

**DURHAM – CHAPEL HILL - CARRBORO
METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE (TAC)****August 8, 2012
9:00 am****Committee Room
2nd Floor Durham City Hall****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

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

ACTION ITEMS**5. June 13, 2012 TAC Meeting Minutes (9:00-9:05)
Attachment 5**

A copy of the June 13, 2012 TAC meeting minutes is enclosed as Attachment 5.

TAC Action: Approve minutes of the June 13, 2012 TAC meeting.

**6. Triangle Regional Transit Program – New Starts Application and Orange County Bus and Rail Investment Plan – Update (9:05-9:15)
Attachment 6**

Patrick McDonough, Triangle Transit
Ellen Beckmann, LPA Staff

Triangle Transit will provide an update on the New Starts application for the Durham-Orange transit corridor.

The Orange County Transit Plan must be adopted by the county, DCHC MPO, Burlington-Graham MPO, and Triangle Transit. The TCC recommended TAC approval of the draft Orange County Plan at the May TCC meeting. Subsequent to the May TCC meeting, the Orange Board of Commissioners approved the plan contingent on the approval of the Implementation Agreement and subject to certain conditions. At the June TAC meeting, LPA staff presented a recommendation for approval of the plan that incorporated the Board of Commissioners' conditional approval and required that the MPO be a party to the Implementation Agreement. The TAC's action was to approve the plan in concept and stated that the MPO must have a role in the Implementation Agreement. The TAC Chair sent a letter describing the TAC's position after the meeting (Attachment 6). LPA, Orange County, and Triangle Transit staff will provide an update on the development of the Implementation Agreement.

TAC Action: Receive updates on the New Starts application and Implementation Agreement.

7. 2040 Metropolitan Transportation Plan and Comprehensive Transportation Plan (9:15-9:40)

Attachment 7, 7A, 7B, 7C, 7D, 7E

Ellen Beckmann, LPA Staff

Yanping Zhang, LPA Staff

At their June 2012 meeting, the TAC: approved updated Goals, Objectives and Targets; received the Deficiency Analysis; and, reviewed updated Socio-economic Data (SE Data). The next step in the process to develop the MTP and CTP will be to review and release the Alternatives Analysis and complete a series of public input events. Attachment 7 is a copy of the MTP/CTP schedule and Attachment 7A is a presentation on the MTP/CTP process, Alternatives Analysis and Collector Street Plan (CSP).

The process to identify the highway and transit projects, and the land use scenario for each Alternative is completed. However, the travel demand modeling for each alternative is in progress, and therefore the output data for all the Alternatives are not available. To help meet the tight schedule for the 2040 MTP, the TCC recommends that the TAC provide authority to the LPA staff to release the full set of Alternatives for public comment when they are completed. This will likely be within a week after the TAC meeting. Attachment 7B is a report presenting the Alternatives Analysis.

The LPA staff also recommends releasing the MPO-wide CSP for public review. This review would be integrated with that for the MTP and CTP. Attachment 7C is a poster-sized copy of the CSP map and Attachment 7D is four letter-sized close-up maps of areas where most of the new collector streets are designated. Attachment 7E is a technical memorandum provided by the consultant that assisted in drafting the CSP – this memorandum will be updated for the release of the CSP.

TCC Recommendation: That the TAC release the Alternatives Analysis and Collector Street Plan for a minimum 30-day public comment period and schedule a public hearing for the October TAC meeting.

TAC Action: Release the Alternatives Analysis and Collector Street Plan for a minimum 30-day public comment period and schedule a public hearing for the October TAC meeting.

8. EB-4707 – Old Durham-Chapel Hill Road - STP-DA Funding Request (9:40-9:55)

Attachment 8

Ellen Beckmann, LPA Staff

EB-4707, Old Durham-Chapel Hill Road bicycle and pedestrian facilities, requires additional funding. The project spans Durham and Chapel Hill and both jurisdictions are proposed to share the local match. The City of Durham has decided to proceed with the Durham portion of the project and will provide the local match. The Town of Chapel Hill has requested that the design be reexamined to determine if there are ways to reduce the cost for its segment before deciding on if it will proceed with the Chapel Hill portion of the project. The City of Durham requests

additional STPDA funding for its portion of the project. Attachment 8 is a memo describing the City of Durham's request.

TCC Recommendation: That the TAC direct LPA staff to amend the STPDA database to add \$2,781,291 federal STPDA to EB-4707.

TAC Action: Direct LPA staff to amend the STPDA database to add \$2,781,291 federal STPDA to EB-4707.

9. Section 5307- FFY12 Apportionment & Split Recommendation (9:55-10:05)

Attachment 9, 9A

Maricia Brown, LPA Staff

Section 5307 funds are allocated to urbanized areas for transit capital and operating assistance and for transportation related planning. The MPO's first partial apportionment (50%) was released by FTA in February 2012 and approved by the TAC in March. A second partial apportionment (75%) was released by FTA in May and approved by the TAC in June. The passage of MAP-21 released the full apportionment.

The MPO transit operators met to develop a recommended distribution of the MPO's FTA Section 5307 funds. A letter to FTA regarding the allocation of these funds among the transit operators (DATA, CHT, and TTA) will need to be approved. Once the allocation has been approved by the TAC, the transit operators will be authorized to seek application for via FTA's TEAM process. Please reference Attachment 9 for the memo detailing this grant program. Attachment 9A is the letter of recommendation for FTA.

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

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

10. Watch for Me NC – Update (10:05-10:20)

Attachment 10

Helen Chaney, NCDOT

The Watch for Me NC pedestrian safety campaign will run from August to October of 2012. The goal of the campaign is to improve pedestrian safety in the Triangle region by using educational safety messaging and enforcement to influence the behaviors of drivers and pedestrians. Each year in the Triangle, more than 400 pedestrians are hit or injured by cars and trucks.

TAC Action: Receive presentation.

11. MPO Boundary – Update (10:20-10:30)**Attachment 11, 11A****Ellen Beckmann, LPA Staff**

LPA staff has begun considering if adjustments to the MPO's boundary are desired following the release of the 2010 U.S. Census data. Adjustments are currently being discussed for western Orange County, Chatham County, and Butner/Granville County. The TCC has not yet made a recommendation for expansion in these areas, and has only directed LPA staff and a subcommittee to gather more information and discuss options with local government staff. A recommendation will be brought forward at a future meeting.

However, LPA staff has been informed that the Burlington Graham MPO may be voting on their boundary at their August 21, 2012 meeting. As their decision affects Orange County and the MPO, LPA staff will provide a brief update on the status of the boundary decisions in this area. Attachment 11 is a memo describing this area. Attachment 11A is a map showing the current MPO boundaries and 2010 Census urbanized areas.

TAC Action: Receive update.

REPORTS:**12. Report from the TAC Chair****Lydia Lavelle, TAC Chair**

TAC Action: Receive Report from TAC Chair

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

TAC Action: Receive Report from TCC Chair

14. Report from Staff**Attachment 14****Felix Nwoko, LPA Staff****15. NCDOT Report****Attachment 15****Wally Bowman, Division 5 – NCDOT****Mike Mills, Division 7 – NCDOT****Julie Bollinger, Transportation Planning Branch – NCDOT****David Bender, Public Transportation Division – NCDOT****Kelly Becker, Traffic Operations – NCDOT**

TAC Action: Receive report of NCDOT

INFORMATIONAL ITEMS

16. Recent News Articles and Updates
Attachment 16

Adjourn

Next meeting: September 12, 2012

Dates of Upcoming Transportation-Related Meetings:

8/8/2012 RTA Solutions Forum on High Performance Roundabouts, 1:30 pm – 3:00 pm, RTP HQ
8/17/2012 Tri-MAP, RDU Authority, 10:30 am

You can now follow the DCHC MPO on Twitter www.twitter.com/dchcmpo

TAC Directives to Staff

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

01/01/11 – Present (Completed/Pending/In Progress)

Meeting Date	Directive	Status
11/11/09	Provide the TAC a summary of the Regional Transit Leadership Group meetings and status of the county transit plans.	<u>In Progress</u> : Status provided to TAC, TAC Chair and elected officials on an ongoing basis
3/10/10	Address the issues raised regarding the Farrington Road Corridor Study.	<u>In Progress</u>
2/9/11	Expedite the contract amendment for the NC 54 Corridor Study and direct the consultant to review the land use assumptions.	<u>Completed</u>
3/9/11	Provide a presentation on the NCDOT tier system and funding levels in the TIP.	<u>Completed</u> : See 5/11/11 TAC Agenda.
3/9/11	Improve public outreach and add links to other transportation organizations to the MPO website	<u>In Progress</u> : DCHC MPO is now on Twitter. Website enhancements are in progress.
3/9/11	Provide an update on the implementation of the Greenhouse Gas Plan.	<u>In Progress</u>
3/9/11	Provide an update on the implementation of the Travel Demand Management program.	<u>Completed</u> : See 8/10/11 TAC Agenda
3/9/11 8/10/11	TAC tabled this issue at 6/13/12 meeting.	<u>Completed</u> : See 8/10/11 TAC and 6/13/2012 TAC Agenda Public meeting held 5/1/12, 5-7 pm, Trinity School
4/13/11	Send a letter to the State Board of Education requesting that bicycle and pedestrian safety be added to the driver's education program	<u>Completed</u> : Bicycle and pedestrian education has been added.
4/13/11	Send a letter to the General Assembly regarding the proposed state budget	<u>Completed</u> : See 5/11/11 TAC Agenda.
4/13/11 8/10/11	Send a letter to the DCHC MPO federal legislative delegation regarding the federal budget.	<u>Completed</u> : See 9/14/11 TAC Agenda.
8/10/11	Send letters to members of the DCHC MPO state legislative delegation and other state legislators regarding the 2011 session	<u>Completed</u> : See 9/14/11 TAC Agenda.
8/10/11	Develop an approval schedule for the Locally Preferred Alternative that takes into consideration review by local boards and commissions and public involvement.	<u>Completed</u> : See 11/9/11 TAC Agenda.
9/14/11	Send a letter to NCDOT requesting an extension of the deadline for submitting MPO rankings.	<u>Completed</u> : Deadline has been extended to 12/16/2011

10/12/11	Send a letter requesting the free use of the toll road by public buses.	<u>In Progress:</u> MPO and transit staffs have reviewed the relevant state legislation and are considering the legal issues related to allowing free use by transit vehicles.
11/9/11	Schedule a presentation on the state gas tax	<u>Completed:</u> See 12/14/11 TAC Agenda
11/9/11	Invite Paul Morris to a TAC meeting to discuss transit	<u>Completed:</u> See 1/11/12 TAC Agenda
12/14/11	Follow-up with Chatham County regarding participation on the TAC	<u>Completed:</u> A letter was sent on 1/25/12. Chatham County's TAC member has been in contact with LPA staff.
5/9/2012	Refer to the Durham-Wake County transit corridor project as "regional rail" not "commuter rail"	<u>In Progress:</u> The change will be integrated into MPO documents and plan.
6/13/2012	Work with Orange County and Triangle Transit on developing the Implementation Agreement for the Orange County Bus and Rail Investment Plan	<u>In Progress:</u>

44 Lydia Lavelle, TAC Chair called the meeting to order at 9:07 a.m. and the Roll Call was
45 conducted.

46 **PRELIMINARIES:**

47 **Adjustments to the Agenda**

48 Mark Ahrendsen stated the handouts that were distributed at the beginning of the TAC
49 meeting will be discussed during the appropriate agenda item.

50 Chuck Watts, Jr. commended staff on getting things on the web.

51 **Public Comments**

52 There were no comments from the public.

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

54 The Directives to Staff are attached for review.

55 **ACTION ITEMS:**

56 **May 9, 2012 TAC Meeting Minutes (Attachment 5)**

57 A motion was made by Mike Woodard and seconded by Alice Gordon to approve the May 9,
58 2012 TAC Meeting Minutes. The motion carried unanimously.

59 **Triangle Regional Transit Program – Orange County Bus and Rail Investment Plan (Attachments 6,**
60 **6A, 6B, and 6C)**

61 Patrick McDonough provided a review of the Triangle Regional Transit Program – Orange
62 County Bus and Rail Investment Plan, along with the attachments.

63 Mr. McDonough stated the Draft Bus and Rail Investment Plan in Orange County; attachment
64 6 is what went to the Orange County Commissioners. Triangle Transit received a variety of guidance
65 points from the County Commissioners via their resolution which passed on June 5, 2012. The
66 changes have not yet been integrated into the plan because there are many items in the
67 Implementation Agreement that are being worked out among the legal staffs of Orange County,
68 Triangle Transit and the MPO. At this time, we brought the latest draft plan and the
69

70 recommendations within the motion of the Orange County Commissioners so everyone can see the
71 recommendations. Mr. McDonough provided a brief PowerPoint Presentation on the draft plan.

72 Alice Gordon reviewed attachment 6B explaining exactly what the Orange County
73 Commissioners approved. Ms. Gordon read the motion made by Orange County Commissioners
74 provided in attachment 6B. Ms. Gordon stated Orange County has only received a draft
75 Implementation Agreement, and they have not received comments back from the Triangle Transit
76 counsel yet. Orange County approved the plan; however, there also has to be an approval of the
77 Implementation Agreement between Triangle Transit and Orange County. The two sections in the
78 Draft Bus and Rail Investment Plan that need to be addressed are: page 25 “Hillsborough Intercity
79 Rail Station: \$8.9 million” – a note needs to be added stating that Orange County will be responsible
80 for the 10% match; “Amount borrowed by Triangle Transit to execute the plan: \$25 million (this
81 number is larger than the line above because debt payments are over 30-year terms and continue
82 past 2035)” - there are nine categories of expenditures and the pie chart in the appendix shows
83 eight. This is actually a note because it is not an expense. On page 25, VII, Agreements - the
84 language doesn’t exactly track with our understanding of the Implementation Agreement will be.
85 Once the agreement is done, the language will be added to the plan. A change will be made to page
86 7, “Maintain existing Services” – The first bullet will be changed to read “Support existing services
87 consistent with state law –Chapter 105 article 43 of the NC General Statutes.”

88 Alice Gordon reviewed attachment 6C. It adds the DCHC MPO as a party to the
89 Implementation Agreement and is not consistent with what the Orange County Board of County
90 Commissions passed. Article 43 does not say the MPO has to be a part of the agreement. The
91 Implementation Agreement status is as follows: Orange County has reviewed the draft and Triangle
92 Transit has not made comments back regarding the draft Implementation Agreement. Ms. Gordon
93 suggested that the MPO pass the motion the Orange County Board of County Commissioners voted

94 on as shown in 6B or send it back to the County for more information. Ms. Gordon stated the motion
95 was to approve the plan contingent on the approval of Implementation Agreement with Triangle
96 Transit and Orange County. To add the DCHC MPO to it means that the DCHC MPO is a party to the
97 agreement. Orange County would not do anything that will impinge upon the authority of the DCHC
98 MPO. This body has to approve the financial plan. If the DCHC MPO approved, the BGMPO should
99 approve. There is a lot to think through before adding parties to the agreement.

100 A motion was made by Alice Gordon and seconded by Eric Hallman to approve the Orange
101 County Bus and Rail Investment Plan as approved by the Orange County Board of County
102 Commissioners on attachment 6B.

103 A substitute motion was made by Mike Woodard and seconded by Diane Catotti to approve
104 the motion as stated in attachment 6C.

105 Ellen Reckhow stated that technically funds for all projects flow through the TAC for
106 distribution. Mark Ahrendsen stated that our understanding is the Implementation Agreement will
107 provide details of how the funds flow and how the plan will be changed. Ellen Reckhow stated that
108 counties are designated through the transit agency to receive funds. Mr. Ahrendsen stated the funds
109 have to be in the TIP approved by the MPO. Ms. Reckhow stated ideally you want all players on
110 board and the TAC is a key player. Ms. Reckhow is trying to establish if it is needed or not to have
111 the TAC as part of the implementation agreement.

112 Patrick McDonough stated one difference between our MPO and BGMPO is our DCHC MPO is
113 the keeper of the Locally Preferred Alternative and that is a federal requirement. The responsibility
114 of the BGMPO is derived through House Bill 148. DCHC MPO's role is a critical regulator within the
115 process. We can only enter the New Starts program if the DCHC MPO has specified the project
116 within the LRTP. BGMPO doesn't have that responsibility because the LPA is not within their
117 jurisdiction.

118 Bernadette Pelissier stated this hasn't even been discussed at the TCC level and there are a
119 lot of questions. Ms. Pelissier asked if the DCHC MPO has to be a signatory of the agreement or do
120 we make sure we have conditions in the Implementation Agreement that says what changes to the
121 plan would have to go through the MPO.

122 Ed Harrison stated on the top of page 26 of the Draft Bus and Rail Investment Plan it sounds
123 like it is agreed to by the three parties.

124 Ellen Reckhow stated we are talking about a regional plan where Durham and Orange County
125 will interface. The MPO is where we work things out. Ms. Reckhow would be reluctant to see this go
126 away. If we move away from the TAC having an involvement in the plan, it will send a bad message
127 to our partners.

128 Bernadette Pelissier stated it is very clear the MPO has a role; but saying the DCHC MPO has
129 to be a signatory before it has been discussed by Orange County will create a conflict.

130 Mike Woodard stated the MPO needs to work together if this is going to work. We seem to
131 be approaching this negatively. We need to be approaching this positively. The MPO must have a
132 role in the plan. It is critical that the DCHC MPO is involved.

133 Alice Gordon stated it is important to start off with a positive message and Ms. Gordon
134 doesn't think that a positive message is being sent at this point with the MPO telling Orange County
135 what they need to do. Ms. Gordon also stated the language on the bottom of page 25 and top of
136 page 26 was not approved and the language is going to be changed to reflect the actual changes
137 once they have been made. Ms. Gordon stated if the MPO has doubts, it should be sent back to the
138 Orange County Board of County Commissioners to work it out. Ms. Gordon stated there is no doubt
139 that the MPO should be involved. The question is how the MPO should be involved. Nobody is
140 trying to cut the MPO out; but at this point there is no need to say they must be a signatory.

141 Lydia Lavelle asked if Durham County has started any work on an Implementation
142 Agreement. Ellen Reckhow stated Durham County has not been as formal. Durham County felt they
143 will work through things both with the TAC and Triangle Transit in a less formal manner.

144 Ellen Reckhow asked if it is critical to take action today on the Bus and Rail Investment Plan.
145 Mark Ahrendsen stated that is the TAC's call as it relates to the action for the referendum in
146 November. Ms. Reckhow stated if it is not critical that a decision be made today; she is prepared to
147 offer a substitute motion.

148 A substitute motion to the substitute motion was made by Ellen Reckhow and seconded by
149 Mike Woodard to defer action and send it back to the Orange County Board of County
150 Commissioners urging them to agree to make the TAC a party to the Implementation Agreement.

151 Diane Catotti stated if we have time, we should send it back to the Orange County Board of
152 County Commissioners. The MPO staff should be involved with developing the language. Diane
153 Catotti asked if we can approve the plan in concept so the general public understands that we agree
154 with the plan and are trying to resolve the MPO's role. Ellen Reckhow accepts the change made by
155 Diane Catotti.

156 Damien Graham with Triangle Transit stated the Implementation Agreement may not be
157 ready by August. The Plan doesn't need to be approved by the MPO until the tax is levied. Mark
158 Ahrendsen stated we just received the information from the Orange County Clerk yesterday. The
159 TCC was supportive of the Plan. The TCC had concerns over the process for changing the plan and
160 the roles of the parties. Mike Woodard asked how we can convey that the MPO role is essential.

161 Bernadette Pelissier stated the Orange County Board of County Commissioners doesn't
162 understand the role of the MPO. The MPO staff should be involved in the discussion to the BOCC at
163 their next meeting on June 19, 2012. The MPO clearly has a role.

164 Alice Gordon stated the MPO should approve the plan in concept and send it back to the
165 Orange County Board of County Commissioners so the MPO role can be clarified.

166 The motion was repeated: The motion is to send it back to the Orange County Board of
167 County Commissioners; including approving the plan in concept and urging the Orange County Board
168 of County Commissioners to consider a role for the TAC in the Implementation Agreement.

169 Mike Woodard asked what the schedule is for the Orange County Board of County
170 Commissioners. Alice Gordon stated there is a work session in August. Bernadette Pelissier stated
171 they will instruct staff at the June meeting so they can work on it at their level so when the Orange
172 County BOCC meets in August they can provide an update.

173 Chuck Watts, Jr. stated the role of the MPO is set by federal statute. Most of the funds come
174 from the federal government. The MPO involvement on all aspects is important so we can say to the
175 federal government that the MPO is supportive. Ellen Reckhow doesn't want the discussion lingering
176 into August. It could send a negative message.

177 The motion passed unanimously.

178 **Triangle Regional Transit Program-Durham-Orange County Transit Corridor Locally-Preferred**
179 **Alternative (Attachments 7, 7A, and 7B)**

180
181 Ellen Beckmann provided an introduction for the Triangle Regional Transit Program-Durham-
182 Orange County Transit Corridor Locally-Preferred Alternative, along with the attachments.

183 A motion was made by Mike Woodard and seconded by Diane Catotti to approve the
184 Resolution to Clarify the Locally-Preferred Alternative for the Durham-Orange County Transit
185 Corridor. The motion carried unanimously.

186 **Pickett Road (Attachments 8, 8A, 8B, 8C, 8D, and 8E)**

187 Andy Henry provided an introduction for Pickett Road, along with the attachments. The
188 TCC's recommendation is to oppose closing Pickett Road.

189 Mike Woodard suggested the MPO not take action at this point. No jurisdiction has the
190 funds to move forward at this point. Mr. Woodard wants staff to work with NCDOT staff on the
191 signals. The closure is not critical to Phase I.

192 A motion was made by Mike Woodard and seconded by Diane Catotti for the TAC to not take
193 any action at this time. Alice Gordon agrees with this recommendation. Ed Harrison stated there are
194 many people that do not know about the park project. Chuck Watts, Jr. stated NCDOT wants local
195 communities to be involved in these decisions. The motion carried unanimously.

196 **2040 Long Range Transportation Plan and Comprehensive Transportation Plan (Attachments 9, 9A,**
197 **9B, 9C, 9D, 9E, and 9F)**

198
199 Andy Henry provided an introduction for the 2040 Long Range Transportation Plan and
200 Comprehensive Transportation Plan, along with the attachments.

201 Andy Henry stated they received comments from the Town of Chapel Hill and it resulted in
202 some changes and Mr. Henry reviewed those changes.

203 Ed Harrison stated the cycling community is moving towards emphasis on educating motor
204 vehicle drivers.

205 Andy Henry reviewed the targets. Ellen Reckhow asked how do we achieve environmental
206 justice population proximity to rail stations and Andy Henry stated that is a difficult question. We
207 don't know where the low income and minority population will live. Ms. Reckhow is concerned that
208 rail will take us in the opposite direction. Mark Ahrendsen stated it puts more emphasis on bus
209 service. Ms. Reckhow asked if the target is realistic.

210 Lydia Lavelle suggested obtaining more details on how population is distributed around rail
211 and bus. Ellen Reckhow stated a housing plan will provide more details and Ms. Reckhow asked if we
212 would we need to incorporate targets in the housing plan.

213 Chuck Watts, Jr. stated the bus system is the key. We need to address gentrification
214 concerns near rail stations through the housing plan. There won't be a racial majority in North
215 Carolina cities in the future.

216 Lydia Lavelle opened the public hearing at 10:45 a.m. being there were no members of the
217 public present to speak, the public hearing closed at 10:45 a.m.

218 Ellen Reckhow recommended changing attachment 9D, page 3 #9 to read as follows "Percent
219 of Low/Moderate Income Population within ¼ mile of transit" and keep the same targets.

220 A motion was made by Ellen Reckhow and seconded by Alice Gordon to approve the Goals
221 and Objectives and Targets with the recommendation above by Ellen Reckhow and GHG "change" by
222 Alice Gordon. The motion carried unanimously.

223 **2040 Long Range Transportation Plan and Comprehensive Transportation Plan – Socio-Economic**
224 **Data and Deficiency Analysis (Attachments 10 and 10A)**

225
226 Andy Henry provided an introduction for the 2040 Long Range Transportation Plan and
227 Comprehensive Transportation Plan-Socio-Economic Data and Deficiency Analysis, along with the
228 attachments.

229 Alice Gordon asked what "too concentrated" means. Ms. Gordon wanted to know more
230 about the impact on Orange County. Andy Henry provided a response and David Bonk described the
231 changes.

232 Ed Harrison stated we need to be very careful because the developer has used this data to
233 justify their density. Andy Henry stated they will put the standard caveat that this can't be used for
234 planning purposes.

235 Ellen Reckhow asked about the employment density in southeast Orange County near the
236 Durham County border. Andy Henry will look at the employment. Alice Gordon asked about the
237 employment in southeast Orange County as well. David Bonk stated the development node is yet to

238 be determined. We need to move forward with the plan and make appropriate changes in the
239 interim.

240 Ellen Reckhow noted the increase in travel time for Hillsborough travel. Andy Henry stated it
241 is due to I-40/I-85 congestion. Andy Henry will provide a book of maps to the TAC.

242 **STP-DA Funding Requests (Attachments 11 and 11A)**

243 Ellen Beckmann provided an introduction for the STP-DA Funding Requests, along with the
244 attachments.

245 A motion was made by Alice Gordon and seconded by Mike Woodard to direct LPA staff to
246 amend the STPDA database to add \$25,303 federal STPDA to U-4726DC. The motion carried
247 unanimously.

248 **FY 2012 UPWP Amendment #5 (Attachment 12)**

249 Maricia Brown provided an introduction for the FY 2012 UPWP Amendment #5, along with
250 the attachment.

251 A motion was made by Mike Woodard and seconded by Diane Catotti to approve the
252 resolution and supporting documents for the FY 2012 UPWP Amendment #5. The motion carried
253 unanimously.

254 **Section 5307-FFY12 Partial Apportionment & Split Recommendation (Attachments 13 and 13A)**

255 Maricia Brown provided an introduction for the Section 5307-FFY12 Partial Apportionment &
256 Split Recommendation, along with the attachments.

257 A motion was made by Mike Woodard and seconded by Diane Catotti to approve the Section
258 5307-FFY12 Partial Apportionment & Split Recommendation. The motion carried unanimously.

259 Mark Ahrendsen stated the doling out the federal funds on a monthly basis is due to the lack
260 of a federal authorization bill.

261 **Legislative Update (Attachment 14)**

262 Ellen Beckmann provided an introduction for the legislative update, along with the
263 attachment.

264 In reference to toll data on the Triangle Parkway, Alice Gordon asked if we can get aggregate
265 toll data to help with the travel demand modeling process, and Ellen Beckmann stated we can pursue
266 this possibility.

267 Ellen Beckmann will continue to work with Julie White at the NC Metro Mayors Coalition and
268 the other MPOs.

269 **Carrboro Downtown Traffic Studies (Attachment 15)**

270 Jeff Brubaker provided a PowerPoint Presentation on the Carrboro Downtown Traffic
271 Studies, along with the attachment. Alice Gordon stated she supports the concept.

272 **REPORTS:**

273 **Report from the Chair**

274 There was no Report from the Chair.

275 **Report from the TCC Chair**

276 Mark Ahrendsen stated the Mobility Fund schedule is Attachment 21. The BOSS launch date
277 is July 16, 2012. August 29, 2012 is on the agenda with a tentative date for a Joint TAC meeting.

278 **NCDOT Report (Attachment 19)**

279 Patrick Wilson, NCDOT Division 7, provided an update on projects. Alice Gordon wants to
280 make sure the Culbreth sidewalks project is still on schedule.

281 Joey Hopkins, NCDOT Division 5, provided an update on projects. The Hillandale Road
282 project is slightly behind schedule with a September completion date. NCDOT is working on the
283 BOSS signs, advertisement, and bus driver training. They don't expect a significant amount of relief
284 on I-40. There is an open house scheduled on July 23, 2012 from 3 p.m. to 7 p.m. for the Durham
285 Access to Transit Plan.

286 **INFORMATIONAL ITEMS:**

287 **Recent News Articles and Updates (Attachment 20)**

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

289 **Draft Mobility Fund Project Schedule (Attachment 21)**

290 The Draft Mobility Fund Project Schedule is attached for review.

291 **TIP Administrative Modification for June 2012 (Attachments 22 and 22A)**

292 The TIP Administrative Modification for June 2012 is attached for review.

293 **Letter from NCDOT re Use of NC 147 by Trucks with Twin Trailers (Attachment 23)**

294 The letter from NCDOT re Use of NC 147 by Trucks with Twin Trailers is attached for review.

295 **Adjournment**

296 There being no further business before the Transportation Advisory Committee a motion was

297 made by Alice Gordon and seconded by Mike Woodard to adjourn the meeting at 11:51 a.m.

Member Organizations: Town of Carrboro • Town of Chapel Hill • County of Chatham • City of Durham
Durham County • Town of Hillsborough • NC Department of Transportation • Orange County

June 25, 2012

Bernadette Pelissier
Chair
Orange County Board of Commissioners
4516 Mystic Lane
Hillsborough, NC 27278

Dear Ms. ~~Pelissier~~: *Bernadette He*

As you know, on June 13, 2012, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Transportation Advisory Committee (TAC) approved the Orange County Bus and Rail Investment Plan in concept, stating that the MPO must have a role in the Implementation Agreement. While the TAC is supportive of the Bus and Rail Investment Plan and Orange County's decision to hold the sales tax referendum this fall, the TAC deferred final approval of the plan until there is clarification of the MPO's role in the Implementation Agreement. We directed MPO staff to work with Orange County and Triangle Transit to bring the agreement and final plan back to the TAC as soon as possible.

As the alternate member for Orange County on the TAC, you participated in the TAC's discussion on this matter. MPO staff and every TAC member who spoke recommended that the MPO be a party to the agreement. You were supportive of this concern as well. You will recall that the motion that was passed was a compromise to the opinion expressed by Alice Gordon (Orange County's member on the TAC) that the MPO not be a party to the agreement. Other than this issue, no TAC members expressed any objections to adopting the plan.

There are overwhelming, compelling reasons why the MPO should be a party to this agreement. It should first be noted that the Bus and Rail Investment Plan speaks to this very important issue. It states that the Implementation Agreement will detail the following areas:

- “(a) Annual review presentations of the activities and progress made in implementation of the Plan by Triangle Transit to the County and the MPO;
- (b) The process for review and vote by the County, the MPO and Triangle Transit's Board of Trustees or the role of the operating agency regarding any significant or substantial revisions to the Plan required by changes experienced in revenues received, capital costs, operating expenses, or other substantial issues affecting the Plan;
- (c) A recognition and preservation of decision making responsibilities of the operating agencies;

- (d) Responsibility of Triangle Transit for direct disbursement of funds from the revenues received per Section V (above) to the public agency responsible for implementing the bus services set forth in the Plan; and
- (e) Other necessary provisions regarding implementation of this Plan as agreed to by the County, the MPO, and Triangle Transit.”

Items a, b, and e directly affect the MPO and items c and d are critical to the implementation of the plan and the MPO’s Long Range Transportation Plan (LRTP). The DCHC MPO is clearly affected by the agreement, and therefore we believe it should be a full party to the agreement.

Of primary concern to the MPO is the process for review and vote by the County, MPO, and Triangle Transit on any changes to the plan. The Durham-Orange rail transit corridor project is the most costly single project in the MPO’s LRTP, and it cannot be implemented without the local, state, and federal funding as outlined in the Orange County Bus and Rail Investment Plan. Further, the Bus and Rail Investment Plan also includes funding for future local and regional bus services that are commitments in our LRTP, important to the MPO’s member agencies, and critical to the success of the rail system. The MPO has a high degree of interest in making sure that these bus and rail projects are implemented. Any changes to the Bus and Rail Investment Plan must be approved by the MPO, must be consistent with our LRTP, and must also be included in the MPO’s Transportation Improvement Program (TIP) as they are funded. As such, the MPO must be a part of developing the language in the Implementation Agreement that describes the process for changing the plan and this language must require Orange County and Triangle Transit to coordinate with the MPO. In short, we believe that the DCHC MPO needs to be a full party to the Implementation Agreement for the Orange County Bus and Rail Investment Plan. This would best ensure that the MPO’s interests are protected.

We understand that Orange County has concerns that if the MPO were a party to the agreement, the MPO may be able to change the Bus and Rail Investment Plan without Orange County’s approval. This is not the case. *The Congestion Relief and Intermodal Transport Fund Act (HB 148) requires that the plan be approved by the County, Triangle Transit, and the MPO. None of the parties can adopt or change the plan unilaterally. North Carolina House Bill 148 required approval by all three because each has an important role in transit planning and implementation.* We believe that the development of the plan has benefitted from close collaboration between the three parties and we believe that continuing this close collaboration will only serve to improve the plan and successfully implement the bus and rail projects in the plan.

We are competing with other regions across the country for limited federal transit funding. *It is critical to be able to demonstrate to the federal government that our plan was developed collaboratively and is supported by local jurisdictions and transit operators.* The DCHC MPO TAC is a forum for regional collaboration between counties, municipalities, Triangle Transit, and state and federal agencies. We have had a history of collegial discussion on issues of regional importance at TAC meetings. Including the DCHC MPO as a party to the Implementation Agreement will help continue the successful regional

collaboration we have had on transit planning issues and demonstrate to the federal government that we are unified in our support for the rail and bus projects in the plan.

You mentioned at the TAC meeting on June 13 that perhaps the Orange County Board of Commissioners needed to have a better understanding of exactly how the MPO operates. In this letter, we have attempted to explain how very important it is that the MPO be a full party to this agreement. Based on the discussion at our June meeting and in accordance with the aforementioned comments, a majority of the TAC members may insist that the MPO be a party to the agreement as a condition of approving the plan. If you need further explanation from any of us about why we believe this is necessary, please do not hesitate to ask.

As stated, we have directed MPO staff to work with Orange County and Triangle Transit staff on the Implementation Agreement and to bring back a recommendation to the TAC later this summer. At that time, we will also consider final approval of the Orange County Bus and Rail Investment Plan. The TAC will carefully consider how the Implementation Agreement accommodates the MPO's interests when we consider final approval of the plan. TAC members and MPO staff look forward to working with Orange County and Triangle Transit on developing an Implementation Agreement that satisfactorily protects the interests of the County, Triangle Transit, and the MPO. Again, please feel free to contact me or DCHC MPO staff with any questions you have on the MPO's position.

Sincerely,



Lydia Lavelle, Chair
Transportation Advisory Committee

CC: DCHC MPO TAC
Orange County Commissioners
Frank Clifton, Orange County
John Roberts, Orange County
Craig Benedict, Orange County
David King, Triangle Transit
Wib Gulley, Triangle Transit
Damien Graham, Triangle Transit
Patrick McDonough, Triangle Transit
Mark Ahrendsen, City of Durham/TCC Chair

2040 Long Range Transportation Plan (LRTP) Comprehensive Transportation Plan (CTP) Summarized Development Schedule

Public Involvement Activities	
W = Public Workshops/meetings	H = Public Hearings
N = LRTP Newsletter	O = Other Public Involvement Activities
M = Mailing List - flyers, information, materials	

(bold/blue block) = TAC task/action
(light/blue crosshatch) = First TAC review or action
(light grey block) = task/action
(yellow/horizontal stripe) = adopted or completed

Task ID#	Plan Tasks	Pub. Involve.	2011					2012						2013												
			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
1	2040 LRTP Work Plan and Schedule -- develop, review and endorse																									
2	2040 LRTP Public Involvement Plan -- update, release for comment, conduct hearing and approve	N, W, M, H, O																								
3	Goals & Objectives and Targets -- develop, release for comment, conduct hearing, and adopt	N, W, M, H, O																								
4	Socio-economic Data (SE Data) -- develop, release for comment, conduct hearing and approve for use in 2040 LRTP	N, W, M, H, O																								
5	Triangle Regional Model (TRM) -- update model, complete Base Year validation, verify network, and TAC approve																									
6	Deficiency Analysis and Needs Assessment -- generate deficiency analysis, develop needs assessment, and TAC review and comment																									
7	Financial Plan -- Preliminary forecasts for Alts. Analysis; final forecasts for Preferred Option																									
8	Alternatives Analysis -- establish evaluation criteria, generate and evaluate alternatives, conduct workshops and public hearing, other agency and local review, TAC select Preferred Option	N, W, M, H, O																								
9	CTP Projects -- Same tasks as #8 (Alternatives Analysis) except most of CTP report will be drafted, and NC Bd. of Transportation needs to approve after TAC approval.	N, W, M, H, O																								
10	Incorporated Studies -- Freight; Purpose & Need; Environmental Justice; Resource agency review (4F); Planning Factors; and, Indirect & Cumulative																									
11	Adoption of 2040 LRTP -- release fiscally-constrained 2040 LRTP full report for public comment, conduct hearing, receive local review, and approve Plan	M, H, O																								
12	CTP Report -- Write full CTP report (includes purpose & need, etc.), release for public comment, conduct workshop, TAC adopt final CTP Report, NC BOT approves final CTP Maps.	M, H, O																								
13	AQ Conformity Determination -- prepare networks, conduct emissions analysis and prepare draft report	M, H, O																								
14	Final LRTP/AQ Conformity Adoption -- release full report for comment, conduct public hearing, TAC approve full report, and federal agency approval	M, H																								
▶	Conformity Lapse Date -- June 15, 2013																									

2040 Metropolitan Transportation Plan (MTP) and Comprehensive Transportation Plan (CTP)

Alternatives Analysis and Collector Street Plan

Transportation Advisory Committee
August 8, 2012



Presentation Outline

- Relationship of the Plans
- Review of what we have done
- Alternatives Analysis and public input process
- Authorization to release Alternatives Analysis when completed:
 - Highway and Transit networks completed
 - SE Data scenarios completed
 - Travel models are still in progress
- MPO-wide Collector Street Plan
- Next steps



But first...

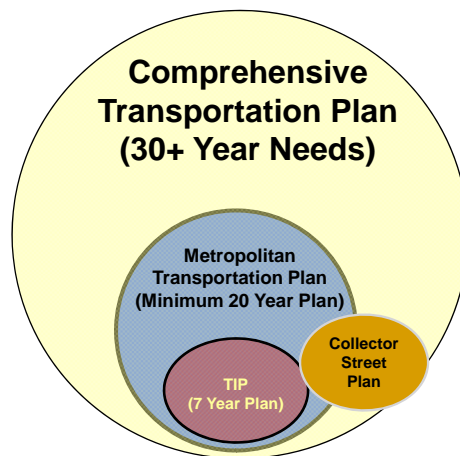


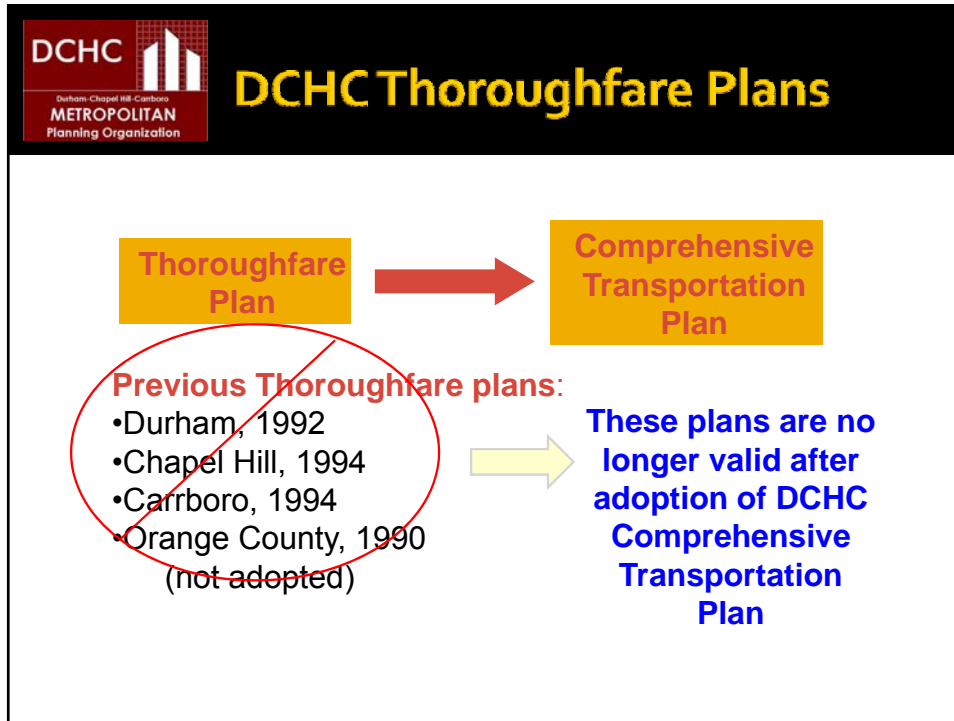
- Part of federal legislation
- Name change won't be easy to remember
- But, have to do it sometime, so let's get started.



Relationship Between Plans

Let's review the plans one more time...






DCHC METROPOLITAN Planning Organization

Plan Comparison


	Approximate Plan Horizon	Identifies?	Fiscally Constrained	Report Required
Comprehensive Transportation Plan	30+ Years	Existing and planned facilities	No	Yes
Metropolitan Transportation Plan	20 Year Minimum	Planned facilities	Yes	Yes
Transportation Improvement Program	7 Years	Planned facilities	Yes	No
Collector Street Plan	30+ Years	Existing and planned facilities	No	No



Plan Comparison (continued)

	Who Requires?	Update Requirement	Adopted by	A/Q Conformity Required
Comprehensive Transportation Plan	State Statute	No requirement	TAC and NCDOT BOT	No
Metropolitan Transportation Plan	Federal legislation	Every 4 years	TAC	Yes, for non-attainment areas
Transportation Improvement Program	Federal legislation	Every 2 years	TAC and NCDOT BOT	Yes, for non-attainment areas
Collector Street Plan	No requirement	No requirement	TAC (local ordinance reference)	No

- MTP and CTP will be single document
- MTP and CTP will have separate state and federal approval processes



Tasks Completed

- ✓ Goals Objectives and Targets: [\(guide decisions\)](#)
 - Released March 2012
 - Adopted June 2012
- ✓ Socioeconomic Data: [\(drives travel demand\)](#)
 - Released March 2012
 - Updated June 2012 (with Deficiency Analysis)
- ✓ Deficiency Analysis: [\(identifies needs and deficiencies\)](#)
 - Presented June 2012
- ✓ Detailed tables, maps, etc. for release on Web site



Alternatives Analysis

- What –
 - Set of highway and transit projects, and land use assumptions that produce transportation scenario for year 2040
- Why –
 - Compare impact of different projects and sets of projects on meeting transportation demand.
 - Inform development of final MTP and CTP
- When –
 - Release in August 2012
 - Public input (e.g., workshops, public hearing) in August, September and early October 2012




Alternatives Analysis (cont.)

- We will compare **5** different Alternatives
- Each Alternative:



Land Use/Network	Highway Intensive	Transit Intensive	Moderate
CommPlan	Yes	Yes	Yes
All-in-Transit	No	Yes	Yes



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Alternatives Analysis

-- Land Use Scenarios

First.. A quick refresher. We start with Guide Totals


Population

--Guide Totals--	2040 LRTP		
	2010	2040	Annual Rate
Jurisdiction			
Durham County	268,925	432,571	1.6%
Orange County	134,325	197,675	1.3%
Chatham County ^{(1),(2)}	38,991	71,672	2.0%
Person County ⁽¹⁾	31,845	44,784	1.1%
Total	474,086	746,702	1.5%

Employment-2

--Guide Totals--	2040 LRTP		
	2010	2040	Annual Rate
Jurisdiction			
Durham County	194,770	306,637	1.5%
Orange County	70,491	119,787	1.8%
Chatham County	10,011	19,509	2.2%
Person County	8,791	13,093	1.3%
Total	284,063	459,026	1.6%

11



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Alternatives Analysis


-- Land Use Scenarios

Next... CommunityViz land use model allocates Guide Totals by county

How does CommunityViz Work?

- Each parcel has suitability value (= how attractive for development)
- Allocates dwelling units and employment in order of suitability to available parcels

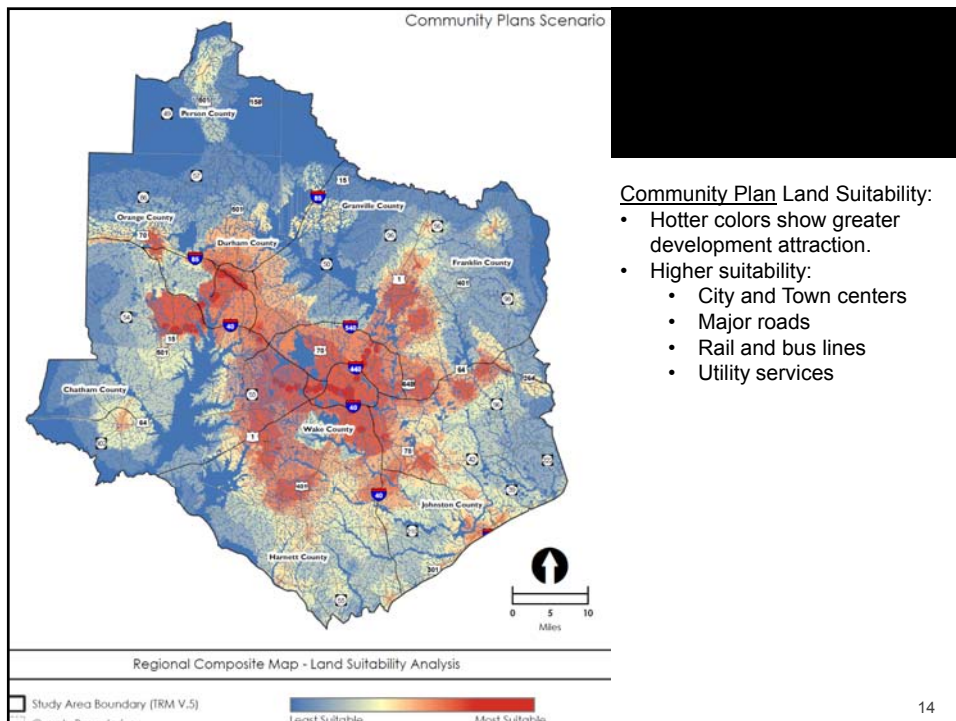
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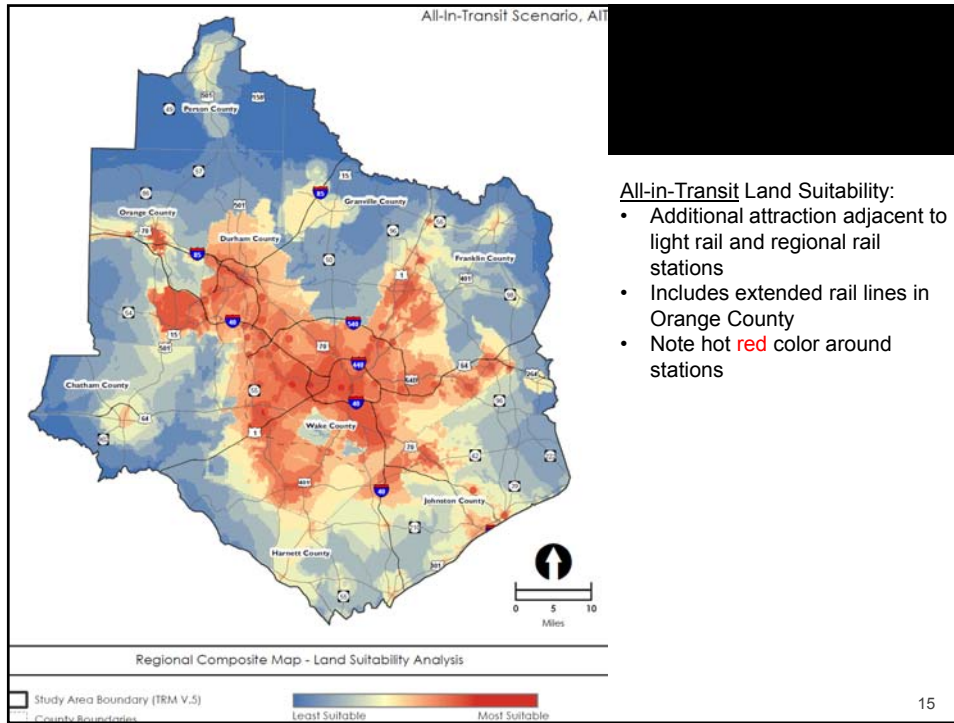


Alternatives Analysis

-- Land Use Scenarios ****Completed****

- Community Plan
 - Based on local comprehensive plans
 - Used in Deficiency Analysis (June 2012)
- All-in-Transit
 - Based on local comprehensive plans, plus...
 - Additional and enhanced transit oriented development
 - Additional development attraction to rail and premium transit





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Alternatives Analysis


-- Land Use Scenarios **Example**


Higher suitability around rail stations results in...


