DCHC

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

AGENDA

February 24, 2010 **City Council Committee Room**
9:00 a.m. **2nd floor Durham City Hall**

1. **Preliminaries**

2. **Adjustments to the Agenda**

3. **Public Comments**

ACTION ITEMS

4. **Approval of January 27, 2010 TCC Meeting Minutes**
(Attachment 4)

A copy of the January 27, 2010 minutes is enclosed as Attachment 4.

TCC Action: Approve minutes of the January 27, 2010 TCC meeting.

5. **MPO Deadlines**
(Attachment 5)
Maricia Brown, LPA Staff

A memo describing MPO deadlines for UPWP submittals, reporting, and supporting documentation is included as Attachment 5.

TCC Action: Receive information and acknowledge procedural changes**.**

6. **FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #13 – STP-DA Funding for the Unified Planning Work Program**
(Attachment 6, 6A)
Maricia Brown, LPA Staff
Ellen Beckmann, LPA Staff

The Amendment to the FY 2009-2010 UPWP and the Draft FY 2010-2011 UPWP require an amendment to the MPO's STP-DA table and FY 2009-2015 MTIP. Attachment 6 is a resolution to amend the FY 2009-2015 MTIP in FY 2010 and 2011 for project U-4727, DCHC Planning Allocation and Unified Work Program. Attachment 6A is a copy of the STP-DA table for FY 2010 through 2015 with the specific changes to U-4727 highlighted. The remainder of the STP-DA table will be approved and the MTIP will be amended within the next few months pending

NCDOT review and further information on the impact of the federal rescission on the Congestion Mitigation and Air Quality Program.

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

7. FY 2009-2010 Unified Planning Work Program – Amendment #1
(Attachment 7, 7A)
Maricia Brown, LPA Staff

The TAC approved the 2009-2010 UPWP on March 11, 2009. The UPWP provides yearly funding allocations to support the ongoing transportation planning activities of the DCHC MPO. The UPWP must identify MPO planning tasks to be undertaken with the use of federal transportation funds, including highway and transit programs. Funds that would not be expended during the current fiscal year (FY 2009-2010) must be de-obligated through an amendment in order for the funds to be available for programming during the next fiscal year (2010-2011). The proposed Amendment #1 is necessary in order to reflect de-obligation of FY10 funds. Attachment 7 is a memo describing Amendment #1 to the 2009-2010 UPWP. Attachment 7A is a resolution.

TCC Action: Recommend that the TAC adopt a resolution regarding Amendment #1 to the 2009-2010 UPWP (Attachment 7A).

8. Draft FY 2010-2011 Unified Planning Work Program
(Attachment 8, 8A, 8B)
Maricia Brown, LPA Staff

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

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

TCC Action: Recommend that the TAC release the draft FY 2010-2011 Unified Planning Work Program for public comment

9. Safe Routes to School Infrastructure Grant
(Attachment 9)
David Bonk, Town of Chapel Hill

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

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

10. FY 2009-2015 Metropolitan Transportation Improvement Program – Amendment #14
(Attachment 10)
Ellen Beckmann, LPA Staff

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

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

11. Farrington Road Study
(Attachment 11, 11A)
Andy Henry, LPA Staff
Felix Nwoko, LPA Staff

The goal of the Farrington Road Corridor Study is to identify appropriate future transportation improvements in an area that has great growth potential but is currently rural in character and possesses a large expanse of environmentally-sensitive land. The Study was conducted in 2007 and 2008, and the TAC received a preliminary Study presentation at their June 11, 2008 meeting that covered the issues, analysis, scenario planning and preliminary recommendations. The TAC received the presentation and referred the matter to staff. The Chatham County Board of Commissioners received a similar presentation on September 15, 2008.

The preliminary Farrington Road Corridor Study recommendations were incorporated into the draft 2035 Long Range Transportation Plan (2035 LRTP), however several TAC members asked that the road widenings in the rural and environmentally-sensitive areas be removed from the 2035 LRTP. The final 2035 LRTP notably included transportation system management solutions, such as intersection improvements and roundabouts, in lieu of the roadway widenings. Subsequently, the following changes were made to the preliminary Farrington Road Corridor Study to produce the draft Study, which is Attachment 11.

1. The recommended road widenings in environmentally-sensitive areas have been removed based on concerns about the impact to wetlands and water quality. The study added

recommendations for intersection improvements and roundabouts to address anticipated congestion in these corridors.
2. An Executive Summary has been added to the front of the document.
3. The transportation recommendations are: more closely tied to deficiencies; divided into short- and long-term recommendations; and, clearly designated whether they are included in the 2035 Long Range Transportation Plan (2035 LRTP).
4. The land use scenario planning section has been improved with more detailed descriptions of the scenarios, results and recommendations

The TAC and local government elected bodies have not received the draft Study. Local elected bodies within the DCHC MPO planning area that might have an interest in receiving the draft Study would include:

- City of Durham;
- Durham Board of County Commissioners;
- Town of Chapel Hill;
- Orange County Board of County Commissioners; and,
- Chatham County Board of County Commissioners.

Staff believes the TAC and local governments will benefit not only from reviewing the recommended transportation improvements that are summarized in Figure 31 map (on page 99), but also from the land use scenario results summarized in Table 9 (on page 71). The scenario results describe the transportation impacts, such as reduced vehicle trips and increased conservation acreage, of implementing more compact or constrained land use development in the study area. Attachment 11A is previous version of the Figure 31 map displaying the preliminary Study recommendations.

TCC Action: Receive draft Farrington Road Corridor Study and make recommendation to the TAC.

12. <u>2010 Economic Stimulus Legislation - The "Jobs for Main Street" Act</u>
(Attachment 12)
Ellen Beckmann, LPA Staff

A second economic stimulus bill is currently being considered by the U.S. Congress. The Hous of Representatives has already passed the "Jobs for Main Street" Act and the Senate is considering a similar bill. Attachment 12 is a comparison of the House bill to the 2009 American Recovery and Reinvestment Act. The Federal Highway Administration and the Federal Transit Administration have requested that MPO and NCDOT staff begin preparing for the passage of this legislation by identifying potential projects and amending the Transportation Improvement Program.

TCC Action: Discuss how to prepare for the 2010 economic stimulus legislation.

13. <u>Elizabeth Brady Road</u>
(Attachment 13, 13A, 13B, 13C)
Ellen Beckmann, LPA Staff
Felix Nwoko, LPA Staff

In January, the TAC endorsed the no build option for U-3808, Elizabeth Brady Road (Attachment 13). In response to a review of the project and comments from citizens, NCDOT responded that they have stopped work on the project (Attachment 13A). The TAC requested that a recommendation be brought back to them on how to proceed with funding other improvements in Hillsborough. Attachment 13B is a modeling analysis of projects in Hillsborough. Attachment 13C is another modeling analysis of the congestion on Churton Street.

TCC Action: Discuss how to respond to the TAC's request on reprogramming funding to other projects in Hillsborough.

REPORTS FROM STAFF:

14. Reports from Staff
(Attachment 14)
Felix Nwoko, LPA Staff

TCC Action: Receive Report from staff

15. Report from the Chair
Mark Ahrendsen, TCC Chair

TCC Action: Receive Report from TCC Chair

16. NCDOT Report
(Attachment 16)
Wally Bowman, Division 5 – NCDOT
Mike Mills, Division 7 – NCDOT

INFORMATIONAL ITEMS

Adjourn

Next meeting: February 24, 2010

TECHNICAL COORDINATING COMMITTEE

January 27, 2010

MINUTES OF MEETING

The Technical Coordinating Committee met on January 27, 2010 at 9:00 a.m. in the Council Committee Room on the second floor of Durham City Hall. The following attended:

*Mark Ahrendsen	City of Durham – Transportation (TCC Chair)
*Bill Barlow	NCDOT – PTD
*Ellen Beckmann (Alternate)	City of Durham – Transportation
*Julie Bollinger	NCDOT – TPB
*David Bonk	Town of Chapel Hill
*Jeff Brubaker	Town of Carrboro
*Bonnie Estes	Durham City/County Planning
*Melissa Guilbeau	Chatham County
*Andy Henry	City of Durham – Transportation
*John Hodges-Copple	Triangle J COG
*Joey Hopkins (Alternate)	NCDOT – Division 5
*Tom King	Town of Hillsborough
*Karen Lincoln	Orange County
*Brian Litchfield	Town of Chapel Hill
*Ray Magyar	UNC – Transportation
*Patrick McDonough	Triangle Transit
*Kumar Neppalli	Town of Chapel Hill
*Pierre Osei-Owusu (Alternate)	City of Durham – DATA
*Liz Rooks	Research Triangle Foundation
*Patrick Wilson (Alternate)	NCDOT – Division 7
Maricia Brown	City of Durham – Transportation
Dale McKeel	City of Durham – Transportation
Ryan Mickles	Town of Chapel Hill
Joe Milazzo	Regional Transportation Alliance
Brian Rhodes	City of Durham – Transportation

*Voting Member
^Temporary Non-Voting Member
Quorum Count: 20 of 22 Voting Members Present

According to the TCC Bylaws, when a member misses three meetings in a row he/she is not considered a voting member on the third consecutive missed meeting. Voting privileges are reinstated on the second consecutive meeting that he/she attends.

Mark Ahrendsen, TCC Chair, called the meeting to order at 9:09 a.m. The Alternate Voting Members were identified and are indicated above.

PRELIMINARIES:

Adjustments to the Agenda

Ellen Beckmann asked that agenda Item 6 be delayed because Joe Milazzo with the Regional Transportation Alliance is going to try to attend the meeting to discuss the item.

Public Comments

There were no public comments.

ACTION ITEMS:

Approval of December 16, 2009 TCC Meeting Minutes (Attachment 4)

A motion was made by John Hodges-Copple and seconded by Pierre Osei-Owusu to approve the December 16, 2009 TCC Meeting Minutes. The motion carried unanimously.

Draft FY 2010-2011 Unified Planning Work Program (Attachment to be distributed at the meeting)

David Bonk stated related to the existing UPWP, he wanted to confirm that we are fast approaching the deadline for having changes made for this year's planning work program of February 8, 2010, and Chapel Hill has at least one project change related to the STP-DA allocation. Mr. Bonk is working with the project manager to determine how much they will need to spend in this year. This will need to be added to the UPWP. Maricia Brown stated the only part that you can de-obligate is what hasn't been spent. Ms. Brown also stated that staff hasn't received any FY2010-11 budget figures from anyone. They are using the same allocation we received last year from the federal government as a starting point and then we will modify. Pierre Osei-Owusu stated they need to meet with Felix Nwoko to understand the numbers. David Bonk stated they need to know about the CMS project.

Maricia Brown stated the MPO will be revisiting the reporting process with partners to see if we can minimize some of problems to make it a single process and make it clear for everyone.

Ellen Beckmann provided an introduction for the Draft FY 2010-2011 Unified Planning Work Program, along with the attachment that was just distributed.

Ms. Beckmann stated the MPO has not received the funding schedule from partners yet with the exception of the Town of Chapel Hill. We don't know the allocation so we are assuming the FY2010-2011 allocations for next year. The attachment is a draft work plan which is a work in progress. Andy Henry stated some of the emphasis projects are a few years away (e.g. the Freight Plan and the Purpose and Need).

Jeff Brubaker asked if the Triangle Regional Model Service Bureau is moving ahead with the new emissions model regarding #12, the MPO Climate Change Plan. Ellen Beckmann stated the work task is related to the Greenhouse Gas Plans and how we can better integrate them into the LRTP process. Mr. Brubaker stated he would like to know the TRM schedule with getting the new emissions model integrated in it. John Hodges-Copple stated in the past the TRM did an automated back-end module that could feed the Triangle Regional Model into the old Mobile 6 emissions model, but the regional model team didn't actually do the emissions modeling because that is still the responsibility of the Division of Air Quality. The question is do they do an add-on module for that and if so how does it work. There hasn't been much discussion at this point. There will be an Executive Committee meeting coming up in February.

Ellen Beckmann noted the schedule which is on the agenda. Staff should have a draft UPWP at our next TCC meeting; release for public comment in March; public hearing in April and have approval in May.

Patrick McDonough stated Triangle Transit is trying to verify their information and asked if staff plans to have a draft UPWP at the next TCC meeting. If so, what is the deadline for providing the requested information. Ellen Beckmann stated Felix Nwoko's deadline has already past. Staff needs the information as soon as possible. Maricia Brown stated everyone needs to submit the narrative

description of the projects as well as the funding schedule. Staff needs the requested information no later than February 5, 2010.

David Bonk stated that if Felix Nwoko has additional guidance for the partners then it needs to be provided as quickly as possible. Mark Ahrendsen stated everyone will get direction from Felix Nwoko this week so that everything can be submitted by the new deadline of February 5, 2010.

FY 2012-2018 TIP – Urban Loop Prioritization Process (Attachments 6, 6A, and 6B)

Ellen Beckmann provided an update on the FY2012-2018 TIP – Urban Loop Prioritization Process, along with the attachments.

Ms. Beckmann stated attachment 6B is the second draft of the prioritization process and NCDOT has asked for comments by February 28th. The MPO staff worked with RTA to evaluate the process.

Andy Henry suggested using percentile to award points instead of ranking or trying to use ranges. Ellen Beckmann stated a lot of the scores are based on volumes on parallel routes which will be tricky when it comes to Durham's projects. Joey Hopkins suggested adding missing links as a point factor. Joe Milazzo thanked everyone at the TCC level for all the input.

Joey Hopkins stated there is a meeting today at NCDOT on the loop prioritization method. SPOT will also be having regional meetings to announce the results of the prioritization methodology. There is a meeting on February 22 at 1:30 p.m. in Alamance Community College and there will be one in Kinston and one out west. Ellen Beckmann will distribute information to TCC members on webinars.

Bill Barlow stated there is a ranking of the SPOT transit projects. This was required even though transit systems are not competing with each other for funding.

FY 2009-2015 MTIP – Amendment #12 (Attachment 7)

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

Pierre Osei-Owusu stated it was an oversight that was not in the TIP. It is related to an earmark for Durham. We need to amend the TIP to include the earmark as provided in attachment 7.

Bill Barlow stated the RGP funding source is actually Rural General Public, and is not related to DATA. It was written as preventative maintenance which it isn't - it is operating assistance. Mr. Barlow stated he is going to make the change himself. The word "preventative maintenance" will become "operating assistance" and the agency will be "Durham County Access" not Durham DATA. Mr. Barlow will change the STIP. Ellen Beckmann stated staff will modify the amendment and resolution to agree with the changes Mr. Barlow is making.

A motion was made by David Bonk and seconded by Andy Henry to recommend TAC approval of amendment #12 as modified. The motion carried unanimously.

Federal Rescission (Attachment 8, Attachment 8A to be handed out at the meeting)

Ellen Beckmann provided an introduction for the Federal Rescission, along with the attachments.

Ellen Beckmann stated a subcommittee meeting was held to discuss the STP-DA projects and their schedules. This information is included in the table. Ms. Beckmann just received everything yesterday, so everyone needs to look it over as there may be some discrepancies. These are projects that were programmed in 2009 and earlier or 2010 and later. The projects in 2009 and earlier were affected by the rescission. Some of them haven't been progressing, but the local governments still want to pursue them. The table includes all of the projects that the local governments still want to pursue and haven't been obligated. There are a few projects not on the table that have been obligated. Ms. Beckmann is going to follow up on this issue. This table is only projects that we don't think have been obligated. The Town of Chapel Hill requested switching a few projects; deleting some and adding some keeping the total funding constant. There is no increase in funding for any of the projects with one exception. For the Old Durham-Chapel Hill Road bicycle and pedestrian project, the latest estimate is

higher than the original cost. Ms. Beckmann thinks there are funds available. We should have enough funds for all the projects, assuming that the STP-DA stays constant over the next seven years. There may be some changes to a few projects since information is still coming in.

Ms. Beckmann stated the goal is to send the schedule to NCDOT to see if they think it can accommodated and get the new schedules noted in the next TIP. The draft will be coming out in September of this year. We aren't going to worry about fiscal years 2016, 2017, and 2018 for now. Programming in those years will be put off until the next TIP when we can do another evaluation of our STP-DA program. We will have more years to work with and will have a better idea of how much funds will be available for the future years. We may have to amend the FY2009-2015 TIP to change FY2010-2011 projects, especially those to be delayed.

David Bonk stated a long time ago, Chapel Hill put STP-DA funds for the Weaver Dairy sidewalks and now there is an agreement to be signed. At some point, the funds were removed from the STP-DA list and we don't know why. Chapel Hill will need to amend their projects to accommodate this project.

Ellen Beckmann stated we're using the annual reserve to fund these projects, so there will not be a reserve for the next six years. The MPO will monitor used funds, like the ARRA process, and if projects are running behind, we will move another project in its place to stay on schedule.

Dale McKeel stated project #2, American Tobacco Trail project, will likely need additional funding. Mr. McKeel asked if Chapel Hill is being asked to contribute anything to bike lanes on Weaver Dairy Road and David Bonk stated he thinks it is just sidewalks.

Ellen Beckmann stated the next steps are: (1) check the spreadsheet to make sure it is correct; (2) share it with NCDOT and see if they think it can be accommodated; (3) find out the CMAQ impact because some of these projects rely on CMAQ funds; and (4) share the information with TAC in February and then the following month, we should have a TIP amendment for TAC approval.

Joey Hopkins stated we should have some planning funds set aside for projects in case a project is delayed so we can move another project in its place.

Job Access Reverse Commute and New Freedom – 2010 Call for Projects (Attachments 9, 9A, and 9B)

Maricia Brown provided an introduction for the Job Access Reverse Commute and New Freedom – 2010 Call for Projects, along with the attachments.

Ms. Brown stated that the funds are moving slowly which is not a good thing when it comes to JARC and New Freedom because the funding is recommended for annual projects. The projects need to start and finish within the fiscal year and we have had quite a few of these projects not move along. Brier Creek has moved to the next fiscal year because the local funds were not available. The projects are moving very slow. The paratransit eligibility project started very late. Brian Litchfield with the Town of Chapel Hill stated they filled their mobility manager position so we will see expenditures soon and the funds will be used quickly.

Ms. Brown stated she doesn't recommend asking for new projects when we can't justify more funds for more projects. All the projects require objectives and goals related specifically to the project and we are in the process of developing a project analysis to monitor the projects. Ms. Brown stated that we delay the next call for projects until we know what our next allocations are. Our current funds won't lapse until 2013 so we have time.

Pierre Osei-Owusu stated that we need to look at how we objectively evaluate projects. Ms. Brown stated that we have asked CAMPO about setting up a system for the evaluation of each other's projects.

Bill Barlow stated a mobility manager can help evaluate transit service and we could lean on them to evaluate the projects. Mr. Barlow stated new 5310 funding can be used for a Durham mobility manager. Mr. Barlow stated that there will be an application for 5310 and small urban and rural JARC and New Freedom funding coming out soon. Urban systems can apply to serve rural areas.

Maricia Brown stated the status of the projects will be provided in staff reports from this point forward.

NC 54 Corridor Study – Update (Attachment 10)

The NC 54 Corridor Study is moving along on schedule. The next public workshop is scheduled for February 25, 2010. The consultant is scheduled to provide us with the results of the land use alternatives. There is a staff meeting this afternoon. A draft report will be complete and submitted to the local governments in June for review. The last public workshop will be in May. The draft schedule envisions the process being complete by November or December of 2010.

American Recovery and Reinvestment Act of 2009 – Update (Attachment 11 and 11A)

Ellen Beckmann provided an update on the American Recovery and Reinvestment Act of 2009 – Update, along with the attachments. All projects are moving forward and there are no updates on the local projects.

Joey Hopkins stated NCDOT Division 5 opened bids on their last three stimulus projects. All costs were under the projected estimates for Durham. There are two meetings scheduled for contract administration. One will be held on March 17th at Cary Town Hall and FHWA is running the meeting. NCDOT is having a meeting prior to the March 17th meeting in Cary. Joey Hopkins will provide the date of the meetings to Ellen Beckmann and she will forward the dates to staff.

Joey Hopkins stated there is a second stimulus in a House Bill. There is one big change; projects must be under contract within ninety days and there are no exemptions. Bill Barlow stated there is 10 percent for operating in the initial proposal on the transit side. There is discussion of 20 percent.

Ellen Beckmann stated the ARRA update will be provided in the staff reports from this point forward.

Joey Hopkins stated there may be an announcement tonight during the State of the Union Address on Southeast High Speed Rail. There is no news on TIGER funds.

REPORTS FROM STAFF:

Reports from Staff (Attachment 12)

Dale McKeel stated that last week Triangle J COG sent out a 2011 Request for Proposals for the Transportation Demand Management Program. Mr. McKeel will send the schedule out to TCC members. There will be a question and answer session on February 19, 2010 at Triangle J COG at 11:30 a.m.

Report from Chair

Mark Ahrendsen stated work is continuing in Durham, Orange, and Wake counties for the development of a regional transit plan. The environmental assessment on the East End Connector was released a few weeks ago. A public hearing will be scheduled within the next four to six weeks. There will be a public meeting scheduled on the Alston Avenue widening project and realignment to address the environmental justice issue. There was a pre-let meeting on the Weaver Dairy Road project and they are working on comments. Jeff Brubaker with the Town of Carrboro stated they are waiting to see what NCDOT is going to do on the Smith Level Road project.

Joe Milazzo stated there will be a Wayfinding meeting on February 25, 2010, 2-3 p.m. in Cary. Mr. Milazzo will send the notice to Ellen Beckmann and she will provide to TCC members.

NCDOT Report (Attachment 14)

Patrick Wilson, NCDOT Division 7, stated the report is attached for review. The 4-way stop at NC57 and NC157 in Orange County was installed the week before Christmas. They are working to complete the design for the additional turns at the intersection as well as a traffic signal. The project is scheduled to begin in the spring of this year.

Joey Hopkins, NCDOT Division 5, stated the report is attached for review.

INFORMATIONAL ITEMS:

NCDOT Division 5 Highway Priority List for FY 2012-2018 TIP (Attachment 15)

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

Adjournment

There being no further business before the Technical Coordinating Committee, the meeting adjourned at 10:47 a.m.

MEMORANDUM

TO: **Technical Coordinating Committee**
DCHC MPO

FROM: **DCHC MPO Lead Planning Agency**

DATE: **February 24th, 2010**

SUBJECT: **MPO Deadlines for UPWP Submittals, Reporting, & Supporting Documentation**

The UPWP reporting and grant administration is a very complex process that is streamlined and developed through the assistance and cooperation of the LPA staff and all participating agencies. As we all know, working to be compliant in a comprehensive Federal Grant program environment, takes team-work. The MPO has been experiencing late submittals on quarterly invoices, UPWP amendment & UPWP budget development requests. The MPO staff is working diligently to be intentionally timely and compliant with NCDOT, FHWA & FTA deadlines. All of these agencies rely on our timeliness of reporting, billing, invoices and narrative project status updates to keep federal funds current. In efforts to reiterate the new FY10 financial reporting processes, implemented in June of 2009, we are asking member agencies to please be more diligent about meeting deadlines. This memo also serves to implement an additional requirement listed in Section B below.

Section A. Deadlines for Quarterly UPWP Submittal of Reports & Backup Documentation:

First Quarter: October 15th

Second Quarter: January 15th

Third Quarter: April 15th

Fourth Quarter: July 15th

Reporting packages *must be* submitted on time with complete documentation. Complete documentation includes the following, --Invoice cover letter, --UPWP check list, --Quarterly Narrative (project status) report, --Expenditure report, --Composite report & --All supporting documentation (timesheets, etc.). MPO Agency representatives are individually responsible for putting all necessary documentation together, with accuracy and submitting it on a timely basis.

Section B. If you cannot meet this deadline, a letter will be required no later than 5 days prior to the deadline indicating the reason this information cannot be provided in a timely manner (as outlined above and understood to by the parties involved). A quarterly narrative is required whether a letter is submitted or not.

Section C. Annual UPWP deadlines vary throughout the year, but should be adhered to as requested. Any missed deadlines, without timely communication, will be at risk of being denied.

Section D. All questions and correspondence regarding UPWP should be sent to Maricia Brown and Felix Nwoko.

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

AMENDMENT #13
March 10, 2010

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

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

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

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

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

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

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

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

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

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

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

_____
TAC Chair

STATE of: North Carolina
COUNTY of: _____

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

_____
Notary Public
(Seal) My commission expires_____

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

Amended Table

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

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

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

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

MEMORANDUM

TO: **Transportation Advisory Committee**
DCHC MPO

FROM: **DCHC MPO Lead Planning Agency**

DATE: **February 24, 2010**

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

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

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

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

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

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

City of Durham

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

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

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

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

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

MEMORANDUM

TO: **Transportation Advisory Committee**
DCHC MPO

FROM: **DCHC MPO Lead Planning Agency**

DATE: **February 24, 2010**

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

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

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

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

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

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

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

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

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

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

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

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

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

Federal	$	49,200
NCDOT-TPB	$	12,300
Total SPR funds	$	61,500

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

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

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

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

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

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

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

Special-Major Project Summary

Introduction

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

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

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

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

3. 2009-2015 Metropolitan Transportation Improvement Program (MTIP) and air quality conformity analysis: The MPO finalized the development of the 2009-15 MTIP. The DCHC MPO's Transportation Advisory Committee (TAC) approved the Fiscal Year 2009-2015 Metropolitan Transportation Improvement Program (MTIP) at their August 2008 meeting.

4. Administrative Modifications of the 2007-13 MTIP: The MPO processed several administrative modifications to the 2007-13 MTIP and forwarded to NCDOT to be included in the STIP for BOT approval.

5. Revision and enhancement of the MTIP Project Prioritization and Ranking Methodology for the 2011-2017 MTIP: The Lead Planning Agency continued work on the refinements and revision of the 20011-2017 MTIP project prioritization and ranking methodology. Draft methodology was made available to the public and local MPO agencies for review and comments. The project prioritization and ranking methodology was approved by the TAC in September 2008.

6. Development of the SPOT and the 5-year let plan (TIP fiscal constrained plan) and the 10-year SPOT priorities.

7. Stimulus Program (ARRA) Project Selection, monitoring and Reporting: The Lead Planning Agency worked on project selection, monitoring and reporting of the Economic Recovery Stimulus projects (ARRA). Staff coordinating with NCDOT in project selection consistent with the federal guidelines.

8. Triangle Regional Model (TRM) Update and Enhancement: The MPO continues to participate in the update and enhancement of the TRM at ITRE. The MPO is one of the funding partners of the modeling service bureau and continues to provide .5 FTE to ITRE Model Service Bureau..

9. The MPO continued work on several special and major emphasis projects: MPO Land-use model, MPO Non-Motorized Trip model, MPO GIS-T warehouse & Automation, Farrington Road/Stagecoach Road Corridor Study, MPO Collector Street Plan. Significant progress was made during the 2009-10 fiscal year.

10. Alston Avenue Widening & East-End Connector: The LPA worked on the project planning and NEPA for the Alston Avenue and the East End Connector projects. The LPA continued work in helping NCDOT in the public involvement and outreach for the East-End Connector planning and environmental (NEPA) study.

11. Other Project Development Planning and NEPA: the LPA participated on several NCDOT project planning and NEPA for projects within the MPO. These projects are summarized as follows: South Miami, Blvd widening, NC

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

12. ITS Strategic Deployment Plan (SDP). Work continues on the update of the Triangle Regional ITS SDP. The MPO is providing the contractual and administrative management of this project.

13. Farrington/Stagecoach Road study has been completed. Public involvement and recommendations are anticipated to be folded into the Comprehensive Transportation Plan (CTP).

14. The MPO Collector Street Plan is nearly complete. Public involvement and adoption will be streamlined with the CTP.

2010-2011 Proposed Work Program (Work Plan)

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

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

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

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

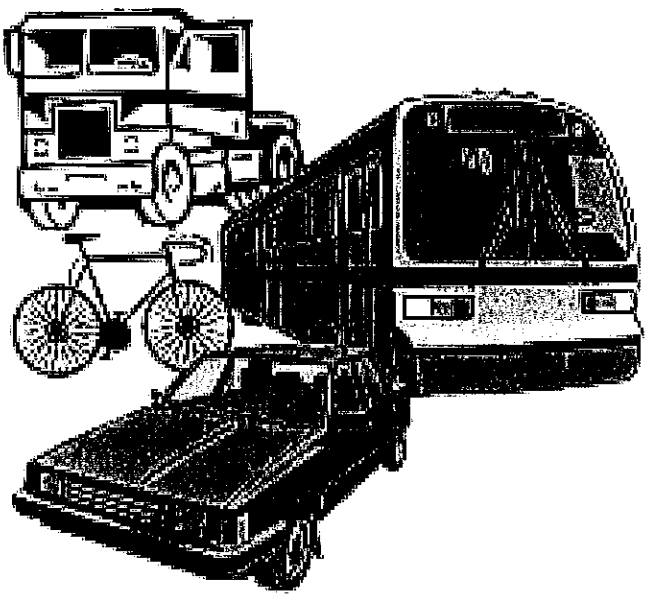
1	UPWP development/amendment/maintenance and invoicing
2	TIP development/amendments
3	ARRA-Stimulus projects reporting and audit compliance
4	TAC/TCC Meetings/agenda preparation/directives to staff/follow-ups
5	GIS mappings and geo-database administration/maintenance
6	bicycle -pedestrian planning
7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

Unified Planning Work Program (UPWP) Development Process

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

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

Durham-Chapel Hill-Carrboro
Metropolitan Planning Organization



DRAFT

2010-2011
Unified Planning Work Program (UPWP)

January 27, 2010

Durham-Chapel Hill-Carrboro
Metropolitan Planning Organization

FY 2010-2011 Unified Planning Work Program

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

RESOLUTION

Approving the FY 2010-2011 Unified Planning Work Program

April 14, 2010

A motion was made by _____ and seconded by _____ for the adoption of the following resolution and upon being put to a vote was duly adopted.

Whereas, a comprehensive and continuing transportation planning program must be carried out cooperatively in order to ensure that funds for transportation projects are effectively allocated to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization; and

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

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

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

****

I, J. Michael Woodard, TAC Chair, do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Durham-Chapel Hill-Carrboro Transportation Advisory Committee, duly held on the 14th day of April, 2010.

Mike Woodard, TAC Chair

_____

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

_____
Notary Public

(Notary seal)

101 City Hall Plaza
Durham, NC 27701

My commission expires _____

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

RESOLUTION (PTD-FTA)

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

February 14, 2010

A motion was made by _____ and seconded by _____ for the adoption of the following resolution and upon being put to a vote was duly adopted.

Whereas, a comprehensive and continuing transportation planning program must be carried out cooperatively in order to ensure that funds for transportation projects are effectively allocated to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization; and

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

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

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

****

I,_____, Chair of the DCHC MPO Transportation Advisory Committee (TAC) do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Durham-Chapel Hill-Carrboro Transportation Advisory Committee, duly held on the 14th day of April, 2010

_____
Mike Woodard
Chairman, Transportation Advisory Committee

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

_____
Notary Public

(Notary seal)

101 City Hall Plaza
Durham, NC 27701

My commission expires _____

RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS

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

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

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

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

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

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

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

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

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

_____

Chair, Transportation Advisory Committee

_____

Clerk/Secretary/Planner

Metropolitan Planning
Self-Certification Process

CFR 450.334
The State and the MPO shall annually certify to the FHWA and the FTA that the planning process is addressing the major issues facing the area and is being conducted in accordance with all applicable requirements of:

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

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

Self-Certification Checklist

1. Is the MPO properly designated by agreement between the Governor and 75% of the urbanized area, including the central city, and in accordance in procedures set forth in state and local law (if applicable)? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (a)]

2. Does the policy board include elected officials, major modes of transportation providers and appropriate state officials? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CF R 450.306 (i)]

3. Does the MPO boundary encompass the existing urbanized area and the contiguous area expected to become urbanized within the 20-yr forecast period? [23 U.S.C. 134 (c), 49 U.S.C. 5303 (d); 23 CFR 450.308 (a)]

4.

5. Is there a currently adopted (Unified) Planning Work Program (U/PWP)? 23 CFR 450.314
    a. Is there an adopted prospectus? Are work programs consistent with the adopted prospectus?
    b. Are tasks and products clearly outlined?
    c. Is the U/PWP consistent with the LRTP?
    d. Has the UPWP been checked for effectiveness to see if it is further meeting the goals of the LRTP?
    e. Is UPWP product driven and result oriented?
    f. Is the work identified in the U/PWP completed in a timely fashion?
6. Does the area have a valid transportation planning process? 23 CFR 450.322
    a. Is the transportation planning process continuous, cooperative and comprehensive?
    b. Is there a valid LRTP?
    c. Did the LRTP have at least a 20-year horizon at the time of adoption?
    d. Does it address the 8-planning factors?
    e. Does it include strategies for evaluating effectiveness of Plan goals and targets?
    f. Does it cover all modes applicable to the area?
    g. Does it address preservation of existing systems? Is consideration of the preservation of existing systems clearly documented in stand-alone section?
    h. How is freight considerations incorporated into the LRTP?
    i. How is safety considerations incorporated in the LRTP? Are safety considerations documented separately (stand-alone)?
    j. Is it financially constrained?
    k. Has the MPO demonstrated reasonableness of LRTP Revenue sources? How?
    l. Does it include funding for the maintenance and operation of the system?
    m. Does it include environmental mitigation?
    n. Does it conform to the State Implementation Plan (SIP) (if applicable)?
    o. Is it updated/reevaluated in a timely fashion (at least every 4 or 5 years)?
7. Is there a valid TIP? 23 CFR 450.324, 326, 328, 332
    a. Is it consistent with the LRTP?
    b. Is it fiscally constrained?
    c. Is it developed cooperatively with the state and local transit operators?
    d. Is it updated at least every 4-yrs and adopted by the MPO and the Governor?
8. Does the area have a valid CMP? (TMA only) 23 CFR 450.320
    a. Is it consistent with the LRTP?
    b. Was it used for the development of the TIP?
    c. Is it monitored and reevaluated to meet the needs of the area?

9. Does the area have a process for including environmental mitigation discussions in the planning process? (SAFETEA-LU)
    a. How _____
    b. Why not _____

10. Does the planning process meet the following requirements of 23 CFR 450.316 (2) (3), EO 12898?
    a. Title VI
        i. Are there procedures in place to address Title VI complaints and does it comply with federal regulation? [23 CFR 200.9 (b)(3)]
    b. Environmental Justice (Executive Order 12898)
        i. Has the MPO identified low-income and minority populations within the planning area and considered the effects in the planning process?
        ii. Has the MPO developed Environmental Justice Policy and Program?
        iii. Has the MPO involved EJ community in the development of the UPWP?
    c. ADA
        i. Are there procedures in place to address ADA complaints of non-compliance and does it comply with federal regulation? [49 CFR 27.13]
    d. DBE
        i. Does the MPO have a DBE policy statement that expresses commitment to the DBE program? [49 CFR 26.23]
11. Does the area have an adopted PIP/Public Participation Plan? 23 CRR 450.316 (b)(1)
    a. Did the public participate in the development of the PIP?
    b. Was the PIP made available for public review for at least 45-days prior to adoption?
    c. Is adequate notice provided for public meetings?
    d. Are meetings held at convenient times and at accessible locations?
    e. Is the public given an opportunity to provide oral and/or written comments on the planning process?
    f.
    g. Does the PIP include criteria for measuring the effectiveness of PIP?
    h. Is the PIP periodically reviewed and updated to ensure its effectiveness?
    i. Are plans/program documents available in an electronic accessible format, i.e. MPO website?
    j. Has the MPO employed visualization tools in LRTP, TIP and planning projects?
    k. Does the PIP include visualization tools?
    l. Is the EJ community given the adequate and meaningful opportunity to provide comments on the planning process?

12. Does the area have a process for including environmental, state, other transportation, historical, local land use and economic development agencies in the planning process? (SAFETEA-LU)
    a. How _____
    b. Why not _____

13. Has the UPWP been checked for effectiveness to see if it is further meeting the goals of the LRTP?
14. Does the UPWP meet SAFETEA-LU requirements? If not, what is the timeline to update the UPWP?
15. Do the selected work items reflect the planning priorities facing the MPO?
16. Do the MPO product UPWP reports consistent with agreements and federal regulation? Are UPWP products and accomplishments documented in reports? Are accomplishments consistent with the proposed work programs? Are reports made available to the Policy Board and the Public? How are reports disseminated?
17. How is safety consideration reflected in the MPO planning process?

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

OVERVIEW

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

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

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

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

INTRODUCTION

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

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

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

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

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

Special Projects

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

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

Continuation of Major Projects

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

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

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

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

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

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

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

Federal	$	49,200
NCDOT-TPB	$	12,300
Total SPR funds	$	61,500

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

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

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

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

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

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

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

Special-Major Project Summary

Introduction

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

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

1. Greenhouse Gas (GHG) Emission Study Implementation: The MPO continues to work on the implementation of the GHG Emissions study, including the formation of an energy Team and providing start support for the Energy Team. One of the first year implementation focus areas is reducing transportation demand mainly SOV and encouraging alternative transportation modes.

2. NC 54/I-40 Corridor Study: The MPO initiated a consultant study for an integrated land use/transportation corridor study for the NC 54 corridor between the I-40 interchange in Durham and the US 15/501 inter-change in Chapel Hill. The purpose of the study is to analyze short-term and long-term land use issues and multi-modal transportation problems, evaluate opportunities and challenges, and recommend short and long-range solutions and strategies along the corridor. A critical component of this study is public outreach and public involvement. In addition to traditional methods for obtaining public input the consultant team conducted focus group meetings and "hands-on" public workshops. The focus groups was used to gather information from specific topic areas ranging from policy, bicycle, pedestrian, transit, neighborhoods, environment, business, development, and commuters. Also the first public workshop was help to collect public input and comments on the alternatives and evaluation measures.

3. 2009-2015 Metropolitan Transportation Improvement Program (MTIP) and air quality conformity analysis: The MPO finalized the development of the 2009-15 MTIP. The DCHC MPO's Transportation Advisory Committee (TAC) approved the Fiscal Year 2009-2015 Metropolitan Transportation Improvement Program (MTIP) at their August 2008 meeting.

4. Administrative Modifications of the 2007-13 MTIP: The MPO processed several administrative modifications to the 2007-13 MTIP and forwarded to NCDOT to be included in the STIP for BOT approval.

5. Revision and enhancement of the MTIP Project Prioritization and Ranking Methodology for the 2011-2017 MTIP: The Lead Planning Agency continued work on the refinements and revision of the 20011-2017 MTIP project prioritization and

ranking methodology. Draft methodology was made available to the public and local MPO agencies for review and comments. The project prioritization and ranking methodology was approved by the TAC in September 2008.

6. Development of the SPOT and the 5-year let plan (TIP fiscal constrained plan) and the 10-year SPOT priorities.

7. Stimulus Program (ARRA) Project Selection, monitoring and Reporting: The Lead Planning Agency worked on project selection, monitoring and reporting of the Economic Recovery Stimulus projects (ARRA). Staff coordinating with NCDOT in project selection consistent with the federal guidelines.

8. Triangle Regional Model (TRM) Update and Enhancement: The MPO continues to participate in the update and enhancement of the TRM at ITRE. The MPO is one of the funding partners of the modeling service bureau and continues to provide .5 FTE to ITRE Model Service Bureau..

9. The MPO continued work on several special and major emphasis projects: MPO Land-use model, MPO Non-Motorized Trip model, MPO GIS-T warehouse & Automation, Farrington Road/Stagecoach Road Corridor Study, MPO Collector Street Plan. Significant progress was made during the 2009-10 fiscal year.

10. Alston Avenue Widening & East-End Connector: The LPA worked on the project planning and NEPA for the Alston Avenue and the East End Connector projects. The LPA continued work in helping NCDOT in the public involvement and outreach for the East-End Connector planning and environmental (NEPA) study.

11. Other Project Development Planning and NEPA: the LPA participated on several NCDOT project planning and NEPA for projects within the MPO. These projects are summarized as follows: South Miami, Blvd widening, NC 98, Holloway Street widening, Alexander Drive widening project, Hopson Road grade separation, Alston Avenue, East End Connector, Hillandale widening, NC 98 (Holloway Street) widening, Weaver Dairy Road widening/improvement, South Columbia, Elizabeth Brady Rd, several bridge replacement projects, resurfacing projects, etc

12. ITS Strategic Deployment Plan (SDP). Work continues on the update of the Triangle Regional ITS SDP. The MPO is providing the contractual and administrative management of this project.

13. Farrington/Stagecoach Road study has been completed. Public involvement and recommendations are anticipated to be folded into the Comprehensive Transportation Plan (CTP).

14. The MPO Collector Street Plan is nearly complete. Public involvement and adoption will be streamlined with the CTP.

2010-2011 Proposed Work Program (Work Plan)

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

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

Continuation of Special Projects

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

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

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

Unified Planning Work Program (UPWP) Development Process

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

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

Summary MPO-Wide Funding Source Table

MPO Detail Funding Tables (FHWA/FTA Funds)

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

MPO Summary
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	Task Description	SPR Highway NCDOT 20%	SPR Highway FHWA 80%	STP-DA 133(b)(3)(7) Local 20%	STP-DA 133(b)(3)(7) FHWA 80%	Sec. 104(f) PL Local 20%	Sec. 104(f) PL FHWA 80%	Section 5303 Highway/Transit Local 10%	Section 5303 Highway/Transit NCDOT 10%	Section 5303 Highway/Transit FTA 80%	Section 5307 Transit Local 10%	Section 5307 Transit NCDOT 10%	Section 5307 Transit FTA 80%	Section 5309 Transit Local 25%	Section 5309 Transit NCDOT 25%	Section 5309 Transit FTA 50%	Task Funding Summary Local	Task Funding Summary NCDOT	Task Funding Summary Federal	Task Funding Summary Total
II A	**Surveillance of Change**																			
II A 1	Traffic Volume Counts	0	0	4,725	18,900	90	360	0	0	0	0	0	0	0	0	0	4,815	-	19,260	24,075
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
4	Traffic Accidents	0	0	825	3,300	48	192	0	0	0	0	0	0	0	0	0	873	-	3,492	4,365
5	Transit System Data	0	0	13,750	55,000	0	0	9,731	9,731	77,851	19,320	19,320	154,557	0	0	0	42,801	29,051	287,408	359,260
6	Dwelling Unit, Pop. & Emp. Change	0	0	3,750	15,000	3,313	13,250	0	0	0	0	0	0	0	0	0	7,063	-	28,250	35,313
7	Air Travel	0	0	125	500	325	1,300	0	0	0	0	0	0	0	0	0	450	-	1,800	2,250
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
9	Travel Time Studies	0	0	10,960	43,838	2,385	9,540	625	625	5,000	0	0	0	0	0	0	13,970	625	58,378	72,973
10	Mapping	0	0	5,000	20,000	5,627	22,506	2,500	2,500	20,000	0	0	0	0	0	0	13,127	2,500	62,506	78,133
11	Central Area Parking Inventory	0	0	1,250	5,000	0	0	0	0	0	0	0	0	0	0	0	1,250	-	5,000	6,250
12	Bike & Ped. Facilities Inventory	0	0	1,000	4,000	48	192	0	0	0	0	0	0	0	0	0	1,048	-	4,192	5,240
13	Bike & Ped. Counts	0	0	4,650	18,600	240	960	0	0	0	0	0	0	0	0	0	4,890	-	19,560	24,450
II B	**Long Range Transp. Plan**																			
B 1	Collection of Base Year Data	0	0	9,000	36,000	2,706	10,824	1,250	1,250	10,000	0	0	0	0	0	0	12,956	1,250	56,824	71,030
2	Collection of Network Data	0	0	1,825	7,300	960	3,840	1,250	1,250	10,000	0	0	0	0	0	0	4,035	1,250	21,140	26,425
3	Travel Model Updates	2,100	8,400	46,610	186,440	5,000	20,000	0	0	0	16,000	16,000	128,000	0	0	0	67,610	18,100	342,840	428,550
4	Travel Surveys	0	0	0	0	0	0	1,200	1,200	9,600	811	811	6,486	0	0	0	2,011	2,011	16,086	20,108
5	Forecast of Data to Horizon year	0	0	3,550	14,200	3,752	15,006	0	0	0	0	0	0	0	0	0	7,302	-	29,206	36,508
6	Community Goals & Objectives	0	0	5,250	21,000	2,998	11,992	0	0	0	0	0	0	0	0	0	8,248	-	32,992	41,240
7	Forecast of Futurel Travel Patterns	0	0	0	0	250	1,000	625	625	5,000	0	0	0	0	0	0	875	625	6,000	7,500
8	Capacity Deficiency Analysis	0	0	2,450	9,800	0	0	0	0	0	0	0	0	0	0	0	2,450	-	9,800	12,250
9	Highway Element of th LRTP	0	0	250	1,000	0	0	0	0	0	0	0	0	0	0	0	250	-	1,000	1,250
10	Transit Element of the LRTP	0	0	250	1,000	750	3,000	625	625	5,000	4,500	4,500	36,000	0	0	0	6,125	5,125	45,000	56,250
11	Bicycle & Ped. Element of the LRTP	0	0	9,500	38,000	2,500	10,000	0	0	0	0	0	0	0	0	0	12,000	-	48,000	60,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
13	Collector Street Element of LRTP	200	800	750	3,000	0	0	0	0	0	0	0	0	0	0	0	750	200	3,800	4,750
14	Rail, Water or other mode of LRTP	0	0	250	1,000	125	500	0	0	0	0	0	0	0	0	0	375	-	1,500	1,875
15	Freight Movement/Mobility Planning	0	0	3,500	14,000	1,100	4,400	0	0	0	0	0	0	0	0	0	4,600	-	18,400	23,000
16	Financial Planning	0	0	0	0	750	3,000	4,544	4,544	36,352	0	0	0	0	0	0	5,294	4,544	39,352	49,190
17	Congestion Management Strategies	800	3,200	15,500	62,000	3,558	14,230	0	0	0	1,616	1,616	12,928	0	0	0	20,674	2,416	92,358	115,448
18	Air Qual. Planning/Conformity Anal.	200	800	3,125	12,500	1,675	6,700	0	0	0	0	0	0	0	0	0	4,800	200	20,000	25,000
II C	**Short Range Transit Planning**																			
1	Short Range Transit Planning	0	0	5,500	22,000	460	1,840	0	0	0	70,125	70,125	561,000				76,085	70,125	584,840	731,050
III-A	**Planning Work Program**	400	1,600	1,250	5,000	5,268	21,072	161	161	1,288	2,983	2,983	23,866	0	0	0	9,662	3,544	52,826	66,033
III-B	**Transp. Improvement Plan**	400	1,600	1,250	5,000	8,513	34,050	250	250	2,000	552	552	4,412	0	0	0	10,564	1,202	47,062	58,828
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**																			
1	Title VI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2	Environmental Justice	0	0	1,425	5,700	1,650	6,600	0	0	0	500	500	4,000	0	0	0	3,575	500	16,300	20,375
3	Minority Business Enterprise	0	0	3,250	13,000	0	0	0	0	0	0	0	0	0	0	0	3,250	-	13,000	16,250
4	Planning for the Elderly & Disabled	0	0	4,250	17,000	310	1,240	0	0	0	0	0	0	0	0	0	4,560	-	18,240	22,800
5	Safety/Drug Control Planning	0	0	2,750	11,000	0	0	0	0	0	0	0	0	0	0	0	2,750	-	11,000	13,750
6	Public Involvement	0	0	7,850	31,400	3,821	15,284	0	0	0	5,271	5,271	42,165	0	0	0	16,942	5,271	88,849	111,061
7	Private Sector Participation	0	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	1,000	-	4,000	5,000
III-D	**Incidental Plng./Project Dev.**																			
1	Transportation Enhancement Plng.	100	400	0	0	0	0	0	0	0	0	0	0	0	0	0	-	100	400	500
2	Enviro. Analysis & Pre-TIP Plng.	1,000	4,000	13,500	54,000	2,090	8,360	0	0	0	0	0	0	0	0	0	15,590	1,000	66,360	82,950
3	Special Studies	1,000	4,000	26,555	106,220	1,943	7,772	563	563	4,500	13,800	13,800	110,400	0	0	0	42,861	15,363	232,892	291,115
4	Regional or Statewide Planning	2,100	8,400	19,375	77,500	867	3,468	625	625	5,000	1,316	1,316	10,524	0	0	0	22,183	4,041	104,892	131,115
III-E	**Management & Operations**																			
1	Management & Operations	4,000	16,000	65,478	261,910	25,392	101,566	3,944	3,944	31,553	32,044	32,044	256,351	0	0	0	126,857	39,988	667,380	834,225
Totals		$12,300	$49,200	$301,277	$1,205,108	$88,511	$354,044	$27,893	$27,893	$223,144	$168,836	$168,836	$1,350,689	$0	$0	$0	$586,517	$209,029	$3,182,185	$3,977,731

	FHWA Planning Funds MPO PL & STP-DA Total	Durham-Chapel Hill-Carrboro Urban Area FY 2010-2011 Unified Planning Work Program MPO PL & STP-DA Funding Tables								
	Task Description	STP-DA Section 133(b)(3)(7)			PL Section 104(f)			Total FHWA Planning Funds		
		Local	FHWA	Total	Local	FHWA	Total	Local	FHWA	Total
		20%	80%	100%	20%	80%	100%	20%	80%	100%
II A	**Surveillance of Change**									
II A 1	Traffic Volume Counts	4,725	18,900	23,625	90	360	450	4,815	19,260	24,075
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0
3	Street System Changes	0	0	0	0	0	0	0	0	0
4	Traffic Accidents	825	3,300	4,125	48	192	240	873	3,492	4,365
5	Transit System Data	13,750	55,000	68,750	0	0	0	13,750	55,000	68,750
6	Dwelling Unit, Pop. & Emp. Change	3,750	15,000	18,750	3,313	13,250	16,563	7,063	28,250	35,313
7	Air Travel	125	500	625	325	1,300	1,625	450	1,800	2,250
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0
9	Travel Time Studies	10,960	43,838	54,798	2,385	9,540	11,925	13,345	53,378	66,723
10	Mapping	5,000	20,000	25,000	5,627	22,506	28,133	10,627	42,506	53,133
11	Central Area Parking Inventory	1,250	5,000	6,250	0	0	0	1,250	5,000	6,250
12	Bike & Ped. Facilities Inventory	1,000	4,000	5,000	48	192	240	1,048	4,192	5,240
13	Bike & Ped. Counts	4,650	18,600	23,250	240	960	1,200	4,890	19,560	24,450
II B	**Long Range Transp. Plan**									
B 1	Collection of Base Year Data	9,000	36,000	45,000	2,706	10,824	13,530	11,706	46,824	58,530
2	Collection of Network Data	1,825	7,300	9,125	960	3,840	4,800	2,785	11,140	13,925
3	Travel Model Updates	46,610	186,440	233,050	5,000	20,000	25,000	51,610	206,440	258,050
4	Travel Surveys	0	0	0	0	0	0	0	0	0
5	Forecast of Data to Horizon year	3,550	14,200	17,750	3,752	15,006	18,758	7,302	29,206	36,508
6	Community Goals & Objectives	5,250	21,000	26,250	2,998	11,992	14,990	8,248	32,992	41,240
7	Forecast of Futurel Travel Patterns	0	0	0	250	1,000	1,250	250	1,000	1,250
8	Capacity Deficiency Analysis	2,450	9,800	12,250	0	0	0	2,450	9,800	12,250
9	Highway Element of th LRTP	250	1,000	1,250	0	0	0	250	1,000	1,250
10	Transit Element of the LRTP	250	1,000	1,250	750	3,000	3,750	1,000	4,000	5,000
11	Bicycle & Ped. Element of the LRTP	9,500	38,000	47,500	2,500	10,000	12,500	12,000	48,000	60,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0
13	Collector Street Element of LRTP	750	3,000	3,750	0	0	0	750	3,000	3,750
14	Rail, Water or other mode of LRTP	250	1,000	1,250	125	500	625	375	1,500	1,875
15	Freight Movement/Mobility Planning	3,500	14,000	17,500	1,100	4,400	5,500	4,600	18,400	23,000
16	Financial Planning	0	0	0	750	3,000	3,750	750	3,000	3,750
17	Congestion Management Strategies	15,500	62,000	77,500	3,558	14,230	17,788	19,058	76,230	95,288
18	Air Qual. Planning/Conformity Anal.	3,125	12,500	15,625	1,675	6,700	8,375	4,800	19,200	24,000
II C	**Short Range Transit Planning**									
1	Short Range Transit Planning	5,500	22,000	27,500	460	1,840	2,300	5,960	23,840	29,800
III-A	**Planning Work Program**	1,250	5,000	6,250	5,268	21,072	26,340	6,518	26,072	32,590
III-B	**Transp. Improvement Plan**	1,250	5,000	6,250	8,513	34,050	42,563	9,763	39,050	48,813
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**									
1	Title VI	0	0	0	0	0	0	0	0	0
2	Environmental Justice	1,425	5,700	7,125	1,650	6,600	8,250	3,075	12,300	15,375
3	Minority Business Enterprise	3,250	13,000	16,250	0	0	0	3,250	13,000	16,250
4	Planning for the Elderly & Disabled	4,250	17,000	21,250	310	1,240	1,550	4,560	18,240	22,800
5	Safety/Drug Control Planning	2,750	11,000	13,750	0	0	0	2,750	11,000	13,750
6	Public Involvement	7,850	31,400	39,250	3,821	15,284	19,105	11,671	46,684	58,355
7	Private Sector Participation	1,000	4,000	5,000	0	0	0	1,000	4,000	5,000
III-D	**Incidental Plng./Project Dev.**									
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0

2	Enviro. Analysis & Pre-TIP Plng.	13,500	54,000	67,500	2,090	8,360	10,450	15,590	62,360	77,950
3	Special Studies	26,555	106,220	132,775	1,943	7,772	9,715	28,498	113,992	142,490
4	Regional or Statewide Planning	19,375	77,500	96,875	867	3,468	4,335	20,242	80,968	101,210
III- E	**Management & Operations**									
1	Management & Operations	65,478	261,910	327,388	25,392	101,566	126,958	90,869	363,476	454,345
Totals		**301,277**	**1,205,108**	**1,506,385**	**88,511**	**354,044**	**442,555**	**389,788**	**1,559,152**	**1,948,940**

Summary Funding Distribution & Agency Allocation Tables……

MPO Detail Funding Tables (FHWA/FTA Funds)

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

MPO Summary
2/18/2010 16:07

	Task Description	SPR Highway NCDOT 20%	SPR Highway FHWA 80%	STP-DA 133(b)(3)(7) Local 20%	STP-DA 133(b)(3)(7) FHWA 80%	Sec. 104(f) PL Local 20%	Sec. 104(f) PL FHWA 80%	Section 5303 Highway/Transit Local 10%	Section 5303 Highway/Transit NCDOT 10%	Section 5303 Highway/Transit FTA 80%	Section 5307 Transit Local 10%	Section 5307 Transit NCDOT 10%	Section 5307 Transit FTA 80%	Section 5309 Transit Local 25%	Section 5309 Transit NCDOT 25%	Section 5309 Transit FTA 50%	Task Funding Summary Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																			
II A 1	Traffic Volume Counts	0	0	4,725	18,900	90	360	0	0	0	0	0	0	0	0	0	4,815	-	19,260	24,075
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
4	Traffic Accidents	0	0	825	3,300	48	192	0	0	0	0	0	0	0	0	0	873	-	3,492	4,365
5	Transit System Data	0	0	13,750	55,000	0	0	9,731	9,731	77,851	19,320	19,320	154,557	0	0	0	42,801	29,051	287,408	359,260
6	Dwelling Unit, Pop. & Emp. Change	0	0	3,750	15,000	3,313	13,250	0	0	0	0	0	0	0	0	0	7,063	-	28,250	35,313
7	Air Travel	0	0	125	500	325	1,300	0	0	0	0	0	0	0	0	0	450	-	1,800	2,250
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
9	Travel Time Studies	0	0	10,960	43,838	2,385	9,540	625	625	5,000	0	0	0	0	0	0	13,970	625	58,378	72,973
10	Mapping	0	0	5,000	20,000	5,627	22,506	2,500	2,500	20,000	0	0	0	0	0	0	13,127	2,500	62,506	78,133
11	Central Area Parking Inventory	0	0	1,250	5,000	0	0	0	0	0	0	0	0	0	0	0	1,250	-	5,000	6,250
12	Bike & Ped. Facilities Inventory	0	0	1,000	4,000	48	192	0	0	0	0	0	0	0	0	0	1,048	-	4,192	5,240
13	Bike & Ped. Counts	0	0	4,650	18,600	240	960	0	0	0	0	0	0	0	0	0	4,890	-	19,560	24,450
II B	**Long Range Transp. Plan**																			
B 1	Collection of Base Year Data	0	0	9,000	36,000	2,706	10,824	1,250	1,250	10,000	0	0	0	0	0	0	12,956	1,250	56,824	71,030
2	Collection of Network Data	0	0	1,825	7,300	960	3,840	1,250	1,250	10,000	0	0	0	0	0	0	4,035	1,250	21,140	26,425
3	Travel Model Updates	2,100	8,400	46,610	186,440	5,000	20,000	0	0	0	16,000	16,000	128,000	0	0	0	67,610	18,100	342,840	428,550
4	Travel Surveys	0	0	0	0	0	0	1,200	1,200	9,600	811	811	6,486	0	0	0	2,011	2,011	16,086	20,108
5	Forecast of Data to Horizon year	0	0	3,550	14,200	3,752	15,006	0	0	0	0	0	0	0	0	0	7,302	-	29,206	36,508
6	Community Goals & Objectives	0	0	5,250	21,000	2,998	11,992	0	0	0	0	0	0	0	0	0	8,248	-	32,992	41,240
7	Forecast of Futurel Travel Patterns	0	0	0	0	250	1,000	625	625	5,000	0	0	0	0	0	0	875	625	6,000	7,500
8	Capacity Deficiency Analysis	0	0	2,450	9,800	0	0	0	0	0	0	0	0	0	0	0	2,450	-	9,800	12,250
9	Highway Element of th LRTP	0	0	250	1,000	0	0	0	0	0	0	0	0	0	0	0	250	-	1,000	1,250
10	Transit Element of the LRTP	0	0	250	1,000	750	3,000	625	625	5,000	4,500	4,500	36,000	0	0	0	6,125	5,125	45,000	56,250
11	Bicycle & Ped. Element of the LRTP	0	0	9,500	38,000	2,500	10,000	0	0	0	0	0	0	0	0	0	12,000	-	48,000	60,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
13	Collector Street Element of LRTP	200	800	750	3,000	0	0	0	0	0	0	0	0	0	0	0	750	200	3,800	4,750
14	Rail, Water or other mode of LRTP	0	0	250	1,000	125	500	0	0	0	0	0	0	0	0	0	375	-	1,500	1,875
15	Freight Movement/Mobility Planning	0	0	3,500	14,000	1,100	4,400	0	0	0	0	0	0	0	0	0	4,600	-	18,400	23,000
16	Financial Planning	0	0	0	0	750	3,000	4,544	4,544	36,352	0	0	0	0	0	0	5,294	4,544	39,352	49,190
17	Congestion Management Strategies	800	3,200	15,500	62,000	3,558	14,230	0	0	0	1,616	1,616	12,928	0	0	0	20,674	2,416	92,358	115,448
18	Air Qual. Planning/Conformity Anal.	200	800	3,125	12,500	1,675	6,700	0	0	0	0	0	0	0	0	0	4,800	200	20,000	25,000
II C	**Short Range Transit Planning**																			
1	Short Range Transit Planning	0	0	5,500	22,000	460	1,840	0	0	0	70,125	70,125	561,000				76,085	70,125	584,840	731,050
III-A	**Planning Work Program**	400	1,600	1,250	5,000	5,268	21,072	161	161	1,288	2,983	2,983	23,866	0	0	0	9,662	3,544	52,826	66,033
III-B	**Transp. Improvement Plan**	400	1,600	1,250	5,000	8,513	34,050	250	250	2,000	552	552	4,412	0	0	0	10,564	1,202	47,062	58,828
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**																			
1	Title VI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
2	Environmental Justice	0	0	1,425	5,700	1,650	6,600	0	0	0	500	500	4,000	0	0	0	3,575	500	16,300	20,375
3	Minority Business Enterprise	0	0	3,250	13,000	0	0	0	0	0	0	0	0	0	0	0	3,250	-	13,000	16,250
4	Planning for the Elderly & Disabled	0	0	4,250	17,000	310	1,240	0	0	0	0	0	0	0	0	0	4,560	-	18,240	22,800
5	Safety/Drug Control Planning	0	0	2,750	11,000	0	0	0	0	0	0	0	0	0	0	0	2,750	-	11,000	13,750
6	Public Involvement	0	0	7,850	31,400	3,821	15,284	0	0	0	5,271	5,271	42,165	0	0	0	16,942	5,271	88,849	111,061
7	Private Sector Participation	0	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	1,000	-	4,000	5,000
III-D	**Incidental Plng./Project Dev.**																			
1	Transportation Enhancement Plng.	100	400	0	0	0	0	0	0	0	0	0	0	0	0	0	-	100	400	500
2	Enviro. Analysis & Pre-TIP Plng.	1,000	4,000	13,500	54,000	2,090	8,360	0	0	0	0	0	0	0	0	0	15,590	1,000	66,360	82,950
3	Special Studies	1,000	4,000	26,555	106,220	1,943	7,772	563	563	4,500	13,800	13,800	110,400	0	0	0	42,861	15,363	232,892	291,115
4	Regional or Statewide Planning	2,100	8,400	19,375	77,500	867	3,468	625	625	5,000	1,316	1,316	10,524	0	0	0	22,183	4,041	104,892	131,115
III-E	**Management & Operations**																			
1	Management & Operations	4,000	16,000	65,478	261,910	25,392	101,566	3,944	3,944	31,553	32,044	32,044	256,351	0	0	0	126,857	39,988	667,380	834,225
Totals		$12,300	$49,200	$301,277	$1,205,108	$88,511	$354,044	$27,893	$27,893	$223,144	$168,836	$168,836	$1,350,689	$0	$0	$0	$586,517	$209,029	$3,182,185	$3,977,731

