

**Member Governments**

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

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

**AGENDA**

**March 23, 2011  
9:00 a.m.**

**City Council Committee Room  
2nd floor Durham City Hall**

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- 1. Preliminaries**
- 2. Adjustments to the Agenda**
- 3. Public Comments**

**ACTION ITEMS**

**4. Approval of February 23, 2011 TCC Meeting Minutes  
(Attachment 4)**

A copy of the February 23, 2011 minutes is enclosed as Attachment 4.

**TCC Action:** Approve minutes of the February 23, 2011 TCC meeting.

**5. FY 2014-2020 Transportation Improvement Program – Regional Priority List  
(Attachment 5)**

**NCDOT Strategic Planning Office of Transportation & Bicycle and Pedestrian Division**

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

Staff from the NCDOT's Strategic Planning Office of Transportation and Bicycle and Pedestrian Division will provide a presentation on Prioritization 2.0 (Attachment 5).

**TCC Action:** Receive presentation and discuss schedule for developing the FY 2014-2020 TIP Regional Priority List.

**6. Triangle Regional Transit Program  
(Attachment 6)**

**Patrick McDonough, Triangle Transit**

The third, and final, round of public workshops will occur between March 22-31 to get public feedback on the rail transit corridors, alignments, stations and ridership information. In addition, Triangle Transit has drafted preliminary financial scenarios for bus and rail transit in Durham, Orange and Wake counties, and the Regional Transportation Alliance (RTA) recently received results of their annual Triangle region transit poll. These events will be summarized and the schedule for the TAC's release of the Triangle Regional Transit Program will be discussed.

The workshop materials will become available the week of the TCC meeting, and therefore the materials or a summary were not available at the time that this TCC agenda was completed. Attachment 6 is a draft schedule. The RTA poll results are available at the RTA Web site: [www.letsgetmoving.org](http://www.letsgetmoving.org).

**TCC Action:** Recommend that the TAC release the Triangle Regional Transit Program for public comment.

**7. FY 2010-2011 Unified Planning Work Program – Amendment #2**  
**(Attachment 7)**

**Maricia Brown, LPA Staff**

The TAC approved the 2010-2011 UPWP on May 12, 2010. 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 must be de-obligated through an amendment in order for the funds to be available for programming in subsequent fiscal years. Some changes also reflect changes in task activities that warrant only a re-allocation between tasks and have a \$0 effect on the overall program amounts.

The proposed Amendment #2 is necessary in order to reflect changes to the originally approved the 2010-2011 UPWP, and subsequent Amendment #1 approved by TAC in November 2010. Attachment 7 is a resolution supporting Amendment #2 to the 2010-2011 UPWP.

**TCC Action:** Recommend that the TAC approve the resolution adopting Amendment #2 to the FY 2010-2011 Unified Planning Work Program.

**8. Congestion Management Program**  
**(Attachment 8)**

**KoSok Chae, LPA Staff**

The DCHC MPO is required by federal regulations to develop and implement a Congestion Management Process (CMP) for monitoring traffic congestion, evaluating system performance, and incorporating mitigation strategies into the Long Range Transportation Plan (LRTP) and the Transportation Improvement Plan (TIP). The CMP Procedures and Responsibilities Report (Attachment 8) describes how the CMP will be implemented and used on a continuing basis to comply with federal requirements. It will replace the previous version of the Congestion Management System (CMS) Procedures and Responsibilities Report adopted in September 1999.

Action	Date
TCC receives draft CMP Procedures and Responsibilities Report	3/23/11
TAC receives draft CMP report and releases for public comment	4/13/11
TCC receives and addresses the public comments	5/25/11
TAC approves final report	6/08/11
Submit to FHWA	6/30/11

**TCC Action:** Recommend that the TAC release the Congestion Management Program Procedures and Responsibilities Report for public comment.

**9. Closure of Pickett Road  
(Attachment 9, 9A, 9B, 9C, 9D)  
Andy Henry, LPA Staff**

The Hollow Rock Access Area Master Plan recommends closing Pickett Road through the park to reduce conflicts between park uses and through vehicle traffic. The Orange County Board of County Commissioners will need to initiate the road closing procedure with the North Carolina Department of Transportation (NCDOT). Given the road closing impacts on Durham citizens, the Durham City/County Planning staff conducted a meeting for residents in the vicinity of Pickett Road, and the Durham City Council and Board of County Commissioners will review this issue and decide whether to adopt a resolution of support for the road closing at their April 18<sup>th</sup> and April 24<sup>th</sup> meetings, respectively. At their March 9<sup>th</sup> meeting, TAC members asked that this item be presented to the TAC at their April meeting.

A memorandum discusses the outcome of the public meeting and traffic analysis study, as well as some of the issues in the proposed road closing.

**Attachments**

- 9A – Vicinity map of road closing
- 9B – Hollow Rock map (excerpt from Master Plan)
- 9C – Traffic Analysis Report
- 9D -- Resolution

**TCC Action:** Discuss proposed road closing and make recommendation for TAC to adopt resolution of support.

**10. FY 2012-2018 Metropolitan Transportation Improvement Program, 2035 Long Range Transportation Plan Amendment #2, and Air Quality Conformity Process (Attachment 10, 10A, 10B, 10C, 10D)**

**Ellen Beckmann, LPA Staff**

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

- the FY 2012-2018 Metropolitan Transportation Improvement Program;
- Amendment #2 to the 2035 Long Range Transportation Plan; and

- corresponding air quality conformity determinations.

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

Attachment 10 is a memo on the three documents and the approval process. Attachment 10 highlights differences between the draft STIP and draft MTIP. Attachment 10A is a response to the public comments received on the draft MTIP. Attachment 10B is an updated STPDA table displaying the changes to be incorporated in the final FY 12-18 MTIP. Attachment 10C is a table displaying the transit portion of the final STIP. Attachment 10D is a resolution and table displaying the 2035 LRTP amendment for the DCHC MPO and the Capital Area MPO.

Both the adoption of the MTIP and the adoption of the 2035 LRTP amendment require adoption of an air quality conformity determination report. The draft air quality conformity report will not be complete until early June and must be adopted in August.

**TCC Action:** Receive update on the development of the FY12-18 MTIP and 2035 LRTP Amendment #2.

**11. FY 2011-2012 Unified Planning Work Program**

**(Attachment 11, 11A, 10B)**

**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 receives draft 2011-2012 UPWP	1/26/11
TAC receives draft 2011-2012 UPWP	2/09/11
TAC receives draft 2011-2012 UPWP and releases for public comments	3/09/11
TAC holds hearing for public comments	4/13/11
TAC approves final 2011-2012 UPWP	5/11/11

Attachment 11 is a memo regarding the draft FY12 UPWP. Attachment 11A is the draft FY12 UPWP document. Attachment 10B is the STP-DA with the proposed change that coincides with the FY12 UPWP.

**TCC Action:** Discuss TJCOG funding requests and make recommendation to TAC.

**REPORTS FROM STAFF:**

**12. Reports from Staff**

**(Attachment 12)**

**Felix Nwoko, LPA Staff**

**TCC Action:** Receive Report from staff

**13. Report from the Chair**

**Mark Ahrendsen, TCC Chair**

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

**14. NCDOT Report**

**(Attachment 14)**

**Wally Bowman, Division 5 – NCDOT**

**Mike Mills, Division 7 – NCDOT**

**INFORMATIONAL ITEMS**

**15. Triangle Regional Transit Program Meeting Notice**

**(Attachment 15)**

**Adjourn**

**Next meeting: April 27, 2011**



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

44 Mark Ahrendsen, TCC Chair, called the meeting to order at 9:03 a.m. The Alternate Voting

45 Members were identified and are indicated above.

46 **PRELIMINARIES:**

47 **Adjustments to the Agenda**

48 Agenda item #8; Regional Bicycle and Pedestrian Advisory Commission will be addressed

49 immediately following the approval of the minutes.

50 **Public Comments**

51 There were no comments from the public.

52

53 **ACTION ITEMS:**

54 **Approval of January 26, 2011 TCC Meeting Minutes (Attachment 4)**

55 Pierre Osei-Owusu stated there is a need to change the designation of member and alternates

56 for the City of Durham. This was referred to the LPA staff.

57 A motion was made by John Hodges-Copple and seconded by David Bonk to approve the

58 January 26, 2011 TCC Meeting Minutes. The motion carried unanimously.

59 **FY 2009-2015 Metropolitan Transportation Improvement Program Amendment #18 and Surface**  
60 **Transportation Program Direct Attributable (STPDA) Approval (Attachments 5 and 5A)**

61

62 Ellen Beckmann provided an introduction for the FY 2009-2015 Metropolitan Transportation

63 Improvement Program Amendment #18 and Surface Transportation Program Direct Attributable

64 (STPDA) Approval, along with the attachments.

65 A motion was made by David Bonk and seconded by Felix Nwoko to recommend approval of the

66 amendment with the change from Cornwallis to Carpenter Fletcher Road. The motion carried

67 unanimously.

68 Maricia Brown asked Dale McKeel about the project. Dale McKeel stated the project is ready to  
69 go out for bid. We still need a revised municipal agreement for the project. The Public Works  
70 Engineering staff is working on it. Ellen Beckmann stated we will roll it into the next MTIP.

71 **FY 2011-2012 Unified Planning Work Program (Attachments 6, 6A, 6B and 6C)**

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

74 Ms. Brown stated footnotes will be added to the UPWP to explain some differences. The first  
75 footnote is we are aware neither the MPO nor our sub-recipients have a federally approved indirect cost  
76 plan. The indirect cost plan must be approved before reimbursement can occur. Ms. Brown is working  
77 with TJCOG to accomplish this task. The second footnote is regarding Section 5307 funds; noting exactly  
78 what appropriation each transit agency is using.

79 Ms. Brown stated the original apportionment for TJCOG on Attachment 6B was approved for  
80 \$34,494 with a federal portion of \$27,605. In this fiscal year, a request was submitted by TJCOG for  
81 \$69,000 of STPDA funding this year.

82 John Hodges-Copple stated the funds will be used for facilitating joint meetings between the  
83 two MPOs on a range of issues; serving as facilitator for the TRM executive committee; completing air  
84 quality conformity; and setting vehicle emission budgets. The amount for the current fiscal year we are  
85 in is \$37,500. Last year we came back to TCC and stated we wanted to add a project for LUCID requiring  
86 additional funding. They are continuing that in the next year and suggesting an additional task for  
87 developing the fiscal constraint element of the 2040 LRTP which will bring the total to \$44,000. The  
88 \$25,000 in Special Studies is a placeholder for the Sustainable Communities Plan. TJCOG is going to  
89 apply again and the \$25,000 is a DCHC MPO commitment for participation at that level. Obviously, if  
90 they don't have the grant program this year, or we don't get approved, the funds would go back.

91 Felix Nwoko stated last year TCC approved the idea of a financial participation, but didn't amend  
92 the UPWP. Funds haven't been identified at this time.

93 David Bonk stated we took a hit on PL funds. He is wary to allocate funds to a new project when  
94 funds for existing projects may be impacted. Mark Ahrendsen state we need to look at how the funds  
95 are being spent now to be sure they are being spent where they should be spent.

96 Felix Nwoko asked if the LUCID will be one-time or continuous and John Hodges-Copple stated  
97 he was going to leave it up to the group. It should continue while the TTA plan is being developed. Felix  
98 Nwoko asked about the cost sharing and John Hodges-Copple stated the CAMPO share is larger except  
99 on the Special Studies project. Mr. Hodges-Copple stated we missed the funding by 2 points on the  
100 Sustainable Communities Plan, but we got preferred status for the next time.

101 A motion was made by David Bonk and seconded by Jeff Brubaker to refer the draft UPWP to  
102 the TAC for release and refer the whole document to the subcommittee including the TJCOG and the  
103 Town of Chapel Hill issues. The motion carried unanimously.

104 Maricia Brown stated that Attachment 6C reflects a change to the Town of Chapel Hill radio  
105 project. It was approved for \$1,325,000 STPDA funds, but the radio project is only \$1,000,000. DCHC  
106 already flexed the funds to FTA. The Town of Chapel Hill wants to use \$325,000 for Planning in FY2012.

107 David Bonk stated it doesn't matter where the funds are spent - the State is committed. Felix  
108 Nwoko suggested referring this to the subcommittee to set up guidance and a tracking mechanism on  
109 how excess funds are to be spent.

110 Maricia Brown stated we need to start tracking when the funds have been obligated and make  
111 sure we don't move funds that have been obligated. LPA staff will develop a database.

112 A subcommittee meeting was scheduled for March 15, 2011 for bicycle/pedestrian from 1 p.m.  
113 to 2 p.m. and UPWP from 2 p.m. to 3 p.m.

114 **Job Access Reverse Commute and New Freedom Programs – 2011 Call for Projects (Attachment 7)**

115 Maricia Brown provided an introduction for the Job Access Reverse Commute and New Freedom  
116 Programs – 2011 Call for Projects, along with the attachment.

117 Maricia Brown stated there is a lot of interest in the JARC/NF grants. Ms. Brown stated we need  
118 to determine who will review the applications.

119 Felix Nwoko stated in the past that LPA staff and TCC members reviewed the applications and it  
120 presents a conflict as some of the reviewers were also the applicants. Felix Nwoko suggested asking  
121 CAMPO to review the applications or perhaps the NCAMPO subcommittee could review the  
122 applications. Pierre Osei-Owusu stated someone from TCC should be included. Bill Barlow stated the  
123 State has an outside committee with PTD staff to provide technical assistance. Getting CAMPO to  
124 review the applications is a creative idea but staff members need to provide technical support because it  
125 is very important.

126 Maricia Brown stated the LPA staff will provide a screening of applications before being  
127 reviewed by the committee. The consensus is to pursue CAMPO's review using our scoring system.

128 **Regional Bicycle and Pedestrian Safety Campaign (Attachment 8)**

129 Steven Waters with the Raleigh Bicycle and Pedestrian Advisory Commission provided a Power  
130 Point presentation on the Regional Bicycle and Pedestrian Safety Campaign.

131 Bill Barlow asked if the TDM group could take it on as an initiative. Steven Waters stated he  
132 doesn't think it can be the TDM group, but it could follow the model of the TDM group. John Hodges-  
133 Cople stated it would be a separate project taken on by TJCOG. David Bonk stated it could be included  
134 in the TDM program as our TDM does things like this project. Bill Barlow stated an element of transit  
135 safety is relevant. John Hodges-Cople stated TJCOG has people who have worked with media  
136 campaigns. Steven Waters stated there are many materials available to use at no cost.

137 Dale McKeel stated that North Carolina is a target state for bicycle/pedestrian safety. Durham is  
138 one of three target communities for pedestrian safety education. We need to look more at the funding  
139 model because we would need to apply in 2012. We will need UPWP and matching funds.

140 Jeff Brubaker asked why there are no funds for bicycle/pedestrian projects and Steven Waters  
141 stated he is not sure. Mr. Waters stated it is a competitive matching grant program.

142 Mark Ahrendsen asked if he could share CAMPO's level of interest or comments and Mr. Waters  
143 stated that CAMPO did not have a quorum at their TAC so there wasn't any discussion. It was briefly  
144 mentioned.

145 Mark Ahrendsen asked if there is an interest in pursuing a program like this and Andy Henry  
146 stated we would need to put together a proposal with CAMPO. Mark Ahrendsen stated we need to  
147 refer this to the bicycle/pedestrian subcommittee to develop a complete proposal before bringing it to  
148 the TAC.

149 A motion was made by David Bonk and seconded by Karen Lincoln to refer the concept to TAC  
150 with a recommendation that the TCC develop a complete proposal. The motion carried unanimously.

151 **FY 2014-2020 Transportation Improvement Program – Regional Priority List (Attachment 9)**

152 Ellen Beckmann provided an update on the FY 2014-2020 Transportation Improvement Program  
153 – Regional Priority List, along with the attachment. Karen Lincoln stated to go to NCDOT's website to  
154 view projects.

155 John Hodges-Copple suggested the possibility of discussing this in more detail at a future  
156 meeting. David Bonk asked that staff send a copy to TCC members of what was submitted and the  
157 ranking.

158 After discussion, a decision was made to request that NCDOT's SPOT office attend the next TCC  
159 meeting.

160

**REPORTS FROM STAFF:**

161 **Reports from Staff (Attachment 10)**

162 Felix Nwoko stated the Community Viz meeting was well attended. CAMPO is on board and  
163 staff is working on the schedule. There will be three focus groups. There will be meetings in March and  
164 April.

165 Dale McKeel stated on January 28, 2011 there was a Regional Bicycle/Pedestrian workshop  
166 which was well attended. We are looking at the possibility of doing it again next year.

167 **Report from the Chair**

168 Mark Ahrendsen stated the draft date for the MPO Planning Certification Review has been set  
169 for May 3 and May 4, 2011. Felix Nwoko stated staff and the TAC need to use this opportunity to raise  
170 issues with the feds.

171 Felix Nwoko has been selected by the International Modes of Travel as the recipient of the 2011  
172 Transit Cooperative Research International Transit Studies Program Study Mission in China and India in  
173 April 2011. One of the things that Felix Nwoko will be looking at is sustainable transportation.

174 **NCDOT Report (Attachment 12)**

175 Joey Hopkins, NCDOT Division 5, provided an update on projects. There will be a TIP Division 5  
176 meeting in Oxford on March 21, 2011 from 4 p.m. to 7 p.m. NC 751 is now resurfaced as the weather  
177 cooperated.

178 Patrick Wilson, NCDOT Division 7, provided an update on projects. There will be a TIP Division 7  
179 meeting in Burlington on March 29, 2010 from 4 p.m. to 7 p.m. NCDOT staff has met with Orange  
180 County and the Town of Hillsborough officials to go over some projects. They have developed a list of  
181 pending items they are working on.

182 Patrick Wilson provided an update on the roundabout at the intersection of Erwin Road and Mt.  
183 Moriah. NCDOT is currently in the process of trying to obtain all the funding for this project.

184 David Bonk asked Patrick McDonough if there will be a transit report on March 15, 2011. Patrick  
185 McDonough stated he doesn't know; but he will get an answer. Mr. McDonough asked David Bonk to  
186 let him know what elements he wants to see so that he can make sure it is provided.

187 David Bonk stated that the Town of Chapel Hill was selected as a test case to have bike sharrows  
188 and a report has been created. They did find that the markings provided some benefit and recommend  
189 they be implemented as a standard marking in the future.

190 John Hodges-Copple stated that Paul Black is now the MPO Director for Asheville so we are  
191 hiring for the Triangle RPO Coordinator position. RTA and TJCOG will host a forum on the NCRR corridor  
192 on April 5, 2011 probably from 10 a.m. to 2 p.m. at RTA Headquarters.

193 **Adjournment**

194 There being no further business before the Technical Coordinating Committee, the meeting  
195 adjourned at 11:20 a.m.

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# NCDOT – Prioritization 2.0

January 2011



## Process

**Workgroup guided development of P2.0 – agreed to all changes**

**Input from 4 Listening Sessions and Survey**

**Changes finalized on January 13<sup>th</sup>**

- Presented to MPO Association on January 14<sup>th</sup>
- Presented to RPO Association on January 28<sup>th</sup>





## P2.0 Changes – Highway Projects

### No ranking of infrastructure health and safety projects

- Projects can still be submitted
  - Safety projects → Mobility & Safety Division for consideration in existing programs
  - Infrastructure health projects → Divisions for consideration in existing programs

### New “Modernization” category

### New quantitative scoring criteria

- Mobility projects:
  - Benefit-cost
  - Economic Competitiveness
- Modernization projects:
  - Lane width
  - Shoulder width





## P2.0 Changes – Highway Projects

### Revised quantitative scoring %s

- Subregional tier mobility and modernization projects now scored

### “Qualitative” ranking changed to “Local Input” ranking

### Local Input ranking changed to Control Total

- Same approach for Divisions and MPOs/RPOs
- Can continue to rank top 25 projects (includes both mobility & modern.)  
or
- Distribute 1300 total points amongst all mob. & mod. projects
- Can transfer points between areas (w/ agreement between all parties)
- Projects will continue to be ranked by TIP segment





## P2.0 Changes – Highway Projects

### **Tweaked multimodal scoring**

Added direct connection to freight intermodal terminal and military base

### **Projects to evaluate include:**

- Projects expected to be let for construction in 2018-2020 or later (years 8,9, and 10 in Draft Work Program)
- Unfunded projects submitted in P1.0
- New candidate projects (limited to 15 mobility/modernization projects for each MPO/RPO and Division)

### **No submittal of enhancement projects**

**Continue to submit CMAQ projects – evaluated by TPB**





## **P2.0 Tentative Schedule**

Now – June 2011: Develop Prioritization 2.0 System

March - April: Outreach/Education Meetings across State on Prioritization 2.0

April 2011: Launch Partner Connect

June 2011: MPOs, RPOs, Divisions, & Internal BUs submit new projects (1 month)

July – August 2011: SPOT QAs/QCs all projects and calculates quantitative scores.

September – October 2011: MPOs, RPOs, & Divisions rank projects (2 months)

- Note: Final 10 YR Work Program (2011-2020) is expected to be adopted in August

Late Fall 2011: Project Rankings Released

Winter 2011/2012: Investment Strategy Summits

Winter 2012: Develop Draft 10YR Work Program

Spring 2012: Release Draft 10YR Work Program





## Feedback From Survey and Listening Sessions for Highways

**No strong consensus to overhaul any one particular area**

**Support and opposition to benefit/cost, local contribution and economic impact analysis factors**

- Concern about penalizing rural areas
- Also support for each factor, especially for large and more urban projects

**Support to have Safety & Infrastructure Health projects ranked by data (but desire some input on Safety projects)**

**Conflicting feedback for data-driven approach for CMAQ and Enhancement projects**





## Feedback From Survey and Listening Sessions for Highways

Support to keep rank by segment vs. by TIP limits

Concern about definitions and calculations of each scoring criteria - participants indicated more info needed

Survey results provide conflicting picture from Listening Sessions feedback

171 people took survey; not all respondents answered every question

4 listening sessions: Raleigh, Kinston, Greensboro, Morganton; ~150 participants





## **HIGHWAY – Scoring P2.0**

**Total Score = Quantitative Data + Local Input + Multimodal Pts**

**Projects scored as either Mobility or Modernization**

**Quantitative Data varies for Mobility and Modernization projects**

**Local Input Ranking includes MPO/RPO Rank and Division rank**

**Multimodal Points based on multimodal characteristics included in project**



## HIGHWAY – Scoring P2.0

**Total Score = Quantitative Data + Local Input + Multimodal Pts**

### Quantitative Data

- **Congestion** (Volume/Capacity Ratio + AADT)
- **Safety Score** (Critical Crash Rates, Crash Density, Severity)
- **Pavement Score** (Pavement Condition Rating)
- **Benefit/Cost** (Travel Time Savings / Project Cost)
- **Economic Competitiveness** (Economic Value Added in \$)
- **Lane Width** (Existing Width vs. Standard Width)
- **Shoulder Width** (Existing Width vs. Standard Width)

### Mobility

### Modernization

- |   |   |
|---|---|
| ✓ | ✓ |
| ✓ | ✓ |
| ✓ | ✓ |
| ✓ |   |
| ✓ |   |
|   | ✓ |
|   | ✓ |

### Local Input Ranking

- MPO/RPO Rank (use local methodology)
- Division Rank (use knowledge of area)



## Scoring for Highway Mobility Projects

Tier	<u>QUANTITATIVE</u>	<u>LOCAL INPUT</u>	
	Data	Division Rank	MPO/RPO Rank
Statewide	Congestion = 20% Benefit/Cost = 20% Safety = 10% Pavement Condition = 10% <u>Economic Competiveness = 10%</u> <b>Total = 70%</b>	20%	10%
Regional	Congestion = 20% Benefit/Cost = 15% Safety = 5% Pavement Condition = 5% <u>Economic Competiveness = 5%</u> <b>Total = 50%</b>	25%	25%
Subregional	Congestion = 20% Safety = 5% <u>Pavement Condition = 5%</u> <b>Total = 30%</b>	30%	40%



## HIGHWAY – Benefit/Cost

**20% for Statewide Tier Mobility projects**  
**15% for Regional Tier Mobility projects**

### Benefits

- Based on travel time savings the project is expected to provide
- Travel time savings = difference between 2009 v/c and 2009 v/c with project
- Travel time savings multiplied by number of daily users (AADT) for 30 years

### Cost

- Based on latest DOT cost estimate if available
- Where no DOT cost est. is available, use cost estimate spreadsheet
  - During QA/QC process (July – August) SPOT will verify with Divisions on reasonableness of estimate





## HIGHWAY – Economic Competitiveness

**10% for Statewide Tier Mobility projects**

**5% for Regional Tier Mobility projects**

### Uses TREDIS

- Primary input is change in VHT (calculated from travel time savings)
- Output is value added based on % change in Division
  - Includes jobs created, wages increased, increased productivity
- Includes forecasted data (from Moody's)
  - Background baseline growth





## Modernization Projects

### Modernization projects

- Upgrade roadway
- Widen roadway lane and/or shoulder width
- Add turn lanes and resurface
- Upgrade to design standards (including interstate standards)
- On-road bicycle improvements (larger projects, > \$1M)
- No new travel lanes/through capacity

**In P1.0 projects were categorized as Infrastructure Health**

### In P2.0

- Separate category with separate scoring
- Will include both quantitative score and local input rank
- Quantitative score based on lane width, shoulder width, congestion, safety, and pavement condition rating





# Scoring for Highway Modernization Projects

Tier	<u>QUANTITATIVE</u>	<u>LOCAL INPUT</u>	
	Data	Division Rank	MPO/RPO Rank
Statewide	Lane Width = 20% Shoulder Width = 20% Safety = 10% Congestion = 10% <u>Pavement Condition = 10%</u> <b>Total = 70%</b>	20%	10%
Regional	Lane Width = 15% Shoulder Width = 15% Safety = 10% Congestion = 5% <u>Pavement Condition = 5%</u> <b>Total = 50%</b>	25%	25%
Subregional	Lane Width = 10% Shoulder Width = 10% <u>Safety = 10%</u> <b>Total = 30%</b>	30%	40%



## Modernization Projects – Lane Width & Shoulder Width

### Lane Width

- Comparison between existing vs. DOT design standard
- 1 ft difference = 25 pts
- 2 ft difference = 50 pts
- 3 ft difference = 75 pts
- 4+ ft difference = 100 pts

### Shoulder Width

- Comparison between existing vs. DOT design standard
- Scoring the same as Lane Width





## On-Road Bicycle Projects

Submitted/Evaluated as either a Bike & Ped project OR Modernization project

DOT will review all on-road projects and may shift projects between Bike & Ped and Modernization based on:

- Project scope (i.e., involves more than just adding bike lanes/stripping, such as horizontal or vertical roadway realignment)
- Cost (projects above \$1,000,000 will be considered Modernization)
- Any shifts will occur prior to MPO/RPO/Division ranking window

SPOT will provide examples/guidance prior to project submittal





## Local Input Ranking – Options (formerly Qualitative Ranking)

In P1.0 → MPOs/RPOs and Divisions ranked top 25 projects

- Top 25 totaled 1,300 pts (100 + 96 + 92 ... + 4)

In P1.0 → Divisions and MPOs/RPOs ranked same # of projects, even though Divisions encompass multiple POs

To increase flexibility with local input ranking, Control Total options proposed

Proposed options for Local Input Ranking:

1. Control Total based on Equal Points per Area
2. Control Total based on Equal Share & Population
3. Continue to use Top 25 ranking

Note: Ranking will be used for all Highway projects (Mobility & Modernization)





## Local Input Ranking – Control Total w/Equal Points per Area

Each MPO/RPO & Division receives equal # of pts → 1,300

Can choose between Top 25 project ranking (for easy explanation to TCC/TAC reps) or Control Total (no limit on # of project rankings)

Top 25	OR	Control Total
#1 = 100		Can rank as projects as desired
#2 = 96		Max 100 pts per project
#3 = 92		Min 4 pts per project
...		
#25 = 4		

Note: Person entering local rank into DOT system will enter as points



## Ranking Projects Outside Your Area

**MPOs/RPOs & Divisions can transfer up to 100 points per project to another area if a project is a high priority**

**Regardless of scenario, project cannot score more than 100 pts**

**Must be agreement between giving and receiving organizations**

- SPOT will make actual transfer in system

Example A	Example B
<ul style="list-style-type: none"> <li>• Piedmont Triad RPO wishes to rank Project I-9000 in Greensboro MPO.</li> <li>• Greensboro MPO gives I-9000 30 pts.</li> <li>• Piedmont Triad RPO can transfer up to 70 pts if agreement w/ Greensboro MPO.</li> </ul>	<ul style="list-style-type: none"> <li>• Kerr-Tar RPO wishes to rank new Project in CAMPO.</li> <li>• CAMPO does not give new Project any pts.</li> <li>• Kerr-Tar RPO can transfer up to 100 pts if agreement w/CAMPO.</li> </ul>



## Multimodal Scoring (Mobility & Modernization Projects)

**Bonus Points** if the **highway** project includes one or more of the following new or additional multimodal components (select all that apply).

### Multimodal Options → 8 points:

HOV / HOT, light rail, bus rapid transit, or bus-on-shoulder w/in the highway ROW

### Multimodal Connections → 5 points:

Direct connection to a transportation terminal (airport, seaport, rail depot, ferry terminal, transit terminal, freight intermodal terminal, or military base)

### Multimodal Design Features → 3 points:

Sidewalks, pedestrian crossings, striped bicycle lanes, wide outside shoulders (greater than or equal to two feet), bus pullouts, transit bypass lanes, transit signal prioritization, bus shelters

*Multimodal Projects must be ranked and must be included in an adopted Comprehensive Transportation Plan, Long Range Transportation Plan, or a mode-specific plan to receive pts.*



## **HIGHWAY - TIP Segments vs. Entire Project**

**Survey = 59% (out of 61 respondents) say rank by Segments**

**Listening Sessions = More support for Segments, but not all agreed**

### **Continue to rank projects by TIP Segment**

- Allows for areas to show priority
- Combined with use of Control Points, allows for areas to rank segments equally if desired





## Project Submittal

### In P1.0

- No limit on new candidate projects (could rank up to 25)
- Over 300 new candidate projects (out of 1100 total highway projects)
- \$45B in highway needs vs. \$9B in revenue

### In P2.0

- Limit new candidate Mobility and Modernization projects to 15 (total) per MPO/RPO and Division
- No limit on Infrastructure Health and Safety projects (projects will be submitted to respective NCDOT units)





## **CMAQ Projects**

**Still be submitted through Prioritization 2.0 Process**

**Will be option to identify as CMAQ Project**

**Local organization will still complete an application and attach it to SPOT template.**

**Department will score and rank CMAQ projects at Statewide and Regional level (DOT matched projects and projects which span more than one air quality area).**





## Enhancement Projects

**No Change – no prioritization process**

**NCHRP is undertaking a research effort to determine if a prioritization process for enhancement program is feasible.**

**Will await results of NCHRP effort.**

**No call for enhancement projects is on the horizon.**

**Enhancement projects will not be accepted in P2.0**





## Highway Projects to be Prioritized in P2.0

Projects expected to be let for construction in 2018-2020 or later  
(years 8,9, and 10 in Draft Work Program)

Projects not funded/unprogrammed in P1.0

Limited number of projects that have slipped from years 1-7

New candidate Mobility and Modernization projects (up to 15 total)





# Bike and Pedestrian Prioritization 2.0

## Contact Information

**John Vine-Hodge**

Phone: 919.807.0772

Email: [javinehodge@ncdot.gov](mailto:javinehodge@ncdot.gov)





## Bicycle and Pedestrian Prioritization 2.0

### Bicycle Improvements (on-road bike facilities and multi-use paths) & Pedestrian Improvements (separate category but similar criteria)

**Right-of-Way Acquired – 10 points max.** Self explanatory.

**Connectivity – 10 points max.** direct access to transit/school/CBD/high density residential or commercial area/park linked to a larger system of interconnected bicycle/multi-use facilities

**Inclusion in an Adopted Plan – 10 points max.** Recognition of a project in an adopted pedestrian plan illustrates that the project has been professionally evaluated and its value to the community established. Public involvement with plan development and local adoption also indicates community support.

**Bicycle or Pedestrian Crashes – 1 point max.** Crash data can be provided by the NCDOT Safety Planning Group. Projects that attempt to address a safety concern can receive additional points. 3 or more bicycle/vehicle crashes or pedestrian/vehicle crashes within last 5 yrs.

**MPO/RPO Ranking – 25 points max. Rank Top 5 Projects. #1 = 25, #2 = 20, etc.**





## Bicycle and Pedestrian Prioritization 2.0

### Additional Consideration Factors (especially for equal scoring projects):

**Demand** – Persons per square mile within 0.5 miles of a pedestrian facility and/or 1.5 miles of a bicycle facility. Employment density will also be utilized depending on data availability. Equal demand scores will be ranked by MPO/RPO size.

**Division Input-** Highway Division and DBPT will review projects for identification of any constructability issues or other concerns.

- \* Also each MPO & RPO will be able to submit **additional projects** based on size and population
  - *Any additional projects will **not** received MPO/RPO points*





# Rail Prioritization 2.0

## Contact Information

**Cheryl Hannah**

Phone: 919.733.7245 x 276

Email: [cwhannah@ncdot.gov](mailto:cwhannah@ncdot.gov)





# Rail Division Prioritization Process 2.0

## Passenger/Freight Rail: \$6 Million/year

Based on service frequency and capacity analysis the projects that advance High Speed Rail (HSR) & connections to HSR are ranked 1-25 by Rail Division\* Also, Rail Division may apply for CMAQ and TE funds if projects match funding windows. (Mobility Goal)

## Highway Grade Crossing: \$6 Million/year

Based on the Investigative Index rail crossings are ranked 1-25 by Rail Division (Safety Goal).

## Rail Industrial Access (\$1 Million/year) & Short Line Projects (\$2 Million/year)

Based on a prescribed funding formula and state funding, grants for rail industrial access and shortline railroads are awarded by the Division until the allocation is exhausted\*\* (Infrastructure Health Goal).