2040 Community Plan -- Employment

○ = Increased employment concentrations adjacent to rail transit

2040 Highway Intensive -- Employment

 <h2 style="display: inline;">Alternatives Analysis</h2> -- Transportation Networks **Completed**			
	Highway Intensive	Transit Intensive	Moderate
Highway	<ul style="list-style-type: none"> • 2035 LRTP • CTP highway projects • 2,979 lane miles 	<ul style="list-style-type: none"> • Basically, 2015 and 2025 tier • No 2035 tier or CTP highway projects 	<ul style="list-style-type: none"> • Basically, 2035 LRTP (minus some minor highway projects)
Transit	<ul style="list-style-type: none"> • Current bus transit • No rail transit 	<ul style="list-style-type: none"> • Current bus transit • County plans (based on ½ cent sales tax) • LRT and CRT (based on Locally Preferred Alternative) • LRT and CRT extensions in Orange County • All Bus Rapid Transit (BRT) in Chapel Hill 	<ul style="list-style-type: none"> • Current bus transit • County plans (based on ½ cent sales tax) • LRT and CRT (based on Locally Preferred Alternative) • MLK Blvd Bus Rapid Transit (BRT) in Chapel Hill

 <h2 style="display: inline;">Alternatives Analysis</h2> -- Output for Analysis **In Progress**	
<ul style="list-style-type: none"> ■ Highway and transit project <u>lists</u> and <u>maps</u> ■ Triangle Regional Model output for each Alternative ■ Compare five Alternatives and E+C (from Deficiency Analysis) ■ Detailed tables and maps on MPO Web site ■ Short study on Southwest Durham Drive 	





Alternatives Analysis

-- Triangle Regional Model Output


- Triangle Regional Model Output Performance Measures
- Travel Isochrones
- Travel Time
- Congestion Maps (V/C)

Performance Measures - DCHC MPO				
Performance Measure	2040		2040	
	2040	2040	2040	2040
1.1.1 Total Vehicle Miles Traveled (VMT) daily	21,281,636	21,962,571	20,556,024	20,541,027
1.1.2 All Facility Connectors	21,281,636	21,962,571	20,556,024	20,541,027
1.2.1 Total Vehicle Hours Traveled (VHT) daily	19,842,072	20,556,024	19,842,072	19,842,072
1.2.2 All Facility Connectors	19,842,072	20,556,024	19,842,072	19,842,072
1.3.1 - Freeway	55	61	57	61
1.3.2 - Arterial	46	39	46	39
1.3.3 - All Facility	51	47	47	50





Travel isochrones and travel time by TAZ presented only if results are informative.




Alternatives Analysis

-- Performance Measures **Example**

TRM Performance Measures Summary -			
	2040 E+C	Highway	% Change
1 Performance Measures			
1.1 Total VMT (daily)			
1.1.1 All Facility Connectors	21,281,636	21,962,571	3%
1.1.2 All Facility (no C Connectors)	19,842,072	20,556,024	4%
1.2 Total VHT (daily)			
1.2.1 All Facility Connectors	614,488	560,421	-9%
1.2.2 All Facility (no C Connectors)	517,982	466,092	-10%
1.3 Average Speed by Facility (miles/hour)			
1.3.1 - Freeway	55	61	10%
1.3.2 - Arterial	37	39	5%
1.3.3 - All Facility	46	50	10%
1.4 Peak Average Speed by Facility (miles/hour)			
1.4.1 - Freeway	52	59	13%
1.4.2 - Arterial	35	38	7%
1.4.3 - All Facility	43	48	12%
Daily Average Travel Length - All Person			
1.5 Trips			
1.5.1 - Travel Time	15.4	14.5	-6%
1.5.2 - Travel Distance	5.9	6.2	4%

E+C v. Highway Intensive

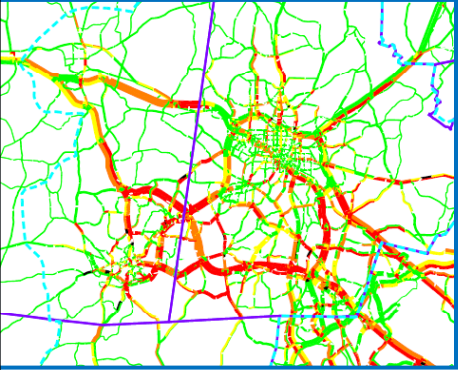
- Moderate changes
- VMT is up a little
- VHT is down
- Speeds are faster
- Travel time is down a little
- Greater travel distances



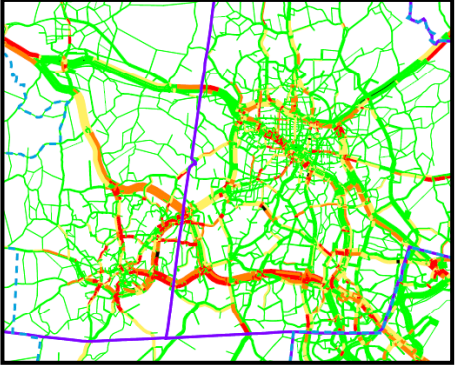
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Alternatives Analysis

-- Congestion Maps **Example**




2040 E+C (no build)



2040 Highway Intensive

In Highway Intensive, congestion persists on interstates, freeways and major road corridors.



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Alternatives Analysis

-- Public Input

- Period – From August release to October 10 (TAC public hearing)
- Notice – newspaper, email lists, public service announcements
- Workshops – Durham (2), Chapel Hill and Hillsborough
- Hearing – At October 10 TAC meeting
- Community – Presentation and comments at local boards and commissions (elected and appointed)
- Newsletter – sent to mailing list
- Agency – request comments from environmental and resource agencies



Alternatives Analysis

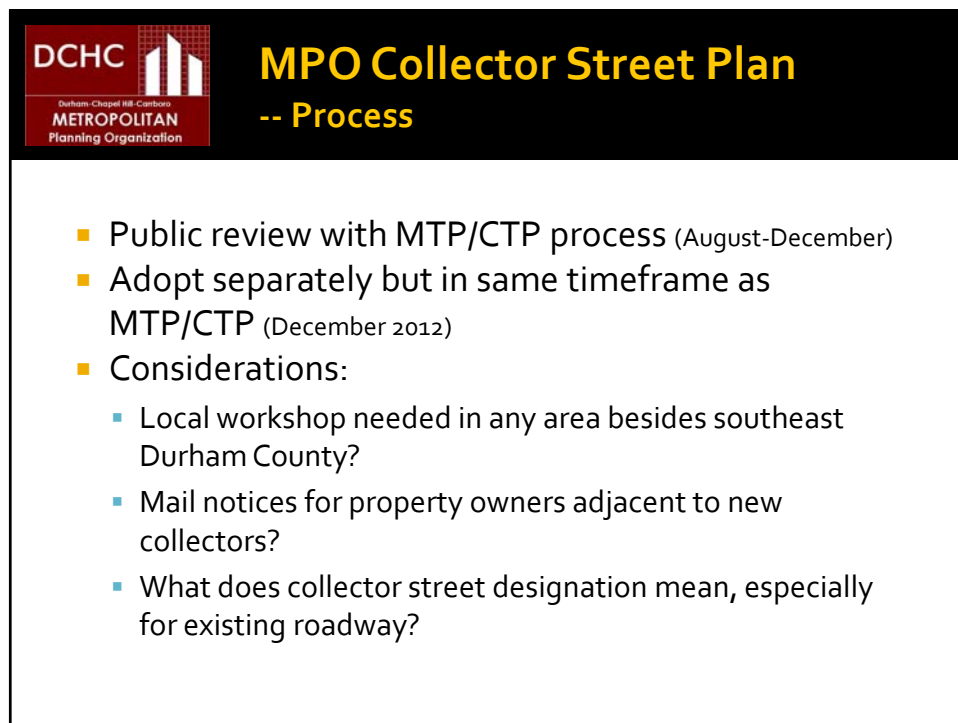
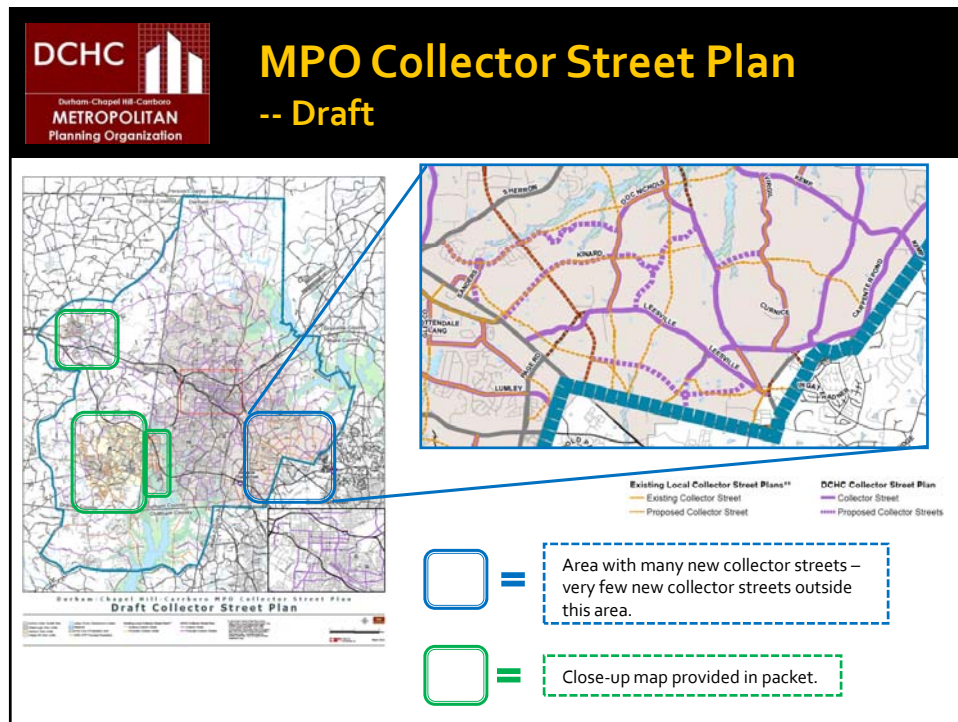
-- Next Steps

1. Finish TRM model runs for Alternatives
 - Highway Intensive/CommPlan finished
 - Moderate by August 7
 - Transit Intensive by August 10
2. Give Lead Planning Agency (LPA) authorization to release Alternatives Analysis (by August 17)
3. Provide more detailed analysis at September TAC meeting (e.g., Southwest Durham Drive)



MPO Collector Street Plan

- First developed in 2009 and 2010 – could not be accommodated in 2035 LRTP process
- Very little land development in interim
- Method:
 - Classified existing roads in MPO
 - Consolidated existing local collector street plans
 - Filled the gaps where development expected but no planned collector street
- Includes memorandum from consultant (attachment 7E)





**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
N.C. Department of
Transportation
County of Orange

**2040 Metropolitan Transportation Plan
And
Comprehensive Transportation Plan**

Alternatives Analysis Report

August 3, 2012

Direct Questions and Comments to:

Andy Henry
City of Durham -- Transportation Division
101 City Hall Plaza
Durham, NC 27701
(919) 560-4366
andrew.henry@durhamnc.gov

www.dchcmpo.org

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2040 MTP and CTP Alternatives -- Introduction

What is the 2040 MTP?

The 2040 Metropolitan Transportation Plan (MTP) is the guide for major transportation investments in the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) area. The DCHC-MPO area covers the entire Durham County and the urbanized portions of Orange and Chatham Counties. The 2040 MTP recommends major transportation projects, policies and strategies designed to maintain existing transportation systems and serve the region's future travel needs. The 2040 MTP is also designed to support land use and air quality goals for the urban area, and must be prepared in accordance with Federal transportation and environmental requirements. Projects must be in the 2040 MTP to receive state and federal transportation funding in the North Carolina Transportation Improvement Program (TIP).

What is the CTP?

North Carolina General Statute 136-66.2 requires each municipality or Metropolitan Planning Organization (MPO), with the cooperation of the NCDOT, to develop a Comprehensive Transportation Plan (CTP) serving present and anticipated travel demand in and around the MPO. The principal differences between the MTP and CTP include:

- MTP lists only proposed highway improvements and transit services, whereas the CTP maps out both the current and proposed projects;
- MTP must be fiscally-constrained, i.e., the anticipated revenues must cover the anticipated costs, but the CTP has no fiscal element.

The development process for these two documents is very similar – each includes the use of a travel demand model and extensive public involvement. As a result, the DCHC MPO will complete the development process for both documents at the same time.

What are Alternatives?

The DCHC MPO plans to develop and evaluate several Alternatives in the process to create the 2040 Metropolitan Transportation Plan. Each Alternative will be a combination of a Transportation network, which includes a set of highway, transit and other transportation improvements, and a Land Use scenario that depicts the distribution of population and employment for the year 2040. These Alternatives will be run in the Triangle Regional Model (TRM) to produce a set of transportation performance measures that describe how the transportation system will meet the travel demand generated by a particular population and employment distribution in the year 2040. These performance

measures, such as the level of roadway congestion, average travel time, and transit ridership, will be used to evaluate and compare the various Alternatives.

It should be noted that it is very unlikely that one of the Alternatives in its entirety would be advanced as the Preferred Option. These Alternatives have been designed to emphasize a particular mode in meeting the future travel demands so that the public and technical staff can understand how the designated mode meets travel demand.

How can Citizens Participate?

There are many opportunities for citizens to review and comment on the Alternatives and Preferred Option at a series of public workshops and public hearings that will take place from August through December 2012. The public involvement calendar for the Alternatives is displayed below. The DCHC MPO Web site will continue to post a detailed list of these public involvement opportunities in the 2040 MTP section of the Website – www.dchcmpo.org. For more information, citizens can also contact Andy Henry, (919) 560-4366, extension 36419, or andrew.henry@durhamnc.gov.

Alternatives Analysis – Public Involvement Calendar

Jurisdiction	Elected Board	Planning Board	Transportation Board	Bicycle/Pedestrian Board	Transit Board	Public Workshops
City of Durham	9/27/2012	9/11/2012	n/a	8/21/2012	9/3/2008	9/11 Durham Station Transportation Center*
Durham County	9/24/2012	9/11/2012	n/a	8/21/2012	n/a	
Chapel Hill	9/24 or 10/8	TBD	TBD	TBD (Active Living)	n/a	9/20 (tentative) Chapel Hill Town Hall, 4-7pm
Carrboro	TBD	TBD	TBD			
Hillsborough	9/24/12	9/20/12	n/a	n/a	n/a	9/13 “The Barn”, 4-7 pm
Orange County	TBD	TBD	TBD	n/a	n/a	
Chatham County	TBD	TBD	n/a	n/a	n/a	n/a

*One workshop will be focused for environmental justice organizations

Note: Check DCHC MPO Web site for any meeting date and time updates – www.dchcmpo.org

What is the Next Step in the 2040 MTP Process?

In the next major step in the 2040 MTP development process, the public, elected officials and technical staff will use the evaluation and comparison of the Alternatives to create a single Alternative that best meets the MPO's Goals and Objectives and the fiscal constraint requirements. The fiscal restraint requirements demand that the project costs do not exceed the expected funding revenues. This final Alternative is called the Preferred Option, and it will also go through a public review process similar to that of the Alternatives.

Development of Alternatives

The table below shows the combinations of transportation networks and land use scenarios that will be modeled for the 2040 MTP development process to produce each Alternative.

Land Use/Network	Highway Intensive	Transit Intensive	Moderate
CommPlan	Yes	Yes	Yes
All-in-Transit	No	Yes	Yes

The land use scenarios are based on the following assumptions:

Community Plan

- Based on local comprehensive plans
- Used in Deficiency Analysis (June 2012)

All-in-Transit

- Based on local comprehensive plans, plus...
- Additional and enhanced transit oriented developments
- Additional development attraction to rail and premium transit

The table on the next page summarizes the highway and transit projects included in each of the three transportation networks. Section 7 provides a map and project list for each transportation network.

The remainder of this report is dedicated to presenting tables and maps that show the level to which each of the Alternatives meets the forecasted travel demand. Two additional Alternatives from the Deficiency Analysis are used for purposes of comparison. The MPO completed the Deficiency Analysis in June 2012 and the detailed results are available on the MPO Web page.

- 2010 – This is the current condition. It uses the current transportation network and current population and employment distribution.
- E+C (Existing plus Committed) – This is the no build alternatives. It uses the current transportation network (including any committed projects) and the forecasted population and employment.

Transportation Networks

	Highway Intensive	Transit Intensive	Moderate
Highway	<ul style="list-style-type: none"> • 2035 LRTP • CTP highway projects • 2,979 lane miles 	<ul style="list-style-type: none"> • Basically, 2015 and 2025 tier • No 2035 tier or CTP highway projects 	<ul style="list-style-type: none"> • Basically, 2035 LRTP (minus some minor highway projects)
Transit	<ul style="list-style-type: none"> • Current bus transit • No rail transit 	<ul style="list-style-type: none"> • Current bus transit • County plans (based on ½ cent sales tax) • LRT between Durham and Wake (instead of CRT) • LRT and CRT extensions in Orange County • CRT addition between Cary and western RTP • All Bus Rapid Transit (BRT) in Chapel Hill 	<ul style="list-style-type: none"> • Current bus transit • County plans (based on ½ cent sales tax) • LRT and CRT (based on Locally Preferred Alternative) • MLK Blvd Bus Rapid Transit (BRT) in Chapel Hill

Summary of Alternatives

The Alternatives presented in this report can be summarized as follows:

2010 – This benchmark shows the current state of the transportation system. It assumes the 2010 highway and transit network and 2010 population and employment.

E+C (Existing plus Committed) – This is the no build benchmark – it shows the state of the transportation system in the year 2040 if no highway or transit improvements are made.

Highway Intensive – This transportation network assumes an emphasis on highway improvements and less investment in transit (e.g., does not include rail transit)

Transit Intensive – This transportation network assumes an emphasis on bus and rail investment, including the extension of light rail transit beyond the UNC-Chapel Hill area and the extension of commuter rail transit into Orange County. There are two Alternatives using this network:

- one assumes a year 2040 land use scenario with Transit Oriented Development (TOD) around proposed rail stations to take advantage of the synergy between the rail mode and concentrated station development – this land scenario is called All-in-Transit for this study.
- one assumes a 2040 land use scenario based on the local comprehensive plans – this scenarios is called Community Plan (CommPlan).

Moderate – This transportation network assumes a mix of highway projects, bus transit and rail transit that is very similar to that of the 2035 Long Range Transportation Plan (2035 LRTP). Like the Transit Intensive network, there are two Alternatives for this network – one for each of the All-in-Transit and Community Plan land use scenarios.

See the Alternatives Description and Socioeconomic Data sections of this report for detailed information on the transportation networks and land use scenarios used to create these Alternatives.

How is Report Organized?

This report presents the TRM model output first and then provides details on the land use scenarios and the Alternatives. The model output begins with the broad, system-wide Performance Measures and progressively moves toward more project based information such as the congestion maps (e.g., volume/capacity ration).

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2040 MTP and CTP Alternatives – Performance Measures

Purpose of Performance Measures

Performance Measures provide a general indicator from a variety of perspectives such as mobility, travel time, congestion, mode choice, and air quality. The measures are not specific to a particular roadway or travel corridor but instead cover the entire transportation system, and therefore are useful for comparing the overall efficiency and effectiveness of the different transportation Alternatives. Most of the data used for calculating the Performance Measures comes from the Triangle Regional Model (TRM), which is a travel demand model that forecasts future travel statistics based on a set of assumptions concerning the highway network, transit service and other transportation facilities.

This report section first presents graphics that compare some key performance measures among the various Alternatives. Next, a detailed table presents all the performance measures.

Presentation of Performance Measures

The first section presents all the Performance Measures for all of the Alternatives. Next a series of graphs compare key Performance Measures.

Blank columns will be completed when the travel demand models are finished.

2040 MTP and CTP
Performance Measures

	SE Data Scenario	2010	2040	CommPlan	AIT	CommPlan	AIT	CommPlan
	Transportation Network	2010	E+C	Highway	Moderate	Moderate	Transit	Transit
1	Performance Measures							
1.1	Total Vehicle Miles Traveled (VMT-daily)							
1.1.1	All Facility+C Connectors	13,217,550	21,281,636	21,962,571				
1.1.2	All Facility (no C Connectors)	12,430,435	19,842,072	20,556,024				
1.2	Total Vehicle Hours Traveled (VHT-daily)							
1.2.1	All Facility+C Connectors	312,669	614,488	560,421				
1.2.2	All Facility (no C Connectors)	260,012	517,982	466,092				
1.3	Average Speed by Facility (miles/hour)							
1.3.1	- Freeway	63	55	61				
1.3.2	- Arterial	42	37	39				
1.3.3	- All Facility	53	46	50				
1.4	Peak Average Speed by Facility (miles/hour)							
1.4.1	- Freeway	62	52	59				
1.4.2	- Arterial	41	35	38				
1.4.3	- All Facility	51	43	48				
1.5	Daily Average Travel Length - All Person Trips							
1.5.1	- Travel Time	14.0	15.4	14.5				
1.5.2	- Travel Distance	6.3	5.9	6.2				
1.6	Daily Average Travel Length - Work Trips							
1.6.1	- Travel Time	17.7	19.4	18.0				
1.6.2	- Travel Distance - Work Trips	9.1	8.0	8.5				
1.7	Peak Average Travel Length - All Person Trips							
1.7.1	- Peak Travel Time	14.8	16.7	15.5				
1.7.2	- Peak Travel Distance	6.7	6.1	6.5				
1.8	Daily Average Travel Length - All CV Trips							
1.8.1	- Travel Time	15.0	17.2	15.7				
1.8.2	- Travel Distance	8.3	8.5	8.5				
1.9	Daily Average Travel Length - Truck Trips							
1.9.1	- Travel Time	15.3	17.4	16.0				
1.9.2	- Travel Distance	8.5	8.8	8.7				
1.1	Hours of Delay (daily)	27,446	139,455	77,308				

Blank columns will be completed when the travel demand models are finished.

2040 MTP and CTP
Performance Measures

	SE Data Scenario	2010	2040	CommPlan	AIT	CommPlan	AIT	CommPlan
	Transportation Network	2010	E+C	Highway	Moderate	Moderate	Transit	Transit
1.10.1	Truck Hours of Delay (daily)	1,086	4,742	2,604				
1.11	Percent of VMT experiencing congestion - All Day							
1.11.1	- Freeway	1.7%	17.1%	5.6%				
1.11.2	- Arterial	3.3%	14.5%	7.0%				
1.11.3	- All Facility	2.0%	13.7%	5.2%				
1.12	Percent of VMT experiencing congestion - Peak							
1.12.1	- Freeway	3.0%	30.7%	9.8%				
1.12.2	- Arterial	5.0%	22.7%	11.4%				
1.12.3	- All Facility	3.1%	22.7%	8.7%				
1.12.4	- Designated truck routes	5.0%	16.6%	6.7%				
1.12.5	- Facilities w/bus routes	3.8%	20.0%	9.7%				
2	Mode Share Measures							
2.1	All Trips - Daily							
2.1.1	- Drive alone (single occupant vehicle -SOV)	864,965	1,535,469	1,556,192				
2.1.2	- Carpool (Share ride)	683,083	1,184,575	1,210,390				
2.1.3	- Bus	50,579	71,588	74,672				
2.1.4	- Rail	-	-	-				
2.1.5	- Non-Motorized (Bike and Walk)	176,554	281,839	275,473				
2.2	Work Trips - Daily							
2.2.1	- Drive alone (single occupant vehicle -SOV)	270,716	473,750	480,908				
2.2.2	- Carpool (Share ride)	35,360	61,545	63,278				
2.2.3	- Bus	12,852	19,080	20,448				
2.2.4	- Rail	-	-	-				
2.2.5	- Non-Motorized (Bike and Walk)	16,343	25,102	24,155				
2.3	All Trips - Peak Hours							
2.3.1	- Drive alone (single occupant vehicle -SOV)	483,159	845,886	865,655				
2.3.2	- Carpool (Share ride)	411,958	704,589	727,434				
2.3.3	- Bus	25,416	34,741	37,027				
2.3.4	- Rail	-	-	-				
2.3.5	- Non-Motorized (Bike and Walk)	101,821	165,869	158,458				
3	Transit Measures							

Blank columns will be completed when the travel demand models are finished.

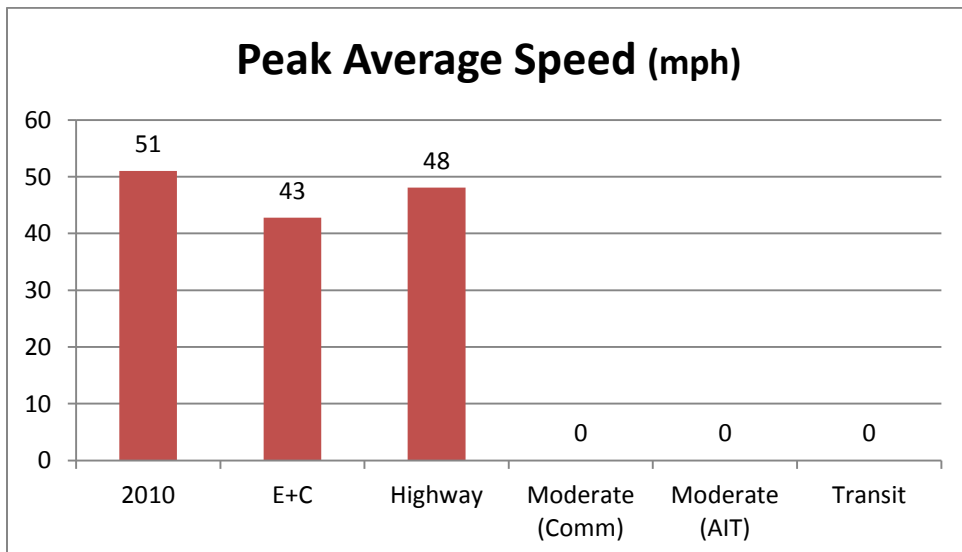
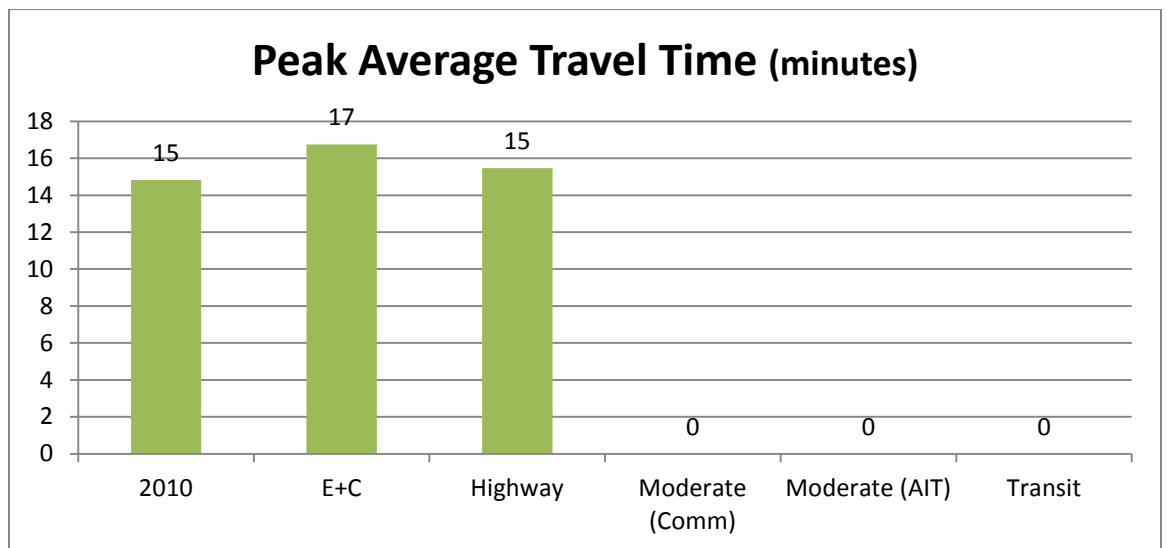
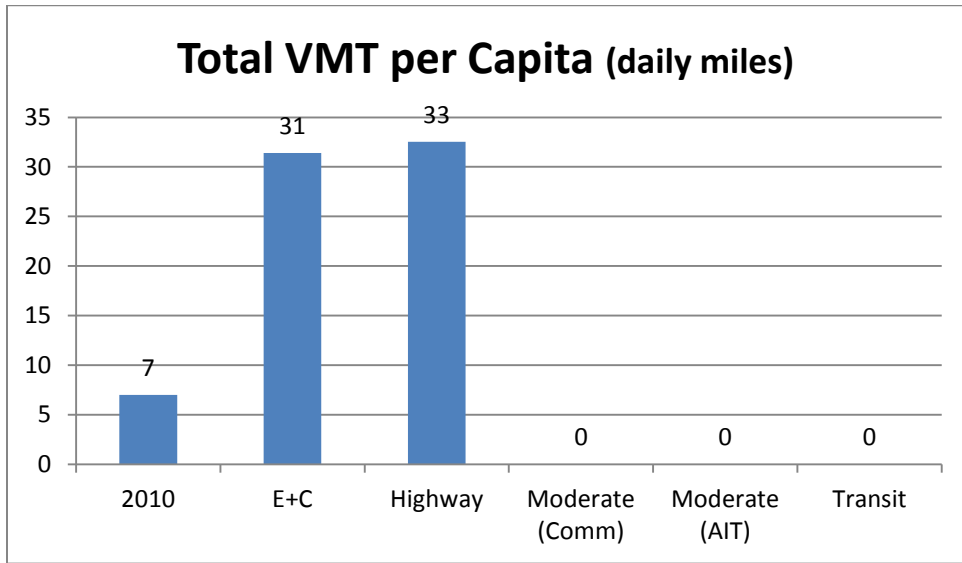
2040 MTP and CTP
Performance Measures

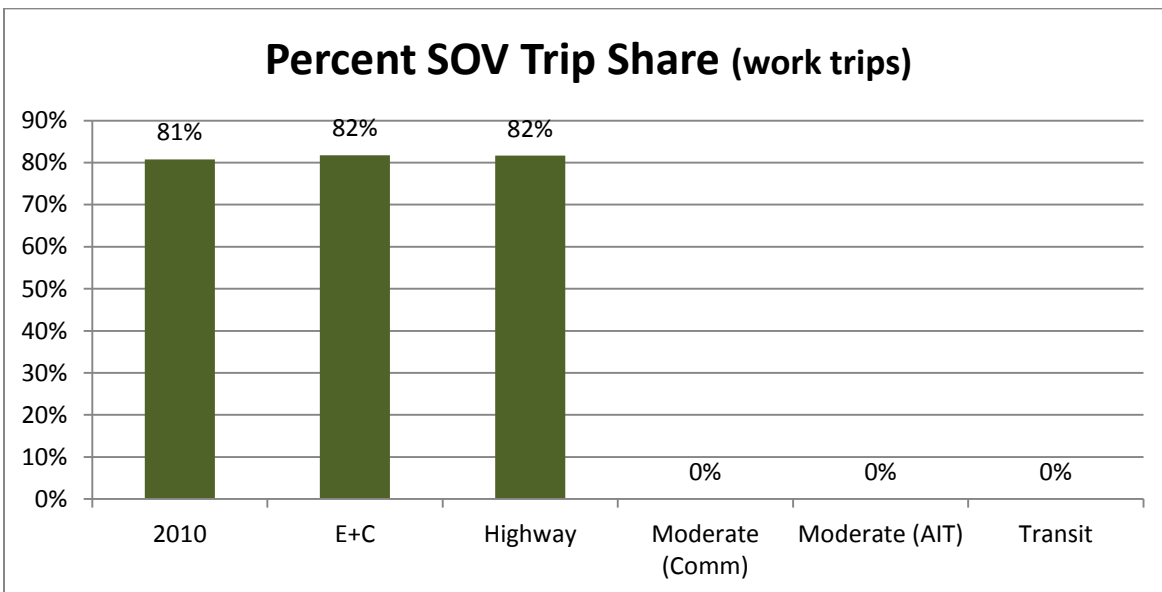
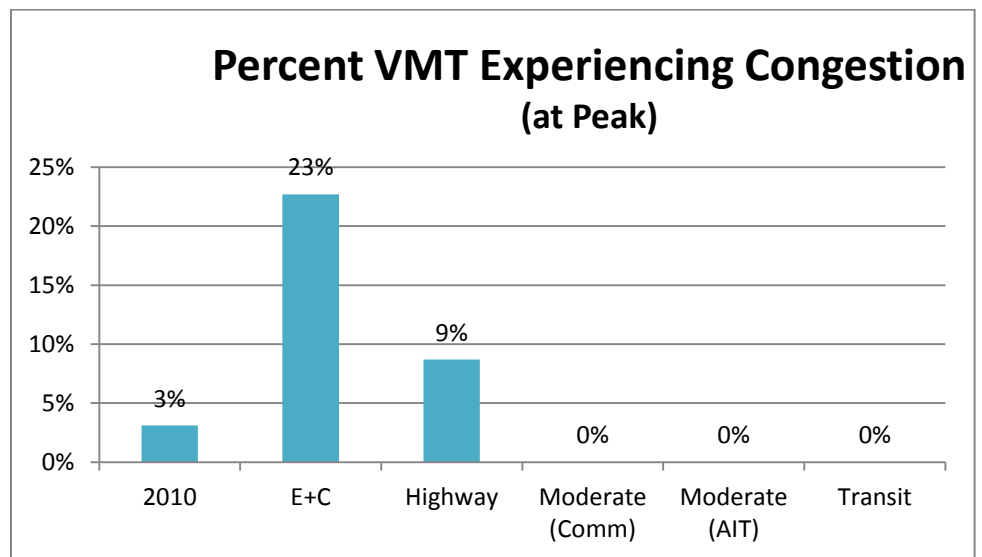
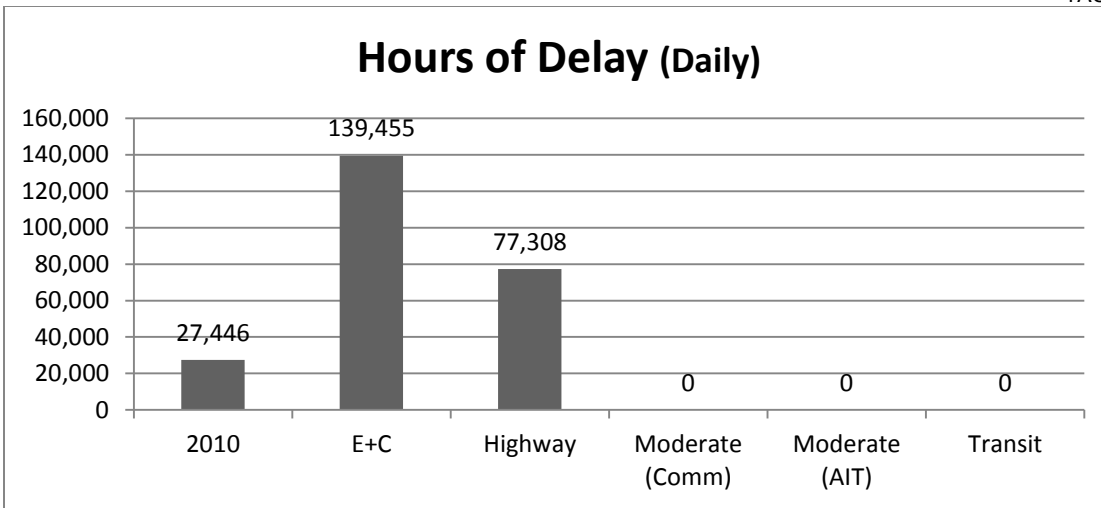
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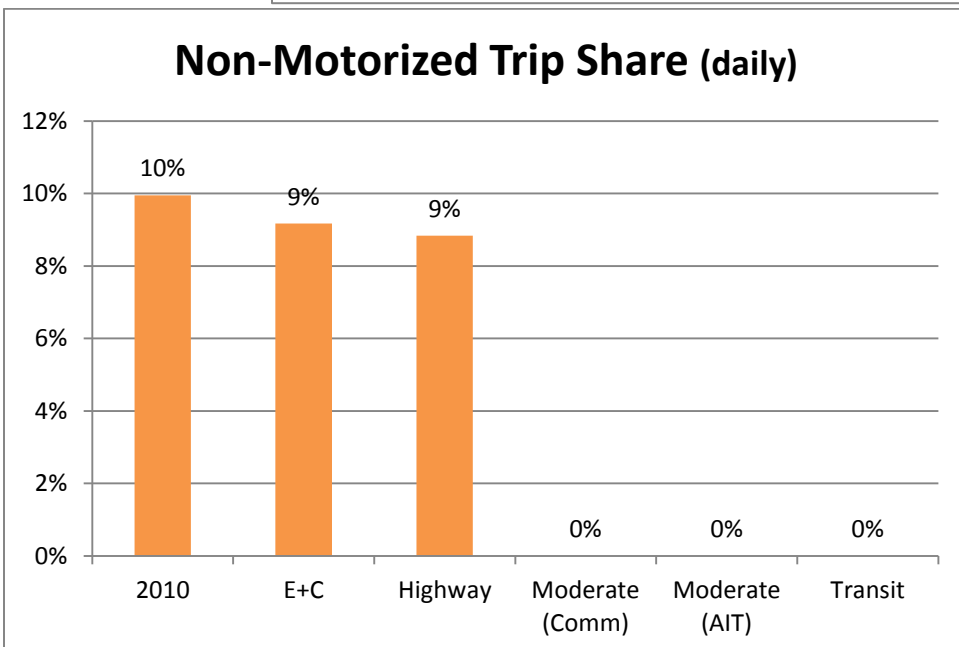
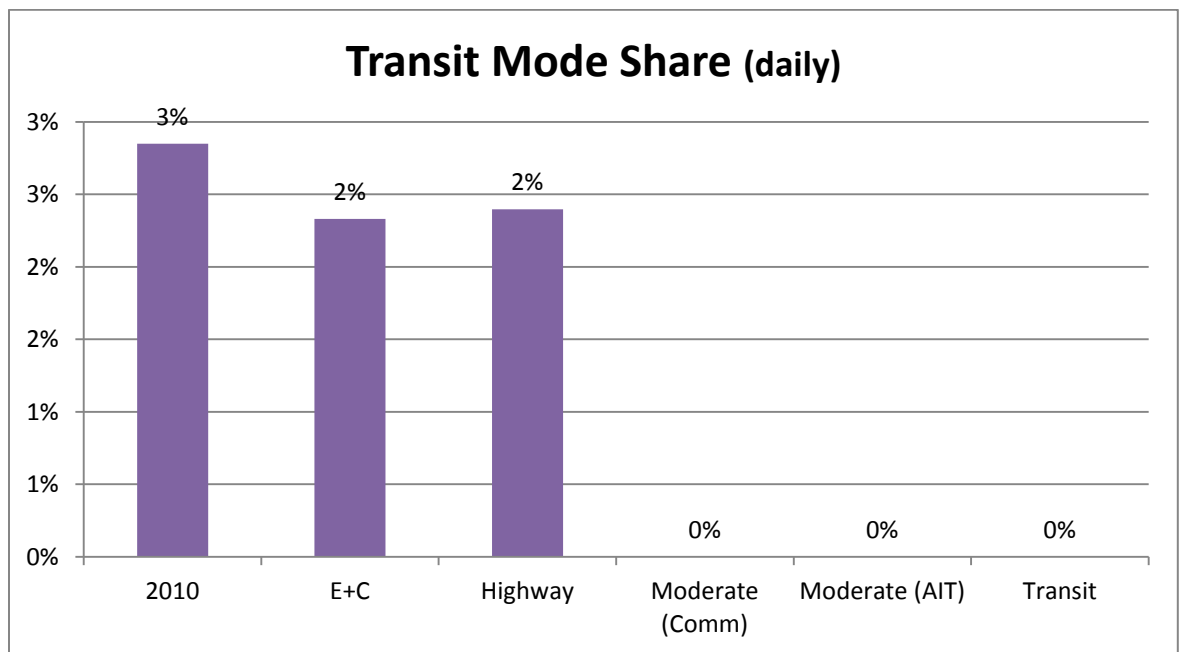
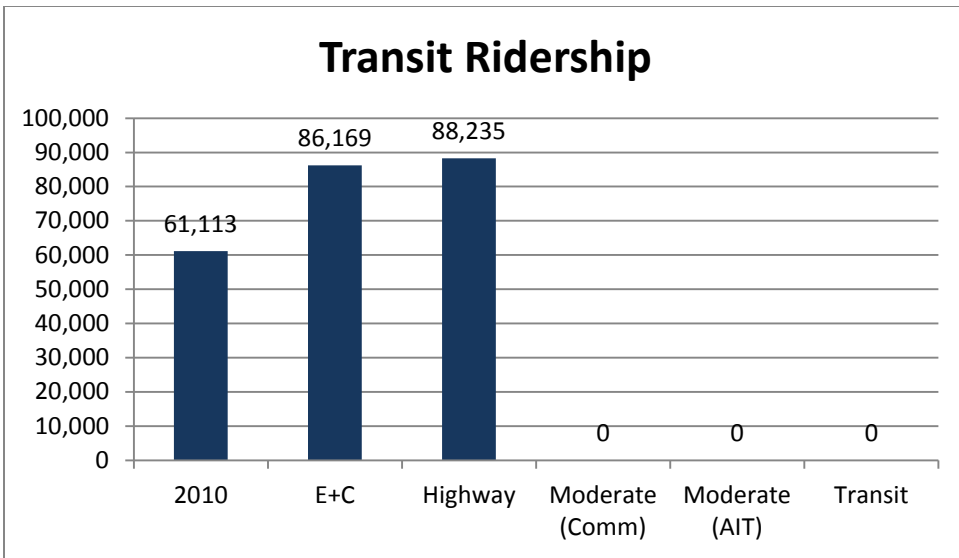
	SE Data Scenario	2010	2040	CommPlan	AIT	CommPlan	AIT	CommPlan
	Transportation Network	2010	E+C	Highway	Moderate	Moderate	Transit	Transit
3.1	Transit Ridership by Prod. Ends	Total	Total	Total				
3.1.1	- TTA (Including Rail)	5,362	8,853	9,858				
3.1.2	- CAT	16,639	22,957	24,986				
3.1.3	- CHT	26,788	38,460	39,061				
3.1.4	- DATA	17,637	25,924	26,614				
3.1.5	- NCSU	12,147	21,332	21,403				
3.1.6	- DUKE	14,007	17,358	17,631				
3.1.7	- OPT	N/A	N/A	N/A				
3.1.8	- CARY	1,412	2,136	2,266				
3.1.9	Total	93,988	137,015	141,816				
3.3	Total Rail Ridership		N/A	N/A				
4	Demographics Measures							
4.1	Population	403,494	632,102	632,102				
4.2	Employment	261,566	427,876	427,876				
4.3	Total Daily Person Trips	1,775,182	3,073,472	3,116,728				
4.3.1	Work Person Trips	335,271	579,478	588,790				
4.4	Total Daily CV Trips	137,279	211,324	211,324				
4.4.1	Daily Truck Trips	57,715	85,991	85,991				
5	Other Measures							
5.1	Lane Miles	2,472	2,548	2,979				

2040 MTP and CTP

Performance Measures – Graphs







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2040 MTP and CTP Alternatives – Travel Time

Purpose of Travel Time Measure

This measure calculates and compares the travel time between key activity centers in the Triangle for the afternoon peak period, which occurs from 3:30pm to 7:30pm. The six activity centers include:

- Downtown Durham
- Carrboro/Chapel Hill
- Downtown Hillsborough
- Research Triangle Park
- Downtown Raleigh, and
- Pittsboro

These centers attract a significant portion of the travel demand in the region and therefore the most important travel corridors are between these centers. The travel time impact that each Alternative has on these corridors indicates the effectiveness of that particular Alternative.

Presentation of Travel Time Measure

This section presents the travel time data by Alternative. A series of tables presents the travel time between the activity centers and then compares those values to the Existing plus Committed scenario (E+C). The E+C represents the no build alternative, and thus the comparison demonstrates how effective the particular Alternative reduces travel time from that worst case scenario. A map shows the travel time comparison, as well.

The first set of travel time tables and map show the 2010 and E+C scenario to help provide a baseline for comparison for the Alternatives.

Alternatives – Travel Time 2010 and E+C

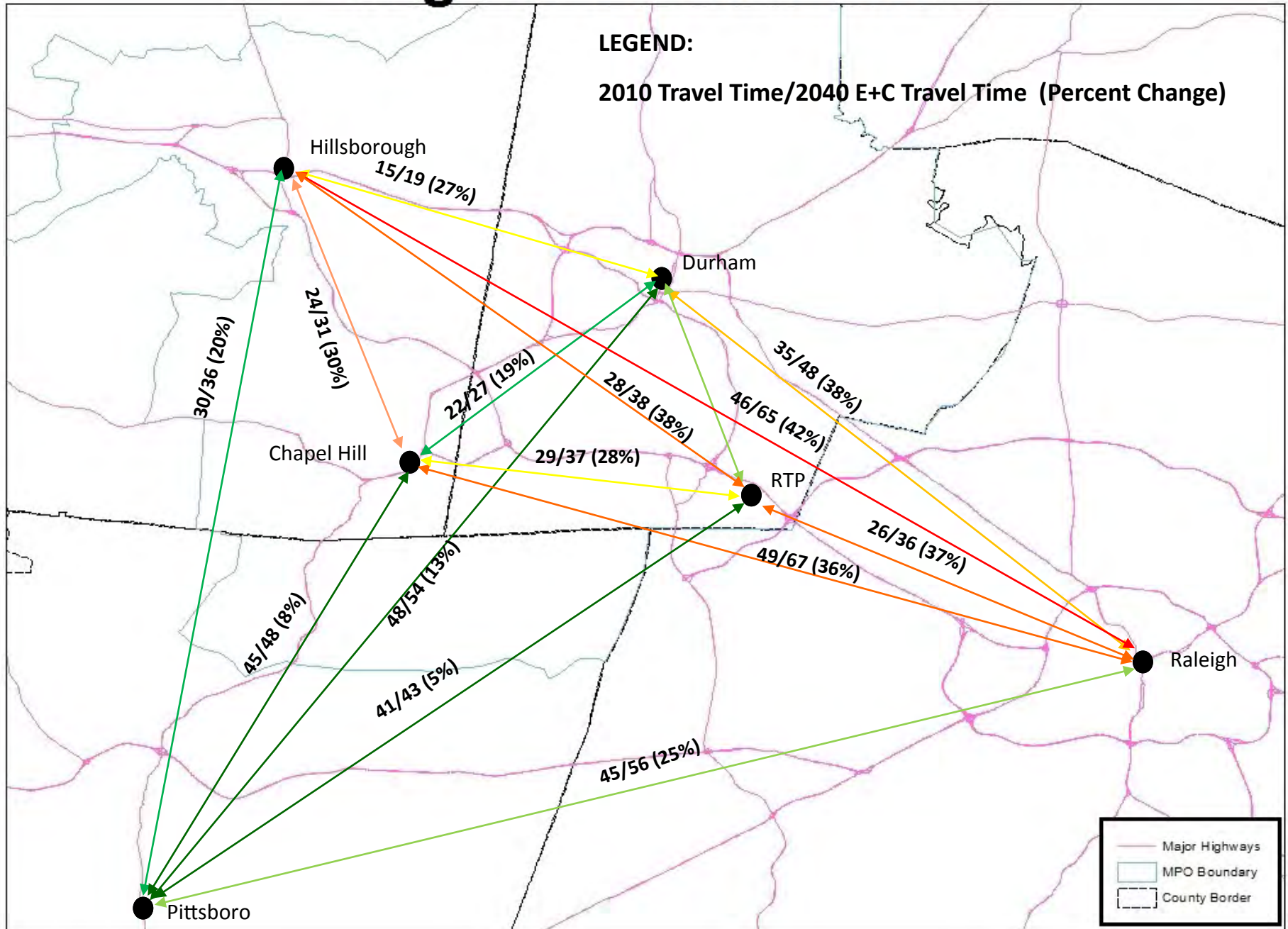
This series of tables compares the 2010 and E+C travel times. The E+C includes the 2040 population and employment with no improvements to the current transportation network. The comparison table (3rd) table shows the percent increase in travel time from 2010 to 2040, and shades the cells with an increasingly hot color as the percentage increases. Trips involving Raleigh and Hillsborough would experience the greatest percentage increase in trip time, while Pittsboro trips would experience the smallest percentage increase. These results reinforce the congestion maps that show the corridors between Raleigh and Hillsborough, such as I-40, US 70 and I-85, experiencing increasingly long delays.