MPO Funds Distribution by Agency

Durham-Chapel Hill-Carrboro Urban Area
FY 2010-2011 Unified Planning Work Program
Funding Distribution by Agency & Funding Sources

MPO Summary
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	Receiving Agency	SPR Highway NCDOT 20%	SPR Highway FHWA 80%	STP-DA Sec. 133(b)(3)(7) Local 20%	STP-DA Sec. 133(b)(3)(7) FHWA 80%	Section 104(f) PL Local 20%	Section 104(f) PL FHWA 80%	Section 5303 Highway/Transit Local 10%	Section 5303 Highway/Transit NCDOT 10%	Section 5303 Highway/Transit FTA 80%	Section 5307 Transit Local 10%	Section 5307 Transit NCDOT 10%	Section 5307 Transit FTA 80%	Section 5309 Transit Local 10%	Section 5309 Transit NCDOT 10%	Section 5309 Transit FTA 80%	Task Funding Summary Local	Task Funding Summary NCDOT	Task Funding Summary Federal	Task Funding Summary Total
	Durham/DATA			188,527	754,108	67,093	268,372	14,225	14,225	113,803	38,333	38,333	306,665	0	0	0	308,179	52,559	1,442,948	1,803,685
	Carrboro			0	0	5,676	22,704	0	0	0	0	0	0	0	0	0	5,676	-	22,704	28,380
	Chapel Hill/CHT			105,250	421,000	15,742	62,968	13,668	13,668	109,341	11,003	11,003	88,024	0	0	0	145,663	24,671	681,333	851,666
	Orange County			0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
	TJCOG			7,500	30,000	0	0	0	0	0	0	0	0	0	0	0	-	7,500	30,000	37,500
	TTA			0	0	0	0	0	0	0	119,500	119,500	956,000	0	0	0	119,500	119,500	956,000	1,195,000
	NCDOT	12300	49200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,300	49,200	61,500
Totals		$12,300	$49,200	$301,277	$1,205,108	$88,511	$354,044	$27,893	$27,893	$223,144	$168,836	$168,836	$1,350,689	$0	$0	$0	$579,017	$216,529	$3,182,185	$3,977,731

			Composite Agency Tables PL/STP-DA	Durham-Chapel Hill-Carrboro Urban Area FY 2010-2011 Unified Planning Work Program Composite Agency Tables (PL &STP-DA Funds)																		MPO Summary		
			Task Description	Chapel Hill			Carrboro			Orange			TJCOG			Durham			TTA			MPO		
				Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%
II	A		Surveillance of Change																					
II	A	1	Traffic Volume Counts	0	0	0	90	360	450	0	0	0	0	0	0	4,725	18,900	23,625	0	0	0	4,815	19,260	24,075
		2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	Street System Changes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	Traffic Accidents	0	0	0	48	192	240	0	0	0	0	0	0	825	3,300	4,125	0	0	0	873	3,492	4,365
		5	Transit System Data	12,500	50,000	62,500	0	0	0	0	0	0	0	0	0	1,250	5,000	6,250	0	0	0	13,750	55,000	68,750
		6	Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	0	0	0	7,063	28,250	35,313	0	0	0	7,063	28,250	35,313
		7	Air Travel	0	0	0	0	0	0	0	0	0	0	0	0	450	1,800	2,250	0	0	0	450	1,800	2,250
		8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		9	Travel Time Studies	0	0	0	60	240	300	0	0	0	0	0	0	13,285	53,138	66,423	0	0	0	13,345	53,378	66,723
		10	Mapping	2,500	10,000	12,500	214	856	1,070	0	0	0	0	0	0	7,913	31,650	39,563	0	0	0	10,627	42,506	53,133
		11	Central Area Parking Inventory	0	0	0	0	0	0	0	0	0	0	0	0	1,250	5,000	6,250	0	0	0	1,250	5,000	6,250
		12	Bike & Ped. Facilities Inventory	0	0	0	48	192	240	0	0	0	0	0	0	1,000	4,000	5,000	0	0	0	1,048	4,192	5,240
		13	Bike & Ped. Counts	0	0	0	240	960	1,200	0	0	0	0	0	0	4,650	18,600	23,250	0	0	0	4,890	19,560	24,450
II	B		Long Range Transp. Plan																					
	B	1	Collection of Base Year Data	2,500	10,000	12,500	206	824	1,030	0	0	0	0	0	0	9,000	36,000	45,000	0	0	0	11,706	46,824	58,530
		2	Collection of Network Data	750	3,000	3,750	210	840	1,050	0	0	0	0	0	0	1,825	7,300	9,125	0	0	0	2,785	11,140	13,925
		3	Travel Model Updates	0	0	0	0	0	0	0	0	0	0	0	0	51,610	206,440	258,050	0	0	0	51,610	206,440	258,050
		4	Travel Surveys	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		5	Forecast of Data to Horizon year	2,500	10,000	12,500	74	296	370	0	0	0	0	0	0	4,728	18,910	23,638	0	0	0	7,302	29,206	36,508
		6	Community Goals & Objectives	500	2,000	2,500	48	192	240	0	0	0	0	0	0	7,700	30,800	38,500	0	0	0	8,248	32,992	41,240
		7	Forecast of Futurel Travel Patterns	0	0	0	0	0	0	0	0	0	0	0	0	250	1,000	1,250	0	0	0	250	1,000	1,250
		8	Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0	0	0	2,450	9,800	12,250	0	0	0	2,450	9,800	12,250
		9	Highway Element of th LRTP	0	0	0	0	0	0	0	0	0	0	0	0	250	1,000	1,250	0	0	0	250	1,000	1,250
		10	Transit Element of the LRTP	750	3,000	3,750	0	0	0	0	0	0	0	0	0	250	1,000	1,250	0	0	0	1,000	4,000	5,000
		11	Bicycle & Ped. Element of the LRTP	0	0	0	0	0	0	0	0	0	0	0	0	12,000	48,000	60,000	0	0	0	12,000	48,000	60,000
		12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		13	Collector Street Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	750	3,000	3,750	0	0	0	750	3,000	3,750
		14	Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	375	1,500	1,875	0	0	0	375	1,500	1,875
		15	Freight Movement/Mobility Planning	0	0	0	0	0	0	0	0	0	0	0	0	4,600	18,400	23,000	0	0	0	4,600	18,400	23,000
		16	Financial Planning	0	0	0	0	0	0	0	0	0	0	0	0	750	3,000	3,750	0	0	0	750	3,000	3,750
		17	Congestion Management Strategies	625	2,500	3,125	240	960	1,200	0	0	0	0	0	0	18,193	72,770	90,963	0	0	0	19,058	76,230	95,288
		18	Air Qual. Planning/Conformity Anal.	0	0	0	0	0	0	0	0	0	3,125	12,500	15,625	1,675	6,700	8,375	0	0	0	4,800	19,200	24,000
II	C		Short Range Transit Planning																					0
		1	Short Range Transit Planning	5,750	23,000	28,750	210	840	1,050	0	0	0	0	0	0	0	0	0	0	0	0	5,960	23,840	29,800
																								0
III-A			Planning Work Program	1,500	6,000	7,500	268	1,072	1,340	0	0	0	0	0	0	4,750	19,000	23,750	0	0	0	6,518	26,072	32,590
																								0
III-B			Transp. Improvement Plan	1,250	5,000	6,250	0	0	0	0	0	0	0	0	0	8,513	34,050	42,563	0	0	0	9,763	39,050	48,813
																								0
III-C			Cvl Rgts. Cmp./Otr .Reg. Reqs.																					0
		1	Title VI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	Environmental Justice	0	0	0	150	600	750	0	0	0	0	0	0	2,925	11,700	14,625	0	0	0	3,075	12,300	15,375
		3	Minority Business Enterprise	3,250	13,000	16,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,250	13,000	16,250
		4	Planning for the Elderly & Disabled	4,250	17,000	21,250	60	240	300	0	0	0	0	0	0	250	1,000	1,250	0	0	0	4,560	18,240	22,800
		5	Safety/Drug Control Planning	2,750	11,000	13,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,750	11,000	13,750
		6	Public Involvement	2,000	8,000	10,000	496	1,984	2,480	0	0	0	0	0	0	9,175	36,700	45,875	0	0	0	11,671	46,684	58,355
		7	Private Sector Participation	1,000	4,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	4,000	5,000
																								0
III-D			Incidental Plng./Project Dev.																					0
		1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	Enviro. Analysis & Pre-TIP Plng.	12,000	48,000	60,000	90	360	450	0	0	0	0	0	0	3,500	14,000	17,500	0	0	0	15,590	62,360	77,950
		3	Special Studies	12,000	48,000	60,000	718	2,872	3,590	0	0	0	0	0	0	15,780	63,120	78,900	0	0	0	28,498	113,992	142,490
		4	Regional or Statewide Planning	10,617	42,468	53,085	0	0	0	0	0	0	4,375	17,500	21,875	5,250	21,000	26,250	0	0	0	20,242	80,968	101,210
III	E		Management & Operations																					
		1	Management & Operations	42,000	168,000	210,000	2,206	8,824	11,030	0	0	0	0	0	0	46,663	186,652	233,315	0	0	0	90,869	363,476	454,345
Totals				120,992	483,968	604,960	5,676	22,704	28,380	0	0	0	7,500	30,000	37,500	255,620	1,022,480	1,278,100	0	0	0	389,788	1,559,152	1,948,940

NOTE: Section 9 carryover funds are not refelcted (NOT included)

	FHWA Planning Funds MPO PL & STP-DA Total	Durham-Chapel Hill-Carrboro Urban Area FY 2010-2011 Unified Planning Work Program MPO PL & STP-DA Funding Tables								
	Task Description	STP-DA Section 133(b)(3)(7)			PL Section 104(f)			Total FHWA Planning Funds		
		Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%	Local 20%	FHWA 80%	Total 100%
II A	**Surveillance of Change**									
II A 1	Traffic Volume Counts	4,725	18,900	23,625	90	360	450	4,815	19,260	24,075
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0
3	Street System Changes	0	0	0	0	0	0	0	0	0
4	Traffic Accidents	825	3,300	4,125	48	192	240	873	3,492	4,365
5	Transit System Data	13,750	55,000	68,750	0	0	0	13,750	55,000	68,750
6	Dwelling Unit, Pop. & Emp. Change	3,750	15,000	18,750	3,313	13,250	16,563	7,063	28,250	35,313
7	Air Travel	125	500	625	325	1,300	1,625	450	1,800	2,250
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0
9	Travel Time Studies	10,960	43,838	54,798	2,385	9,540	11,925	13,345	53,378	66,723
10	Mapping	5,000	20,000	25,000	5,627	22,506	28,133	10,627	42,506	53,133
11	Central Area Parking Inventory	1,250	5,000	6,250	0	0	0	1,250	5,000	6,250
12	Bike & Ped. Facilities Inventory	1,000	4,000	5,000	48	192	240	1,048	4,192	5,240
13	Bike & Ped. Counts	4,650	18,600	23,250	240	960	1,200	4,890	19,560	24,450
II B	**Long Range Transp. Plan**									
B 1	Collection of Base Year Data	9,000	36,000	45,000	2,706	10,824	13,530	11,706	46,824	58,530
2	Collection of Network Data	1,825	7,300	9,125	960	3,840	4,800	2,785	11,140	13,925
3	Travel Model Updates	46,610	186,440	233,050	5,000	20,000	25,000	51,610	206,440	258,050
4	Travel Surveys	0	0	0	0	0	0	0	0	0
5	Forecast of Data to Horizon year	3,550	14,200	17,750	3,752	15,006	18,758	7,302	29,206	36,508
6	Community Goals & Objectives	5,250	21,000	26,250	2,998	11,992	14,990	8,248	32,992	41,240
7	Forecast of Futurel Travel Patterns	0	0	0	250	1,000	1,250	250	1,000	1,250
8	Capacity Deficiency Analysis	2,450	9,800	12,250	0	0	0	2,450	9,800	12,250
9	Highway Element of th LRTP	250	1,000	1,250	0	0	0	250	1,000	1,250
10	Transit Element of the LRTP	250	1,000	1,250	750	3,000	3,750	1,000	4,000	5,000
11	Bicycle & Ped. Element of the LRTP	9,500	38,000	47,500	2,500	10,000	12,500	12,000	48,000	60,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0
13	Collector Street Element of LRTP	750	3,000	3,750	0	0	0	750	3,000	3,750
14	Rail, Water or other mode of LRTP	250	1,000	1,250	125	500	625	375	1,500	1,875
15	Freight Movement/Mobility Planning	3,500	14,000	17,500	1,100	4,400	5,500	4,600	18,400	23,000
16	Financial Planning	0	0	0	750	3,000	3,750	750	3,000	3,750
17	Congestion Management Strategies	15,500	62,000	77,500	3,558	14,230	17,788	19,058	76,230	95,288
18	Air Qual. Planning/Conformity Anal.	3,125	12,500	15,625	1,675	6,700	8,375	4,800	19,200	24,000
II C	**Short Range Transit Planning**									
1	Short Range Transit Planning	5,500	22,000	27,500	460	1,840	2,300	5,960	23,840	29,800
III-A	**Planning Work Program**	1,250	5,000	6,250	5,268	21,072	26,340	6,518	26,072	32,590
III-B	**Transp. Improvement Plan**	1,250	5,000	6,250	8,513	34,050	42,563	9,763	39,050	48,813
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**									
1	Title VI	0	0	0	0	0	0	0	0	0
2	Environmental Justice	1,425	5,700	7,125	1,650	6,600	8,250	3,075	12,300	15,375
3	Minority Business Enterprise	3,250	13,000	16,250	0	0	0	3,250	13,000	16,250
4	Planning for the Elderly & Disabled	4,250	17,000	21,250	310	1,240	1,550	4,560	18,240	22,800
5	Safety/Drug Control Planning	2,750	11,000	13,750	0	0	0	2,750	11,000	13,750
6	Public Involvement	7,850	31,400	39,250	3,821	15,284	19,105	11,671	46,684	58,355
7	Private Sector Participation	1,000	4,000	5,000	0	0	0	1,000	4,000	5,000
III-D	**Incidental Plng./Project Dev.**									
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0

2	Enviro. Analysis & Pre-TIP Plng.	13,500	54,000	67,500	2,090	8,360	10,450	15,590	62,360	77,950
3	Special Studies	26,555	106,220	132,775	1,943	7,772	9,715	28,498	113,992	142,490
4	Regional or Statewide Planning	19,375	77,500	96,875	867	3,468	4,335	20,242	80,968	101,210
III- E	**Management & Operations**									
1	Management & Operations	65,478	261,910	327,388	25,392	101,566	126,958	90,869	363,476	454,345
Totals		**301,277**	**1,205,108**	**1,506,385**	**88,511**	**354,044**	**442,555**	**389,788**	**1,559,152**	**1,948,940**

City of Durham

- Durham/LPA Task Funding Table
- Durham/LPA Task Descriptions and Narrative
- DATA Transit (FTA) Funding Narrative
- DATA Funding Narrative
- FTA Disadvantaged Business Contracting Opportunities From

City of Durham/LPA

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

Durham
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	4,725	18,900	0	0	0	0	0	0	0	0				4,725	-	18,900	23,625
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Traffic Accidents	825	3,300	0	0	0	0	0	0	0	0				825	-	3,300	4,125
5	Transit System Data	1,250	5,000	0	0	8,481	8,481	67,851	1,120	1,120	8,957				10,851	9,601	81,808	102,260
6	Dwelling Unit, Pop. & Emp. Change	3,750	15,000	3,313	13,250	0	0	0	0	0	0				7,063	-	28,250	35,313
7	Air Travel	125	500	325	1,300	0	0	0	0	0	0				450	-	1,800	2,250
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0				-	-	-	-
9	Travel Time Studies	10,960	43,838	2,325	9,300	0	0	0	0	0	0				13,285	-	53,138	66,423
10	Mapping	5,000	20,000	2,913	11,650	0	0	0	0	0	0				7,913	-	31,650	39,563
11	Central Area Parking Inventory	1,250	5,000	0	0	0	0	0	0	0	0				1,250	-	5,000	6,250
12	Bike & Ped. Facilities Inventory	1,000	4,000	0	0	0	0	0	0	0	0				1,000	-	4,000	5,000
13	Bike & Ped. Counts	4,650	18,600	0	0	0	0	0	0	0	0				4,650	-	18,600	23,250
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	*9,000*	36,000	0	0	0	0	0	0	0	0				9,000	-	36,000	45,000
2	Collection of Network Data	*1,825*	7,300	0	0	0	0	0	0	0	0				1,825	-	7,300	9,125
3	Travel Model Updates	*46,610*	186,440	5,000	20,000	0	0	0	0	0	0				51,610	-	206,440	258,050
4	Travel Surveys	*0*	0	0	0	1,200	1,200	9,600	811	811	6,486				2,011	2,011	16,086	20,108
5	Forecast of Data to Horizon year	3,550	14,200	1,178	4,710	0	0	0	0	0	0				4,728	-	18,910	23,638
6	Community Goals & Objectives	5,250	21,000	2,450	9,800	0	0	0	0	0	0				7,700	-	30,800	38,500
7	Forecast of Futurel Travel Patterns	0	0	250	1,000	0	0	0	0	0	0				250	-	1,000	1,250
8	Capacity Deficiency Analysis	2,450	9,800	0	0	0	0	0	0	0	0				2,450	-	9,800	12,250
9	Highway Element of th LRTP	250	1,000	0	0	0	0	0	0	0	0				250	-	1,000	1,250
10	Transit Element of the LRTP	250	1,000	0	0	0	0	0	0	0	0				250	-	1,000	1,250
11	Bicycle & Ped. Element of the LRTP	9,500	38,000	2,500	10,000	0	0	0	0	0	0				12,000	-	48,000	60,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
13	Collector Street Element of LRTP	*750*	3,000	0	0	0	0	0	0	0	0				750	-	3,000	3,750
14	Rail, Water or other mode of LRTP	250	1,000	125	500	0	0	0	0	0	0				375	-	1,500	1,875
15	Freight Movement/Mobility Planning	3,500	14,000	1,100	4,400	0	0	0	0	0	0				4,600	-	18,400	23,000
16	Financial Planning	0	0	750	3,000	4,544	4,544	36,352	0	0	0				5,294	4,544	39,352	49,190
17	Congestion Management Strategies	15,500	62,000	2,693	10,770	0	0	0	1,616	1,616	12,928				19,809	1,616	85,698	107,123
18	Air Qual. Planning/Conformity Anal.	0	0	1,675	6,700	0	0	0	0	0	0				1,675	-	6,700	8,375
II C	**Short Range Transit Planning**														-	-	-	-
1	Short Range Transit Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
III-A	**Planning Work Program**	0	0	4,750	19,000	0	0	0	2,983	2,983	23,866				7,733	2,983	42,866	53,583
III-B	**Transp. Improvement Plan**	0	0	8,513	34,050	0	0	0	239	239	1,912				8,752	239	35,962	44,953
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**														-	-	-	-
1	Title VI	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Environmental Justice	1,425	5,700	1,500	6,000	0	0	0	500	500	4,000				3,425	500	15,700	19,625
3	Minority Business Enterprise	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Planning for the Elderly & Disabled	0	0	250	1,000	0	0	0	0	0	0				250	-	1,000	1,250
5	Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
6	Public Involvement	5,850	23,400	3,325	13,300	0	0	0	5,271	5,271	42,165				14,446	5,271	78,865	98,581
7	Private Sector Participation	0	0	0	0	0	0	0	0	0	0				-	-	-	-
III-D	**Incidental Plng./Project Dev.**														-	-	-	-
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.	1,500	6,000	2,000	8,000	0	0	0	0	0	0				3,500	-	14,000	17,500
3	Special Studies	14,555	58,220	1,225	4,900	0	0	0	0	0	0				15,780	-	63,120	78,900

City of Durham/LPA

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

Durham
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
4	Regional or Statewide Planning	*5,000*	20,000	250	1,000	0	0	0	0	0	0				5,250	-	21,000	26,250
III- E	**Management & Operations**																	
1	Management & Operations	27,978	111,910	18,686	74,742	0	0	0	25,794	25,794	206,351	0	0	0	72,457	25,794	393,003	491,254
Totals		$188,527	$754,108	$67,093	$268,372	$14,225	$14,225	$113,803	$38,333	$38,333	$306,665	$0	$0	$0	$308,179	$52,559	$1,442,948	$1,803,685

Durham Area Transit Authority
DATA

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

Durham
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Traffic Accidents	0	0	0	0	0	0	0	0	0	0				-	-	-	-
5	Transit System Data	0	0	0	0	8,481	8,481	67,851	1,120	1,120	8,957				9,601	9,601	76,808	96,010
6	Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	0				-	-	-	-
7	Air Travel	0	0	0	0	0	0	0	0	0	0				-	-	-	-
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0				-	-	-	-
9	Travel Time Studies	0	0	0	0	0	0	0	0	0	0				-	-	-	-
10	Mapping	0	0	0	0	0	0	0	0	0	0				-	-	-	-
11	Central Area Parking Inventory	0	0	0	0	0	0	0	0	0	0				-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0	0	0	0	0	0	0	0	0				-	-	-	-
13	Bike & Ped. Counts	0	0	0	0	0	0	0	0	0	0				-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Collection of Network Data	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Travel Model Updates	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Travel Surveys	0	0	0	0	1,200	1,200	9,600	811	811	6,486				2,011	2,011	16,086	20,108
5	Forecast of Data to Horizon year	0	0	0	0	0	0	0	0	0	0				-	-	-	-
6	Community Goals & Objectives	0	0	0	0	0	0	0	0	0	0				-	-	-	-
7	Forecast of Futurel Travel Patterns	0	0	0	0	0	0	0	0	0	0				-	-	-	-
8	Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0				-	-	-	-
9	Highway Element of th LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
10	Transit Element of the LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
11	Bicycle & Ped. Element of the LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
13	Collector Street Element of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
14	Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
15	Freight Movement/Mobility Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
16	Financial Planning	0	0	0	0	4,544	4,544	36,352	0	0	0				4,544	4,544	36,352	45,440
17	Congestion Management Strategies	0	0	0	0	0	0	0	1,616	1,616	12,928				1,616	1,616	12,928	16,160
18	Air Qual. Planning/Conformity Anal.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
II C	**Short Range Transit Planning**														-	-	-	-
1	Short Range Transit Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
III-A	**Planning Work Program**	0	0	0	0	0	0	0	2,983	2,983	23,866				2,983	2,983	23,866	29,833
III-B	**Transp. Improvement Plan**	0	0	0	0	0	0	0	239	239	1,912				239	239	1,912	2,390
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**														-	-	-	-
1	Title VI	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Environmental Justice	0	0	0	0	0	0	0	500	500	4,000				500	500	4,000	5,000
3	Minority Business Enterprise	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Planning for the Elderly & Disabled	0	0	0	0	0	0	0	0	0	0				-	-	-	-
5	Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-

Durham Area Transit Authority
DATA

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

Durham
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
6	Public Involvement	0	0	0	0	0	0	0	5,271	5,271	42,165				5,271	5,271	42,165	52,706
7	Private Sector Participation	0	0	0	0	0	0	0	0	0	0				-	-	-	-
III-D	**Incidental Plng./Project Dev.**														-	-	-	-
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Special Studies	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Regional or Statewide Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
III-E	**Management & Operations**																	
1	Management & Operations	0	0	0	0	0	0	0	25,794	25,794	206,351	0	0	0	25,794	25,794	206,351	257,939
Totals		$0	$0	$0	$0	$14,225	$14,225	$113,803	$38,333	$38,333	$306,665	$0	$0	$0	$52,559	$52,559	$420,468	$525,585

Town of Carrboro

Task Funding Table

Task Descriptions and Narrative

Town of Carrboro

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

Carrboro
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	0	0	90	360										90	-	360	450
2	Vehicle Miles of Travel	0	0	0	0										-	-	-	-
3	Street System Changes	0	0	0	0										-	-	-	-
4	Traffic Accidents	0	0	48	192										48	-	192	240
5	Transit System Data	0	0	0	0				0	0					-	-	-	-
6	Dwelling Unit, Pop. & Emp. Change	0	0	0	0										-	-	-	-
7	Air Travel	0	0	0	0										-	-	-	-
8	Vehicle Occupancy Rates	0	0	0	0										-	-	-	-
9	Travel Time Studies	0	0	60	240										60	-	240	300
10	Mapping	0	0	214	856										214	-	856	1,070
11	Central Area Parking Inventory	0	0	0	0										-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0	48	192										48	-	192	240
13	Bike & Ped. Counts	0	0	240	960										240	-	960	1,200
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	0	0	206	824										206	-	824	1,030
2	Collection of Network Data	0	0	210	840										210	-	840	1,050
3	Travel Model Updates	0	0	0	0										-	-	-	-
4	Travel Surveys	0	0	0	0										-	-	-	-
5	Forecast of Data to Horizon year	0	0	74	296										74	-	296	370
6	Community Goals & Objectives	0	0	48	192				0	0	0				48	-	192	240
7	Forecast of Futurel Travel Patterns	0	0	0	0										-	-	-	-
8	Capacity Deficiency Analysis	0	0	0	0										-	-	-	-
9	Highway Element of th LRTP	0	0	0	0										-	-	-	-
10	Transit Element of the LRTP	0	0	0	0										-	-	-	-
11	Bicycle & Ped. Element of the LRTP	0	0	0	0										-	-	-	-
12	Airport/Air Travel Element of LRTP	0	0	0	0										-	-	-	-
13	Collector Street Element of LRTP	0	0	0	0										-	-	-	-
14	Rail, Water or other mode of LRTP	0	0	0	0										-	-	-	-
15	Freight Movement/Mobility Planning	0	0	0	0										-	-	-	-
16	Financial Planning	0	0	0	0										-	-	-	-
17	Congestion Management Strategies	0	0	240	960										240	-	960	1,200
18	Air Qual. Planning/Conformity Anal.	0	0	0	0										-	-	-	-
II C	**Short Range Transit Planning**																	
1	Short Range Transit Planning	0	0	210	840										210	-	840	1,050
III-A	**Planning Work Program**	0	0	268	1,072										268	-	1,072	1,340
III-B	**Transp. Improvement Plan**	0	0	0	0										-	-	-	-
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**																	
1	Title VI	0	0	0	0										-	-	-	-
2	Environmental Justice	0	0	150	600										150	-	600	750
3	Minority Business Enterprise	0	0	0	0										-	-	-	-

Town of Carrboro

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

Carrboro
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
4	Planning for the Elderly & Disabled	0	0	60	240				0	0	0				60	-	240	300
5	Safety/Drug Control Planning	0	0	0	0										-	-	-	-
6	Public Involvement	0	0	496	1,984										496	-	1,984	2,480
7	Private Sector Participation	0	0	0	0										-	-	-	-
III-D	**Incidental Plng./Project Dev.**					0	0											
1	Transportation Enhancement Plng.	0	0	0	0										-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.	0	0	90	360										90	-	360	450
3	Special Studies	0	0	718	2,872										718	-	2,872	3,590
4	Regional or Statewide Planning	0	0	0	0										-	-	-	-
III- E	**Management & Operations**																	
1	Management & Operations	0	0	2,206	8,824	0	0	0	0	0	0	0	0	0	2,206	-	8,824	11,030
Totals		$0	$0	$5,676	$22,704	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,676	$0	$22,704	$28,380

Town of Chapel Hill

- Task Funding Table
- Consulting Services Breakdown Tables
- Task Description and Narrative
- Chapel Hill Transit (FTA) Funding Narrative
- Chapel Hill Transit Narrative
- FTA Disadvantaged Business Contracting Opportunities Form

Chapel Hill Transit (CHT)

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

Town of Chapel Hill
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
4	Traffic Accidents	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
5	Transit System Data	0	0	0	0	1,250	1,250	10,000	0	0	0			0	1,250	1,250	10,000	12,500
6	Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
7	Air Travel	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
9	Travel Time Studies	0	0	0	0	625	625	5,000	0	0	0			0	625	625	5,000	6,250
10	Mapping	0	0	0	0	2,500	2,500	20,000	0	0	0			0	2,500	2,500	20,000	25,000
11	Central Area Parking Inventory	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
13	Bike & Ped. Counts	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	0	0	0	0	1,250	1,250	10,000	0	0	0			0	1,250	1,250	10,000	12,500
2	Collection of Network Data	0	0	0	0	1,250	1,250	10,000	0	0	0			0	1,250	1,250	10,000	12,500
3	Travel Model Updates	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
4	Travel Surveys	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
5	Forecast of Data to Horizon year	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
6	Community Goals & Objectives	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
7	Forecast of Futurel Travel Patterns	0	0	0	0	625	625	5,000	0	0	0			0	625	625	5,000	6,250
8	Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
9	Highway Element of th LRTP	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
10	Transit Element of the LRTP	0	0	0	0	625	625	5,000	0	0	0			0	625	625	5,000	6,250
11	Bicycle & Ped. Element of the LRTP	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
13	Collector Street Element of LRTP	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
14	Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
15	Freight Movement/Mobility Planning	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
16	Financial Planning	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
17	Congestion Management Strategies	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
18	Air Qual. Planning/Conformity Anal.	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
II C	**Short Range Transit Planning**																	
1	Short Range Transit Planning	0	0	0	0	0	0	0	3,125	3,125	25,000			0	3,125	3,125	25,000	31,250
III-A	**Planning Work Program**	0	0	0	0	161	161	1,288	0	0	0			0	161	161	1,288	1,610
III-B	**Transp. Improvement Plan**	0	0	0	0	250	250	2,000	313	313	2,500			0	563	563	4,500	5,625
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**																	
1	Title VI	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
2	Environmental Justice	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
3	Minority Business Enterprise	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
4	Planning for the Elderly & Disabled	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
5	Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-

Chapel Hill Transit (CHT)

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

Town of Chapel Hill
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
6	Public Involvement	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
7	Private Sector Participation	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
III-D	**Incidental Plng./Project Dev.**																	
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.	0	0	0	0	0	0	0	0	0	0			0	-	-	-	-
3	Special Studies	0	0	0	0	563	563	4,500	0	0	0			0	563	563	4,500	5,625
4	Regional or Statewide Planning	0	0	0	0	625	625	5,000	1,316	1,316	10,524			0	1,941	1,941	15,524	19,405
III-E	**Management & Operations**																	
1	Management & Operations	0	0	0	0	3,944	3,944	31,553	6,250	6,250	50,000	0	0	0	10,194	10,194	81,553	101,941
Totals		$0	$0	$0	$0	$13,668	$13,668	$109,341	$11,003	$11,003	$88,024	$0	$0	$0	$24,671	$24,671	$197,365	$246,706

Town of Chapel Hill

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

Town of Chapel Hill
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7) Local 20%	STP-DA 133(b)(3)(7) FHWA 80%	Sec. 104(f) PL Local 20%	Sec. 104(f) PL FHWA 80%	Section 5303 Highway/Transit Local 10%	Section 5303 Highway/Transit NCDOT 10%	Section 5303 Highway/Transit FTA 80%	Section 5307 Transit Local 10%	Section 5307 Transit NCDOT 10%	Section 5307 Transit FTA 80%	Section 5309 Transit Local 25%	Section 5309 Transit NCDOT 25%	Section 5309 Transit FTA 50%	Task Funding Summary Local	Task Funding Summary NCDOT	Task Funding Summary Federal	Task Funding Summary Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Vehicle Miles of Travel	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Street System Changes	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Traffic Accidents	0	0	0	0	0	0	0	0	0	0				-	-	-	-
5	Transit System Data	12,500	50,000	0	0	1,250	1,250	10,000	0	0	0				13,750	1,250	60,000	75,000
6	Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	0				-	-	-	-
7	Air Travel	0	0	0	0	0	0	0	0	0	0				-	-	-	-
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0				-	-	-	-
9	Travel Time Studies	0	0	0	0	625	625	5,000	0	0	0				625	625	5,000	6,250
10	Mapping	0	0	2,500	10,000	2,500	2,500	20,000	0	0	0				5,000	2,500	30,000	37,500
11	Central Area Parking Inventory	0	0	0	0	0	0	0	0	0	0				-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0	0	0	0	0	0	0	0	0				-	-	-	-
13	Bike & Ped. Counts	0	0	0	0	0	0	0	0	0	0				-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	0	0	2,500	10,000	1,250	1,250	10,000	0	0	0				3,750	1,250	20,000	25,000
2	Collection of Network Data	0	0	750	3,000	1,250	1,250	10,000	0	0	0				2,000	1,250	13,000	16,250
3	Travel Model Updates	0	0	0	0	0	0	0	0	0	0				-	-	-	-
4	Travel Surveys	0	0	0	0	0	0	0	0	0	0				-	-	-	-
5	Forecast of Data to Horizon year	0	0	2,500	10,000	0	0	0	0	0	0				2,500	-	10,000	12,500
6	Community Goals & Objectives	0	0	500	2,000	0	0	0	0	0	0				500	-	2,000	2,500
7	Forecast of Futurel Travel Patterns	0	0	0	0	625	625	5,000	0	0	0				625	625	5,000	6,250
8	Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0				-	-	-	-
9	Highway Element of th LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
10	Transit Element of the LRTP	0	0	750	3,000	625	625	5,000	0	0	0				1,375	625	8,000	10,000
11	Bicycle & Ped. Element of the LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
13	Collector Street Element of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
14	Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0	0				-	-	-	-
15	Freight Movement/Mobility Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
16	Financial Planning	0	0	0	0	0	0	0	0	0	0				-	-	-	-
17	Congestion Management Strategies	0	0	625	2,500	0	0	0	0	0	0				625	-	2,500	3,125
18	Air Qual. Planning/Conformity Anal.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
II C	**Short Range Transit Planning**																	
1	Short Range Transit Planning	5,500	22,000	250	1,000	0	0	0	3,125	3,125	25,000				8,875	3,125	48,000	60,000
III-A	**Planning Work Program**	1,250	5,000	250	1,000	161	161	1,288	0	0	0				1,661	161	7,288	9,110
III-B	**Transp. Improvement Plan**	1,250	5,000	0	0	250	250	2,000	313	313	2,500				1,813	563	9,500	11,875
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**																	
1	Title VI	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Environmental Justice	0	0	0	0	0	0	0	0	0	0				-	-	-	-
3	Minority Business Enterprise	3,250	13,000	0	0	0	0	0	0	0	0				3,250	-	13,000	16,250

Town of Chapel Hill

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

Town of Chapel Hill
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
4	Planning for the Elderly & Disabled	4,250	17,000	0	0	0	0	0	0	0	0				4,250	-	17,000	21,250
5	Safety/Drug Control Planning	2,750	11,000	0	0	0	0	0	0	0	0				2,750	-	11,000	13,750
6	Public Involvement	2,000	8,000	0	0	0	0	0	0	0	0				2,000	-	8,000	10,000
7	Private Sector Participation	1,000	4,000	0	0	0	0	0	0	0	0				1,000	-	4,000	5,000
III-D	**Incidental Plng./Project Dev.**																	
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0	0				-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.	12,000	48,000	0	0	0	0	0	0	0	0				12,000	-	48,000	60,000
3	Special Studies	12,000	48,000	0	0	563	563	4,500	0	0	0				12,563	563	52,500	65,625
4	Regional or Statewide Planning	10,000	40,000	617	2,468	625	625	5,000	1,316	1,316	10,524				12,558	1,941	57,992	72,490
III-E	**Management & Operations**																	
1	Management & Operations	37,500	150,000	4,500	18,000	3,944	3,944	31,553	6,250	6,250	50,000	0	0	0	52,194	10,194	249,553	311,941
Totals		$105,250	$421,000	$15,742	$62,968	$13,668	$13,668	$109,341	$11,003	$11,003	$88,024	$0	$0	$0	$145,663	$24,671	$681,333	$851,666

N.C. Department of Transportation
Task Funding Table
Task Description and Narrative

NCDOT

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

NCDOT
2/18/2010 16:07

	Task Description	SPR Highway		Sec. 104(f) & 133(b)(3)(7)		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts	0	0												-	-	-	-
2	Vehicle Miles of Travel	0	0												-	-	-	-
3	Street System Changes	0	0												-	-	-	-
4	Traffic Accidents	0	0												-	-	-	-
5	Transit System Data	0	0						0	0					-	-	-	-
6	Dwelling Unit, Pop. & Emp. Change	0	0												-	-	-	-
7	Air Travel	0	0												-	-	-	-
8	Vehicle Occupancy Rates	0	0												-	-	-	-
9	Travel Time Studies	0	0												-	-	-	-
10	Mapping	0	0												-	-	-	-
11	Central Area Parking Inventory	0	0												-	-	-	-
12	Bike & Ped. Facilities Inventory	0	0												-	-	-	-
13	Bike & Ped. Counts	0	0												-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data	0	0												-	-	-	-
2	Collection of Network Data	0	0												-	-	-	-
3	Travel Model Updates	2,100	8,400												-	2,100	8,400	10,500
4	Travel Surveys	0	0												-			
5	Forecast of Data to Horizon year	0	0												-	-	-	-
6	Community Goals & Objectives	0	0												-	-	-	-
7	Forecast of Futurel Travel Patterns	0	0												-	-	-	-
8	Capacity Deficiency Analysis	0	0												-		-	
9	Highway Element of th LRTP	0	0												-	-	-	-
10	Transit Element of the LRTP	0	0												-	-	-	-
11	Bicycle & Ped. Element of the LRTP	0	0												-	-	-	-
12	Airport/Air Travel Element of LRTP	0	0												-	-	-	-
13	Collector Street Element of LRTP	200	800												-	200	800	1,000
14	Rail, Water or other mode of LRTP	0	0												-	-	-	-
15	Freight Movernent/Mobility Planning	0	0												-	-	-	-
16	Financial Planning	0	0												-	-	-	-
17	Congestion Management Strategies	800	3,200												-	800	3,200	4,000
18	Air Qual. Planning/Conformity Anal.	200	800												-	200	800	1,000
II C	**Short Range Transit Planning**														-	-	-	-
1	Short Range Transit Planning	0	0												-	-	-	-
III-A	**Planning Work Program**	400	1,600												-	400	1,600	2,000
III-B	**Transp. Improvement Plan**	400	1,600												-	400	1,600	2,000
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**														-	-	-	-
1	Title VI	0	0												-	-	-	-
2	Environmental Justice	0	0												-	-	-	-
3	Minority Business Enterprise	0	0												-	-	-	-

NCDOT

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

NCDOT
2/18/2010 16:07

	Task Description	SPR Highway		Sec. 104(f) & 133(b)(3)(7)		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
4	Planning for the Elderly & Disabled	0	0												-	-	-	-
5	Safety/Drug Control Planning	0	0												-	-	-	-
6	Public Involvement	0	0												-	-	-	-
7	Private Sector Participation	0	0												-	-	-	-
III-D	**Incidental Plng./Project Dev.**														-	-	-	-
1	Transportation Enhancement Plng.	100	400												-	100	400	500
2	Enviro. Analysis & Pre-TIP Plng.	1,000	4,000												-	1,000	4,000	5,000
3	Special Studies	1,000	4,000												-	1,000	4,000	5,000
4	Regional or Statewide Planning	2,100	8,400													2,100	8,400	10,500
III- E	**Management & Operations**														-	-	-	-
1	Management & Operations	4,000	16,000													4,000	16,000	20,000
Totals		$12,300	$49,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,300	$49,200	$61,500

Triangle Transit Authority (TTA)

- Task Funding Table
- Task Description and Narrative
- TTA Transit (FTA) Funding Narrative
- FTA Disadvantaged Business Contracting Opportunities Form

Triangle Transit Authority (TTA)

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

TTA
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts			0	0				0	0	0				-	-	-	-
2	Vehicle Miles of Travel			0	0				0	0	0				-	-	-	-
3	Street System Changes			0	0				0	0	0				-	-	-	-
4	Traffic Accidents			0	0				0	0	0				-	-	-	-
5	Transit System Data			0	0				18,200	18,200	145,600				18,200	18,200	145,600	182,000
6	Dwelling Unit, Pop. & Emp. Change			0	0				0	0	0				-	-	-	-
7	Air Travel			0	0				0	0	0				-	-	-	-
8	Vehicle Occupancy Rates			0	0				0	0	0				-	-	-	-
9	Travel Time Studies			0	0				0	0	0				-	-	-	-
10	Mapping			0	0				0	0	0				-	-	-	-
11	Central Area Parking Inventory			0	0				0	0	0				-	-	-	-
12	Bike & Ped. Facilities Inventory			0	0				0	0	0				-	-	-	-
13	Bike & Ped. Counts			0	0				0	0	0				-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data			0	0				0	0	0				-	-	-	-
2	Collection of Network Data			0	0				0	0	0				-	-	-	-
3	Travel Model Updates			0	0				16,000	16,000	128,000				16,000	16,000	128,000	160,000
4	Travel Surveys			0	0				0	0	0				-	-	-	-
5	Forecast of Data to Horizon year			0	0				0	0	0				-	-	-	-
6	Community Goals & Objectives			0	0				0	0	0				-	-	-	-
7	Forecast of Futurel Travel Patterns			0	0				0	0	0				-	-	-	-
8	Capacity Deficiency Analysis			0	0				0	0	0				-		-	
9	Highway Element of th LRTP	0	0	0	0				0	0	0				-		-	
10	Transit Element of the LRTP	0	0	0	0				4,500	4,500	36,000				4,500	4,500	36,000	45,000
11	Bicycle & Ped. Element of the LRTP			0	0				0	0	0				-	-	-	-
12	Airport/Air Travel Element of LRTP			0	0				0	0	0				-	-	-	-
13	Collector Street Element of LRTP			0	0				0	0	0				-	-	-	-
14	Rail, Water or other mode of LRTP			0	0				0	0	0				-	-	-	-
15	Freight Movement/Mobility Planning			0	0				0	0	0				-	-	-	-
16	Financial Planning			0	0				0	0	0				-	-	-	-
17	Congestion Management Strategies	0	0	0	0				0	0	0				-	-	-	-
18	Air Qual. Planning/Conformity Anal.			0	0				0	0	0				-	-	-	-
II C	**Short Range Transit Planning**														-	-	-	-
1	Short Range Transit Planning			0	0				67,000	67,000	536,000				67,000	67,000	536,000	670,000
III-A	**Planning Work Program**			0	0				0	0	0				-	-	-	-
III-B	**Transp. Improvement Plan**			0	0				0	0	0				-	-	-	-
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**														-	-	-	-
1	Title VI			0	0				0	0	0				-	-	-	-
2	Environmental Justice			0	0				0	0	0							
3	Minority Business Enterprise			0	0				0	0	0							
4	Planning for the Elderly & Disabled			0	0				0	0	0				-	-	-	-
5	Safety/Drug Control Planning			0	0				0	0	0				-	-	-	-
6	Public Involvement			0	0				0	0	0				-	-	-	-
7	Private Sector Participation			0	0				0	0	0				-	-	-	-
III-D	**Incidental Plng./Project Dev.**														-	-	-	-
1	Transportation Enhancement Plng.			0	0				0	0	0				-	-	-	-

Triangle Transit Authority (TTA)

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

TTA
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
2	Enviro. Analysis & Pre-TIP Plng.			0	0				0	0	0				-	-	-	-
3	Special Studies			0	0				13,800	13,800	110,400				13,800	13,800	110,400	138,000
4	Regional or Statewide Planning			0	0				0	0	0				-	-	-	-
III- E	**Management & Operations**														-	-	-	-
1	Management & Operations	0	0	0	0				0	0	0							
Totals		$0	$0	$0	$0	$0	$0	$0	$119,500	$119,500	$956,000	$0	$0	$0	$119,500	$119,500	$956,000	$1,195,000

Triangle J Council of Governments (TJCOG)
Task Funding Table
Task Description and Narrative

Triangle J COG

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

TJCOG
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
II A	**Surveillance of Change**																	
II A 1	Traffic Volume Counts														-	-	-	-
2	Vehicle Miles of Travel														-	-	-	-
3	Street System Changes														-	-	-	-
4	Traffic Accidents														-	-	-	-
5	Transit System Data								0	0					-	-	-	-
6	Dwelling Unit, Pop. & Emp. Change														-	-	-	-
7	Air Travel														-	-	-	-
8	Vehicle Occupancy Rates														-	-	-	-
9	Travel Time Studies														-	-	-	-
10	Mapping														-	-	-	-
11	Central Area Parking Inventory														-	-	-	-
12	Bike & Ped. Facilities Inventory														-	-	-	-
13	Bike & Ped. Counts														-	-	-	-
II B	**Long Range Transp. Plan**																	
B 1	Collection of Base Year Data														-	-	-	-
2	Collection of Network Data														-	-	-	-
3	Travel Model Updates														-	-	-	-
4	Travel Surveys	0	0	0	0										-	-	-	-
5	Forecast of Data to Horizon year	0	0	0	0										-	-	-	-
6	Community Goals & Objectives														-	-	-	-
7	Forecast of Futurel Travel Patterns														-	-	-	-
8	Capacity Deficiency Analysis														-		-	
9	Highway Element of th LRTP														-		-	
10	Transit Element of the LRTP	0		0	0										-	-	-	-
11	Bicycle & Ped. Element of the LRTP	0	0	0	0										-	-	-	-
12	Airport/Air Travel Element of LRTP														-	-	-	-
13	Collector Street Element of LRTP			0	0										-	-	-	-
14	Rail, Water or other mode of LRTP														-	-	-	-
15	Freight Movement/Mobility Planning														-	-	-	-
16	Financial Planning														-	-	-	-
17	Congestion Management Strategies														-	-	-	-
18	Air Qual. Planning/Conformity Anal.	3,125	12,500	0	0										-	3,125	12,500	15,625
II C	**Short Range Transit Planning**														-	-	-	-
1	Short Range Transit Planning														-	-	-	-
															-	-	-	-
III-A	**Planning Work Program**														-	-	-	-
															-	-	-	-
III-B	**Transp. Improvement Plan**														-	-	-	-
															-	-	-	-
III-C	**Cvl Rgts. Cmp./Otr .Reg. Reqs.**														-	-	-	-
1	Title VI														-	-	-	-
2	Environmental Justice																-	
3	Minority Business Enterprise																-	

Triangle J COG

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

TJCOG
2/18/2010 16:07

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total
4	Planning for the Elderly & Disabled														-	-	-	-
5	Safety/Drug Control Planning														-	-	-	-
6	Public Involvement														-	-	-	-
7	Private Sector Participation														-	-	-	-
															-	-	-	-
III-D	**Incidental Plng./Project Dev.**														-	-	-	-
1	Transportation Enhancement Plng.														-	-	-	-
2	Enviro. Analysis & Pre-TIP Plng.														-	-	-	-
3	Special Studies	0	0	0	0				0	0	0	0	0	0	-	-	-	-
4	Regional or Statewide Planning	4,375	17,500	0	0										-	4,375	17,500	21,875
III- E	**Management & Operations**																	
1	Management & Operations	0	0														-	
Totals		$7,500	$30,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,500	$30,000	$37,500

Draft FY 2010-2011 Unified Planning Work Program (UPWP) for the DCHC MPO

1

TCC Meeting
February 24, 2010

FY 2010-11 UPWP OVERVIEW

- Federal regulations mandate that the MPO develop an annual work program known as the Unified Planning Work Program (UPWP).
- The annual program must identify transportation planning tasks to be undertaken with the use of federal transportation funds during the upcoming fiscal year.
- The UPWP must a detail technical work program for continuing, cooperative and comprehensive (3C) transportation planning in the DCHC MPO.

2

FY 2010-11 UPWP FUNDING SOURCES

- USDOT has not allocated planning funds for FY2011. The MPO has been directed to use last year's allocation in developing the draft. Revision or amendments will be made subsequent to notification of the final FY 2011 funding allocation.

  - Federal Highway Administration –FHWA (80%)
    - Section 104(f) Planning : $354,044
    - Section 133(b)(3)(7) –STP-DA : $1,205,108 *(this number does not include any carry-over funds or local discretionary funds to be flexed to planning)*

3

FY 2010-11 UPWP FUNDING SOURCES

- Federal Transit Administration – FTA (80%)
  - Section 5303: $ 223,144
  - Section 5307: $1,350,689

- North Carolina DOT - NCDOT (10%)
  - Section 5303: $ 27,893
  - Section 5307: $ 168,836

- Local Matching Funds
  - 10% local match for transit planning
  - 20% local match for FHWA funds

4

FY 2010-11 UPWP

- Funding tasks are derived from the approved *Prospectus* by NCDOT and MPOs statewide.
  - Prospectus broad task areas
    - Surveillance of change – data monitoring
    - Long range transportation plan activities
    - Short range transit planning
    - Planning work program
    - Transportation Improvement Program
    - Civil rights
    - Administration

5

FY 2010-11 UPWP FUNDING BROAD AREAS

- General/On-Going/Core/Routine 3-C Planning Process
- Emphasis Transportation Planning Projects/Products.
- Continuation of Special Projects
- New Initiatives – No new initiatives proposed for 2010-11 UPWP (Maybe Parking Survey/Study ???).

6

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- TCC/TAC meetings/agenda preparation/directives to staff/follow-ups
- MTIP/STIP development including priority lists
- TIP amendments
- Stimulus projects oversight, reporting and audit compliance
- UPWP development and amendments
- Transit planning
- Data collection, monitoring & maintenance
- GIS mapping/maintenance/administration
- Bike/pedestrian planning

7

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- Management and operation of transportation planning process
- JARC/New Freedom programming & administration
- STP-DA Programming, monitoring & administration
- CMAQ Programming, monitoring & administration
- Air quality planning & conformity
- Project planning & development
- Environmental justice involvement / limited English proficiency planning
- State & regional planning coordination

8

GENERAL/ON-GOING/CORE/ROUTINE 3-C PLANNING

- Financial management and auditing
- Public involvement/outreach
- MPO website maintenance/content management, visualization and interactive capabilities
- Civil rights/Title VI planning compliance
- Congestion management monitoring
- Data inventory monitoring

9

EMPHASIS PLANNING PROJECTS/PROGRAMS

- Development of the 2040 Long Range Transportation Plan - LRTP
- Comprehensive Transportation Plan – CTP
- Development & update of the MPO Congestion Management Process (CMP)
- Maintenance and update of the regional Intelligent Transportation System (ITS)
- Maintenance and update of IDAS & DynaSmart

10

EMPHASIS PLANNING PROJECTS/PROGRAMS

- MPO data collection and surveillance of change
- Triangle Regional Model (TRM) update, improvements, calibration and validation
- DCHC MPO policy document and strategic plan
- Environmental justice /limited English proficiency plan update & integration

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EMPHASIS PLANNING PROJECTS/PROGRAMS

- MPO climate change plan/integration of climate change/greenhouse gas into MPO planning processes
- Bicycle friendly designation for Durham and Chapel Hill
- Spatial mapping and analysis of bike and pedestrian access to schools
- Rail traffic separation study (high speed rail)
- Freight/urban goods movement planning

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EMPHASIS PLANNING PROJECTS/PROGRAMS

- Purpose and need statement, indirect & cumulative impacts (ICI) analysis/plan for DCHC MPO
- Preparation of bicycle map
- TDM plan update and monitoring
- MPO policy/process document coordination with CAMPO, organizational study & regional efficiency study (similar to Charlotte area MPOs)
- MPO/MAB expansion prep work for Census

13

FY 2010-11 UPWP CONTINUATION OF SPECIAL PROJECTS

- NC 54/I40 corridor study
- MPO integrated land use/transportation model development
- MPO land use scenario planning tool
- Development of the non-motorized trip model
- MPO GIS warehouse (enterprise)/ automation

14

FY 2010-11 UPWP
NEW INITIATIVES

- None proposed.
- Except parking survey and survey to support transit planning and travel demand forecasting (especially in Chapel Hill, Duke, downtowns and RTP).
- Need matching funds contribution from MPO member agencies .

15

FY 2009-10 UPWP
HIGHLIGHTS OF PLANNING ACTIVITIES

- Environmental project planning/NEPA – staff involvement in project development, engineering and environmental process (e.g., East End Connector, Hillandale Road, South Columbia, Elizabeth Brady Road, etc)
- State and regional coordination (regional transit projects, Intelligent Transportation Systems, I-40 HOV, Triangle Parkway toll projects, etc)

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FY 2009-10 UPWP

- TCC Action:

  Recommend TAC release the Draft FY2010-11 UPWP for public comment

17

RESOLUTION TO ENDORSE APPLICATIONS FROM THE DURHAM-CHAPEL HILL-CARRBORO MPO AREA FOR NCDOT SAFE ROUTES TO SCHOOL DIVISION INFRASTRUCTURE AWARDS

March 10, 2010

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

WHEREAS, the North Carolina Department of Transportation has allocated Safe Routes to School (SRTS) funding to each Highway Division to assist communities in implementing infrastructure projects to address active travel to schools serving Kindergarten – Grade 8 on state-maintained roads; and

WHEREAS, any state, local, and regional agency, including nonprofit organizations, that can demonstrate the ability to meet the requirements of the federal SRTS program is eligible to apply for the infrastructure awards; and

WHEREAS, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee (DCHC TAC) recognizes the importance of a balanced transportation network to the economic and social well-being of the community; and

WHEREAS, the Town of Chapel Hill is within the Durham-Chapel Hill-Carrboro MPO region and submitted three applications for Safe Routes to Schools infrastructure funding to Division 7; and

WHEREAS, the Town's application to construct a sidewalk on the south-side of Culbreth Road to serve Scroggs Elementary, Culbreth Middle, and Carrboro High Schools has been awarded funding;

BE IT THEREFORE RESOLVED that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee gives its support for the Town of Chapel Hill's application to construct a sidewalk on Culbreth Road to serve Scroggs Elementary, Culbreth Middle, and Carrboro High Schools.

_____
TAC Chair

STATE of: North Carolina
COUNTY of: _____

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

_____
Notary Public for the State of NC
(Seal) My commission expires_____

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

AMENDMENT #14
March 10, 2010

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

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

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

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

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

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

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

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

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

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

Resolution for Amendment #14 to DCHC 2009-2015 MTIP" provided here on this, the 10th day of March, 2010.

