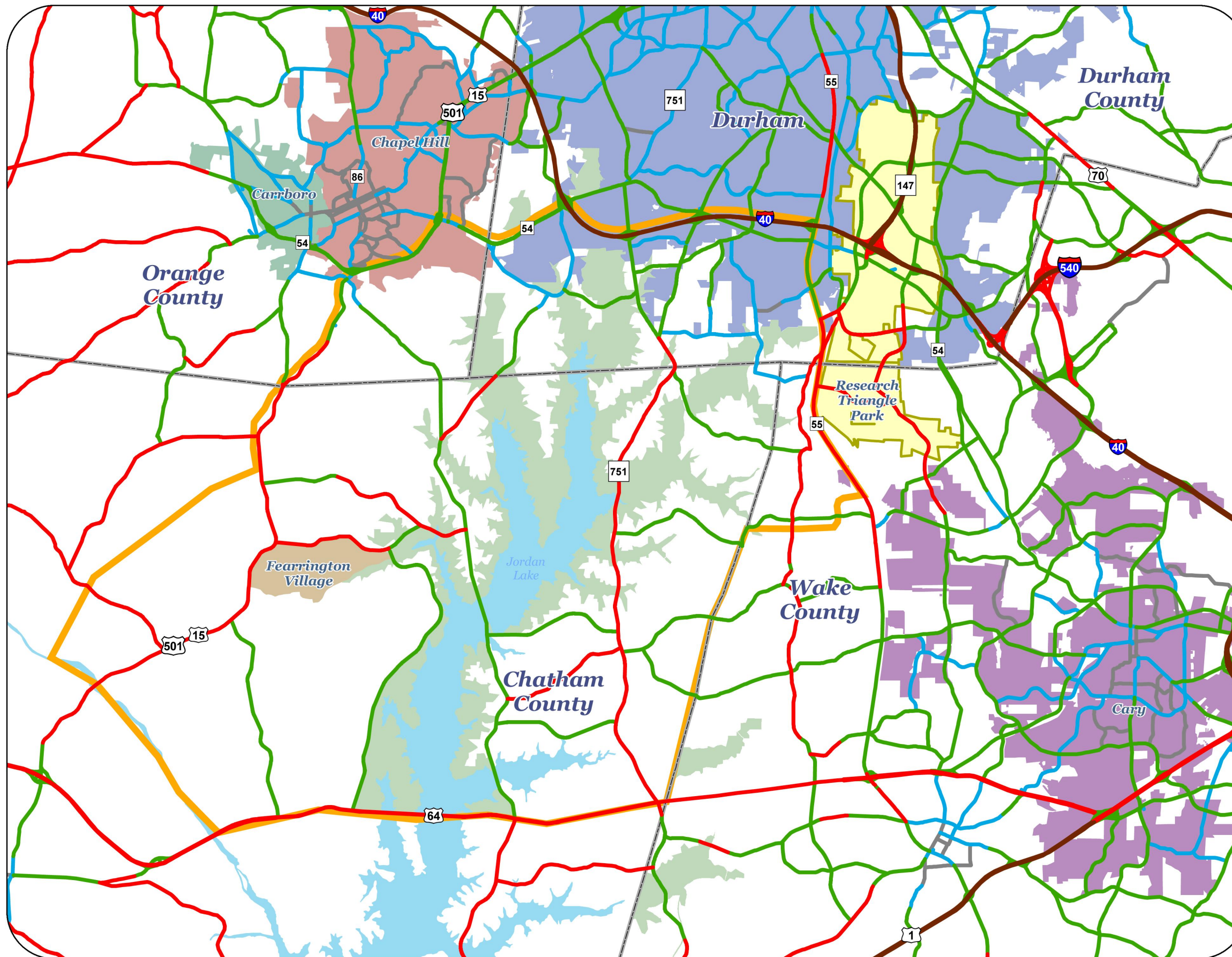
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1 0.5 0 1 2 Miles



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Farrington Road Corridor Study

Figure 5

Triangle Model Attributes

Median

-  Median or Continuous Left Turn lane
-  No Median or Median Treatment not used for Capacity
-  Study Area
-  Lakes
-  Durham
-  Chapel Hill
-  Farrington Village
-  Cary
-  Carrboro
-  Counties
-  Corps of Engineers Land
-  Research Triangle Park

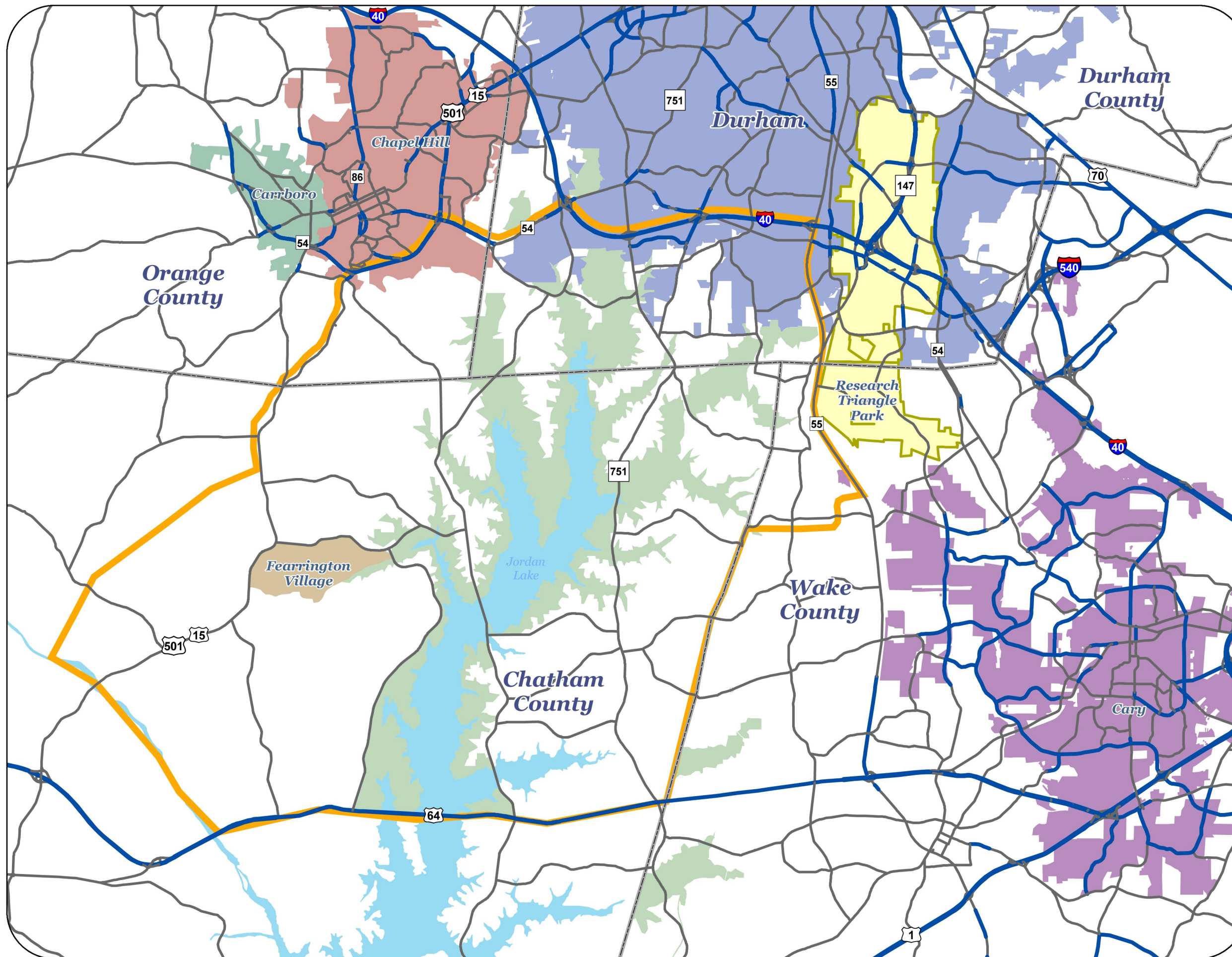
November 25, 2008



0 0.5 1 2 3 Miles



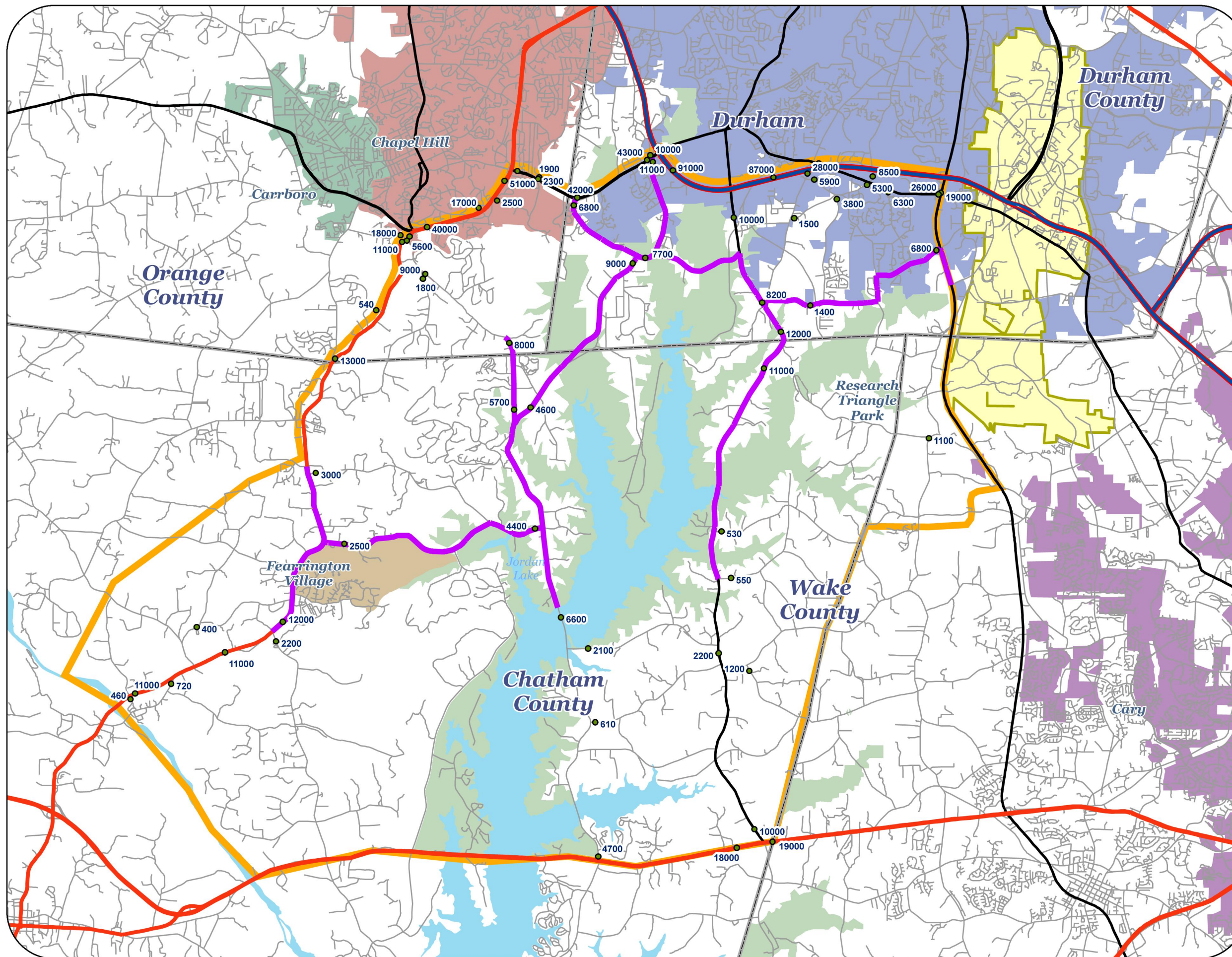
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Farrington Road Corridor Study

Figure 6

**2005 NCDOT
AADT
Traffic Count
Locations**



- 2005 AADT's
- Study Corridors
- Interstates
- US Highways
- State Highways
- State Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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existing conditions

Non-Motorized Facilities

Non-motorized facilities include bicycle and pedestrian routes as well as transit services. There are a limited number of these facilities and services in the corridor study area. This characteristic is consistent with the area's predominantly rural and undeveloped character.

The Durham Area Transit Authority (DATA) operates one route that runs along Sedwick Road and NC 55 in the northeastern portion of the study area. Although the Triangle Transit Authority (TTA) does not have any routes inside the study area, they do operate four routes along NC 54, just to the north of the corridor. The Chatham Transit Network (CTN) operates an "on-demand" service in Chatham County. They also operate one route that makes three trips daily to UNC Hospitals from Pittsboro and Siler City. UNC Hospitals has service from a park-n-ride facility on US 15-501 in northern Chatham County.

As mentioned, due to the rural nature of the study area, bicycle and pedestrian facilities are not common. A portion of the American Tobacco Trail runs through the study area and this facility accommodates bicyclists and pedestrians.

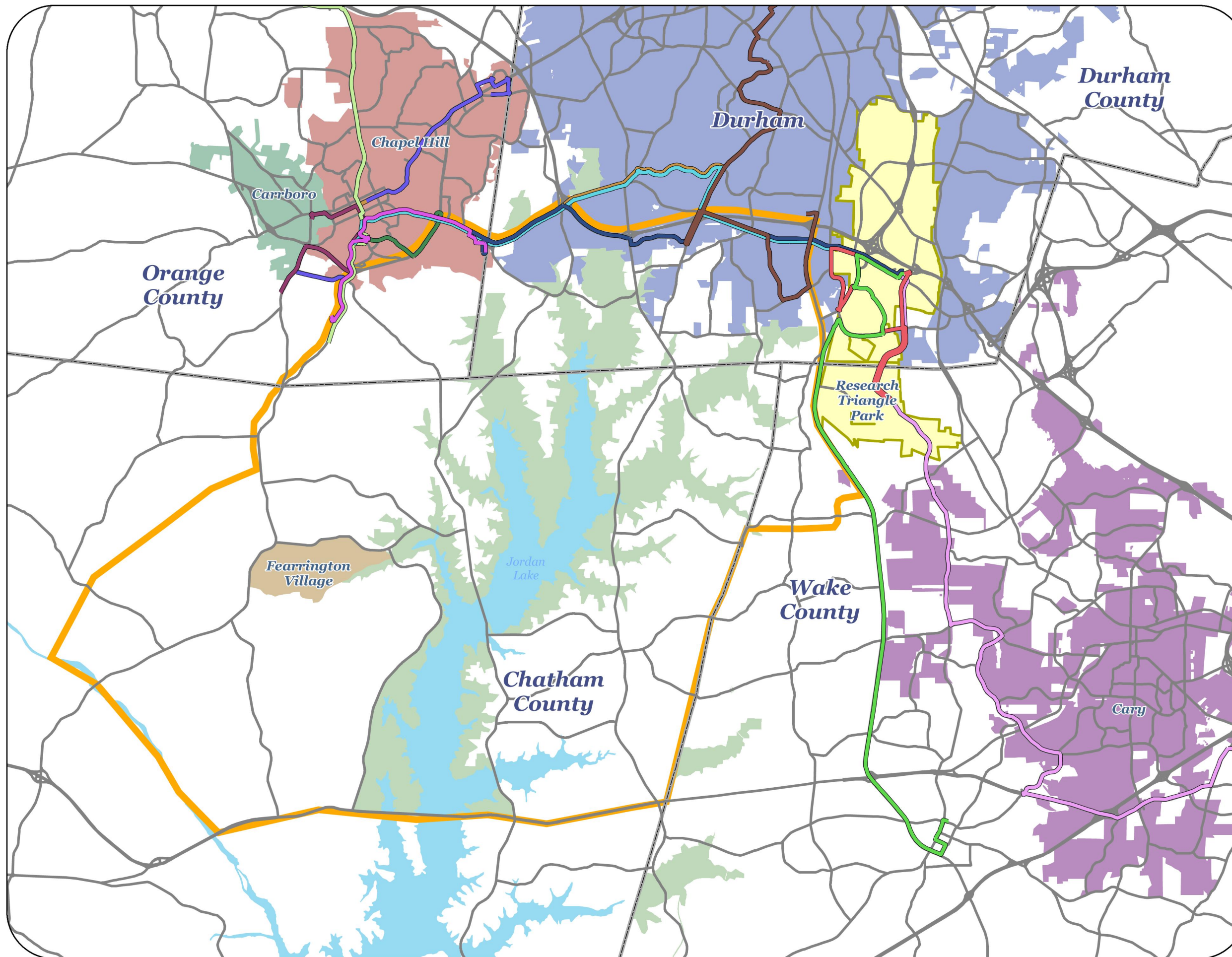
Figures 7-8 show local transit routes and bicycle and pedestrian facilities in the study area.

Farrington Road Corridor Study

Figure 7

Triangle Model Attributes

Study Area
Transit Routes



-  Transit Routes
-  Model Roads
-  Counties
-  Study Area
-  Research Triangle Park
-  Lakes
-  Durham
-  Chapel Hill
-  Fearington Village
-  Cary
-  Carrboro
-  Corps of Engineers Land

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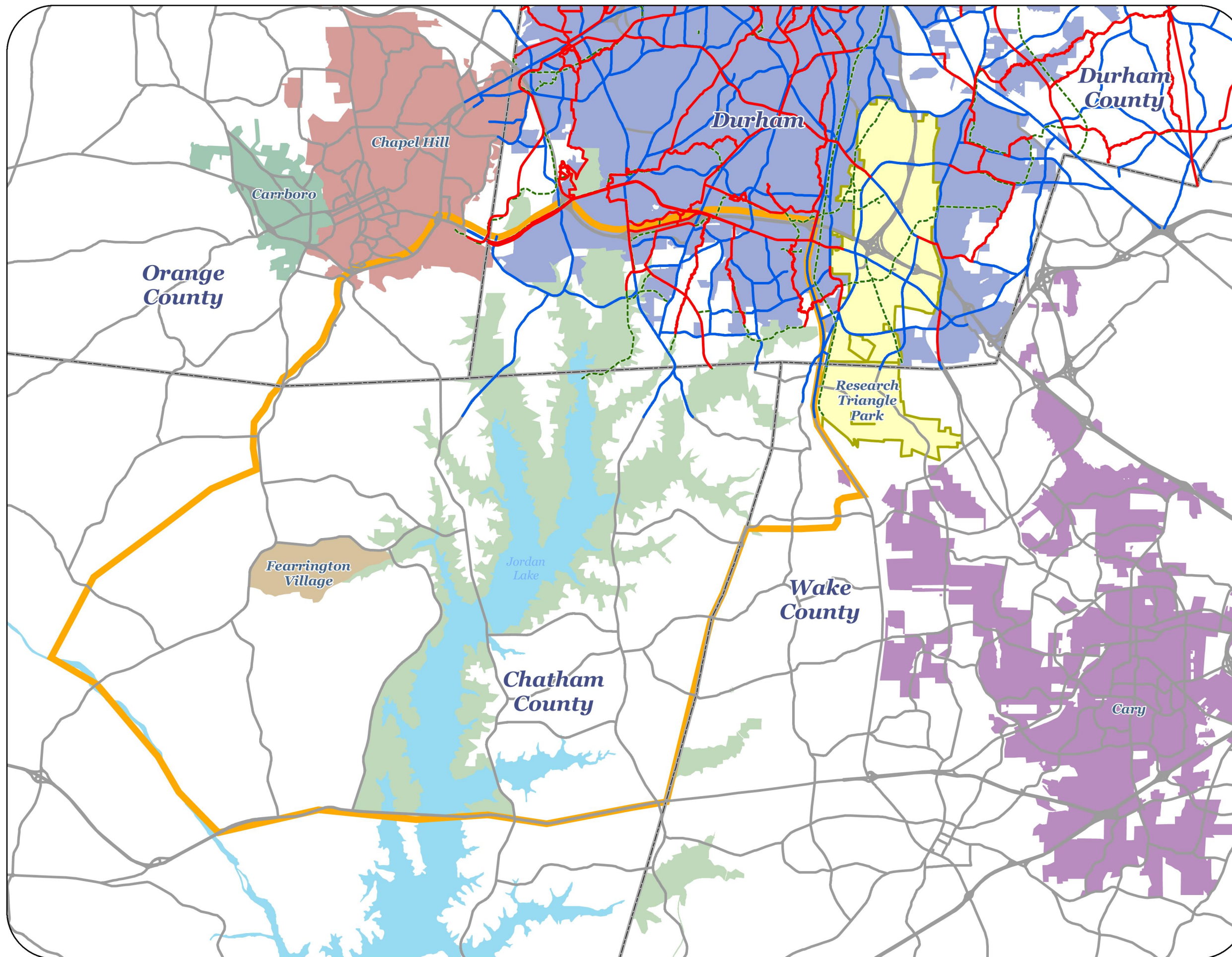
0 0.5 1 2 3
Miles

Farrington Road Corridor Study

Figure 8

Triangle Model Attributes

Bicycle and Pedestrian Facilities



- Trails and Greenways
- - - Off-Road Trail Network
- 2006 Bicycle Plan Network
- Model Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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0 0.5 1 2 3 Miles



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existing conditions

Level of Service

Level of service (LOS) is a standard used to determine the quality of service on transportation facilities. The level of service characterizes the operating conditions on a facility through traffic performance measures related to speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. LOS is represented by the letters “A” through “F”, with “A” representing the most favorable driving conditions and “F” representing the least favorable.

Level of service criteria vary depending on the type of facility being analyzed. Examples of criteria include percent time spent following, average travel speed, control delay per vehicle, maximum density, and maximum volume-to-capacity ratio (V/C). V/C represents congestion on a roadway and is calculated by dividing the volume (average daily traffic) of that roadway by the capacity.

For this study, two individual “types” of LOS analysis were performed: corridor LOS analysis and intersection LOS analysis.

Corridor Level-of-Service

Seventeen roadway sections were identified for corridor LOS traffic analysis for existing (and projected future) conditions. This analysis includes the collection of roadway characteristics (lanes, speeds, development type), along with current traffic counts.

Figure 1 shows corridors that were studied as part of this analysis, as well as a reference Section ID that will be used throughout the report. These corridors are also listed in **Table 1**. For each section, 48-hour traffic count data and roadway characteristic data were collected in September 2007. Field visits were also used to observe traffic patterns and issues.

The majority of the corridors in the study area are operating at LOS B or better. These results are consistent with the rural character of the area. Two corridors are operating at LOS C. The only road section whose level of service is below LOS C is Section No. 23, NC 751 (Hope Valley Road) between Scott King Road and the southern planning area boundary (PAB). This corridor has a 2007 capacity of 11,800 and a 2007 average daily traffic flow (ADT) of 10,900 for a resulting V/C ratio of 0.92, which corresponds to LOS D.

existing conditions

Table 1. Study Corridors

Section	Road	From	To	Functional Classification	Distance (miles)	Lanes	Median Type	Speed Limit (mph)	LOS D Traffic Capacity	2007 Traffic (average vehicles / day)	2007 V/c	2007 LOS
11	US 15-501	Southern PAB	Jack Bennett Road	Rural Principal Arterial	1.9	4	Divided	55	62,600	15,700	0.25	A
12	US 15-501	Jack Bennett Road	Northern PAB	Rural Principal Arterial	1.4	4	Divided	55	62,600	17,300	0.28	A
13	Jack Bennett Rd	US 15-501	Farrington Point Road	Rural Local	4.1	2	None	45/55	11,900	3,300	0.28	A
14	Farrington Rd	Southern PAB	Lystra Road	Rural Major Collector	1.4	2	None	55	11,800	5,900	0.5	B
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	Rural Major Collector	2	2	None	45/55	10,500	6,000*	0.57	B
16	Old Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	Rural Major Collector	3.7	2	None	45/55	9,400	4,300	0.46	B
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	Rural Major Collector	1.5	2	None	45	12,400	5,700	0.46	B
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	Rural Major Collector	1.6	2	None	45	9,500	5,300	0.56	B
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	Urban Collector	1.7	2	None	45	15,300	8,000	0.52	B
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	Urban Collector	0.4	2	None	45	15,300	7,700	0.5	B
21	Stagecoach Rd	Farrington Road	NC 751	Rural Major Collector	1.6	2	None	45	9,500	6,700	0.71	C
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	Urban Minor Arterial	1	2	None	55	12,800	9,000	0.7	C
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	Rural Major Collector	5.2	2	None	55	11,800	10,900	0.92	D
24	Scott King Road	NC 751	Grandale Drive	Urban Collector	2.1	2	None	35/45	9,500	1,700	0.18	A
25	Grandale Dr	Scott King Road	Sedwick Road	Urban Collector	0.5	2	None	35	9,500	4,000	0.42	B
26	Sedwick Rd	Grandale Drive	NC 55	Urban Collector	1.2	2	None	25	12,500	6,800	0.54	B
27	NC 55	Sedwick Road	Alexander Drive	Urban Principal Arterial	0.7	5	TWLTL	50	39,700	15,400	0.39	B

V/C is volume-to-capacity (ADT/Capacity). TWLTL is a two-way left turn lane (center lane in roadway). *

Historic Traffic Growth

NCDOT traffic counts from 1990 through 2005 were analyzed in this study to better understand traffic growth in the area. These counts are presented in **Table 2**. Historical patterns indicate that the study corridors have experienced significant traffic growth since 1990, with traffic on many small rural roads increasing over 5% a year and traffic in some locations increasing over 10%. Since this area is expected to continue to experience significant growth in housing, there is no reason to believe that traffic demand will dramatically slow or reduce in the future.

existing conditions

Table 2. Historic AADT Growth in Study Corridors

Section	Road	From	To	Count Location	NCDOT Traffic Survey Count ID	Average Yearly Growth* (1990-2005)	1990	1992	1994	1997	1999	2001	2003	2005
11	US 15-501	Southern PAB	Jack Bennett Road	South of Jack Bennett Road	1800069	3.80%	--	10,000	12,000	13,000	13,000	14,000	--	--
12	US 15-501	Jack Bennett Road	Northern PAB	North of Manns Chapel Road	1800921	2.20%	15,000	15,000	18,000	18,000	19,000	20,000	20,000	--
13	Jack Bennett Rd	US 15-501	Farrington Point Road	East of 15-501	1800923	5.00%	1,200	1,500	2,100	2,300	2,300	2,400	2,400	2,500
14	Farrington Rd	Southern PAB	Lystra Road	South of Jack Bennett Road	1800918	8.10%	--	2,400	2,700	3,500	4,600	5,700	5,800	6,600
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	N/A	N/A	N/A	No historic count on or near this corridor section							
16	Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	North of Farrington Road	1800917	7.80%	1,500	2,300	2,700	3,300	3,200	3,300	3,800	4,600
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	North of Farrington Road	1800920	7.20%	2,000	2,200	2,500	3,800	4,000	5,000	5,000	5,700
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	N/A	N/A	N/A	No historic count on or near this corridor section							
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	South of NC 54	3100499	8.80%	3,100	3,400	5,600	--	7,200	8,200	--	11,000
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	West of Stagecoach Road	3100505	8.70%	2,200	2,400	4,200	5,500	7,200	7,900	--	7,700
21	Stagecoach Rd	Farrington Road	NC 751	N/A	N/A	N/A	No historic count on or near this corridor section							
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	North of Scott King Road	3100734	10.60%	1,800	2,200	2,500	3,400	5,500	7,200	8,200	8,200
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	South of Scott King Road	3100514	10.40%	3,600	3,500	3,400	5,200	7,000	8,800	9,900	12,000
24	Scott King Road	NC 751	Grandale Drive	East of NC 751	3100515	10.80%	300	300	520	600	1,100	1,500	1,400	1,400
25	Grandale Dr	Scott King Road	Sedwick Road	N/A	N/A	N/A	No historic count on or near this corridor section							
26	Sedwick Rd	Grandale Drive	NC 55	West of NC 55	3100528	6.60%	2,600	3,700	4,500	5,300	6,300	7,200	7,900	--
27	NC 55	Sedwick Road	Alexander Drive	South of Sedwick Road	3100726	5.80%	6,700	7,200	9,800	--	12,000	14,000	14,000	--

Based on average annual increase using available counts

existing conditions

Intersection Level-of-Service (LOS) Analysis

Nine intersections were identified for intersection operational analysis. Commute period data were collected in the morning (AM) and afternoon (PM) peak hours. Turning movement counts were performed by Traffic Survey Services, Inc. on typical weekdays in the morning (7:00 to 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) time periods at the following intersections:

- US 15-501 at Jack Bennett Road September 18, 2007
- Farrington Point Road at Lystra Road September 18, 2007
- Farrington Point Road/Old Farrington Point Road at Mt. Carmel Road September 13, 2007
- Farrington Mill Road/Farrington Road at Barbee Chapel Road September 13, 2007
- Farrington Road at Stagecoach Road September 13, 2007
- Stagecoach Road at Hope Valley Road (NC 751) September 11, 2007
- Hope Valley Road (NC 751) at Fayetteville Road September 11, 2007
- NC 55 at Sedwick Road September 12, 2007
- NC 55 at T.W. Alexander Drive September 12, 2007

All turning movement counts were performed while public schools in Durham and Chatham County were in session. For these intersections, operational and geometric data were collected in the field in September 2007. This data was used to analyze current intersection LOS for study intersections in *SYNCHRO* software.

Capacity analyses were performed for the AM and PM peak hours for existing (2007) traffic conditions using *SYNCHRO* (Version 7) software to determine the operating characteristics of the adjacent road network.

existing conditions

For intersection analysis, capacity is combined with LOS in a relationship table to describe the operating characteristics of a road segment or intersection. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation.

For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by *SYNCHRO* Version 7 or computable using methodology published in the *Highway Capacity Manual*. Results between LOS A and LOS C for the side street approach are assumed to represent short delays. For descriptive purposes, results between LOS D and LOS E for the side street approach are assumed to represent moderate delays, and LOS F for the side street approach is assumed to represent long delays. It is typical for stop sign controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. **Table 3** lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections, as well as the unsignalized operational descriptions assumed herein.

Table 3. Level-Of-Service (LOS) Control Delay Thresholds

Level-of-Service	Signalized Intersections – Control Delay Per Vehicle [seconds of delay per vehicle]	Unsignalized Intersections – Average Control Delay [seconds of delay per vehicle]	
	A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15	
C	> 20 – 35	> 15 – 25	
D	> 35 – 55	> 25 – 35	Moderate Delays
E	> 55 – 80	> 35 – 50	
F	> 80	> 50	Long Delays

Capacity analyses were performed for the existing (2007) traffic conditions for the following intersections:

- US 15-501 at Jack Bennett Road
- Farrington Point Road at Lystra Road
- Farrington Road and Stagecoach Road at Mt. Carmel Road

existing conditions

- Farrington Mill Road/Farrington Road at Barbee Chapel Road
- Hope Valley Road (NC 751) at Fayetteville Road
- Stagecoach Road at Hope Valley Road (NC 751)
- Farrington Road at Stagecoach Road
- NC 55 at T.W. Alexander Drive
- NC 55 at Sedwick Road

Table 4 summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing traffic conditions.

Table 4. Existing (2007) Level-of-Service (LOS) Summary

Intersection	Signalized	AM Peak-Hour LOS (Delay in seconds)	PM Peak-Hour LOS (Delay in seconds)
US 15-501 and Jack Bennett Road	Yes	A (9.0)	B (10.1)
Farrington Point Road and Lystra Road	Yes	C (20.6)	B (14.5)
Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road	No	Short delays for minor street approach	Moderate delays for minor street approach
Farrington Mill Road/Farrington Road and Barbee-Chapel Road	No	Moderate delays for minor street approach	Long delays for minor street approach
Farrington Road and Stagecoach Road	No	Long delays for minor street approach	Long delays for minor street approach
Stagecoach Road and Hope Valley Road (NC 751)	Yes	D (43.0)	B (19.8)
Hope Valley Road (NC 751) and Fayetteville Road	Yes	B (10.7)	C (21.4)
NC 55 and Sedwick Road	Yes	B (19.6)	C (29.8)
NC 55 and T.W. Alexander Drive	Yes	C (24.3)	C (24.5)

existing conditions

Summary of Existing Intersection Deficiencies

All of the studied intersections operate at an acceptable LOS. The following signalized intersections have significant queuing and may need additional vehicle storage (i.e. longer turn lanes) to decrease vehicle queue lengths:

US 15-501 and Jack Bennett Road

- The westbound left-turn lane queue on Jack Bennett Road exceeds existing storage lengths during the PM peak hour.

Farrington Point Road and Lystra Road

- The eastbound left-turn lane queue on Lystra Road exceeds existing storage lengths during the AM peak hour

Farrington Point Road and Stagecoach Road

- Westbound Stagecoach Road has queuing problems during peak hours due to poor sight distance for left-turning vehicles (of oncoming traffic from northbound Farrington Road).

Stagecoach Road and Hope Valley Road (751)

- The eastbound left-turn lane queue on Stagecoach Road exceeds existing storage lengths during the AM and PM peak hours.

NC 55 and T.W. Alexander Drive

- The northbound right-turn lane and southbound left lane queues on NC 55 exceed existing storage lengths during the AM peak hour.
- The westbound left-turn lane queue on T.W. Alexander Drive exceeds existing storage length during the PM peak hour.

Travel Pattern Analysis

Travel patterns in the study area were reviewed to identify prevalent traffic movements that currently affect the roads in the study area. This analysis drew from available resources from the Census, DCHC

existing conditions

Metropolitan Planning Organization (MPO), and the Triangle Regional Model (TRM) to determine regional traffic patterns from western Chatham County and the Jordan Lake area to Research Triangle Park (RTP). Specific data included in the review are:

- County-to-County Work Flows from the 2000 Census journey-to-work supplemental survey (i.e. “Census long form”),
- Travel patterns identified in the 2006 Triangle Cordon Survey (conducted on US 64 west of Pittsboro),
- TRM base year (2005) model traffic flows from Chatham County,
- TRM base year (2005) model select link analysis, and
- 2006 Triangle Household Survey work-trip flows and all-trip flows.

The shape and location of Jordan Lake affects the intensity of travel patterns in the few east-west corridors that cross or neighbor it. Interstate 40 and NC 54 are the predominant east-west routes north of the watershed, while U.S. Highway 64 crosses Jordan Lake via a bridge at the southern edge of the study area. Stagecoach Road and connecting streets cross through the watershed at the north end of the lake. There are no roads crossing Jordan Lake in the approximately ten miles separating Stagecoach Road and U.S. Highway 64. The east/west gap in the roadway network becomes more problematic given increasing urbanization of northeast Chatham County. As residential developments expand there, employment trips originating from that area to the Research Triangle Park (RTP) and Raleigh-Durham Airport continue to grow, as well.

existing conditions

County-to-County Work Flows

County-to-County work flow data were compiled from Census 2000 responses to the long-form (sample) questions about where people work. These files describe the county-to-county work travel patterns, detailing the counties people live and work in. Analysis of this data can help identify some of the predominant travel patterns through the region and the study area.

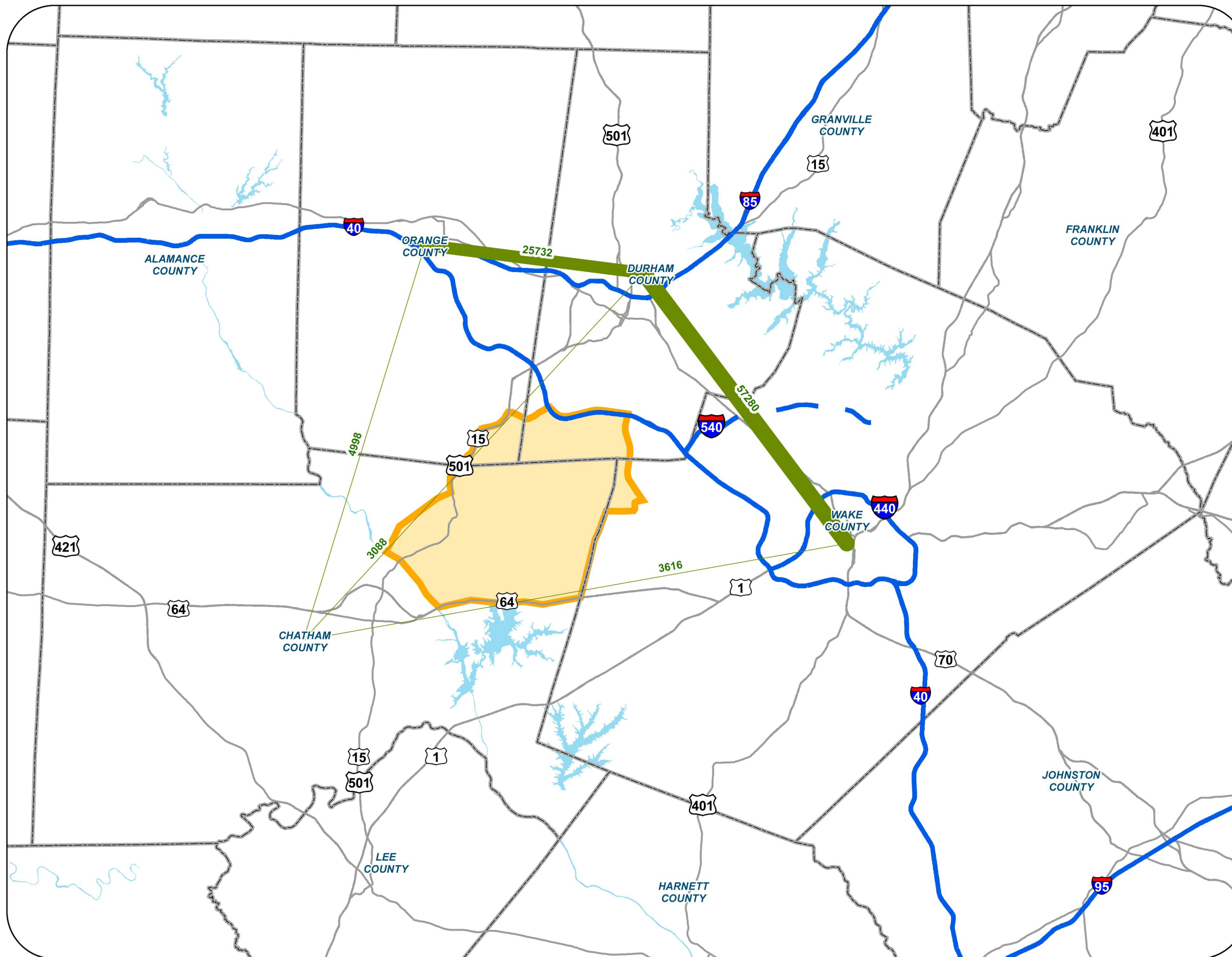
According to Census 2000 County-to-County worker flow files, Chatham County “produces” (those people living in Chatham County and going to work either in Chatham County or elsewhere) 24,657 work trips, and “attracts” (those people working in Chatham County and living in Chatham County or elsewhere) 16,901 work trips. 28% of the produced trips (6,945) travel to Durham or Orange Counties from Chatham County, out of a total of 13,639 (55%) that travel outside of the County. For the work “attractions”, 5,883 (or 35%) travel into Chatham County for work, and, of that total, 1,141 (or 7%) come from Durham or Orange Counties.

Figure 9 shows the Journey-to-Work flows for the study area.

Farrington Road Corridor Study

Figure 9

Journey to Work Flows



Total Work Trips To/From

- 0 - 5000
- 5001 - 10000
- 10001 - 20000
- 20001 - 40000
- 40001 - 60000

Study Area
Interstates
US Highways
Lakes
Counties

November 25, 2008

0 2 4 8 12 Miles

existing conditions

Triangle Cordon Survey Flows

A cordon survey collects travel pattern information including origins and destinations at the perimeter of the study area. A cordon survey provides more detailed information for specific highway corridors than is normally possible using other survey methods.

The Institute for Transportation Research and Education (ITRE) worked with ETC Institute consultants in fall 2006 to conduct 13 cordon station surveys surrounding the Raleigh-Durham-Chapel Hill metropolitan planning area. Survey data collected at the cordon stations included trip purpose, origin and destination information, and traffic characteristics of travelers entering the region via major non-interstate facilities.

Of these 13 locations, two survey stations are particularly relevant to the Farrington Road Corridor Study: 1 south of Pittsboro; and, US 64 west of Pittsboro. Outside of local traffic (i.e., Farrington Village) and traffic from Pittsboro, these two locations capture the primary sources of any external traffic from the south and west into the Farrington Road Corridor study area.

Tables 5 and 6 show the primary destinations (greater than 1% of total traffic) of travelers entering the Triangle Region at US 64 and US 15-501. **Figures 10 and 11** display the major destinations graphically. The majority of traffic from US 64 would not use the Farrington Road corridor because the travel patterns of the corridor make reaching desired destinations difficult. The most probable destinations requiring use of the corridor are Northern Chatham County and the Durham area, which make up approximately 8% (500 vehicles) of the 6,500 daily vehicles entering/exiting the region at this location. Trips entering the region from US 15-501 are more likely to use the corridor, based on their destinations, but these trips, which are destined for Durham and Western Chatham County, only comprise 12% (333 vehicles) of the 2,800 daily vehicles using this location.

Based on this information, trips from outside the area are not expected to create significant demand on the Farrington Road Corridor. Therefore, future travel patterns and improvements should focus on trips that are generated within the region.

existing conditions

Table 5. Destination of Trips Entering the Region via US 64 West of Pittsboro

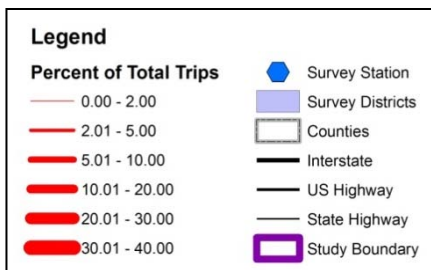
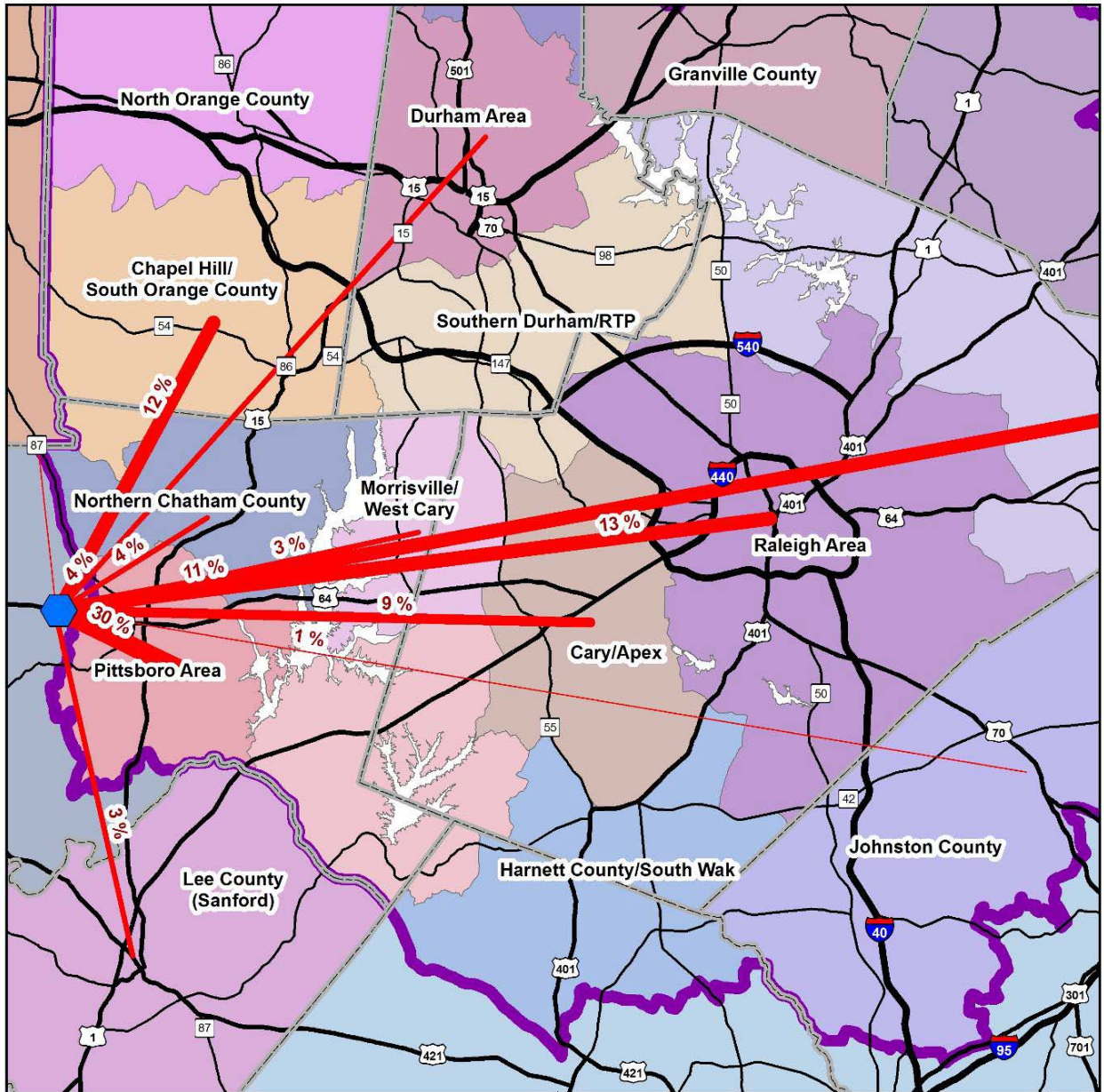
Destination	US 15 Trips
Chapel Hill Area	31%
Pittsboro Area	30%
Alamance	14%
Durham Area	7%
West Chatham	5%
Northern Chatham County	4%
US 64 West of Pittsboro	3%

Table 6. Destination of Trips Entering the Region via US 15-501 South of Pittsboro

Destination	US 64 Trips
Pittsboro Area	30%
Raleigh Area	13%
Chapel Hill Area	12%
US 64 East of Raleigh	11%
Cary/Apex	9%
Durham Area	4%
Northern Chatham County	4%
Lee County/Sanford	3%
North Wake County	3%
Area east of Jordan Lake	3%

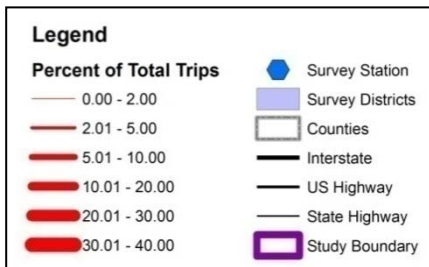
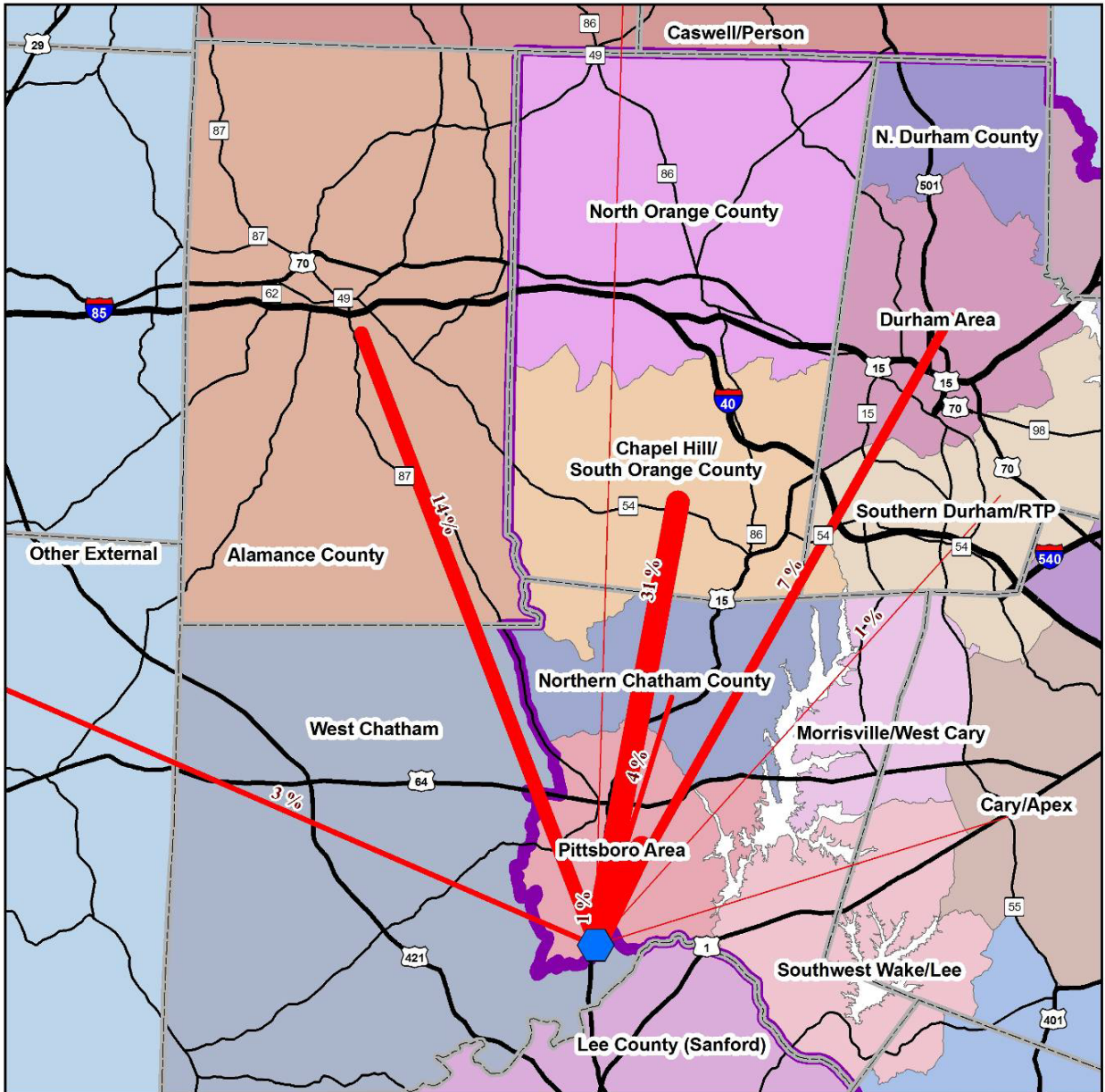
existing conditions

Figure 10. Triangle External Trip Survey – US 64 West of Pittsboro



existing conditions

Figure 11. Triangle External Trip Survey – US 15/501 South of Pittsboro



existing conditions

Select Link Analysis

Select link analysis is a tool used to determine where traffic is coming from and going to on a select road segment or link. It is used to retrieve information about network conditions (on a 24-hour basis). It does not present the total volume for model links, only those which pass through a particular section.