\* ranking subject to change based on federal grant criteria

\*\*projects not included in STIP as they are analyzed when received in the Rail Division





# Public Transit Prioritization 2.0

## Contact Information

**Bill Barlow**

Phone: 919.733.4713 x 227

Email: [wrbarlow@ncdot.gov](mailto:wrbarlow@ncdot.gov)





# Public Transportation Prioritization 2.0

**Increase in Service Hours**

Percent increase system-wide after project

**Synchronized Connections**

Points for new connections, i.e. new park and ride, transit hub, etc

**Investment In Technology**

Percent increase in dollars spent on info technology, i.e. vehicle tracking

**Decrease in Average Age of Fleet and Facilities**

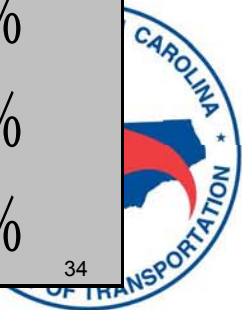
Percent improvement in life of equipment





## Weighting - Growing Public Transportation solutions

TIER	GOALS	State	Local
STATEWIDE	All	75%	25%
REGIONAL	Mobility	25%	75%
	Infrastructure Health	10%	90%
	Safety & Security	25%	75%
SUBREGIONAL	Mobility	10%	90%
	Infrastructure Health	10%	90%
	Safety & Security	25%	75%





# Ferry Prioritization 2.0

## Contact Information

**Charles Fearing**

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Email: [cfearing@ncdot.gov](mailto:cfearing@ncdot.gov)





## Ferry Division Prioritization 2.0

Vessel  
Name

Engines  
&  
Equipment  
20%

Steel  
20%

Plumbing  
20%

Age  
20%

Electrical  
10%

Transport  
Capacity  
10%





M/V Hyde				
Measured Component	Rating	Value	Weighted Score	
Engine	3	20%	0.6	
Steel	1	20%	0.2	
Plumbing	1	20%	0.2	
Age	1	20%	0.2	
Electric	3	10%	0.3	
Transport Capacity	5	10%	0.5	
<b>Weighted Score</b>			<b>1.8</b>	





# Bridge, Ramp, Gantry, & Dolphin Evaluation System

Bridge, Ramp  
Gantry,  
& Dolphins

Structure  
50%

Mechanical  
50%





# Infrastructure Evaluation System

Structure  
Name

General  
Building  
Condition  
35%

Electrical  
15%

Plumbing  
15%

HVAC  
15%

Roof  
10%

Foundation  
10%





# Aviation Prioritization 2.0

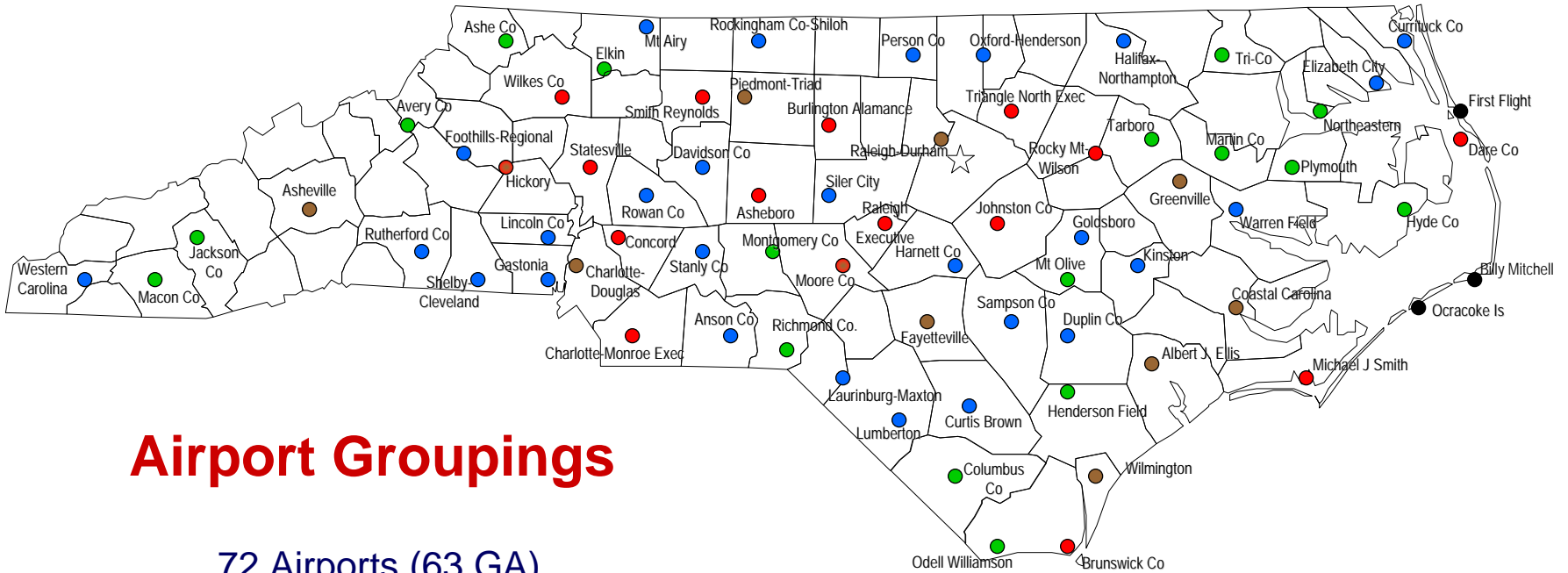
## Contact Information

**Bobby Walston**

Phone: 919.840.0112

Email: [bwalston@ncdot.gov](mailto:bwalston@ncdot.gov)





# Airport Groupings

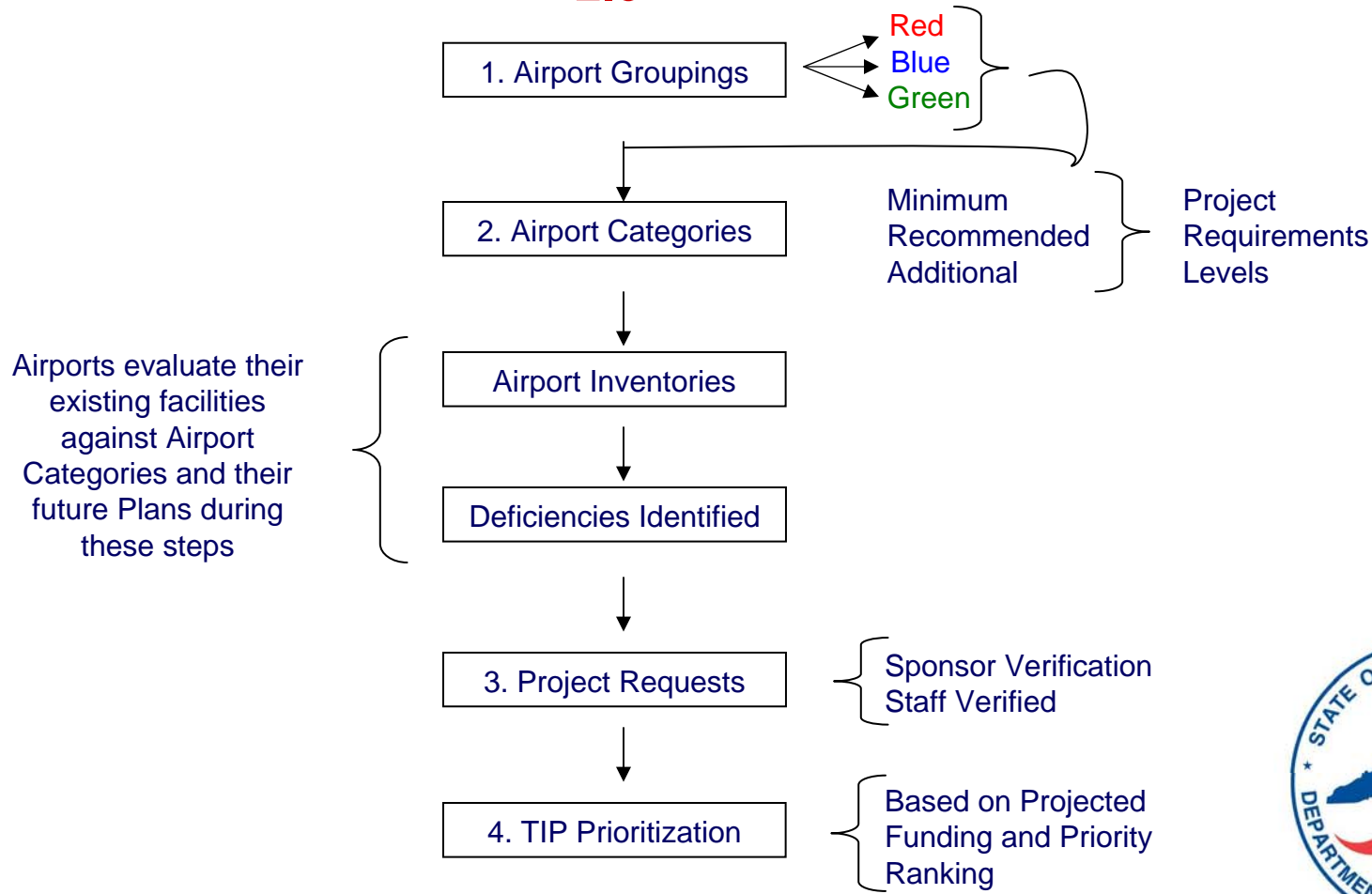
72 Airports (63 GA)

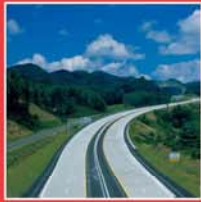
- RED – Regional/Business - 16
- BLUE – Community with Business Aircraft Capability - 27
- GREEN – Small Community - 17
- BROWN – Commercial Service - 9
- BLACK – National Parks Service - 3





# Aviation Division Prioritization 2.0





# Airport Categories

NCDOT Goals

SAFETY

- Runway Approach
- Runway Safety Area (RSA)
- Runway Protection Zones
- Visual Navigational Aids
- Runway Edge Lighting
- Weather Reporting Capability
- Taxiway and Apron Edge Lighting
- Airfield Signage
- Ground Communication
- Approach Lighting
- Aircraft Rescue & Fire Fighting (ARFF) Equipment
- Perimeter Fencing

INFRASTRUCTURE HEALTH

- Pavement Condition
- Airfield Maintenance Equipment & Storage Building

MOBILITY

- Runway Length
- Pavement Strength
- Standard Instrument Approach Procedures (SIAP)
- Taxiway Requirements
- Aircraft Apron Requirements
- Terminal Building





## Step 4 - TIP Prioritization

Finally, in the TIP Prioritization step, the master list of all GA airport project requests statewide in the Aviation Project Request database are sorted in priority order. A shortlist of projects are selected based on available funding and project merits.





## **P2.0 Tentative Schedule**

Now – June 2011: Develop Prioritization 2.0 System

March 2011: Launch Partner Connect

March - April: Outreach Meetings across State on Prioritization 2.0

June 2011: MPOs, RPOs, Divisions, & Internal BUs submit new projects (1 month)

July – August 2011: SPOT QAs/QCs all projects and calculates quantitative scores.

September – October 2011: MPOs, RPOs, & Divisions rank projects (2 months)

- Note: Final 10 YR Work Program (2011-2020) is expected to be adopted in August

Late Fall 2011: Project Rankings Released

Winter 2011/2012: Investment Strategy Summits

Winter 2012: Develop Draft 10YR Work Program

Spring 2012: Release Draft 10YR Work Program



### Financial Modeling Meetings

- Choose Projects and timetable
- Balance Bus and Rail
- Assumptions

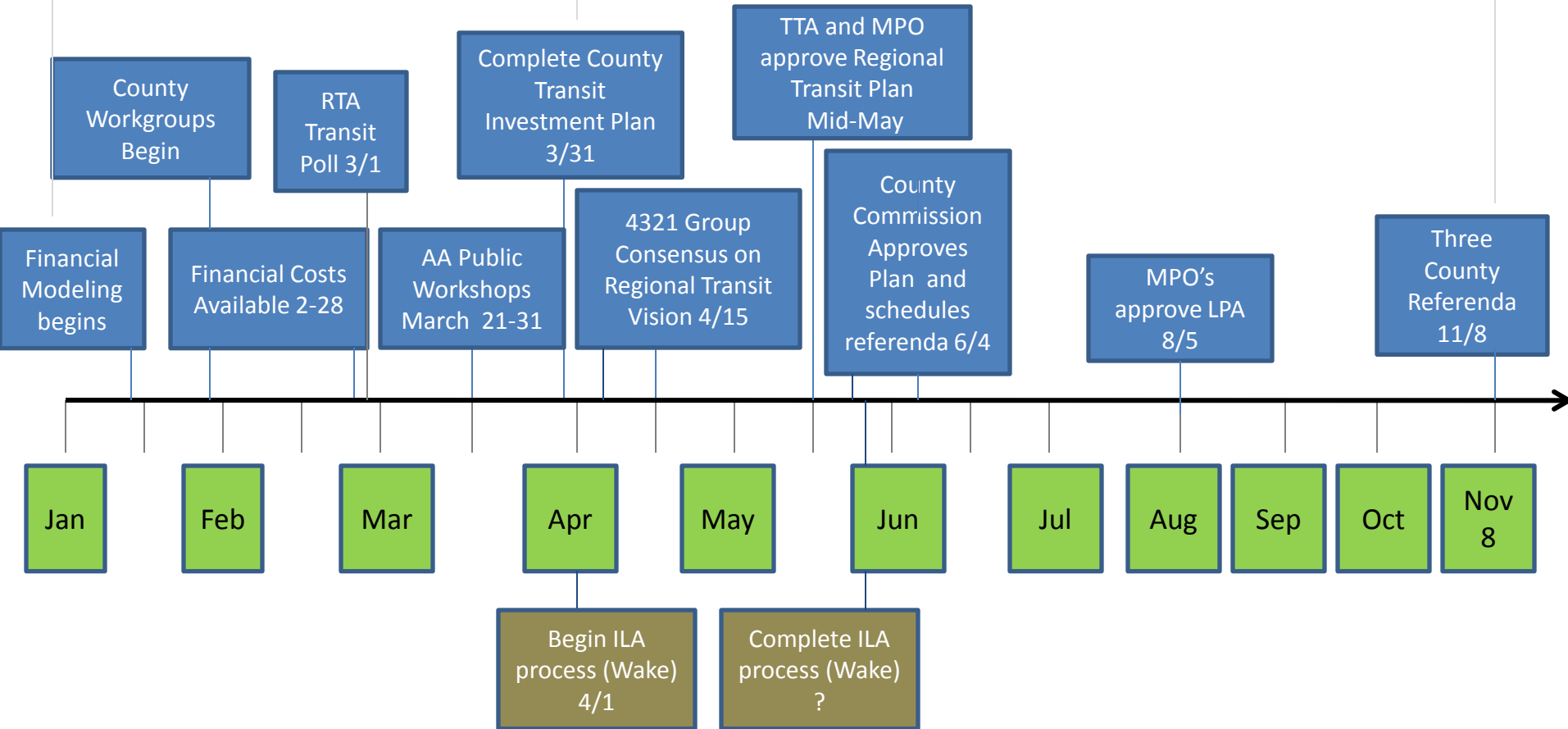
### Approval Process

- TTA Board
- County Commission
- DCHC and CAMPO

### Public Education Campaign

- Business Community
- Grassroots Organizations
- Media

# DRAFT



**RESOLUTION**

**TO APPROVE AMENDMENT #2 TO THE FY 2010-2011 UNIFIED PLANNING WORK PROGRAM OF THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)**

**March 23, 2011**

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

**WHEREAS**, A comprehensive and continuing transportation planning program must be carried out cooperatively in order to ensure that funds for transportation planning projects are effectively allocated to the DCHC MPO; and

**WHEREAS**, The Durham-Chapel Hill-Carrboro MPO requests an amendment to the 2010-2011 UPWP as outlined on the attached tables; and

**WHEREAS**, Members of the Transportation Advisory Committee agree that the Unified Planning Work Program amendment effectively advances transportation planning for 2010-2011.

**Now, therefore, be it resolved that the Transportation Advisory Committee hereby endorses Amendment #2 of the Durham-Chapel Hill-Carrboro Urban Area Unified Planning Work Program for the FY 2010-2011 as described in the attached sheets.**

I, Lydia E. Lavelle, TAC Chair, do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Durham-Chapel Hill- Carrboro Urban Area Transportation Advisory Committee, duly held on the 23<sup>rd</sup> day of March, 2011.

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

Durham County, North Carolina

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

Date: March 23, 2011

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



MPO-Wide Detail Funding Tables  
Amendment #2 Details

Task Description	Task Funding Summary																			
	AMENDMENT #2 PROPOSED CHANGES																			
	SPR Highway			STP-DA 133(b)(3)(7)			Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Section 5309 Transit					
	NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 25%	NCDOT 25%	FTA 50%	Local	NCDOT	Federal	Total	
<b>III A</b>																				
Surveillance of Change																				
1 Traffic Volume Counts	0	0	0	0	0	0	0	0	0	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	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
4 Traffic Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Transit System Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Dwelling Unit, Pop. & Emp. Change	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
8 Vehicle Occupancy Rates	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	(10,960)	(43,838)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Mapping	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0
13 Bike & Ped. Counts	0	0	(4,650)	(18,600)	(96)	(384)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>III B</b>																				
Long Range Transp. Plan																				
1 Collection of Base Year Data	0	0	(8,100)	(32,400)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Collection of Network Data	0	0	(96)	(384)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Travel Model Updates	0	0	(12,500)	(50,000)	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
5 Forecast of Data to Horizon year	0	0	(3,550)	(14,200)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Community Goals & Objectives	0	0	(5,250)	(21,000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Forecast of Future Travel Patterns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Capacity Deficiency Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Highway Element of th L RTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Transit Element of the L RTP	0	0	(3,888)	(15,550)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Bicycle & Ped. Element of the L RTP	0	0	(9,500)	(38,000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Airport/Air Travel Element of L RTP	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 L RTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Rail, Water or other mode of L RTP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 Freight Movement/Mobility Planning	0	0	(3,017)	(12,068)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 Financial Planning	0	0	0	0	(4,544)	(18,176)	4,544	4,544	36,352	0	0	0	0	0	0	0	0	0	0	0
17 Congestion Management Strategies	0	0	(7,500)	(30,000)	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
<b>III C</b>																				
Short Range Transit Planning																				
1 Short Range Transit Planning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>III A</b>																				
Planning Work Program																				
1 Planning Work Program	0	0	3,750	15,000	2,983	11,937	2,983	2,983	23,866	(2,983)	(2,983)	(23,866)	0	0	0	0	0	0	0	0
<b>III B</b>																				
Transp. Improvement Plan																				
1 Transp. Improvement Plan	0	0	160	640	239	960	239	239	1,912	(239)	(239)	(1,912)	0	0	0	0	0	0	0	0
<b>III C</b>																				
Cvl Rgts. Cmp./Otr. Reg. Reqs.																				
1 Title VI	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	(64)	(256)	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
4 Planning for the Elderly & Disabled	0	0	138	550	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
6 Public Involvement	0	0	(5,000)	(20,000)	(64)	(256)	1,322	1,322	10,574	(1,322)	(1,322)	(10,574)	0	0	0	0	0	0	0	0
7 Private Sector Participation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>III D</b>																				
Incidental Plng./Project Dev.																				
1 Transportation Enhancement Plng.	0	0	160	640	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
3 Special Studies	0	0	(50,000)	(200,000)	5,608	22,432	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
<b>III E</b>																				
Management & Operations																				
1 Management & Operations	0	0	5,000	20,000	(256)	(1,024)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	\$0	\$0	(\$115,027)	(\$460,106)	\$5,352	\$21,408	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0



***Congestion Management Process  
Procedures and Responsibilities  
Report (DRAFT)***

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

***November 2010***

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## **1. Introduction**

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

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

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

### **1.1. Background**

#### **a) Legislative Background**

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

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

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

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<sup>1</sup> Public Law 109–59, 109th Cong., August 10, 2005

### b) Requirements

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

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

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

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

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

### 1.2. Outreach

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

#### a) Stakeholders

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

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

b) Technical Steering Committee

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

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

c) Public

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

### **1.3. CMP Goals and Objectives**

a) Goals

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

b) Objectives

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

**Table 1.1 LRTP Goals and Objectives that Relate to the CMP**

Goals	ID	Objectives	MOE
Overall Transportation System	L-1.1	- Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services, activities, and destinations.	N/A
	L-1.2	- Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.	Benefit-Cost Ratio
	L-1.3	- Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.	N/A
	L-1.4	- Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.	Person-to-Capacity ratios, by facility and mode
Multi-Modal Street and Highway System	L-2.1	- Establish performance standards and report on the condition and effectiveness of the multimodal street and highway system.	N/A
	L-2.2	- Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.	N/A
Public Transportation System	L-3.1	- Establish performance standards and report on the condition and effectiveness of the public transportation system.	N/A
	L-3.2	- Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.	N/A
Pedestrian and Bicycle System	L-4.1	- Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.	N/A
	L-4.2	- Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.	N/A
	L-4.3	- Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.	N/A
Public Involvement	L-7.1	- Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.	Number of Meetings and Contacts
Safety and Security	L-8.1	- Reduce fatality, injury, and crash/incident rates on all modes.	Fatality & Crash Rates, Local transit crashes, Bike/Ped incidents/injuries
Freight Transportation and Urban Goods Movement	L-9.1	- Relieve congestion on heavily-traveled truck routes.	Percentage of truck VMT under congested conditions / in off-peak

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

**Table 1.2 CMP Objectives**

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

#### 1.4. Study Area

##### a) Geographic Coverage

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

b) CMP Network

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

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

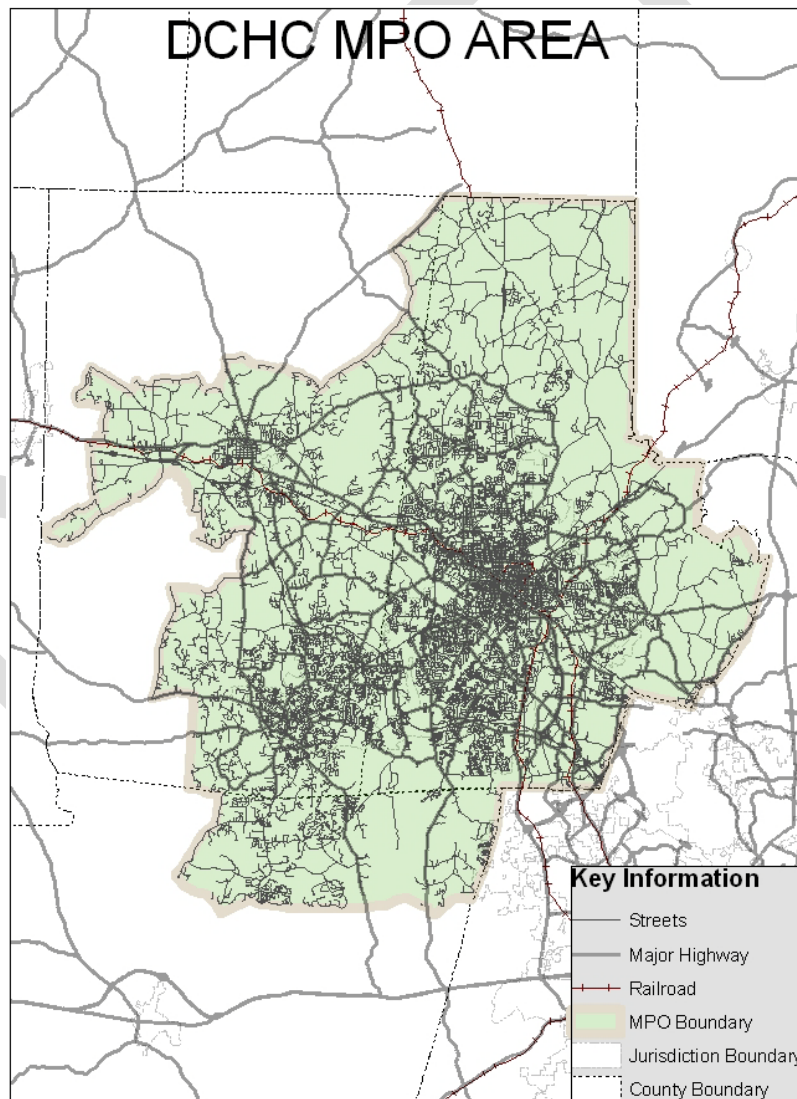


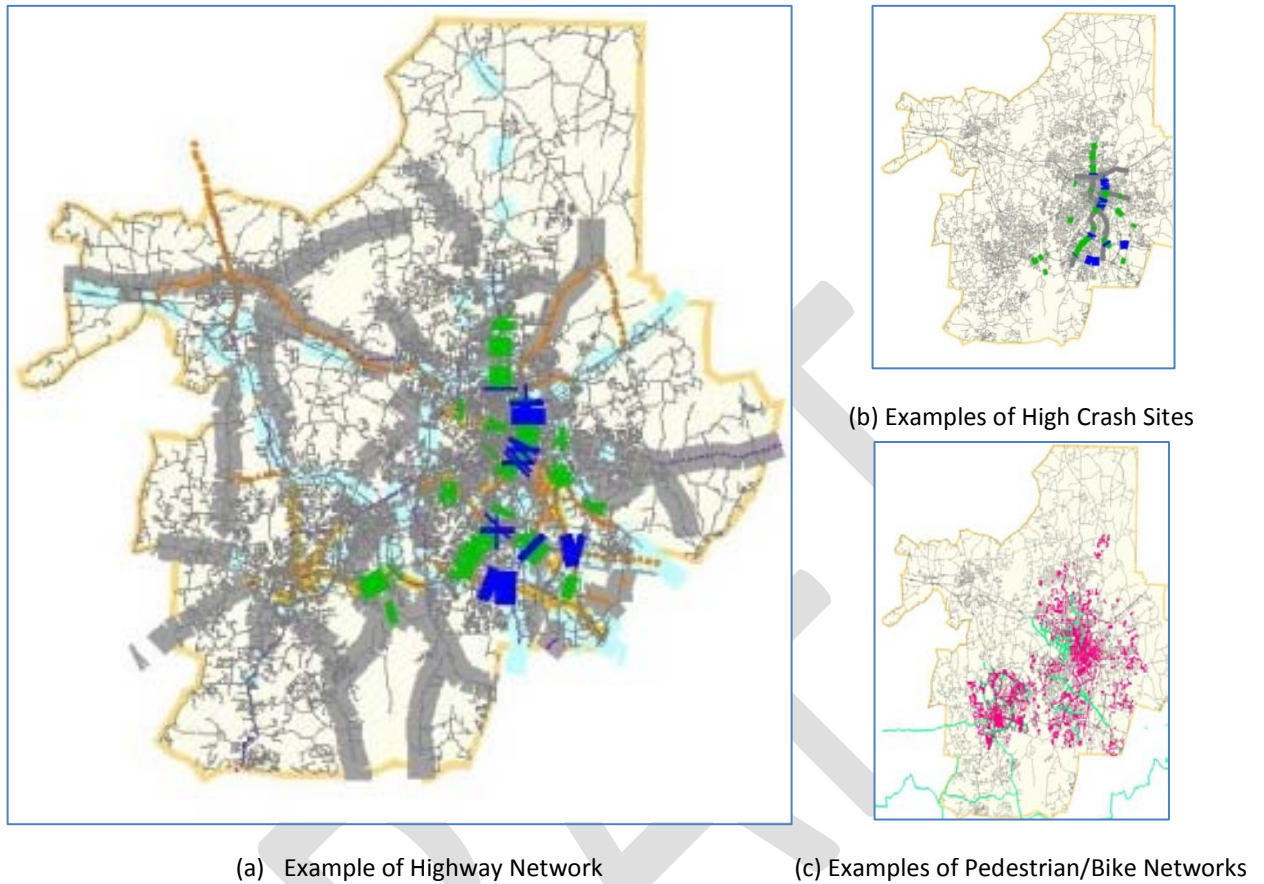
Figure 1.1 CMP Geographic Coverage

**Table 1.3 Network Selection Criteria and CMP Network**

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

c) CMP Tier System

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



**Figure 1.2 CMP Network**

**Table 1.4 CMP Three Tier-Systems**

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

\* More detailed selection criteria are explained in Appendix B.

## **2. CMP Steps**

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

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

1. **Develop Performance Measures:** Performance measures are determined through a cooperative effort. The measures are used in all steps of the process. In this step, guidelines are also identified for determining congestion in terms of extent, intensity and duration and congestion-based ranking.
2. **Collect and Analyze Data:** A coordinated data collection program is to be established, using existing data sources when possible.
3. **Quantify Performance, Identify and Evaluate Alternatives:** Develop data summaries, graphics, and maps that quantify the performance of the system based on previously defined measures and associated data analysis. Expected benefits of the congestion management strategies are identified and evaluated based on the established performance measures.
4. **Select Projects:** Appropriate improvement strategies are selected. Consideration should be given to demand management, traffic operational improvements, public transportation improvements, Intelligent Transportation Systems (ITS) improvements, and where necessary, additional system capacity. Implementation schedules and responsibilities are to be identified.
5. **Monitor Improvements:** Compare before and after conditions using performance measures. Learn from the results and apply the appropriate findings to subsequent projects.

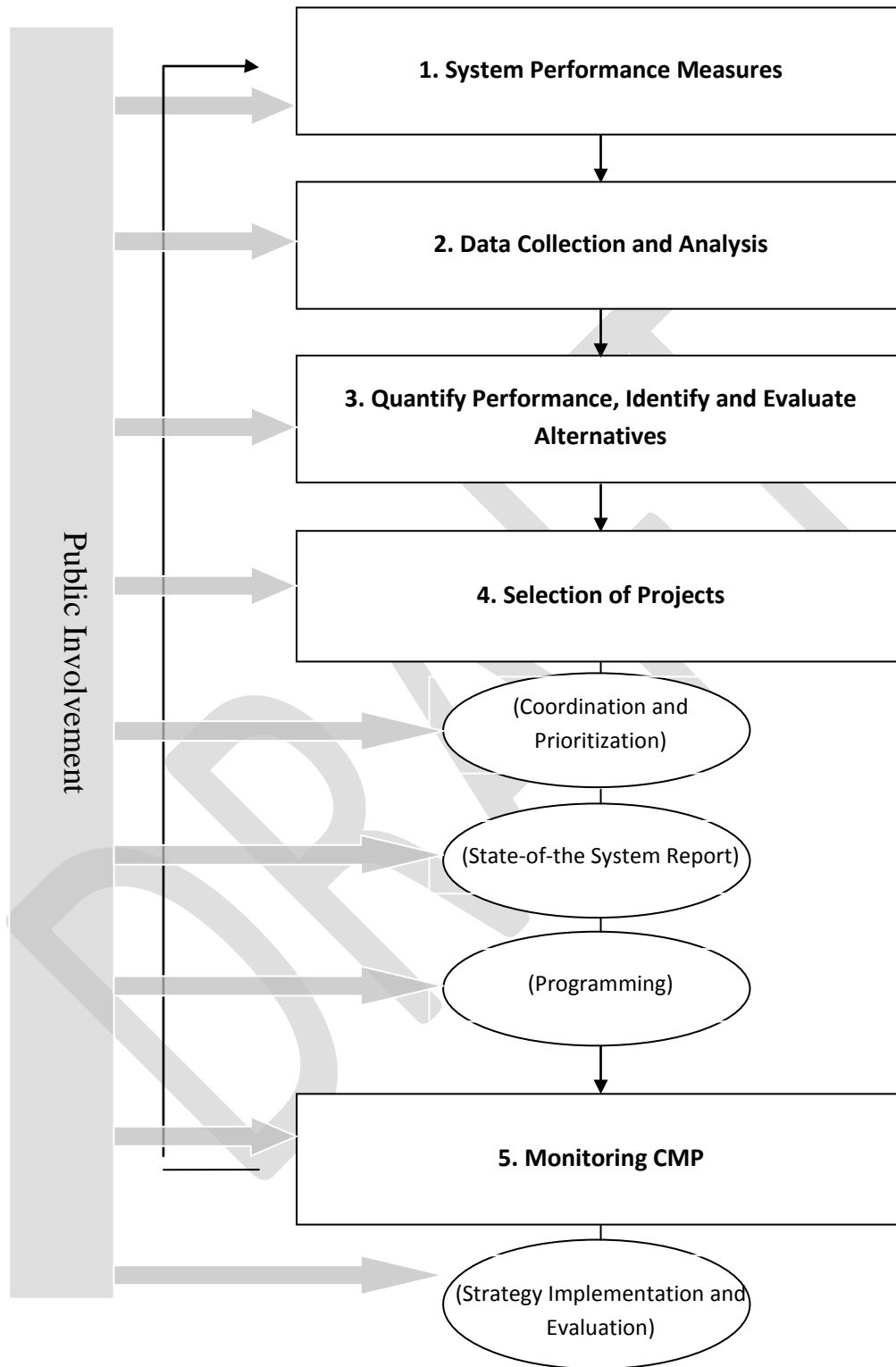


Figure 2.1 Congestion Management Process (CMP) Structure

### **3. Performance Measures**

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

#### **3.1. Identification and Evaluation of Performance Measurements**

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

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**Table 3.1 Performance Measures**

<u>Performance Measures</u>	<u>Definition</u>	<u>Units of Measurement</u>	<u>Benefits</u>	<u>Constraints</u>	<u>Data Type (Observed / Estimated)</u>	<u>Goals &amp; Objectives (ID)</u>	<u>Application Level</u>	<u>Recommendation</u>
Volume to Capacity (v/c) ratio	Measurement of average volume compared to adopted service volume or capacity.	<ul style="list-style-type: none"> <li>Roadway v/c ratio (daily and/or peak hour).</li> <li>Intersection movement v/c ratio.</li> </ul>	<ul style="list-style-type: none"> <li>Can indicate congestion. Can be flexible for multiple time periods and area types. Daily v/c can be determined using existing data by combining AADT and service volumes. Daily v/c can be used as first screen of congestion, providing a cost-effective use of limited resources.</li> </ul>	<ul style="list-style-type: none"> <li>Daily v/c may limit the identification of certain types of improvements, additional data sources are needed to determine peak-hour v/c.</li> </ul>	Estimated	C-2	Major Corridors, Intersections	Yes
Vehicle delay	Measurement of average vehicle delay of all of the movements, or average vehicle delay of an individual movement(s) during a specified time period	<ul style="list-style-type: none"> <li>Average control delay (sec/veh)</li> </ul>	<ul style="list-style-type: none"> <li>Can indicate congestion and may highlight potential safety issues.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to measure.</li> <li>Forecast data will be useful.</li> </ul>	Estimated	C-1	Corridor, Intersection	Yes
Number of lane miles that are congested	Miles of roadway that can be classified as "congested". The definition of "congested" can be customized for a particular area or facility type.	<ul style="list-style-type: none"> <li>Lane miles of congested roadways.</li> <li>Percent of congested roadways (congested/total x 100%).</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of severity of congestion. Can be used to determine percentage of total lane miles that are congested.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to measure. There are no existing data sources. While this is a useful areawide indicator, it does not identify specific constraints, or causes.</li> </ul>	Observed	C-1, C-2	System wide	No
Duration of Congestion	Time duration where pre-defined sections can be classified as "congested".	<ul style="list-style-type: none"> <li>Hours of congestion.</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of severity of congestion, can be used to determine percentage of time that a facility is congested.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to measure. There are no existing data sources. Does not identify specific constraints, causes, or needed improvements.</li> </ul>	Observed	C-2	Interstates	Yes
Percent of daily miles traveled under congested conditions	The percentage of travel distance that is spent under congested conditions.	<ul style="list-style-type: none"> <li>Percent of congestion.</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of severity of congestion.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to measure. While this is a useful areawide indicator, it does not identify specific constraints, causes, or needed improvements.</li> </ul>	Estimated	C-2, C-7	Major Corridors, Interstates	For future consideration
Daily vehicle miles	Miles traveled throughout the region.	<ul style="list-style-type: none"> <li>Miles traveled per average vehicle. Total miles traveled.</li> </ul>	<ul style="list-style-type: none"> <li>Can be derived from AADT or TRM</li> </ul>	<ul style="list-style-type: none"> <li>Takes more effort than AADT, but is not more informative.</li> </ul>	Estimated	C-1, C-7	Systemwide	For future consideration

<u>Performance Measures</u>	<u>Definition</u>	<u>Units of Measurement</u>	<u>Benefits</u>	<u>Constraints</u>	<u>Data Type (Observed / Estimated)</u>	<u>Goals &amp; Objectives (ID)</u>	<u>Application Level</u>	<u>Recommendation</u>
Average Delay – recurring	Average vehicle delay that occurs at a typical time-of-day and day-of-week.	<ul style="list-style-type: none"> <li>• Vehicle-hours.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicates average congestion. Can be measured over different area types, time periods, and facilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Delay is difficult to calculate when v/c ratios are exceeded.</li> </ul>	Observed / Estimated	C-1, C-7	Systemwide, Major Corridors	For future consideration
Average Speed	Average travel speed.	<ul style="list-style-type: none"> <li>• Miles per hour.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicates average congestion. Can be measured over different area types, time periods, and facilities. Easily understood.</li> </ul>	<ul style="list-style-type: none"> <li>• Speed is difficult to calculate when congestion exists.</li> </ul>	Observed / Estimated	C-1, C-7	Systemwide, Major Corridors	Yes
Person Miles of Travel	Total miles traveled per person (miles per vehicle times occupancy).	<ul style="list-style-type: none"> <li>• Miles per person.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a region-wide indicator of transportation demand.</li> </ul>	<ul style="list-style-type: none"> <li>• Does not identify mode split, potential for demand management, or congested locations.</li> </ul>	Estimated	C-1, C-7	Systemwide	For future consideration
Travel Time Index (TTI)	Ratio of actual travel time to uncongested travel time.	<ul style="list-style-type: none"> <li>• Unitless; the measurement is an index. 1.0 indicates no congestion.</li> <li>• Travel Time</li> <li>• Speed Limit</li> </ul>	<ul style="list-style-type: none"> <li>• Qualifies average travel time data. Can be used to calculate average travel speed as a percent of the speed limit (or 15 percentile of free flow speed).</li> </ul>	<ul style="list-style-type: none"> <li>• Requires travel speed data.</li> </ul>	Observed	C-1	Systemwide, Major Corridors	Yes
Buffer Index (BI)	Buffer Index measures the amount of time added to an average trip to ensure on-time arrival for 95% of trips. Buffer Index indicates predictability.	<ul style="list-style-type: none"> <li>• Unitless; the measurement is an index. 0.0 indicates no volatility.</li> </ul>	<ul style="list-style-type: none"> <li>• Can indicate instability and areas with higher potential for nonrecurring congestion.</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to measure. Needs extensive data collection and processing.</li> </ul>	Observed	C-1, C-2	Systemwide, Major Corridors	No
Planning Index (PI)	This measurement is an indicator of the total time required to arrive on time. It is calculated by combining TTI and BI.	<ul style="list-style-type: none"> <li>• Unitless; the measurement is an index. 1.0 indicates no congestion.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicates areas with recurring and nonrecurring congestion.</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to measure. Needs extensive data collection and processing.</li> </ul>	Observed	C-1, C-2	Systemwide, Major Corridors	No
Roughness Index for pavement	A measurement of the quality of pavement conditions.	<ul style="list-style-type: none"> <li>• Unitless; the measurement is an index.</li> </ul>	<ul style="list-style-type: none"> <li>• Can identify potential contributing factor of congestion.</li> </ul>	<ul style="list-style-type: none"> <li>• Additional factors are more likely to cause congestion.</li> </ul>	Observed	-	Systemwide, Major Corridors	No