_____
TAC Chair

STATE of: North Carolina
COUNTY of: _____

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

_____
Notary Public
(Seal) My commission expires_____

Attachment to Resolution for Amendment #14 to DCHC 2009-2015 MTIP

New Project

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Durham	Division 5 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	$ 2,000,000	$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Durham	Division 5 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	$ 100,000

New Project

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Durham	Division 7 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	$ 2,000,000	$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Durham	Division 7 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	$ 100,000

New Project

TIP	County	Description	Funding	Phase	FY 2010	FY 2011
BD-5106	Durham	Division 8 Purchase Order Contract bridge replacement projects at selected locations	NFA	C	$ 2,000,000	$ 2,000,000

New Project

TIP	County	Description	Funding	Phase	FY 2010
W-5205	Durham	Division 8 Rumble strips, guardrail and lighting improvements at selected locations to assist with maintenance of effort	HES	C	$ 100,000

DCHC
Durham-Chapel Hill-Carrboro
METROPOLITAN
Planning Organization

FARRINGTON ROAD CORRIDOR STUDY

Prepared for:

DURHAM · CHAPEL HILL · CARRBORO
METROPOLITAN PLANNING ORGANIZATION

Prepared by:

Kimley-Horn and Associates, Inc.

URBAN RESOURCE GROUP
A DIVISION OF KIMLEY-HORN AND ASSOCIATES, INC.

February 2010

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acknowledgements

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Felix Nwoko
Mark Ahrendsen

City of Durham

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executive summary

The Research Triangle area experienced considerable growth over the past three decades which is expected to continue. Growth is forecasted to occur in undeveloped areas of the region that have large tracts of vacant land that are in close proximity to employment centers -- including areas influencing the Farrington Road Corridor. **The focus of the Farrington Road Corridor Study is to identify the type and extent of growth patterns and development intensities anticipated for the area, and the associated traffic impacts likely to result.**

The study area for the Farrington Road Corridor Study focuses on the potential high-growth area emerging at the convergence of four counties — Chatham, Durham, Orange, and Wake — and three cities — Cary, Chapel Hill, and Durham — immediately south and west of Research Triangle Park. See **Figure 31** on the last page of this Executive Summary for a depiction of the study area**.** This study seeks to offer recommendations that will address the future transportation and land use concerns while respecting and preserving the natural environment within the area. Extensive environmental, transportation, and land use analysis was conducted to understand the needs and conditions of the area.

Existing Analysis

Analysis of the existing transportation conditions included corridor Level-of-Service (LOS) analysis, intersection LOS analysis, cordon survey flows, select link analysis, and district flow analysis. It was determined that all of the studied corridors and intersections are operating at an acceptable LOS. In addition, it was found that the majority of the trips are local in nature and that trips from outside the area are not expected to create significant demand on the Farrington Road Corridor.

Natural Environment

Environmental features in the study area have a significant impact on development patterns, and constrain additions to the built environment and to roadway facilities. The following features of the natural environment were considered:

- Wetlands
- Federally Threatened and Endangered Species
- Nutrient Sensitive Waters
- Water Supply Watersheds
- Floodplain/Floodway Zones

Scenario Planning

The scenario analysis effort demonstrated that a new trend toward compact development centers would result in a more efficient transportation network, reduce overall infrastructure costs and conserve land. Scenario planning allows communities to

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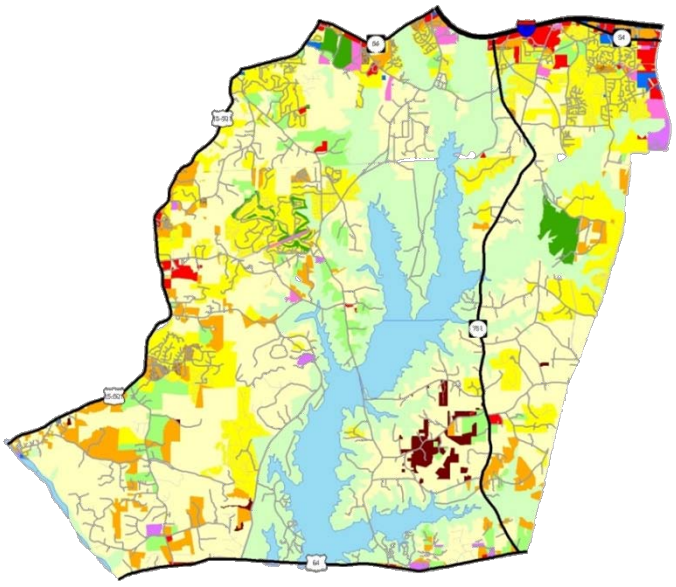
evaluate the influence of land use, design and environmental features on the efficiency of the surrounding transportation. CommunityViz® Scenario 360® (scenario analysis software) evaluated impacts on the transportation system by three distinct future year development scenarios (year 2035): business-as-usual; compact development centers; and constrained growth projections.

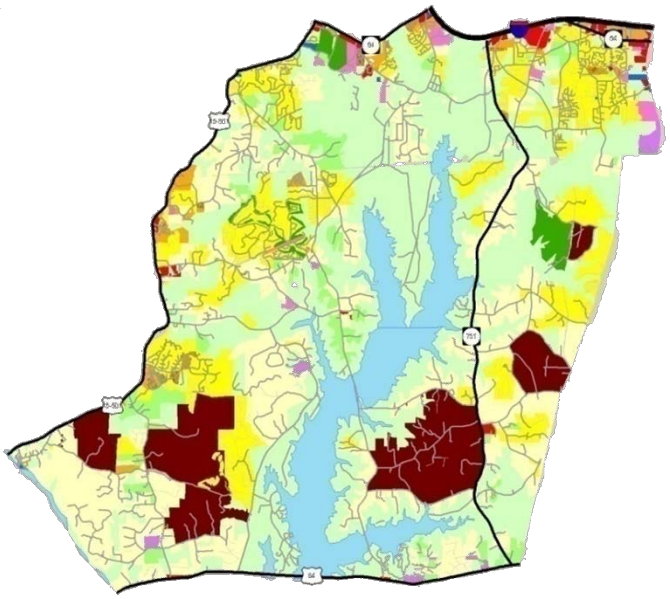
The two maps below and the table on the next page show the different development patterns and densities for the three scenarios. Although the business-as-usual and compact development centers accommodate the same level of employment and population, the compact development centers scenario allows approximately 9,000 more acres to remain in permanent conservation.

Development Scenario Maps

Rural Residential	Civic / Institutional	Agriculture
Low Density Residential	Commercial	Conservation
Medium Density Residential	Light Industrial	Parks / Recreation
High Density Residential	General Office	Compact Dev. Center



Business-as-Usual



Compact Development Centers

executive summary

Land Use Profile by Scenario

General Land Use Category	Business As Usual		Compact Development Centers		Constrained Growth Projection	
	Acreage	Percent	Acreage	Percent	Acreage	Percent
Agriculture	2,989.95	4.20%	2,614.06	3.67%	2,989.95	4.20%
Civic / Institutional	519.48	0.73%	519.48	0.73%	519.48	0.73%
Commercial	1,046.66	1.47%	599.62	0.84%	1,046.66	1.47%
General Office	227.81	0.32%	123.87	0.17%	227.81	0.32%
High Density Residential	166.63	0.23%	166.63	0.23%	166.63	0.23%
Low Density Residential	10,656.32	14.96%	9,604.48	13.48%	10,656.32	14.96%
Light Industrial	335.03	0.47%	335.03	0.47%	335.03	0.47%
Medium Density Residential	3,846.39	5.40%	916.33	1.29%	3,846.39	5.40%
Permanent Conservation	24,669.52	34.63%	33,494.36	47.02%	24,669.52	34.63%
Parks & Recreation	923.14	1.30%	917.71	1.29%	923.14	1.30%
Rural Residential	25,209.14	35.39%	15,416.21	21.64%	25,209.14	35.39%
Compact Development Center	650.07	0.91%	6,532.37	9.17%	650.07	0.91%
Total	**71,240.15**	**100.00%**	**71,240.15**	**100.00%**	**71,240.15**	**100.00%**

(Business as Usual and Compact Development assume the same employment and population levels. Constrained Growth represents a 15% reduction in employment and population)

The compact development centers scenario also provides travel advantages. The table below presents measures of effectiveness (MOEs) for comparing the three land use scenarios. The per-capita level of trips, travel miles and travel minutes are lower when comparing the business-as-usual and compact development centers scenarios, resulting in an approximately 5% reduction in vehicle miles traveled (VMT) for the compact development center scenario.

Measures of Effectiveness from the Triangle Research Model (TRM)

	Scenario			Percent Difference	
	Business-as-Usual (BAU)	Compact Development Centers (CDC)	Constrained Growth Projection (CGP)	BAU-CDC	BAU-CGP
Study Area Population	22,789	22,789	19,367	0%	-15%
Households	10,457	10,457	8,888	0%	-15%
Vehicle Trips	95,116	76,330	71,895	-19.75%	-24.41%
Vehicle Trips/Person	4.17	3.35	3.71	-19.75%	-11.03%
VMT	526,106	501,041	466,130	4.76%	-11.40%
VMT/ Person	23.09	21.99	24.1	-4.76%	4.4%
VHT	795,316	752,541	694,950	-5.38%	-12.62%
VHT/ Person (hours)	0.58	0.55	.60	-5.38%	3.4%
VHT/ Person (minutes)	34.90	33.02	35.88	-5.38%	3.4%
Average AM Speed	41.11	41.36	41.03	0.61%	-0.80%
Percent VMT over Capacity	5.32%	4.66%	4.41%	NA	NA

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Future Analysis

Analysis of future transportation conditions indicated that many transportation facilities within the study area will experience significant traffic volumes. The impacts will be five roadway sections that experience a LOS F, including NC 751, Farrington Road, Old Farrington Point Road, Barbee Chapel Road, and Stagecoach Road, and two intersections at LOS F, including NC 751/Hope Valley Road and NC 751/Fayetteville Road. In addition, several road segments and intersections will operate at LOS E. The majority of the traffic demand in the study area will remain local.

Recommendations

Roadway and Intersection Recommendations

Recommendations for roadway and intersection improvements are listed below and have been designated as short- or long-term solutions. There is no priority order for these recommendations and it is assumed that private developers might build some projects to mitigate the traffic impacts of a particular development. **Figure 31** is a map showing the location of the proposed recommendations.

It is expected that several roadways within the Farrington Road area will require significantly increased capacity given an expected LOS of E or F. Increasing capacity is typically accomplished through widening, i.e., the addition of travel lanes. However, the DCHC MPO applies a heavy weight to environmental considerations such as wetland preservation and water quality when evaluating projects. Alternative improvements including intersection upgrades and roundabouts are recommended for these roadways to avoid the environmental impacts of road widenings. Construction of a roundabout would be in lieu of adding turn lanes and traffic signals.

US 15-501 and Jack Bennett Road

- Short-term: Lengthen the existing westbound left-turn lane on Jack Bennett Road to provide 250 feet of full-width storage.

Old Farrington Point Road and Lystra Road

- Short-term: Construct an additional eastbound left-turn lane on Lystra Road with 425 feet of full-width storage, and corresponding receiving lane on northbound Old Farrington Point Rd.
- Long-term: Construct an exclusive southbound right-turn lane on Old Farrington Point Road with 300 feet of full-width storage.

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- Long-term: In lieu of constructing turn lanes, consider conversion of traffic signal to a roundabout configuration.

Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road

- Long-term: Construct an exclusive westbound right-turn turn lane on Farrington Point Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive northbound right-turn lane on Old Farrington Point Road with 225 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn turn lane on Mt. Carmel Road with 125 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Mill Road/Farrington Point Road and Barbee-Chapel Road

- Long-term: Construct an exclusive eastbound right-turn turn lane on Barbee-Chapel Road with 125 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Farrington Point Road with 700 feet of full-width storage.
- Long-term: Construct an exclusive northbound left-turn lane on Farrington Point Road to provide 225 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Road and Stagecoach Road

- Short-term: Construct an exclusive northbound right-turn turn lane on Farrington Road with 200 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn lane on Farrington Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Stagecoach Road with 100 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Stagecoach Road and Hope Valley Road (751)

- Short-term: Construct an additional eastbound left-turn lane on Stagecoach Road with 250 feet of full-width storage.

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- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Construct an exclusive northbound left-turn lane on Hope Valley Road with 400 feet of full-width storage.
- Long-term: Construct an exclusive southbound right-turn lane on Hope Valley Road with 200 feet of full-width storage.

Hope Valley Road (751) and Fayetteville Road

- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Lengthen the existing northbound right-turn lane on Hope Valley Road to provide 350 feet of full-width storage.
- Long-term: Construct an additional westbound left-turn lane Fayetteville Road with 100 feet of full-width storage
- Long-term: Lengthen the existing westbound right-turn lane on Fayetteville Road to provide 175 feet of full-width storage.

NC 55 and T.W. Alexander Drive

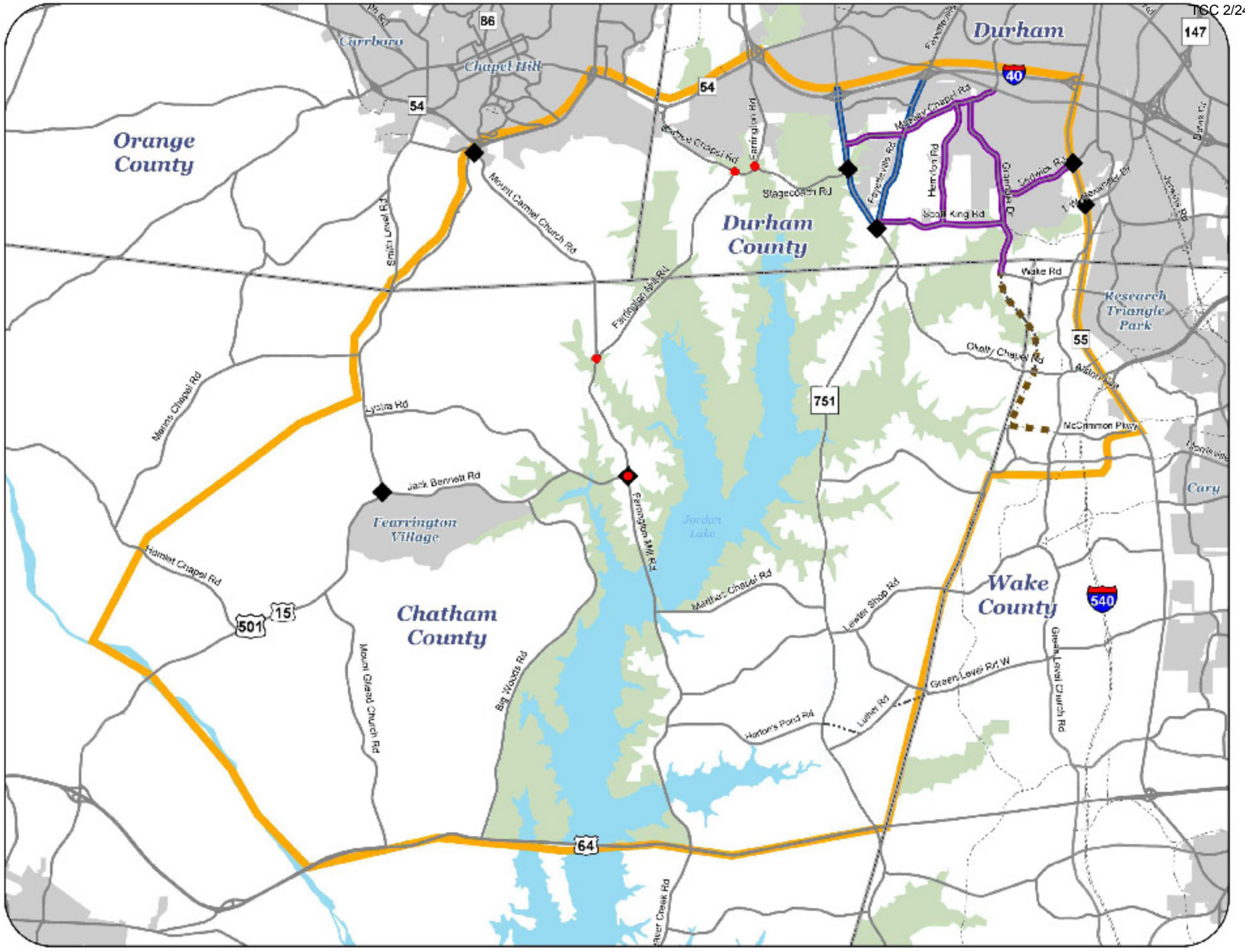
- Short-term: Lengthen the existing westbound right-turn lane on T.W. Alexander Drive to provide 400 feet of full-width storage.
- Long-term: Provide a free flow northbound right-turn lane.

Transit Recommendations

The only transit service provided in the study area was along the study area borders such as NC 54 and US 15-501. However, the land use recommendation identifies six compact development centers that might create densities at a threshold that make transit service feasible in the area. Providing transit service, both local service and express service to UNC-CH (University of North Carolina at Chapel Hill) and the RTP (Research Triangle Park), should be considered if more transit-friendly land use patterns are realized in the future.

Land Use Recommendations

It is recommended that local jurisdictions consider land use changes as well as strengthening development policies and/or land development controls to encourage a compact, nodal development pattern within the study area.



Farrington Road Corridor Study

Figure 31

Recommended Transportation Improvements

Recommendations
- Roundabout Conversion
- Intersection Improvement
- Access Management
- Operational Management
- New Roadway
- New Roads
- Counties
- Study Area
- Municipalities
- Lakes
- Corps of Engineers Land

November 25, 2008

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1 introduction

The Raleigh-Durham-Chapel Hill "Research Triangle" area, with its favorable weather, affordable housing, great schools and universities, and presence of high tech jobs, has long been a desirable place to live and work in the region. The metropolitan area is one of the fastest growing areas in the country, expanding from a 1970 population of 537,000 to a 2006 population of 1,400,000.

Growth in the Triangle has spread from the traditional urban centers in Raleigh, Durham, and Chapel Hill to neighboring municipalities including Cary and Hillsborough, and beyond into rural areas of Chatham, Durham, Orange, and Wake Counties. Large tracts of rural, undeveloped land, combined with proximity to the Research Triangle area and Research Triangle Park make land surrounding Jordan Lake particularly desirable for another wave of new development. The focus of the Farrington Road Corridor Study is to identify the type and extent of growth patterns and development intensities anticipated for the area, and the associated traffic impacts likely to result.

The DCHC MPO staff will consider the recommended improvements from the Corridor Study while preparing the most recent Long Range Transportation Plan. Member jurisdictions represented in the study area are encouraged to act collaboratively on opportunities to improve land use, urban design, and transportation decision-making discussed in this report; highlighting the demand factors (i.e., trip generation, trip length, and travel mode) influenced by local land use decisions to improve the safety and efficiency of the proposed transportation system.

Building the Case for Urgency

The Research Triangle area experienced considerable growth in housing and employment over the past three decades. Demographers forecast a continuation of this trend for the foreseeable future. Much of the growth is forecasted to occur in undeveloped areas of the region that have large tracts of vacant, unprotected land available for development — including areas influencing the Farrington Road Corridor.

As a result of population growth and development pressures, traffic congestion steadily increased in the area over the past ten years. A recent report from the Texas Transportation Institute indicated the amount of time an average commuter spends in congestion for the

1 introduction

Research Triangle area increased from 26 hours to 35 hours per year, an increase of 35 percent over the past ten years. Automobile travel slowed by congestion in the same period increased from 34 percent to 47 percent for all peak period trips.

The majority of observed congestion in the study area is on freeways and major arterials; however, as development continues to expand outward into rural areas surrounding Jordan Lake, traffic on the rural road network is also expected to increase. These traffic volumes will increase both as a result of development in the immediate area and as travelers from outside of the study area look for ways to access Durham, Chapel Hill, and Research Triangle Park by circumventing larger, more congested freeways and arterials. Future year forecasts in the 2035 Triangle Area Regional Travel Demand Model predict that increased congestion will continue to degrade the rural road system if changes are not made to better integrate land use, urban design, and transportation decision-making.

Study Area

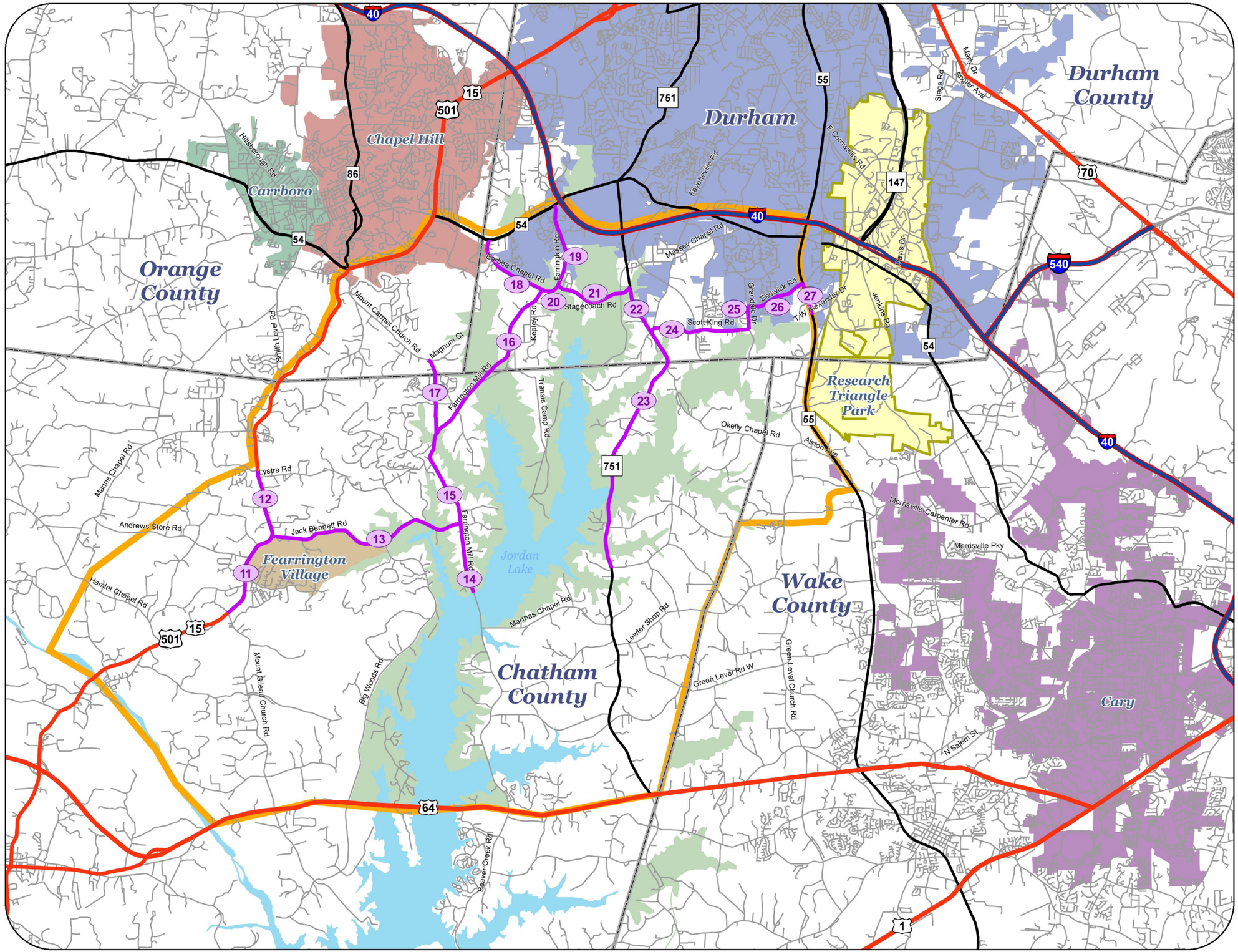
The study area for the Farrington Road Corridor Study focuses on the potential high-growth area emerging at the convergence of four counties — Chatham, Durham, Orange, and Wake — and three cities — Cary, Chapel Hill, and Durham — immediately south and west of Research Triangle Park (see **Figure 1**). B. Everett Jordan Reservoir (Jordan Lake) and surrounding environmentally-sensitive lands occupy a significant portion of the study area and help define its uniqueness within the region. Recent growth pressures highlight the strain on communities to manage sometimes conflicting goals related to growing population and employment centers, rural preservation initiatives, environmental stewardship, and regional transportation mobility.

Regional mobility in the study area is limited to a sparse network of federal and state highways. US 15-501, NC 55, and NC 751 run north to south. US 64 and NC 54 run east to west. Other major roads serving the study area include Farrington Road, Farrington Point Road, Old Farrington Point Road, Grande Drive, Jack Bennett Road, and Scott King Road. Connections between roads in the study area are limited by the presence of Jordan Lake.

Farrington Road Corridor Study

Figure 1

Study Area



99 Corridor Section ID

- Corridor Roads
- Study Area
- Interstates
- US Highways
- State Highways
- State Roads
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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1 introduction

Working farms, residential homes, businesses, and permanent conservation areas are all present in the study area. A concentration of businesses and high-density residential uses in the northeastern portion of the study area have resulted in the emergence of a regional activity center anchored by a 1.3-million square foot regional shopping mall (i.e., Streets at South Point) and supporting residential and non-residential uses. Critical watershed areas and other environmentally-sensitive lands observed in the study area make it unique in terms of the quantity and quality of development that should be expected.

Vision Statement

The Farrington Road corridor is uniquely situated at the intersection of Wake, Chatham, Orange, and Durham counties. The characteristics of this location are a composite of those in the greater region. As such, the vision for this corridor is drawn from the goals of the plans and policies that govern the region's land use and transportation:

> *To celebrate rural and environmentally-sensitive lands unique to this emerging growth area, and support local smart growth initiatives underway by local governments, by recommending appropriate future transportation improvements to the regional transportation system.*

Guiding Principles

The consultant team prepared a set of guiding principles for the corridor study based on a review of locally adopted plans, programs, and policies administered in the study area. These principles generally support, encourage, and implement a vision that celebrates protection of rural and environmentally-sensitive lands unique to the study area while recommending necessary and appropriate improvements to the regional transportation system.

Guiding principles for the corridor study include:

- Protect environmentally-sensitive lands in the study area from encroaching development.
- Prepare for future growth anticipated for the study area following the principles of smart growth, favoring compact

development nodes over continued single-use, suburban sprawl development patterns.

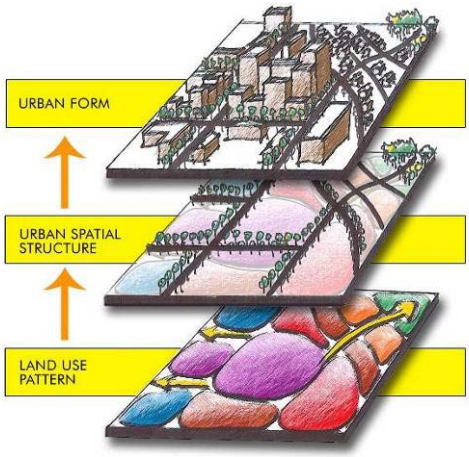
- Identify improvements to the transportation system that balance regional mobility with community livability, highlighting corridor (road-widening) improvements, intersection treatments, and opportunities to promote non-vehicular travel.

- Protect expensive transportation investments in the study area with locally-adopted development controls, such as access management standards or corridor protection ordinances that better coordinate future land use and transportation decisions.

2 transportation/land use connection

In recent years, planners and community leaders across the country have observed increased public interest for reducing or reversing the trend of suburban sprawl and its consequences. These efforts are largely motivated by the impacts associated with suburban development patterns: consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion. In emerging suburban development centers, the physical distance between complementary land uses (e.g., between home and work, home and school, or home and shopping) and a lack of overall street connectivity leads to increased vehicle miles traveled and energy consumption, longer commute times, increased air pollution, heightened infrastructure and public service costs, and decreased resource lands. Future year forecasts in the 2035 Triangle Regional Model (TRM) predict that these unintended consequences will continue for the region if changes are not made to better integrate land use, urban design, and transportation decision-making.

Land Use & Urban Form



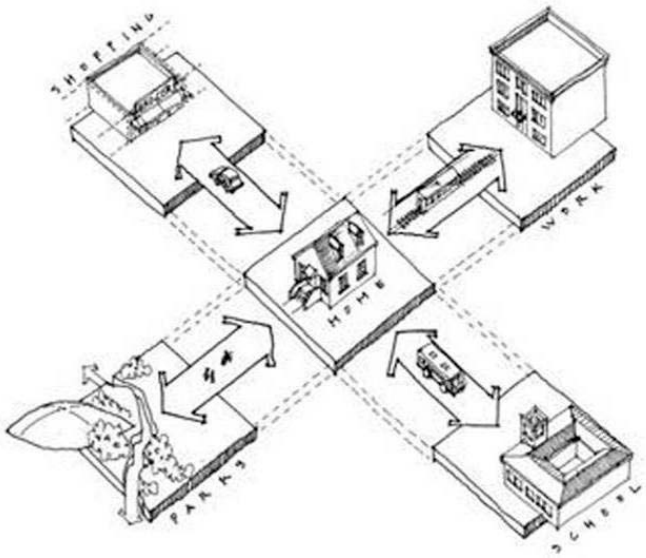
Land use serves as the foundation of the built environment. It defines the type, mix, and general location of uses within communities, and ultimately defines the boundaries for neighborhoods, commercial nodes, and employment centers. Communities make efforts to influence patterns of land use when they develop a future land use map or goals, objectives, and policies within a comprehensive plan. (See **Chapter 3** of this report for an overview of comprehensive plans administered by local governments in the study area).

Typically, a comprehensive plan represents the community's vision for how to promote local growth and prosperity. Urban form is the land use vision as it becomes reality in the physical world. It is commonly measured by street patterns, block lengths, building heights, building setbacks, average residential density, and average non-residential intensity. Putting these design elements in categories allows for the

region's form to be measured, and identifies a natural progression from rural to suburban to urban areas. The components of urban form are traditionally regulated through the community's zoning ordinance, subdivision ordinance, engineering specifications, or architectural design standards.

Urban Form & Travel Behavior

These physical elements of urban form can influence the comfort, speed, cost, convenience, attractiveness, and safety of movement between complementary land uses. Elements of the transportation system — including road, pedestrian, bicycle, and transit facilities — impact how land is developed in terms of size, shape, density, and mix of land uses. Where land uses fall and how they are designed (i.e., urban form) can favor one mode of travel over others, and may influence overall travel behavior by changing the ease of use or accessibility of various modes of travel for meeting daily needs. For example, if low-density development is spread out, the residents of such areas must rely almost entirely on automobiles to get from one location or land use to another. On the other hand, denser urban centers that combine complementary land uses near each other enable greater choice in transportation.



Bringing It All Together

Evaluating the relationship between land use, urban design, and regional travel behavior produces several benefits. When considered together, decisions and investments regarding all three elements could have a significant bearing on the DCHC MPO and its member jurisdictions represented in the study area:

- The impacts to sensitive land uses (such as environmentally-sensitive areas) can be minimized when facilities identified for transportation investments are

located *after* considering appropriate land use patterns and development intensities for the area.

- Development can be stimulated in prime locations if transportation investments consider available capacity or appropriate mobility options.

- Complementary activities can be placed next to existing or planned transportation infrastructure, making the most of land use opportunities and dedicated transportation investments.

- The quantity and location of travel demand can be influenced by land use decisions, highlighting the factors (i.e., trip generation, trip length, and travel mode) that influence the efficiency of a proposed transportation system.

- Context-sensitive design elements can transform transportation corridors from vehicle-dominated thoroughfares into community-oriented streets that safely and conveniently accommodate all modes of travel.

3 existing conditions

This section represents a comprehensive inventory and assessment of transportation conditions, the built environment, and the natural environment in the study area. It communicates how land is organized, used, and supported by the regional transportation system. A review of plans, programs, and policies administered in the study area acknowledges the forces that could affect the planning process or resulting recommendations for the Farrington Road Corridor Study.

Transportation

This section of the report inventories existing roads in the study area and current operational characteristics. As part of this assessment, the current roadway facilities were categorized in terms of operational characteristics and functional classification designation. Transit route, bicycle route, and available pedestrian information for these roads are also presented. The results of this task are presented in a series of maps that were used to identify operational capacities.

Existing Facilities

Portions of the following roads were inside the study area and were analyzed for this corridor study.

1. NC 55
2. US 15-501
3. Barbee Chapel Road
4. Farrington Road
5. Farrington Mill Road
6. Farrington Point Road
7. Grandale Drive
8. Hope Valley Road (NC 751)
9. Jack Bennett Road
10. Mount Carmel Church Road
11. Scott King Road
12. Sedwick Road
13. Stagecoach Road

3 existing conditions

Operational Characteristics

Operational characteristics included in this study are the functional classification, roadway attributes, and non-motorized facilities. These characteristics are briefly described in the sections below.

Functional Classification

Roadways are categorized into functional classification groups according to the character of service they provide. The four functional classification groups for urbanizing areas are principal arterials, minor arterials, collectors, and local streets. The length of the segment and degree of access control is a significant factor in defining the functional classification of a roadway. Regulated access (or limited access) is necessary on arterials to enhance their primary function of mobility, while the primary function of local streets is to provide access to adjacent land uses.

The functional classification of roads inside the study area was assigned using information available from the Triangle Regional Model (TRM).

Figure 2 shows the federal functional classification for facilities in the corridor analysis.

Roadway Attributes

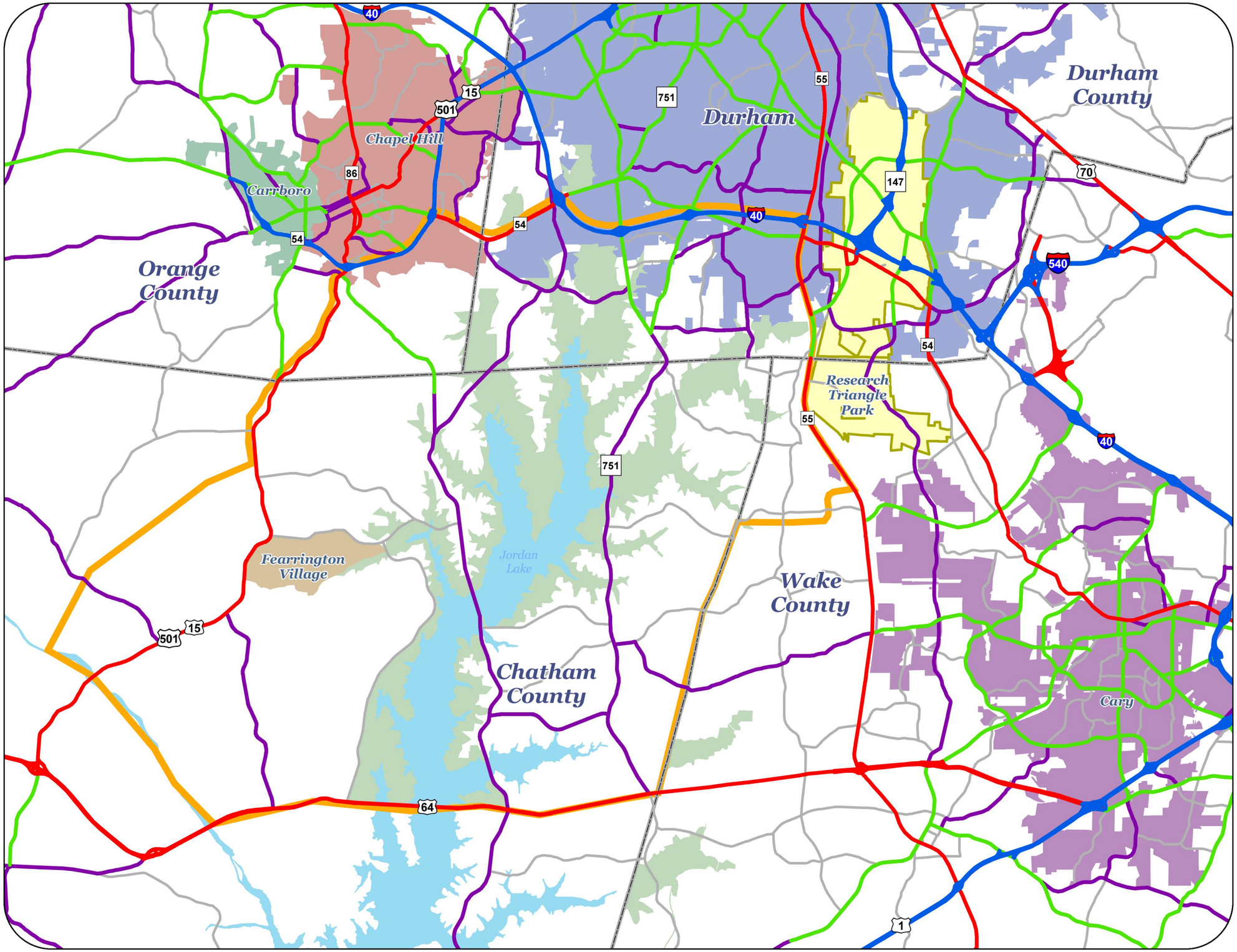
The Triangle Regional Model (TRM) was used to determine major roadway attributes for facilities within the study area. These attributes include the number of lanes, speed limit, and median type. The model also accounts for 2005 NCDOT Average Annual Daily Traffic (AADT) counts. These attributes are shown in **Figures 3 – 6**.

Farrington Road Corridor Study

Figure 2

Triangle Model Attributes

Functional Classification



Functional Classification

- Interstate/Freeway
- Principal Arterial
- Minor Arterial
- Collector
- Local
- Study Area
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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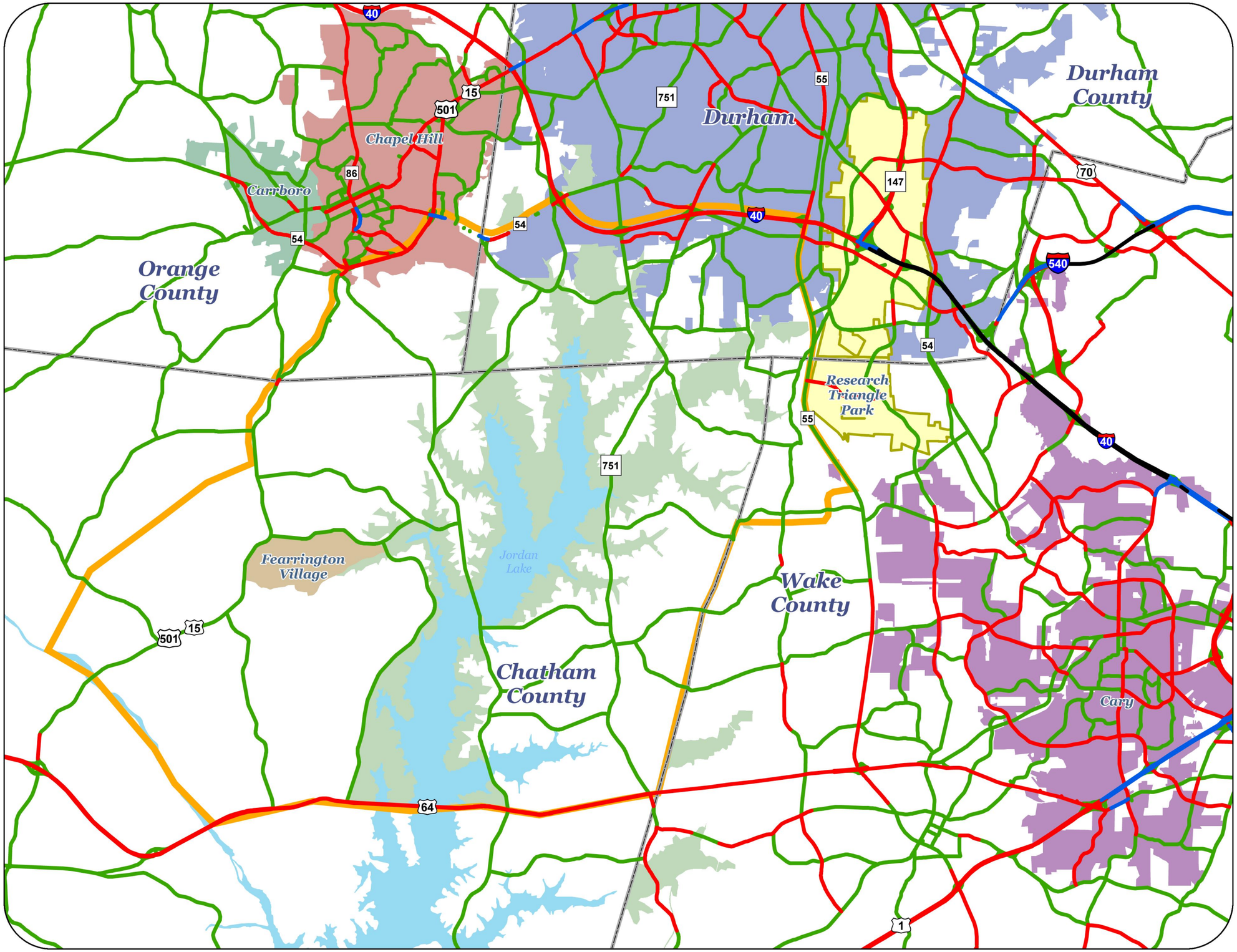
Figure 3

Triangle Model Attributes

Number of Lanes Per Direction



Lanes Per Direction

- 1 Lane per Direction
- 2 Lanes per Direction
- 3 Lanes per Direction
- 4 Lanes per Direction
- Study Area
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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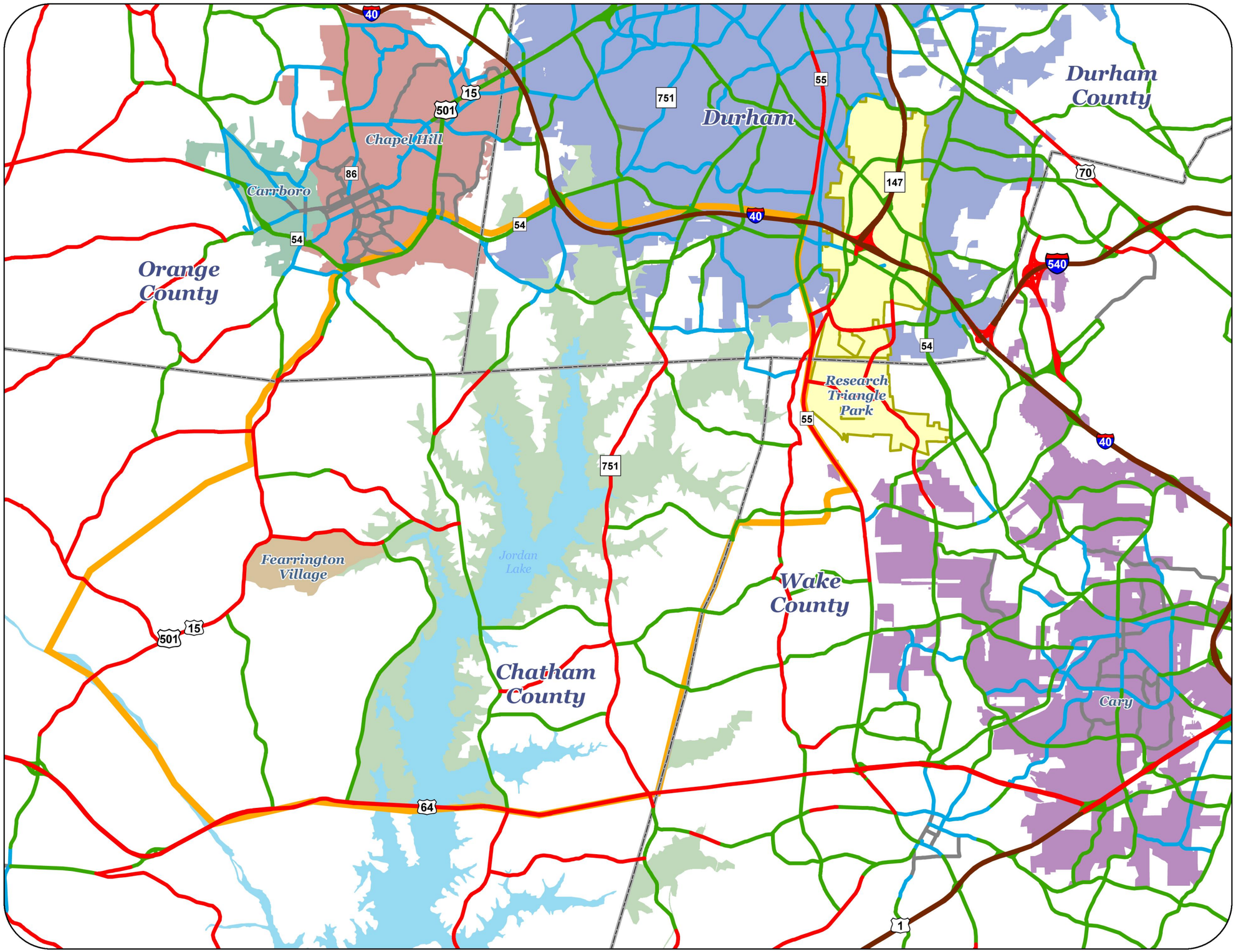
Figure 4

Triangle Model Attributes

Posted Speeds



Posted Speed (MPH)

- 25
- 35
- 45
- 55
- 65
- Study Area
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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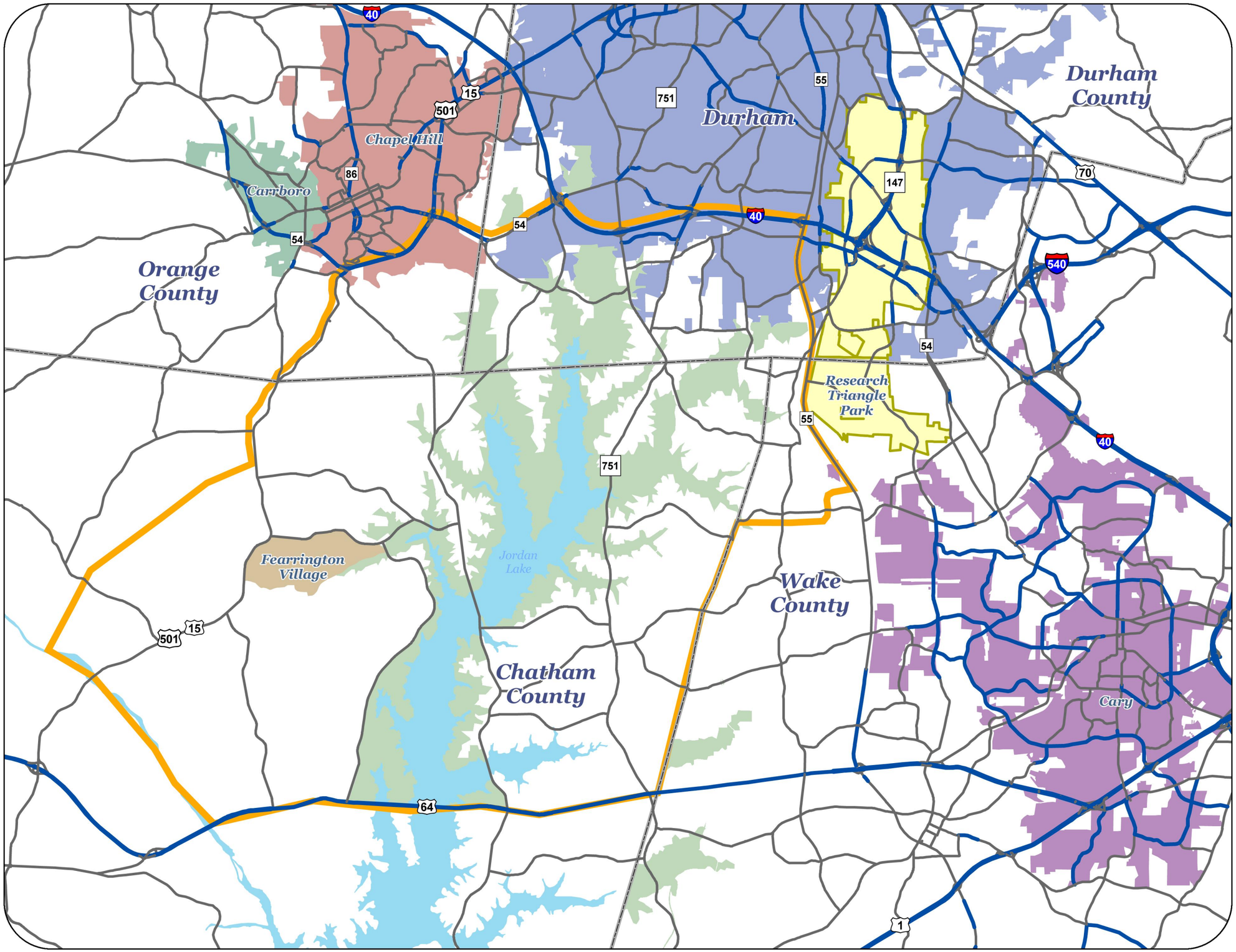
Figure 5

Triangle Model Attributes

Median



- Median or Continuous Left Turn lane
- No Median or Median Treatment not used for Capacity
- Study Area
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Counties
- Corps of Engineers Land
- Research Triangle Park

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0 0.5 1 2 3 Miles

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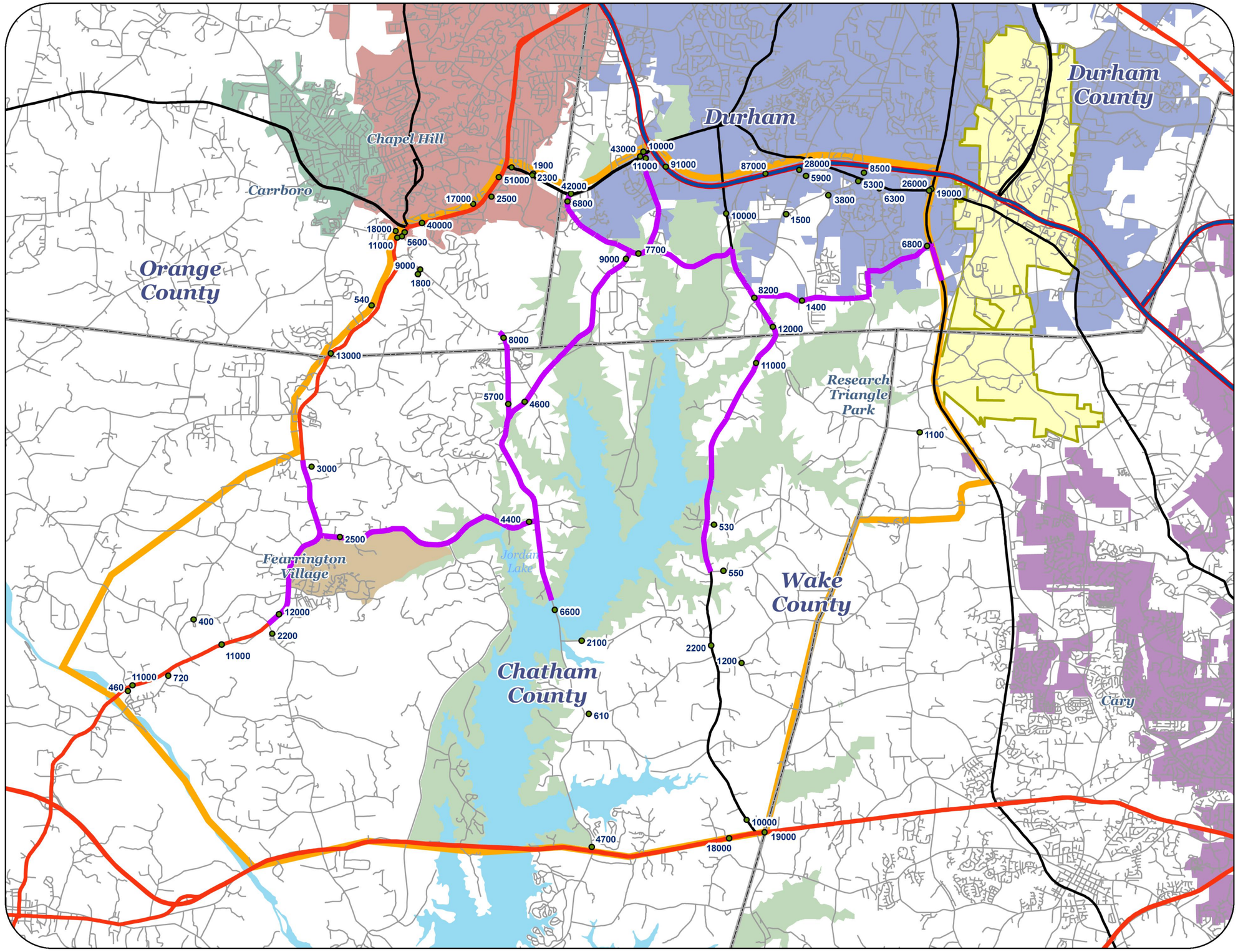
Figure 6

2005 NCDOT AADT Traffic Count Locations



- 2005 AADT's
- Study Corridors
- Interstates
- US Highways
- State Highways
- State Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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0 0.5 1 2 3 Miles

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Non-Motorized Facilities

Non-motorized facilities include bicycle and pedestrian routes as well as transit services. There are a limited number of these facilities and services in the corridor study area. This characteristic is consistent with the area's predominantly rural and undeveloped character.

The Durham Area Transit Authority (DATA) operates one route that runs along Sedwick Road and NC 55 in the northeastern portion of the study area. Chapel Hill Transit Although the Triangle Transit Authority (TTA) does not have any routes inside the study area, they do operate four routes along NC 54, just to the north of the corridor. The Chatham Transit Network (CTN) operates an "on-demand" service in Chatham County. They also operate one route that makes three trips daily to UNC Hospitals from Pittsboro and Siler City.

As mentioned, due to the rural nature of the study area, bicycle and pedestrian facilities are not common. A portion of the American Tobacco Trail runs through the study area and this facility accommodates bicyclists and pedestrians.

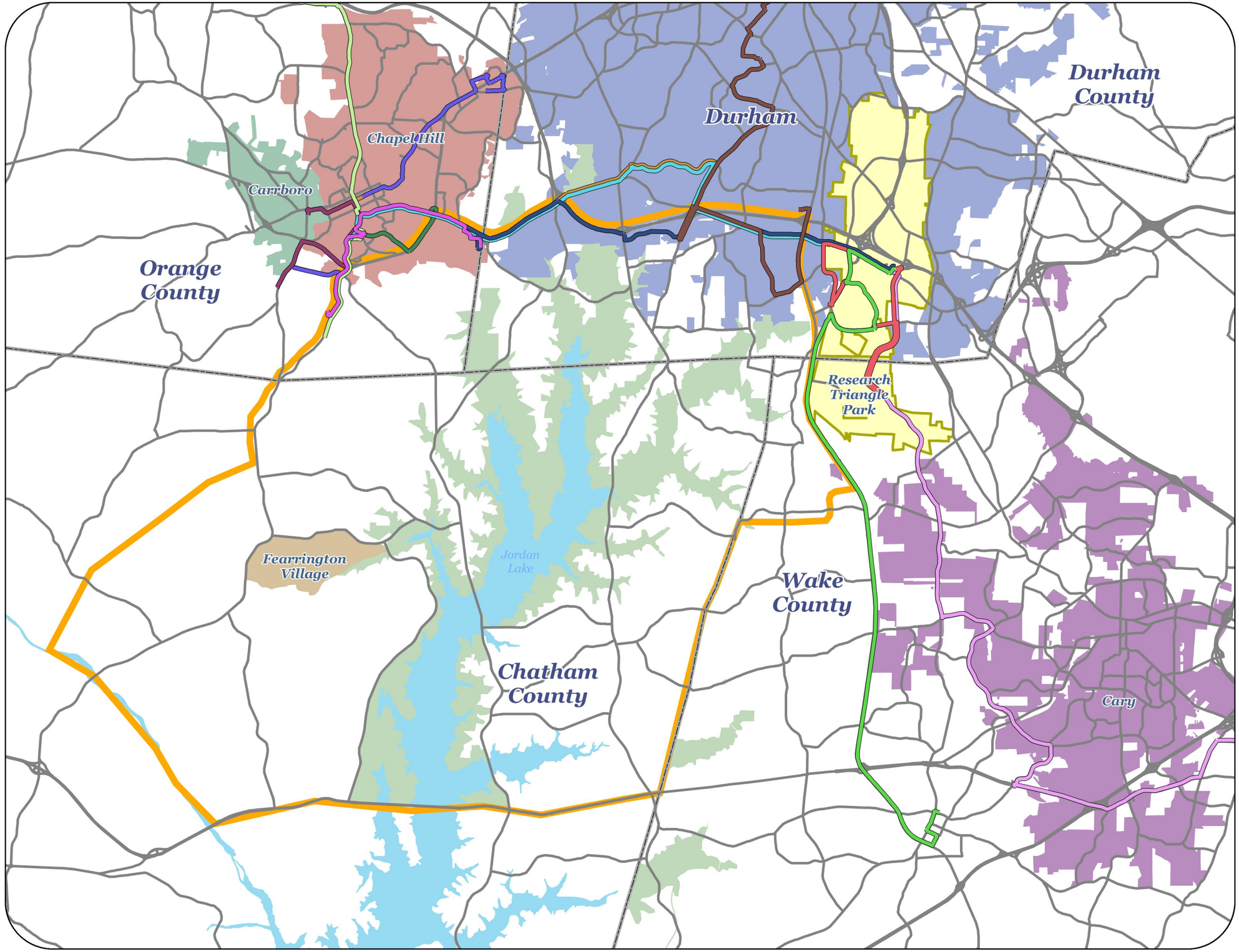
Figures 7-8 show local transit routes and bicycle and pedestrian facilities in the study area.