2010 PM Peak Travel time (minutes)								
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham		14	35	24	22	28	48
	RTP	16		27	16	30	29	43
	Raleigh	35	25		26	50	46	46
	RDU	23	14	27		38	34	44
	Chapel Hill	22	28	49	38		24	45
	Hillsborough	29	27	46	34	25		31
	Pittsboro	48	39	44	42	44	29	

E+C PM Peak Travel time (minutes)								
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham		17	54	30	27	33	56
	RTP	20		43	20	39	37	48
	Raleigh	43	29		30	62	57	56
	RDU	28	15	40		47	43	47
	Chapel Hill	26	35	72	48		28	50
	Hillsborough	40	40	73	50	35		41
	Pittsboro	51	39	56	43	46	31	

Compare 2010 and E+C: PM Peak Travel time (percent increase)								
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham		23%	54%	28%	20%	16%	17%
	RTP	27%		58%	23%	29%	27%	11%
	Raleigh	23%	15%		14%	25%	24%	22%
	RDU	22%	8%	49%		26%	24%	6%
	Chapel Hill	18%	26%	47%	29%		18%	12%
	Hillsborough	39%	49%	60%	45%	41%		34%
	Pittsboro	8%	-1%	28%	1%	4%	6%	

Regional Travel Time In Minutes



(based on afternoon peak travel time)

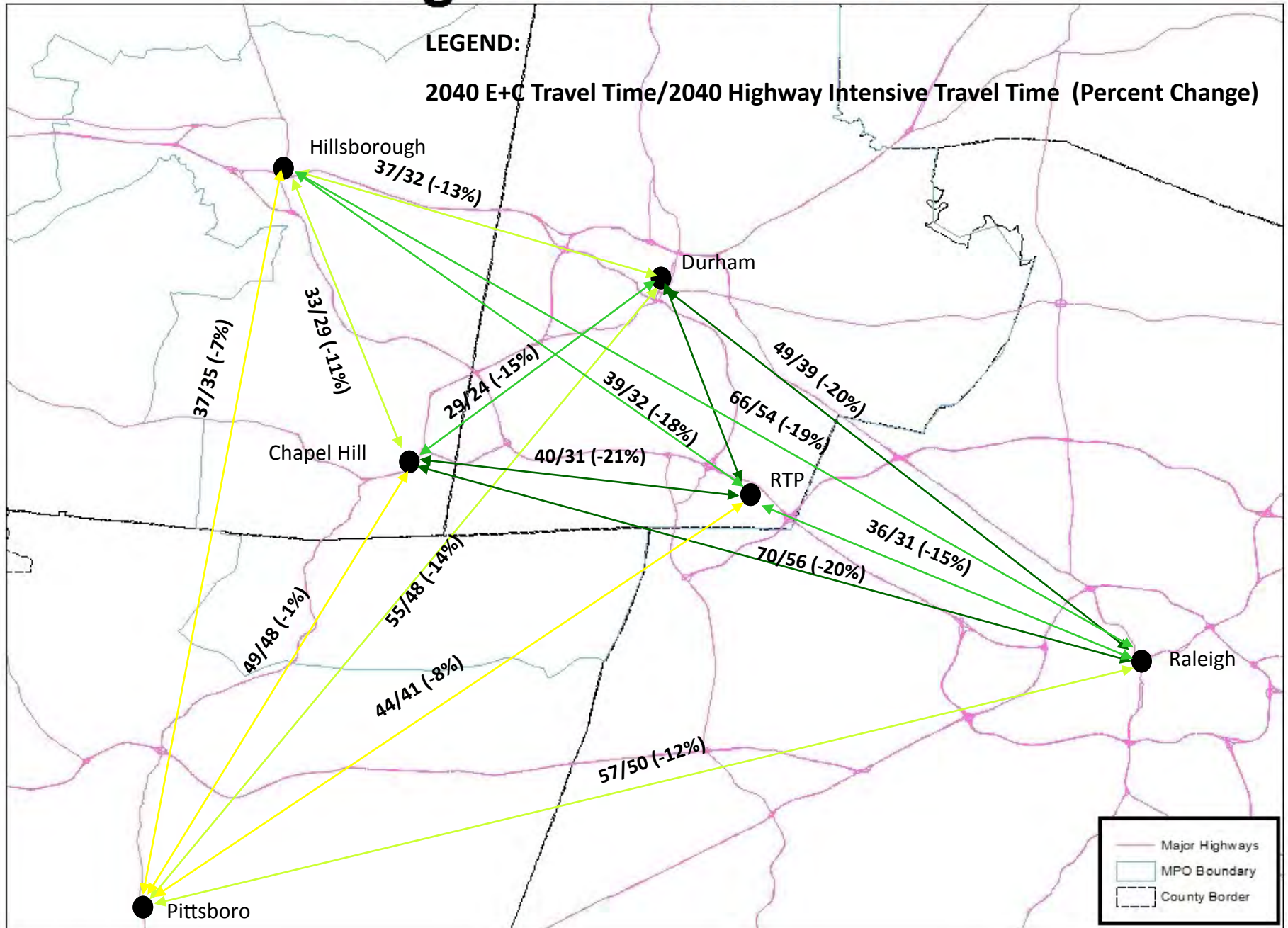
Alternatives – Travel Time

Highway Intensive

This series of tables compares the 2040 Highway Intensive Alternative and E+C travel times. The comparison table (3rd) table shows that trips to Raleigh and Chapel Hill, and trips from the RTP would experience the greatest percentage decrease in trip time (i.e., green shaded cells). The high level of existing and forecasted congestion and the concentration of highway improvements in the plan for these corridors produce these results.

E+C		PM Peak Travel time (w/ Terminal Time)						
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham DT		17	54	30	29	33	58
	RTP	21		43	20	42	38	49
	Raleigh DT	44	29		30	65	59	58
	RDU	29	15	40		51	44	48
	Chapel Hill	28	37	74	50		29	51
	Hillsborough	41	41	74	51	37		43
	Pittsboro	52	39	57	44	47	32	
Hwy Int.		PM Peak Travel time (w/ Terminal Time)						
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham DT		14	41	25	24	30	49
	RTP	16		34	18	32	31	43
	Raleigh DT	37	28		29	53	50	52
	RDU	23	14	32		39	36	44
	Chapel Hill	25	31	58	41		27	49
	Hillsborough	35	34	58	42	31		38
	Pittsboro	46	38	48	42	48	32	
		Compare E + C and Highway Intensive PM Peak Travel Time (percent increase)						
		To						
		Durham	RTP	Raleigh	RDU	Chapel Hill	Hillsborough	Pittsboro
From	Durham DT		-18%	-24%	-17%	-18%	-10%	-15%
	RTP	-24%		-22%	-10%	-24%	-18%	-12%
	Raleigh DT	-16%	-5%		-3%	-18%	-15%	-10%
	RDU	-20%	-2%	-20%		-22%	-17%	-9%
	Chapel Hill	-12%	-17%	-22%	-18%		-5%	-4%
	Hillsborough	-15%	-17%	-23%	-17%	-15%		-12%
	Pittsboro	-12%	-2%	-15%	-3%	2%	-1%	

Regional Travel Time In Minutes



(based on afternoon peak travel time)

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2040 MTP and CTP Alternatives – Isochrones

Purpose of Isochrone Maps

Isochrone travel maps connect the points that have the same travel time from a specified center. They resemble contour maps. They are useful for illustrating the mobility from a specified center and for showing the labor, retail, residential and other markets in terms of travel time. These maps are based the average travel time for the afternoon peak period, which occurs from 3:30pm to 7:30pm. The four specified locations include:

- Downtown Durham
- Carrboro/Chapel Hill
- Research Triangle Park, and
- Downtown Raleigh

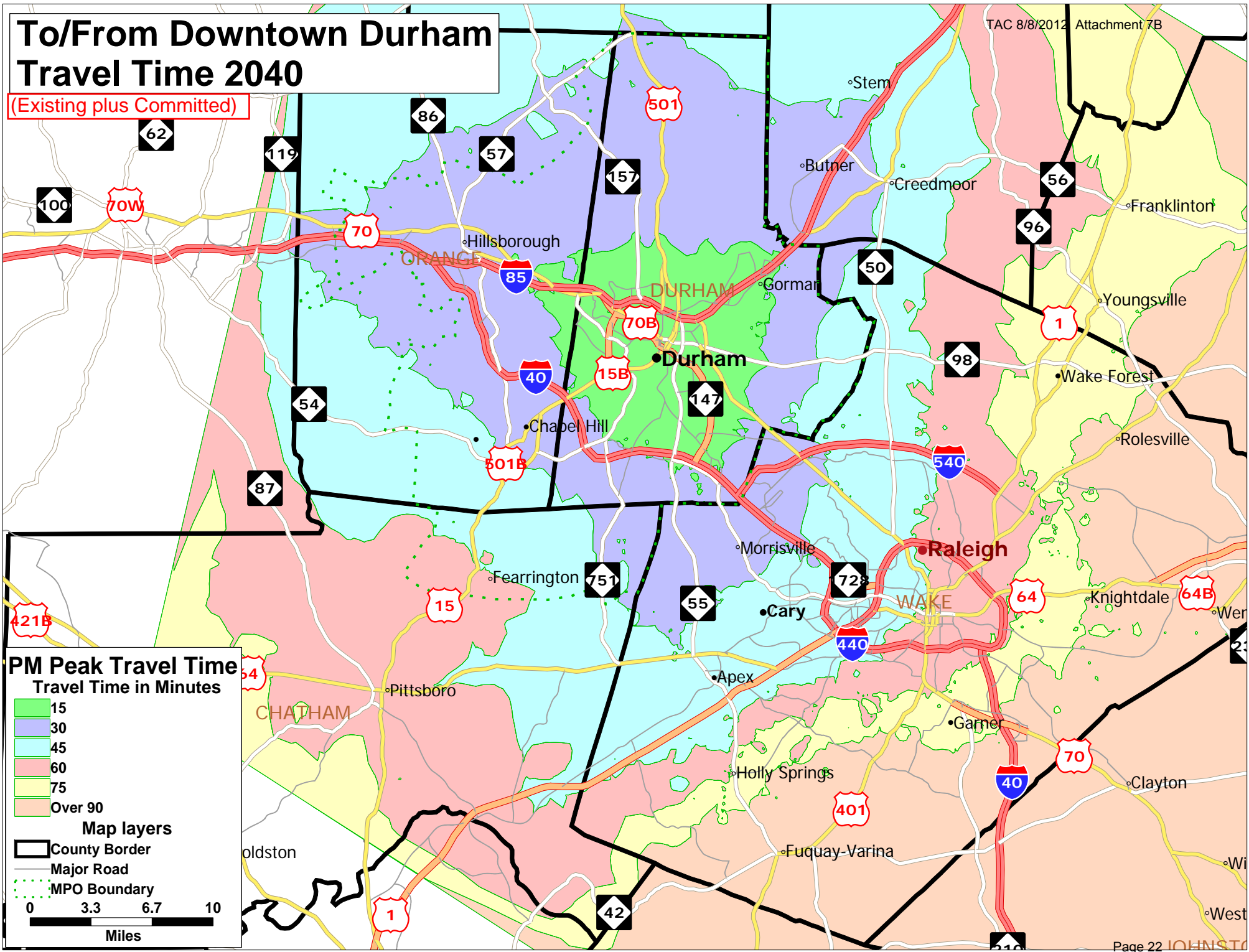
These centers attract a significant portion of the travel demand in the region. Therefore, it is important to understand the impact that each Alternative has on the travel markets for these centers.

Presentation of Travel Time Measure

This section presents the Isochrone maps by Alternative. Each Alternative has four maps, one for each center.

To/From Downtown Durham Travel Time 2040

(Existing plus Committed)



PM Peak Travel Time
Travel Time in Minutes

- 15
- 30
- 45
- 60
- 75
- Over 90

Map layers

- County Border
- Major Road
- MPO Boundary

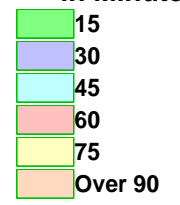
0 3.3 6.7 10
Miles

To/From Chapel Hill Travel Time 2040

(Existing plus Committed)

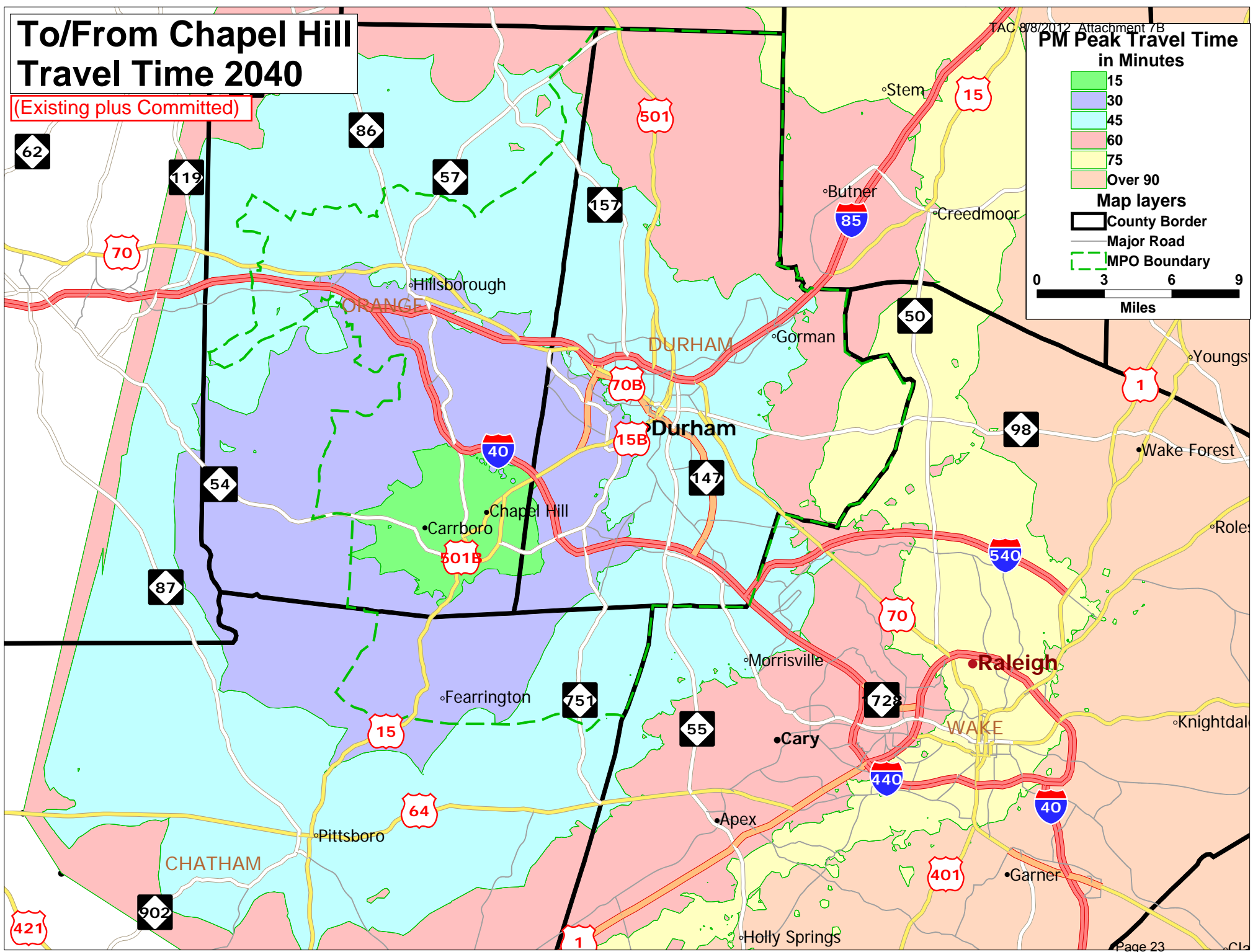
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PM Peak Travel Time in Minutes



Map layers

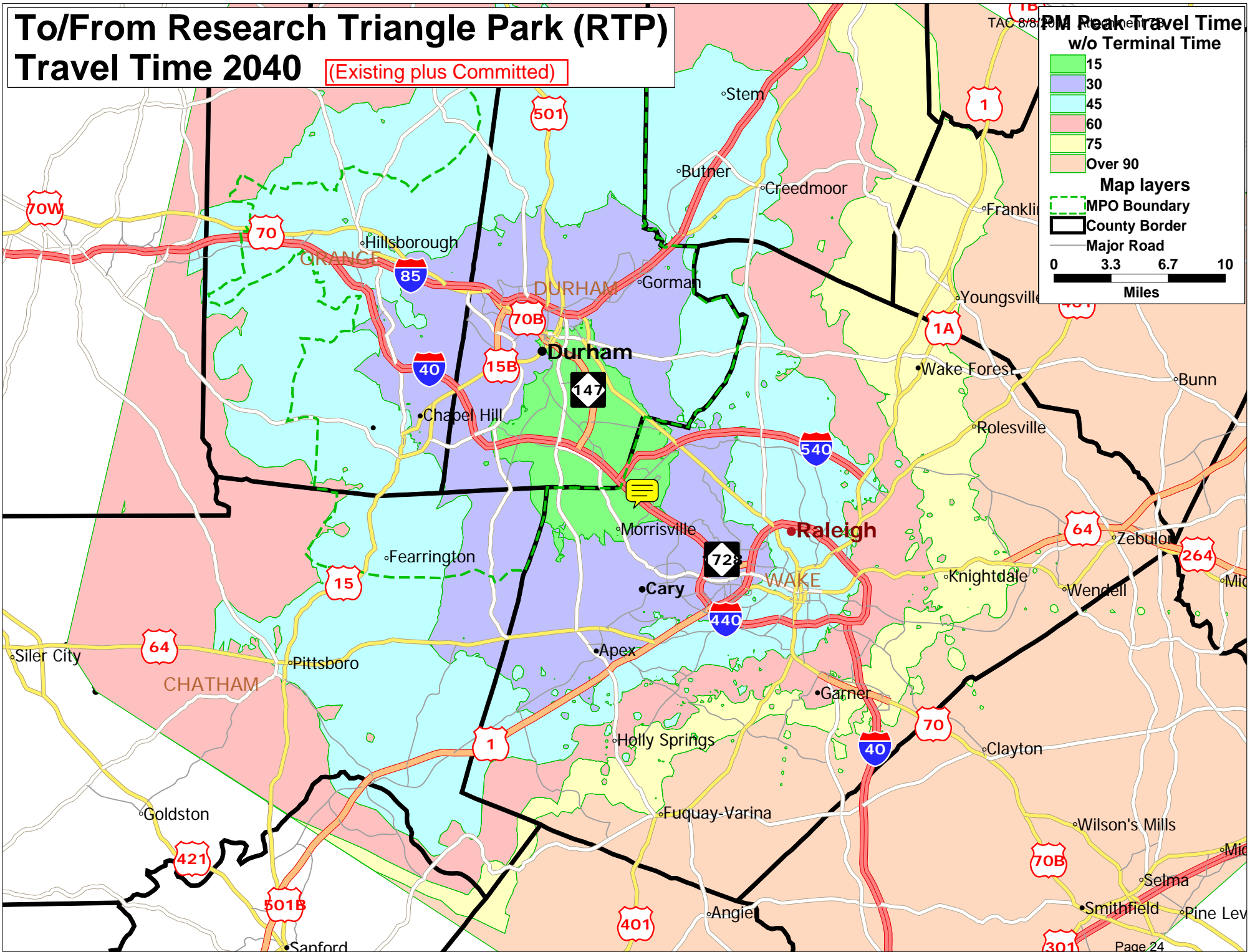
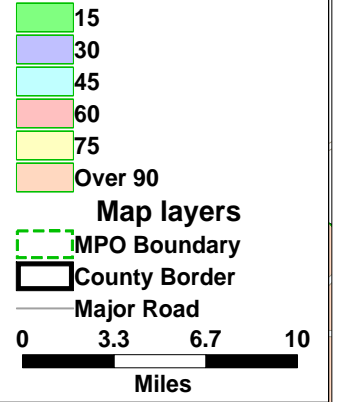
- County Border
- Major Road
- MPO Boundary



To/From Research Triangle Park (RTP) Travel Time 2040

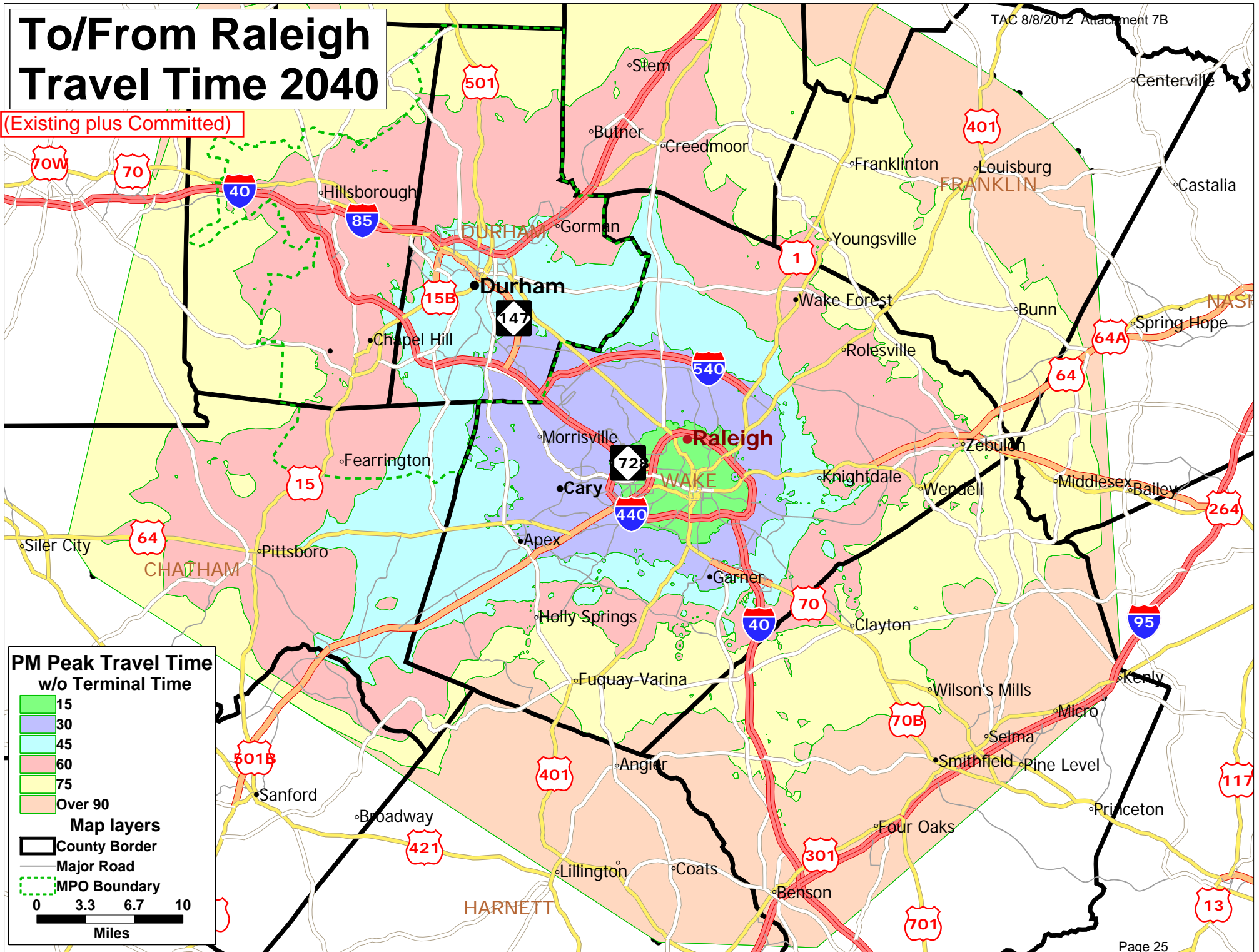
(Existing plus Committed)

PM Peak Travel Time w/o Terminal Time

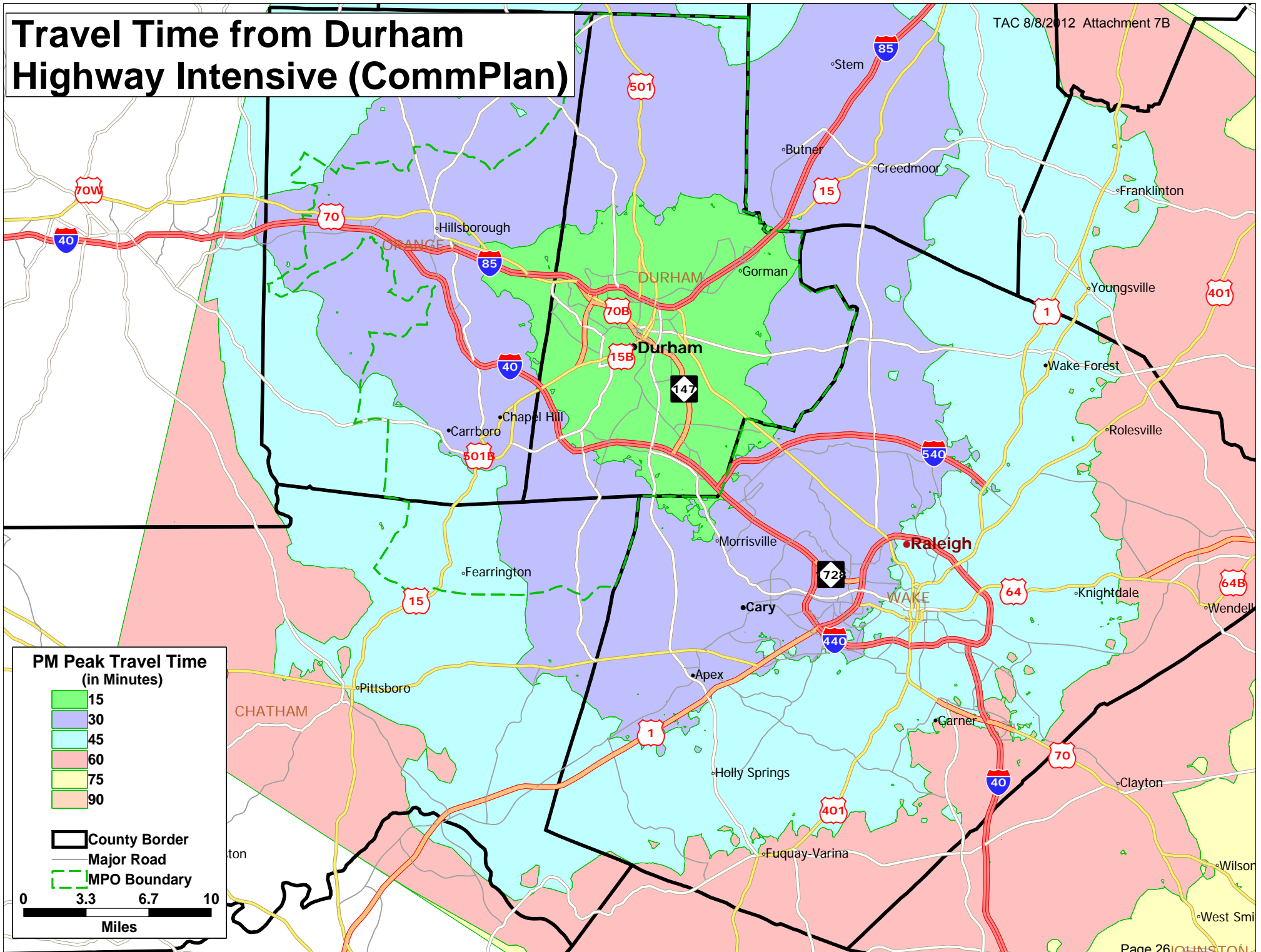


To/From Raleigh Travel Time 2040

(Existing plus Committed)



Travel Time from Durham Highway Intensive (CommPlan)



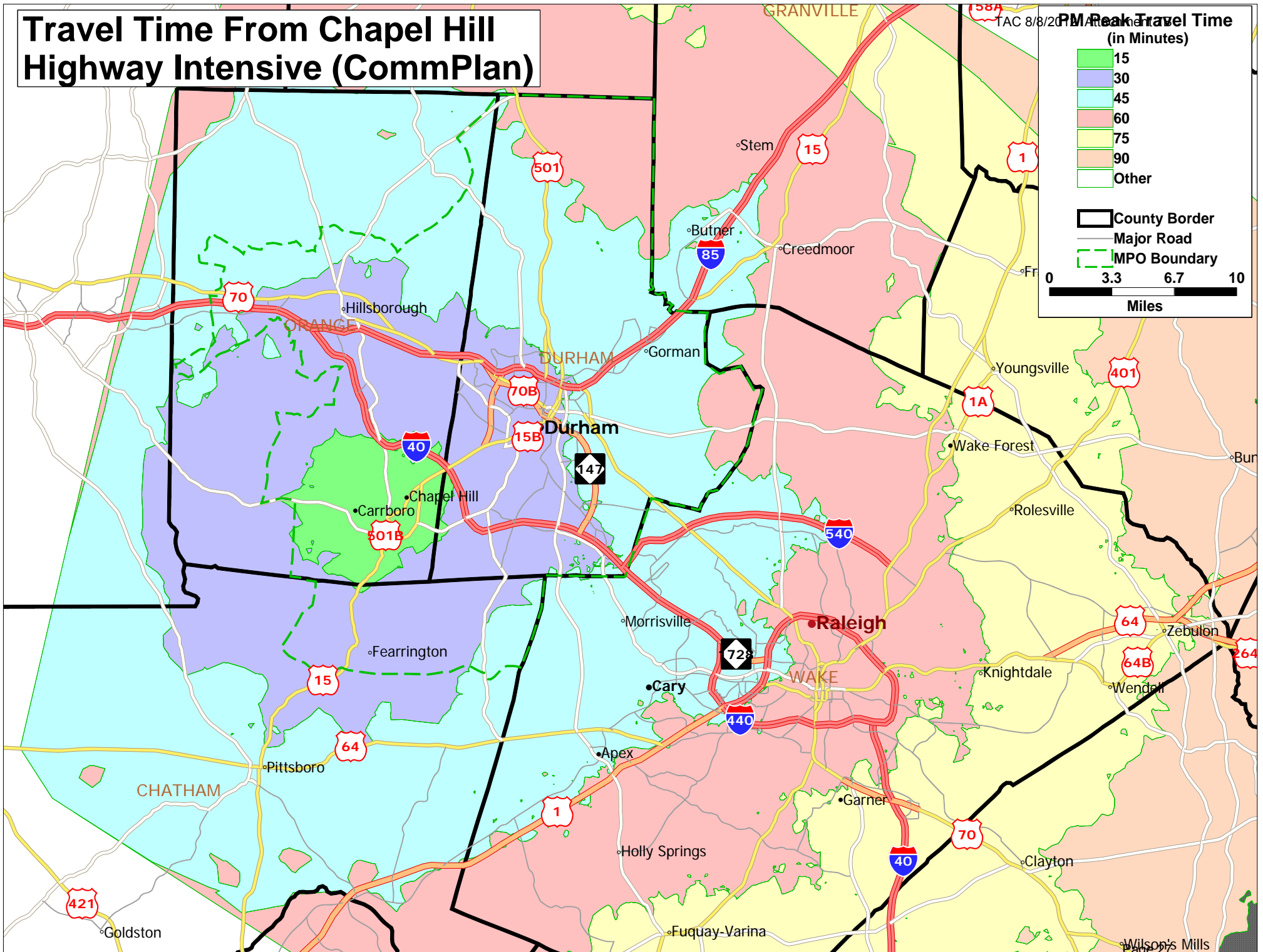
PM Peak Travel Time (in Minutes)

15
30
45
60
75
90

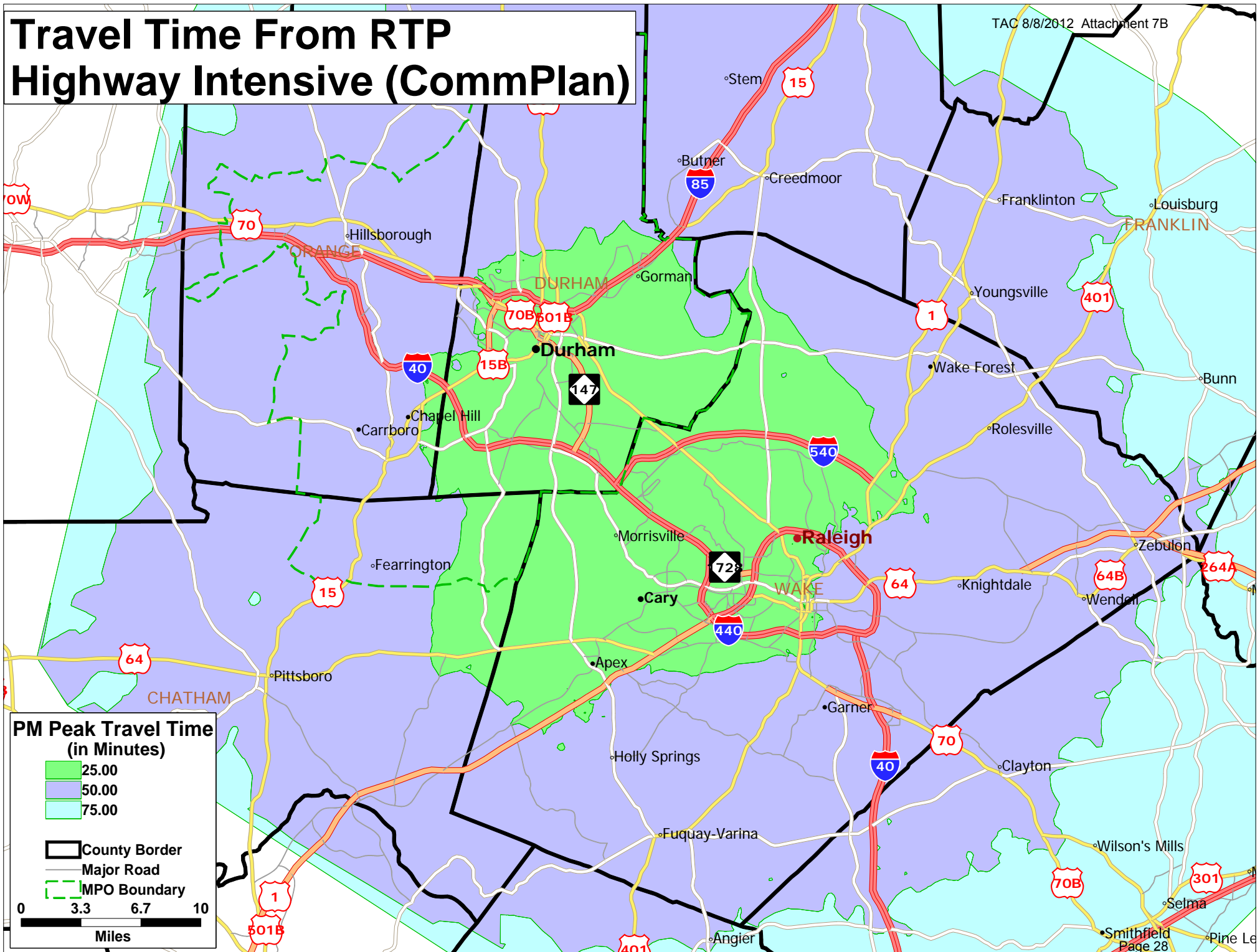
[Black Line] County Border
 [Grey Line] Major Road
 [Dashed Green Line] MPO Boundary

0 3.3 6.7 10
Miles

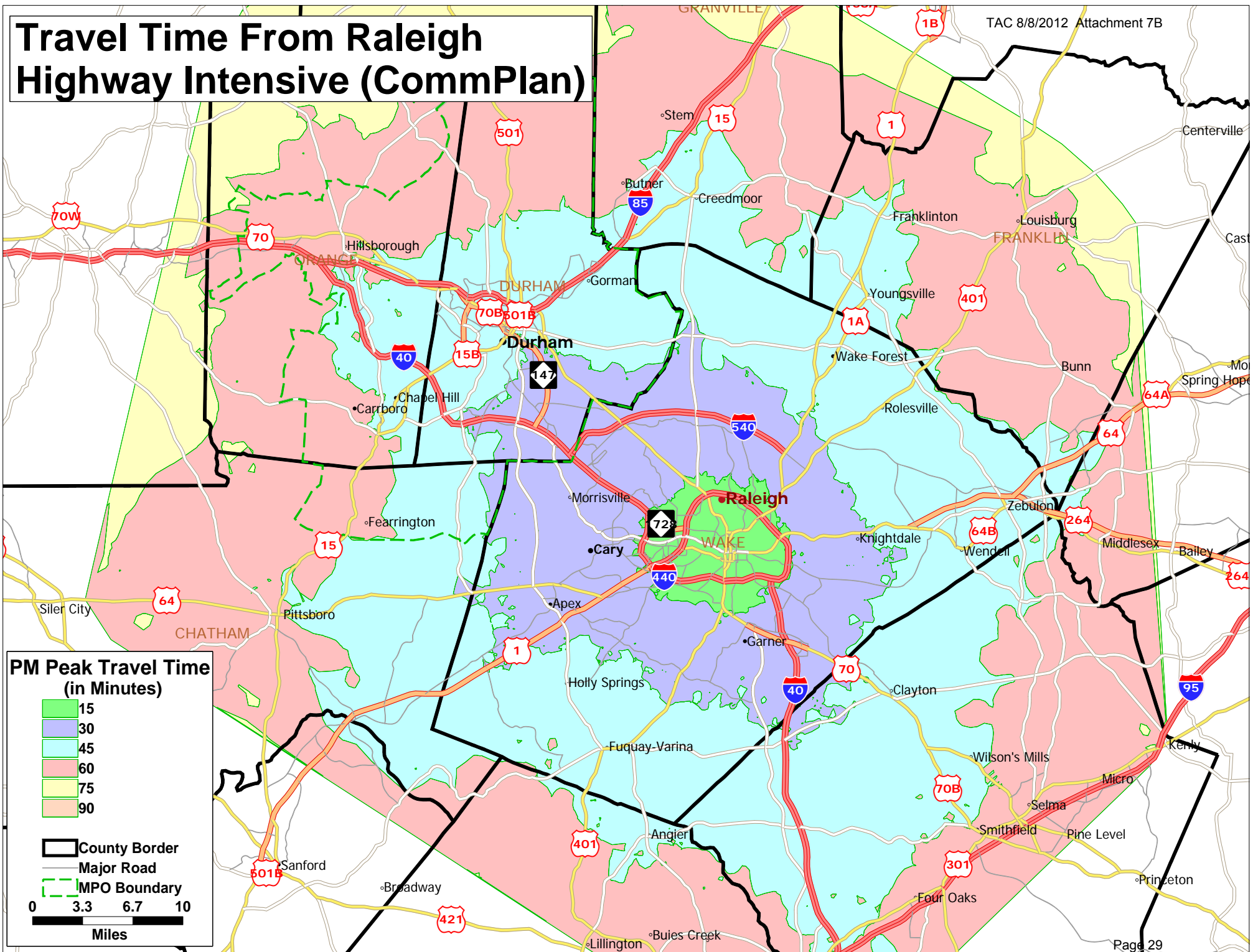
Travel Time From Chapel Hill Highway Intensive (CommPlan)



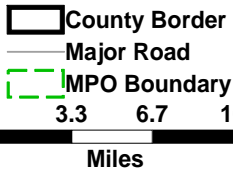
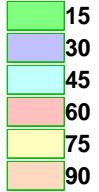
Travel Time From RTP Highway Intensive (CommPlan)



Travel Time From Raleigh Highway Intensive (CommPlan)



PM Peak Travel Time (in Minutes)



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2040 MTP and CTP Alternatives – Congestion Maps (V/C maps)

Use of Congestion Maps

The Performance Measures provide a general indicator of the overall transportation system. On the other hand, the Congestion Maps show the forecasted level of service on specific road segments based on the average of the four-hour afternoon peak hour. These maps are sometimes called “V/C” maps (V over C maps) because the level of service, or existence of congestion, is derived by dividing the traffic volume by the traffic capacity of the road segment. For example, a volume of 9,000 vehicles on a road that is capable of carrying 10,000 vehicles will produce a V/C of 0.9. A V/C of 1.0 is equal to a Level of Service (LOS) of “E”, which can be described as:

Limit of acceptable delay, unstable flow, poor signal progression,
traffic near roadway capacity, frequent cycle failures.

It should be noted that these congestion maps show the average for the afternoon peak. The total volume for the four-hour afternoon peak period is divided by the total capacity for the same period. Thus, the V/C ratio for the afternoon peak is likely to be less than the one-hour peak, or peak-of-the-peak, often experienced by motorists.

Although the term traffic congestion is subjective in that it means different levels of delay to different people, it can be said that any road segment approaching a V/C of 1.0, which is indicated on the maps with an **orange color**, experiences some delays. A V/C greater than 1.0, which is indicated on the maps by the **red color**, means frequent delays for the motorist and as the V/C approaches a value of 1.1 most motorists experience what might be termed unacceptable travel delays.

The Triangle Regional Model (the travel demand model for the Triangle Region) uses travel behavior data for the Triangle Region, future transportation system networks, and future population and employment data, to forecast the volume and capacity values needed to produce these maps. The forecasts are for the year 2040. Each congestion map represents one of the Alternatives, which are comprised of a specific transportation network and land use scenario.

Review and comparison of the congestion maps for the various Alternatives will show how well a particular Alternative addresses travel demand on the key roadway segments and corridors in the MPO planning area.

Of particular importance is the comparison of any one Alternative with the **E+C map** (Existing plus Committed), which can be considered a benchmark. The E+C map uses a transportation network with the current roadways and transit services plus any others that have been committed to being implemented, and the Socioeconomic Data (i.e., population and employment) for the year 2040. This map shows the level of service to be

experienced if no additional roadways improvements or transit services are implemented, and thus helps to answer the question, “When we make our next transportation investment decision, where do we need to focus our investment?” Furthermore, by comparing the E+C Congestion Map with the other Alternatives, you can see how well the transportation investments in that Alternative address the congestion in the E+C.

The 2010 congestion map is provided, as well, to give an additional benchmark. The 2010 basically represents current conditions because it is based on the current transportation network and socioeconomic data.

Presentation of Congestion Maps

The 2010 and E+C congestion maps are presented first, followed by the Alternatives. Each Alternative provides the following map views:

- Durham County
- Close up for City of Durham
- Orange County
- Close up for Chapel Hill and Carrboro
- Chatham County

2010 Durham County V/C

Mapayers

- County Boundary
- MPO Boundary

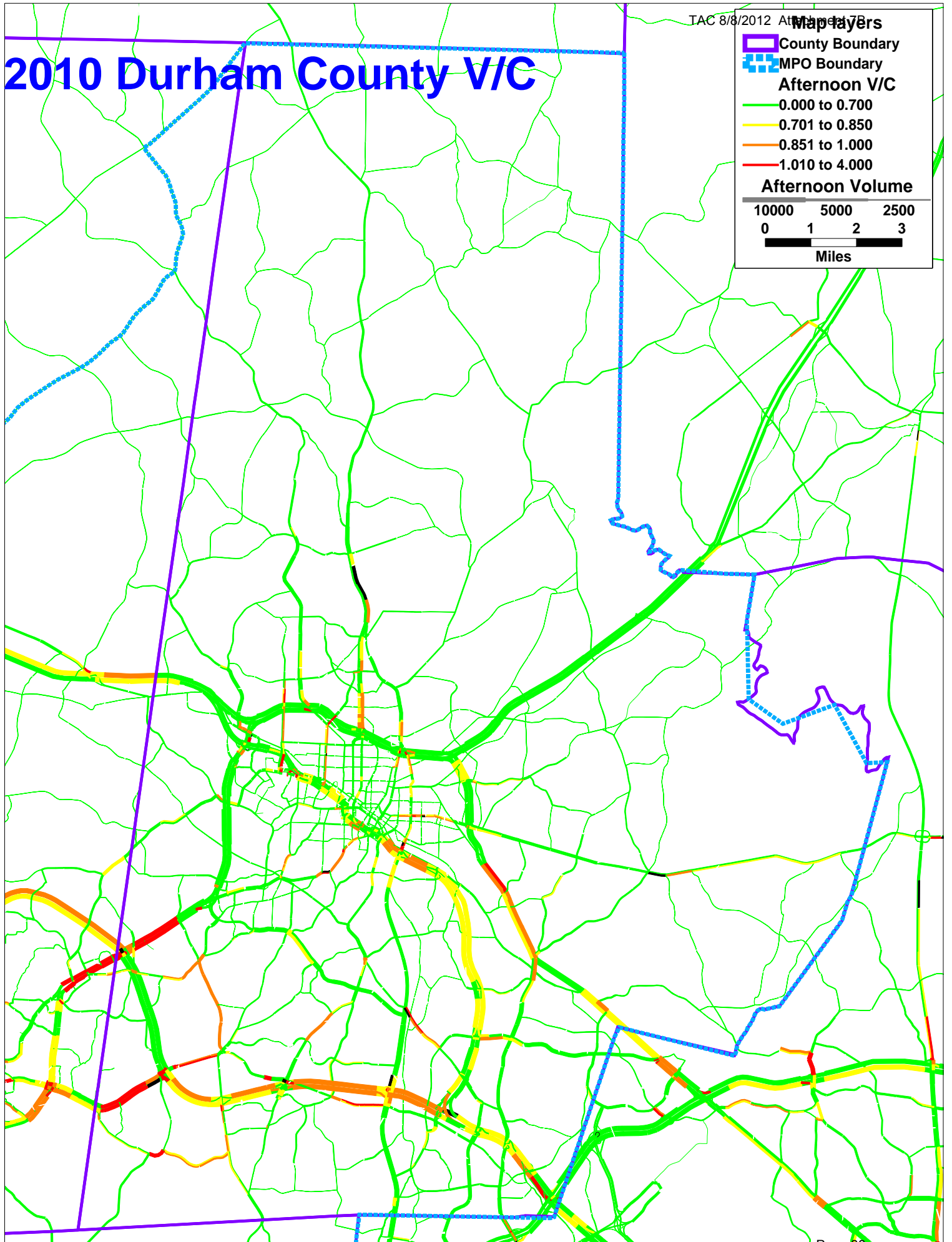
Afternoon V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 4.000

Afternoon Volume

10000	5000	2500	
0	1	2	3

Miles



2010 Downtown Durham V/C

TAC 8/8/2012 Attachment

Map Layers

- County Boundary
- MPO Boundary

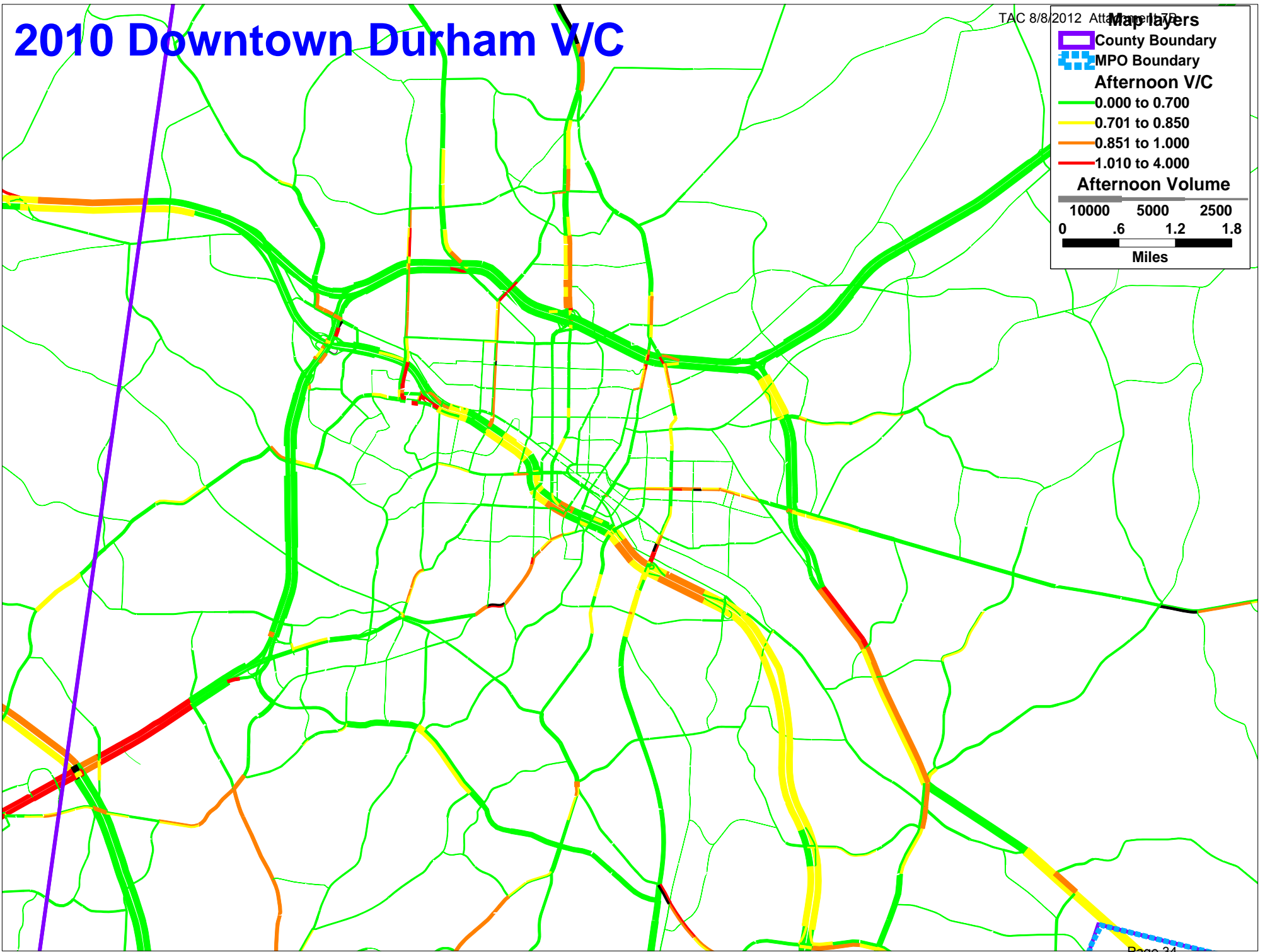
Afternoon V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 4.000