<u>Performance Measures</u>	<u>Definition</u>	<u>Units of Measurement</u>	<u>Benefits</u>	<u>Constraints</u>	<u>Data Type (Observed / Estimated)</u>	<u>Goals &amp; Objectives (ID)</u>	<u>Application Level</u>	<u>Recommendation</u>
Customer Satisfaction (User Surveys) – Bike/Ped	A qualitative measure of the opinions of people using the transportation system. This can be specific to areas.	<ul style="list-style-type: none"> <li>• Very satisfied.</li> <li>• Somewhat satisfied.</li> <li>• Neutral.</li> <li>• Somewhat dissatisfied.</li> <li>• Very dissatisfied.</li> <li>• Not applicable.</li> </ul>	<ul style="list-style-type: none"> <li>• Projects determined with user input are desirable to users.</li> </ul>	<ul style="list-style-type: none"> <li>• Collection and processing of data is relatively difficult.</li> </ul>	Observed	C-5	Systemwide, Major Corridors	For future consideration
Incident Duration	The time elapsed from notification of an incident until all evidence of the incident has been removed from the scene.	<ul style="list-style-type: none"> <li>• Minutes per incident.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicator of non-recurring congestion. Great indicator of conditions before and after improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to collect data.</li> </ul>	Observed	C-1, C-3	Systemwide, Major Corridors	For future consideration
Incident Severity	A quantitative measurement of the cost of an incident. Assumed injury costs vary by injury severity.	<ul style="list-style-type: none"> <li>• Cost per incident.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicator of potential safety concern that can lead to long incident durations</li> </ul>	<ul style="list-style-type: none"> <li>• Additional data is needed to prioritize locations, such as number of crashes per million vehicles.</li> </ul>	Observed	C-3	Major Corridors, Intersections	For future consideration
Number of crashes	Measurement of the total number of crashes at a certain location per unit of time.	<ul style="list-style-type: none"> <li>• Crashes per year.</li> </ul>	<ul style="list-style-type: none"> <li>• Indicator of nonrecurring congestion. Can identify problem areas to help focus limited resources. Can be determined using existing data sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Ignores type, cause, severity, etc. To be more useful, there is a need to determine the relationship with total volume entering the location. Additional data needed to evaluate causes.</li> </ul>	Observed	C-3	Major Corridors, Intersections	For future consideration
Crash Rate	Measurement of the total number of crashes at a certain location, compared to the total volume at the location. This measurement allows for the identification of locations that have a disproportionate number of crashes (compared to intersections with similar volumes).	<ul style="list-style-type: none"> <li>• Crashes per million entering vehicles at intersections</li> <li>• Crashes per million entering vehicles at segments</li> </ul>	<ul style="list-style-type: none"> <li>• Indicator of nonrecurring congestion. Can identify problem areas to help focus limited resources. Can be determined using existing data sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Ignores type, cause, severity, etc.</li> <li>• Additional data is needed to evaluate causes.</li> </ul>	Observed	C-3	Major Corridors, Intersections	Yes

Performance Measures	Definition	Units of Measurement	Benefits	Constraints	Data Type (Observed / Estimated)	Goals & Objectives (ID)	Application Level	Recommendation
Air quality analysis	A measure of the concentration of vehicle emissions.	<ul style="list-style-type: none"> <li>Emissions – kg, kg per year.</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of congestion.</li> </ul>	<ul style="list-style-type: none"> <li>Secondary indicator; low travel speeds and excessive delay will result in poor air quality.</li> </ul>	Estimated	-	Systemwide, Major Corridors, Intersections	Yes
Office Parking	Parking lot utilization data	<ul style="list-style-type: none"> <li>Ratio of Occupied / available parking lots</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of parking strategy</li> <li>Can divert SOV user to transit</li> </ul>	<ul style="list-style-type: none"> <li>Regarding to development of a jurisdiction’s policy</li> </ul>	Observed	C-1	Areawide	For future consideration
Bike parking	Bike parking utilization data	<ul style="list-style-type: none"> <li>Bike racks</li> <li>Bike parking lots</li> </ul>	<ul style="list-style-type: none"> <li>Can promote bike user</li> </ul>	<ul style="list-style-type: none"> <li>Secondary indicator</li> </ul>	Observed	C-5	Systemwide	For future consideration
Pedestrian Facilities	Sidewalk length	<ul style="list-style-type: none"> <li>Sidewalk length</li> <li>Sidewalk length within transit service area</li> </ul>	<ul style="list-style-type: none"> <li>Important for transit mobility and pedestrian safety</li> </ul>	<ul style="list-style-type: none"> <li>Ignores connectivity and Pedestrian density or connectivity and density of population</li> </ul>	Observed	C-5	Systemwide, areawide	Yes
Pedestrian Activity	A measure of the number of pedestrians	<ul style="list-style-type: none"> <li>Pedestrian count</li> </ul>	<ul style="list-style-type: none"> <li>what level of pedestrian activity is being experienced</li> <li>where pedestrian activity is occurring in order to better understand the reasons why there may or may not be pedestrian activity in different areas</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to understand a function for land use, facility presence, and facility design.</li> <li>Difficulty of count</li> </ul>	Observed	C-5	Systemwide, areawide	Yes
Centerline miles of bike path	Total miles of bike path	<ul style="list-style-type: none"> <li>Length of facilities</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of bicycle network</li> </ul>	<ul style="list-style-type: none"> <li>Data does not consider demand. Does not identify specific corridors or routes that should be improved.</li> </ul>	Observed	C-5	Systemwide, areawide	Yes
Bike Activity	A measure of the number of bicyclists	<ul style="list-style-type: none"> <li>Number of bicyclist</li> </ul>	<ul style="list-style-type: none"> <li>what level of bicyclist activity is being experienced</li> <li>where bicyclist activity is occurring</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to understand a function for land use, facility presence, and facility design.</li> <li>Difficulty of count</li> </ul>	Observed	C-5	Systemwide, areawide	Yes
Non-motorized traffic safety	Measurement of the total number of crashes related with pedestrian or bicyclist	<ul style="list-style-type: none"> <li>Number of pedestrian/bicycle accidents</li> </ul>	<ul style="list-style-type: none"> <li>Indicator of safer route</li> <li>Indicator of nonrecurring congestion</li> </ul>	<ul style="list-style-type: none"> <li>Ignores type, cause, severity, etc.</li> </ul>	Observed	C-5, C-3	Systemwide, major routes	For future consideration
Transit Ridership	Number of people on a transit route per unit of time.	<ul style="list-style-type: none"> <li>Riders per hour</li> </ul>	<ul style="list-style-type: none"> <li>Key performance measure when determining which routes to expand or reduce service on.</li> </ul>	<ul style="list-style-type: none"> <li>It can be difficult to forecast ridership for proposed routes.</li> </ul>	Observed	C-4	Systemwide, major routes	Yes

<u>Performance Measures</u>	<u>Definition</u>	<u>Units of Measurement</u>	<u>Benefits</u>	<u>Constraints</u>	<u>Data Type (Observed / Estimated)</u>	<u>Goals &amp; Objectives (ID)</u>	<u>Application Level</u>	<u>Recommendation</u>
Schedule Adherence	Ability of transit to adhere to the planned schedule. This is typically used to determine how to operate a route.	<ul style="list-style-type: none"> <li>Percentage of stops that are on-time</li> </ul>	<ul style="list-style-type: none"> <li>Can use adherence to identify LOS. Can be used to help determine how to run a route.</li> </ul>	<ul style="list-style-type: none"> <li>Not used to determine whether or not to increase or reduce service.</li> </ul>	Observed	C-4	Systemwide, major routes	For future consideration
Subsidized Cost of Transit	This measurement identifies the amount of money it costs to operate a route. This is the cost to the transit agency, not the cost paid by the user.	<ul style="list-style-type: none"> <li>Cost per rider</li> </ul>	<ul style="list-style-type: none"> <li>The subsidized cost per route is used to make decisions about whether a route should be run or not. Critical element in decision making process.</li> </ul>	<ul style="list-style-type: none"> <li>Cost is not a stand-alone measure. This must be used in combination with other measures.</li> </ul>	Observed	C-4	Systemwide, major routes	For future consideration
Transit Service	Measurement of transit service availability	<ul style="list-style-type: none"> <li>Annual service hours of operation</li> <li>Geographical coverage</li> <li>Population coverage</li> </ul>	<ul style="list-style-type: none"> <li>Indicates whether transit service is available</li> </ul>	<ul style="list-style-type: none"> <li>Does not consider demand.</li> </ul>	Observed	C-4	Systemwide	Yes
Availability of transit within congested corridor	Presence of a transit route or system within or adjacent to a congested corridor.	<ul style="list-style-type: none"> <li>Available/Not available. Type and frequency of transit should be specified.</li> </ul>	<ul style="list-style-type: none"> <li>Indicates whether modal split options are available.</li> </ul>	<ul style="list-style-type: none"> <li>Does not consider demand.</li> </ul>	Observed	C-4, C-1	Systemwide	For future consideration

### 3.2. Selection of Performance Measures

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

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

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

#### a) Recurring Congestion

The following recurring congestion performance measures will be selected:

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

#### b) Non-Recurring Congestion

The following nonrecurring performance measures will be selected:

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

<sup>2</sup> Available data is limited currently; Interstate only.

## **4. Monitoring Plan**

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

### **4.1. Monitoring Plan Overview**

#### **a) Data Source**

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

#### **b) Data Management**

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

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

**Table 4.1 Data Sources and Hierarchy**

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

**Table 4.2 Data Collection Challenges and Barriers**

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

### c) Reporting Procedure

#### CMP Status Report

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

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

#### WEB Based GIS Database Report

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

#### **4.2. Coordinated Data Collection**

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

##### a) Travel time and travel speeds

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

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

##### b) Traffic volume

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

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

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

Based on the locations of the segments in the Tier system, it will be categorized as annual, bi-annual, and 5th year program. Data including the vehicle classification should be collected at least during 72 consecutive hours with 15 minute time periods using the tube counter. The data and traffic counts from

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

c) Turning Movement Count

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

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

d) Pedestrian and Bicyclist Count and Satisfaction Survey

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

e) Transit ridership and satisfaction survey

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

f) Crash rate, count, and severity

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

g) Public and expert survey results

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

### 4.3. Data Analysis

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

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

**Table 4.3 LOS for At-Grade Intersections**

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

**Table 4.4 LOS for Corridors (TTI)**

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

**Table 4.5 LOS Criteria for Pedestrian Mode**

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

Source: 2010 HCM

**Table 4.6 LOS Criteria for Bicycle and Transit Modes**

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

Source: 2010 HCM

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

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

The rank system is as follows:

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

$$= \text{MAX}\{ \{ (\text{TTI}_E + \text{CT}_E + \text{D}_E) \cdot 0.80 + (\text{TTI}_P + \text{CT}_P + \text{D}_P) \cdot 0.20 \}, \{ (\text{CT}_E + v/\text{C}_E + \text{D}_E) \cdot 0.80 + (\text{CT}_P + v/\text{C}_P + \text{D}_P) \cdot 0.20 \} \}$$

Where:

ELOS = (Existing congestion)

FLOS = (Projected congestion from a operational model or TRM)

TTI<sub>E</sub> = (Existing Travel Time Index, Free flow speed/travel speed)

CT<sub>E</sub> = (Duration of existing congestion)

$v/c_E$  = (Existing volume/capacity)

$D_E$  = (Existing control delay / 120)

$TTI_p$  = (Projected Travel Time Index, Free flow speed/travel speed)

$CT_p$  = (Duration of projected congestion)

$v/c_p$  = (Projected volume/capacity)

$D_p$  = (Projected control delay / 120)

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

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

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

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

## **5. Problem Identification**

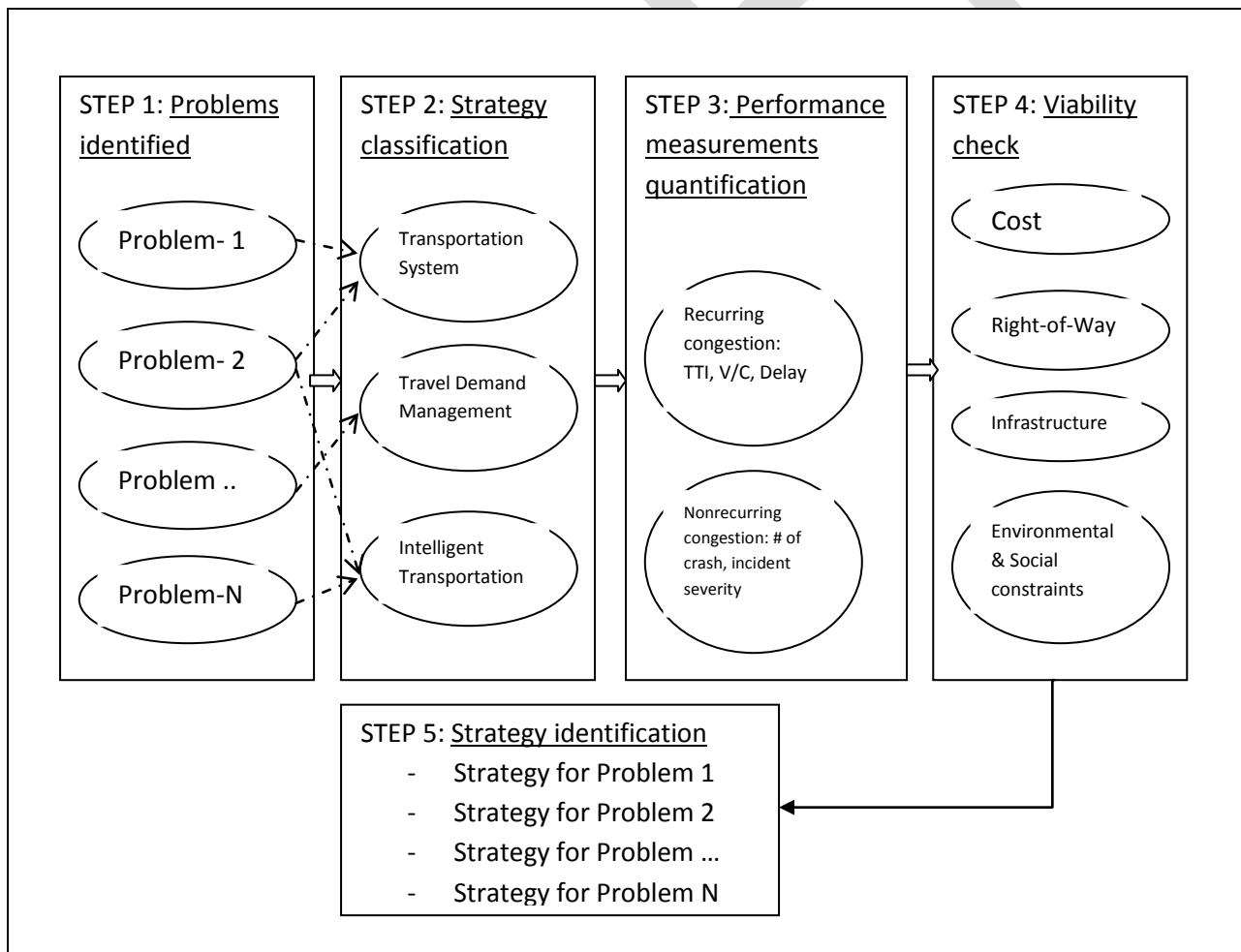
To identify the causes of the problem for the reported corridors or intersections, the results of the following analyses will be carefully reviewed:

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

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

## 6. Identification of Strategies

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



**Figure 6.1 Strategies identification process**

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

- Transportation System Management Strategies;
- Travel Demand Management Strategies; and
- Intelligent Transportation System Strategies;

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

**Table 6.1 DCHC MPO CMP Improvement Strategies Tool Box**

Main group	Sub group	Strategies
Transportation System Management Strategies	Traffic Signalization and Control	<ul style="list-style-type: none"> <li>- new signal installation,</li> <li>- signal re-timing,</li> <li>- signal hardware upgrades,</li> <li>- signal interconnection, and</li> <li>- demand-responsive signal system</li> </ul>
	Intersection and Street Improvements	<ul style="list-style-type: none"> <li>- Intersection/street widening,</li> <li>- lane assignment changes,</li> <li>- installation of turn lanes,</li> <li>- land use restrictions, and</li> <li>- bus loading bays</li> </ul>
	Bottleneck Removal	<ul style="list-style-type: none"> <li>- re-striping,</li> <li>- installation of signage,</li> <li>- addition of lanes,</li> <li>- reduction of merging and weaving</li> </ul>
	Special-Event Management	<ul style="list-style-type: none"> <li>- traffic management plans,</li> <li>- signal timing plans, and</li> <li>- dynamic lane assignments</li> </ul>
	Access Management	<ul style="list-style-type: none"> <li>- turn lanes,</li> <li>- driveway closures</li> <li>- median treatment</li> <li>- implementation of superstreet design</li> </ul>

Table 6-1 Improvement strategies (continue)

Main group	Sub group	Strategies
Travel Demand Management Strategies	Improve Transportation Options	<ul style="list-style-type: none"> <li>- alternative work schedules,</li> <li>- vanpooling/carpooling,</li> <li>- park &amp; ride, and</li> <li>- bike and pedestrian improvements</li> </ul>
	Incentives to Use Alternative Modes	<ul style="list-style-type: none"> <li>- parking management/shared parking,</li> <li>- congestion pricing/road pricing, and</li> <li>- guaranteed ride home programs</li> </ul>
	Sustainable Development	<ul style="list-style-type: none"> <li>- transit-oriented development,</li> <li>- land use density and clustering, and</li> <li>- bicycle parking facilities</li> </ul>
	Policy and Institutional Reform	<ul style="list-style-type: none"> <li>- car-free planning,</li> <li>- speed reduction, and</li> <li>- context sensitive design</li> </ul>
	TDM Marketing and Education	<ul style="list-style-type: none"> <li>- walking and cycling encouragement, and</li> <li>- transit and alternative mode encouragement</li> </ul>
Intelligent Transportation System Strategies	Public Transportation	<ul style="list-style-type: none"> <li>- transit vehicle tracking,</li> <li>- transit fixed-route operations,</li> <li>- transit passenger and fare management, and</li> <li>- transit traveler information</li> </ul>
	Traffic Management	<ul style="list-style-type: none"> <li>- network surveillance,</li> <li>- surface street control,</li> <li>- freeway control,</li> <li>- traffic incident-management system,</li> <li>- advanced railroad-grade crossing, and</li> <li>- roadway closure management</li> </ul>
	Commercial Vehicle Operations	<ul style="list-style-type: none"> <li>- fleet and freight administration,</li> <li>- electronic clearance,</li> <li>- weigh-in-motion,</li> <li>- roadside commercial vehicle operations safety, and</li> <li>- freight assignment tracking</li> </ul>
	Emergency Management	<ul style="list-style-type: none"> <li>- emergency routing,</li> <li>- roadway service patrols, and</li> <li>- disaster traveler information</li> </ul>
	Maintenance & Construction Management	<ul style="list-style-type: none"> <li>- maintenance and construction vehicle and equipment tracking,</li> <li>- road weather data collection, and</li> <li>- work-zone management</li> </ul>

## **7. Implementing Strategies and Monitoring Strategy Effectiveness**

### **7.1. Implementation and Management**

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

### **7.2. Monitoring Strategy Effectiveness**

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

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

**Appendix A: TITLE 23--HIGHWAYS**

## CHAPTER I--FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

## PART 450—PLANNING ASSISTANCE AND STANDARDS

## Subpart C—Metropolitan Transportation Planning and Programming

< <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e1e6fde77bb21ea5585c6420e6552eb&rgn=div8&view=text&node=23:1.0.1.5.11.3.1.11&idno=23> >

**§ 450.320 Congestion management process in transportation management areas.**

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

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

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

- (1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;
- (2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

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

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

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

(ii) Traffic operational improvements;

(iii) Public transportation improvements;

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

(v) Where necessary, additional system capacity;

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

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

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

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

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

DRAFT

**Appendix B: Tier-2 Selection Criteria****Travel Time**

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

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

**Traffic Count**

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

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

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

## Appendix C: Travel Time Data Collection Procedures

### 1. Sample Size Calculation

#### a. Using Standard Deviation of Travel Time

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

Where  $n$  = Sample Size;

$t$  = Student's  $t$  statistics value from confidence interval for  $(n-1)$  degree of freedom;

$c.v.$  = Coefficient of variance – the relative variability in the travel times from empirical data, expressed as a percentage (%); and

$e$  = Relative error- the relative permissible error in the travel time estimate, expressed as a percentage (%).

Coefficients of Variance for the Test Vehicle Technique on Freeway and Arterial Streets from Empirical data<sup>1)</sup>

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

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

#### Test Vehicle Sample Sizes on Freeways<sup>1)</sup>

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

#### Test Vehicle Sample Sizes on Arterial Streets<sup>1)</sup>

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

2) Planning purpose

3) Operational purpose



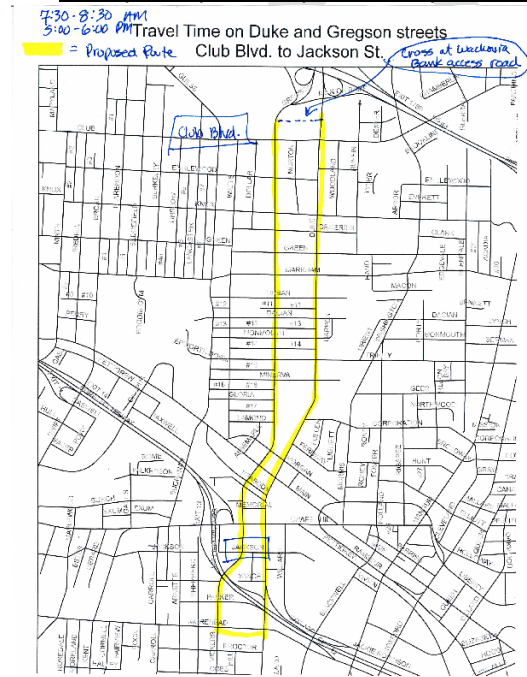
Example of Schedule

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

Example of pre-study information (MLK Blvd.)

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

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



March 23, 2011

**To:** Transportation Coordinating Committee**From:** Lead Planning Agency (LPA)**Subject:** Resolution of Support for the Closing of Pickett Road in Orange County for the Hollow Rock Access Area

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## Summary

The Hollow Rock Access Area Master Plan recommends closing Pickett Road through the park to reduce conflicts between park uses and through vehicle traffic. The Orange County Board of County Commissioners will need to initiate the road closing procedure with the North Carolina Department of Transportation (NCDOT). Given the road closing impacts on Durham citizens, the Durham City/County Planning staff organized and conducted a meeting for residents in the vicinity of Pickett Road. Approximately 55 people attended, and comments regarding the closing of Pickett Road received at the meeting were mixed. The primary concern of the attendees both in favor and opposed was the need for a traffic signal at the intersection of Randolph and Erwin Roads. City of Durham Transportation subsequently performed a traffic analysis in the area which determined that signal warrants were met at the intersection of Randolph Road and Erwin Road, and Kerley Road and Erwin Road. See attachment 9C.

The Durham City Council and Board of County Commissioners will review this issue and decide whether to adopt a resolution of support for the road closing at their April 18<sup>th</sup> and April 24<sup>th</sup> meetings, respectively. At their March 9<sup>th</sup> meeting, TAC members asked that this issue be brought to the TAC for discussion and a vote at their April 13<sup>th</sup> meeting.

## Recommendation

Receive this report and adopt a resolution in support of closing Pickett Road in Orange County, subject to:

- the installation of a traffic signal at the intersection Erwin Road and Randolph Road and
- retention of an easement for public access that is to be used for bicyclists and pedestrians access along the approximate former right-of-way alignment thereby allowing interconnection from the remaining Pickett Road segment and Erwin Road.

## Attachments

- 9A – Vicinity map of road closing
- 9B – Hollow Rock map (excerpt from Master Plan)
- 9C – Traffic Analysis Report
- 9D -- Resolution

## Background

The Master Plan for the Hollow Rock Access Area was developed as a partnership between the City of Durham, Durham County, Orange County and the Town of Chapel Hill. The future parkland is bisected

by Pickett Road, which the master plan recommended closing in Phase II of the park development to provide better pedestrian connectivity and allow for parking. See attachment 9B, and the following link is a copy of the Hollow Rock Park Master Plan Final Report:

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

The section of Pickett Road to be closed is designated as a minor thoroughfare on the Durham-Chapel Hill-Carrboro Urban Area Thoroughfare Plan. The DCHC MPO will complete a Comprehensive Transportation Plan (CTP) within the next year that will supersede the 1991 Thoroughfare Plan, and staff anticipates that Pickett Road will be designated as a local road, not a thoroughfare in the CTP. The road is currently unpaved west of the Trinity School, and no improvements are proposed or funded. Pickett Road is maintained by NCDOT.

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

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

In the fall of 2010, the City Transportation Department agreed to perform a traffic analysis at three intersections in the vicinity of Pickett Road (see attachment 2): Erwin Road at Randolph Road, Erwin Road at Kerley Road, and Pickett Road at Randolph Road. The study concluded the first two intersections already meet signal warrants, regardless whether or not Pickett Road is closed. The intersection of Pickett Road and Randolph Road does not meet signal warrants in either case. Due to insufficient space, traffic signals cannot be placed at both the Erwin/Randolph and the Erwin/Kerley intersections. Transportation's study recommends that a roundabout be placed at the Erwin/Kerley intersection instead.

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

At the December 2010 Durham-Chapel Hill-Orange Work Group meeting, some members requested crash data for the intersection of Erwin Road and Pickett Road. While raw accident data is available from NCDOT, the City Transportation Department does not currently have resources available to provide analysis for intersection outside of the City's jurisdiction. It should be noted that even if Pickett Road is closed, a driveway to Hollow Rock Park is proposed in the same location.

## Issues and Analysis

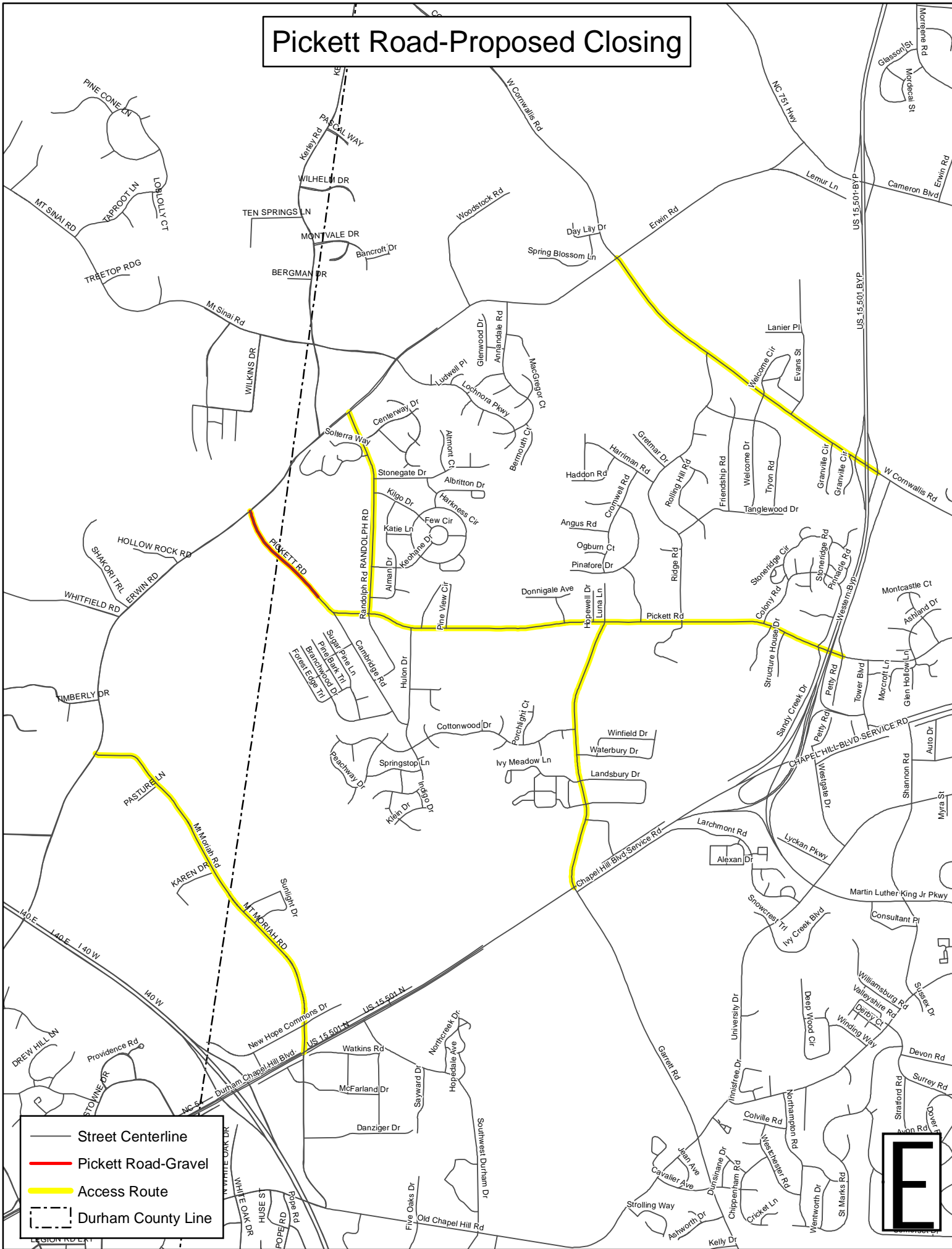
The closing of Pickett Road could have an impact on Durham residents, particularly those who live on Randolph Road. However, leaving the road open could undermine the public and private investment in the Hollow Rock Access Area.

The City of Durham Comprehensive Plan, chapter 8, calls for a “continuous and comprehensible street network” and the unified development ordinance rates new developments on a connectivity ratio. The proposed street closing runs counter to the connectivity objectives of the Plan and ordinance, e.g., south Durham residents will need to drive a longer, more circuitous route to get to the proposed park.

The subject section of Pickett Road had only 645 daily trips in 2009, compared to 3,972 on Randolph Road. It is reasonable to assume that many of the Pickett Road trips would be diverted to Randolph Road, as the closest alternative route. The provision of a traffic signal at the intersection of Randolph Road and Erwin Road would address present circulation and safety problems at that location, and could help alleviate the impacts of the additional traffic. While a roundabout is warranted by current conditions at the intersection of Kerley Road and Erwin Road, that location would be less impacted by the closure of Pickett Road and could be cost prohibitive.

It is understood that the road will be closed by placing a gate in the road so that vehicles will not be able to pass through. The City of Durham will be interested in the design details of Hollow Rock Park and the gated road closing. The jurisdictions will want to ensure that vehicles have an adequate facility for turning around at the gate, and that bicyclists and pedestrians are able to pass through or around the gate to continue using the road alignment for through access.

# Pickett Road-Proposed Closing

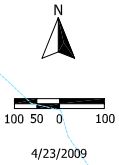
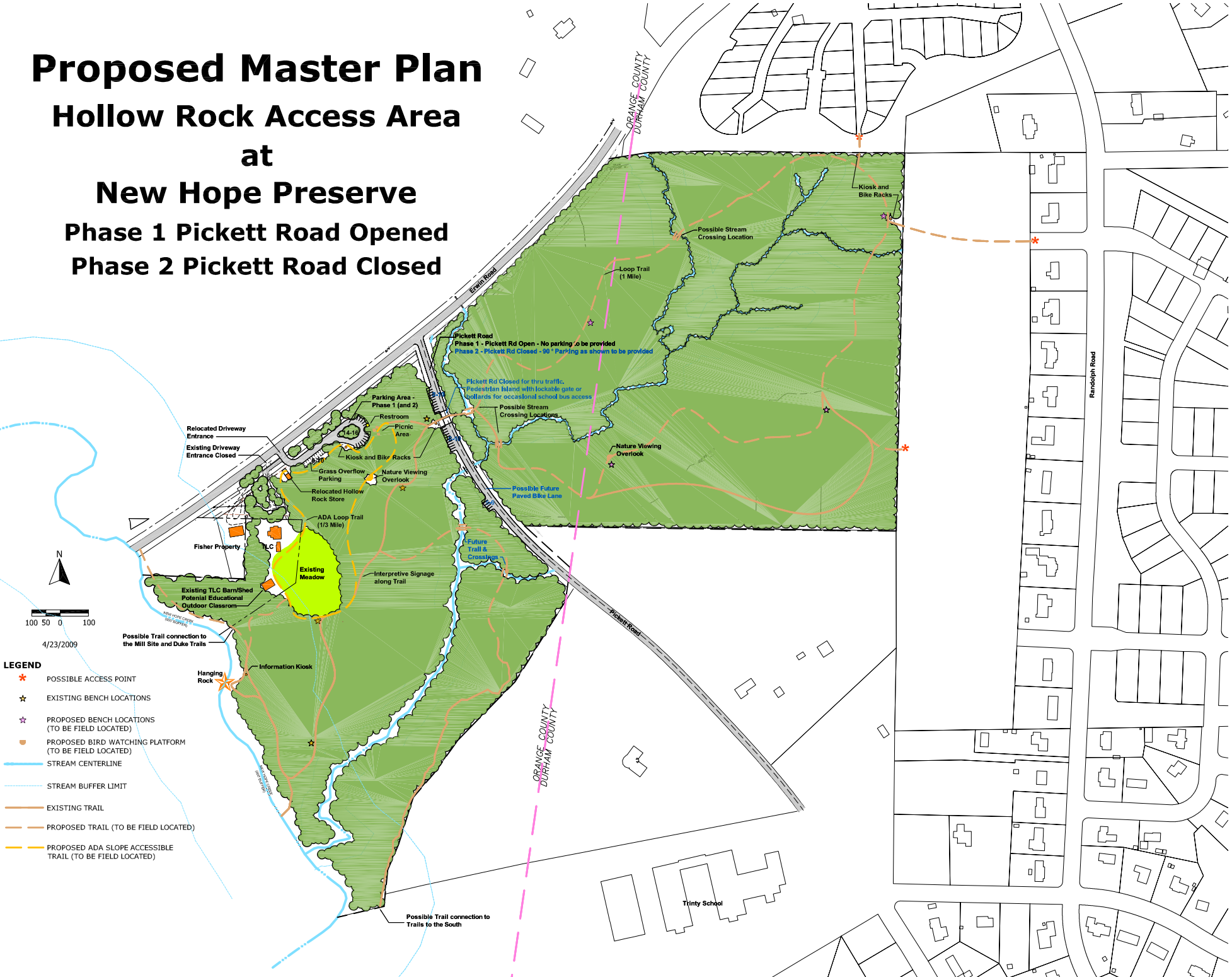


- Street Centerline
- Pickett Road-Gravel
- Access Route
- - - Durham County Line

E

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

Phase 1 Pickett Road Opened  
Phase 2 Pickett Road Closed



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

4/23/2009

Possible Trail connection to the Mill Site and Duke Trails

Hanging Rock

Information Kiosk

Possible Trail connection to Trails to the South

Pickett Road  
Phase 1 - Pickett Rd Open - No parking to be provided  
Phase 2 - Pickett Rd Closed - 90' Parking as shown to be provided

Pickett Rd Closed for thru traffic. Pedestrian Island with lockable gate or bollards for occasional school bus access

Loop Trail (1 Mile)

Possible Stream Crossing Location

Kiosk and Bike Racks

Relocated Driveway Entrance

Existing Driveway Entrance Closed

Parking Area - Phase 1 (and 2)

Restroom

Picnic Area

Grass Overflow Parking

Relocated Hollow Rock Store

Nature Viewing Overlook

ADA Loop Trail (1/3 Mile)

Existing Meadow

Interpretive Signage along Trail

Fisher Property

Existing TLC Barn/Shop Potential Educational Outdoor Classroom

Future Trail & Crossings

Possible Future Paved Bike Lane

Possible Stream Crossing Locations

Nature Viewing Overlook

Possible Stream Crossing Location

Trinity School

Randolph Road

ORANGE COUNTY  
DURHAM COUNTY

ORANGE COUNTY  
DURHAM COUNTY

Pickett Road

Edin Road

## Traffic Analysis Report

### INTRODUCTION:

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

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

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

### STUDY AREA:

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

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

### ANALYSIS PROCEDURE:

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

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

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

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

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

**Existing Conditions:**

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

**Findings: (Existing Conditions)**

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

**Findings: (Proposed Conditions)**

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

## **Erwin Road and Randolph Road**

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

### **Existing Conditions:**

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

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

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

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

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

## **Erwin Road and Kerley Road**

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

### **Existing Conditions:**

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

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

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

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

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

## CONCLUSIONS:

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

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

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

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

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

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

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

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

### **RECOMMENDATIONS:**

The following are roadway improvements recommended under current conditions:

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

- No improvements are recommended at this intersection

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

- Signal installation is recommended

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

- Roundabout installation is recommended

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

**April 13, 2011**

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

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

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

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

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

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

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

1. A traffic signal is installed at the intersection of Erwin Road and Randolph Road, and,
2. Retain public access for bicyclist and pedestrians to use the approximate former right-of-way alignment of Pickett Road thereby allowing interconnection from the remaining Pickett Road segment and Erwin Road, and,
3. Adequate vehicle turn around facilities be provided at the roadway dead ends.