Farrington Road Corridor Study

Figure 7

Triangle Model Attributes

Study Area Transit Routes



- Transit Routes
- Model Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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N W E S

0 0.5 1 2 3 Miles

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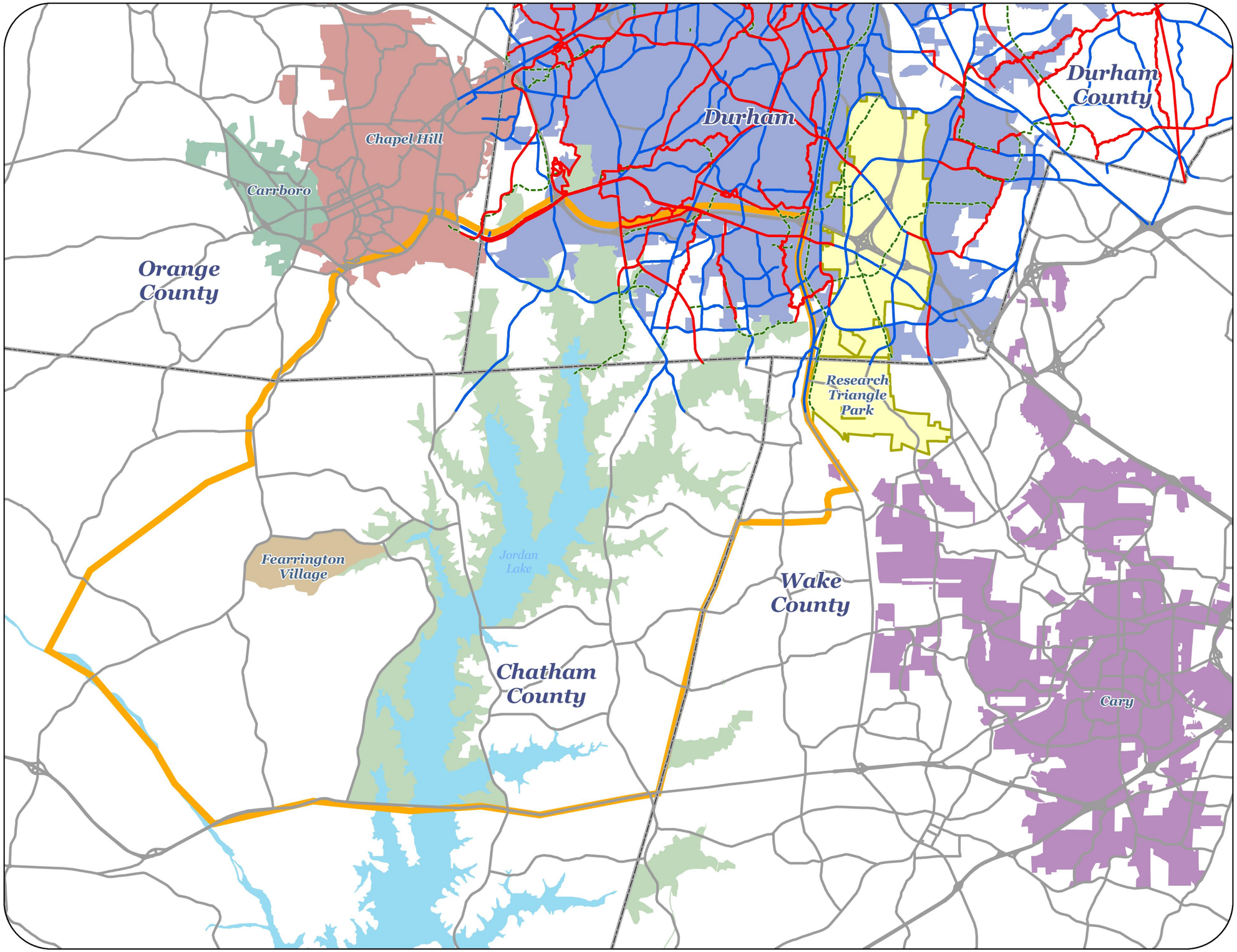
Farrington Road Corridor Study

Figure 8

Triangle Model Attributes

Bicycle and Pedestrian Facilities



- Trails and Greenways
- Off-Road Trail Network
- 2006 Bicycle Plan Network
- Model Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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3 existing conditions

Level of Service

Level of service (LOS) is a standard used to determine the quality of service on transportation facilities. The level of service characterizes the operating conditions on a facility through traffic performance measures related to speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. LOS is represented by the letters "A" through "F", with "A" representing the most favorable driving conditions and "F" representing the least favorable.

Level of service criteria vary depending on the type of facility being analyzed. Examples of criteria include percent time spent following, average travel speed, control delay per vehicle, maximum density, and maximum volume-to-capacity ratio (V/C). V/C represents congestion on a roadway and is calculated by dividing the volume (average daily traffic) of that roadway by the capacity.

For this study, two individual "types" of LOS analysis were performed: corridor LOS analysis and intersection LOS analysis.

Corridor Level-of-Service

Seventeen roadway sections were identified for corridor LOS traffic analysis for existing (and projected future) conditions. This analysis includes the collection of roadway characteristics (lanes, speeds, development type), along with current traffic counts.

Figure 1 shows corridors that were studied as part of this analysis, as well as a reference Section ID that will be used throughout the report. These corridors are also listed in **Table 1**. For each section, 48-hour traffic count data and roadway characteristic data were collected in September 2007. Field visits were also used to observe traffic patterns and issues.

The majority of the corridors in the study area are operating at LOS B or better. These results are consistent with the rural character of the area. Two corridors are operating at LOS C. The only road section whose level of service is below LOS C is Section No. 23, NC 751 (Hope Valley Road) between Scott King Road and the southern planning area boundary (PAB). This corridor has a 2007 capacity of 11,800 and a 2007 average daily traffic flow (ADT) of 10,900 for a resulting V/C ratio of 0.92, which corresponds to LOS D.

3 existing conditions

Table 1. Study Corridors

Section	Road	From	To	Functional Classification	Distance (miles)	Lanes	Median Type	Speed Limit (mph)	LOS D Traffic Capacity	2007 Traffic (average vehicles / day)	2007 V/c	2007 LOS
11	US 15-501	Southern PAB	Jack Bennett Road	Rural Principal Arterial	1.9	4	Divided	55	62,600	15,700	0.25	A
12	US 15-501	Jack Bennett Road	Northern PAB	Rural Principal Arterial	1.4	4	Divided	55	62,600	17,300	0.28	A
13	Jack Bennett Rd	US 15-501	Farrington Point Road	Rural Local	4.1	2	None	45/55	11,900	3,300	0.28	A
14	Farrington Rd	Southern PAB	Lystra Road	Rural Major Collector	1.4	2	None	55	11,800	5,900	0.5	B
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	Rural Major Collector	2	2	None	45/55	10,500	6,000*	0.57	B
16	Old Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	Rural Major Collector	3.7	2	None	45/55	9,400	4,300	0.46	B
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	Rural Major Collector	1.5	2	None	45	12,400	5,700	0.46	B
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	Rural Major Collector	1.6	2	None	45	9,500	5,300	0.56	B
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	Urban Collector	1.7	2	None	45	15,300	8,000	0.52	B
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	Urban Collector	0.4	2	None	45	15,300	7,700	0.5	B
21	Stagecoach Rd	Farrington Road	NC 751	Rural Major Collector	1.6	2	None	45	9,500	6,700	0.71	C
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	Urban Minor Arterial	1	2	None	55	12,800	9,000	0.7	C
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	Rural Major Collector	5.2	2	None	55	11,800	10,900	**0.92**	**D**
24	Scott King Road	NC 751	Grandale Drive	Urban Collector	2.1	2	None	35/45	9,500	1,700	0.18	A
25	Grandale Dr	Scott King Road	Sedwick Road	Urban Collector	0.5	2	None	35	9,500	4,000	0.42	B
26	Sedwick Rd	Grandale Drive	NC 55	Urban Collector	1.2	2	None	25	12,500	6,800	0.54	B
27	NC 55	Sedwick Road	Alexander Drive	Urban Principal Arterial	0.7	5	TWLTL	50	39,700	15,400	0.39	B

V/C is volume-to-capacity (ADT/Capacity). TWLT is a two-way left turn lane (center lane in roadway). *

Historic Traffic Growth

NCDOT traffic counts from 1990 through 2005 were analyzed in this study to better understand traffic growth in the area. These counts are presented in **Table 2**. Historical patterns indicate that the study corridors have experienced significant traffic growth since 1990, with traffic on many small rural roads increasing over 5% a year and traffic in some locations increasing over 10%. Since this area is expected to continue to experience significant growth in housing, there is no reason to believe that traffic demand will dramatically slow or reduce in the future.

Table 2. Historic AADT Growth in Study Corridors

Section	Road	From	To	Count Location	NCDOT Traffic Survey Count ID	Average Yearly Growth* (1990-2005)	1990	1992	1994	1997	1999	2001	2003	2005
11	US 15-501	Southern PAB	Jack Bennett Road	South of Jack Bennett Road	1800069	3.80%	--	10,000	12,000	13,000	13,000	14,000	--	--
12	US 15-501	Jack Bennett Road	Northern PAB	North of Manns Chapel Road	1800921	2.20%	15,000	15,000	18,000	18,000	19,000	20,000	20,000	--
13	Jack Bennett Rd	US 15-501	Farrington Point Road	East of 15-501	1800923	**5.00%**	1,200	1,500	2,100	2,300	2,300	2,400	2,400	2,500
14	Farrington Rd	Southern PAB	Lystra Road	South of Jack Bennett Road	1800918	**8.10%**	--	2,400	2,700	3,500	4,600	5,700	5,800	6,600
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	N/A	N/A	N/A	No historic count on or near this corridor section							
16	Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	North of Farrington Road	1800917	**7.80%**	1,500	2,300	2,700	3,300	3,200	3,300	3,800	4,600
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	North of Farrington Road	1800920	**7.20%**	2,000	2,200	2,500	3,800	4,000	5,000	5,000	5,700
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	N/A	N/A	N/A	No historic count on or near this corridor section							
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	South of NC 54	3100499	**8.80%**	3,100	3,400	5,600	--	7,200	8,200	--	11,000
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	West of Stagecoach Road	3100505	**8.70%**	2,200	2,400	4,200	5,500	7,200	7,900	--	7,700
21	Stagecoach Rd	Farrington Road	NC 751	N/A	N/A	N/A	No historic count on or near this corridor section							
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	North of Scott King Road	3100734	**10.60%**	1,800	2,200	2,500	3,400	5,500	7,200	8,200	8,200
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	South of Scott King Road	3100514	**10.40%**	3,600	3,500	3,400	5,200	7,000	8,800	9,900	12,000
24	Scott King Road	NC 751	Grandale Drive	East of NC 751	3100515	**10.80%**	300	300	520	600	1,100	1,500	1,400	1,400
25	Grandale Dr	Scott King Road	Sedwick Road	N/A	N/A	N/A	No historic count on or near this corridor section							
26	Sedwick Rd	Grandale Drive	NC 55	West of NC 55	3100528	**6.60%**	2,600	3,700	4,500	5,300	6,300	7,200	7,900	--
27	NC 55	Sedwick Road	Alexander Drive	South of Sedwick Road	3100726	**5.80%**	6,700	7,200	9,800	--	12,000	14,000	14,000	--

Based on average annual increase using available counts

Intersection Level-of-Service (LOS) Analysis

Nine intersections were identified for intersection operational analysis. Commute period data were collected in the morning (AM) and afternoon (PM) peak hours. Turning movement counts were performed by Traffic Survey Services, Inc. on typical weekdays in the morning (7:00 to 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) time periods at the following intersections:

- US 15-501 at Jack Bennett Road — September 18, 2007
- Farrington Point Road at Lystra Road — September 18, 2007
- Farrington Point Road/Old Farrington Point Road at Mt. Carmel Road — September 13, 2007
- Farrington Mill Road/Farrington Road at Barbee Chapel Road — September 13, 2007
- Farrington Road at Stagecoach Road — September 13, 2007
- Stagecoach Road at Hope Valley Road (NC 751) — September 11, 2007
- Hope Valley Road (NC 751) at Fayetteville Road — September 11, 2007
- NC 55 at Sedwick Road — September 12, 2007
- NC 55 at T.W. Alexander Drive — September 12, 2007

All turning movement counts were performed while public schools in Durham and Chatham County were in session. For these intersections, operational and geometric data were collected in the field in September 2007. This data was used to analyze current intersection LOS for study intersections in *SYNCHRO* software.

Capacity analyses were performed for the AM and PM peak hours for existing (2007) traffic conditions using *SYNCHRO* (Version 7) software to determine the operating characteristics of the adjacent road network.

3 existing conditions

For intersection analysis, capacity is combined with LOS in a relationship table to describe the operating characteristics of a road segment or intersection. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation.

For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by *SYNCHRO* Version 7 or computable using methodology published in the *Highway Capacity Manual.* Results between LOS A and LOS C for the side street approach are assumed to represent short delays. For descriptive purposes, results between LOS D and LOS E for the side street approach are assumed to represent moderate delays, and LOS F for the side street approach is assumed to represent long delays. It is typical for stop sign controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. **Table 3** lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections, as well as the unsignalized operational descriptions assumed herein.

Table 3. Level-Of-Service (LOS) Control Delay Thresholds

Level-of-Service	Signalized Intersections – Control Delay Per Vehicle [seconds of delay per vehicle]	Unsignalized Intersections – Average Control Delay [seconds of delay per vehicle]	
A	≤ 10	≤ 10	
B	> 10 – 20	> 10 – 15	
C	> 20 – 35	> 15 – 25	Short Delays
D	> 35 – 55	> 25 – 35	
E	> 55 – 80	> 35 – 50	Moderate Delays
F	> 80	> 50	Long Delays

Capacity analyses were performed for the existing (2007) traffic conditions for the following intersections:

- US 15-501 at Jack Bennett Road
- Farrington Point Road at Lystra Road
- Farrington Road and Stagecoach Road at Mt. Carmel Road

- Farrington Mill Road/Farrington Road at Barbee Chapel Road
- Hope Valley Road (NC 751) at Fayetteville Road
- Stagecoach Road at Hope Valley Road (NC 751)
- Farrington Road at Stagecoach Road
- NC 55 at T.W. Alexander Drive
- NC 55 at Sedwick Road

Table 4 summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing traffic conditions.

Table 4. Existing (2007) Level-of-Service (LOS) Summary

Intersection	Signalized	AM Peak-Hour LOS (Delay in seconds)	PM Peak-Hour LOS (Delay in seconds)
US 15-501 and Jack Bennett Road	Yes	A (9.0)	B (10.1)
Farrington Point Road and Lystra Road	Yes	C (20.6)	B (14.5)
Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road	No	Short delays for minor street approach	Moderate delays for minor street approach
Farrington Mill Road/Farrington Road and Barbee-Chapel Road	No	Moderate delays for minor street approach	Long delays for minor street approach
Farrington Road and Stagecoach Road	No	Long delays for minor street approach	Long delays for minor street approach
Stagecoach Road and Hope Valley Road (NC 751)	Yes	D (43.0)	B (19.8)
Hope Valley Road (NC 751) and Fayetteville Road	Yes	B (10.7)	C (21.4)
NC 55 and Sedwick Road	Yes	B (19.6)	C (29.8)
NC 55 and T.W. Alexander Drive	Yes	C (24.3)	C (24.5)

Summary of Existing Intersection Deficiencies

All of the studied intersections operate at an acceptable LOS. The following signalized intersections have significant queuing and may need additional vehicle storage (i.e. longer turn lanes) to decrease vehicle queue lengths:

US 15-501 and Jack Bennett Road

- The westbound left-turn lane queue on Jack Bennett Road exceeds existing storage lengths during the PM peak hour.

Farrington Point Road and Lystra Road

- The eastbound left-turn lane queue on Lystra Road exceeds existing storage lengths during the AM peak hour

Farrington Point Road and Stagecoach Road

- Westbound Stagecoach Road has queuing problems during peak hours due to poor sight distance for left-turning vehicles (of oncoming traffic from northbound Farrington Road).

Stagecoach Road and Hope Valley Road (751)

- The eastbound left-turn lane queue on Stagecoach Road exceeds existing storage lengths during the AM and PM peak hours.

NC 55 and T.W. Alexander Drive

- The northbound right-turn lane and southbound left lane queues on NC 55 exceed existing storage lengths during the AM peak hour.
- The westbound left-turn lane queue on T.W. Alexander Drive exceeds existing storage length during the PM peak hour.

Travel Pattern Analysis

Travel patterns in the study area were reviewed to identify prevalent traffic movements that currently affect the roads in the study area. This analysis drew from available resources from the Census, DCHC

Metropolitan Planning Organization (MPO), and the Triangle Regional Model (TRM) to determine regional traffic patterns from western Chatham County and the Jordan Lake area to Research Triangle Park (RTP). Specific data included in the review are:

- County-to-County Work Flows from the 2000 Census journey-to-work supplemental survey (i.e. "Census long form"),
- Travel patterns identified in the 2006 Triangle Cordon Survey (conducted on US 64 west of Pittsboro),
- TRM base year (2005) model traffic flows from Chatham County,
- TRM base year (2005) model select link analysis, and
- 2006 Triangle Household Survey work-trip flows and all-trip flows.

The shape and location of Jordan Lake affects the intensity of travel patterns in the few east-west corridors that cross or neighbor it. Interstate 40 and NC 54 are the predominant east-west routes north of the watershed, while U.S. Highway 64 crosses Jordan Lake via a bridge at the southern edge of the study area. Stagecoach Road and connecting streets cross through the watershed at the north end of the lake. There are no roads crossing Jordan Lake in the approximately ten miles separating Stagecoach Road and U.S. Highway 64. The east/west gap in the roadway network becomes more problematic given increasing urbanization of northeast Chatham County. As residential developments expand there, employment trips originating from that area to the Research Triangle Park (RTP) and Raleigh-Durham Airport continue to grow, as well.

County-to-County Work Flows

County-to-County work flow data were compiled from Census 2000 responses to the long-form (sample) questions about where people work. These files describe the county-to-county work travel patterns, detailing the counties people live and work in. Analysis of this data can help identify some of the predominant travel patterns through the region and the study area.

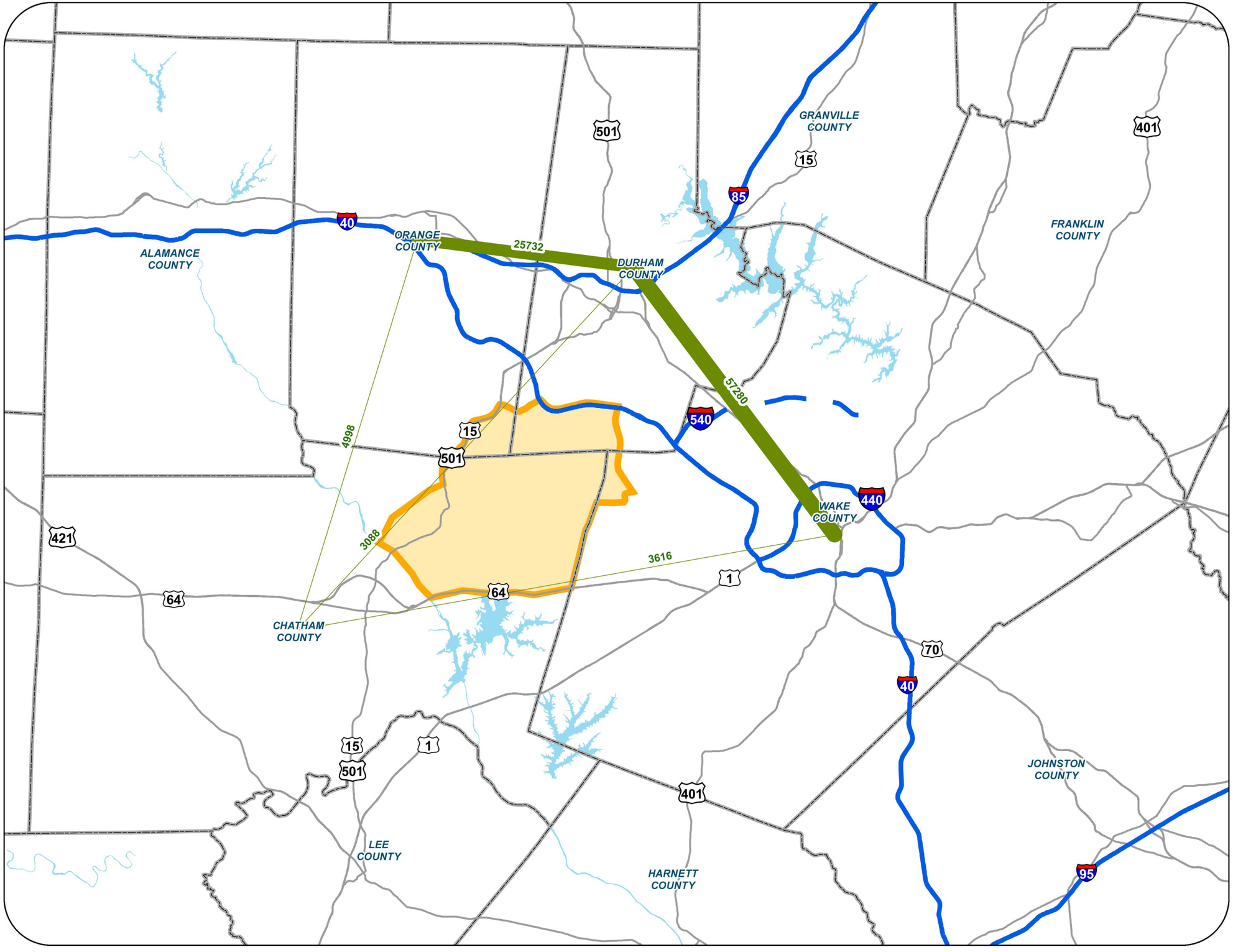
According to Census 2000 County-to-County worker flow files, Chatham County "produces" (those people living in Chatham County and going to work either in Chatham County or elsewhere) 24,657 work trips, and "attracts" (those people working in Chatham County and living in Chatham County or elsewhere) 16,901 work trips. 28% of the produced trips (6,945) travel to Durham or Orange Counties from Chatham County, out of a total of 13,639 (55%) that travel outside of the County. For the work "attractions", 5,883 (or 35%) travel into Chatham County for work, and, of that total, 1,141 (or 7%) come from Durham or Orange Counties.

Figure 9 shows the Journey-to-Work flows for the study area.

Farrington Road Corridor Study

Figure 9

Journey to Work Flows



Total Work Trips To/From

- 0 - 5000
- 5001 - 10000
- 10001 - 20000
- 20001 - 40000
- 40001 - 60000
- Study Area
- Interstates
- US Highways
- Lakes
- Counties

November 25, 2008

N W E S

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Triangle Cordon Survey Flows

A cordon survey collects travel pattern information including origins and destinations at the perimeter of the study area. A cordon survey provides more detailed information for specific highway corridors than is normally possible using other survey methods.

The Institute for Transportation Research and Education (ITRE) worked with ETC Institute consultants in fall 2006 to conduct 13 cordon station surveys surrounding the Raleigh-Durham-Chapel Hill metropolitan planning area. Survey data collected at the cordon stations included trip purpose, origin and destination information, and traffic characteristics of travelers entering the region via major non-interstate facilities.

Of these 13 locations, two survey stations are particularly relevant to the Farrington Road Corridor Study: 1 south of Pittsboro; and, US 64 west of Pittsboro. Outside of local traffic (i.e., Fearrington Village) and traffic from Pittsboro, these two locations capture the primary sources of any external traffic from the south and west into the Farrington Road Corridor study area.

Tables 5 and 6 show the primary destinations (greater than 1% of total traffic) of travelers entering the Triangle Region at US 64 and US 15-501. **Figures 10 and 11** display the major destinations graphically. The majority of traffic from US 64 would not use the Farrington Road corridor because the travel patterns of the corridor make reaching desired destinations difficult. The most probable destinations requiring use of the corridor are Northern Chatham County and the Durham area, which make up approximately 8% (500 vehicles) of the 6,500 daily vehicles entering/exiting the region at this location. Trips entering the region from US 15-501 are more likely to use the corridor, based on their destinations, but these trips, which are destined for Durham and Western Chatham County, only comprise 12% (333 vehicles) of the 2,800 daily vehicles using this location.

Based on this information, trips from outside the area are not expected to create significant demand on the Farrington Road Corridor. Therefore, future travel patterns and improvements should focus on trips that are generated within the region.

Table 5. Destination of Trips Entering the Region via US 64 West of Pittsboro

Destination	US 15 Trips
Chapel Hill Area	31%
Pittsboro Area	30%
Alamance	14%
Durham Area	7%
West Chatham	5%
Northern Chatham County	4%
US 64 West of Pittsboro	3%

Table 6. Destination of Trips Entering the Region via US 15-501 South of Pittsboro

Destination	US 64 Trips
Pittsboro Area	30%
Raleigh Area	13%
Chapel Hill Area	12%
US 64 East of Raleigh	11%
Cary/Apex	9%
Durham Area	4%
Northern Chatham County	4%
Lee County/Sanford	3%
North Wake County	3%
Area east of Jordan Lake	3%

Figure 10. Triangle External Trip Survey – US 64 West of Pittsboro

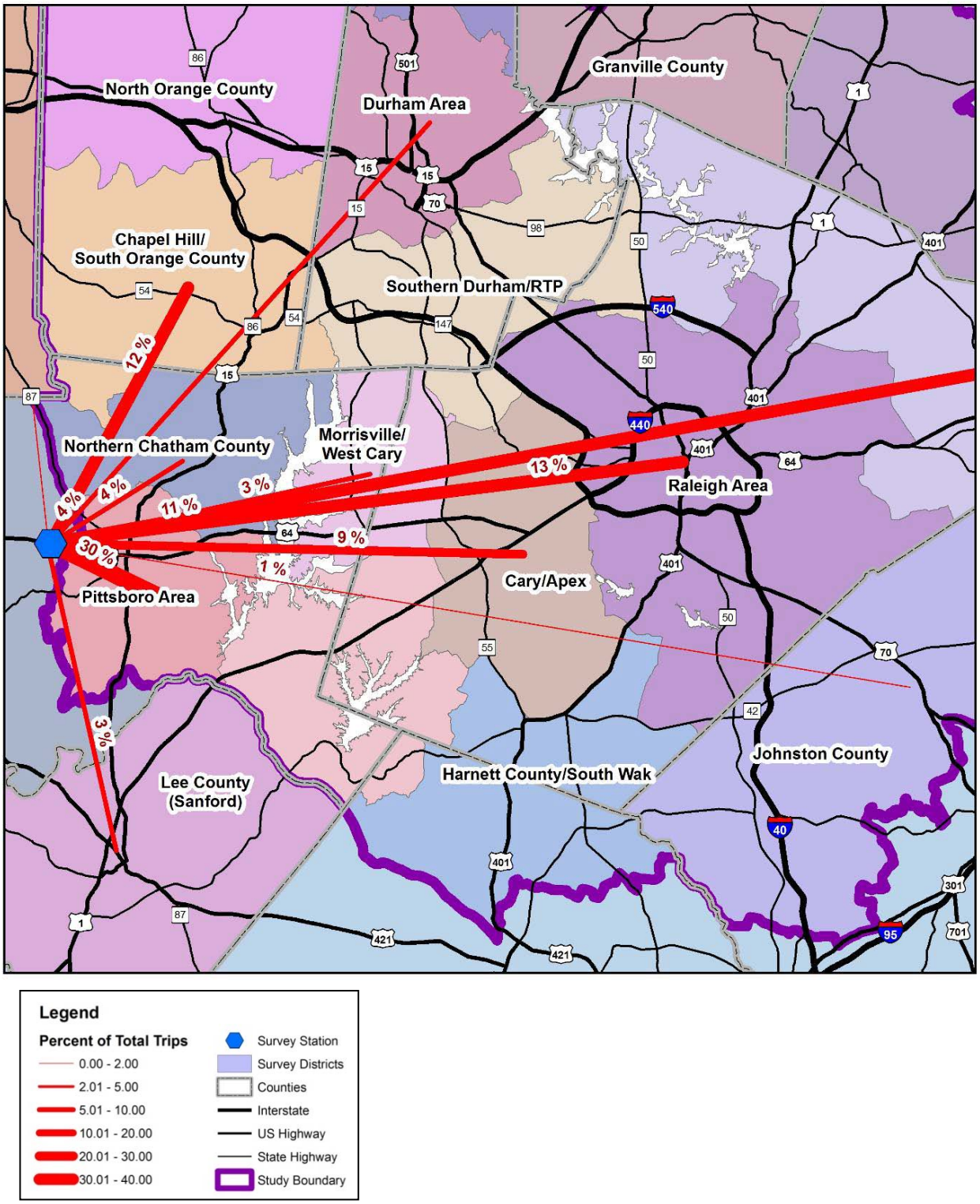
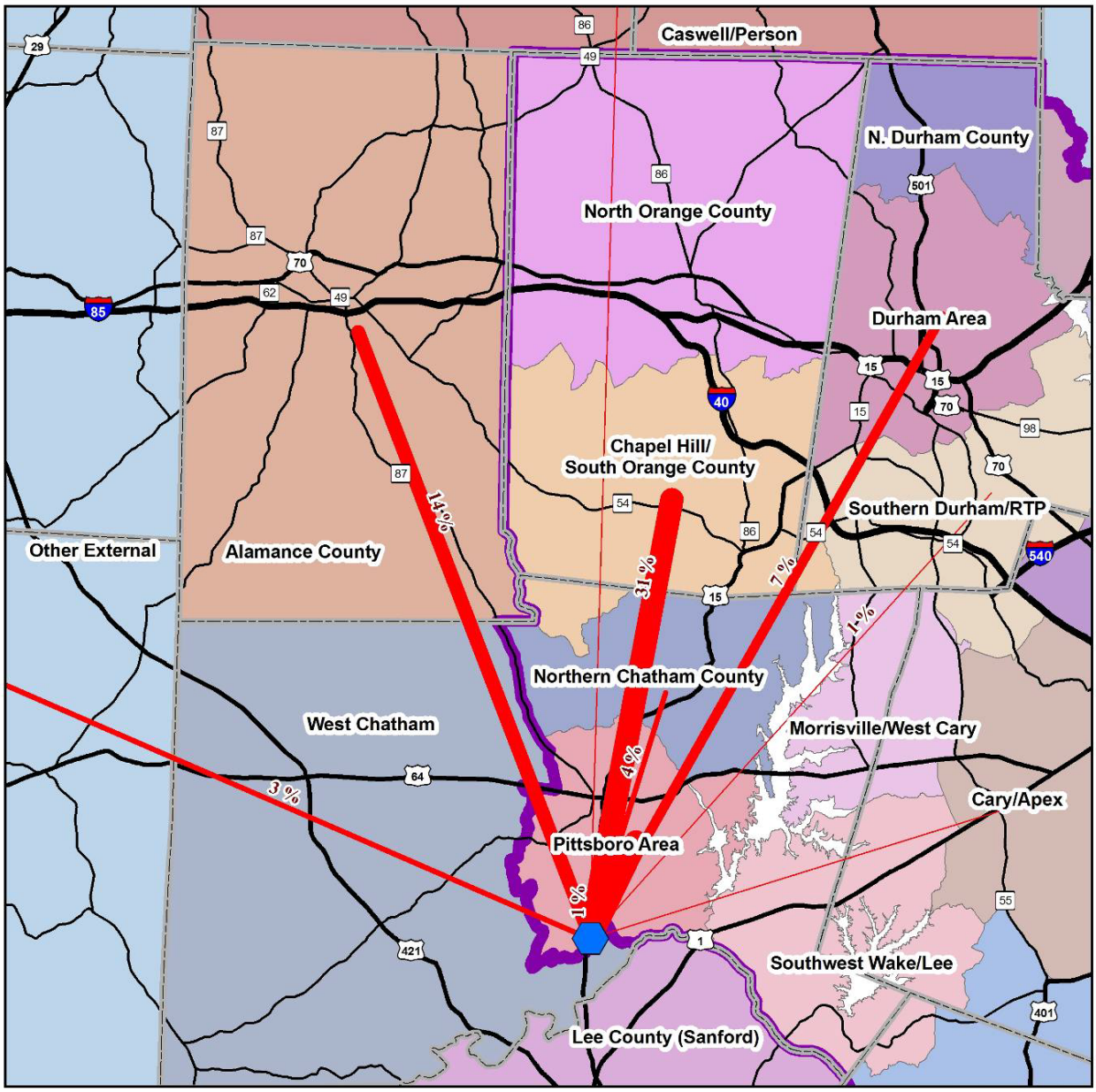
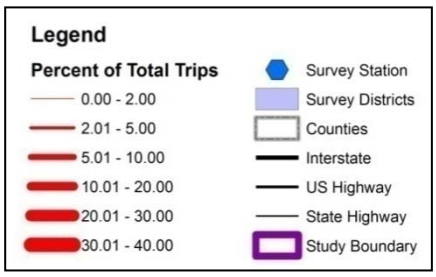


Figure 11. Triangle External Trip Survey – US 15/501 South of Pittsboro





Select Link Analysis

Select link analysis is a tool used to determine where traffic is coming from and going to on a select road segment or link. It is used to retrieve information about network conditions (on a 24-hour basis). It does not present the total volume for model links, only those which pass through a particular section.

DCHC MPO and Kimley-Horn prepared a number of Select Link Analysis model runs using the Triangle Regional Model (TRM) for roadway segments in the study area. Segments that corresponded to corridors in this study include:

- Farrington Mill Road
- Farrington Road
- US 15-501
- Jack Bennett Road
- Scott King Road
- NC 55.

Figures 12-17 on the following pages show the results of the select link analysis for each corridor. These figures show the location of each of the select link analysis and the distribution of trips (by percentage of total trips on the subject link). For example, in **Figure 12**, the select link analysis is Farrington Road between Stagecoach Road and Barbee Chapel Road. By definition, 100% of the select link volume goes through this section. Looking to the East, 66% of this traffic is either coming from or going to Stagecoach Road. The other 34% is heading North on Farrington Road. Of the 66% using Stagecoach Road, 22% heads south on NC 751.

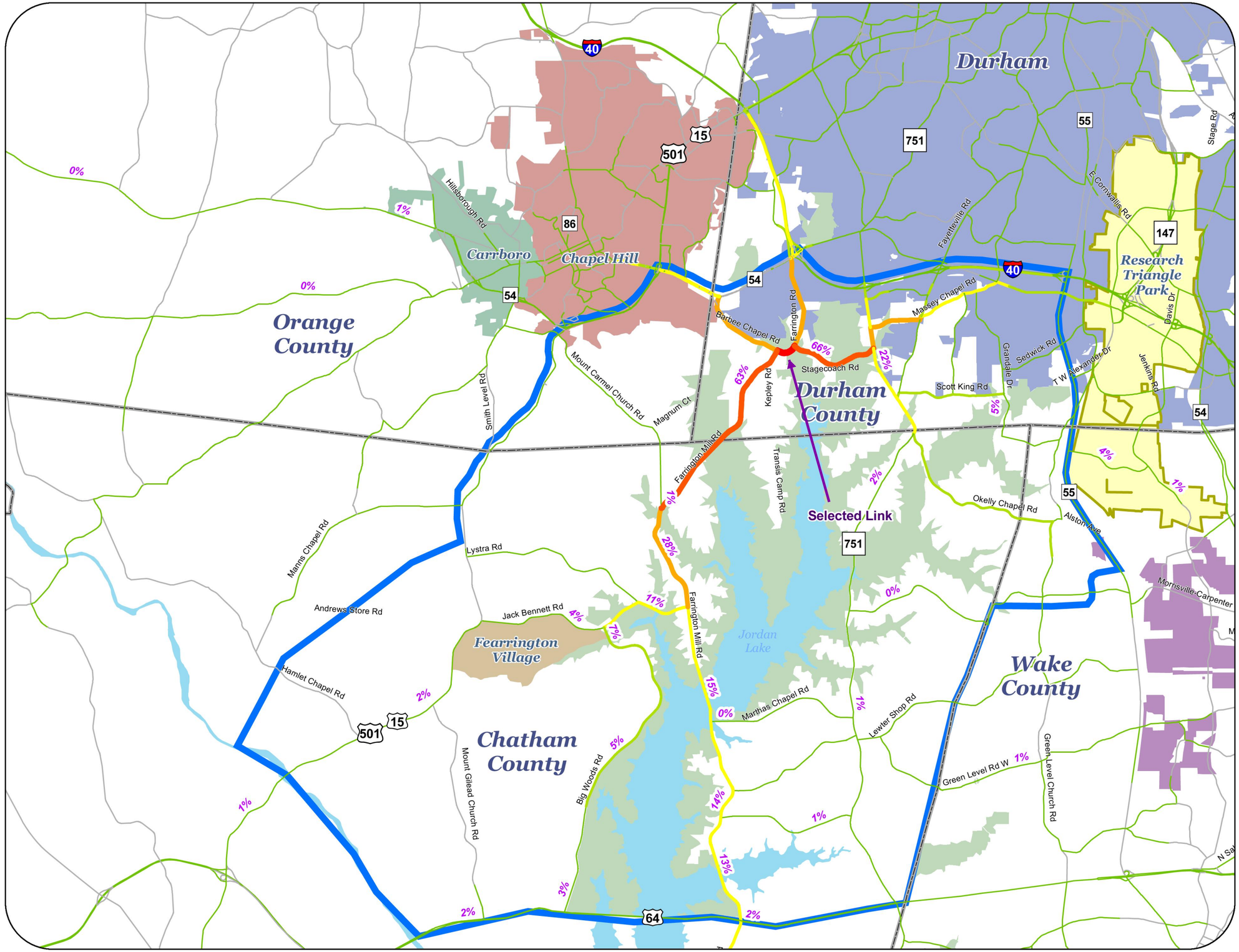
In general, the results of the select link analysis indicate that the majority of traffic traveling on the Farrington Road/Farrington Mill Road corridors is local in nature. For example, in **Figure 14**, traffic to/from the south is mostly from the area north of US 64, west of Cary, and east of Jordan Lake. Traffic to/from the North is nearly equally split between Farrington Mill Road and Mount Carmel Church Road, with the primary destinations being Chapel Hill and southwest Durham. A very small percentage of traffic from major highways (US 15-501, NC 55) traveled the study corridors, consistent with the results of the Triangle Cordon Survey Flow analysis.

Based on this analysis, the majority of impact on these facilities will be caused by local development pressures within the study area. Future Year (2035) Corridor Analysis will test the effect of local development on the transportation system, and present additional select link analyses to determine the magnitude of shifts in traffic as major highways bordering the study area experience increases in traffic.

Farrington Road Corridor Study

Figure 12

Select Link Analysis Farrington Rd.



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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N W E S

0 0.5 1 2 3 Miles

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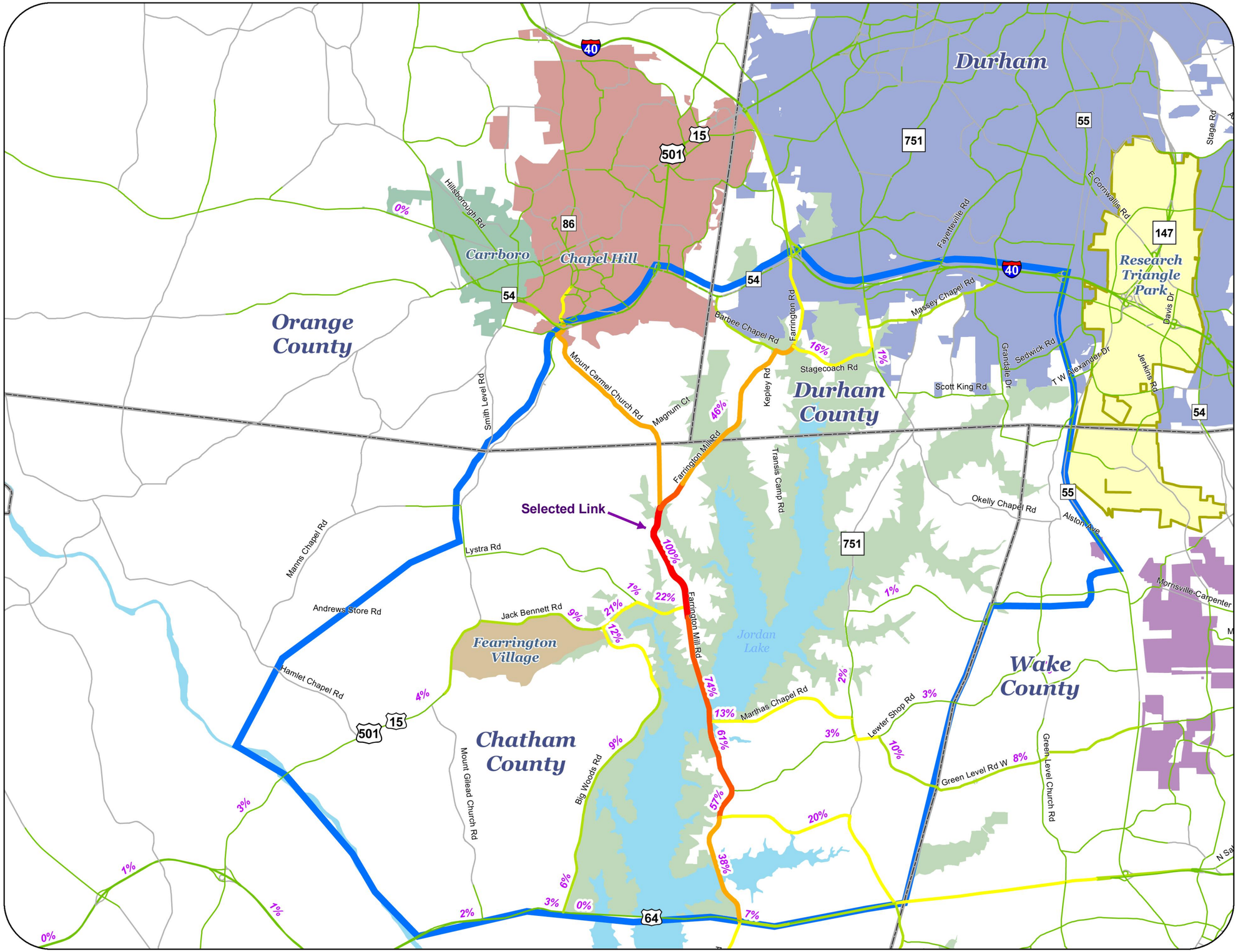
Farrington Road Corridor Study

Figure 13

Select Link Analysis Farrington Mill Rd



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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N W E S

0 0.5 1 2 3 Miles

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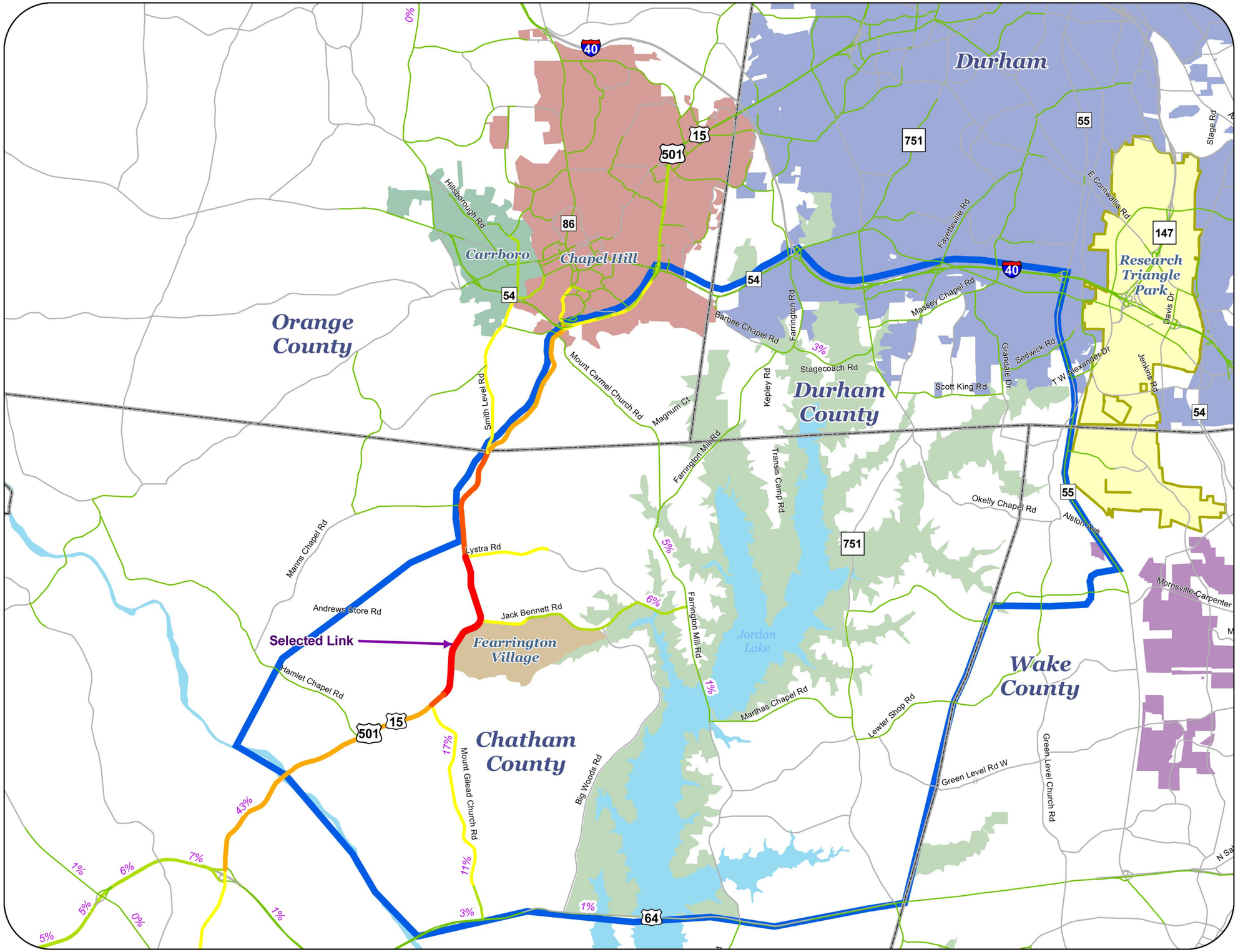
Farrington Road Corridor Study

Figure 14

Select Link Analysis
US 15/501



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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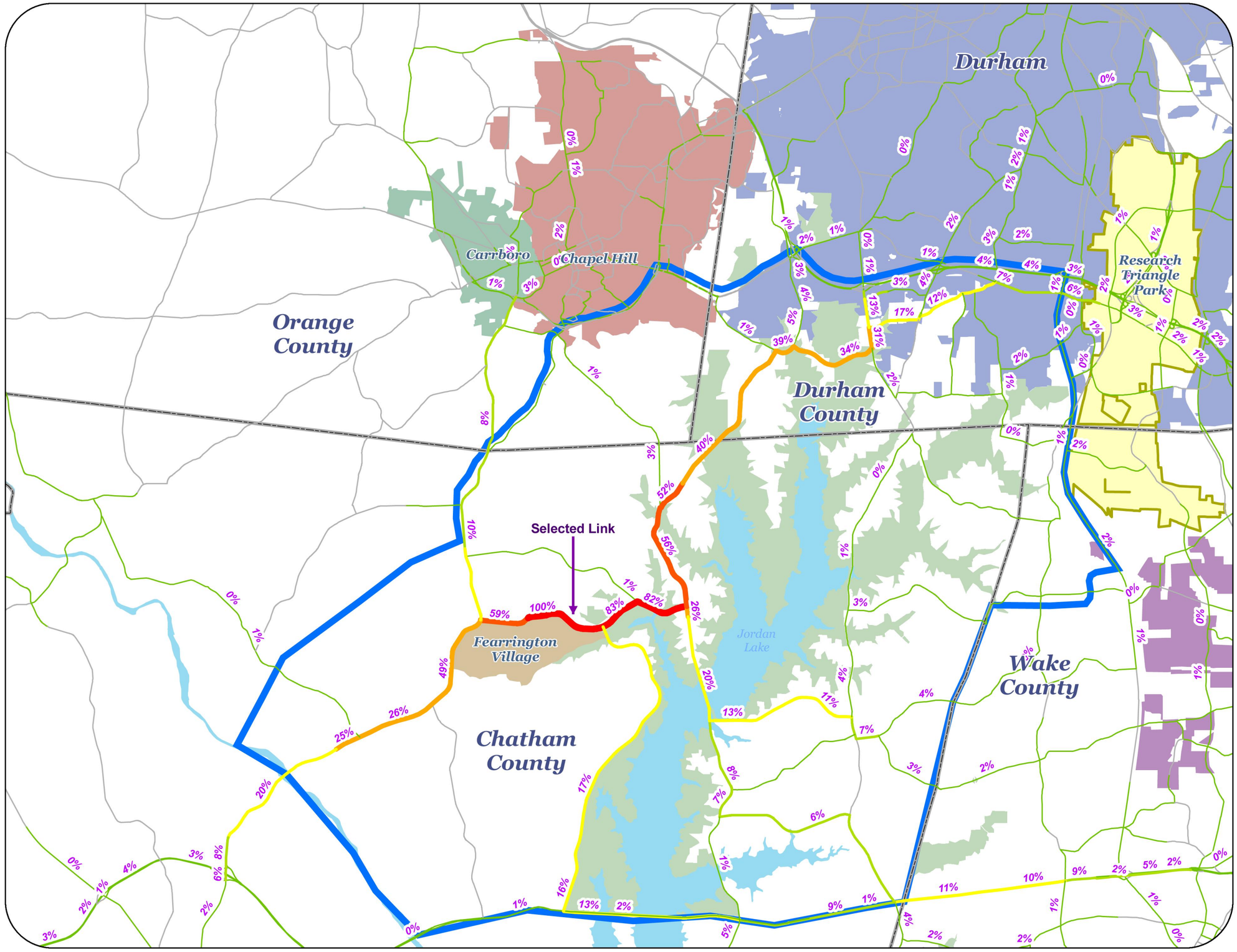
Farrington Road Corridor Study

Figure 15

Select Link Analysis
Jack Bennett Rd



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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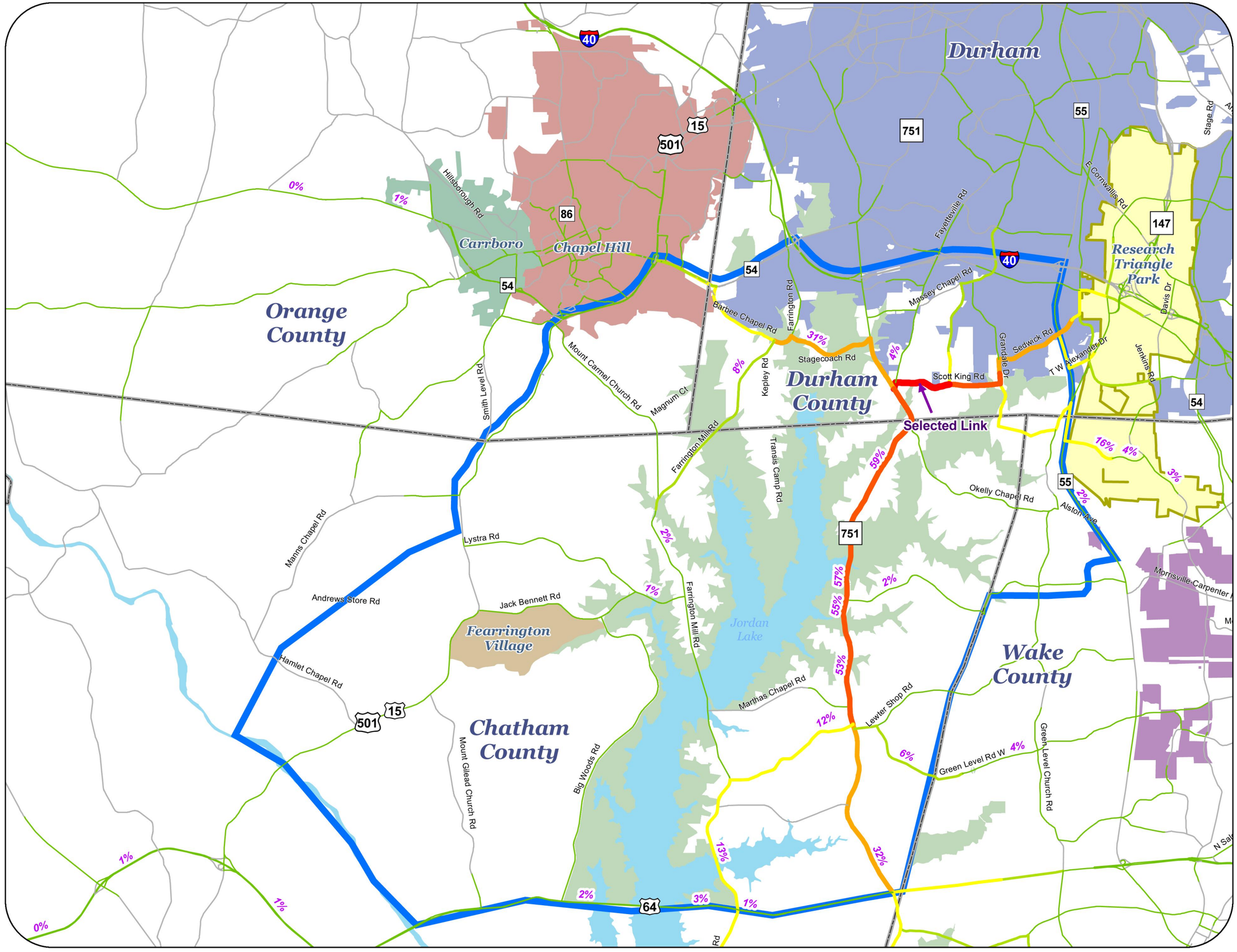
Farrington Road Corridor Study

Figure 16

Select Link Analysis Scott King Road



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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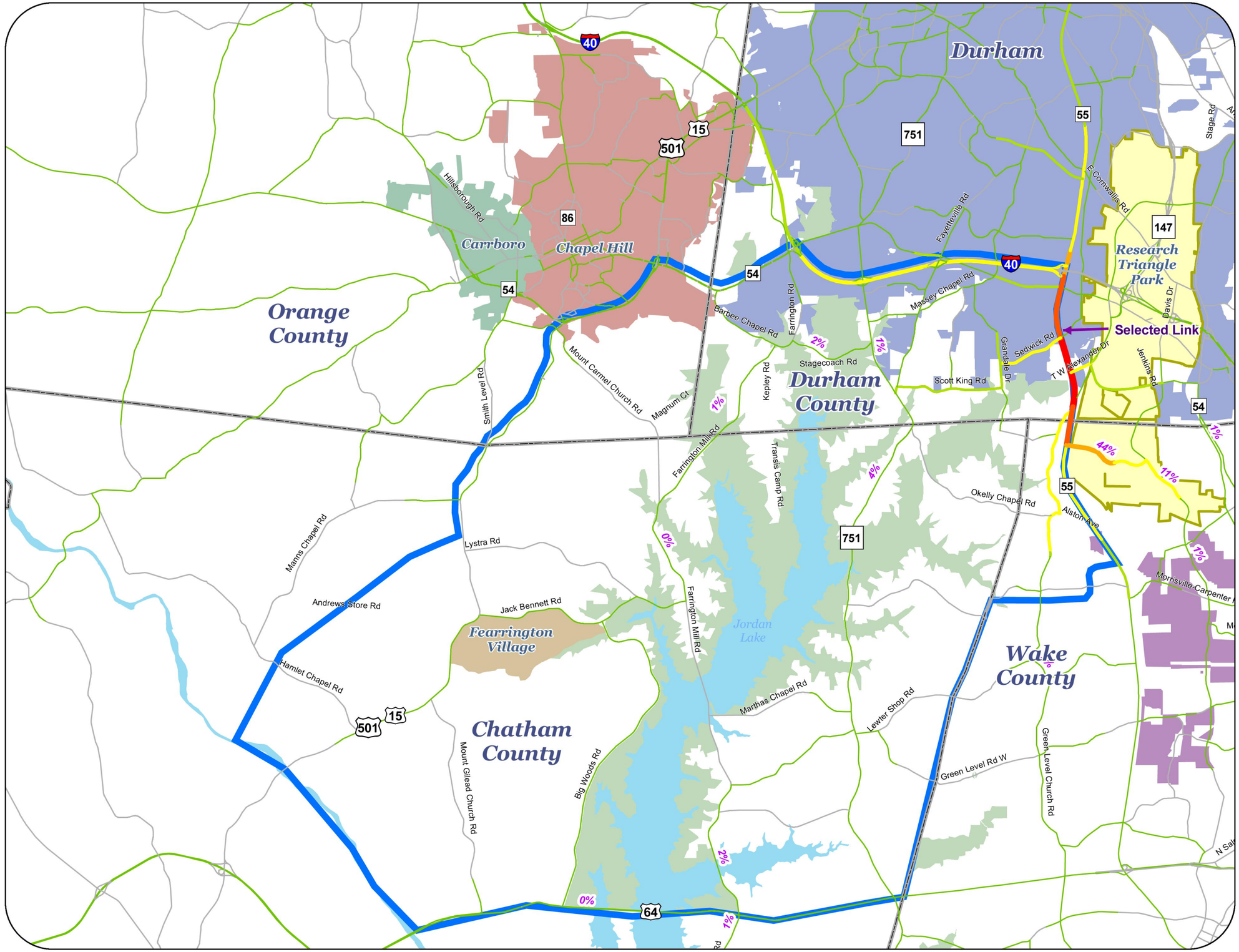
Farrington Road Corridor Study

Figure 17

Select Link Analysis
NC 55



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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District Flow Analysis

DCHC MPO provided daily and peak period origin-destination (O-D) matrices at the district level from the Triangle Regional Model (TRM). For the TRM, the region is divided into 21 districts representing different parts of the area. For example, the portion of Chatham County in the regional model is considered one district, while the western and southern portions of Wake County are divided into two districts. Durham County is divided into six districts which are labeled Northern, Eastern, Central, Downtown, Southwest, and Research Triangle Park. Orange County is divided into four districts which are labeled Northern, Southeast, Southwest, and Chapel Hill-Carrboro.

For the Farrington Road analysis, these 21 TRM districts were grouped into 14 super-districts. For example, Southeast Orange County was combined with Chapel-Hill-Carrboro. O-D data from the Triangle Regional Model were aggregated to these super-districts and are presented in **Table 7**. This table shows that the majority of trips to and from Chatham County are internal (63%). Trips to the Chapel Hill/Carrboro area are also prominent (14%), and are expected to use the US 15-501 corridor. Trips to Western Wake (Cary/Apex) comprise 8% of trips, and are expected to use the US 64 corridor. Southwest Durham County and RTP make up 5% and 2% of the trips, respectively (approximately 7% or 12,400 trips combined). These trips are the most likely to use the Farrington Road Corridor to avoid future congestion on US 15-501, US 64, and I-40.