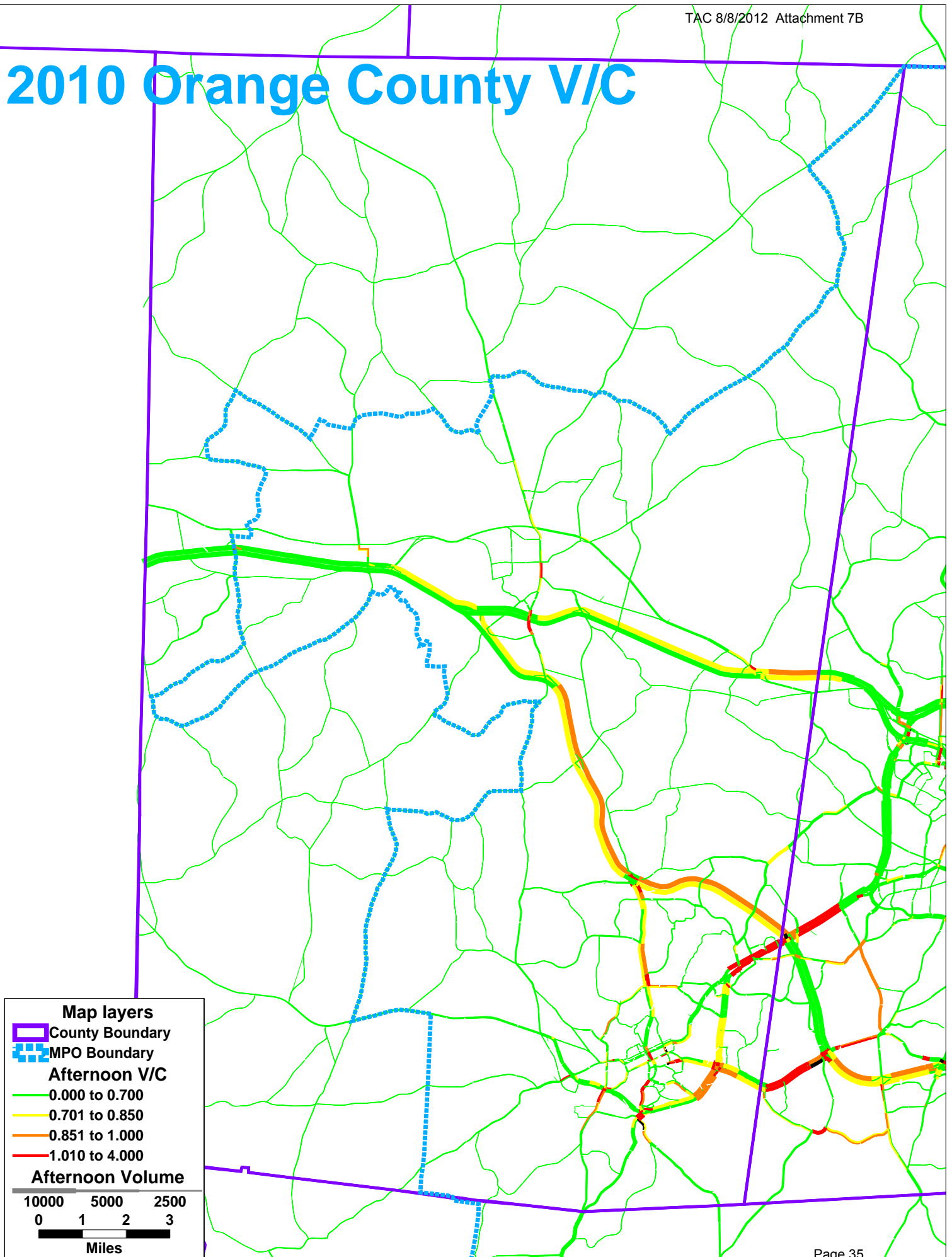
Afternoon Volume

10000	5000	2500	
0	.6	1.2	1.8

Miles



2010 Orange County V/C



Map layers

- County Boundary
- MPO Boundary

Afternoon V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 4.000

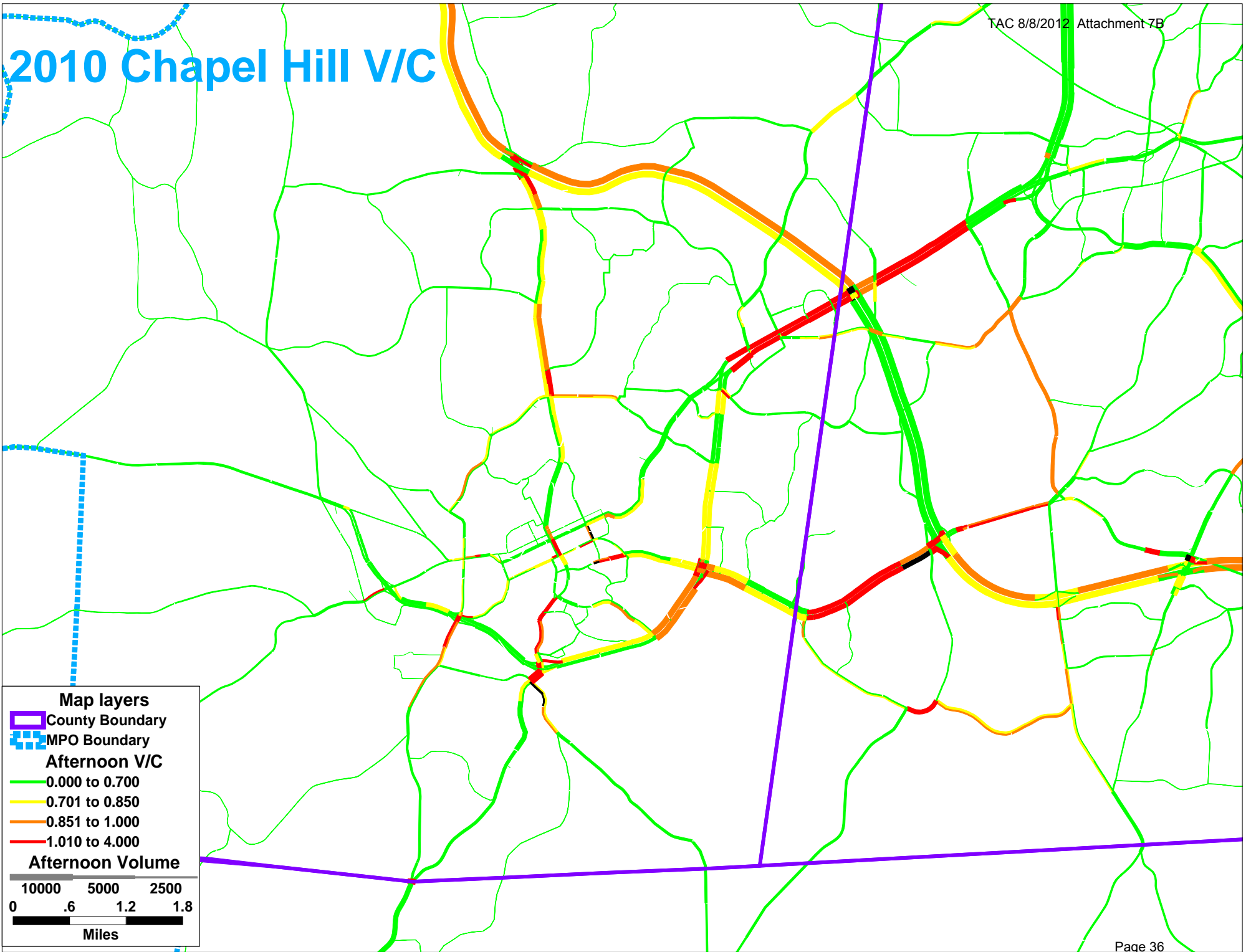
Afternoon Volume

10000 5000 2500

0 1 2 3

Miles

2010 Chapel Hill V/C



Map layers

- County Boundary
- MPO Boundary

Afternoon V/C

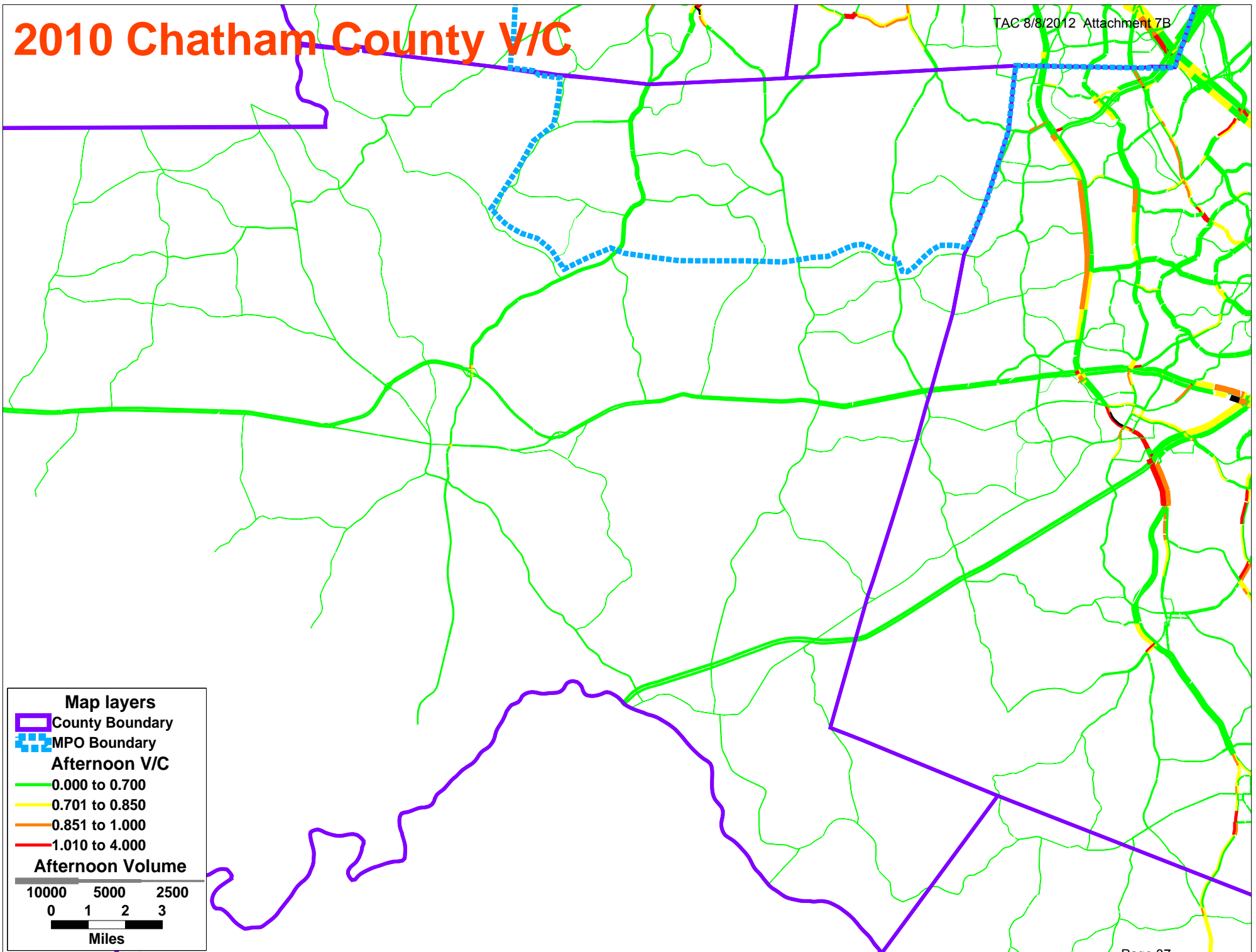
- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 4.000

Afternoon Volume

10000	5000	2500	
0	.6	1.2	1.8

Miles

2010 Chatham County V/C



Map layers

- County Boundary
- MPO Boundary

Afternoon V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 4.000

Afternoon Volume

10000 5000 2500

0 1 2 3

Miles

2040 Durham County V/C

E plus C

Map layers

- County Boundary
- MPO Boundary

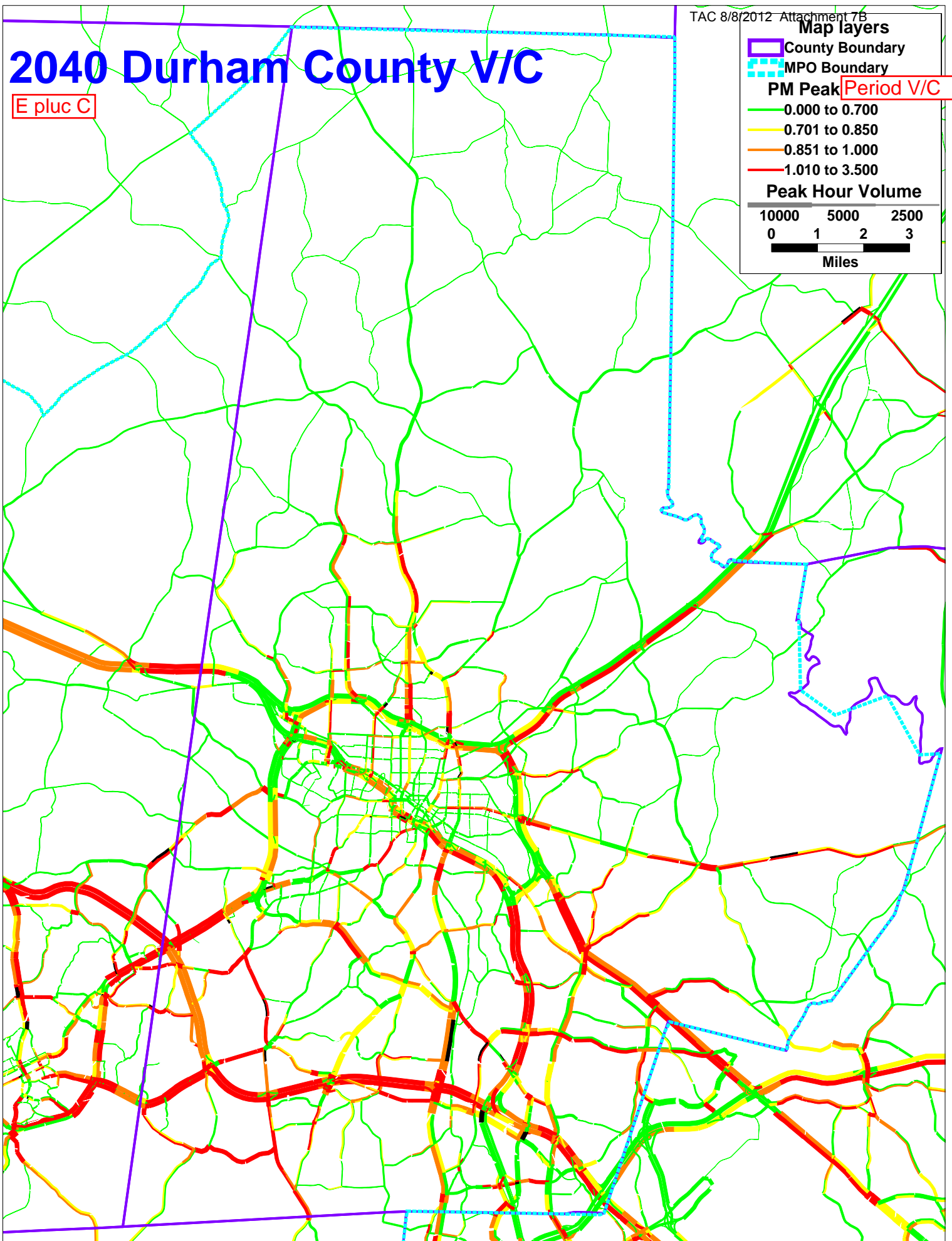
PM Peak Period V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 3.500

Peak Hour Volume

10000	5000	2500
0	1	2 3

Miles



2040 Downtown Durham V/C

E plus C

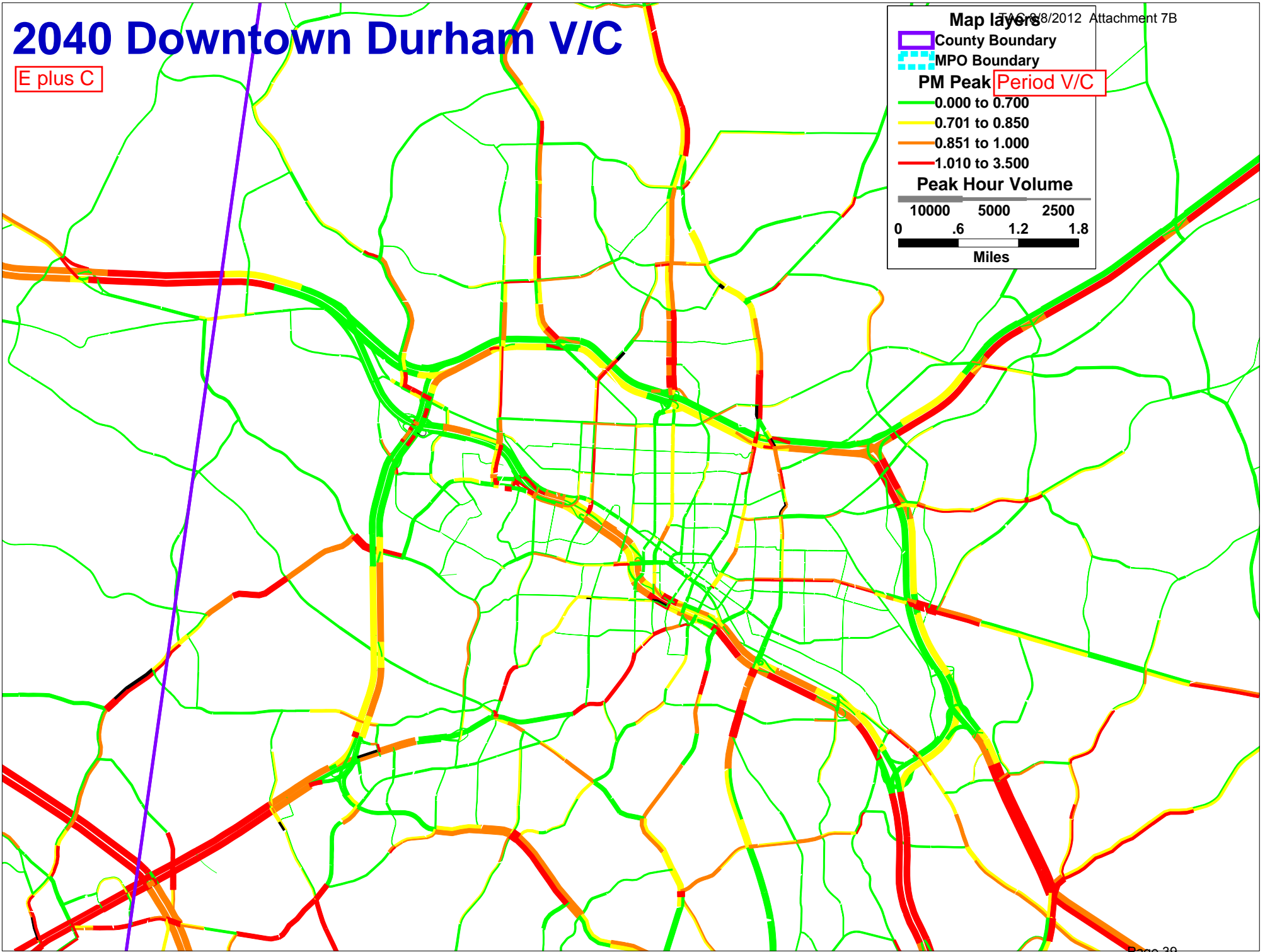
Map layers

- County Boundary
- MPO Boundary
- PM Peak Period V/C

Peak Hour Volume

10000	5000	2500	
0	.6	1.2	1.8

Miles



2040 Orange County V/C

E plus C

Map layers

- County Boundary
- MPO Boundary

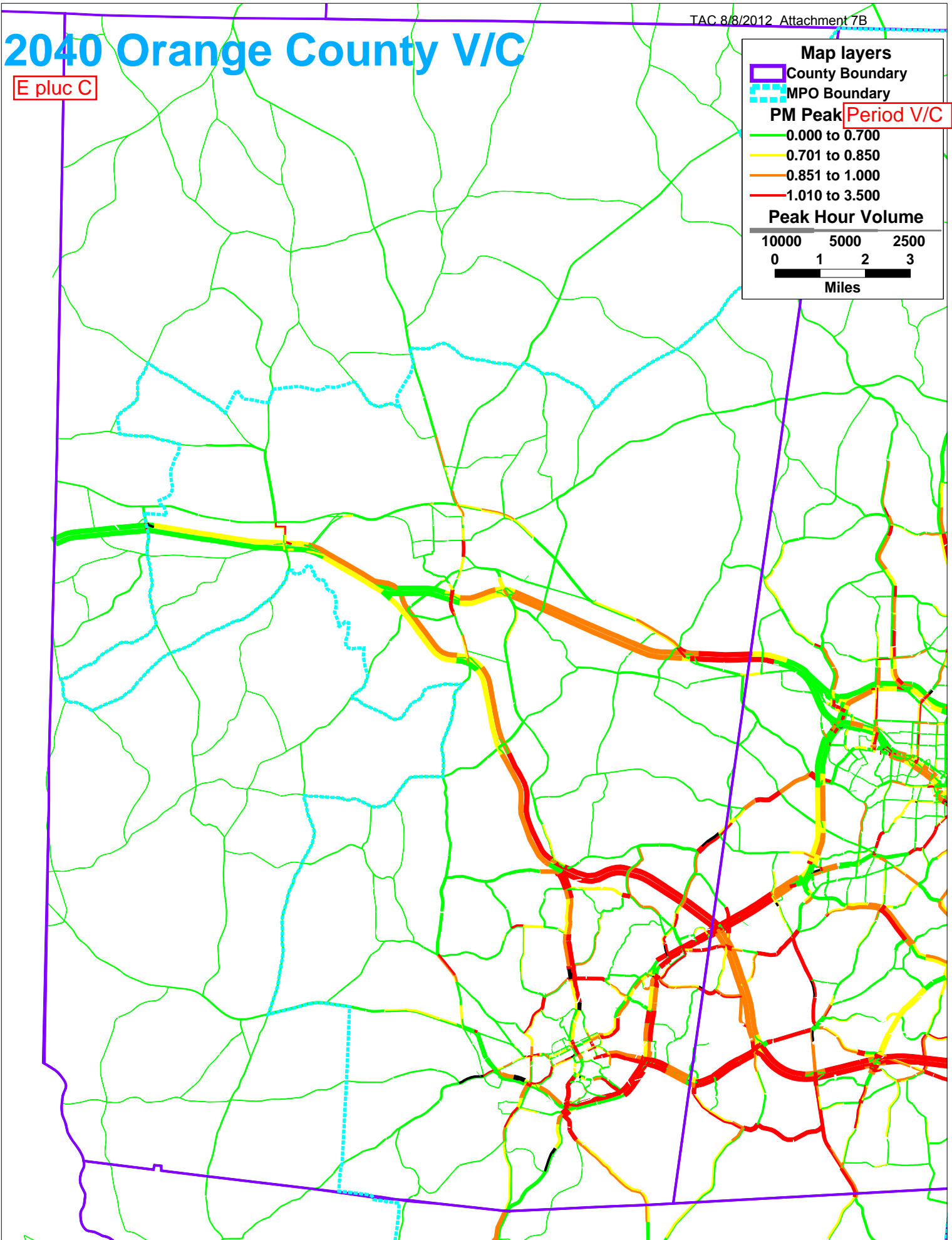
PM Peak Period V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 3.500

Peak Hour Volume

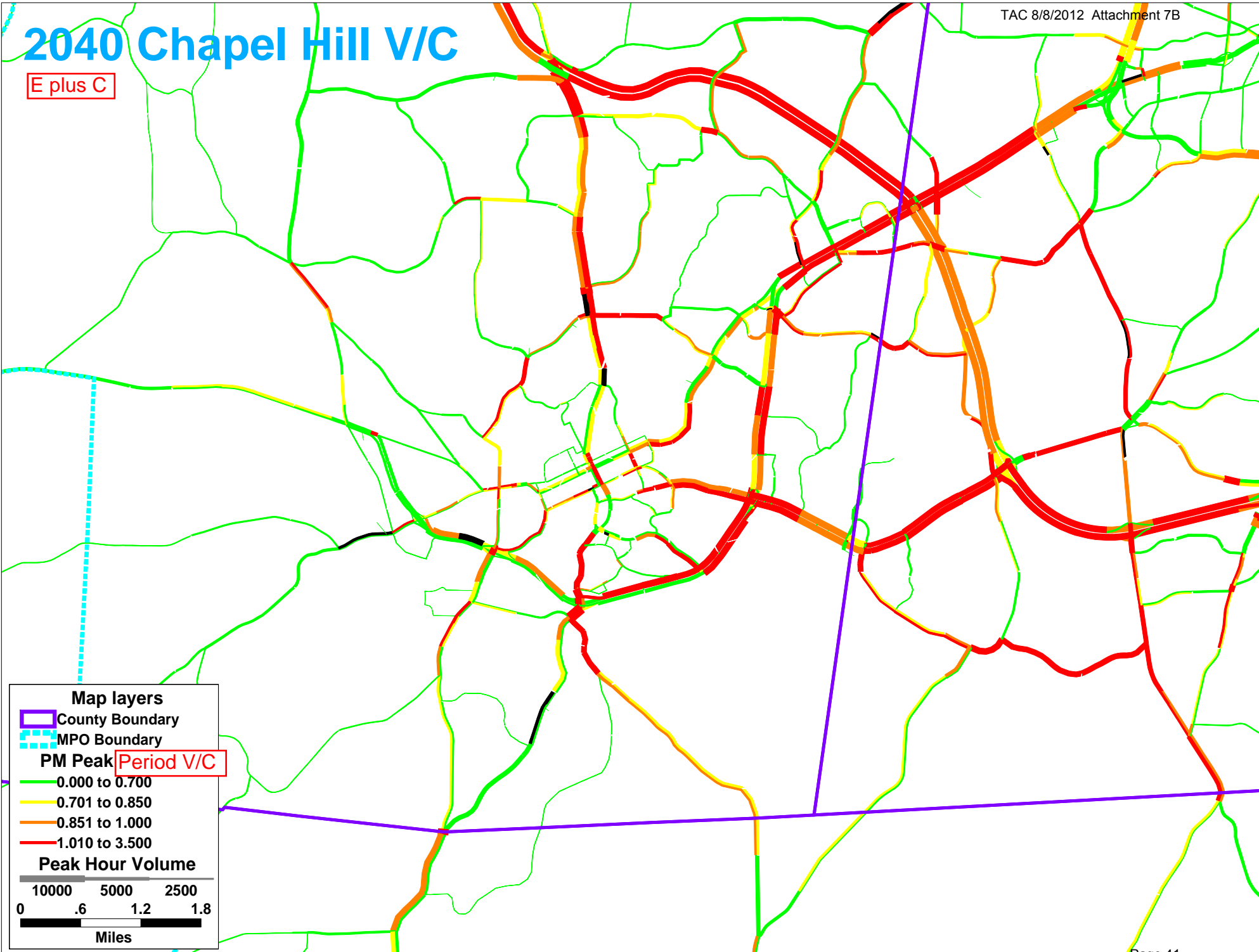
10000	5000	2500	
0	1	2	3

Miles



2040 Chapel Hill V/C

E plus C



Map layers

- County Boundary
- MPO Boundary

PM Peak Period V/C

- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 3.500

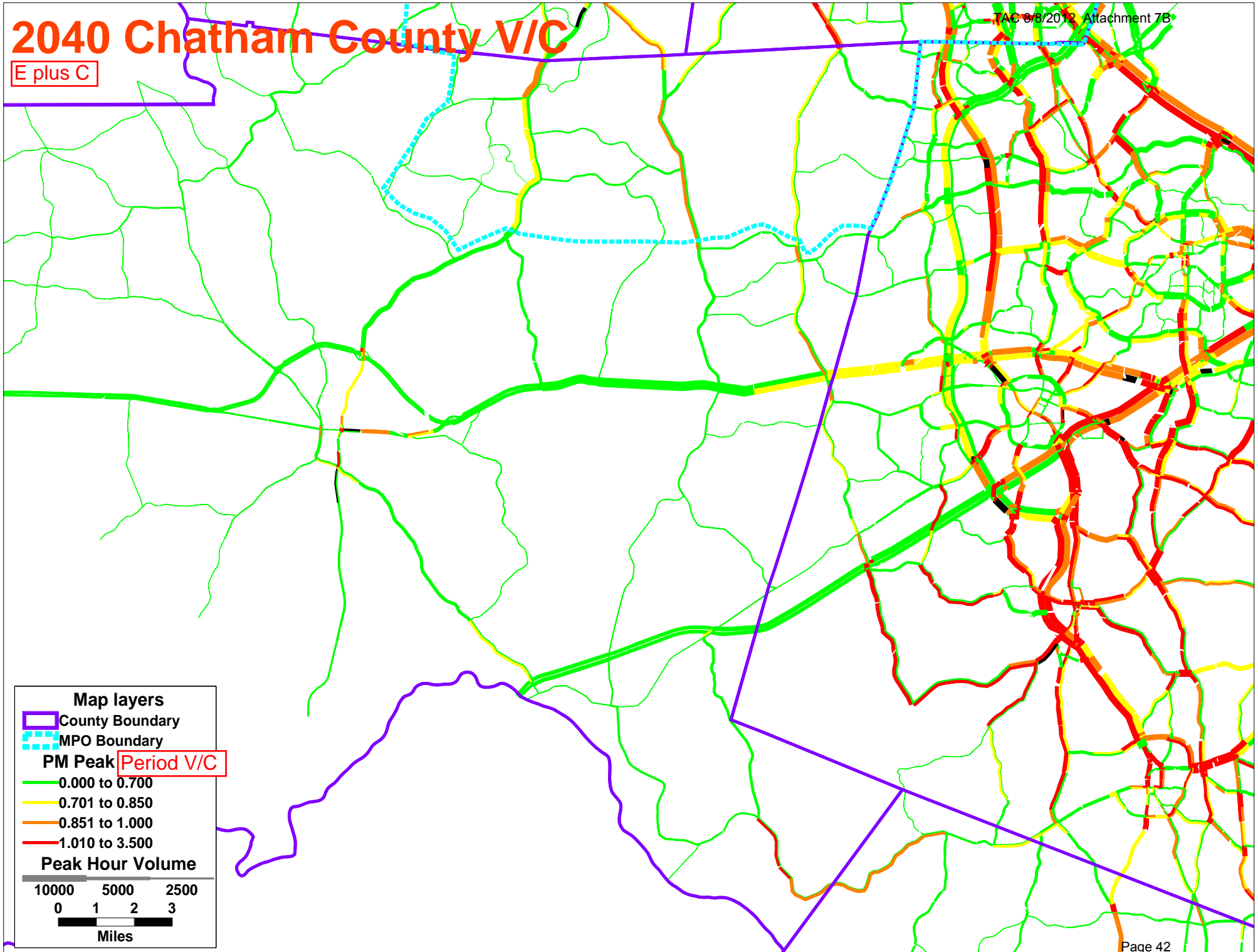
Peak Hour Volume

10000	5000	2500
0	.6	1.2
1.8		

Miles

2040 Chatham County V/C

E plus C



Map layers

- County Boundary
- MPO Boundary

PM Peak Period V/C

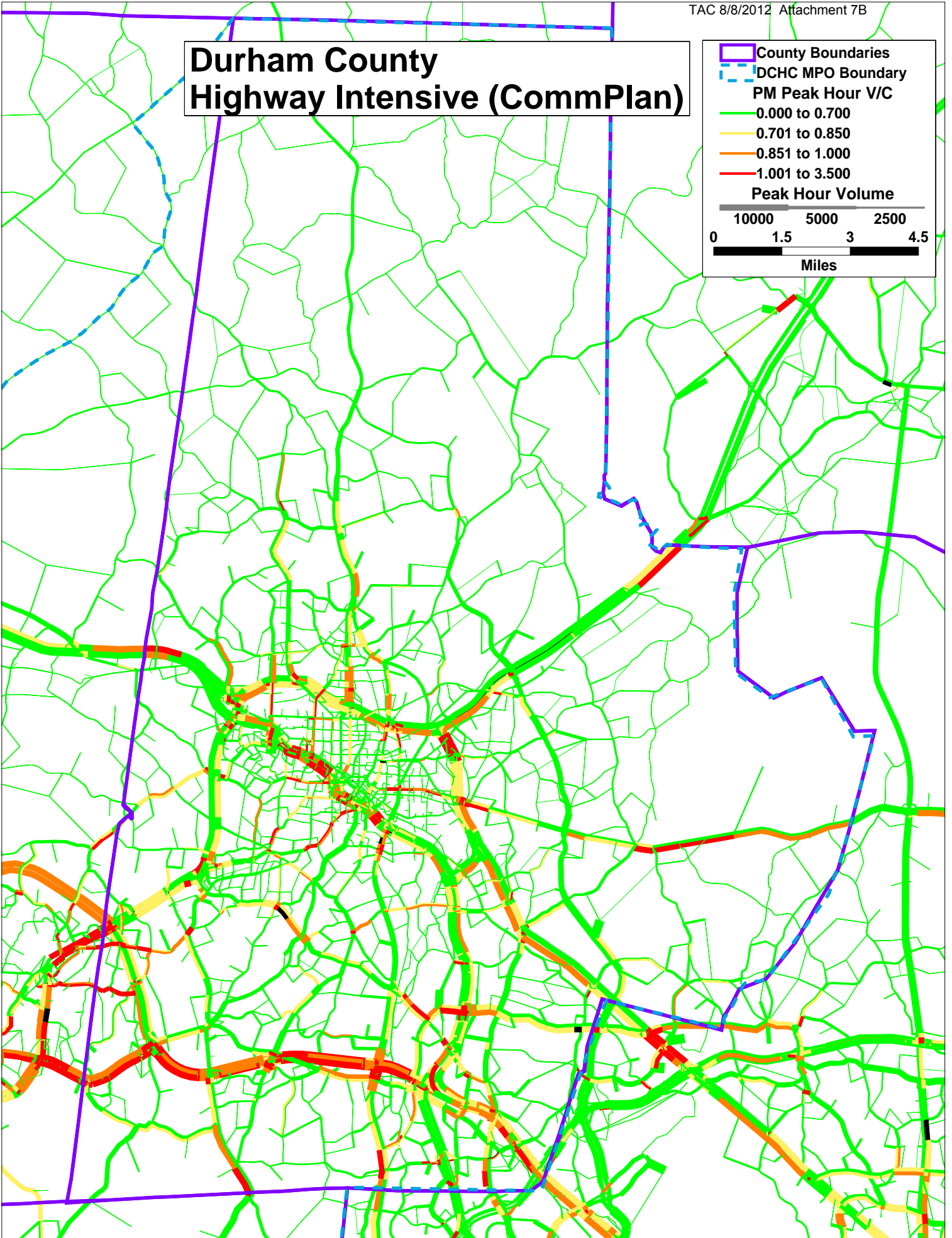
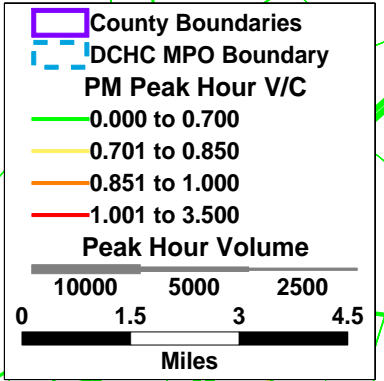
- 0.000 to 0.700
- 0.701 to 0.850
- 0.851 to 1.000
- 1.010 to 3.500

Peak Hour Volume

10000	5000	2500
0	1	2 3

Miles

Durham County Highway Intensive (CommPlan)



Downtown Durham Highway Intensive (CommPlan)

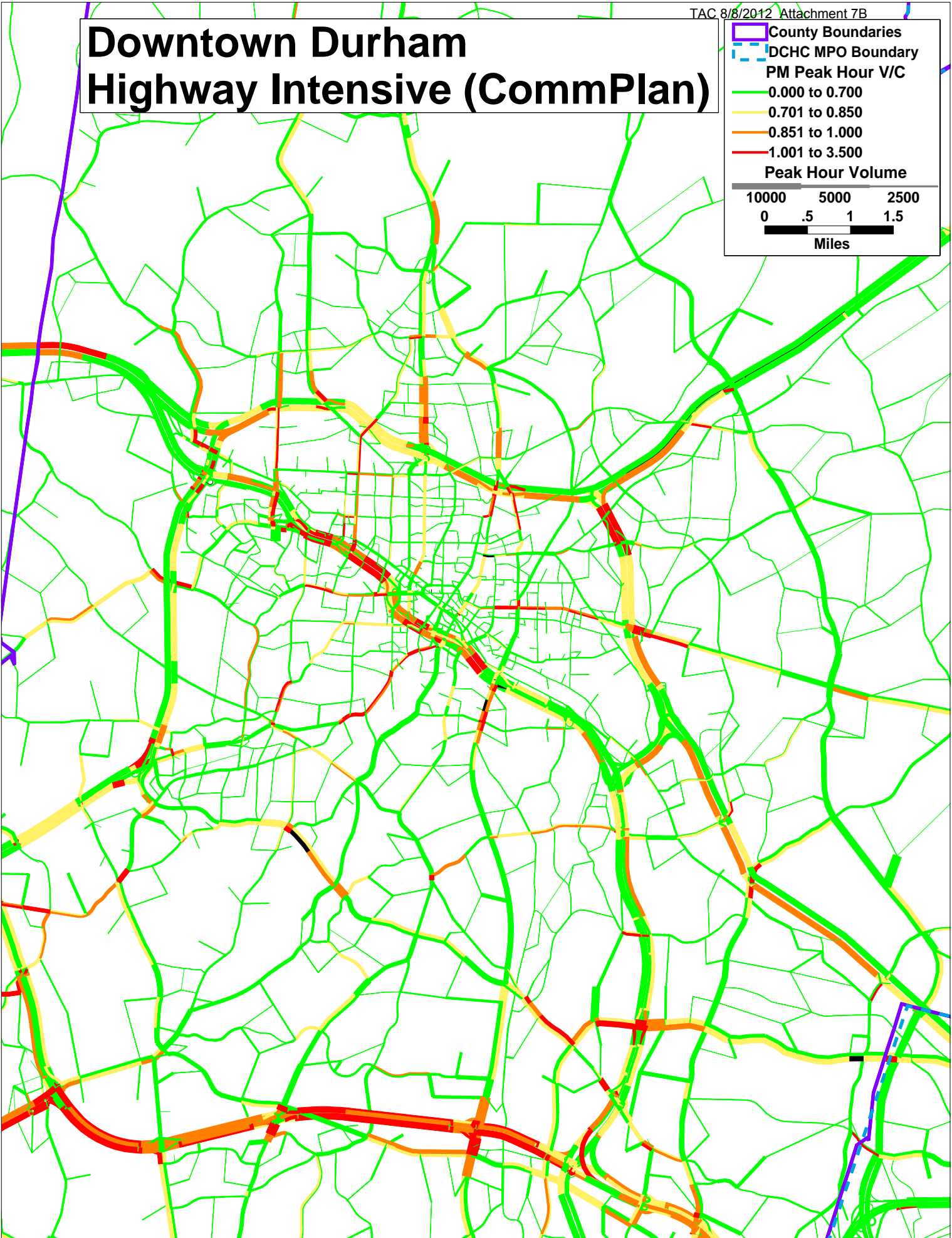
County Boundaries
DCHC MPO Boundary
PM Peak Hour V/C

0.000 to 0.700
0.701 to 0.850
0.851 to 1.000
1.001 to 3.500

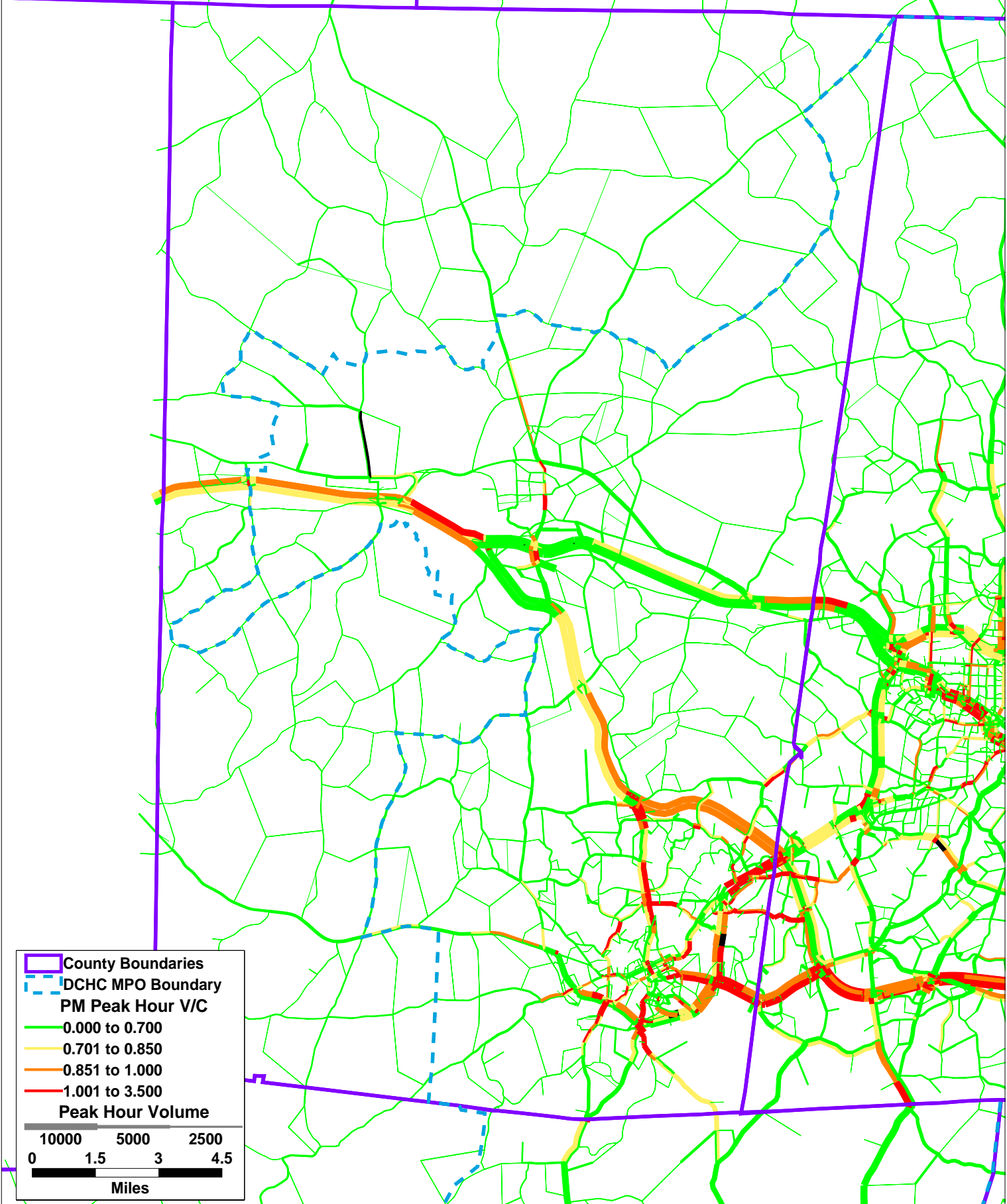
Peak Hour Volume

10000	5000	2500	
0	.5	1	1.5

Miles

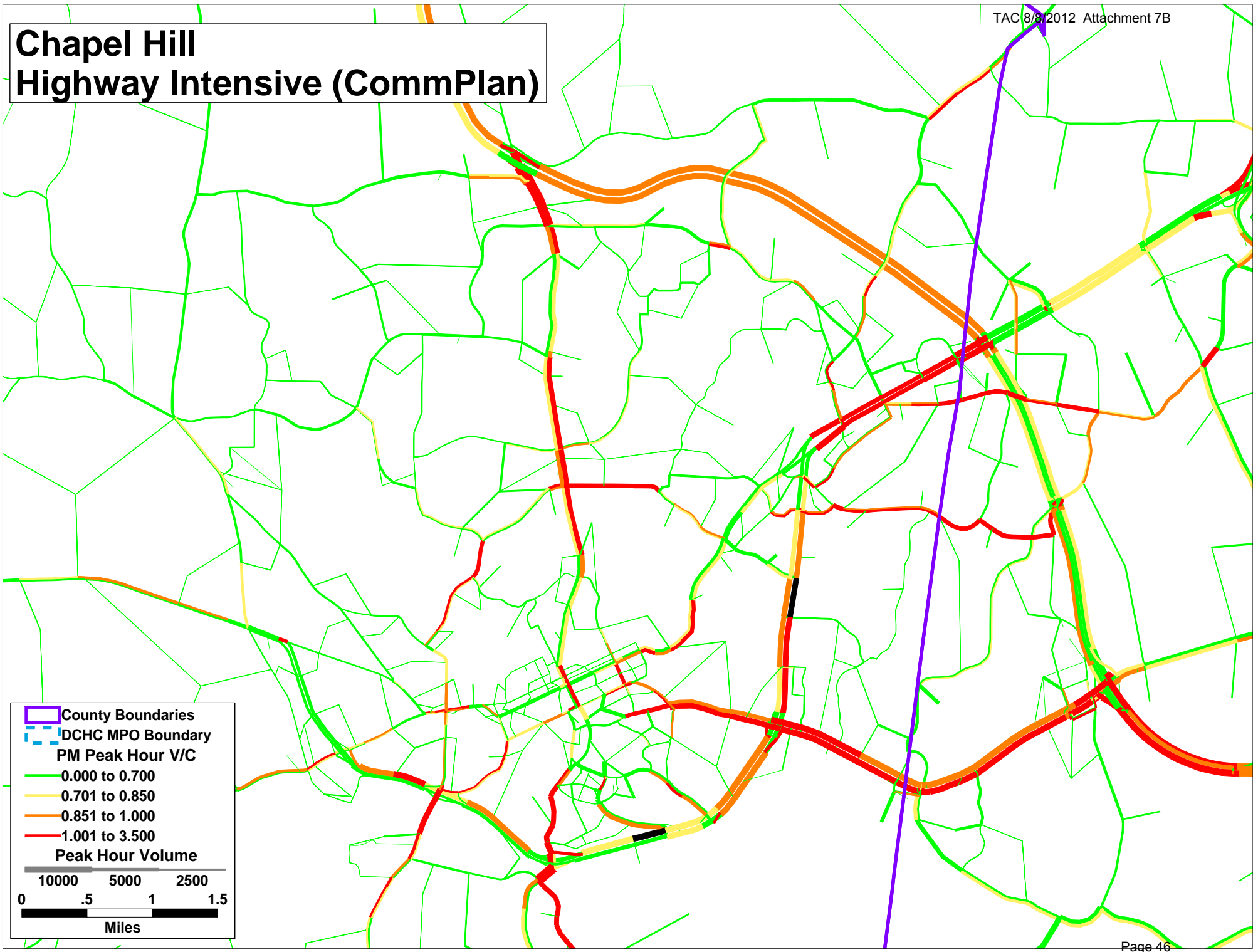


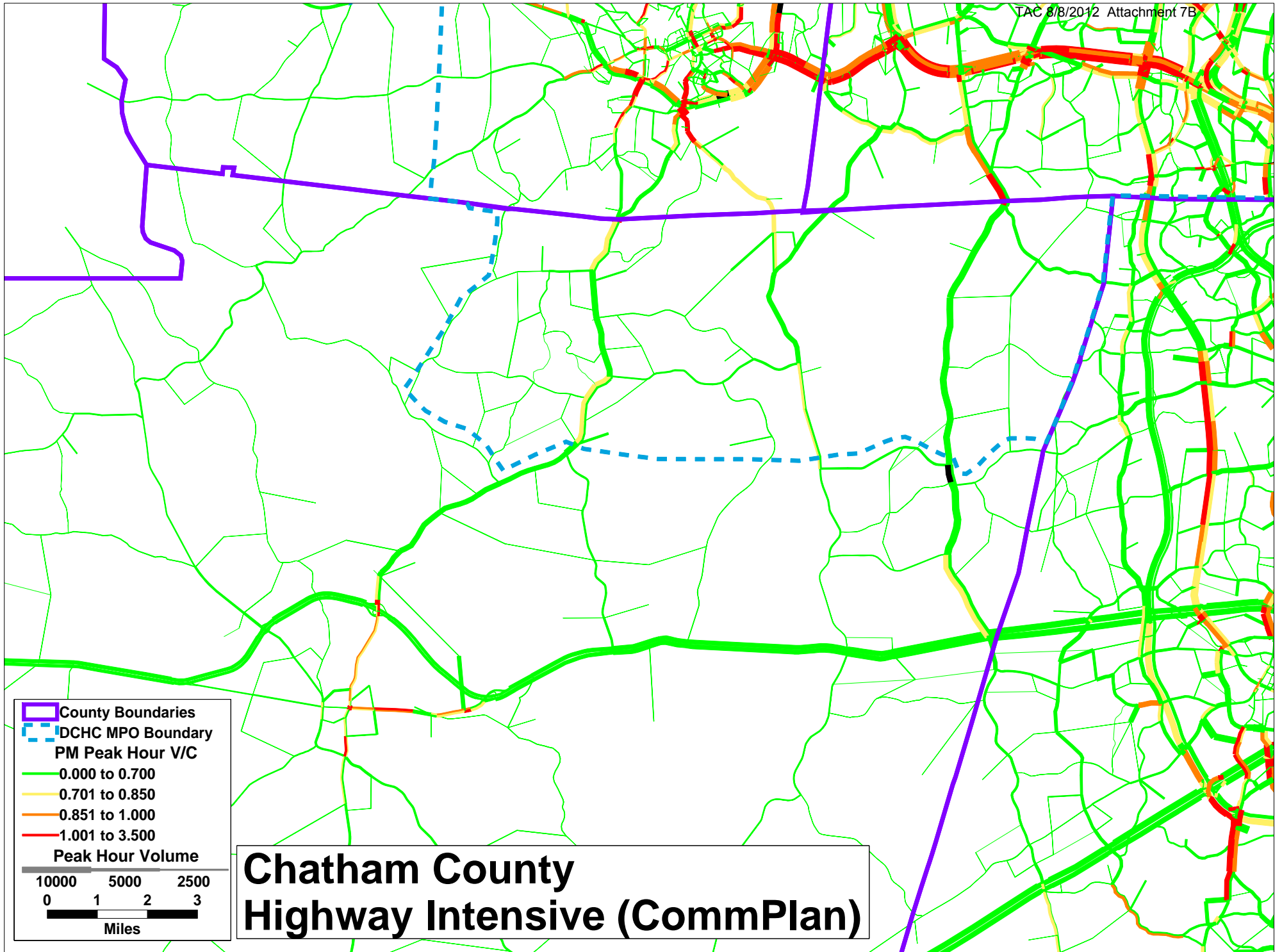
Orange County Highway Intensive (CommPlan)



County Boundaries
DCHC MPO Boundary
PM Peak Hour V/C
0.000 to 0.700
0.701 to 0.850
0.851 to 1.000
1.001 to 3.500
Peak Hour Volume
10000 5000 2500
0 1.5 3 4.5
Miles

Chapel Hill Highway Intensive (CommPlan)





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2040 MTP and CTP Socioeconomic Data

Purpose of Socioeconomic Data

The socioeconomic data (SE Data) shows the location of the population and employment, median household income and other demographic data that drives the travel demand. The SE Data is among the most important inputs into the Triangle Regional Model (TRM) because the residential data is used to determine the number and type of trips and the employment data is critical for determining the destination for those trips. The distance between residential and employment centers, and the location of roads and transit service in relation to those house and jobs, will have a big impact on the travel distance, travel time, mode shares, and congestion in the TRM output.