DCHC MPO and Kimley-Horn prepared a number of Select Link Analysis model runs using the Triangle Regional Model (TRM) for roadway segments in the study area. Segments that corresponded to corridors in this study include:

- Farrington Mill Road
- Farrington Road
- US 15-501
- Jack Bennett Road
- Scott King Road
- NC 55.

Figures 12-17 on the following pages show the results of the select link analysis for each corridor. These figures show the location of each of the select link analysis and the distribution of trips (by percentage of total trips on the subject link). For example, in **Figure 12**, the select link analysis is Farrington Road between Stagecoach Road and Barbee Chapel Road. By definition, 100% of the select link volume goes through this section. Looking to the East, 66% of this traffic is either coming from or going to Stagecoach Road. The other 34% is heading North on Farrington Road. Of the 66% using Stagecoach Road, 22% heads south on NC 751.

In general, the results of the select link analysis indicate that the majority of traffic traveling on the Farrington Road/Farrington Mill Road corridors is local in nature. For example, in **Figure 14**, traffic to/from the south is mostly from the area north of US 64, west of Cary, and east of Jordan Lake. Traffic to/from the North is nearly equally split between Farrington Mill Road and Mount Carmel Church Road, with the primary destinations being Chapel Hill and southwest Durham. A very small percentage of traffic from major highways (US 15-501, NC 55) traveled the study corridors, consistent with the results of the Triangle Cordon Survey Flow analysis.

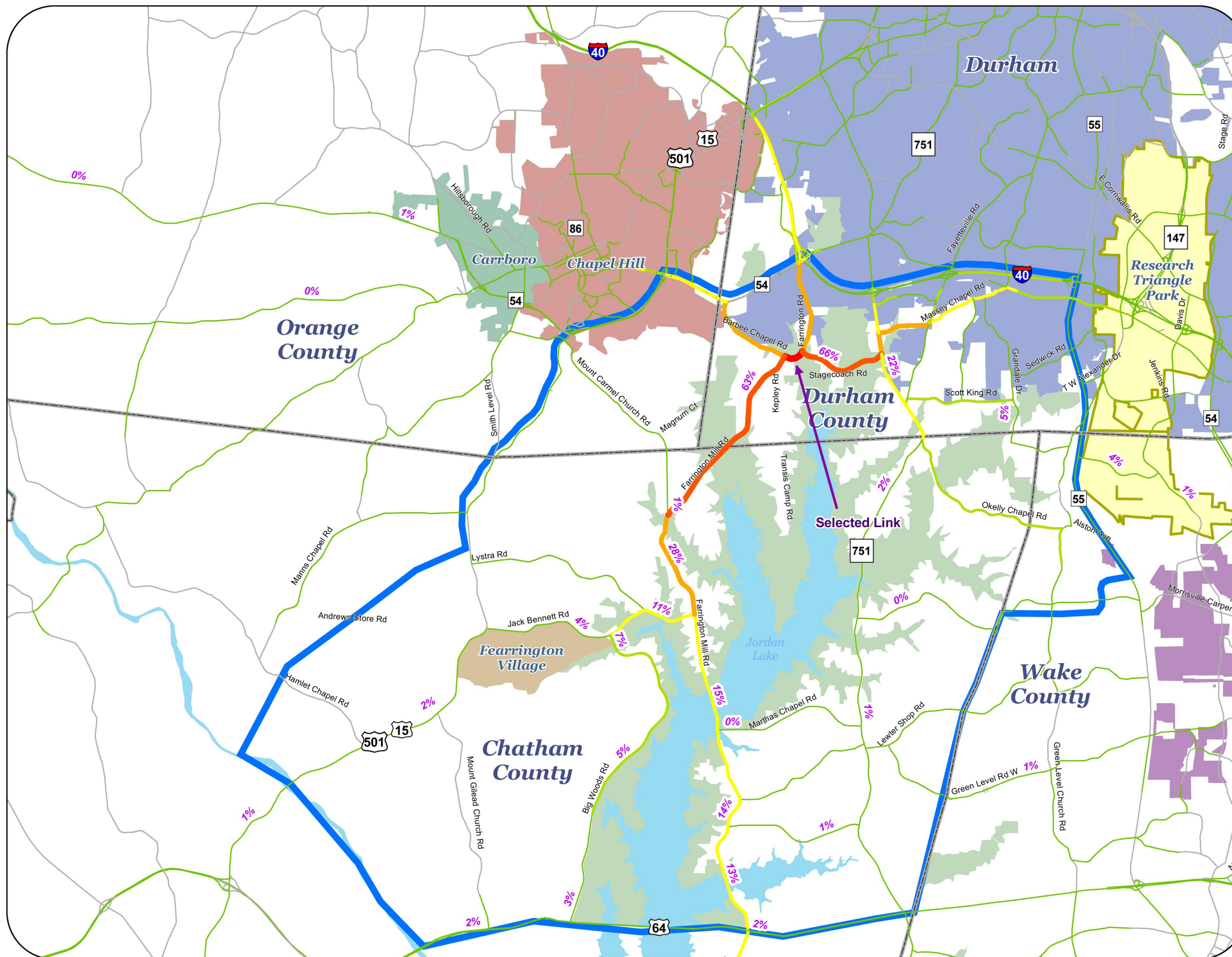
existing conditions

Based on this analysis, the majority of impact on these facilities will be caused by local development pressures within the study area. Future Year (2035) Corridor Analysis will test the effect of local development on the transportation system, and present additional select link analyses to determine the magnitude of shifts in traffic as major highways bordering the study area experience increases in traffic.

Farrington Road Corridor Study

Figure 12

Select Link Analysis
Farrington Rd.



Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Corps of Engineers Land

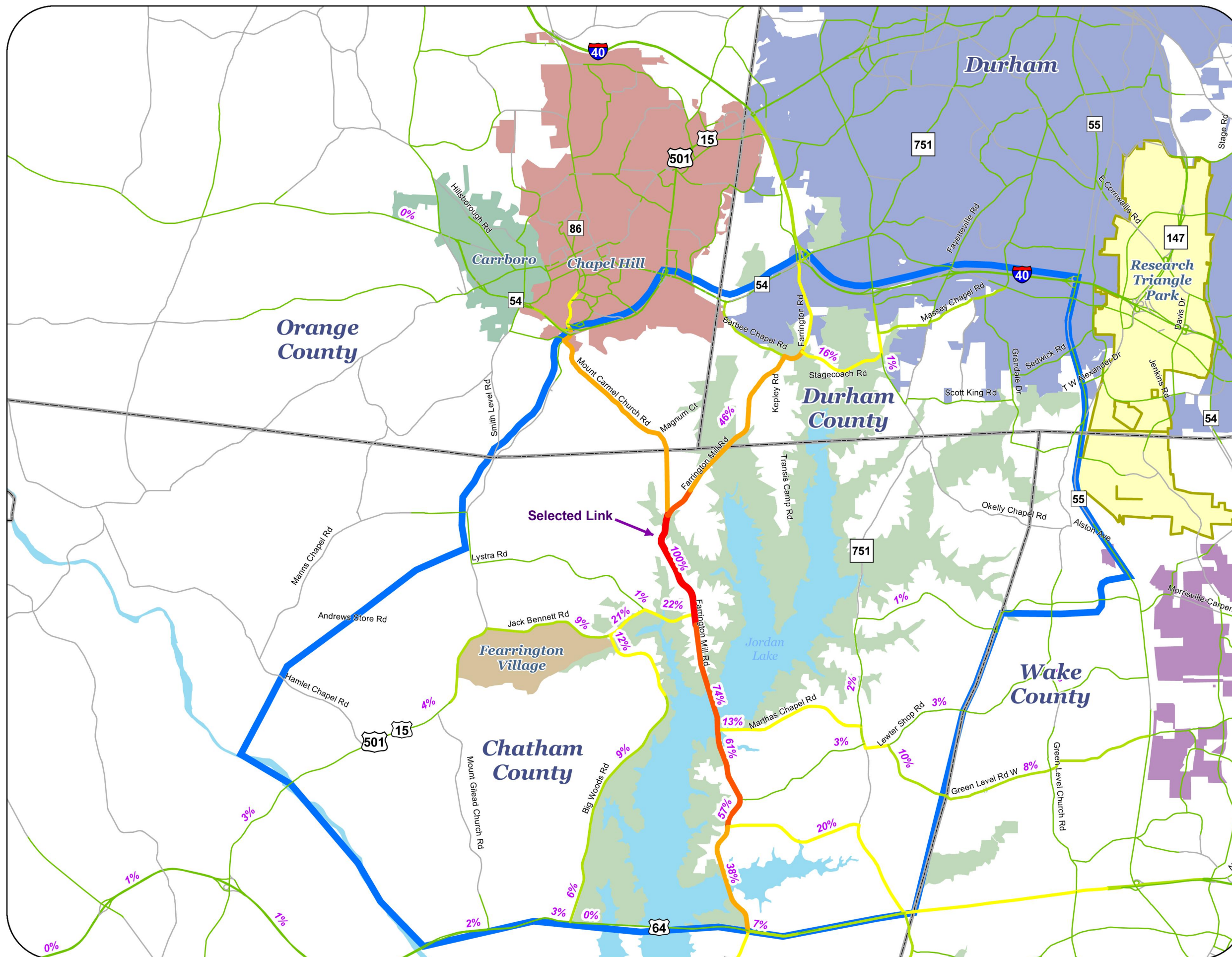
November 25, 2008



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Farrington Road Corridor Study

Figure 13
Select Link Analysis
Farrington Mill Rd



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

Counties
 Study Area
 Research Triangle Park
 Lakes
 Durham
 Chapel Hill
 Farrington Village
 Cary
 Carrboro
 Corps of Engineers Land

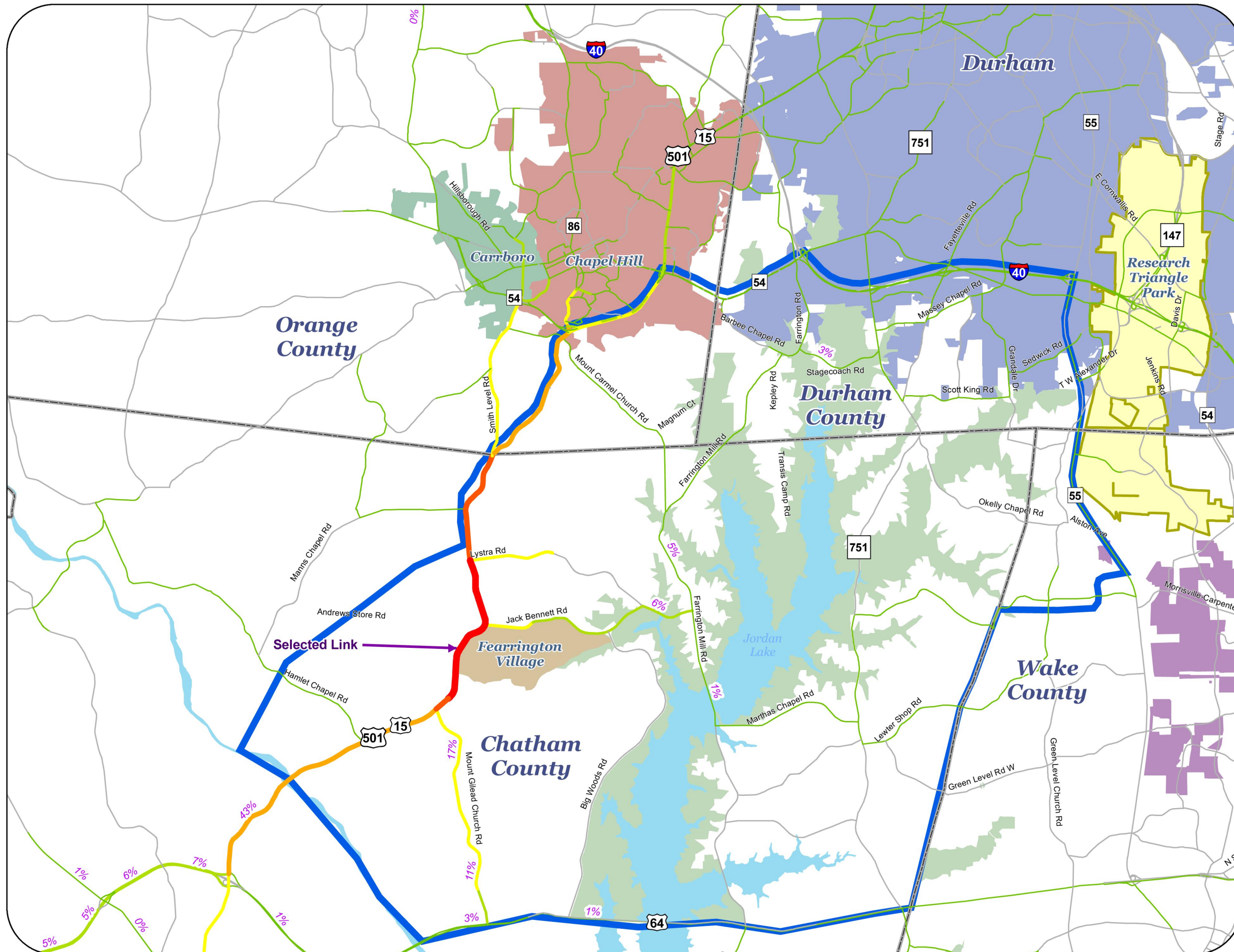
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Farrington Road Corridor Study

Figure 14

Select Link Analysis
US 15/501



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

Counties
 Study Area
 Research Triangle Park
 Lakes
 Durham
 Chapel Hill
 Fearrington Village
 Cary
 Carrboro
 Corps of Engineers Land

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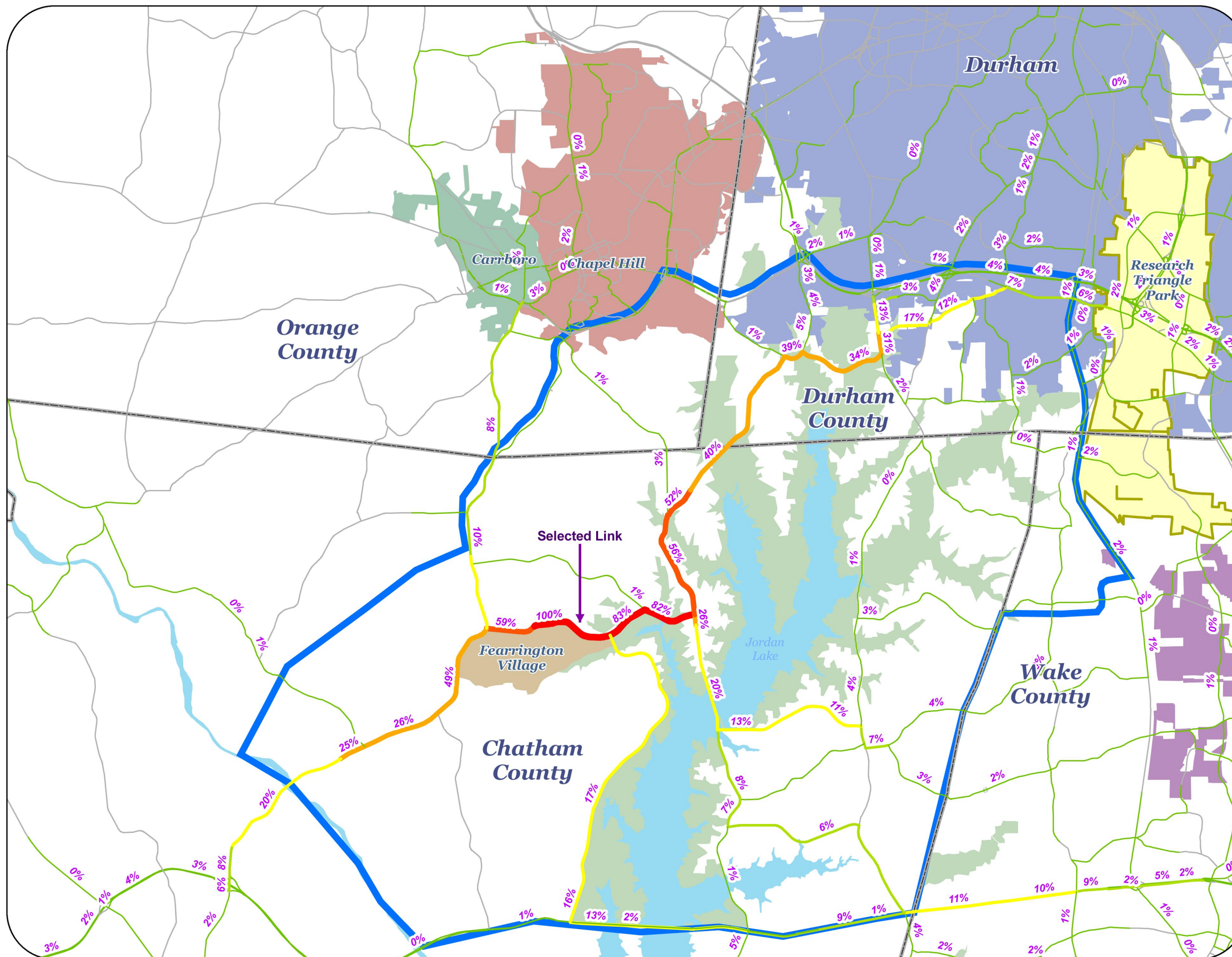
0 0.5 1 2 3 Miles



Farrington Road Corridor Study

Figure 15

Select Link Analysis
Jack Bennett Rd



Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

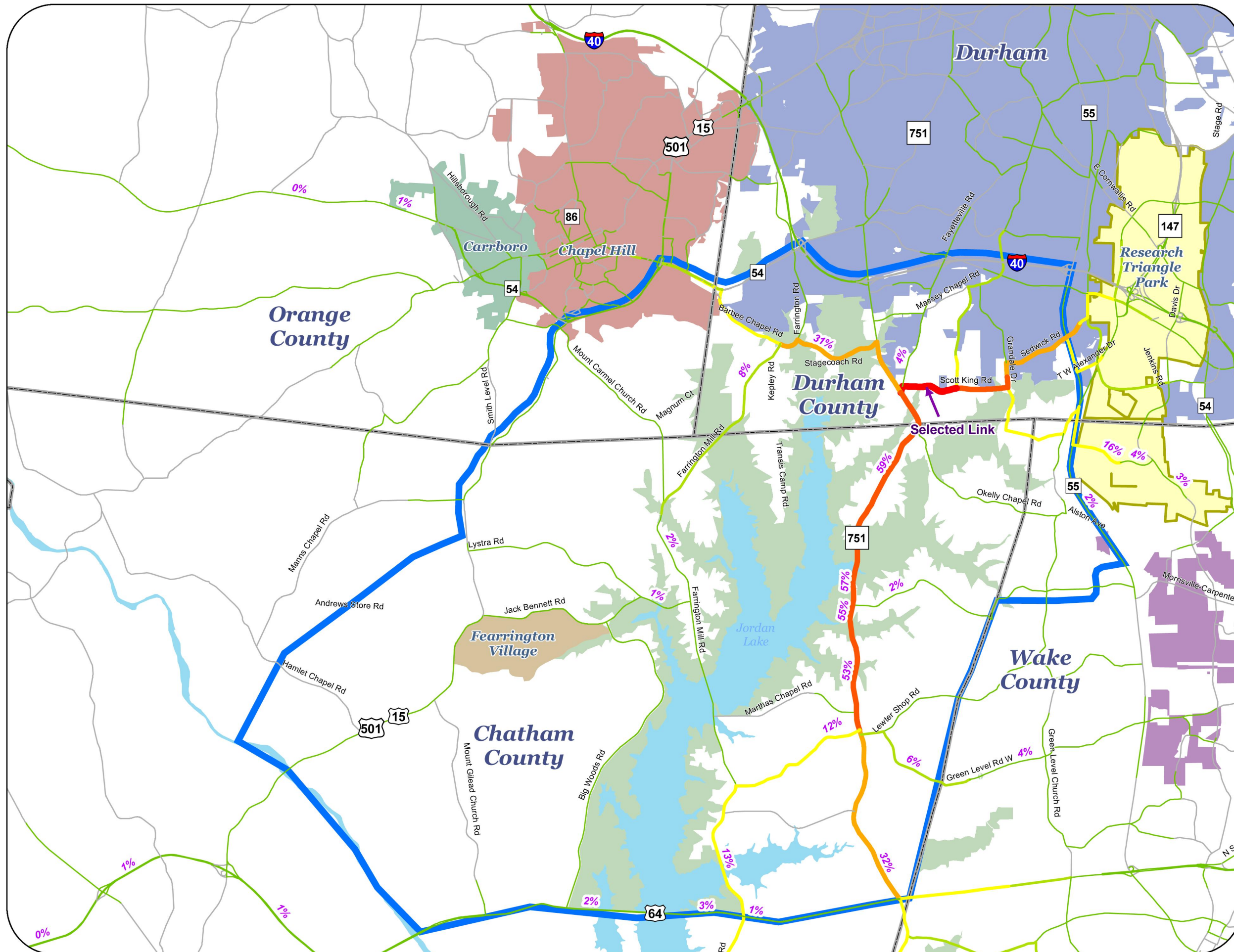
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Farrington Road Corridor Study

Figure 16
Select Link Analysis
Scott King Road



- Select Link Volumes**
Percent of Trips
- 0.0
 - 0.1 - 5
 - 5 - 10
 - 10 - 25
 - 25 - 50
 - 50 - 75
 - 75 - 100
- Counties
 Study Area
 Research Triangle Park
 Lakes
 Durham
 Chapel Hill
 Farrington Village
 Cary
 Carrboro
 Corps of Engineers Land

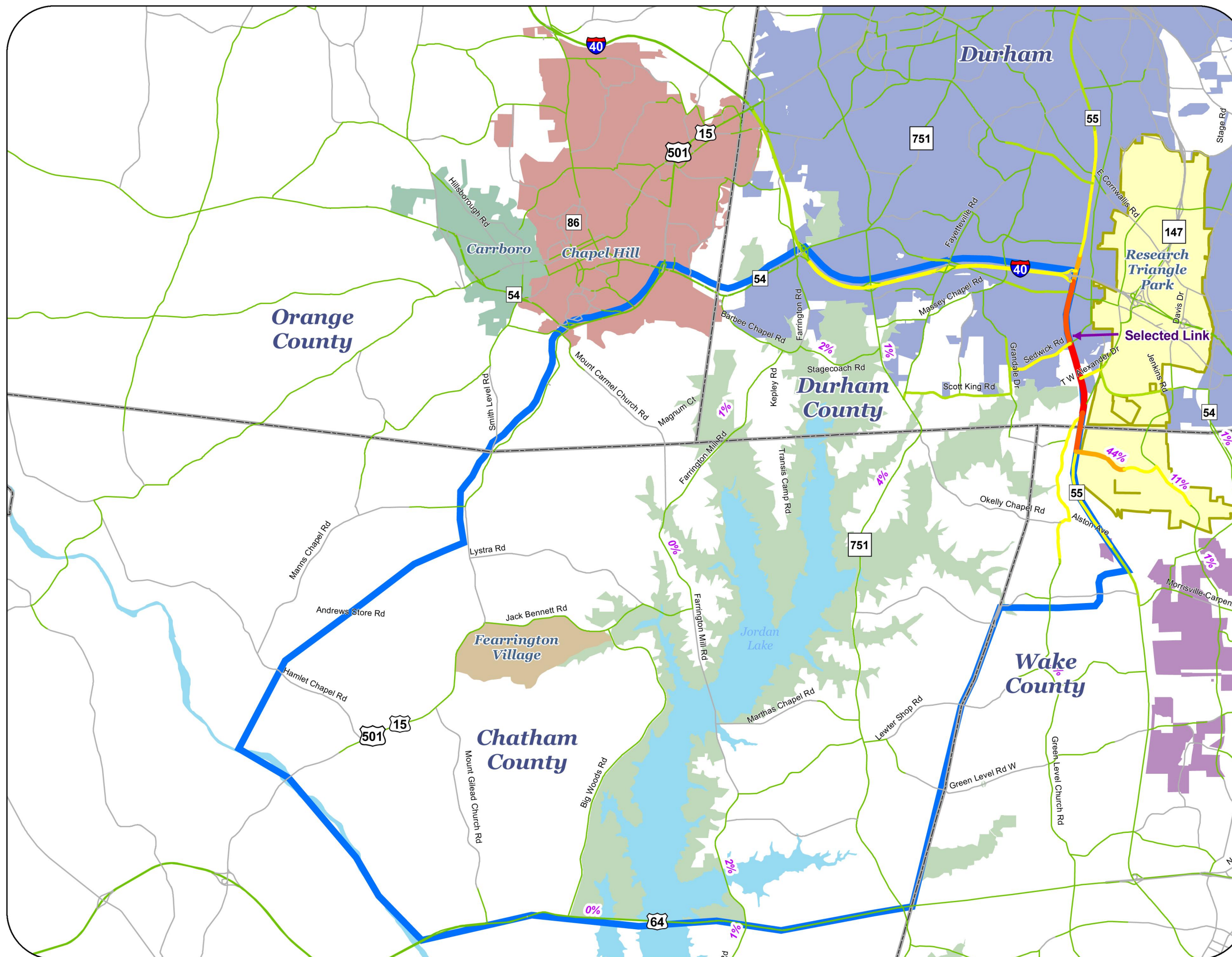
November 25, 2008

0 0.5 1 2 3 Miles

Farrington Road Corridor Study

Figure 17

Select Link Analysis
NC 55



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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0 0.5 1 2 3 Miles



existing conditions

District Flow Analysis

DCHC MPO provided daily and peak period origin-destination (O-D) matrices at the district level from the Triangle Regional Model (TRM). For the TRM, the region is divided into 21 districts representing different parts of the area. For example, the portion of Chatham County in the regional model is considered one district, while the western and southern portions of Wake County are divided into two districts. Durham County is divided into six districts which are labeled Northern, Eastern, Central, Downtown, Southwest, and Research Triangle Park. Orange County is divided into four districts which are labeled Northern, Southeast, Southwest, and Chapel Hill-Carrboro.

For the Farrington Road analysis, these 21 TRM districts were grouped into 14 super-districts. For example, Southeast Orange County was combined with Chapel-Hill-Carrboro. O-D data from the Triangle Regional Model were aggregated to these super-districts and are presented in **Table 7**. This table shows that the majority of trips to and from Chatham County are internal (63%). Trips to the Chapel Hill/Carrboro area are also prominent (14%), and are expected to use the US 15-501 corridor. Trips to Western Wake (Cary/Apex) comprise 8% of trips, and are expected to use the US 64 corridor. Southwest Durham County and RTP make up 5% and 2% of the trips, respectively (approximately 7% or 12,400 trips combined). These trips are the most likely to use the Farrington Road Corridor to avoid future congestion on US 15-501, US 64, and I-40.

existing conditions

Table 7. Triangle Regional Model District Flows to and from Chatham County

Super-District	Trips to/From Chatham County	% of Total
Chatham County	110,574	63%
Chapel Hill/Carrboro Area	24,403	14%
West Wake (Cary/Apex)	13,576	8%
Southwest Durham County	8,731	5%
South Wake (Holly Springs/Fuquay Varina)	4,972	3%
Research Triangle Park	3,721	2%
Central Durham	2,532	1%
Raleigh (Inside the Beltline)	2,040	1%
Northern Durham /Durham County	1,267	1%
North/Eastern Wake County	1,229	1%
Southwest Orange County	1,114	1%
Northern Orange County	635	0%
Johnston/Harnett County	462	0%
Granville/Franklin County	116	0%
Total	175,372	100%

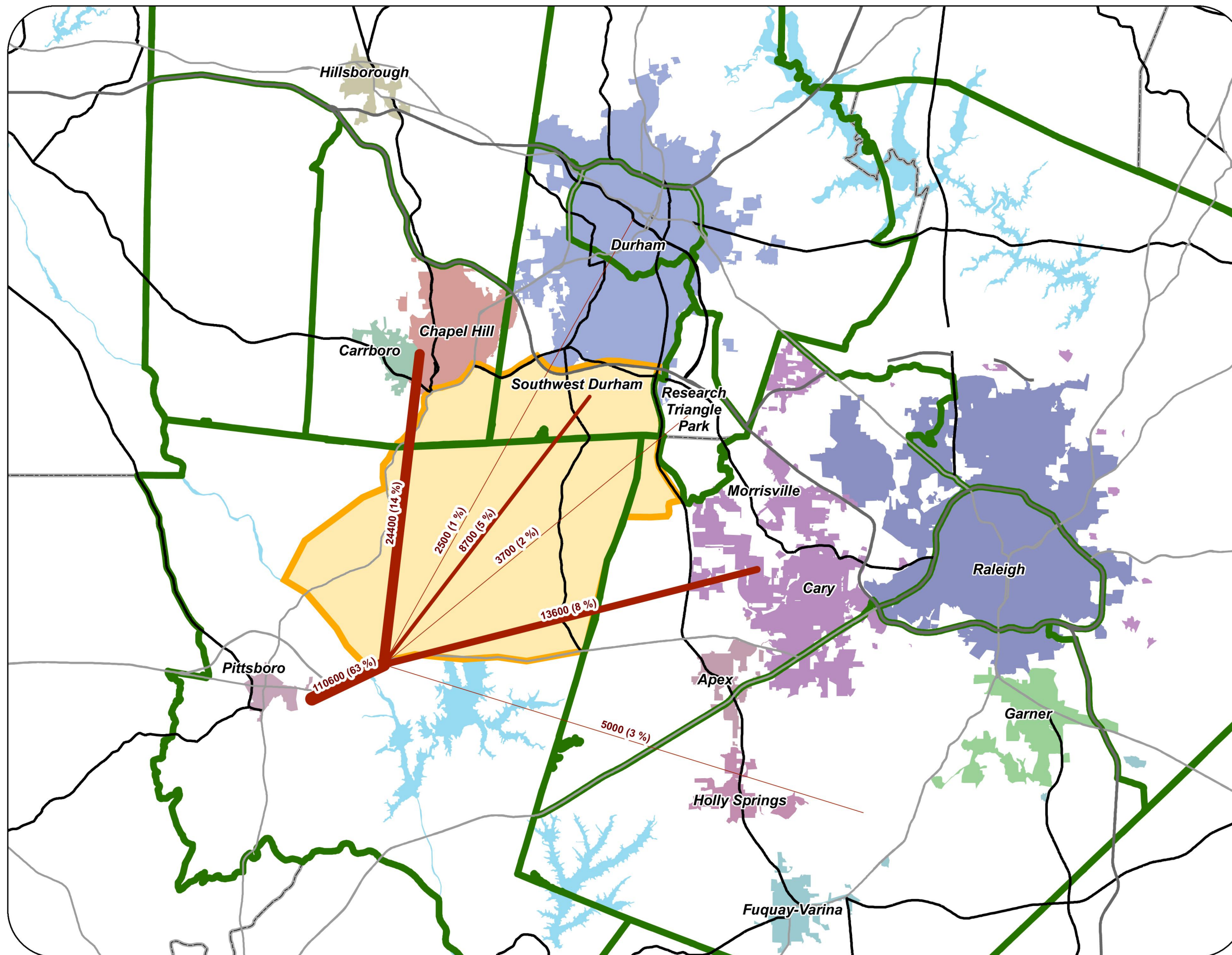
These district flows were added to the Triangle Regional Model to create a graphic showing “travel desire lines”. These desire lines show the district flows in a graphical manner. These graphical district flows can be seen in **Figure 18**.

Farrington Road Corridor Study

Figure 18

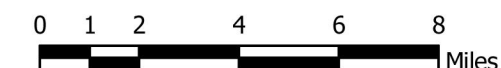
District Flows into Chatham County

Triangle Regional Model Origin-Destination Data



- District Flows**
- Total Trips (and % of Trips)**
- 2500 - 5000
 - 5000 - 10000
 - 10000 - 20000
 - 20000 - 30000
 - > 30000
- TRM Super-Districts**
- Interstates
 - US Highways
 - State Highways
 - Counties
 - Study Area
 - Lakes

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existing conditions

The Built Environment

To demonstrate and understand growth in the Farrington Road corridor, it is necessary to examine the existing land use profile, development patterns, and the effects of these trends on the transportation system. A CommunityViz model that contains land use data (by parcel and TAZ) was developed. This land use model provides existing conditions and the existing land use profile along with future conditions in both a “business as usual” and “compact development” scenario. Each of these scenarios impacts the transportation system in a different way.

Land Use Profile

The Farrington Road Corridor study area is largely rural and undeveloped and includes a significant portion of environmentally sensitive lands. Over 41% of the land in the study area is classified as permanent conservation. These lands are predominantly comprised of Jordan Lake and its tributaries and game lands owned by the US Army Corps of Engineers but also include preserves and natural areas.

Slightly less than 40% of land in the study area is classified as residential. The majority of residential land is developed at extremely low densities. Roughly a fifth of residential land is classified as rural residential, with an additional 13.56% classified as low density residential. These lands are predominantly located adjacent to Jordan Lake. Less than 2% of land in the study area is comprised of medium or high density residential land uses.

Less than 2% of land in the study area is classified as commercial, industrial, or institutional. The majority of these areas are found in the extreme northern and southern portions of the study area, along Interstate 40 and Highway 64.

Lastly, slightly less than 9% of land in the study area is classified as vacant/unprotected. This category includes all undeveloped lands that are not classified as permanent conservation, farmland, or parks and recreation. These lands are usually adjacent to residential developments and in areas west of Jordan Lake.

Table 8 summarizes the existing land use profile for the study area and **Figure 19** shows Existing Land Use by parcel.

existing conditions

Table 8. Existing Land Use

Land Use	Acres	Percentage
Agriculture	4101.12	5.07%
Civic/Institutional	486.13	0.60%
Commercial/Retail	1735.3	2.14%
General Office	31.06	0.04%
High Density Residential	1.17	0.00%
Low Density Residential	26756.11	33.05%
Light Industrial	20.28	0.03%
Medium Density Residential	1433.98	1.77%
Conservation	33471.3	41.35%
Rural Residential	6123.41	7.56%
Vacant/Unprotected	6785.36	8.38%
Total	80945.22	100.00%

Note: Assumed Residential Densities:

High Density Residential = 12 dwelling units per acre

Medium Density Residential = 5 dwelling units per acre

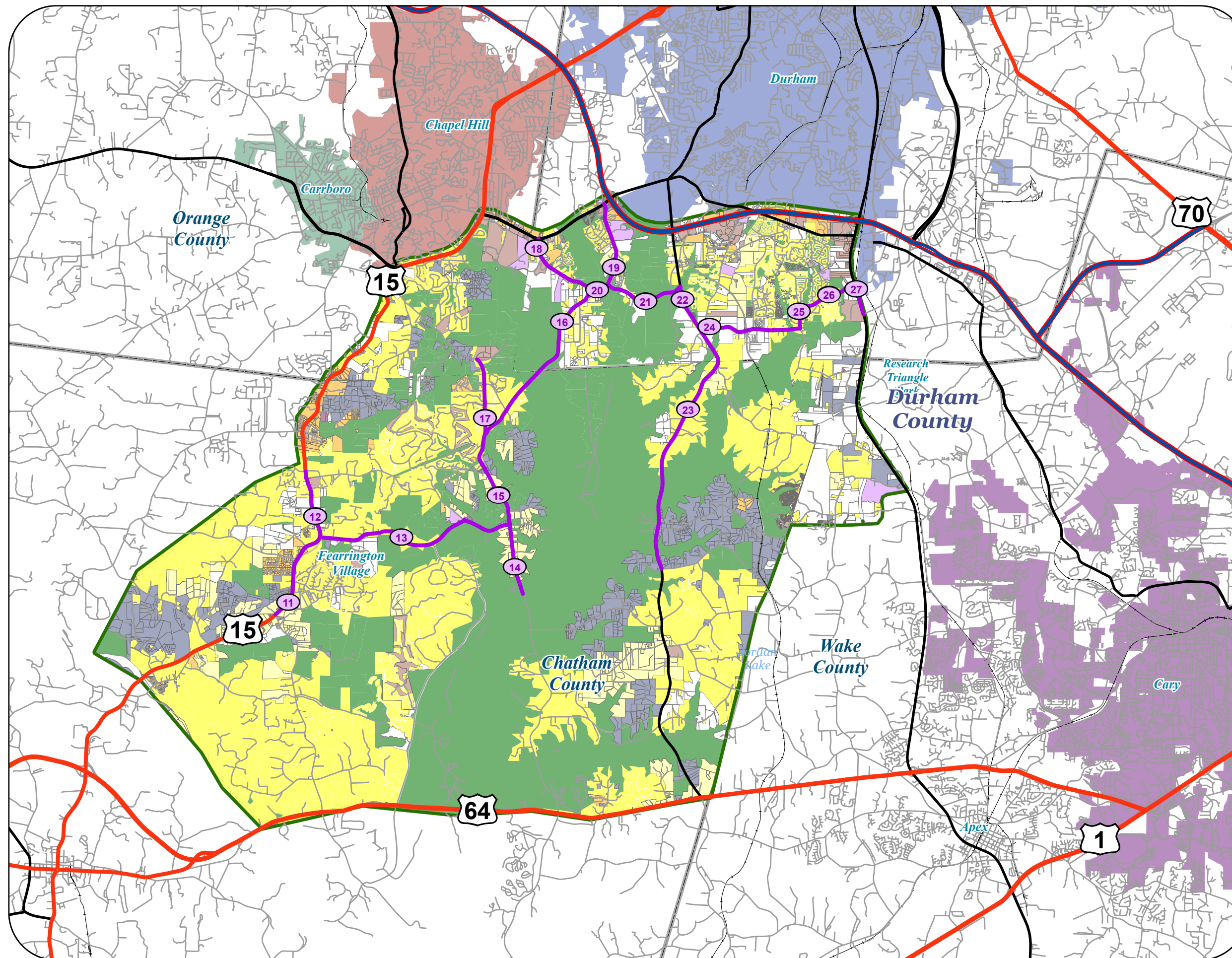
Low Density Residential = 3 dwelling units per acre

Rural Residential = 0.2 dwelling units per acre

Farrington Road Corridor Study

Figure 19

Existing Land Use



Legend

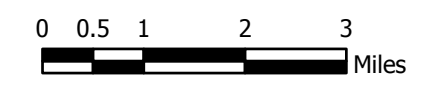
Study area

- Agriculture
- Civic/Institutional
- Commercial Retail
- Conservation
- General Office
- High Density Residential
- Low Density Residential
- Light Industrial
- Medium Density Residential
- Rural/Residential
- Vacant Unprotected
- Study Area
- Counties

Surrounding Communities

- Durham
- Chapel Hill
- Farrington Village
- Cary
- Carrboro

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existing conditions

The travel distance between origin and destination is one primary factor (along with travel mode choice) for influencing travel behavior. The physical distance between complimentary land uses in more rural or suburban settings tends to promote automobile travel, particularly since safe, convenient facilities are not usually available for pedestrians and bicyclists. Mixed-use, dense community development centers decrease the travel distance between complimentary land uses, and support transit, bicycle, and walking as viable alternatives to the automobile for meeting daily travel needs.

Existing Development Patterns

As indicated by the Land Use profile, the majority of the study area is characterized by very low density development. Residential development of this nature is comprised of large lot residential subdivisions designed with limited access points and cul-de-sacs. Large tracts of rural and farmland areas are interspersed throughout the study area, which have little transportation infrastructure other than two-lane farm-to-market roads which are ill-equipped to accommodate encroaching urbanization.

The examination of existing transportation infrastructure revealed that Jordan Lake significantly influences regional transportation and development patterns. Because east-west corridors that cross the lake are limited to Interstate 40 and NC 54 to the north and US 64 to the south, traffic is forced onto these existing routes or other existing smaller routes that travel around the lake entirely.

Proximity to the lake and location within its watershed can make infrastructure investment and development in those areas undesirable. Not all sites within the study area are unacceptable, but the transportation system must be low impact, especially in the interior core of the study area. Avoidance of environmental constraints creates additional gaps in the roadway network.

Natural Environment

As part of the corridor and land use evaluation, this section identifies and summarizes features of the natural environment that affect development patterns and build-out in the study area. The mapping in this section should be used for planning purposes only. Detailed assessments and

existing conditions

formal delineations of natural features should be conducted for any projects within the study area, prior to design and development.

Wetlands

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands provide a variety of environmental benefits, including erosion and flood control, ground water recharge and discharge, and wildlife habitat.

Wetlands and streams are under the jurisdiction of the U.S. Army Corps of Engineers (USACE) as defined in Section 404 of the Clean Water Act. The Division of Water Quality (DWQ) also regulates streams and wetlands under Section 401 of the Clean Water Act. Additionally, the state regulates isolated wetlands under a separate state law. The USACE must approve any jurisdictional determinations as part of the permitting process. It is required that wetland and stream delineations be obtained prior to design. Permits (404/401) are required prior to impacting streams and wetlands within the study area.

Wetlands are prevalent in the study area throughout Jordan Lake and its tributaries. Several roads in the study area have wetlands on both sides of the right-of-way. Widening or relocations of the road in these areas to smooth or straighten curves would require considerable study for and scrutiny by DWQ and USACE.

Federally Threatened and Endangered Species

According to information provided by the U.S. Fish and Wildlife Service and National Heritage Program, threatened and endangered species and their habitats are present in the study area. These species are found in Chatham, Orange, and Durham Counties and include the following:

- bald eagle (*Haliaeetus leucocephalus*)
- Cape Fear Shiner (*Notropis mekistocholas*)
- red-cockaded woodpecker (*Picoides borealis*)
- harperella (*Ptilimnium nodosum*)
- Michaux's sumac (*Rhus michauxii*)
- smooth coneflower (*Echinacea laevigata*).

existing conditions

Any projects conducted in the study area should avoid impacting federally threatened and endangered species and their habitats.

Nutrient Sensitive Waters

Jordan Reservoir was constructed as a flood control project, and also functions as a water supply reservoir for surrounding communities. All waters in the Haw River watershed including Jordan Reservoir were classified as nutrient sensitive waters (NSW) due to the high nitrogen levels found in the lake in 1983.

This classification remains in place today, and according to DWQ, the Jordan Reservoir (and its tributaries) is one of the most eutrophic reservoirs in the state.

As a result, a NSW strategy was created and implemented to protect the reservoir from water quality problems associated with nutrient enrichment. As part of the management strategy, the entire Jordan watershed was designated a critical water supply watershed and given additional, more stringent requirements than the state minimum water supply watershed management requirements. These additional requirements include rules for protection and maintenance of riparian areas, urban storm water management, and discharge.

Water Supply Watersheds

All water supply watersheds in the study area are classified as WS-IV NSW. Class WS-IV watersheds have the following maximum allowable development requirements:

- Low density development at 2 dwelling units an acre or 24% built-upon area, and
- High density development at 24-50% built-upon area.

In addition, Class WS-IV watersheds do not allow the 10/70 provision. Typically this provision allows local governments to use 10% of the non-critical area of the watershed for development up to, but not exceeding, a total of 70% built upon area. In the study area, this provision is not allowed.

existing conditions

Agriculture, forest, and transportation best management practices (BMPs) are also required. Specifically the transportation BMP's are those described in DOT's document "Best Management Practices for Protection of Surface Waters."

Required stream buffers in WS-IV watersheds are 30 ft for low density development and 100 feet for high density development. However, because the Neuse River Basin Riparian Buffer Protection Rules are applicable to the study area, 50 foot buffers are required, and these buffers are measured differently than buffers required by other classifications.

Floodplain/Floodway Zones

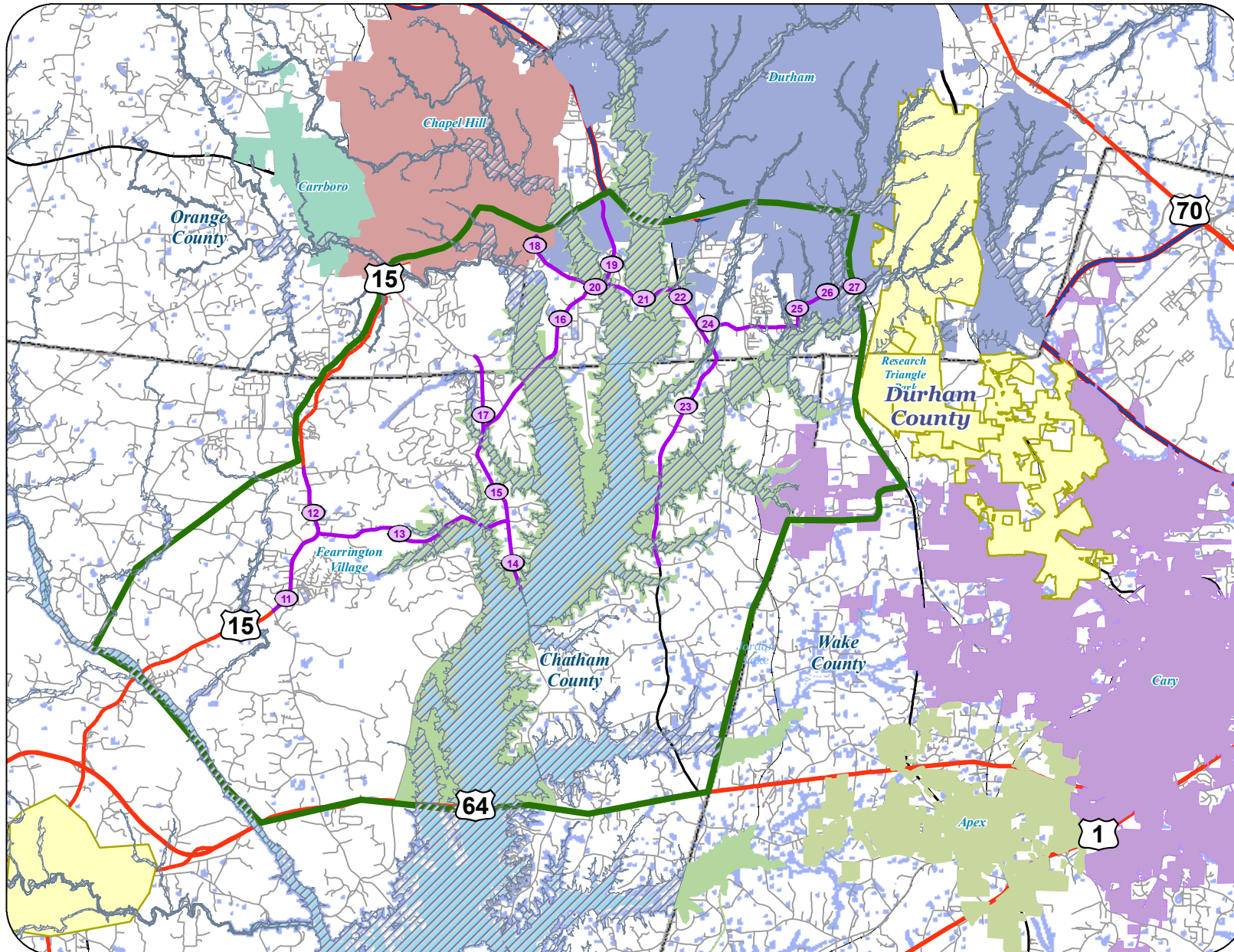
Many areas within the project corridor contain regulated floodplains or floodways. Jordan Reservoir and adjacent areas are within the 100-year flood zone. These areas are designated as Special Flood Hazard Areas and AE zones. Special Flood Hazard areas are defined as areas subject to inundation by the 1% chance annual flood. Zones designated as AE are also present within the Special Flood Hazard Areas. Zone AE is defined as the channel of a stream and the adjacent floodway that must be kept free of encroachment.