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

Durham County, North Carolina

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

Date: April 13, 2011

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

## MEMORANDUM

**To:** Technical Coordinating Committee  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** March 23, 2011

**Subject:** **FY 2012-2018 Metropolitan Transportation Improvement Program, 2035 Long Range Transportation Plan Amendment #2, and Air Quality Conformity Process**

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

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

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

A proposed schedule for the three documents is listed below:

- 2/9/2011 For the air quality modeling process, the TAC needs to identify changes to non-exempt projects in the first four years of the MTIP and projects crossing air quality horizon years in the LRTP.  
The TAC releases the draft MTIP and LRTP Amendment #2 for public comment.
- 3/1/2011 through 6/17/2011 Air quality modeling, emission analysis, and conformity report preparation.
- 3/9/2011 The TAC holds a public hearing on the draft MTIP and LRTP Amendment #2.
- 4/13/2011 Earliest date that the TAC may approve the final MTIP and LRTP Amendment #2 (subject to air quality conformity).
- 5/11/2011 If not approved in April, the TAC may consider approval of the final MTIP and LRTP Amendment #2 (subject to air quality conformity).
- 6/8/2011 The TAC releases the air quality conformity draft for public comment.

8/10/2011 The TAC holds a public hearing on the air quality conformity draft and approves the air quality determination report.

9/2/2011 Federal action on air quality conformity determination.

The approval of the final MTIP and LRTP Amendment #2 may shift later in the schedule as long as approval occurs by the August TAC meeting.

### Draft MTIP

The North Carolina Department of Transportation released the draft FY 2012-2018 State Transportation Improvement Program (STIP) in August 2010. The seven-year STIP is included within the Department's ten-year work program for FY 2011-2020. The DCHC MPO met with NCDOT to discuss the STIP in November 2010. Subsequently, the TCC developed a recommended draft FY 2012-2018 Metropolitan Transportation Improvement Program (MTIP).

The differences between the draft STIP and the draft MTIP are listed in the table below. Federal regulations require that the STIP and MTIP agree in the first four years (FY 2012-2015).

### Changes to Draft STIP

Route	ID	Description/Miles/Cost	Changes
I-40	I-3306	I-85 in Orange Co. to US-15-501; add additional lanes. <ul style="list-style-type: none"> <li>• 20.7 miles</li> <li>• \$47 million</li> </ul>	Define Phase A as NC 86 to Durham County Line (westbound) and Phase C as I-85 to NC 86 and NC 86 to Durham County Line (eastbound) (Phase B is completed Durham County project) Fund Phase A in FY 2016 and FY 2017 for \$10,208,000. Phase C \$36,792,000 unfunded in post year.
I-85	I-0305	I-40 at Hillsborough to Durham County Line. Widen to six lanes and reconstruct interchanges and structures.	Include widening of NC 86 from US 70A to Old NC 10.
Old Durham/Chapel Hill Rd	EB-4707	Garrett Rd. to US 15-501; bicycle and pedestrian improvements. <ul style="list-style-type: none"> <li>• 2.7 miles</li> <li>• \$4 million</li> </ul>	Add \$1million in funding in FY 2012. (Placeholder for potential cost increase.)
US 15-501	U-5304	S. Columbia St. to Ephesus Ch. Rd.; sidewalks, wide outside lanes and transit accommodations. <ul style="list-style-type: none"> <li>• 4 miles</li> <li>• \$5.1 million</li> </ul>	Accelerate by three years, thus construction starts FY 2016. Include roadway, transit, bicycle and pedestrian improvements consistent with recommendations of the Ephesus Church Road/Fordham Boulevard Transportation Study. <ul style="list-style-type: none"> <li>• \$5 million + \$5.1 million</li> </ul>

Route	ID	Description/Miles/Cost	Changes
NC 54	FS-1005C	I-40 to NC 55 in City of Durham; feasibility study <ul style="list-style-type: none"> <li>• 5.2 miles</li> <li>• \$91 million</li> </ul>	Add \$30.333 M in FY 2017, FY 2018, and FY 2019 to fully fund the project.
Durham Orange	TN-5102	New Freedom – Beyond Am. Disability Act Requirements	Delete – redundant with TM-5129B
Durham Orange Chatham	TM-5123B	Job Access / Reverse Commute: Capital, Planning, Operating Cost	Added Chatham County, funding amounts to be updated
Durham Orange Chatham	TM-5129B	New Freedom – Beyond Am. Disability Act Requirements	Added Chatham County, funding amounts to be updated
Durham Orange	TE-4706Au	Fixed Guideway: Light Rail Service – Durham-Chapel Hill Right-of-way	Added Durham County, Changed to Triangle Transit
Durham Orange	TE-4706Bu	Fixed Guideway: Light Rail – Alternatives Analysis, PE & Design – Durham-Chapel Hill	Added Durham County, Changed to Triangle Transit

### Additions to Draft STIP

Route	ID	Description/Miles/Cost
NC 54	New TIP project	I-40 to Fordham Blvd.; feasibility study that considers results of MPO's NC 54 Study and includes roadway, bicycle, pedestrian and transit improvements. <ul style="list-style-type: none"> <li>• 1.7 miles</li> </ul> Add funding for short-term recommendations of the NC 54 corridor study in FY 2016-2020. (Use draft report recommendations as placeholder for final report recommendations.) Short-term improvements in draft report: <ul style="list-style-type: none"> <li>• Park-n-Ride: \$1,795,000 capital, \$720,000 operating</li> <li>• Transit: \$2,100,000 capital, \$4,066,200 operating</li> <li>• Bicycle and Pedestrian \$6,820,000</li> <li>• Roadway \$6,100,000 (without collector street network)</li> <li>• Total: \$21,601,200</li> </ul>
Fayetteville Road	New TIP project	Woodcroft Pkwy to Riddle Rd.; widen to multilane and include bicycle, pedestrian and transit improvements; add \$7 million in funding each year from FY 2016 through 2018. <ul style="list-style-type: none"> <li>• 2.3 miles</li> <li>• \$21 million</li> </ul>
Erwin Road	New TIP project	US 15-501 to NC 751; construct bicycle lanes, sidewalks and safety improvements; add \$5.5 million in funding in FY 2016. Statewide STP Enhancement program is suggested funding source. <ul style="list-style-type: none"> <li>• 5.5 miles</li> <li>• \$5.5 million</li> </ul>
Jack Bennett Road	New TIP project	US 15-501 to Lystra Rd.; safety improvements; add \$6.9 million in funding in FY 2016. <ul style="list-style-type: none"> <li>• 2.3 miles</li> <li>• \$6.9 million</li> </ul>

Route	ID	Description/Miles/Cost
Churton Street	R-2825	US 70 Business to I-40; congestion mgmt., aesthetic and capacity improvements; add \$9.5 million each year in FY 2019 and 2020. <ul style="list-style-type: none"> <li>• 2.5 miles</li> <li>• \$19 million</li> </ul>
Eno Mountain Road	U-3436	Eno Mtn. Rd. and Mayo St. alignment; add \$2.4 million in funding in FY 2020. <ul style="list-style-type: none"> <li>• \$2.4 million</li> </ul>
NC 86	New TIP project	US 70 Bypass to Coleman Loop Rd.; widen to multilanes; add \$7.5 million in funding in FY 2020. <ul style="list-style-type: none"> <li>• 0.42 mile</li> <li>• \$7.5 million</li> </ul>
Orange Grove Road	New TIP project	Churton St. to US 70 Alternate; construct roadway; add \$30 million to FY 2020. <ul style="list-style-type: none"> <li>• 0.40 mile</li> <li>• \$30 million</li> </ul>
Park and Ride Facilities	New TIP project	Construct park-n-ride lots in five corridors: US 501 north of Durham; I-85 east of Durham; I-40/I-85 near Mebane; US 15-501 between Durham and Chapel Hill; and, I-40/NC 751 in Durham. <ul style="list-style-type: none"> <li>• 2,500 total parking spaces</li> <li>• \$5,625,000</li> </ul>
Orange Grove Road Pedestrian Bridge	EB-4980	Construct pedestrian bridge over I-40 (or retrofit existing vehicle bridge to accommodate pedestrians). <ul style="list-style-type: none"> <li>• 0.04 mile</li> <li>• \$400,000</li> </ul>

A few minor edits have been made to the public transportation section of the draft STIP in the draft MTIP. The MPO will be working with the public transit agencies and NCDOT over the coming months to make sure that the STIP and MTIP accurately reflect all planned transit projects. Attachment 10C is the transit portion of the final STIP as transmitted by NCDOT in March 2011.

In February, the TAC released the draft MTIP for public comment and scheduled a public hearing for the March meeting. The MPO's public involvement plan establishes a minimum three-week public comment period. An advertisement was posted in the Herald-Sun on February 16, 2011, and a press release was issued on February 28, 2011. Copies are available in the planning departments of all MPO member jurisdictions and in public libraries as well as on [www.dhcmmpo.org](http://www.dhcmmpo.org). Attachment 10A is a summary of public comments on the draft MTIP.

Attachment 10B is an updated the STPDA table. These changes are recommended to be rolled into the final MTIP.

## 2035 LRTP Amendment #2

Amendment #2 to the 2035 LRTP corrects the mileage for five projects to match the figures in the STIP/MTIP and changes the air quality horizon year for one project (Carver Street

Extension). Attachment 10D is the resolution and table for Amendment #2. Additional changes are listed in the table to correct the Capital Area MPO's projects.

Several DCHC MPO projects were coded incorrectly in the modeled network for the 2035 LRTP air quality conformity determination. The air quality conformity determination for the 2012-2018 STIP/MTIP and 2035 LRTP Amendment #2 will correct this error. Since the projects were correctly listed in the 2035 LRTP report, no amendment is needed to correct this modeling error.

## **Draft FY 2012-2018 Metropolitan Transportation Improvement Program Summary of Public Comments**

**Comment:** Request for information on the extension of Martin Luther King Parkway to Cornwallis Road.

**Response:** Staff sent the NCDOT feasibility study (2008) for improvements to this intersection to Debra Morgan. The cross-sections for the two alternatives in this feasibility study assume bicycle lanes and sidewalks.

**Comment:** Request to construct bicycle stations at future park-and-ride lots.

**Response:** As the location and design of future park and ride lots is being considered, DCHC MPO and local staffs will need to carefully consider the needs of bicyclists and opportunities to encourage bicycle use through the types of facilities available at the park and ride locations. DCHC staff has received additional information from the bicycle station representative who spoke at the public hearing.

**Comment:** Request to fund Erwin Road and University Drive bicycle and pedestrian projects.

**Response:** The DCHC MPO has requested that the Erwin Road project be funded and is waiting for a response from NCDOT. The University Drive project was the MPO's top ranked bicycle and pedestrian project and ranked third in the State according to NCDOT's prioritization. However, it was not funded in the draft STIP. The MPO will continue to pursue funding for these projects.

**Comment:** Improve notification for public meetings.

**Response:** The DCHC MPO will update our email list and use it to send notices on public hearings. The MPO is also in the process of updating our website and investigating the use of social media for notices.

**Comment:** Request to use enhancement funds to buy the billboard near the R. Kelly Bryant Bicycle and Pedestrian Bridge over NC 147.

**Response:** DCHC staff spoke with Jimmy Travis, manager of NCDOT's Programs Management Office. Mr. Travis stated that the last call for transportation enhancement funds was in 2004, and he does not anticipate another call until after the passage of a federal reauthorization bill. He said the request for funds to buy the billboard could be submitted by the MPO for consideration as part of the next TIP process. However, according to NCDOT's SPOT office, enhancement projects will not be accepted in the next TIP prioritization process. Mr. Travis noted that while there currently appears to be a large balance of enhancement and CMAQ funds, in actuality NCDOT cannot spend these funds because they are being used as a cash reserve to enable accelerated construction of highway projects. DCHC staff also spoke with Rob Ayers of the North Carolina FHWA office. Mr. Ayers stated that NCDOT has the discretion to fund billboard removal through enhancement as well as other funding categories, and since there is not an avenue to submit a TIP request or separately apply for funds, the best course of action is to request funding through the DOT board member and division engineer. Mr. Ayers said that NCDOT has the discretion to manage federal funds in such a way that rescissions will disproportionately impact the enhancement and CMAQ funds.

**Comment:** Support for the acceleration of the widening of I-40 from US 15-501 to NC 86.

**Response:** Widening I-40 from US 15-501 to NC 86 in FY 2016 and 2017 is included in the recommended final MTIP.

**A RESOLUTION PROVIDING THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE WITH RECOMMENDATIONS AND COMMENTS ON THE DRAFT 2012-2018 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM.**

WHEREAS, the North Carolina Department of Transportation has released a Draft 2012-2018 Transportation Improvement Program; and

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee has released the State draft as the Draft 2012-2018 Metropolitan Transportation Improvement Program; and

WHEREAS, the Transportation Advisory Committee has requested public comment on the draft Metropolitan Transportation Improvement Program; and

WHEREAS, the Town Council has reviewed the Draft 2012-2018 Metropolitan Transportation Improvement Program.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the Town of Chapel Hill that the Council provides the Transportation Advisory Committee with the following comments and recommendations:

- Add an additional \$1 million to the Old Durham-Chapel Hill bicycle and pedestrian project in FY2012.
- Accelerate the I-40, US 15-501 to I-85, project by two years with construction funding in FY2017. Add an additional westbound lane from US 15-501 to NC86 as the first phase. Include an analysis of providing noise walls for adjoining neighborhoods as part of the project.
- Accelerate the proposed funding for bicycle, pedestrian and transit improvements along US 15-501 between South Columbia to Estes Drive to FY2016. In addition, the project scope should be expanded to Franklin Street and include bicycle facilities and a pedestrian bridge over US 15-501. A separate engineering study to implement recommendations of the Ephesus Church Road Transportation Study should be included and the overall project budget increased to \$12.1 million.
- Include short term funding in FY2016-2020 to implement recommendations of the NC54 Corridor Study.
- Add \$5.5 million in FY2016 for bicycle and pedestrian improvements to Erwin Road, between US 15-501 in Chapel Hill and NC751 in Durham.
- Include \$7.625 million for construction of new and expanded park ride facilities at various locations including Eubanks Road and US 15-501 in Chapel Hill.

This the 14<sup>th</sup> day of March, 2011

**From:** [Milazzo II, Joe](#)  
**To:** [Beckmann, Ellen](#)  
**Cc:** [mark.skiff@netapp.com](mailto:mark.skiff@netapp.com)  
**Subject:** comments on draft MTIP  
**Date:** Friday, March 04, 2011 9:26:33 AM

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Dear Ellen,

The Regional Transportation Alliance business leadership group supports the cost-effective and timely improvement of various links in the region's freeway system to maintain or enhance mobility, sustain our economy, and preserve our quality of life. It is our understanding that there is an opportunity to accelerate the widening of I-40 westbound (only) from US 15-501 near the Durham/Orange county line to the NC 86 interchange in Orange County. We would support widening the freeway in just the westbound direction -- which will provide relief to the evening peak period -- in order to advance the project.

We thank the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization and the NC Department of Transportation for the opportunity to comment on this project and on the proposed MTIP. Please let me know if you have any questions about this matter.

Sincerely,

Joe Milazzo II, PE  
Executive Director  
Regional Transportation Alliance

cc Mark Skiff, PE, RTA Streets and Highways chair

DCHC MPO STPDA Funding Table for FY 2010 through 2015 - Approved March 9, 2011 - with proposed changes to be presented to the TAC for FY12 UPWP and 12-18 MTIP

Jurisdiction	TIP No	Description	Cost 100%	Cost 80%	2010		2011		2012		2013		2014		2015		
					Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	
Carrboro	U-4726	DC	Multi-use Path from Wilson Park to Estes Dr.	\$ 210,855	\$ 168,684			Construction	\$168,684								
Carrboro	U-4726	DE	Bolin Creek Greenway - Carrboro (Homestead to Chapel Hill HS Greenway)	\$ 737,500	\$ 590,000			Construction	\$590,000								
Carrboro	EL-4828		Morgan Creek Greenway - Carrboro	\$ 600,000	\$ 480,000			Planning	\$105,880	Construction	\$374,120						
Carrboro	U-4726	Dx	Bolin Creek Greenway (Jones Creek)	\$ 268,375	\$ 214,700			Construction	\$214,700								
Carrboro	U-4726	DD	Rogers Road - Sidewalk (Homestead to Meadow Run)	\$ 536,200	\$ 428,960			Planning	\$65,000	Construction	\$363,960						
Carrboro	U-4726	Dx	S. Greensboro St. - Sidewalk	\$ 58,300	\$ 46,640					Construction	\$46,640						
Carrboro	U-4726	Dx	Bicycle Loop Detectors	\$ 37,500	\$ 30,000			Construction	\$30,000								
Carrboro	U-4726	Dx	Bel Arbor-Plantation Acres Multi-use Path	\$ 83,750	\$ 67,000							Construction	\$ 67,000				
Chapel Hill	TG-4731		Chapel Hill Transit - Misc. Capital - Tires Purchase	\$ 255,415	\$ 204,332			Capital	\$ 204,332								
Chapel Hill	U-4727		Chapel Hill Transit Planning	\$ 1,357,500	\$ 1,086,000	UPWP/Planr	\$ 388,000	UPWP/Planr	\$ 373,000	UPWP/Planr	\$ 325,000						
Chapel Hill	U-4727		Intersection & Traffic Study @ RAMS Plaza	\$ 100,000	\$ 80,000	UPWP/Planr	\$ 32,000	UPWP/Planr	\$ 48,000								
Chapel Hill	SR-5001	AR	CH - Culbreth Rd: Cobble Ridge to Rosburn sidewalk	\$ 135,000	\$ 108,000			Construction	\$ 108,000								
Chapel Hill	U-5119		NC 86/US 15-501 BRT improvements	\$ 565,000	\$ 452,000					Construction	\$ 452,000						
Chapel Hill	TT-5109		FCC Radio Communications (Upgrade fleet)	\$ 1,250,000	\$ 1,000,000			Capital	\$ 1,000,000								
Chapel Hill	U-4726	IG	Morgan Creek Greenway Phase 2 - Chapel Hill	\$ 700,000	\$ 560,000			Construction	\$ 560,000								
Chapel Hill	U-4726	IF	Bolin Creek Stairs - Chapel Hill	\$ 125,000	\$ 100,000					Construction	\$ 100,000						
Chapel Hill	U-4726	Ix	CH - Chapel Hill Sidewalks	\$ 400,000	\$ 320,000			Construction	\$ 320,000								
Chapel Hill	U-4726	Ix	NC86/other locations Pedestrian Safety Improvements	\$ 375,000	\$ 300,000			Construction	\$ 150,000	Construction	\$ 150,000						
Chapel Hill	U-4727		Greenways/Bike Ped Maps	\$ 30,000	\$ 24,000			UPWP/Planr	\$ 24,000								
Chapel Hill	U-4726	Ix	Bolin Creek Greenway construction	\$ 937,500	\$ 750,000							Construction	\$ 750,000				
Chapel Hill	TT-5109		Technology: Automatic Passenger Counters	\$ 55,811	\$ 44,649			Capital	\$ 44,649								
Durham	U-4445		NC 147 Bicycle/Pedestrian Bridge - Durham	\$ 500,000	\$ 400,000	Construction	\$400,000										
Durham	E-2921E		American Tobacco Trail Phase E - Durham, Durham County	\$ 1,680,000	\$ 1,344,000	Construction	\$1,344,000										
Durham	U-4726	HL	Barbee Rd. (Orindo to Pearson town Elem.) Sidewalk	\$ 19,600	\$ 15,680					Construction	\$15,680						
Durham	U-4726	HL	DATA Sidewalk	\$ 19,800	\$ 15,840					Construction	\$15,840						
Durham	C-4928		Morreene Road - Bike/Ped Facilities (Neal to Erwin)	\$ 1,560,000	\$ 1,248,000					Planning	\$100,000			Construction	\$ 1,148,000		
Durham	U-4724		Cornwallis Road - Bike/Ped Facilities (S. Roxboro to University or C.H.)	\$ 2,395,000	\$ 1,916,000					Planning	\$255,000			Construction	\$ 1,661,000		
Durham	U-3804		Hillandale (I-85 to Carver) - Sidewalks	\$ 81,144	\$ 64,915	Construction	\$64,915										
Durham	U-4726	Hx	Carpenter Fletcher - Bike/Ped Facilities (Woodcroft to Alston)	\$ 1,174,716	\$ 939,773					Planning	\$255,000			Construction	\$ 684,773		
Durham	U-4726	Hx	Avondale - Sidewalk (I-85 to Geer)	\$ 515,000	\$ 412,000					Construction	\$412,000						
Durham	U-4726	Hx	Cheek - Bike/Ped Facilities (Geer to Hardee)	\$ 695,000	\$ 556,000					Construction	\$556,000						
Durham	U-4726	Hx	Hillandale - Bike/Ped Facilities (I-85 to Fulton)	\$ 1,315,484	\$ 1,052,387					Planning	\$157,858			Construction	\$ 894,529		
Durham	U-4726	Hx	Holloway St sidewalks	\$ 157,106	\$ 125,685									Construction	\$ 125,685		
Durham	TT-5110		Technology: Automatic Passenger Counters	\$ 98,490	\$ 78,792			Capital	\$78,792								
Durham	SR-5001	C	Fayetteville Road (Cornwallis to Nelson) bicycle lanes and sidewalks	\$ 251,000	\$ 200,800					Construction	\$200,800						
LPA	U-4727		UPWP - staff and routine	\$ 4,962,103	\$ 3,969,682	UPWP/Planr	\$ 405,872	UPWP/Planr	\$ 632,709	UPWP/Planr	\$ 856,364	UPWP/Planr	\$ 671,241	UPWP/Planr	\$ 691,378	UPWP/Planr	\$ 712,119
LPA	U-4727		UPWP - ITS Deployment Plan Update	\$ 70,000	\$ 56,000	UPWP/Planr	\$ 56,000										
LPA	U-4727		UPWP - Bike/Ped (non-motorized trip)Model Development	\$ 175,000	\$ 140,000	UPWP/Planr	\$ 113,500	UPWP/Planr	\$ 26,500								
LPA	U-4727		UPWP - GIS Integration and Automation	\$ 200,000	\$ 160,000	UPWP/Planr	\$ 160,000										
LPA	U-4727		UPWP - Land Use Model Development	\$ 250,000	\$ 200,000	UPWP/Planr	\$ 200,000										
LPA	U-4727		UPWP - MPO Collector Street Plan	\$ 50,000	\$ 40,000	UPWP/Planr	\$ 40,000										
LPA	U-4727		UPWP - NC 54 Subarea Study	\$ 250,000	\$ 200,000	UPWP/Planr	\$ 150,000	UPWP/Planr	\$ 50,000								
LPA	U-4727		UPWP - Commercial Vehicle Study	\$ 125,000	\$ 100,000	UPWP/Planr	\$ 55,100	UPWP/Planr	\$ 44,900								
LPA	U-4727		UPWP - GIS Integration Phase II	\$ 375,000	\$ 300,000					UPWP/Planr	\$ 150,000	UPWP/Planr	\$ 150,000				
LPA	U-4727		UPWP - Parking Study	\$ 125,000	\$ 100,000					UPWP/Planr	\$ 100,000						
LPA	U-4727		UPWP - Transit Studies	\$ 546,454	\$ 437,163					UPWP/Planr	\$ 137,163	UPWP/Planr	\$ 300,000				
TJCOG	U-4727		UPWP - staff and routine	\$ 210,541	\$ 168,433	UPWP/Planr	\$ 26,922	UPWP/Planr	\$ 26,922	UPWP/Planr	\$ 27,595	UPWP/Planr	\$ 28,285	UPWP/Planr	\$ 28,992	UPWP/Planr	\$ 29,717
TJCOG	U-4727		UPWP - LUCID project	\$ 10,098	\$ 8,078			UPWP/Planr	\$ 3,078	UPWP/Planr	\$ 5,000						
TJCOG	U-4727		UPWP - Fiscal Constraints	\$ 28,256	\$ 22,605					UPWP/Planr	\$ 22,605						
NCDOT	EB-4707		Old Durham-Chapel Hill Road - Chapel Hill, Durham	\$ 4,639,000	\$ 3,711,200	ROW	\$191,200	ROW	\$320,000	Construction	\$3,200,000						
Triangle Transit	TT-4911		Technology: Automatic Passenger Counters	\$ 49,245	\$ 39,396			Capital	\$39,396								
				\$ 31,346,743	\$ 25,077,394		\$ 3,627,509		\$5,228,542		\$8,278,625		\$ 1,966,526		\$ 5,234,357	\$ 741,836	

MTIP changes to be approved as part of FY12-18 MTIP  
 Moved Beyond One-Year Grace Period  
 UPWP changes to be approved as part of FY12 UPWP

Urban funded

WORK PROGRAM	MODE	GOAL	TIER	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017
Operating	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	C-5104	Expansion Bus - plus 3 yrs operating	\$94	80%	Oc	5307	CMAQ	US	\$97						
Operating	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	C-5104	Expansion Bus - plus 3 yrs operating	\$23	20%	Oc	5307	CMAQ	L	\$24						
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4726	Replacement Bus - articulated	\$7,550	80%	C	5307	FUZ	US	\$4,896	\$2,608			\$1,939	\$1,939	\$1,939
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4726	Replacement Bus - articulated	\$1,224	10%	C	5307	FUZ	STAT	\$612	\$326			\$242	\$242	\$242
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4726	Replacement Bus - articulated	\$1,224	10%	C	5307	FUZ	L	\$612	\$326			\$242	\$242	\$242
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4748	Replacement - paratransit vehicle	\$563	83%	C	5307	FUZ	US			\$923	\$634	\$157	\$157	\$157
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4748	Replacement - paratransit vehicle	\$70	11%	C	5307	FUZ	STAT			\$115	\$115	\$20	\$20	\$20
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4748	Replacement - paratransit vehicle	\$70	6%	C	5307	FUZ	L			\$79	\$79	\$20	\$20	\$20
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4979	Replacement Van	\$563	80%	C	5307	FUZ	US	\$160		\$634				
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4979	Replacement Van	\$70	10%	C	5307	FUZ	STAT	\$15		\$79				
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4979	Replacement Van	\$70	10%	C	5307	FUZ	L	\$15		\$79				
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6512	Expansion Bus	\$300	80%	C	5316	JARC	US	\$300						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6512	Expansion Bus	\$38	10%	C	5316	JARC	STAT	\$38						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6512	Expansion Bus	\$38	10%	C	5316	JARC	L	\$38						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6514	Expansion Van		80%	C	5310	FEPD	US	\$16						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6514	Expansion Van		10%	C	5310	FEPD	STAT	\$2						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-6514	Expansion Van		10%	C	5310	FEPD	L	\$2						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TD-4710B	Facility - Park & Ride	\$0	80%	Oc	5307	FUZ	US	\$702						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TD-4710B	Facility - Park & Ride		20%	Oc	5307	FUZ	STAT	\$88						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TD-4710B	Facility - Park & Ride		20%	Oc	5307	FUZ	L	\$88						
Operating	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4731A	Preventive maintenance		80%	Oc	5307	STPDA	US	\$204						
Operating	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4731A	Preventive maintenance		20%	Oc	5307	STPDA	L	\$51						
Operating	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4731B	Preventive maintenance	\$927	80%	Oc	5307	FUZ	US	\$955	\$984	\$1,013	\$1,043	\$1,074	\$1,074	\$1,074
Operating	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4731B	Preventive maintenance	\$232	20%	Oc	5307	FUZ	L	\$239	\$246	\$253	\$261	\$269	\$269	\$269
Maintenance	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4732A	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, farebox, service vehicles, etc	\$56	80%	C	5307	FUZ	US	\$32	\$432	\$56				
Maintenance	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4732A	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, farebox, service vehicles, etc	\$500	100%	C	ARRA	FUZST	US							
Maintenance	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4732A	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, farebox, service vehicles, etc	\$14	20%	C	5307	FUZ	L	\$8	\$108	\$14				
Maintenance	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4732B	Routine Capital - service vehicle	\$240	80%	C	5307	FUZ	US					\$157		
Maintenance	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TG-4732B	Routine Capital - service vehicle		20%	C	5307	FUZ	L					\$39		

Urban funded

WORK PROGRAM	MODE	GOAL	TIER	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017	
Operations	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TM-5132	Operating Assistance	\$54	50%	O	5316	JARC	US	\$54							
Operations	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TM-5132	Operating Assistance	\$54	50%	O	5316	JARC	L	\$54							
Operations	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TO-5133	Operating Assistance	\$3,570	100%	O	SMAP	SMAP	STAT	\$3,671	\$3,570	\$3,570	\$3,570	\$3,570	\$3,570	\$3,570	\$3,570
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TQ-6501	Mobility Management - elderly and disabled persons		80%	Oc	5310	FEPD	US	\$106	\$106						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TQ-6501	Mobility Management - elderly and disabled persons		10%	Oc	5310	FEPD	STAT	\$13	\$13						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TQ-6501	Mobility Management - elderly and disabled persons		10%	Oc	5310	FEPD	L	\$13	\$13						
Operations	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TQ-6506	Operating assistance - Elderly and Disabled persons		50%	O	5310	FEPD	US	\$64	\$64						
Operations	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TQ-6506	Operating assistance - Elderly and Disabled persons		50%	O	5310	FEPD	L	\$64	\$64						
Construction & Engineering	Public Transportation	safety	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TS-5106	Safety & Security - Min. 1% set aside	\$99		C	5307	FUZ	US	\$67	\$40	\$26	\$17	\$33	\$32	\$32	\$32
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TT-5109	Technology - veh. tracking, passenger info, data communications, traffic signal priority		80%	C	5307	STPDA	US	\$1,000							
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TT-5109	Technology - veh. tracking, passenger info, data communications, traffic signal priority		20%	C	5307	STPDA	L	\$331							
Construction & Engineering	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-5019C	Replacement bus - light transit vehicles		80%	C	5307	CMAQ	US			\$583					
Construction & Engineering	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-5019C	Replacement bus - light transit vehicles		10%	C	5307	CMAQ	STAT			\$73					
Construction & Engineering	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-5019C	Replacement bus - light transit vehicles		10%	C	5307	CMAQ	L			\$73					
Maintenance	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TG-4738	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, service vehicles, etc.	\$475	80%	C	5307	FUZ	US	\$475	\$125	\$475	\$475	\$475	\$475	\$475	\$475
Maintenance	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TG-4738	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, service vehicles, etc.	\$119	20%	C	5307	FUZ	L	\$119	\$32	\$119	\$119	\$119	\$119	\$119	\$119
Operating	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TG-4738A	Preventive maintenance	\$2,535	80%	Oc	5307	FUZ	US	\$2,535	\$2,782	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Operating	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TG-4738A	Preventive maintenance	\$634	20%	Oc	5307	FUZ	L	\$634	\$696	\$750	\$750	\$750	\$750	\$750	\$750
Operating	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TG-4738B	Preventive maintenance	\$1,000	100%	Oc	ARRA	FUZST	US								
Operations	Public Transportation	mobility	sub regional	7	Durham Orange	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TN-5102	Operating assistance - New Freedom - urban	\$63	50%	O	5317	FNF	US	\$63	\$63	\$63	\$63	\$63	\$63	\$63	\$63
Operations	Public Transportation	mobility	sub regional	7	Durham Orange	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TN-5102	Operating assistance - New Freedom - urban	\$63	50%	O	5317	FNF	L	\$63	\$63	\$63	\$63	\$63	\$63	\$63	\$63
Operations	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TO-5130	Operating Assistance	\$2,806	100%	O	SMAP	SMAP	STAT	\$2,622	\$2,890	\$2,806	\$2,806	\$2,806	\$2,806	\$2,806	\$2,806
Operating	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TO-5130B	Operating Assistance - new route		80%	O	5307	CMAQ	US			\$951	\$999				
Operating	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TO-5130B	Operating Assistance - new route		20%	O	5307	CMAQ	L			\$238	\$250				
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5108	Planning Assistance - 5303	\$112	80%	C	5303	FMPL	US	\$112	\$112	\$112	\$112	\$112	\$112	\$112	\$112
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5108	Planning Assistance - 5303	\$14	10%	C	5303	FMPL	STAT	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5108	Planning Assistance - 5303	\$14	10%	C	5303	FMPL	L	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5109	Planning Assistance - 5307		80%	C	5307	FUZ	US	\$384	\$510	\$384	\$384	\$384	\$384	\$384	\$384
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5109	Planning Assistance - 5307		10%	C	5307	FUZ	STAT	\$48	\$64	\$48	\$48	\$48	\$48	\$48	\$48
Planning	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TP-5109	Planning Assistance - 5307		10%	C	5307	FUZ	L	\$48	\$64	\$48	\$48	\$48	\$48	\$48	\$48

Urban funded

WORK PROGRAM	MODE	GOAL	TIER	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017
Construction & Engineering	Public Transportation	safety	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TS-5108	Safety & Security - Min. 1% set aside	\$30		C	5307	FUZ	US	\$34	\$34	\$39	\$39	\$39	\$39	\$39
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-4818B	Replacement Bus	\$936	80%	C	5307	FUZ	US	\$1,511	\$360			\$770		
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-4818B	Replacement Bus	\$117	10%	C	5307	FUZ	STAT	\$237	\$45			\$96		
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-4818B	Replacement Bus	\$117	10%	C	5307	FUZ	L	\$237	\$45			\$96		
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-5123B	Expansion Bus - fixed route	\$1,380	80%	C	5307	FUZ	US		\$9,200	\$500	\$540	\$540	\$1,351	
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-5123B	Expansion Bus - fixed route		10%	C	5307	FUZ	STAT		\$115	\$63	\$68	\$68	\$135	
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-5123B	Expansion Bus - fixed route		10%	C	5307	FUZ	L		\$115	\$63	\$68	\$68	\$135	
Construction & Engineering	Public Transportation	mobility	regional	5, 7	Durham Orange	DCHC	TRIANGLE TRANSIT	TE-4903	Fixed Guideway - Alternatives Analysis for Major Transit Corridor Projects	\$491	50%	C	0000	L	L	\$2,965						
Maintenance	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TG-4821B	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, farebox, service vehicles, etc	\$800	80%	C	5307	FUZ	US	\$800	\$800	\$800	\$800	\$200	\$200	\$200
Maintenance	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TG-4821B	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, farebox, service vehicles, etc	\$228	20%	C	5307	FUZ	L	\$200	\$200	\$200	\$200	\$200	\$200	\$200
Maintenance	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TG-4821C	Routine Capital - Bus stop shelters, benches, shop equip., spare parts, engines, service vehicles, etc.	\$228	80%	C	5307	STPDA	US	\$96						
Maintenance	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TG-4821C	Routine Capital - Bus stop shelters, benches, shop equip., spare parts,	\$57	20%	C	5307	STPDA	L	\$24						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TM-5123B	Operating Assistance	\$174	50%	O	5316	JARC	US	\$174						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TM-5123B	Operating Assistance	\$174	50%	O	5316	JARC	L	\$174						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TN-5129B	Operating assistance - New Freedom - urban	\$78	50%	O	5317	FNF	US	\$78						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TN-5129B	Operating assistance - New Freedom - urban	\$78	50%	O	5317	FNF	L	\$78						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TN-6104B	Operating assistance - New Freedom - non-urban		50%	O	5317	FNF	US	\$78						
Operations	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TN-6104B	Operating assistance - New Freedom - non-urban		50%	O	5317	FNF	L	\$78						
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TQ-6504	Mobility Management - elderly and disabled persons (TQ-5105)		80%	Oc	5310	FEPD	US	\$68	\$68					
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TQ-6504	Mobility Management - elderly and disabled persons (TQ-5105)		10%	Oc	5310	FEPD	STAT	\$9	\$9					
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TQ-6504	Mobility Management - elderly and disabled persons (TQ-5105)		10%	Oc	5310	FEPD	L	\$9	\$9					
Construction & Engineering	Public Transportation	safety	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TS-5119	Safety & Security - Min. 1% set aside	\$57		C	5307	FUZ	US	\$23	\$102	\$21	\$10	\$21	\$20	\$7

WORK PROGRAM	MODE	GOAL	TIER	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4726A	Replacement Bus			C	0000	FED	TBD				\$886						
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4979A	Replacement Van - Safe-Ride			C	0000	FED	TBD				\$31	\$31	\$31	\$31	\$31	\$31	\$31
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4981	Replacement - Sedans/Wagons/4X4			C	0000	FED	TBD			\$430	\$443						
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TA-4995	Expansion Bus			C	0000	FED	TBD			\$3,600							
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TD-4710	Facility - Park & Ride			C	0000	FED	TBD			\$2,000							
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TD-5204	Facility - Intermodal Center - Hillsborough			C	0000	FED	TBD					\$1,000					
Construction & Engineering	Public Transportation	mobility	regional	7	Orange	DCHC	CHAPEL HILL TRANSIT	TE-5202	Fixed Guideway - Light Rail - carolina Noth to Carrboro - constuction			C	0000	FED	TBD							\$6,200			
Construction & Engineering	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-4755	Expansion Bus			C	0000	FED	TBD				\$4,800				\$4,000		\$4,000
Construction & Engineering	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-4923	Replacement Bus - fixed route			C	0000	FED	TBD					\$9,100	\$9,100			\$5,200	\$5,200
Construction & Engineering	Public Transportation	infrastructure health	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-5019A	Replacement - Paratransit Van			C	0000	FED	TBD		\$112								
Construction & Engineering	Public Transportation	mobility	sub regional	5	Durham	DCHC	DURHAM AREA TRANSIT AUTHORITY / DATA	TT-4911	Technology - veh. tracking, passenger info, data communications, traffic signal priority			C	0000	FED	TBD			\$1,000							
Construction & Engineering	Public Transportation	infrastructure health	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-4994B	Replacement - Paratransit Van			C	0000	FED	TBD		\$ 237								
Construction & Engineering	Public Transportation	infrastructure health	regional	5	Durham Orange	DCHC	TRIANGLE TRANSIT	TA-5108	Replacement Van - vanpool			C	0000	FED	TBD		\$728	\$ 258	\$ 110						
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TD-4944B	Facility - I-40 Bus Bypass Shoulder Project.			C	0000	FED	TBD			\$40							
Construction & Engineering	Public Transportation	mobility	regional	7	Durham Orange	DCHC	TRIANGLE TRANSIT	TE-4903B	Fixed Guideway - Light Rail Service-Raleigh-Rtp-Durham Design Phase 1			C	0000	FED	TBD			\$1,000							
Construction & Engineering	Public Transportation	mobility	regional	5, 7	Durham Orange	DCHC	TRIANGLE TRANSIT	TT-5213	Technology - Regional Fare System Upgrade			C	0000	FED	TBD					\$1,250					
Construction & Engineering	Public Transportation	mobility	regional	5, 7	Durham Orange	DCHC	TRIANGLE TRANSIT	TT-5214	Technology - Advanced Public Info Communication System			C	0000	FED	TBD						\$500				