Table 7. Triangle Regional Model District Flows to and from Chatham County

Super-District	Trips to/From Chatham County	% of Total
Chatham County	110,574	63%
Chapel Hill/Carrboro Area	24,403	14%
West Wake (Cary/Apex)	13,576	8%
Southwest Durham County	8,731	5%
South Wake (Holly Springs/Fuquay Varina)	4,972	3%
Research Triangle Park	3,721	2%
Central Durham	2,532	1%
Raleigh (Inside the Beltine)	2,040	1%
Northern Durham /Durham County	1,267	1%
North/Eastern Wake County	1,229	1%
Southwest Orange County	1,114	1%
Northern Orange County	635	0%
Johnston/Harnett County	462	0%
Granville/Franklin County	116	0%
Total	**175,372**	**100%**

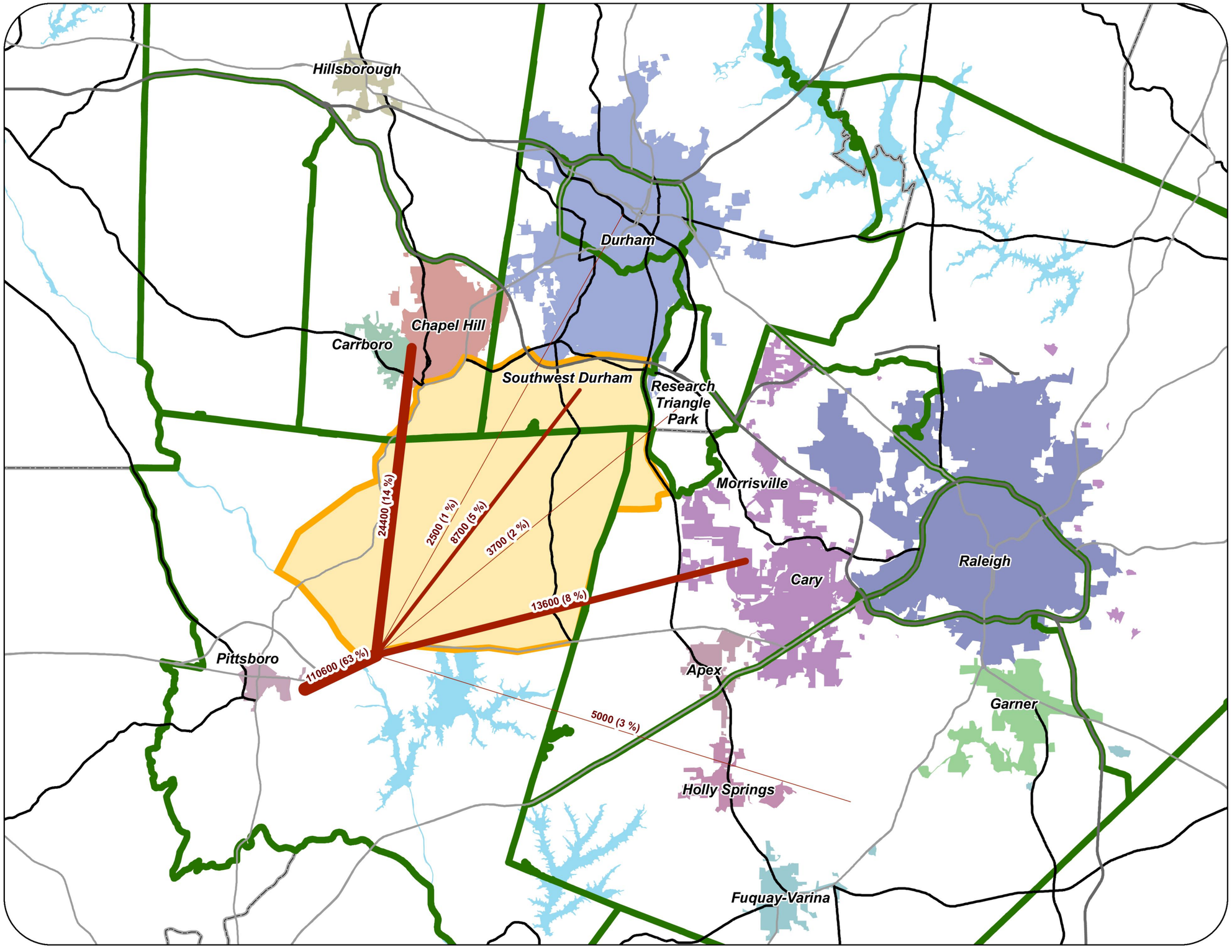
These district flows were added to the Triangle Regional Model to create a graphic showing “travel desire lines”. These desire lines show the district flows in a graphical manner. These graphical district flows can be seen in **Figure 18**.

Farrington Road Corridor Study

Figure 18

District Flows into Chatham County

Triangle Regional Model Origin-Destination Data



District Flows
Total Trips (and % of Trips)
- 2500 - 5000
- 5000 - 10000
- 10000 - 20000
- 20000 - 30000
- > 30000
- TRM Super-Districts
- Interstates
- US Highways
- State Highways
- Counties
- Study Area
- Lakes

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N W E S

0 1 2 4 6 8 Miles

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The Built Environment

To demonstrate and understand growth in the Farrington Road corridor, it is necessary to examine the existing land use profile, development patterns, and the effects of these trends on the transportation system. A CommunityViz model that contains land use data (by parcel and TAZ) was developed. This land use model provides existing conditions and the existing land use profile along with future conditions in both a "business as usual" and "compact development" scenario. Each of these scenarios impacts the transportation system in a different way.

Land Use Profile

The Farrington Road Corridor study area is largely rural and undeveloped and includes a significant portion of environmentally sensitive lands. Over 41% of the land in the study area is classified as permanent conservation. These lands are predominantly comprised of Jordan Lake and its tributaries and game lands owned by the US Army Corps of Engineers but also include preserves and natural areas.

Slightly less than 40% of land in the study area is classified as residential. The majority of residential land is developed at extremely low densities. Roughly a fifth of residential land is classified as rural residential, with an additional 13.56% classified as low density residential. These lands are predominantly located adjacent to Jordan Lake. Less than 2% of land in the study area is comprised of medium or high density residential land uses.

Less than 2% of land in the study area is classified as commercial, industrial, or institutional. The majority of these areas are found in the extreme northern and southern portions of the study area, along Interstate 40 and Highway 64.

Lastly, slightly less than 9% of land in the study area is classified as vacant/unprotected. This category includes all undeveloped lands that are not classified as permanent conservation, farmland, or parks and recreation. These lands are usually adjacent to residential developments and in areas west of Jordan Lake.

Table 8 summarizes the existing land use profile for the study area and **Figure 19** shows Existing Land Use by parcel.

existing conditions

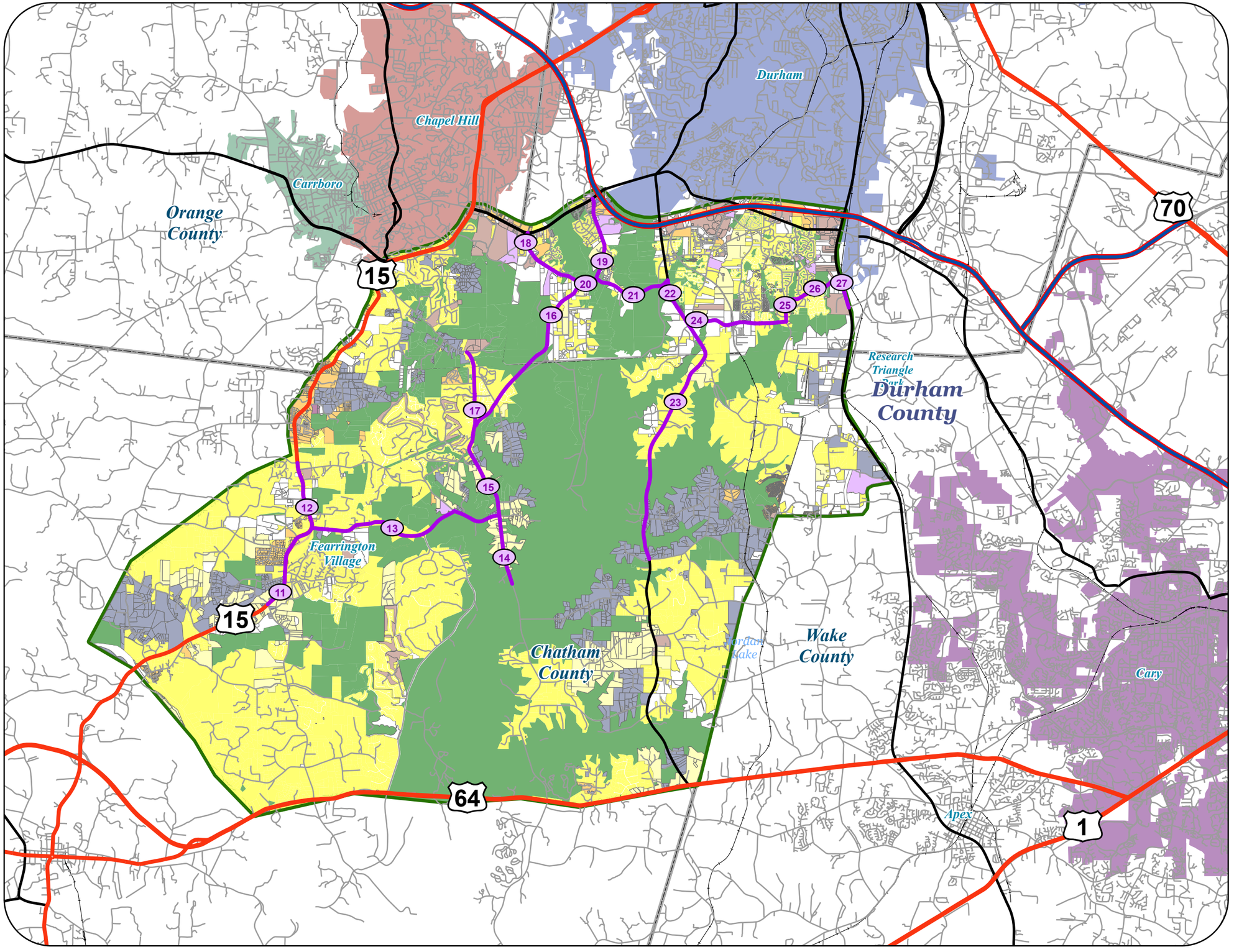
Table 8. Existing Land Use

Land Use	Acres	Percentage
Agriculture	4101.12	5.07%
Civic/Institutional	486.13	0.60%
Commercial/Retail	1735.3	2.14%
General Office	31.06	0.04%
High Density Residential	1.17	0.00%
Low Density Residential	26756.11	33.05%
Light Industrial	20.28	0.03%
Medium Density Residential	1433.98	1.77%
Conservation	33471.3	41.35%
Rural Residential	6123.41	7.56%
Vacant/Unprotected	6785.36	8.38%
Total	80945.22	100.00%

Farrington Road Corridor Study

Figure 19

Existing Land Use



Legend

elum study area

- Agriculture
- Civic/Institutional
- Commercial Retail
- Conservation
- General Office
- High Density Residential
- Low Density Residential
- Light Industrial
- Medium Density Residential
- Rural/Residential
- Vacant Unprotected
- Study Area
- Counties

Surrounding Communities

- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro

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N W E S

0 0.5 1 2 3 Miles

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The travel distance between origin and destination is one primary factor (along with travel mode choice) for influencing travel behavior. The physical distance between complimentary land uses in more rural or suburban settings tends to promote automobile travel, particularly since safe, convenient facilities are not usually available for pedestrians and bicyclists. Mixed-use, dense community development centers decrease the travel distance between complimentary land uses, and support transit, bicycle, and walking as viable alternatives to the automobile for meeting daily travel needs.

Existing Development Patterns

As indicated by the Land Use profile, the majority of the study area is characterized by very low density development. Residential development of this nature is comprised of large lot residential subdivisions designed with limited access points and cul-de-sacs. Large tracts of rural and farmland areas are interspersed throughout the study area, which have little transportation infrastructure other than two-lane farm-to-market roads which are ill-equipped to accommodate encroaching urbanization.

The examination of existing transportation infrastructure revealed that Jordan Lake significantly influences regional transportation and development patterns. Because east-west corridors that cross the lake are limited to Interstate 40 and NC 54 to the north and US 64 to the south, traffic is forced onto these existing routes or other existing smaller routes that travel around the lake entirely.

Proximity to the lake and location within its watershed can make infrastructure investment and development in those areas undesirable. Not all sites within the study area are unacceptable, but the transportation system must be low impact, especially in the interior core of the study area. Avoidance of environmental constraints creates additional gaps in the roadway network.

Natural Environment

As part of the corridor and land use evaluation, this section identifies and summarizes features of the natural environment that affect development patterns and build-out in the study area. The mapping in this section should be used for planning purposes only. Detailed assessments and

formal delineations of natural features should be conducted for any projects within the study area, prior to design and development.

Wetlands

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands provide a variety of environmental benefits, including erosion and flood control, ground water recharge and discharge, and wildlife habitat.

Wetlands and streams are under the jurisdiction of the U.S. Army Corps of Engineers (USACE) as defined in Section 404 of the Clean Water Act. The Division of Water Quality (DWQ) also regulates streams and wetlands under Section 401 of the Clean Water Act. Additionally, the state regulates isolated wetlands under a separate state law. The USACE must approve any jurisdictional determinations as part of the permitting process. It is required that wetland and stream delineations be obtained prior to design. Permits (404/401) are required prior to impacting streams and wetlands within the study area.

Wetlands are prevalent in the study area throughout Jordan Lake and its tributaries. Several roads in the study area have wetlands on both sides of the right-of-way. Widenings or relocations of the road in these areas to smooth or straighten curves would require considerable study for and scrutiny by DWQ and USACE.

Federally Threatened and Endangered Species

According to information provided by the U.S. Fish and Wildlife Service and National Heritage Program, threatened and endangered species and their habitats are present in the study area. These species are found in Chatham, Orange, and Durham Counties and include the following:

- bald eagle (*Haliaetus leucocephalus*)
- Cape Fear Shiner (*Notropis mekistocholas*)
- red-cockaded woodpecker (*Picoides borealis*)
- harperella (*Ptilimnium nodosum*)
- Michaux's sumac *(Rhus michauxii*)
- smooth coneflower (*Echinacea laevigata*).

Any projects conducted in the study area should avoid impacting federally threatened and endangered species and their habitats.

Nutrient Sensitive Waters

Jordan Reservoir was constructed as a flood control project, and also functions as a water supply reservoir for surrounding communities. All waters in the Haw River watershed including Jordan Reservoir were classified as nutrient sensitive waters (NSW) due to the high nitrogen levels found in the lake in 1983.

This classification remains in place today, and according to DWQ, the Jordan Reservoir (and its tributaries) is one of the most eutrophic reservoirs in the state.

As a result, a NSW strategy was created and implemented to protect the reservoir from water quality problems associated with nutrient enrichment. As part of the management strategy, the entire Jordan watershed was designated a critical water supply watershed and given additional, more stringent requirements than the state minimum water supply watershed management requirements. These additional requirements include rules for protection and maintenance of riparian areas, urban storm water management, and discharge.

Water Supply Watersheds

All water supply watersheds in the study area are classified as WS-IV NSW. Class WS-IV watersheds have the following maximum allowable development requirements:

- Low density development at 2 dwelling units an acre or 24% built-upon area, and
- High density development at 24-50% built-upon area.

In addition, Class WS-IV watersheds do not allow the 10/70 provision. Typically this provision allows local governments to use 10% of the non-critical area of the watershed for development up to, but not exceeding, a total of 70% built upon area. In the study area, this provision is not allowed.

Agriculture, forest, and transportation best management practices (BMPs) are also required. Specifically the transportation BMP's are those described in DOT's document "Best Management Practices for Protection of Surface Waters."

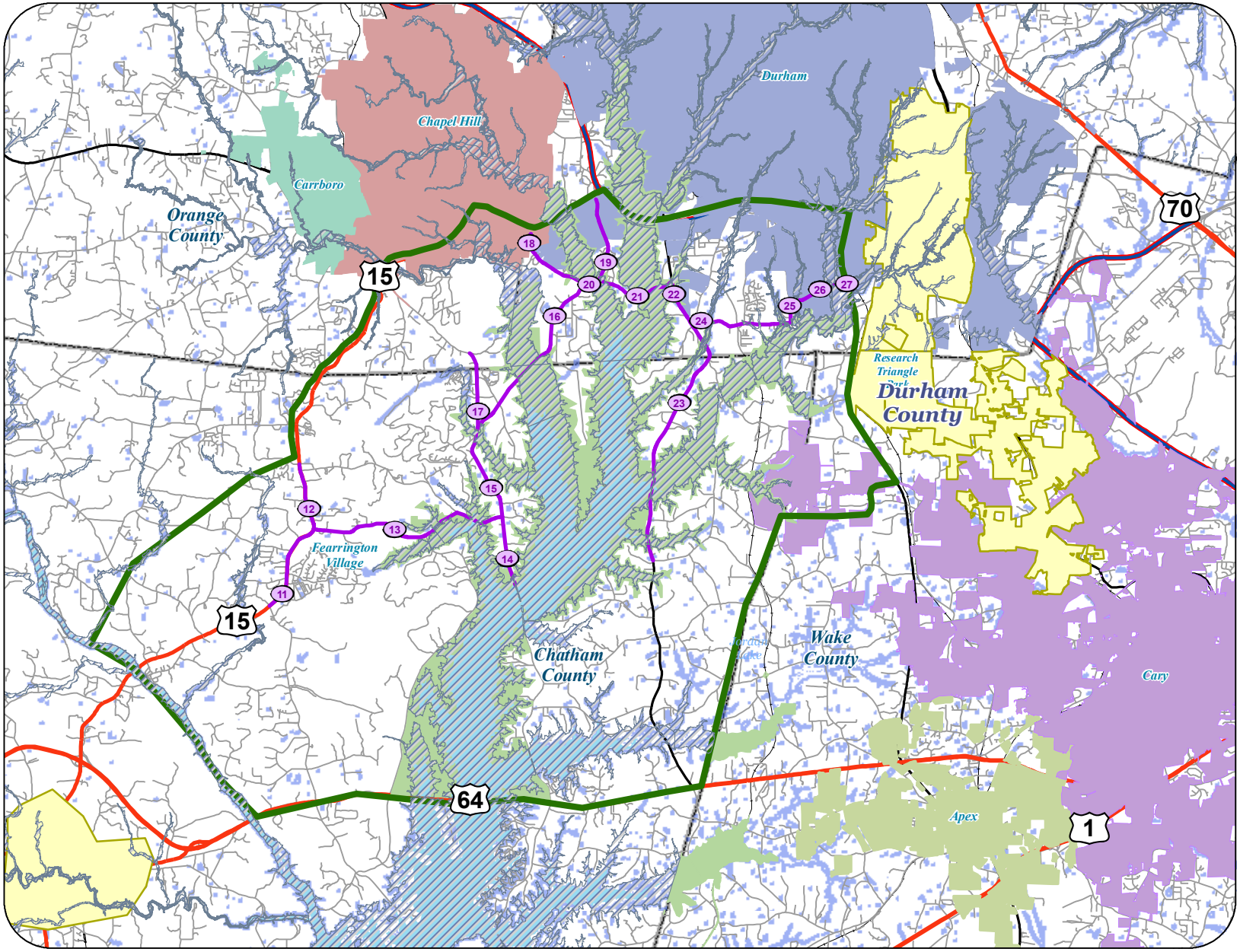
Required stream buffers in WS-IV watersheds are 30 ft for low density development and 100 feet for high density development. However, because the Neuse River Basin Riparian Buffer Protection Rules are applicable to the study area, 50 foot buffers are required, and these buffers are measured differently than buffers required by other classifications.

Floodplain/Floodway Zones

Many areas within the project corridor contain regulated floodplains or floodways. Jordan Reservoir and adjacent areas are within the 100-year flood zone. These areas are designated as Special Flood Hazard Areas and AE zones. Special Flood Hazard areas are defined as areas subject to inundation by the 1% chance annual flood. Zones designated as AE are also present within the Special Flood Hazard Areas. Zone AE is defined as the channel of a stream and the adjacent floodway that must be kept free of encroachment.

Development in these areas will require coordination with the county's floodplain administrator. Any proposed fill in the floodplain will need to be evaluated to show a "no rise" in flood elevation. If this is not possible, detailed hydrologic analysis will be required and a map revision will need to be approved by the administrator and the Federal Emergency Management Agency (FEMA). Floodplain fill permits may be required by county regulators prior to construction. Counties may have delegated programs for disturbance activities within these areas. It is recommended that the floodplain administrators be contacted for specific information regarding floodway regulations within each of the counties.

Figure 20 shows the natural features present in the study area**.**



Farrington Road Corridor Study

Figure 20

Natural Features Map

Legend

- Study Area
- Counties
- Corridor Roads
- 100-Year Floodplain
- UFWS National Wetland Inventory
- Corps of Engineers Land
- Lakes
- RESEARCH TRIANGLE PARK
- APEX NC
- CARRBORO NC
- CARY NC
- CHAPEL HILL NC
- DURHAM NC

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N W E S

0 0.5 1 2 3 Miles

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Existing Plans, Policies, & Regulatory Tools

The Corridor Study was coordinated closely with other state, regional, county, and local plans and/or policies that guide planning efforts in the area. All plans and policies in jurisdictions pertinent to the study area were reviewed. These jurisdictions include Orange County, Durham County, Chatham County, Wake County, the City of Durham, the Town of Chapel Hill, and the Town of Cary. Plans and policies were divided into three main categories: visioning documents, land development controls, and environmental rules and regulations. This section summarizes the consultant's review of the materials and highlights, issues, policies, or directives that may influence reasonable implementation of the Farrington Road Corridor Study.

Visioning Documents

Visioning documents create a framework for decision-making in communities. They serve to guide growth and development and can address a multitude of issues from housing to transportation to economic development. Visioning documents set goals and objectives for the community and should be referenced by officials when making policy decisions to ensure a coordinated approach for future growth. With a clear vision for the future and an established course of action to get there, a community is much more likely to realize desired outcomes. The following visioning documents are believed to have an impact on the Farrington Road Corridor Study:

Joint Land Use Plan-Chatham County and Town of Cary

A resolution to draft a joint land use plan between Jordan Lake and the Chatham/Wake County line was adopted by Chatham County and the Town of Cary in December 2005. Two community meetings were held in 2006 and two joint meetings and a public hearing were held in 2007. Development of the plan is currently underway, with a draft land use map available online for public comment.

The draft plan emphasizes very low density development (1 du/10 acres) within a ½ mile of the lake because of sensitive environmental resources including natural heritage sites and game lands. A resource conservation overlay, a 150 yard hunting buffer, and ½ mile buffers

around burn-blocks are also recommended to protect natural resources. The plan is recommending placement of no major roads through designated environmentally-sensitive areas. Residential development should occur in "zoning extremes," where some areas allow very high density development and some allow very low density development to prevent fragmentation of the landscape. Conservation subdivision design should be used whenever possible within the study area.

Chatham County Land Conservation and Development Plan

Chatham County's vision developed for this plan is as follows: "Chatham County will be a place that cooperatively controls its own destiny to assure the state of well-being desired by all of our people, while proudly preserving diverse cultural heritages and the County's rural character." Two fundamental policies identified throughout the plan are achieving "balanced growth" and engaging in "an open, pro-active and cooperative approach to land development and conservation." The plan emphasizes preservation of form and function of rural character, development of compact communities with a mix of activities including economic development centers in order to promote a diversified, sustainable business community, and development of an integrated approach to protecting and promoting high-quality open space, recreation, historic and tourism locations. However, the "community plan map" was never adopted.

Chatham County Land Use Strategic Plan

The Land Use Strategic Plan complements the Land Conservation and Development Plan described above. Achieving "balanced growth" and conserving and protecting natural resources are of particular relevance to this Plan. In support of these policies, goals were established. These goals include: implementation of community-supported growth management strategies, conservation of prime farmland, concentration of high intensity uses, increased proportion of land preserved as open space in areas under development, and provision of a transportation system that effectively and efficiently fulfills the needs of all county interests.

Draft Orange County Comprehensive Plan

The Orange County Comprehensive Plan serves as a guide to the county's growth and development through 2030. On May 19, 2008 a draft of the Comprehensive Plan was made available for public review. Adoption of the comprehensive plan document is pending.

Becoming a sustainable community is the underpinning of the plan. Key objectives to achieve sustainability initiatives in the county include environmental conservation, energy efficiency, affordable housing, social equity, a thriving economy, regional agricultural production, and the availability of transit-oriented, walkable, mixed-use communities. Key implementation strategies include:

- Establish Economic Development Districts to stimulate and accommodate development in strategic locations that can be served by transportation systems and public infrastructure, and be convenient to housing opportunities.
- Identify and encourage mixed-use districts that provide live-work-shop opportunities and minimize travel needs.
- Explore a Strategic Growth and Resource Conservation program that will help focus new development in areas that can best accommodate it. Simultaneously, this program should preserve / conserve rural and agricultural land with compensation mechanisms for rural property owners.
- Develop an interconnected system of pedestrian and bicycle trails to provide both recreation opportunities and increased mobility choices to residents.
- Identify growth opportunity areas near transit corridors and along major thoroughfares to encourage more public transportation use by County residents.
- Encourage residents to use alternative modes of transportation and ride-sharing including interconnected pedestrian and bicycle trails, transit lanes along major

thoroughfares; and development of park-and-ride lots that would encourage use of public transportation to travel to and from work.

Durham City/County Comprehensive Plan

The Durham City/County Comprehensive Plan serves as a guide for future growth and development through 2020. The document was adopted in February 2005 and amended in August 2007.

The transportation element of the Comprehensive Plan emphasizes public transit and pedestrian and bicycle movement, as well as automobile travel. It stresses regional solutions and the importance of integration between land use and transportation planning processes. The land use element concentrates on balancing predicted demand with the need to protect natural resources and to move towards a more efficient development pattern.

Wake County Land Use Plan

The Wake County Land Use Plan was adopted in 1996 and updated in 2003. Goals and strategies of particular significance to this plan include seeking regional solutions to transportation issues, ensuring that the land use plan and transportation plan mutually support each other, identifying and preserving areas that make a significant contribution to environmental quality, and planning transportation facilities in relation to planned growth.

Wake County Transportation Plan

The Wake County Transportation Plan was adopted by the County in April 2003. The goal of the plan is to identify a diversified multimodal transportation investment program to provide safe, efficient, and effective mobility for all citizens and visitors. The plan encompasses collector streets, thoroughfares, public transit, bicycle and pedestrian needs of the County through 2025.

Chapel Hill Southern Area Small Area Plan

The Chapel Hill Southern Area Small Area Plan was adopted June 23, 1992. The area of town, although undeveloped, was designated to

develop at urban densities and the plan was created to determine how best to develop the land. The primary objective of the plan was preservation, with a focus on preserving the natural beauty and character of the area, protecting environmentally sensitive areas and water quality, and enhancing existing neighborhoods. The Plan proposes low density residential development for most of the land, with higher density residential development concentrated in a walkable village setting.

Land Development Controls

Land Development Controls, including zoning ordinances, subdivision ordinances, and unified development ordinances establish regulations, procedures, and standards local governments can enforce or implement to ensure land is developed in a manner that is consistent with the goals, policies, and strategies set forth in the various visioning documents described above.

The land development controls of particular influence to this corridor study include the Chatham County zoning ordinance and the Durham City/County Unified Development Ordinance (UDO).

Chatham County amended their zoning ordinance to include a Compact Community District in April 2004. This district allowed for compact residential development with a mixed-use commercial village center with a conditional use permit. It was created to help implement the Chatham County Land Conservation and Development Plan described above. The desirable location for these villages is in northeastern Chatham County, within the study area. The purpose of this district is to promote new communities that support mixed-use development, allow for compact village-style development surrounded by protected green space, and promote connectivity and walkability. This type of development was considered when reviewing future year development scenarios (see Scenario Planning section).

The Durham City/County UDO establishes development tiers to ensure that development reflects the character of the area within which it occurs. The southern portions of Durham City and County are in the study area. These areas are predominately located in rural and suburban tiers. The majority of Rural tiers are located within watershed critical areas Development in this tier should focus on protecting water

resources and is characterized by large lots and limited commercial areas. Suburban tiers are where the majority of population growth in Durham is expected and are characterized by traditional suburban densities and patterns.

Environmental Rules and Regulations

Federal, state, and local governments have established environmental regulations to protect water quality of streams and surface waters and other environmentally sensitive areas, to minimize losses due to flooding, and to encourage the wise and productive use of natural resources.

The following environmental rules and regulations were considered in the development of recommendations for the study area:

Neuse River Nutrient Sensitive Waters (NSW) Management Strategy

The study area that is essentially east of NC 55 is subject to the Neuse River Nutrient Sensitive Waters (NSW) Management Strategy. This strategy is state mandated by the North Carolina Division of Water Quality (DWQ) and uses nutrient removal as the water quality criteria. The strategy resulted in the development of Neuse Rules, or permanent rules designed to support implementation of the strategy. These rules established a nutrient reduction goal and included rules for wastewater discharges, urban storm water management, agricultural nitrogen reduction, and nutrient management.

Another set of rules of particular interest to this study, also established under the NSW management strategy, is the Neuse Riparian Buffer Protection Rules. Neuse River buffer rules apply to vegetated areas within 50 feet of the top of the bank along surface water features, including streams, rivers, lakes, ponds, etc. These rules apply where features are shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). In addition to the 50-foot buffer requirements, storm water that runs into the buffer must be continually diffused. New buffer rules were implemented for the study area as part of the newly adopted Jordan Lake Rules in 2007.

Jordan Lake Rules

The Division of Water Quality (DWQ) published a proposed set of rules for Jordan Lake that affects all jurisdictions in the study area. These rules are the strictest implemented watershed rules to date in North Carolina and include measures that will require retrofitting of existing development. These rules were revised in 2008, and a new set of rules is still under review. Like the Neuse Rules, the Jordan Lake Rules establish nutrient reduction goals and require nutrient management, agriculture, storm water management (both for new and existing development), and protection of riparian buffers.

These buffer rules apply to all streams and areas along the edge of Jordan Lake. In addition, these rules govern activities that impact any areas within 50 feet of surface waters in the Jordan watershed, including intermittent streams, perennial streams, lakes, reservoirs, and ponds.

In addition, the N.C. Division of Water Quality (DWQ) requires that a Hazardous Spill Catch Basin be constructed at stream crossings that are within the Lake Jordan watershed, excluding roadway projects.

Local Buffer Regulations

The following county-wide buffer regulations were considered in the development of the corridor study:

Chatham County has local buffer regulations that require buffers on most any water feature, with buffers from 30 feet in width to 100 feet in width (adopted January/February 2008). The County also adopted a Stormwater Ordinance and amended Soil Erosion and Sedimentation Control Ordinance, including steep slopes, in December 2008.

The buffer regulations in Orange County vary from approximately 65-80 feet dependent upon the degree of slope within the area. If the feature occurs within a floodplain, a licensed engineer or surveyor must calculate the extent of the floodplain and slopes. There are general 50-foot buffers for those areas not within a protected watershed. The protected and unprotected watersheds are designated by the County, and protected areas are defined by

the county as those features that feed into a water supply watershed.

Durham County buffer regulations include 50-foot buffers on all perennial or intermittent streams. Streams occurring within water supply watersheds can have increased buffer requirements of 50-100 feet for intermittent streams and 100-150 feet for perennial streams.

Watershed Regulations/Ordinances

A watershed ordinance protects the water quality of the streams and surface water in the water supply watersheds. Watershed regulations/ordinances in this study area comply with the management strategies and rules described above.

Flood Damage Prevention Ordinance

A flood damage prevention ordinance promotes the health, safety, morals, and general welfare of a community by minimizing public and private losses due to flood conditions within flood prone areas. These ordinances restrict or prohibit certain uses which are dangerous to health, safety, and property due to water or erosion hazards, or those uses which result in damaging increases in erosion, flood heights, or velocities.

Environmental Impact Ordinance

Orange County has an environmental impact ordinance that encourages the wise and productive use of natural resources, promotes public and governmental awareness of the environment, educates the public on the environmental consequences of development, requires full disclosure of the anticipated effects of proposed development on the resources of the county, and permits and facilitates full enforcement of all ordinances and regulations concerning the environment in an efficient, coordinated and comprehensive manner.

Specifically, the ordinance requires the preparation and evaluation of environmental impact documents for projects that either require certain state permits or require a local land use permit for development within environmentally sensitive areas.

Section 404 Wetland Regulations

Communities within the study area recognize the importance of protecting environmentally sensitive areas, which include those lands designated as wetlands by the US Army Corps of Engineers. It is generally the policy of the local governments that all development within these areas conforms to federal, state, and local regulations and relevant development ordinances.

4 scenario planning

Scenario planning represents a process that encourages the consideration of multiple futures for a community based on various development patterns and intensities. Through consensus and evaluation, these futures come together into a vision and set of strategies used to direct policy. Scenario planning allows communities to evaluate the influence of physical characteristics, environmental features, land use patterns, development intensities, and urban design on the efficiency of the surrounding transportation system. Visualization of the interaction between land use and transportation decisions provide community leaders with information they need to evaluate the consequences of potential actions. Building on this momentum, the Federal Highway Administration, Environmental Protection Agency, and other federal agencies are actively promoting the use of scenario planning models by state agencies, metropolitan planning organizations, and local governments to better integrate land use, urban design, and transportation decision-making processes.

Evaluating the relationship between urban form and regional travel behavior in a scenario planning analysis produces several benefits. When considered together, decisions and investments regarding both elements can have a significant bearing on the Farrington Road study area:

- The impacts to sensitive land uses can be minimized when facilities identified for transportation investments are located after considering appropriate land use patterns and development intensities for the area.
- Prime locations for development can be stimulated if transportation investments consider available capacity or appropriate mobility options.
- Complementary activities can be placed next to existing or planned transportation infrastructure, making the most of land use opportunities and dedicated transportation investments.
- The quantity and location of travel demand can be influenced by land use decisions, making the possibility of real choices for various modes of travel both accessible and attractive.

4 scenario planning

Typically, scenario planning represents a multi-step process including:

- inventory existing conditions
- develop trend analysis
- explore alternative development scenarios
- assess impacts and trade-offs
- prioritize options and make recommendations.

These processes were conducted as part of the Farrington Road Corridor Study. Based on the alternative development scenarios, trade-offs and impacts of land use decisions were evaluated, and allowed the consultant to recommend land use policy changes in the study area.

CommunityViz Software

The two-dimensional map and data analysis component of CommunityViz® software, Scenario 360®, was used to evaluate impacts on the transportation system generated by competing future year development scenarios considered for the study area. It adds the functionality of a spatial spreadsheet to ArcGIS Map®, similar to how a spreadsheet program like Microsoft Excel® handles numerical data. Dynamic calculations embedded in the spatial spreadsheet were controlled by user-written formulas that change value as referenced inputs change. Formulas were written to supply the result of mathematical relationships with other spatial data included in the analysis, and with assumptions programmed in the planning model that reflect certain public policies, development controls, or market conditions unique to the study area.

Study Area

The study area for the scenario planning analysis is slightly smaller than the study area described in Chapter 1. Specifically, it omits parcels in the Town of Cary and Wake County to better match the traffic analysis zone boundaries used in the Triangle Regional Model (TRM).

Growth Projections (2035)

The MPO planning process for developing growth projections in the region (commonly referred to as socioeconomic data) relies on static data sets generated from independent studies commissioned during major updates to the Triangle Area Regional Travel Demand Model. Collectively, this information represents the assumed development potential for eight counties (some full and some in part) and multiple cities (major cities include Raleigh, Durham, Chapel-Hill, Apex, Cary, and Wake Forest) included in the Triangle Region. Demand on the transportation system (i.e., trip generation) is calculated directly from the TRM socioeconomic data.

The last major update to regional control totals for socioeconomic data used in the Triangle Regional Travel Demand Model was completed in 2008. Population, housing, and employment estimates included in the socioeconomic dataset available for the study area were used as direct inputs to the CommunityViz® growth allocation model. The planning horizon for the land use allocation model is 2035.

Growth Allocation Model: Three Step Process

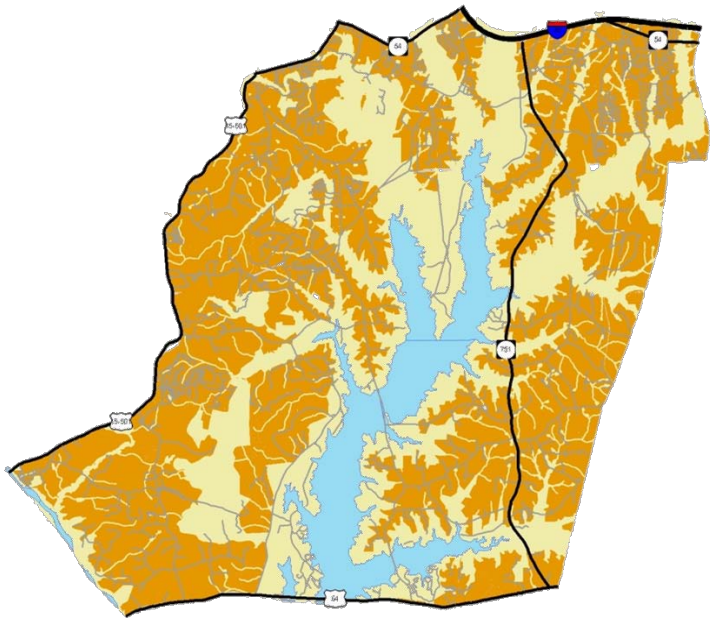
There are three main steps in the CommunityViz® growth allocation model: supply, desirability, and demand. Each of these is briefly described below.

Supply

The "supply" of development potential remaining in the study area was estimated using two general factors: land availability and local land development controls. Land availability was determined based on the presence of physical, political, or policy conditions that would prohibit or limit future growth (i.e., areas highly-constrained for development). Data used to identify highly-constrained areas for development in the study area include major water bodies, 100-year floodplain, 50-foot riparian buffers from perennial streams, dedicated and registered conservation easements, NWI wetlands, formalized agriculture districts, and significant natural heritage areas.

A site efficiency factor (10%-30%) for each generalized land use category was also applied to the parcels greater than twenty acres in size to account for land typically dedicated to certain on-site improvements (e.g., internal streets, storm water management, open space, etc.) necessitated by new development. The remaining portion(s) of a parcel after removal of highly-constrained areas for development and application of the site efficiency factor was used to estimate build-out potential in the model.

Highly-Constrained Areas Map



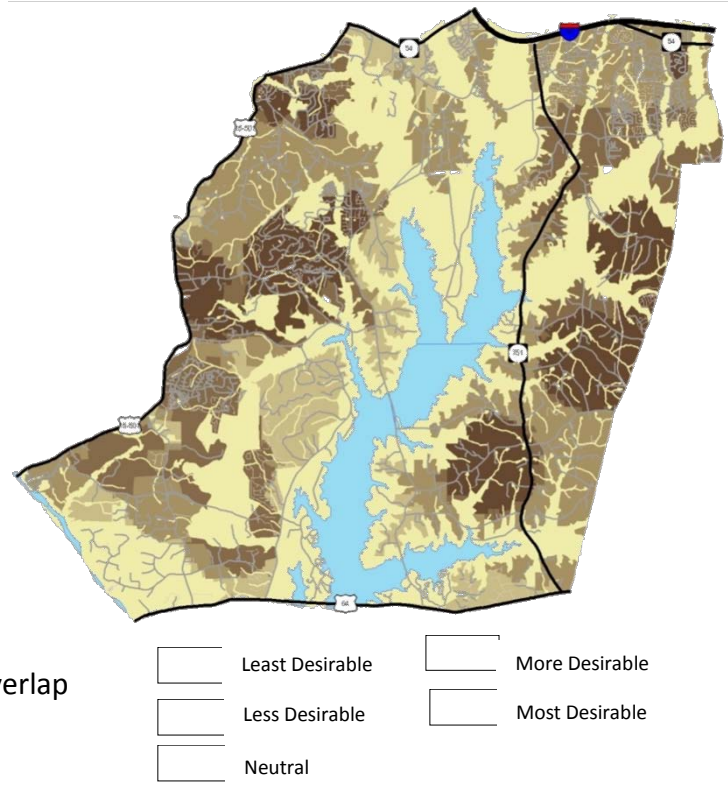
Areas Deemed Highly-Constrained for Development

Build-out potential for residential and non-residential uses was estimated using land development controls set forth in adopted plans and ordinances administered by cities and counties in the study area. Height, bulk, and density controls observed for the study area were inventoried and applied to general land use categories assigned in the model (See appendix for development controls by generalized land use). Build-out potential for each parcel in the model was reported by number of dwelling units, commercial square footage, commercial employees, general office square footage, general office employees, institutional square footage, institutional employees, industrial square footage, and industrial employees.

Desirability

The "desirability" of one parcel to develop relative to another was based on its spatial relationship to factors deemed either positive or negative for attracting growth. Factors represented in the study area included proximity to existing urban areas, proximity to permanent conservation areas, access to water and sewer service, proximity to major

Development Desirability Map



intersections, proximity to the regional activity center in the study area (i.e., Streets at South Point Mall), and proximity to compact development nodes identified for Chatham County.

The physical presence of factors prevalent in the study area, as well as those that extend across the region, were layered on a parcel map, and calculations were performed to determine either percent overlap or physical proximity (as appropriate) for each of the physical features in relation to individual parcels. CommunityViz® software calculated a numeric score for desirability based on the presence of each individual feature relevant to individual parcels. A normalized score (between 0 and 100) was used to rank the parcels from least to most desirable for development. Raw scores reported for individual features were weighted to prioritize the desirability factors for attracting new development (See appendix for weighting values). For example, access to water and sewer service areas was assigned a higher importance in determining desirability for development than proximity to the regional activity center in the study area. After each of the individual features was weighted, the scores were combined into one final desirability score representing the overall desirability of that parcel for attracting new development. These scores were normalized to ensure that the lowest score was rescaled to 0, the highest score rescaled to 100, and the scores in between rescaled to fall within the new spectrum. Normalizing the scores is a critical process for ensuring that parcels are ranked relative to each other, that suitability maps are easily presentable to viewers, and that allocation of new growth occurs according to relative desirability.

Demand

The amount of growth anticipated in 2035 (i.e., "demand") was forecasted to the parcel level for the study area. The "allocation tool wizard" in CommunityViz® used supply, desirability, and demand statistics calculated in the model to allocate projected new dwelling units and employees by type amongst the parcels. For this process, the allocation wizard uses build-out potential as the "supply", population and employment forecasts as the "demand", and the results of the land suitability analysis as the "desirability score." (Note: Parcels noted with existing development were removed from the list of eligible parcels for new development in the "supply" step of the process). Results generated at the parcel level were aggregated to the traffic analysis zone level for use in the regional travel demand model.

Future Year Development Scenarios

There is increased public interest in reducing or reversing the trend of urban sprawl and its consequences. This interest is motivated by the impacts associated with suburban development patterns, including consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion. In areas like Farrington Road, the long physical distance between complementary land uses (e.g., between home and work, home and school, or home and shopping) and a lack of overall street connectivity leads to unintended consequences—increased vehicle miles traveled and energy consumption, longer commute times, increased air pollution, heightened infrastructure and public service costs, and decreased resource lands. Future year forecasts in the Triangle Regional Model (TRM – travel demand model) predict that these unintended consequences will continue for the region if changes are not made to better integrate land use, urban form, and transportation decision-making.

Land use serves as the foundation of the built environment. It defines the type, mix, and general location of uses within communities, and ultimately defines the boundaries for neighborhoods, commercial nodes, and employment centers. Communities attempt to guide the built environment through the creation of their future land use maps. Typically, a comprehensive plan and accompanying future land use map represent the community's vision for how to promote local growth and prosperity.

4 scenario planning

Urban form represents physical elements of the built environment; it is the spatial footprint of our cities-- measured by street patterns, block length, mix of land uses, maximum building height, average residential density, and non-residential intensity. These physical elements can influence comfort, speed, cost, convenience, attractiveness, and safety of movement between complementary land uses. On the other hand, elements of the transportation system—including road, pedestrian, bicycle, and transit facilities—impact how land is developed in terms of size, shape, density and mix of land uses. Urban form and transportation elements influence each other.

The location of land uses and how they are designed (i.e., urban form) can favor one mode of travel over others, and may influence overall travel behavior by changing the ease of use or accessibility of various modes. If low-density development is spread out, the residents of such areas must rely almost entirely on automobiles to get from one location or land use to another. On the other hand, denser urban centers that combine complementary land uses near each other enable greater choice in transportation.

Reorganization of urban form in the Farrington Road area to create a more efficient transportation system requires that community leaders evaluate the four Ds commonly associated with the relationship between land use, urban design, and transportation—density, diversity, design and destinations. By doing so, the MPO and Farrington road area will collectively be able to shorten the commuting distance between complementary land uses, provide more travel choices, and create a more efficient transportation system.

In order to test this hypothesis, three distinctive future year development scenarios (i.e., business-as-usual, compact development centers, and constrained growth projections) were created for the study area to measure the impact that competing development alternatives may have on demand factors (i.e., trip generation, trip length, and travel mode choice). All three development scenarios represent the same study area and long-term planning horizon (2035). A brief summary of each development scenario follows.

Business-as-Usual

The business-as-usual scenario represents continuation of an emerging suburban development pattern prevalent in the study area (see image on following page). New construction is characterized by isolated, single-use developments surrounded by low-density rural residential home sites. The regional activity center surrounding the Streets at South Point Mall continues to be the social and economic center of the study area. Low-density development patterns and the physical distance between complementary land uses tends to promote automobile travel, particularly since safe, convenient facilities are not easily available for pedestrians, bicyclists, and transit riders. Increased traffic congestion on the rural road network means less mobility for residents and visitors to the study area as well as others traveling through the community.

Compact Development Centers

The compact development scenario represents fulfillment of the vision for many communities in the study area to promote a more sustainable development pattern – measured by environmental stewardship and equitable distribution of community resources – that also reflects the community's unique character and local values. These visions are evident in the review of local land plans in Chapter 3 – Existing Conditions. In this planning scenario, future year growth is largely directed to one of six compact development centers identified for the study area. Each compact development center would be designed following the principles of new urbanism (i.e., containing town center, walkable streets, higher densities, etc.) and may include multiple neighborhoods within it.

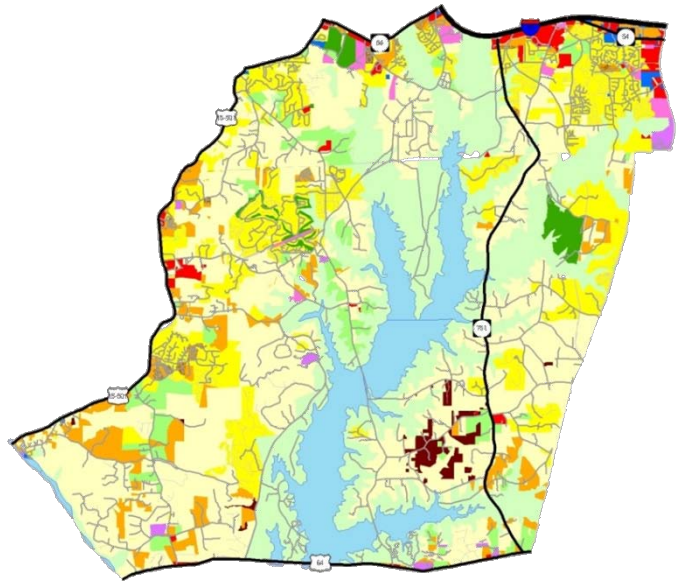
Each compact development center supports higher densities and FARs (Floor-to-area ratio – usually a measure of non-residential building density) as well as more mixed use designations. These land use changes intensify development in areas and shrink the distance of complementary land uses. Both changes influence travel behavior because they require less driving on a daily basis.

The diversity of close-by, complementary land uses and local travel options within the designated compact development centers encourages better distribution of trips and shorter trip lengths, thereby reducing the number of vehicles traveling similar routes on a daily basis. This scenario

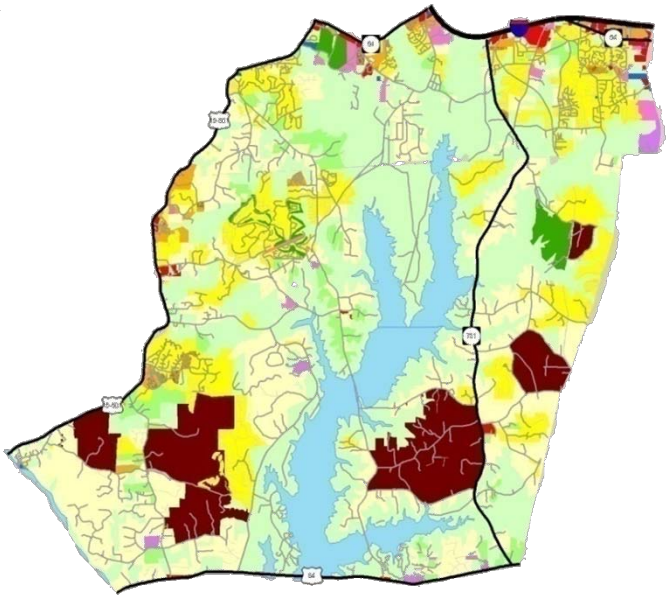
also assumes provision of safe and convenient facilities for pedestrians, bicyclists, and transit riders traveling between complementary land uses. Permanent preservation of natural areas in between the designated centers respects the vulnerability of this environmentally-sensitive area while accommodating new growth.

Development Scenario Maps

Rural Residential	Civic / Institutional	Agriculture
Low Density Residential	Commercial	Conservation
Medium Density Residential	Light Industrial	Parks / Recreation
High Density Residential	General Office	Compact Dev. Center



Business-as-Usual



Compact Development Centers

Constrained Growth Projection

The constrained growth projection scenario assumes the same land use patterns and development densities/intensities represented in the business-as-usual development scenario. However, this scenario assumes a 15% overall reduction in the number of new dwelling units and employees anticipated for the area. This phenomenon could occur for several reasons, including reduced market demand for development in the study area, new water quality regulations that reduce the permitted densities, adoption of an adequate public facilities ordinance for the study area, increased development impact fees, or some other policy-driven initiative by local governments in the study area to reduce overall growth.

These policy changes would constrict growth because they would limit the number of new approved developments through stricter rezoning and the building permit processes.

Scenario Planning Results

Summary statistics for evaluating the impacts generated by the three development scenarios were reported using CommunityViz software® and the 2035 Triangle Regional Travel Demand Model. Measures of Effectiveness (MOEs) generated by the two software programs articulate the significance of reorganizing land use patterns and development densities/intensities, or implementing policies and ordinances to manage the type and timing of development, to improve efficiency of the regional transportation system (i.e., business-as-usual scenario vs. compact development centers scenario or business-as-usual scenario vs. constrained growth projections scenario).

MOEs from the TRM indicated a 4.76% decrease in vehicle miles traveled per person (system-wide) for the compact development center scenario and 6.90% decrease in vehicle miles traveled per person for the constrained growth projection scenario compared to business-as-usual. In addition, the average trips, miles and travel time per person is reduced by approximately 5.0% for the compact development centers scenario. **Table 9** summarizes all MOEs from the 2035 TRM for all three development scenarios.

Table 9. Measures of Effectiveness from the Triangle Research Model (TRM)

	Scenario			Percent Difference	
	Business-as-Usual (BAU)	Compact Development Centers (CDC)	Constrained Growth Projection (CGP)	BAU-CDC	BAU-CGP
Study Area Population	22,789	22,789	19,367	0%	-15%
Households	10,457	10,457	8,888	0%	-15%
Vehicle Trips	95,116	76,330	71,895	-19.75%	-24.41%
Vehicle Trips/Person	4.17	3.35	3.71	-19.75%	-11.03%
VMT	526,106	501,041	466,130	4.76%	-11.40%
VMT/ Person	23.09	21.99	24.1	-4.76%	4.4%
VHT	795,316	752,541	694,950	-5.38%	-12.62%
VHT/ Person (hours)	0.58	0.55	.60	-5.38%	3.4%
VHT/ Person (minutes)	34.90	33.02	35.88	-5.38%	3.4%
Average AM Speed	41.11	41.36	41.03	0.61%	-0.80%
Percent VMT over Capacity	5.32%	4.66%	4.41%	NA	NA

Both the compact development centers scenario and constrained growth projection scenario reduce the spatial footprint of suburban development on the surrounding landscape. Compact, mixed-use centers identified in the hypothetical development scenario would limit sprawling, low-density development patterns and reduce accompanying public infrastructure costs. Output data from CommunityViz® indicates that up to 47.02% of the total land area included in the study area could be conserved compared to 34.63% in the business-as-usual scenario. Beyond environmental stewardship, the compact development scenario supports prudent fiscal responsibility for capital improvements planning and accommodates purposeful growth beyond the twenty year planning horizon.

Land consumption in the constrained growth projection development scenario would also limit the footprint of suburban-scale development through 2035. However, continued reliance on the same land use patterns and development densities/intensities represented in the business-as-usual development scenario only delays the effects of sprawl in the study area or "pushes" it to another location in the region.

Table 10 summarizes the land use profile, by general land use category, for all three development scenarios.

Table 10. Land Use Profile by Scenario

General Land Use Category	Business As Usual		Compact Development Centers		Constrained Growth Projection	
	Acreage	Percent	Acreage	Percent	Acreage	Percent
Agriculture	2,989.95	4.20%	2,614.06	3.67%	2,989.95	4.20%
Civic / Institutional	519.48	0.73%	519.48	0.73%	519.48	0.73%
Commercial	1,046.66	1.47%	599.62	0.84%	1,046.66	1.47%
General Office	227.81	0.32%	123.87	0.17%	227.81	0.32%
High Density Residential	166.63	0.23%	166.63	0.23%	166.63	0.23%
Low Density Residential	10,656.32	14.96%	9,604.48	13.48%	10,656.32	14.96%
Light Industrial	335.03	0.47%	335.03	0.47%	335.03	0.47%
Medium Density Residential	3,846.39	5.40%	916.33	1.29%	3,846.39	5.40%
Permanent Conservation	24,669.52	34.63%	33,494.36	47.02%	24,669.52	34.63%
Parks & Recreation	923.14	1.30%	917.71	1.29%	923.14	1.30%
Rural Residential	25,209.14	35.39%	15,416.21	21.64%	25,209.14	35.39%
Compact Development Center	650.07	0.91%	6,532.37	9.17%	650.07	0.91%
Total	**71,240.15**	**100.00%**	**71,240.15**	**100.00%**	**71,240.15**	**100.00%**

Next Steps for Planning Jurisdictions

Reorganization of urban form for a more efficient transportation system may require that community leaders reevaluate the four Ds commonly associated with urban form and travel behavior (i.e., density, diversity, design and destination). The development scenarios presented in this chapter highlight the benefits of changing urban form (i.e., density, diversity, and design) to reduce the number of vehicle trips and vehicle miles traveled on the transportation system. The spread of these smart growth planning initiatives to other areas of the region could generate a critical mass that results in significantly lower vehicle trips and vehicle miles traveled over the entire regional transportation system. Smart growth initiatives presented for reorganizing urban form also support shorter commuting distance between complementary land uses and greater mode choice for meeting daily travel needs.

The Durham Carrboro Chapel Hill Metropolitan Planning Organization and its member jurisdictions all have vested interest and responsibilities for improving the efficiency of the regional transportation system while promoting livability within local communities. Community leaders exploring one or more of the smart growth initiatives highlighted in this chapter should consider the general development characteristics

generated from these models when implementing local plans and policies that better integrate land use, urban form, and transportation planning.

In an effort to support smart growth development, there are a number of local initiatives that the DCHC MPO can encourage. The following recommendations aim to identify priority areas where MPO actions—including incentive programs and administrative reforms—can contribute significantly to quality growth in partnership with local communities within the region.

The results of the scenario planning analysis demonstrate that reorganizing urban form with respect to transportation planning both improves the efficiency of the existing transportation system and improves the quality of life for residents and those that work in the area by shortening trip length and vehicle miles traveled.

In the future it will be essential for land use planners to work with transportation planners to identify areas where growth will be planned for. By jointly identifying areas in need of transportation improvements and land use changes, future development may be influenced to help minimize or reduce traffic problems through efficient planning and integration.

Land use plans and zoning ordinances must be collectively constructed to guide and implement land use in order to respond to transportation behavior.

5 future year transportation analysis

This chapter of the report summarizes a comprehensive assessment of traffic conditions anticipated for the study area in 2035. Future year conditions reported for corridors and key intersections were used to identify isolated deficiencies in the transportation network, as well as indications of larger, system-wide deficiencies expected from continued "business-as-usual" development patterns. Results from the analysis were compared to existing conditions (2005) using performance measures included in the Triangle Regional Model (TRM). Output from the analysis was used to justify short- and long-term improvements highlighted in Chapter 5 of this report.

Triangle Regional Model

The Triangle Regional Model (Air Quality Conformance Version) was developed in 2004 to serve as a planning tool for analyzing and forecasting traffic in the Triangle area. The model was developed using the TranPlan software package and follows a traditional four-step modeling process — trip generation, trip distribution, mode split, and traffic assignment. The base year for the approved travel demand model is 2005. Forecast years include 2015, 2025, and 2035. Future year traffic forecasts for this study (2035) were estimated from the fiscally-constrained existing + committed network assumed for the DCHC MPO Long Range Transportation Plan.

Growth Scenario

The future year transportation assessment assumed the business-as-usual development scenario described in Chapter 4 of this report.

Future Travel Pattern Analysis

Travel patterns in the study area were reviewed to identify prevalent traffic movements that will affect the roads in the study area in 2035. This analysis drew from the 2035 TRM to determine regional traffic patterns from western Chatham County and the Jordan Lake area to Research Triangle Park (RTP). Specific data included in the review are:

- TRM Future Year (2035) model traffic flows from Chatham County
- TRM Future Year (2035) model select link analysis

As in the 2005 base year, the presence and shape of Jordan Lake has an effect on local and regional travel patterns, limiting the number of east-west corridors that cross it. Interstate 40 and NC 54 are the predominant routes north of the watershed, while U.S. Highway 64 crosses Jordan Lake at the southern edge of the study area. In addition, future growth and changes in the larger transportation system (such as the addition of I-540 in Western Wake County) are likely to have significant effects on travel throughout the study area.

Select Link Analysis

DCHC MPO and Kimley-Horn prepared a number of Select Link Analysis model runs using the Triangle Research Model for roadway segments in the study area. Segments that corresponded to corridors in this study included:

- Farrington Road
- Farrington Mill Road
- US 15-501
- Jack Bennett Road
- Scott King Road
- NC 55.