Development in these areas will require coordination with the county's floodplain administrator. Any proposed fill in the floodplain will need to be evaluated to show a "no rise" in flood elevation. If this is not possible, detailed hydrologic analysis will be required and a map revision will need to be approved by the administrator and the Federal Emergency Management Agency (FEMA). Floodplain fill permits may be required by county regulators prior to construction. Counties may have delegated programs for disturbance activities within these areas. It is recommended that the floodplain administrators be contacted for specific information regarding floodway regulations within each of the counties.

Figure 20 shows the natural features present in the study area.

Farrington Road Corridor Study

Figure 20
Natural Features Map



- Legend**
- Study Area
 - Counties
 - Corridor Roads
 - 100-Year Floodplain
 - UFWs National Wetland Inventory
 - Corps of Engineers Land
 - Lakes
 - RESEARCH TRIANGLE PARK
 - APEX NC
 - CARRBORO NC
 - CARY NC
 - CHAPEL HILL NC
 - DURHAM NC

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0 0.5 1 2 3 Miles

existing conditions

Existing Plans, Policies, & Regulatory Tools

The Corridor Study was coordinated closely with other state, regional, county, and local plans and/or policies that guide planning efforts in the area. All plans and policies in jurisdictions pertinent to the study area were reviewed. These jurisdictions include Orange County, Durham County, Chatham County, Wake County, the City of Durham, the Town of Chapel Hill, and the Town of Cary. Plans and policies were divided into three main categories: visioning documents, land development controls, and environmental rules and regulations. This section summarizes the consultant's review of the materials and highlights, issues, policies, or directives that may influence reasonable implementation of the Farrington Road Corridor Study.

Visioning Documents

Visioning documents create a framework for decision-making in communities. They serve to guide growth and development and can address a multitude of issues from housing to transportation to economic development. Visioning documents set goals and objectives for the community and should be referenced by officials when making policy decisions to ensure a coordinated approach for future growth. With a clear vision for the future and an established course of action to get there, a community is much more likely to realize desired outcomes. The following visioning documents are believed to have an impact on the Farrington Road Corridor Study:

Joint Land Use Plan-Chatham County and Town of Cary

A resolution to draft a joint land use plan between Jordan Lake and the Chatham/Wake County line was adopted by Chatham County and the Town of Cary in December 2005. Two community meetings were held in 2006 and two joint meetings and a public hearing were held in 2007. Development of the plan is currently underway, with a draft land use map available online for public comment.

The draft plan emphasizes very low density development (1 du/10 acres) within a ½ mile of the lake because of sensitive environmental resources including natural heritage sites and game lands. A resource conservation overlay, a 150 yard hunting buffer, and ½ mile buffers

existing conditions

around burn-blocks are also recommended to protect natural resources. The plan is recommending placement of no major roads through designated environmentally-sensitive areas. Residential development should occur in “zoning extremes,” where some areas allow very high density development and some allow very low density development to prevent fragmentation of the landscape. Conservation subdivision design should be used whenever possible within the study area.

Chatham County Land Conservation and Development Plan

Chatham County’s vision developed for this plan is as follows: “Chatham County will be a place that cooperatively controls its own destiny to assure the state of well-being desired by all of our people, while proudly preserving diverse cultural heritages and the County’s rural character.” Two fundamental policies identified throughout the plan are achieving “balanced growth” and engaging in “an open, proactive and cooperative approach to land development and conservation.” The plan emphasizes preservation of form and function of rural character, development of compact communities with a mix of activities including economic development centers in order to promote a diversified, sustainable business community, and development of an integrated approach to protecting and promoting high-quality open space, recreation, historic and tourism locations. However, the “community plan map” was never adopted.

Chatham County Land Use Strategic Plan

The Land Use Strategic Plan complements the Land Conservation and Development Plan described above. Achieving “balanced growth” and conserving and protecting natural resources are of particular relevance to this Plan. In support of these policies, goals were established. These goals include: implementation of community-supported growth management strategies, conservation of prime farmland, concentration of high intensity uses, increased proportion of land preserved as open space in areas under development, and provision of a transportation system that effectively and efficiently fulfills the needs of all county interests.

existing conditions

Draft Orange County Comprehensive Plan

The Orange County Comprehensive Plan serves as a guide to the county's growth and development through 2030. On May 19, 2008 a draft of the Comprehensive Plan was made available for public review. Adoption of the comprehensive plan document is pending.

Becoming a sustainable community is the underpinning of the plan. Key objectives to achieve sustainability initiatives in the county include environmental conservation, energy efficiency, affordable housing, social equity, a thriving economy, regional agricultural production, and the availability of transit-oriented, walkable, mixed-use communities. Key implementation strategies include:

- Establish Economic Development Districts to stimulate and accommodate development in strategic locations that can be served by transportation systems and public infrastructure, and be convenient to housing opportunities.
- Identify and encourage mixed-use districts that provide live-work-shop opportunities and minimize travel needs.
- Explore a Strategic Growth and Resource Conservation program that will help focus new development in areas that can best accommodate it. Simultaneously, this program should preserve / conserve rural and agricultural land with compensation mechanisms for rural property owners.
- Develop an interconnected system of pedestrian and bicycle trails to provide both recreation opportunities and increased mobility choices to residents.
- Identify growth opportunity areas near transit corridors and along major thoroughfares to encourage more public transportation use by County residents.
- Encourage residents to use alternative modes of transportation and ride-sharing including interconnected pedestrian and bicycle trails, transit lanes along major

existing conditions

thoroughfares; and development of park-and-ride lots that would encourage use of public transportation to travel to and from work.

A Bicycle Transportation Plan – Orange County, NC

This purpose of the Plan, which was adopted in April 1999, is to provide a bicycle component to the Orange County Comprehensive Plan. It recommends bicycle facilities in both urban and rural areas of the County and is coordinated with the bicycle plans of adjacent jurisdictions.

Durham City/County Comprehensive Plan

The Durham City/County Comprehensive Plan serves as a guide for future growth and development through 2020. The document was adopted in February 2005 and amended in August 2007.

The transportation element of the Comprehensive Plan emphasizes public transit and pedestrian and bicycle movement, as well as automobile travel. It stresses regional solutions and the importance of integration between land use and transportation planning processes. The land use element concentrates on balancing predicted demand with the need to protect natural resources and to move towards a more efficient development pattern.

Durham Comprehensive Bicycle Transportation Plan

This plan, which was adopted in 2006, reviews existing conditions and proposes an improved bicycle network to develop an implementation plan for bicycle facility improvements. It also sets out policy, program and design recommendations.

Wake County Land Use Plan

The Wake County Land Use Plan was adopted in 1996 and updated in 2003. Goals and strategies of particular significance to this plan include seeking regional solutions to transportation issues, ensuring that the land use plan and transportation plan mutually support each other, identifying and preserving areas that make a significant

existing conditions

contribution to environmental quality, and planning transportation facilities in relation to planned growth.

Wake County Transportation Plan

The Wake County Transportation Plan was adopted by the County in April 2003. The goal of the plan is to identify a diversified multimodal transportation investment program to provide safe, efficient, and effective mobility for all citizens and visitors. The plan encompasses collector streets, thoroughfares, public transit, bicycle and pedestrian needs of the County through 2025.

Chapel Hill Southern Area Small Area Plan

The Chapel Hill Southern Area Small Area Plan was adopted June 23, 1992. The area of town, although undeveloped, was designated to develop at urban densities and the plan was created to determine how best to develop the land. The primary objective of the plan was preservation, with a focus on preserving the natural beauty and character of the area, protecting environmentally sensitive areas and water quality, and enhancing existing neighborhoods. The Plan proposes low density residential development for most of the land, with higher density residential development concentrated in a walkable village setting.

Land Development Controls

Land Development Controls, including zoning ordinances, subdivision ordinances, and unified development ordinances establish regulations, procedures, and standards local governments can enforce or implement to ensure land is developed in a manner that is consistent with the goals, policies, and strategies set forth in the various visioning documents described above.

The land development controls of particular influence to this corridor study include the Chatham County zoning ordinance and the Durham City/County Unified Development Ordinance (UDO).

Chatham County amended their zoning ordinance to include a Compact Community District in April 2004. This district allowed for compact residential development with a mixed-use commercial village center with

existing conditions

a conditional use permit. It was created to help implement the Chatham County Land Conservation and Development Plan described above. The desirable location for these villages is in northeastern Chatham County, within the study area. The purpose of this district is to promote new communities that support mixed-use development, allow for compact village-style development surrounded by protected green space, and promote connectivity and walkability. This type of development was considered when reviewing future year development scenarios (see Scenario Planning section).

The Durham City/County UDO establishes development tiers to ensure that development reflects the character of the area within which it occurs. The southern portions of Durham City and County are in the study area. These areas are predominately located in rural and suburban tiers. The majority of Rural tiers are located within watershed critical areas. Development in this tier should focus on protecting water resources and is characterized by large lots and limited commercial areas. Suburban tiers are where the majority of population growth in Durham is expected and are characterized by traditional suburban densities and patterns.

Environmental Rules and Regulations

Federal, state, and local governments have established environmental regulations to protect water quality of streams and surface waters and other environmentally sensitive areas, to minimize losses due to flooding, and to encourage the wise and productive use of natural resources.

The following environmental rules and regulations were considered in the development of recommendations for the study area:

Neuse River Nutrient Sensitive Waters (NSW) Management Strategy

The study area that is essentially east of NC 55 is subject to the Neuse River Nutrient Sensitive Waters (NSW) Management Strategy. This strategy is state mandated by the North Carolina Division of Water Quality (DWQ) and uses nutrient removal as the water quality criteria. The strategy resulted in the development of Neuse Rules, or permanent rules designed to support implementation of the strategy. These rules established a nutrient reduction goal and included rules

existing conditions

for wastewater discharges, urban storm water management, agricultural nitrogen reduction, and nutrient management.

Another set of rules of particular interest to this study, also established under the NSW management strategy, is the Neuse Riparian Buffer Protection Rules. Neuse River buffer rules apply to vegetated areas within 50 feet of the top of the bank along surface water features, including streams, rivers, lakes, ponds, etc. These rules apply where features are shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). In addition to the 50-foot buffer requirements, storm water that runs into the buffer must be continually diffused. New buffer rules were implemented for the study area as part of the newly adopted Jordan Lake Rules in 2007.

Jordan Lake Rules

The Division of Water Quality (DWQ) published a proposed set of rules for Jordan Lake that affects all jurisdictions in the study area. These rules are the strictest implemented watershed rules to date in North Carolina and include measures that will require retrofitting of existing development. These rules were revised in 2008, and a new set of rules is still under review. Like the Neuse Rules, the Jordan Lake Rules establish nutrient reduction goals and require nutrient management, agriculture, storm water management (both for new and existing development), and protection of riparian buffers.

These buffer rules apply to all streams and areas along the edge of Jordan Lake. In addition, these rules govern activities that impact any areas within 50 feet of surface waters in the Jordan watershed, including intermittent streams, perennial streams, lakes, reservoirs, and ponds.

In addition, the N.C. Division of Water Quality (DWQ) requires that a Hazardous Spill Catch Basin be constructed at stream crossings that are within the Lake Jordan watershed, excluding roadway projects.

Local Buffer Regulations

existing conditions

The following county-wide buffer regulations were considered in the development of the corridor study:

Chatham County has local buffer regulations that require buffers on most any water feature, with buffers from 30 feet in width to 100 feet in width (adopted January/February 2008). The County also adopted a Stormwater Ordinance and amended Soil Erosion and Sedimentation Control Ordinance, including steep slopes, in December 2008.

The buffer regulations in Orange County vary from approximately 65-80 feet dependent upon the degree of slope within the area. If the feature occurs within a floodplain, a licensed engineer or surveyor must calculate the extent of the floodplain and slopes. There are general 50-foot buffers for those areas not within a protected watershed. The protected and unprotected watersheds are designated by the County, and protected areas are defined by the county as those features that feed into a water supply watershed.

Durham County buffer regulations include 50-foot buffers on all perennial or intermittent streams. Streams occurring within water supply watersheds can have increased buffer requirements of 50-100 feet for intermittent streams and 100-150 feet for perennial streams.

Watershed Regulations/Ordinances

A watershed ordinance protects the water quality of the streams and surface water in the water supply watersheds. Watershed regulations/ordinances in this study area comply with the management strategies and rules described above.

Flood Damage Prevention Ordinance

A flood damage prevention ordinance promotes the health, safety, morals, and general welfare of a community by minimizing public and private losses due to flood conditions within flood prone areas. These ordinances restrict or prohibit certain uses which are dangerous to health, safety, and property due to water or erosion hazards, or those uses which result in damaging increases in erosion, flood heights, or velocities.

existing conditions

Environmental Impact Ordinance

Orange County has an environmental impact ordinance that encourages the wise and productive use of natural resources, promotes public and governmental awareness of the environment, educates the public on the environmental consequences of development, requires full disclosure of the anticipated effects of proposed development on the resources of the county, and permits and facilitates full enforcement of all ordinances and regulations concerning the environment in an efficient, coordinated and comprehensive manner.

Specifically, the ordinance requires the preparation and evaluation of environmental impact documents for projects that either require certain state permits or require a local land use permit for development within environmentally sensitive areas.

Section 404 Wetland Regulations

Communities within the study area recognize the importance of protecting environmentally sensitive areas, which include those lands designated as wetlands by the US Army Corps of Engineers. It is generally the policy of the local governments that all development within these areas conforms to federal, state, and local regulations and relevant development ordinances.

scenario planning

Scenario planning represents a process that encourages the consideration of multiple futures for a community based on various development patterns and intensities. Through consensus and evaluation, these futures come together into a vision and set of strategies used to direct policy. Scenario planning allows communities to evaluate the influence of physical characteristics, environmental features, land use patterns, development intensities, and urban design on the efficiency of the surrounding transportation system. Visualization of the interaction between land use and transportation decisions provides community leaders with information they need to evaluate the consequences of potential actions. Building on this momentum, the Federal Highway Administration, Environmental Protection Agency, and other federal agencies are actively promoting the use of scenario planning models by state agencies, metropolitan planning organizations, and local governments to better integrate land use, urban design, and transportation decision-making processes.

Evaluating the relationship between urban form and regional travel behavior in a scenario planning analysis produces several benefits. When considered together, decisions and investments regarding both elements can have a significant bearing on the Farrington Road study area:

- The impacts to sensitive land uses can be minimized when facilities identified for transportation investments are located after considering appropriate land use patterns and development intensities for the area.
- Prime locations for development can be stimulated if transportation investments consider available capacity or appropriate mobility options.
- Complementary activities can be placed next to existing or planned transportation infrastructure, making the most of land use opportunities and dedicated transportation investments.
- The quantity and location of travel demand can be influenced by land use decisions, making the possibility of real choices for various modes of travel both accessible and attractive.

scenario planning

Typically, scenario planning represents a multi-step process including:

- inventory existing conditions
- develop trend analysis
- explore alternative development scenarios
- assess impacts and trade-offs
- prioritize options and make recommendations.

These processes were conducted as part of the Farrington Road Corridor Study. Based on the alternative development scenarios, trade-offs and impacts of land use decisions were evaluated, and allowed the consultant to recommend land use policy changes in the study area.

CommunityViz Software

The two-dimensional map and data analysis component of CommunityViz® software, Scenario 360®, was used to evaluate impacts on the transportation system generated by competing future year development scenarios considered for the study area. It adds the functionality of a spatial spreadsheet to ArcGIS Map®, similar to how a spreadsheet program like Microsoft Excel® handles numerical data. Dynamic calculations embedded in the spatial spreadsheet were controlled by user-written formulas that change value as referenced inputs change. Formulas were written to supply the result of mathematical relationships with other spatial data included in the analysis, and with assumptions programmed in the planning model that reflect certain public policies, development controls, or market conditions unique to the study area.

Study Area

The study area for the scenario planning analysis is slightly smaller than the study area described in Chapter 1. Specifically, it omits parcels in the Town of Cary and Wake County to better match the traffic analysis zone boundaries used in the Triangle Regional Model (TRM).

scenario planning

Growth Projections (2035)

The MPO planning process for developing growth projections in the region (commonly referred to as socioeconomic data) relies on static data sets generated from independent studies commissioned during major updates to the Triangle Area Regional Travel Demand Model.

Collectively, this information represents the assumed development potential for eight counties (some full and some in part) and multiple cities (major cities include Raleigh, Durham, Chapel-Hill, Apex, Cary, and Wake Forest) included in the Triangle Region. Demand on the transportation system (i.e., trip generation) is calculated directly from the TRM socioeconomic data.

The last major update to regional control totals for socioeconomic data used in the Triangle Regional Travel Demand Model was completed in 2008. Population, housing, and employment estimates included in the socioeconomic dataset available for the study area were used as direct inputs to the CommunityViz® growth allocation model. The planning horizon for the land use allocation model is 2035.

Growth Allocation Model: Three Step Process

There are three main steps in the CommunityViz® growth allocation model: supply, desirability, and demand. Each of these is briefly described below.

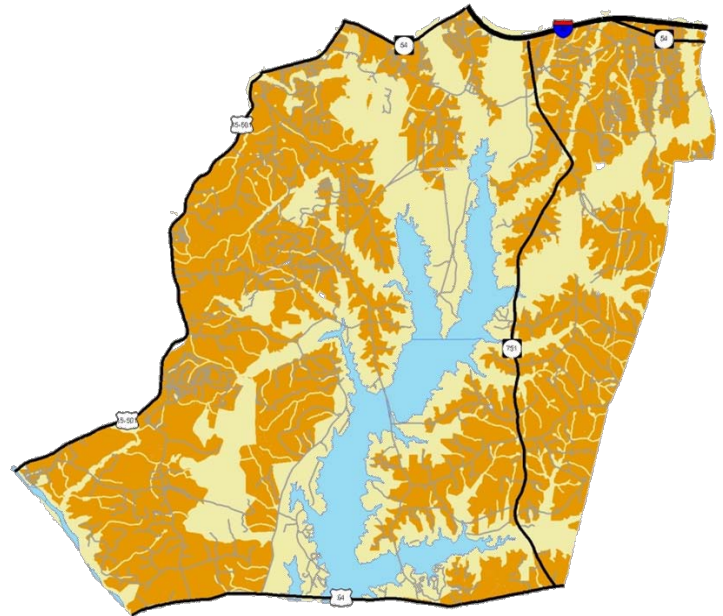
Supply

The “supply” of development potential remaining in the study area was estimated using two general factors: land availability and local land development controls. Land availability was determined based on the presence of physical, political, or policy conditions that would prohibit or limit future growth (i.e., areas highly-constrained for development). Data used to identify highly-constrained areas for development in the study area include major water bodies, 100-year floodplain, 50-foot riparian buffers from perennial streams, dedicated and registered conservation easements, NWI wetlands, formalized agriculture districts, and significant natural heritage areas.

scenario planning

A site efficiency factor (10%-30%) for each generalized land use category was also applied to the parcels greater than twenty acres in size to account for land typically dedicated to certain on-site improvements (e.g., internal streets, storm water management, open space, etc.) necessitated by new development. The remaining portion(s) of a parcel after removal of highly-constrained areas for development and application of the site efficiency factor was used to estimate build-out potential in the model.

Highly-Constrained Areas Map



Areas Deemed Highly-Constrained for Development

Build-out potential for residential and non-residential uses was estimated using land development controls set forth in adopted plans and ordinances administered by cities and counties in the study area. Height, bulk, and density controls observed for the study area were inventoried and applied to general land use categories assigned in the model (See appendix for development controls by generalized land use). Build-out potential for each parcel in the model was reported by number of dwelling units, commercial square footage, commercial employees, general office square footage, general office employees, institutional square footage, institutional employees, industrial square footage, and industrial employees.

Desirability

The “desirability” of one parcel to develop relative to another was based on its spatial relationship to factors deemed either positive or negative for attracting growth. Factors represented in the study area included proximity to existing urban areas, proximity to permanent conservation areas, access to water and sewer service, proximity to major

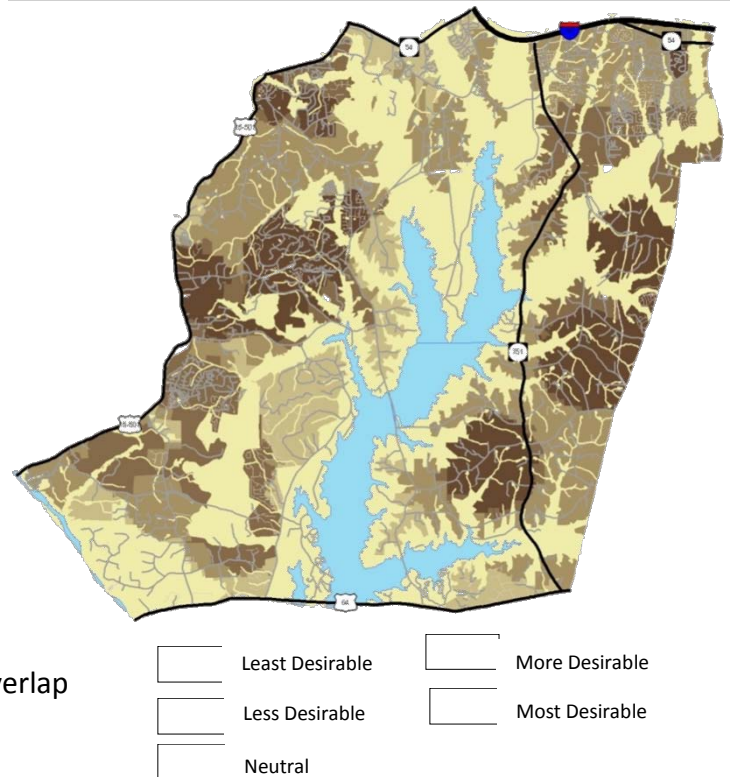
scenario planning

intersections, proximity to the regional activity center in the study area (i.e., Streets at South Point Mall), and proximity to compact development nodes identified for Chatham County.

The physical presence of factors prevalent in the study area, as well as those that extend across the region, were layered on a parcel map, and calculations were performed to determine either percent overlap or physical proximity (as appropriate) for each of the physical features in relation to

individual parcels. CommunityViz® software calculated a numeric score for desirability based on the presence of each individual feature relevant to individual parcels. A normalized score (between 0 and 100) was used to rank the parcels from least to most desirable for development. Raw scores reported for individual features were weighted to prioritize the desirability factors for attracting new development (See appendix for weighting values). For example, access to water and sewer service areas was assigned a higher importance in determining desirability for development than proximity to the regional activity center in the study area. After each of the individual features was weighted, the scores were combined into one final desirability score representing the overall desirability of that parcel for attracting new development. These scores were normalized to ensure that the lowest score was rescaled to 0, the highest score rescaled to 100, and the scores in between rescaled to fall within the new spectrum. Normalizing the scores is a critical process for ensuring that parcels are ranked relative to each other, that suitability maps are easily presentable to viewers, and that allocation of new growth occurs according to relative desirability.

Development Desirability Map



scenario planning

Demand

The amount of growth anticipated in 2035 (i.e., “demand”) was forecasted to the parcel level for the study area. The “allocation tool wizard” in CommunityViz® used supply, desirability, and demand statistics calculated in the model to allocate projected new dwelling units and employees by type amongst the parcels. For this process, the allocation wizard uses build-out potential as the “supply”, population and employment forecasts as the “demand”, and the results of the land suitability analysis as the “desirability score.” (Note: Parcels noted with existing development were removed from the list of eligible parcels for new development in the “supply” step of the process). Results generated at the parcel level were aggregated to the traffic analysis zone level for use in the regional travel demand model.

Future Year Development Scenarios

There is increased public interest in reducing or reversing the trend of urban sprawl and its consequences. This interest is motivated by the impacts associated with suburban development patterns, including consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion. In areas like Farrington Road, the long physical distance between complementary land uses (e.g., between home and work, home and school, or home and shopping) and a lack of overall street connectivity leads to unintended consequences—increased vehicle miles traveled and energy consumption, longer commute times, increased air pollution, heightened infrastructure and public service costs, and decreased resource lands. Future year forecasts in the Triangle Regional Model (TRM – travel demand model) predict that these unintended consequences will continue for the region if changes are not made to better integrate land use, urban form, and transportation decision-making.

Land use serves as the foundation of the built environment. It defines the type, mix, and general location of uses within communities, and ultimately defines the boundaries for neighborhoods, commercial nodes, and employment centers. Communities attempt to guide the built environment through the creation of their future land use maps. Typically, a comprehensive plan and accompanying future land use map represent the community’s vision for how to promote local growth and prosperity.

scenario planning

Urban form represents physical elements of the built environment; it is the spatial footprint of our cities-- measured by street patterns, block length, mix of land uses, maximum building height, average residential density, and non-residential intensity. These physical elements can influence comfort, speed, cost, convenience, attractiveness, and safety of movement between complementary land uses. On the other hand, elements of the transportation system—including road, pedestrian, bicycle, and transit facilities—impact how land is developed in terms of size, shape, density and mix of land uses. Urban form and transportation elements influence each other.

The location of land uses and how they are designed (i.e., urban form) can favor one mode of travel over others, and may influence overall travel behavior by changing the ease of use or accessibility of various modes. If low-density development is spread out, the residents of such areas must rely almost entirely on automobiles to get from one location or land use to another. On the other hand, denser urban centers that combine complementary land uses near each other enable greater choice in transportation.

Reorganization of urban form in the Farrington Road area to create a more efficient transportation system requires that community leaders evaluate the four Ds commonly associated with the relationship between land use, urban design, and transportation—density, diversity, design and destinations. By doing so, the MPO and Farrington road area will collectively be able to shorten the commuting distance between complementary land uses, provide more travel choices, and create a more efficient transportation system.

In order to test this hypothesis, three distinctive future year development scenarios (i.e., business-as-usual, compact development centers, and constrained growth projections) were created for the study area to measure the impact that competing development alternatives may have on demand factors (i.e., trip generation, trip length, and travel mode choice). All three development scenarios represent the same study area and long-term planning horizon (2035). A brief summary of each development scenario follows.

scenario planning

Business-as-Usual

The business-as-usual scenario represents continuation of an emerging suburban development pattern prevalent in the study area (see image on following page). New construction is characterized by isolated, single-use developments surrounded by low-density rural residential home sites. The regional activity center surrounding the Streets at South Point Mall continues to be the social and economic center of the study area. Low-density development patterns and the physical distance between complementary land uses tends to promote automobile travel, particularly since safe, convenient facilities are not easily available for pedestrians, bicyclists, and transit riders. Increased traffic congestion on the rural road network means less mobility for residents and visitors to the study area as well as others traveling through the community.

Compact Development Centers

The compact development scenario represents fulfillment of the vision for many communities in the study area to promote a more sustainable development pattern – measured by environmental stewardship and equitable distribution of community resources – that also reflects the community’s unique character and local values. These visions are evident in the review of local land plans in Chapter 3 – Existing Conditions. In this planning scenario, future year growth is largely directed to one of six compact development centers identified for the study area. Each compact development center would be designed following the principles of new urbanism (i.e., containing town center, walkable streets, higher densities, etc.) and may include multiple neighborhoods within it.

Each compact development center supports higher densities and FARs (Floor-to-area ratio – usually a measure of non-residential building density) as well as more mixed use designations. These land use changes intensify development in areas and shrink the distance of complementary land uses. Both changes influence travel behavior because they require less driving on a daily basis.

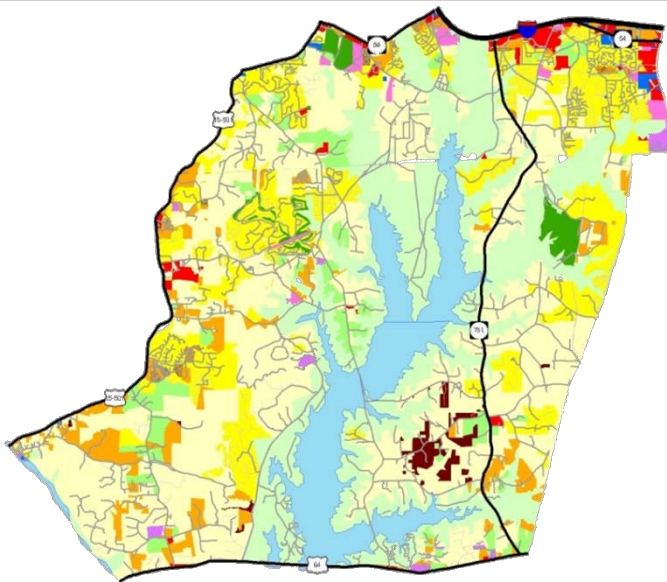
The diversity of close-by, complementary land uses and local travel options within the designated compact development centers encourages better distribution of trips and shorter trip lengths, thereby reducing the number of vehicles traveling similar routes on a daily basis. This scenario also assumes provision of safe and convenient facilities for pedestrians,

scenario planning

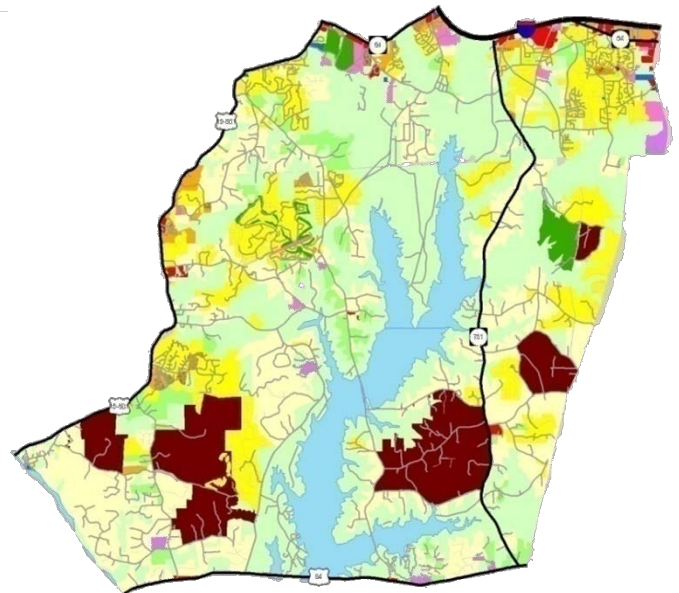
bicyclists, and transit riders traveling between complementary land uses. Permanent preservation of natural areas in between the designated centers respects the vulnerability of this environmentally-sensitive area while accommodating new growth.

Development Scenario Maps

<input type="checkbox"/>	Rural Residential	<input type="checkbox"/>	Civic / Institutional	<input type="checkbox"/>	Agriculture
<input type="checkbox"/>	Low Density Residential	<input type="checkbox"/>	Commercial	<input type="checkbox"/>	Conservation
<input type="checkbox"/>	Medium Density Residential	<input type="checkbox"/>	Light Industrial	<input type="checkbox"/>	Parks / Recreation
<input type="checkbox"/>	High Density Residential	<input type="checkbox"/>	General Office	<input type="checkbox"/>	Compact Dev. Center



Business-as-Usual



Compact Development Centers

scenario planning

Constrained Growth Projection

The constrained growth projection scenario assumes the same land use patterns and development densities/intensities represented in the business-as-usual development scenario. However, this scenario assumes a 15% overall reduction in the number of new dwelling units and employees anticipated for the area. This phenomenon could occur for several reasons, including reduced market demand for development in the study area, new water quality regulations that reduce the permitted densities, adoption of an adequate public facilities ordinance for the study area, increased development impact fees, or some other policy-driven initiative by local governments in the study area to reduce overall growth.

These policy changes would constrict growth because they would limit the number of new approved developments through stricter rezoning and the building permit processes.

Scenario Planning Results

Summary statistics for evaluating the impacts generated by the three development scenarios were reported using CommunityViz software® and the 2035 Triangle Regional Travel Demand Model. Measures of Effectiveness (MOEs) generated by the two software programs articulate the significance of reorganizing land use patterns and development densities/intensities, or implementing policies and ordinances to manage the type and timing of development, to improve efficiency of the regional transportation system (i.e., business-as-usual scenario vs. compact development centers scenario or business-as-usual scenario vs. constrained growth projections scenario).

MOEs from the TRM indicated a 4.76% decrease in vehicle miles traveled per person (system-wide) for the compact development center scenario and 6.90% decrease in vehicle miles traveled per person for the constrained growth projection scenario compared to business-as-usual. In addition, the average trips, miles and travel time per person is reduced by approximately 5.0% for the compact development centers scenario.

Table 9 summarizes all MOEs from the 2035 TRM for all three development scenarios.

scenario planning

Table 9. Measures of Effectiveness from the Triangle Research Model (TRM)

	Scenario			Percent Difference	
	Business-as-Usual (BAU)	Compact Development Centers (CDC)	Constrained Growth Projection (CGP)	BAU-CDC	BAU-CGP
Study Area Population	22,789	22,789	19,367	0%	-15%
Households	10,457	10,457	8,888	0%	-15%
Vehicle Trips	95,116	76,330	71,895	-19.75%	-24.41%
Vehicle Trips/Person	4.17	3.35	3.71	-19.75%	-11.03%
VMT	526,106	501,041	466,130	4.76%	-11.40%
VMT/ Person	23.09	21.99	24.1	-4.76%	4.4%
VHT	795,316	752,541	694,950	-5.38%	-12.62%
VHT/ Person (hours)	0.58	0.55	.60	-5.38%	3.4%
VHT/ Person (minutes)	34.90	33.02	35.88	-5.38%	3.4%
Average AM Speed	41.11	41.36	41.03	0.61%	-0.80%
Percent VMT over Capacity	5.32%	4.66%	4.41%	NA	NA

Both the compact development centers scenario and constrained growth projection scenario reduce the spatial footprint of suburban development on the surrounding landscape. Compact, mixed-use centers identified in the hypothetical development scenario would limit sprawling, low-density development patterns and reduce accompanying public infrastructure costs. Output data from CommunityViz® indicates that up to 47.02% of the total land area included in the study area could be conserved compared to 34.63% in the business-as-usual scenario. Beyond environmental stewardship, the compact development scenario supports prudent fiscal responsibility for capital improvements planning and accommodates purposeful growth beyond the twenty year planning horizon.

Land consumption in the constrained growth projection development scenario would also limit the footprint of suburban-scale development through 2035. However, continued reliance on the same land use patterns and development densities/intensities represented in the business-as-usual development scenario only delays the effects of sprawl in the study area or “pushes” it to another location in the region.

Table 10 summarizes the land use profile, by general land use category, for all three development scenarios.

scenario planning

Table 10. Land Use Profile by Scenario

General Land Use Category	Business As Usual		Compact Development Centers		Constrained Growth Projection	
	Acreage	Percent	Acreage	Percent	Acreage	Percent
Agriculture	2,989.95	4.20%	2,614.06	3.67%	2,989.95	4.20%
Civic / Institutional	519.48	0.73%	519.48	0.73%	519.48	0.73%
Commercial	1,046.66	1.47%	599.62	0.84%	1,046.66	1.47%
General Office	227.81	0.32%	123.87	0.17%	227.81	0.32%
High Density Residential	166.63	0.23%	166.63	0.23%	166.63	0.23%
Low Density Residential	10,656.32	14.96%	9,604.48	13.48%	10,656.32	14.96%
Light Industrial	335.03	0.47%	335.03	0.47%	335.03	0.47%
Medium Density Residential	3,846.39	5.40%	916.33	1.29%	3,846.39	5.40%
Permanent Conservation	24,669.52	34.63%	33,494.36	47.02%	24,669.52	34.63%
Parks & Recreation	923.14	1.30%	917.71	1.29%	923.14	1.30%
Rural Residential	25,209.14	35.39%	15,416.21	21.64%	25,209.14	35.39%
Compact Development Center	650.07	0.91%	6,532.37	9.17%	650.07	0.91%
Total	71,240.15	100.00%	71,240.15	100.00%	71,240.15	100.00%

Next Steps for Planning Jurisdictions

Reorganization of urban form for a more efficient transportation system may require that community leaders reevaluate the four Ds commonly associated with urban form and travel behavior (i.e., density, diversity, design and destination). The development scenarios presented in this chapter highlight the benefits of changing urban form (i.e., density, diversity, and design) to reduce the number of vehicle trips and vehicle miles traveled on the transportation system. The spread of these smart growth planning initiatives to other areas of the region could generate a critical mass that results in significantly lower vehicle trips and vehicle miles traveled over the entire regional transportation system. Smart growth initiatives presented for reorganizing urban form also support shorter commuting distance between complementary land uses and greater mode choice for meeting daily travel needs.

The Durham Carrboro Chapel Hill Metropolitan Planning Organization and its member jurisdictions all have vested interest and responsibilities for improving the efficiency of the regional transportation system while promoting livability within local communities. Community leaders exploring the smart growth initiative highlighted in this chapter, i.e., compact development centers, should consider the general development characteristics generated from these models when implementing local

scenario planning

plans and policies that better integrate land use, urban form, and transportation planning.

In an effort to support smart growth development, there are a number of local initiatives that the DCHC MPO can encourage. The following recommendations aim to identify priority areas where MPO actions—including incentive programs and administrative reforms—can contribute significantly to quality growth in partnership with local communities within the region.

The results of the scenario planning analysis demonstrate that reorganizing urban form with respect to transportation planning both improves the efficiency of the existing transportation system and improves the quality of life for residents and those that work in the area by shortening trip length and vehicle miles traveled.

In the future it will be essential for land use planners to work with transportation planners to identify areas where growth will be planned for. By jointly identifying areas in need of transportation improvements and land use changes, future development may be influenced to help minimize or reduce traffic problems through efficient planning and integration.

Land use plans and zoning ordinances must be collectively constructed to guide and implement land use in order to respond to transportation behavior.

future year transportation analysis

This chapter of the report summarizes a comprehensive assessment of traffic conditions anticipated for the study area in 2035. Future year conditions reported for corridors and key intersections were used to identify isolated deficiencies in the transportation network, as well as indications of larger, system-wide deficiencies expected from continued “business-as-usual” development patterns. Results from the analysis were compared to existing conditions (2005) using performance measures included in the Triangle Regional Model (TRM). Output from the analysis was used to justify short- and long-term improvements highlighted in Chapter 5 of this report.

Triangle Regional Model

The Triangle Regional Model (Air Quality Conformance Version) was developed in 2004 to serve as a planning tool for analyzing and forecasting traffic in the Triangle area. The model was developed using the TranPlan software package and follows a traditional four-step modeling process — trip generation, trip distribution, mode split, and traffic assignment. The base year for the approved travel demand model is 2005. Forecast years include 2015, 2025, and 2035. Future year traffic forecasts for this study (2035) were estimated from the fiscally-constrained existing + committed network assumed for the DCHC MPO Long Range Transportation Plan.

Growth Scenario

The future year transportation assessment assumed the business-as-usual development scenario described in Chapter 4 of this report.

Future Travel Pattern Analysis

Travel patterns in the study area were reviewed to identify prevalent traffic movements that will affect the roads in the study area in 2035. This analysis drew from the 2035 TRM to determine regional traffic patterns from western Chatham County and the Jordan Lake area to Research Triangle Park (RTP). Specific data included in the review are:

- TRM Future Year (2035) model traffic flows from Chatham County
- TRM Future Year (2035) model select link analysis

future year transportation analysis

As in the 2005 base year, the presence and shape of Jordan Lake has an effect on local and regional travel patterns, limiting the number of east-west corridors that cross it. Interstate 40 and NC 54 are the predominant routes north of the watershed, while U.S. Highway 64 crosses Jordan Lake at the southern edge of the study area. In addition, future growth and changes in the larger transportation system (such as the addition of I-540 in Western Wake County) are likely to have significant effects on travel throughout the study area.

Select Link Analysis

DCHC MPO and Kimley-Horn prepared a number of Select Link Analysis model runs using the Triangle Research Model for roadway segments in the study area. Segments that corresponded to corridors in this study included:

- Farrington Road
- Farrington Mill Road
- US 15-501
- Jack Bennett Road
- Scott King Road
- NC 55.

Select link analysis is a means to demonstrate how traffic that crosses a particular section of roadway distribute (comes from and goes to) throughout the network. It does not present the total volume for model links, only those which pass through a particular section. This type of analysis is helpful when contemplating the likely impacts of proposed improvements.

Figures 21-24 on the following pages show the results of the select link analysis for each corridor. These figures show the location of each of the select link analysis locations, along with the distribution of trips (by percentage of total trips on the subject link). For example, in **Figure 21**, the select link analysis location is Farrington Road between Stagecoach Road and Barbee Chapel Road. By definition, 100% of the select link volume goes through this section. East of this link, 74% of this traffic is either coming from or going to Stagecoach Road. The other 26% is heading North on Farrington Road. Of the 74% using Stagecoach Road, 24% heads south on NC 55.

future year transportation analysis

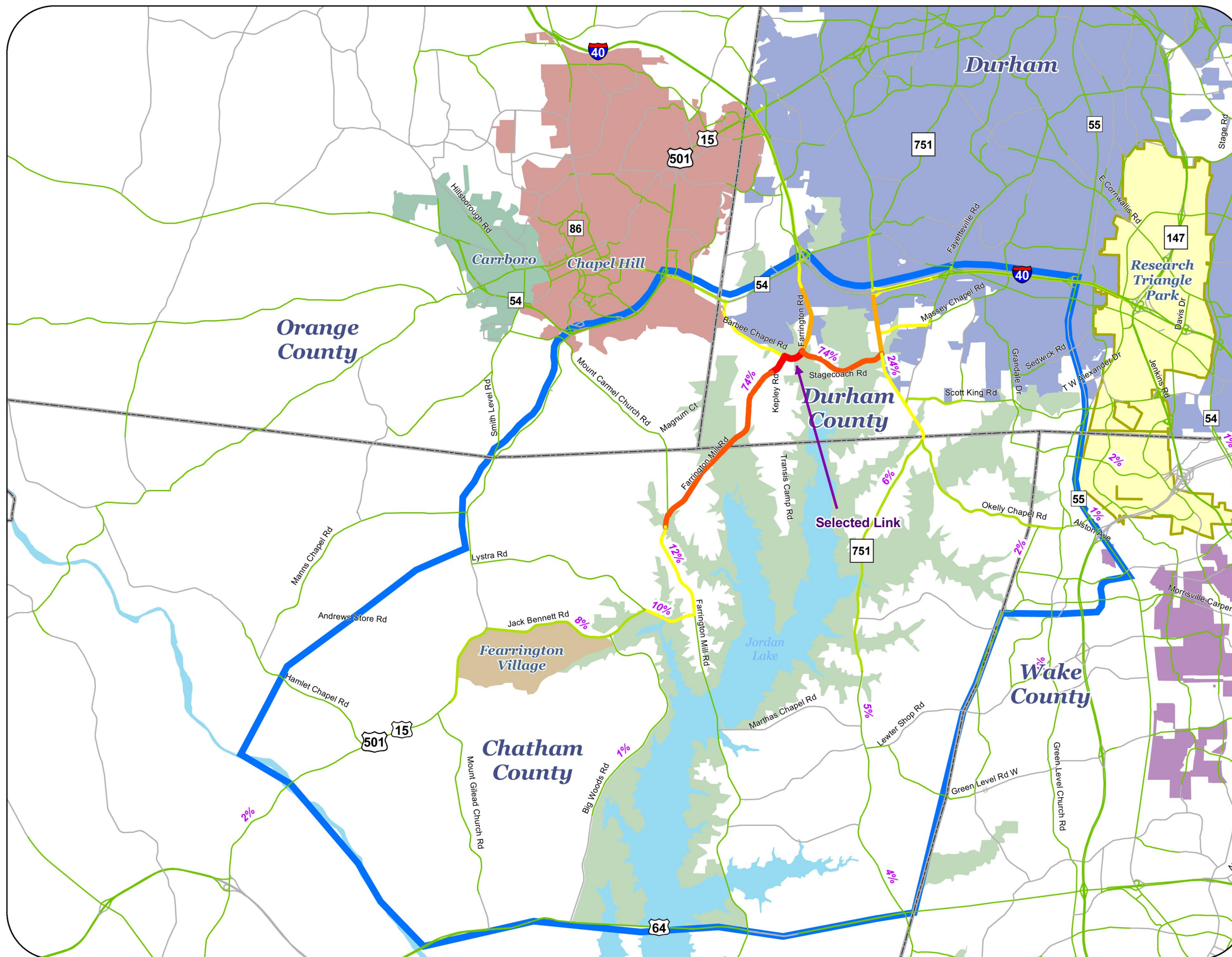
Figure 21 shows the select link analysis for Farrington Road between Stagecoach Road and Barbee Chapel Road. This select link reveals that the majority of traffic on this facility could be characterized as local, even more than the 2005 select link analysis showed in **Figure 13**. Increases in demand (percentage, not total volume) from the Farrington Village area were noted, along with traffic from NC 751.

Decreases in the percent of the total demand from Farrington Mill Road south of Jack Bennett Road were observed, indicating that over time, a majority of traffic growth on this facility will be from inside the study area.

Farrington Road Corridor Study

Figure 21

Select Link Analysis
Farrington Rd.



Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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future year transportation analysis

Figure 22 shows the select link analysis for Farrington Mill Road south of Mt. Carmel Church Road. Like the select link analysis for Farrington Road, a shift in demand is observed when compared to the 2005 select link analysis shown in **Figure 14**, but to a lesser extent. As a percent of link volume, reduction in traffic demand from the south occurs, while traffic increases from developing areas near Farrington Village and east of Jordan Lake. The most significant shifts in traffic are increases in demand from US 64 from the east and US 15-501 to the south.

Figure 23 shows the select link analysis for US 15-501 south of Jack Bennett Road. When compared to **Figure 15**, no major shifts in traffic demand are noted, except for a minor shift of traffic demand from Mount Gilead Church Road to southwest of the study area (Pittsboro).