Scenarios

The DCHC MPO and the Capital Area MPO partnered together in a process called *Imagine 2040* to create a land use model for the entire Triangle region that is capable of producing multiple land use scenarios. The GIS (geographic information system) software called *Community Visualization* provides the method and data bases for the scenarios. This partnership created two distinct SE Data scenarios for use in the Alternatives:

CommPlan – The Community Plan scenario is based on the comprehensive land use plans of the local jurisdictions and counties.

AIT – The All-in-Transit scenario starts with the comprehensive land use plans and adds transit oriented development (TOD) around the light rail and commuter rail stations. The TOD has higher density and more mixed land uses than the anticipated development in the CommPlan. In addition, the factors in this land use scenario that drive the attractiveness of the parcels (e.g., land use suitability) are weighted more positively for rail transit stations.

It is important to note that the county-level population and employment are the same between for the two scenarios. The county-level guide totals established for each county earlier in the 2040 MTP process are used for both scenarios. The difference between the two scenarios is the location. The population and employment in the AIT scenario is more concentrated around the rail transit stations than in the CommPlan scenario.

Detailed Information

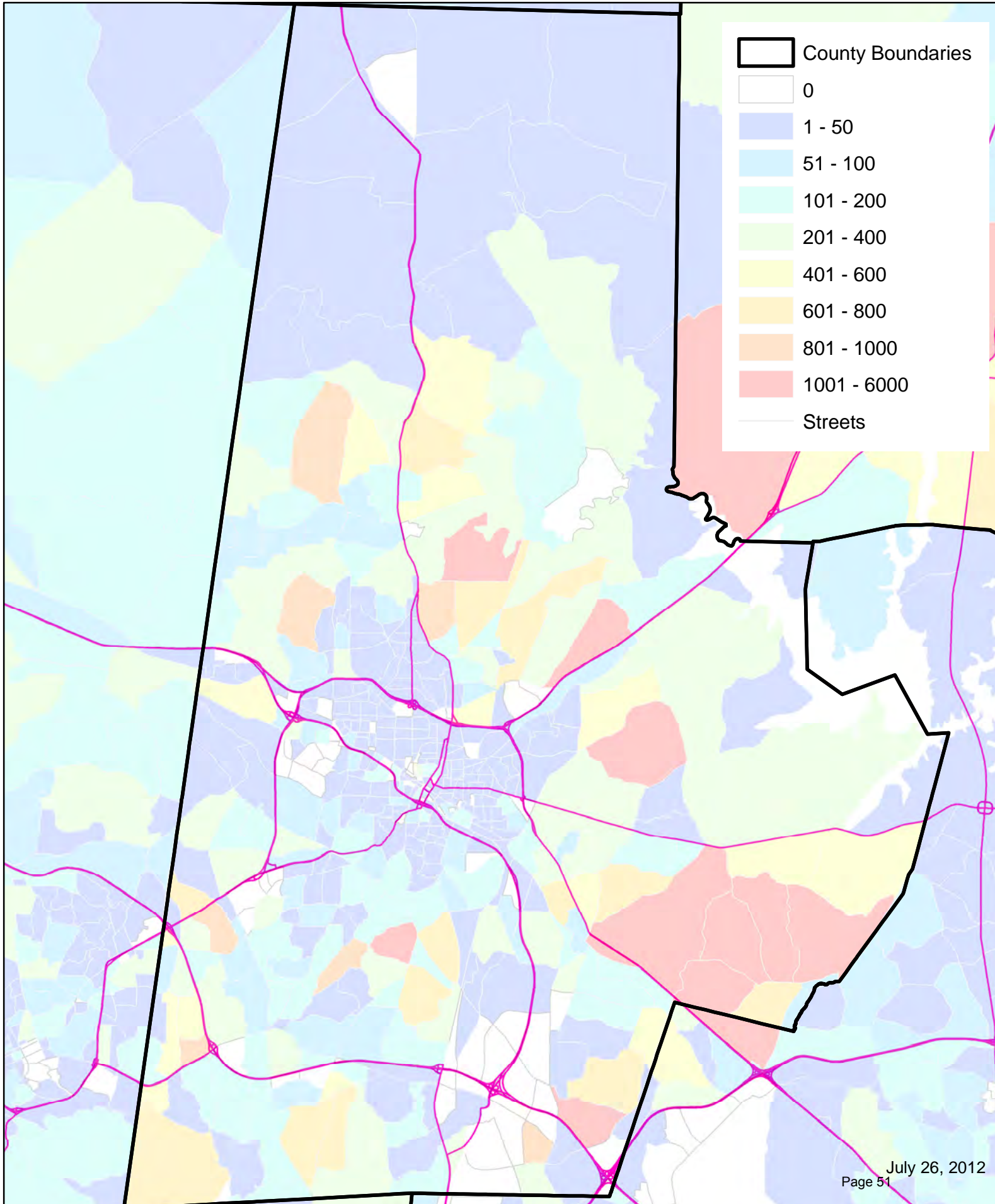
The DCHC MPO released draft SE Data for the 2040 MTP in March 2012 for public comment, and subsequently updated the draft SE Data in June 2012. As a result, the MPO's Web site, www.dchcmpo.org, has ample information on the use of SE Data in travel demand modeling, the Community Visualization process, population and employment guide totals for the year 2040, and more on the project pages for Deficiency Analysis and Draft 2040 Socioeconomic Data.

Presentation of SE Data

The maps on the ensuing pages show the household and employment growth from the year 2010 to 2040 for each scenario. The growth is broken out by traffic analysis zones (TAZs), which are the primary geographic input into the travel demand model. There are over 800 TAZs in the DCHC MPO and the TAZs are different sizes, tending to be small in the more urbanized area to account for the higher residential and employment concentrations. These are so-called heat maps – the color becomes “hotter” as the values increase. The maps views are by county. Close up maps for the City of Durham and Chapel Hill/Carrboro are available on the MPO Web site.

Durham County Community Plan--Dwelling Unit Growth 2010-2040

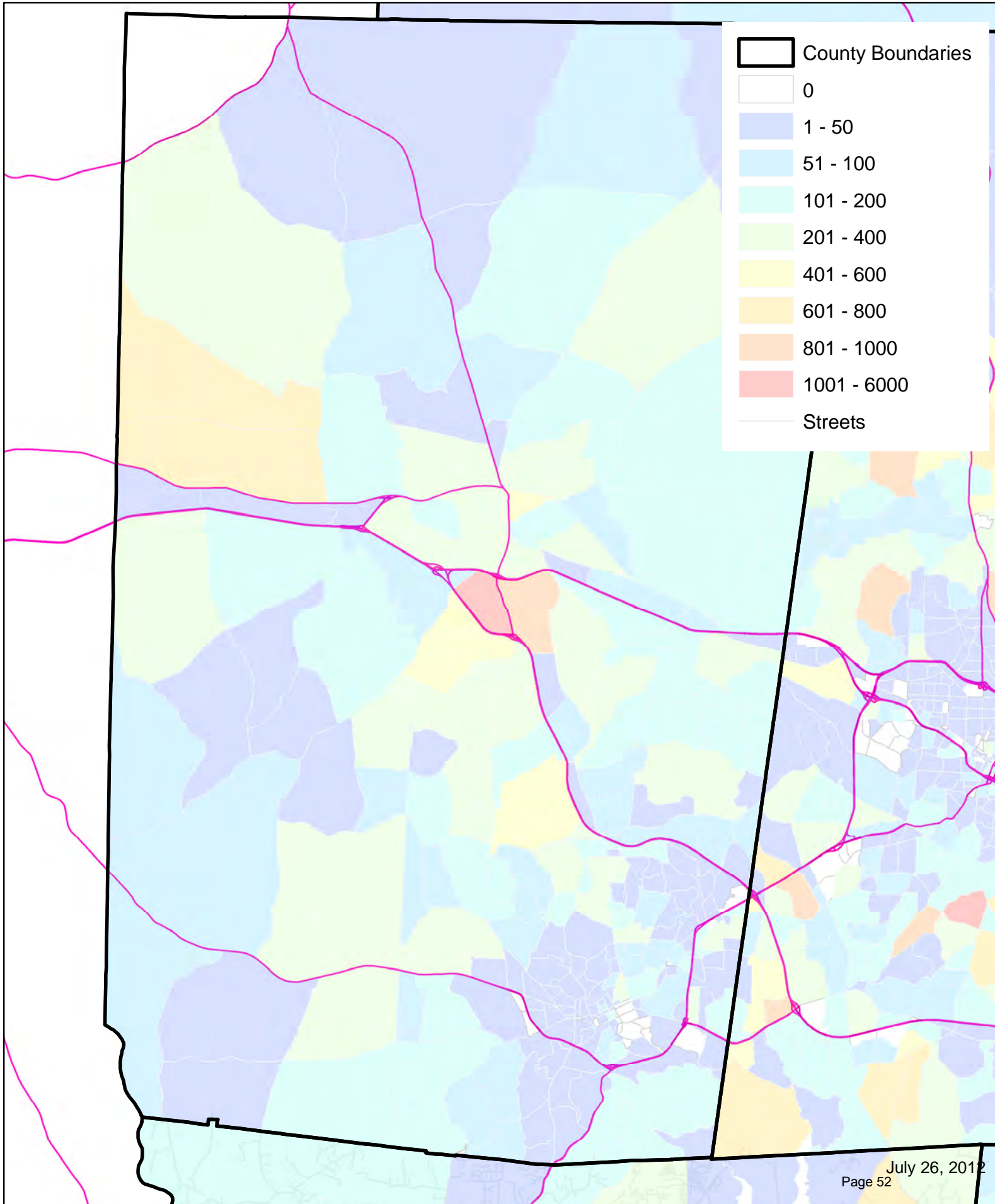
TAC 8/8/2012 Attachment 7B



Orange County

TAC 8/8/2012 Attachment 7B

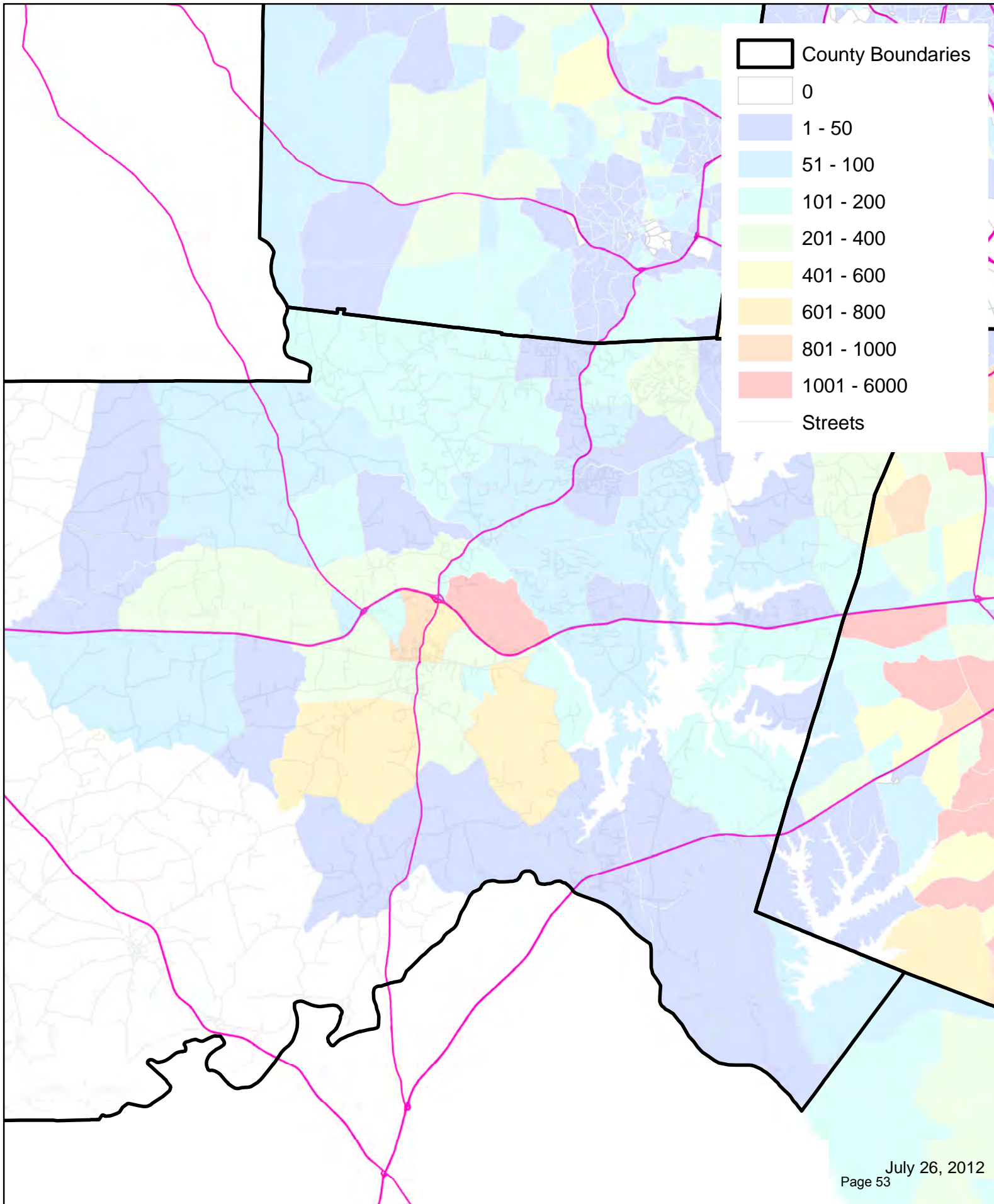
Community Plan--Dwelling Unit Growth 2010-2040



Chatham County

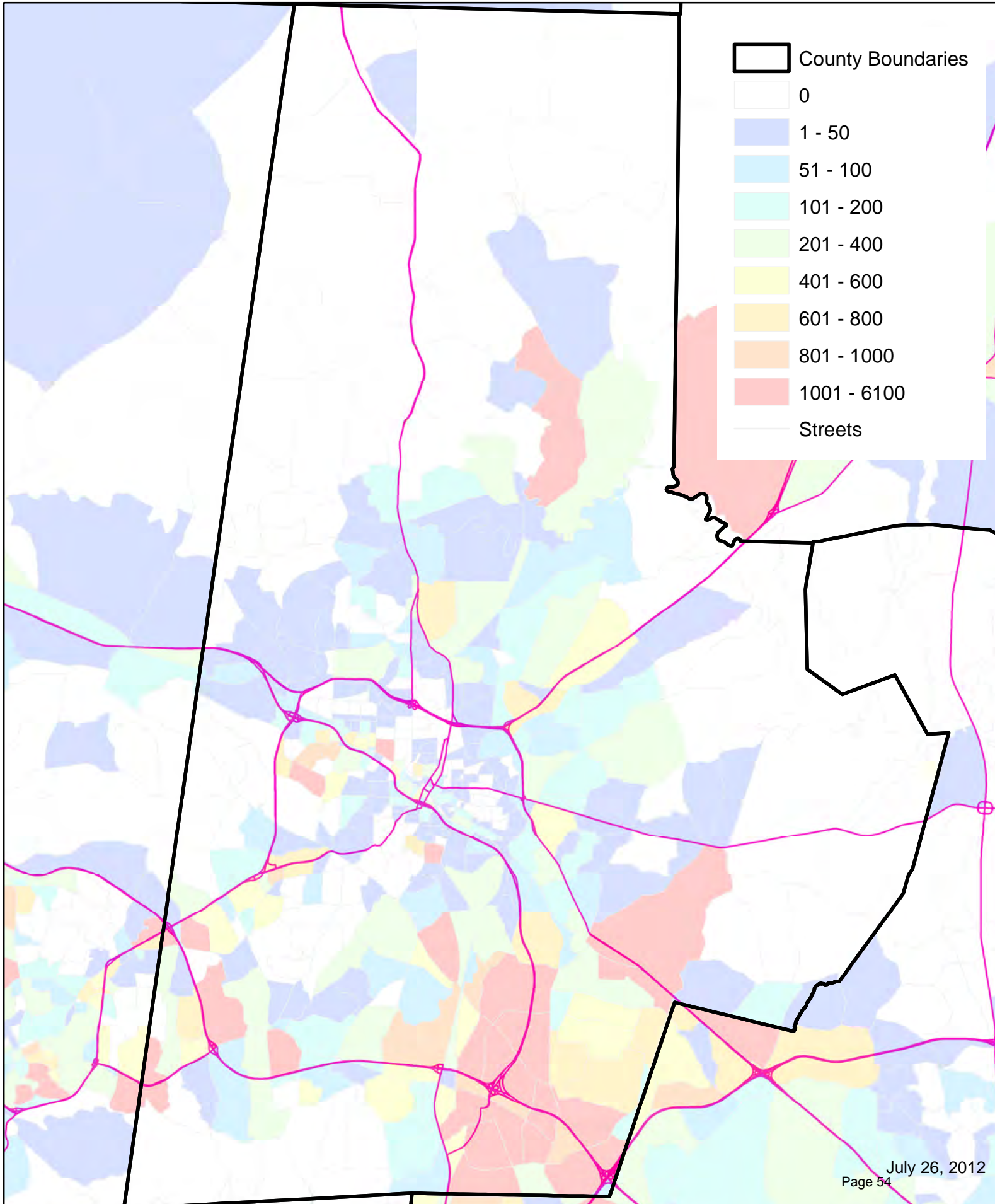
TAC 8/8/2012 Attachment 7B

Community Plan--Dwelling Unit Growth 2010-2040

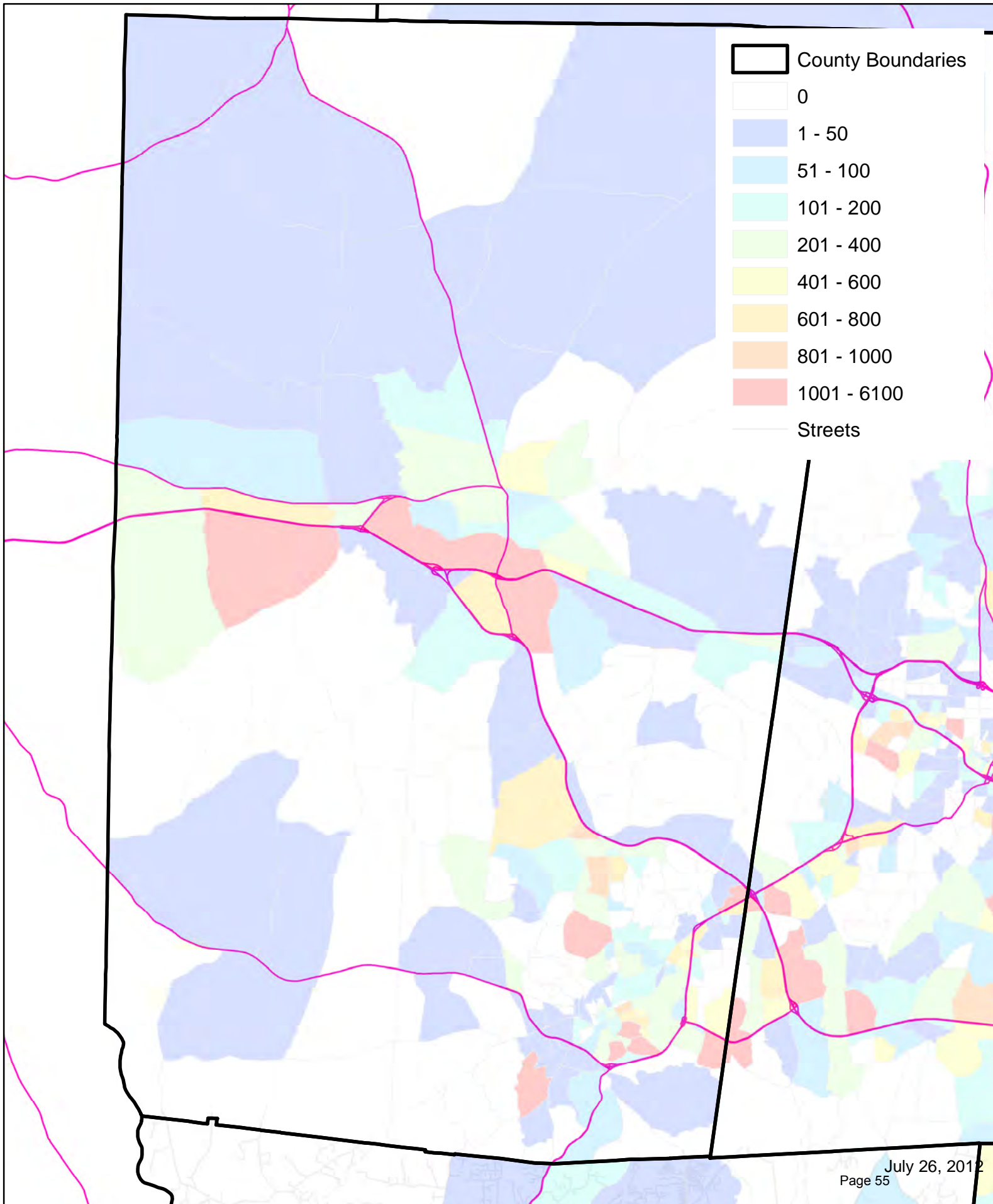


Durham County Community Plan--Employment Growth 2010-2040

TAC 8/8/2012 Attachment 7B

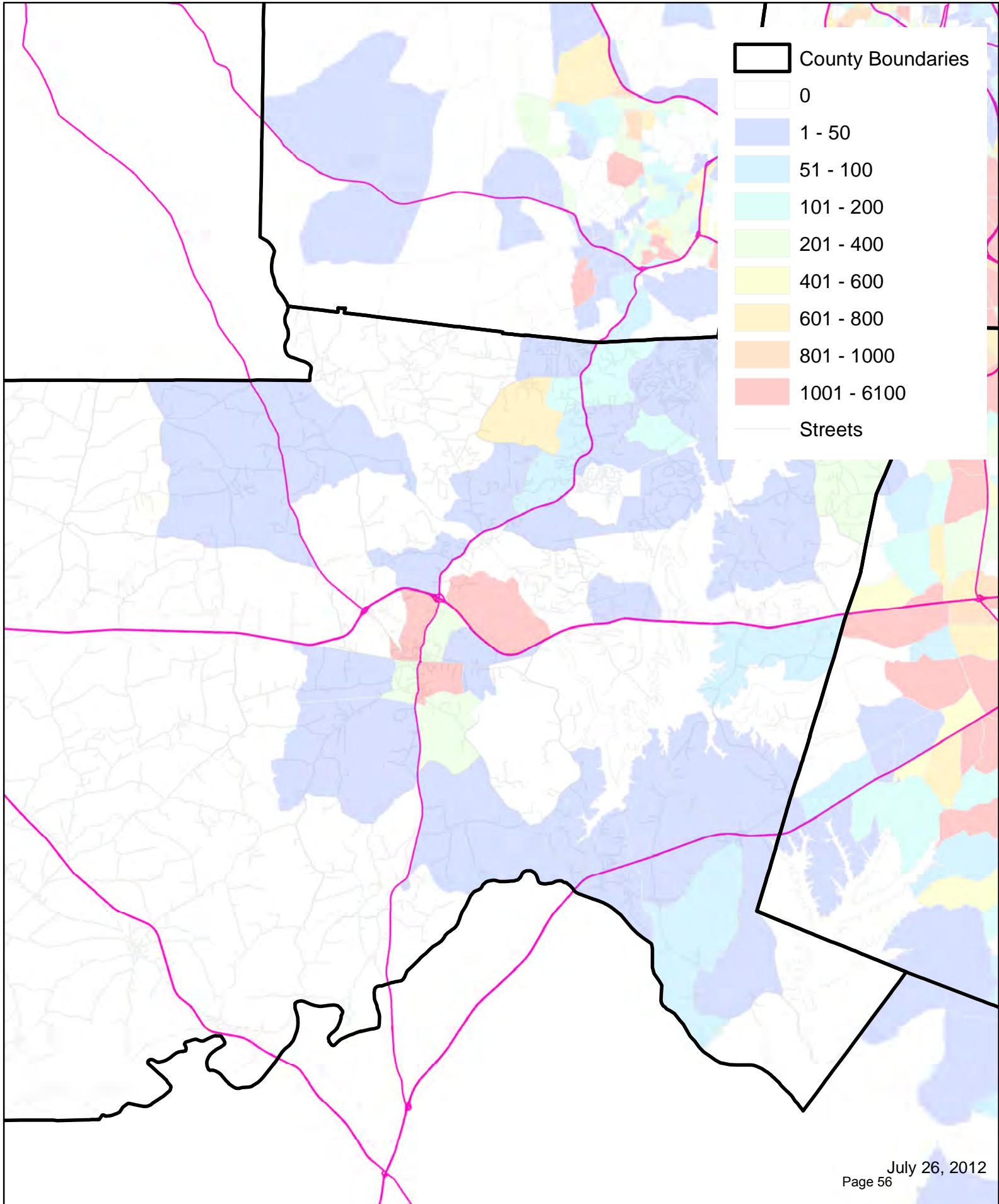


Community Plan--Employment Growth 2010-2040



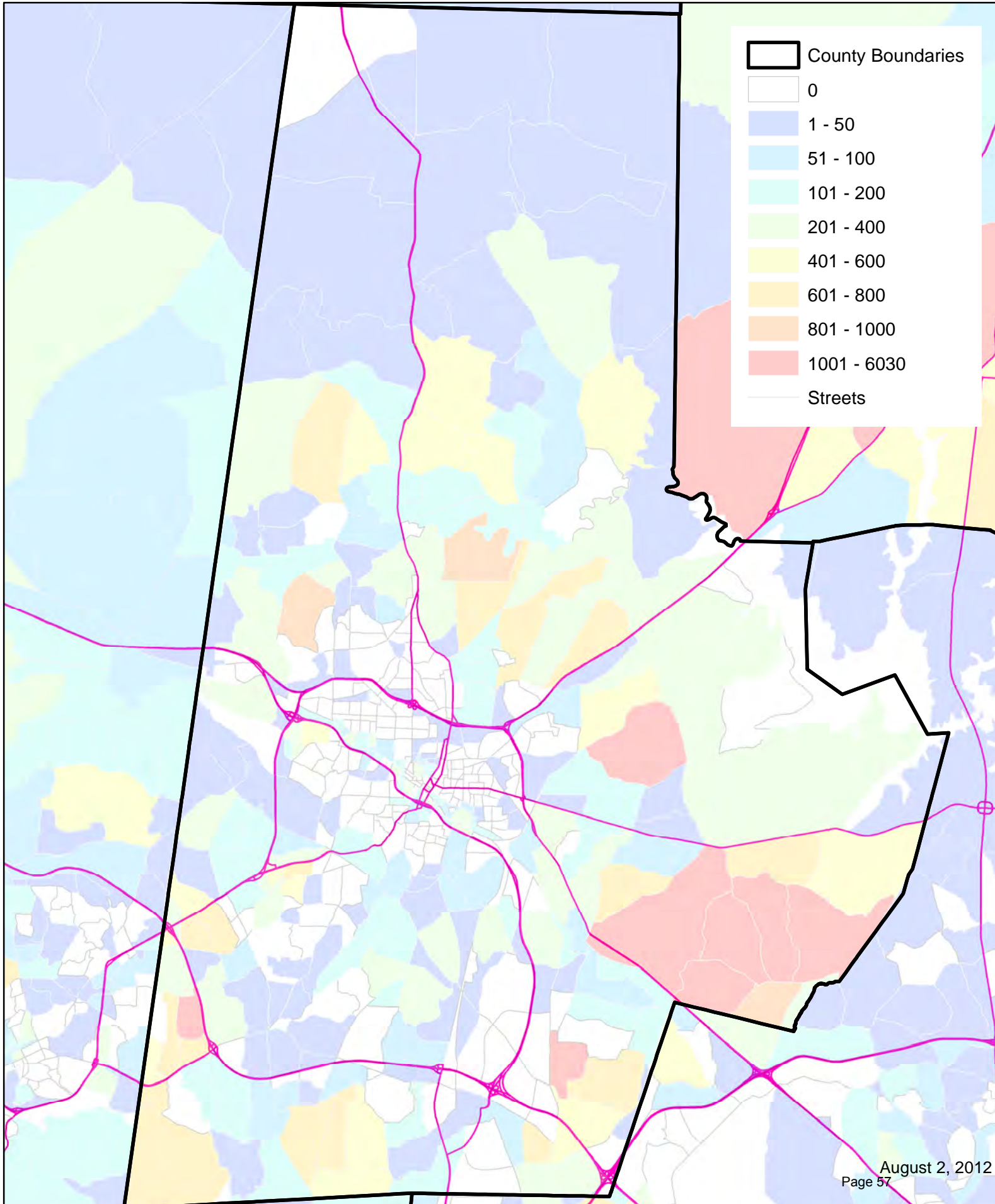
Chatham County Community Plan--Employment Growth 2010-2040

TAC 8/8/2012 Attachment 7B

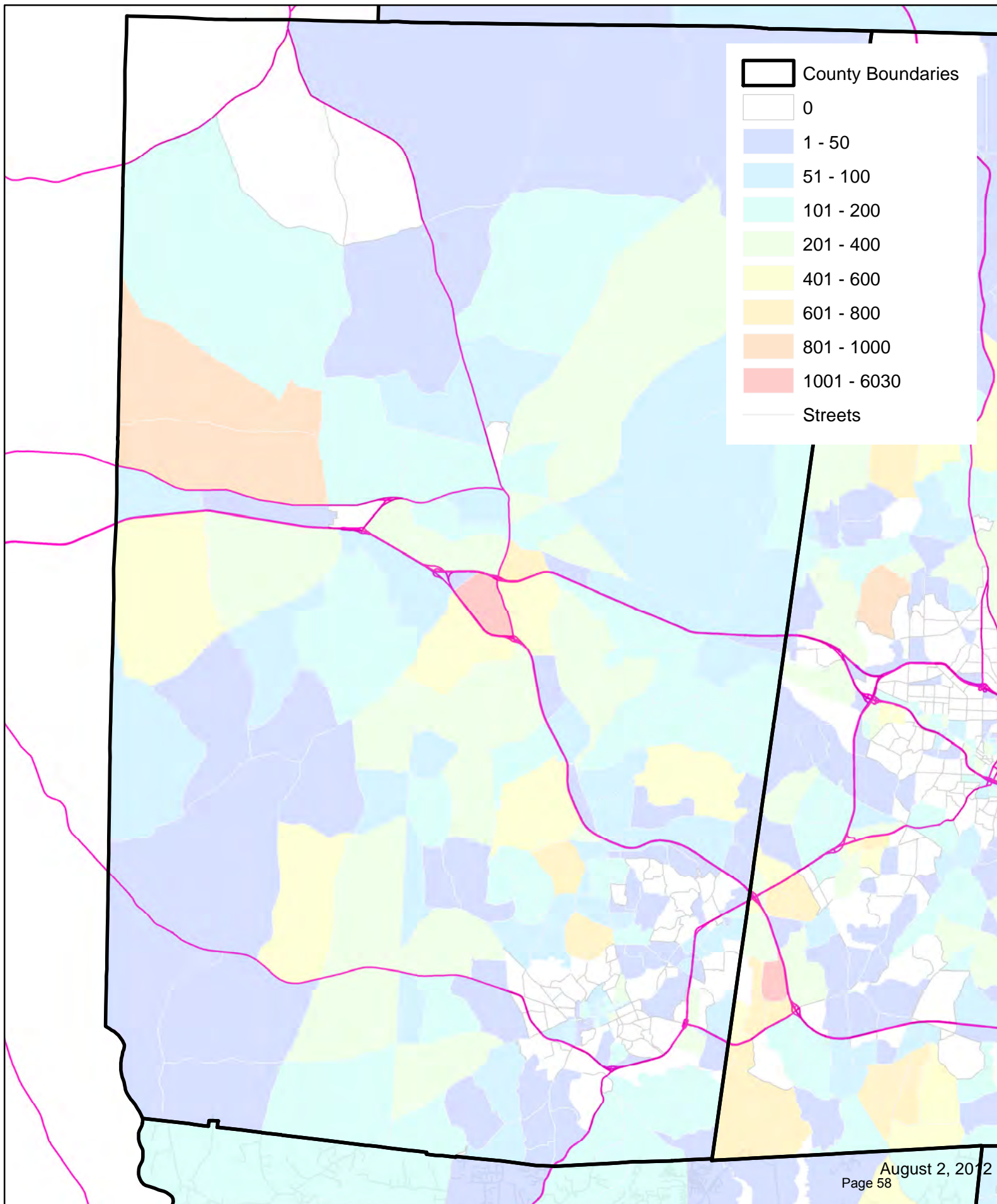


Durham County All In Transit--Dwelling Unit Growth 2010-2040

TAC 8/8/2012 Attachment 7B



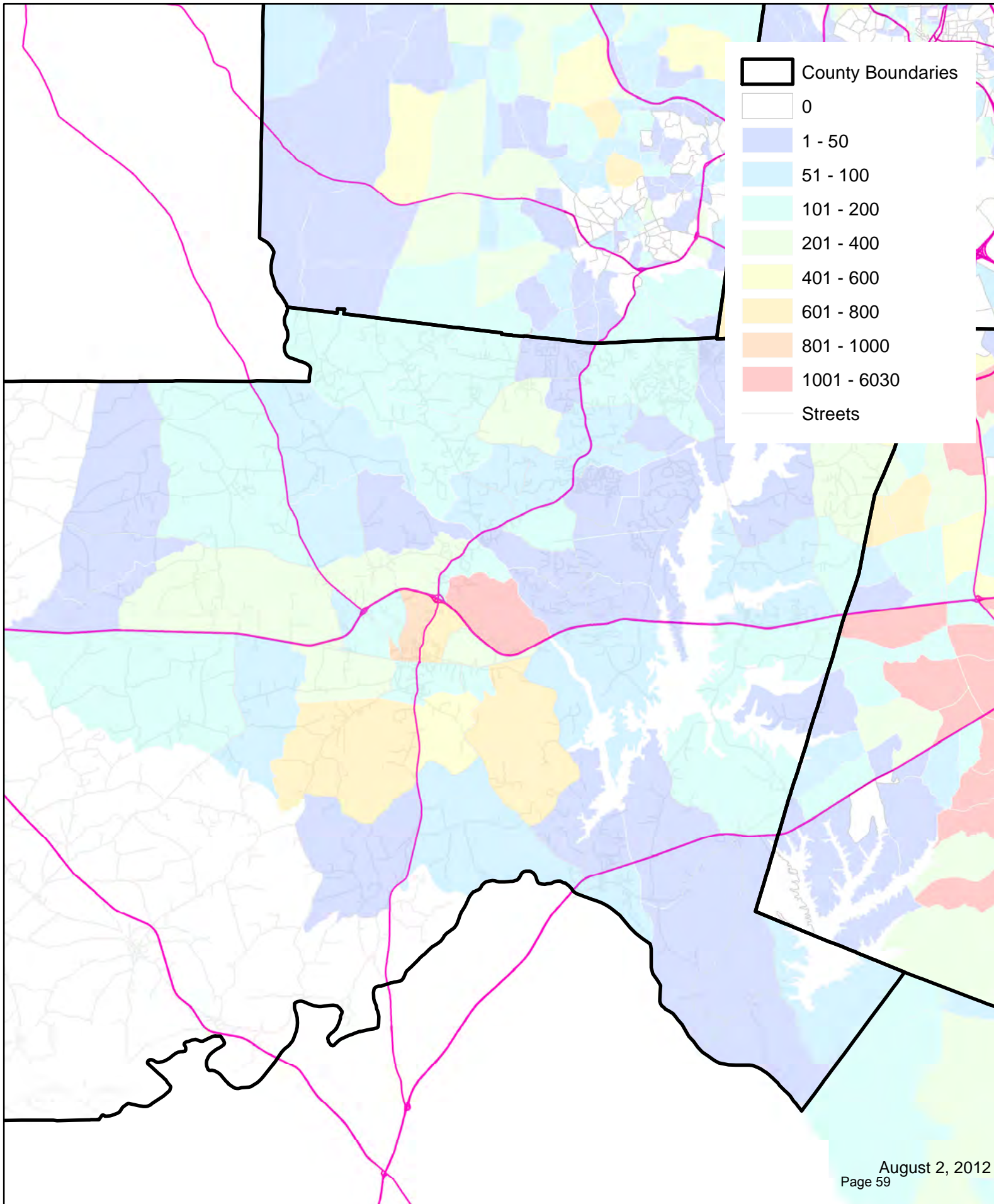
All In Transit--Dwelling Unit Growth 2010-2040



Chatham County

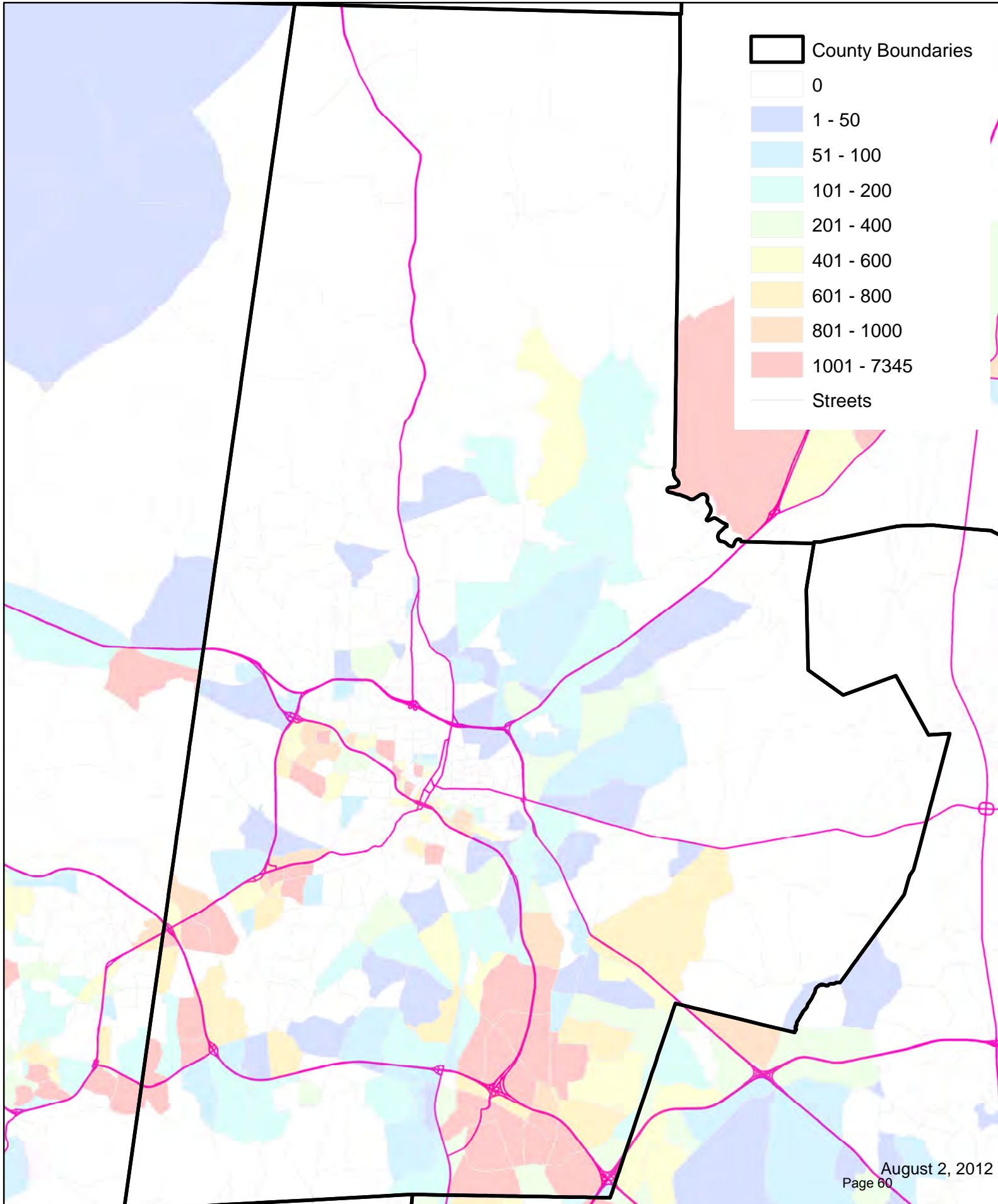
TAC 8/8/2012 Attachment 7B

All In Transit-- Dwelling Unit Growth 2010-2040



Durham County All In Transit--Employment Growth 2010-2040

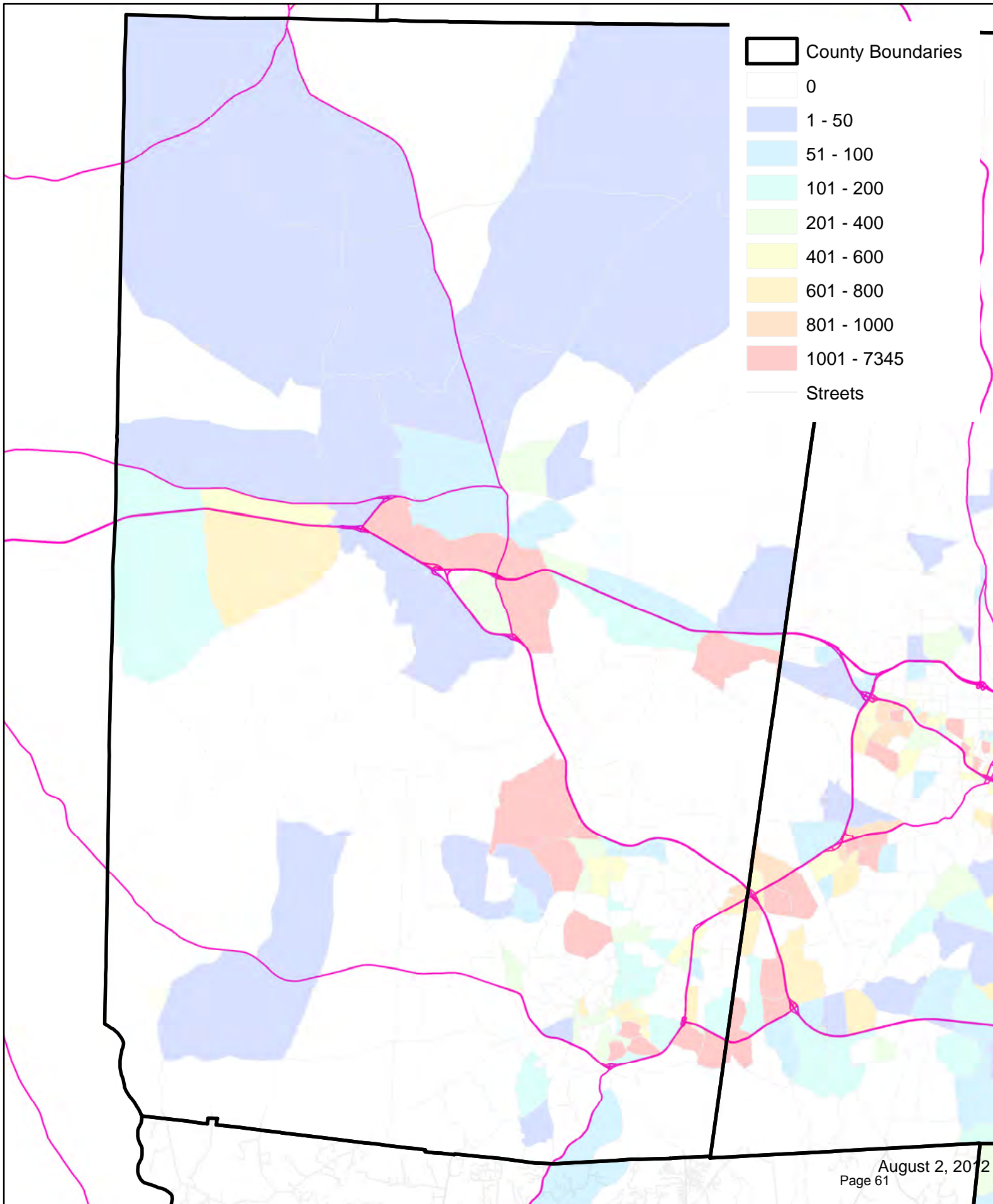
TAC 8/8/2012 Attachment 7B



Orange County

TAC 8/8/2012 Attachment 7B

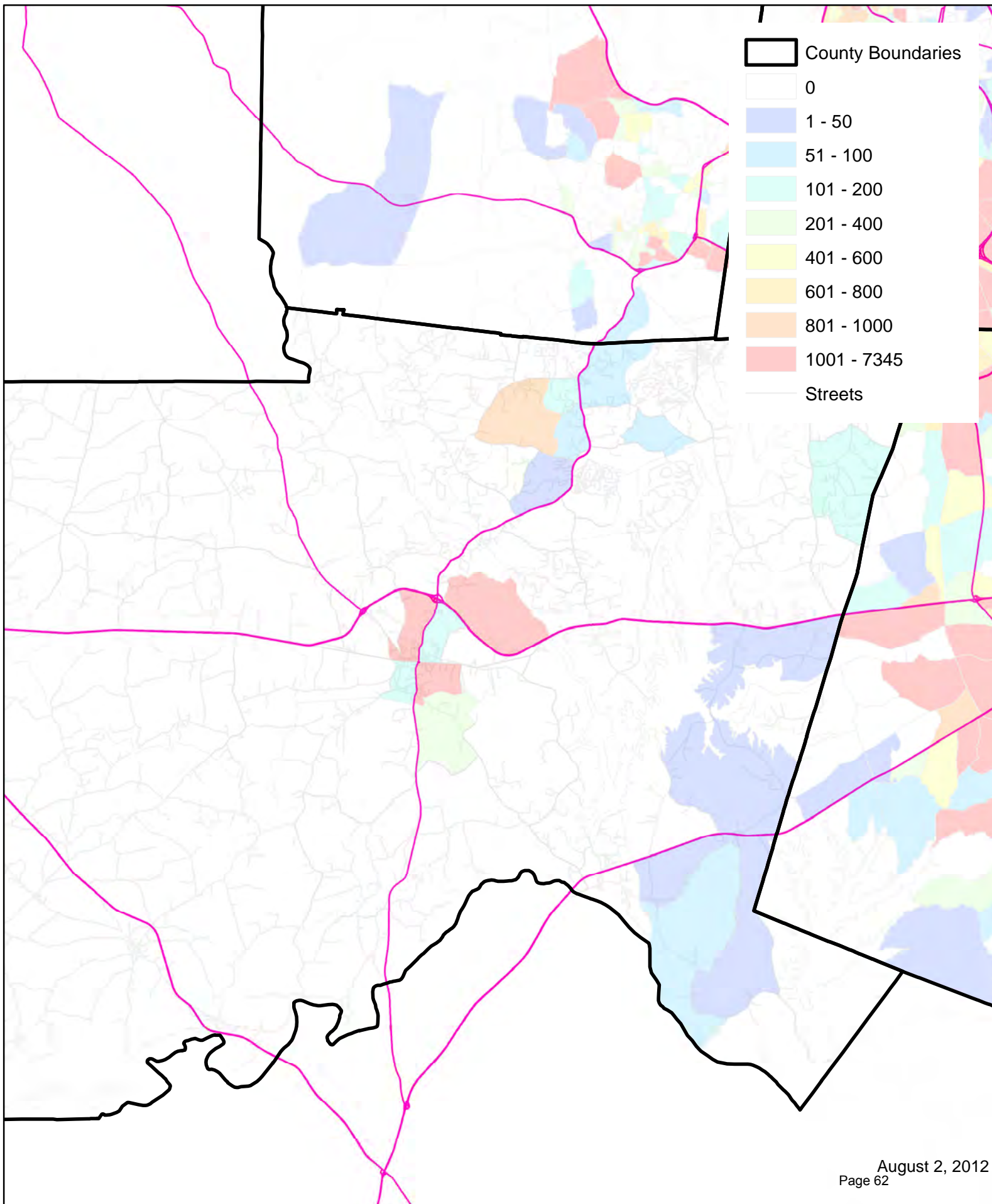
All In Transit--Employment Growth 2010-2040



Chatham County

TAC 8/8/2012 Attachment 7B

All In Transit--Employment Growth 2010-2040



2040 MTP and CTP Alternatives Description -- Highways

Highways in Alternatives

A different set of highway projects are assumed in each transportation network:

Highway Intensive – This is the Comprehensive Transportation Plan (CTP) highway network. It includes most of the projects in the current 2035 Long Range Transportation Plan (2035 LRTP) plus over fifty additional highway projects that will be proposed for the CTP.

Transit Intensive – This includes most of the highway projects in the 2015 and 2025 horizon years of the current 2035 LRTP. Except for the NC 54 widening in Durham County, it does not include large scale highway projects that provide mobility in the same corridor as the proposed light rail transit system between Durham and Orange counties.