Select link analysis is a means to demonstrate how traffic that crosses a particular section of roadway distribute (comes from and goes to) throughout the network. It does not present the total volume for model links, only those which pass through a particular section. This type of analysis is helpful when contemplating the likely impacts of proposed improvements.

Figures 21-24 on the following pages show the results of the select link analysis for each corridor. These figures show the location of each of the select link analysis locations, along with the distribution of trips (by percentage of total trips on the subject link). For example, in **Figure 21**, the select link analysis location is Farrington Road between Stagecoach Road and Barbee Chapel Road. By definition, 100% of the select link volume goes through this section. East of this link, 74% of this traffic is either coming from or going to Stagecoach Road. The other 26% is heading North on Farrington Road. Of the 74% using Stagecoach Road, 24% heads south on NC 55.

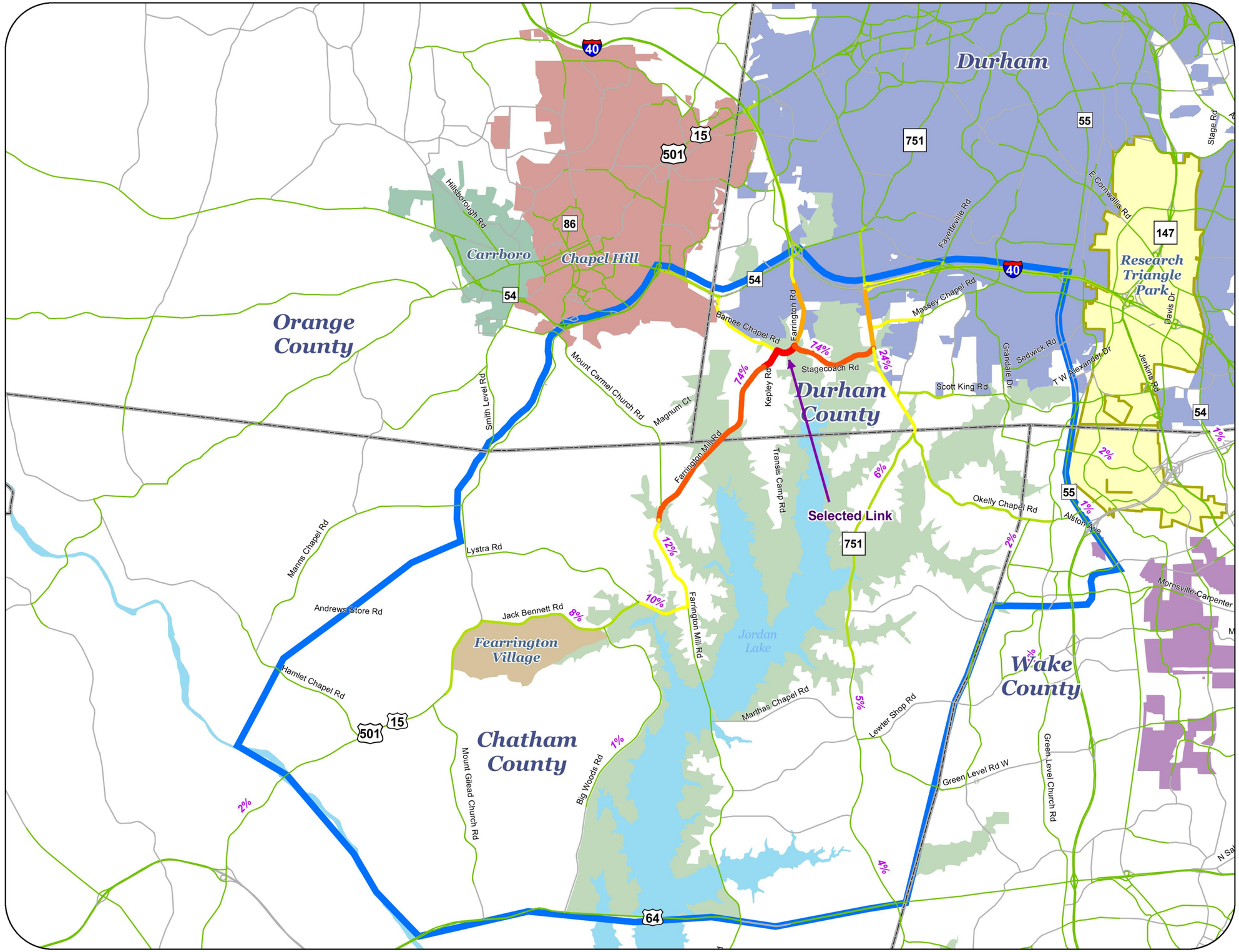
Figure 21 shows the select link analysis for Farrington Road between Stagecoach Road and Barbee Chapel Road. This select link reveals that the majority of traffic on this facility could be characterized as local, even more than the 2005 select link analysis showed in **Figure 13**. Increases in demand (percentage, not total volume) from the Fearrington Village area were noted, along with traffic from NC 751.

Decreases in the percent of the total demand from Farrington Mill Road south of Jack Bennett Road were observed, indicating that over time, a majority of traffic growth on this facility will be from inside the study area.

Farrington Road Corridor Study

Figure 21

Select Link Analysis Farrington Rd.



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

Kimley-Horn and Associates, Inc.

Figure 22 shows the select link analysis for Farrington Mill Road south of Mt. Carmel Church Road. Like the select link analysis for Farrington Road, a shift in demand is observed when compared to the 2005 select link analysis shown in **Figure 14**, but to a lesser extent. As a percent of link volume, reduction in traffic demand from the south occurs, while traffic increases from developing areas near Fearrington Village and east of Jordan Lake. The most significant shifts in traffic are increases in demand from US 64 from the east and US 15-501 to the south.

Figure 23 shows the select link analysis for US 15-501 south of Jack Bennett Road. When compared to **Figure 15**, no major shifts in traffic demand are noted, except for a minor shift of traffic demand from Mount Gilead Church Road to southwest of the study area (Pittsboro).

Figure 24 shows the select link analysis for Jack Bennett Road west of Farrington Mill Road. When compared to **Figure 16**, no major shifts in traffic demand are noted, except for a shift of traffic demand from Big Woods Road to Farrington Mill Road to the south, and increasing traffic from developing areas east of Jordan Lake, including Western Wake County.

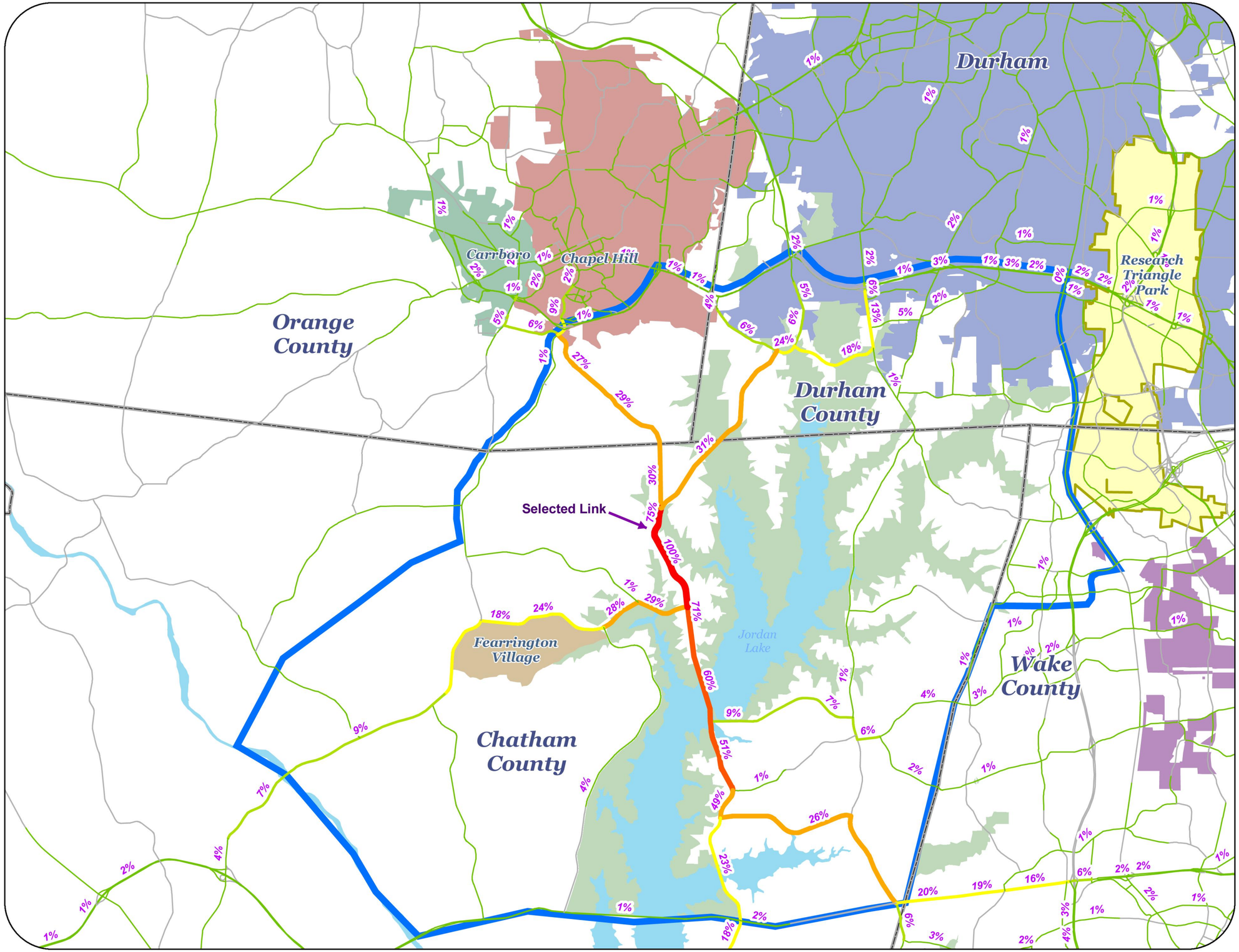
Figure 25 shows the select link analysis for Scott King Road east of Fayetteville Road. This analysis shows the most dramatic shift in traffic from 2005 (**Figure 17**). In 2005, a majority of the traffic was coming from NC 751 to the south (59%). In 2035, only 9% of traffic is predicted to come from this area. Traffic demand increases are noted on Farrington Mill Road, Stagecoach Road, NC 751 north of Stagecoach, and Fayetteville Road. The analysis further indicates that this facility will experience traffic pressure in the future due to heavy congestion on I-40, and will serve as an alternative route to Research Triangle Park and I-540.

Figure 26 shows the select link analysis for NC 55 north of Sedwick Road. When compared to **Figure 18**, little change in travel demand patterns are noted, other than the expected shift of traffic onto the new section of I-540 south of NC 55 towards Apex. No other significant changes are noted in the study area.

Farrington Road Corridor Study

Figure 22

Select Link Analysis
Farrington Mill Rd



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

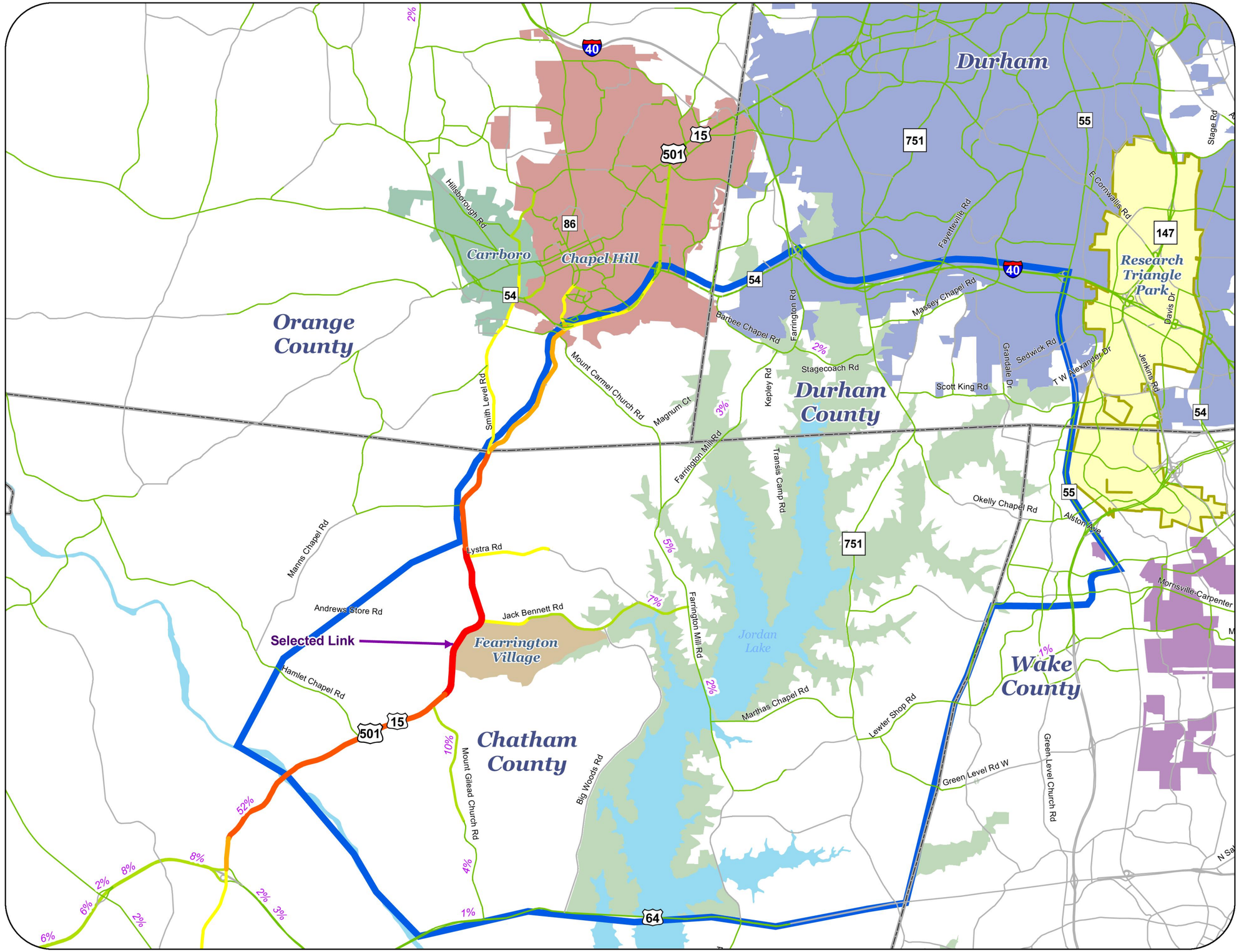
0 0.5 1 2 3 Miles

Kimley-Horn and Associates, Inc.

Farrington Road Corridor Study

Figure 23

Select Link Analysis
US 15/501



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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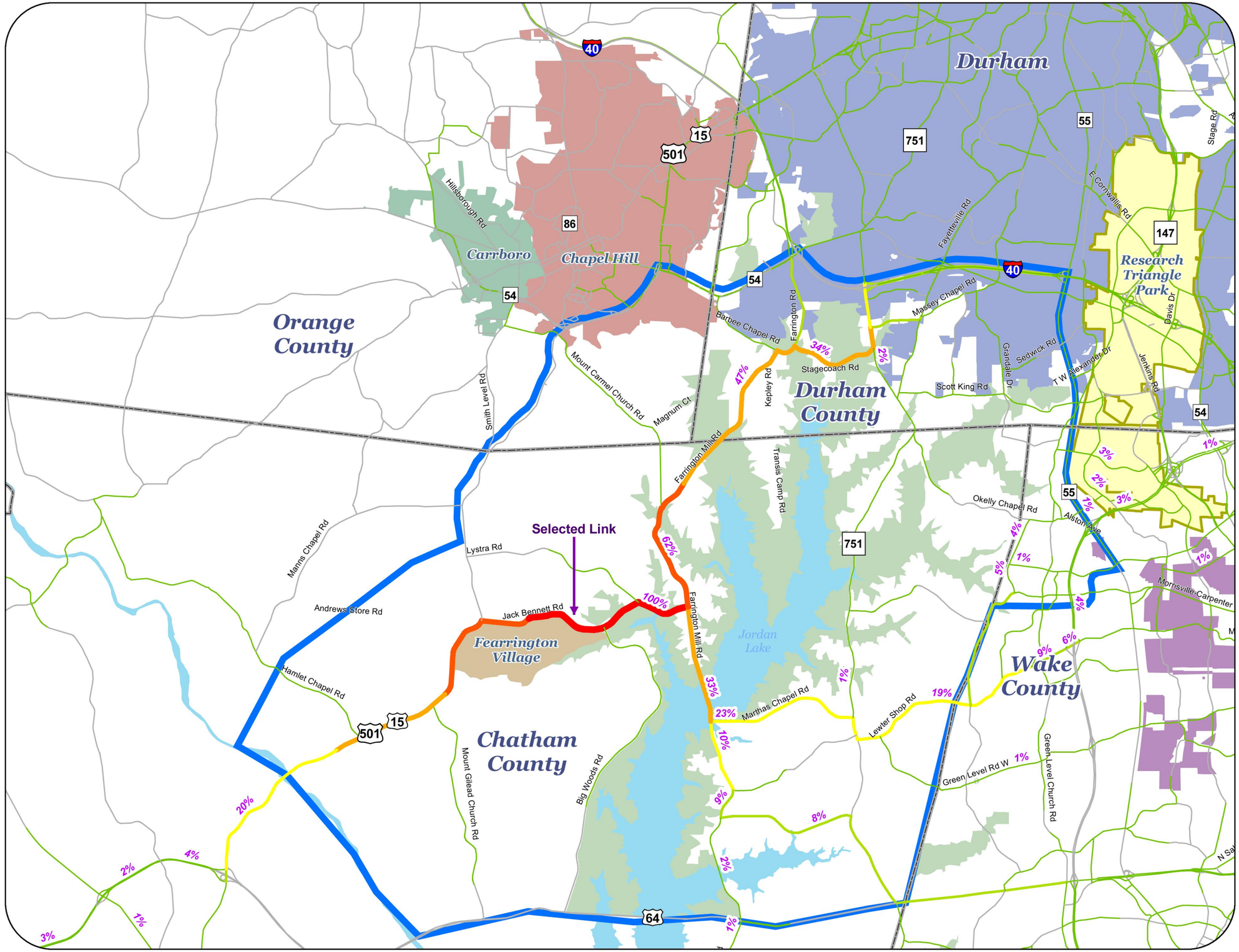
Farrington Road Corridor Study

Figure 24

Select Link Analysis
Jack Bennett Rd



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

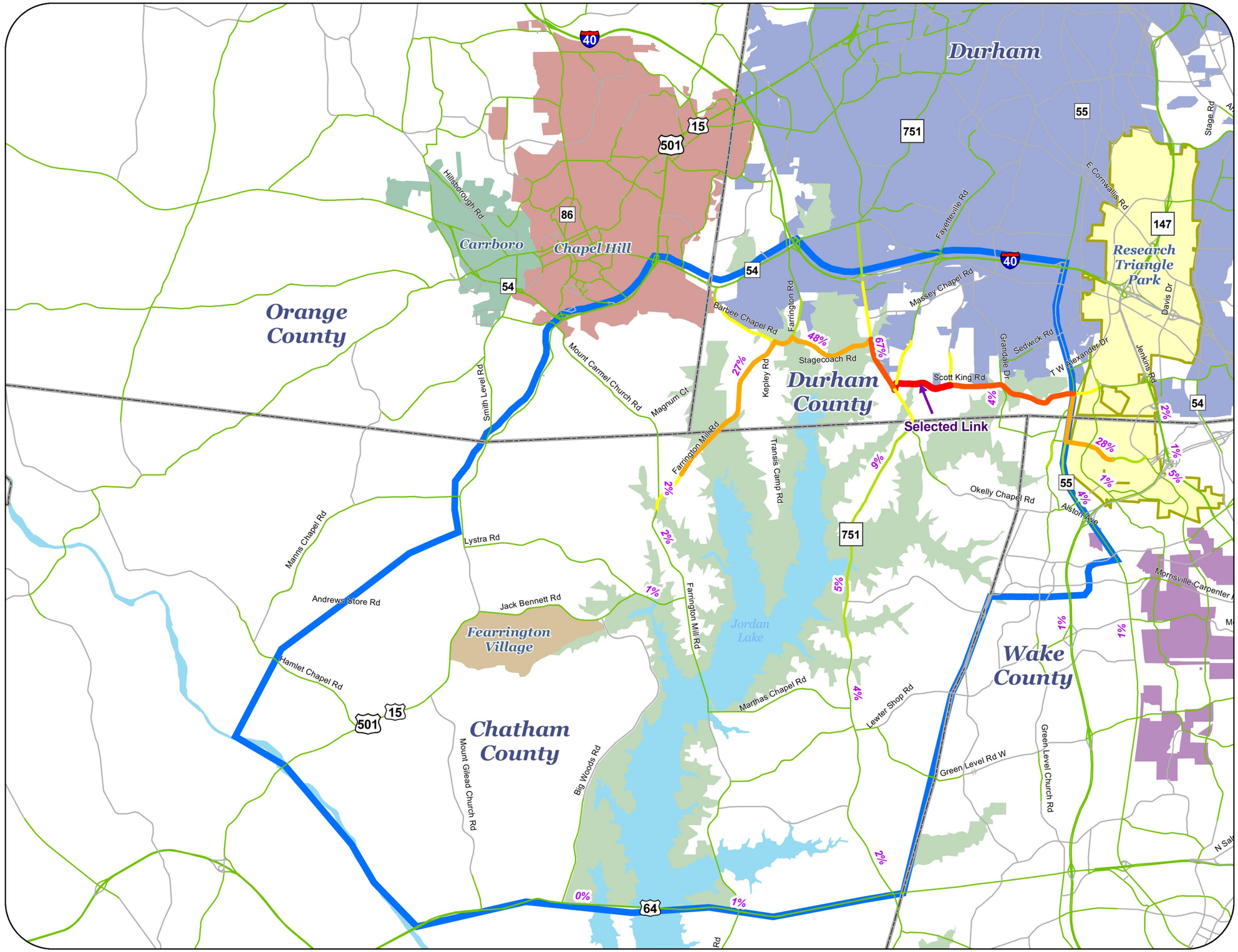
0 0.5 1 2 3 Miles

Kimley-Horn and Associates, Inc.

Farrington Road Corridor Study

Figure 25

Select Link Analysis Scott King Road



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

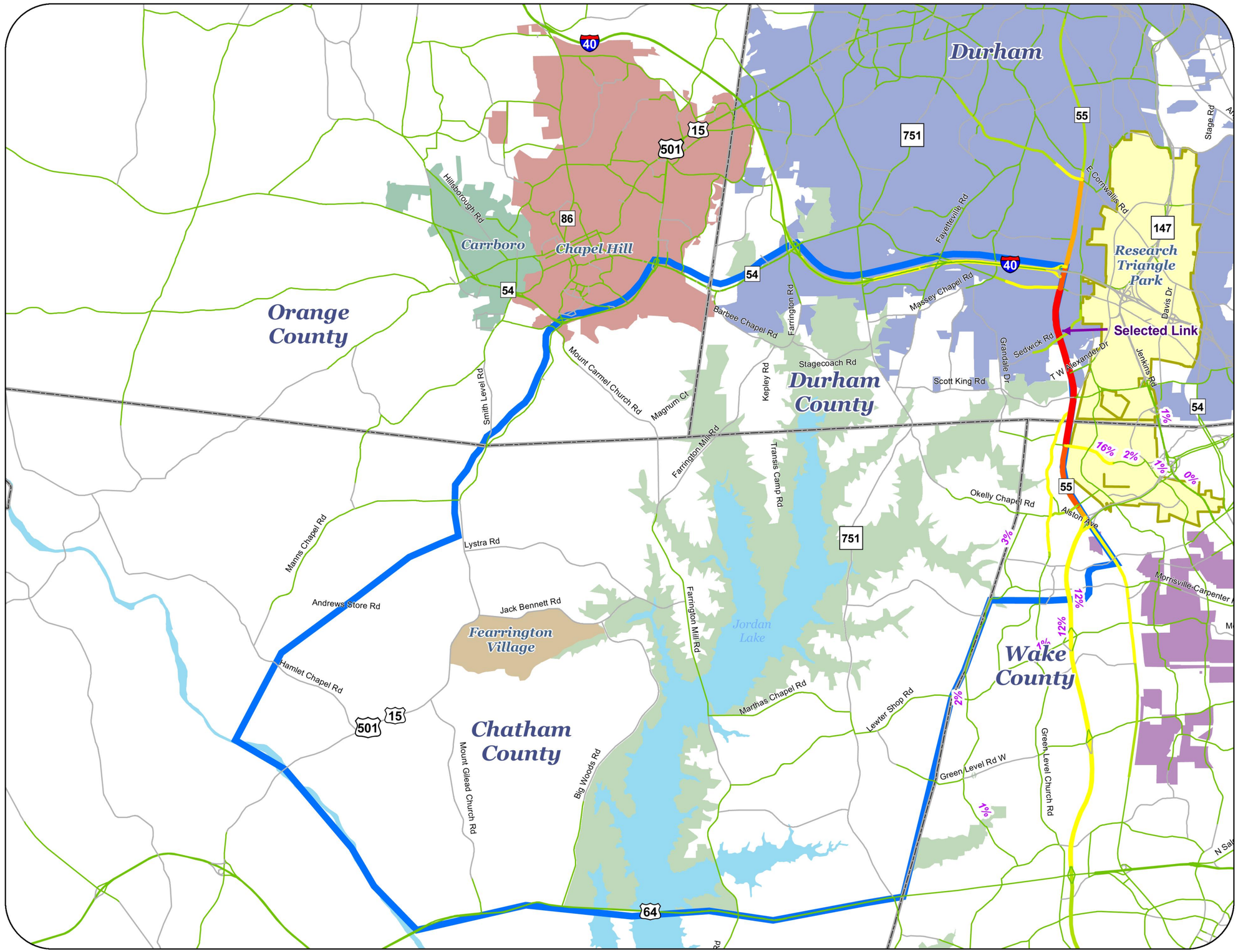
0 0.5 1 2 3 Miles

Kimley-Horn and Associates, Inc.

Farrington Road Corridor Study

Figure 26

Select Link Analysis
NC 55



Select Link Volumes
Percent of Trips

- 0.0
- 0.1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

November 25, 2008

N W E S

0 0.5 1 2 3 Miles

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6 recommendations

Based on the results of the 2035 select link analysis, it can be concluded that the majority of the traffic demand in the study area will remain local. However, there will be impacts associated with increased congestion on I-40 and shifts in regional traffic demand resulting from the extension of I-540.

District Flow Analysis

DCHC MPO provided daily and peak period origin-destination (O-D) matrices at the district level from the Triangle Regional Model (TRM). For the Triangle Model, the region is divided into 21 districts representing different parts of the area. For the Farrington Road analysis, these 21 TRM districts were grouped into 14 super-districts. O-D data from the Triangle Regional Model were aggregated to these super-districts, and are presented in **Table 11**.

Table 11 shows that the majority of trips to and from Chatham County are internal (63%). Trips to the Chapel Hill/Carrboro area are also prominent (14%), and are predicted to use the US 15-501 corridor. Trips to Western Wake (Cary/Apex) represent 8% of trips, and are expected to use the US 64 corridor for access into those areas. Southwest Durham County and RTP make up 5% and 2% of the trips, respectively (approximately 7% or 12,400 trips combined). These trips are the most likely to use the Farrington Road Corridor to avoid future congestion on US 15-501, US 64, and I-40.

Table 11. Triangle Model District Flows to and from Chatham County

Super-District	Trips to/From Chatham County (2035)	% of Total (2035)	% of Total (2005)
Chatham County	389,545	72%	63%
Chapel Hill/Carrboro Area	32,185	6%	14%
West Wake (Cary/Apex)	50,009	9%	8%
Southwest Durham County	19,208	4%	5%
South Wake (Holly Springs/Fuquay Varina)	18,283	3%	3%
Research Triangle Park	10,697	2%	2%
Central Durham	5,235	1%	1%
Raleigh (Inside the Beltine)	3,030	1%	1%
Northern Durham /Durham County	3,461	1%	1%
North/Eastern Wake County	2,268	0%	1%
Southwest Orange County	2,606	0%	1%
Northern Orange County	2,121	0%	0%
Johnston/Harnett County	3,092	1%	0%
Granville/Franklin County	144	0%	0%
Total	**541,884**	**100%**	**100%**

These district flows were added to the Triangle Model to create a thematic map representing "travel desire lines". These graphical district flows can be seen in **Figure 27**.

Future Traffic and Travel Conditions

Future Year (2035) traffic conditions were analyzed based on the results of the Triangle Regional Model and other available data developed during this study. The 2035 TRM was run using updated socio-economic data (residential and employment) based on future land use scenarios (described in the Scenario Planning chapter of this document). The resulting traffic volumes were used to identify future deficiencies (corridor and intersection level) based on volume-to-capacity (V/C) ratios for the study area corridors. Corridor and intersection traffic forecasts were prepared based on the output of the model, and were refined based on review of 2007 traffic count data and the results of the 2005 model.

Figures 28 and 29 show the 2005 and 2035 Model Volumes, respectively. These figures show that many facilities within the study area experience significant traffic increases, including NC 751, Farrington Mill Road, Farrington Road, Stagecoach Road, NC 55, and US 15-501. Many of these roads are two-lane facilities with no current plans or funding for improvements.

Hillsborough
Durham
Chapel Hill
Carrboro
Southwest Durham
Research Triangle Park
Morrisville
Cary
Raleigh
Apex
Garner
Holly Springs
Fuquay-Varina
Pittsburo
24400 (14 %)
2500 (1 %)
8700 (5 %)
3700 (2 %)
13600 (8 %)
110600 (63 %)
5000 (3 %)

Farrington Road Corridor Study

Figure 27

2035 District Flows into Chatham County

Triangle Regional Model Origin-Destination Data

District Flows
Total Trips (and % of Trips)
- 5000 - 10000
- 10000 - 15000
- 15000 - 20000
- 20000 - 30000
- 30000 - 40000
- 40000 - 50000
- > 50000
- Interstates
- US Highways
- State Highways
- TRM Super-Districts
- Counties
- Study Area
- Lakes

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N W E S

0 1 2 4 6 8 Miles

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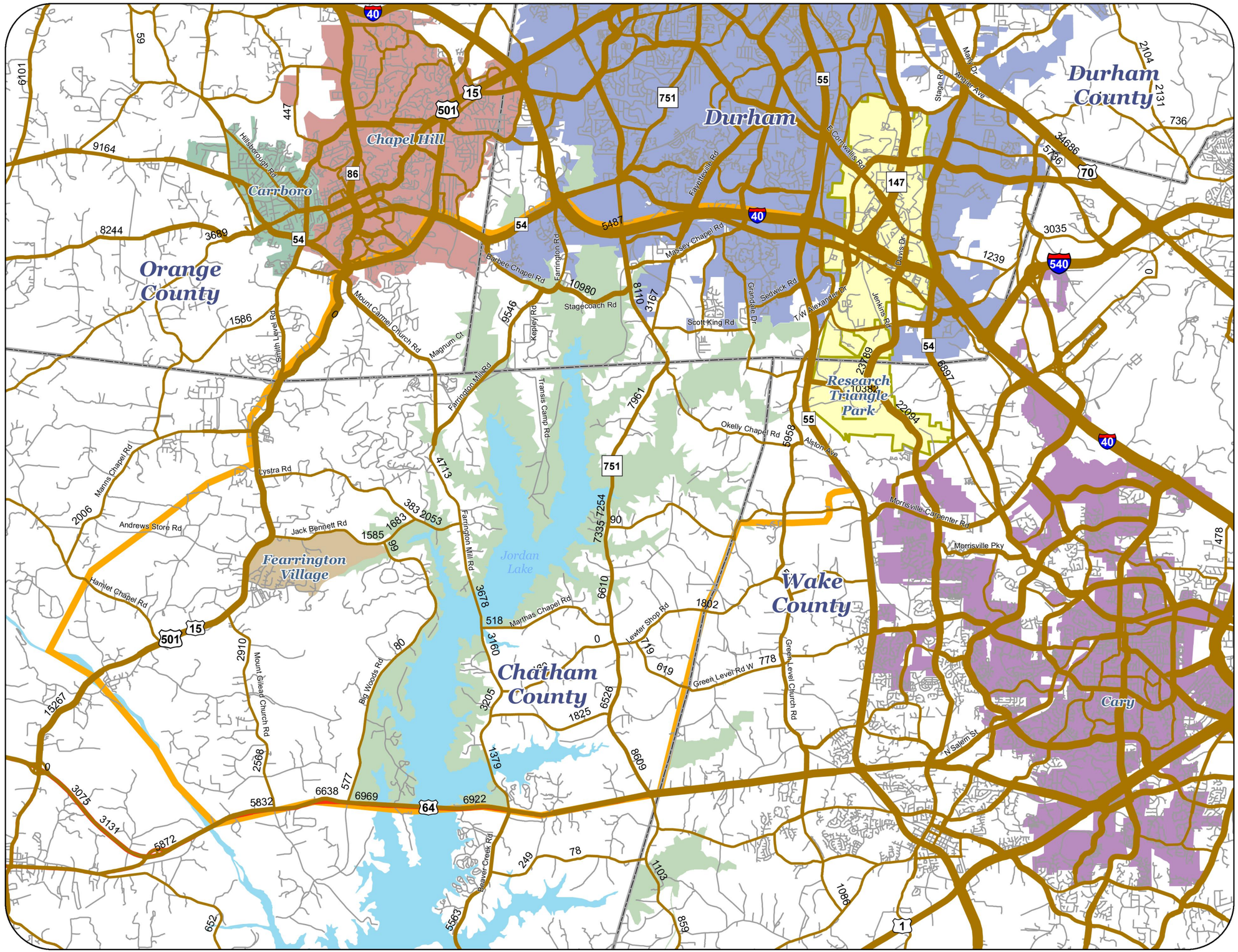
Figure 28

2005 Volumes



2005 Volumes

- < 5000
- 5001 - 10000
- 10001 - 15000
- 15001 - 20000
- 20001 - 30000
- 30001 - 40000
- > 40000
- Interstates
- US Highways
- State Highways
- State Roads
- Counties
- Study Area
- Research Triangle Park
- Lakes
- Durham
- Chapel Hill
- Fearrington Village
- Cary
- Carrboro
- Corps of Engineers Land

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Figure 29

2035 Volumes

Durham County
Durham
Chapel Hill
Carrboro
Orange County
Research Triangle Park
Wake County
Cary
Chatham County
Fearrington Village
Jordan Lake
Hillsborough Rd
Fayetteville Rd
E Cornwallis Rd
Stage Rd
Martin Dr
Amherst Ave
Massey Chapel Rd
Barbee Chapel Rd
Farrington Rd
Stagecoach Rd
Seaforth Rd
Scott King Rd
Grandale Dr
Sedwick Rd
T/W Alexander Dr
Jenkins Rd
Lewis Dr
Smith Level Rd
Mount Carmel Church Rd
Magnum Ct
Farrington Mill Rd
Transis Camp Rd
Okelly Chapel Rd
Alston Ave
Manns Chapel Rd
Eastowne Dr
Cystra Rd
Andrews Store Rd
Jack Bennett Rd
Hamlet Chapel Rd
Mount Gilead Church Rd
Big Woods Rd
Marthas Chapel Rd
Lewter Shop Rd
Green Level Rd W
Green Level Church Rd
Morrisville-Carpenter Rd
Morrisville Pky
N Salem St
Beaver Creek Rd

2035 Daily Traffic Volumes

- < 5000
- 5000 - 10000
- 10000 - 15000
- 15000 - 20000
- 20000 - 30000
- 30000 - 40000
- > 40000
- State Roads
- Counties
- Study Area
- Lakes

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N W E S

0 0.5 1 2 3 Miles

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Figure 30 shows growth between 2005 and 2035 in the study area as an average annual growth rate. The more established areas such as Durham, Chapel Hill, and Cary experience low to moderate growth, between 1% and 3% per year. Annual growth rates are much higher in the rural parts of the study area, particularly in areas where new development is forecast. However, percent growth can be deceiving. The absolute growth in traffic is actually higher in the established urbanized locations and, these locations have a much higher observed and predicted future traffic volume. Nonetheless, this figure does demonstrate that development in the area, paired with external factors such as travel along the I-40 and I-540 corridors, will likely have measurable impacts on the transportation system within the study area.

Trendline Scenario - Future Corridor Level-of-Service

As in the existing conditions analysis, seventeen roadway sections were identified for corridor level-of-service (LOS) traffic analysis for projected future conditions. **Figure 1** shows the corridors that were studied as part of this analysis, as well a reference Section ID that are used throughout the report.

Corridor Level-of-Service Analysis shows that traffic growth between 2005 and 2035 in the study area will significantly impacts the transportation system. In 2005, only one of the 27 roadway sections studied performed at a LOS D, and no sections were failing (LOS E or worse). In 2035, two sections are predicted to perform at LOS D, and six sections are LOS E or worse. Two of the six failing sections are NC Routes – NC 55 and NC 751, but four of the most congested sections are two-lane rural roads: Farrington Road, Old Farrington Point Road, Barbee Chapel Road, and Stagecoach Road. Without improvements (or a change in future development patterns), these sections of road may experience heavy traffic delays on a daily basis. They are not designed to carry the forecasted traffic.

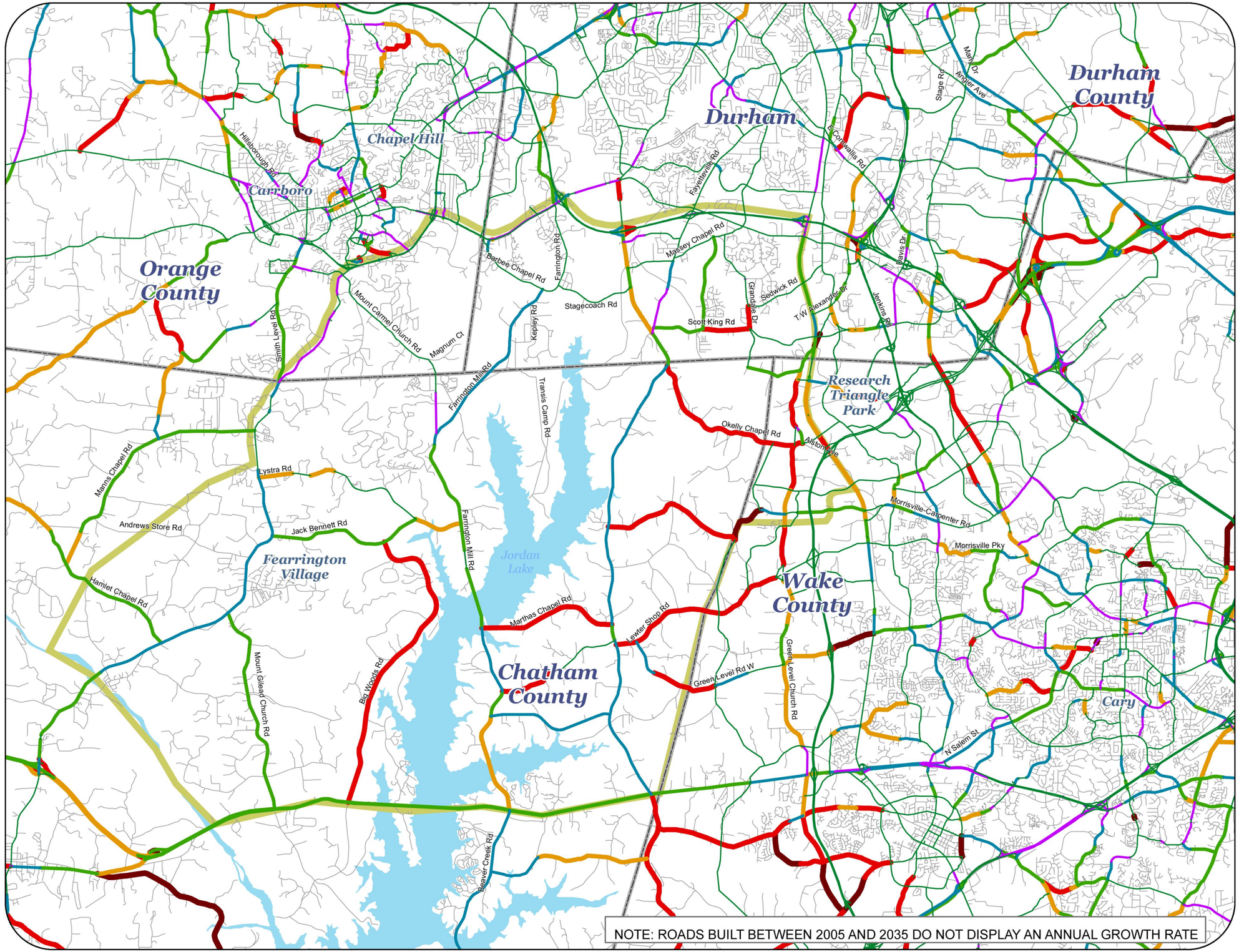
Table 12 communicates existing as well as predicted 2035 Level of Service.

Farrington Road Corridor Study

Figure 30

Annual Growth Rate, 2005 - 2035 (%)

Triangle Regional Model



2035_Model_Growth
Annual Growth Rate

- < 1%
- 1 - 2%
- 2 - 3%
- 3 - 4%
- 4 - 5%
- 5 - 7.5%
- > 7.5%
- State Roads
- Counties
- Study Area
- Lakes

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N W E S

0 0.5 1 2 3 Miles

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Table 12 - Trendline 2035 Level of Service

Section	Road	From	To	LOS D Traffic Capacity	2035 Traffic (ADT)	2035 V/C	2035 LOS	2005 LOS
11	US 15-501	Southern PAB	Jack Bennett Road	62,600	36,100	0.58	B	A
12	US 15-501	Jack Bennett Road	Northern PAB	62,600	35,600	0.57	B	A
13	Jack Bennett Rd	US 15-501	Farrington Point Road	11,900	4,900	0.41	B	A
14	Farrington Rd	Southern PAB	Lystra Road	11,800	8,800	0.75	C	B
15	Farrington Point Rd	Lystra Road	Mt. Carmel Church Rd.	10,500	9,700	**0.92**	**D**	B
16	Old Farrington Pt Rd	Mt. Carmel Church Rd.	Barbee Chapel Road	9,400	16,600	**1.77**	**F**	B
17	Mt Carmel Rd	Farrington Mill Road	Downing Creek Pkwy	12,400	10,900	**0.88**	**D**	B
18	Barbee Chapel Rd	Farrington Mill Road	NC 54	9,500	11,300	**1.19**	**F**	B
19	Farrington Rd	Stagecoach Road	Ridgefield Drive	15,300	8,200	0.54	B	B
20	Farrington Rd	Barbee Chapel Road	Stagecoach Road	15,300	19,800	**1.29**	**F**	B
21	Stagecoach Rd	Farrington Road	NC 751	9,500	15,600	**1.64**	**F**	C
22	NC 751 (Hope Valley Rd)	Stagecoach Road	Scott King Road	62600	22,800	0.36	B	C
23	NC 751 (Hope Valley Rd)	Scott King Road	Southern PAB	11,800	17,400	**1.48**	**F**	**D**
24	Scott King Road	NC 751	Grandale Drive	9,500	4,000	0.42	B	A
25	Grandale Dr	Scott King Road	Sedwick Road	9,500	5,500	0.58	B	B
26	Sedwick Rd	Grandale Drive	NC 55	12,500	5,800	0.46	B	B
27	NC 55	Sedwick Road	Alexander Drive	39,700	44,800	**1.13**	**E**	B

TWLTL = Two-Way Left Turn Lane

Future Intersection Level-of-Service (LOS) Analysis

For the future year intersection LOS analysis, the same nine intersections that were analyzed in the existing conditions section were used. For each of these intersections, a set of 2035 turning-movement projections was prepared using existing volumes and trend growth rates. These forecasted traffic volumes were then analyzed using existing intersection geometry, as shown in **Figure 9**. Capacity analyses were performed for the AM and PM peak hours for projected trendline (2035) traffic conditions using *SYNCHRO* (Version 7) and SIDRA (for roundabouts) software to determine the operating characteristics of the adjacent road network.

Capacity analyses were performed for the existing (2007) traffic condition for the following intersections:

- US 15-501 at Jack Bennett Road
- Farrington Point Road at Lystra Road
- Farrington Road and Stagecoach Road at Mt. Carmel Road

- Farrington Mill Road/Farrington Road at Barbee Chapel Road
- Hope Valley Road (NC 751) at Fayetteville Road
- Stagecoach Road at Hope Valley Road (NC 751)
- Farrington Road at Stagecoach Road
- NC 55 at T.W. Alexander Drive
- NC 55 at Sedwick Road.

For intersection analysis, capacity is combined with Level-of-Service (LOS) in a relationship table to describe the operating characteristics of a road segment or intersection. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation. For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by *SYNCHRO* Version 7 or computable using methodology published in the *Highway Capacity Manual.*

Recommended improvements that are based on the deficiencies identified in **Table 13** are listed following that table. These improvements are further delineated into short-term and long-term improvements in **Section 6**. **Table 13** summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing traffic conditions.

Table 13. Intersection Level of Service Summary

Condition	AM Peak-Hour LOS (Delay)	PM Peak-Hour LOS (Delay)
US 15-501 and Jack Bennet Road - (Signalized)		
Existing (2007) Traffic	A (9.0)	B (10.1)
Projected (2035) Traffic	B (13.5)	B (16.1)
Projected (2035) Traffic with Improvements	B (13.5)	B (16.1)
Farrington Point Road and Lystra Road - (Signalized)		
Existing (2007) Traffic	C (20.6)	B (14.3)
Projected (2035) Traffic	E (78.7)	E (58.7)
Projected (2035) Traffic with Improvements	D (40.1)	C (33.4)
Projected (2035) Traffic with Improvements -*Roundabout*	B (19.0)	B (12.5)
Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road -(Unsignalized)		
Existing (2007) Traffic	Short delays for minor street approach	Moderate delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements -*Signalized*	B (15.6)	C (21.8)
Projected (2035) Traffic with Improvements -*Roundabout*	B (12.1)	B (11.9)
Farrington Mill Road/Farrington Road and Barbee-Chapel Road - (Unsignalized)		
Existing (2007) Traffic	Moderate delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements - *Signalized*	B (17.0)	D (37.8)
Projected (2035) Traffic with Improvements - *Roundabout*	A (8.1)	A (9.9)
Farrington Road and Stagecoach Road - (Unsignalized)		
Existing (2007) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic	Long delays for minor street approach	Long delays for minor street approach
Projected (2035) Traffic with Improvements – *Signalized*	C (20.4)	B (17.4)
Projected (2035) Traffic with Improvements - *Roundabout*	A (9.4)	A (9.1)
Stagecoach Road and Hope Valley Road (NC 751) - (Signalized)		
Existing (2007) Traffic	D (43.0)	B (19.8)
Projected (2035) Traffic	F (370.0)	F (287.5)
Projected (2035) Traffic with Improvements	C (21.8)	C (23.8)
Hope Valley Road (NC 751) and Fayetteville Road - (Signalized)		
Existing (2007) Traffic	B (10.7)	C (21.4)
Projected (2035) Traffic	E (71.8)	F (136.1)
Projected (2035) Traffic with Improvements	B (18.7)	C (21.8)
NC 55 and Sedwick Road - (Signalized)		
Existing (2007) Traffic	B (19.6)	C (29.8)
Projected (2035) Traffic	C (25.2)	D (39.4)
Projected (2035) Traffic with Improvements	C (25.2)	D (39.4)
NC 55 and T.W. Alexander Drive – (Signalized)		
Existing (2007) Traffic	C (24.3)	C (24.5)
Projected (2035) Traffic	D (47.0)	D (26.1)
Projected (2035) Traffic with Improvements	B (16.1)	C (26.1)

6 recommendations

The transportation recommendations were developed based on the established vision and guiding principles, results from the Triangle Regional Model, thorough consideration of existing and future land uses, and basic transportation planning principles. The structure of the recommendations does not require that all improvements be completed in unison. This structure allows flexibility to encourage cooperation and partnership with the development community to implement the vision of the plan in several phases as development occurs and funding sources become available.

It was determined based on the future year transportation analysis that several roadways within the Farrington Road area would require significantly increased capacity. The six roadway sections with an anticipated LOS F include:

- NC 55,
- NC 751,
- Farrington Road,
- Old Farrington Point Road,
- Barbee Chapel Road, and
- Stagecoach Road.

Increasing capacity is typically accomplished through widening, i.e., the addition of travel lanes. However, the DCHC MPO applies a heavy weight to environmental considerations such as wetland preservation and water quality when evaluating projects. Therefore, alternative improvements including intersection upgrades and roundabouts are recommended. Construction of a roundabout would be in lieu of adding turn lanes and traffic signals.

The improvements listed below are recommended for the study intersections to accommodate projected traffic volumes in 2035. They are designated as either short- or long-term improvements to provide guidance on implementation phasing. **Figure 31** is a map that illustrates these recommended improvements.

All of the roadway and intersection improvements in this study are included in the DCHC MPO's 2035 Long Range Transportation Plan (2035 LRTP). Intersection improvements, such as the addition of turn lanes and roundabout construction, are considered Transportation System Management (TSM) improvements. As a practice, TSM projects are not

explicitly listed in the MPO Long Range Transportation Plan, but are identified as a general category of transportation improvements to be funded. Given the need for the intersection improvements listed below to provide the mobility improvements that are commonly associated with the addition of travel lanes, the 2035 LRTP explicitly identifies all the intersection improvements listed below. In addition, the 2035 LRTP includes the addition of through lanes on Hope Valley Road that is listed below (project #*77.3* in the 2035 LRTP).

Roadway Recommendations

US 15-501 and Jack Bennett Road

- Short-term: Lengthen the existing westbound left-turn lane on Jack Bennett Road to provide 250 feet of full-width storage.

Old Farrington Point Road and Lystra Road

- Short-term: Construct an additional eastbound left-turn lane on Lystra Road with 425 feet of full-width storage, and corresponding receiving lane on northbound Old Farrington Point Rd.
- Long-term: Construct an exclusive southbound right-turn lane on Old Farrington Point Road with 300 feet of full-width storage.
- Long-term: In lieu of constructing turn lanes, consider conversion of traffic signal to a roundabout configuration.

Farrington Point Road/Old Farrington Point Road and Mt. Carmel Road

- Long-term: Construct an exclusive westbound right-turn turn lane on Farrington Point Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive northbound right-turn lane on Old Farrington Point Road with 225 feet of full-width storage.

- Long-term: Construct an exclusive southbound left-turn turn lane on Mt. Carmel Road with 125 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Mill Road/Farrington Point Road and Barbee-Chapel Road

- Long-term: Construct an exclusive eastbound right-turn turn lane on Barbee-Chapel Road with 125 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Farrington Point Road with 700 feet of full-width storage.
- Long-term: Construct an exclusive northbound left-turn lane on Farrington Point Road to provide 225 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Farrington Road and Stagecoach Road

- Short-term: Construct an exclusive northbound right-turn turn lane on Farrington Road with 200 feet of full-width storage.
- Long-term: Construct an exclusive southbound left-turn lane on Farrington Road with 100 feet of full-width storage.
- Long-term: Construct an exclusive westbound left-turn lane on Stagecoach Road with 100 feet of full-width storage.
- Long-term: Install a roundabout or traffic signal when warranted. The roundabout would be in lieu of constructing the turn lanes.

Stagecoach Road and Hope Valley Road (751)

- Short-term: Construct an additional eastbound left-turn lane on Stagecoach Road with 250 feet of full-width storage.
- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Construct an exclusive northbound left-turn lane on Hope Valley Road with 400 feet of full-width storage.
- Long-term: Construct an exclusive southbound right-turn lane on Hope Valley Road with 200 feet of full-width storage.

Hope Valley Road (751) and Fayetteville Road

- Long-term: Construct an additional northbound and southbound through lane on Hope Valley Road.
- Long-term: Lengthen the existing northbound right-turn lane on Hope Valley Road to provide 350 feet of full-width storage.
- Long-term: Construct an additional westbound left-turn lane Fayetteville Road with 100 feet of full-width storage
- Long-term: Lengthen the existing westbound right-turn lane on Fayetteville Road to provide 175 feet of full-width storage.

NC 55 and T.W. Alexander Drive

- Short-term: Lengthen the existing westbound right-turn lane on T.W. Alexander Drive to provide 400 feet of full-width storage.

Long-term: Provide a free flow northbound right-turn lane.

Roundabouts were not recommended at the Hope Valley Rd./Stagecoach Rd. and Hope Valley Rd./Fayetteville Rd. intersections because of the relatively high volume of traffic and existing traffic signals. However, the design and use of two-lane roundabouts are becoming more common in the U.S. and North Carolina, and these larger roundabouts are performing well. When additional improvements at these two

intersections are warranted, further study of roundabouts would be a worthwhile effort.

In addition to the roadway and intersection improvements identified above, this study recommends that a collector road network be developed. The scope of this study did not include designating current and future collector streets. However, it is understood that a collector road network helps to distribute vehicle trips to relieve congestion on the intersections of the arterial road network, and offers more direct routing for bicyclists and pedestrians to encourage more use of those two alternative modes. The stream and wetland corridors that run through the study area and the lack of stub out roads in the existing subdivisions (to which connection for future subdivisions can be made) limit the ability to create an effective collector street network. Nonetheless, a collector street network should be developed to the greatest extent possible.

Transit Recommendations

Providing transit service, both local service and express service to UNC-CH (University of North Carolina at Chapel Hill) and the RTP (Research Triangle Park), should be considered if more transit-friendly land use patterns are realized in the future. As discussed in Chapter 3 -- Existing Conditions, the only transit service provided in the study area was along the study area borders such as NC 54 and US 15-501. However, the land use recommendation identifies six compact development centers that might create densities at a threshold that make transit service feasible in the area.

Land Use Recommendations

The scenario planning analysis confirms that reorganization of land use patterns and/or development densities throughout the study area into a more compact, nodal development pattern significantly improves the efficiency of the transportation system, while preserving unspoiled natural areas immediately surrounding new town centers.

It is recommended that local jurisdictions consider land use changes as well as strengthening development policies and/or land development controls administered to implement a compact, nodal development pattern in the study area. **Table 14** summarizes the percentage of land

use categories for the business-as-usual and compact development scenarios, and shows the percentage difference between the two scenarios. Besides enabling a more efficient transportation system and decreasing travel demand, as demonstrated in the Chapter 4 Scenario Planning, the Compact Development scenario significantly increases the portion of land available for permanent conservation.

Table 14. Recommended Land Use Summary

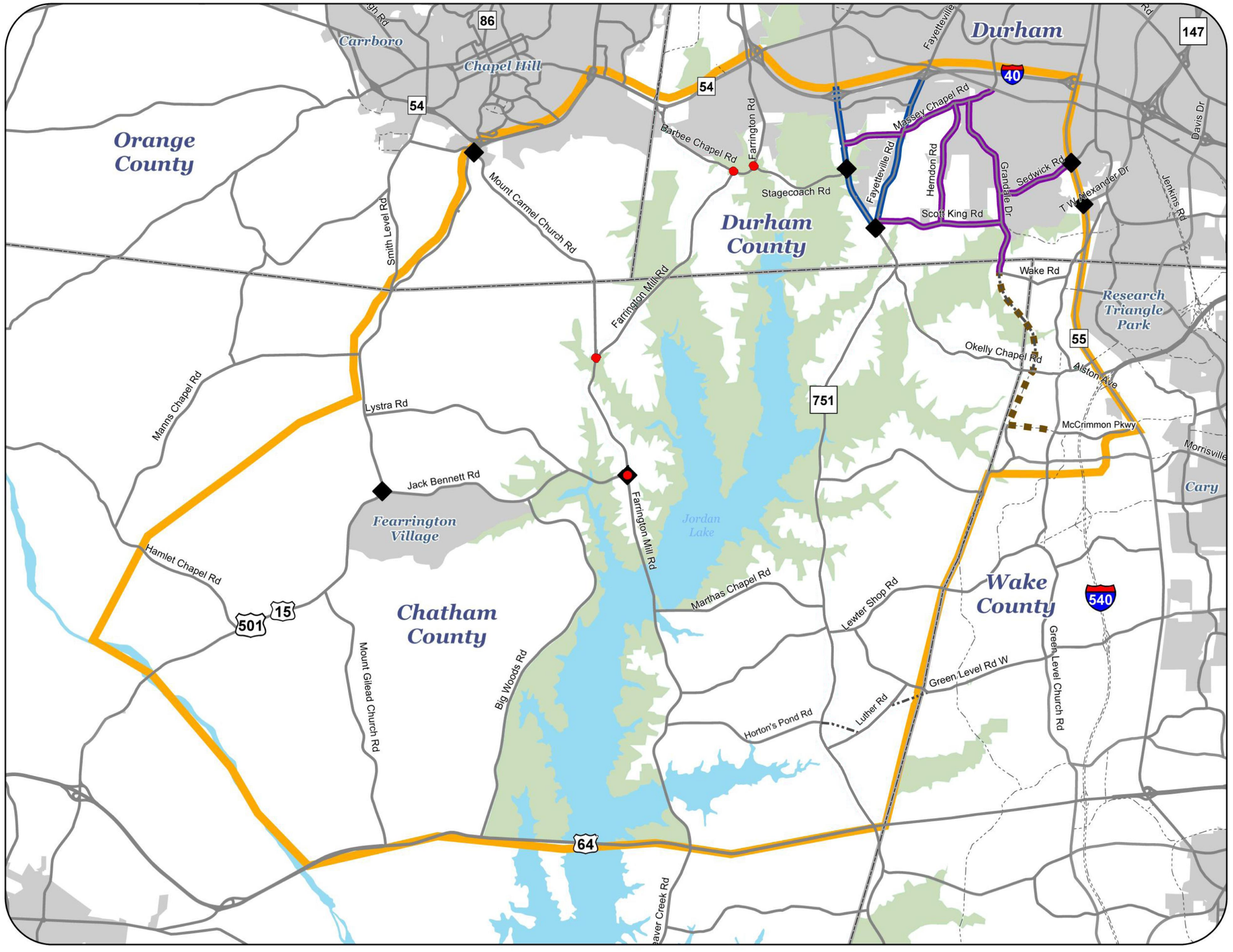
General Land Use Category	Land Use Scenario		
	Business As Usual	Recommended Compact Development Centers	Land Use Scenario Difference
	Percent Area		
Agriculture	4.20%	3.67%	-0.53%
Civic / Institutional	0.73%	0.73%	0.00%
Commercial	1.47%	0.84%	-0.63%
General Office	0.32%	0.17%	-0.15%
High Density Residential	0.23%	0.23%	0.00%
Low Density Residential	14.96%	13.48%	-1.48%
Light Industrial	0.47%	0.47%	0.00%
Medium Density Residential	5.40%	1.29%	-4.11%
Permanent Conservation	34.63%	47.02%	12.39%
Parks & Recreation	1.30%	1.29%	-0.01%
Rural Residential	35.39%	21.64%	-13.75%
Compact Development Center	0.91%	9.17%	8.26%

Purposeful coordination among private landowners, officials for the various local governments, the DCHC MPO, and the North Carolina Department of Transportation to combine land use and transportation planning processes traditionally completed in isolation will ensure a more efficient and fiscally responsible regional transportation system.