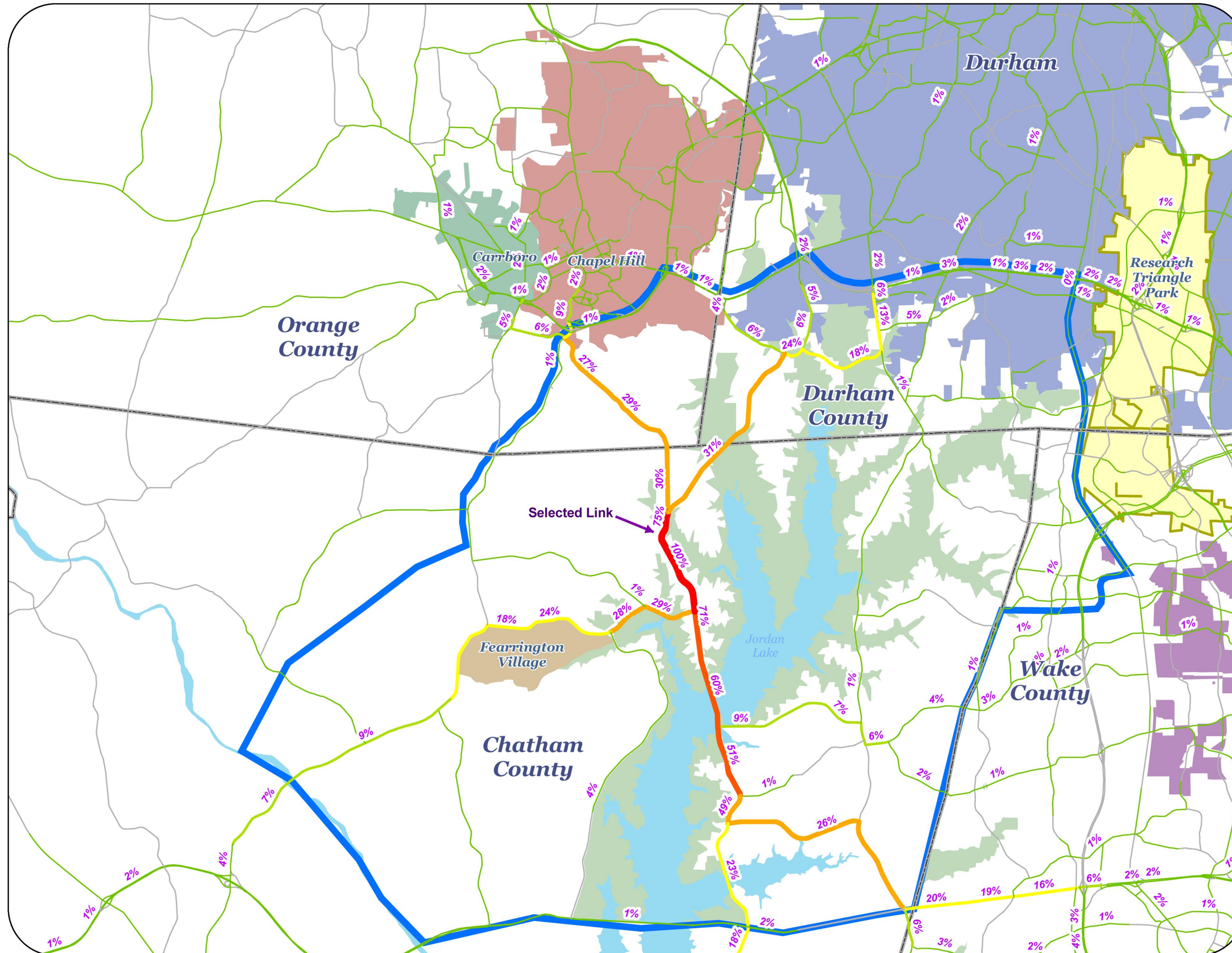
Figure 24 shows the select link analysis for Jack Bennett Road west of Farrington Mill Road. When compared to **Figure 16**, no major shifts in traffic demand are noted, except for a shift of traffic demand from Big Woods Road to Farrington Mill Road to the south, and increasing traffic from developing areas east of Jordan Lake, including Western Wake County.

Figure 25 shows the select link analysis for Scott King Road east of Fayetteville Road. This analysis shows the most dramatic shift in traffic from 2005 (**Figure 17**). In 2005, a majority of the traffic was coming from NC 751 to the south (59%). In 2035, only 9% of traffic is predicted to come from this area. Traffic demand increases are noted on Farrington Mill Road, Stagecoach Road, NC 751 north of Stagecoach, and Fayetteville Road. The analysis further indicates that this facility will experience traffic pressure in the future due to heavy congestion on I-40, and will serve as an alternative route to Research Triangle Park and I-540.

Figure 26 shows the select link analysis for NC 55 north of Sedwick Road. When compared to **Figure 18**, little change in travel demand patterns are noted, other than the expected shift of traffic onto the new section of I-540 south of NC 55 towards Apex. No other significant changes are noted in the study area.

Farrington Road Corridor Study

Figure 22
Select Link Analysis
Farrington Mill Rd



Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- ▭ Counties
- ▭ Study Area
- ▭ Research Triangle Park
- ▭ Lakes
- ▭ Durham
- ▭ Chapel Hill
- ▭ Fearrington Village
- ▭ Cary
- ▭ Carrboro
- ▭ Corps of Engineers Land

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0 0.5 1 2 3 Miles

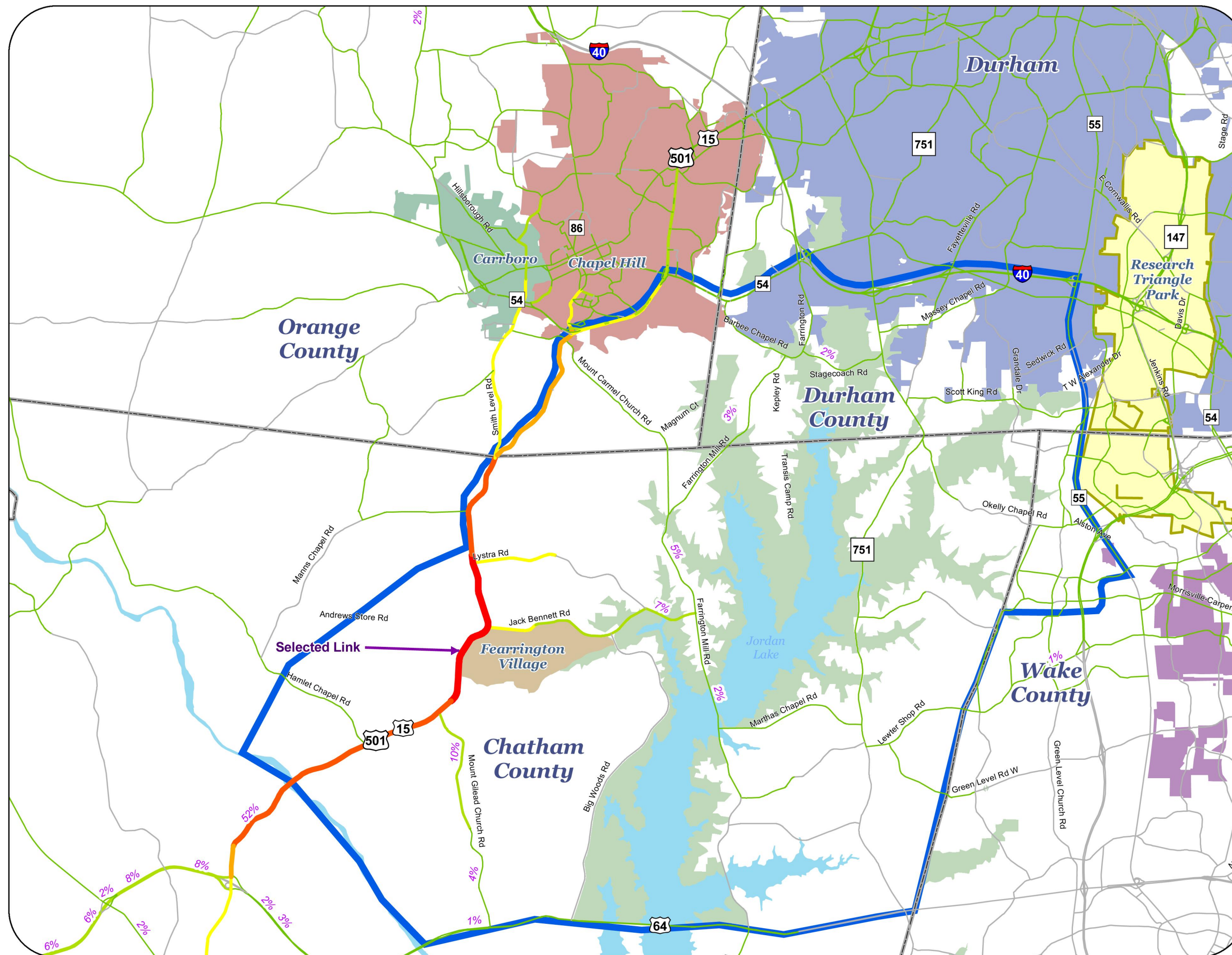


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Farrington Road Corridor Study

Figure 23

Select Link Analysis US 15/501



Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100

- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Ferrington Village
- Cary
- Carrboro
- Corps of Engineers Land

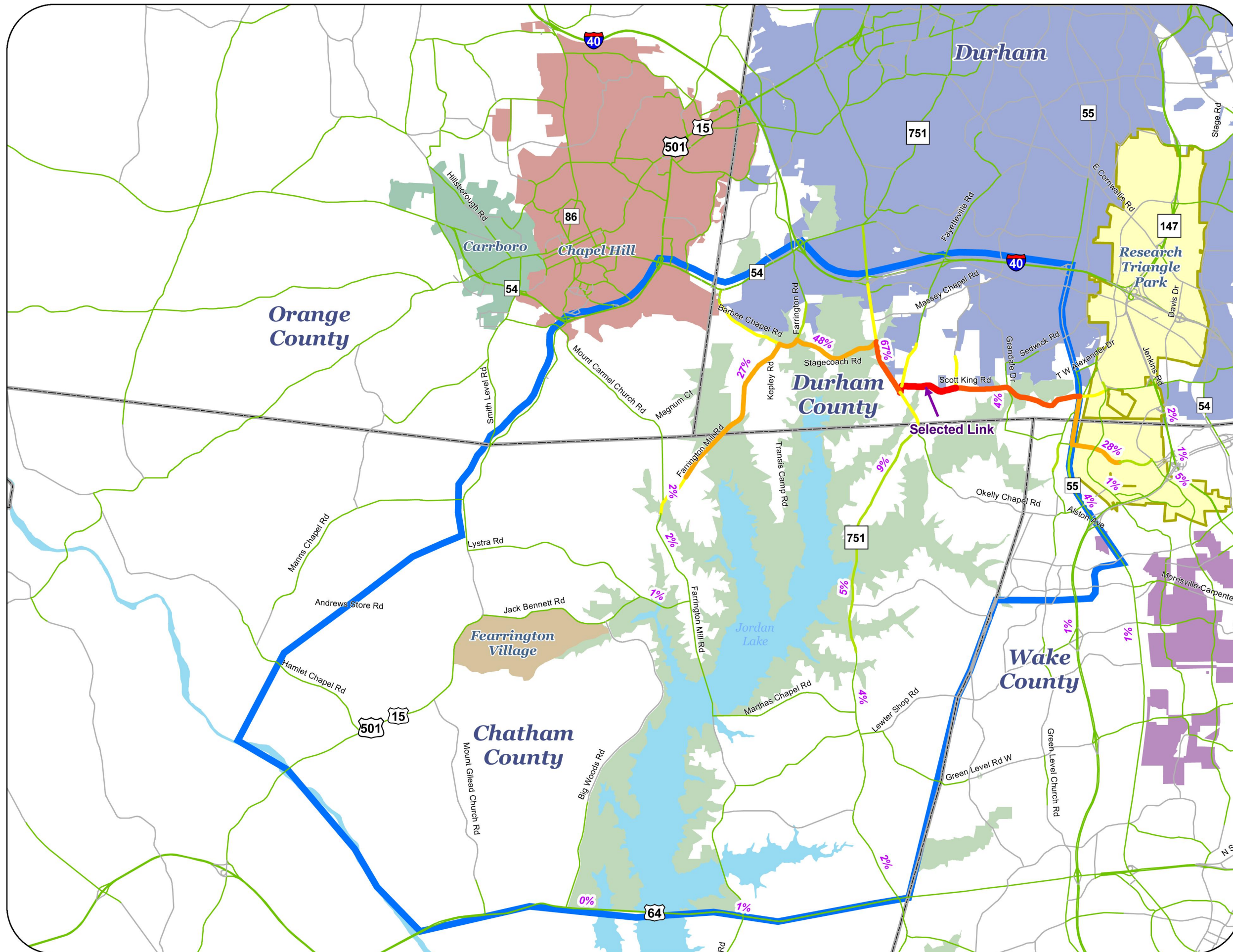
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Farrington Road Corridor Study

Figure 25
Select Link Analysis
Scott King Road

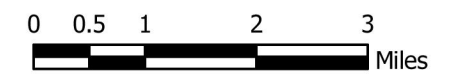


Select Link Volumes

Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- ▭ Counties
- ▭ Study Area
- ▭ Research Triangle Park
- ▭ Lakes
- ▭ Durham
- ▭ Chapel Hill
- ▭ Farrington Village
- ▭ Cary
- ▭ Carrboro
- ▭ Corps of Engineers Land

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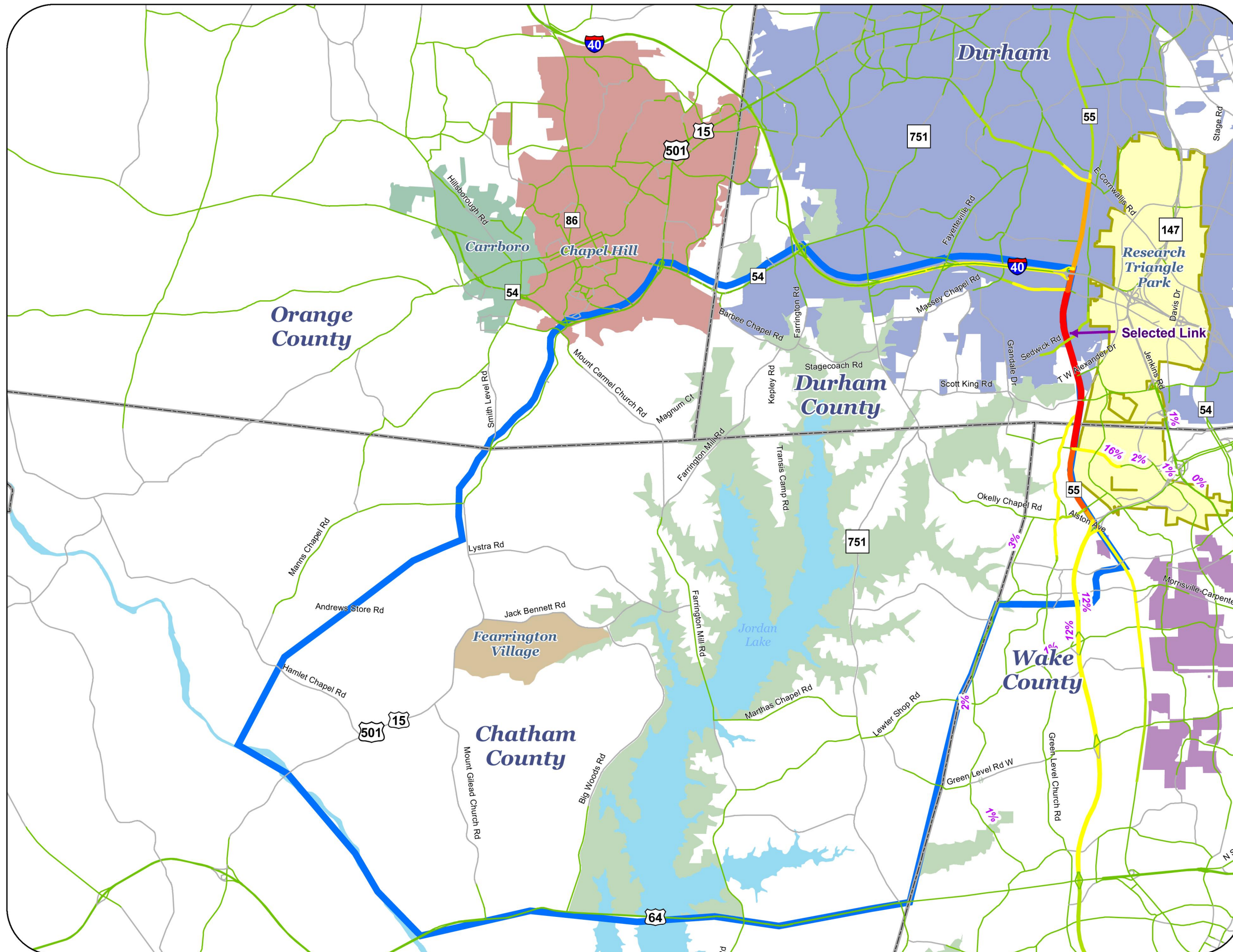


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Farrington Road Corridor Study

Figure 26

Select Link Analysis
NC 55



- Select Link Volumes**
Percent of Trips
- 0.0
 - 0.1 - 5
 - 5 - 10
 - 10 - 25
 - 25 - 50
 - 50 - 75
 - 75 - 100
- Counties
 Study Area
 Research Triangle Park
 Lakes
 Durham
 Chapel Hill
 Farrington Village
 Cary
 Carrboro
 Corps of Engineers Land

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0 0.5 1 2 3 Miles



recommendations

Based on the results of the 2035 select link analysis, it can be concluded that the majority of the traffic demand in the study area will remain local. However, there will be impacts associated with increased congestion on I-40 and shifts in regional traffic demand resulting from the extension of I-540.

District Flow Analysis

DCHC MPO provided daily and peak period origin-destination (O-D) matrices at the district level from the Triangle Regional Model (TRM). For the Triangle Model, the region is divided into 21 districts representing different parts of the area. For the Farrington Road analysis, these 21 TRM districts were grouped into 14 super-districts. O-D data from the Triangle Regional Model were aggregated to these super-districts, and are presented in **Table 11**.

Table 11 shows that the majority of trips to and from Chatham County are internal (63%). Trips to the Chapel Hill/Carrboro area are also prominent (14%), and are predicted to use the US 15-501 corridor. Trips to Western Wake (Cary/Apex) represent 8% of trips, and are expected to use the US 64 corridor for access into those areas. Southwest Durham County and RTP make up 5% and 2% of the trips, respectively (approximately 7% or 12,400 trips combined). These trips are the most likely to use the Farrington Road Corridor to avoid future congestion on US 15-501, US 64, and I-40.

Table 11. Triangle Model District Flows to and from Chatham County

Super-District	Trips to/From Chatham County (2035)	% of Total (2035)	% of Total (2005)
Chatham County	389,545	72%	63%
Chapel Hill/Carrboro Area	32,185	6%	14%
West Wake (Cary/Apex)	50,009	9%	8%
Southwest Durham County	19,208	4%	5%
South Wake (Holly Springs/Fuquay Varina)	18,283	3%	3%
Research Triangle Park	10,697	2%	2%
Central Durham	5,235	1%	1%
Raleigh (Inside the Beltline)	3,030	1%	1%
Northern Durham /Durham County	3,461	1%	1%
North/Eastern Wake County	2,268	0%	1%
Southwest Orange County	2,606	0%	1%
Northern Orange County	2,121	0%	0%
Johnston/Harnett County	3,092	1%	0%
Granville/Franklin County	144	0%	0%
Total	541,884	100%	100%

recommendations

These district flows were added to the Triangle Model to create a thematic map representing “travel desire lines”. These graphical district flows can be seen in **Figure 27**.

Future Traffic and Travel Conditions

Future Year (2035) traffic conditions were analyzed based on the results of the Triangle Regional Model and other available data developed during this study. The 2035 TRM was run using updated socio-economic data (residential and employment) based on future land use scenarios (described in the Scenario Planning chapter of this document). The resulting traffic volumes were used to identify future deficiencies (corridor and intersection level) based on volume-to-capacity (V/C) ratios for the study area corridors. Corridor and intersection traffic forecasts were prepared based on the output of the model, and were refined based on review of 2007 traffic count data and the results of the 2005 model.

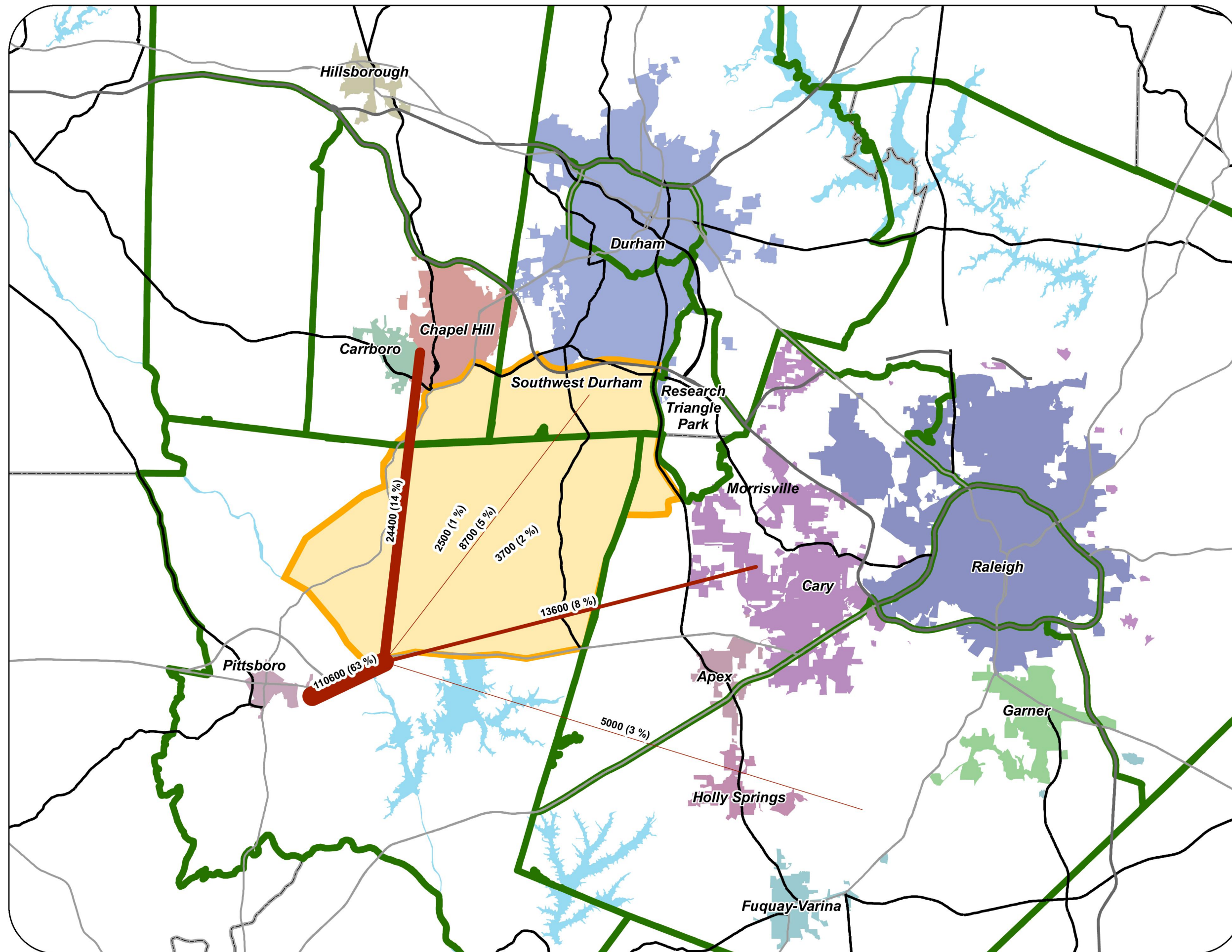
Figures 28 and 29 show the 2005 and 2035 Model Volumes, respectively. These figures show that many facilities within the study area experience significant traffic increases, including NC 751, Farrington Mill Road, Farrington Road, Stagecoach Road, NC 55, and US 15-501. Many of these roads are two-lane facilities with no current plans or funding for improvements.

Farrington Road Corridor Study

Figure 27

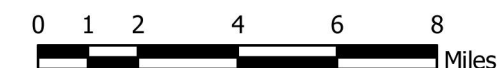
2035 District Flows into Chatham County

Triangle Regional Model Origin-Destination Data



- District Flows**
Total Trips (and % of Trips)
- 5000 - 10000
 - 10000 - 15000
 - 15000 - 20000
 - 20000 - 30000
 - 30000 - 40000
 - 40000 - 50000
 - > 50000
- Interstates
 - US Highways
 - State Highways
 - TRM Super-Districts
 - Counties
 - Study Area
 - Lakes

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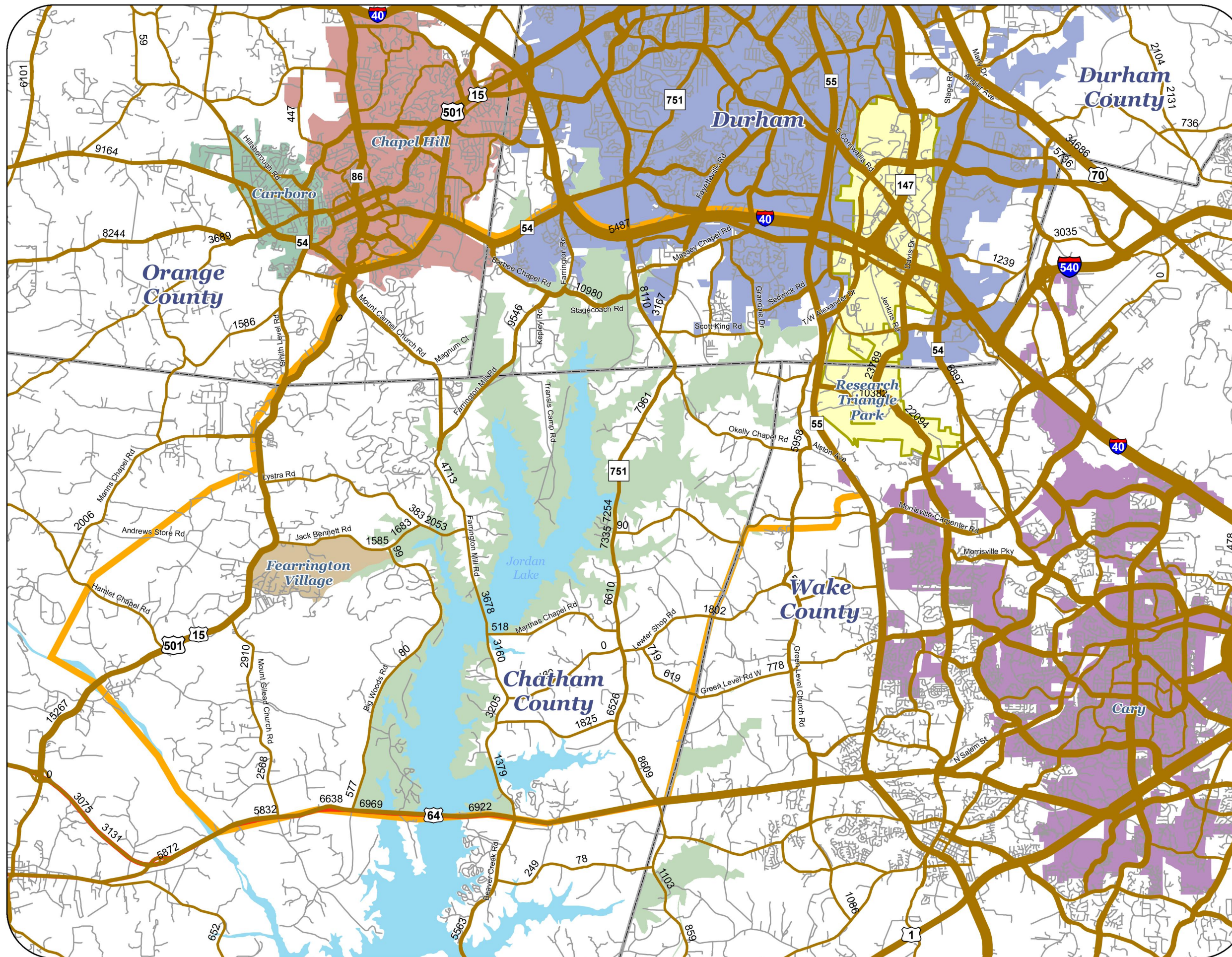


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Farrington Road Corridor Study

Figure 28

2005 Volumes



2005 Volumes

- < 5000
- 5001 - 10000
- 10001 - 15000
- 15001 - 20000
- 20001 - 30000
- 30001 - 40000
- > 40000
- Interstates
- US Highways
- State Highways
- State Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearington Village
- Cary
- Carrboro
- Corps of Engineers Land

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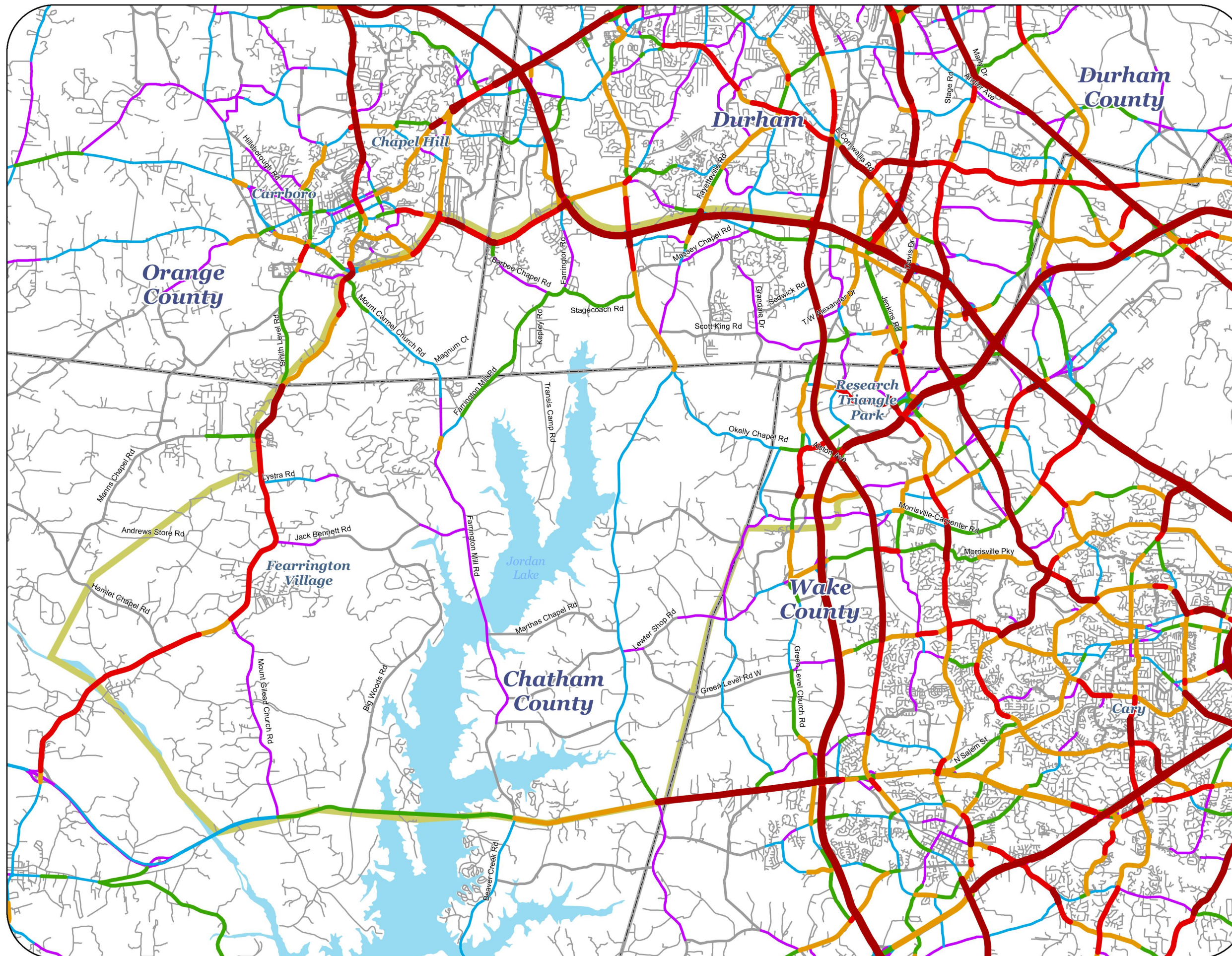


0 0.5 1 2 3 Miles

Farrington Road Corridor Study

Figure 29

2035 Volumes



2035 Daily Traffic Volumes

- < 5000
- 5000 - 10000
- 10000 - 15000
- 15000 - 20000
- 20000 - 30000
- 30000 - 40000
- > 40000
- State Roads
- Counties
- Study Area
- Lakes

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0 0.5 1 2 3 Miles

recommendations

Figure 30 shows growth between 2005 and 2035 in the study area as an average annual growth rate. The more established areas such as Durham, Chapel Hill, and Cary experience low to moderate growth, between 1% and 3% per year. Annual growth rates are much higher in the rural parts of the study area, particularly in areas where new development is forecast. However, percent growth can be deceiving. The absolute growth in traffic is actually higher in the established urbanized locations and, these locations have a much higher observed and predicted future traffic volume. Nonetheless, this figure does demonstrate that development in the area, paired with external factors such as travel along the I-40 and I-540 corridors, will likely have measurable impacts on the transportation system within the study area.

Trendline Scenario - Future Corridor Level-of-Service

As in the existing conditions analysis, seventeen roadway sections were identified for corridor level-of-service (LOS) traffic analysis for projected future conditions. **Figure 1** shows the corridors that were studied as part of this analysis, as well a reference Section ID that is used throughout the report.

Corridor Level-of-Service Analysis shows that traffic growth between 2005 and 2035 in the study area will significantly impact the transportation system. In 2005, only one of the 27 roadway sections studied performed at a LOS D, and no sections were failing (LOS E or worse). In 2035, two sections are predicted to perform at LOS D, and six sections are LOS E or worse. Two of the six failing sections are NC Routes – NC 55 and NC 751, but four of the most congested sections are two-lane rural roads: Farrington Road, Old Farrington Point Road, Barbee Chapel Road, and Stagecoach Road. Without improvements (or a change in future development patterns), these sections of road may experience heavy traffic delays on a daily basis. They are not designed to carry the forecasted traffic.

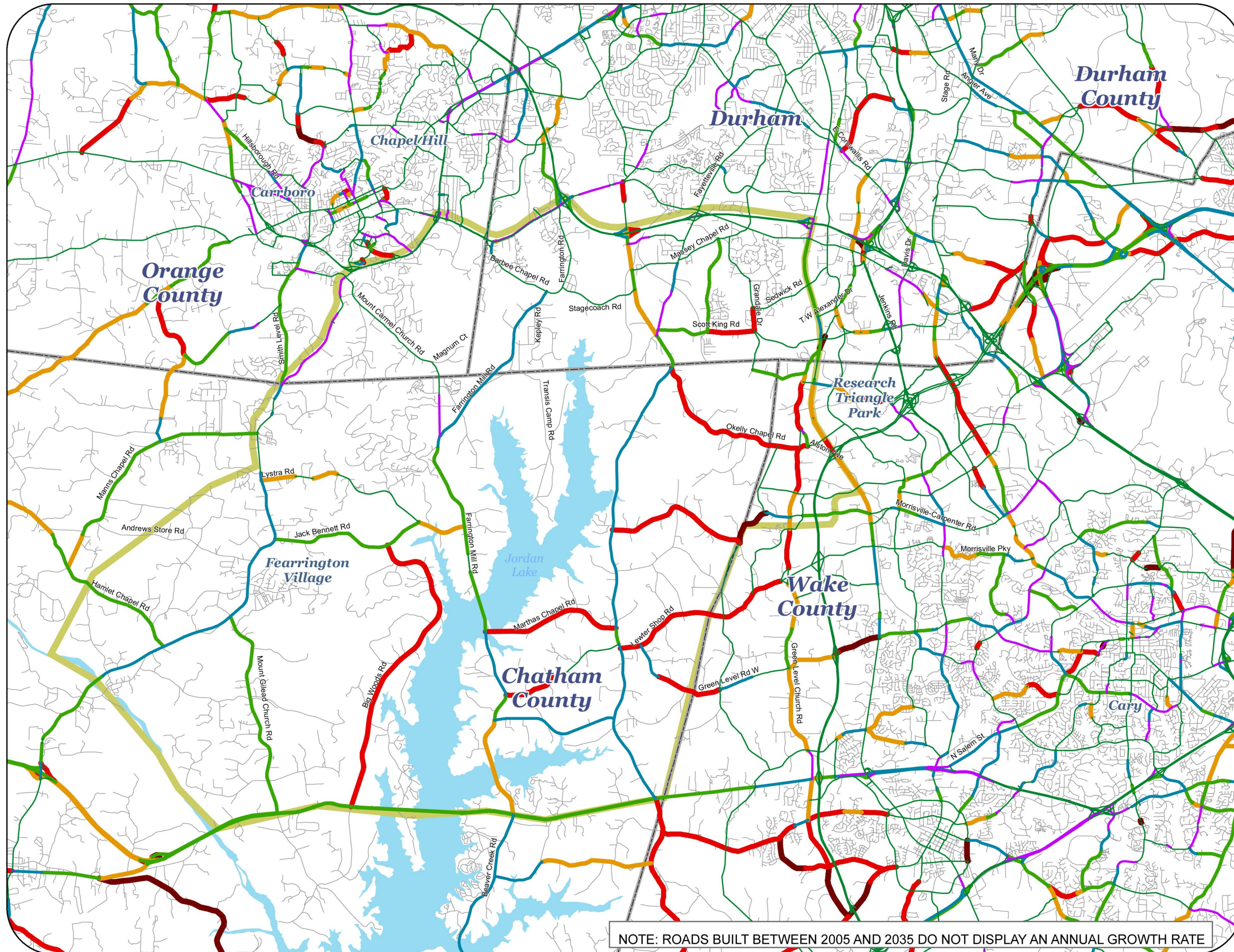
Table 12 communicates existing as well as predicted 2035 Level of Service.

Farrington Road Corridor Study

Figure 30

Annual Growth Rate,
2005 - 2035 (%)

Triangle Regional
Model

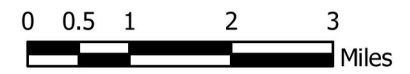


2035_Model_Growth Annual Growth Rate

- < 1%
- 1 - 2%
- 2 - 3%
- 3 - 4%
- 4 - 5%
- 5 - 7.5%
- > 7.5%

- State Roads
- Counties
- Study Area
- Lakes

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NOTE: ROADS BUILT BETWEEN 2005 AND 2035 DO NOT DISPLAY AN ANNUAL GROWTH RATE

recommendations

Table 12 - Trendline 2035 Level of Service

Section	Road	From	To	LOS D Traffic Capacity	2035 Traffic (ADT)	2035 V/C	2035 LOS	2005 LOS
11	US 15-501	Southern PAB	Jack Bennett Road	62,600	36,100	0.58	B	A
12	US 15-501	Jack Bennett Road	Northern PAB	62,600	35,600	0.57	B	A
13	Jack Bennett Rd	US 15-501	Farrington Point Road	11,900	4,900	0.41	B	A
14	Farrington Rd	Southern PAB	Lystra Road	11,800	8,800	0.75	C	B
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	10,500	9,700	0.92	D	B
16	Old Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	9,400	16,600	1.77	F	B
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	12,400	10,900	0.88	D	B
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	9,500	11,300	1.19	F	B
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	15,300	8,200	0.54	B	B
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	15,300	19,800	1.29	F	B
21	Stagecoach Rd	Farrington Road	NC 751	9,500	15,600	1.64	F	C
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	62600	22,800	0.36	B	C
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	11,800	17,400	1.48	F	D
24	Scott King Road	NC 751	Grandale Drive	9,500	4,000	0.42	B	A
25	Grandale Dr	Scott King Road	Sedwick Road	9,500	5,500	0.58	B	B
26	Sedwick Rd	Grandale Drive	NC 55	12,500	5,800	0.46	B	B
27	NC 55	Sedwick Road	Alexander Drive	39,700	44,800	1.13	E	B

TWLTL = Two-Way Left Turn Lane

Future Intersection Level-of-Service (LOS) Analysis

For the future year intersection LOS analysis, the same nine intersections that were analyzed in the existing conditions section were used. For each of these intersections, a set of 2035 turning-movement projections was prepared using existing volumes and trend growth rates. These forecasted traffic volumes were then analyzed using existing intersection geometry, as shown in **Figure 9**. Capacity analyses were performed for the AM and PM peak hours for projected trendline (2035) traffic conditions using *SYNCHRO* (Version 7) and *SIDRA* (for roundabouts) software to determine the operating characteristics of the adjacent road network.

Capacity analyses were performed for the existing (2007) traffic condition for the following intersections:

- US 15-501 at Jack Bennett Road
- Farrington Point Road at Lystra Road
- Farrington Road and Stagecoach Road at Mt. Carmel Road

recommendations

- Farrington Mill Road/Farrington Road at Barbee Chapel Road
- Hope Valley Road (NC 751) at Fayetteville Road
- Stagecoach Road at Hope Valley Road (NC 751)
- Farrington Road at Stagecoach Road
- NC 55 at T.W. Alexander Drive
- NC 55 at Sedwick Road.

For intersection analysis, capacity is combined with Level-of-Service (LOS) in a relationship table to describe the operating characteristics of a road segment or intersection. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation. For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by *SYNCHRO* Version 7 or computable using methodology published in the *Highway Capacity Manual*.

Recommended improvements that are based on the deficiencies identified in **Table 13** are listed following that table. These improvements are further delineated into short-term and long-term improvements in **Section 6**. **Table 13** summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing traffic conditions.

recommendations

Table 13. Intersection Level of Service Summary

Condition	AM Peak-Hour LOS (Delay)	PM Peak-Hour LOS (Delay)
US 15-501 and Jack Bennet Road - (Signalized)		
Existing (2007) Traffic	A (9.0)	B (10.1)
Projected (2035) Traffic	B (13.5)	B (16.1)
Projected (2035) Traffic with Improvements	B (13.5)	B (16.1)
Farrington Point Road and Lystra Road - (Signalized)		
Existing (2007) Traffic	C (20.6)	B (14.3)
Projected (2035) Traffic	E (78.7)	E (58.7)
Projected (2035) Traffic with Improvements	D (40.1)	C (33.4)
Projected (2035) Traffic with Improvements -Roundabout	B (19.0)	B (12.5)
Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road -(Unsignalized)		
Existing (2007) Traffic	Short delays for minor street approach	Moderate delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements -Signalized	B (15.6)	C (21.8)
Projected (2035) Traffic with Improvements -Roundabout	B (12.1)	B (11.9)
Farrington Mill Road/Farrington Road and Barbee-Chapel Road - (Unsignalized)		
Existing (2007) Traffic	Moderate delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements - Signalized	B (17.0)	D (37.8)
Projected (2035) Traffic with Improvements - Roundabout	A (8.1)	A (9.9)
Farrington Road and Stagecoach Road - (Unsignalized)		
Existing (2007) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements - Signalized	C (20.4)	B (17.4)
Projected (2035) Traffic with Improvements - Roundabout	A (9.4)	A (9.1)
Stagecoach Road and Hope Valley Road (NC 751) - (Signalized)		
Existing (2007) Traffic	D (43.0)	B (19.8)
Projected (2035) Traffic	F (370.0)	F (287.5)
Projected (2035) Traffic with Improvements	C (21.8)	C (23.8)
Hope Valley Road (NC 751) and Fayetteville Road - (Signalized)		
Existing (2007) Traffic	B (10.7)	C (21.4)
Projected (2035) Traffic	E (71.8)	F (136.1)
Projected (2035) Traffic with Improvements	B (18.7)	C (21.8)
NC 55 and Sedwick Road - (Signalized)		
Existing (2007) Traffic	B (19.6)	C (29.8)
Projected (2035) Traffic	C (25.2)	D (39.4)
Projected (2035) Traffic with Improvements	C (25.2)	D (39.4)
NC 55 and T.W. Alexander Drive - (Signalized)		
Existing (2007) Traffic	C (24.3)	C (24.5)
Projected (2035) Traffic	D (47.0)	D (26.1)
Projected (2035) Traffic with Improvements	B (16.1)	C (26.1)

recommendations

The transportation recommendations were developed based on the established vision and guiding principles, results from the Triangle Regional Model, thorough consideration of existing and future land uses, and basic transportation planning principles. The structure of the recommendations does not require that all improvements be completed in unison. This structure allows flexibility to encourage cooperation and partnership with the development community to implement the vision of the plan in several phases as development occurs and funding sources become available.

It was determined based on the future year transportation analysis that several roadways within the Farrington Road area would require significantly increased capacity. The six roadway sections with an anticipated LOS F include:

- NC 55,
- NC 751,
- Farrington Road,
- Old Farrington Point Road,
- Barbee Chapel Road, and
- Stagecoach Road.

Increasing capacity is typically accomplished through widening, i.e., the addition of travel lanes. However, the DCHC MPO applies a heavy weight to environmental considerations such as wetland preservation and water quality when evaluating projects. Therefore, alternative improvements including intersection upgrades and roundabouts are recommended. Construction of a roundabout would be in lieu of adding turn lanes and traffic signals.

The improvements listed below are recommended for the study intersections to accommodate projected traffic volumes in 2035. They are designated as either short- or long-term improvements to provide guidance on implementation phasing. **Figure 31** is a map that illustrates these recommended improvements.

All of the roadway and intersection improvements in this study are included in the DCHC MPO's 2035 Long Range Transportation Plan (2035 LRTP). Intersection improvements, such as the addition of turn lanes and roundabout construction, are considered Transportation System Management (TSM) improvements. As a practice, TSM projects are not

recommendations

explicitly listed in the MPO Long Range Transportation Plan, but are identified as a general category of transportation improvements to be funded. Given the need for the intersection improvements listed below to provide the mobility improvements that are commonly associated with the addition of travel lanes, the 2035 LRTP explicitly identifies all the intersection improvements listed below. In addition, the 2035 LRTP includes the addition of through lanes on Hope Valley Road that is listed below (project #77.3 in the 2035 LRTP).

Roadway Recommendations

US 15-501 and Jack Bennett Road

- Short-term: Lengthen the existing westbound left-turn lane on Jack Bennett Road to provide 250 feet of full-width storage.

Old Farrington Point Road and Lystra Road

- Short-term: Construct an additional eastbound left-turn lane on Lystra Road with 425 feet of full-width storage, and corresponding receiving lane on northbound Old Farrington Point Rd.
- Long-term: Construct an exclusive southbound right-turn lane on Old Farrington Point Road with 300 feet of full-width storage.
- Long-term: In lieu of constructing turn lanes, consider conversion of traffic signal to a roundabout configuration.

Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road

- Long-term: Construct an exclusive westbound right-turn lane on Farrington Point Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive northbound right-turn lane on Old Farrington Point Road with 225 feet of full-width storage.

recommendations

- Long-term: Construct an exclusive southbound left-turn turn lane on Mt. Carmel Road with 125 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Mill Road/Farrington Point Road and Barbee-Chapel Road

- Long-term: Construct an exclusive eastbound right-turn turn lane on Barbee-Chapel Road with 125 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Farrington Point Road with 700 feet of full-width storage.
- Long-term: Construct an exclusive northbound left-turn lane on Farrington Point Road to provide 225 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Road and Stagecoach Road

- Short-term: Construct an exclusive northbound right-turn turn lane on Farrington Road with 200 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn lane on Farrington Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Stagecoach Road with 100 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Stagecoach Road and Hope Valley Road (751)

recommendations

- Short-term: Construct an additional eastbound left-turn lane on Stagecoach Road with 250 feet of full-width storage.
- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Construct an exclusive northbound left-turn lane on Hope Valley Road with 400 feet of full-width storage.
- Long-term: Construct an exclusive southbound right-turn lane on Hope Valley Road with 200 feet of full-width storage.

Hope Valley Road (751) and Fayetteville Road

- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Lengthen the existing northbound right-turn lane on Hope Valley Road to provide 350 feet of full-width storage.
- Long-term: Construct an additional westbound left-turn lane Fayetteville Road with 100 feet of full-width storage
- Long-term: Lengthen the existing westbound right-turn lane on Fayetteville Road to provide 175 feet of full-width storage.

NC 55 and T.W. Alexander Drive

- Short-term: Lengthen the existing westbound right-turn lane on T.W. Alexander Drive to provide 400 feet of full-width storage.

Long-term: Provide a free flow northbound right-turn lane.

Roundabouts were not recommended at the Hope Valley Rd./Stagecoach Rd. and Hope Valley Rd./Fayetteville Rd. intersections because of the relatively high volume of traffic and existing traffic signals. However, the design and use of two-lane roundabouts are becoming more common in the U.S. and North Carolina, and these larger roundabouts are performing well. When additional improvements at these two

recommendations

intersections are warranted, further study of roundabouts would be a worthwhile effort.