Rural

WORK PROGRAM	GOAL	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6177	Replacement Van		80%	C	5311	FNU	US	\$99										
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6177	Replacement Van		10%	C	5311	FNU	STAT	\$12										
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6177	Replacement Van		10%	C	5311	FNU	L	\$12										
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6239	Expansion - Light Transit Vehicle		80%	C	5316	JARC	US	\$118										
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6239	Expansion - Light Transit Vehicle		10%	C	5316	JARC	STAT	\$15										
Construction & Engineering	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TA-6239	Expansion - Light Transit Vehicle		10%	C	5316	JARC	L	\$15										
Maintenance	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TG-6109	Routine Capital	\$13	80%	C	5311	FNU	US											
Maintenance	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TG-6109	Routine Capital	\$2	10%	C	5311	FNU	STAT											
Maintenance	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TG-6109	Routine Capital	\$2	10%	C	5311	FNU	L											
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TJ-6114	Operating Assistance - employment transportation	\$17	100%	O	ROAP	OAWP	STAT	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17
Operations	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TK-6117	Administration	\$190	80%	O	5311	FNU	US	\$187										
Operations	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TK-6117	Administration	\$12	5%	O	5311	FNU	STAT	\$12										
Operations	infrastructure health	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TK-6117	Administration	\$36	15%	O	5311	FNU	L	\$35										
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TL-6113	Operating Assistance - elderly and disabled persons	\$81	100%	O	ROAP	EDTAP	STAT	\$81	\$81	\$81	\$81	\$81	\$81	\$81	\$81	\$81	\$81	\$81
Construction & Engineering	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TM-6102	mobility management - ARRA funded	\$42	100%	Oc	ARRA	ARRA	US											
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TM-6103	operating - Job Access / Reverse Commute		50%	O	5316	JARC	US	\$34	\$34									
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TM-6103	operating - Job Access / Reverse Commute		50%	O	5316	JARC	L	\$34	\$34									
Construction & Engineering	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TQ-6111	mobility management - Elderly and Disabled persons health rides - Council on Aging	\$119	80%	Oc	5310	FEPD	US	\$108	\$108									
Construction & Engineering	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TQ-6111	mobility management - Elderly and Disabled persons health rides - Council on Aging	\$15	10%	Oc	5310	FEPD	STAT	\$14	\$14									
Construction & Engineering	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TQ-6111	mobility management - Elderly and Disabled persons health rides - Council on Aging	\$15	10%	Oc	5310	FEPD	L	\$14	\$14									
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TR-6153	Operating Assistance - general public in rural areas	\$11	10%	O	ROAP	RGP	STAT	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$11
Operations	mobility	8	Chatham	TRIANGLE AREA	Chatham Transit Network	TR-6153	Operating Assistance - general public in rural areas	\$96	90%	O	ROAP	RGP	STAT	\$96	\$96	\$96	\$96	\$96	\$96	\$96	\$96	\$96	\$96	\$96
Construction & Engineering	infrastructure health	7	Chatham	TRIANGLE AREA	Chatham Transit Network (pass thru Chapel Hill Transit)	TG-6109	Routine capital - spare engines		80%	C	5307	CMAQ	US			\$120								
Construction & Engineering	infrastructure health	7	Chatham	TRIANGLE AREA	Chatham Transit Network (pass thru Chapel Hill Transit)	TG-6109	Routine capital - spare engines		20%	C	5307	CMAQ	L			\$30								
Construction & Engineering	infrastructure health	5	Durham	DCHC	Durham County Access	TA-6187	Replacement Van		80%	C	5311	FNU	US	\$66										
Construction & Engineering	infrastructure health	5	Durham	DCHC	Durham County Access	TA-6187	Replacement Van		10%	C	5311	FNU	STAT	\$8										
Construction & Engineering	infrastructure health	5	Durham	DCHC	Durham County Access	TA-6187	Replacement Van		10%	C	5311	FNU	L	\$8										
Operations	mobility	5	Durham	DCHC	Durham County Access	TJ-6124	Operating Assistance - employment transportation	\$25	100%	O	ROAP	OAWP	STAT	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Operations	infrastructure health	5	Durham	DCHC	Durham County Access	TK-6126	Administration	\$12	12%	O	5311	FNU	US	\$8										
Operations	infrastructure health	5	Durham	DCHC	Durham County Access	TK-6126	Administration	\$73	78%	O	5311	FNU	STAT	\$46										
Operations	infrastructure health	5	Durham	DCHC	Durham County Access	TK-6126	Administration	\$15	10%	O	5311	FNU	L	\$9										
Operations	mobility	5	Durham	DCHC	Durham County Access	TL-6123	Operating Assistance - elderly and disabled persons	\$156	100%	O	ROAP	EDTAP	STAT	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156

Rural

WORK PROGRAM	GOAL	DIV	COUNTIES	MPO/RPO	Transit Partners and Providers	STIP#	DESCRIPTION	2010	%	C/O	FTA	STIP FUND	match	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Construction & Engineering	mobility	5	Durham	DCHC	Durham County Access	TQ-6109	operating - Elderly and Disabled persons purchase of service		80%	Oc	5310	FEPD	US	\$46	\$46										
Construction & Engineering	mobility	5	Durham	DCHC	Durham County Access	TQ-6109	operating - Elderly and Disabled persons purchase of service		10%	Oc	5310	FEPD	STAT	\$6	\$6										
Construction & Engineering	mobility	5	Durham	DCHC	Durham County Access	TQ-6109	operating - Elderly and Disabled persons purchase of service		10%	Oc	5310	FEPD	L	\$6	\$6										
Operations	mobility	5	Durham	DCHC	Durham County Access	TR-6164	Operating Assistance - general public in rural areas	\$72	90%	O	ROAP	RGP	STAT	\$72	\$72	\$72	\$72	\$72	\$72	\$72	\$72	\$72	\$72	\$72	\$72
Operations	mobility	5	Durham	DCHC	Durham County Access	TR-6164	Operating Assistance - general public in rural areas	\$8	10%	O	ROAP	RGP	L	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8
Construction & Engineering	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TA-6206	Replacement - Light Transit Vehicle		65%	C	5311	FNU	US	\$129											
Construction & Engineering	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TA-6206	Replacement - Light Transit Vehicle		25%	C	5311	FNU	STAT	\$50											
Construction & Engineering	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TA-6206	Replacement - Light Transit Vehicle		10%	C	5311	FNU	L	\$20											
Maintenance	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TG-6129	Routine Capital	\$2	65%	C	5311	FNU	US	\$7											
Maintenance	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TG-6129	Routine Capital	\$1	25%	C	5311	FNU	STAT	\$3											
Maintenance	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TG-6129	Routine Capital	\$0	10%	C	5311	FNU	L	\$1											
Operations	mobility	7	Orange	TRIANGLE AREA	Orange Public Transit	TJ-6149	Operating Assistance - employment transportation	\$25	100%	O	ROAP	OAWP	STAT	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Operations	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TK-6151	Administration	\$120	65%	O	5311	FNU	US	\$120											
Operations	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TK-6151	Administration	\$37	25%	O	5311	FNU	STAT	\$37											
Operations	infrastructure health	7	Orange	TRIANGLE AREA	Orange Public Transit	TK-6151	Administration	\$28	10%	O	5311	FNU	L	\$28											
Operations	mobility	7	Orange	TRIANGLE AREA	Orange Public Transit	TL-6148	Operating Assistance - elderly and disabled persons	\$97	100%	O	ROAP	EDTAP	STAT	\$97	\$97	\$97	\$97	\$97	\$97	\$97	\$97	\$97	\$97	\$97	\$97
Operations	mobility	7	Orange	TRIANGLE AREA	Orange Public Transit	TR-6156	Operating Assistance - general public in rural areas	\$10	10%	O	ROAP	RGP	STAT	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10
Operations	mobility	7	Orange	TRIANGLE AREA	Orange Public Transit	TR-6156	Operating Assistance - general public in rural areas	\$93	90%	O	ROAP	RGP	STAT	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93

WORK PROGRAM CATEGORY	MODE	GOAL	TIER	DIV	COUNTIES	MPO /RP	transit partners	STIP#	DESCRIPTION	2010	%	C/ O/	FTA	STIP FUNDS	match	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Planning	Public Transportation	infrastructure health	statewide	99	STATEWIDE	s	regional	TP-4901	Planning and Research support activities	\$373	80%	C	5304	FSPR	US	\$373	\$373	\$373	\$373	\$373	\$373	\$373	\$373	\$373	\$373
Planning	Public Transportation	infrastructure health	statewide	99	STATEWIDE	s	regional	TP-4901	Planning and Research support activities	\$93	20%	C	5304	FSPR	STAT	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93	\$93
Construction & Engineering	Public Transportation	mobility	regional	99	STATEWIDE	s	regional	TT-9702	Technology - veh. tracking, passenger info, data communications, traffic signal priority	\$1,120	90%	C	STAT	UTCH	STAT	\$1,325	\$900	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800
Construction & Engineering	Public Transportation	mobility	regional	99	STATEWIDE	s	regional	TT-9702	Technology - veh. tracking, passenger info, data communications, traffic signal priority	\$124	10%	C	STAT	UTCH	L	\$147	\$100	\$89	\$89	\$89	\$89	\$89	\$89	\$89	\$89
Administration	Public Transportation	mobility	statewide	99	STATEWIDE	s	statewide	TS-4900Z	Statewide training and support services for rural, small urban and paratransit operations	\$283	100%	A	5311	RTAP		\$283	\$283	\$283	\$283	\$283	\$283	\$283	\$283	\$283	\$283
Administration	Public Transportation	infrastructure health	statewide	99	STATEWIDE	s	sub regional	TK-4900Z	State Administration oversight, and planning assistance for rural area general public transit services	\$1,000	100%	A	5311	FNU	US	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031	\$1,031
Administration	Public Transportation	mobility	statewide	99	STATEWIDE	s	sub regional	TM-5301	State Administration - Job Access / Reverse Commute	\$503	100%	A	5316	JARC	US	\$301	\$301	\$301	\$301	\$301	\$301	\$301	\$301	\$301	\$301
Administration	Public Transportation	mobility	statewide	99	STATEWIDE	s	sub regional	TN-5112	State Administration - New Freedom - beyond Am. Disability Act requirements	\$327	100%	A	5317	FNF	US	\$196	\$196	\$196	\$196	\$196	\$196	\$196	\$196	\$196	\$196
Administration	Public Transportation	mobility	statewide	99	STATEWIDE	s	sub regional	TV-4903	State Administration - Federal Elderly and Disabled persons assistance program	\$674	100%	A	5310	FEDP	US	\$388	\$388	\$388	\$388	\$388	\$388	\$388	\$388	\$388	\$388

**RESOLUTION APPROVING  
AMENDMENT #2 TO  
THE 2035 LONG RANGE TRANSPORTATION PLAN  
FOR THE  
DURHAM-CHAPEL HILL-CARRBORO (DCHC)  
METROPOLITAN PLANNING ORGANIZATION (MPO)**

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 Transportation Advisory Committee is the duly recognized transportation decision making body for the 3-C transportation planning process (i.e., continuous, cooperative, and comprehensive) of the Durham–Chapel Hill–Carrboro Metropolitan Planning Organization (DCHC MPO); and,

**WHEREAS**, the Transportation Advisory Committee approved the DCHC MPO 2035 Long Range Transportation Plan (LRTP) on May 13, 2009; and,

**WHEREAS**, the DCHC MPO has amended the 2035 Long Range Transportation Plan (LRTP) to ensure that the Plan conforms to the intent and purpose of the North Carolina State Implementation Plan (or interim emissions tests in areas where no SIP is approved or found adequate) in accordance with the Clean Air Act Amendment (CAAA); and,

**WHEREAS**, the Amended 2035 Long Range Transportation Plan (LRTP) meets the planning requirements of 23 CFR Part 134 and the public involvement policies of the DCHC MPO as adopted on October 11, 2006; and,

**WHEREAS**, that conformity determination was made according to the established interagency consultation (IC) procedures for North Carolina; and,

**WHEREAS**, the Transportation Conformity Determination Analysis and Report demonstrate that the Amended 2035 Long Range Transportation Plan (LRTP) conform to the intent and purpose of the North Carolina State Implementation Plan (or interim emissions tests in areas where no SIP is approved or found adequate) in accordance with the Clean Air Act Amendment (CAAA); and,

(Continued)

(Continued – Resolution Adopting Amendment #1 to the DCHC MPO's 2035 LRTP)

**NOW THEREFORE, BE IT RESOLVED:** that the Amended 2035 Long Range Transportation Plan (LRTP) for the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) be approved and adopted.

---

Lydia E. Lavelle, TAC Chair

Durham County, North Carolina

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

Date: April 13, 2011

---

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

# Addendum

## Amendment 2 (April 13, 2011)

Amendment 2 corrects the mileage (called Distance in the project table) to match the values in the North Carolina State Transportation Improvement Program (STIP) and makes changes to the Air Quality Analysis Year to correspond to current estimates of the project complete timeframe. The following table shows the corrections, in **bold** font, using the format from Appendix 1 of the 2035 LRTP.

Project ID	Road Name	Project Limits		Existing # of Lanes	Proposed # of Lanes	Distance (miles)	Regionally Significant	Exempt from AQ	Project Capital Cost (2008 \$)	AQ Analysis Year
		From	To							
<b>DCHC MPO Roadway Projects</b>										
83	Northern Durham Pkwy	US 70 E	I 85 N	0	4	<del>6.40</del> <b>8.1</b>	Yes	No	\$66,999,951	2025
84	Northern Durham Pkwy	I 85 North	Old Oxford Hwy	0	4	<del>2.40</del> <b>3.8</b>	Yes	No	\$27,284,982	2025
85	Northern Durham Pkwy	Old Oxford Hwy	Roxboro Rd	0	2	<del>2.64</del> <b>4.4</b>	No	No	\$19,358,989	2025
49	I-85	US 70	Red Mill Rd	4	6	<del>5.68</del> <b>6.4</b>	Yes	No	\$76,107,334	2025
44	I-40	NC 86	I-85	4	6	<del>7.32</del> <b>7.5</b>	Yes	No	\$77,277,997	2035
9	Carver St Ext	Armfield St	Old Oxford Rd	0	4	0.73	No	No	\$7,660,000	<del>2025</del> <b>2015</b>
56	Louis Stephens Dr (RTP)	Hopson Rd	Wake County Line	0	<del>4</del> <b>2</b>	0.90	No	No	\$0	2015
56.1	Louis Stephens Dr (RTP)	Hopson Rd	Wake County Line	2	4	0.90	No	No	\$8,010,000	2035
<b>NC CAMPO Roadway Projects</b>										
A46	Tryon Rd	Norfolk Southern Rail	South Wilmington St.	2	4	0.9	No	No	\$5,200,000	<del>2015</del> <b>2025</b>
F43	I-40	US 1/64	Lake Wheeler Rd.	6	8	4.43	Yes	No	\$49,027,558	<del>2015</del> <b>2025</b>
	US 64/Laura Duncan Interchange						No	No	\$32,500,000	<b>2025</b>
A380	US 64	US 1	Laura Duncan Rd.	4	4	2.49	Yes	No	\$11,000,000	<del>2015</del> <b>2025</b>
A90d	US401	Franklin County	NC 39	2	4	10.50	Yes	No	\$22,485,000	<del>2015</del> <b>2025</b>
A222a	NC 54	Cary Parkway	Weston Parkway	2	9	0.90	Yes	No	\$4,759,000	<del>2015</del> <b>2025</b>
A235b	US 1A	Forbes Rd.	Rogers Rd.	2	4	0.26	No	No	\$1,700,000	<del>2015</del> <b>2025</b>

**MEMORANDUM**

**TO: Transportation Advisory Committee  
DCHC MPO**

**FROM: DCHC MPO Lead Planning Agency**

**DATE: March 9, 2011**

**SUBJECT: 2011-2012 Unified Planning Work Program (UPWP)**

**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 funds. These funds are allocated by NCDOT's Public Transportation Division (PTD). Transit agencies can also use portions of their Section 5307 capital and operating funds for planning. These funds must be approved by the TAC as part of the UPWP approval process.

**Unified Planning Work Program (UPWP) Development Process**

The development process for the 2011-12 UPWP is presented below. The work program contains any new initiative for FY2012 and a continuation of the FY2011 initiatives and emphasis areas. In addition, the schedule provides for opportunity for linking the UPWP development with the local member governments' budget process. Draft 2011-2012 UPWP schedule is illustrated in the attached development schedule.

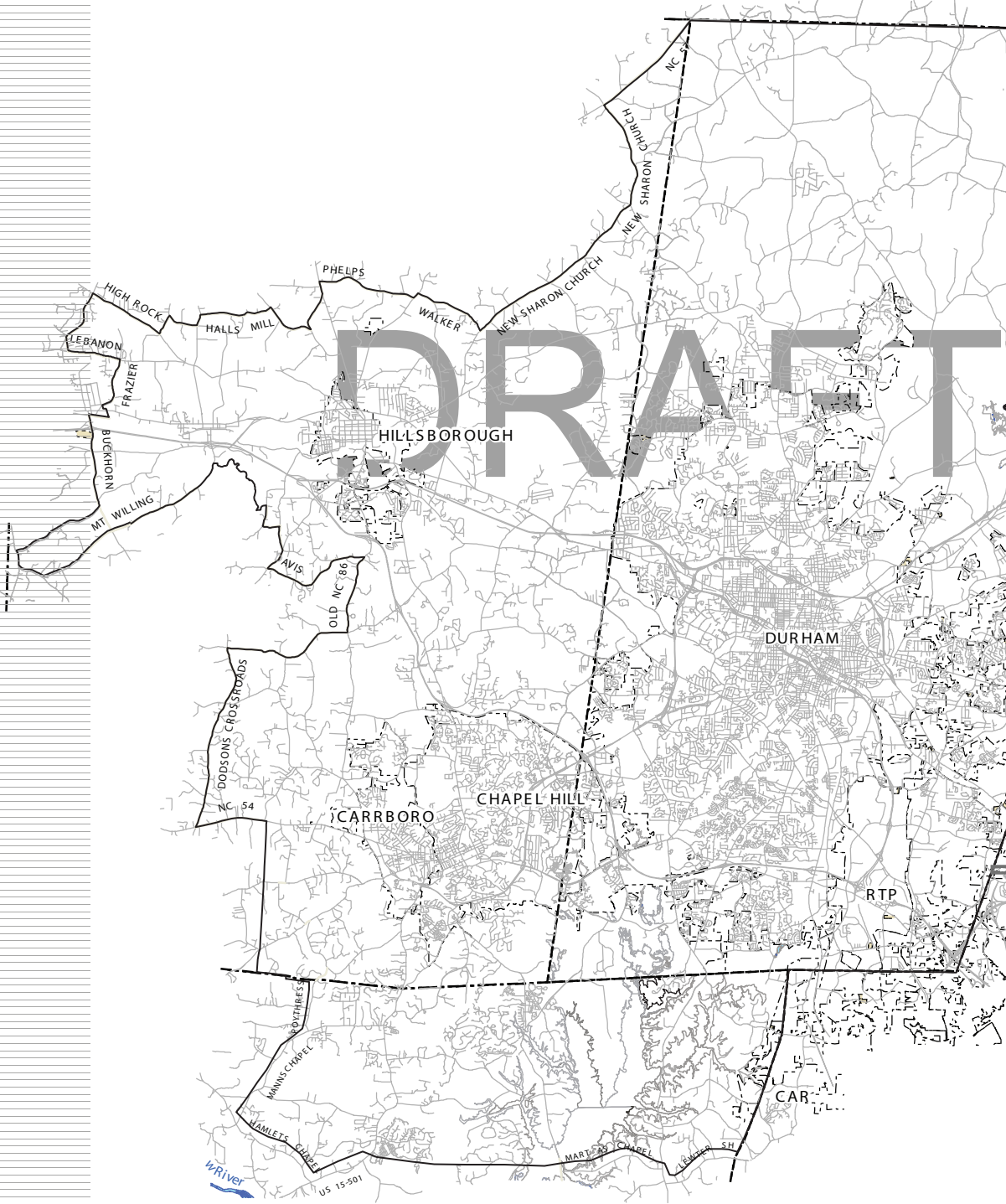
1	26-Jan-11	TCC receives the schedule for the development of the 2011-2012 UPWP and Draft financial tables.
2	23-Jan-11	Deadline for submitting transit element of the UPWP to NCDOT-PTD
3	9-Feb-11	TAC receives schedule for the development of the 2011-2012 UPWP and Draft of Financial Schedules.
4	23-Feb-11	TCC receives 2nd Draft 2011-2012 UPWP and recommends TAC release 2nd draft UPWP for public comment.
5	February-March	Development of Draft 2011-2012 UPWP and coordinating with local agencies continues.
6	February-March	TCC coordinates with member jurisdictions budget process for local matching funds
7	9-Mar-11	TAC receives Draft 2011-2012 UPWP and releases UPWP for public comment
8	23-Mar-11	TCC recommends Draft 2011-2012 UPWP for TAC approval
9	13-Apr-11	TAC reviews Draft 2011-2012 UPWP, hold public comments hearing
10	27-Apr-11	TCC considers public comments and recommends that TAC adopt FINAL 2011-2012 UPWP and self certifies MPO planning process
11	11-May-11	TAC adopts FINAL 2011-2012 UPWP and self certifies MPO planning process
12	1-Jun-11	NCDOT/FHWA approves 2011-2012 UPWP

# DCHC- MPO

TCC 3/23/2011 Attachment 11A

## Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Unified Planning Work Program

FY 2011-12



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

**FY 2011-2012 Unified Planning Work Program**

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

**FY 2011-2012 Unified Planning Work Program**

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

**RESOLUTION**

Approving the FY 2011-2012 Unified Planning Work Program

May 11, 2011

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

**Whereas**, 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 2011-2012.

**Now, therefore, be it resolved that the Transportation Advisory Committee hereby endorses the *Durham-Chapel Hill-Carrboro Metropolitan Planning Organization FY 2011-2012 Unified Planning Work Program.***

I, Lydia E. Lavelle, TAC Chair, do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Durham-Chapel Hill-Carrboro Transportation Advisory Committee, duly held on the 11<sup>th</sup> day of May, 2011.

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

Durham County, North Carolina

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

Date: May 11, 2011

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

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

**RESOLUTION (PTD-FTA)**

Approving the FY 2011-2012 Unified Planning Work Program (UPWP) of the  
DCHC Urban Area/Metropolitan Planning Organization

May 11, 2011

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

**Whereas**, 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 2011-2012.

**Now therefore, be it resolved that the Transportation Advisory Committee hereby endorses  
the FY 2011-2012 Unified Planning Work Program for the Durham-Chapel Hill-Carrboro  
Metropolitan Planning Organization.**

I, Lydia E. Lavelle, 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 11<sup>th</sup> day of May, 2011.

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

Durham County, North Carolina

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

Date: May 11, 2011

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

**RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS**

**RESOLUTION CERTIFYING THE DURHAM-CHAPEL HILL-CARRBORO (DCHC MPO) METROPOLITAN PLANNING ORGANIZATION'S TRANSPORTATION PLANNING PROCESS FOR FY 2011-2012 (FY 2012)**

**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 11th day of May, 2011.**

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Lydia E. Lavelle, TAC Chair

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Clerk/Secretary/Planner

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## Metropolitan Planning Self-Certification Process

CFR 450.334

The State and the MPO shall annual 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.

# DRAFT

## Metropolitan Planning Self-Certification Process

### Self-Certification Checklist

1. Is the MPO properly designated by agreement between the Governor and 75% of the urbanized area, including the central city, and in accordance in procedures set forth in state and local law (if applicable)? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (a)]
2. Does the policy board include elected officials, major modes of transportation providers and appropriate state officials? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (i)]
3. Does the MPO boundary encompass the existing urbanized area and the contiguous area expected to become urbanized within the 20-yr forecast period? [23 U.S.C. 134 (c), 49 U.S.C. 5303 (d); 23 CFR 450.308 (a)]
4. Is there a currently adopted Unified Planning Work Program (UPWP)? 23 CFR 450.314
  - a. Is there an adopted prospectus
  - b. Are tasks and products clearly outlined
  - c. Is the UPWP consistent with the LRTP
  - d. Is the work identified in the UPWP completed in a timely fashion
5. Does the area have a valid transportation planning process?  
23 U.S.C. 134; 23 CFR 450
  - 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 cover all modes applicable to the area
  - f. Is it financially constrained
  - g. Does it include funding for the maintenance and operation of the system
  - h. Does it conform to the State Implementation Plan (SIP) (if applicable)
  - i. Is it updated/reevaluated in a timely fashion (at least every 4 or 5 years)
6. Is there a valid TIP? 23 CFR 450.324, 326, 328, 330, 332
  - a. Is it consistent with the LRTP
  - b. Is it fiscally constrained
  - c. Is it developed cooperatively with the state and local transit operators
  - d. Is it updated at least every 4-yrs and adopted by the MPO and the Governor
7. Does the area have a valid CMP? (TMA only) 23 CFR 450.320
  - a. Is it consistent with the LRTP
  - b. Was it used for the development of the TIP
  - c. Is it monitored and reevaluated to meet the needs of the area
8. Does the area have a process for including environmental mitigation discussions in the planning process?
  - a. How \_\_\_\_\_
  - b. Why not \_\_\_\_\_

## Metropolitan Planning Self-Certification Process

### Self-Certification Checklist

9. Does the planning process meet the following requirements:
- a. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
  - b. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
  - c. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
  - d. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
  - e. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
  - f. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
  - g. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
  - h. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
  - i. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
  - j. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.
  - k. All other applicable provisions of Federal law. (i.e. Executive Order 12898)
10. Does the area have an adopted PIP/Public Participation Plan? 23 CRR 450.316 (b)(1)
- a. Did the public participate in the development of the PIP?
  - b. Was the PIP made available for public review for at least 45-days prior to adoption?
  - c. Is adequate notice provided for public meetings?
  - d. Are meetings held at convenient times and at accessible locations?
  - e. Is the public given an opportunity to provide oral and/or written comments on the planning process?
  - f. Is the PIP periodically reviewed and updated to ensure its effectiveness?
  - g. Are plans/program documents available in an electronic accessible format, i.e. MPO website?
11. Does the area have a process for including environmental, state, other transportation, historical, local land use and economic development agencies in the planning process?  
SAFETEA-LU
- a. How \_\_\_\_\_
  - b. Why not \_\_\_\_\_

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## 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 2011-2012 UPWP and is included in this (FY 2012) 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 funds. These funds are allocated by NCDOT's Public Transportation Division (PTD). Transit agencies can also use portions of their Section 5307 capital and operating funds for planning. These funds must be approved by the TAC as part of the UPWP approval process.

FY 2011-12 STP-DA Funds will cover special projects and continuation major emphasis projects. These are summarized as follows:

### **Special Projects**

- Follow-up Planning studies for the Special Transit Advisory Commission – STAC
- Commercial vehicle survey and counts for the Triangle Regional Model (TRM)

- Parking survey, inventory and study for the TRM
- NC 54/I40 Corridor/Sub-Area Study
- Initiation of the 2040 LRTP
- MPO Freight planning
- MPO Safety and security Plan
- Model data collection
- MPO Congestion Management Plan and process
- Integration Climate Change in Transportation Planning Process

**Continuation of Major Projects**

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

FY 2011-12 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 a formula. The DCHC MPO PL fund allocation for FY 2011-12 is as follows:

Federal (PL funds)	\$ 456,112
Local (20% match)	\$ 114,028
Total PL Funds	<u>\$ 570,140</u>

**STP-DA** – These funds are the Direct Attributable Allocation portion of the federal Surface Transportation Program (STP) funds provided to Transportation Management Areas (TMAs are MPOs over 200,000 population). By agreement with the DCHC MPO and NCDOT, a portion of these funds are used for MPO transportation planning activities. STP-DA funds earmarked for programming in the FY 2011-2012 UPWP are shown below; including re-obligated or carried over to FY 2011-12:

Federal (STP-DA)	\$ 1,588,865
Local (20% match)	\$ 397,216
Total	<u>\$ 1,986,081</u>

**State Planning and Research Funds (SPR Funds)** – These are FHWA funds allocated to the Transportation Planning Branch (TPB) of NCDOT. NCDOT determines the allocation of these funds among tasks in the UPWP and is responsible for contributing 20% of non federal matching funds. SPR funds programmed in the 2011-2012 UPWP are as follows:

Federal	\$ 64,000
NCDOT-TPB	\$ 16,000
Total SPR funds	<u>\$ 80,000</u>

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

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

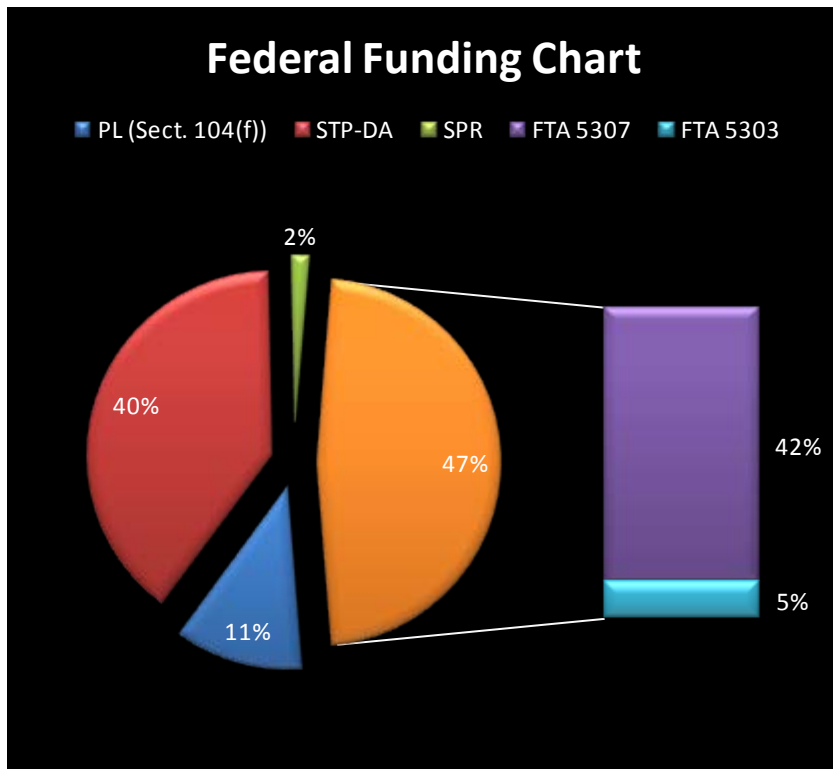
	CHT	DATA	TTA	MPO Total
Federal	\$107,596	\$111,986	\$0	\$219,582
State	\$13,450	\$13,999	\$0	\$27,449
Local	\$13,450	\$13,999	\$0	\$27,449
Total Sect. 5303	\$134,496	\$139,984	\$0	\$274,480

**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	\$325,000	\$509,724	\$851,000	\$1,685,724
State	\$40,625	\$63,716	\$106,375	\$210,716
Local	\$40,625	\$63,716	\$106,375	\$210,716
Total Sect. 5307	\$406,250	\$637,156	\$1,063,750	\$2,107,156

# DCHC MPO UPWP FY 2011-2012 SUMMARY Funding Sources

Funding Type	Federal	State	Local	Total
PL (Sect. 104(f))	\$456,112	\$0	\$114,028	\$570,140
STP-DA	\$1,588,865	\$0	\$397,216	\$1,986,081
SPR	\$64,000	\$16,000	\$0	\$80,000
FTA 5307	\$1,685,724	\$210,716	\$210,716	\$2,107,156
FTA 5303	\$219,582	\$27,449	\$27,449	\$274,480
<b>Totals</b>	<b>\$4,014,283</b>	<b>\$254,165</b>	<b>\$749,409</b>	<b>\$5,017,857</b>



# Special-Major Project Summary

## Introduction

The Main emphases of the current (FY 2010-11) 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 2035 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 2010-11 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, completed the formation of an energy Team and continues to provide for the Energy Team. There is on-going implementation in the focus areas of 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. Phase I has been completed and Phase 2 is begun.
3. 2012-2015 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 2009-15 MTIP: The MPO processed several administrative modifications to the 2009-15 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

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. Significant progress was made during the 2010-11 fiscal year.
10. Alston Avenue Widening and East End Connector: The LPA worked with NCDOT on the project planning and environmental documentation (NEPA) for the Alston Avenue and East End Connector projects. The LPA will facilitate the public involvement for the East End Connector project including finalizing recommendations from the Ad Hoc Committee and the City of Durham. The LPA coordinated with NCDOT on the environmental justice issues associated with the Alston Avenue project.
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) was completed and the implementation is under way. The MPO is providing the contractual and administrative management of this project.

### **2011-2012 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 2011-2012 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 2011-12 work programs.

<b>FY 2012 Transportation Planning Work Plan and Unified Planning Work Program (UPWP) Emphasis Transportation Planning Projects/Products</b>	
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

<b>Continuation of Special Projects</b>	
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

DRAFT

### Unified Planning Work Program (UPWP) Development Process

The development process for the 2011-12 UPWP is presented below. The work program contains any new initiative for FY2012 and a continuation of the FY2011 initiatives and emphasis areas. In addition, the schedule provides for opportunity for linking the UPWP development with the local member governments' budget process. Draft 2011-2012 UPWP schedule is illustrated in the attached development schedule.

1	26-Jan-11	TCC receives the schedule for the development of the 2011-2012 UPWP and Draft financial tables.
2	23-Jan-11	Deadline for submitting transit element of the UPWP to NCDOT-PTD
3	9-Feb-11	TAC receives schedule for the development of the 2011-2012 UPWP and Draft of Financial Schedules.
4	23-Feb-11	TCC receives 2nd Draft 2011-2012 UPWP and recommends TAC release 2nd draft UPWP for public comment.
5	February-March	Development of Draft 2011-2012 UPWP and coordinating with local agencies continues.
6	February-March	TCC coordinates with member jurisdictions budget process for local matching funds
7	9-Mar-11	TAC receives Draft 2011-2012 UPWP and releases UPWP for public comment
8	23-Mar-11	TCC recommends Draft 2011-2012 UPWP for TAC approval
9	13-Apr-11	TAC reviews Draft 2011-2012 UPWP, hold public comments hearing
10	27-Apr-11	TCC considers public comments and recommends that TAC adopt FINAL 2011-2012 UPWP and self certifies MPO planning process
11	11-May-11	TAC adopts FINAL 2011-2012 UPWP and self certifies MPO planning process
12	1-Jun-11	NCDOT/FHWA approves 2011-2012 UPWP

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**MPO Funding Table - Distribution by Agency**

Receiving Agency	SPR Highway		STP-DA Sec. 133(b)(3)(7)		Section 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Funding Summary			
	NCDOT	FHWA	Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA	Local	NCDOT	Federal	Total
	20%	80%	20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
Durham/DATA	\$0	\$0	\$383,416	\$1,533,665	\$90,043	\$360,170	\$13,999	\$13,999	\$111,986	\$63,716	\$63,716	\$509,724	\$551,173	\$77,714	\$2,515,547	\$3,144,434
Carrboro	\$0	\$0	\$0	\$0	\$6,634	\$26,538	\$0	\$0	\$0	\$0	\$0	\$0	\$6,634	\$0	\$26,538	\$33,172
Chapel Hill/CHT	\$0	\$0	\$0	\$0	\$17,351	\$69,404	\$13,450	\$13,450	\$107,596	\$40,625	\$40,625	\$325,000	\$71,426	\$54,075	\$502,000	\$627,500
Orange County	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TJCOG	\$0	\$0	\$13,800	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800	\$0	\$55,200	\$69,000
TTA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,375	\$106,375	\$851,000	\$106,375	\$106,375	\$851,000	\$1,063,750
NCDOT	\$16,000	\$64,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,000	\$64,000	\$80,000
Totals	\$16,000	\$64,000	\$397,216	\$1,588,865	\$114,028	\$456,112	\$27,449	\$27,449	\$219,582	\$210,716	\$210,716	\$1,685,724	\$749,408	\$254,164	\$4,014,285	\$5,017,856

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Footnote: All program of activities have been developed with the knowledge that there is no approved Federal Indirect Cost Plan in place at the time of the approval of the FY2012 work program.