Moderate – This includes most of the highway projects in the current 2035 LRTP.

Presentation of Highways

This section presents a list of highway projects and some key detailed data for each project such as the proposed segments to be improved (“to” and “from”) and the estimated cost. The subheadings indicate the horizon year and plan for which the highway is proposed, and a set of three columns indicate whether or not the project is assumed in each of the transportation networks. The table is followed by three maps that show the location of the highway projects for each network.

There are several terms used in the “Proposed Improvement” that require a definition:

- *Widening* – through lanes are added
- *New Location* – there is no existing roadway; this is new alignment or roadway
- *Modernization* – turn lanes at needed junctures, bicycle and pedestrian facilities are added; no consistent through lane is added
- *TSM* – Transportation System Management; capacity improvements to intersections and interchanges, and other relatively less costly measures that reduce delays and improve safety on existing roads and intersections

Note – The project maps are not included in this report version but will be available when all the travel demand models are completed.

**2040 MTP and CTP
Roadway Project List**

TAC 8/8/2012 Attachment 7B

Project ID	Road Name	From	To	Existing # of Lanes	Proposed # of Lanes	Distance (miles)	Proposed Improvement	Project Total Cost (2012 \$)	Mode rate	Transit	High way
2020 MTP											
1	Alexander Dr	Cornwallis Rd	NC 147	2	4	1.00	Widening	\$4,450,000	1	1	1
30	Hillandale Rd.	I-85	Carver	2	4	0.7	Widening	11941000	1	1	1
59	Miami Blvd.	Methodist Dr.	Angier Ave	2	5	0.72	Widening	(budget before 2012)	1	1	1
9	Carver St Ext	Armfield St	Old Oxford Rd	0	4	0.73	New Location	\$10,110,000	1	1	1
15	East End Connector (EEC)	NC 147	US 70 E; US 70:EEC to NC	0	4	2.50	New Location	\$153,981,250	1	1	1
202	Hopson Rd	Davis Dr	NC 54	2	4	0.67	Widening	\$6,026,000	1	1	1
43	I-40	US 15-501	NC 86	4	6	4.10	Widening	\$25,957,093	1	1	1
44	I-40	NC 86	I-85	4	6	7.32	Widening	\$46,342,907	1	1	1
70.4	I-40/ NC 54 ramp	Farrington Rd.	I-40	0	1	0.20	New Location	\$1,600,000	1	1	1
75	NC 55 (Alston Ave)	NC 147	NC 98	2	4	1.00	Widening	\$31,024,000	1	1	1
92.1	Roxboro/Latta/Infinity Intersection	Latta Rd.	Infinity Rd.	4	6	0.50	Widening	\$4,100,000	1	1	1
97	Smith Level Rd	Rock Haven Rd	NC 54 bypass	2	3	0.60	Widening	\$8,199,000	1	1	1
98	South Columbia St	NC 54	Manning Dr	2	2	0.70	Modernization	\$7,860,000	1	1	1
119	Weaver Dairy Rd	NC 86	Erwin Rd	2	3	2.80	Widening	(budget before 2012)	1	1	1
								\$311,591,250			
2030 MTP											
40	Carolina North network	Carolina North Campus		0	2	2.16	New Location	\$16,851,580	1	1	1
12	Cornwallis Rd	MLK	Alexander Dr	2	4	1.07	Widening	\$10,346,536	1	1	1
221	S Elliot Rd Ext	Fordham Blvd	Ephesus Church Rd	0	2	0.25	New Location	\$1,950,414	1	1	1
17	Estes Dr	NC 86	Seawell School Rd	2	2	0.71	Modernization	\$3,123,567	1	1	1
17.1	Estes Dr	Seawell School Rd	Greensboro Rd	2	2	0.93	Modernization	\$4,091,433	1	1	1
200	Eubanks Rd	Old NC 86	NC 86	2	2	2.64	Modernization	\$9,652,000	1	1	1
222	Eubanks Rd	Millhouse Rd	NC 86	2	4	0.80	Widening	\$7,735,728	1	1	1
201	Farrington Rd realignment	NC 54	Wendell Rd	0	2	0.85	New Location	\$6,631,409	1	0	1
23	Fayetteville Rd	Woodcroft Pkwy	Cornwallis Rd	2	4	2.31	Widening	\$21,314,000	1	1	1
24.11	Garrett Rd	NC 751	Old Durham Rd	2	2	2.10	Modernization	\$20,570,004	1	1	1
35	Homestead Rd	High School Rd	NC 86	2	2	1.70	Modernization	\$9,102,000	1	1	1
36	Homestead Rd	Old NC 86	High School Rd	2	2	1.47	Modernization	\$9,691,637	1	1	1
203	I-40/NC 54 interchange	I-40	NC 54	6	7	0.35	Interchange	(part of #69.1)	1	0	1
48	I-85	I-40	the Durham Co line	4	6	7.35	Widening	\$214,665,000	1	1	1
49	I-85	US 70	Red Mill Rd	4	6	3.50	Widening	\$102,515,000	1	1	1
50.11	Jack Bennet Rd/Lystra Rd	US 15-501 South	Farrington Mill/Point Rd	2	2	2.77	Modernization	\$18,316,754	1	1	1
223	Legion Rd Ext	Legion Rd	Fordham Blvd	0	2	0.10	New Location	\$780,166	1	1	1
69.1	NC 54	I-40 Interchange	NC 751	2	4	?	Widening	\$115,400,000	1	1	1

2040 MTP and CTP Roadway Project List

TAC 8/8/2012 Attachment 7B

Project ID	Road Name	From	To	Existing # of Lanes	Proposed # of Lanes	Distance (miles)	Proposed Improvement	Project Total Cost (2012 \$)	Mode rate	Transit	High way
69.2	NC 54	NC 751	Fayetteville	2	4	?	Widening	(see #69.1)	1	1	1
69.3	NC 54	Fayetteville	Barbee	2	4	?	Widening	(see #69.1)	1	1	1
69.4	NC 54	Barbee	NC 55	2	4	?	Widening	(see #69.1)	1	1	1
70	NC 54 (widening; superstreet)	I-40	Barbee Chapel Rd	4	6	1.68	Widening	\$16,024,000	1	0	1
70.1	NC 54 superstreet (east)	Meadowmont Dr	Barbee Chapel Rd	6	6	0.20	Improvements	\$4,300,000	1	0	1
70.2	NC 54/Farrington Rd grade separa	Farrington Rd	NC 54	0	6	0.00	Improvements	\$6,500,000	1	0	1
73	NC 54/US 15-501 Bypass	NC 54	US 15-501	4	6	2.12	Widening	\$25,180,578	1	0	1
77.1	NC 751	S Roxboro St	NC 54	2	4	0.70	Widening	\$10,589,000	1	1	1
89.3	Orange Grove Connector	Orange Grove Rd	US 70	0	2	0.40	New Location	\$4,950,000	1	1	1
220	Purefoy Rd Ext	Sandberg Ln	Weaver Dairy Rd	0	2	0.60	New Location	\$4,680,995	1	1	1
92	Roxboro Rd (501N)	Duke St	Goodwin Rd	4	6	2.65	Widening	\$28,480,000	1	1	1
94	Roxboro St	Cornwallis Rd	MLK Pkwy	0	4	1.10	New Location	\$20,489,000	1	1	1
102	SW Durham Dr	Meadowmont Dr	I-40	0	2	1.55	New Location	\$20,000,000	1	0	1
106	SW Durham Dr	15-501	Mt Moriah Rd	0	2	0.35	New Location	\$3,922,805	1	1	1
116	US 70	Lynn Rd (Durham Co.)	Aviation Pkwy Ext (Wake Co)	4	6	4.11	Widening	\$237,400,000	1	1	1
123.11	Woodcroft Pkwy Ext	Garrett Rd	Hope Valley Rd	0	2	0.27	New Location	\$2,504,002	1	1	1
204	US 15-501/NC 54 Interchange	US 15-501	NC 54	4	4	0.30	Improvements	\$17,300,000	1	0	1
								\$975,057,608			
2040 MTP											
5	Alston Ave Ext	Holloway St	Old Oxford/Roxboro	0	2	3.50	New Location	\$27,305,801	1	0	1
22.1	Fayetteville Rd	Renaissance Pkwy	NC 751	2	4	1.90	Widening	\$18,426,000	1	0	1
26.11	Globe Rd Ext (Brier Creek Pkwy)	Miami Blvd	Wake County Line	0	2	2.18	New Location	\$17,007,613	1	0	1
45	I-40 HOV	Wake County Line	NC 54	0	2	10.63	New Location	\$631,410,442	1	0	1
53	Leesville Rd Ext	Northern Parkway	US 70/Page Rd Ext	0	4	0.81	New Location	\$6,319,343	1	0	1
64.13	NC 147 General purpose widening	East End Conn	I-40	4	6	4.78	Widening	\$44,500,000	1	0	1
70.3	NC 54 superstreet (west)	Burning Tree	Meadowmont Dr	6	6	0.55	Improvements	\$4,900,000	1	0	1
77.2	NC 751	NC 54	Renaissance Pkwy	2	4	1.23	Widening	\$11,915,000	1	0	1
77.3	NC 751	Renaissance Pkwy	Fayetteville/Scott King Rd	2	4	1.94	Widening	\$17,393,000	1	0	1
81.1	NC 98 (Holloway St)	Oak Grove/Nichols Farm	Wake County Line	2	4	5.94	Widening	\$57,437,780	1	0	1
83	Northern Durham Pkwy	US 70 E	I 85 N	0	4	6.40	New Location	\$71,731,296	1	0	1
84	Northern Durham Pkwy	I 85 North	Old Oxford Hwy	0	4	2.40	New Location	\$66,693,606	1	0	1
85	Northern Durham Pkwy	Old Oxford Hwy	Roxboro Rd	0	2	5.38	New Location	\$35,068,780	1	0	1
86	Old NC 86	I-40	Lafayette Dr	2	4	0.80	Widening	\$7,735,728	1	0	1
87	Old NC 86	Lafayette Dr	US 70 Business	2	4	1.70	Widening	\$16,438,422	1	0	1
89	Olive Branch Rd Ext	NC 98	Wake County Line	0	2	2.22	New Location	\$17,319,680	1	0	1

2040 MTP and CTP Roadway Project List

TAC 8/8/2012 Attachment 7B

Project ID	Road Name	From	To	Existing # of Lanes	Proposed # of Lanes	Distance (miles)	Proposed Improvement	Project Total Cost (2012 \$)	Mode rate	Transit	Highway
106.1	SW Durham Dr	15-501	Mt Moriah Rd	2	4	0.35	Widening	\$3,922,805	1	1	1
104	SW Durham Dr	Witherspoon Rd	Old Chapel Hill Rd	2	4	0.62	Widening	\$5,995,189	1	1	1
113	US 15-501 (Freeway conversion)	US 15-501 Bypass	I-40	6	6	2.39	Improvements	\$138,677,000	1	0	1
114	US 15-501 Bypass	Pickett Rd	Morreene Rd	4	6	2.69	Widening	\$33,696,567	1	0	1
								\$1,233,894,054			
Comprehensive Transportation Plan											
2.1	Alexander Dr	NC 147	Miami Blvd	4	6	0.70	Widening	\$11,531,075	0	0	1
4	Alexander Dr	NC 54	Cornwallis Rd	2	4	1.89	Widening	\$32,389,388	0	0	1
5.3	Barbee Chapel Rd	NC 54	Farrington Mill Rd	2	4	1.60	Widening	\$13,750,642	0	0	1
8.2	Carpenter Fletcher	Woodcroft Pewit Ext	NC 55	2	4	0.60	Widening	\$5,156,491	0	0	1
13.11	Cornwallis Rd Ext	Miami Blvd	Chin Page Rd	0	2	0.54	New Location	\$4,212,895	0	0	1
14.1	Duke St (North)	I-85	N Roxboro split	4	6	2.30	Widening	\$37,887,819	0	0	1
205	Erwin Rd	NC 751	US 15-501	2	2	5.66	Modernization	\$22,977,000	0	0	1
19	Farrington Mill Rd	Jack Bennett Rd	Durham Co line	2	2	2.42	Modernization	\$6,753,425	0	0	1
20	Farrington Mill Rd	Barbee Chapel Rd	Chatham Co line	2	2	2.04	Modernization	\$5,684,339	0	0	1
21	Farrington Rd	Barbee Chapel Rd	Stagecoach Rd	2	4	0.40	Widening	\$1,120,891	0	0	1
24.12	Garrett Rd	Old Durham Rd	US 15-501	2	2	1.00	Modernization	\$20,570,004	0	0	1
27	Glover Rd	Glover Rd/NC 147 interchange	Angier	2	4	0.64	Widening	\$18,289,000	0	0	1
28.11	Glover Rd	Angier	US 70	0	2	0.59	New Location	\$4,602,978	0	0	1
31	Hillandale Rd	Carver	Horton Rd	2	4	1.74	Widening	\$16,825,208	0	0	1
39	Horton Rd	Duke St	Hillandale Rd	2	2	1.90	Modernization	\$18,372,354	0	0	1
41	I-40/Farrington Rd interchange	I-40	Farrington Interchange	0	0	0.20	New Location	\$28,700,475	0	0	1
45.2	I-40 HOV/HOT	NC 54	US 15-501	6	8	2.70	New Location	\$40,500,000	0	0	1
45.3	I-40 HOV/HOT	US 15-501	NC 86	6	8	4.20	New Location	\$63,000,000	0	0	1
49.1	I-85 HOV/HOT	US 70	Red Mill Rd	6	8	5.68	Widening	\$232,183,373	0	0	1
49.2	I-85	Red Mill Rd	Durham/Granville county lin	6	8	1.20	Widening	\$49,051,844	0	0	1
206	I-85/US 70 Connector	I-85 (Interchange improvement)	US 70	4	4	0.41	TSM	\$2,446,000	0	0	1
52	Latta Rd	Guess Rd	Roxboro Rd	2	2	1.20	Modernization	\$11,603,592	0	0	1
57	Lynn Rd Ext	US 70	Existing Lynn Rd	0	2	1.09	New Location	\$8,503,807	0	0	1
207	Lystra Rd	US 15-501	Jack Bennet Rd	2	2	4.55	Modernization	\$10,300,000	0	0	1
58	Mason Farm Rd Realignment	Near S Columbia St		2	2	1.10	New Location	\$17,186,404	0	0	1
60	Midland Terrace	NC 98	Geer St	0	2	1.80	New Location	\$14,042,984	0	0	1
61	Midland Terrace	Dearborn	Old Oxford Rd/Hamlin Junc	0	2	0.95	New Location	\$7,411,575	0	0	1
63	MLK Pkwy (NC 55 interchange)	NC 55	Cornwallis Rd connector	0	4	0.49	New Location	\$30,267,000	0	0	1
64.11	NC 147 General purpose widening	Alston Ave	East End Connector	4	6	1.84	Widening	\$28,698,063	0	0	1

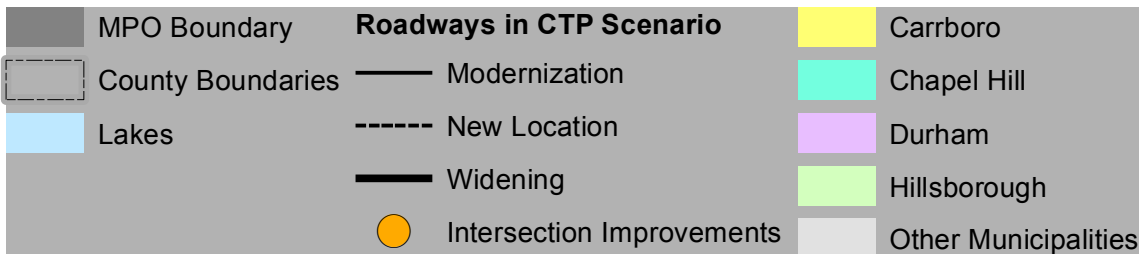
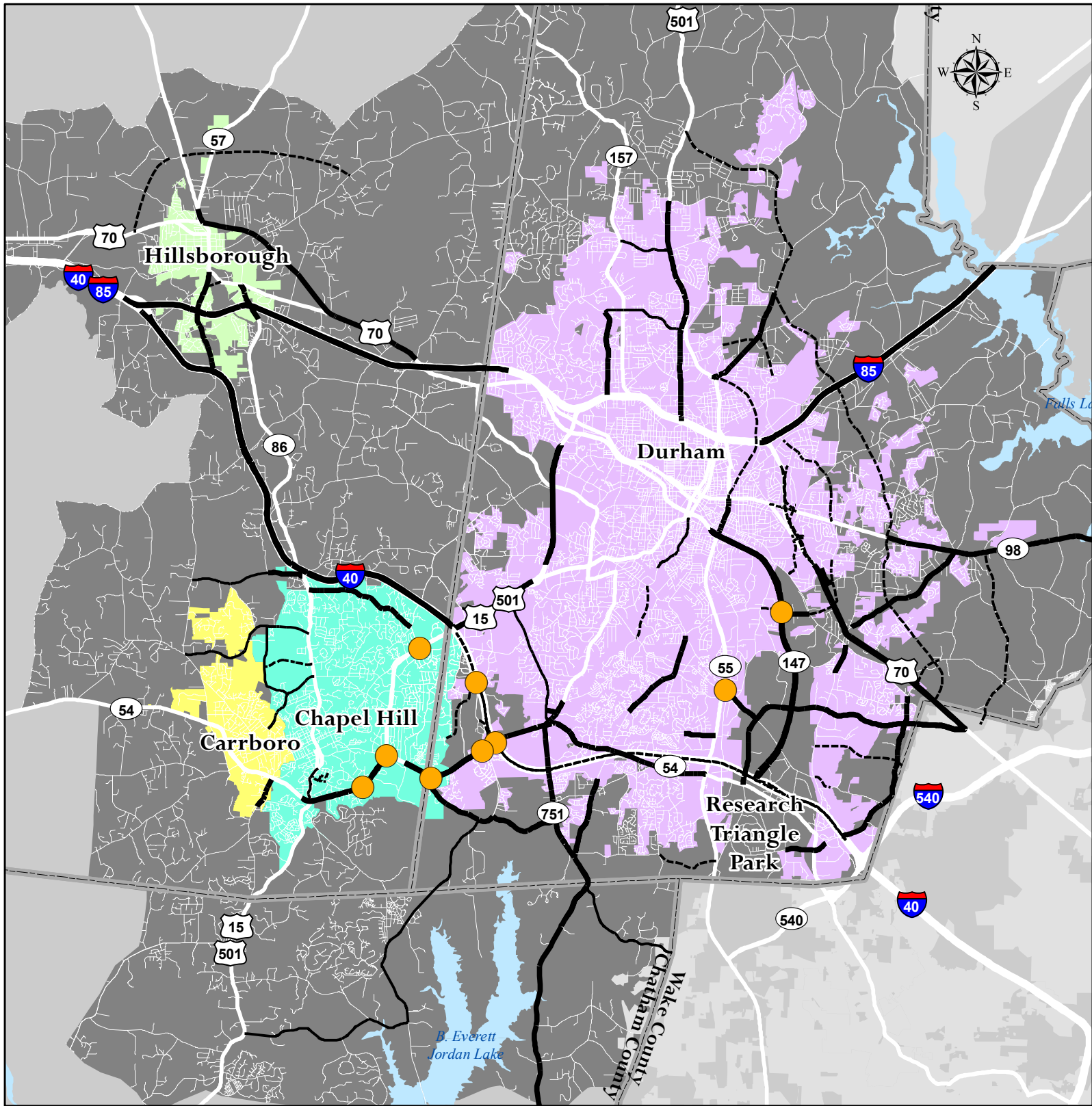
2040 MTP and CTP Roadway Project List

TAC 8/8/2012 Attachment 7B

Project ID	Road Name	From	To	Existing # of Lanes	Proposed # of Lanes	Distance (miles)	Proposed Improvement	Project Total Cost (2012 \$)	Mode rate	Transit	High way
64	NC 147 HOV/HOT	Alston Ave	East End Connector	4	6	1.84	Widening	\$75,214,332	0	0	1
65	NC 147 HOV/HOT	East End Conn	I-40	0	2	4.78	Widening	\$195,393,754	0	0	1
208	NC 54/Barbee Chapel Rd intercha	NC 54	Barbee Chapel Rd	0	2	0.20	Interchange	\$9,200,000	0	0	1
209	NC 54/Falconbridge interchange	NC 54	Falconbridge Rd	0	4	0.20	Interchange	\$9,800,000	0	0	1
76	NC 751	US 64 (MAB)	Durham Co. line	2	4	7.00	Widening	\$42,550,690	0	0	1
78	NC 751	O'Kelly Chapel Rd	Fayetteville/Scott King Rd	2	4	0.74	Widening	\$6,359,672	0	0	1
80	NC 86	Old NC 10	US 70 Business	2	4	0.90	Widening	\$11,025,250	0	0	1
81	NC 86	US 70 Bypass	NC 57	2	4	0.42	Widening	\$3,267,000	0	0	1
85.2	O'Kelly Chapel Rd	NC 751	Wake Co. line	2	2	2.90	Modernization	\$11,460,314	0	0	1
88	Old Oxford Rd	Roxboro Rd	Northern Durham Parkway	2	4	2.51	Widening	\$24,270,847	0	0	1
90	Page Rd	I-40	Page Rd Ext	2	4	3.27	Widening	\$31,619,788	0	0	1
91	Riddle Rd Ext	Ellis Rd	NC 147	0	2	0.49	New Location	\$3,822,812	0	0	1
94.1	Roxboro St South	Summit	E. Lakewood	2	2	1.50	Modernization	\$12,891,227	0	0	1
95.11	Scott King Rd	Grandale Dr	Hopson Rd	0	2	1.30	New Location	\$10,142,155	0	0	1
210	Seawell School Rd	Estes Dr	Homestead Rd	2	2	1.91	Modernization	\$7,548,000	0	0	1
96.1	Sherron Rd	US 70	NC 98	2	4	2.83	Widening	\$27,365,138	0	0	1
101	Stagecoach Rd	Farrington Mill Rd	NC 751	2	4	1.96	Widening	\$18,070,177	0	0	1
107.1	T. W. Alexander Dr	Miami Blvd	US 70	4	6	3.40	Widening	\$39,771,235	0	0	1
211	US 15-501 Superstreet	Sage Rd	E Lakeview Dr	4	4	0.65	TSM	\$2,178,000	0	0	1
212	US 15-501/Manning Interchange	Manning Dr	Manning Dr	4	4	0.20	TSM	\$35,335,000	0	0	1
117	US 70 Bypass	NC 86	I-85 (exit 170)	2	4	7.80	Widening	\$21,857,378	0	0	1
120	Western Bypass	US 70	NC 86	0	2	2.60	New Location	\$14,300,897	0	0	1
121	Western Bypass	NC 86	Stroud Creek Rd	0	2	0.30	New Location	\$1,650,103	0	0	1
123	Woodcroft Pkwy Ext	Garrett Rd	Hope Valley Rd	2	4	0.27	Widening	\$2,320,421	0	0	1
								\$1,381,432,816			

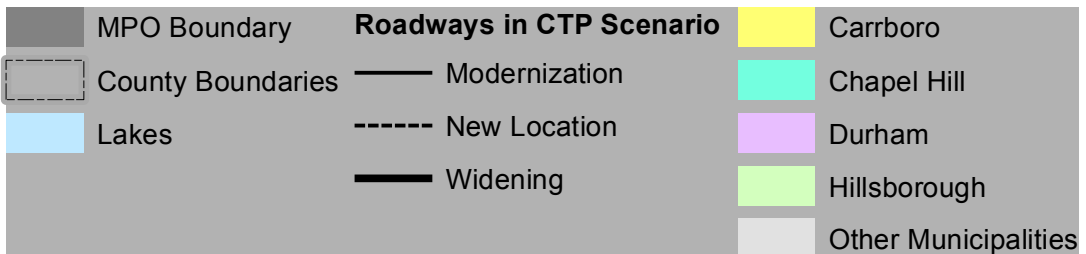
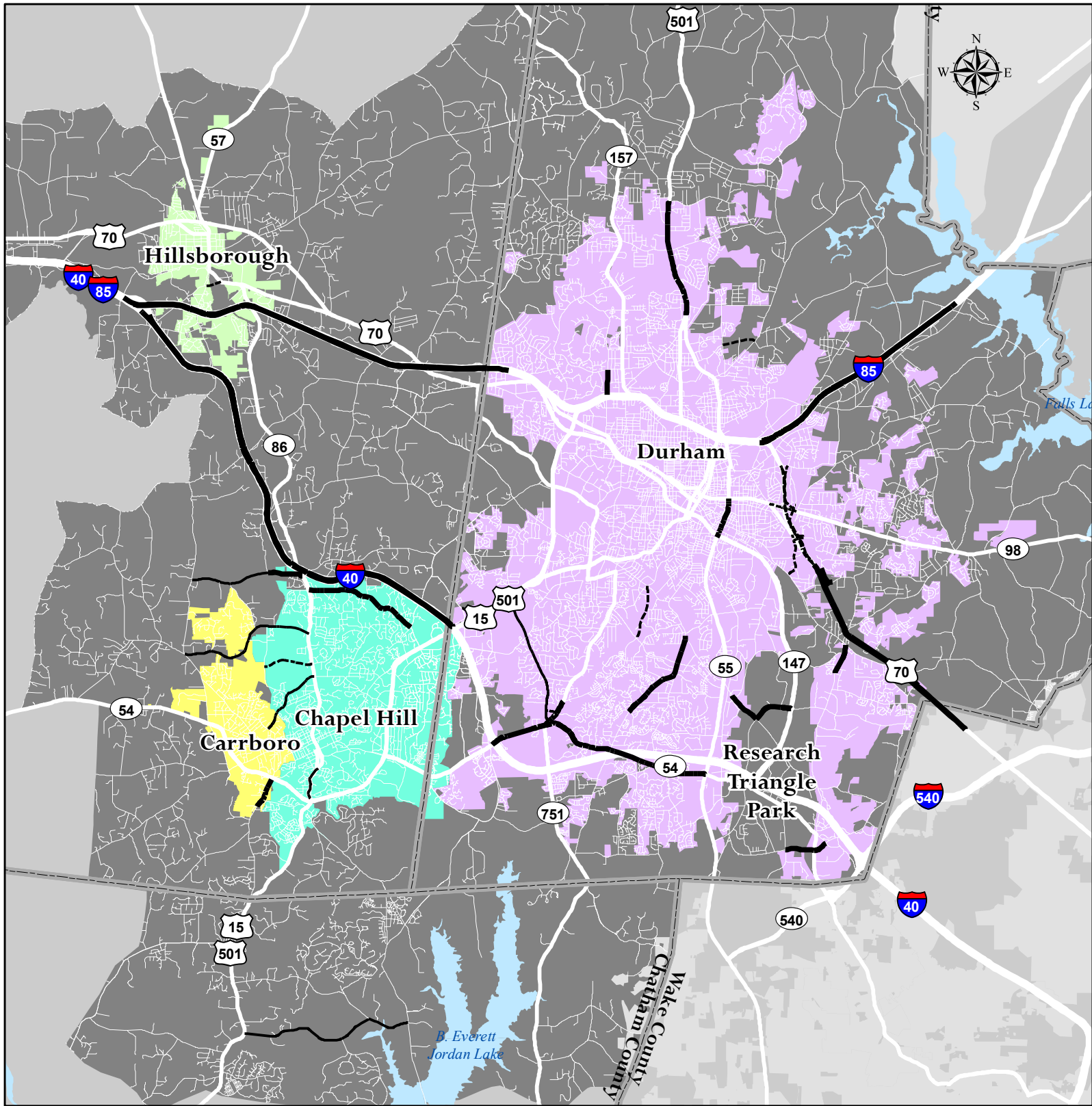
Durham Chapel Hill Carrboro Metropolitan Planning Organization Roadway Improvements in Highway Intensive Network

TAC 8/8/2012 Attachment 7B



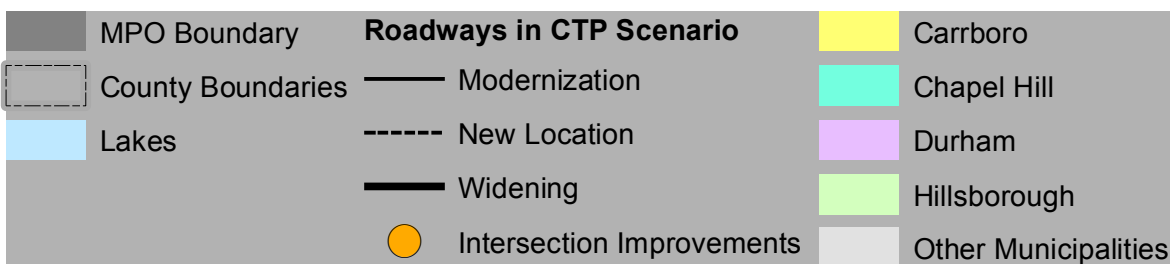
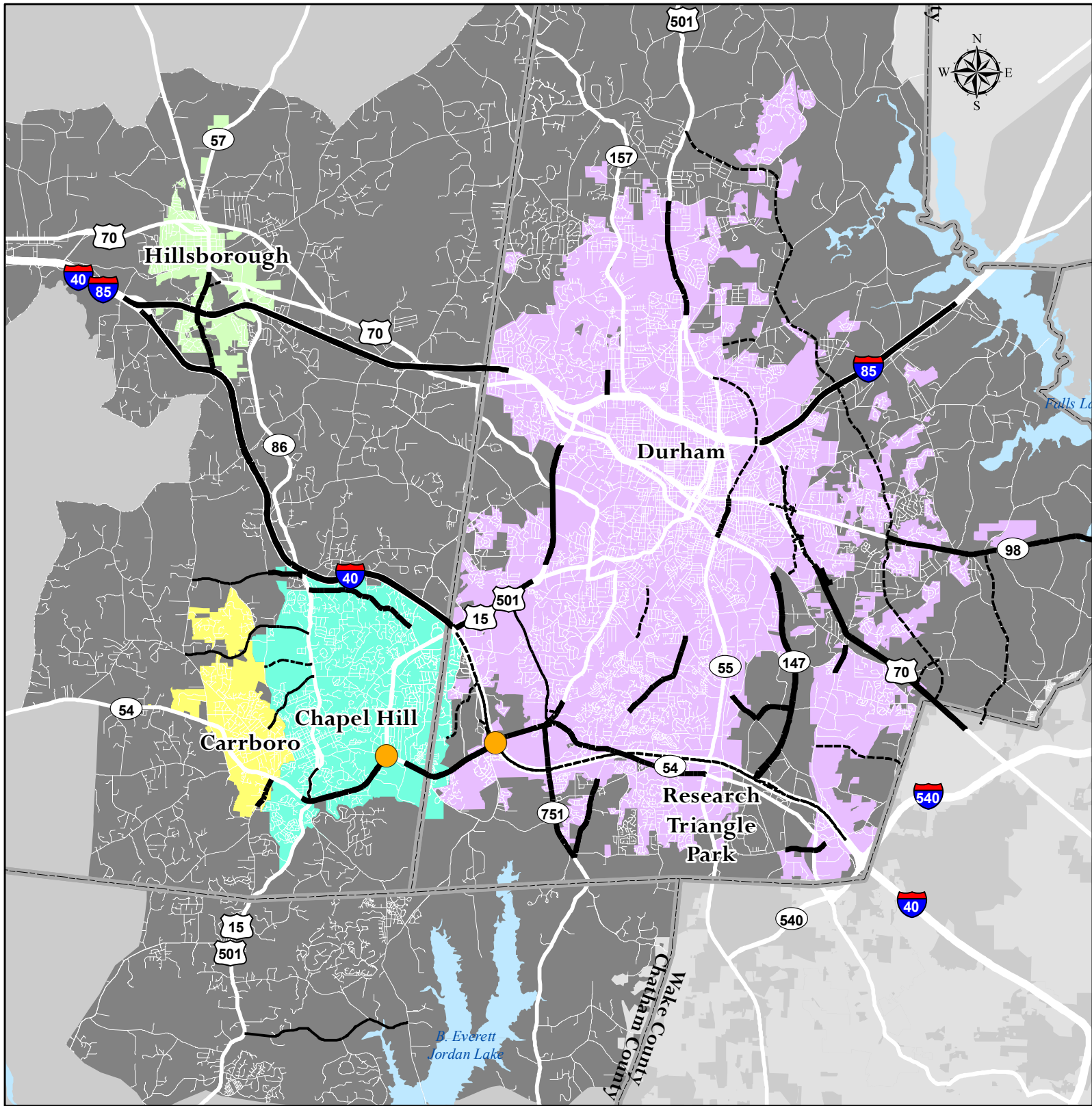
Durham Chapel Hill Carrboro Metropolitan Planning Organization Roadway Improvements in Transit Intensive Network

TAC 8/8/2012 Attachment 7B



Durham Chapel Hill Carrboro Metropolitan Planning Organization Roadway Improvements in Moderate Network

TAC 8/8/2012 Attachment 7B



2040 MTP and CTP Alternatives Description -- Transit

Transit in Alternatives

A different set of transit service is assumed in each transportation network:

Highway Intensive

- Current bus transit
- No bus transit improvements from the county plans (e.g., based on ½ cent sales tax)
- No rail transit

Transit Intensive

- Current bus transit
- Bus transit improvements in county plans (based on ½ cent sales tax)
- Light rail between Durham and Wake counties (in place of regional rail from the Locally Preferred Alternative)
- Light rail and regional rail extensions in Orange County
- CRT addition between Cary and western RTP
- Five Bus Rapid Transit (BRT) projects in Chapel Hill

Moderate – This includes most of the highway projects in the current 2035 LRTP.

- Current bus transit
- Bus transit improvements in county plans (based on ½ cent sales tax)
- Light rail and regional rail (based on Locally Preferred Alternative)
- MLK Blvd Bus Rapid Transit (BRT) in Chapel Hill

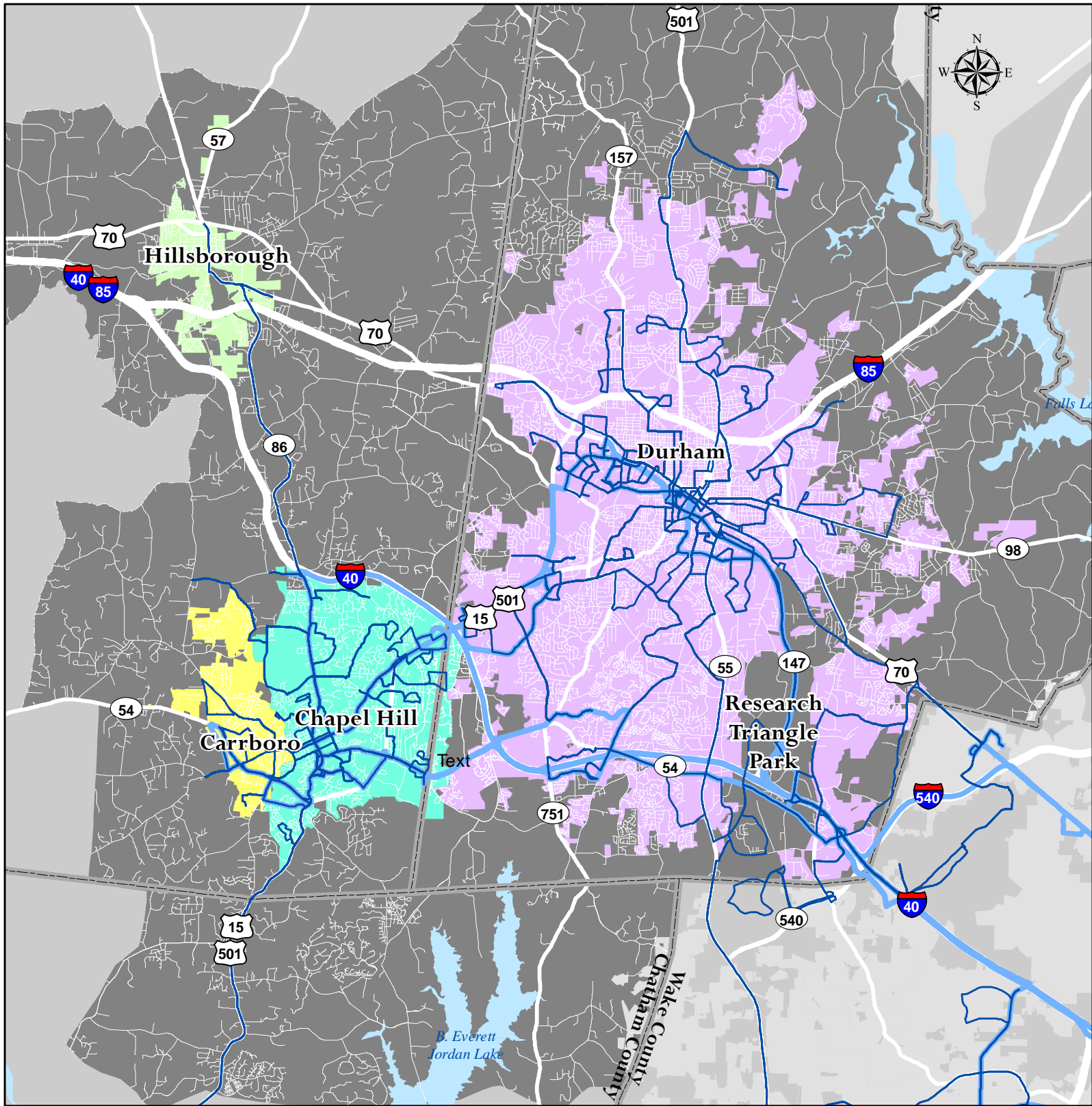
Presentation of Transit Service

This section presents a list of transit services and indicates in which Alternative the service is included. There are a series of maps show the service coverage areas.

Note – The list of transit services are not included in this report version but will available when all the travel demand models are completed.

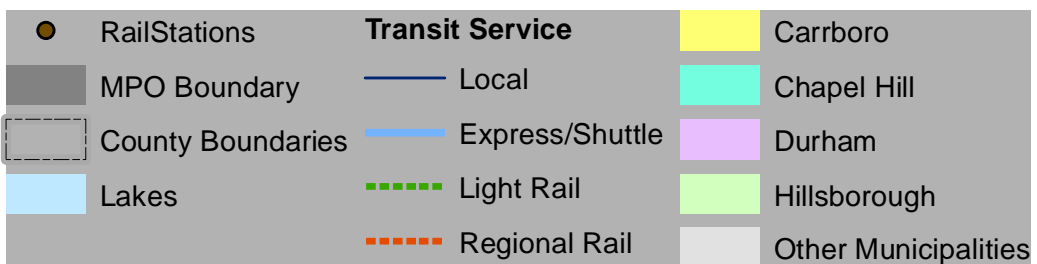
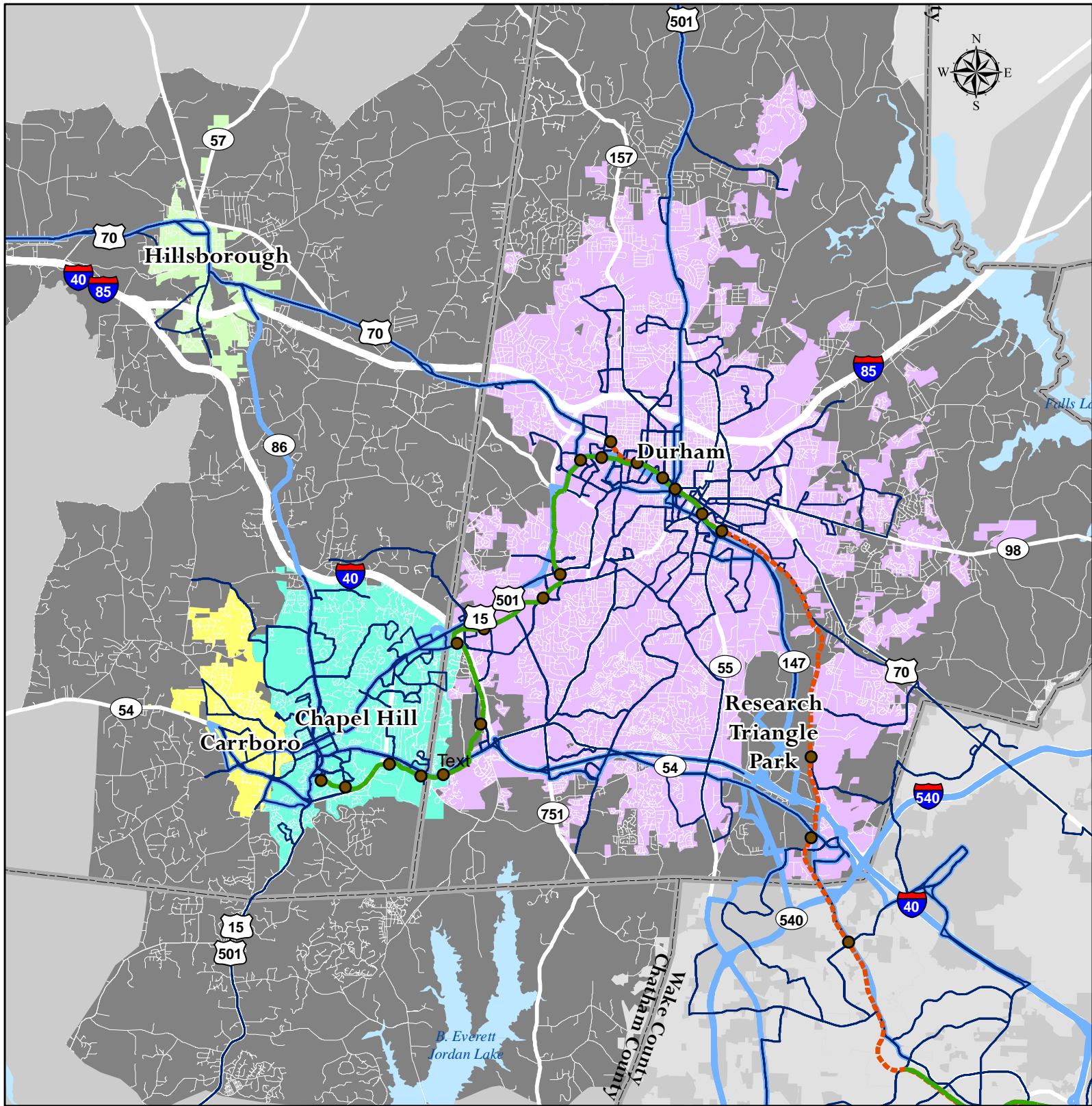
Durham Chapel Hill Carrboro Metropolitan Planning Organization Transit Service in Highway Intensive Network

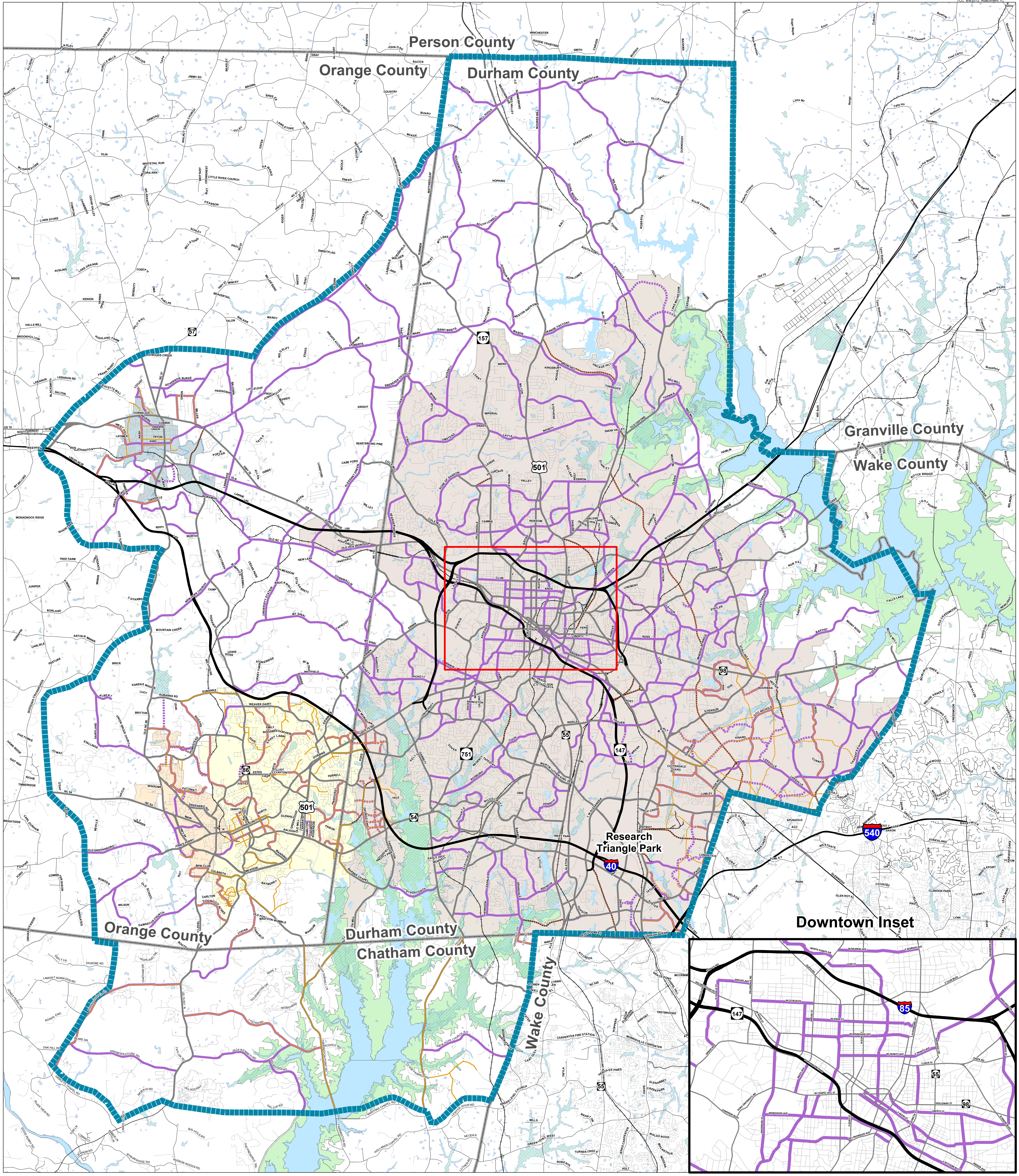
TAC 8/8/2012 Attachment 7B



Durham Chapel Hill Carrboro Metropolitan Planning Organization Transit Service in Moderate Network

TAC 8/8/2012 Attachment 7B





Durham - Chapel Hill - Carrboro MPO Collector Street Plan Draft Collector Street Plan

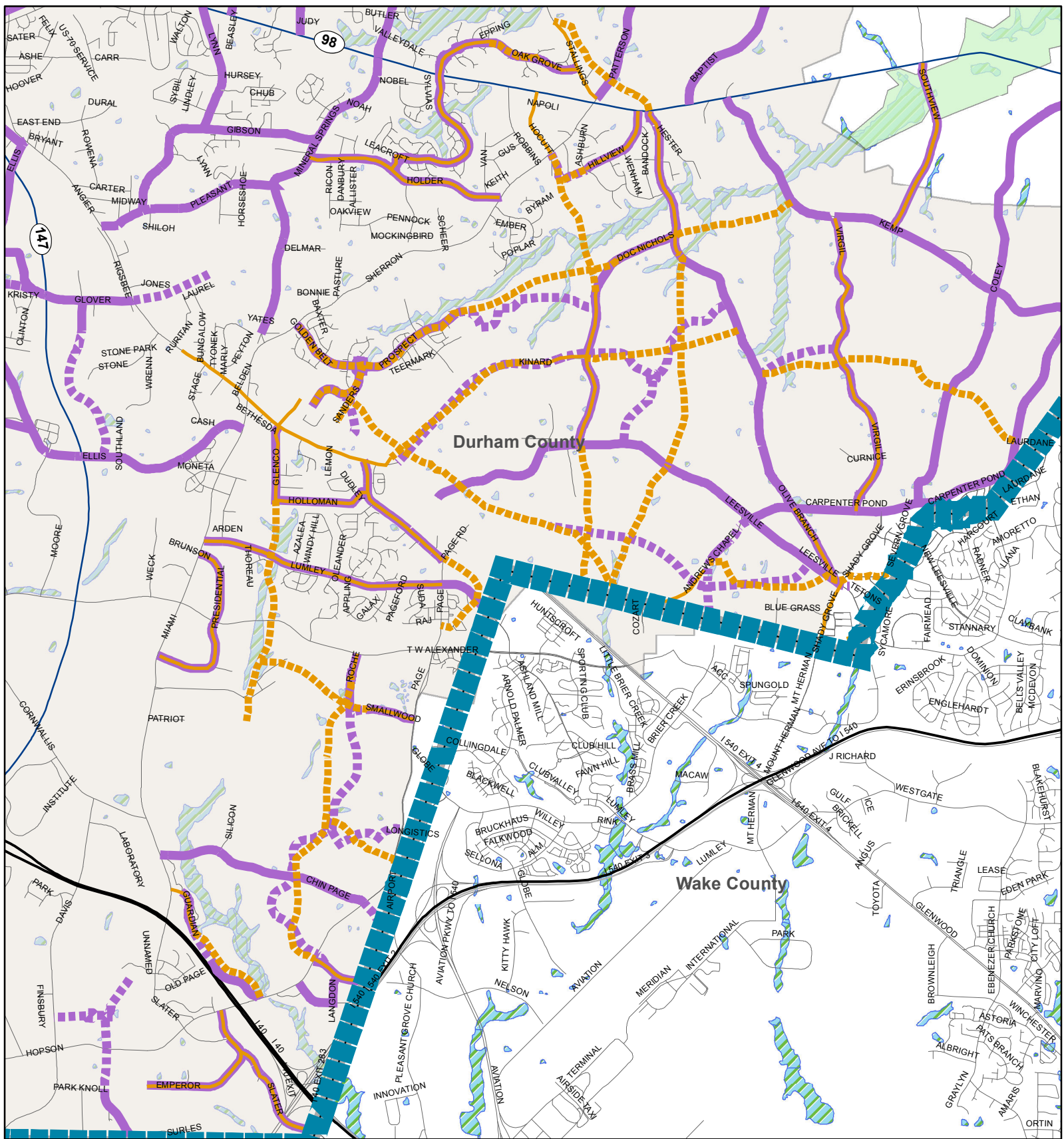
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March 2010