In addition to the roadway and intersection improvements identified above, this study recommends that a collector road network be developed. The scope of this study did not include designating current and future collector streets. However, it is understood that a collector road network helps to distribute vehicle trips to relieve congestion on the intersections of the arterial road network, and offers more direct routing for bicyclists and pedestrians to encourage more use of those two alternative modes. The stream and wetland corridors that run through the study area and the lack of stub out roads in the existing subdivisions (to which connection for future subdivisions can be made) limit the ability to create an effective collector street network. Nonetheless, a collector street network should be developed to the greatest extent possible.

Transit Recommendations

Providing transit service, both local service and express service to UNC-CH (University of North Carolina at Chapel Hill) and the RTP (Research Triangle Park), should be considered if more transit-friendly land use patterns are realized in the future. As discussed in Chapter 3 -- Existing Conditions, the only transit service provided in the study area was along the study area borders such as NC 54 and US 15-501. However, the land use recommendation identifies six compact development centers that might create densities at a threshold that make transit service feasible in the area.

Land Use Recommendations

The scenario planning analysis confirms that reorganization of land use patterns and/or development densities throughout the study area into a more compact, nodal development pattern significantly improves the efficiency of the transportation system, while preserving unspoiled natural areas immediately surrounding new town centers.

It is recommended that local jurisdictions consider land use changes as well as strengthening development policies and/or land development controls administered to implement a compact, nodal development pattern in the study area. **Table 14** summarizes the percentage of land

recommendations

use categories for the business-as-usual and compact development scenarios, and shows the percentage difference between the two scenarios. Besides enabling a more efficient transportation system and decreasing travel demand, as demonstrated in the Chapter 4 Scenario Planning, the Compact Development scenario significantly increases the portion of land available for permanent conservation.

Table 14. Recommended Land Use Summary

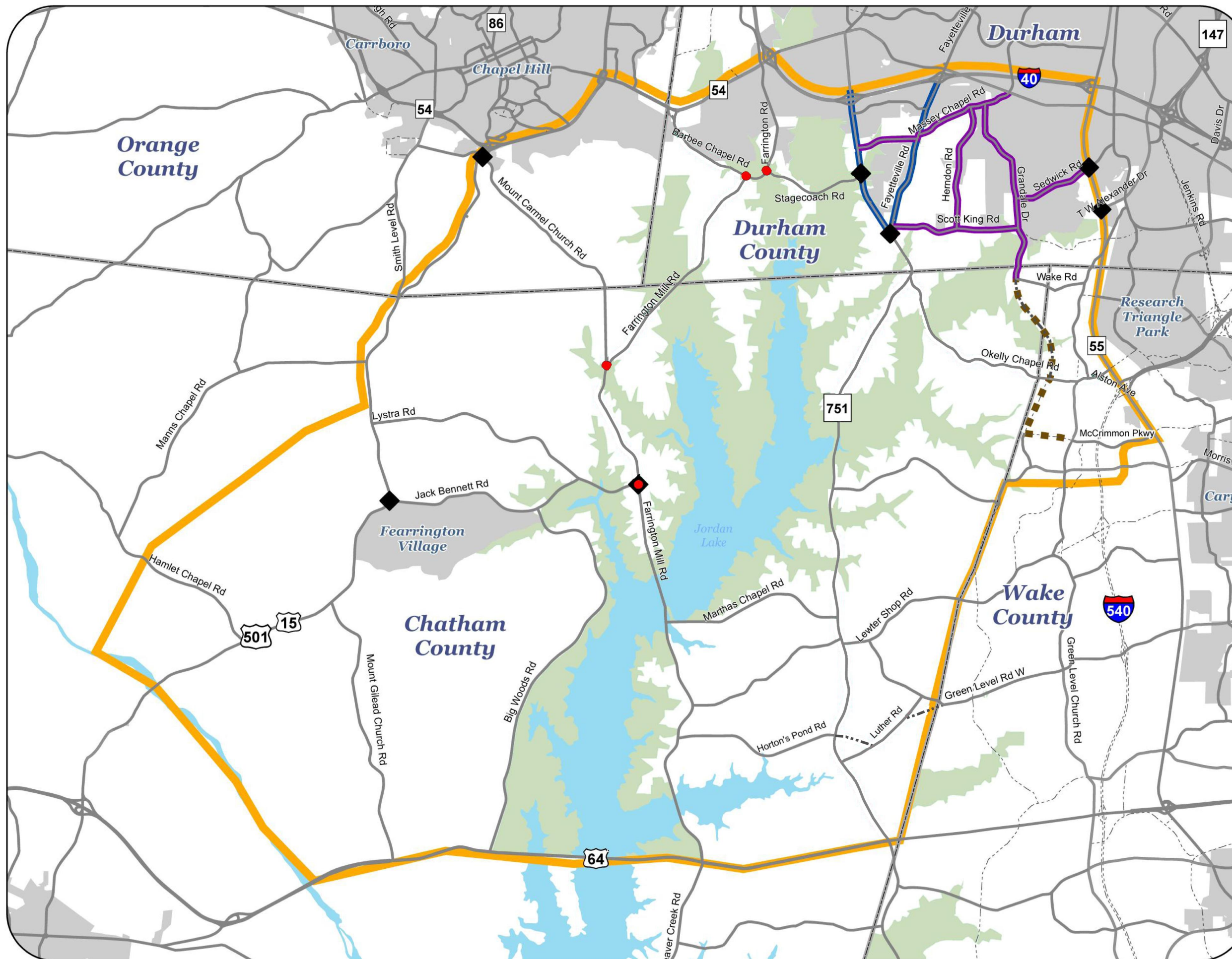
General Land Use Category	Land Use Scenario		
	Business As Usual	Recommended Compact Development Centers	Land Use Scenario Difference
Percent Area			
Agriculture	4.20%	3.67%	-0.53%
Civic / Institutional	0.73%	0.73%	0.00%
Commercial	1.47%	0.84%	-0.63%
General Office	0.32%	0.17%	-0.15%
High Density Residential	0.23%	0.23%	0.00%
Low Density Residential	14.96%	13.48%	-1.48%
Light Industrial	0.47%	0.47%	0.00%
Medium Density Residential	5.40%	1.29%	-4.11%
Permanent Conservation	34.63%	47.02%	12.39%
Parks & Recreation	1.30%	1.29%	-0.01%
Rural Residential	35.39%	21.64%	-13.75%
Compact Development Center	0.91%	9.17%	8.26%

Purposeful coordination among private landowners, officials for the various local governments, the DCHC MPO, and the North Carolina Department of Transportation to combine land use and transportation planning processes traditionally completed in isolation will ensure a more efficient and fiscally responsible regional transportation system.

Farrington Road Corridor Study

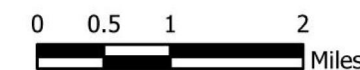
Figure 31

Recommended Transportation Improvements



- Recommendations**
- Roundabout Conversion
 - ◆ Intersection Improvement
 - Access Management
 - Operational Management
 - New Roadway
 - New Roads
 - ▭ Counties
 - ▭ Study Area
 - ▭ Municipalities
 - ▭ Lakes
 - ▭ Corps of Engineers Land

November 25, 2008



appendix

Farrington Road Corridor Study Land Use Scenario Planning Analysis Generalized Development Characteristics Table					
Generalized Land Use Category	Site Efficiency Factor	Average Res. Density	Floor Area Ratio	Employee Space Ratio	
Agriculture	-	-	-	-	
Civic / Institutional	85%	-	0.45	5.0 / 1,000 s.f.	
Commercial	80%	-	0.25	4.5 / 1,000 s.f.	
General Office	80%	-	0.35	4.0 / 1,000 s.f.	
High-Density Residential	70%	12 du / ac	-	-	
Low-Density Residential	70%	3 du / ac	-	-	
Light Industrial	80%	-	0.15	2.5 / 1,000 s.f.	
Medium-Density Residential	70%	5 du / ac	-	-	
Conservation	-	-	-	-	
Parks & Recreation	-	-	-	-	
Rural Residential	90%	0.2 du / ac	-	-	
Compact Dev. Center	70%	8 du / ac	0.50	4.5 / 1,000 s.f. (com) 4.0 / 1,000 s.f. (off)	

Note: land use categories and associated development controls were normalized among the various political jurisdictions represented in the study area.


Farrington Road Corridor Study Land Use Scenario Planning Analysis Desirability Factor Weightings Table		
Desirability Factor	Relationship to a Parcel	Weighting Factor (0 - 10)
Proximity to Open Space	Positive	2
Proximity to Existing Urban Areas	Positive	8
Proximity to Major Intersections	Positive	6
Proximity to Regional Activity Center	Positive	6
Proximity to Community Development Nodes	Positive	8
Access to Water / Sewer Service	Positive	10

The Culbreth Road sidewalk to be constructed with Safe Routes to School and Surface Transportation Program Direct Allocation funds is approximately 320 feet in length. About 25 feet will be located in the Town of Carrboro and the remaining portion in the Town of Chapel Hill. There are roughly 250 properties and several Chapel Hill transit stops within one quarter mile of the site. Culbreth Middle, Frank Porter Graham Elementary, and Carrboro High schools are relatively close to each other and are located about 1/2 mile of the proposed sidewalk. The construction and completion of the sidewalk would provide a continuous sidewalk/pedestrian link on the south side of Culbreth Road from western town limits to US 15-501.





Project Map - Culbreth Road Sidewalk

Town of Chapel Hill, NC



	Distance (Mi)			
	Culbreth Middle	Carrboro High	Frank Porter Graham Elem	Proposed Sidewalk
Culbreth Middle	-	1.1	1.1	0.5
Carrboro High	1.1	-	0.9	0.5
Frank Porter Graham Elem	1.1	0.9	-	0.5
Proposed Sidewalk	0.5	0.5	0.5	-

Legend

-  Jurisdiction Boundary
-  CH Sidewalk (existing)
-  Sidewalk (proposed)
-  Bus Stop



RESOLUTION TO ENDORSE APPLICATIONS FROM THE DURHAM-CHAPEL HILL-CARRBORO MPO AREA FOR NCDOT SAFE ROUTES TO SCHOOL DIVISION INFRASTRUCTURE AWARDS

March 10, 2010

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 North Carolina Department of Transportation has allocated Safe Routes to School (SRTS) funding to each Highway Division to assist communities in implementing infrastructure projects to address active travel to schools serving Kindergarten – Grade 8 on state-maintained roads; and

WHEREAS, any state, local, and regional agency, including nonprofit organizations, that can demonstrate the ability to meet the requirements of the federal SRTS program is eligible to apply for the infrastructure awards; and

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee (DCHC TAC) recognizes the importance of a balanced transportation network to the economic and social well-being of the community; and

WHEREAS, the Town of Chapel Hill is within the Durham-Chapel Hill-Carrboro MPO region and submitted three applications for Safe Routes to Schools infrastructure funding to Division 7; and

WHEREAS, the Town’s application to construct a sidewalk on the south-side of Culbreth Road to serve Scroggs Elementary, Culbreth Middle, and Carrboro High Schools has been awarded funding;

BE IT THEREFORE RESOLVED that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee gives its support for the Town of Chapel Hill’s application to construct a sidewalk on Culbreth Road to serve Scroggs Elementary, Culbreth Middle, and Carrboro High Schools.

TAC Chair

STATE of: North Carolina
COUNTY of: _____

I, _____, a Notary Public of County, North Carolina do hereby certify that personally Mike Woodard appeared before me on the 10th day of March, 2010, to affix his signature to the foregoing document.

(Seal) _____
Notary Public for the State of NC
My commission expires _____

**RESOLUTION TO MODIFY THE
2009-2015 TRANSPORTATION IMPROVEMENT PROGRAM
FOR THE DURHAM-CHAPEL HILL-CARRBORO URBAN AREA**

**AMENDMENT #14
March 10, 2010**

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 Metropolitan Transportation Improvement Program (MTIP) is a staged multiple year listing of all federally funded transportation projects scheduled for implementation within the Durham-Chapel Hill-Carrboro Urban Area which have been selected from a priority list of projects; and

WHEREAS, the document provides the mechanism for official endorsement of the program of projects by the Transportation Advisory Committee (TAC); and

WHEREAS, the inclusion of the TIP in the transportation planning process was first mandated by regulations issued jointly by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and no project within the planning area will be approved for funding by these federal agencies unless it appears in the officially adopted TIP; and

WHEREAS, the procedures for developing the MTIP have been modified in accordance with certain provisions of the SAFETEA-LU Federal Transportation Act and guidance provided by the State; and

WHEREAS, projects listed in the MTIP are also included in the State TIP (STIP) and balanced against anticipated revenues as identified in the STIP; and

WHEREAS, the North Carolina Department of Transportation and the Transportation Advisory Committee have determined it to be in the best interest of the Urban Area to amend the FY 2009-2015 Metropolitan Transportation Improvement Program as described in the attached sheet; and

WHEREAS, there has been no change in the MTIP project schedule or project design concept and scope with regard to the air quality conformity finding made by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee on August 13, 2008; and

WHEREAS, the DCHC MPO certifies that this MTIP amendment is consistent with the intent of the DCHC MPO 2035 LRTP; and

BE IT THEREFORE RESOLVED that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee hereby amends the FY 2009-2015 Metropolitan Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the TAC on August 13, 2008, and as described in the "Attachment to

Resolution for Amendment #14 to DCHC 2009-2015 MTIP” provided here on this, the 10th day of March, 2010.

TAC Chair

STATE of: North Carolina
COUNTY of: _____

I, _____, a Notary Public of Durham County, North Carolina do hereby certify that personally J. Michael Woodard appeared before me on the 10th day of March, 2010, to affix his signature to the foregoing document.

Notary Public
My commission expires _____

(Seal)

Attachment to Resolution for Amendment #14 to DCHC 2009-2015 MTIP**New Project**

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Durham	Division 5 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	\$ 2,000,000	\$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Durham	Division 5 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	\$ 100,000

New Project

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Orange	Division 7 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	\$ 2,000,000	\$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Orange	Division 7 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	\$ 100,000

New Project

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Chatham	Division 8 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	\$ 2,000,000	\$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Chatham	Division 8 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	\$ 100,000



 DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION
Member Governments

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

January 13, 2010

Mr. Jamille Robbins
 North Carolina Department of Transportation
 1583 Mail Service Center
 Raleigh, NC 27699-1583

Dear Mr. Robbins:

On January 13, 2010, the Transportation Advisory Committee of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) reviewed the Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation for project U-3808, Elizabeth Brady Road Extension, and voted to support the no-build option. The MPO supports the no-build option due to the low impact the proposed project would have on addressing congestion in downtown Hillsborough, the high negative environmental, community, and cultural impacts of the three build alternatives, and the high cost of the project.

Elizabeth Brady Road Extension has been included in our MPO's Long Range Transportation Plan ever since the Hillsborough area was added to our MPO's planning area in 1994. The road has also been in the Town's Thoroughfare Plan for many years before Hillsborough joined the MPO. The project was envisioned to provide a north-south connection on the east side of Hillsborough to relieve traffic on NC 86/Churton Street through downtown Hillsborough.

Unfortunately, the results of the measures of effectiveness analysis do not reveal that any of the build alternatives will result in an acceptable level of congestion relief for NC 86 through downtown Hillsborough. While all three alternatives decrease travel times in 2025 as compared to the no build option for NC 86 from US 70 Business to US 70 Bypass, the travel times are four to six times the existing travel times in the peak hour. The analysis forecasts that it may take up to 41.4 minutes to travel 1.2 miles southbound through downtown in the PM peak in 2025 with the project built as compared to 7.7 minutes today. It is clear that the proposed project is not the solution to congestion on Churton Street as was originally envisioned by the Town and the MPO.

Furthermore, on April 21, 2009, the NEPA/404 Merger Team agreed to change the project purpose from "Reduce traffic congestion and improve the level-of-service in

the central business district of the Town of Hillsborough, including Churton Street and St. Mary's Road" to "Reduce congestion on Churton Street in the central business district in terms of traffic delay at intersections and travel time for the peak period/peak direction." While the MPO understands that level-of-service is inadequate to measure all the benefits of the project, the MPO abstained from signing the revised purpose and need statement because of concern that the new purpose and need would not ensure that the project will result in a sufficient amount of congestion relief to justify the monetary and environmental costs of constructing the project. As evidenced in the DEIS, the build alternatives may meet the revised purpose and need by reducing traffic delay and travel time. However, the improvement is not significant enough to be acceptable to our MPO.

In addition, the environmental cost of the three build alternatives is too high in comparison to the relatively minor congestion relief benefits. Alternative 3 would require a new crossing of the Eno River and pass through the Occoneechee Speedway which is on the National Register of Historic Places. Alternative 4 also would require a new crossing of the Eno River, parallels the Eno River, and impacts the Riverside Drive neighborhood. Alternative 6 parallels the Eno River, requiring extensive cut and fill on steep slopes and crossing several feeder streams, and traverses property owned by the Classical American Homes Preservation Trust that is protected from development through deed restrictions.

The monetary costs of the build alternatives range from \$31.7M to \$45.2M. With increasingly scarce and inadequate funding for transportation projects, the MPO does not believe that investing this much money into a project with insignificant benefits and high negative impacts is justified. Instead, the MPO supports the development and construction of other transportation projects in Hillsborough as submitted in the MPO's FY 2012-2018 Transportation Improvement Program (TIP) Regional Priority List:

- R-2835 South Churton Street Improvements
- Orange Grove Road Extension to US 70 Business
- U-3435 Eno Mountain Road, Mayo Street, and Orange Grove Road Realignment

In addition, the following projects in Hillsborough are in the 2035 Long Range Transportation Plan and funding will be pursued through future TIPs:

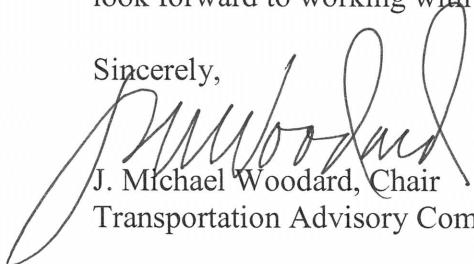
- Widening of NC 86 from Old NC 10 to US 70 Business
- Widening of NC 86 from US 70 Bypass to NC 57

Operational improvements to roads in Hillsborough should also be implemented in order to optimize the efficiency of the current roadway system.

The purpose of the DEIS is to document the purpose of the project, the alternatives, and the impacts of the proposed project to help the NEPA/404 Merger Team develop a consensus on how to proceed. The MPO greatly appreciates the effort that NCDOT staff has put forth to study U-3808, Elizabeth Brady Road Extension, and develop the DEIS. However, the findings in the DEIS have led us to conclude that the project provides too little benefit and has too high of impacts to justify the cost of construction. We will proceed with taking this project out of our Long Range Transportation Plan and Metropolitan Transportation Improvement Program. There

is still a great need for transportation improvements in the Hillsborough area, and we look forward to working with the department on the development of other projects.

Sincerely,



J. Michael Woodard, Chair
Transportation Advisory Committee

- Cc: Michael S. Fox, NC Board of Transportation - Division 7
Chuck Watts, NC Board of Transportation – Division 5
Eugene A. Conti, Jr., NCDOT
DCHC MPO TAC
Town of Hillsborough Town Board
Orange County Board of Commissioners
Eric Peterson, Town of Hillsborough
Frank Clifton, Orange County
Mike Mills, NCDOT – Division 7
Derrick Weaver, NCDOT – PDEA
Vincent Rhea, NCDOT – PDEA
Margaret Hauth, Town of Hillsborough
Karen Lincoln, Orange County



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

1501 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1501

EUGENE A. CONTI, JR.
SECRETARY

February 3, 2010

Mr. Mark Ahrendsen, Chair TCC
DCHC MPO
101 City Hall Plaza, 4th Floor
Durham, North Carolina 27701

Dear Mr. Ahrendsen:

Thank you for your recent letter and resolutions regarding the proposed widening and extension of Elizabeth Brady Road in Hillsborough. It is clear that you support the "No-Build" option as presented in our Draft Environmental Impact Statement, but also see the need for transportation improvements in downtown Hillsborough.

I have reviewed your requests with the North Carolina Department of Transportation's (NCDOT) professional staff responsible for the planning and design of this project. Based upon this review and comments received from you and local citizens, the Department has stopped work on the Elizabeth Brady Road project. The proposed project will be removed from the State Transportation Improvement Program (STIP) and no more work will be conducted.

Project funding will be returned to the STIP. Any additional projects to address the transportation needs in the area will have to go through the Department's new prioritization process. This process uses data on pavement conditions, safety and traffic projections, as well as input from local governments and NCDOT staff, to determine the Department's priorities. This data-driven approach will put all projects in priority order, based on the Department's goals, and serve as the primary input source for the STIP. Final programming of projects will be constrained by funding availability, funding eligibility and equity allocation. We encourage you to work with your Board of Transportation members, Division staff and the MPO to address your project needs.

Thank you again for sharing your concerns and comments regarding this project. If I can provide further assistance, please let me know.

Sincerely,

A handwritten signature in black ink that reads "Eugene A. Conti, Jr."

Eugene A. Conti, Jr.

EAC/efl

Mr. Mark Ahrendsen

February 3, 2010

Page 2

cc: Senator Eleanor Kinnaird
Representative(s)
Michael S. Fox, Member, Board of Transportation
Chuck Watts, Member, Board of Transportation
Mike Mills, P.E., Division Engineer
Debbie Barbour, P.E., Director of Preconstruction
Art McMillan, P.E., State Highway Design Engineer
Greg Thorpe, Ph D., Project Development and Environmental Analysis Branch

MEMORANDUM

TO: Transportation Advisory Committee (TAC)
DCHC MPO

FROM: Lead Planning Agency

DATE: March 10, 2010

RE: Job Access Reverse Commute and New Freedom 2010 Call for Projects

The available funds are from two sources – Job Access/Reverse Commute (JARC) and New Freedom (NF). JARC funds are intended to fund “the development and maintenance of transportation services designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment”. NF funds are intended to provide improved public transportation services and alternatives to public transportation for people with disabilities beyond those required by the Americans with Disabilities Act of 1990 (ADA). Eligible applicants for both programs include state or local governments, private non-profit organizations, and operators of public transportation services including private operators of public transportation services. Funds may be used for planning, capital, or operating costs. Funds can be used according to the following limits:

- Up to 80% for capital projects.
- Up to 50% for operating assistance.
- Up to 10% for program administration.

As required by the FTA, the DCHC MPO created a Coordinated Public Transit - Human Services Transportation Plan to guide the selection and funding of future JARC and NF projects. The TAC approved this plan in March 2007. The DCHC MPO has held three Calls for Projects in 2007, 2008, and 2009 for the MPO’s FY 2006- FY 2009 JARC and NF funds using the procedures outlined in the Coordinated Public Transit - Human Services Transportation Plan. The DCHC MPO has allocated all of the FY 2007, 2008 and a portion of FY 2009 funds. The remainder of FY 2009 funds is available for allocation during FY 2010’s Call for Projects.

2010 Call for Projects – Funds Available

The tables in Attachment 6A summarize the funds available for the JARC and NF programs. The MPO has received appropriations for FY 2006, 2007, and 2008, and 2009 funding. The FTA has not yet published the 2010 appropriations. Based the wave of economic and Federal changes, we have no expectations regarding the increase in future allocations. Once the FTA has published the FY2010 appropriations, the MPO will hold a call for projects. The MPO anticipates this will be late spring 2010. Once the MPO approves project funding, projects are obligated in FTA’s financial system using the “oldest” funding available. Funds are available for up to 4 years (including the year of

allocation) before they lapse. FY 2009 funds would potentially lapse on September 30, 2013. In May 2009, the TAC approved enough JARC projects to use up all of the FY 2008 and a portion of 2009 JARC funds. All approved funding have been obligated in FTA's financial system. The MPO's remaining JARC appropriations that have not already been committed to a project and have not lapsed are \$72,671. This amount will be offered for use in the MPO's FY 2010 Call-for-projects. In May 2009, the TAC approved enough NFP projects to use up all of the FY 2007, FY 2008 and a portion of 2009 NFP funds. All approved funding have been obligated in FTA's financial system. The MPO's remaining NFP appropriations that have not already been committed to a project and have not lapsed are \$10,769. This amount will be offered for use in the MPO's FY 2010 Call-for-projects.

2010 Call for Projects – Schedule

The LPA recommends the following schedule for the 2010 Call for Projects:

- 12/16/2009 TCC update on 2010 Call for Projects & prior year's project status
- Spring 2010 FTA releases FY 2010 appropriations
- 10/13/2010 TAC update on FTA application & funding status. TAC request staff begins project solicitations.
- 10/27/2010 LPA staff submit updated Call for Projects schedule
- 09/23/2011 FY 2009 funds lapse if not obligated

Program Management Plan

A Program Management Plan (PMP) is required by FTA to document and describe the methods or processes used by the City of Durham, the designated recipient of the Job Access Reverse Commute (JARC) and New Freedom (NF) funds, to solicit, select, award and administer both JARC and NF funds. The MPO developed a PMP and submitted it to FTA. The PMP was approved by FTA on July 30, 2008. The MPO will submit the new Program of Projects (POP) with the FY 2010 JARC and NFP applications.

TAC Action: Receive the proposed FY 2010 Call for Projects schedule and the FY2006 - FY2009 project status and funding updates.

APPROVED - PROGRAM OF PROJECTS
NEW FREEDOM (5317)

TAC 3/10/10 Attachment 14A

MPO Approval Date	Sub-Recipient	Agency Type	Project Status	Project Description	Project Type	FTA PROJECT ID#	PROJECT COSTS		
							Total Cost	Federal Share	Planning & Administrative
6/13/2007	DURHAM	Public Transit	Not-Applicable	Administrative	Administration	NC-57-X006-02	\$ 5,745	\$ 5,745	\$ 5,745
6/13/2007	DATA/TTA/CHT	Public Transit	In-Progress	Paratransit Eligibility Assessment	Operating	NC-57-X006-02	\$ 35,000	\$ 17,500	\$ -
5/14/2008	DURHAM	Public Transit	Not-Applicable	Administrative	Administration	NC-57-X006-02	\$ 6,206	\$ 6,206	\$ 6,206
5/14/2008	CHT & OPT	Public Transit	In-Progress	Elderly population feeder service	Operating	NC-57-X006-02	\$ 97,600	\$ 48,800	\$ -
5/13/2009	DATA	Public Transit	In-Progress	Taxicab service to supplement ACCESS service	Operating	NC-57-X006-02	\$ 140,760	\$ 70,380	\$ -
5/13/2009	DURHAM	Public Transit	Not-Applicable	Administrative	Administration	NC-57-X006-02	\$ 7,153	\$ 7,153	\$ 7,153
5/13/2009	DCCSC	Non-profit	In-Progress	Travel Training / Mobility Manager	Capital	NC-57-X006-02	\$ 31,357	\$ 20,000	\$ -
5/13/2009	CHT	Public Transit	In-Progress	Go Triangle Regional Transit Information Center	Capital	NC-57-X006-02	\$ 50,614	\$ 40,491	\$ -
5/13/2009	CHT	Public Transit	In-Progress	Mobility Manager	Capital	NC-57-X006-02	\$ 70,000	\$ 35,000	\$ -

MPO Approved Funding		Total:	\$ 251,275
DCHC MPO Appropriations	FY 2006:	\$	71,878
	FY 2007:	\$	71,810
	FY 2008:	\$	77,573
	FY 2009:	\$	89,416
Appropriations Total:		\$	310,677
Lapsed funds (FY 2006):		\$	(48,633)
Remaining Balance (FY 2009):		\$	10,769

**APPROVED - PROGRAM OF PROJECTS
JARC (5316)**

TAC 3/10/10 Attachment 14A

MPO Approval Date	Sub-Recipient	Agency Type	Project Status	Project Description	Project Type	FTA PROJECT ID#	PROJECT COSTS		
							Total Cost	Federal Share	Program Administration
6/14/2006	DATA	Public Transit	COMPLETE	Downtown Durham to the Brier Creek	Operating	NC-37-X010-00	\$ 193,752	\$ 96,876	\$ -
9/13/2006	TTA	Public Transit	Not-Applicable	Administrative Costs	Administration	NC-37-X010-00	\$ 22,433	\$ 22,433	\$ 22,433
6/13/2007	DATA	Public Transit	Not-Applicable	Administrative Costs	Administration	NC-37-X017-00	\$ 12,856	\$ 14,463	\$ 14,463
6/13/2007	DATA	Public Transit	COMPLETE	Evening service extension	Operating	NC-37-X017-00	\$ 203,138	\$ 100,000	\$ -
6/13/2007	CHT	Public Transit	COMPLETE	Evening service extension	Operating	NC-37-X017-00	\$ 101,098	\$ 50,549	\$ -
5/14/2008	DURHAM	Public Transit	Not-Applicable	Administrative Costs	Administration	NC-37-X017-01	\$ 13,928	\$ 13,928	\$ 13,928
5/14/2008	CHT	Public Transit	In-Progress	Rogers Road Project	Operating	NC-37-X017-01	\$ 169,936	\$ 84,968	\$ -
5/14/2008	DATA	Public Transit	COMPLETE	New Hope Commons Project	Operating	NC-37-X017-01	\$ 145,986	\$ 72,993	\$ -
5/13/2009	DATA	Public Transit	ON HOLD	Continuation of Downtown to Brier Creek Service	Operating	NC-37-X017-01	\$ 188,566	\$ 94,283	\$ -
5/13/2009	CHT	Public Transit	In-Progress	Continuation of NS&G (night service)	Operating	NC-37-X017-01	\$ 118,534	\$ 59,267	\$ -
5/13/2009	DURHAM	Governmental	Not-Applicable	Administrative Costs	Administration	NC-37-X017-01	\$ 16,347	\$ 16,347	\$ 16,347

MPO Approved Funding		Total:	\$	626,107
DCHC MPO Appropriations	FY 2006	\$	152,453	
	FY 2007	\$	160,702	
	FY 2008	\$	174,094	
	FY 2009	\$	204,341	
Appropriations Total:		\$	691,590	
Unused (FY 2006) funds for Brier Creek Project:		\$	7,312	
Lapsed funds (FY2006):		\$	(124)	
Remaining Balance (FY 2009):		\$	72,671	

Federal Financial Reporting (FFR)
NEW FREEDOM (5317)

TAC 3/10/10 Attachment 14B

DR FY	MPO Approval Date	Sub- Recipient	Project Description	PROJECT COSTS		1stQtr2010 Expenditures		2ndQtr2010 Expenditures		Year To Date Expenditures		Percent Of Cost Expended To Date
				Total Cost	Federal Share	Total Cost	Federal Share	Total Cost	Federal Share	Total Cost	Federal Share	
2008	6/13/2007	DATA	Paratransit Eligibility Project	\$ 35,000	\$ 17,500	-	-	-	-	-	-	0%
2010	5/13/2009	DATA	ACCESS Taxi cab supplement service	\$ 140,760	\$ 70,380	-	-	-	-	-	-	0%
2009	5/14/2008	CHT & OPT	Cross Town Shuttle Project	\$ 97,600	\$ 48,800	-	-	-	-	-	-	0%
TOTAL OPERATING COST - NC-57-4006				\$ 273,360	\$ 136,680	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2010	5/13/2009	CHT	Call Center (capital)	\$ 50,614	\$ 40,491	-	-	-	-	-	-	0.0%
2010	5/13/2009	CHT	Mobility Manager (capital)	\$ 70,000	\$ 35,000	-	-	3,860	3,088	3,860	3,088	5.5%
2010	5/13/2009	DCCSC	Senior Travel Training Program (capital)	\$ 31,357	\$ 20,000	-	-	-	-	-	-	0.00%
TOTAL CAPITAL EXPENDITURES - NC-57-0006				\$ 151,971	\$ 95,491	\$ -	\$ -	\$ 3,860	\$3,088	\$ 3,860	\$ 3,088	
2008	6/13/2007	DATA	Administrative - <u>FY07</u>	\$ 5,745	\$ 5,745	-	-	-	-	-	-	0.0%
2009	5/14/2008	DATA	Administrative - <u>FY08</u>	\$ 6,206	\$ 6,206	-	-	328	328	328	328	5.3%
2010	5/13/2009	City of Durham	Administrative - <u>FY09</u>	\$ 7,153	\$ 7,153	-	-	-	-	-	-	0.0%
TOTAL ADMINITRATIVE EXPENDITURES - NC-57-6006				\$ 19,104	\$ 19,104	\$ -	\$ -	\$ 328	\$ 328	\$ 328	\$ 328	

TOTALS \$: \$ - \$ - \$ 4,188 \$ 3,416 \$ 4,188 \$ 3,416

NC 54 Blueprint Review and Approval Process

Proposed

Date	Activity	Resource
June	Draft report delivered by RPG and reviewed by staff (Steering Committee)	RPG
July	Draft report provided to Chapel Hill Council and referred to advisory boards for review and comment. Draft report reviewed by NCDOT staff/managers as appropriate.	MPO
August	Draft report presented to JCCPC, Durham BPAC for review and comment. Draft report provided to Durham Planning Commission for review and comment (no presentation or public hearing).	
September	Comment on the draft report provided at the Chapel Hill Public Forum. Chapel Hill brings in UNC to review and comment on draft report. Chapel Hill Council approves comments on draft. Draft report with advisory board comments provided to Durham County Board of Commissioners at a work session for review and comment. Durham City Council receives the draft report at a work session with advisory board comments for comment. The draft report presented to the DURCHO group for review and comment.	
October	RPG revises the draft report to incorporate comments and recommended changes (2 weeks). TCC receives the final draft report and forwards to TAC.	RPG
November	TAC receives final draft report to forward to local agencies for approval. Durham Planning Commission holds public hearing on final draft report.	MPO
December	Durham City Council, Durham Board of County Commissioners, and Town of Chapel Hill review and approve the final draft report.	
January, 2011	TCC approval of final report	
February, 2011	TAC approval of final report	

Notes: Schedule may change depending on whether issues are controversial or if major changes to the draft report are recommended and implemented.

MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: March 10, 2010

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

This memorandum provides a summary status of tasks for projects in the FY 2009-2010 Unified Planning Work Program.

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

2009-2010 Unified Planning Work Program (UPWP) – Projects

Comprehensive Transportation Plan (CTP)

- Draft CTP
- Public Input
- Recommended CTP
- Adopted CTP
- 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 – Spring 2010

- Documentation and Final Presentation – June 2010
- Study completion – June 2010

Commercial Vehicle/Freight Survey (TRM Service Bureau Project)

- ✓ Pilot study
- ✓ Obtain DMV records
- ✓ Finalize sample plan
- ✓ Begin survey mail out – Jan 2010
- ✓ Surveyor Training – Jan 2010
- Survey Data Collection – Jan through March 2010
- Data Processing/Geocoding – April 2010
- Weighting and Expansion – April 2010
- Analysis/Draft Report – May 2010
- Final Report/Draft Dataset – June 2010
- Presentation of Results – July 2010

GIS/Data Integration and Automation

- ✓ Phase I in progress
- ✓ Initial Kick of meeting and scan completed
- ✓ Initiation Workshop report completed
- ✓ Draft Requirement Assessment & Application Development Report - October 2008
- ✓ Needs Assessment Workshop
- ✓ Final Draft Needs Assessment Report
- ✓ Application Development Plan – Sept 09
- ✓ Application Plan/Algorithm for CMP – complete
- ✓ Application Plan/Algorithm for LRTP Tool – Oct 2009
- ✓ Application Plan/Algorithm for SE Data Tool – Oct 2009
- ✓ Supporting Hardware/Software Recommendation – complete
- ✓ Functional capability for TELUDE – Nov 2009
- Database Design – Feb 2010
- Database Design Document – Feb 2010
- Strategic Planning Document – Feb 2010
- TELUDE User's Handbook v1 – Mar 2010
- Hands-on Training – May 2010
- TELUDE Test and Evaluation Manual – July 2010
- Project Completion – Sept 2010

Land-use Model Development

- ✓ Multi-year project in progress
- ✓ Review of existing data and need/requirement analysis completed
- ✓ Land use data collection completed
- ✓ Development of Model specification Completed
- ✓ Model architecture and design completed
- Zone level model for Triangle Region v1
 - ✓ Database completion – Aug 09

- ✓ Initial model estimation – Sept 09
- ✓ Initial calibration – Oct 09
- 2035 model run – Jan 2010
- Installation and documentation – Feb 2010
- Parcel level model for DCHC
 - Initial database – Mar 2010
 - Initial model estimation – Apr 2010
 - Initial calibration – May 2010
 - 2035 model run – June 2010
- Installation and documentation – July 2010

Non-Motorized Model Development

- ✓ Phase 1 completed.
- ✓ Phase 2 underway
- ✓ Update and enhancement of Generation Choice Models – Sept 2009
- Revision and revalidation of Destination choice models – Mar 2010
- Development of improved Model Choice model – Jan 2010
- Prepare and implement new TransCAD routines to implement new models – Apr 2010
- Documentation, User's manual, and training – Jun 2010
- Project completion date anticipated in July 2010

ITS Deployment Plan

- ✓ Two Triangle regional stakeholder coordination meetings held.
- ✓ Update of ITS short range strategies for the 2007-2013 TIP.
- ✓ Update of 2007-2010 ITS project – December 2006
- ✓ Request for funding from NCDOT
- ✓ Draft scope of services and Request for Proposals.
- ✓ Consultant selection in spring of 2008
- ✓ Notice to proceed in January 2009
- ✓ Scan of Best practices
- ✓ ITS Vision and goals
- ✓ Gap Assessment
- ✓ Development of ITS Architecture
- ✓ Development of ITS Cost Estimates and Cost database
- ✓ Development of Maintenance Plan
- ✓ Development of IDAS Model
- ✓ Integration & Streamlining of ITS with Transportation Planning.
- ✓ Strategic Deployment Plan
- ✓ Project Management
- ✓ Final Reports
- Completion of Project expected in winter of 2010.

MPO Collector Street Plan

- ✓ Supplemental Agreement with Kimley Horn and Associates
- ✓ Data collection underway
- ✓ Coordination with partner agencies to classify roads and identify collector streets

- Public review (possibly with Comprehensive Transportation Plan)
- Completion of study and integration with related plans and review processes

MPO Expansion for the next LRTP Update

- ✓ Approved February 2010. Expansion approved for Orange County. No expansion in Chatham County.

Public Outreach for the East End Connector Planning and Environmental Study

- ✓ LPA working on the Public Involvement and Outreach Program for the East End Connector Planning and Environmental Study (NEPA).
- ✓ Development of mailing list database complete.
- ✓ Received project schedule and time line from NCDOT.
- ✓ Newsletter distributed May 2006
- ✓ Speakers Bureau presentations June 2006 – ongoing
- ✓ First public meeting September 26, 2006
- ✓ Second public meeting – January 30, 2007
- ✓ Alternative 3 selected as LEDPA – June 19, 2007
- ✓ Ad Hoc Committee Meetings – August 9, 2007, August 27, 2007, September 19, 2007, October 10, 2007, November 7, 2007, December 5, 2007
- ✓ Third public meeting December 10, 2007, Orange Grove Missionary Baptist Church
- ✓ Environmental Assessment – signed December 2009
- Public meeting/hearing – March 25, 2010

Farrington Road/Stagecoach Road Corridor Study

- ✓ This study involved the following tasks:
 1. Data collection and analysis
 2. Traffic circulation plan (including a collector street system plan)
 3. Sub-area modeling analysis and forecast of future demand
 4. Alternative evaluation
 5. Recommendation
- ✓ Kimley Horn and Associates is the consultant
- ✓ Data collection underway
- ✓ Steering Committee proposed
- ✓ Completion of study expected in January
- ✓ Integration in the 2035 LRTP
- ✓ Draft report complete
- Presentation to TAC – March 2010

MPO Parking Survey and Study (postponed to FY 2011)

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

Contract Number: C200840 **Route:** NC-54
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** R-2904, U-4026
Length: 6.363 miles **Federal Aid Number:** STP-54(5)
Resident Engineer: Jeffrey D. Allen, PE **RE Phone Number:** (919)733-9499
Location Description: NC-54 FROM SR-1999 IN DURHAM CO TO SR-1959 IN DURHAM CO & SR-1999 FROM SR-3014 IN WAKE CO TO NC-54 IN DURHAM CO.
Type of Work: WIDENING, GRADING, DRAINAGE, PAVING, SIGNALS & CULVERTS.
Contractor Name: C C MANGUM COMPANY LLC
Contract Amount: \$35,467,891.08 **Cost Overrun/Underrun:** 6.9%
Availability Date: 2/5/2007 **Letting Date:** 12/19/2006
Completion Date: 11/1/2009 **Work Began:** 2/19/2007
Revised Completion Date: 12/4/2009 **Estimated Completion:** 4/1/2010
Last Estimate Thru: 12/31/2009 **Scheduled Progress:** 100%
Last Estimate Paid: 1/14/2010 **Actual Progress:** 97.44%

Contract Number: C201487 **Route:** US-15
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** B-3450, U-4009, U-4012
Length: 1.769 miles **Federal Aid Number:** BRSTP-1116(6)
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: BRIDGES OVER SANDY CRK & TRIBUTARY & APPROACHES ON SR-1116, SR-1126 NEAR US-15/501 & SR-1116, US-15/501 AT MT MORIAH RD.
Type of Work: GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES.
Contractor Name: DLB, INC DBA DLB INC (OF VA)
Contract Amount: \$18,810,912.36 **Cost Overrun/Underrun:** 3.38%
Availability Date: 10/1/2007 **Letting Date:** 8/21/2007
Completion Date: 8/1/2010 **Work Began:** 10/1/2007
Revised Completion Date: 8/3/2010 **Estimated Completion:** 9/3/2010
Last Estimate Thru: 1/31/2010 **Scheduled Progress:** 69.1%
Last Estimate Paid: 2/26/2010 **Actual Progress:** 69.06%

Contract Number: C201994 **Route:** NC-147
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** U-4763B
Length: 4.2 miles **Federal Aid Number:** TIFIA-540(2)
Resident Engineer: Jason R. Peterson, PE **RE Phone Number:** (919)571-3000
Location Description: TRIANGLE PARKWAY FROM NC-540 IN WAKE CO TO I-40 IN DURHAM CO
Type of Work: GRADING, DRAINAGE, PAVING, SIGNALS, TOLL FACILITIES & STRS.
Contractor Name: S. T. WOOTEN CORPORATION
Contract Amount: \$137,446,000.00 **Cost Overrun/Underrun:**
Availability Date: 9/19/2008 **Letting Date:** 8/5/2008
Completion Date: 7/1/2011 **Work Began:** 8/3/2009
Revised Completion Date: **Estimated Completion:**
Last Estimate Thru: **Scheduled Progress:**
Last Estimate Paid: **Actual Progress:**

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

Contract Number: C202277 **Route:** I-40
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** R-2000AF, R-5164B
Length: 3.56 miles **Federal Aid Number:** STM-540(15)
Resident Engineer: Jeffrey D. Allen, PE **RE Phone Number:** (919)733-9499

<p>Completion Date: 12/16/2010 Revised Completion Date: Last Estimate Thru: Last Estimate Paid:</p>	<p>Work Began: Estimated Completion: Scheduled Progress: Actual Progress:</p>
<p>Contract Number: C202496 Physical Division: 5 Administrative Division: 5 Length: 2.9 miles Resident Engineer: Chad D. Hinnant Location Description: 3 SECTIONS OF US-15/501 BUS AND 3 SECTIONS OF SECONDARY ROADS. Type of Work: MILLING & RESURFACING. Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT Contract Amount: \$861,556.72 Availability Date: Completion Date: Revised Completion Date: Last Estimate Thru: Last Estimate Paid:</p>	<p>Route: - County: Durham TIP Number: R-5164C Federal Aid Number: STM-0015(30) RE Phone Number: (919)220-4680 Cost Overrun/Underrun: Letting Date: 1/19/2010 Work Began: Estimated Completion: Scheduled Progress: Actual Progress:</p>
<p>Contract Number: C202538 Physical Division: 5 Administrative Division: 5 Length: 22.96 miles Resident Engineer: Cadmus Capehart, PE Location Description: 1 SECTION OF US-70, 1 SECTION OF NC-55, 1 SECTION OF NC-751 & 13 SECTIONS OF SECONDARY ROADS. Type of Work: MILLING, RESURFACING & SHOULDER RECONSTRUCTION. Contractor Name: TRIANGLE GRADING & PAVING, INC Contract Amount: \$4,474,348.51 Availability Date: 3/15/2010 Completion Date: 12/16/2010 Revised Completion Date: Last Estimate Thru: Last Estimate Paid:</p>	<p>Route: NC-751 County: Durham TIP Number: Federal Aid Number: RE Phone Number: (919)840-0914 Cost Overrun/Underrun: Letting Date: 1/19/2010 Work Began: Estimated Completion: Scheduled Progress: Actual Progress:</p>

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

County	WBS #	Route	Location Description	Amount	Status
Orange	B-5191A	Various	Repairs to Bridge expansion joints (Bridge #6 on US 70 Bus. over the Eno River)	\$40,000	ARRA- Applied Polymerics, Inc.- to be compl. 5/29/10
Orange	EL-4601	Morgan Creek Greenway	Construct Greenway	\$940,000	ARRA- Letting by Town 11/9/09; Sullivan Eastern to be compl. 365 days after NTP
Orange	EL-5103	Carrboro	Construct bus shelters at 4 locations	\$48,296	ARRA-Letting by Town 1/5/10; WC Construction to be complete 45 days after NTP
Orange	ER-5100 GE	US 15-501@ SR 1734 (Erwin Rd./Europa Dr.)	Plantings	\$65,000	ARRA -Design by Town, Let by DOT; Plymouth Nursery and Landscaping to be complete by 4/30/12
Orange	I-5138	I-85	Mill, resurface, and overlay from I-85/I-40 split to Bridge over SR 1006 (Orange Grove Rd.)	\$2.0 million	ARRA-Rea Contracting, LLC; Avail. 3/29/10 Compl. 7/16/10
Orange	R-5178A	NC 57	Widen for two foot paved shoulders and resurface from NC 86 to SR 1544 (Pearson Road)	\$1.0 million	ARRA-Riley Paving, Inc.; Avail. 4/5/10 Compl. 7/30/10
Orange	R-5178B	NC 86 (S. Columbia St.) from SR 1010 (Franklin St.) to Cameron Ave.	Mill, resurface, and replace curband gutter	\$200,000.00	ARRA; Bids to be opened by Division on 3/8/10
Orange	U-3100B	SR 1107 (Old Fayetteville Rd.) from NC 54 to SR 1106 (Stroud Lane)	Safety Improvements (Bicycle, Pedestrian, and Transit Accommodations)	\$1.8 million	ARRA-Atwell Const. Co., Inc., Greenville, NC Avail. 3/1/10 Compl. 9/15/10
Orange	U-4704	Chapel Hill-Carrboro	Computerized Traffic Signal System	\$5.175 million	ARRA-Brooks Berry Haynie & Assoc., Inc.; Mableton, Ga.; work began 2/1/10; Compl. 8/1/12
Orange	U-4726 DA	Carrboro	Construct sidewalk on Ashe St. from W. Main St. to Shelton St.	\$284,176.00	ARRA Letting by Town 10/27/09; Centurion Construction Co. to be compl. 120 days after NTP
Orange	U-4726 DB	Carrboro	Construct sidewalk on Bim St. from SR 1005 (Jones Ferry Rd.) to Fidelity St.	Combined w/ U-4726 DA	ARRA-See U-4726 DA

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

Orange	U-4726 GA	Twin Creeks Park Greenway	Linear park: 10' multi-use asphalt trail including bridge over Jones Creek	\$429,457.00	ARRA Letting by County 11/19/09; McQueen Construction to be compl. 190 days after NTP
Orange	U-4726 IA	Chapel Hill	ADA ramps at selected locations	\$53,924.00	ARRA Letting by Town 10/29/09; Econ International to be compl. 150 days after NTP
Orange	U-4726 IB	Chapel Hill	Raised crosswalks/traffic calming	\$65,189.00	ARRA Letting by Town 10/29/09; Turner Asphalt to be compl. 150 days after NTP
Orange	U-4726 IC	Chapel Hill	Pedestrian safety improvements (refuge islands @ 7 locations)	\$370,014.80	ARRA Letting by Town 10/29/09; Econ International to be compl. 150 days after NTP
Orange	U-4726 ID	Chapel Hill	Install in-street pedestrian lighting	\$0.00	ARRA-Project voided by request of Town; funds redistributed to other Town projects
Orange	U-4726 IE	Chapel Hill	Sidewalk construction on US 15-501/NC54 from SR 1902 (Manning Dr.) to Old Mason Farm Rd.	\$142,613.00	ARRA Letting by Town 10/29/09; Holmes Contracting to be compl. 150 days after NTP
Orange	U-4726 JA	Hillsborough	Construct sidewalks	\$1,034,110.00	ARRA, STP-DA, & Contingency Letting by Town 11/19/09; S.T. Wooten Corp. to be compl. 501 days after NTP
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST					
County	TIP #	Route	Location Description	TIP Est.	Est. Let Date
Orange	TA-5117		Two 28' light transit vehicles w/ wheelchair lift	\$183,200.00	ARRA Letting by County TBD