Farrington Road Corridor Study

Figure 31

Recommended Transportation Improvements



Recommendations

- Roundabout Conversion
- Intersection Improvement
- Access Management
- Operational Management
- New Roadway
- New Roads
- Counties
- Study Area
- Municipalities
- Lakes
- Corps of Engineers Land

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0 0.5 1 2 Miles

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7 appendix

Farrington Road Corridor Study
Land Use Scenario Planning Analysis
Generalized Development Characteristics Table

Generalized Land Use Category	Site Efficiency Factor	Average Res. Density	Floor Area Ratio	Employee Space Ratio
Agriculture	-	-	-	-
Civic / Institutional	85%	-	0.45	5.0 / 1,000 s.f.
Commercial	80%	-	0.25	4.5 / 1,000 s.f
General Office	80%	-	0.35	4.0 / 1,000 s.f.
High-Density Residential	70%	12 du / ac	-	-
Low-Density Residential	70%	3 du / ac	-	-
Light Industrial	80%	-	0.15	2.5 / 1,000 s.f.
Medium-Density Residential	70%	5 du / ac	-	-
Conservation	-	-	-	-
Parks & Recreation	-	-	-	-
Rural Residential	90%	0.2 du / ac	-	-
Compact Dev. Center	70%	8 du / ac	0.50	4.5 / 1,000 s.f. (com) 4.0 / 1,000 s.f. (off)

Note: land use categories and associated development controls were normalized among the various political jurisdictions represented in the study area.

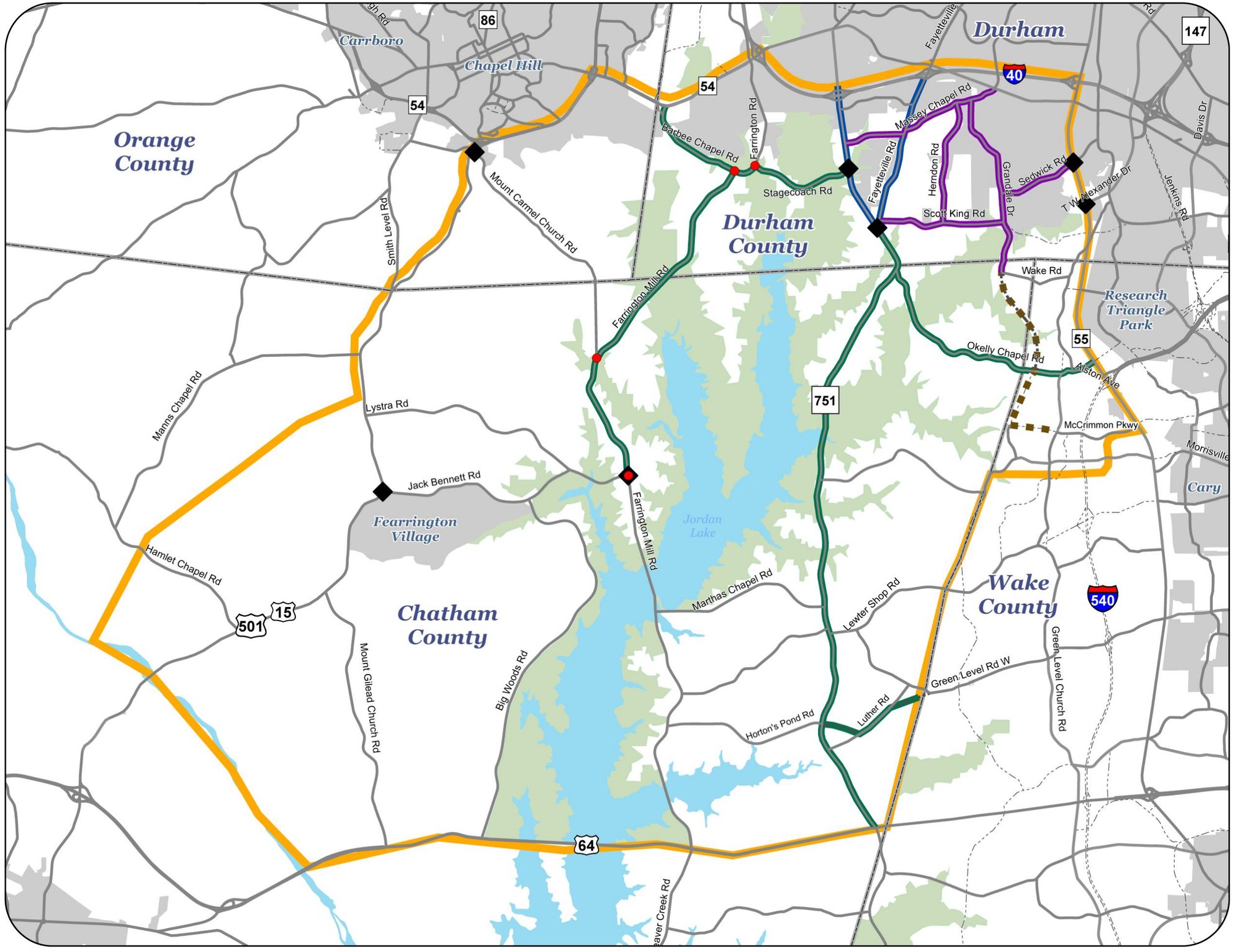
Farrington Road Corridor Study
Land Use Scenario Planning Analysis
Desirability Factor Weightings Table

Desirability Factor	Relationship to a Parcel	Weighting Factor (0 - 10)
Proximity to Open Space	Positive	2
Proximity to Existing Urban Areas	Positive	8
Proximity to Major Intersections	Positive	6
Proximity to Regional Activity Center	Positive	6
Proximity to Community Development Nodes	Positive	8
Access to Water / Sewer Service	Positive	10

Farrington Road Corridor Study

Figure 31

Recommended Transportation Improvements



Recommendations

- Roundabout Conversion
- Intersection Improvement
- Widen 1 Lane Per Direction
- Access Management
- Operational Management
- New Roadway
- New Roads
- Counties
- Study Area
- Municipalities
- Lakes
- Corps of Engineers Land

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N W E S

0 0.5 1 2 Miles

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Comparison of Highway Provisions in Jobs Legislation

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Supplemental Discretionary Grants for a National Surface Transportation System (TIGER Grants)			
	$1.5 B discretionary grant program administered by Secretary	No comparable program	
Highway Infrastructure Investment			
Funds Apportioned to States			
Amount Appropriated	$27.5 B for Highway Infrastructure Investment Funds available through FY 2010 unless otherwise specified. §1603	$27.5 B for Highway Infrastructure Investment available through FY 2011 unless otherwise specified	
Eligible Activities	Restoration, repair, construction and other activities eligible under the Surface Transportation Program (23 USC 133(b)). In addition, they may be used for passenger and freight rail transportation and port infrastructure projects that would be eligible under 23 USC 601(a)(8), the TIFIA program.	Same as ARRA	
Ineligible Activities	Restriction on use of funds for advance construction under 23 USC 115(b). Funds may not be used by any State or local government or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool. §1604	Same as ARRA §1702	
Project Selection	In selecting projects for funding, priority is to be given to projects that are projected for completion with a 3-year time frame and are located in economically distressed areas as defined by section 301 of the	Same as ARRA **plus** new proviso that in selecting projects, States must ensure equitable geographic distribution and appropriate balance in addressing the needs of urban and	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
	Public Works and Economic Development Act of 1965, as amended (42 USC 3161).	rural communities	
Apportionment of Funds	Takedowns before apportionment: • Up to $40,000,000 for Federal Highway Administration for administration and oversight of projects funded under the act, available until September 30, 2012 o Indian Reservations and Federal Lands - $550,000,000 • Highway Surface Transportation and Technology Training under 23 USC 140(b), commonly referred to as On-the-Job Training/Supportive Services - $20,000,000 • DBE Bonding Assistance under 49 USC 332(e) - $20,000,000 • Puerto Rico Highway Program under 23 USC 165- $105,000,000 • Territorial Highway Program under 23 USC 215 - $45,000,000 • Ferry Boat and Ferry Terminal Facilities under 23 USC 147 - $60,000,000	Takedowns before apportionments: Same as ARRA except that up to $45,000,000 is available for FHWA administration and oversight of which $5,000,000 is for a new Office of Expedited Program Delivery, available until September 30, 2013	
	Apportionment to States: Remainder Apportioned to States (50 States and District of Columbia) *(within 21 days of enactment)* Formula - based on 2 factors, weighted equally:	Apportionment to States: Same as ARRA	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
	• Surface Transportation Program formula in 23 USC 104(b) • Same ratio as the obligation limitation distribution for FY 2008 under section 120(a)(6) of division K of Public Law 110-161 (the distribution of formula limitation) Set-asides and suballocation of funds from the amount apportioned to each State: • Transportation Enhancements – 3 percent • Suballocation to Areas – 30 percent suballocation is required for all States. The exception for Alaska and Hawaii under 23 USC 133(d)(3)(C) does not apply.		
Redistribution of Unused Funds	First redistribution of funds within *120 days* of apportionment—50 percent of the funds awarded to a State (excluding suballocated funds) less the amount of funding *obligated.* States from which funds have been withdrawn may not receive funds under the redistribution	First redistribution within *90 days* of apportionment—50 percent of the funds awarded to a State *(including suballocated funds)* less the amount of funding *under contract.* States from which funds have been withdrawn *(including cases where suballocated funds are withdrawn)* may not receive funds under the redistribution	
	Second redistribution at 1 year after apportionment—*any unobligated funds.* States from which funds have been withdrawn may not receive funds under	Second redistribution at 1 year after apportionment—*any funds that are not under contract.* States from which funds have been withdrawn	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
	the redistribution. The fact that funds have been withdrawn from the amounts suballocated to areas will not disqualify a State from receiving redistributed funds. The Secretary of Transportation may provide an extension of the 1-year period, but only to the extent that he is satisfied that the State has encountered extreme conditions that create an unworkable bidding environment or other extenuating circumstances. Before granting an extension, the Secretary must send a letter to the House and Senate Committees on Appropriations providing a thorough justification of the extension.	*(including cases where suballocated funds are withdrawn)* may not receive funds under the redistribution. Authority for Secretary to provide an extension continues as under ARRA	
Federal Share	Federal share is up to 100% at the option of the recipient	Same as ARRA	
Impact on other Funds	Funding is in addition to any and all funds provided for FYs 2009 and 2010 in any other Act for ‘‘Federal-aid Highways’’	Funding is in addition to any and all funds provided for FYs 2010 and 2011 in any other Act for ‘‘Federal-aid Highways’’	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
Federal Lands Funds			
Funding	Funds are set aside for four components of the Federal Lands Highway Program: • Indian Reservation Roads - $310,000,000 of which up to 4% may be used by the Secretary of the Interior for program management and oversight and project-related administrative expenses. • Park Roads and Parkways - $170,000,000 • Forest Highway Program - $60,000,000 • Refuge Road Program - $10,000,000 Takedown for planning for Lake Tahoe MPO in 23 USC 134(f)(3)(C)(ii)(II) does not apply.	Same as ARRA	
Federal Share	Federal share is up to 100% at the option of the recipient	Same as ARRA	
Eligible Uses	Funds for each program may be used for the same types of projects and activities eligible for under that program..	Same as ARRA	
Project Selection	Priority to be given to capital investments and to projects and activities that can be completed within 2 years of enactment.	Same as ARRA	
Administration of Funds	Administer in accordance with chapter 2 of 23 USC	Same as ARRA	
Redistribution of Funds	One year after enactment, the Secretary may redistribute unobligated funds within the respective program for which the funds were appropriated.	Same as ARRA	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Other Funds			
Ferry Boat and Ferry Terminal Facilities	$60,000,000 set aside for the program under 23 USC 147 to be used for capital expenditures eligible under that section Funds to be distributed as competitive grants. Priority to be given to projects that demonstrate their ability to be completed within 2 years of enactment. Federal share is up to 100% at the recipient's option. Funds administered in accordance with chapter 1 of title 23.	Same as ARRA	
Puerto Rico Highway Program	$105,000,000 set aside for the program under 23 USC 165 to be used for purposes eligible under that section. Federal share is up to 100% at the recipient's option. Funds administered in accordance with chapter 1 of title 23.	Same as ARRA	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
Territorial Highway Program	$45,000,000 set aside for the program under 23 USC 215 to be used for purposes eligible under that section. Federal share is up to 100% at the recipient's option. Administered in accordance with chapter 2 of title 23.	Same as ARRA	
On-the-Job Training/Supportive Services	$20,000,000 set aside for the program under 23 USC 140(b) for purposes eligible under that subsection. Federal share is up to 100% at the recipient's option. Administered in accordance with chapter 1 of 23 USC.	Same as ARRA	
DBE Bonding Assistance	$20,000,000 set aside for the program under 40 USC 332(e) for purposes eligible under that program. Administered in accordance with chapter 3 of 49 USC. This program is administered by OST	Same as ARRA	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Administration and Requirements			
Generally applicability of U.S. Code	Funds under the Highway Infrastructure Investment heading to be administrated in accordance with chapter 1 of 23 USC, except for Federal Lands and Territorial funds administered under chapter 2 of 23 USC and DBE Bonding Assistance funds administered under chapter 3 of 49 USC.	Same as ARRA	
Preference for Quick Start Activities	Recipients to give preference to activities that can be started and completed expeditiously and use the funds in a manner that maximizes job creation and economic benefit. §1602	Provision not repeated but intent is captured in other provisions, including the project selection priorities and the requirements for redistribution of unused funds.	
DBE Goals	DBE goals under section 1101(b) of Public Law 109-59 (SAFETEA-LU) apply to the apportioned funds.	Same as ARRA	
Wage Rate Requirements	Requires the application of Davis Bacon to any projects funded directly by or assisted in whole or in part by Recovery Act funds. This requirement is broader than that in 23 USC 113, which applies to projects in the ROW of Federal-aid highways. §1606	No specific provision. Prevailing wage requirements in 23 USC 113 would apply because of requirement to administer in accordance with chapter 1 of 23 USC.	
Use of American Iron, Steel, and Manufactured Goods (Buy America)	Section 1605 of the ARRA states: "None of the funds appropriated or otherwise made available by this Act may be used for a project for the construction, alteration, maintenance, or repair of a public building or public work unless all of the iron, steel, and manufactured goods used in the project are produced in the	Section 4002 continues the application of section 1605 of ARRA to the new funds. Also, section 2013 amends 23 USC 313 as follows: • Modifies waiver requirements: o Requests for waivers must be published on the	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
	United States." Thus, FHWA's existing Buy America requirements, including the established waiver process, apply to all ARRA funded projects. §1605	Internet within 5 days of receipt o Issuance of public interest waivers requires consideration of the impact of a waiver on domestic manufacturing employment. o Insufficient domestic source waivers may be issued only if publication of notice is made on the Internet at least 5 business days prior to issuance and if a sufficient domestic source of the material or product does not identify itself during the 5-day period. o If a waiver is issued, a detailed written justification as to necessity of the waiver and the amount of Federal funds associated with the waiver must be posted on the Internet within 30 days of issuance. If a public interest waiver, the justification must include statement detailing the	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
		sort and long-term impact on domestic manufacturing employment. • Bridge projects-Buy America requirements apply to all construction contracts carried out within the scope of the applicable decisions under NEPA and carried out on the bridge from abutment to abutment (including the abutments) regardless of the funding source of the contracts, if at least one contract for construction with respect to the bridge is funded with amounts made available under 23 USC. • Revised guidance to be issued within 120 days of enactment with new requirements taking effect when guidance is issued. • Semi-annual reports to Congress by GAO on the use of waivers required.	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
National Environmental Policy Act (NEPA)	Stating findings on the value of the orderly processes under NEPA, the Act requires that adequate resources be devoted to ensuring that applicable environmental reviews under the NEPA are completed on an expeditious basis and that the shortest existing applicable process under the NEPA be used. The President is to report to the Senate Environment and Public Works and House Natural Resources Committee every 90 days following enactment until September 30, 2011 on the status and progress of projects and activities funded by the Act with respect to NEPA compliance. §1609	No similar provision	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Federal Contracts	For projects initiated with funds provided by the Act and initiated after enactment, contracts must be in accordance with the Federal property and Administrative Services Act or chapter 135 of 10 USC, and the Federal Acquisition Regulation unless the contract is otherwise authorized by statute to be entered into without regard to the referenced statutes. All projects to be conducted under the authority of the Indian Self-Determination and Education Assistance Act, the Tribally-Controlled Schools Act, the Sanitation and Facilities Act, the native American Housing and Self-Determination Assistance Act and the buy-Indian Act shall be identified by the appropriate Secretary and that Secretary is to incorporate provisions to ensure that the agreement conforms with the provisions of this Act regarding the timing for the use of funds and transparency, oversight, reporting, and accountability, including review by the Inspectors General, the Accountability and Transparency Board, and Government Accountability Office consistent with the objectives of this Act. §1610	No similar provision	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
Additional Funding Distribution and Assurance of Appropriate Use of Funds	Certification by Governor.—Not later than 45 days after enactment of the Act, for any funds provide to a State, the Governor must certify that the State will request and use funds provided by the Act and that the funds will be used to create jobs and promote economic growth. An alternative is provided for a State of which the Governor will not certify. §1607	No similar provision	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Maintenance of Effort with Regard to State Funding (MOE)			
Certification Required	Requires State MOE certification by Governor 30 days after ARRA date of enactment—applies to date of enactment through September 30, 2010. §1201(a)	MOE certification under §1201(a) of ARRA continues in effect through September 20, 2010. §1601(a)(1)(A) New certification from date of enactment through September 30, 2011 due within 30 days of enactment. State may calculate planned expenditures from State funds in the same manner as under ARRA §1201(a) or may calculate the amount by pro rating the amount certified under ARRA §1201(a) to establish the amount of planned expenditures for such period. §1601(a)(1)(B) For purposes of MOE certifications, includes definition of "state funds"—funds used for transportation purposes expended by the State agency primarily responsible for carrying out the covered program. Does not include State transportation funds that are expended by or at the direction of non-State governmental entities. §1601(a)(2)	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	**H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)**	**Senate Bill (none introduced to date)**
MOE Reporting	MOE Reporting - Periodic reporting requirements include information tracking the actual aggregate expenditures by each grant recipient from State sources for projects eligible for funding under the program during the period beginning on ARRA enactment of this Act through September 30, 2010, as compared to the level of such expenditures that were planned to occur during such period as of the date of enactment of this Act. §1201(c)(2)(G)	MOE Reporting - Provision deleted from periodic reports section and moved under MOE section: States must submit to DOT reports of actual aggregate expenditures from State funds during the period of February 17, 2009, through September 30, 2011, as compared to the level of such expenditures certified. States submit MOE reports in the same manner and in the same timeframe as the reports required for the periodic reports on the use of funds under §1601(c) [see below], except that States are not required to submit MOE report on February 17, 2013. §1601(b)(1)	
MOE Compliance		New provision that a State is deemed to have met its level of effort if the aggregate amount of actual expenditures of State funds reported in the February 17, 2012 report meets or exceeds the aggregate amount of planned expenditures of State funds identified in the certification. §1601(b)(2)	
	Failure to maintain effort: If a State fails to maintain effort certified, it will be barred from receiving additional obligation limitation in the August Redistribution for FY 2011. §1201(b)	Failure to maintain effort: If a State fails to maintain effort certified, it will be barred from receiving additional obligation limitation in the August Redistribution for FY 2012.	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
		§1601(b)(3).	
Reporting Requirements Specific to Transportation Funds			
Requirement for Periodic Reporting	Each grant recipient (State or other recipient, excluding Federal departments or agencies) is required to submit to the granting agency (FHWA) reports on the use of the funds. The reports are to be collected and compiled by the granting agency and transmitted to Congress. The agency may develop such reports on behalf of grant recipients to ensure the accuracy and consistency of such reports. §1201(c)(1) The Paperwork Reduction Act (44 USC 3501-3521) does not apply to this reporting.	Same as ARRA	
Timing of Periodic Reports	Not later than *90 days* after date of enactment of ARRA and updated reports not later than *180 days, 1 year, 2 years*, and *3 years* after date of enactment of ARRA. §1201(c)(3)	Not later than *1 year* after the date of enactment of ARRA and updated reports not later than *15 months, 18 months, 2 years, 3 years*, and *4 years* after date of enactment of ARRA, except that no report on aggregate expenditures compared to the amount certified under the MOE certification is required on February 17, 2013. §1601(b) &(c)(3)	
Content of Periodic Reports	The grant recipient shall include in the periodic reports information tracking: • The amount of federal funds appropriated, allocated, obligated and outlayed • The number of projects and associated	Content same as ARRA, except the coverage of the report on aggregate expenditures from State sources covers the period from February 17, 2009 through September 30, 2011 compared to the amount certified for	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
	Federal funds under the Act that have been o Put out to bid o For which contracts have been awarded o For which work has begun under the awarded contracts o For which work has been completed • The number of direct, on-project jobs created or sustained by the Federal funds under the Act provided for the projects • To the extent possible, the estimated indirect jobs created or sustained in the associated supplying industries, including the number of job-years created and the total increase in employment since the date of enactment • MOE Report - For the program, information tracking the actual aggregate expenditures by the grant recipient from State sources for projects eligible for funding under the program during the period beginning from the date of enactment through September 30, 2010 as compared t the level of such expenditures that were planned to occur during such period as of the date of enactment. §1201(c)	that period under in the MOE certification. § 1601(b) & (c)	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
Accountability and Transparency Requirements			
Certifications Required	As a condition of receiving funds under the Act, with respect to funds made available to State of local governments for infrastructure investments, the Governor, mayor, or other chief executive must certify that the infrastructure investment has received full review and vetting required by law and the that the chief executive accepts responsibility that the investment is an appropriate use of the taxpayer dollars. Sets forth requirements of certification content and requires posting of certification on a website linked to Recovery.gov. §1511	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Reports on Use of Funds	In addition to reports required by section 1201, recipients must file quarterly reports to funding agency, including the amount of funds received from the agency, amounts obligated or expended and a detailed list of projects with status and employment estimates. Reporting is a condition of funding. Guidance to be issued by OMB. §1512	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Reports of Council of Economic Advisors (CEA)	Quarterly reporting requirements for CEA in consultation with OMB and Secretary of the Treasury. §1513	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Inspector General Reviews	Authorizes review by appropriate inspector general of records of contractor or grantee and interview of any officer or employee of the contractor, grantee, subgrantee or agency. §§ 1514-1515	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. Funds appropriated to any OIG by ARRA	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
		continue to be available for the same purposes with respect to programs under this Act. No additional funds appropriated. §1703	
Recovery Accountability and Transparency (RAT) Board	Requires establishment of Board, defines its composition, functions, powers. Board is to establish website, Recovery.gov. §§1521-1530	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. Funds appropriated to the RAT Board by ARRA continue to be available for the same purposes with respect to programs under this Act. No additional funds provided. §1703	
Authority to establish separate funding accounts	Secretary of Treasury to ensure that separate accounts established for funds under the Act unless waiver is approved by Director of OMB. §1551	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Set-aside for State and Local Government Reporting and Recordkeeping	Federal agencies receiving funds under the Act may, after following notice and comment rulemaking requirements, reasonably adjust applicable limits on administrative expenditures for Federal awards to help award recipients defray the costs of data collection requirements under the Act. §1552	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Protecting State and local government contractor whistleblowers	Provides for prohibition against reprisals and investigation of complaints by the appropriate inspector general. §1553	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	
Special Contracting Provisions	To maximum extent possible, contracts funded under the Act to be awarded as fixed-price contract through the use of competitive procedures. Reporting	Funds under this Act are subject to the reporting, transparency, and oversight requirements established by title XV of ARRA. §1703	

	American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5)	H.R. 2847, the Jobs for Main Street Act, 2010 (as Passed House)	Senate Bill (none introduced to date)
	required for exceptions and must be posted on Recovery.gov. §1554		

DCHC

DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

January 13, 2010

Mr. Jamille Robbins
North Carolina Department of Transportation
1583 Mail Service Center
Raleigh, NC 27699-1583

Dear Mr. Robbins:

On January 13, 2010, the Transportation Advisory Committee of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) reviewed the Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation for project U-3808, Elizabeth Brady Road Extension, and voted to support the no-build option. The MPO supports the no-build option due to the low impact the proposed project would have on addressing congestion in downtown Hillsborough, the high negative environmental, community, and cultural impacts of the three build alternatives, and the high cost of the project.

Elizabeth Brady Road Extension has been included in our MPO's Long Range Transportation Plan ever since the Hillsborough area was added to our MPO's planning area in 1994. The road has also been in the Town's Thoroughfare Plan for many years before Hillsborough joined the MPO. The project was envisioned to provide a north-south connection on the east side of Hillsborough to relieve traffic on NC 86/Churton Street through downtown Hillsborough.

Unfortunately, the results of the measures of effectiveness analysis do not reveal that any of the build alternatives will result in an acceptable level of congestion relief for NC 86 through downtown Hillsborough. While all three alternatives decrease travel times in 2025 as compared to the no build option for NC 86 from US 70 Business to US 70 Bypass, the travel times are four to six times the existing travel times in the peak hour. The analysis forecasts that it may take up to 41.4 minutes to travel 1.2 miles southbound through downtown in the PM peak in 2025 with the project built as compared to 7.7 minutes today. It is clear that the proposed project is not the solution to congestion on Churton Street as was originally envisioned by the Town and the MPO.

Furthermore, on April 21, 2009, the NEPA/404 Merger Team agreed to change the project purpose from "Reduce traffic congestion and improve the level-of-service in

the central business district of the Town of Hillsborough, including Churton Street and St. Mary's Road" to "Reduce congestion on Churton Street in the central business district in terms of traffic delay at intersections and travel time for the peak period/peak direction." While the MPO understands that level-of-service is inadequate to measure all the benefits of the project, the MPO abstained from signing the revised purpose and need statement because of concern that the new purpose and need would not ensure that the project will result in a sufficient amount of congestion relief to justify the monetary and environmental costs of constructing the project. As evidenced in the DEIS, the build alternatives may meet the revised purpose and need by reducing traffic delay and travel time. However, the improvement is not significant enough to be acceptable to our MPO.

In addition, the environmental cost of the three build alternatives is too high in comparison to the relatively minor congestion relief benefits. Alternative 3 would require a new crossing of the Eno River and pass through the Occoneechee Speedway which is on the National Register of Historic Places. Alternative 4 also would require a new crossing of the Eno River, parallels the Eno River, and impacts the Riverside Drive neighborhood. Alternative 6 parallels the Eno River, requiring extensive cut and fill on steep slopes and crossing several feeder streams, and traverses property owned by the Classical American Homes Preservation Trust that is protected from development through deed restrictions.

The monetary costs of the build alternatives range from $31.7M to $45.2M. With increasingly scarce and inadequate funding for transportation projects, the MPO does not believe that investing this much money into a project with insignificant benefits and high negative impacts is justified. Instead, the MPO supports the development and construction of other transportation projects in Hillsborough as submitted in the MPO's FY 2012-2018 Transportation Improvement Program (TIP) Regional Priority List:

- R-2835 South Churton Street Improvements
- Orange Grove Road Extension to US 70 Business
- U-3435 Eno Mountain Road, Mayo Street, and Orange Grove Road Realignment

In addition, the following projects in Hillsborough are in the 2035 Long Range Transportation Plan and funding will be pursued through future TIPs:

- Widening of NC 86 from Old NC 10 to US 70 Business
- Widening of NC 86 from US 70 Bypass to NC 57

Operational improvements to roads in Hillsborough should also be implemented in order to optimize the efficiency of the current roadway system.

The purpose of the DEIS is to document the purpose of the project, the alternatives, and the impacts of the proposed project to help the NEPA/404 Merger Team develop a consensus on how to proceed. The MPO greatly appreciates the effort that NCDOT staff has put forth to study U-3808, Elizabeth Brady Road Extension, and develop the DEIS. However, the findings in the DEIS have led us to conclude that the project provides too little benefit and has too high of impacts to justify the cost of construction. We will proceed with taking this project out of our Long Range Transportation Plan and Metropolitan Transportation Improvement Program. There

is still a great need for transportation improvements in the Hillsborough area, and we look forward to working with the department on the development of other projects.

Sincerely,

J. Michael Woodard, Chair
Transportation Advisory Committee

Cc: Michael S. Fox, NC Board of Transportation - Division 7
Chuck Watts, NC Board of Transportation – Division 5
Eugene A. Conti, Jr., NCDOT
DCHC MPO TAC
Town of Hillsborough Town Board
Orange County Board of Commissioners
Eric Peterson, Town of Hillsborough
Frank Clifton, Orange County
Mike Mills, NCDOT – Division 7
Derrick Weaver, NCDOT – PDEA
Vincent Rhea, NCDOT – PDEA
Margaret Hauth, Town of Hillsborough
Karen Lincoln, Orange County

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

1501 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1501

EUGENE A. CONTI, JR.
SECRETARY

February 3, 2010

Mr. Mark Ahrendsen, Chair TCC
DCHC MPO
101 City Hall Plaza, 4th Floor
Durham, North Carolina 27701

Dear Mr. Ahrendsen:

Thank you for your recent letter and resolutions regarding the proposed widening and extension of Elizabeth Brady Road in Hillsborough. It is clear that you support the "No-Build" option as presented in our Draft Environmental Impact Statement, but also see the need for transportation improvements in downtown Hillsborough.

I have reviewed your requests with the North Carolina Department of Transportation's (NCDOT) professional staff responsible for the planning and design of this project. Based upon this review and comments received from you and local citizens, the Department has stopped work on the Elizabeth Brady Road project. The proposed project will be removed from the State Transportation Improvement Program (STIP) and no more work will be conducted.

Project funding will be returned to the STIP. Any additional projects to address the transportation needs in the area will have to go through the Department's new prioritization process. This process uses data on pavement conditions, safety and traffic projections, as well as input from local governments and NCDOT staff, to determine the Department's priorities. This data-driven approach will put all projects in priority order, based on the Department's goals, and serve as the primary input source for the STIP. Final programming of projects will be constrained by funding availability, funding eligibility and equity allocation. We encourage you to work with your Board of Transportation members, Division staff and the MPO to address your project needs.

Thank you again for sharing your concerns and comments regarding this project. If I can provide further assistance, please let me know.

Sincerely,

Eugene A. Conti, Jr.

EAC/efl

cc: Senator Eleanor Kinnaird
Representative(s)
Michael S. Fox, Member, Board of Transportation
Chuck Watts, Member, Board of Transportation
Mike Mills, P.E., Division Engineer
Debbie Barbour, P.E., Director of Preconstruction
Art McMillan, P.E., State Highway Design Engineer
Greg Thorpe, Ph D., Project Development and Environmental Analysis Branch

Elizabeth Brady Road Extension Study

Model Result Report

Prepared for:

The Town of Hillsborough

Hillsborough, North Carolina

By

DCHC MPO

February 20, 2009

To evaluate the TIP project of Elizabeth Brady Road Extension and other alternatives, DCHC MPO staff has performed travel demand model runs as requested by the Town of Hillsborough in February 2009.

The Triangle Regional Travel Demand Model was used for this study. The DCHC MPO's 2035 population and employment projections, and its 2035 LRTP network were used as sources for creating the three alternatives that the Town of Hillsborough identified. A 2035 No- Build scenario was also added for alternative comparisons.

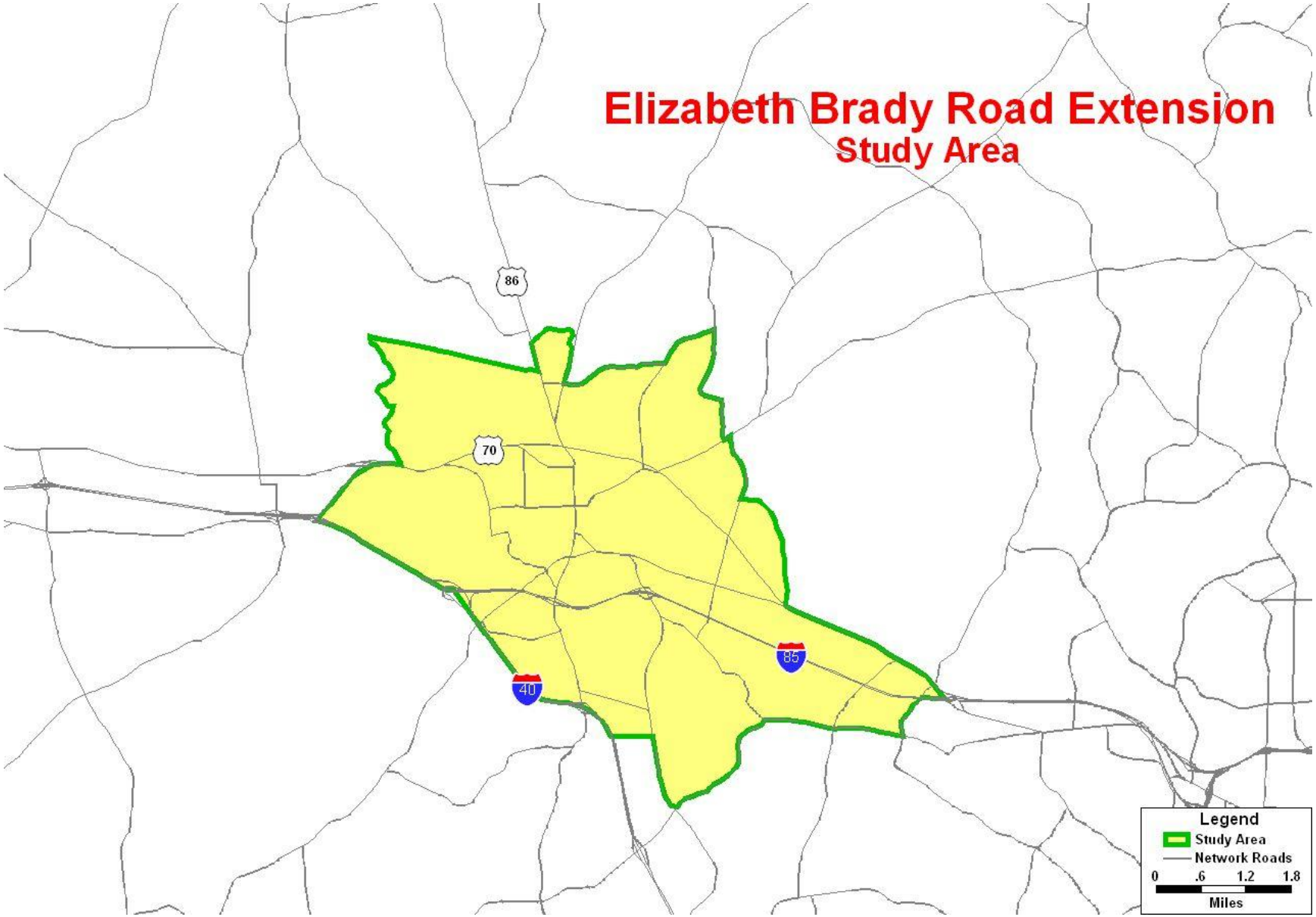
Table 1: Alternatives for Elizabeth Brady Road Study

Project #	Road Name	Improvement	No Build	Alt 1	Alt2	Alt3
16	Elizabeth Brady Rd Ext.	New	N	N	N	Y
81	NC 86	Widen	N	N	Y	N
16.1	Eno Mt./Mayo St.	New	N	Y	Y	N
86	Churton St.	Widen	N	Y	Y	N
87	Churton St.	Widen	N	Y	Y	N
89.3	Orange Grove Rd	New	N	Y	Y	N

The Town selected five performance measures to evaluate the three alternatives as:

- Daily VMTs,
- Daily hours of delays,
- Percentage VMT experiencing congestion all day,
- Percentage VMT experiencing congestion peak hours, and
- Degree of congestion on truck routes (freeways, expressways and major arterials)

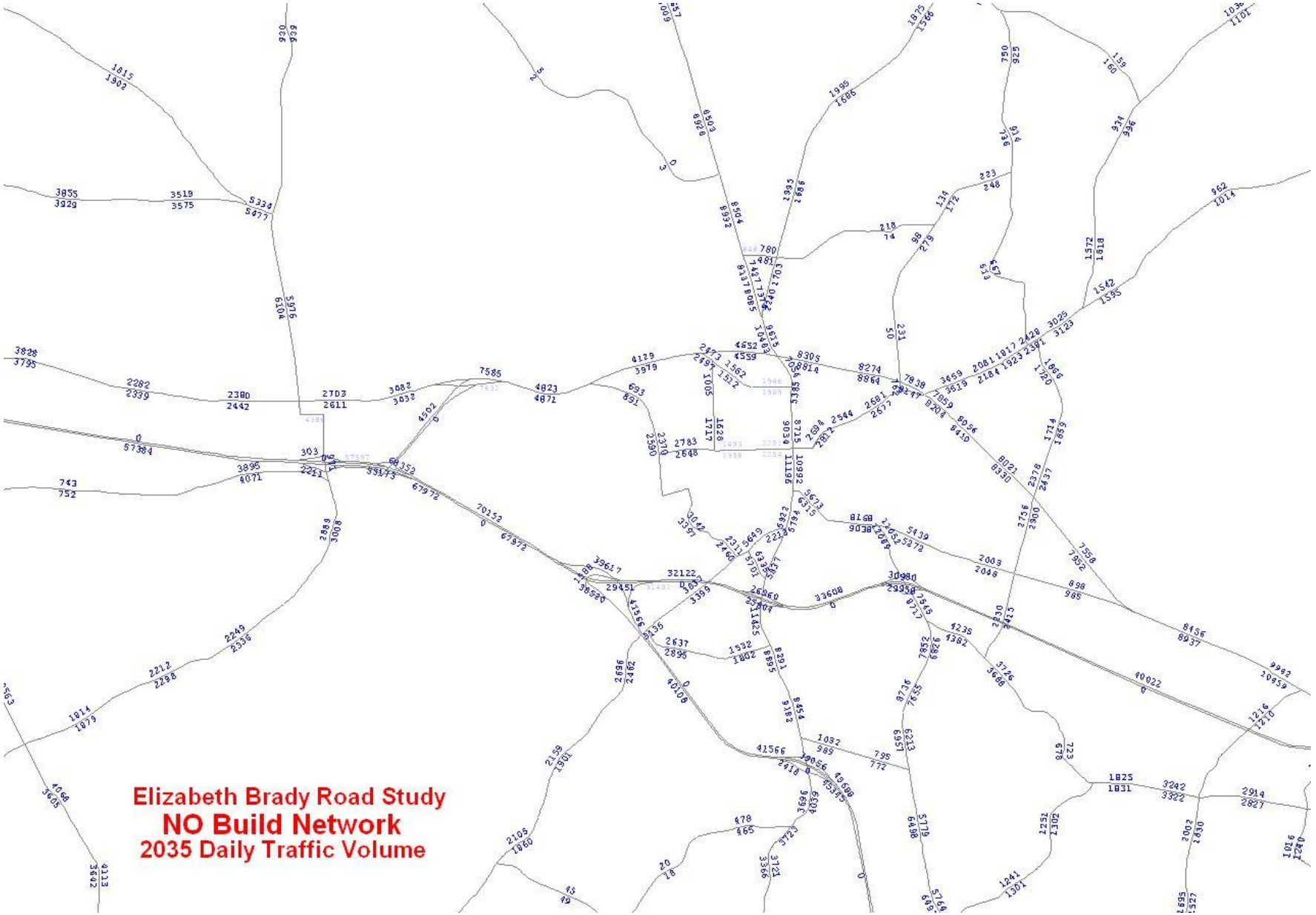
A study area was created to calculate these measures. It covers Hillsborough's jurisdictional boundary and includes US 70, NC Highway 86 (Churton Street) and other major roadways for the purpose of this study (see study area map).

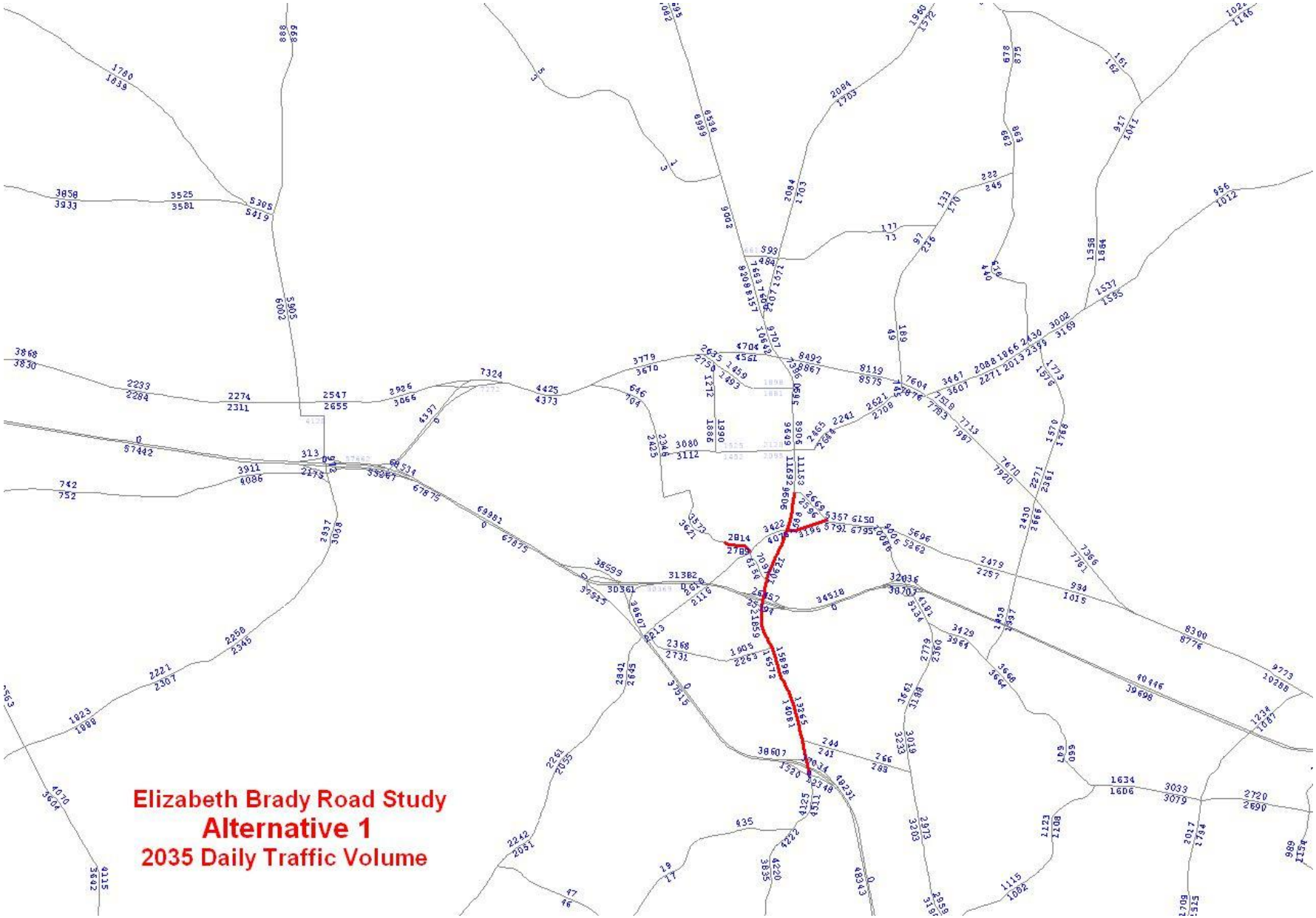

Elizabeth Brady Road Extension
Study Area
86
70
40
85
Legend
Study Area
Network Roads
0 .6 1.2 1.8
Miles

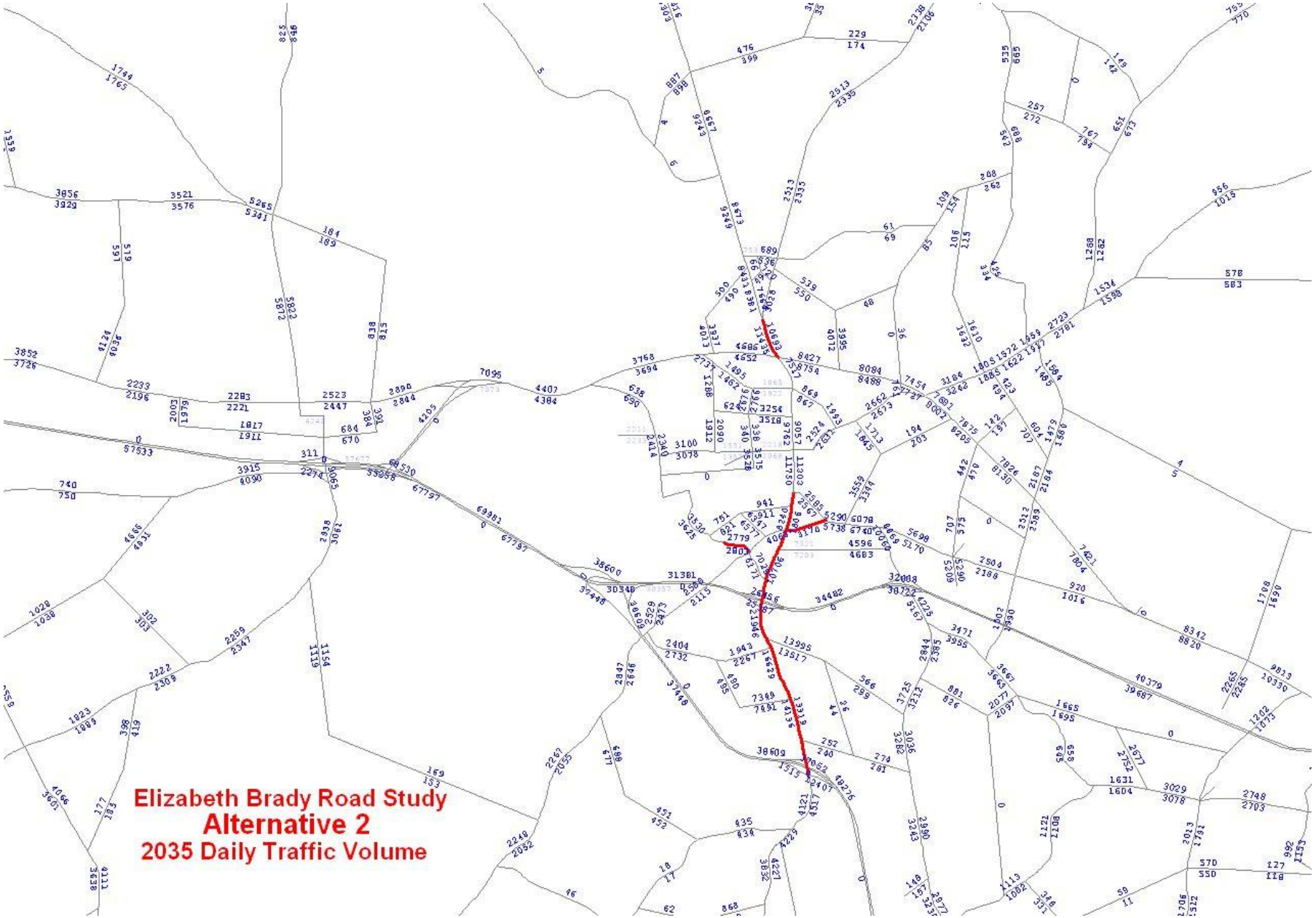
The model run results of the No-Build and three alternatives are summarized in table 2 below. Daily traffic volume maps and peak hour V/C ratio maps for the No-Build and three alternatives were also provided in this report.

Table 2: Measures for Elizabeth Brady Road Extension Study

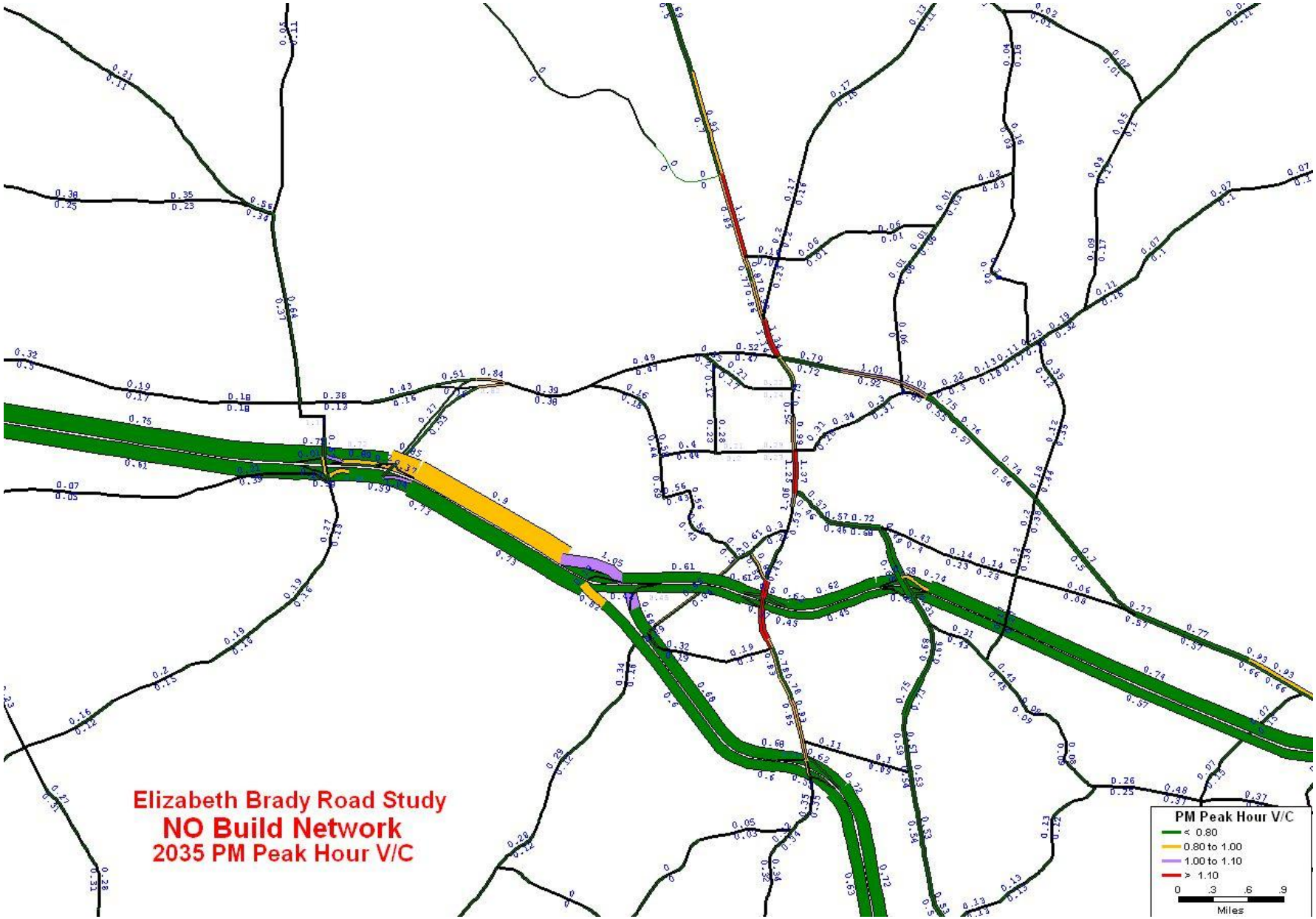
Measures	No Build	Alternatives			% change from No Build		
		Alt. 1	Alt. 2	Alt. 3	Alt. 1	Alt. 2	Alt. 3
1. Total daily VMT	1,412,878	1,397,657	1,397,922	1,420,568	-1.1%	-1.1%	0.5%
2. Total daily Hours of delay	3,161	2,738	2,591	3,121	-13.4%	-18.0%	-1.3%
3. Percent of VMT experiencing congestion - All Day							
- Freeway	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
- Arterial	11.5%	5.5%	4.0%	10.0%	-52.2%	-65.2%	-13.0%
- All Facility	1.5%	0.8%	0.6%	1.2%	-46.7%	-60.0%	-20.0%
4. Percent of VMT experiencing congestion - Peak							
- Freeway	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
- Arterial	12.6%	6.7%	3.8%	12.0%	-46.8%	-69.8%	-4.8%
- All Facility	1.7%	1.0%	0.6%	1.5%	-41.2%	-64.7%	-11.8%
5. Degree of congestion (V/C >1) on designated truck routes	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6. Demographics							
- Population	28,320	28,320	28,320	28,320			
- Employment	15,971	15,971	15,971	15,971			
7. Other Measures							
Lane Miles	178	184	185	181	3.4%	3.9%	1.7%

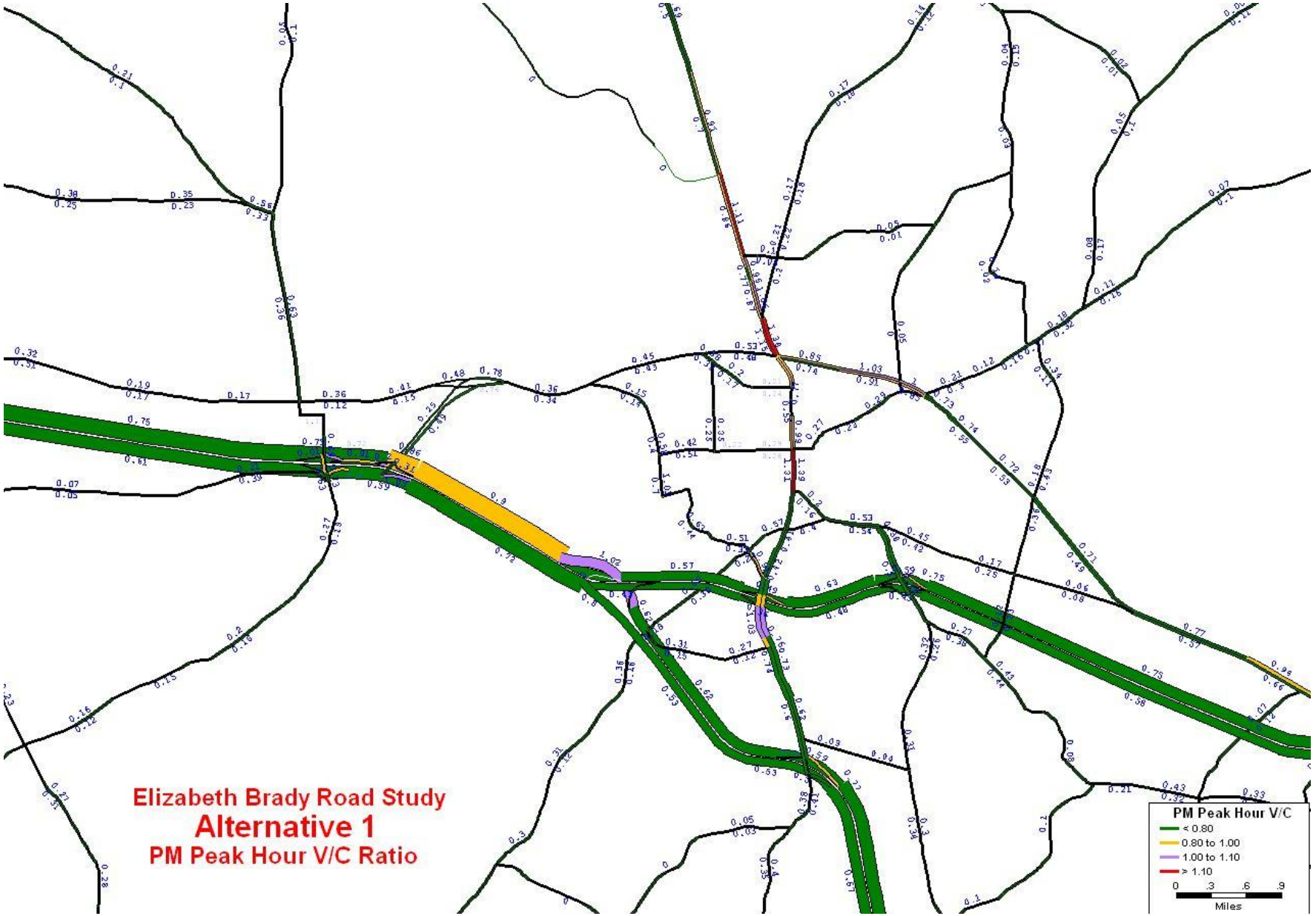

Elizabeth Brady Road Study
NO Build Network
2035 Daily Traffic Volume

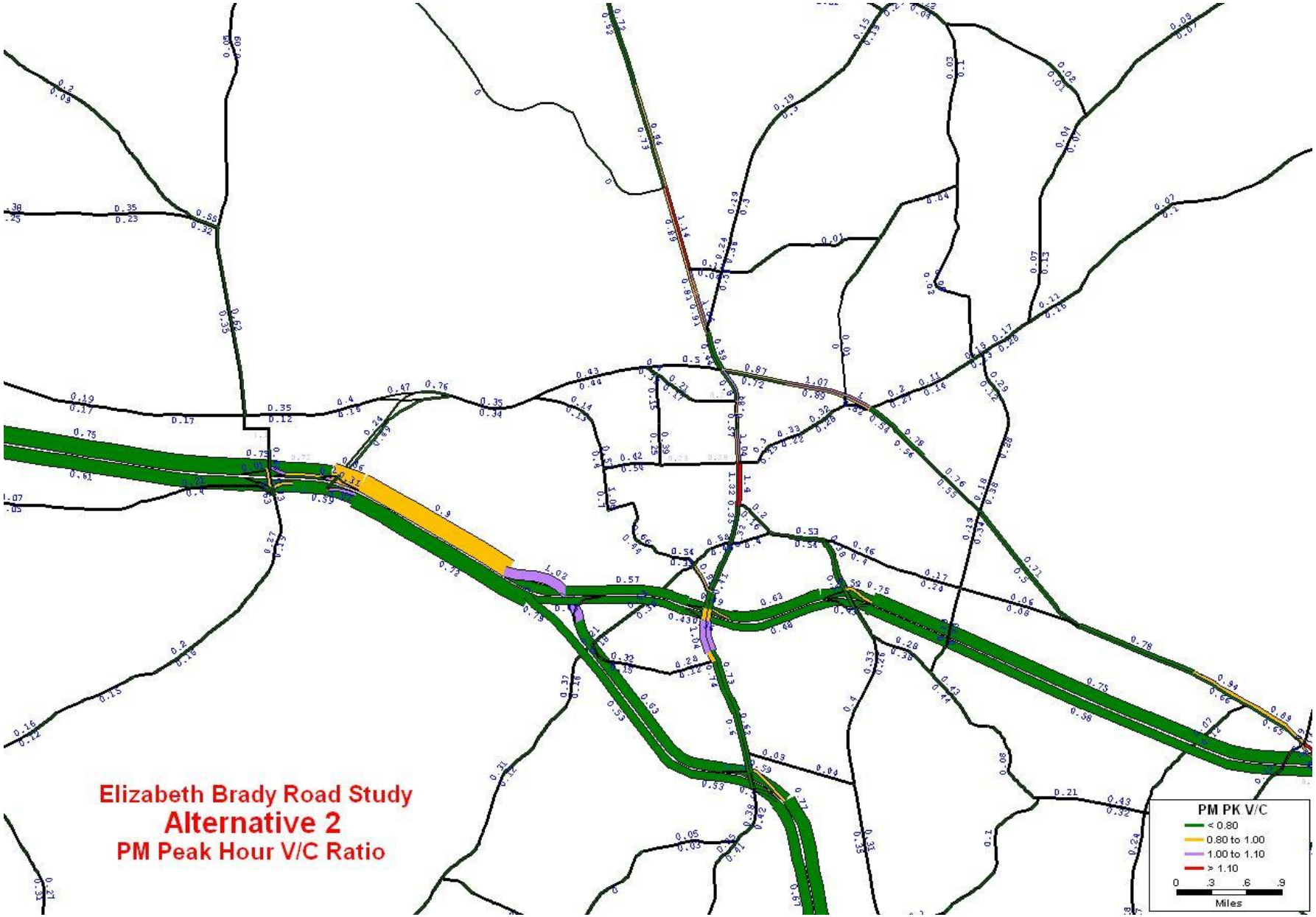

Elizabeth Brady Road Study
Alternative 1
2035 Daily Traffic Volume

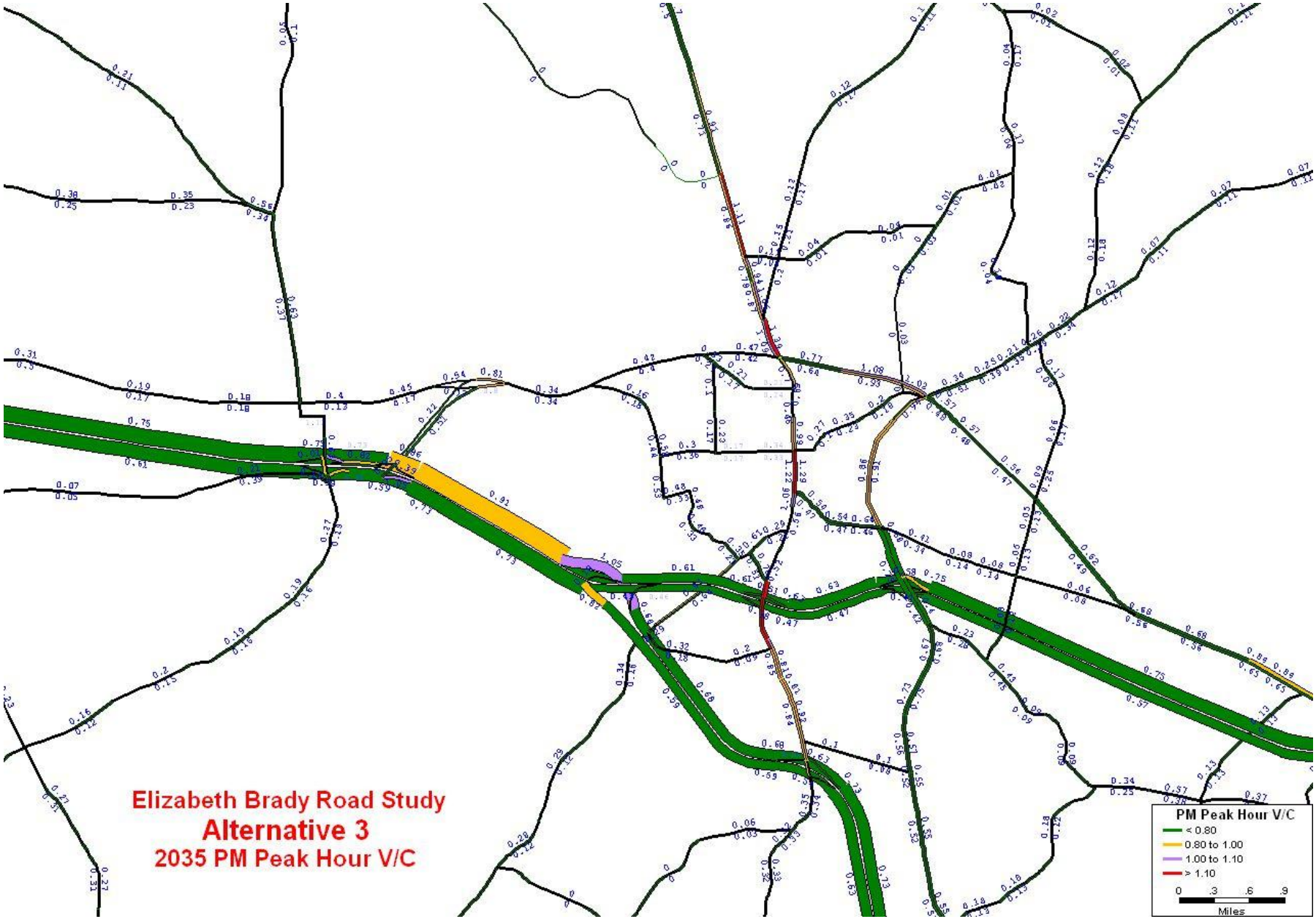

Elizabeth Brady Road Study
Alternative 2
2035 Daily Traffic Volume


Elizabeth Brady Road Study
Alternative 3
2035 Daily Traffic Volume


Elizabeth Brady Road Study
NO Build Network
2035 PM Peak Hour V/C
PM Peak Hour V/C
< 0.80
0.80 to 1.00
1.00 to 1.10
> 1.10
0 .3 .6 .9
Miles


Elizabeth Brady Road Study
Alternative 1
PM Peak Hour V/C Ratio
PM Peak Hour V/C
< 0.80
0.80 to 1.00
1.00 to 1.10
> 1.10
0 .3 .6 .9
Miles


Elizabeth Brady Road Study
Alternative 2
PM Peak Hour V/C Ratio
PM PK V/C
< 0.80
0.80 to 1.00
1.00 to 1.10
> 1.10
0 .3 .6 .9
Miles


Elizabeth Brady Road Study
Alternative 3
2035 PM Peak Hour V/C
PM Peak Hour V/C
< 0.80
0.80 to 1.00
1.00 to 1.10
> 1.10
0 .3 .6 .9
Miles

DCHC

DURHAM • CHAPEL HILL • CARRBORO METROPOLITAN PLANNING ORGANIZATION

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

Memorandum

From: Felix Nwoko, Transportation Planning Manager, DCHC MPO

To: Margaret Hauth, Planning Director, Town of Hillsborough
Tom King, Senior Planner, Town of Hillsborough

CC: Leta Huntsinger, Technical Services Team Leader, DCHC MPO
Ellen Beckmann, Transportation Planner, DCHC MPO
Dawn Qiu, Transportation Planner, DCHC MPO

Date: June 12, 2009

Re: Analysis of Churton Street Traffic, Hillsborough, NC

The Elizabeth Brady Road Extension is a TIP project in the Hillsborough area. As stated in the project purpose and need of April 21, 2009, it is intended to reduce congestion on Churton Street in the central business district (CBD) in terms of traffic delay at intersections and travel time for the peak period/peak direction. The recent traffic study conducted by NCDOT's consultant concluded that with the Elizabeth Brady Road extension being built, travel time on Churton Street in downtown will be reduced from 36 minutes to 26 minutes in the afternoon peak in year 2025. The travel time saving of the project is about 10 minutes.