Durham - Chapel Hill - Carrboro MPO

TAC 8/8/2012 Attachment 7D

Draft Collector Street Plan -- Southeast Durham County

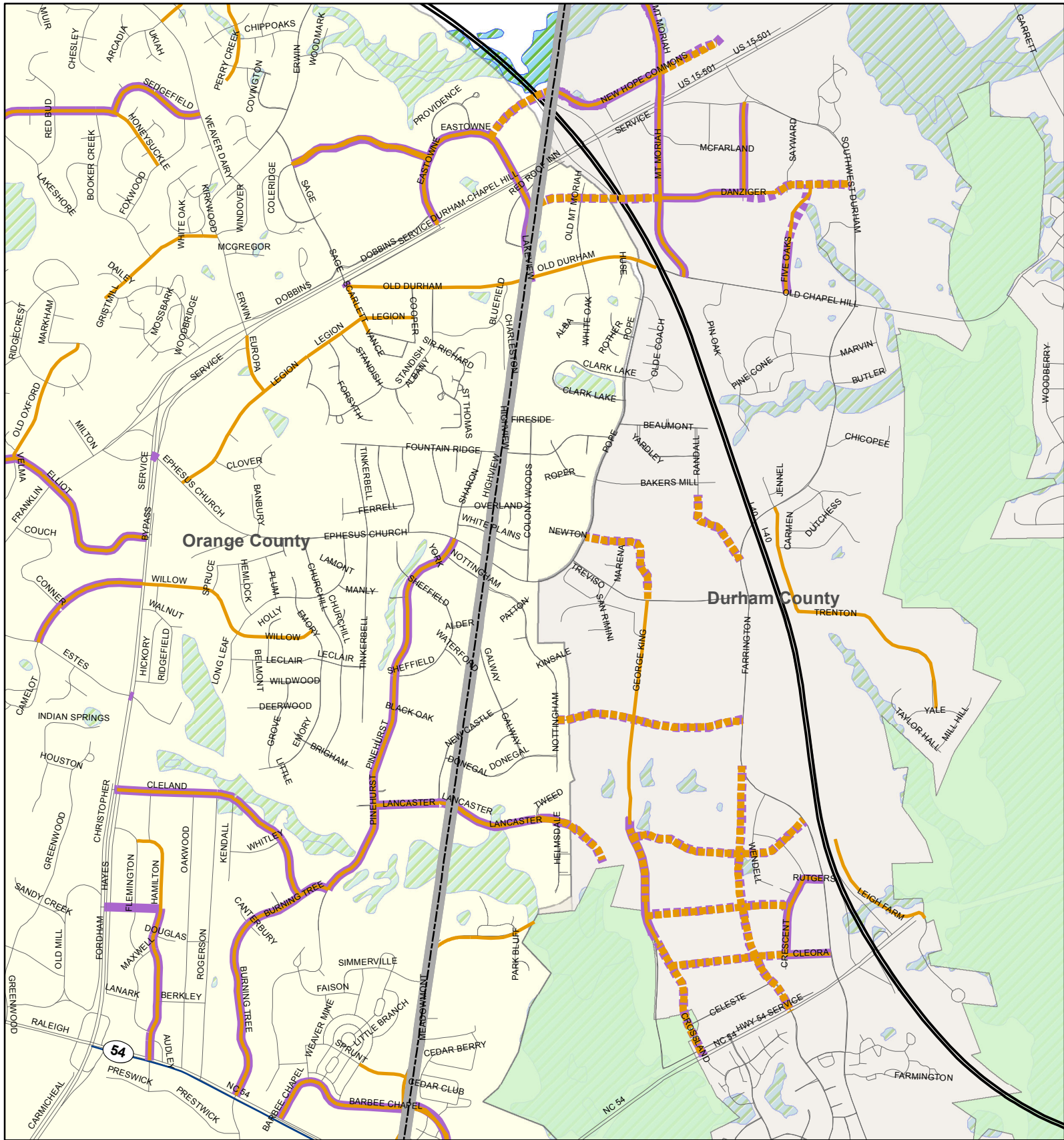


<ul style="list-style-type: none"> Durham Urban Growth Area Carrboro Town Limits Chapel Hill Town Limits Hillsborough Town Limits 	<ul style="list-style-type: none"> Army Crop of Engineers Wetlands 	<p>Existing Local Collector Street Plan</p> <ul style="list-style-type: none"> Existing Collector Streets Proposed Collector Streets 	<p>DCHC Collector Street Plan</p> <ul style="list-style-type: none"> Collector Street Proposed Collectors Street
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Durham - Chapel Hill - Carrboro MPO

Draft Collector Street Plan -- Southwest Durham County

TAC 8/8/2012 Attachment 7D

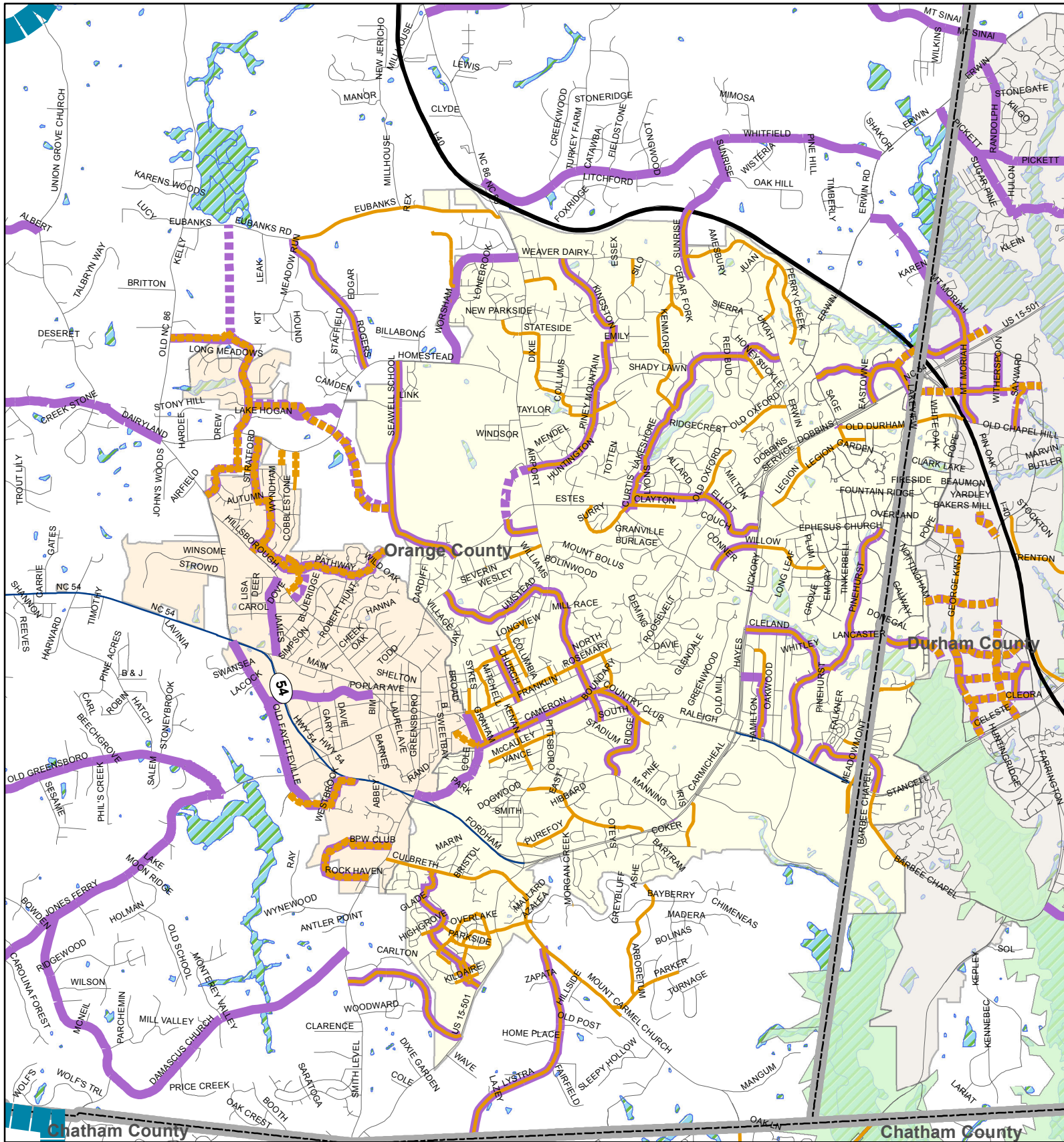


Durham Urban Growth Area	Army Crop of Engineers	Existing Local Collector Street Plan	DCHC Collector Street Plan
Carrboro Town Limits	Wetlands	Existing Collector Streets	Collector Street
Chapel Hill Town Limits		Proposed Collector Streets	Proposed Collectors Street
Hillsborough Town Limits			

Durham - Chapel Hill - Carrboro MPO

Draft Collector Street Plan -- Chapel Hill/Carrboro

TAC 8/8/2012 Attachment 7D

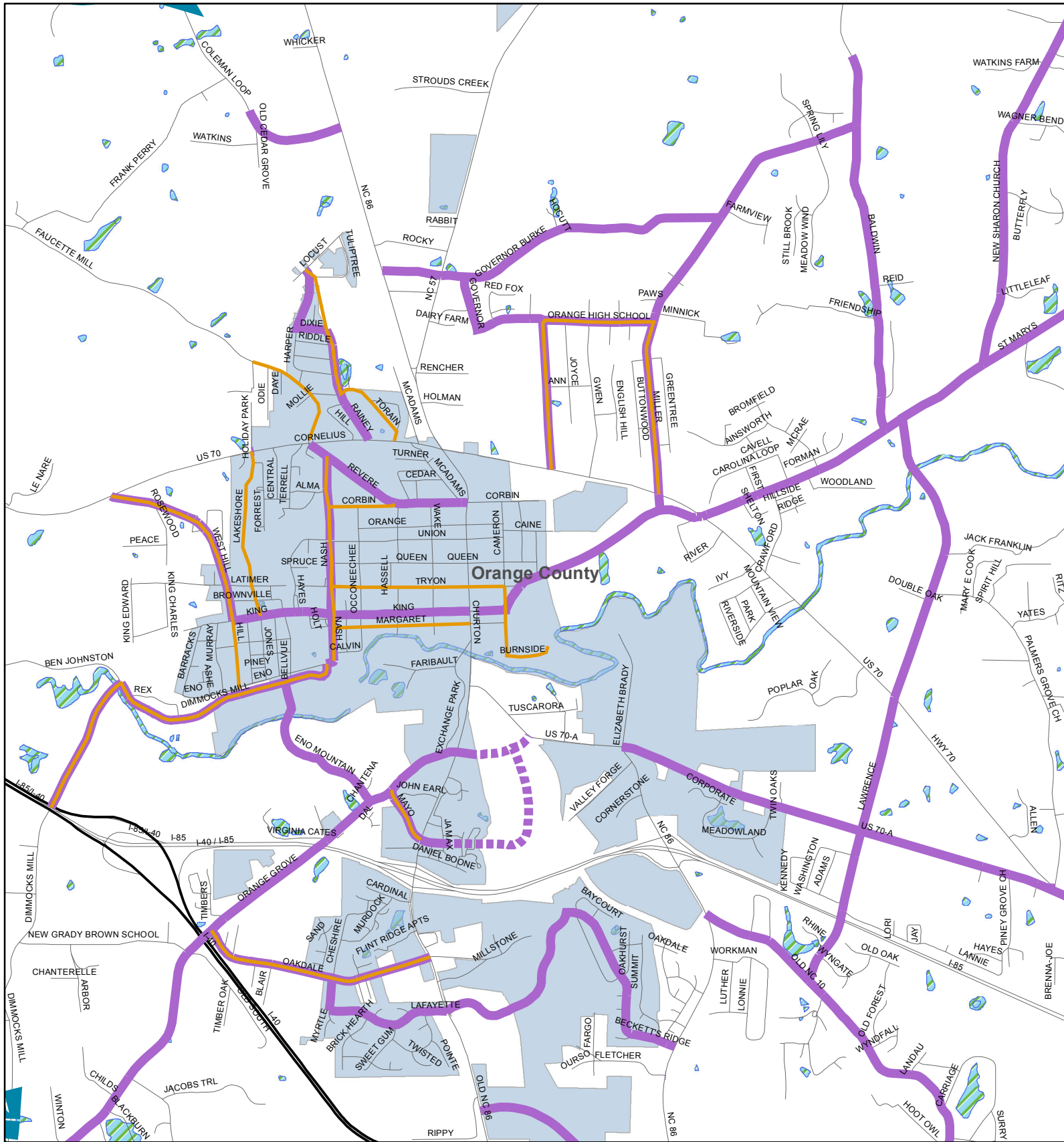


Durham Urban Growth Area	Army Corp of Engineers	Existing Local Collector Street Plan	DCHC Collector Street Plan
Carrboro Town Limits	Wetlands	Existing Collector Streets	Collector Street
Chapel Hill Town Limits		Proposed Collector Streets	Proposed Collectors Street
Hillsborough Town Limits			

Durham - Chapel Hill - Carrboro MPO

TAC 8/8/2012 Attachment 7D

Draft Collector Street Plan -- Hillsborough



Durham Urban Growth Area	Army Crop of Engineers	Existing Local Collector Street Plan	DCHC Collector Street Plan
Carrboro Town Limits	Wetlands	Existing Collector Streets	Collector Street
Chapel Hill Town Limits		Proposed Collector Streets	Proposed Collectors Street
Hillsborough Town Limits			



Kimley-Horn
and Associates, Inc.

Memorandum

To: Andy Henry
DCHC MPO

From: Natalie Smusz Mengelkoch, P.E.
Kimley-Horn and Associates, Inc.

Date: October 27, 2009

Subject: Defining Collector Streets for DCHC MPO

■
P.O. Box 33068
Raleigh, North Carolina
27636-3068

Kimley-Horn and Associates, Inc. has worked with DCHC MPO to identify existing and future collector streets. This memorandum is intended to present the methodology used to define the ***Draft DCHC MPO Collector Street Plan***.

Draft DCHC MPO Collector Street Plan

Collector streets are not typically considered in long range transportation plans which are oriented toward “regional” transportation. However, in many situations collector streets serve as the backbone for local mobility, property access, and non-vehicular transportation modes. Without adequate interconnected collector streets, regional routes bear the burden of both access and mobility, becoming overcrowded with the combination of local and regional traffic. The ***Draft DCHC MPO Collector Street Plan*** looks holistically at the hierarchy of streets within the community and identifies recommendations for reinforcing the community vision with the collector street system – taming traffic, providing mobility options, and reinforcing community character.

Following the adoption of this collector street plan, local governments will have the opportunity to make sure that an interconnected system of collector streets is built incrementally as development occurs. This strategy has the added advantage of timing the transportation infrastructure so that it coincides with the creation of transportation demand. This collector street plan recommends specific connections be made to improve connectivity and congestion. *It is important to note that the maps in this plan address potential connections but do not reflect the exact location or alignment of a proposed facility. The exact location will be decided during the development review process based on development design, traffic impacts, and environmental factors.*



In addition, it is important to note that the collector street network is to be built using private funding. Thus, new collector streets will be built as new residential, commercial and other types of development occur and the timing of new collector streets is unknown at this time.

Collector Street Planning Process

The *Draft DCHC MPO Collector Street Plan* was developed by using the Functional classification GIS Interface (FCGI) to produce the first draft of the collector street network based on quantitative analysis and then adjusting this network through a series of work-sessions and individual meetings with staff from local jurisdictions. Planners relied upon the FCGI, existing federal functional classifications, currently adopted plans within and adjacent to MPO boundaries, and multiple resource maps which displayed recent aerials, environmental features, proposed development, and activity nodes.

In the first step to develop the draft collector street plan and functional classification, Kimley-Horn developed the FCGI for current and future use by DCHC MPO. The interface is a versatile tool capable of classifying current and future facilities according to a series of technical criteria that were developed based on local, state, and federal functional classification definitions. The technical criteria for collector streets are shown in **Table 1**.

The DCHC MPO street network shapefile was appended with Triangle Regional Model (TRM) attributes to create the base network in which the FCGI operates. The FCGI considers the attributes of the network and, through its algorithm, populates a field in the network shapefile with the computed functional classification for each segment of roadway in the network. Additional streets can be added to the network with their corresponding attributes—creating the ability to classify future facilities as the network evolves. Streets classified by the FCGI as collectors served as a starting point for existing collector street designation by displaying which links meet the normal standards for collector streets.

As an essential part of the Long Range Transportation Plan (LRTP) process, the Federal Functional Classification is used to determine how roads will be considered for planning, funding, and air quality purposes. As such, the Federal Functional Classification designations were considered while defining the proposed collector street network.

There are several existing sub-areas in which collector street networks have already been designated by local planning agencies within or adjacent to the DCHC MPO planning boundary. These existing plans include:

- *Southwest Durham-Southeast Chapel Hill Collector Street Plan*
- *Wake-Durham Collector Street Plan*
- *Chatham County Thoroughfare Plan*



- *Cary Thoroughfare Plan*
- *Carrboro Connector Roads Policy*
- *Town of Chapel Hill Collector Street Plan*
- *Wake County Collector Street Plan*

Those facilities designated by the FCGI as collector streets were overlaid with the federally classified collector streets and the existing collector street plans for review.

Table 1: Collector Street Attributes	
Speed Limit*	25 - 45 mph
Median	Median possible
Access	Limited as desired
Lane Widths/Shoulder Widths	Average
Parking	Parking possible
Bike Lanes	Bike facilities possible
Sidewalks	Pedestrian facilities likely
Volume/VMT*	2,500 - 8,000
Function**	Distributing traffic between residential/non-residential and arterial streets
Surrounding Land Use Density	Typically residential, local commercial, or local industrial
Route Numbering*	SR or local
Lanes*	Generally two lanes
Regional Significance Designation	Never regionally significant
At-Grade Intersections	Signals or stop controlled with priority over locals and yield control to minor arterials
Transit Service	Allowed
Corridor Length	Typically less than two miles
Centroid Connections from Travel Demand Model	Possible

* These quantitative criteria were weighted more heavily by the FCGI, however, all attributes were considered by planning staff during the collector street planning work-sessions and meetings.

** The "Function" attribute allows subjective input to help guide classification on particular links.



Planning Resources

Street spacing and access also are critical to collector street designation. Local officials should consider street spacing guidelines to promote efficient development of an expanding transportation system. Ultimately, these street spacing guidelines were used as “rules of thumb” during the development review process. Spacing guidelines recommended for collector streets are summarized in **Table 2**.

Environmental Features

Table 2 - Street Spacing Guidelines

Land Use/ Type of Collector Street	Intensity	Access Function	Approximate Street Spacing
Very Low Intensity Residential	Less than 2 dwelling units per acre	High	3,000 to 6,000 ft apart
Low Intensity Residential	2 to 4 dwelling units per acre	High	1,500 to 3,000 ft apart
Medium and High Intensity Residential	More than 4 dwelling units per acre	High	750 to 1,500 ft apart
Activity Center	Mixed-use residential/commercial	Medium	750 to 1,500 ft apart

Note: Street spacing guidelines were developed through research performed by Kimley-Horn and Associates, Inc. for the Wake County Collector Street Plan.

Because the land within the study area will continue to develop, awareness regarding the impacts to the surrounding environment has become heightened. It is imperative to manage and minimize these impacts to continue to serve this area with clean air and water as well as unpolluted land. The **Draft Collector Street Plan Map** illustrates important environmental resources within the study area. Wetlands and U.S. Army Corps of Engineers land in the southern and eastern portions of the study area have limited street planning activities to the edges of these environmental resource areas. The collector street network was developed in a way to minimize potential impacts to the wetlands. The shortest crossing length should be recommended for potential wetland crossings. **Table 3** gives general “rules of thumb” that were used as a guide when it was appropriate to cross natural or manufactured barriers. It was extremely important to be sensitive to the natural environment while developing this plan so that the potential impacts would be minimal, while making sure that the plan would be reasonable and feasible.

**Table 3 - Crossing Barriers - Rules of Thumb**

Freeway Considerations	Consider grade separated crossings between interchanges Collectors may need to parallel the facility
Stream Crossings	Parallel the stream at a distance sufficient to avoid water quality impacts
	When necessary, space a minimum of 2,500-3,000 feet apart
Railroad	Must close 3 existing at-grade crossings to build 1 new at grade crossing Design at 90 degrees to reduce roadway footprint.
	Request a NCDOT railroad crossing closure study be conducted to determine which crossing to close
	A parallel arterial system supports good circulation

Proposed Development

It is expected that parcels throughout the study area will continue to be developed, with specific areas known to have upcoming development. These areas were given additional consideration and, where possible, potential site plans were referenced to incorporate the proposed networks. The site plans that were considered include:

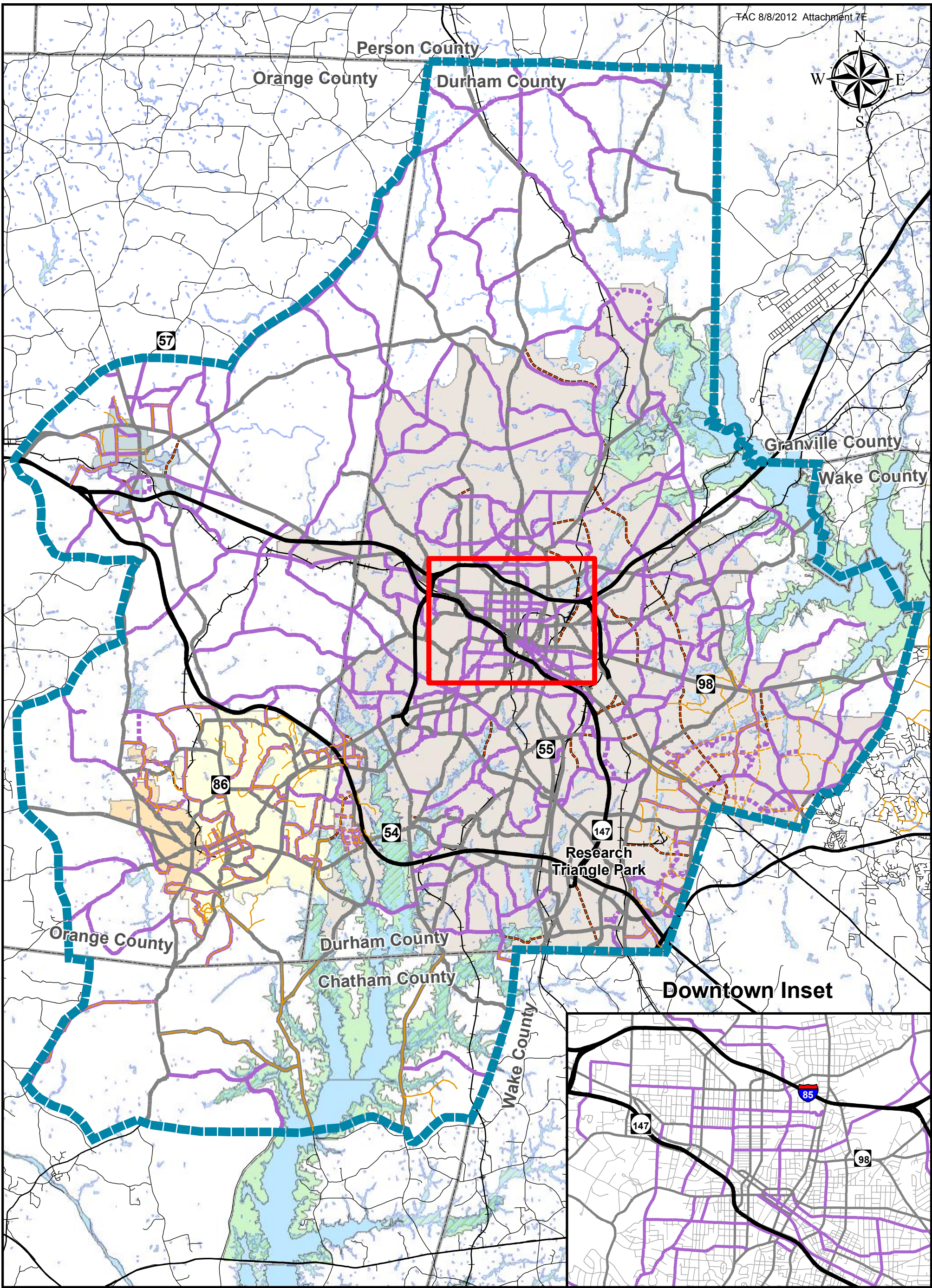
- Falls Village The Crossings at Grove Park
- Grove Park
- Ravenstone
- Brightleaf
- Sauternes
- Egypt
- Alexander Place
- Future MacGregor developments
- Horton Grove
- Triple Crown Farms
- Village Creek
- Regency at Brier Creek Country Club
- Davis Park
- Keystone East office development
- Joven – Northeast Creek
- Chesapeake
- Fayetteville Road assemblage
- Four Seasons
- Beth Page



Kimley-Horn held two work-sessions with DCHC MPO staff to validate the proposed collector street network. Additional meetings with staff from the local jurisdictions involved also were held to gain perspective as to the validity of the collector streets. Finally, after the proposed collector streets were confirmed with local jurisdiction planning staff, a ***Draft DCHC MPO Collector Street Plan Map*** was developed (see **Figure 1**). This map shows the collector streets designated by current local plans in dark gold and the proposed existing and future MPO collector streets in purple.

Summary

The purpose of this study was to define existing collector streets and develop potential locations for future collector streets. The methodology in this memorandum outlined a process that drove the development of a draft plan by considering existing designations, output from the newly developed Functional Classification GIS Interface, environmental constraints, and future development concerns. The ***Draft DCHC MPO Collector Street Plan*** will be an invaluable resource when directing development and making policy considerations.



Durham - Chapel Hill - Carrboro MPO Collector Street Plan
Figure 1: Draft Collector Street Plan - October 27, 2009

DCHC

- Durham Urban Growth Area
- Lakes, Rivers, Streams and Creeks
- Hillsborough Town Limits
- Wetlands
- Carrboro Town Limits
- Army Corp of Engineers Land
- Chapel Hill Town Limits
- 2035 LRTP Proposed Roadways

- DCHC Higher Classified Facilities**
- Freeway or Interstate
- Minor or Principal Arterials

- Local Collector Street Plans****
- Existing Collector Street
- Proposed Collector Street
- DCHC Collector Street Plan**
- Collector Street
- Proposed Collector Streets

**Local Adopted Collector Street Plans include:
 Wake-Durham Comprehensive Street System Plan,
 Chatham County Thoroughfare Plan, Wake
 County Collector Street Plan, Town of Cary
 Comprehensive Transportation Plan Thoroughfare
 Map, Town of Carrboro Connector Roads Policy,
 Southwest Durham - Southeast Chapel Hill
 Collector Street Plan, Town of Chapel Hill Street
 Classification Map

Kimley-Horn
and Associates, Inc.

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 Miles

Page 1 of 7

MEMORANDUM

To: Transportation Advisory Committee
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: August 8, 2012

Subject: **STPDA Request for EB-4707, Old Durham-Chapel Hill Road**

The TAC has previously approved \$3,911,200 in STPDA funds to project EB-4707 to make bicycle, pedestrian, and other improvements to Old Durham-Chapel Hill Road. In 2011, final design plans were completed for the project and detailed right-of-way and construction cost estimates were prepared. The new cost estimates were much higher than previous estimates, and it became clear that additional funds were needed in order to move forward with utility relocation, right-of-way acquisition, and construction.

Due to the overall cost increase, the local match requirement for Chapel Hill and Durham has also increased. The Town of Chapel Hill is currently considering how it wishes to proceed with the project. The Chapel Hill Town Council has asked NCDOT and LPA staff to review ways to decrease the Town's local match obligation by modifying the project design and/or seeking other non-federal funding to augment the Town's local match.

The City of Durham has identified a local match funding source and is ready for NCDOT to move forward with right-of-way acquisition and construction for the portion of the project between Garrett Road and Pope Road, including the construction of the Pope Road roundabout. In addition to the STPDA funds previously allocated to the project, an additional \$2,781,291 is needed to move forward on the Durham portion of the project.

The last STPDA Call for Projects was done in 2009, and allocated estimated funding through 2015. However, some funding was held in reserve for future programming. In late 2011, some of these reserved funds were allocated to the American Tobacco Trail Phase E cost over-run, and some funds were recently allocated to a Carrboro project.

While the TCC would prefer to hold a general Call for Projects for STPDA funding in 2014 or 2015 for projects to be obligated in FY 2016 and 2017 and include revisions to our STPDA allocation formula at that time, the TCC also supports the current request for funding to allow an already designed project to move forward. Therefore, the TCC recommends that the TAC approve Durham's request for additional funding.

Background

The Old Durham Road/Old Chapel Hill Road Project will make improvements to a 2.7 mile corridor linking Durham and Chapel Hill. The project will add sidewalks and an on-road striped bike lane on both sides of the road, pedestrian signals at two signalized intersections (US 15-501 and Farrington Road), a new pedestrian signal at a crosswalk in front of Githens Middle School, bus stop improvements, intersection lighting, and a roundabout at the intersection with Pope Road.

In 2005 and 2006, the Old Durham/Chapel Hill Road Bicycle and Pedestrian Feasibility Study was prepared. This study included an extensive public outreach component and provided cost estimates and constructability drawings for improvement to the corridor. The feasibility study was adopted by the DCHC MPO in 2006. The study can be downloaded at:

www.dchcmpo.org/index.php?option=com_content&task=view&id=27&Itemid=35

In February 2008, the City of Durham, the Town of Chapel Hill, and the N.C. Department Transportation (NCDOT) approved an inter-governmental agreement to jointly participate in the planning and construction of bicycle and pedestrian facilities along Old Durham/Chapel Hill Road. NCDOT's Division 5 Office, based in Durham, agreed to manage the project design and construction. Consultant Kimley-Horn and Associates was selected to develop project designs. The project was placed in the Transportation Improvement Program (TIP) as project number EB-4707.

On August 24, 2010, NCDOT held an open house and public information session on the project. The purpose of this meeting was to provide the public and businesses the opportunity to review the preliminary engineering design plans, provide feedback on the improvements, and discuss project specifics with NCDOT, the consultant, and staff from Durham and Chapel Hill.

During 2010 and 2011, meetings occurred with one major employer and two neighborhood associations in the corridor to modify the design to address specific concerns. On February 4, 2011, the Categorical Exclusion for the project was approved by the Division Administrator of the Federal Highway Administration.

In 2011, a cost estimate of \$13,111,929 for utility relocation, right-of-way acquisition, and construction was provided by NCDOT and the consultant. These estimates are considered to be conservative and actual costs may be less. In order to address the unanticipated higher costs, LPA staff applied for funding through the TIGER III grant program and the FY 2012 Transportation Community and System Preservation (TCSP) grant program. The TIGER III grant was unsuccessful. The Federal Highway Administration has not announced the 2012 TCSP grant awards; however, the TCSP program is very competitive and the MPO would like to identify an alternative funding source should the grant not be approved.

Funding Expended for Preliminary Engineering

Funding has already been expended for preliminary engineering, as follows:

- NCDOT Bike/Ped Division \$400,000
- Previous STPDA Allocation \$333,456
- City of Durham Match \$ 54,187
- Town of Chapel Hill Match \$ 29,177
- Total \$816,820

Funding Needed for the Durham Portion of Project

The total estimated cost for utility relocation, right-of-way acquisition, and construction on the Durham portion of the project is \$7,948,794. Proposed funding is as follows:

- Previous STPDA Allocation \$3,577,744
- Additional STPDA Funding \$ 2,781,291
- City of Durham Match \$1,339,759
- NCDOT (Pope Rd Roundabout) \$ 250,000
- Total \$7,948,794

Funding Needed for the Chapel Hill Portion of Project

The total estimated cost for utility relocation, right-of-way acquisition, and construction on the Chapel Hill portion of the project is \$5,163,135. The local match funds needed for the Chapel Hill portion are \$1,032,627. At such time that the Chapel Hill portion of the project is ready to move forward, the MPO will need to allocate STPDA funds to replace those used for the Durham portion of the project, plus an additional amount. It appears that there are adequate funds available in the STPDA program to fund a future request from the Town of Chapel Hill. In addition, the federal MAP-21 bill provides Transportation Alternatives funding that the MPO potentially could allocate to the project.

On June 11, 2012, the Chapel Hill Town Council received an update on the status of the project. Town Council members and staff discussed several options for proceeding with the project. For example, there was discussion of making design changes to the Chapel Hill portion of the project to reduce project cost, thus reducing the Town's local match requirement (e.g., such as providing sidewalk on one side rather than both sides). But since the local match is just 20 percent of the overall project cost, there would need to be significant cost reductions in order to make much of a dent in Chapel Hill's local match. There was also discussion of requesting that NCDOT and/or other entities (such as foundations or the private sector) contribute funds that could be counted toward the local match. Staff from the LPA, Town of Chapel Hill, NCDOT, and the consultant are meeting on August 13 to explore these options.

Recommended Funding for the Durham Portion of the Project

The TCC recommends allocating \$ 2,781,291 of STPDA funding for the Durham portion of the project. The MPO currently has an unobligated STPDA balance of \$7,415,648 and we expect to receive approximately \$4.5 million annually in STPDA. While the MPO has already programmed much of our STPDA funding through FY 2015, there are some funds that are unprogrammed due to the restoration of the 2009 rescission. LPA staff estimate that approximately \$3 million of the restored funding is currently unprogrammed. This is an approximate amount since the programming of funds is done based on estimated costs and estimated STPDA allocations. The unobligated balance is a more accurate accounting of how much STPDA funding is currently available and is based on actual obligations and allocations.

The MPO is allowed to over-program and over-obligate funding. NCDOT staff report that we can obligate all of the funding on our current STPDA programming table and the additional funding for Old Durham-Chapel Hill Road. No projects will need to be delayed or cancelled.

The recommended funding will help decrease the MPO's high unobligated balance of STPDA funding, helping to shield it from potential rescissions. It also helps advance a project that the MPO has long supported and rated as a high priority. The project is a regional-scale project that connects multiple jurisdictions in the MPO. It will provide regional connectivity benefits and is an appropriate use of federal funding. Furthermore, this project has already met all of the requirements for federally funded projects and will be administered by NCDOT. As many local jurisdictions have recently experienced, administering these federally funded projects requires a lot of local staff resources. In many cases, NCDOT may be able to administer these projects more efficiently than local governments because of their greater resources and experience with the federal requirements.

Future STPDA Call for Projects

Programming and obligating the additional funds for Old Durham-Chapel Hill Road will affect the amount of funds available for a future STPDA call for projects. Typically, the MPO programs STPDA for a set number of future years (last time it was for FY 2009-2015) based on our unobligated balance and estimated future allocations. If the MPO obligates more funding now, the unobligated balance will decrease and thus there will be fewer funds to allocate to future projects. Based on our adopted STPDA distribution formula, the impact will be distributed proportionately across all funding categories and jurisdictions.

While LPA Staff have previously discussed holding our call for projects for FY 2016 through 2020 in the spring of 2012, we are now recommending that we delay this until potentially 2014. The MPO has 26 projects programmed for obligation in FY 2012 through 2015. Nine of these projects have been delayed one year, and six of these projects have been delayed more than one year. With so many projects currently behind schedule, the MPO would like our member jurisdictions to focus on obligating projects over the next couple of years before we start to program future funding. By 2014, the MPO will have a

better idea of which projects have been able to move forward and which projects may need to be cancelled due to inactivity. In addition, with the changes in the local programs management process, member jurisdictions are learning which projects are best to pursue with federal funding and which are better done with local funds. Delaying the call for projects will allow local jurisdictions more time to consider which of their priorities are better suited for federal funding and which are better done with local funding.

Furthermore, an issue with the current STPDA program and allocation process is that local jurisdictions have difficulty anticipating their needs far out into the future. This has resulted in many projects being delayed, cancelled, or funding reassigned. It increases the amount of TIP amendments necessary and LPA Staff oversight to track funding. For the next call for projects, the MPO may want to limit the allocation to a shorter, more immediate time period (maybe two years only) so jurisdictions only program projects that are able to meet their anticipated schedules. Similarly, some STPDA funding is allocated to routine and special planning projects. The LPA is also better able to anticipate our planning needs on a shorter term basis.

In addition, with the recent passage of MAP-21, the MPO will be receiving "Transportation Alternatives" funding directly. This program replaces the Transportation Enhancements program. Thus the MPO expects to have additional funding for bicycle and pedestrian projects starting in FFY 2013.

TCC Recommendation: That the TAC direct LPA staff to amend the STPDA database to add \$2,781,291 federal STPDA to EB-4707.

TAC Action: Direct LPA staff to amend the STPDA database to add \$2,781,291 federal STPDA to EB-4707.

MEMORANDUM

**TO: Transportation Advisory Committee
DCHC MPO**

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

DATE: August 8, 2012

SUBJECT: FFY 2012 Section 5307/5340 Final Apportionment for Durham NC UZA

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

Funding is made available to designated recipients that must be public bodies with the legal authority to receive and dispense Federal funds. Governors, responsible local officials and publicly owned operators of transit services are to designate a recipient to apply for, receive, and dispense funds for transportation management areas pursuant to 49 USC 5307(a)(2). Generally, a transportation management area (tma) is an urbanized area with a population of 200,000 or over. The Governor or Governor's designee is the designated recipient for urbanized areas between 50,000 and 200,000.

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

The DCHC- MPO has received the final FFY2012 Apportionment and has submitted a recommended split by agency. Funding is apportioned on the basis of legislative formulas. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles as well as population and population density.

Please reference attachment to this agenda item.

Member Organizations

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

August 8, 2012

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

Attn: Marie Lopez, Transportation Program Specialist

Subject: FFY 2012 Section 5307/5340 (Full) Apportionment for Durham NC UZA

Dear Regional Administrator:

We have been advised that the FFY 2012 apportionment for the Durham-Chapel Hill-Carrboro Urbanized Area includes both 5307 and 5340 funds has now been updated with a second amount \$6,927,328. Distribution of the FFY 2012 Section 5307/5340 Durham UZA apportionment in the table below includes an allocation to all three transit operators within the DCHC MPO. The Transit Enhancement and Safety and Security apportionments are also calculated in the table below.

	FFY 2012	Transit	Safety and	Net
	Full	Enhancement	Security	Available for
	Apportionment	1%	1%	Transit
				Expenditures
Chapel Hill	1,936,506.00	19,365.00	0	1,917,141.00
Durham Area Transit Authority	3,697,045.00	36,970.00	0	3,660,075.00
Triangle Transit	1,293,777.00	12,938.00	0	1,280,839.00
Totals	6,927,328.00	69,273.00	0	6,858,055.00

The Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO), as the Designated Recipient for the Durham UZA, request that the Federal Transit Administration approve each operator's FFY 2012 FTA Section 5307/5340 grant application in accordance with the amounts apportioned.

Please copy the North Carolina Department of Transportation, Public Transportation Division with your confirmation letter stating that the approved distribution has been

completed. Should you have any questions regarding this request, please contact Felix Nwoko (Felix.Nwoko@Durhamnc.gov) or Maricia Brown, (Maricia.brown@Durhamnc.gov).

Sincerely,

Lydia Lavelle, Chair
Transportation Advisory Committee

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



A Pedestrian Safety Campaign for the Triangle Region

August–October, 2012

The goal of the Watch for Me NC campaign is to improve pedestrian safety in the Triangle region by using educational safety messaging and enforcement to influence the behaviors of drivers and pedestrians. Each year in the Triangle, more than 400 pedestrians are hit or injured by cars and trucks.

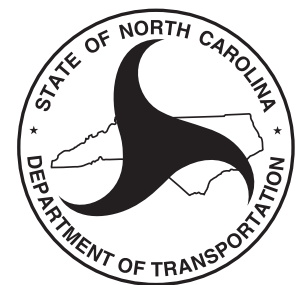
“Yield to People in Crosswalks” is a key message of the campaign. Drivers are unaware of or are ignoring laws requiring them to yield to pedestrians at crosswalks, and pedestrians are failing to use them. Other messages emphasize safe behaviors in identified problem areas where accidents are occurring, such as at bus stops, at night, in parking lots and at intersections.

CAMPAIGN COMPONENTS

- Media/Advertising
 - Radio spots
 - Earned media on TV/radio
 - Transit advertising
 - Print materials, including posters and bumper stickers
- Enforcement
- Program evaluation

PARTNERS

- North Carolina Department of Transportation
- UNC Highway Safety Research Center, Pedestrian Bicycle Information Center
- City of Raleigh, Raleigh Police
- City of Durham, Durham Police
- Town of Chapel Hill, Chapel Hill Police
- Town of Carrboro, Carrboro Police
- Capital Area Metropolitan Planning Organization
- Durham Chapel Hill Carrboro Metropolitan Planning Organization
- Triangle J Council of Governments
- North Carolina State University
- University of North Carolina, Chapel Hill
- Duke University



MEMORANDUM

TO: Transportation Advisory Committee (TAC)
FROM: Lead Planning Agency
DATE: August 8, 2012
RE: MPO Boundary Update

With the release of the 2010 Census, the DCHC MPO will be re-examining the MPO's planning area. The TCC has directed LPA staff and a subcommittee to gather information and discuss adjustments to the MPO's planning area in the following areas:

- Mebane-Orange County
- Butner-Granville County
- Chatham County

The TCC has not made a recommendation to expand in these areas. A recommendation will be brought forward to the TAC at a future meeting.

Metropolitan Area Boundary

Federal legislation requires that an MPO's metropolitan planning area (MPA) contain, at a minimum, the entire Urbanized Area, as defined by the U.S. Census. The legislation also states that the MPA should contain the area beyond the Urbanized Area that is expected to be urbanized within the next twenty years or that is affected by urban policies and influence. Inclusion of the area that is expected to be urbanized within the next twenty years or that is influenced by urban policies is up to the MPO and the local governments' discretion.

The DCHC MPO does not need to expand the MPA following the 2010 Census because the Census-defined Urbanized Area is fully contained within the MPO's current boundary. However, the MPO has the option to expand or make adjustments as needed to ensure that our boundary includes all areas expected to be urbanized over the next 20 years or influenced by urban policies. There are three areas where the MPO may want to consider adjusting or expanding the MPA.

Mebane-Orange County

In 2009-2010, the MPO expanded the MPA to include areas along the I-85/I-40 corridor in western Orange County up to the Burlington-Graham MPO MPA. This expansion was supported by the Orange County Commissioners and was approved by the Governor (through NCDOT) as required by federal legislation. The justification for this expansion was that the area

was in the Orange County Economic Development Zone so it is expected to become urbanized, and that Orange County desired to have their jurisdiction in this area represented by the DCHC MPO. At the time, Orange County did not have membership in the BGMPO although the BGMPO did include portions of Mebane and Orange County. The boundaries of the expansion were drawn to follow Traffic Analysis Zones (TAZs) which are large in this part of the county.

In 2010, DCHC MPO and NCDOT staff were surprised to learn that the BGMPO MPA used for mapping for our expansion was not their officially approved boundary. Several years ago, LPA staff received a GIS file from the BGMPO that was not their officially approved boundary. This had been inadvertently used by the MPO and NCDOT to represent the BGMPO boundary. Due to this discrepancy, there is currently some overlap between the BGMPO's boundary and the DCHC MPO's boundary. This overlap must be corrected.

During discussions with the BGMPO, Orange County, Mebane, and NCDOT, other issues related to this area have risen to attention. The Economic Development Zone along I-85/I-40 will receive utility services from Mebane according to a recently adopted water-sewer agreement, and Mebane is expected to annex the area as it develops. Mebane has expressed an interest in only being a member of one MPO.

In addition, the 2010 Census Urbanized Area boundary for Burlington was extended north and east into the DCHC MPO's MPA. Federal regulations require that this area be included in a MPO. It could be in a neighboring MPO as long as there is agreement between the two MPOs on the planning jurisdiction for this area (this situation also applies to the Durham and Raleigh Urbanized Areas that cross the Durham-Wake county line and Chatham-Wake county line).

There has been much discussion of this issue between LPA staff, BGMPO, Orange County, Mebane, and NCDOT recently. LPA staff has taken the position that we will support a boundary that is mutually acceptable to Mebane and Orange County as it is their jurisdictions. NCDOT's policy is that they will only approve MPA expansions outside of the Census Urbanized Area if the local jurisdiction is supportive.

BGMPO staff have informed LPA staff, Orange County, and NCDOT that they intend to ask their TAC to act on boundary expansion at their August 21, 2012 meeting. Their recommendation is to only add the Census-defined Urbanized Area to their current boundary. While this would meet the minimum federal requirements, this would result in an irregular boundary that does not correspond with Orange County's Economic Development Zone or the transportation network. The BGMPO's proposed action will affect the options for the DCHC MPO in this area.

The MPA could also be adjusted in the remainder of Orange County outside of the Mebane area as all of Orange County could be considered to be influenced by urban policies. However, Orange County staff has not expressed an interest in any changes in the rest of the county. It does not appear that any areas outside of the MPA are expected to urbanize over the next 20 years according to current land use plans and socio-economic forecasts.

Butner-Granville County

The Butner and Creedmoor area is a Census defined Urban Cluster. The boundary of this Urban Cluster partially abuts the Durham-Granville county line and I-85 bisects it. I-85 and the Tar River mark the Capital Area MPO's northern boundary. Creedmoor is currently a member of the Capital Area MPO and has expressed a desire to remain a member of CAMPO. Butner and Creedmoor do not necessarily need to be included in a MPO or need to be included in the same MPO/RPO. Butner is currently considering if they would like to join a MPO or remain a member of the Kerr-Tar RPO. LPA staff, CAMPO staff, Kerr-Tar RPO staff, NCDOT, FHWA have met with Butner, Creedmoor, and Granville County to discuss their options. The Town has not taken a position on this yet, but they did discuss it at their August 2, 2012 meeting. If Butner were to join the DCHC MPO, Granville County would also need to join the MPO.

Geographically, Butner is close to the Durham Urbanized Area. Parts of the Durham Urbanized Area and Butner Urban Cluster are less than four miles apart – with much of the distance separated by Falls Lake. Due to Falls Lake, much of the area in between likely will not become urbanized over the next 20 years. However, MPO expansion could be justified because the area is influenced by urban policies. There are many commuters between Durham and Butner. Butner has several federal and state institutions with many employees.

This area is currently in the Triangle Regional Model and Triangle non-attainment area. Thus, the MPO is already highly involved in the development of socio-economic forecasts, transportation modeling, and air quality conformity for the area. Since Granville County and Creedmoor are already members of CAMPO, CAMPO has been more involved than DCHC MPO in coordinating with Granville County. Expanding to this area would necessitate additional responsibilities for LPA staff in developing the MTP, TIP, coordination with NCDOT on construction projects, etc. The MPO would not receive any additional federal funding if it expanded to this area.

If expansion is not desired, LPA staff recommend developing a memorandum of agreement with Butner and Granville County or the Kerr-Tar RPO that formally identifies how we will coordinate the development of socio-economic forecasts, transportation modeling, and air quality conformity.

Chatham County

The MPA could be adjusted in Chatham County if desired. In 2009, the MPO approved a modest expansion to have the boundary follow TAZs. However, the Governor (through NCDOT) did not approve this expansion since the Chatham County Board of Commissioners was not supportive. If expansion/adjustment is desired in this area, LPA staff recommend working closely with Chatham County to develop a mutually acceptable proposal.