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

County	WBS #	Route	Location Description	Amount	Status
Orange	36945	SR 1010 (Franklin St.) @ Mallette St.	Upgrade traffic signal and install pedestrian signal heads REVISION: Install mast arm	\$110,000.00	Spending Authority FY '10-'11
Orange		SR 1942 (Jones Ferry Rd.) from SR 1140 (Wilson Rd.) to Chatham Co.	Widen existing pavement to 22' with a 1' paved shoulder on each side and resurface. Finished pavement width will be 24'.		See 7CR.10681.16 7CR.20681.16
Orange	41593	Union Street	Construct 750 feet of sidewalk and a crosswalk to connect Hillsborough Elementary School to SR 1156 (Nash St.)	\$32,000 (Statewide Contingency)	Town to include as part of sidewalk project ; See U- 4726 JA
Orange	42486	SR 1008 (Mt. Carmel Ch. Rd.) @ SR 1913 (Bennett Rd.)	Install solar powered flashers at both approaches to the intersection	\$10,000	Flashers operating 10/6/09
Orange	42501	US 15/501/NC54 (Fordham Blvd.) at SR 1900 (Old Mason Farm Rd.)	Construct bus pulloffs on both sides	\$140,000	FA const. to begin after compl. of sidewalks on U- 4726 IE
Orange	42502	SR 1010 (Franklin St.) between Hillsborough St. and Plant Rd.	Replace deteriorated curb and gutter at several locations on both sides	\$30,000	Municipal Agreement requested by Town 2/26/10; Const. FY '10-'11
Orange	42810	SR 1713 (Mt. Hermon Ch. Rd.) and SR 1710 (Old NC 10)	Install a flasher	\$15,000	Installation =98% compl.; operation pending electrical connection
Orange	7CR.10681.15	NC 57 from joint north of SR 1544 (Pearson Rd.) to approx. 685' south of centerline of NC 157	Widening, resurfacing and pavement markings		S.T. Wooten Corp.- began work 11/16/09 for compl. by 4/30/10
Orange	7CR.10681.16 7CR.20681.16	NC 54 and 11 sections of secondary roads	Milling, resurfacing and shoulder reconstruction		S.T. Wooten Corp. Avail. 4/26/10 Compl. 9/3/10
Orange	B-4216	SR 1002 (St. Mary's Road)	Replacement of Bridge # 66 over Stroud's Creek	\$800,000	Dane Const. Inc. Avail. 3/1/10 Compl. 12/31/10
Orange	I-4716	I-40	Grind and reseal joints on I-40 from I-85 to Durham Co. ((Patching spalls, Diamond grinding and slab repair added)	\$7.4 million	Safety Grooving & Grinding, L.P., Napolean, Ohio Avail. 3/1/10 Compl. 9/1/10

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

Orange	42170 SS- 4907 T 42204.2 42204.1	SR 1710 (Old NC 10) @ NC 86	Construct a right turn lane on SR 1710 and install a traffic signal	\$215,000	Design underway; minor R/W & utility relocation; Const. FY '10-'11
Orange	42171 SS- 4907 U 42205.2 42205.1	SR 1710 (Old NC 10) @ SR 1713 (Mt. Herman Church Road)	Improve sight distance on SR 1710 by lowering the crest vertical curve on the westbound approach to the intersection	\$300,000	Design underway; Const. FY '10-'11
Orange	42423.3 42423.1 SS -4907V	SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	Realign intersection	\$165,000	Survey compl. & Design underway; Const. FY '10-'11
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST					
County	TIP #	Route	Location Description	TIP Est.	Est. Let Date
Orange	I-5142	I-85/I-40	Mill, resurface and install pavement markers and rumble strips from west of SR 1114(Buckhorn Road) to the I-85/I-40 interchange	12.0 million	March 16, 2010
Orange	R-5200	NC 86	Widen for 2' paved shoulders from SR 1730 (Whitfield Rd.) to south of SR 1710	\$950,000.00	Letting not scheduled
Orange	U-0624	NC 86 (S. Columbia St.)	Corridor upgrade including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	\$4.30 million	Nov. 2011
Orange	U-3306	SR 1733 (Weaver Dairy Rd.) from NC 86 to SR 1734 (Erwin Rd.)	Grading, drainage, paving, signals, curb and gutter	\$13.4 million	July 20, 2010

**TARPO TCC/TAC Meeting
Division 8 Project Report**

COUNTY	WBS #	ROUTE	DESCRIPTION	TOTAL FUNDING ALLOCATION	CONTRACT BID AMOUNT	STATUS
Chatham	B-4063 33427.3.1	NC 902	Replacement of bridge # 20 over Sandy Creek and approaches	PE: \$150,000.00 ROW: \$75,000.00 CONST: \$1,390,181.00	\$1,205,102.89	Dellinger, Inc began work on 9/18/08 and is currently at 98.8% complete; Structure & roadway complete, open to traffic; working on punchlist items; Estimated completion is December 2009; Complete, accepted 11/19/09
Divisionwide	38913.3.1 R-4425	US 421, US 15-501, US 1	Guardrail rehabilitation to upgrade sub-standard guardrail, end treatments and bridge anchor units	PE \$210,000.00 Const \$2,622,565.00	\$2,280,491.45	Reynold's Fence & Guardrail began work October 27, 2008; Scheduled completion is April 24, 2009. Complete, accepted 6/17/09
Chatham	8CR.20191.1 1	4 sections of secondary roads	Contract resurfacing let as purchase order	\$900,000.00	\$697,376.00	Awarded to S. T. Wooten Corp.; Available 7/20/09; Scheduled completion is 12/16/09; Complete, accepted on 12/16/09
Chatham	41700 SF-4908J	NC 751	Install protected permitted traffic signal and left turn lane at intersection of NC 751 and SR 1731 (O'Kelly Church Road)	PE: \$10,000 ROW: \$58,214.50 Const: \$523,000.00	\$301,260.69	Awarded to S.T. Wooten Corp. Available 10/5/09; Scheduled completion is 4/30/10 Economic Stimulus Project
Chatham	8CR.20191.1 2	8 sections of secondary roads	Contract resurfacing	\$2,600,000.00	\$2,641,575.45	Awarded to Riley Paving, Inc.; Available 11/30/09; Scheduled completion 8/13/10
Chatham	42221	NC 87 from south of SR 1516 to north of SR 1516	Construct elliptical roundabout near CCCC in Pittsboro	\$375,000.00	\$584,478.20	Project let on January 21, 2010; Awarded to Sanford Contractors, Inc; Availability date is 3/1/10; Scheduled completion date is 8/13/10; Economic Stimulus Project
Chatham	36268 U-4726FA & 45067 ER-5100HA	US 15-501 from Cole Park Plaza to Orange County	Install pedestrian facilities (sidewalk) & Streetscaping/Landscaping	U-4726FA PE: \$22,000.00 Const: \$198,000.00 ER-5100HA PE: \$2,525.00 Const: \$22,730.00	\$144,614.00	Chatham County Municipal Agreement; Letting scheduled for 12/3/09; Awarded to White Oak Construction Corp; Availability Date is 1/5/10; Scheduled completion is 6/15/10; Economic Stimulus Project
Chatham	41848.3 SS-4908K	US 64 and SR 2229 (Treatment Plant Road)/SR 1363 (Pearlman Teague Road)	Island construction and improvements to accommodate U-turns	PE: \$27,000.00 ROW: \$11,000.00 CONST: \$19,000.00		Design is complete; ROW being acquired; Letting is not scheduled; Insufficient funds available

Wednesday, February 3, 2010, 11:52am EST

With \$1.5M already spent, NCDOT gives up on Elizabeth Brady Road extension

Triangle Business Journal - by [Chris Baysden](#)

The North Carolina Department of Transportation is calling it quits on a proposed extension of Elizabeth Brady Road in Hillsborough after local leaders withdrew their support for the project.

The bad news is that taxpayers already have footed the bill for a \$1.5 million environmental impact study on the project. The good news is that the 2009 study apparently saved a lot more money from being wasted: While the long-sought project's final price tag was never determined, it was expected to cost between \$32 million to \$45 million.

The **study showed** that the benefits of extending the road were small compared to the cost.

The town of Hillsborough, the Orange County Board of Commissioners and the **Durham-Carrboro-Chapel Hill Metropolitan Planning Organization** declined to support the project after the study's results were released.

NCDOT said in a statement issued Wednesday that it was removing the project from the State Transportation Improvement Program and that no more work will be conducted.

The project was designed to make Elizabeth Brady Road into a bypass around Hillsborough in an effort to alleviate congestion on Churton Street, a two-lane section of U.S. 70 business that passes through the Orange County town. The proposed extension would have involved the construction of a three-mile, multilane highway – and could have included building a new bridge over the Eno River. The proposal, in some form or fashion, had been part of Hillsborough's transportation plan since 1969.

Reporter e-mail: cbaysden@bizjournals.com.

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BRIDGE DELAY IRKS AREA RESIDENTS

By Ray Gronberg

gronberg@heraldsun.com; 419-6648

DURHAM -- A washed-out bridge in northern Durham County is drawing complaints from Rougemont residents, N.C. State University administrators and County Commissioners, all of whom want it fixed.

The bridge carried State Forest Road over the Flat River until early September 2008, when rains from Tropical Storm Hanna knocked it down.

Now, residents of the area say the N.C. Department of Transportation is dragging its feet about replacing the crossing, at an estimated cost of about \$250,000, because few vehicles use the road.

But "not replacing this bridge endangers our community," said Linda Huff, a Rougemont-area resident who recently asked County Commissioners to join in lobbying DOT to put in a new crossing.

County leaders agreed. "There's a compelling case here in terms of health and safety issues," Commissioner Ellen Reckhow said.

The crossing's strategic value is tied to its location amid N.C. State's George Watts Hill Demonstration Forest, a 2,450-acre tract of land the university's College of Natural Resources uses to train students in forestry management.

The summertime training sessions are based out of a facility called Camp Slocum, which is off State Forest Road just west of the downed bridge.

Typically, 40 to 60 students, five teaching assistants and three instructors work in the forest each summer, College of Natural Resources Dean Robert Brown said in a letter last year to DOT officials asking for their help in replacing the bridge.

Students spend six or nine weeks in the forest, depending on their major, according to a posting on the Web site of N.C. State's Department of Forestry and Environmental Resources.

The forest is also open to recreational users. There are a number of trails on the property that are popular with hikers, horseback riders and mountain bikers.

The bridge's destruction creates a number of problems, the most serious of which is potential delays in emergency response if medics or firefighters aren't sure which side of the river they're going to.

Their closest departure point is from the Bahama Volunteer Fire Department's station near the corner of Quail Roost and Bahama roads. The station is about four road miles away from Camp Slocum, assuming a route keeping west of the river along Quail Roost Road, U.S. 501, Moores Mill Road and State Forest Road.

The problem, Brown said, is that Camp Slocum shows up in the Durham 911 center's computers as being on Hampton Road, east of the river.

Brown said that while Bahama firefighters generally are aware of the discrepancy, he worries a dispatch error could add up to 15 minutes to emergency responders' travel times.

He added that the Bahama department's chief, Len Needham, told him the volunteers answered 10 fire and seven medical calls in the forest in the 12 months preceding March 2009.

Supporters of a bridge replacement also worry about dispatch problems affecting aid to the forest's recreational users, and about the bridge's absence slowing the response to wildfires. There are a number of homes bordering the property.

Finally, Brown noted that the bridge's absence also inconveniences students and faculty with work to do in the forest east of the river.

Brown's letter didn't include any offer for N.C. State -- a \$1.1 billion-a-year business, according to its financial statements -- to help pick up the bill for replacing the bridge.

Neither Huff nor commissioners raised that possibility either when they discussed the situation last week. Commissioners suggested looking to federal economic-stimulus dollars, provided officials could tap that money without delaying priority road projects.

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Modified Thu, Feb 25, 2010 12:28 AM

Tonight's your chance to shape N.C. 54 stretch

CHAPEL HILL Triangle residents are invited to join a community discussion this evening to help local leaders make long-range plans for guiding growth and improving mobility along a clogged stretch of N.C. 54 between Chapel Hill and Interstate 40.

The corridor centers on the most congested interchange west of Research Triangle Park, and it serves as a busy gateway linking Chapel Hill and southwest Durham.

Traffic counts have grown steadily, with about 47,000 cars a day on N.C. 54. Regional transit plans include a light-rail line along N.C. 54 and I-40, with several transit stops that would be focal points for residential and commercial development.

The recent economic slowdown has chilled plans for major projects that would add more traffic to the corridor, postponing the next growth spurt. That bought some time for local officials whose decisions will help determine growth and traffic patterns in the neighborhood.

"But we're starting to see a little more activity in that corridor, with people starting to talk about developing some of these tracts," said Leta Huntsinger, who is guiding the N.C. 54/I-40 Corridor Study for the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization.

Tonight's workshop is the second of three scheduled for the study.

More than 100 people met at the Friday Center in December to air ideas for transportation improvements and growth priorities. Tonight, citizens will be asked to comment on alternative scenarios for guiding growth and traffic over the next 25 years.

The choices include different options for widening N.C. 54 and building a strong network of nearby streets called collectors, which could diffuse some of the traffic now concentrated on N.C. 54.

With UNC Hospitals already expanding with clinics and offices at Meadowmont on N.C. 54, one scenario includes the prospect of dense medical and research office development that would make the corridor even busier. Another approach would keep density more limited.

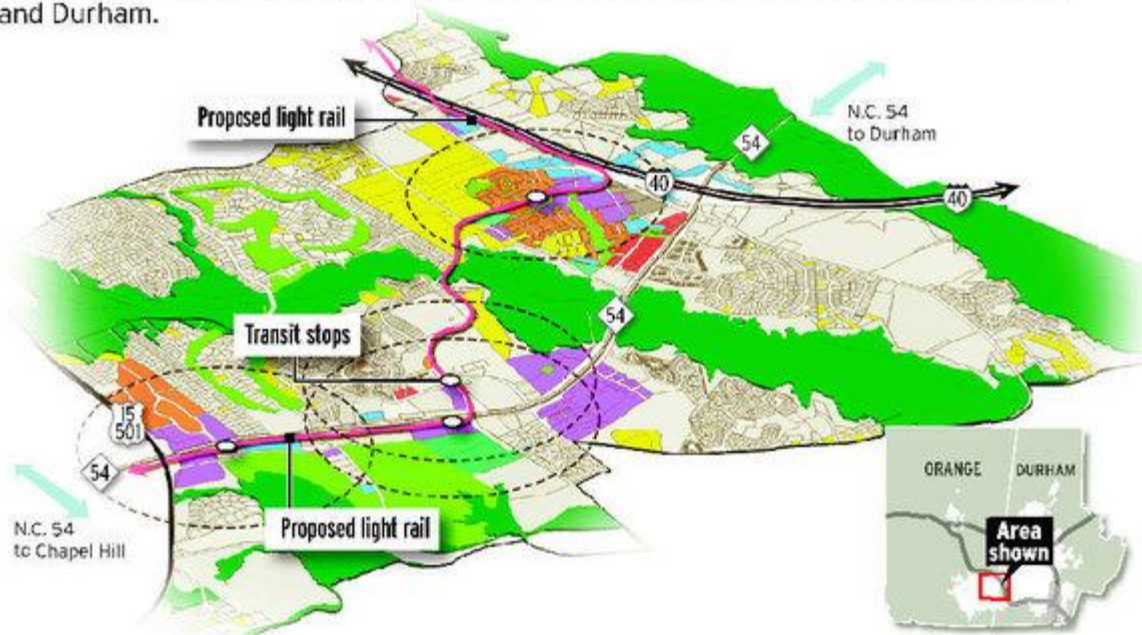
What's next?

After tonight's discussion, planners will develop a recommended scenario for the N.C. 54/I-40 corridor, then submit it for discussion at a final public workshop in May. A master plan will be presented later this year to help local and regional boards make transportation and land-use decisions for the next 25 years.

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A POSSIBLE FUTURE

One scenario for 2035 shows commercial and university development centered around light-rail transit stops on the busy N.C. 54 - Interstate 40 corridor between Chapel Hill and Durham.



Source: Durham-Chapel Hill-Carrboro Metropolitan Planning Organization

The News & Observer

N.C. 54 at top of DOT's priority list

By Ray Gronberg, gronberg@heraldsun.com; 419-6648

DURHAM -- Don't go counting the extra lanes before they're hatched, but engineers at the N.C. Department of Transportation agree with commuters that N.C. 54 between Interstate 40 and N.C. 55 near the Parkwood neighborhood needs some work.

In fact, staff at DOT believes a road-improvement project of some sort targeting that two-lane, 2-mile stretch of blacktop would offer such a boost to mobility in the Triangle that it merits attention as a No. 1 priority for all of North Carolina.

N.C. 54's prospective accession to that status stems from the agency's attempt to examine and rank the full range of road projects cities, towns and counties would like it to take from 2015 to 2020.

The new ranking system is supposed to take some of the politics out of road-building decisions, and will feed later this year into the draft of DOT's next multi-year transportation improvement program.

Durham officials got word of the ranking over the weekend and by Tuesday were crowing a bit about how well N.C. 54 had fared in it.

While there's no design and no agreement on what an improvement to the corridor might look like, they think the ranking will induce DOT officials to earmark money to start planning one.

N.C. 54's proper functioning is critical because "you need a decent parallel road to I-40 that drives right through the heart of one of the state's economic engines, RTP," said City Councilman Mike Woodard, who chairs a joint transportation group for counties in the western Triangle.

"If we want RTP to continue humming along as an economic engine, and want to promote people living in close proximity to RTP, we've got to provide them solid alternatives to using I-40 exclusively," Woodard added.

DOT officials, however, have been cautioning local governments that funding decisions will be influenced as much by revenue shortfalls as the rankings.

The new rankings took more than 1,100 road projects, not including urban "loops" like Durham's proposed East End Connector that engineers are evaluating separately, or projects like the Alston Avenue widening that are almost ready to go.

The 1,100-some future projects would cost more than \$45 billion, DOT says.

But the agency is only likely to have \$9 billion to spend on them from 2015 to 2020.

Agency leaders still have to figure out how much of that money to commit to region-level improvements, as opposed to local-only projects or "strategic highway corridors" like the interstates and federal-numbered surface roads that promise statewide impact.

State Transportation Secretary Gene Conti has the leeway to tinker with the rankings a bit, and officials also have to decide on a split of money between projects likely to boost mobility, projects addressing safety and projects that mostly involve repairs.

Local officials had listed the Parkwood stretch of N.C. 54 high on the list of 25 road projects they'd like to see the state address in the second half of this decade.

They envision a widened, divided road that includes "transit accommodations, bike lanes and sidewalks," making it a true "multimodal project" in the argot of the planning trade, city Transportation Director Mark Ahrendsen said.

Also appearing on the state's regional mobility list, at No. 17, are improvements to another stretch of N.C. 54, the one on the Durham/Chapel Hill border from I-40 west to Barbee Chapel Road.

That segment already has four travel lanes, but officials agree it's not likely to continue handling the load as the area grows. A locally funded planning effort is already under way, and is looking at how land-use decisions would shape needs for extra lanes and transit.

Ahrendsen noted that the second in a series of public workshops on the border segments of N.C. 54 is coming up Thursday, from 5 to 8 p.m. at the Friday Center in Chapel Hill.

Timing on transit tax eyed

By Ray Gronberg

gronberg@heraldsun.com; 419-6648

DURHAM -- Early planning in Durham, Orange and Wake counties all points to the likelihood that they'd use some of the proceeds of a half-cent sales surcharge tax for transit to pay for major, early expansions of bus service.

Even given conservative, recession-driven revenue projections, it looks like there'd be money enough to expand the Durham Area Transit Authority's offerings by a third and double service on Raleigh's Capital Area Transit, Durham Transportation Director Mark Ahrendsen said during a Tuesday briefing for Durham elected officials.

But one key question remains the timing of legislatively mandated, separate referendums on the tax in

each of the three counties.

Administrators have been assuming their governments would put the question the voters in the fall of 2011, but Tuesday's discussion showed the county commissioners who would decide the matter for Durham aren't sure conditions will be right then.

They and Triangle Transit General Manager David King all said the key issue would be the economy.

"For that to happen, the economy has got to get better," King said, referring to the fall 2011 timetable. "No just more [gross domestic product], but more jobs. People have got to feel in their gut a sense of economic security."

King and Ahrendsen stressed, however, that local officials have to spend the remainder of 2010 preparing the transit plans for each of the counties that the General Assembly last year set as precondition for any referendums.

"It's easy to postpone the vote based on economic conditions not having measured up," King said. "But if conditions do improve, if the plan's not ready you can't force it to be ready in time for a vote in fall 2011."

Tuesday's briefing -- conducted for members of the City Council and County Commissioners -- highlighted some of the design and political issues the plans have to address.

Officials figure on front-loading bus service in any plan to show voters an early return on their money, build ridership and generate more support for transit.

But as they have for a couple decades now, they see rail service eventually becoming the backbone of a regional system.

And as it always has, that confronts officials with a design dilemma -- namely, that there isn't any one rail technology that promises to work immediately everywhere in the Triangle.

Planners have long assumed that in relatively dense places like Chapel Hill and western Durham, commuters would board streetcar-like "light rail" cars capable of frequent stops.

But to get from there to more distant locales like Raleigh or Clayton, it looks like they'd need heavier, mainline-capable rail cars that would run faster but make fewer stops.

Current thinking by administrators and Triangle Transit officials suggests using both technologies -- as did an earlier plan stymied by Bush administration policy changes, and a spring 2008 report from a citizens group tasked with reviewing transit policy.

Durham Mayor Bill Bell, however, said Tuesday he prefers the idea of using light rail throughout the system, to create what he termed "a seamless" experience for riders.

Transit planners floated that as a possibility starting in the fall of 2008, when officials with the N.C. Railroad signaled they'd be open to seeing light rail share the existing rail corridor between Durham and Raleigh.

But light rail is roughly four times as expensive as mainline-style service, mainly because of the provisions builders would have to make for powering the cars electrically.

Ahrendsen said the recession-lowered revenue estimates for the sales-tax surcharge county finance types are insisting on don't promise money enough to cover that everywhere.

There's also not enough housing around RTP to justify the extra expense of light rail between Durham and Raleigh.

"We're not really fixing the RTP issue until redevelopment happens" there, City Councilman Mike Woodard said, backing Ahrendsen.

Bell remained dubious. "Long term, I'm not convinced if we start with express rail we'll ever get the light rail piece," he said.

Published Wed, Mar 03, 2010 05:24 AM

Modified Wed, Mar 03, 2010 12:34 PM

Looking for the bus? GPS can find it for you

Catrin Davies was late picking up her son from child care, because her Triangle Transit bus was early.

"I was on the other side of the road when it arrived, and because of the traffic I couldn't get across before it left," said Davies, a medical researcher at UNC-Chapel Hill, who waited 30 minutes in the afternoon chill for the next bus to her home in Durham.

"If I had known it was running a few minutes early," Davies said, "I could have left my office in time to catch it."

Riders such as Davies in Chapel Hill and Raleigh now have real-time satellite technology to tell them when the bus is coming. And two more local bus lines will add the technology in the coming year.

By early 2011, five Triangle bus agencies will have GPS technology that tracks the speed and location of each bus and lets riders find out how soon their buses will arrive.

Triangle Transit and the Durham Area Transit Authority will spend \$1.2 million this year in federal stimulus money to outfit 131 buses. Riders will be able to check bus times on Internet browsers, cell phones and electronic message boards at some stops.

One likely bidder for these contracts is Digital Recorders Inc., based in Research Triangle Park. The company, with 80 employees, expects to rake in up to \$5.5 million in stimulus-funded contracts from transit agencies across the United States.

"Users of transit systems increasingly want good, real-time information," said David L. Turney, chief executive officer of Dallas-based DRI Corp., the RTP company's parent. "They want to know if the transit vehicle is coming, and they want to know if it is coming on time."

Raleigh's Capital Area Transit spent \$500,000 to equip its 65 buses with Digital Recorders gear. CAT recently introduced its real-time bus-tracking service online at www.raleighrides.org.

Blue CAT bus icons scuttle around their routes on a Google map. A mouse click reveals an up-to-the minute prediction for arrival at the next major stop. Riders can subscribe to alerts that will notify them when a particular bus is due.

Message boards post times for riders waiting at CAT's four busiest transfer points - Moore Square, WakeMed-Raleigh, Crabtree Valley Mall and Triangle Towne Center.

"If you're an occasional rider, this provides a greater level of confidence," said David Eatman, Raleigh transit administrator. The arrival predictions aren't foolproof, but they'll make transit more reliable for many users, he said.

"The biggest drawback ... is that anxiety when you're standing at the stop and you have that doubt: Did I miss it, or is it delayed - and how long am I going to stand here?"

Chapel Hill Transit, the region's busiest bus line, began its real-time service in 2006. Riders can check buses at www.chtransit.org or www.nextbus.com .

"I use the bus to get around town as well as to go home," said Sharon Mays of Hillsborough, a data analyst at UNC-Chapel Hill. "If I have, say, a 10 o'clock meeting, I use the Web site to figure out what time I need to leave my office to get my bus."

System isn't glitch-free

Riders said signs and satellite systems aren't always right.

"Sometimes it says a bus is coming in 10 minutes or 5 minutes, but it doesn't necessarily show up," said Joshua Chiu of Durham, a physical therapist. "You're left waiting until who knows when."

Chiu was in a group of construction workers, nurses and researchers who stamped their feet in the cold one afternoon last week at a Chapel Hill Transit stop near UNC Hospitals. They watched a message board counting down the minutes they would wait for the buses taking them home.

"Sometimes it plays tricks on you," said Yvonne Dunlap, who works in the Lineberger Cancer Center. "Just now it said the FCX bus would come in 12 minutes - but when it got down to 8, it jumped back to 11 minutes."

Brian Fahey, customer service manager for Triangle Transit, said plans call for a shared Web site that will show bus locations and times for Durham Area Transit, Chapel Hill Transit, Triangle Transit, Capital Area Transit and N.C. State University's Wolfline.

Local software developers will be invited to use the bus data for their own Web sites and software applications.

Meanwhile, Fahey said, anyone with a cell phone will be able to check arrival times for any bus stop and receive the answer in a text message.

Davies, the researcher from Durham who commutes to UNC-CH, was glad to hear that Triangle Transit will add real-time information next year, and that riders will get text updates on their phones.

"With that text message, I think they'll be able to reach out to other people who don't have access to the Internet," Davies said.

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Friday, February 19, 2010

Regional rail effort chugs into stiff headwinds

Lagging tax revenue, sour electorate chief obstacles

Triangle Business Journal - by [Chris Baysden](#)

Steve Wilson

Triangle Transit's David King builds a new plan.

DURHAM – The dour economy is threatening to delay work on a proposed new regional rail system even before the project can get started.

The financial linchpin to constructing the system is a proposed half-cent sales tax in Wake, Orange and Durham counties. But the economic slowdown has reduced the amount of money that such a tax would be expected to generate. And local political and civic leaders, who once thought that such a measure could be put before the public in 2010, now are afraid to hold such a referendum this year.

“I don't think you're going to see it before 2011,” says Durham County Manager Mike Ruffin.

The sales tax in all three Triangle counties currently sits at 7.75 cents per dollar. **The North Carolina General Assembly** passed legislation in 2009 that gave Triangle counties the ability to hold referendums on an additional half-cent tax. When the idea was first thrown around as a funding source a few years ago, a **Special Transit Advisory Committee** estimated that it would generate about \$5 billion that could be used on bus and rail projects through 2035.

But thanks to the economic downturn, the latest estimates project that number would decline by \$470 million. Both estimates are in year of expenditure dollars. While the decline wouldn't kill the project, it could alter the system's implementation.

“Those numbers clearly indicate we'd have less money to deal with and would take longer to build out the system,” says Wake County Commissioner Joe Bryan.

After the region's first attempt to build a regional rail system failed in 2007 when the system failed to gain federal funding, local officials went back to the drawing board and developed the outline of a plan that called for bolstered bus service and the construction of a rejiggered, 56-mile rail system.

Triangle Transit General Manager David King says that if sales tax figures continue to come in below previous estimates, the revenue situation could cause the area to delay the construction of rail segments and the purchases of buses, as well as reduce the number of buses that are added to the transit system.

“Basically, it affects what we can afford,” King says.

The financial picture could improve if the project were to win federal funding. But planners would like to be able to build the initial segment without counting on federal money.

Triangle Transit expects to hire **URS Corp.** North Carolina as a program management consultant on the proposed project by early March. That contract is worth about \$2 million.

Local transit planners currently are thinking about combining an approach that incorporates both commuter rail, which conceptually could run on existing tracks, with light rail trains running on newly constructed tracks.

Tentative plans call for commuter rail service to start by 2018. Triangle Transit, the **North Carolina Railroad Co.** and the state Department of Transportation all could be involved in that effort.

The diesel-powered service is expected to cost in the neighborhood of \$12 million to \$15 million a mile. It would include the construction of stations and the purchase of trains. Planners would like for it to run between Johnston County and Durham County.

The first electric-powered light rail segment expected to be built would stretch 11.5 miles, starting at Triangle Town Center and going to downtown Raleigh before heading out to the State Fairgrounds. Planners hope that segment would come on line by 2020.

A 4.5-mile section connecting the fairgrounds to Cary is tentatively slated to start service five years later. Light rail costs roughly \$55 million per mile to build.

Over in Durham and Orange, planners hope to build a 17-mile light rail segment from UNC Hospitals in Chapel Hill to Alston Avenue in Durham. That segment is projected to open around 2024.

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NCDOT Strategic Prioritization Results (Highway)

		<u>Goal</u>						<u>Tier</u>		<u>Submode</u>	
		Health						Statewide		Interstate Pav	
RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESC		
1 (13)	34.41	45391		05	DURHAM, GRANVILLE	I- 85	US 70	NC 56	MILL AND RESURFACE SECTIONS FROM NC R DURHAM COUNTY TO GRANVILLE COUNTY		

2/22/10

These rankings represent initial results based on data and need, which have not been subject to legal, and scheduling constraints. This list includes proposed projects that may end up being funded through other programs besides the State Transportation Improvement Plan. Therefore, while they appear in this initial listing, some of these projects will ultimately NOT be included in the Draft State Transportation Improvement Plan. This is only the first of many steps to creating the Draft State Transportation Improvement Plan.

NCDOT Strategic Prioritization Results (Highway)

		<u>Goal</u> Health				<u>Tier</u> Subregional			<u>Submode</u> Modernization	
RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESCRIPTION	
1 (12)	26.1	44277		08	CHATHAM	SR 1721 (LYSTRA RD)	US 15, US 501	SR 1008 (FARRINGTON POINT RD)	LYSTRA ROAD (SR 1721) TO FARRINGTON POINT RD SAFETY IMPROVEMENT	
2 (17)	16.76	44273		08	CHATHAM	SR 1762 (JEREMIAH DR)	SR 1721 (LYSTRA RD)	END	JEREMIAH DRIVE (SR 1762) TO END) ELEVATION FLOOD CONTROL.	

2/22/10

These rankings represent initial results based on data and need, which have not been subject to legal, and scheduling constraints. This list includes proposed projects that may end up being funded through other programs besides the State Transportation Improvement Plan. Therefore, while they appear in this initial listing, some of these projects will ultimately NOT be included in the Draft State Transportation Improvement Plan. This is only the first of many steps to creating the Draft State Transportation Improvement Plan.

NCDOT Strategic Prioritization Results (Highway)

		<u>Goal</u>					<u>Tier</u>		<u>Submode</u>	
		Mobility					Regional		Highway	
RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESC	
1 (1)	81.03	44259		05	DURHAM	NC 54	I- 40	NC 55	NC 54 (I-40 EAST TO V MULTI-LANE DIVIDED V ACCOMMODATIONS, E SIDEWALKS.	
2 (17)	57.94	44274		05	DURHAM	NC 54	I- 40	BARBEE CHAPEL RD	NC 54 (I-40 WEST TO E WIDEN TO 6-LANE DI /	
3 (91)	32.16	43462	U-2405	05	DURHAM	NC 55	ML KING, JR PKWY		M. L. KING, JR. PARK M CONSTRUCT INTERC H OVER RAILROAD TR (
4 (107)	30.25	44276		05	DURHAM	NC 751 (HOPE VALLEY RD)	S ROXBORO RD	NC 54	NC 751 (S. ROXBORO I TO 4-LANE, BIKE LANE E	
5 (134)	26.76	43623	U-4010	05	DURHAM	NC 98 (HOLLOWAY STREET)	US 70 (EAST OF US 70)	EAST OF JUNCTION ROAD	NC 98 (HOLLOWAY ST I 70 TO EAST OF JUNCT FOR CENTER TURN I A	

2/22/10

These rankings represent initial results based on data and need, which have not been subject to legal, and scheduling constraints. This list includes proposed projects that may end up being funded through other programs besides the State Transportation Improvement Plan. Therefore, while they appear in this initial listing, some of these projects will ultimately NOT be included in the Draft State Transportation Improvement Plan. This is only the first of many steps to creating the Draft State Transportation Improvement Plan.

NCDOT Strategic Prioritization Results (Highway)

Goal
Tier
Submode
Mobility
Statewide
Highway

RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESC
1 (43)	59.73	42714	I-3306A	07	ORANGE	I- 40	I- 85	US 15, US 501	I-85 IN ORANGE COUNTY (DEAN FREEWAY) IN ORDER TO ADD ADDITIONAL LANES TO COUNTY LINE. I-85 TRUCK PURPOSE WIDENING
2 (47)	58.69	44257		07	ORANGE	US 15 (FORDHAM BLVD), US 501 (FORDHAM BLVD)	US 15, US 501, NC 86 (COLUMBIA ST)	SR 1742 (EPHESUS CHURCH RD)	(US 15-501) FORDHAM BLVD (COLUMBIA ST)/US 15-1742 (EPHESUS CHURCH WIDE-OUTSIDE LANES ACCOMMODATIONS.
3(63)	54.14	43506	U-2807	05	DURHAM	US 15, US 501	SR 1010 (FRANKLIN STREET)	US 15 (BYPASS), US 501 (BYPASS)	I-40 TO US 15-501 BYPASS MAJOR CORRIDOR IMPROVEMENT
4 (100)	45.69	42689	I-0305B	07	ORANGE	I- 85	SR 1709 (EAST OF SR 1709)	DURHAM COUNTY LINE	I-40 AT HILLSBOROUGH COUNTY LINE. WIDE JUNCTION RECONSTRUCT INTERSECTIONS - EAST OF DURHAM COUNTY LINE
5 (107)	44.53	42688	I-0305A	07	ORANGE	I- 85	SR 1006 (NEAR HILLSBOROUGH)	SR 1709 (EAST OF SR 1709)	I-40 AT HILLSBOROUGH COUNTY LINE. WIDE JUNCTION RECONSTRUCT INTERSECTIONS - SR 1006 HILLSBOROUGH TO DURHAM

2/22/10

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NCDOT Strategic Prioritization Results (Highway)

Goal
Mobility
Tier
Subregional
Submode
Highway

RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESCRIPTION
1 (26)	71.8	43673	U-4716B	05	DURHAM, WAKE	CHURCH STREET	NC 54	HOPSON ROAD	PROJECT A - REALIGN AND CONSTRUCT DOUBLE END BRIDGE OVER HOPSON ROAD AT-GRADE CROSSING. PROJECT B - EXTEND CHURCH STREET INCLUDING SIDEWALK LANES, TO HOPSON ROAD CHURCH ST. AT-GRADE CROSSING. PROJECT C - CONSTRUCT UNDERPASS FROM SOUTH SIDE OF HOPSON ROAD TO NORTH SIDE OF HOPSON ROAD PARKWAY.
2 (35)	63	44255		05	DURHAM	SR 1118 (FAYETTEVILLE RD)	WOODCROFT PKWY	SR 1171 (RIDDLE)	SR 1118 (FAYETTEVILLE RD) FROM WOODCROFT PKWY TO RIDDLE RD (SR 1171) 4-LANE DIVIDED, BIKE LANES AND SIDEWALKS.
3 (38)	60.6	44248		05, 07	DURHAM, ORANGE	SR 1742 (EPHESUS CHURCH RD)	US 15, US 501	SR 1109 (FARRINGTON RD)	EPHESUS CHURCH RD FROM FARRINGTON RD TO US 15 AND US 501. BIKE LANES AND SAFETY IMPROVEMENTS.
4 (42)	58.2	44249		05, 07	DURHAM, ORANGE	SR 1734 (ERWIN RD)	US 15, US 501	NC 751	SR 1734 (ERWIN RD) FROM US 15 AND US 501 TO NC 751. BIKE LANES, SIDEWALKS AND IMPROVEMENTS (DESIGNED FOR LENGTH).
5 (87)	43.8	43093	R-2825	07	ORANGE	SR 1009 (S. CHURTON STREET)	I-40	ENO RIVER	I-40 TO ENO RIVER. BIKE LANES WITH LANDSCAPING, BIKEWAY, BIKEWAY BRIDGE NO. 240 OVER RAILROAD.
6 (104)	39	44262		07	ORANGE	SR 1780 (ESTES DRIVE)	NC 86	CASWELL RD	ESTES DRIVE (NC 86) FROM CASWELL RD TO I-40. WIDEN EXISTING ROAD TO TWO 12-FOOT TRAVEL LANE WITH BIKEWAY LANES AND SIDEWALKS.

2/22/10

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NCDOT Strategic Prioritization Results (Highway)

		<u>Goal</u>					<u>Tier</u>		<u>Submode</u>	
		<u>Mobility</u>					<u>Subregional</u>		<u>Highway</u>	
<u>RANK</u>	<u>SCORE</u>	<u>SPOT ID</u>	<u>TIP #</u>	<u>DIV</u>	<u>COUNTY(S)</u>	<u>ROUTE</u>	<u>FROM / CROSS STREET</u>	<u>TO</u>	<u>DESC</u>	
7 (109)	36.6	43518	U-2909	07	ORANGE	SR 1780 (ESTES DRIVE)	SR 1772 (GREENSBORO ST.)	NC 86	SR 1780 (ESTES DRIVE) (GREENSBORO STREET) TO ADD BIKE LANES AND TRANSIT ACCOMMODATIONS. CONSTRUCT A MULTI-LANE WILLIAMS STREET.	
8 (120)	34.2	44268		07	ORANGE	PINEY MOUNTAIN RD	NC 86	RIGGSBEE RD	PINEY MOUNTAIN RD (RIGGSBEE RD) TURN LANES, SIDEWALKS AND TRANSIT ACCOMMODATIONS.	
9 (131)	31.8	44278		07	ORANGE	SR 1010 (FRANKLIN ST), SR 1771 (MERRITT MILL RD)	E MAIN ST, BREWER LN		FRANKLIN ST/MERRITT MILL RD/E MAIN ST INTERSECTION IMPROVEMENTS.	
10 (136)	29.4	44269		07	ORANGE	SR 1006 (ORANGE GROVE ROAD)	SR 1006 (ORANGE GROVE RD)	US 70	ORANGE GROVE RD TO US 70 INTERSECTION AND BICYCLE LANES.	
11 (171)	22.2	44279		07	ORANGE	SR 1780 (ESTES DRIVE)	SR 1772 (GREENSBORO ST)		SR 1780 (ESTES DRIVE) (GREENSBORO STREET) ROUNDABOUT.	
12 (180)	19.8	43561	U-3436	07	ORANGE	SR 1148 (ENO MOUNTAIN RD.), SR 1192 (MAYO ST.)	SR 1006 (ORANGE GROVE ROAD)		SR 1148 (ENO MOUNTAIN RD.)/SR 1192 (MAYO STREET) INTERSECTION AND MAKE SAFETY IMPROVEMENTS. INCLUDE BICYCLE LANES AND SIDEWALKS.	
13 (212)	12.6	44275		05	DURHAM	SR 1004 (OLD OXFORD HWY)	US BUS 501 (ROXBORO RD)	HAMLIN RD	OLD OXFORD HIGHWAY (HAMLIN RD) EXPANDED TO 4 LANES, AND SIDEWALKS.	

2/22/10

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NCDOT Strategic Prioritization Results (Highway)

		<u>Goal</u>					<u>Tier</u>		<u>Submode</u>	
		<u>Mobility</u>					<u>Subregional</u>		<u>Highway</u>	
<u>RANK</u>	<u>SCORE</u>	<u>SPOT ID</u>	<u>TIP #</u>	<u>DIV</u>	<u>COUNTY(S)</u>	<u>ROUTE</u>	<u>FROM / CROSS STREET</u>	<u>TO</u>	<u>DESCRIPTION</u>	
14 (237)	7.8	43505	U-2805	07	ORANGE	NC 1777 (HOMESTEAD RD.)	SR 1009 (OLD NC 86)	NC 86	SR 1777 (HOMESTEAD) (OLD NC 86) TO NC 86. BICYCLE LANES, SIDE ACCOMMODATIONS, AND IMPROVEMENTS (DESIGN ALONG LENGTH).	
15 (248)	5.4	44892		07	ORANGE	SR 1843 (SEAWELL SCHOOL)	SR 1780 (ESTES)	SR 1777 (HOMESTEAD)	SEAWELL SCHOOL FOR ESTES) BICYCLE LANE TRANSIT ACCOMMODATION, INTERSECTION SAFETY (DESIGN MAY VARY BY	
16 (256)	4.6	43604	U-3808	07	ORANGE	ELIZABETH BRADY ROAD EXTENSION	US BUS 70 (SOUTH OF US 70 BUSINESS)	US 70 (NORTH OF US 70 BYPASS AT SR 1002 (ST. MARY'S ROAD)	ELIZABETH BRADY FOR SOUTH OF US 70 BUSINESS) ROAD). MULTI-LANE CROSSING OF ENO RIVER	
unranked	unranked	43162	R-3438	07	ORANGE	NEW ROUTE	US 70	NC 57	HILLSBOROUGH WEST TO NC 57. TWO LANES	
unranked	unranked	43514	U-2831B	05	DURHAM	BRIGGS AVENUE EXTENSION	RIDDLE ROAD	SR 1951 (SOUTH DRIVE)	BRIGGS AVENUE EXTENSION ROAD TO SR 1951 (SOUTH) LANES ON MULTI-LANE	
unranked	unranked	43676	U-4724	05	DURHAM	CORNWALLIS ROAD	SOUTH ROXBORO ROAD	UNIVERSITY DRIVE	CORNWALLIS ROAD, SOUTH ROAD TO UNIVERSITY PEDESTRIAN FEATURES	
unranked	unranked	45383	U-4716D	05	DURHAM	SR 1978 (HOPSON ROAD)	SR 1999 (DAVIS DRIVE)	NC 54 (MIAMI BLVD)	WIDEN TO MULTI-LANE	

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NCDOT Strategic Prioritization Results (Highway)

Goal
Safety

Tier
Subregional

Submode
Safety (I, R, U)

RANK	SCORE	SPOT ID	TIP #	DIV	COUNTY(S)	ROUTE	FROM / CROSS STREET	TO	DESC
1 (2)	62	44250		08	CHATHAM	SR 1717 (JACK BENNETT RD)	US 15, US 501	SR 1721 (LYSTRA RD)	JACK BENNETT RD (SR 1717) AT LYSTRA RD (SR 1721) IMPROVEMENTS.
2 (6)	52.84	44261		07	ORANGE	SR 1772 (NORTH GREENSBORO ST)	WEAVER ST	SHELTON ST	SR 1772 (NORTH GREENSBORO ST) (WEAVER ST TO SHELTON ST) MEDIAN, BICYCLE SIGNAGE
3 (18)	20.8	44272		08	CHATHAM	SR 1721 (LYSTRA RD)	SR 1717 (JACK BENNETT RD)	W SIDE OF N CHATHAM ELEMENTARY	LYSTRA ROAD (SR 1721) AT SR 1717 (SR 1717) TO WEST SIDE OF CHATHAM ELEMENTARY LENGTH OF TURN LANE

2/22/10

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Bicycle & Pedestrian

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
3	44283		05	DURHAM		UNIVERSITY DR (GARRETT RD TO NC RD)) BIKE LANES AND SIDEWALKS.
57	44349		07	ORANGE		BOLIN CREEK PHASE IV (UMSTEAD P. NORTH, FOLLOW UMSTEAD DR TO E9 ALONG ESTES DR TO CAROLINA NOR PATH.
60	44282		05	DURHAM		NC 55 (AVONDALE DR) (US 501 BUS (F SR 1670 (E GEER ST)) BIKE LANES AN
68	44308		07	ORANGE		NC 86 (ML KING, JR BLVD/NC 86 CORP NORTH ST) SIDEWALKS AND BIKE LA
70	44289		05	DURHAM		SR 1669 (CLUB BLVD) (RUFFIN ST TO ST)) BIKELANES AND SIDEWALKS.
75	44311		07	ORANGE		NC 54 (US 15-501 (FORDHAM BLVD) T CHAPEL RD)) SIDEWALKS AND BIKE L
76	44292		05	DURHAM		SR 1666 (DEARBORN DR) (SR 1669 (E 1004 (OLD OXFORD RD)) BIKE LANES
78	44296		05	DURHAM		SR 1158 (W CORNWALLIS RD) (SR 130 SR 1127 (CHAPEL HILL RD))
79	44346		07	ORANGE		US 15-501 (FORDHAM BLVD) PEDESTI OVERPASS/UNDERPASS ACROSS FO BETWEEN SR 1902 (MANNING DR) AN FARM RD.
80	44300		05	DURHAM		SR 1945 (S ALSTON AVE) (CAPPS ST. (RIDDLE RD) AND CARPENTER FLETC 1977 (SEDWICK RD)) BIKE LANES AND
unranked	44281		05	DURHAM		SR 1118 (FAYETTEVILLE RD) (SR 1158 RD) TO NELSON ST) BIKE LANES AND
unranked	44285		05	DURHAM		SR 1118 (FAYETTEVILLE ST) (SR 1158 RD) TO NC 147) SIDEWALKS.
unranked	44286		05	DURHAM		NC 98 (HOLLOWAY ST) (US 70 BUS (S 70) SIDEWALK AND WIDE OUTSIDE LA
unranked	44287		05	DURHAM		HILLANDALE RD (I-85 TO NC 147) BIKE SIDEWALKS.

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Bicycle & Pedestrian

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
unranked	44290		05	DURHAM		W CHAPEL HILL STREET (KENT ST TO SIDEWALKS.
unranked	44291		05	DURHAM		SR 1800 (CHEEK RD) (SR 1670 (E GEE ST) SIDEWALKS.
unranked	44293		05	DURHAM		NC 751 (HOPE VALLEY RD) (SR 1146 (TO US 15-501 BUS (DURHAM-CHAPEL LANES AND SIDEWALKS.
unranked	44294		05	DURHAM		E MAIN ST (HOOD ST TO NC SS (ALST SIDEWALKS.
unranked	44297		05	DURHAM		SR 1926 (ANGIER AVE) AND S DRIVER SIDEWALKS.
unranked	44299		05	DURHAM		US 15-501 BUSINESS (N MANGUM ST) INTERSECTION SIDEWALKS.
unranked	44301		05	DURHAM		SR 1110 (BARBEE CHAPLE RD) (NC 54 (STAGECOACH RD)) (DESIGN MAY VA LENGTH) BIKE LANES AND SIDEWALKS.
unranked	44303		05	DURHAM		SR 1113 (POPE RD) (SR 2220 (OLD DU HILL RD) TO SR 1114 (EPHESUS CHURCH LANES AND SIDEWALKS.
unranked	44304		05	DURHAM		NC 98 (HOLLOWAY ST) (SR 1838 (JUN 1919 (LYNNRD)) SIDEWALK AND WIDE
unranked	44306		05	DURHAM		E MAIN ST (GARY ST TO S DRIVER ST
unranked	44314		07	ORANGE		SR 1156 (NASH ST) (SR 1328 (FAUCET 1144 (DIMMOCKS MILL)) SIDEWALKS.
unranked	44320		05	DURHAM		SR 1102/SR1977 (SEDWICK RD) (SR 1102 DR) TO SR 1945 (S ALSTON AVE)) BIKE LANES AND SIDEWALKS.
unranked	44321		07	ORANGE		MORGAN CREEK PHASE II (FROM THURGOOD TO CARRBORO TOWN LINE) MULTI-USE PATH.
unranked	44322		07	ORANGE		NC 54 SIDEPATH (JAMES ST TO ANDERSON ST) MULTI-USE PATH.
unranked	44323		07	ORANGE		US 15-501 (FORDHAM BOULEVARD) (S ALSTON AVE) TO ELLIOTT RD) SIDEWALKS.