However, it will still take 26 minutes in year 2025 to travel on Churton Street, a massive 3 fold increase comparing to the current 6 minutes of travel time. There are still significant travel delays in the downtown area. To investigate the reasons behind congestion on Churton Street and to explore potential solutions to improve traffic conditions, in June of 2009 DCHC MPO staff used the Triangle Regional Demand Model (TRM) and conducted an analysis of Churton Street traffic.

This technical memorandum discusses our analysis of the estimated Churton Street traffic flows in 2035 and provides findings and recommendations based on this analysis.

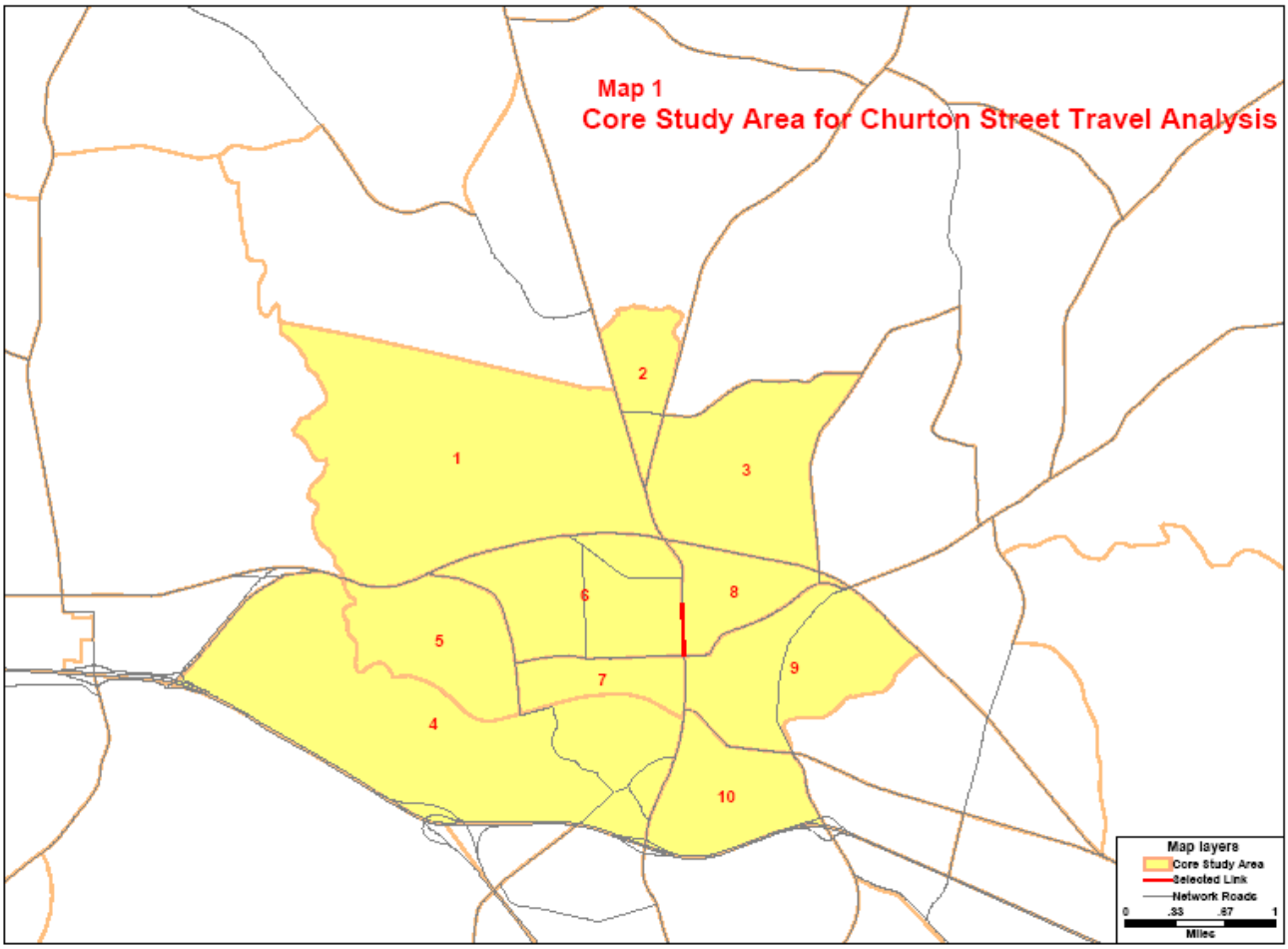
Study Methodology

The purpose of this analysis was to evaluate traffic flows on a segment of Churton Street and to identify travel patterns to and from the selected roadway segment. It is called "selected link analysis".

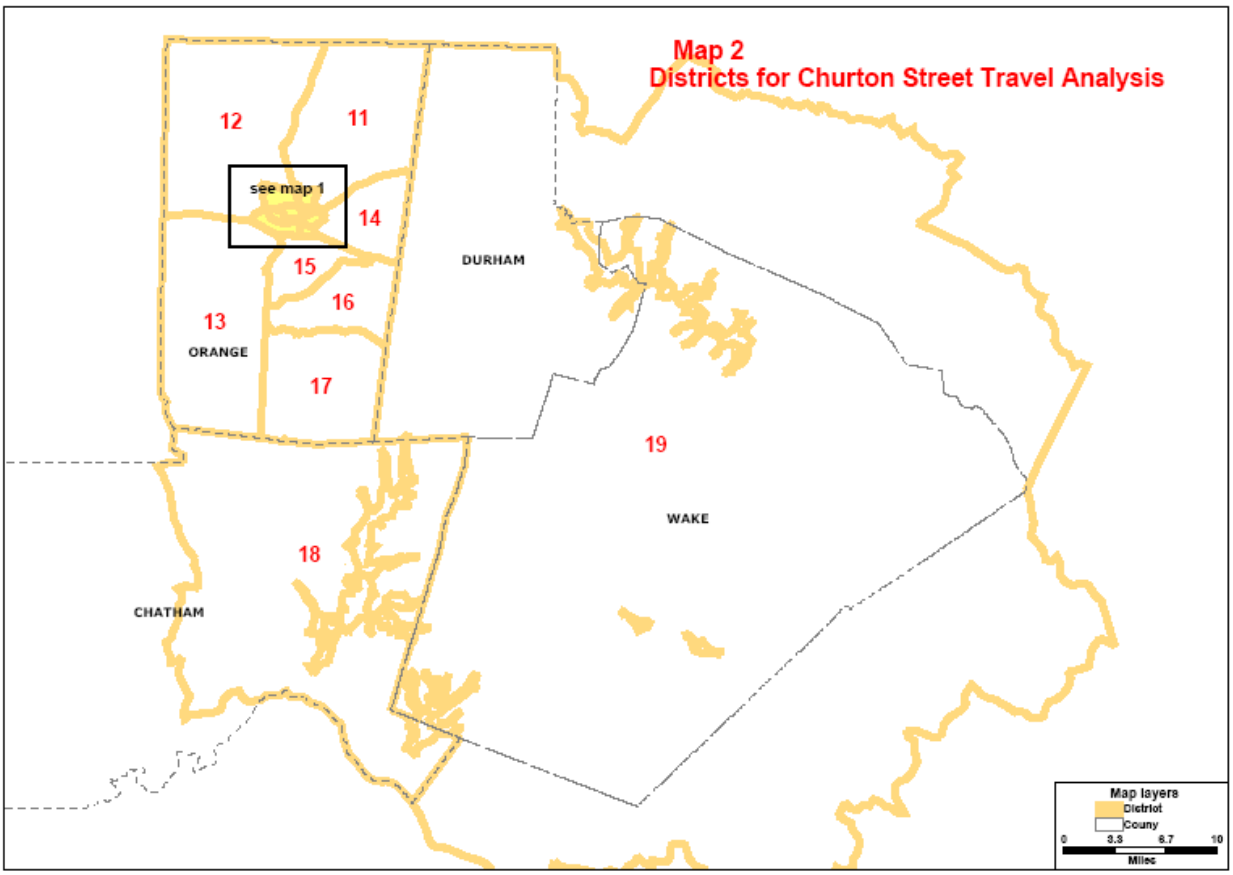
The TRM v4 was used for this analysis. A model run was performed based on DCHC MPO's 2035 population and employment projections and its 2035 LRTP highway network with the Elizabeth Brady Road Extension project included.

To conduct the study we selected a portion of Churton Street between St. Mary's Road and Corbin Street. The segment was chosen because it is located in the "heart" of the Hillsborough CBD and also reflects the most congested segment in the north-south corridor in downtown area.

Additionally, a total of 10 traffic analysis zones (TAZs) along Churton Street/ NC 86 were identified to form a core study area surrounding the CBD, because trips from/to these zones use Churton Street as their main path to get around the area (see Map 1).



To best understand travel patterns for the traffic travels along this segment of roadway, the regional TAZ system was divided into 19 districts. The 10 districts in Hillsborough CBD are essentially the TAZ structures for that area because we wanted to maintain the lowest level of detail for the core study area. The remaining TAZs were aggregated to districts by focusing on major geographic regions in Orange County first. Then Chatham County was formed its own district. The rest of counties, including Durham and Wake, were combined into one district (see Map 2).



Trips that use the Churton Street link are recorded in an origin-destination (O-D) table to identify which district the tips are originated from and which district they are going to.

Approach

To evaluate the Churton Street travel patterns, a selected link analysis will trace the Churton Street trips and discover where the trips are coming from and where they are going to.

For each of the AM peak, PM peak, off-peak periods, a multi-model, multi-class user equilibrium traffic assignment was performed and traffic flow for the selected link was captured in a separate trip assignment table. A trip matrix was also generated which identifies origins and destinations of the trips that use Churton Street link. To assure consistency with the original model, the outputs of the selected link analysis went through a quality check process: comparing the selected link assignments to the TRM model assignments, and comparing the trips in the O-D matrix to the traffic flow table for the selected link. The daily traffic assignment of 16,455 in the selected link is found identical to the TRM model assignment and to the trip O-D matrix.

The daily traffic flow for Churton Street is shown in Map 3. The AM, PM, and off-peak traffic flows have been combined for simplicity. The Churton Street daily trip destinations by district are shown in Map 4 and table 1.

Table 1: Churton Street Daily Trip Origins-Destinations by District

District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
1	0	0	0	29	0	0	0	0	4	221	0	0	2	55	175	11	61	3	158	**719**
2	0	0	0	32	0	0	20	0	1	43	0	0	2	10	64	3	28	1	37	**243**
3	0	0	0	159	0	0	99	0	0	11	0	0	22	0	94	2	16	13	8	**425**
4	63	32	159	0	0	215	0	0	0	0	107	173	0	0	0	0	0	0	0	**749**
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
6	0	0	0	267	0	0	0	0	256	419	2	0	18	187	666	87	412	24	1,320	**3,658**
7	0	20	99	0	0	0	0	0	0	0	60	103	0	0	0	0	0	0	0	**282**
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
9	40	9	0	0	0	247	0	0	0	0	0	113	0	0	0	0	0	0	0	**408**
10	214	42	0	0	0	393	0	0	0	0	90	239	0	0	0	0	0	0	0	**979**
11	0	0	0	109	0	8	62	0	0	108	0	0	7	16	158	8	152	6	163	**798**
12	0	0	0	181	0	0	108	0	87	274	0	0	11	73	334	21	461	13	842	**2,405**
13	2	2	23	0	0	29	0	0	0	0	8	11	0	0	0	0	0	0	0	**75**
14	40	8	0	0	0	193	0	0	0	0	19	53	0	0	0	0	0	0	0	**312**
15	151	66	113	0	0	644	0	0	0	0	141	332	0	0	0	0	0	0	0	**1,448**
16	13	3	2	0	0	85	0	0	0	0	9	19	0	0	0	0	0	0	0	**131**
17	75	19	16	0	0	395	0	0	0	0	156	393	0	0	0	0	0	0	0	**1,055**
18	4	1	15	0	0	38	0	0	0	0	7	13	0	0	0	0	0	0	0	**78**
19	184	38	8	0	0	1,243	0	0	0	0	204	1,016	0	0	0	0	0	0	0	**2,693**
Total	**785**	**241**	**434**	**777**	**0**	**3,491**	**289**	**0**	**349**	**1,076**	**803**	**2,465**	**62**	**341**	**1,492**	**132**	**1,131**	**60**	**2,528**	**16,455**

Table 1 shows that 3,491 of Churton Street trips are ended in District 6, which is located on Churton Street in downtown. The second and third largest destination choices for Churton Street trips are District 12 and 15, which are adjacent to Hillsborough CBD in Orange County. District 19 which includes Durham and Wake Counties, only have 2,528 trip destinations from the link. The trip destinations by district in Map 4 also indicate that a lot of trips on Churton Street are originated from and ended in the Hillsborough CBD and its surrounding area.

To relate the Churton Street traffic to a regional scale travel picture, the daily O-D trips in Table 1 were categorized into internal, external, internal – external, and external – internal trips as shown in Table 2. Percentages of the internal and external trips are provided in Table 3.

The internal and external trips are defined as:

Internal – Internal: trips start and end in District 1-10, the core study area;
Internal – External: trips start from District 1-10 and end in District 11-19;
External – Internal: trips start from District 11-19 and end in District 1-10, and
External – External: trips start from and end in District 11-19, through trips.

Table 2: Churton Street Trips by Internal and External District

District	Internal (district 1-10)	External (district 11-19)
Internal (district 1-10)	3,094	4,368
External (district 11-19)	4,348	4,645

Table 3: Percentage of Churton Street Trips by Internal and External District

District	Internal (district 1-10)	External (district 11-19)
Internal (district 1-10)	18.80 %	26.55 %
External (district 11-19)	26.42 %	28.23 %

Table 3 and Table 4 further indicate that only 28% of the traffic that use Churton Street in Hillsborough CBD are through trips. A majority of the trips (72%) on Churton Street, including internal-internal, internal-external, and external-internal, are local traffic. They use Churton Street to work, shop, or to go to other activities in downtown area. And they leave from work and shopping in downtown area for their destinations outside of the Hillsborough CBD.

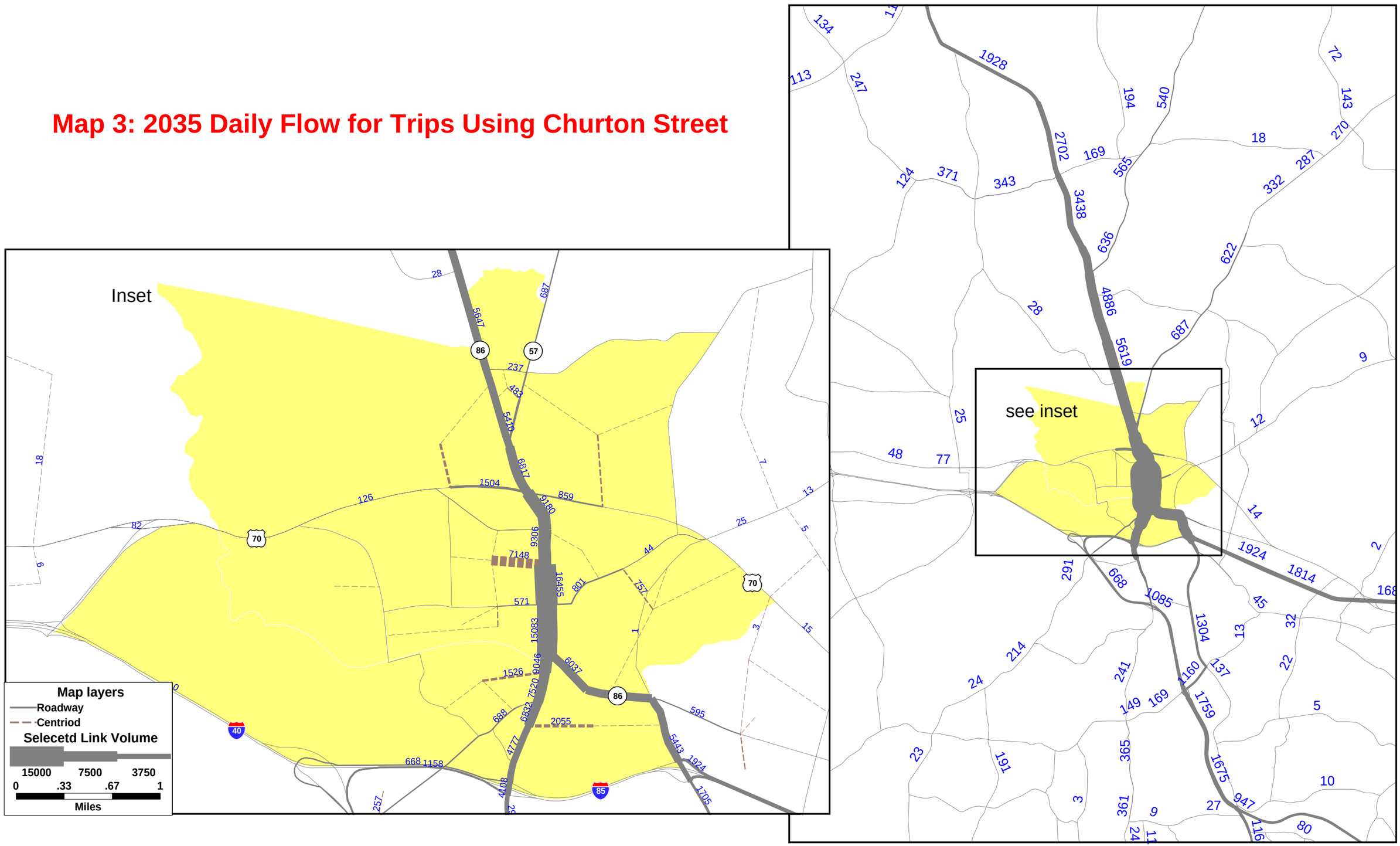
The traffic flows in Map 3 also shows that most of the 16, 455 trips on Churton Street link are traveling between north of I-85 and south of Walnut Grove Church Road. Long distance travels beyond I-85 and Walnut Grove Church Road which use Churton Street are not significant.

Finding and Recommendations

Staff's finding of this analysis is that most of the traffic on Churton Street will stay due to the nature of the internal trips and internal-external trips. Because of the attractiveness of businesses in the Hillsborough CBD, people will use Churton Street to work and shop in the morning and daytime. They will leave from work and shop in downtown to home in or outside of downtown in the afternoon. These travel patterns on Churton Street will not change. Congestion in the downtown area will remain.

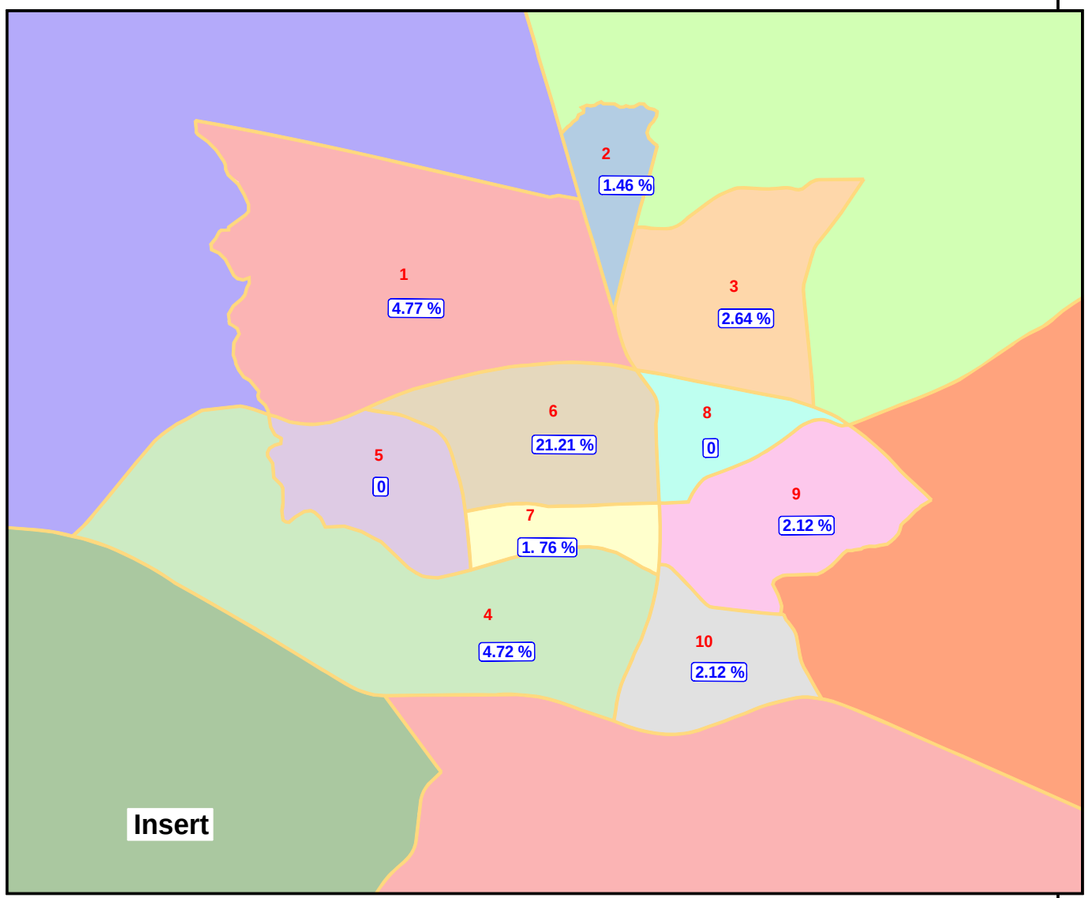
A solution for traffic congestion in Hillsborough CBD should be focused on improving traffic operations on Churton Street, such as traffic signal and intersection improvements. Another solution could be looking at land use and zonings and trying to limit traffic productions and attractions in the downtown area.

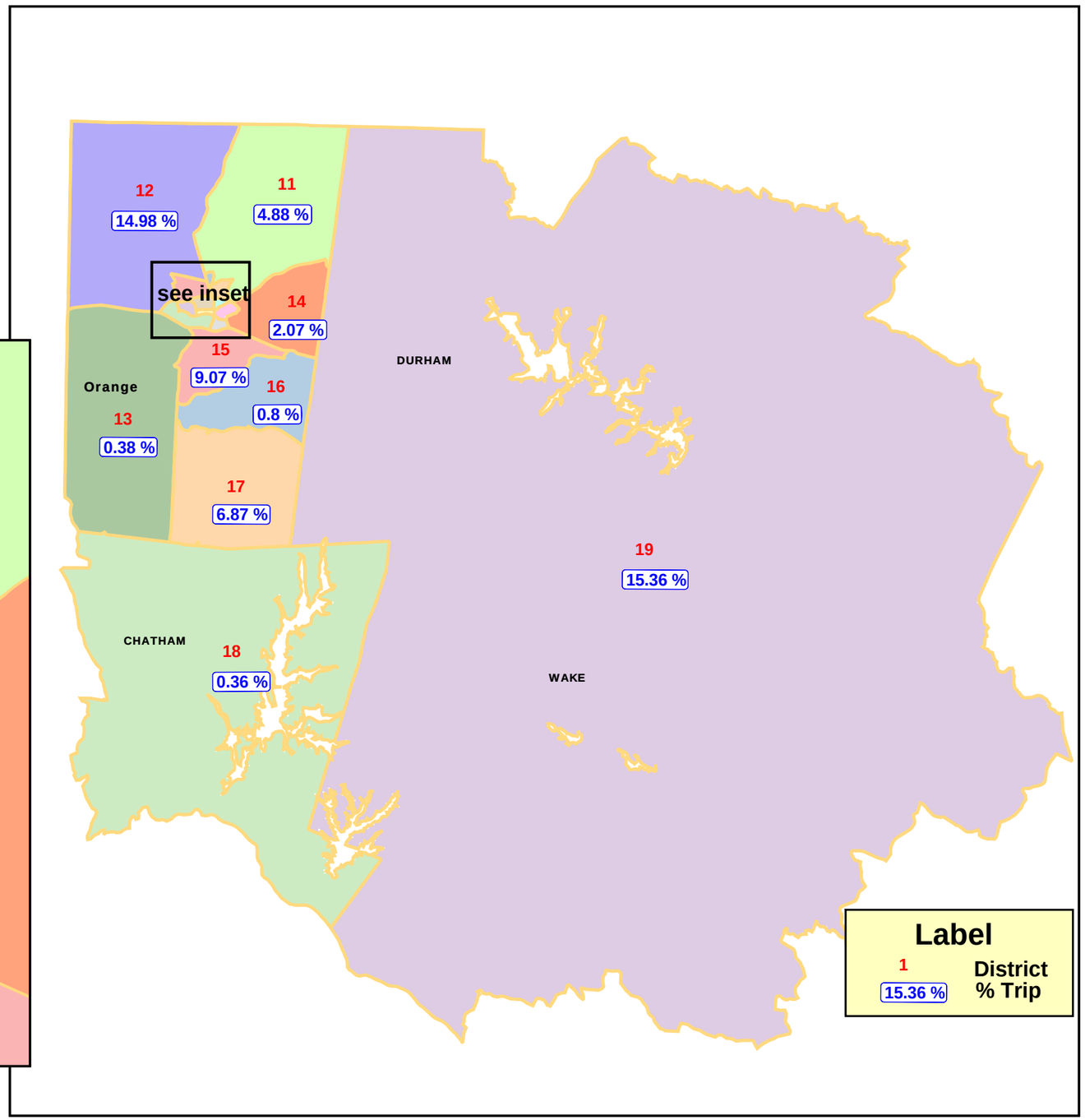
Map 3: 2035 Daily Flow for Trips Using Churton Street



Map 4: 2035 Trip Destinations

Using Churton Street Link





MEMORANDUM

To: Transportation Advisory Committee (TAC)
DCHC MPO

From: DCHC MPO Lead Planning Agency

Date: February 10, 2010

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

This memorandum provides a summary status of tasks for projects in the FY 2009-2010 Unified Planning Work Program.

- ✓ Indicates that task is complete.
- • Indicates that task is ongoing or not complete.

2009-2010 Unified Planning Work Program (UPWP) – Projects

Comprehensive Transportation Plan (CTP)

- Draft CTP
- Public Input
- Recommended CTP
- Adopted CTP
- Technical report and implementation

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

- ✓ Staff study initiation meeting
- ✓ Draft scope of services
- ✓ Agency review of scope and time
- ✓ Request for Proposal notice – October 2008
- ✓ Proposal due January 2009
- ✓ Consultant selected
- ✓ Contract negotiation underway
- ✓ Council contract approval May 18, 2009
- ✓ Notice to Proceed – June 2009
- ✓ Kickoff Meeting – July 2009
- ✓ Public Outreach Plan – August 2009
- ✓ Prepare Corridor / Subarea Community Profile – Dec 2009
  - Public Workshop #1 – Fall 2009
- • Development and Evaluation of Scenarios – Apr 2010
  - Public Workshop #2 – Feb/Mar 2010
- • Transportation/Land Use Master Plan – June 2010
  - Public Workshop #3 – Spring 2010

- Documentation and Final Presentation – June 2010
- Study completion – June 2010

Commercial Vehicle/Freight Survey (TRM Service Bureau Project)

- ✓ Pilot study
- ✓ Obtain DMV records
- ✓ Finalize sample plan
- Begin survey mail out – Jan 2010
- Surveyor Training – Jan 2010
- Survey Data Collection – Jan through March 2010
- Data Processing/Geocoding – April 2010
- Weighting and Expansion – April 2010
- Analysis/Draft Report – May 2010
- Final Report/Draft Dataset – June 2010
- Presentation of Results – July 2010

GIS/Data Integration and Automation

- ✓ Phase I in progress
- ✓ Initial Kick of meeting and scan completed
- ✓ Initiation Workshop report completed
- ✓ Draft Requirement Assessment & Application Development Report - October 2008
- ✓ Needs Assessment Workshop
- ✓ Final Draft Needs Assessment Report
- ✓ Application Development Plan – Sept 09
- ✓ Application Plan/Algorithm for CMP – complete
- ✓ Application Plan/Algorithm for LRTP Tool – Oct 2009
- ✓ Application Plan/Algorithm for SE Data Tool – Oct 2009
- ✓ Supporting Hardware/Software Recommendation – complete
- Functional capability for TELUDE – Nov 2009
- Database Design – Feb 2010
- Database Design Document – Feb 2010
- Strategic Planning Document – Feb 2010
- TELUDE User's Handbook v1 – Mar 2010
- Hands-on Training – May 2010
- TELUDE Test and Evaluation Manual – July 2010
- Project Completion – Sept 2010

Land-use Model Development

- ✓ Multi-year project in progress
- ✓ Review of existing data and need/requirement analysis completed
- ✓ Land use data collection completed
- ✓ Development of Model specification Completed
- ✓ Model architecture and design completed
- Zone level model for Triangle Region v1
    - ✓ Database completion – Aug 09

- ✓ Initial model estimation – Sept 09
- ✓ Initial calibration – Oct 09
- 2035 model run – Jan 2010
- Installation and documentation – Feb 2010

- Parcel level model for DCHC
  - Initial database – Mar 2010
  - Initial model estimation – Apr 2010
  - Initial calibration – May 2010
  - 2035 model run – June 2010
- Installation and documentation – July 2010

Non-Motorized Model Development

- ✓ Phase 1 completed.
- ✓ Phase 2 underway
- ✓ Update and enhancement of Generation Choice Models – Sept 2009
- Revision and revalidation of Destination choice models – Mar 2010
- Development of improved Model Choice model – Jan 2010
- Prepare and implement new TransCAD routines to implement new models – Apr 2010
- Documentation, User's manual, and training – Jun 2010
- Project completion date anticipated in July 2010

ITS Deployment Plan

- Two Triangle regional stakeholder coordination meetings held.
- ✓ Update of ITS short range strategies for the 2007-2013 TIP.
- ✓ Update of 2007-2010 ITS project – December 2006
- ✓ Request for funding from NCDOT
- ✓ Draft scope of services and Request for Proposals.
- ✓ Consultant selection in spring of 2008
- ✓ Notice to proceed in January 2009
- ✓ Scan of Best practices
- ✓ ITS Vision and goals
- ✓ Gap Assessment
- ✓ Development of ITS Architecture
- Development of ITS Cost Estimates and Cost database
- Development of Maintenance Plan
- Development of IDAS Model
- Integration & Streamlining of ITS with Transportation Planning.
- Strategic Deployment Plan
- Project Management
- Final Reports
- Completion of Project expected in winter of 2010.

MPO Collector Street Plan

- ✓ Supplemental Agreement with Kimley Horn and Associates
- ✓ Data collection underway

- ✓ Coordination with partner agencies to classify roads and identify collector streets
- Public review (possibly with Comprehensive Transportation Plan)
- Completion of study and integration with related plans and review processes

MPO Expansion for the next LRTP Update

- MPO expansion and revision of MOU expected to be completed after the 2035 LRTP.

Public Outreach for the East End Connector Planning and Environmental Study

- ✓ LPA working on the Public Involvement and Outreach Program for the East End Connector Planning and Environmental Study (NEPA).
- ✓ Development of mailing list database complete.
- ✓ Received project schedule and time line from NCDOT.
- ✓ Newsletter distributed May 2006
- ✓ Speakers Bureau presentations June 2006 – ongoing
- ✓ First public meeting September 26, 2006
- ✓ Second public meeting – January 30, 2007
- ✓ Alternative 3 selected as LEDPA – June 19, 2007
- ✓ Ad Hoc Committee Meetings – August 9, 2007, August 27, 2007, September 19, 2007, October 10, 2007, November 7, 2007, December 5, 2007
- ✓ Third public meeting December 10, 2007, Orange Grove Missionary Baptist Church
- ✓ Environmental Assessment – signed December 2009
- Public meeting/hearing – February 2010

Farrington Road/Stagecoach Road Corridor Study

- ✓ This study involved the following tasks:
  1. Data collection and analysis
  2. Traffic circulation plan (including a collector street system plan)
  3. Sub-area modeling analysis and forecast of future demand
  4. Alternative evaluation
  5. Recommendation
- ✓ Kimley Horn and Associates is the consultant
- ✓ Data collection underway
- ✓ Steering Committee proposed
- ✓ Completion of study expected in January
- ✓ Integration in the 2035 LRTP
- ✓ Draft report complete
- Presentation to TAC – fall 2009

MPO Parking Survey and Study (postponed to FY 2011)

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

Contract Number:	C200840	**Route:**	NC-54
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	R-2904, U-4026
Length:	6.363 miles	**Federal Aid Number:**	STP-54(5)
Resident Engineer:	Jeffrey D. Allen, PE	**RE Phone Number:**	(919)733-9499
Location Description:	NC-54 FROM SR-1999 IN DURHAM CO TO SR-1959 IN DURHAM CO & SR-1999 FROM SR-3014 IN WAKE CO TO NC-54 IN DURHAM CO.		
Type of Work:	WIDENING, GRADING, DRAINAGE, PAVING, SIGNALS & CULVERTS.		
Contractor Name:	C C MANGUM COMPANY LLC		
Contract Amount:	$35,467,891.08	**Cost Overrun/Underrun:**	6.9%
Availability Date:	2/5/2007	**Letting Date:**	12/19/2006
Completion Date:	11/1/2009	**Work Began:**	2/19/2007
Revised Completion Date:	12/4/2009	**Estimated Completion:**	4/1/2010
Last Estimate Thru:	12/31/2009	**Scheduled Progress:**	100%
Last Estimate Paid:	1/14/2010	**Actual Progress:**	97.44%

Contract Number:	C201487	**Route:**	US-15
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	B-3450, U-4009, U-4012
Length:	1.769 miles	**Federal Aid Number:**	BRSTP-1116(6)
Resident Engineer:	Chad D. Hinnant	**RE Phone Number:**	(919)220-4680
Location Description:	BRIDGES OVER SANDY CRK & TRIBUTARY & APPROACHES ON SR-1116, SR-1126 NEAR US-15/501 & SR-1116, US-15/501 AT MT MORIAH RD.		
Type of Work:	GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES.		
Contractor Name:	DLB, INC DBA DLB INC (OF VA)		
Contract Amount:	$18,810,912.36	**Cost Overrun/Underrun:**	2.98%
Availability Date:	10/1/2007	**Letting Date:**	8/21/2007
Completion Date:	8/1/2010	**Work Began:**	10/1/2007
Revised Completion Date:	8/3/2010	**Estimated Completion:**	8/3/2010
Last Estimate Thru:	11/30/2009	**Scheduled Progress:**	60%
Last Estimate Paid:	12/28/2009	**Actual Progress:**	65.68%

Contract Number:	C201994	**Route:**	NC-147
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	U-4763B
Length:	4.2 miles	**Federal Aid Number:**	TIFIA-540(2)
Resident Engineer:	Jason R. Peterson, PE	**RE Phone Number:**	(919)571-3000
Location Description:	TRIANGLE PARKWAY FROM NC-540 IN WAKE CO TO I-40 IN DURHAM CO		
Type of Work:	GRADING, DRAINAGE, PAVING, SIGNALS, TOLL FACILITIES & STRS.		
Contractor Name:	S. T. WOOTEN CORPORATION		
Contract Amount:	$137,446,000.00	**Cost Overrun/Underrun:**	
Availability Date:	9/19/2008	**Letting Date:**	8/5/2008
Completion Date:	7/1/2011	**Work Began:**	8/3/2009
Revised Completion Date:		**Estimated Completion:**	
Last Estimate Thru:		**Scheduled Progress:**	
Last Estimate Paid:		**Actual Progress:**	

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

Contract Number:	C202313	**Route:**	US-501
Physical Division:	5	**County:**	Durham
Administrative Division:	5	**TIP Number:**	R-5135, U-5122, U-5124 U-5126, U-5127
Length:	16.62 miles	**Federal Aid Number:**	STM-1004(39)
Resident Engineer:	Chad D. Hinnant	**RE Phone Number:**	(919)220-4680

Location Description: 1 SECTION OF US-501 BYPASS, 1 SECTION OF NC-98 & 3 SECTIONS OF SECONDARY ROADS.
Type of Work: WIDENING, MILLING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: BARNHILL CONTRACTING COMPANY
Contract Amount: $3,611,898.13 **Cost Overrun/Underrun:** 0%
Availability Date: 7/27/2009 **Letting Date:** 6/16/2009
Completion Date: 5/14/2010 **Work Began:** 7/28/2009
Revised Completion Date: **Estimated Completion:** 5/14/2010
Last Estimate Thru: 1/7/2010 **Scheduled Progress:** 82%
Last Estimate Paid: 1/12/2010 **Actual Progress:** 88.22%

Contract Number: C202405 **Route:** NC-55
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:** U-5143
Length: 0.2 miles **Federal Aid Number:** STM-0055(42)
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: INTERSECTION OF SR-1171 (RIDDLE RD) AND NC-55.
Type of Work: GRADING, DRAINAGE, PAVING, CURB AND GUTTER, AND SIGNALS.
Contractor Name: C C MANGUM COMPANY LLC
Contract Amount: $176,802.75 **Cost Overrun/Underrun:** 14.49%
Availability Date: 8/3/2009 **Letting Date:** 7/7/2009
Completion Date: 10/30/2009 **Work Began:** 8/3/2009
Revised Completion Date: **Estimated Completion:** 3/20/2010
Last Estimate Thru: 1/7/2010 **Scheduled Progress:** 100%
Last Estimate Paid: 1/15/2010 **Actual Progress:** 74.9%

Contract Number: C202408 **Route:** US-501
Physical Division: 5 **County:** Durham
Administrative Division: 5 **TIP Number:**
Length: 18.15 miles **Federal Aid Number:**
Resident Engineer: Chad D. Hinnant **RE Phone Number:** (919)220-4680
Location Description: US-501 BUS FROM SOUTH OF SR-1669 (CLUB BLVD) TO SR-1443 (HORTON RD) AND 8 SECTIONS OF SECONDARY ROADS.
Type of Work: MILLING, RESURFACING & SHOULDER RECONSTRUCTION.
Contractor Name: C C MANGUM COMPANY LLC
Contract Amount: $2,694,654.51 **Cost Overrun/Underrun:**
Availability Date: 10/5/2009 **Letting Date:** 8/18/2009
Completion Date: 6/11/2010 **Work Began:**
Revised Completion Date: **Estimated Completion:**
Last Estimate Thru: **Scheduled Progress:**
Last Estimate Paid: **Actual Progress:**

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

County	WBS #	Route	Location Description	Amount	Status
Orange	36945	SR 1010 (Franklin St.) @ Mallette St.	Upgrade traffic signal and install pedestrian signal heads REVISION: Install mast arm	$110,000.00	Spending Authority FY '10-'11
Orange		SR 1942 (Jones Ferry Rd.) from SR 1140 (Wilson Rd.) to Chatham Co.	Widen existing pavement to 22' with a 1' paved shoulder on each side and resurface. Finished pavement width will be 24'.		**See 7CR.10681.16 7CR.20681.16**
Orange	41593	Union Street	Construct 750 feet of sidewalk and a crosswalk to connect Hillsborough Elementary School to SR 1156 (Nash St.)	$32,000 (Statewide Contingency)	Town to include as part of sidewalk project ; See U-4726 JA
Orange	42486	SR 1008 (Mt. Carmel Ch. Rd.) @ SR 1913 (Bennett Rd.)	Install solar powered flashers at both approaches to the intersection	$10,000	Flashers operating 10/6/09
Orange	42501	US 15/501/NC54 (Fordham Blvd.) at SR 1900 (Old Mason Farm Rd.)	Construct bus pulloffs on both sides	$140,000	**FA const. to begin after compl. of sidewalks on U-4726 IE**
Orange	42502	SR 1010 (Franklin St.) between Hillsborough St. and Plant Rd.	Replace deteriorated curb and gutter at several locations on both sides	$30,000	Municipal Agreement **has not been requested**; Const. FY '10-'11
Orange	42810	SR 1713 (Mt. Hermon Ch. Rd.) and SR 1710 (Old NC 10)	Install a flasher	$15,000	**Installation =98% compl.; operation pending electrical connection**
Orange	7CR.10681.15	NC 57 from joint north of SR 1544 (Pearson Rd.) to approx. 685' south of centerline of NC 157	Widening, resurfacing and pavement markings		S.T. Wooten Corp.- began work 11/16/09 for compl. by 4/30/10
Orange	**7CR.10681.16 7CR.20681.16**	**NC 54 and 11 sections of secondary roads**	**Milling, resurfacing and shoulder reconstruction**		**S.T. Wooten Corp. Avail. 4/26/10 Compl. 9/3/10**
Orange	**B-4216**	**SR 1002 (St. Mary's Road)**	**Replacement of Bridge # 66 over Stroud's Creek**	**$800,000**	**Dane Const. Inc. Avail. 3/1/10 Compl. 12/31/10**
Orange	B-5191A	Various	Repairs to Bridge expansion joints (Bridge #6 on US 70 Bus. over the Eno River)	$40,000	ARRA- Applied Polymerics, Inc.- to be compl. 5/29/10

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

Orange	EL-4601	Morgan Creek Greenway	Construct Greenway	$940,000	ARRA- Letting by Town 11/9/09; Sullivan Eastern to be compl. 365 days after NTP
Orange	EL-5103	Carrboro	Construct bus shelters at 4 locations	$48,296	ARRA-Letting by Town 1/5/10; **WC Construction to be compl. 45 days after NTP; Suppl. Agreement pending execution**
Orange	ER-5100 GE	US 15-501@ SR 1734 (Erwin Rd./Europa Dr.)	Plantings	$65,000	ARRA -Design by Town, Let by DOT; Plymouth Nursery and Landscaping to be complete by 4/30/12
Orange	**I-4716**	**I-40**	**Grind and reseal joints on I-40 from I-85 to Durham Co. (Patching spalls, Diamond grinding and slab repair added)**	**$7.4 million**	**Safety Grooving & Grinding, L.P., Napolean, Ohio Avail. 3/1/10 Compl. 9/1/10**
Orange	I-5138	I-85	Mill, resurface, and overlay from I-85/I-40 split to Bridge over SR 1006 (Orange Grove Rd.)	$2.0 million	ARRA-Rea Contracting, LLC; Avail. 3/29/10 Compl. 7/16/10
Orange	R-5178A	NC 57	Widen for two foot paved shoulders and resurface from NC 86 to SR 1544 (Pearson Road)	$1.0 million	ARRA-Riley Paving, Inc.; Avail. 4/5/10 Compl. 7/30/10
Orange	42170 SS-4907 T 42204.2 42204.1	SR 1710 (Old NC 10) @ NC 86	Construct a right turn lane on SR 1710 and install a traffic signal	$215,000	Design underway; minor R/W & utility relocation; Const. FY '10-'11
Orange	42171 SS-4907 U 42205.2 42205.1	SR 1710 (Old NC 10) @ SR 1713 (Mt. Herman Church Road)	Improve sight distance on SR 1710 by lowering the crest vertical curve on the westbound approach to the intersection	$300,000	Design underway; Const. FY '10-'11
Orange	42423.3 42423.1 SS -4907V	SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	Realign intersection	$165,000	Survey compl.& **Design underway**; Const. FY '10-'11
Orange	U-3100B	SR 1107 (Old Fayetteville Rd.) from NC 54 to SR 1106 (Stroud Lane)	Safety Improvements (Bicycle, Pedestrian, and Transit Accommodations)	$1.8 million	**ARRA-Atwell Const. Co., Inc., Greenville, NC Avail. 3/1/10 Compl. 9/15/10**

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

Orange	U-4704	Chapel Hill-Carrboro	Computerized Traffic Signal System	$5.175 million	**ARRA-**Brooks Berry Haynie & Assoc., Inc.; Mableton, Ga.; **work began 2/1/10**; Compl. 8/1/12
Orange	U-4726 DA	Carrboro	Construct sidewalk on Ashe St. from W. Main St. to Shelton St.	$284,176.00	ARRA Letting by Town 10/27/09; Centurion Construction Co. to be compl. 120 days after NTP
Orange	U-4726 DB	Carrboro	Construct sidewalk on Bim St. from SR 1005 (Jones Ferry Rd.) to Fidelity St.	Combined w/ U-4726 DA	See U-4726 DA
Orange	U-4726 GA	Twin Creeks Park Greenway	Linear park: 10' multi-use asphalt trail including bridge over Jones Creek	$429,457.00	ARRA Letting by County 11/19/09; McQueen Construction to be compl. 190 days after NTP
Orange	U-4726 IA	Chapel Hill	ADA ramps at selected locations	$53,924.00	ARRA Letting by Town 10/29/09; Econ International to be compl. 150 days after NTP
Orange	U-4726 IB	Chapel Hill	Raised crosswalks/traffic calming	$65,189.00	ARRA Letting by Town 10/29/09; Turner Asphalt to be compl. 150 days after NTP
Orange	U-4726 IC	Chapel Hill	Pedestrian safety improvements (refuge islands @ 7 locations)	$370,014.80	ARRA Letting by Town 10/29/09; Econ International to be compl. 150 days after NTP
Orange	U-4726 ID	Chapel Hill	Install in-street pedestrian lighting	$0.00	ARRA-Project voided by request of Town; funds redistributed to other Town projects
Orange	U-4726 IE	Chapel Hill	Sidewalk construction on US 15-501/NC54 from SR 1902 (Manning Dr.) to Old Mason Farm Rd.	$142,613.00	ARRA Letting by Town 10/29/09; Holmes Contracting to be compl. 150 days after NTP
Orange	U-4726 JA	Hillsborough	Construct sidewalks	$1,034,110.00	ARRA, STP-DA, & Contingency Letting by Town 11/19/09; S.T. Wooten Corp. to be compl. 501 days after NTP
NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTNG LIST					
County	**TIP #**	**Route**	**Location Description**	**TIP Est.**	**Est. Let Date**
Orange	I-5142	I-85/I-40	Mill, resurface and install pavement markers and rumble strips from west of SR 1114(Buckhorn Road) to the I-85/I-40 interchange	12.0 million	March 16, 2010

ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO

Orange	R-5200	NC 86	Widen for 2' paved shoulders from SR 1730 (Whitfield Rd.) to south of SR 1710	$950,000.00	Letting not scheduled
Orange	TA-5117		Two 28' light transit vehicles w/ wheelchair lift	$183,200.00	ARRA Letting by County TBD
Orange	U-0624	NC 86 (S. Columbia St.)	Corridor upgrade including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	$4.30 million	Nov. 2011
Orange	U-3306	SR 1733 (Weaver Dairy Rd.) from NC 86 to SR 1734 (Erwin Rd.)	Grading, drainage, paving, signals, curb and gutter	$13.4 million	July 20, 2010

TARPO TCC/TAC Meeting
Division 8 Project Report

2/3/2010

COUNTY	WBS #	ROUTE	DESCRIPTION	TOTAL FUNDING ALLOCATION	CONTRACT BID AMOUNT	STATUS
Chatham	B-4063 33427.3.1	NC 902	Replacement of bridge # 20 over Sandy Creek and approaches	PE: $150,000.00 ROW: $75,000.00 CONST: $1,390,181.00	$1,205,102.89	Dellinger, Inc began work on 9/18/08 and is currently at 98.8% complete; Structure & roadway complete, open to traffic; working on punchlist items; Estimated completion is December 2009; **Complete, accepted 11/19/09**
Divisionwide	38913.3.1 R-4425	US 421, US 15-501, US 1	Guardrail rehabilitation to upgrade sub-standard guardrail, end treatments and bridge anchor units	PE $210,000.00 Const $2,622,565.00	$2,280,491.45	Reynold's Fence & Guardrail began work October 27, 2008; Scheduled completion is April 24, 2009. **Complete, accepted 6/17/09**
Chatham	8CR.20191.1 1	4 sections of secondary roads	Contract resurfacing let as purchase order	$900,000.00	$697,376.00	Awarded to S. T. Wooten Corp.; Available 7/20/09; Scheduled completion is 12/16/09; **Complete, accepted on 12/16/09**
Chatham	41700 SF-4908J	NC 751	Install protected permitted traffic signal and left turn lane at intersection of NC 751 and SR 1731 (O'Kelly Church Road)	PE: $10,000 ROW: $58,214.50 Const: $523,000.00	$301,260.69	Awarded to S.T. Wooten Corp. Available 10/5/09; Scheduled completion is 4/30/10 **Economic Stimulus Project**
Chatham	8CR.20191.1 2	8 sections of secondary roads	Contract resurfacing	$2,600,000.00	$2,641,575.45	Awarded to Riley Paving, Inc.; Available 11/30/09; Scheduled completion 8/13/10
Chatham	42221	NC 87 from south of SR 1516 to north of SR 1516	Construct eliptical roundabout near CCCC in Pittsboro	$375,000.00	$584,478.20	Project let on January 21, 2010; Awarded to Sanford Contractors, Inc; Availability date is 3/1/10; Scheduled completion date is 8/13/10; Economic Stimulus Project ehuled for January 21, 2010; **Economic Stimulus Project**
Chatham	36268 U-4726FA & 45067 ER-5100HA	US 15-501 from Cole Park Plaza to Orange County	Install pedestrian facilities (sidewalk) & Streetscaping/Landscaping	U-4726FA PE: $22,000.00 Const: $198,000.00 ER-5100HA PE: $2,525.00 Const: $22,730.00	$144,614.00	Chatham County Municipal Agreement; Letting scheduled for 12/3/09; Awarded to White Oak Construction Corp; Availability Date is 1/5/10; Scheduled completion is 6/15/10; **Economic Stimulus Project**
Chatham	41848.3 SS-4908K	US 64 and SR 2229 (Treatment Plant Road)/SR 1363 (Pearlman Teague Road)	Island construction and improvements to accommodate U-turns	PE: $27,000.00 ROW: $11,000.00 CONST: $19,000.00		Design is complete; ROW being acquired; Letting is not scheduled; Insufficient funds available