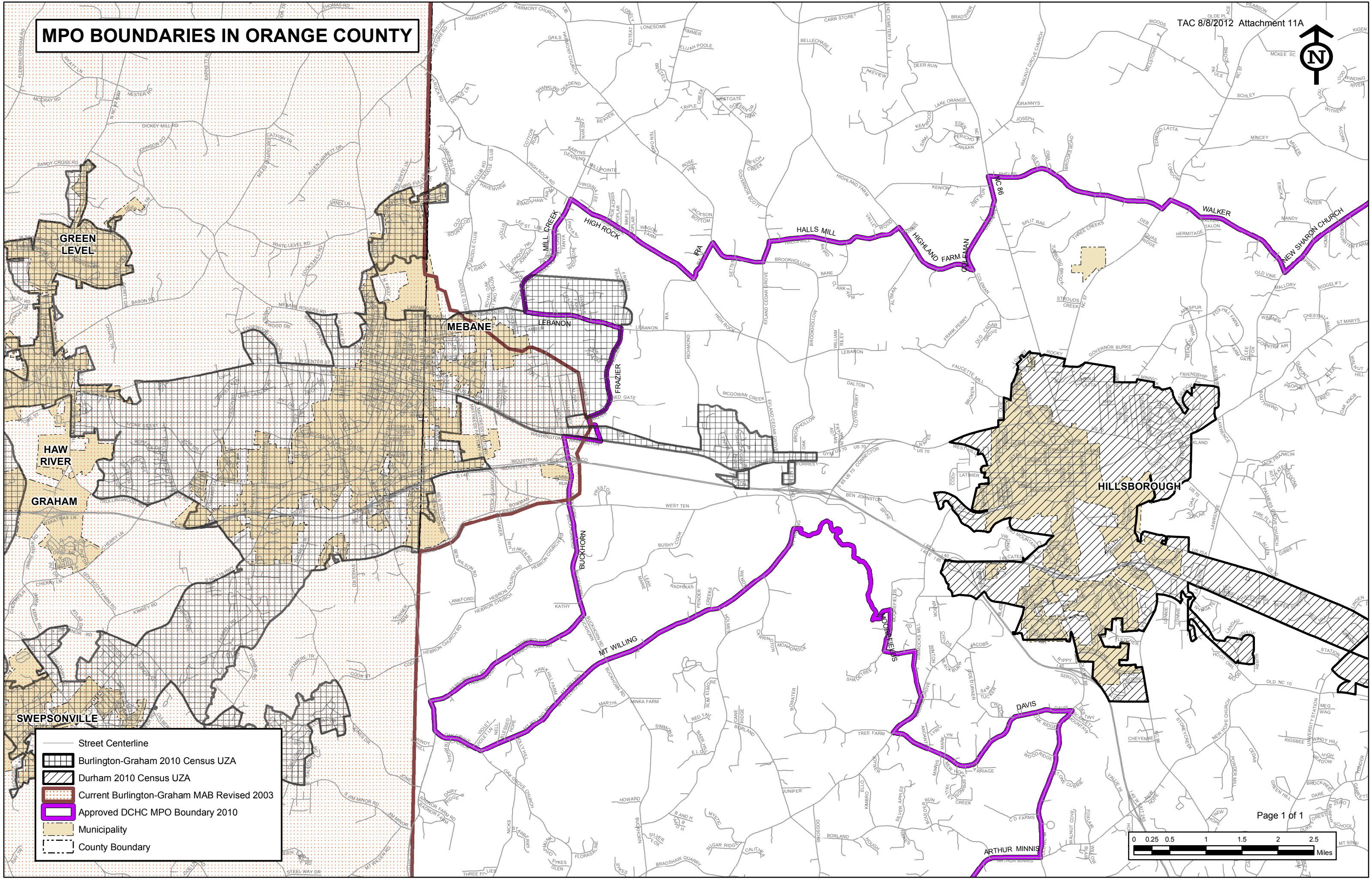
Roxboro-Person County

The TCC briefly discussed the option of expanding to Roxboro and Person County at their meeting. The consensus was that expansion was not desired at this time. Reasons discussed included the distance between Roxboro and Durham, and that the MPO would not receive additional federal funding for the additional responsibilities that the MPO would be required to take on.

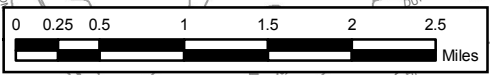
Next Steps

The decision whether or not to expand the MPO to the above areas has many technical and political implications. The TCC has directed LPA staff and the Administrative Subcommittee to review information and make a recommendation to the TCC. This recommendation would then be presented to the TAC at a future meeting. Outreach to the affected local jurisdiction will be essential. Per NCDOT, any expansion must be approved by the local jurisdiction in areas outside of the Urbanized Area. Thus, the MPO cannot expand without local approval.

MPO BOUNDARIES IN ORANGE COUNTY



	Street Centerline
	Burlington-Graham 2010 Census UZA
	Durham 2010 Census UZA
	Current Burlington-Graham MAB Revised 2003
	Approved DCHC MPO Boundary 2010
	Municipality
	County Boundary



MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: August 8, 2012

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

This memorandum provides a summary status of tasks for projects in the FY 2011-2012 Unified Planning Work Program.

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

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

Town of Carrboro Transportation Study/Main Street Road Diet

- ✓ Consultant selected
- ✓ Scope development/contract negotiation complete
- ✓ Data Collection to commence in September 2011 – Analysis Underway

Town of Hillsborough Downtown Transportation Study

- ✓ Consultant selected
- ✓ Scope development/contract negotiation complete
- ✓ Data Collection to commence in September 2011 – Analysis Underway

2040 Long Range Transportation Plan LRTP

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

Comprehensive Transportation Plan (CTP)

- Draft CTP –Depends on NCDOT Schedule
- Public Input

- Recommended CTP
- Adopted CTP - September 2012
- Technical report and implementation

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

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

GIS/Data Integration and Automation

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

Land-use Model Development

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

MPO Parking Survey and Study (postponed)

- Parking model specification
- Regional Coordination and planning
- Draft scope of services
- Request for Proposal notice
- Consultant selection

- Council contract approval
- Project commences

MPO Community Viz. Scenarios Planning and Visualization

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

MPO Congestion Management Process CMP

- ✓ CMP Procedure Plan approval – completed
- ✓ FHWA Approval of CMP procedure plan – August 2011
- ✓ CMP data requirement collection plan – Fall of 2011
- ✓ CMP Data collection and monitoring – ongoing
- ✓ CMP implementation – ongoing
- State- of Systems Report – December 2012
- Evaluation of effective of CMP projects and funded projects - ongoing

MPO Safety and Security Plan

- ✓ Action Plan and schedule to be completed in September 2011

Update of the MPO Public Involvement consistent with Federal Certification Review

- ✓ Action Plan and schedule completed in September 2011

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

- ✓ Action Plan and schedule completed in September 2011

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

- ✓ Action Plan and schedule completed in September 2011

MPO Freight Plan and Integration

- ✓ Action Plan and schedule completed in September 2011

DCHC MPO
FY2012-2013 UPWP AMENDMENT SCHEDULE

Amendment	Funding Type	Deadline for submission to MPO	TCC Action Date	TAC Action Date	Submittal Date to NCDOT	Submittal to NCDOT-PTD and/or FTA
FY13 - AM#1	PL/STP-DA/5303	9-Nov-12	28-Nov-12	12-Dec-12	14-Dec-12	14-Dec-12
FY13 - AM#	PL/STP-DA/5303	7-Dec-12	19-Dec-12	9-Jan-13	11-Jan-13	11-Jan-13
FY13 - AM#	PL/STP-DA/5303	11-Jan-13	23-Jan-13	13-Feb-13	15-Feb-13	15-Feb-13
FY13 - AM#	PL/STP-DA/5303	8-Feb-13	27-Feb-13	13-Mar-13	8-Mar-13	8-Mar-13
FY13 - AM#	5307 (reallocation only)	10-May-13	22-May-13	12-Jun-13	~~	14-Jun-13
FY13 - AM#	5307 (reallocation only)	12-Jul-13	24-Jul-13	14-Aug-13	~~	16-Aug-13

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

Contract Number: C202164	Route: SR-1959
Physical Division: 5	County: Durham
Administrative Division: 5	TIP Number: U-4011
Length: 0.767 miles	Federal Aid Number: STP-1959(3)
Resident Engineer: Mark W. Luther, PE	RE Phone Number: (919)220-4680
Location Description: SR-1959 (S MIAMI BLVD) FROM SOUTH OF SR-2112 (METHODIST ST) TO NORTH OF SR-1960 (BETHESDA AVE).	
Type of Work: GRADING, DRAINAGE, PAVING & SIGNALS.	
Contractor Name: TRIANGLE GRADING & PAVING, INC	
Contract Amount: \$4,666,751.41	Cost Overrun/Underrun: 6.21%
Availability Date: 6/27/2011	Letting Date: 5/17/2011
Completion Date: 7/13/2012	Work Began: 7/13/2011
Revised Completion Date:	Estimated Completion: 8/1/2012
Last Estimate Thru: 7/15/2012	Scheduled Progress: 100%
Last Estimate Paid: 7/23/2012	Actual Progress: 80.82%

Contract Number: C202340	Route: SR-1321
Physical Division: 5	County: Durham
Administrative Division: 5	TIP Number: U-3804
Length: 1.07 miles	Federal Aid Number: STM-0505(50)
Resident Engineer: Mark W. Luther, PE	RE Phone Number: (919)220-4680
Location Description: SR-1321 (HILLANDALE RD) FROM I-85 TO NORTH OF SR-1407 (CARVER AVE).	
Type of Work: GRADING, DRAINAGE, PAVING, AND SIGNAL.	
Contractor Name: REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT	
Contract Amount: \$4,222,625.78	Cost Overrun/Underrun: 20.61%
Availability Date: 8/30/2010	Letting Date: 7/20/2010
Completion Date: 6/15/2012	Work Began: 9/30/2010
Revised Completion Date: 7/1/2012	Estimated Completion: 9/14/2012
Last Estimate Thru: 7/7/2012	Scheduled Progress: 100%
Last Estimate Paid: 7/16/2012	Actual Progress: 76.33%

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

Contract Number: C202538	Route: NC-55, NC-751, SR-1118 SR-1357, SR-1404, SR-1615 SR-1641, SR-1646, SR-1656 SR-1670, SR-1671, SR-1901 SR-1954, SR-1955, SR-1981 US-70
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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: 6/22/2011
Last Estimate Paid: 7/7/2011

County: Durham
TIP Number:
Federal Aid Number:
RE Phone Number: (919)840-0914
Estimated Completion: 3/30/2012
Scheduled Progress: 100%
Actual Progress: 98.01%

Contract Number: C202610
Physical Division: 5
Administrative Division: 5
Length: 6.8 miles
Resident Engineer: Cadmus Capehart, PE
Location Description: NC-147 FROM NORTH OF SR-1322 (BROAD ST) TO NORTH OF SR-2028 (TW ALEXANDER BLVD).
Type of Work: DIAMOND GRINDING, CONC PVT SLAB REMOVAL & SHOULDER RECONST.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: \$4,274,880.20
Availability Date: 3/15/2011
Completion Date: 11/1/2011
Revised Completion Date:
Last Estimate Thru: 7/7/2012
Last Estimate Paid: 7/19/2012

Route: NC-147
County: Durham
TIP Number: R-5164D
Federal Aid Number: STM-0147(3)
RE Phone Number: (919)840-0914
Estimated Completion: 7/30/2012
Scheduled Progress: 100%
Actual Progress: 94.15%

Contract Number: C202620
Physical Division: 5
Administrative Division: 5
Length: 12.6 miles
Resident Engineer: Cadmus Capehart, PE
Location Description: I-85 FROM NORTH OF US-70 IN DURHAM COUNTY TO NORTH OF NC-56 IN GRANVILLE COUNTY.
Type of Work: PAVEMENT REHABILITATION AND BRIDGE REPAIR OVERLAYS.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: \$8,098,211.15
Availability Date: 6/1/2011
Completion Date: 7/15/2012
Revised Completion Date:
Last Estimate Thru: 7/15/2012
Last Estimate Paid: 7/19/2012

Route: I-85
County: Durham
TIP Number: I-5145
Federal Aid Number: IMS-085-4(118)178
RE Phone Number: (919)840-0914
Estimated Completion: 7/30/2012
Scheduled Progress: 100%
Actual Progress: 99.93%

Contract Number: C202875
Physical Division: 5
Administrative Division: 5
Length: 17.133 miles
Resident Engineer: Cadmus Capehart, PE
Location Description: I-540 FROM I-40 OVERPASS TO TRIANGLE TOWN BLVD, AND TRIANGLE TOWN BLVD FROM I-540 TO NEW ASPHALT PAVEMENT JOINT.
Type of Work: MILLING, RESURFACING, SHOULDER RECONST, AND STR REHAB.
Contractor Name: FSC II LLC DBA FRED SMITH COMPANY
Contract Amount: \$8,384,157.45
Availability Date: 2/27/2012
Completion Date: 11/15/2012
Revised Completion Date:
Last Estimate Thru: 7/22/2012
Last Estimate Paid: 7/26/2012

Route: I-540
County: Durham
TIP Number: I-5307, I-5310
Federal Aid Number: IM-0540(23)
RE Phone Number: (919)840-0914
Estimated Completion: 11/15/2012
Scheduled Progress: 65%
Actual Progress: 63.56%

Contract Number: C202918
Physical Division: 5
Administrative Division: 5
Length: 6.09 miles
Resident Engineer: Mark W. Luther, PE

Route: SR-1002, SR-1400, SR-1628
 SR-1669, SR-1675
County: Durham
TIP Number:
Federal Aid Number:
RE Phone Number: (919)220-4680

<p>Location Description: 5 SECTIONS OF SECONDARY ROADS. Type of Work: MILLING, RESURFACING & SHOULDER RECONSTRUCTION. Contractor Name: CAROLINA SUNROCK LLC Contract Amount: \$1,398,321.31 Cost Overrun/Underrun: 0.93% Availability Date: 4/2/2012 Letting Date: 1/17/2012 Completion Date: 6/29/2012 Work Began: 5/2/2012 Revised Completion Date: Estimated Completion: 7/13/2012 Last Estimate Thru: 6/30/2012 Scheduled Progress: 100% Last Estimate Paid: 7/12/2012 Actual Progress: 87.64%</p>	
<p>Contract Number: C202928 Route: NC-54, SR-1103, SR-1107 SR-1171, SR-1815, SR-1902 SR-1911, SR-1926, SR-1945 SR-1977 Physical Division: 5 County: Durham Administrative Division: 5 TIP Number: Length: 13.57 miles Federal Aid Number: Resident Engineer: Cadmus Capehart, PE RE Phone Number: (919)840-0914 Location Description: NC-54 FROM NC-55 TO WEST OF DAVIS DR AND 10 SECTIONS OF SECONDARY ROADS. Type of Work: WIDENING, MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION. Contractor Name: CAROLINA SUNROCK LLC Contract Amount: \$3,634,988.89 Cost Overrun/Underrun: Availability Date: 3/12/2012 Letting Date: 1/17/2012 Completion Date: 11/9/2012 Work Began: Revised Completion Date: Estimated Completion: Last Estimate Thru: Scheduled Progress: Last Estimate Paid: Actual Progress:</p>	
<p>Contract Number: C202995 Route: - Physical Division: 5 County: Durham Administrative Division: 5 TIP Number: Length: 0 miles Federal Aid Number: Resident Engineer: Mark W. Luther, PE RE Phone Number: (919)220-4680 Location Description: BRG# 195 SR-1675, 16 US-15, 35 US-158, 43 SR-1103, 44 NC-96, 45 NC-56, 50 SR- 1127, 54 SR-1135, 57 SR-1192 & 193 SR-1671. Type of Work: BRIDGE PRESERVATION Contractor Name: TAYLOR & MURPHY CONSTRUCTION CO, INC Contract Amount: \$3,034,500.45 Cost Overrun/Underrun: Availability Date: Letting Date: 4/17/2012 Completion Date: Work Began: Revised Completion Date: Estimated Completion: Last Estimate Thru: Scheduled Progress: Last Estimate Paid: Actual Progress:</p>	
<p>Contract Number: DE00019 Route: NC-55 Physical Division: 5 County: Durham Administrative Division: 5 TIP Number: W-5110 Length: 0.225 miles Federal Aid Number: STP-0055(40) Resident Engineer: Mark W. Luther, PE RE Phone Number: (919)220-4680 Location Description: NC 55 (ALSTON AVE) AT EAST LAWSON STREET Type of Work: GRADING, PAVING, CURB AND GUTTER, SIDEWALK, SIGNALS, SIGNING Contractor Name: TRIANGLE GRADING & PAVING, INC Contract Amount: \$615,467.55 Cost Overrun/Underrun: 0.28% Availability Date: 5/1/2012 Letting Date: 3/28/2012 Completion Date: 8/1/2012 Work Began: 5/1/2012 Revised Completion Date: Estimated Completion: 8/1/2012 Last Estimate Thru: 6/30/2012 Scheduled Progress: 53% Last Estimate Paid: 7/10/2012 Actual Progress: 62.06%</p>	
<p>Contract Number: DE00030 Route: I-40 Physical Division: 5 County: Durham Administrative Division: 5 TIP Number: R-4049R Length: 0 miles Federal Aid Number: STP-000S(416) Resident Engineer: Cadmus Capehart, PE RE Phone Number: (919)840-0914 Location Description: I-40 AND I-85 Type of Work: Dynamic Message Sign Replacement Contractor Name: ALS OF NORTH CAROLINA, INC. Contract Amount: \$641,917.55 Cost Overrun/Underrun:</p>	

Availability Date: 6/4/2012 Completion Date: 2/28/2013 Revised Completion Date: Last Estimate Thru: Last Estimate Paid:	Letting Date: 5/9/2012 Work Began: Estimated Completion: Scheduled Progress: Actual Progress:
Contract Number: DO00069 Physical Division: 5 Administrative Division: 5 Length: 0 miles Resident Engineer: Cadmus Capehart, PE Location Description: BRIDGES #12, 71, 137, 154, 156, AND 169 ON NC-147. Type of Work: BRIDGE PAINTING. Contractor Name: S & D INDUSTRIAL PAINTING, INC. Contract Amount: \$922,562.15 Availability Date: 7/11/2011 Completion Date: 11/7/2011 Revised Completion Date: 8/28/2012 Last Estimate Thru: Last Estimate Paid:	Route: NC-147 County: Durham TIP Number: BK-5102G Federal Aid Number: BRNHS-0147(4) RE Phone Number: (919)840-0914 Cost Overrun/Underrun: Letting Date: 8/19/2010 Work Began: 7/11/2011 Estimated Completion: Scheduled Progress: Actual Progress:

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO- ARRA

County	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
rev 8/1/12							
Orange	ER-5100 GE	Landscape planting on US 15-501 @ SR 1734 (Erwin Rd./Europa Dr.)	11/24/2009	4/30/2012	All work complete; final inspection held	\$65,000	ARRA
Orange	U-3306 34913.3.ST1 STM-1733 (16)	Grading, drainage, paving, signals, curb and gutter, and retaining wall on SR 1733 (Weaver Dairy Rd.) from NC 86 to Old Sterling Road	7/20/2010	6/15/2013	65%	\$13.4 million	ARRA
Orange	U-4704	Computerized Traffic Signal System for Chapel Hill-Carrboro	9/15/2009	Revised completion 9/30/12	95% complete	\$5.175 million	ARRA
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST							
County	TIP #	Description	Let Date	Completion Date	Status	Cost	Comments

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

County	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
Orange	36945	Upgrade traffic signal with mast arm and install pedestrian signal heads on SR 1010 (Franklin St.) @ Mallette St.	11/4/2010	Fall 2012	Work delayed; numerous utilities interfere with boring under road; contractor has requested meeting to resolve; Town has submitted check for \$33,000	\$173,000.00	Small Construction/ Town of Chapel Hill
ALAMANCE/ ORANGE	17BP.7.P.2	Bridge Deck Preservation - BRIDGES 38, 41, 51, 52, 121, AND 293 IN ALAMANCE COUNTY; BRIDGE #6 on US 70 Bus.,#59 on NC 86, and #81, & #82 on I-85 in ORANGE COUNTY	5/15/2012	6/30/2013	Available 6/25/12	\$2.8 million	Bridge Preservation
Orange	C-4932 A	Construct a Transit Shelter at the Park and Ride Lot for DTCC in Hillsborough and install bike racks on Orange Public Transportation buses	5/17/2011	Fall 2012	Bike racks installed and reimbursed ; bus shelter installed; Field inspection 5/23/12 and punchlist sent to County 5/30/12	\$20,275	CMAQ
Orange	ER-2971 G 3607.3.09	Widen roadway, install curb and gutter and construct sidewalk along SR 1750 (Estes Drive) between Burlage Circle and SR 1010 (Franklin Street)		10/3/2012	MA with Town executed; plans & proposal received from Town; revisions made by NCDOT and incorporated by Town 6/29/12	\$200,000.00	Small Construction/ STP-Division Enhancement
Orange	ER-2971 G 3607.3.13	Construct sidewalks on SR 1900 (Mason Farm Road) from US 15/501 (Fordham Blvd.) to Highland Woods Road			M.A. with Town	\$30,000.00	Division Enhancement
Orange	SR-5000 S 40922.1.18 PE	Education, encouragement, evaluation, and neighborhood outreach for Carrboro Elementary School	N/A	N/A	Municipal Agreement with Town; program underway	\$12,865	Safe Routes to Schools

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

Orange	SR-5001 AE	Construct 870 linear feet of 5' sidewalk on Elm Street from existing sidewalk near Weaver Street to Shelton Street in Carrboro	2/21/2012	120 days after Notice to Proceed	Const. =48% compl.; CEI proposal approved	\$300,000.00	SRTS
Orange	SR-5001 AR	Construct 320' of 5' sidewalk on Culbreth Road between Cobbleridge Rd. in Chapel Hill and Rosburn Rd. in Carrboro	4/12/2012	8/10/2012	Town rejected bids from 4/12/12; re-bid 5/31/12- Concurrence in Award pending Town resolution	\$55,000 SRTS/\$108,000 STPDA	SRTS/STP-DA
Orange	SS-4907 U 42205.2 42205.1 42171	Improve sight distance on SR 1710 by lowering the crest vertical curve on the westbound approach to the intersection of SR 1710 (Old NC 10) @ SR 1713 (Mt. Herman Church Road)	N/A	6/28/2012	FA construction complete	\$320,000	Spot Safety-State
Orange	SS -4907 V 42423.3 42423.1	Realign intersection of SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	Let 12/20/12		Plans to R/W 7/2/12	\$198,000	Spot Safety-State
Orange	U-4726 DC	Wilson Park Multi-Use Path	6/7/2012	105 days from Notice to Proceed	Municipal Agreement with Town of Carrboro; CEI approved; Town rejected bids from 3/13/12; bid opening 6/7/12- req. for Concurrence in Award rec'd. 6/28/12	\$39,262.65 PE \$129,431.35 C	STPDA
Orange	U-4726 DD	Construct sidewalk on Rogers Road from Homestead Road to Meadowrun Ct.	5/1/2013		Municipal Agreement with Town of Carrboro; Design underway- need to coordinate with District for developer project at Purefoy Rd.	\$67,025 PE \$469,175 C	STPDA

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

Orange	U-4726 DE	Construct Bolin Creek Multi-use Path from Homestead Road to Chapel Hill High School	1/1/2013		Municipal Agreement with Town of Carrboro for construction (replaces EL-4994) Design underway	\$59,000 PE	STPDA
Orange	U-4726 DF	Bicycle detection at Signalized Intersections	10/18/2012	FFY 2013	Municipal Agreement with Town of Carrboro	\$36,000	STP-DA
Orange	U-4726 IF	Design and install stairs from the sidewalk on the north side of Franklin St. to the Bolin Creek Trail	N/A	N/A	Supplemental agreement to remove construction; Town to pay for construction	\$20,000 PE	STPDA
Orange	U-4726 IG	Construct 10' wide greenway from existing Fan Branch Trail near Culbreth Rd. and US 15/501 to Phase I	7/24/2012		Municipal Agreement with Town of Chapel Hill; requested construction funds 5/25/12; Supplemental to add \$100,000 pending	\$1,310,000	STPDA
Orange	W-5207 E 45337.1.5 PE	Installation of a roundabout on SR 1734 (Erwin Rd.) and SR 1791 (Mt. Moriah Rd.) near Chapel Hill	Revised to 8/2012	12/31/2012- to be revised	Consultant design- R/W staking complete for acquisition	\$450,000	High Hazard Safety
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST							
County	TIP #	Location Description	Est. Let Date	Completion Date	Status	Cost	Comments
Durham/ Orange	EB-4707	Bicycle improvements(Bikeway and signals) on Durham/ Chapel Hill (SR 1838/SR 2220)from SR 1116 (Garrett Road) in Durham County to US 15-501 in Orange County				\$4.0 million	Delayed R/W to 8/12 and Construction to 9/13 to allow City to secure increased funding

ACTIVE NCDOT PROJECTS LOCATED IN DCHC MPO-NON ARRA

Orange	U-0624	Corridor upgrade on NC 86 (S. Columbia St.)including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	10/16/2012			\$4.2 million	STP
Orange	U-2803	Widening of SR 1919 (Smith Level Road) from Rock Haven Road to Bridge# 88 over Morgan Creek	12/18/2012			\$3,7 million	
Orange	W-5318	GRADE, DRAIN, AND PAVE NC 86 FROM NC 57 TO CASWELL COUNTY LINE GEOMETRIC IMPROVEMENT, PAVED SHOULDERS AND RUMBLE STRIPS; Resurfacing	1/15/2013			\$4.75 million	Remove centerline rumble strpes per JMM

Plan made, N.C. 54 future up to players

TheDurhamNews.com By Jim Wise, News and Observer June 20, 2012

If you virtually go to nc54-i40corridorstudy.com, you'll find the final, approved version of how to keep traffic congestion in southwest Durham and eastern Chapel Hill from getting too much worse than it is already.

If you actually go to the N.C. 54/I-40/Farrington Road intersection, you'll find out why Durham and Chapel Hill spent \$350,000 to have the study done. It's generally regarded as the Triangle's most bottlenecked intersection, and should be the first place commuters see some practical results from the plans on paper.

That result would be a dedicated "slip ramp" allowing northbound motorists on Farrington Road to get onto I-40 going east, toward the Research Triangle and airport, without having to go through the intersection, said Leta Huntsinger, technical services team leader with the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization.

The MPO has applied to the state Mobility Fund to pay for the \$3.4 million slip ramp. DOT has not made an award yet, but Huntsinger and Durham City Councilman Mike Woodard, a member of the MPO's transportation committee, said highway authorities have indicated they like the project very much.

Even so, the slip ramp would not open for three to five years, Woodard said, and it is but one of five different projects, totaling an estimated \$18.5 million, directly involved in the intersection's reconfiguration. Indirect steps include building and rebuilding a "collector street" system for decongesting traffic flow, estimated at \$31.4 million.

Further along, but on the N.C. Department of Transportation's to-do list and "in the funding stream," said Chapel Hill Planning Director David Bonk, is widening N.C. 54 from four to six lanes from Farrington Road to Barbee Chapel Road: \$22.7 million.

Long-range plan

The entire master plan for the corridor – from Fordham Boulevard (N.C. 15-501 Bypass) in Chapel Hill east to Interstate 40 in Durham County, and from Ephesus Church Road south to Stagecoach Road – spans from now to 2035.

The DCHC MPO gave the N.C. 54-I 40 master plan its seal of approval in May. Adopted plans, though, are not adopted laws and authorities' priorities and minds can change over time.

"When the MPO adopts a plan that's had that much work go into it, they tend to pay attention to it," said Chapel Hill Town Councilman Ed Harrison.

The MPO has authority over transportation priorities affecting its members. The plan also involves augmented bus service and a light-rail line being managed by Triangle Transit, the future of which is wrapped up with the proposed light-rail line and the half-cent sales tax going to Orange County voters in November.

Besides building and rebuilding roads, rails and greenways and expanding public transportation, all dependent on money from sources outside the local area, the 54-40 big picture includes managing how the land they serve is used – which has a lot to do with how much traffic of all kinds there is to deal with.

“From the land-use perspective, there are some recommendations we would certainly take into account,” said Aaron Cain of the Durham Planning Department.

Carolina Crossing

An indication of how much they are taken into account could be already on the way in the form of a rezoning application for Carolina Crossing II: a 84,000-square foot office project, on a 5-acre Farrington Road site just yards north of N.C. 54.

Developer Chris Howlett complained, before the 54-40 plan was adopted, that its proposed reconstruction of the Farrington-54-40 intersections would discourage commerce and hurt businesses already there. Some nearby residents, on the other hand, claim that more development would only aggravate a bad situation.

The rezoning, case Z1200004, is currently under the city’s review. How it is received by the Durham Planning Commission and City Council could be a test of the 54-40 plan’s influence on real-life decision making.

“It definitely will,” Huntsinger said. “The challenge is, (the case) hit the review process before it was adopted (by the MPO) and ‘official.’ “

Ideally, she said, Carolina Crossing would be sited near a light-rail station where the 54-40 plan encourages high-density mixed-use development.

“But the light-rail station doesn’t exist yet,” she said, and won’t for more than a decade, at the soonest.

Neither Chapel Hill nor Durham planning staffs expect to ask their governing bodies to adopt the 54-40 plan as official policy, Cain and Bonk said. Still, Bonk said Chapel Hill’s council members have weighed in on it and work is under way to reconcile it and the town’s in-process long-range land-use plan.

“The important thing about the plan, until the funding comes along, is that it should be driving the municipal decisions (affecting) that area,” said Woodard. That includes planning, transportation and economic development – and who is making decisions for the next 23 years.

Congress reaches deal on transportation bill, the first since 2005

The Washington Post By Ashley Halsey III Published: June 27, 2012

Congress has reached an agreement on a transportation bill for the first time since 2005, averting a crisis that could have disrupted the nation's highway projects at the height of the construction season.

In the final days before a deadline, Republicans dropped their demands to piggyback onto the bill approval for the Keystone oil pipeline, as well as relaxation of proposed restrictions on coal ash produced by power plants.

In return, Democrats gave up on \$1.4 billion for conservation and agreed to allow states more leeway in how they use money that was once mandated for landscaping, bike improvements and pedestrian walkways.

"I am so glad that House Republicans met Democrats halfway, as Senate Republicans did months ago," said Sen. Barbara Boxer (D-Calif.), the bill's chief architect and advocate. "The bill is funded at current levels, and it will protect and create 3 million jobs."

The conference committee bill, which would maintain spending at the current level of about \$54 billion a year, is set to come up for a ratification vote in both chambers this week.

"This is the jobs bill for the 112th Congress," said House transportation committee Chairman John L. Mica (R-Fla.). "This agreement will help strengthen our nation's construction industry and provide stability to highway, bridge and infrastructure projects across the country."

The deal was struck in the shadow of a June 30 deadline, when federal highway funding was due to expire. It came after House Speaker John A. Boehner (R-Ohio) and Senate Majority Leader Harry M. Reid (D-Nev.) ordered conference committee members back to the table after talks appeared to falter last week.

While the details will take several days to emerge, the bill would streamline a federal system that expanded its network of agencies and programs in a patchwork fashion to meet immediate needs, producing a cumbersome bureaucracy that has smothered state transportation projects.

"We speed up project delivery, cut red tape and do it without jeopardizing environmental laws," Boxer said. "For the first time, we send half of the funds for bike paths and pedestrian walkways directly to local entities, and we protect those funds while giving states more flexibility on their share."

The bill also would provide greater incentives for corporations to partner with government to invest in major infrastructure improvements.

The agreement is a notable achievement for lawmakers, who have garnered public disdain for their inability to agree on much. But even long before partisan politics came to infuse every issue, Congress had proved itself unable to resolve the nation's transportation needs.

It last approved a long-term plan in 2005 and has extended funding at that level nine times since the measure expired almost three years ago. Democrats controlled both the House and the Senate during the first several extensions.

No one pretends that the new bill would provide a sound long-term footing for the national transportation system. It would expire in 2014, and it would draw on several other pools of money to supplement the longtime source of federal transportation funding, the Highway Trust Fund.

In a sharp critique this month, Taxpayers for Common Sense concluded: "The story remains a familiar one: Congress wants to spend more money than it has."

The transportation bill would rely on transfers of almost \$5 billion from the general fund; almost \$3.7 billion from a fund to fix leaking underground storage tanks; almost \$700 million from the gas guzzler tax, which targets new cars with poor fuel economy; and \$4.5 billion from tariffs on imported vehicles.

“The Highway Trust Fund is going bankrupt, and this paid-for measure provides necessary, real reform that focuses our limited resources on critical infrastructure needs,” Mica said.

The federal gas tax — set at 18.4 cents per gallon — funded the interstate system and contributes almost \$40 billion toward current highway and transit projects. But that revenue has been bolstered in recent years by \$34.5 billion from general tax funds, a practice that distressed lawmakers and transportation planners who prefer the comfort of a dedicated source of money.

The gas tax was last increased in 1993, and Congress has had little interest in raising it. (Inflation has eroded the value of that 1993 tax to 11 cents.) Neither have lawmakers shown much inclination to implement a taxing system that charges drivers for the miles they travel through some sort of toll.

If Congress continues transportation spending at current levels through 2021, the Highway Trust Fund will fall between \$85 billion and \$115 billion short. And even if lawmakers find a new way of funding transportation to fill that gap, the spending will be far less than what is required to meet infrastructure needs.

A group co-chaired by former transportation secretaries Samuel K. Skinner and Norman Y. Mineta has estimated that an additional \$134 billion to \$262 billion must be spent per year through 2035 to rebuild and improve roads, rail systems and air transportation.

The American Society of Civil Engineers has projected that \$1.7 trillion should be invested between now and 2020 to rebuild roads, bridges, water lines, sewage systems and dams that are reaching the end of their planned life cycles.

The debate over programs for bikes, pedestrians and landscaping — known as enhancements — was a flash point, with each side believing that it was taking the more pragmatic and realistic approach. Cyclists and pedestrians argued that investment in riding and walking saves fuel, reduces pollution, promotes health and relieves congestion.

Opponents of the programs, largely Republicans, didn't debate any of that but said the initiatives were a luxury in tight times when roadway repair should be given a higher priority, and they thought that states should be allowed leeway in setting spending priorities.

A deal reached among Senate leaders to freeze student-loan rates for a year will probably be packaged with the transportation measure, speeding passage through both chambers before the end of the week.

Cyclist to paving-crew pilot car: Not so fast!

Submitted by Bruce Sicheloff on 6/26/2012

Maybe it wasn't head-strong bicyclists who started that little dust-up on Dairyland Road between the two-wheelers and a DOT paving contractor. Maybe, Orange County bike rider Ivan Bachelder says, it was the contractor's fault.

As the Road Worrier reported today (see [column with reader comments](#)), DOT is repaving the rural Orange County road, extremely popular with bike riders, and adding 24-inch paved shoulders on both sides. There were alarms when the paving contractor pilot truck found itself meeting cyclists head-on.

DOT and others said cyclists ignored a flagger's request to stop, and decided to go rather than wait for the pilot truck.

But at least in some cases, Bachelder said by email, the pilot vehicle drove too fast and the cyclists fell behind. Then, when making a return trip, the pilot truck met the cyclists head-on:

Well, as you know, the pilot truck is responsible for leading vehicular traffic from one end of the construction zone to the other. The problem is that many bikers cannot keep up with the pilot truck, especially given the length of the construction zone (over ½ mile, up a hill in some cases). If the truck driver is not paying attention, he may not realize that there are bikers that still have not yet made it across the zone, and therefore start back with a line of cars in the other direction. In other words, it is not necessarily because the bikers are ignoring the flaggers.

This is precisely what happened to us. We waited for almost 5 minutes when the flagger (who couldn't speak English) told us to stop. We waited for the pilot truck, got in line behind the cars, fell behind, and then had to contend with the pilot truck and a line of 10 cars or so coming back in the other direction at us. We had to pull over to the side of the road and wait for them, and then also for all of the heavy paving trucks behind them. You can imagine our surprise and indignation that everyone in that line of vehicles gave us dirty looks as if we were in the wrong, when in fact we were doing exactly what we had been told.

The contractor, Riley Paving Co. of Carthage, posted signs telling cyclists to keep away from Dairyland Road until the paving work is finished.

DOT ordered the signs removed, reminded Riley that cyclists and cars have equal rights to share the road, and then issued a news release reminding everybody to be careful.

Maybe DOT should remind the pilot truck driver to keep those cyclists in his rear-view mirror.

<http://blogs.newsobserver.com/crosstown/cyclist-to-paving-crew-pilot-car-not-so-fast>
July 2, 2012

DOT raises road-maintenance questions again

The Herald-Sun By Ray Gronberg July 14, 2012

DURHAM, NC – N.C. Department of Transportation officials have once again floated the idea of asking or forcing cities and counties to take over the job of maintaining secondary roads that the state now owns.

The proposal surfaced in a draft of a long-range plan the agency says is supposed to set its overall direction to 2040.

As outlined in the plan, the idea is that the state should at the very least study a "transition or transfer of some portion of funding [or] operation" of roads falling below the status of interstates and numbered U.S. and North Carolina routes.

An appendix that explained the proposal in more detail indicated that advocates don't see the move as one that would apply to all 100 of the state's counties.

Instead, it would target "selected local governments," primarily "in urbanized counties," provided the General Assembly agrees to give them local-option taxing authority to raise money to use for paving and other repairs.

Another funding option is to share with local governments revenues from the state's gasoline tax, the draft said, acknowledging that any transfer "likely will meet opposition from the affected counties and municipalities."

Indeed, just as in 2008, when the idea first surfaced, city leaders from across the state piped up this spring to say they don't want the DOT dumping its problems on their governments.

Their complaints prompted a DOT official involved in the planning effort, Terry Arellano, to email state Board of Transportation members in May to say that agency staffers, "because of the continuing negative perception," would recommend dropping the proposal from the final version of the document.

"It is not now, nor was it ever, intended to be a recommendation to turn over the secondary roads system to municipal and county governments," Arellano said in his email.

That comment appeared to flatly contradict the wording of the appendix, which said the shift would require state legislation "to enable counties [or] municipalities to build and maintain secondary roads and expand their ability to raise local-option revenue."

The apparent disconnect may mirror attitudes at the very top of the DOT.

State Transportation Secretary Gene Conti in 2010 told local officials he didn't think a secondary road transfer "would be at all workable, financially, institutionally or any other way."

But the agency's No. 2 official, Chief Operating Officer Jim Trogdon, while still a legislative committee aide, said in 2008 he thought a transfer is "a good potential action to pursue."

Conti and Trogdon in theory could be out of their jobs early next year after lame-duck Gov. Beverly Perdue steps down.

But Trogdon made a point late in the just-concluded General Assembly session of publicly breaking with Perdue over a budgeting issue involving a proposed toll road in Gaston County. Perdue wanted it funded in the state's 2012-13 budget; Trogdon made it known to legislators he didn't see any need to reserve money for it now.

That combined with a flattering newspaper profile that played up Trogdon's military connections – he's second in command of the N.C. National Guard – had political observers wondering whether he's angling to stay on when Lt. Gov. Walter Dalton or former Charlotte Mayor Pat McCrory replaces Perdue in January.

The draft of the 2040 plan says the state does need to change the way it does business because the gasoline tax, long term, isn't likely to generate enough revenue to keep North Carolina's transportation network operating to the same standards as today.

It said new revenues – generated at the very least by indexing existing taxes and fees to inflation – will be necessary to keep maintenance and system expansions from losing ground.

Existing revenue streams "are insufficient to maintain status quo," suggesting that "infrastructure health and mobility will suffer as North Carolina grows, becomes more urban, and systems age," the draft said.

Gasoline taxes are expected to fall off as cars and trucks become more fuel-efficient and as prices at the pump continue to fluctuate.

Planners estimate that the DOT from now to 2040 will need \$86.4 billion, in today's dollars, to preserve existing mobility levels. But they think it will only be able to raise \$54 million – leaving a \$32.4 million gap.

North Carolina has one of the country's most extensive state-owned road networks, largely because the state took over county road systems after local-government finances collapsed during the 1930s-era Great Depression.

This state is one of only nine in the U.S. "where counties own no roadways," an appendix to the draft 2040 plan stated.

Pending NC toll road projects less a sure thing

WRAL.com Posted: July 15, 2012 @ 10:57 a.m.

RALEIGH, N.C. -- An unusual probe by North Carolina Republican legislators into edited state Department of Transportation letters on funding for two divisive toll projects raised howls among Democrats who believed it was designed to embarrass Gov. Beverly Perdue.

"It's a tempest in a teapot," said Sen. Dan Blue, D-Wake, a former House speaker who couldn't recall hearing before the kind of grilling DOT workers received from the Senate Rules Committee in the final days of the session that ended this month. "It's much ado about nothing, and it's all political posturing."

Republicans defended their investigation as neither about politics nor the merits of the Garden Parkway and Mid-Currituck Bridge projects — but rather ensuring that lawmakers get factual information from state officials.

However, the investigation raised more questions about if or when shovels of dirt will be turned over for the bridge and parkway construction, which was mandated by the Legislature when it was in Democratic hands. A new crop of elected GOP lawmakers in the majority have questioned the efficacy of going through with the projects, giving hope to project opponents.

"I think they will expose some of the reasoning for this road," said Marion Beach, 69, of Belmont. He and his wife's home sits in what would be the westbound lanes of the current preferred route for the Garden Parkway. "I don't see a benefit for Gaston County. I was opposed to the road long before it coming through my property."

The proposed 7-mile bridge connecting mainland Currituck County with the northern Outer Banks and 22-mile parkway linking Gaston and Mecklenburg counties could cost \$1.5 billion combined. Tens of millions of tax dollars will be paid annually to help pay a portion of expected revenue bonds that tolls won't meet.

The state Department of Transportation and the North Carolina Turnpike Authority, which was formed 10 years ago to develop, build and operate toll projects, said the Perdue administration is committed to seeing these projects built. But Perdue leaves office in January. The projects currently are on track for completion in 2016 — unless potential environmental litigation delays them as it has with another toll project in Union County.

The Senate committee's investigation into the letters shined the spotlight on the two projects and the \$63 million combined that legislators have pledged to give annually as "gap funding" for the incurred debt.

Letters purported to be signed by DOT chief operating officer Jim Trogdon appeared to have reversed his earlier suggestion that the gap funding wasn't needed this coming year. It turned out that two Perdue aides changed Trogdon's draft of the letters and sent them to key legislators — affixed with his digital signature — without his express approval.

Trogdon disavowed the letters within hours of their release June 14. The enacted state budget still delayed the gap funding for another year. The governor's aides attributed the letter changes to sloppy editing completed in a rush to affirm Perdue's commitment to the projects. But the Republican majority on the Rules Committee wasn't convinced and sent the findings to the State Ethics Commission for review.

Sen. Stan White, D-Dare, who spent his first full term in the Legislature trying to preserve the Mid-Currituck project, said the flap can only hurt a project that's been discussed for 20 years. White's predecessor, Senate leader Marc Basnight, D-Dare, was a powerful champion for the span.

White said the Mid-Currituck Bridge would reduce hurricane evacuation times and increase employment for northeastern North Carolina residents on the northern Outer Banks by making it easier to commute to work in places such as Corolla by bypassing Dare County.

"On a given Saturday or Sunday at this time of year, what normally would take 45 minutes is a four-hour drive," he said.

But opponents said the project would only encourage more population in a region known for its seclusion and could actually make it more difficult to evacuate people. Improving existing roads near and on the Outer Banks is a better alternative, said David Farren, a senior attorney at the Southern Environmental Law Center.

"The obvious purpose of this project is to promote massive development on a fragile, shifting barrier island," said Farren, whose group successfully sued the state to delay the Monroe Bypass toll project. Now the group is weighing whether to sue over the Garden Parkway by September on similar environmental grounds.

Opponents of the Garden Parkway said well-connected residents in the region — including former legislators — stand to win financially if the road is built because their companies own property near the proposed route.

Freshman Sen. Bill Rabon, R-Brunswick, co-chairman of the Senate transportation budget subcommittee, said he wants to see the Legislature repeal its requirement that the Mid-Currituck Bridge and Garden Parkway be built. The projects should then be evaluated by DOT using the same measures as other road-building initiatives to minimize political considerations.

"If they are good projects and if we should invest in those projects, then they will rise and you can address them by whatever means we need," Rabon said.

First-term Sen. Kathy Harrington, R-Gaston, another transportation budget-writer, opposes the parkway. A GOP primary runoff this week for a Gaston County House seat also could result in ensuring another parkway opponent joins the Legislature.

Transportation Secretary Gene Conti said last week his agency is focused on carrying out projects directed by the Legislature — for example, the Garden Parkway — in a way that makes fiscal sense.

"If the Legislature decides that we shouldn't do it, that's a whole different story," Conti said.

Watch for buses (perhaps with envy) on I-40 shoulder

The News and Observer By Bruce Sicheloff July 16, 2012

Interstate 40 commuters should not be surprised on Monday to see the occasional Triangle Transit bus rolling past them on the freeway shoulder – while cars and trucks are stuck in the latest traffic jam.

North Carolina's "bus-on-shoulder" pilot program gets under way today on I-40 in Durham County. It will give bus riders a new advantage over other commuters.

Whenever the traffic stops or crawls as slowly as 35mph, transit bus drivers will have the option to drive slowly on the shoulder – something that remains illegal for other vehicles. Bus drivers will be allowed to drive on the shoulder no faster than 35mph, and no more than 15mph faster than I-40 traffic.

The initial program will be in effect for a 10-mile section of I-40 in both directions between U.S. 15-501 and N.C. 147 (the Durham Freeway and Triangle Expressway), and in the eastbound direction for two miles from N.C. 147 to Page Road.

Drivers on these Triangle Transit routes will have the bus-on-shoulder option:

- CRX – Chapel Hill-Raleigh Express, the only route that uses this entire portion of I-40
- 800 – Chapel Hill to Regional Transit Center via Southpoint
- 700 – Durham to Regional Transit Center (southbound only – eastbound on I-40)
- 42 – Shuttle between IBM and Regional Transit Center (southbound only – eastbound on I-40)

If this first bus-on-shoulder program goes well, state Department of Transportation officials say it might be extended to other busy transit routes.

NCDOT: Name I-40/440 project and get 'bragging rights'

WRAL.com Posted: 5:40 p.m. July 30, 2012 Angie Basiouny, Web Editor

The North Carolina Department of Transportation is asking Triangle residents to come up with a creative name for a three-year project to reconstruct Interstate 40/440.

Department officials on Monday called for submissions to their contest to find a catchy name like Carmageddon, the moniker for a major highway closure in Los Angeles, or Crawlumbus, which was given to a three-year project in Columbus, Ohio.

The winning name will be used in all future references to the \$168 million project, including on the project website. The winner will also retain "bragging rights," officials said.

The major rebuild of 11 miles of I-40/440 – from U.S. Highway 1 in Cary to U.S. Highway 64/264 in Raleigh – will require lane closures, sometimes leaving only two lanes. Officials said the section of highway is 30 years old, and workers must dig at least 2 feet to remove and replace concrete and asphalt on the road, shoulders and ramps.

Contest entries must be submitted to lfriedman@ncdot.gov by 5 p.m. on Aug. 10.

The name should be one or two words and must not contain profanity. NCDOT employees will pick the five best names and put them to a public vote on www.ncdot.gov from Aug. 14 to 17.

The winner will be announced Aug. 22.

Art while you wait

The Herald-Sun By Cliff Bellamy Posted August 2, 2012

DURHAM – Durham has come a long way from its “Amshack” days. City Councilman Howard Clement coined the phrase, combining “Amtrak” and “shack,” to describe the spare and uninviting passenger shelter that sat next to the railroad tracks on Pettigrew Street.

Now Durham has a true transit station, and Tuesday the city unveiled two new bus passenger shelters on the Bull City Connector route, complete with public art. Visual artist David Wilson’s shelter at Oldham Towers on East Main Street was unveiled in an official ceremony on the lawn of the towers. Wilson’s art takes images from historic Durham photographs and intersperses them with a map of downtown Durham.

To create his art, Wilson said he looked back into the history of transportation in Durham. “I did a lot of research to tie in the history,” Wilson said. His idea of public art is to make a connection with history, and when riders are waiting for the bus at the Oldham Towers site, they can perhaps learn something about Durham’s history, he said. Wilson’s art has images of St. Philip’s Episcopal Church, the Durham Hosiery Mill Band and many downtown buildings.

Farther north on Main Street, artist Chris Vespermann’s tribute to blues icons Rev. Gary Davis, Sonny Terry and Blind Boy Fuller also opened for the public Tuesday.

In the next year, nine more shelters with public art will dot the Bull City Connector route, a free bus that

connects Duke University with Golden Belt and other areas downtown. The shelters are part of Durham's Public Art Program. In August 2010, the nonprofit group Durham Area Designers, which advocates for better public spaces, teamed with the Durham Arts Council and issued a call for artists to design shelters with art. The artists' charge was to reflect in some way Durham's history and culture.

A selection committee picked artists Wilson of Apex, Vespermann of Cary, Sharon Dowell of Charlotte and Al Frega of Durham to create the shelters. Future shelters will be at Ninth Street, Duke Street, Brightleaf Square, West Village, Five Points and Durham County Human Services Complex.

Lisa Hemingway, a resident of Oldham Towers who also is vice president of the building, had high praise for Wilson's design. "I think it's beautiful," Hemingway said. Too often visitors vandalize bus shelters, but with the art work "hopefully people will think of it as the city giving back, that we have a chance to grow, that better days are coming," she said.

Vespermann's design takes three photos of Davis, Terry and Fuller, who made the Bull City a center for the blues, and gives them an op-art (or optical art) effect. Vespermann was inspired by the musicians, who not only had to contend with being African-American in the 20th century with its segregation laws, but also in the case with Davis and Fuller, dealt with blindness, he said. They did not have benefit of formal lessons or music theory, he said. "These gentlemen, never having access to that, were able to express themselves unbridled," Vespermann said.

He is still working on the sun shade part of the courthouse shelter. It will have a Braille translation of a song that Davis, Terry and Fuller recorded together: "I've got fiery fingers/I've got fiery hands/And when I get up in heaven/Going to join that fiery band." Vespermann calls the technique "painting Braille with light." Vespermann is working on a shelter for Duke's East Campus commemorating President Theodore Roosevelt's 1905 speech there.

Dowell has two shelters in design – one for Brightleaf and one for Golden Belt. Some photographs of her concept were on view at the unveiling. The Brightleaf design takes advantage of the district's architecture. The Golden Belt art will have images of the tobacco bags that were once manufactured there, along with the building's wooden beams. "I like to work with architecture a lot," Dowell said. "My art is about place." Dowell added, "This is really fun to work on."

Eventually, the Bull City Connector route will have 11 shelters with public art. The estimated cost for all the shelters is \$259,158, according to the Triangle Transit Authority, which manages Durham Area Transit Authority. Most funding, 80 percent, comes from federal transit funds, the rest from the city's transportation budget, the TTA said.