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Bicycle & Pedestrian

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
unranked	44324		07	ORANGE		SR 1994 (CULBRETH RD) (ADAM WAY LEVEL)) SIDEWALKS.
unranked	44325		07	ORANGE		SR 1009 (OLD NC 86) (SR 1009 (HILLSIDE RD) (SR 1777 (HOMESTEAD RD))(DESIGN MAY VARY ALONG LENGTH) SIDEWALKS AND BICYCLE LANES.
unranked	44326		07	ORANGE		SR 1008 (MOUNT CARMEL CHURCH RD TO BENNETT RD) SIDEWALKS AND BICYCLE LANES.
unranked	44327		07	ORANGE		SR 1900 (OLD MASON FARM RD/FINLEY RD) SIDEWALKS AND BICYCLE LANES.
unranked	44328		07	ORANGE		SR 1009 (OLD NC 86) (SR 1777 (HOMESTEAD RD) (SR 1727 (EUBANKS RD)) (DESIGN MAY VARY ALONG LENGTH) SIDEWALKS AND BICYCLE LANES.
unranked	44330		07	ORANGE		SR 1727 (EUBANKS RD) (ROGERS RD) SIDEWALKS AND BICYCLE LANES.
unranked	44331		07	ORANGE		HORACE WILLIAMS TRAIL (HOMESTEAD RD) CAROLINA NORTH TO THE TOWN OF OPIKONING ADJACENT TO THE NORFOLK SOUTH RAILROAD (FORMERLY SOUTHERN RAILROAD GRADE).
unranked	44333		07	ORANGE		NC 86 (US 70A TO I-40) WIDE OUTSIDE LANES.
unranked	44335		07	ORANGE		SR 1919 (S GREENSBORO ST) (OLD PLYMOUTH RD) SR 1771 (MERRITT MILL RD)) SIDEWALKS AND BICYCLE LANES.
unranked	44338		07	ORANGE		CLELAND DR/BURNING TREE DR (CLELAND DR) SIDEWALKS.
unranked	44339		07	ORANGE		SR 1727 (EUBANKS RD) (SR 1009 (OLD NC 86) (SR 1777 (HOMESTEAD RD) (SR 1771 (MERRITT MILL RD)) (DESIGN MAY VARY ALONG LENGTH) SIDEWALKS AND BICYCLE LANES.
unranked	44342		07	ORANGE		SR 1008 (MOUNT CARMEL CHURCH RD TO CHATHAM COUNTY LINE) BICYCLE LANES.
unranked	44344		07	ORANGE		SR 1009 (OLD NC 86) (I-40 TO SR 1727) WIDE OUTSIDE LANES.
unranked	44345		07	ORANGE		18 CHAPEL HILL INTERSECTIONS-BICYCLE AND PEDESTRIAN IMPROVEMENTS.

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NCDOT Strategic Prioritization Results (Non-Highway)

TAC 3/10/10 Attachment 21

Mode
Bicycle & Pedestrian

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
unranked	44351		07	ORANGE		BOLIN CREEK/LITTLE CREEK GREEN COMMUNITY CENTER TO PINEHURST PATH.

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Public Transport

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
2	46250	TA-4726B	07	ORANGE	(CHAPEL HILL TRANSIT),	REPLACEMENT BUSES - ARTICULATE
4	46244	TA-4923	05	DURHAM	(DURHAM/DATA),	REPLACEMENT HYBRID BUSES 2017 \$8,400,000
6	46253	TA-4818A	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	REPLACEMENT BUSES
20	46269	TA-4726A	07	ORANGE	(CHAPEL HILL TRANSIT),	REPLACEMENT BUSES
24	46263	TA-5019	05	DURHAM	(DURHAM/DATA),	REPLACEMENT VANS (15)
30	46273	TA-4748	07	ORANGE	(CHAPEL HILL TRANSIT),	REPLACEMENT PARATRANSIT VEHIC \$467,000; 20175 VANS \$515,000
35	46285	TA-4979	07	ORANGE	(CHAPEL HILL TRANSIT),	REPLACEMENT VANS - SAFE-RIDE
36	46284	TA-4994B	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	REPLACEMENT: PARATRANSIT FLEET
39	46290	TA-4981	07	ORANGE	(CHAPEL HILL TRANSIT),	REPLACEMENT: SEDANS/WAGONS/4)
40	46299		05	DURHAM	(DURHAM/DATA),	REPLACEMENT BUSES: ADA VANS FY \$900,000.
49	46347	TE-4903B	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	FIXED GUIDEWAY: TRIANGLE TRANSIT SERVICE-RALEIGH-RTP-DURHAM FY : OF-WAY \$42,000,000; FY 2017-2019 C \$286,800,000
50	46348		05	DURHAM	(DURHAM/DATA),	FIXED GUIDEWAY: NCRR GRADE SEP TRACK REALIGNMENTS IN DURHAM C
57	46358	TE-4706A	07	ORANGE	(CHAPEL HILL TRANSIT),	FIXED GUIDEWAY: LIGHT RAIL SERVI CHAPEL HILL-RIGHT-OF-WAY
58	46357	TE-4903A	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	FIXED GUIDEWAY: LIGHT RAIL SERVI DURHAM DESIGN PHASE 1
60	46304		05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	REPLACEMENT VANS 58 VANPOOL V,
69	46341	TA-4755	05	DURHAM	(DURHAM/DATA),	EXPANSION HYBRID BUSES 2015 2 BU
72	46369	TE-4706B	05, 07	DURHAM, ORANGE	(CHAPEL HILL TRANSIT),	FIXED GUIDEWAY: LIGHT RAIL - DURH ALTERNATIVES ANALYSIS, PE AND DI
83	46376	U-5119	05, 07	DURHAM, ORANGE	(CHAPEL HILL TRANSIT),	FIXED GUIDEWAYS: BUS RAPID TRAN IMPROVEMENTS

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Public Transport

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
90	46328	TD-4945	05	DURHAM	(DURHAM/DATA),	FACILITY: PARK AND RIDE - LAND FOR PARK-N-RIDE LOTS
120	46379		05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	EXPANSION BUSES
129	46382	TA-4995	07	ORANGE	(CHAPEL HILL TRANSIT),	EXPANSION BUSES 2015 5 BUSES \$1
138	46385	TA-4992B	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	EXPANSION VANPOOL FLEET
141	46394	TA-4993B	05, 07	DURHAM, ORANGE	(TRIANGLE TRANSIT),	EXPANSION PARATRANSIT FLEET
142	46386		07	ORANGE	(CHAPEL HILL TRANSIT),	EXPANSION BUSES - HILLSBOROUGH
151	46389	TD-4710	07	ORANGE	(CHAPEL HILL TRANSIT),	FACILITY: PARK AND RIDE 1,000 SPAC
153	46393		07	ORANGE	(CHAPEL HILL TRANSIT),	FACILITY: HILLSBOROUGH - TRAIN ST MODAL CENTER
166	46367	TT-4911	05	DURHAM	(DURHAM/DATA),	TECHNOLOGY: REAL TIME TRAVEL IN
167	46395	TG-4958	05	DURHAM	(DURHAM/DATA),	ROUTINE CAPITAL: 2017 25 SHELTER BENCHES
171	46396	TG-4732	07	ORANGE	(CHAPEL HILL TRANSIT),	ROUTINE CAPITAL: REPLACE SERVIC
182	46298		05	DURHAM	(DURHAM/DATA),	ROUTINE CAPITAL: REPLACE SERVIC

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NCDOT Strategic Prioritization Results (Non-Highway)

Mode Rail

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
15	45349	P-3819L	05	DURHAM		CREATE GRADE SEPARATION AT ELLIS ROAD. NCRR H 57.6
22	45346	P-3819H	07	ORANGE		HILLSBOROUGH NEW STOP, CONSTRUCTION AND PLATFORM AND CLOSURE OF HILLSBOROUGH CROSSING. NCRR H 41.7
26	45347	P-3819J	05	DURHAM		H 42 CURVES REALIGNMENT - 5 CURVES. NCRR H 41.7 - 43.8
30	45348	P-3819K	05	DURHAM		UNIVERSITY STATION MAJOR MAINLINE REALIGNMENT REPLACES FIVE SHARP CURVES AND ONE MILE PASSING SIDING, H44.9 TO H47.8. RAILROAD BRIDGES, GRADE SEPARATION AT GREENBRIER AT-GRADE CROSSING AND CARRBORO. CREATES EXTENSION OF FUNSTON STATION. NCRR H 44.5 - 48
54	45371	P-3819AA	07	ORANGE		CURVE REALIGNMENT WEST OF HILLSBOROUGH. REPLACE BRIDGE OVER ENO RIVER.
55	45372	P-3819AB	05	DURHAM		DOUBLE TRACK FUNSTON TO DURHAM. BRIDGES FOR ADDITIONAL TRACK AND TRACK GEOMETRY. NCRR H48 - 54.5
56	45373	P-3819AC	05	DURHAM		DOUBLE TRACK 2 MILES FROM DURHAM TO D&S JUNCTION. NCRR H 54.5 - 56.5
57	45374	P-3819AD	05	DURHAM		EXTENSION OF EAST DURHAM SIDING AND REALIGNMENT OF RAILROAD FROM CARRBORO TO ALEXANDER DRIVE, INCLUDING GLOUCESTER SEPARATION, WRENN ROAD CROSSING AND ELLIS ROAD (EAST) GRADE SEPARATION. NCRR H 61.2
58	45375	P-3819AE	05	DURHAM		DOUBLE TRACK ALEXANDER DRIVE TO DURHAM. INCLUDES BRIDGE OVER I-40. NCRR H 61.2
unranked	42803	P-3802	05	DURHAM	DURHAM	STATION CONSTRUCTION.
unranked	43771	Z-4007B	07	ORANGE	CARRBORO	SR 1927 (BREWER ROAD) IN CARRBORO. SOUTHERN RAILWAY CROSSING 735 IMPROVEMENTS.

These rankings represent initial results based on data and need, which have not been subject to legal, and scheduling constraints. This list includes proposed projects that may end up being funded through other programs besides the State Transportation Improvement Plan. Therefore, while they appear in this initial listing, some of these projects will ultimately NOT be included in the Draft State Transportation Improvement Plan. This is only the first of many steps to creating the Draft State Transportation Improvement Plan.

NCDOT Strategic Prioritization Results (Non-Highway)

Mode
Rail

RANK	SPOT ID	TIP #	DIV	COUNTY(S)	LOCATION	DESCRIPTION
unranked	44955		07	ORANGE		HILLSBOROUGH TRAIN STATION/MUL \$1,500,000

These rankings represent initial results based on data and need, which have not been subject to legal, and scheduling constraints. This list includes proposed projects that may end up being funded through other programs besides the State Transportation Improvement Plan. Therefore, while they appear in this initial listing, some of these projects will ultimately NOT be included in the Draft State Transportation Improvement Plan. This is only the first of many steps to creating the Draft State Transportation Improvement Plan.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY HAVES PERDUE
GOVERNOR

1501 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1501

EUGENE A. CONTI, JR.
SECRETARY

February 11, 2010

Mr. J. Michael Woodard
Chair, Durham-Carrboro-Chapel Hill MPO
Durham Department of Transportation
101 City Hall Plaza
Durham, North Carolina 27701


Dear Mr. Woodard:

This is in regards to the MPO's request to expand its current Metropolitan Area Boundary (MAB) into previously non-included areas of Chatham and Orange counties. By authority delegated to me in my role as Secretary of Transportation, I am approving the MPO's request to expand its MAB into Orange County and not approving the MPO's request to expand its MAB into Chatham County.

Based on federal regulations, the MAB must include all areas that are included in the urbanized area in the most recent US Census. The current MAB in Chatham County meets this requirement. In addition, to be consistent with FHWA regulations and current Department practice, expansions of MAB's into areas not included in a MPO's urbanized boundary will not be approved over the objections of the local governing body. On December 23, 2009, the Department received a letter from the Chatham County Board of Commissioners objecting to the expansion of the MAB further into Chatham County.

I applaud your efforts to carry out an effective transportation planning process in the region. Once the US Census releases the revised urbanized boundaries from the 2010 census, the Department will review a revised MAB request. If you have any questions or need additional information, please contact Mike Bruff in the Transportation Planning Branch at 919-733-4705 or mbruff@ncdot.gov.

Sincerely,


Eugene A. Conti, Jr.

EAC/msb

Mr. J. Michael Woodard

February 11, 2010

Page 2

cc: John Sullivan, III, PE, FHWA
Jill Stark, FHWA
J. Micahel Woodard, Chair, DCHC MPO
Sally Kost, Chair, Chatham County Board of Commissioners
Charlie Horn, Manager, Chatham County
✓ Mark Ahrendsen, DCHC MPO TCC Chair
Paul Black, Triangle Area RPO
Mike Bruff, P.E., Transportation Planning Branch Manager

DCHC**DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION**

February 19, 2010

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

Sen. Bob Atwater
 300 N. Salisbury Street, Room 312
 Raleigh, NC 27603-5925

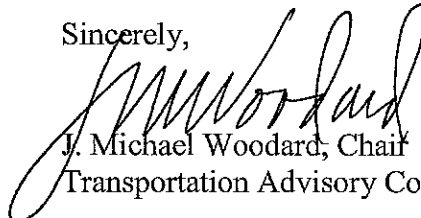
Dear Senator Atwater:

The Transportation Advisory Committee (TAC) of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) at its February 10, 2010, meeting adopted a resolution in support of evaluating and revising the North Carolina transportation equity formula (enclosed).

The transportation equity formula needs to be revised in order to better reflect the growing needs in North Carolina's urban areas. Projections from the North Carolina Metropolitan Mayors Coalition show that eighty-eight percent of the state's population growth from 2000 through 2030 will be in metropolitan areas. This growth will continue to increase traffic and congestion in these urban areas, and the transportation equity formula does not include any consideration of traffic and congestion levels. A revision of the formula is needed now to better reflect the changing nature of the state's transportation needs.

The DCHC MPO appreciates your support for addressing the transportation needs of our area. Please consider our MPO's position on this issue.

Sincerely,



J. Michael Woodard, Chair
 Transportation Advisory Committee

Enclosure

Cc: DCHC MPO State Legislative Delegation
 DCHC MPO TAC
 Mark Ahrendsen, City of Durham/DCHC MPO
 Thomas J. Bonfield, City of Durham
 Roger Stancil, Town of Chapel Hill
 Steve Stewart, Town of Carrboro
 Eric Peterson, Town of Hillsborough
 Mike Ruffin, Durham County
 Frank Clifton, Orange County
 Charlie Horne, Chatham County

RESOLUTION IN SUPPORT OF EVALUATING AND REVISING THE NORTH CAROLINA TRANSPORTATION EQUITY FORMULA

February 10, 2010

A motion was made by TAC Member William V. "Bill" Bell and seconded by TAC Member Mark Kleinschmidt for the adoption of the following resolution, and upon being put to a vote, was duly adopted.

WHEREAS, the North Carolina legislature implemented its Transportation Equity Formula as a result of the 1989 Highway Trust Fund Law;

WHEREAS, significant portions of the highway system envisioned in 1989 have not been completed;

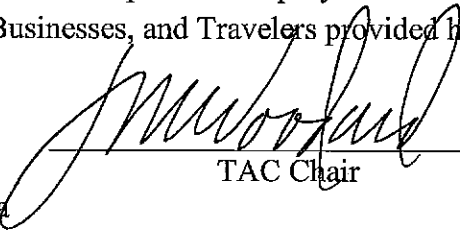
WHEREAS, the North Carolina Department of Transportation anticipates \$64 billion in unmet transportation needs through 2030;

WHEREAS, the Transportation Equity Formula makes it more difficult to fund significant, and costly, transportation needs such as replacing the I-85 Bridges over the Yadkin River;

WHEREAS, the North Carolina Department of Transportation is developing a new objective multi-modal project prioritization process intended to maximize mobility, safety, and infrastructure health; and

WHEREAS, the Transportation Equity Formula does not consider any of these factors in distributing transportation funds;

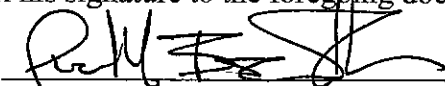
NOW THEREFORE, be it resolved that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee supports reevaluating, revising, and modifying the North Carolina Transportation Equity formula to better meet the current needs of North Carolina Citizens, Businesses, and Travelers provided here the 10th day of February, 2010.



TAC Chair

STATE of: North Carolina
COUNTY of: DURHAM

I, FREDERICK BRIAN RHODES, a Notary Public of Durham County, North Carolina do hereby certify that personally J. Michael Woodard appeared before me on the 10th day of February, 2010, to affix his signature to the foregoing document.



Notary Public



My commission expires 5.10.10



DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION

Member Governments

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

February 26, 2010

Mr. Don Voelker
 Director, Strategic Planning Office of Transportation
 North Carolina Department of Transportation
 1501 Mail Service Center
 Raleigh, NC 27699-1501

Dear Mr. Voelker:

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) has reviewed the second draft of the proposed process for prioritizing urban loop projects across the state and is submitting the following comments. We greatly appreciate NCDOT's consideration of our initial comments submitted in November 2009 and are supportive of many of the changes that were made to the methodology in the second draft. We also appreciate that NCDOT has provided MPOs a second opportunity for commenting on the methodology and has offered multiple opportunities for MPO staffs to review and ask questions about the proposal. The Strategic Planning Office of Transportation has made an effort to involve MPOs in the transportation reform process, and we recognize and appreciate this effort.

The needs factors included in the methodology are congestion and safety. We appreciate that infrastructure health has been deleted from the needs factors in the second draft. Both the congestion and safety scores are based on current data collected on parallel routes. The parallel routes selected for Durham's urban loop projects are shown in the table below:

Urban Loop Project	Description	Route	From	To
EAST END CONNECTOR	NC 147 TO NORTH OF NC 98	NC 147	SR 1954 (Ellis Road)	US 15-501 Bus (Roxboro Rd.)
		US 70	I-85	SR 1921 (Lynn Road)
US 70	LYNN ROAD TO THE PROPOSED NORTHERN DURHAM PARKWAY	US 70	SR 1921 (Lynn Road)	SR 2095
NORTHERN DURHAM PARKWAY	I-540 TO US 501 (ROXBORO ROAD)	US 70	SR 2095	I-85
		I-85	US 70	US 501 (Duke Street)
		US 501	I-85	SR 1631
I-85	US 70 TO SR 1632 (RED MILL ROAD)	I-85	US 70	SR 1632 (Red Mill Road)
US 501 (ROXBORO ROAD)	US 501 BYPASS (DUKE STREET) TO SR 1640 (GOODWIN ROAD)	US 501 (Roxboro Road)	US 501 Bypass (Duke Street)	SR 1640 (Goodwin Road)

We agree that these routes are appropriate for the current analysis considering the way that the methodology will be applied and data availability limitations. However, as currently proposed, the congestion and safety factors will not fully assess the benefits that the East End Connector will have on all of the project's parallel routes. In addition to NC 147 and US 70, the parallel routes for the East End Connector also include a multitude of local surface streets such as Alston Avenue, Avondale Drive, Mangum Street, Roxboro Street, Duke Street, Gregson Street, Ellis Road, Angier Avenue, East End Avenue, TW Alexander Drive, etc. Traffic is currently widely dispersed on these routes affecting congestion and safety on all of these routes and in all of the neighborhoods that these routes travel through. One of the primary purposes of the East End Connector is to divert through traffic from local streets to a fully grade-separated freeway facility. Freeway facilities are generally safer than local streets, avoid dangerous at-grade railroad crossings, and avoid vehicular conflicts with bicyclists and pedestrians. Unfortunately, current data availability and time constraints limit the Department's ability to assess all of the benefits for urban loops that have multiple local streets as parallel routes. The methodology as currently proposed will most favor projects with one high-volume parallel route. These factors should be re-evaluated in future versions of the urban loop prioritization methodology. This shortcoming in the methodology should be considered when funding decisions are made.

The benefits factors included in the methodology are travel time savings, economic development, non-loop funding, multi-modal, freight mobility, and protected right-of-way. Travel time savings is measured as the difference in vehicle hours of travel for the modeled network with and without the urban loop project. NCDOT has also proposed using data from a model run that includes all of an urban area's urban loop projects and has proposed dividing the travel time savings by the population of the modeled network. The DCHC MPO has several concerns with this approach.

First of all, the travel demand forecasting models used across the State vary in their sophistication and accuracy. Some models may consistently over-assign or under-assign traffic to different types of routes. We recognize that until a statewide model is developed using results generated from each urban area's model may be the Department's only option. However, it is important to emphasize that differences between the models may cause variability in the results. The models were not designed to be readily comparable with each other, and thus the results of this analysis should not be considered as definitive.

Secondly, the proposal to divide travel time savings by the population of the modeled network unfairly disadvantages projects in areas that have cooperatively developed a large regional model with neighboring MPOs and discounts the value of time for the populations of these areas. This factor should simply be based on total travel time savings. Durham is a partner in the Triangle Regional Model. This model includes 1,056,774 households in 2035, of which only 151,712, or 14.4%, are projected to be in Durham County. It is unfair to include households in Harnett or Johnston counties in the evaluation of urban loop projects in Durham County. The large size of the modeled area does not confer any benefit to the evaluation of Durham's projects. All models are not closed systems and consider both internal

and external trips. Furthermore, the total travel time savings is more relevant as a measurement of effectiveness than per household travel time savings. An urban loop project that saves 1 minute for 1,000,000 households provides more benefit than a project that saves 5 minutes for 100,000 households if the value of time for a person in each urban area is equivalent. The urban loop program was designated specifically to address the congestion needs in the State's largest urban areas. As such, the methodology should not unfairly disadvantage projects in the largest urban areas with the largest travel demand models.

Thirdly, the approach of using the existing plus committed transportation network and the 2035 socio-economic forecasts in the model runs may unfairly disadvantage projects in MPOs that have developed the most robust relationship between future land use and transportation in their long-range plans. In developing our 2035 Long Range Transportation Plan, the DCHC MPO developed a series of land use scenarios for the distribution of future population and employment in our MPO. These land use scenarios were directly based on the planned future transportation network. We conducted a series of model runs that varied the future transportation network and the land use scenarios to determine which projects and which distribution of future growth to adopt as part of our plan. The land use scenario that was ultimately adopted clustered future growth around transportation corridors. By using model runs that use the 2035 socio-economic forecast and a transportation network that only includes existing plus committed projects as the base, the urban loop prioritization methodology is making an assumption that there is no relationship between future growth and the transportation network. In reality, we would expect our future growth to vary significantly if the MPO's planned transportation projects are not built by 2035. The results of some of the model runs for our urban loop projects may indicate increases in vehicle hours of travel for our MPO because we purposefully clustered growth around future transportation corridors. If certain facilities are not built, high travel times from these growth areas may be offsetting the benefit of constructing an individual urban loop project. This effect may be especially pronounced for our MPO since we have five smaller urban loop projects rather than one large traditional loop project.

Fourthly, since Durham has five smaller urban loop projects, the timing and relationship between these projects and other projects is critical for the proper functioning of the transportation network. This relationship may result in an underestimate of the benefits of the urban loop project using the model. For example, one of Durham's projects, converting US 70 to a freeway between Lynn Road and the Wake County line, should only be modeled in conjunction with the construction of the East End Connector and the conversion of US 70 to a freeway in Wake County to I-540. These three projects will form one continuous freeway facility from I-540 to the current US 70 bypass in Durham. It is unrealistic to model a scenario where the Durham loop project portion of US 70 would be constructed without the other two projects. The bottlenecks created on either end of the project in this scenario may offset any travel time savings caused by the construction of the loop project. The Department should consider running the models with a sequential, cumulative network that reflects each city's priority order for urban loop projects and includes adjacent projects on the same facility.

We recognize the Department's desire to use model data that can be produced quickly using a consistent methodology for all of the urban loop cities. However, using the travel demand models for purposes that they were not designed for may result in illogical and inconsistent results. The use of model data needs to be more thoroughly developed in consultation with each MPO's modeling staff. If there is not time to modify the methodology for this prioritization process, the weighting of this category should be decreased significantly.

The economic development factor is a combination of a measurement of impacts due to construction, impacts on existing economic characteristics, and impacts on future economic characteristics. The measurement of impacts due to construction should be modified to be a combination of the direct, indirect, and induced employment and the total employment multiplied by the average unemployment rate. The proposal to also include total employment divided by the regional employment should be deleted. The inclusion of this would unfairly disadvantage projects in large regions. Again, the urban loop program is specifically designated to address the needs of the State's largest urban regions and projects in these areas should not be disadvantaged. All jobs should be considered equally regardless of the size of the region.

The measurement of impacts due to existing economic conditions should only include the existing employment in the region and the projected 10 year population growth in the region. The proposal to specifically include employment in distribution, logistics, and manufacturing and to include state and local tourism receipts unfairly favors certain employment sectors. In addition, it does not consider the value of the job to the State's economy and income tax receipts. Many jobs in these industries are low-wage, low-skill jobs that have less value than jobs in other sectors. The proposal to include existing population in the region is duplicative of the existing employment in the region. The proposal to include establishments within a one-mile buffer of the project does not recognize that many of the urban loop projects are limited access facilities and that businesses within one mile may actually be much farther away by driving. A one-mile buffer is extremely limited and does not adequately assess the benefits that short projects that provide connectivity to other transportation facilities may have on businesses along those other facilities. The East End Connector will greatly enhance connectivity throughout the Triangle for businesses on I-85, NC 147, I-40, and I-540. This benefit is a primary reason that the project is supported by businesses, organizations, and jurisdictions throughout the Triangle and will not be reflected in the methodology as it is currently proposed.

The measurement of impacts due to future economic characteristics is proposed to include the number of interchanges and typical economic impact per interchange. This again does not recognize the benefits of short projects that provide connections between facilities but do not include multiple interchanges. It also appears to favor projects that promote urban sprawl in undeveloped areas. Typical economic impact per interchange may mostly include low-wage, low-skill jobs in retail and service industries. This may not be the type of economic growth expected or desired by the municipality. It also does not consider the value of the job to the State's economy

and income tax receipts. Furthermore, this methodology is not able to be universally applied to all urban loop projects because some projects do not include any new interchanges (the East End Connector, I-85 widening) or are not intended to be grade-separated freeway facilities (Roxboro Road widening, the Northern Durham Parkway). The NC Department of Commerce staff who have assisted NCDOT seem to recognize the limitations of the proposed approach but have said that, without access to more sophisticated and expensive economic models, their options are limited. These other models should be purchased and used for future rankings. Until then, the weighting of this category should be significantly reduced.

The non-loop funding factor should be deleted. Instead any non-loop funds should be subtracted from the project cost denominator.

The multi-modal factor only considers co-located HOV/HOT, light rail, or bus rapid transit projects and other transportation terminals within one mile of the project. The one-mile buffer is again extremely limited and doesn't reflect the benefit provided by a short project that connects to other transportation facilities. The East End Connector will offer a faster route from areas in north Durham, Person County, Granville County, and Vance County to RDU Airport, but is not within one mile of the airport and will not receive points. The multi-modal factor should also award points to projects that divert traffic from routes that have at-grade crossings of high speed rail corridors to grade-separated facilities. The East End Connector will divert traffic from Mangum Street, Duke Street, Ellis Road, and Angier Avenue – all of which have one or two at-grade crossings of the State's high speed rail corridor. Providing an alternative to these at-grade crossings may make future crossing closures or grade-separation projects more feasible and ultimately permit the safe operation of higher speed trains through the State.

The freight mobility factor does not need to be changed at this time. The protected right-of-way factor is a good addition to the second draft methodology. However, the assignment of points needs to recognize the proportion of protected or purchased right-of-way. As currently proposed a project with one percent of right-of-way purchased receives the same amount of points as a project with ninety-nine percent of right-of-way purchased. Since the Department may not have specific data on percent of right-of-way purchased for every loop project, ranges could be used. We suggest using the following ranges:

- 0 points if not protected or purchased
- 25 points if protected but no right-of-way purchased
- 25 points if 1 to 33 percent purchased
- 50 points if 34 to 67 percent purchased
- 75 points if 68 to 99 percent purchased
- 100 points if right-of-way fully purchased or funds already authorized to fully fund right-of-way

As noted above, the proposed factors do not adequately measure the benefits of projects that provide connectivity between existing facilities. A new connectivity factor should be added that will award points based on the ratio of the distance of the proposed urban loop facility to the route between the start and end point of the

facility using existing roadways that are classified as Class I Urban Streets or freeways. A table is enclosed with this letter that illustrates how this factor could be applied to selected urban loop projects in the State. Any project that does not decrease the mileage between the start and end point of the project would not receive any points. Projects that result in a decrease in mileage would receive points proportionate to the percentage decrease. Adding this factor would help the methodology better recognize the benefits of urban loop projects that are not traditional loop projects.

The cost denominator is the most critical factor in the proposed methodology. As such, it is essential that the Department ensure that all costs are updated for all urban loop projects. The costs must be normalized to the same year. This normalization must consider a reduction in cost for projects that had estimates completed during the 2005-2008 timeframe when real estate and construction costs were at their peaks.

In summary, we appreciate your consideration of the changes noted above. The weighting of the project categories should be adjusted to the following:

- 10% Congestion
- 5% Safety
- 20% Travel Time Savings
- 15% Economic Development
- 5% Multi-modal
- 5% Freight Mobility
- 10% Protected Right-of-Way
- 30% Connectivity

The cost denominator should be reduced by the amount of non-loop funding. In addition, wherever possible points should be assigned proportionate to the data being measured in order to best identify distinctions between projects.

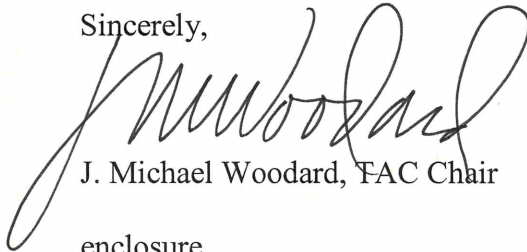
We recognize the difficult challenge of creating a quantitative methodology that comprehensively measures the benefits of the urban loop projects, can be applied universally to the variety of projects in the State, and that uses readily available data sources. We believe that with the changes suggested in this letter, NCDOT's methodology would be a good initial step towards a more transparent decision-making process for the urban loop program. The methodology still must be open for continuous evaluation and improvement during each TIP development cycle. MPO input should be an integral consideration in this process.

In addition, we support the proposal that the Secretary of Transportation has the authority to make funding decisions independent of the results of the methodology as long as the reason for the decision is clearly documented. It is likely impossible to develop a perfect methodology that measures the benefits of every urban loop project across the State. Each project is unique and there may be benefits that are not fully captured in the quantitative methodology. For example, the benefits of the DCHC MPO's top priority project, the East End Connector, are not wholly assessed by the proposed methodology. The methodology fails to adequately measure the benefits that the project will have by diverting traffic from local streets, improving congestion and safety on these local streets, providing a critical missing link in the

Triangle's freeway system, improving accessibility for businesses along adjacent transportation facilities, improving accessibility for high-wage high-skill jobs, and reducing traffic on at-grade railroad crossings. We ask that the Secretary consider these benefits when making funding decisions for the urban loop program.

Please contact Mark Ahrendsen (mark.ahrendsen@durhamnc.gov) or Ellen Beckmann (ellen.beckmann@durhamnc.gov) to discuss these comments further. We look forward to continuing to work with you in improving transportation decision-making and implementing the urban loop projects.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Woodard". The signature is fluid and cursive, with a large loop at the end.

J. Michael Woodard, TAC Chair

enclosure

Cc: DCHC MPO TAC
Mark Ahrendsen, City of Durham/DCHC MPO
Ellen Beckmann, City of Durham/DCHC MPO
Joe Milazzo, Regional Transportation Alliance

Connectivity Scoring

TIP#	Area	Route	Improvement Type	Description	TIP Project Length in Miles	Class I Urban Street* Connection Distance between two locations in the model - WITH TIP project	Class I Urban Street* Connection Distance between the same two locations in the model - WITHOUT TIP project	Connectivity Distance Ratio	Connectivity Improvement (%)	Connectivity Improvement Score	Connection Route - WITHOUT TIP project
X-0002C	Fayetteville	I-295	New Location	East of NC 210 (Murchison Rd) to US 401 (Ramsey St)	4.08	5.23	7.58	0.69	31%	31	NC 210 (starting at I-295 interchange) to Honeycutt Rd to McArthur Rd to Andrews Rd to US 401 (ending at I-295 interchange)
U-2524 (C, D & F)	Greensboro	I-840 (Western Loop)	New Location	North of Bryan Blvd to Lawndale Dr	5.7	12.88	12.37	1.04	-4%	0	I-840 Western Loop (starting at Bryan Blvd Interchange) to Bryan Blvd to Benjamin Pkwy to Cone Blvd to I-840 Eastern Loop (ending at Cone Blvd Interchange)
U-2525 (B, C, & D)	Greensboro	I-840 (Eastern Loop)	New Location	Lawndale Dr to US 70	10.1	15.67	13.29	1.18	-18%	0	I-840 Western Loop (starting at Bryan Blvd Interchange) to Bryan Blvd to Benjamin Pkwy to Wendover Ave to I-840 Eastern Loop (ending at US 70 Interchange)
U-0071	Durham	East End Connector	Part Existing Part New Location	From NC 147 to north of NC 98	2.5	5.94	8.6	0.69	31%	31	NC 147 (starting at Ellis Rd Interchange) to Ellis Rd to Miami Blvd to I-85 (ending at US 70 interchange)
U-0071	Durham	East End Connector	Part Existing Part New Location	From NC 147 to north of NC 98	2.5	4.04	11.7	0.35	65%	65	NC 147 (starting at East End Connector interchange) to US 15/501 to I-85 (ending at US 70 interchange)
U-2579	Winston Salem	I-74 Northern Beltway (Eastern Section)	New Location	From US 52 to US 311	17.4	17.4	16.7	1.04	-4%	0	US 52 to I-40 to US 311
R-2633	Wilmington	I-140 / IUS 17	New Location	From NC 87 South of Bishop to US 421 North of Wilmington	12.9	12.9	13	0.99	1%	1	US 421 to US 17

NOTE:

* The Highway Capacity Manual (HCM 2000) defines urban streets into four classes: I, II, III and IV, based on AASHTO's functional class distinction (i.e., principal vs. minor arterial) and design characteristics such as posted speed limit, signal density, driveway density and roadside development. As per this HCM definition, Class I Urban Streets are referred to as high-speed principal arterials with posted speed limit 45 mph or higher.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

DIVISION OF HIGHWAYS

EUGENE A. CONTI, JR.
SECRETARY

February 12, 2010

Ms. Sally Kost
Chair, Chatham County Board of Commissioners
P.O. Box 1809
Pittsboro, NC 27312-1809

**SUBJECT: Response to Letters and Meeting Concerning Roadway Improvements
Associated with Briar Chapel Development and Proposed Chatham Middle
School**

Ms. Kost:

This letter is in response to your most recent attached correspondences dated January 12 and January 14, 2010, and both received by the District Engineer's office January 26, 2010 as well as a follow up to the meeting we had on February 10, 2010 concerning the same subject. The North Carolina Department of Transportation shares your eagerness to see the necessary improvements in place on Andrews Store Road before the opening of the middle school. The Department distributed a review of the most recently updated Traffic Impact Analyses (TIA's) for the Briar Chapel development and middle school on January 28, 2010 (TIA's dated December, 2009 and received by NCDOT District Office December 7, 2009). In our review comments (attached), we commented that the improvements listed within the TIA's, including a signal installation at US 15-501 and Andrews Store Road, would be required to be installed prior to the opening of the new middle school. In addition, we advised that an exclusive right turn lane on Andrews Store Road, with appropriate storage, was necessary. In addition to these improvements Andrews Store Road should also be widened to 24', and resurfaced to accommodate the additional traffic that the middle school and Briar Chapel developments are anticipated to soon generate. This widening was also requested of Newland via the attached April 17, 2008 plan review letter.

The Department has completed the roadway improvement plan review for the Andrews Store Road encroachment submitted by Kimley-Horn and Associates. Issuance of this encroachment to Newland Communities is pending receipt of the proper Performance and Indemnity Bond documentation to the District Office. As of the date of this letter a Plan Handover meeting is scheduled for February 22, 2010 to grant approval for this encroachment. The Department has also been in close contact with McKim & Creed engineers, and is currently

Page 2 of 2
 February 12, 2010
 Briar Chapel Development and Proposed Middle School

working to finalize the hydraulic and roadway aspects of the Granite Mill Boulevard construction plans. It was apparent from the meeting on February 10, 2010 at the Chatham Planning Office that the main concerns with the Granite Mill Road plan review was our requirement of 12' thru lanes, 50' radii at the bus drive and 40' radii at the other intersecting roads and drives. As I stated in this meeting these requirements are to help accommodate the bus traffic around the new school. If these requirements are not found to be necessary in the opinion of the County and the School System a letter from both entities stating that they will assume all costs and liability for narrow lane widths and smaller radii shall be sent to this office for consideration.

Funding for all of the required improvements associated with Briar Chapel shall be borne by others. However, we are currently researching the availability of other funding sources for the aforementioned resurfacing and 2' widening improvements to Andrews Store Road from approximately Woodland Grove Lane to US 15-501.

Your recommendations for a reduction in the posted speed limit on Andrews Store Road have been forwarded to the NCDOT Division Traffic Engineer. For further inquiries concerning speed limit reductions or signage, please contact Mr. David Willett, Division Traffic Engineer, at (910) 947-3930.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,



Reuben E. Blakley, P.E.
 District Engineer

Attachments

cc: Mr. Timothy Johnson, P.E., Division Engineer
 Mr. David Willett, Division Traffic Engineer
 Chatham County Board of Commissioners
 Mr. Charlie Horne, Chatham County Manager
 Mr. Jason Sullivan, Interim Planning Director
 Mr. Keith Hurand, Senior Vice President, Newland Communities
 Mr. Bill Mumford, P.E. Project Manager, Newland Communities
 ✓ Durham Chapel Hill Carrboro Metropolitan Planning Organization
 File



Established 1771

- COUNTY COMMISSIONERS
 - Sally Kost, Chair
 - George Lucier, Vice Chair
 - Mike Cross
 - Carl Thompson
 - Tom Vanderbeck
- COUNTY MANAGER
 - Charlie Home

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

January 12, 2010

Received

JAN 16 2010

Mr. Reuben Blakley, PE
 District Engineer
 North Carolina Department of Transportation
 Highway Division 8; District 1
 PO Box 1164
 Asheboro, North Carolina 27204

DIVISION 8 DISTRICT 1
 DEPT. OF TRANSPORTATION

Dear Mr. Blakley,

We are writing to express our concern about road improvements along Andrews Store Road (SR 1528) in Chatham County between US 15-501 and Manns Chapel Road.

Briar Chapel Development Improvements near Parker Herndon Road

Briar Chapel Development has been working with the Department of Transportation for nearly two years on the plans for road improvements on Andrews Store Road, close to the intersection with Parker Herndon Road. I believe one of the major hold ups has been related to your recent request for an updated analysis of the traffic/roadway network along Andrews Store Road. It has been completed by Briar Chapel's engineer (Kimley Horn) and currently lies with Congestion Management for review.

In checking with the Chatham County Schools, the School System is on schedule for opening the new Margaret Pollard Middle School no later than October 2010. Of course, we would like to open this school sooner, if the construction moves along quicker than what is currently projected.

As the agreement to the road improvements along Andrews Store Road is delayed, we are becoming increasingly concerned about the schedule for completing these critical road improvements. We ask that DOT complete their review as quickly as possible, so as to not jeopardize the opening of this critically needed school and to provide relief to our North Chatham School which is currently over capacity by over 50 percent.

Additionally, I understand that the Briar Chapel Developers are awaiting final approval of the plans for Granite Mill Boulevard. We understand this delay was due to finalizing the updated traffic

analysis mentioned above. We ask that the final sign-offs be forwarded to Briar Chapel as quickly as possible so that the bidding process may begin soon in order to complete this work in time for the school opening.

Other Improvements along Andrews Store Road

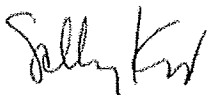
Outside of what is required by Briar Chapel Development, Chatham County is concerned about road conditions and safety along Andrews Store Road. As you know the Durham Chapel Hill Carrboro Metropolitan Planning Organization (DCHC MPO) Long Range Transportation Plan (LRTP) approved in 2009 does not include any improvements for this section of road. Given the condition of this narrow rural road we think this is a mistake. The new Margaret Pollard Middle School (opening October 2010), the already opened Woods Charter School, the new Chatham County Park, and existing development within Briar Chapel, are all estimated to generate an additional 2,818 trips per day. Even though the opening bells for the new Margaret Pollard Middle School and the existing Woods Charter School schools are to be staggered, we will likely see peak times along this roadway, especially in the mornings.

We are looking for creative solutions, and perhaps other monies outside of the control of the DCHC MPO that could be used to remedy what we feel is a dangerous situation.

As part of the overall review of Andrews Store Road, we also ask that consideration be given to the reduction of the 55 mile per hour speed limit. Given the projected traffic counts along with the condition of this road, this speed limit must be reduced.

We appreciate your help in these matters and please, let me, or Charlie Horne know if you need additional information.

Sincerely,



Sally Kost
Chair, Chatham Board of Commissioners

Cc: Chatham County Board of Commissioners
Mr. Charlie Horne, Chatham County Manager
Mr. Keith Hurand, Senior Vice President, Newland Communities, Division Manager Carolinas
Mr. Lee Bowman, Project Manager, Eastern Region, Newland Communities
Durham Chapel Hill Carrboro Metropolitan Planning Organization



Established 1771

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

- COUNTY COMMISSIONERS
- Sally Kost, Chair
- George Lucier, Vice Chair
- Mike Cross
- Carl Thompson
- Tom Vanderbeck

- COUNTY MANAGER
- Charlie Home

January 14, 2010

Received

JAN 29 2010

Mr. Reuben Blakley, PE
 District Engineer
 North Carolina Department of Transportation
 Highway Division 8; District 1
 PO Box 1164
 Asheboro, North Carolina 27204

DIVISION 8 DISTRICT 1
 DEPT. OF TRANSPORTATION

Dear Mr. Blakley,

Chatham County has been working closely with the Development Team of Briar Chapel to accelerate the intersection improvements to US Highway 15-501 and Andrews Store Road. As it currently stands, the developers are slated to signalize this intersection and construct one northbound turn lane when traffic counts reach 7,500. Construction of a southbound turn lane from Andrews Store Road on to US Highway 15-501 is required when traffic counts reach 23,000. Additionally, there are other improvements required, specifically dealing with the commercial entrance on the east side of US Highway 15-501.

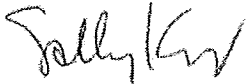
Because the new Margaret Pollard Middle School (opening in October 2010) and the K-12 Woods Charter School (already open) are located just off Andrews Store Road, just over one mile from the intersection of Andrews Store Road and US Highway 15-501, Chatham County is very interested in seeing that the slated intersection upgrades are done sooner than what is currently required. Moreover, the Briar Chapel development team has indicated to the County that they could provide a lump sum payment as part of a cost sharing arrangement to assist with accelerating the improvements if it would help expedite the overall design, engineering approval and construction process.

The County is very interested in the intersection improvements being made before the new Margaret Pollard Middle School opens as we are very concerned about potential traffic backup especially in the mornings, when our citizens are trying to commute to work, and get the kids to one of the two schools. This intersection is the primary outlet for traffic to both the Woods Charter School and to the Margaret Pollard Middle School and is used heavily by parents who drop off their children at Perry Harrison School (located on Hamlets Chapel Road).

We are writing to see what help DOT can provide, both in expediting this intersection upgrade and providing any financial assistance. We do not feel that the southbound turn lane can wait until the traffic counts reach 23,000 daily trips as identified in the approved TIA – we have no doubt that traffic will backup on Andrew Store Road, and without the signal, will be extremely dangerous.

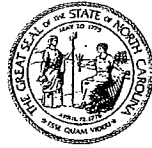
We thank you for your consideration in helping us with these intersection upgrades – the additional turn lanes and the traffic signs. Please let me, or our County Manager, Charlie Horne, know if you need additional information.

Sincerely,



Sally Kost
Chair, Chatham Board of Commissioners

Cc: Chatham County Board of Commissioners
Mr. Charlie Horne, Chatham County Manager
Mr. Keith Hurand, Senior Vice President, Newland Communities, Division Manager Carolinas
Mr. Lee Bowman, Project Manager, Eastern Region, Newland Communities
Durham Chapel Hill Carrboro Metropolitan Planning Organization



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

DIVISION OF HIGHWAYS

EUGENE A. CONTI, JR.
SECRETARY

January 28, 2010

Mr. Richard Adams, P.E.
Kimley-Horn and Associates, Inc.
Suite 600
333 Fayetteville Street
Raleigh, NC 27601

SUBJECT: NCDOT Review of TIA to Assess Required Improvements Associated with Briar Chapel Middle School

Mr. Adams,

The N. C. Department of Transportation has reviewed the two Traffic Impact Assessments (TIA) dated December, 2009 submitted to this office for the Briar Chapel Middle School. One TIA studied the school intersections and the other focused on Andrews Store Road in relation to Briar Chapel Middle School traffic Generation in school build-out conditions; Based on comments from the District Engineer's office, Division Traffic Engineer's office, and the Congestion Management unit of the Traffic Mobility and Safety Division, the following stipulations and recommendations are offered (comments encompass the two TIAs combined):

1. Please see attached drawing for proposed improvements/incorporation of T.I.A. recommendations for the subject site.
2. Maintain 12' thru and turn lanes throughout with the exception of the allowance of 11' turn lanes along Granite Mill Boulevard.
3. Specify the bus driveway entrance on Granite Mill Boulevard be constructed with 50' radii.
4. Specify 40' radii for all other driveways and streets unless specified otherwise by NCDOT.
5. Granite Mill Boulevard and School Driveway # 2/Internal Roadway Intersection:
 - a. WB Internal Roadway - Construct a 150' internal protected stem.
6. Andrews Store Road at US 15-501:
 - a. Install a traffic signal

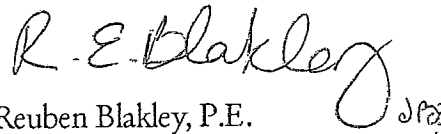
Page 2
Briar Chapel Middle School TIA Review
January 28, 2010

All other improvements specified on the attached graphic shall be in place prior to the completion of the school, and shall be done by others.

All work associated with the above mentioned improvements shall be carried out through an approved Encroachment Agreement issued by the NCDOT Division 8 Engineer. In addition, traffic signal plans, a traffic signal agreement and bond will need to be coordinated through the Division Traffic Engineer's Office (Attn: David Willett, 150 DOT Drive, Carthage, NC, 28327) before work may commence.

If you have any further questions regarding this matter, please do not hesitate to call Jennifer Britt, E.I., Assistant District Engineer, at (336) 629-1423.