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**MPO Wide - Detail Funding Tables - All Funding Sources**

	Task Description	SPR Highway		STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
<b>II-A</b>	<b>Surveillance of Change</b>																	
	1 Traffic Volume Counts	0	0	3,525	14,100	728	2,912	0	0	0	0	0	0	4,253	-	17,012	21,265	
	2 Vehicle Miles of Travel	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	-	-	-	-	
	4 Traffic Accidents	0	0	650	2,600	58	232	0	0	0	0	0	0	708	-	2,832	3,540	
	5 Transit System Data	0	0	0	0	0	0	9,319	9,319	74,549	8,674	8,674	69,390	17,992	17,992	143,938	179,923	
	6 Dwelling Unit, Pop. & Emp. Change	0	0	0	0	12,064	48,256	0	0	0	0	0	0	12,064	-	48,256	60,320	
	7 Air Travel	0	0	0	0	400	1,600	0	0	0	0	0	0	400	-	1,600	2,000	
	8 Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
	9 Travel Time Studies	0	0	0	0	7,128	28,512	0	0	0	0	0	0	7,128	-	28,512	35,640	
	10 Mapping	0	0	14,880	59,520	6,942	27,768	3,000	3,000	24,000	0	0	0	0	24,822	3,000	111,288	139,110
	11 Central Area Parking Inventory	0	0	952	3,808	0	0	0	0	0	0	0	0	952	-	3,808	4,760	
	12 Bike & Ped. Facilities Inventory	0	0	1,000	4,000	652	2,608	0	0	0	0	0	0	1,652	-	6,608	8,260	
	13 Bike & Ped. Counts	0	0	10,000	40,000	760	3,040	0	0	0	0	0	0	10,760	-	43,040	53,800	
<b>II-B</b>	<b>Long Range Transp. Plan</b>																	
	1 Collection of Base Year Data	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
	2 Collection of Network Data	0	0	0	0	64	256	0	0	0	0	0	0	64	-	256	320	
	3 Travel Model Updates	1,700	6,800	63,356	253,424	0	0	300	300	2,400	11,250	11,250	90,000	74,906	13,250	352,624	440,780	
	4 Travel Surveys	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
	5 Forecast of Data to Horizon year	0	0	0	0	17,100	68,400	1,000	1,000	8,000	0	0	0	18,100	1,000	76,400	95,500	
	6 Community Goals & Objectives	0	0	0	0	2,550	10,200	500	500	4,000	0	0	0	3,050	500	14,200	17,750	
	7 Forecast of Future Travel Patterns	0	0	3,486	13,944	600	2,400	300	300	2,400	0	0	0	4,386	300	18,744	23,430	
	8 Capacity Deficiency Analysis	0	0	9,200	36,800	600	2,400	0	0	0	0	0	0	9,800	-	39,200	49,000	
	9 Highway Element of th LRTP	2,300	9,200	1,120	4,480	300	1,200	0	0	0	0	0	0	1,420	2,300	14,880	18,600	
	10 Transit Element of the LRTP	1,300	5,200	1,760	7,040	0	0	1,000	1,000	8,000	3,889	3,889	31,110	6,649	6,189	51,350	64,187	
	11 Bicycle & Ped. Element of the LRTP	1,300	5,200	12,800	51,200	1,400	5,600	0	0	0	0	0	0	14,200	1,300	62,000	77,500	
	12 Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
	13 Collector Street Element of LRTP	200	800	1,000	4,000	0	0	0	0	0	0	0	0	1,000	200	4,800	6,000	
	14 Rail, Water or other mode of LRTP	1,000	4,000	0	0	0	0	0	0	0	0	0	0	-	1,000	4,000	5,000	
	15 Freight Movement/Mobility Planning	0	0	3,600	14,400	0	0	0	0	0	0	0	0	3,600	-	14,400	18,000	
	16 Financial Planning	0	0	2,500	10,000	2,000	8,000	300	300	2,400	8,334	8,334	66,674	13,134	8,634	87,074	108,842	
	17 Congestion Management Strategies	200	800	102,130	408,520	1,256	5,024	500	500	4,000	2,145	2,145	17,160	106,031	2,845	435,504	544,380	
	18 Air Qual. Planning/Conformity Anal.	1,000	4,000	0	0	3,378	13,512	0	0	0	0	0	0	3,378	1,000	17,512	21,890	
<b>II-C</b>	<b>Short Range Transit Planning</b>																	
	Short Range Transit Planning	0	0	0	0	224	896	0	0	0	56,500	56,500	452,000	56,724	56,500	452,896	566,120	
<b>III-A</b>	<b>Planning Work Program</b>																	
	Planning Work Program	400	1,600	0	0	9,134	36,536	3,438	3,438	27,506	1,000	1,000	8,000	13,572	4,838	73,642	92,053	
<b>III-B</b>	<b>Transp. Improvement Plan</b>																	
	TIP	400	1,600	0	0	12,108	48,432	559	559	4,475	1,800	1,800	14,400	14,467	2,759	68,907	86,134	
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr. Reg. Reqs.</b>																	
	1 Title VI	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
	2 Environmental Justice	0	0	2,692	10,768	160	640	0	0	0	664	664	5,310	3,516	664	16,718	20,897	
	3 Minority Business Enterprise	0	0	0	0	0	0	0	0	0	500	500	4,000	500	500	4,000	5,000	
	4 Planning for the Elderly & Disabled	0	0	0	0	64	256	0	0	0	0	0	0	64	-	256	320	
	5 Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0	2,000	2,000	16,000	2,000	2,000	16,000	20,000	
	6 Public Involvement	0	0	13,000	52,000	486	1,944	1,682	1,682	13,458	9,148	9,148	73,180	24,316	10,830	140,582	175,727	
	7 Private Sector Participation	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
<b>III-D</b>	<b>Incidental Png./Project Dev.</b>																	
	1 Transportation Enhancement Png.	100	400	0	0	0	0	0	0	0	49,250	49,250	394,000	49,250	49,350	394,400	493,000	
	2 Enviro. Analysis & Pre-TIP Png.	400	1,600	1,089	4,356	96	384	0	0	0	0	0	0	1,185	400	6,340	7,925	
	3 Special Studies	1,000	4,000	76,300	305,200	10,954	43,816	0	0	0	0	0	0	87,254	1,000	353,016	441,270	
	4 Regional or Statewide Planning	700	2,800	13,885	55,540	351	1,403	2,000	2,000	16,000	1,825	1,825	14,600	18,061	4,525	90,343	112,929	
<b>III-E</b>	<b>Management &amp; Operations</b>																	
	1 Management & Operations	4,000	16,000	58,291	233,165	22,471	89,884	3,550	3,550	28,397	53,738	53,738	429,902	138,050	61,287	797,347	996,684	
	<b>Totals</b>	<b>\$16,000</b>	<b>\$64,000</b>	<b>\$397,216</b>	<b>\$1,588,865</b>	<b>\$114,028</b>	<b>\$456,111</b>	<b>\$27,448</b>	<b>\$27,448</b>	<b>\$219,585</b>	<b>\$210,716</b>	<b>\$210,716</b>	<b>\$1,685,724</b>	<b>\$749,408</b>	<b>\$254,164</b>	<b>\$4,014,285</b>	<b>\$5,017,856</b>	

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Composite Agency Tables -PL & STPDA Funding ONLY.**

	Task Description	Chapel Hill			Carrboro			TJCOG			Durham			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%
<b>II A</b>	<b>Surveillance of Change</b>															
1	Traffic Volume Counts	\$600	\$2,400	\$3,000	\$128	\$512	\$640	\$0	\$0	\$0	\$3,525	\$14,100	\$17,625	\$4,253	\$17,012	\$21,265
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	\$0	\$58	\$232	\$290	\$0	\$0	\$0	\$650	\$2,600	\$3,250	\$708	\$2,832	\$3,540
5	Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Dwelling Unit, Pop. & Emp. Change	\$600	\$2,400	\$3,000	\$64	\$256	\$320	\$0	\$0	\$0	\$11,400	\$45,600	\$57,000	\$12,064	\$48,256	\$60,320
7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$1,600	\$2,000	\$400	\$1,600	\$2,000
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	\$0	\$128	\$512	\$640	\$0	\$0	\$0	\$7,000	\$28,000	\$35,000	\$7,128	\$28,512	\$35,640
10	Mapping	\$2,000	\$8,000	\$10,000	\$342	\$1,368	\$1,710	\$0	\$0	\$0	\$19,480	\$77,920	\$97,400	\$21,822	\$87,288	\$109,110
11	Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$952	\$3,808	\$4,760	\$952	\$3,808	\$4,760
12	Bike & Ped. Facilities Inventory	\$600	\$2,400	\$3,000	\$52	\$208	\$260	\$0	\$0	\$0	\$1,000	\$4,000	\$5,000	\$1,652	\$6,608	\$8,260
13	Bike & Ped. Counts	\$600	\$2,400	\$3,000	\$160	\$640	\$800	\$0	\$0	\$0	\$10,000	\$40,000	\$50,000	\$10,760	\$43,040	\$53,800
<b>II-B</b>	<b>Long Range Transp. Plan</b>															
1	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Collection of Network Data	\$0	\$0	\$0	\$64	\$256	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$256	\$320
3	Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,356	\$253,424	\$316,780	\$63,356	\$253,424	\$316,780
4	Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Forecast of Data to Horizon year	\$4,000	\$16,000	\$20,000	\$100	\$400	\$500	\$0	\$0	\$0	\$13,000	\$52,000	\$65,000	\$17,100	\$68,400	\$85,500
6	Community Goals & Objectives	\$0	\$0	\$0	\$52	\$208	\$260	\$0	\$0	\$0	\$2,498	\$9,992	\$12,490	\$2,550	\$10,200	\$12,750
7	Forecast of Future Travel Patterns	\$600	\$2,400	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,486	\$13,944	\$17,430	\$4,086	\$16,344	\$20,430
8	Capacity Deficiency Analysis	\$600	\$2,400	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$9,200	\$36,800	\$46,000	\$9,800	\$39,200	\$49,000
9	Highway Element of th L RTP	\$300	\$1,200	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,120	\$4,480	\$5,600	\$1,420	\$5,680	\$7,100
10	Transit Element of the L RTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,760	\$7,040	\$8,800	\$1,760	\$7,040	\$8,800
11	Bicycle & Ped. Element of the L RTP	\$1,400	\$5,600	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$12,800	\$51,200	\$64,000	\$14,200	\$56,800	\$71,000
12	Airport/Air Travel Element of L RTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Collector Street Element of L RTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$4,000	\$5,000	\$1,000	\$4,000	\$5,000
14	Rail, Water or other mode of L RTP	\$0	\$0	\$0	\$0	\$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	\$3,600	\$14,400	\$18,000	\$3,600	\$14,400	\$18,000
16	Financial Planning	\$1,000	\$4,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500	\$14,000	\$17,500	\$4,500	\$18,000	\$22,500
17	Congestion Management Strategies	\$1,000	\$4,000	\$5,000	\$256	\$1,024	\$1,280	\$0	\$0	\$0	\$102,130	\$408,520	\$510,650	\$103,386	\$413,544	\$516,930
18	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,378	\$13,512	\$16,890	\$3,378	\$13,512	\$16,890
<b>II-C</b>	<b>Short Range Transit Planning</b>															
	Short Range Transit Planning	\$0	\$0	\$0	\$224	\$896	\$1,120	\$0	\$0	\$0	\$0	\$0	\$0	\$224	\$896	\$1,120
<b>III-A</b>	<b>Planning Work Program</b>															
	Planning Work Program	\$400	\$1,600	\$2,000	\$286	\$1,144	\$1,430	\$0	\$0	\$0	\$8,448	\$33,792	\$42,240	\$9,134	\$36,536	\$45,670
<b>III-B</b>	<b>Transp. Improvement Plan</b>															
	TIP	\$300	\$1,200	\$1,500	\$488	\$1,952	\$2,440	\$0	\$0	\$0	\$11,320	\$45,280	\$56,600	\$12,108	\$48,432	\$60,540
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>															
1	Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Environmental Justice	\$0	\$0	\$0	\$160	\$640	\$800	\$0	\$0	\$0	\$2,692	\$10,768	\$13,460	\$2,852	\$11,408	\$14,260
3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$64	\$256	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$256	\$320
5	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Public Involvement	\$0	\$0	\$0	\$486	\$1,944	\$2,430	\$0	\$0	\$0	\$13,000	\$52,000	\$65,000	\$13,486	\$53,944	\$67,430
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>															
1	Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$96	\$384	\$480	\$0	\$0	\$0	\$1,089	\$4,356	\$5,445	\$1,185	\$4,740	\$5,925
3	Special Studies	\$0	\$0	\$0	\$954	\$3,816	\$4,770	\$5,000	\$20,000	\$25,000	\$81,300	\$325,200	\$406,500	\$87,254	\$349,016	\$436,270
4	Regional or Statewide Planning	\$351	\$1,403	\$1,754	\$0	\$0	\$0	\$8,800	\$35,200	\$44,000	\$5,085	\$20,340	\$25,425	\$14,236	\$56,943	\$71,179
<b>III-E</b>	<b>Management &amp; Operations</b>															
1	Management & Operations	\$3,000	\$12,000	\$15,000	\$2,472	\$9,890	\$12,362	\$0	\$0	\$0	\$75,290	\$301,159	\$376,449	\$80,762	\$323,049	\$403,811
	<b>Totals</b>	<b>\$17,351</b>	<b>\$69,403</b>	<b>\$86,754</b>	<b>\$6,634</b>	<b>\$26,538</b>	<b>\$33,172</b>	<b>\$13,800</b>	<b>\$55,200</b>	<b>\$69,000</b>	<b>\$473,459</b>	<b>\$1,893,835</b>	<b>\$2,367,294</b>	<b>\$511,244</b>	<b>\$2,044,976</b>	<b>\$2,556,220</b>

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

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

	Task Description	STP-DA Section 133(b)(3)(7)			PL Section 104(f)			TOTAL PL & STP-DA		
		Local	FHWA	Total	Local	FHWA	Total	Local	FHWA	Total
		20%	80%	100%	20%	80%	100%	20%	80%	100%
<b>II-A</b>	<b>Surveillance of Change</b>									
1	Traffic Volume Counts	3,525	14,100	17,625	728	2,912	3,640	4,253	17,012	21,265
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	650	2,600	3,250	58	232	290	708	2,832	3,540
5	Transit System Data	0	0	0	0	0	0	0	0	0
6	Dwelling Unit, Pop. & Emp. Change	0	0	0	12,064	48,256	60,320	12,064	48,256	60,320
7	Air Travel	0	0	0	400	1,600	2,000	400	1,600	2,000
8	Vehicle Occupancy Rates	0	0	0	0	0	0	0	0	0
9	Travel Time Studies	0	0	0	7,128	28,512	35,640	7,128	28,512	35,640
10	Mapping	14,880	59,520	74,400	6,942	27,768	34,710	21,822	87,288	109,110
11	Central Area Parking Inventory	952	3,808	4,760	0	0	0	952	3,808	4,760
12	Bike & Ped. Facilities Inventory	1,000	4,000	5,000	652	2,608	3,260	1,652	6,608	8,260
13	Bike & Ped. Counts	10,000	40,000	50,000	760	3,040	3,800	10,760	43,040	53,800
<b>II-B</b>	<b>Long Range Transp. Plan</b>									
1	Collection of Base Year Data	0	0	0	0	0	0	0	0	0
2	Collection of Network Data	0	0	0	64	256	320	64	256	320
3	Travel Model Updates	63,356	253,424	316,780	0	0	0	63,356	253,424	316,780
4	Travel Surveys	0	0	0	0	0	0	0	0	0
5	Forecast of Data to Horizon year	0	0	0	17,100	68,400	85,500	17,100	68,400	85,500
6	Community Goals & Objectives	0	0	0	2,550	10,200	12,750	2,550	10,200	12,750
7	Forecast of Future Travel Patterns	3,486	13,944	17,430	600	2,400	3,000	4,086	16,344	20,430
8	Capacity Deficiency Analysis	9,200	36,800	46,000	600	2,400	3,000	9,800	39,200	49,000
9	Highway Element of th LRTP	1,120	4,480	5,600	300	1,200	1,500	1,420	5,680	7,100
10	Transit Element of the LRTP	1,760	7,040	8,800	0	0	0	1,760	7,040	8,800
11	Bicycle & Ped. Element of the LRTP	12,800	51,200	64,000	1,400	5,600	7,000	14,200	56,800	71,000
12	Airport/Air Travel Element of LRTP	0	0	0	0	0	0	0	0	0
13	Collector Street Element of LRTP	1,000	4,000	5,000	0	0	0	1,000	4,000	5,000
14	Rail, Water or other mode of LRTP	0	0	0	0	0	0	0	0	0
15	Freight Movement/Mobility Planning	3,600	14,400	18,000	0	0	0	3,600	14,400	18,000
16	Financial Planning	2,500	10,000	12,500	2,000	8,000	10,000	4,500	18,000	22,500
17	Congestion Management Strategies	102,130	408,520	510,650	1,256	5,024	6,280	103,386	413,544	516,930
18	Air Qual. Planning/Conformity Anal.	0	0	0	3,378	13,512	16,890	3,378	13,512	16,890
<b>II-C</b>	<b>Short Range Transit Planning</b>									
1	Short Range Transit Planning	0	0	0	224	896	1,120	224	896	1,120
<b>III-A</b>	<b>Planning Work Program</b>									
	Planning Work Program	0	0	0	9,134	36,536	45,670	9,134	36,536	45,670
<b>III-B</b>	<b>Transp. Improvement Plan</b>									
	TIP	0	0	0	12,108	48,432	60,540	12,108	48,432	60,540
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>									
1	Title VI	0	0	0	0	0	0	0	0	0
2	Environmental Justice	2,692	10,768	13,460	160	640	800	2,852	11,408	14,260
3	Minority Business Enterprise	0	0	0	0	0	0	0	0	0
4	Planning for the Elderly & Disabled	0	0	0	64	256	320	64	256	320
5	Safety/Drug Control Planning	0	0	0	0	0	0	0	0	0
6	Public Involvement	13,000	52,000	65,000	486	1,944	2,430	13,486	53,944	67,430
7	Private Sector Participation	0	0	0	0	0	0	0	0	0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>									
1	Transportation Enhancement Plng.	0	0	0	0	0	0	0	0	0
2	Enviro. Analysis & Pre-TIP Plng.	1,089	4,356	5,445	96	384	480	1,185	4,740	5,925
3	Special Studies	76,300	305,200	381,500	10,954	43,816	54,770	87,254	349,016	436,270
4	Regional or Statewide Planning	13,885	55,540	69,425	351	1,403	1,754	14,236	56,943	71,179
<b>III-E</b>	<b>Management &amp; Operations</b>									
1	Management & Operations	58,291	233,165	291,456	22,471	89,884	112,355	80,762	323,049	403,811
	<b>Totals</b>	<b>397,216</b>	<b>1,588,865</b>	<b>1,986,081</b>	<b>114,028</b>	<b>456,111</b>	<b>570,139</b>	<b>511,244</b>	<b>2,044,976</b>	<b>2,556,220</b>

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**II-A: Surveillance of Change**

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

**Task II-A-1: Traffic Volume Counts**

Perform automatic traffic counts and turning movement counts at specified locations. Maintain ADT counts and database for model calibration on arterial, minor arterial, and collector streets. The MPO will continue traffic counts data collection at specific locations. These counts will augment triennial traffic counts collected by NCDOT. Traffic counts will include daily, hourly, vehicle classification, or turning movements. The MPO agencies will be responsible for obtaining counts at specified locations within their jurisdiction and for furnishing the raw daily traffic counts, count information, and location maps to the Lead Planning Agency (LPA). The Traffic count data will feed into the MPO Congestion Management Process (CMP), Triangle Regional Model (TRM) maintenance and update, MPO TELUDE GIS warehouse and Safety and Freight planning.

**Task II-A-2: Vehicle Miles of Travel**

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

**Task II-A-3: Street System Mileage Change**

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

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

Task II-A-4: Traffic Accidents

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

Task II-A-5: Transit System Data

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

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

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

Task II-A-7: Air Travel

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

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Task II-A-8: Vehicle Occupancy Rates

No activities proposed, therefore no funds programmed.

Task II-A-9: Travel Time Studies

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

Task II-A-10: Mapping

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

Task II-A-11: Central Area Parking Inventory

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

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

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

Task II-A-13: Bicycle and Pedestrian Counts

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

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**II-B: Long Range Transportation Plan Activities**

Federal Law (as updated by SAFETEA\_LU) and USDOT's Metropolitan Planning Regulations, require the MPO to have a Long-Range Transportation Plan (LRTP) that is: multi-modal, financially constrained, has a minimum 20 year horizon, adhere to the MPO's adopted Public Involvement Policy (PIP), have growth forecasts consistent with latest planning assumptions and local land use plan, meet air quality conformity and be approved by the Transportation Advisory Committee. The LRTP must be updated and reaffirmed every 4 years. The DCHC will continue tasks associated with the development of the 2040 LRTP air quality and the Comprehensive Transportation Plan as well as commence data collection for the 2010 model base year.

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

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

Task II-B-2: Collection of Network Data

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

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

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

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

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Task II-B-3: Travel Model Updates

This task essentially involves the update and calibration and validation for the model to support the development of the 2040 LRTP. Update of the Triangle Regional Model (TRM) including improvements, enhancements and major updates. Proposed tasks include model sub-area enhancement, other improvements identified during the development of the 2035 LRTP, such capacities revision, parking enhancement, performance measures automation, peak hour highway and transit demand forecasts, non-motorized trip incorporation, etc. The MPO will continue work on the development of the Land-use/transportation model integration and the non-motorized trip model. The MPO will carry out other tasks needed to support the Triangle Regional Model updates, including providing the MPO's share of the Service Bureau funding and 50% FTE.

Task II-B-4: Travel Surveys

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

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

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

Task II-B-6: Community Goals and Objectives

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

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

MPO will generate travel demand forecasts for future years including the LRTP horizon and air

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quality intermediate years. The forecast of travel patterns will include a review of these factors and comparison to community goals and objectives to determine if changes in assumptions are warranted.

Task II-B-8: Capacity Deficiency Analysis

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

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

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

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

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

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

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

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

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MPO bicycle and pedestrian educational brochures and pamphlets as well as Durham County bike map.

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

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

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

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

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

No activities proposed, therefore no funds programmed.

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

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

Task II-B-16: Financial Planning

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

Task II-B-17: Congestion Management Systems Strategies

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

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

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

**Task II-C: Short Range Transit Planning**

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

**Task III-A: Planning Work Program**

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

**Task III-B: Transportation Improvement Program (TIP)**

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

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**Task III-C: Civil Rights Compliance/Other Regulations and Requirements**

Task III-C-1: Title VI

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

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

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

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

Task III-C-3: Minority Business Enterprise

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

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

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

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

No funds programmed.

Task III-C-6: Public Involvement

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

Task III-C-7: Private Sector Participation

No funds programmed.

**Task III-D: Incidental Planning/Project Development**

Task III-D-1: Transportation Enhancement Planning

No funds programmed

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

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

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Task III-D-3 Special Studies

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

Task III-D-4: Regional or Statewide Planning

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

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

**Task III-E: Management and Operations**

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

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

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

DRAFT

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
<b>1</b>	<b>Surveillance of Change/ Data monitoring</b>	<b>Surveillance of Change/ Data monitoring</b>	<b>Surveillance of Change/ Data monitoring</b>	<b>Surveillance of Change/ Data monitoring</b>	<b>Surveillance of Change/ Data monitoring</b>
<b>1.1</b>	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal	ADT count and TMC annual and seasonal
<b>1.2</b>	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring
<b>1.3</b>	Street System Changes update	Street System Changes update	Street System Changes update	Street System Changes update	Street System Changes update
<b>1.4</b>	Traffic accidents data	Traffic accidents data	Traffic accidents data	Traffic accidents data	Traffic accidents data
<b>1.5</b>	Transit system data	Transit system data	Transit system data	Transit system data	Transit system data
<b>1.6</b>	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data	Housing, POP, Emp. data
<b>1.7</b>	Air travel	Air travel	Air travel	Air travel	Air travel
<b>1.8</b>	VOC	VOC	VOC	VOC	VOC
<b>1.9</b>	Travel Time	Travel Time	Travel Time	Travel Time	Travel Time
<b>1.10</b>	Mapping	Mapping	Mapping	Mapping	Mapping
<b>1.11</b>	Parking inventory	Parking inventory		Parking inventory	Parking inventory
<b>1.12</b>	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv
<b>1.13</b>	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts
<b>2</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>
<b>2.1</b>	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary
<b>2.2</b>	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports
<b>2.3</b>	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation
<b>2.4</b>	Develop FY 2012 UPWP	Develop FY 2013 UPWP	Develop FY 2014 UPWP	Develop FY 2015 UPWP	Develop FY 2016 UPWP
<b>2.5</b>	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management	UPWP financial management
	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit	Grant monitoring and audit

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
2.6	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development
3	<b>Long-Range Transportation Plan (LRTP)</b>	<b>Long-Range Transportation Plan (LRTP)</b>	<b>Long-Range Transportation Plan (LRTP)</b>	<b>Long-Range Transportation Plan (LRTP)</b>	<b>Long-Range Transportation Plan (LRTP)</b>
3.1	Land-use Scenario analysis	Approval of the 2040 LRTP for AQ analysis and conformity	Amendment of the 2040 LRTP for AQ analysis and conformity as necessary	Goals, Objectives and targets for 2045 LRTP	Approval of the 2045 LRTP for AQ analysis and conformity
3.2	Deficiency Analysis	CTP components-Highway, transit, bicycle and pedestrian vision plans	Model Update for 2045 LRTP analysis	SE data collection and Forecasts for 2045 LRTP	CTP components-Highway, transit, bicycle and pedestrian vision plans
3.3	Alternative analysis	AQ analysis and conformity determination process	Inter-Agency Consultation process	Deficiency analysis and need assessment	AQ analysis and conformity determination process
3.4	Development of Preferred Option	Inter-Agency Consultation process	CTP update	Generation of alternatives and evaluation of alternatives	Inter-Agency Consultation process
3.5		Draft LRTP AQ Conformity Jan 2013 & approval in March 2013	Land-use Scenario analysis	Land-use Scenario analysis	
3.6			2045 LRTP Visioning process	Financial analysis	
3.7		2040 LRTP conformity deadline June 15 2013		Selection of Preferred options	
3.8					
3.9					
3.10					

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
<b>4</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>
<b>4.1</b>	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities
<b>4.2</b>	Collection of 2010 base year survey data, Census, ACS augment, onboard transit, commercial vehicle, etc	Collection of 2013 base year data- traffic counts, transit, etc	Model Update for 2045 LRTP analysis	Model Update for 2045 LRTP analysis	Model Update for 2045 LRTP analysis
<b>4.3</b>	2010 Census TAZ Delineation	Collection & development of 2013 networks			
<b>4.4</b>	Re-specification of the the model TRM V6	Socio-economic and demographic data collection and forecasts			
<b>4.5</b>					
<b>4.6</b>					
<b>4.7</b>		2013 base year model calibration and validation			
<b>5</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>
<b>5.1</b>	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	
<b>5.2</b>	Update of the Comprehensive Bicycle Plan. Update of the Regional Bike Plan		Update of the Comprehensive Pedestrian Plan	Update of the Comprehensive Bicycle Plan. Update of the Regional Bike Plan	on-going implementation of the bike and pedestrian plans
<b>5.3</b>			On-going bike-pedestrian programs monitoring of strategies & effectiveness	On-going bike-pedestrian programs monitoring of strategies & effectiveness	On-going bike-pedestrian programs monitoring of strategies & effectiveness

**DCHC MPO 5-Year Unified Planning Work Program**  
**July 1, 2011 to June 30, 2016**

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
<b>6</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>
<b>6.1</b>	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process
<b>6.2</b>	Transit Development Plan (TDP) DATA	Transit Development Plan (TDP) TTA		Transit Development Plan (TDP) CHT & TTA	Transit survey
<b>7</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>
<b>7.1</b>					
<b>7.2</b>	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness
<b>7.3</b>	Establishment of Area of application & reevaluation of definition of congestion		Establishment of Area of application & reevaluation of definition of congestion		Establishment of Area of application & reevaluation of definition of congestion
<b>7.4</b>	Transportation system definition (modes & networks)		Transportation system definition (modes & networks)		Transportation system definition (modes & networks)
<b>7.5</b>	Transportation system definition (modes & networks)		Transportation system definition (modes & networks)		Transportation system definition (modes & networks)
<b>7.6</b>	Data collection & analysis for MPO CMS Update		Data collection & analysis for MPO CMS Update		Data collection & analysis for MPO CMS Update
<b>7.7</b>	Develop Performance monitoring Plan		Develop Performance monitoring Plan		Develop Performance monitoring Plan
<b>7.8</b>	Identification and evaluation of strategies.		Identification and evaluation of strategies.		Identification and evaluation of strategies.
<b>7.9</b>	Action plan for monitoring effectiveness of strategies		Action plan for monitoring effectiveness of strategies		Action plan for monitoring effectiveness of strategies

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
7.10	Public comment and adoption of the MPO CMS		Public comment and adoption of the MPO CMS		Public comment and adoption of the MPO CMS
8	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>
			Develop final draft 2013-2019 MTIP. TIP conformity determination		Develop final draft 2015-2021 MTIP. TIP conformity determination
	Reconcile 2011-17 MTIP and STIP		TAC Approves 2013-2019 MTIP		TAC Approves 2015-2021 MTIP
	TAC Approves 2011-2017 MTIP	Update TIP ranking & project prioritization methodology as necessary	BOT Approves 2013-2019 STIP	Update TIP ranking & project prioritization methodology as necessary	BOT Approves 2015-2021 STIP
	BOT Approves 2011-2017 STIP	Develop & submit TIP Project Priority List for 2013-2019 TIP		Develop & submit TIP Project Priority List for 2015-2021 TIP	
		Review draft STIP and prepare analysis comparison. Generate financial & revenue information for MTIP		Review draft STIP and prepare analysis comparison. Generate financial & revenue information for MTIP	
		One-on-one discussion between the MPO and NCDOT		One-on-one discussion between the MPO and NCDOT	
		Development 2013-2019 MTIP . Public input and comment process.		Development 2015-2021 MTIP . Public input and comment process.	
	Process MTIP amendments as needed	Process MTIP amendments as needed	Process MTIP amendments as needed	Process MTIP amendments as needed	
	Annual TIP project Listing	Annual TIP project Listing	Annual TIP project Listing	Annual TIP project Listing	

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
<b>9</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>
	Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts		Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts		Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts
	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list
	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program
	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed
	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database
<b>10</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>
	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process
		Social media in mpo public outreach and input process	Social media in mpo public outreach and input process	Social media in mpo public outreach and input process	Social media in mpo public outreach and input process
	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management

**DCHC MPO 5-Year Unified Planning Work Program  
July 1, 2011 to June 30, 2016**

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
11	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>
	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process	Participation in project development, environmental analysis, NEAP process
	Northern Durham Parkway/US 70 NEAP study	Northern Durham Parkway/US 70 NEAP study	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination
12	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>
	Community Viz and UrbanSim implementation and update	Community Viz and UrbanSim implementation and update	Community Viz and UrbanSim implementation and update	Community Viz and UrbanSim implementation and update	Community Viz and UrbanSim implementation and update
	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	
13	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>
	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance
	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring
14	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>
	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process
<b>15</b>	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>
	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination	on-going freight planning and coordination
	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies
	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps
<b>16</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>
	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation
	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation
<b>17</b>	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>
	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>
	Maintain Databases	Maintain Databases	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software
	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers

## DCHC MPO 5-Year Unified Planning Work Program July 1, 2011 to June 30, 2016

	1	2	3	4	5
FY	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Period	2011-12	2012-13	2013-14	2014-15	2015-16
	July 1, 2011-June 30, 2012	July 1, 2012-June 30, 2013	July 1, 2013-June 30, 2014	July 1, 2014-June 30, 2015	July 1, 2015-June 30, 2016
	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data
	<i>Update green print maps</i>	<i>Update green print maps</i>	<i>Update green print maps</i>	<i>Update green print maps</i>	<i>Update green print maps</i>
	Data development and update. Maintenance and update of TELUDE and applications	Data development and update. Maintenance and update of TELUDE and applications	Data development and update. Maintenance and update of TELUDE and applications	Data development and update. Maintenance and update of TELUDE and applications	Data development and update. Maintenance and update of TELUDE and applications
<b>18</b>	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>
	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process
	TAC directives	TAC directives	TAC directives	TAC directives	TAC directives
<b>19</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>
	NC 54 Studies	Parking survey/Study	As Needed	As Needed	As needed

# ***Appendices A***

## ***Federal Highway Administration (FHWA) & Federal Transit Administration (FTA)***

### ***Agency Project Narratives***

***&***

### ***Funding Tables***

**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**City of Durham / LPA**

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
<b>II A</b>	<b>Surveillance of Change</b>															
	1 Traffic Volume Counts	\$3,525	\$14,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,525	\$0	\$14,100	\$17,625	
	2 Vehicle Miles of Travel	\$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	
	4 Traffic Accidents	\$650	\$2,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$650	\$0	\$2,600	\$3,250	
	5 Transit System Data	\$0	\$0	\$0	\$0	\$8,819	\$8,819	\$70,549	\$1,486	\$1,486	\$11,890	\$10,305	\$10,305	\$82,438	\$103,048	
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$11,400	\$45,600	\$0	\$0	\$0	\$0	\$0	\$0	\$11,400	\$0	\$45,600	\$57,000	
	7 Air Travel	\$0	\$0	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$2,000	
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	9 Travel Time Studies	\$0	\$0	\$7,000	\$28,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$0	\$28,000	\$35,000	
	10 Mapping	\$14,880	\$59,520	\$4,600	\$18,400	\$0	\$0	\$0	\$0	\$0	\$0	\$19,480	\$0	\$77,920	\$97,400	
	11 Central Area Parking Inventory	\$952	\$3,808	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$952	\$0	\$3,808	\$4,760	
	12 Bike & Ped. Facilities Inventory	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$4,000	\$5,000	
	13 Bike & Ped. Counts	\$10,000	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$40,000	\$50,000	
<b>II B</b>	<b>Long Range Transp. Plan</b>															
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0	
	3 Travel Model Updates	\$63,356	\$253,424	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,356	\$0	\$253,424	\$316,780	
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	5 Forecast of Data to Horizon year	\$0	\$0	\$13,000	\$52,000	\$0	\$0	\$0	\$0	\$0	\$0	\$13,000	\$0	\$52,000	\$65,000	
	6 Community Goals & Objectives	\$0	\$0	\$2,498	\$9,992	\$0	\$0	\$0	\$0	\$0	\$0	\$2,498	\$0	\$9,992	\$12,490	
	7 Forecast of Future Travel Patterns	\$3,486	\$13,944	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,486	\$0	\$13,944	\$17,430	
	8 Capacity Deficiency Analysis	\$9,200	\$36,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,200	\$0	\$36,800	\$46,000	
	9 Highway Element of th LRTP	\$1,120	\$4,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,120	\$0	\$4,480	\$5,600	
	10 Transit Element of the LRTP	\$1,760	\$7,040	\$0	\$0	\$0	\$0	\$0	\$1,076	\$1,076	\$8,610	\$2,836	\$1,076	\$15,650	\$19,562	
	11 Bicycle & Ped. Element of the LRTP	\$12,800	\$51,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,800	\$0	\$51,200	\$64,000	
	12 Airport/Air Travel Element of LRTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	13 Collector Street Element of LRTP	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$4,000	\$5,000	
	14 Rail, Water or other mode of LRTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	15 Freight Movement/Mobility Planning	\$3,600	\$14,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600	\$0	\$14,400	\$18,000	
	16 Financial Planning	\$2,500	\$10,000	\$1,000	\$4,000	\$0	\$0	\$0	\$6,334	\$6,334	\$50,674	\$9,834	\$6,334	\$64,674	\$80,842	
	17 Congestion Management Strategies	\$102,130	\$408,520	\$0	\$0	\$0	\$0	\$0	\$2,145	\$2,145	\$17,160	\$104,275	\$2,145	\$425,680	\$532,100	
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$3,378	\$13,512	\$0	\$0	\$0	\$0	\$0	\$0	\$3,378	\$0	\$13,512	\$16,890	
<b>II C</b>	<b>Short Range Transit Planning</b>															
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,625	\$9,625	\$77,000	\$9,625	\$9,625	\$77,000	\$96,250	
<b>III-A</b>	<b>Planning Work Program</b>															
	Planning Work Program	\$0	\$0	\$8,448	\$33,792	\$3,238	\$3,238	\$25,906	\$0	\$0	\$0	\$11,686	\$3,238	\$59,698	\$74,623	
<b>III-B</b>	<b>Transp. Improvement Plan</b>															
	TIP	\$0	\$0	\$11,320	\$45,280	\$259	\$259	\$2,075	\$0	\$0	\$0	\$11,579	\$259	\$47,355	\$59,194	
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>															
	1 Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	2 Environmental Justice	\$2,692	\$10,768	\$0	\$0	\$0	\$0	\$0	\$664	\$664	\$5,310	\$3,356	\$664	\$16,078	\$20,097	
	3 Minority Business Enterprise	\$0	\$0	\$0	\$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	\$0	\$0	\$0	
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	6 Public Involvement	\$13,000	\$52,000	\$0	\$0	\$1,682	\$1,682	\$13,458	\$8,148	\$8,148	\$65,180	\$22,830	\$9,830	\$130,638	\$163,297	
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>															
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	2 Enviro. Analysis & Pre-TIP Plng.	\$1,089	\$4,356	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,089	\$0	\$4,356	\$5,445	
	3 Special Studies	\$71,300	\$285,200	\$10,000	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$81,300	\$0	\$325,200	\$406,500	
	4 Regional or Statewide Planning	\$5,085	\$20,340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,085	\$0	\$20,340	\$25,425	
<b>III-E</b>	<b>Management &amp; Operations</b>															
	1 Management & Operations	\$58,291	\$233,165	\$16,999	\$67,994	\$0	\$0	\$0	\$34,238	\$34,238	\$273,902	\$109,528	\$34,238	\$575,061	\$718,826	
	<b>Totals</b>	<b>\$383,416</b>	<b>\$1,533,665</b>	<b>\$90,043</b>	<b>\$360,170</b>	<b>\$13,999</b>	<b>\$13,999</b>	<b>\$111,986</b>	<b>\$63,716</b>	<b>\$63,716</b>	<b>\$509,724</b>	<b>\$551,173</b>	<b>\$77,714</b>	<b>\$2,515,547</b>	<b>\$3,144,434</b>	

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#### **Task II-A: Surveillance of Change**

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

#### **Task II-A-1: Traffic Volume Counts**

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

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

#### **Objectives:**

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

#### **Previous Work:**

1. 2009 traffic counts collected as part of the Surveillance of Change and studies (traffic, corridor, project planning, etc);
2. Turning movement counts 2009;

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3. Screen line counts for the 2005 TRM update;
4. ADT counts, 2008-2009;
5. NCDOT triennial counts and ADT maps;
6. Updated the DCHC traffic count library by supplementing the NCDOT count locations in the region and performing traffic counts for communities on a limited request basis;
7. Update and maintain the DCHC traffic count database; and
8. Continue to expand the DCHC traffic count database to include the hourly breakdown of traffic counts.