Yours very truly,



Reuben Blakley, P.E.
District Engineer

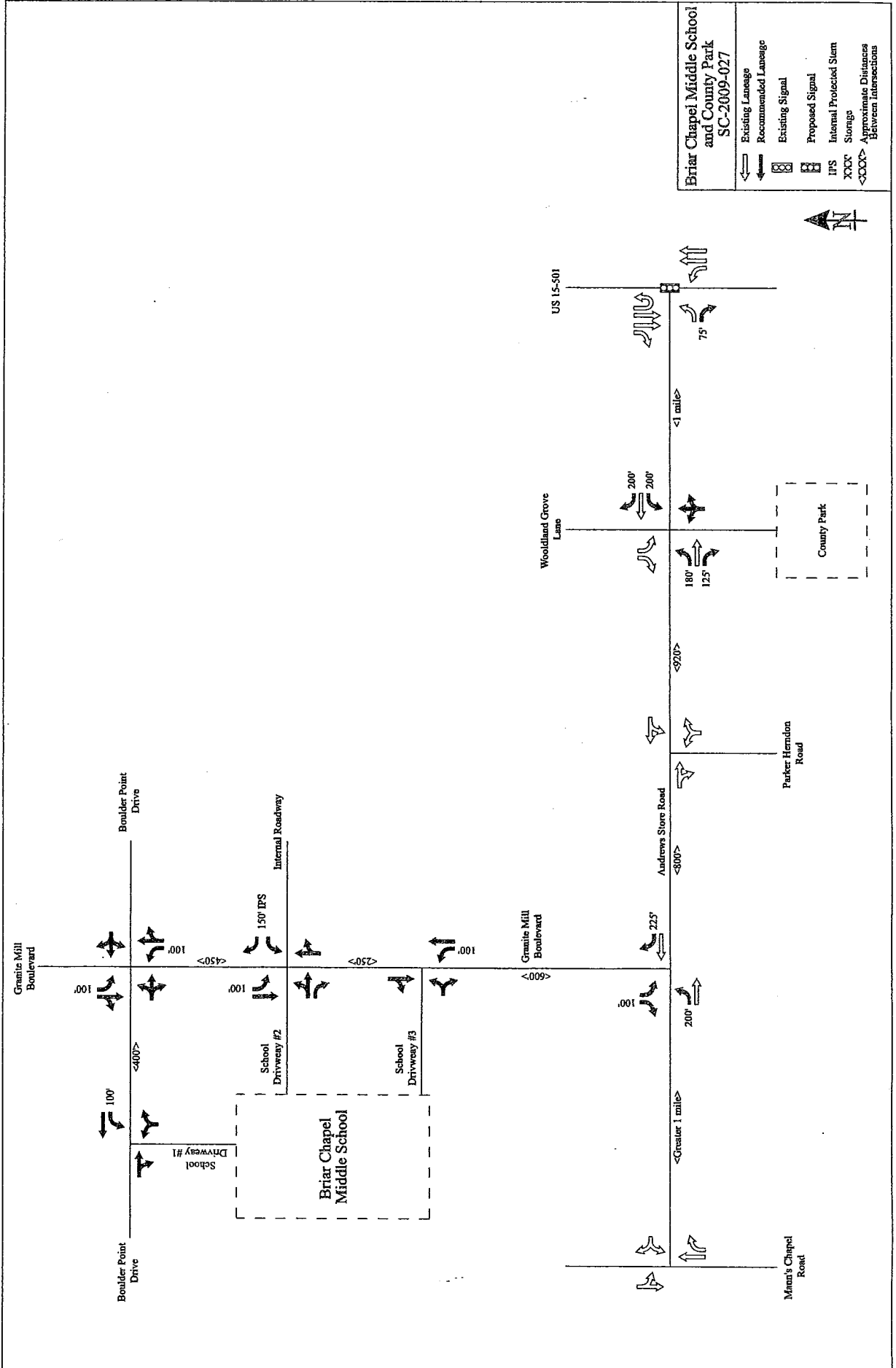
Attachment

- cc: Mr. Tim Johnson, P.E., Division Engineer
- Mr. David Willett, Division Traffic Engineer
- Mr. Doumit Ishak, P.E., Congestion Management Regional Engineer
- Mr. Doug Brown, Newland Communities

✓File

Mr. Benjamin Howell, Chatham County Planner

P. O. BOX 1164, ASHEBORO, NORTH CAROLINA 27204
PHONE: (336) 629-1423 FAX: (336) 629-7228



Briar Chapel Middle School and County Park
SC-2009-027

	Existing Laneage
	Recommended Laneage
	Existing Signal
	Proposed Signal
	IFS
	Internal Protected Stem
	Storage
	Approximate Distances Between Intersections



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

MICHAEL F. EASLEY
 GOVERNOR

LYNDO TIPPETT
 SECRETARY

April 17, 2008

Chatham County

Subject: Briar Chapel - Andrews Store Road Improvements and Widening

Kimley-Horn and Associates, Inc.
 c/o Matt West, P.E.
 P.O. Box 33068
 Raleigh, N.C. 27636

Dear Mr. West:

The N. C. Department of Transportation has reviewed your most recent submittal concerning the roadway improvements and widening for the southern accesses from the Briar Chapel Development. Please find the attached redlined plans for your use.

Be advised that the plans submitted to this office do not address the required 4' asphalt widening and resurfacing of Andrews Store Road from the end of this project (sta. 49+30) to the improvements required at the Andrews Store Road / US 15-501 intersection. Please plan to include the aforementioned improvements in your Andrews Store Road / US 15-501 intersection offsite improvement plans.

Upon completion of these revisions, please submit 7 new sets of plans with the recommended changes for review. Include a \$500,000 performance and indemnity bond for the work to be completed within the Right of Way. A RW16 and a RW 16A form have been included for your use. Either form will meet the requirements for implementation of the bond. If you have any questions, do not hesitate to contact this office.

Yours truly,

Reuben Blakley

Reuben Blakley, P.E.
 District Engineer

REB/jeb

Attachments

cc: Timothy Johnson, P.E., Division Engineer
 Rob Stone, P.E., Division Traffic Engineer
 Keith Megginson, Chatham County Planning
 Ed Timoney, Newland Communities
 File

MEMORANDUM

TO: Transportation Advisory Committee
DCHC MPO

FROM: DCHC MPO Lead Planning Agency

DATE: March 10, 2010

SUBJECT: American Recovery and Reinvestment Act of 2009

President Obama signed the American Recovery and Reinvestment Act (ARRA) of 2009 on February 17, 2009. The legislation provides funding for transportation projects including highways, transit, rail, airports, enhancements, etc. The transportation funds are being distributed through the agencies within the U.S. Department of Transportation.

TIP Administrative Modifications and Amendments

The TAC approved FY 2009-2015 Metropolitan Transportation Improvement Program (MTIP) Administrative Modification #3 on March 11, 2009, Administrative Modification #5 on April 8, 2009, Amendment #7 on August 12, 2009, Amendment #8 on September 9, 2009, and Amendment #9 on November 11, 2009. These five modifications/amendments added ARRA funded projects to the TIP. These projects were funded using the ARRA funding provided through the Surface Transportation Program, Surface Transportation Program Direct Allocation, and Section 5307/5340 transit program. The State Board of Transportation has approved similar STIP modifications/amendments.

ARRA STP, STPDA, and 5307/5340 Projects

The table of ARRA funded projects is attached. The first page lists the ARRA STP projects that have both been confirmed by NCDOT. The following pages list the STPDA and Section 5307/5340 projects.

Implementation and Tracking of Projects

The NCDOT will be managing the ARRA STP projects, local governments will be implementing the ARRA STPDA projects, and transit agencies will be implementing the ARRA Section 5307/5340 projects. The DCHC MPO will be closely monitoring and tracking the implementation of the STPDA and Section 5307/5340 projects.

The following steps will need to be taken to implement projects. All of these steps do not apply to every project.

July 1, 2009 (local approval)	Step 1 – Agreement Preparation and Execution
	Step 2 – Preliminary Engineering Authorization

	Step 3 – Scoping Meeting
	Step 4 – Procuring Professional Services
	Step 5 – Environmental Documentation
	Step 6 – Design
	Step 7 – Right-Of-Way Certification
September 1, 2009	Submit all above documentation to NCDOT
October 1, 2009	Step 8 – Construction Authorization
January 1, 2010	Step 9 – Procuring Construction Services
	Step 10 – Construction Administration
	Step 11 – Close Out
	Step 12 – Final Audit

The MPO's deadline for local approval of agreements for STPDA projects was July 1, 2009. All local agencies have reported to the MPO that their municipal agreements have been approved by their elected boards. The environmental documentations, design packages, and right-of-way certifications had to be submitted to NCDOT by the September 1, 2009. All documentation has been submitted for the STPDA projects and approved by NCDOT. All projects also have construction authorization from FHWA. All projects have been put out to bid by the local governments. Contracts with the qualified low bidders have been executed by the January 1, 2010 deadline. The Town of Carrboro received an extension for the bus shelter project to January 31, 2010. This project was re-bid and a contract has been executed with a qualified bidder.

One STPDA project programmed by the City of Durham, the construction of sidewalks on SR 1116 (Garrett Road), was withdrawn because the plans were not able to be developed by the deadline. The City of Durham will use some of the \$438,840 programmed for this project to cover cost over-runs on other ARRA projects and has requested that NCDOT use the remainder on resurfacing state-maintained roads in and around downtown Durham. NCDOT has put out to bid several resurfacing projects in Durham displayed in the table.

One STPDA project programmed by the Town of Chapel Hill, the installation of in-street pedestrian lighting, was withdrawn because no bidders were able to meet the specifications for the project. The Town of Chapel Hill will use some of the funds for this project to cover cost over-runs on other ARRA projects and has requested that NCDOT use the remainder on resurfacing state-maintained roads in and around Chapel Hill.

Reporting Requirements

Any entity receiving ARRA funds directly from the Federal Government is required to provide monthly "Recipient Reports". The MPO has assumed the responsibility of ensuring the reporting and audit requirements are met. In order to meet the intent of ARRA, the reporting must be submitted on schedule each month "to preserve transparency and provide real time reporting information" the FHWA. Reporting has already been initiated for MPO projects.

In addition to the reporting requirements in the legislation, the House Transportation and Infrastructure Committee has requested information on the progress of ARRA funds from States

and transit agencies. The Committee will be highlighting best and worst performers among States, MPOs, and transit agencies beginning in September. The Committee will be posting reports on its website <http://transportation.house.gov>.

ARRA TIGGER Funding

The Federal Transit Administration is administering a \$100 million discretionary grant program called Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) through the ARRA. The DCHC MPO's transit operators developed a joint application for these funds described in the following table. FTA reported that it received requests for \$1.87 billion through the TIGGER program, and only \$100 million is available. Project awards were announced in September, and the MPO's application was not selected for funding.

Operator	Description	Unit Cost	Total Cost
DATA	5 hybrid electric gasoline light transit vehicles	\$120,000 each	\$600,000
CHT	6 40' hybrid electric buses	\$543,600 each	\$3,261,600
CHT	5 hybrid electric gasoline support vehicles	\$29,500 each	\$147,500
TTA	3 propane light transit vehicles	\$96,000 each	\$288,000
TTA	1 propane truck	\$45,500 each	\$45,500
		TOTAL	\$4,342,600

ARRA High Speed Rail Funding

The Federal Rail Administration is administering an \$8 billion discretionary grant program to provide capital assistance for high speed rail corridors and intercity passenger rail corridors. The NCDOT has submitted several grant applications totaling more than \$5 billion, many of which include improvements in the DCHC MPO area. In August, the TAC approved a resolution of support for NCDOT's ARRA high speed rail applications.

Grant awards were announced on January 28, 2010. The Charlotte-Raleigh-Richmond-Washington D.C. corridor will receive approximately \$620 million of improvements, including \$545 million in North Carolina. The funding will be used primarily to increase speed and frequencies on the Raleigh to Charlotte passenger rail service to up to 90 miles per hour and 4 frequencies per day. This service includes a stop in Durham. The improvements include the Hopson Road grade separation, Church Street crossing closure and extension, and track realignment in south Durham County. The State intends to further pursue grants for additional improvements in this corridor, including a new train station in Hillsborough, through future grant opportunities.

ARRA TIGER Funding

The Federal Highway Administration is administering a \$1.5 billion discretionary grant program called Transportation Investments Generating Economic Recovery (TIGER) through the ARRA. The NCDOT submitted an application for \$300 million for replacement of the I-85 Yadkin River bridge in Rowan and Davidson Counties. The City of Durham submitted an application for \$68.7 million for five neighborhood commercial streetscape projects. In September, the TAC approved a resolution of support for NCDOT and the City of Durham's ARRA TIGER

applications. The Town of Carrboro also submitted a TIGER application for the Town's Bolin and Morgan Creek Greenway projects. The Jones Creek Greenway was also included as a segment within the Bolin Creek corridor. A total of \$4.3 million was requested to supplement currently allocated funding for the projects.

In February 2010, the USDOT announced the selection of TIGER grants. NCDOT received the only grant in North Carolina and will receive \$10 million for the I-85 Yadkin River bridge project. Durham and Carrboro's applications were not selected.

Schedule

Action	Date
TAC discuss process for ARRA funding TAC approval of MTIP administrative modification #3 for first wave of stimulus projects TAC approval of Section 5307/5340 funding split.	March 11, 2009
TAC approval of 2009-2015 MTIP administrative modification #5 for second wave of stimulus projects, STPDA projects, and Section 5307/5340 projects (and contingency projects).	April 8, 2009
ARRA TIGGER applications due	May 22, 2009
50% of STP funds must be obligated	June 30, 2009
Applications for Section 5307/5340 grants must be submitted Agreements for STPDA projects must be approved by local governments	July 1, 2009
TAC approval of 2009-2015 MTIP amendment #7 for ARRA projects. TAC endorsement of ARRA High Speed Rail applications	August 12, 2009
50% of Section 5307/5340 funds must be obligated	September 1, 2009
Local governments submit STPDA project information to NCDOT	September 1, 2009
TAC approval of 2009-2015 MTIP amendment #8 for ARRA projects. TAC endorsement of ARRA TIGER Grant applications	September 9, 2009
ARRA TIGER applications due	September 15, 2009
Highway/Bicycle/Pedestrian projects – construction authorization from FHWA	October 1, 2009
Transit projects - grant awarded in FTA system Highway/Bicycle/Pedestrian projects – contract awarded	January 1, 2010
100% of all STP and STPDA funds must be obligated	March 2, 2010
100% of all Section 5307/5340 funds must be obligated	March 5, 2010
Unobligated funds are redistributed to states	March 2010

American Recovery and Reinvestment Act
Confirmed STP - Funded - Managed by NCDOT

TIP #	Location	Description	Confirmed, STIP Status	Construction Authorization	Procuring Construction Services	Total ARRA STP	Other Funding	Total Project Funds
		DIVISION 5						
I-5116	Durham Wake - I-540	I-40 to US 70 (4.00 miles) Mill, Resurface SR 1838 (Junction Road) to SR 1811 (Sherron Road)	Confirmed 2/09, STIP 3/09	Complete	5/29/2009	\$2,569,522		\$2,569,522
U-5122	Durham - NC 98	(3.80 miles) Mill, Resurface	Confirmed 2/09, STIP 3/09	Complete	6/16/2009	\$832,825		\$832,825
R-5135	Durham - SR 1004 (Old Oxford Road)	US 501 Business (N. Roxboro Street) to Granville County Line (10.10 miles) Mill, Resurface	Confirmed 2/09, STIP 3/09	Complete	6/16/2009	\$2,136,170		\$2,136,170
U-5127	Durham - SR 1321 (Hilldale/Fulton)	I-85 to SR 1320 (Erwin Road) (1.32 miles) Mill, Resurface	Confirmed 2/09, STIP 4/09	Complete	6/16/2009	\$385,312		\$385,312
U-5124	Durham - SR 1978 (Old Page Road)	SR 1926 (Angier Avenue) to SR 2095 (Page Road Extension) (0.99 miles) Mill, Resurface	Confirmed 2/09, STIP 4/09	Complete	6/16/2009	\$151,498		\$151,498
U-5126	Durham - US 501 Bypass (Duke Street)	SR 1443 (Horton Road) to Hudson Street (1.90 miles) Mill, Resurface	Confirmed 2/09, STIP 4/09	Complete	6/16/2009	\$647,878		\$647,878
R-2000AF	Durham - I-540 and I-40	Interchange improvements	Confirmed 4/09, in STIP	Complete	1/19/2010	\$7,577,355		\$7,577,355
U-5142	Durham	Installation of LED Traffic Signals on the City-maintained system (cost proposed to be shared by the State and City)	Confirmed 6/09, STIP 5/09	Complete	9/1/2009	\$525,504	\$100,096	\$625,600
U-5143	Durham - NC 55 and SR 1171 (Riddle Road)	Installation of turn lanes	Confirmed 6/09, STIP 5/09	Complete	7/1/2009	\$203,323		\$203,323
R-5164A	Durham - I-85, US 15-501, NC 147	Resurfacing		Complete	1/19/2010	\$6,088,736		\$6,088,736
R-5164C	Durham - US 15-501 Business, Other Streets	US 15-501 Business South (Mangum) from NC 98 to Lakewood; US 15-501 Business (Lakewood, University) from Roxboro to Vickers; US 15-501 Business North (Lakewood to NC 98); Chapel Hill St. from Great Jones to Kent; Kent St. from W. Chapel Hill St. to Morehead; Mangum Roxboro Connector		Complete	1/19/2010	\$861,557		\$861,557
		Total				\$21,979,680		
		DIVISION 7						
U-4704	Chapel Hill Durham Orange	Signal System Upgrade	Confirmed 4/09, in STIP	Complete	9/29/2009	\$5,174,666	\$511,780	\$5,686,446
U-3100B	Carrboro	SR 1107 (Old Fayetteville Road), NC 54 to SR 1106 (Stroud Lane), Provide bicycle and pedestrian facilities, and transit accommodations	Confirmed 4/09, STIP 5/09	Complete	1/19/2010	\$1,234,000		\$1,234,000
R-5178	Orange - NC 57	NC 86 to SR 1544 (Pearson Road) Widen 2-foot paved shoulders and resurface	Confirmed 5/09, Confirmed 6/09, STIP 5/09	Complete	9/29/2009	\$1,135,134		\$1,135,134
B-5191A	Orange	Bridge expansion joint repairs	Confirmed 6/09, STIP 5/09	Complete	Aug-09	\$123,203		\$123,203
I-5138	Orange, I-85	Bridge over SR 1006 (Orange Grove Rd.), Mill, Resurface, and Overlay with Open Graded Friction Course	Confirmed 8/09, in STIP	Complete	10/20/2009	\$1,741,569		\$1,741,569
R-5178B	Chapel Hill	Improvements to South Columbia St between Cameron Ave and Franklin St (NC 86 Route)				\$250,000		\$250,000
R-5200	Orange, NC 86	SR 1730 (Whitfield Road) to Railroad Bridge south of SR 1710, Orange County. Widen for 2 foot paved shoulders on both sides.	Confirmed 9/09, in STIP			\$950,000		\$950,000
ER-5100G	Chapel Hill - US 15-501	Plantings at US 15-501 and SR 1734 (Erwin Rd./Europa Dr.)	Confirmed	Complete		\$65,000		\$65,000
		Total				\$10,673,572		
		DIVISION 8						
SF-4908I	Chatham - NC 751 and SR 1731 (O'Kelly Chapel Road)	Install signal and left-turn lanes	Confirmed 4/09, in STIP	Complete	Sep-09	\$346,450		\$346,450
		Total				\$346,450		

American Recovery and Reinvestment Act
STPDA Table - Funded - Managed Locally

TIP #	Location	Description	1. Agreement Approved Locally 7/1/2009	1. Agreement Executed by NCDOT	2. Preliminary Engineering Authorization	3. Scoping Meeting	4. Procuring Professional Services	5. Environmental Documentation	6. Design (PS&E)	7. Right-of-Way Certification	8. Construction Authorization 10/1/2009	9. Procuring Construction Services 1/12/2010	Total ARRA STPDA	Other Funding	Total Project Funds
TOTAL AVAILABLE			Type date that step was completed or n/a										\$ 7,889,430		
CITY OF DURHAM													\$4,309,579		
ER-5100EA	Durham	Duke and Gregson Urban Forestry and Landscaping	6/15/2009	7/27/2009	n/a	n/a	n/a	8/11/2009	9/15/2009	8/20/2009	9/23/2009	12/21/2009	\$108,572		\$108,572
U-4726HA	SR 1666 (Dearborn Drive)	Sidewalk Construction (Old Oxford to Ruth)	6/15/2009	7/16/2009	n/a	n/a	n/a	9/3/2009	9/10/2009	9/8/2009	9/23/2009				
U-4726HB	NC 751 (Hope Valley Road)	Sidewalk Construction (NC 54 to Swarthmore)	6/15/2009	7/14/2009	n/a	n/a	n/a	9/3/2009	9/10/2009	8/28/2009	9/23/2009				
U-4726HC	SR 1116 (Garrett Road)	Sidewalk Construction (NC 751 to Swarthmore)	6/15/2009	7/16/2009	n/a	n/a	n/a				cancelled				
U-4726HD	SR 1321 (Hillandale Road E/S)	Sidewalk Construction (Cammie to Peppertree)	6/15/2009	7/16/2009	n/a	n/a	n/a	9/3/2009	9/10/2009	9/1/2009	9/23/2009		\$579,977		\$579,977
U-4726HE	US 70 Bus (Hillsborough Rd S/S) and Markham Street	Sidewalk Construction (15-501 Bypass to Broad Street)	6/15/2009	7/16/2009	n/a	n/a	n/a	9/2/2009	9/10/2009	9/4/2009	9/23/2009				
U-4726HF	Washington St W/S	Sidewalk Construction (Trinity to Glendale)	6/15/2009	7/14/2009	n/a	n/a	n/a	9/3/2009	9/10/2009	9/2/2009	9/23/2009				
U-4726HG	SR 1183 (University Drive N/S)	Sidewalk Construction (Chapel Hill Rd to Chapel Hill Rd)	6/15/2009	7/16/2009	n/a	n/a	n/a	9/3/2009	9/10/2009	9/2/2009	9/23/2009	12/16/2009			
U-4726HI	Durham - North-South Trail	Resurfacing the North-South Greenway Trail from Lavender to Murray	6/15/2009	7/14/2009	n/a	n/a	n/a	8/28/2009	9/10/2009	8/21/2009	9/18/2009				
U-4726HJ	Durham - American Tobacco Trail	Resurfacing Riddle Road Spur	6/15/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/10/2009	8/27/2009	9/18/2009		\$342,183		\$342,183
U-4726HK	Durham - American Tobacco Trail	Resurfacing from Morehead to Southpoint Crossing	6/15/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/10/2009	8/27/2009	9/18/2009	12/16/2009			
U-5142	Durham	Installation of LED Traffic Signals on the City-maintained system (cost proposed to be shared by the State and City) - Managed by NCDOT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Complete	9/1/2009	\$100,096	\$525,504	\$625,600
U-5146	Durham	Traffic signal upgrades on the City-maintained system (cost proposed to be shared by the State and City)	6/15/2009	7/16/2009	n/a	n/a	n/a	9/2/2009	9/16/2009	8/26/2009	9/23/2009	12/21/2009	\$125,729		\$125,729
U-5149A	Durham - Renaissance Parkway	Installation of traffic signal	6/15/2009	7/17/2009	n/a	n/a	n/a	8/11/2009	9/14/2009	8/26/2009	9/23/2009				
U-5149B	Durham - Renaissance Pkwy	Installation of a traffic signal at American Tobacco Trail crossing	6/15/2009	7/17/2009	n/a	n/a	n/a	8/11/2009	9/14/2009	8/26/2009	9/23/2009	12/21/2009	\$232,071		\$232,071
U-5148	Durham - Northpointe Drive	Installation of traffic signal	6/15/2009	7/14/2009	n/a	n/a	n/a	8/11/2009	9/14/2009	8/26/2009	9/23/2009				
U-5150	Durham - William Penn and Ben Franklin	Installation of traffic signal	6/15/2009	7/16/2009	n/a	n/a	n/a	8/11/2009	9/14/2009	8/26/2009	9/23/2009	12/21/2009	\$346,539		\$346,539
U-5151	Durham - Miami Blvd. and Geer St.	Intersection reconstruction	6/15/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/10/2009	8/26/2009	9/18/2009	12/16/2009	\$80,000	\$ 344	\$80,344
U-5164	Durham	Resurfacing, multiple locations - Managed by NCDOT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			\$2,394,413		\$2,394,413
		City of Durham Uncommitted Balance											(\$0)		

American Recovery and Reinvestment Act
STPDA Table - Funded - Managed Locally

TIP #	Location	Description	1. Agreement Approved Locally 7/1/2009	1. Agreement Executed by NCDOT	2. Preliminary Engineering Authorization	3. Scoping Meeting	4. Procuring Professional Services	5. Environmental Documentation	6. Design (PS&E)	7. Right-of-Way Certification	8. Construction Authorization 10/1/2009	9. Procuring Construction Services 1/12/2010	Total ARRA STPDA	Other Funding	Total Project Funds
TOWN OF CHAPEL HILL													\$1,171,563		
EL-4601	Chapel Hill	Morgan Creek Greenway, Phase I	6/22/2009	7/21/2009	4/10/2003	n/a	2003	5/6/2009	10/1/2009	6/8/2009	10/14/2009	12/8/2009	\$300,000	\$ 1,099,334	\$1,399,334
U-4704	Signal System	Installation of bicycle detection loops as part of the Signal System Upgrade Project - Managed by NCDOT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	complete	9/29/2009	\$175,000		\$175,000
U-4726IA	Chapel Hill	ADA Ramps at selected locations	6/22/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/14/2009	8/28/2009	9/23/2009	12/14/2009	\$53,924		\$53,924
U-4726IB	Chapel Hill	Raised Crosswalks/traffic calming	6/22/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/17/2009	8/28/2009	9/23/2009	12/14/2009	\$65,189	\$ 3	\$65,192
U-4726IC	NC 86	Martin Luther King Jr. Blvd: Pedestrian Safety Improvements	6/22/2009	7/16/2009	7/29/2009	7/30/2009	7/30/2009	8/28/2009	9/14/2009	8/28/2009	9/23/2009	12/15/2009	\$370,052		\$370,052
U-4726ID	Chapel Hill	Installation of in-street pedestrian lighting @ three locations	6/22/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/17/2009	8/28/2009	9/23/2009	cancelled	cancelled		
U-4726IE	US 15-501, NC 54	Sidewalk Construction: Fordham Blvd, Manning Dr. to Old Mason Farm	6/22/2009	7/16/2009	n/a	n/a	n/a	8/28/2009	9/17/2009	8/28/2009	9/23/2009	12/15/2009	\$142,611		\$142,611
R-5178	Orange	Resurfacing, multiple locations	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$64,787		\$64,787
Town of Chapel Hill Uncommitted Balance													\$0		
TOWN OF CARRBORO													\$403,596		
U-4726DA	Ashe Street	Sidewalk on one side from Weaver Street to Shelton	6/16/2009	7/2/2009	n/a	7/16/2009	n/a	7/22/2009	9/3/2009	7/27/2009	9/11/2009				
U-4726DB	Bim Street	Sidewalk on one side from Jones Ferry to Fidelity	6/16/2009	7/2/2009	n/a	7/16/2009	n/a	7/22/2009	9/3/2009	7/27/2009	9/11/2009	12/3/2009	\$284,176		\$284,176
EL-5103	Carrboro	Bus shelter and shelter materials	6/16/2009	7/14/2009	7/31/2009	n/a	n/a	8/20/2009	9/18/2009	8/28/2009	9/23/2009	1/12/2010	\$76,296		\$76,296
R-5178	Orange	Resurfacing, multiple locations	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$43,124		\$43,124
Town of Carrboro Uncommitted Balance													\$0		
TOWN OF HILLSBOROUGH													\$319,459		
U-4726JA	Hillsborough	Nash Street Sidewalk	7/13/2009	7/24/2009	n/a	5/13/2009 and 7/16/2009	n/a	9/2/2009	9/18/2009	9/21/2009	9/23/2009	12/14/2009	\$319,459	\$880,541	\$1,200,000
Town of Hillsborough Uncommitted Balance													\$0		

American Recovery and Reinvestment Act
STPDA Table - Funded - Managed Locally

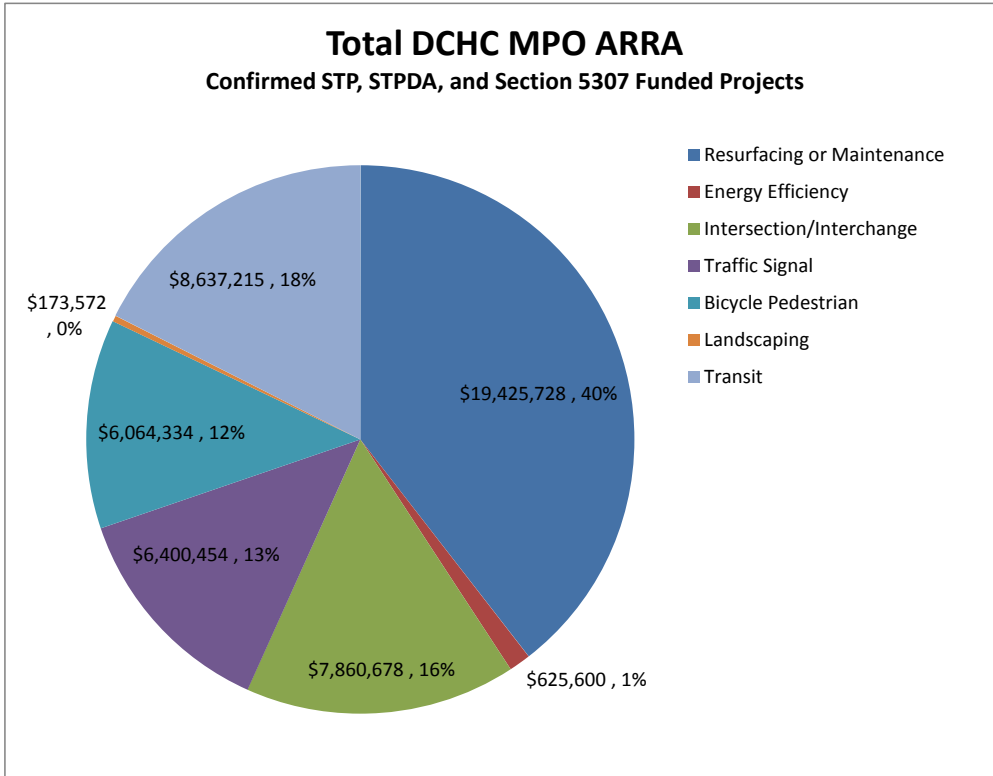
TIP #	Location	Description	1. Agreement Approved Locally 7/1/2009	1. Agreement Executed by NCDOT	2. Preliminary Engineering Authorization	3. Scoping Meeting	4. Procuring Professional Services	5. Environmental Documentation	6. Design (PS&E)	7. Right-of-Way Certification	8. Construction Authorization 10/1/2009	9. Procuring Construction Services 1/12/2010	Total ARRA STPDA	Other Funding	Total Project Funds
DURHAM COUNTY													\$827,321		
U-4726HH	Durham - Third Fork Creek Trail	Third Fork Creek Trail from Woodcroft Parkway to Garrett Road; Third Fork Creek Trail from MLK to Southern Boundaries Park; Third Fork Creek Trail MLK connector	6/15/2009	7/14/2009	n/a	n/a	n/a	9/2/2009	9/18/2009	9/1/2009	9/23/2009	12/16/2009	\$827,000	\$125,583	\$952,593
U-5164	Durham	Resurfacing, multiple locations - Managed by NCDOT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			\$321		\$321
<i>Durham County Uncommitted Balance</i>													(\$0)		
ORANGE COUNTY													\$612,657		
TA-5117	OPT	Two (2) 28' light transit vehicles w/wheelchair lift: 1 replacement; 1 expansion for CMAQ Project C-4932, service to start Sept. 2009	Funds to be flexed to FTA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10/1/2009		\$183,200		\$183,200
U-4726GA	Carrboro-Orange County	Twin Creeks Park Greenway (linear park): 10' multiuse asphalt trail including bridge over Jones Creek	6/16/2009	7/16/2009	n/a	7/8/2009	n/a	9/2/2009	9/18/2009	8/12/2009	9/23/2009	12/14/2009	\$429,457	\$144,384	\$573,841
<i>Orange County Uncommitted Balance</i>													(\$0)		
CHATHAM COUNTY													\$245,255		
U-4726FA	Chatham - US 15-501	Pedestrian Facilities on East and/or West side of US 15-501 in Cole Park area north to county line - using existing curb and gutter, serving existing commercial and UNC Park and Ride Lot	6/15/2009	6/23/2009	7/14/2009	6/17/2009	8/6/2009	8/8/2009	9/1/2009	9/1/2009	9/24/2009				
ER-5100HA	Chatham - US 15-501	Streetscaping/landscaping along US 15-501	6/15/2009	6/23/2009	7/14/2009	6/17/2009	8/6/2009	8/8/2009	9/1/2009	9/1/2009	10/22/2009	12/21/2009	\$166,306		\$166,306
R-XXXX	Chatham	Resurfacing, multiple locations	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			\$78,949		\$78,949
<i>Chatham County Uncommitted Balance</i>													(\$0)		
Uncommitted Balance													\$0		

American Recovery and Reinvestment Act
Section 5307/5340 Table - Funded - Managed by Transit Agencies

TIP #	Location	Description	Grant filed in TEAM 7/1/2009	Grant approved	Total Federal	Other Funding	Total Project Funds
		<u>TOTAL AVAILABLE</u>			\$ 8,377,719		
		<u>DATA</u>			\$4,257,465		
TG-4738	Durham	FY 2009 Fixed Route Preventative Maintenance	5/19/2009	7/20/2009	\$500,000		\$500,000
TR-4931	Durham	FY 2009 Paratransit Preventative Maintenance	5/19/2009	7/20/2009	\$500,000		\$500,000
TG-4738	Durham	FY 2010 Fixed Route Preventative Maintenance	5/19/2009	7/20/2009	\$500,000		\$500,000
TR-4931	Durham	FY 2010 Paratransit Preventative Maintenance	5/19/2009	7/20/2009	\$500,000		\$500,000
TA-5019	Durham	15 Paratransit Replacement Vans	5/19/2009	7/20/2009	\$707,790		\$707,790
TA-5108	Durham	9 Paratransit Expansion Vans	5/19/2009	7/20/2009	\$424,675		\$424,675
TT-4911	Durham	Logistical Enhancement - Real Time Bus Arrival/AVL/GPS for all vehicles	5/19/2009	7/20/2009	\$600,000		\$600,000
TG-4958	Durham	Passenger Amenities - 20 Bus Shelters, 20 Solar Lights, 20 Benches and Trashcans	5/19/2009	7/20/2009	\$230,000		\$230,000
TG-4738	Durham	30 Bus Repaint@7,850k each	5/19/2009	7/20/2009	\$235,000		\$235,000
TG-4958	Durham	1,200 Sq. ft Storage Shed for Passenger Amenities	5/19/2009	7/20/2009	\$60,000		\$60,000
		<i>DATA Uncommitted Balance</i>			\$0		
		<u>CHT</u>			\$2,714,867		
TA-4748	Chapel Hill	8 Paratransit Replacement Vans	5/4/2009	7/10/2009	\$520,000		\$520,000
TA-4726	Chapel Hill	2 Hybrid Replacement Buses	5/4/2009	7/10/2009	\$1,072,851		\$1,072,851
TG-4731	Chapel Hill	FY 2009 Preventative Maintenance	5/4/2009	7/10/2009	\$500,000		\$500,000
TG-4731	Chapel Hill	FY 2010 Preventative Maintenance	5/4/2009	7/10/2009	\$500,000		\$500,000
TG-4732	Chapel Hill	1 Service Truck Replacement	5/4/2009	7/10/2009	\$45,000		\$45,000
TT-5104	Chapel Hill	Computer Technology/Hardware	5/4/2009	7/10/2009	\$49,867		\$49,867
TG-4731	Chapel Hill	Bus Stop Shelters, Lighting & other Enhancements	5/4/2009	7/10/2009	\$27,149		\$27,149
		<i>CHT Uncommitted Balance</i>			\$0		
		<u>TRIANGLE TRANSIT</u>			\$1,405,387		
TA-4993	Triangle Transit	Paratransit fleet expansion	5/29/2009	7/20/2009	\$75,000	\$75,000	\$150,000
TT-4911	Triangle Transit	ITS Project - Real Time Passenger Information Project	5/29/2009	7/20/2009	\$398,467	\$212,432	\$610,899
TA-4818	Triangle Transit	Replacement Buses	5/29/2009	7/20/2009	\$917,500	\$917,500	\$1,835,000
TG-4821	Triangle Transit	Passenger Amenities	5/29/2009	7/20/2009	\$14,420	\$13,390	\$27,810
		<i>TT Uncommitted Balance</i>			\$0		
		Uncommitted Balance			\$0		

Confirmed ARRA STP, STPDA, and Section 5307 Funded Projects

Resurfacing or Maintenance	\$ 19,425,728
Energy Efficiency	\$ 625,600
Intersection/Interchange	\$ 7,860,678
Traffic Signal	\$ 6,400,454
Bicycle Pedestrian	\$ 6,064,334
Landscaping	\$ 173,572
Transit	\$ 8,637,215
Total	\$ 49,187,581





COUNTY OF DURHAM

MICHAEL M. RUFFIN
COUNTY MANAGER

February 24, 2010

Mr. Wally Bowman, Division Engineer
Division of Highways - Division Five
North Carolina Department of Transportation
815 Stadium Drive
Durham, North Carolina 27704

Re: Replacement of Bridge 151 at Flat River on Secondary Road 1614

Dear Mr. Bowman:

The Durham County Board of Commissioners expressed concern about a bridge (151) that has not been replaced on Secondary Road 1614 at Flat River and has asked that I appeal to the your office for a review and response as to the status of its replacement. This bridge has been out for some time and its closure is greatly hampering emergency services. In fact, concerns have been expressed from the Durham County Emergency Medical Services, the Bahama Fire Department and area residents. This bridge also provides important access to the Hill Demonstration Forest by the School of Forestry at North Carolina State University, which has also expressed concern about its replacement.

Recently, a citizen and representative of the Friends of Hill Forest told our Board that the replacement of this bridge is not included in NCDOT's five-year plan. If correct, this news is extremely distressing. The cost of replacement is not excessive. Perhaps your office could consider the use of a stimulus funds left over from other projects in order to facilitate its replacement.

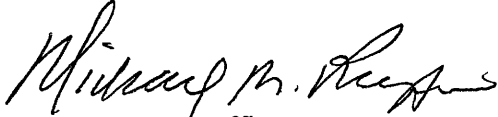
Mr. Wally Bowman, Division Engineer

Page 2

February 23, 2010

Please give this matter your urgent scrutiny and advise me as to the plan to replace it and any recommendations you could advance to facilitate its immediate replacement. As always, I appreciate your assistance and invite your questions.

Sincerely,



Michael M. Ruffin
County Manager

xc: Board of County Commissioners
Honorable Beverly Purdue, Governor
Mr. Gene Conti, Secretary of Transportation
Mr. Chuck Watts, DOT Board member
Mark Ahrendsen, Transportation Director, City of Durham
Mr. Joe Cox, College Forest Manager, North Carolina State University
Ms. Linda Huff, Friends of Hill Forest

SR 1614 (State Forest Road)

On the morning of September 6, 2008 Tropical Storm Hanna traveled through North Carolina. Rainfall caused the waters of the Flat River in Durham County to rise and this along with the amount of debris in the water caused Bridge 151 on SR 1614 (State Forest Road) to fail and wash downstream.

Bridge 151 was built as a low-water timber structure in 1969. The sufficiency rating was 49.1 and it was posted at 17 tons for SV and 21 tons for TTST. The structure was not considered structurally deficient or functionally obsolete. SR 1614 is an unpaved road in rural Durham County and the estimated ADT before the structure failed was 50. SR 1614 is approximately 2 ¼ miles long and runs in an east-west direction. It connects on the west to SR 1601 (Moores Mill Road) and to the east to SR 1613 (Wilkins Road).

SR 1614 is #24 on the current Durham County 2005 rural paving priority. Division 5 has received authorization to pave up to priority 9F, which is SR 1808 (Bennie Ross Road), as part of the 2008-2009 paving program. Due to budgetary constraints, it is doubtful that we will complete this paving program and there is no schedule to pave SR 1614. Also, it is anticipated that NCDOT will be directed by the Board of Transportation to reprioritize the unpaved roads in North Carolina and this could affect the priority number of SR 1614. SR 1614 is, also, identified as an alternate route on the North Durham Country Byway (one of the states scenic byways).

It is estimated to cost \$250,000 to replace the bridge as it was before and the costs could be greater depending on the scope of the design.

There seems to be 3 property owners along SR 1614 – Mr. and Mrs. William A. and Blanche J. McFarland; NC Division of Parks & Recreation, and NCSU. The property under control of NCSU is a University Forest and this property is on both sides of the Flat River with all building structures and equipment being located on the west side and approximately 60% of the property on the east side of the River. Also, there is a state employee that lives on site and there is a need for daily river crossings in a pickup truck. Each year the University holds a 9-week camp for college students and there is a need to transport the students across the river in a bus. There are fire roads in the forest and the University owns a small dozer (with no trailer) that is used to maintain the fire breaks, ditch, and to help fight fires.

The Bahama Fire Department is located just less than 5 miles from the Flat River at SR 1614 coming from the east or the west and Emergency Services receives a number of calls from this area each year. Most of the calls are trauma related from horseback riders or 4-wheelers, but there are a couple of fire calls each year. All of the calls emanating from the land line on University property show as coming from the Hampton Road area.

Due to the limited usage (low volume) and alternate access for the property owners along SR 1614, the Department is considering not replacing the bridge. There are approximately 8000 bridges in NC that have timber components and it is projected that these bridges will need to be replaced over the next 20 years. Recent history shows we are replacing just over 100 per year, which is well below the needs. Many of these

SR 1614 (State Forest Road)

bridges have higher volumes than bridge 151. Just in Durham County there are 193 structures that NCDOT maintains. 61 of these have been determined to be functionally obsolete and 8 are structurally deficient.

- Highway bridges classified as functionally obsolete are NOT structurally deficient, but their design is outdated. They may have lower load carrying capacity, narrower shoulders or less clearance underneath than bridges built to the current standard.
- A highway bridge is classified as structurally deficient if the deck, superstructure, substructure, or culvert is rated in "poor" condition (0 to 4 on the NBI rating scale). A bridge can also be classified as structurally deficient if its load carrying capacity is significantly below current design standards or if a waterway below frequently overtops the bridge during floods.

There was a meeting on January 6, 2009 to discuss this option with some of the affected parties. The attendance sheet is below. As a result of this meeting NCSU and Emergency Services are going to draft short summaries of their use of this bridge and their concerns if the bridge is not replaced. Also, Ms. Huff will provide a summary of the community uses of the bridge and concerns if it is not replaced.

Once the information is received we will consider it along with other pertinent data as we make a decision to replace or not replace this bridge. If this bridge replacement does not reach a high enough priority for NCDOT to recommend replacement, we will schedule a more inclusive public meeting to allow the general community an opportunity for input.

SR 1614 (State Forest Road)

Meeting - SR 1614 (State Forest Road)/Bridge # 151 – Durham County
January 6, 2009

<u>Name</u>	<u>Company</u>	<u>Phone</u>	<u>E-mail</u>
Joey Hopkins	NCDOT	220-2600	jhopkins@ncdot.gov
Reese Briley	NCDOT	733-4699	rbriley@ncdot.gov
Brandon Jones	NCDOT	220-4600	bhjones@ncdot.gov
Jeff Batten	DCEM	560-4600	jbatten@co.durham.nc.us
Mike Smith	Durham County EMS	560-8285	msmith@co.durham.nc.us
Len Needham	Bahama Fire Dept.	201-1589	needham@email.unc.edu
Jimmy Dodson	NCSU – Dept. of Forestry	796-7308	rocks_and_flies@hotmail.com
Joe Cox	NCSU	515-7576	joe_cox@ncsu.edu
Barry Goldfarb	NCSU	515-4471	barry_goldfarb@ncsu.edu
Linda Huff	Community Rep.	477-1889	lhuff1@mindspring.com



 DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION
Member Governments

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

February 10, 2010

Secretary Eugene A. Conti, Jr.
 NC Department of Transportation
 1501 Mail Service Center
 Raleigh, NC 27699-1501

Dear Mr. Conti:

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) recently submitted our FY 2012-2018 Transportation Improvement Program regional priority list to NCDOT. As requested, we submitted lists separated by mode or funding program for highway, bicycle and pedestrian, transit, enhancements, Congestion Mitigation Air Quality, and Surface Transportation Program Direct Attributable (STPDA).

The DCHC MPO has several high priority projects that are comprehensive, multi-modal projects designed to upgrade existing roads to modern, complete streets that can serve all road users. These projects are typically upgrades to strip-paved 2-lane roads that were built in once-rural areas that are now in the middle of the MPO's urbanized area. The upgrades include safety improvements for motorists such as wider lanes, more gradual curves, and dedicated turn lanes; upgrades for bicyclists and pedestrians such as wide-outside lanes, bicycle lanes, and sidewalks; and upgrades for transit users such as bus pull-offs and bus stop improvements. Most of these projects do not include wholesale road widening to increase capacity for motorists. Projects that fit this description and were submitted in our regional priority list include:

- Ephesus Church Road in Durham and Orange Counties
- Erwin Road in Durham and Orange Counties
- Fordham Boulevard in Chapel Hill
- North Greensboro Street in Carrboro
- Estes Drive in Chapel Hill
- Estes Drive Extension in Carrboro and Chapel Hill
- Piney Mountain Road in Chapel Hill
- Homestead Road in Carrboro and Chapel Hill
- Seawell School Road in Carrboro and Chapel Hill

Due to the multi-modal character of all of the above projects, the larger amount of highway funding as compared to other modes, and the flexibility of what highway funding can be used for, these projects were all submitted to NCDOT under our highway regional priority list.

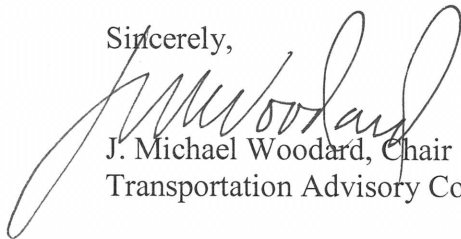
We understand that NCDOT has many requests for highway funds and is increasingly finding it difficult to meet the needs in the State. As a result, the Department is increasingly focusing on capacity, maintenance, and safety improvements to statewide or regional tier roads. However, it is imperative that the Department not ignore the critical need to upgrade the regional and sub-regional tier roads into modern, multi-modal, complete streets. These regional and sub-regional tier roads are also on the state-maintained system and have a tremendous impact on the livability and sustainability of our towns and cities.

NCDOT recently adopted a policy on complete streets. While we applaud this step and look forward to the implementation of this policy on upcoming NCDOT projects, NCDOT must also recognize that decades of building incomplete streets has left us with a network of streets that is inadequate to serve the needs of bicyclists, pedestrians, and transit users in urban areas. Upgrading existing streets is essential to improving our transportation system for all users. These upgrades must not only occur concurrent with road widening projects. Highway funding must be set aside specifically for upgrading regional and sub-regional tier roads separate from highway widening projects.

Statewide bicycle and pedestrian project funding is wholly inadequate to accommodate the need to upgrade these roads to complete streets. In addition, CMAQ and STPDA funding apportioned to our MPO is also extremely limited, particularly now that the federal rescission withdrew approximately \$7 million of our MPO's STPDA funds. Although limited, federal and state highway funding is the most abundant funding source for these improvements needed on state-maintained roads. Federal and state highway funding is currently scheduled to be used to construct multi-modal projects like these in our MPO (for example, U-0624, South Columbia Street in Chapel Hill, and U-3306, Weaver Dairy Road in Chapel Hill), and we hope to see an increase in the willingness of NCDOT to invest in other projects like these in our MPO.

We appreciate your consideration of our regional priority list and look forward to the release of the draft TIP. We hope that NCDOT will continue to consider the needs of all road users, particularly in urban areas, when prioritizing, funding, designing, and constructing highway projects. We look forward to discussing this issue further when we meet with our Board Members and NCDOT to discuss the draft TIP later this year.

Sincerely,



J. Michael Woodard, Chair
Transportation Advisory Committee

Cc: Chuck Watts, Jr., NC Board of Transportation
Michael S. Fox, NC Board of Transportation
DCHC MPO TAC