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Completion Date:**

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

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

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

II-A-1 - Traffic Volume Counts							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 14,100	\$ 3,525	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,625

**Funding Commitments from Other Entities:**

The cost of bi-annual ADT counts within the MPO is borne by NCDOT. University of North Carolina (UNC) will provide traffic counts within the university.

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#### **Task II-A-4: Traffic Accidents**

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

#### **Objectives:**

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

#### **Previous Work:**

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

#### **Proposed Activities:**

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

#### **Products/Deliverables:**

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

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**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

June 2012.

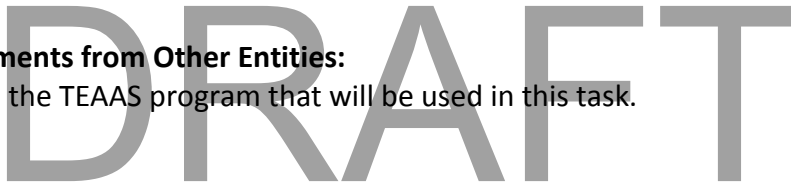
**Proposed Budget and Level of Effort (Staff or Consulting):**

Tasks will be undertaken by LPA and municipal staff.

II-A-4 - Traffic Accidents							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 2,600	\$ 650	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,250

**Funding Commitments from Other Entities:**

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



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

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

**Objectives:**

1. Check consistency between development proposal and socio-economic/ Demographic forecasts.
2. Maintain up-to-date socio-economic and demographic spatial data
3. Monitor development reviews and proposal consistent with the TAC directives and resolution.

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4. To monitor changes in dwelling units, population, and employment change; and,
5. To provide current data for MPO planning activities.

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

**Proposed Level of Effort (Staff or Consulting):**

Tasks will be undertaken by LPA and municipal staff.

II-A-6 - Dwelling Unit, Population & Employment Changes							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 45,600	\$ 11,400	\$ -	\$ -	\$ -	\$ 57,000

**Funding Commitments from Other Entities:** None.

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**Task II-A-7: Air Travel**

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

II-A-7 - Air Travel							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 1,600	\$ 400	\$ -	\$ -	\$ -	\$ 2,000

**Task II-A-9: Travel Time Studies**

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

II-A-9 - Travel Time Studies							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 28,000	\$ 7,000	\$ -	\$ -	\$ -	\$ 35,000

**Task II-A-10: Mapping**

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

**Objectives:**

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

**Previous Work:**

The LPA has prepared mapping for various MPO activities such as the 2035 LRTP, MTIP

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Regional Priority project Lists, 2009-15 MTIP, functional classification based on the 2000 Census, MPO urbanized area maps, MAB, etc.

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

Tasks will be undertaken by LPA and municipal staff.

II-A-10 - Mapping							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 59,520	\$ 14,880	\$ 18,400	\$ 4,600	\$ -	\$ -	\$ -	\$ 97,400

**Funding Commitments from Other Entities:** None.

**Task II-A-11: Central Area Parking Inventory**

The MPO will inventory of on- and off-street parking facilities in the Central Business Districts (CBD) and universities as part of the Congestion Management System and Mobility Report Card. Parking data to be collected include, number of spaces, parking fee rates (hourly daily, and

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monthly), average weekday costs and demand/occupancy. Parking information collected will help in the calibration and maintenance of the travel model.

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

Tasks will be undertaken by LPA and municipal staff.

II-A-11 - Central Area Parking Inventory							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 3,808	\$ 952	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,760

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**Funding Commitments from Other Entities:**

City of Durham and Durham County.

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

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

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**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

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

II-A-12 - Bike and Pedestrian Facilities Inventory							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 4,000	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000

**Funding Commitments from Other Entities:** None



**Task II-A-13: Bike & Ped Counts**

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

1. Collect 48-hour traffic count as part of CMS and Mobility Report Card;
2. Collect turning movement counts as part of the CMS;
3. Develop the DCHC traffic count library by supplementing the NCDOT count locations within the metropolitan area;

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4. Develop MPO Count database/GIS and mapping; and,
5. Conduct four monthly traffic counts to collect seasonal traffic information, which will assist in the development of adjustment factors and growth rates.

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:** On-going.

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

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

II-A-13 - Bike and Pedestrian Counts							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 40,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000

**Funding Commitments from Other Entities:** None

**Task II-B: Long Range Transportation Plan Activities**

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

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#### **Task II-B-3: Travel Model Updates:**

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

#### **Objectives:**

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

#### **Previous Work:**

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

#### **Proposed Activities:**

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

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

#### **Products/Deliverables:**

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

#### **Relationship to Other Plans and MPO Activities:**

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

#### **Completion Date:**

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

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

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

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II-B-3 - Travel Model Updates							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 253,424	\$ 63,356	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316,780

**Funding Commitments from Other Entities:**

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

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

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

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**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

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

II-B-5 - Forecast of Data to Horizon Year							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 52,000	\$ 13,000	\$ -	\$ -	\$ -	\$ 65,000

**Funding Commitments from Other Entities:**

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

**Task II-B-6: Community Goals and Objectives**

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

**Objectives:**

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

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4. Develop measures for measuring how goals, objectives and targets are met.

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

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

II-B-6 - Community Goals & Objectives							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 9,992	\$ 2,498	\$ -	\$ -	\$ -	\$ 12,490

**Funding Commitments from Other Entities:** None.

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

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

#### **Objectives:**

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

#### **Previous Work:**

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

#### **Proposed Activities:**

1. Run Triangle Regional Model and other modeling tools to develop future year forecasts (summary tables, maps, etc.):
  - a. Run model to evaluate performance and suitability of model to be delivered by TRM Service Bureau;
  - b. Develop future year model setups as required for Long Range Transportation Plan alternative analysis, Air Quality Conformity and other needs; and,
  - c. Run model for LRTP alternative analysis.

#### **Products/Deliverables:**

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

#### **Relationship to Other Plans and MPO Activities:**

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

#### **Completion Date:**

The specific proposed activities in this UPWP will be completed during FY 2011-2012.

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

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

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FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 13,944	\$ 3,486	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,430

**Funding Commitments from Other Entities:** None.

**Task II-B-8: Capacity Deficiency Analysis**

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

Run Triangle Regional Model and other modeling tools to develop forecasts of travel efficiencies (summary tables, maps, etc.):

1. Develop model setups as required for deficiency analysis (existing committed network with future year socio-economic data); and,
2. Run model for and prepare output files

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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The specific proposed activities in this UPWP will be completed during FY 2011-2012

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

Work on this project will be completed by LPA staff.

II-B- 8 - Capacity Deficiency Analysis							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 36,800	\$ 9,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,000

**Funding Commitments from Other Entities:** None.

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

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

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

II-B-9 - Highway Element of the LRTP							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 4,480	\$ 1,120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,600

**Funding Commitments from Other Entities:** None.

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

The MPO will begin evaluation of transit elements of the Comprehensive Transportation Plan and the 2040 LRTP. Transit evaluate will include fixed-route bus service, fixed-guide way transit, highway capacity transit and demand responsive transit. Using travel behavior, ridership forecasts and other analysis, evaluation of transit element will look at unmet needs, new services areas and potential markets. Performance measures will be established for evaluating transit alternatives. An extensive roster of transit routes, projects and services will be identified based on the current 2035 LRTP, transit feasibility studies, transit 5-year and master plans, travel demand forecast and capacity deficiency analysis. Different combinations of these

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services will produce a variety of transit alternatives that will be analyzed to find the alternative that best meets the LRTP Goals and Objectives and targets, and meets the fiscal constraint requirement. Each alternative will characterize a one or more emphasis area such as new roadways, transit intensive, etc. The transit element of the Comprehensive Transportation Plan (CTP) will be developed in parallel with the LRTP, but will likely have a different set of constraints (e.g., no fiscal constraint).

### Objectives:

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

### Previous Work:

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

### Proposed Activities:

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

### Products/Deliverables:

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

### Relationship to Other Plans and MPO Activities:

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

### Completion Date:

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Analysis and studies associated with the transit elements of the LRTP and CTP will commence in fall of 2011.

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

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

II-B-10 - Transit Element of the LRTP							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 7,040	\$ 1,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,800

**Funding Commitments from Other Entities:** None.

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

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

**Objectives:**

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

**Previous Work:**

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

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**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

Continuous – on-going.

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

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

II-B-11 - Bicycle & Pedestrian Element of the LRTP							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 51,200	\$ 12,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,000

**Funding Commitments from Other Entities:** None

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

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

**Objectives:**

1. To create an efficient and effective transportation network, especially that part of the

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network not addressed in the MPO's long-range transportation plan;

2. To develop criteria for delineating function classification and facility classification
3. To develop a plan that the development community, planners and citizens can easily understand and use for creating this ideal transportation network; and,
4. To ensure coordination of the collector street network among the various jurisdictions and transportation plans in the MPO planning area.

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities**

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

**Completion Date:**

During the 2010-11 UPWP planning period.

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

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

II-B-13 - Collector Street Element of the LRTP							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 4,000	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000

**Funding Commitments from Other Entities:** None.

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

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

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**Relationship to Other Plans and MPO Activities**

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

**Completion Date:**

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

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

LPA staff will complete these tasks.

II-B-15 - Frieght Movement/Mobility Planning							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 14,400	\$ 3,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,000

**Funding Commitments from Other Entities:**

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

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**Task II-B-16: Financial Planning**

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

1. Refine project costs estimates, as needed;

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2. Coordinate and support regional efforts to identify new transportation sources such as the joint TAC finance committee meeting for DCHC/CAMPO, mayors' meetings, North
3. Carolina Metropolitan Coalition (League of Municipalities), and Regional Transportation Alliance; and,
4. Investigate technical aspects of potential funding sources such as taxing strategies, impact fees and private/public partnerships.

### Products/Deliverables:

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

### Relationship to Other Plans and MPO Activities

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

### Completion Date:

These tasks will be ongoing.

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

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

II-B-16 - Financial Planning							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 10,000	\$ 2,500	\$ 4,000	\$ 1,000	\$ -	\$ -	\$ -	\$ 17,500

**Funding Commitments from Other Entities:** None.

### Task II-B-17: Congestion Management System

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

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

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

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5. Database and user interface.

**Relationship to Other Plans and MPO Activities**

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

**Completion Date:**

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

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

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

II-B-17 - Congestion Management Strategies							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 408,520	\$ 102,130	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 510,650

**Funding Commitments from Other Entities:** None.

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

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

**Objectives:**

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

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**Previous Work:**

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

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities**

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

**Completion Date:**

These tasks will be ongoing.

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

MPO staff will complete these tasks.

Staff effort – 176 person hours.

II-B-18 - Air Quality Planning/Conformity Analysis							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 13,512	\$ 3,378	\$ -	\$ -	\$ -	\$ 16,890

**Funding Commitments from Other Entities:**

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

## TASK DESCRIPTIONS & NARRATIVES

### FY 2011-2012 UPWP

#### **Task III-A: Planning Work Program**

This task will be to administer the FY 2011-2012 UPWP and prepare and process amendments as needed. Evaluate transportation planning work needs and emphasis areas and prepare the FY 2012-2013 UPWP. To prepare and continually maintain a Unified Planning Work Program (UPWP) that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for the FY 2011-2012. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

#### **Objectives:**

1. To prepare and continually maintain a Unified Planning Work Program (UPWP) that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for FY 2011-2012;
2. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines; and,
3. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

#### **Previous Work:**

1. FY 2010-11 UPWP; and,
2. Amendment of the UPWP as requested by member agencies.
3. Prepare quality invoices and reports
4. Prepare annual report
5. Prepare financial and audit management

#### **Proposed Activities:**

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

#### **Products/Deliverables:**

1. Prepare quality invoices and reports
2. Prepare financial and audit management
3. Management and operation and Administration of the 3C process
4. Amendments to the FY 2011-2012 UPWP, as needed; and,
5. Development of the FY 2012-2013 UPWP.

**CITY OF DURHAM/LPA**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2011-2012 UPWP**

**Relationship to Other Plans and MPO Activities**

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

**Completion Date:**

These tasks will be ongoing.

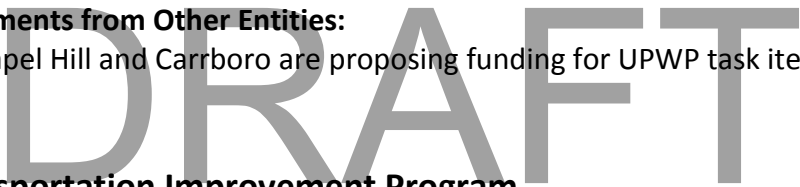
**Proposed Budget and Level of Effort (Staff or Consulting):**

MPO staff will complete these tasks.

III-A-1 - Planning Work Program							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 33,792	\$ 8,448	\$ -	\$ -	\$ -	\$ 42,240

**Funding Commitments from Other Entities:**

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



**Task III-B-Transportation Improvement Program**

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

**Objectives:**

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

**Previous Work:**

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

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**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2011-2012 UPWP**

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities**

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

DRAFT

**Completion Date:**

On-going.

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

MPO staff will complete these tasks.

III-B-1 - Transportation Improvement Plan							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 45,280	\$ 11,320	\$ -	\$ -	\$ -	\$ 56,600

**Funding Commitments from Other Entities:** None

**Task III-C-2: Environmental Justice**

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

## TASK DESCRIPTIONS & NARRATIVES

### FY 2011-2012 UPWP

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

#### Objectives:

To ensure that minority and low-income communities are:

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

#### Previous Work:

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

#### Proposed Activities:

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

#### Products/Deliverables:

1. Updated maps utilizing information from the 2010 Census and 2010 base year data;
2. Increased involvement of low-income and minority populations in the transportation

**TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

planning process;

3. Technical assistance memoranda, reports, and workshops as needed;
4. Protocol for responding to issues and concerns regarding Environmental Justice; and,
5. MPO Environmental Justice plan.

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

Environmental justice activities will be on-going.

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

Tasks will be undertaken by LPA staff.

III-C-2 - Environmental Justice							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 10,768	\$ 2,692	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,460

**Funding Commitments from Other Entities:** None.

**Task III-C-6: Public Involvement**

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

**Objectives:**

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

**Previous Work:**

1. MPO Public Involvement Process;
2. MPO website;

**CITY OF DURHAM/LPA**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2011-2012 UPWP**

3. Newsletters;
4. Stakeholder address database; and,
5. Newspaper advertisements.

**Proposed Activities:**

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

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

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

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

Tasks will be undertaken by LPA and municipal staff.

III-C-6 - Public Involvement							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 52,000	\$ 13,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65,000

**Funding Commitments from Other Entities:** None.

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

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

**CITY OF DURHAM/LPA**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2011-2012 UPWP**

the public involvement process. The MPO will continue to support and be involved in NCDOT efforts to link NEPA process in the MPO systems planning process.

**Objectives:**

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

**Previous Work:**

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

**Proposed Activities:**

Regular participation at project scoping, environmental study and public meetings, especially those conducted by the NCDOT;  
 Review and comment on project scoping and environmental documents;  
 LPA participation in NEPA process for the East End Connector; and,  
 LPA leadership in the public involvement process for the East End Connector.

**Products/Deliverables:**

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

**Relationship to Other Plans and MPO Activities:**

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

**Completion Date:**

These activities are provided as needed.

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

Tasks will be undertaken by LPA and municipal staff.

III-D-2 - Environmental Analysis & Pre-TIP Planning							Total All Funds
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			
Federal	Local	Federal	Local	Federal	Local	State	
\$ 4,356	\$ 1,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,445

**Funding Commitments from Other Entities:** None.

## TASK DESCRIPTIONS & NARRATIVES FY 2011-2012 UPWP

### **Task III-D-3: Special Studies**

The MPO will be engaged in wide range of studies which will be conducted to meet the transportation planning needs of the area. These studies are expected to include but not limited to the following: Continuation of the NC 54/I-40 Corridor Study, CommunityViz Scenario Planning Initiative, UrbanSim, TELUDE, Hillsborough Downtown Study, Carrboro Downtown Traffic Circulation Study/Main Street Road Diet, Non-motorized trip modeling enhancement and regional transit initiatives, etc.

III- D- 3 - Special Studies							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 285,200	\$ 71,300	\$ 40,000	\$ 10,000	\$ -	\$ -	\$ -	\$ 406,500

### **Task III-D-4: Regional or Statewide Planning**

The MPO will continue to coordinate with CAMPO, TTA, NCDOT, DENR, FHWA, FTA, EPA, and other State and regional agencies in regional transportation. This includes participation in the DCHC-CAMPO joint TAC meetings, TTA Board Meetings, Durham-Chapel Hill-Orange County Work Group, and a wide range of regional transportation planning working groups and committees. Examples include the Model Team, the Executive Committee, and the regional transit planning/operation coordination. Statewide planning includes participation in various statewide planning initiatives such as CMAQ Committee, Indirect and Cumulative Impacts of Transportation Projects in North Carolina, the State Transportation Plan process, and the Comprehensive Transportation Plan.

III-D-4 - Regional or Statewide Planning							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 20,340	\$ 5,085	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,425

### **Task III-E-1: Management and Operations**

III-E-1 - Management and Operations							
FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ 233,165	\$ 58,291	\$ 67,994	\$ 16,999	\$ -	\$ -	\$ -	\$ 376,449

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**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Town of Chapel Hill**

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II-A</b>	<b>Surveillance of Change</b>														
1	Traffic Volume Counts	\$0	\$0	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
2	Vehicle Miles of Travel	\$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
4	Traffic Accidents	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Transit System Data	\$0	\$0	\$0	\$0	\$500	\$500	\$4,000	\$6,000	\$6,000	\$48,000	\$6,500	\$6,500	\$52,000	\$65,000
6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
7	Air Travel	\$0	\$0	\$0	\$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	\$0	\$0	\$0
9	Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Mapping	\$0	\$0	\$2,000	\$8,000	\$3,000	\$3,000	\$24,000	\$0	\$0	\$0	\$5,000	\$3,000	\$32,000	\$40,000
11	Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Bike & Ped. Facilities Inventory	\$0	\$0	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
13	Bike & Ped. Counts	\$0	\$0	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
<b>II-B</b>	<b>Long Range Transp. Plan</b>														
1	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
3	Travel Model Updates	\$0	\$0	\$0	\$0	\$300	\$300	\$2,400	\$0	\$0	\$0	\$300	\$300	\$2,400	\$3,000
4	Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Forecast of Data to Horizon year	\$0	\$0	\$4,000	\$16,000	\$1,000	\$1,000	\$8,000	\$0	\$0	\$0	\$5,000	\$1,000	\$24,000	\$30,000
6	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$500	\$500	\$4,000	\$0	\$0	\$0	\$500	\$500	\$4,000	\$5,000
7	Forecast of Future Travel Patterns	\$0	\$0	\$600	\$2,400	\$300	\$300	\$2,400	\$0	\$0	\$0	\$900	\$300	\$4,800	\$6,000
8	Capacity Deficiency Analysis	\$0	\$0	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
9	Highway Element of th LRTP	\$0	\$0	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
10	Transit Element of the LRTP	\$0	\$0	\$0	\$0	\$1,000	\$1,000	\$8,000	\$0	\$0	\$0	\$1,000	\$1,000	\$8,000	\$10,000
11	Bicycle & Ped. Element of the LRT	\$0	\$0	\$1,400	\$5,600	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400	\$0	\$5,600	\$7,000
12	Airport/Air Travel Element of LRTP	\$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	\$0	\$0
14	Rail, Water or other mode of LRTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	Financial Planning	\$0	\$0	\$1,000	\$4,000	\$300	\$300	\$2,400	\$2,000	\$2,000	\$16,000	\$3,300	\$2,300	\$22,400	\$28,000
17	Congestion Management Strategies	\$0	\$0	\$1,000	\$4,000	\$500	\$500	\$4,000	\$0	\$0	\$0	\$1,500	\$500	\$8,000	\$10,000
18	Air Qual. Planning/Conformity Ana	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>II-C</b>	<b>Short Range Transit Planning</b>														
	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$40,000	\$5,000	\$5,000	\$40,000	\$50,000
<b>III-A</b>	<b>Planning Work Program</b>														
	Planning Work Program	\$0	\$0	\$400	\$1,600	\$200	\$200	\$1,600	\$1,000	\$1,000	\$8,000	\$1,600	\$1,200	\$11,200	\$14,000
<b>III-B</b>	<b>Transp. Improvement Plan</b>														
	TIP	\$0	\$0	\$300	\$1,200	\$300	\$300	\$2,400	\$1,800	\$1,800	\$14,400	\$2,400	\$2,100	\$18,000	\$22,500
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>														
1	Title VI	\$0	\$0	\$0	\$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	\$0	\$0	\$0
3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$4,000	\$500	\$500	\$4,000	\$5,000
4	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000	\$16,000	\$2,000	\$2,000	\$16,000	\$20,000
6	Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$1,000	\$8,000	\$1,000	\$1,000	\$8,000	\$10,000
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>														
1	Transportation Enhancement Plng.	\$0	\$0	\$0	\$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	\$0	\$0	\$0
3	Special Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Regional or Statewide Planning	\$0	\$0	\$351	\$1,403	\$2,000	\$2,000	\$16,000	\$1,825	\$1,825	\$14,600	\$4,176	\$3,825	\$32,003	\$40,004
<b>III-E</b>	<b>Management &amp; Operations</b>														
1	Management & Operations	\$0	\$0	\$3,000	\$12,000	\$3,550	\$3,550	\$28,397	\$19,500	\$19,500	\$156,000	\$26,050	\$23,050	\$196,397	\$245,496
	<b>Totals</b>	\$0	\$0	\$17,351	\$69,404	\$13,450	\$13,450	\$107,596	\$40,625	\$40,625	\$325,000	\$71,426	\$54,075	\$502,000	\$627,500

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II A 1 Traffic Volume Counts**

Oversee the collection of traffic volume counts and related information as part of the development of the MPO CMS

**Objectives**

To provide necessary local traffic data for the CMS

**Previous work**

Collection and review of counts from various regional and local studies.

**Proposed activities**

Identification of count locations and monitoring of collection efforts

**Products**

CMS traffic counts December, 2011

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

## II-A-1 - Traffic Volume Counts

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ -	\$ -	\$ -	\$ 3,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II A 6 Dwelling Unit, Population and Employment Change**

Develop updates to estimates of future growth in Chapel Hill

**Objectives**

- Develop 2040 socio economic projections
- Work with CH Town Council to endorse projections
- Incorporate into MPO level projections

**Previous work**

Development of 2035 projections.

**Proposed activities**

Develop and implement methodology for 2040 projections

**Products**

2040 Chapel Hill Socio Economic projections - December, 2011

**Relationship to other plans and MPO activities**

Supports development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-A-6 - Dwelling Unit, Population & Employment Changes

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ -	\$ -	\$ -	\$ 3,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II A 10 Mapping**

Prepare mapping for use in the implementation of 2035 LRTP, development of 2040 LRTP and ongoing regional and local transportation projects.

**Objectives**

To support regional planning efforts.

**Previous work**

Preparation of maps.

**Proposed activities**

Update existing GIS databases, coordinate with MPO staff on GIS clearinghouse and prepare maps as necessary.

**Products**

Maps, ongoing

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

## II-A-10 - Mapping

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 8,000	\$ 2,000	\$ 24,000	\$ 3,000	\$ 3,000	\$ 40,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II A 12 Bike and Pedestrian Facilities inventory**

To maintain and update existing inventory of bicycle and pedestrian facilities.

**Objectives**

Prepare annual update of bicycle and pedestrian facilities and incorporate data into development of 2040 LRTP

**Previous work**

Maintenance of existing database.

**Proposed activities**

Collect data on changes in pedestrian and bicycle facilities and update GIS database.

**Products**

Updated bicycle and pedestrian facilities maps, June, 2012

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-A-12 - Bike and Pedestrian Facilities Inventory

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ -	\$ -	\$ -	\$ 3,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II A 13 Bicycle and Pedestrian Volume Counts**

Oversee the collection of bicycle and pedestrian volume counts and related information as part of the development of the MPO CMS

**Objectives**

To provide necessary local bicycle and pedestrian data for the CMS

**Previous work**

Collection and review of counts from various regional and local studies.

**Proposed activities**

Identification of count locations and monitoring of collection efforts

**Products**

CMS bicycle and pedestrian counts December, 2011.

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-A-13 - Bike and Pedestrian Counts

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ -	\$ -	\$ -	\$ 3,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 5 Forecast of Data to Horizon Year**

Update socio economic forecasts for development of 2040 LRTP

**Objectives**

Review base socio economic data and project 2040 horizon year.

**Previous work**

Development of 2035 forecasts

**Proposed activities**

Confirm 2005 base year data, prepare draft 2040 projections for review and endorsement by Chapel Hill Council and incorporate forecasts into MPO projections.

**Products**

2040 socio economic projections December, 2011

**Relationship to other plans and MPO activities**

Supports development of 2040 LRTP

**Proposed budget and level of effort**

Staff

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

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 16,000	\$ 4,000	\$ 8,000	\$ 1,000	\$ 1,000	\$ 30,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 7 Forecast Future Travel Patterns**

Utilize TRM and 2040 socio economic projections to forecast future regional travel demand.

**Objectives**

Prepare future travel demand

**Previous work**

Development of travel demand for 2035 LRTP and Triangle Transit Alternatives Analysis

**Proposed activities**

Work with MPO staff and TRM staff to prepare future travel forecasts.

**Products**

2040 travel forecasts for adopted 2035 LRTP and 2040 LRTP alternatives. June, 2012

**Relationship to other plans and MPO activities**

Supports development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-B-7 - Forecast of Future Travel Patterns

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ 2,400	\$ 300	\$ 300	\$ 6,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 8 Capacity Deficiency Analysis**

Identify areas of future congestion and assess the adequacy of transportation network to address future travel needs.

**Objectives**

Assess adequacy of 2040 transportation network

**Previous work**

Development of 2035 LRTP, NC54 Corridor Study and Triangle Transit Alternatives Analysis.

**Proposed activities**

Review 2040 travel patterns from TRM and develop strategies to address future congestion.

**Products**

2040 LRTP, June 2012

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-B- 8 - Capacity Deficiency Analysis

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 2,400	\$ 600	\$ -	\$ -	\$ -	\$ 3,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 9 Highway Element of LRTP**

Evaluate adequacy of highway network in 2040 LRTP

**Objectives**

Assess need for modifications to adopted 2035 highway element in 2040 LRTP update.

**Previous work**

Development of 2035 LRTP.

**Proposed activities**

Review TRM regional travel projections for highway network and assess need for additional capacity through expansion or new construction.

**Products**

2040 LRTP June, 2012

**Relationship to other plans and MPO activities**

Supports development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-B-9 - Highway Element of the LRTP

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 1,200	\$ 300	\$ -	\$ -	\$ -	\$ 1,500

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 11 Bicycle and Pedestrian Element of LRTP**

Work with MPO staff to assess impact of existing and future bicycle and pedestrian networks on local and regional travel.

**Objectives**

Prepare bicycle and pedestrian element of 2040 LRTP

**Previous work**

2035 LRTP

**Proposed activities**

Prepare updated network information, work with TRM to incorporate bicycle and pedestrian mode considerations, assess need for additional facilities and complete bicycle and pedestrian element of 2040 LRTP.

**Products**

2040 Bicycle and Pedestrian element, June, 2012

**Relationship to other plans and MPO activities**

Supports development of 2040 LRTP

**Proposed budget and level of effort**

Staff

DRAFT

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

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 5,600	\$ 1,400	\$ -	\$ -	\$ -	\$ 7,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 16 Financial Planning**

Develop financial element of 2040 LRTP, assist in development of regional rail financial model and county transit plans financial plans.

**Objectives**

Provide input to development of county transit plans and related regional rail financial model. Refine 2040 LRTP financial plan.

**Previous work**

2035 LRTP financial model.

**Proposed activities**

Work with Orange County and Triangle Transit staff to refine county transit plan financial plans and regional rail financial model. Work with MPO to prepare revisions to 2040 LRTP financial plan.

**Products**

- County transit financial plans/TT regional rail implementation plan, September, 2011
- 2040 LRTP Financial element, June, 2012

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

## II-B-16 - Financial Planning

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 4,000	\$ 1,000	\$ 18,400	\$ 2,300	\$ 2,300	\$ 28,000

**Funding Commitments from other Entities:** None.

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II B 17 Congestion Management Strategies**

Develop congestion management plans and programs for incorporation into 2040 LRTP

**Objectives**

Support the development of the 2040 LRTP

**Previous work**

Ongoing Triangle Regional TDM programs and congestion management element of 2035 LRTP

**Proposed activities**

Review projections of future travel and capacity deficiency analysis to identify 2040 congestion. Develop and evaluate menu of congestion management strategies and incorporate appropriate strategies into 2040 LRTP.

**Products**

Congestion Management element of 2040 LRTP, June, 2012

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

II-B-17 - Congestion Management Strategies

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 4,000	\$ 1,000	\$ 4,000	\$ 500	\$ 500	\$ 10,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III A 1 Planning Work Program**

Prepare Chapel Hill element of FY2012 Planning Work Program.

**Objectives**

Identify tasks to be undertaken in FY2012 and allocate available resources in PWP.

**Previous work**

Development of FY2011 PWP

**Proposed activities**

Develop FY2012 Chapel Hill PWP and coordinate with MPO staff for inclusion into MPO PWP.

**Products**

2012 PWP, April 2012

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

III-A-1 - Planning Work Program

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 1,600	\$ 400	\$ 9,600	\$ 1,200	\$ 1,200	\$ 14,000

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III B 1 TIP**

Monitor implementation of adopted MTIP, prepare amendments as necessary and prepare revisions TIP updates.

**Objectives**

Implement adopted TIP and prepared TIP updates.

**Previous work**

Development of adopted TIP.

**Proposed activities**

Monitor implementation of adopted TIP and complete work on priorities for inclusion in 2012-2019 MTIP.

**Products**

2012-2019 MTIP, September, 2011

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP.

**Proposed budget and level of effort**

Staff

III-B-1 - Transportation Improvement Plan

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 1,200	\$ 300	\$ 16,800	\$ 2,100	\$ 2,100	\$ 22,500

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III D 4 Regional or Statewide Planning**

Support regional and statewide planning initiatives.

**Objectives**

Provide staff support and input into various regional planning activities such as the Triangle Transit Alternatives Analysis and NC54 Corridor Study.

**Previous work**

Support to Triangle Transit Transitional Analysis, Alternatives Analysis and MPO NC54 Corridor Study.

**Proposed activities**

Work with Triangle Transit and MPO staff on identified projects.

**Products**

- NC54 Corridor Study, December, 2011
- Triangle Transit Alternatives Analysis, September, 2011

**Relationship to other plans and MPO activities**

Supports implementation of adopted 2035 LRTP and development of 2040 LRTP

**Proposed budget and level of effort**

Staff

III-D-4 - Regional or Statewide Planning

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 1,403	\$ 351	\$ 30,600	\$ 3,825	\$ 3,825	\$ 40,004

**Funding Commitments from other Entities:**

None

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III E Management and Operations**

Manage regional and local transportation planning activities, provide information to the public and provide staff assistance to regional projects.

**Objectives**

To manage the Town’s involvement in various regional transportation planning projects.

**Previous work**

Ongoing management of local and regional transportation planning activities.

**Proposed activities**

Attend MPO policy and advisory board meetings  
Participate with MPO staff in development of 2040 LRTP and related projects.  
Provide information to the public, elected official and citizen advisory boards

**Products**

Not Applicable.

**Relationship to other plans and MPO activities**

Support implementation of the adopted 2035 LRTP, development of 2040 LRTP and other regional/local planning initiatives.

**Proposed budget and level of effort**

Staff

DRAFT

III-E-1 - Management and Operations

FHWA (STP-DA)		FHWA (PL)		FTA (5303/5307) Transit/Highway			Total All Funds
Federal	Local	Federal	Local	Federal	Local	State	
\$ -	\$ -	\$ 12,000	\$ 3,000	\$ 184,397	\$ 23,050	\$ 23,050	\$ 245,496

**Funding Commitments from other Entities:**

None.

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**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Town of Carrboro**

	Task Description	STP-DA		Sec. 104(f)		Section 5303			Section 5307			Task Funding Summary				
		133(b)(3)(7)		PL		Highway/Transit			Transit			Local	NCDOT	Federal	Total	
		Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA					
20%	80%	20%	80%	10%	10%	80%	10%	10%	80%							
<b>II-A</b>	<b>Surveillance of Change</b>															
1	Traffic Volume Counts	\$0	\$0	\$128	\$512	\$0	\$0	\$0	\$0	\$0	\$0	\$128	\$0	\$512	\$640	
2	Vehicle Miles of Travel	\$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	
4	Traffic Accidents	\$0	\$0	\$58	\$232	\$0	\$0	\$0	\$0	\$0	\$0	\$58	\$0	\$232	\$290	
5	Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$64	\$256	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$0	\$256	\$320	
7	Air Travel	\$0	\$0	\$0	\$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	\$0	\$0	\$0	
9	Travel Time Studies	\$0	\$0	\$128	\$512	\$0	\$0	\$0	\$0	\$0	\$0	\$128	\$0	\$512	\$640	
10	Mapping	\$0	\$0	\$342	\$1,368	\$0	\$0	\$0	\$0	\$0	\$0	\$342	\$0	\$1,368	\$1,710	
11	Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
12	Bike & Ped. Facilities Inventory	\$0	\$0	\$52	\$208	\$0	\$0	\$0	\$0	\$0	\$0	\$52	\$0	\$208	\$260	
13	Bike & Ped. Counts	\$0	\$0	\$160	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$160	\$0	\$640	\$800	
<b>II-B</b>	<b>Long Range Transp. Plan</b>															
1	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2	Collection of Network Data	\$0	\$0	\$64	\$256	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$0	\$256	\$320	
3	Travel Model Updates	\$0	\$0	\$0	\$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	\$0	\$0	\$0	
5	Forecast of Data to Horizon year	\$0	\$0	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$400	\$500	
6	Community Goals & Objectives	\$0	\$0	\$52	\$208	\$0	\$0	\$0	\$0	\$0	\$0	\$52	\$0	\$208	\$260	
7	Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8	Capacity Deficiency Analysis	\$0	\$0	\$0	\$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	\$0	\$0	\$0	
10	Transit Element of the LRTP	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0	
12	Airport/Air Travel Element of LRTP	\$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	\$0	\$0	
14	Rail, Water or other mode of LRTP	\$0	\$0	\$0	\$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	\$0	\$0	\$0	
16	Financial Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	Congestion Management Strategies	\$0	\$0	\$256	\$1,024	\$0	\$0	\$0	\$0	\$0	\$0	\$256	\$0	\$1,024	\$1,280	
18	Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>II-C</b>	<b>Short Range Transit Planning</b>															
1	Short Range Transit Planning	\$0	\$0	\$224	\$896	\$0	\$0	\$0	\$0	\$0	\$0	\$224	\$0	\$896	\$1,120	
											\$0	\$0	\$0	\$0	\$0	
<b>III-A</b>	<b>Planning Work Program</b>															
	Planning Work Program	\$0	\$0	\$286	\$1,144	\$0	\$0	\$0	\$0	\$0	\$0	\$286	\$0	\$1,144	\$1,430	
											\$0	\$0	\$0	\$0	\$0	
<b>III-B</b>	<b>Transp. Improvement Plan</b>															
	TIP	\$0	\$0	\$488	\$1,952	\$0	\$0	\$0	\$0	\$0	\$0	\$488	\$0	\$1,952	\$2,440	
											\$0	\$0	\$0	\$0	\$0	
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr. Reg. Reqs.</b>															
1	Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2	Environmental Justice	\$0	\$0	\$160	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$160	\$0	\$640	\$800	
3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	Planning for the Elderly & Disabled	\$0	\$0	\$64	\$256	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$0	\$256	\$320	
5	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
6	Public Involvement	\$0	\$0	\$486	\$1,944	\$0	\$0	\$0	\$0	\$0	\$0	\$486	\$0	\$1,944	\$2,430	
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>III-D</b>	<b>Incidental Png./Project Dev.</b>															
1	Transportation Enhancement Png.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2	Enviro. Analysis & Pre-TIP Png.	\$0	\$0	\$96	\$384	\$0	\$0	\$0	\$0	\$0	\$0	\$96	\$0	\$384	\$480	
3	Special Studies	\$0	\$0	\$954	\$3,816	\$0	\$0	\$0	\$0	\$0	\$0	\$954	\$0	\$3,816	\$4,770	
4	Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>III-E</b>	<b>Management &amp; Operations</b>															
1	Management & Operations	\$0	\$0	\$2,472	\$9,890	\$0	\$0	\$0	\$0	\$0	\$0	\$2,472	\$0	\$9,890	\$12,362	
<b>Totals</b>		\$0	\$0	\$6,634	\$26,538	\$0	\$0	\$0	\$0	\$0	\$0	\$6,634	\$0	\$26,538	\$33,172	

**TOWN OF CARRBORO**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2011-2012 UPWP**

**II-A-1. Traffic Volume Counts**

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

**Objectives**

To provide necessary local traffic data for the CMS.

**Previous work**

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

**Proposed activities**

1. Collect traffic data using new traffic counters purchased by the Town.
2. Provide data collected through other planning processes (e.g. traffic impact assessments) to the MPO as needed.

**Products**

1. Traffic volume data from 2011-12 or as recent a year as possible.

**Relationship to other plans and MPO activities**

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

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 20 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-1 - Traffic counts	\$128	\$512	\$640

**Funding Commitments from other Entities:** None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-4. Traffic Accidents**

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

**Objectives**

To provide local accident data for the CMS.

**Previous work**

Accident data is reported in the 2003 and 2005 Mobility Report Cards and the 2009 Comprehensive Bicycle Transportation Plan. Accident data was also gathered for the Smith Level Rd. TIP project (U-2803) and for other Town arterials.

**Proposed activities**

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

**Products**

1. Along with MPO partners, crash data for the three-year period from 2008-2010.
2. Other accident data as needed.

**Relationship to other plans and MPO activities**

Relates to MPO-wide accident data collection task.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 9 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-4 - Traffic accidents	\$58	\$232	\$290

**Funding Commitments from other Entities:** MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-6. Dwelling Unit, Population, and Employment Change**

The Town will submit housing and economic data for reviewing regional development trends of the past decade.

**Objectives**

To provide local dwelling unit, population, and employment data for the 2000-2010 period for a regional development analysis.

**Previous work**

In FY 2011, submitted housing data, employment data, and population estimates by TAZ to LPA staff as part of the 2040 LRTP data collection process.

**Proposed activities**

1. Collect building permit and certificate of occupancy data for the review years.
2. To the extent practicable, measure land use and zoning changes.

**Products**

1. Local data as part of MPO review of development trends.

**Relationship to other plans and MPO activities**

Relates to MPO-wide development trend analysis task.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 10 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-6 - Dwelling Unit, Population, and Employment Change	\$64	\$256	\$320

**Funding Commitments from other Entities:** MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-9. Travel Time Studies**

The Town will conduct travel time studies to compare the impacts of different bicycle-pedestrian investments and the impacts of connector roads.

**Objectives**

To measure the travel time impacts of various transportation investment scenarios.

**Previous work**

Previous LRTP processes have included travel time surveys that collected data to input into the TRM. Locally, the 2003 and 2005 Mobility Report Cards included travel time data for major arterials.

**Proposed activities**

1. Using GIS Network Analyst and possibly other traffic analysis software, analyze travel speeds and travel times.

**Products**

1. Reports on travel time impacts of various transportation investments.

**Relationship to other plans and MPO activities**

Tasks will supplement, but not duplicate, information gathered in the CMP.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 20 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-9 - Travel time studies	\$128	\$512	\$640

**Funding Commitments from other Entities:** None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-10. Mapping**

The Town's GIS specialist, along with other planning staff, will assist in developing base maps, GIS layers, and databases to serve MPO-wide and local transportation mapping objectives, including the 2040 LRTP. They will provide, as needed, GIS layers for highway, transit, bike, and pedestrian networks as well as parcel and zonal spatial information.

**Objectives**

To update base maps, including spatial and network data, with new data, including Census 2010. To ensure high-quality mapping of transportation facilities and amenities.

**Previous work**

GIS mapping was used to provide local socioeconomic data for the data collection phase of the 2040 LRTP. The Town regularly updates its transportation shapefiles based on new developments and completed projects. The Town has contributed to the GIS Warehouse/Integration and Automation project.

**Proposed activities**

1. Provide up-to-date GIS data for MPO-wide mapping activities.
2. To use GIS in the Town's contribution to the CommunityViz planning project.

**Products**

1. Up-to-date GIS data.

**Relationship to other plans and MPO activities**

Tasks will potentially contribute to MPO activities such as CommunityViz, the 2040 LRTP, and the next TIP process. Mapping may play a role in the local Physical Activity action plan and greenway planning being carried out by the Town.

**Proposed budget and level of effort**

60 percent of work to be completed by GIS Analyst.

40 percent of work to be completed by Transportation Planner.

Local staff hours: 50 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-10 - Mapping	\$342	\$1,368	\$1,710

**Funding Commitments from other Entities:** MPO members.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-12. Bicycle and Pedestrian Facilities Inventory**

The Town will supply bicycle and pedestrian facility data to the MPO for the 2040 LRTP and TIP.

**Objectives**

To enhance the 2040 LRTP's ability to accurately account for bicycle and pedestrian travel by providing up-to-date information on local bike-ped facilities.

To determine priorities for bicycle and pedestrian investments in the TIP.

**Previous work**

The Town has collected bicycle and pedestrian facility data from a number of planning processes, including the 2009 Comprehensive Bicycle Transportation Plan, the sidewalk bond program, and two Mobility Report Cards.

**Proposed activities**

1. Submit bicycle and pedestrian facility data to the MPO when needed.

**Products**

1. Bike-ped facility data, in map or list format.

**Relationship to other plans and MPO activities**

This information is useful for not only the 2040 LRTP, but also the CTP and CMP processes. As bicycling and walking are an essential part of Carrboro's transportation system, this information is always relevant for a number of local planning processes.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 8 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-12 - Bike & Ped. Facilities Inventory	\$52	\$208	\$260

**Funding Commitments from other Entities:** None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-A-13. Bicycle and Pedestrian Counts**

The Town will contribute existing bicycle and pedestrian traffic information for the 2040 LRTP and other planning processes as needed. Where more recent data would be helpful, the Town will arrange to conduct additional bicycle and pedestrian counts.

**Objectives**

To supply bicycle and pedestrian travel data for regional planning processes, such as the 2040 LRTP and-or Congestion Management Process.

To inform local planning efforts with up-to-date bike-ped data.

**Previous work**

The Town has collected bicycle and pedestrian traffic data from a number of planning processes, including the 2009 Comprehensive Bicycle Transportation Plan and two Mobility Report Cards. By the beginning of FY 2012, the Town will have collected additional bicycle and pedestrian data in certain downtown locations.

**Proposed activities**

1. Submit bicycle and pedestrian traffic data to the MPO when needed.
2. Conduct additional bike-ped counts where relevant.

**Products**

1. Bike-ped traffic data.

**Relationship to other plans and MPO activities**

This information is useful for not only the 2040 LRTP, but also the CTP and CMP processes. As bicycling and walking are an essential part of Carrboro's transportation system, this information is always relevant for a number of local planning processes.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 25 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-A-13 - Bike & Ped. Counts	\$160	\$640	\$800

**Funding Commitments from other Entities:** None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-B-2. Collection of Network Data**

To continue to contribute to MPO-wide network data collection for the 2040 LRTP, CMP, or other regional or local planning processes.

**Objectives**

To provide local data as needed for regional transportation planning processes.

**Previous work**

This project was included in the 2010-11 UPWP and is ongoing.

**Proposed activities**

1. Contribute to Chapel Hill Transit Comprehensive Operations Analysis, which will make recommendations on transit route modifications.
2. Contribute local highway and bike-ped network data as needed.

**Products**

1. Network data related to transit routes in Chapel Hill-Carrboro.
2. Highway/street and bike-ped data as needed.

**Relationship to other plans and MPO activities**

Related to 2040 LRTP and Chapel Hill Transit COA.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 10 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-B-2 - Collection of Network Data	\$64	\$256	\$320

**Funding Commitments from other Entities:**

Chapel Hill Transit Partners, MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-B-5. Forecast of Data to Horizon Year**

The Town will contribute local data as needed for forecasting for the 2040 LRTP.

**Objectives**

To prepare for 2040 LRTP forecasting of travel demand.

**Previous work**

Forecasts have been conducted for alternatives analyses for previous LRTPs.

**Proposed activities**

1. At the MPO level, use the Triangle Regional Model to begin the forecasting and scenario planning process for the 2040 horizon year
2. On the local level, provide information as needed to the MPO on local land use plans and other local policies that can be used to validate forecasts for the horizon year

**Products**

1. GIS layers or tables with socioeconomic and demographic data for the horizon year (2040)

**Relationship to other plans and MPO activities**

May also inform CommunityViz planning process.

**Proposed budget and level of effort**

Work to be completed by Transportation Planner and Planning Administrator.

Local staff hours: 14 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-B-5 - Forecast of data to horizon year	<b>\$100</b>	<b>\$400</b>	<b>\$500</b>

**Funding Commitments from other Entities:** MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-B-6. Community Goals and Objectives**

The Town will contribute to MPO-wide community visioning and update of goals, objectives and targets in order to guide the recommendations of the 2040 LRTP and other planning processes.

**Objectives**

To establish goals, objectives, and targets based on sound planning performance measures, public input, and addressing the complex transportation challenges faced by metropolitan regions.

**Previous work**

Goals, objectives, and targets have guided previous transportation plans and other MPO activities. In FY 2011, the MPO stated its goals and objectives in communications with NCDOT and Board of Transportation representatives relating to the 2011-2020 STIP and the Highway Mobility Fund selection criteria.

**Proposed activities**

1. Provide input in re-evaluating existing goals and objectives.
2. Contribute to community visioning meetings and other opportunities for public input.
3. Gather local community input on transportation-related topics and relay that input to the MPO.

**Products**

1. Updated, comprehensive, and forward-thinking goals, objectives, and targets.

**Relationship to other plans and MPO activities**

Goals and objectives of the LRTP should also inform the MTIP process. The LRTP's goals and objectives relate to the Regional Transit Vision Program as well.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 8 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-B-6 - Community Goals and Objectives	\$52	\$208	\$260

**Funding Commitments from other Entities:** MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-B-17. Congestion Management Strategies**

The MPO is undertaking a Congestion Management Process (CMP) to address congestion within the metropolitan area boundary. The Town will contribute planning resources to this process. The Town will also continue to promote TDM strategies and collaborate with Chapel Hill on joint TDM projects.

**Objectives**

To participate in the development of the CMP.

To continue to promote TDM as a congestion management strategy and collaborate with Chapel Hill and the region on TDM.

**Previous work**

The CMP is required by federal law and incorporated into the LRTP and TIP processes.

Carrboro has partnered in the past with Chapel Hill and regional groups to hold TDM events.

**Proposed activities**

1. Contribute to the development of the CMP.
2. Participate in regional TDM events, such as the SmartCommute challenge and Bike to Work Week.
3. Conduct additional outreach to citizens and/or local business owners regarding TDM.
4. Assess the feasibility of holding carefree periods on selected streets on a regular basis, such as on Weaver St., through traffic analysis.

**Products**

1. Local traffic data for the CMP, as needed.
2. TDM events.

**Relationship to other plans and MPO activities**

As noted above, the CMP informs the LRTP and TIP processes.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 40 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-B-17 - Congestion Management Strategies	\$256	\$1,024	\$1,280

**Funding Commitments from other Entities:**

MPO members (CMP), TDM commitments from Triangle J COG and Town of Chapel Hill

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**II-C-11. Short Range Transit Planning**

The Town will participate in short-range transit planning for the Carrboro-Chapel Hill area. Through the Transit Partners Committee, the Town will provide input on Chapel Hill Transit planning initiatives. The Town will collaborate with Triangle Transit where necessary and with the Town of Chapel Hill in coordinating the annual Transit Forum.

**Objectives**

To ensure that Carrboro plays a key role in Chapel Hill Transit planning, capital investment, and operations.

To continue to work with Chapel Hill Transit on new initiatives, short range planning, and troubleshooting.

**Previous work**

Town of Carrboro elected officials, advisory board members, and staff regularly attend Chapel Hill Transit Partners Committee meetings. The Town has provided local GIS data and other information as input for the CHT Comprehensive Operations Analysis. A public transit forum was held in Carrboro in October 2010. In FY 2011, Town staff participated in Orange County Transit Plan meetings and the initial stages of a feasibility study for the Eubanks Park-and-Ride.

**Proposed activities**

1. Participate in monthly transit meetings
2. Continue to communicate with the Transit Partners Committee and Chapel Hill Transit staff on relevant issues.

**Products**

1. With Chapel Hill Transit, a Comprehensive Operations Analysis of fixed bus routes.
2. Annual Transit Forum.
3. With Orange County stakeholders, the draft Orange County Transit Plan.
4. Local data as needed.

**Relationship to other plans and MPO activities**

Related to the Orange County Transit Plan and Comprehensive Operations Analysis.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 35 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
II-C-1 - Short Range Transit Planning	\$224	\$896	\$1,120

**Funding Commitments from other Entities:**

Town of Chapel Hill, Orange County, University of North Carolina

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-A-1. Planning Work Program**

The Town will administer the FY 2011-2012 UPWP and prepare and process amendments as needed. It will evaluate transportation planning work needed and emphasis areas and prepare the FY 2012-2013 UPWP.

**Objectives**

To implement Carrboro's 2011-2012 UPWP activities  
To be ready for amendments to the UPWP if necessary  
To submit the 2012-2013 UPWP to the MPO

**Previous work**

Town staff have prepared UPWPs each year and tracked the completion of UPWP tasks with quarterly progress reports. Progress reports have made clear how much funding remains for tasks in the fiscal year, guiding whether or not amendments are necessary.

**Proposed activities**

1. Evaluate progress on implementing the 2011-2012 UPWP
2. Prepare Carrboro's 2012-2013 UPWP documents and budget

**Products**

1. Quarterly progress reports and invoices to the MPO on UPWP activities
2. Carrboro's 2011-2012 UPWP activities narrative and budget

**Relationship to other plans and MPO activities**

Required by federal law, the UPWP is the mechanism for regional transportation planning and coordination in the MPO.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.  
Local staff hours: 45 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-A-1 - Planning Work Program	\$286	\$1,144	\$1,430

**Funding Commitments from other Entities:**

MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-B-1. Transportation Improvement Program**

The Town will participate in the initial stages in the development of the 2013-2022 TIP.

**Objectives**

To identify transportation improvement needs at the local level.

To prioritize these needs using an approved TCC ranking methodology.

**Previous work**

The MTIP is a recurring planning process. Adoption of the 2011-2020 MTIP by the MPO is expected in the summer of 2011.

**Proposed activities**

1. Contribute to development of TIP ranking methodology.
2. Submit a local priority list to the MPO.
3. Identify needs eligible for the next STP-DA call for projects.
4. Continue to work with the MPO in communicating regional priorities to NCDOT.

**Products**

1. Along with MPO members, an approved ranking methodology.
2. A local priority list to inform regional priority lists.
3. Transportation project information.

**Relationship to other plans and MPO activities**

The TIP carries out the goals and objectives of the LRTP. Projects on the TIP must be included in the 2040 LRTP.

**Proposed budget and level of effort**

80 percent of work to be completed by Transportation Planner.

20 percent of work to be completed by Planning Administrator.

Local staff hours: 70 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-B-1 - Transportation Improvement Program	\$488	\$1,952	\$2,440

**Funding Commitments from other Entities:**

MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-C-2. Environmental Justice**

The Town will provide local information to enhance the MPO's EJ-related data. The Town will conduct outreach to disadvantaged groups and residents with limited English proficiency.

**Objectives**

To ensure adequate public involvement of low-income and minority groups in decision-making  
To prevent disproportionately high and adverse impacts to low-income and minority groups resulting from transportation decisions

To assure that low-income and minority groups receive a proportionate share of benefits resulting from transportation decisions made by the MPO

To support progress toward the development of a regional Environmental Justice Plan.

**Previous work**

In FY 2010 and FY 2011, the Town studied bicycle and pedestrian alternatives for an underserved, minority neighborhood along Estes Dr. Ext.

**Proposed activities**

1. Assist the MPO in updating its EJ mailing database, demographic data, and historical demographic data.
2. Make an effort to include disadvantaged groups in the public involvement for the Wilson Park Multi-use Path STP-DA project.

**Products**

1. Local EJ-related demographic data.

**Relationship to other plans and MPO activities**

This is an MPO-wide activity.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 25 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-C-2 - Environmental Justice	\$160	\$640	\$800

**Funding Commitments from other Entities:**

MPO members

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-C-4. Planning for the Elderly and Disabled**

The Town will continue efforts to emphasize the planning, development, evaluation, and reevaluation of transportation facilities and services for the elderly and disabled.

**Objectives**

To continue efforts to emphasize the planning, development, evaluation, and reevaluation of transportation facilities and services for the elderly and disabled.

**Previous work**

Throughout the year staff responds to disabled and elderly citizen concerns regarding the transportation system, primarily related to paratransit and accessibility of infrastructure.

**Proposed activities**

1. Continue to address transportation concerns of elderly and disabled.
2. Make planning information more accessible to elderly and disabled residents.

**Products**

None

**Relationship to other plans and MPO activities**

Recognition of ADA-related needs in urban transportation is required by FHWA and FTA regulations.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 10 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-C-4 - Planning for the Elderly and Disabled	\$64	\$256	\$320

**Funding Commitments from other Entities:**

None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-C-6. Public Involvement**

The Town will continue to provide for an open exchange of information and ideas between the public and transportation decision-makers. The Town will work to increase public participation in transportation planning issues at the local and regional (MPO) levels.

**Objectives**

To provide opportunities for the public to contribute to the planning of local and regional transportation facilities.

**Previous work**

The Town continued public involvement activities in FY 2011. Two additional public hearing continuations for U-2803 – Smith Level Rd. were held in September. Outreach was conducted for the Safe Routes to School Action Plan. A public transit forum was held in late October 2010, in conjunction with Chapel Hill Transit.

**Proposed activities**

1. Annual transit forum
2. Participation in MPO development of public outreach planning, databases, and evaluation
3. Continued public input process for the Bolin Creek Greenway, Phases 3 and 4
4. Public input processes associated with MPO activities such as CommunityViz
5. Other public input opportunities as they arise

**Products**

1. Summaries from public input workshops

**Relationship to other plans and MPO activities**

**Proposed budget and level of effort**

70 percent of work to be completed by Transportation Planner.  
30 percent of work to be completed by Planning Administrator.  
Local staff hours: 68 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-C-6 - Public Involvement	\$486	\$1,944	\$2,430

**Funding Commitments from other Entities:**

MPO members (public outreach planning, CommunityViz)

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-D-2. Environmental Analysis & Pre-TIP Planning**

The Town will assist in the development of environmental documentation for several transportation projects. This may include public comments, public meetings, scoping meetings, site visits, and related activities.

**Objectives**

To complete, commence, and-or assist with necessary environmental impact documentation for several transportation projects expected to be underway in FY 2012.

**Previous work**

By the end of FY 2011, the Town is expected to have worked with a consultant to complete NEPA documentation for the Wilson Park Multi-use Path (U-4726DC).

**Proposed activities**

1. Complete, commence, and-or assist with environmental documentation for the Rogers Rd. sidewalk (STP-DA), the Morgan Creek Greenway, and a section of the Bolin Creek Greenway.

**Products**

1. Environmental documentation

**Relationship to other plans and MPO activities**

None

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 15 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-D-2 - Environmental Analysis & Pre-TIP Planning	\$96	\$384	\$480

**Funding Commitments from other Entities:** None.

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-D-3. Special Studies**

Town staff will continue to conduct special studies related to local transportation issues.

**Objectives**

1. To coordinate an inclusive and comprehensive public input process for greenway planning.
2. To ensure that new studies reflect public input to the extent practicable and that they inform future planning processes.

**Previous work**

Conceptual plans for the Bolin and Morgan Creek Greenways were completed in FY 2010, with implementation beginning in FYs 2010-2011. A Safe Routes to School Action Plan was developed in FYs 2010-2011 as well. Other studies that are expected to have been conducted by the end of FY 2011 include a traffic circulation plan for the Old Carrboro neighborhood and a traffic impact analysis of a road diet concept.

**Proposed activities**

1. Coordinate a public input process for Phases 3 and 4 of the Bolin Creek Greenway, as identified in the Bolin Creek Greenway Conceptual Master Plan.
2. Coordinate with NCDOT, planners, and developers on potential land use and transportation planning activities in northern Carrboro.
3. Complete the Old Carrboro Traffic Circulation Plan, if not completed in FY 2011.
4. Contribute to MPO-level special studies as necessary

**Products**

1. Greenway public input process materials
2. Recommendations from northern Carrboro land use-transportation planning activities and the Old Carrboro Traffic Circulation Plan.

**Relationship to other plans and MPO activities**

None

**Proposed budget and level of effort**

90 percent of work to be completed by Transportation Planner.

10 percent of work to be completed by Planning Administrator.

Local staff hours: 145 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-D-3 - Special Studies	\$954	\$3,816	\$4,770

**Funding Commitments from other Entities:** None

**TOWN OF CARRBORO  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III-E-1. Management and Operations**

Administrative tasks necessary to maintaining the 3C planning process will be completed.

**Objectives**

To participate and contribute to MPO-related meetings

To adhere to the goals and tasks laid out in the Unified Planning Work Program

To ensure that elected officials have adequate information to make informed decisions on local and regional transportation issues

To ensure the local transportation advisory board has the information it needs to develop sound recommendations on local and regional transportation issues

To improve staff efficiency and knowledge through training sessions and educational materials

**Previous work**

Similar to proposed activities described below

**Proposed activities**

1. Attend and participate in TAC and TCC meetings
2. Preparing quarterly progress reports/invoices and documenting expenditures for planning work items
3. Staff development through professional training courses, seminars, and conferences
4. Subscriptions to professional publications and professional organizational dues
5. Acquire needed software, books, and other materials
6. Facilitate local transportation advisory board meetings by creating agendas, minutes, and staff reports
7. Prepare materials and present to the local elected officials related to local and regional transportation planning topics
8. Attend and participate in MPO subcommittee meetings

**Products**

1. Staff reports for Board of Aldermen and advisory board meetings

**Relationship to other plans and MPO activities**

See objectives and proposed activities.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner.

Local staff hours: 365 hours

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-E-1. Management and Operations	\$2,472	\$9,890	\$12,362

**Funding Commitments from other Entities:**

None.

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**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Triangle J COG**

	Task Description	STP-DA 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
<b>II A</b>	<b>Surveillance of Change</b>															
	1 Traffic Volume Counts	\$0	\$0	\$0	\$0	\$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	\$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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$0	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0	\$0
	12 Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
<b>II B</b>	<b>Long Range Transp. Plan</b>															
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	10 Transit Element of the LRTP	\$0	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0	\$0
	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	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	17 Congestion Management Strategies	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
<b>II C</b>	<b>Short Range Transit Planning</b>															
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-A</b>	<b>Planning Work Program</b>															
	1 Planning Work Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-B</b>	<b>Transp. Improvement Plan</b>															
	1 TIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr .Reg. Reqs.</b>															
	1 Title VI	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>															
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	3 Special Studies	\$5,000	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$20,000	\$25,000	\$25,000
	4 Regional or Statewide Planning	\$8,800	\$35,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,800	\$0	\$35,200	\$44,000	\$44,000
<b>III E</b>	<b>Management &amp; Operations</b>															
	1 Management & Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Totals</b>		\$13,800	\$55,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800	\$0	\$55,200	\$69,000	\$69,000

**TRIANGLE J COUNCIL OF GOVERNMENTS  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III D 3 Special Studies.**

Undertake mobility-related activities associated with creating a regional sustainable development plan through the federal DOT/EPA/HUD sustainable communities' partnership.

**Objectives**

To ensure mobility investments are central features of a regional sustainability plan and to ensure that any regional sustainability plan can fulfill MPO requirements, especially the housing assessment requirements in the Intermodal Bill.

**Previous work**

None.

**Proposed activities**

Details to be determined, but major activities of the previous *PRISM-Research Triangle* proposal included a housing needs and assessment plan that fulfills the requirements in the Intermodal Bill, scenario analysis and visualization, extensive public outreach and an implementation agreement among participating organizations.

**Products**

Housing assessment that meets the requirements of the NC Intermodal Bill.

**Relationship to other plans and MPO activities**

Most direct relationship would be to local or regional transit projects seeking state funding through the Intermodal Bill. Depending on scope details and timing, other activities may be useful in LRTP development (especially related to scenario analysis and public involvement) or in seeking discretionary federal funding.

**Proposed budget and level of effort**

Details to be determined, but previous *PRISM-Research Triangle* proposal expected to serve as foundation for work program. Budget would include both staff work and consultant assistance, in addition to direct costs associated with travel, meetings and printing/publications.

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-D-3 - Special Studies	\$5,000	\$20,000	\$25,000

**Funding Commitments from other Entities:**

CAMPO and Triangle Transit would be other mobility-related funding partners; the overall project would be expected to have a wide range of sponsoring entities (previous proposal had 17 "leverage resource" partners providing cash or in-kind services), including NCDOT.

**TRIANGLE J COUNCIL OF GOVERNMENTS  
TASK DESCRIPTIONS & NARRATIVES  
FY 2011-2012 UPWP**

**III D 4 Regional or Statewide Planning.**

Facilitate and/or manage joint activities and undertake analysis work in land use, transportation and air quality planning that involve multiple MPO, RPO, local government, transit agency, state and federal agency and private sector partners.

**Objectives**

To ensure that activities that have a scope or scale that transcend any single MPO are done in a coordinated, timely, effective and cost-efficient way.

**Previous work**

STAC transit vision technical support, joint 2035 LRTP facilitation and technical work, ozone standards and non-attainment education and technical assistance, LRTP and TIP conformity coordination, LUCID land use – transit forum and technical work, TRM executive committee support.

**Proposed activities**

Major activities include TRM executive committee support, joint MPO 2040 LRTP facilitation and technical work (emphasizing SE data and fiscal constraint), land use-transit investment integration and transportation-air quality integration.

**Products**

- Triangle Regional Model Executive Committee meeting summaries
- Joint 2040 LRTP framework and meeting facilitation/summaries
- 2020, 2030, 2040 SE data forecast facilitation and tracking
- 2040 LRTP fiscal constraint process and document
- LUCID forum meetings and reports
- TIP and LRTP air quality conformity process and documentation
- New federal ozone standard and non-attainment boundary education and technical support

**Relationship to other plans and MPO activities**

This work feeds into the DCHC 2040 LRTP process and products and enables the DCHC MPO to participate in air quality standard setting, non-attainment boundary designation, LRTP development, land use-transit integration.

**Proposed budget and level of effort**

Budget largely supports staff work by Planning Director, Planner II, GIS Analyst and MIS staff (webpage work), with some direct costs associated with travel and meeting expenses.

<b>Task Code-Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-D-4 - Regional or Statewide Planning	\$8,800	\$35,200	\$44,000

**Funding Commitments from other Entities:**

20% local match to be provided by TJCOG; other funding anticipated from CAMPO and Triangle Transit as in previous years.

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**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**NCDOT**

	Task Description	SPR Highway		STP-DA 133(b)(3)(7)		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	3 Street System Changes	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	12 Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$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	\$0	\$0	\$0
<b>II B</b>	<b>Long Range Transp. Plan</b>														
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$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	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$1,700	\$6,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,700	\$6,800	\$8,500
	4 Travel Surveys	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Highway Element of th L RTP	\$2,300	\$9,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,300	\$9,200	\$11,500
	10 Transit Element of the L RTP	\$1,300	\$5,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,300	\$5,200	\$6,500
	11 Bicycle & Ped. Element of the L RTP	\$1,300	\$5,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,300	\$5,200	\$6,500
	12 Airport/Air Travel Element of L RTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of L RTP	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$800	\$1,000
	14 Rail, Water or other mode of L RTP	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$4,000	\$5,000
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	17 Congestion Management Strategies	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$800	\$1,000
	18 Air Qual. Planning/Conformity Anal.	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$4,000	\$5,000
<b>III C</b>	<b>Short Range Transit Planning</b>														
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-A</b>	<b>Planning Work Program</b>														
	Planning Work Program	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$1,600	\$2,000
<b>III-B</b>	<b>Transp. Improvement Plan</b>														
	TIP	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$1,600	\$2,000
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr .Reg. Reqs.</b>														
	1 Title VI	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$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	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$0	\$0	\$0	\$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	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>														
	1 Transportation Enhancement Plng.	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100	\$400	\$500
	2 Enviro. Analysis & Pre-TIP Plng.	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$1,600	\$2,000
	3 Special Studies	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$4,000	\$5,000
	4 Regional or Statewide Planning	\$700	\$2,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$700	\$2,800	\$3,500
<b>III E</b>	<b>Management &amp; Operations</b>														
	1 Management & Operations	\$4,000	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$16,000	\$20,000
<b>Totals</b>		<b>\$16,000</b>	<b>\$64,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,000</b>	<b>\$64,000</b>	<b>\$80,000</b>

# ***Appendices B***

***Federal Transit Administration***

**DRAFT**  
**(FTA)**

***Agency Project Narratives***

***&***

***Funding Tables***

**Durham-Chapel Hill-Carrboro Urban Area  
 FY 2011-2012 Unified Planning Work Program  
 Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Durham Area Transit Authority**

	Task Description	Section 5303			Section 5307			FTA - Task Funding Summary			
		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%				
<b>II A</b>	<b>Surveillance of Change</b>										
	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	\$8,819	\$8,819	\$70,549	\$1,486	\$1,486	\$11,890	\$10,305	\$10,305	\$82,438	\$103,048
	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
<b>II B</b>	<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	\$0	\$0	\$0	\$0	\$0	\$0
	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 Future 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	\$1,076	\$1,076	\$8,610	\$1,076	\$1,076	\$8,610	\$10,762
	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	\$6,334	\$6,334	\$50,674	\$6,334	\$6,334	\$50,674	\$63,342
	17 Congestion Management Strategies	\$0	\$0	\$0	\$2,145	\$2,145	\$17,160	\$2,145	\$2,145	\$17,160	\$21,450
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>II C</b>	<b>Short Range Transit Planning</b>										
	1 Short Range Transit Planning	\$0	\$0	\$0	\$9,625	\$9,625	\$77,000	\$9,625	\$9,625	\$77,000	\$96,250
<b>III-A</b>	<b>Planning Work Program</b>	\$3,238	\$3,238	\$25,906	\$0	\$0	\$0	\$3,238	\$3,238	\$25,906	\$32,383
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$259	\$259	\$2,075	\$0	\$0	\$0	\$259	\$259	\$2,075	\$2,594
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>										
	1 Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Environmental Justice	\$0	\$0	\$0	\$664	\$664	\$5,310	\$664	\$664	\$5,310	\$6,637
	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
	6 Public Involvement	\$1,682	\$1,682	\$13,458	\$8,148	\$8,148	\$65,180	\$9,830	\$9,830	\$78,638	\$98,297
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>										
	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
<b>III-E</b>	<b>Management &amp; Operations</b>										
	1 Management & Operations	\$0	\$0	\$0	\$34,238	\$34,238	\$273,902	\$34,238	\$34,238	\$273,902	\$342,377
	<b>Totals</b>	\$13,999	\$13,999	\$111,988	\$63,716	\$63,716	\$509,724	\$77,714	\$77,714	\$621,712	\$777,140

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.



**DURHAM AREA TRANSIT AUTHORITY (DATA)  
FTA TASK NARRATIVE TABLE  
FY2012 UPWP**

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code 42100
- 3. Task Code II-B-10
- 4. Title Transit Element of the LRTP
  
- 5. Task Objective To provide needed Transit support for the MPO's LRTP updates
  
- 6. Tangible Product Expected Annual Planning Work Program outline and associated costs
  
- 7. Expected Completion / Date of Products Jun-12
  
- 8. Previous Work FY-2011 Planning Work Program
  
- 9. Prior FTA Funds (\$ amount/Funding Year) \$6,486 (FY 11) - 5307
  
- 10. Relationship PWP is intended to support various planning efforts of the LRTP
  
- 11. Agency Durham Area Transit Authority (DATA)

DRAFT

					<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0		
13. HPR - Highway	FHWA	80%	\$0		<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0		
15. Section 104 (f) PL	FHWA	80%	\$0		<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0		
17. Section 5303	NCDOT	10%	\$0		
18. Section 5303	FTA	80%	\$0		<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$1,076		
20. Section 5307 (planning)	NCDOT	10%	\$1,076		
21. Section 5307 (planning)	FTA	80%	\$8,610		<u>\$10,762 5307</u>
22. Additional Funds	Local	100%	\$0		<u>\$0 Misc.</u>
				Total Funding:	<u><u>\$10,762</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.



**DURHAM AREA TRANSIT AUTHORITY (DATA)  
FTA TASK NARRATIVE TABLE  
FY2012 UPWP**

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code 44250
- 3. Task Code II-B-17
- 4. Title *Congestion Management Strategies*
  
- 5. Task Objective To assist the MPO in its congestion management strategies by collecting and providing transit-related data
  
- 6. Tangible Product Expected Work plan and transit related data in GIS format
  
- 7. Expected Completion / Date of Products Jun-12
  
- 8. Previous Work Short Range Transit Development Plan
  
- 9. Prior FTA Funds (\$ amount/Funding Year) \$12,928 (FY11) - 5307
- 10. Relationship These activities support local MPO transportation planning effort
  
- 11. Agency Durham Area Transit Authority (DATA)

DRAFT

				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$2,145	
20. Section 5307 (planning)	NCDOT	10%	\$2,145	
21. Section 5307 (planning)	FTA	80%	\$17,160	<u>\$21,450 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			<b>Total Funding:</b>	<u><u>\$21,450</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.



**DURHAM AREA TRANSIT AUTHORITY (DATA)  
FTA TASK NARRATIVE TABLE  
FY2012 UPWP**

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code 44250
- 3. Task Code III-A-1
- 4. Title *Planning Work Program*
  
- 5. Task Objective To identify task areas and staff hours to complete each task
  
- 6. Tangible Product Expected Work Program outline and costs associated with them.
  
- 7. Expected Completion / Date of Products Jun-12
  
- 8. Previous Work Planning Work Program
  
- 9. Prior FTA Funds (\$ amount/Funding Year) \$23,866 (FY11) - 5307
  
- 10. Relationship Supports MPO's PWP
  
- 11. Agency Durham Area Transit Authority (DATA)

DRAFT

				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$3,238	
17. Section 5303	NCDOT	10%	\$3,238	
18. Section 5303	FTA	80%	\$25,906	<u>\$32,383 5303</u>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<u>\$0 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total Funding:	<u><u>\$32,383</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.



**DURHAM AREA TRANSIT AUTHORITY (DATA)  
FTA TASK NARRATIVE TABLE  
FY2012 UPWP**

1. MPO	Durham-Chapel Hill-Carrboro (DCHC)		
2. FTA Code	442500		
3. Task Code	III-C-2		
4. Title	<i>Environmental Justice</i>		
5. Task Objective	To assist the MPO in its transportation outreach to Minorities and LEP group		
6. Tangible Product Expected	Work plan and transit related EJ date		
7. Expected Completion / Date of Products	Jun-12		
8. Previous Work	Transportation Improvement Program		
9. Prior FTA Funds (\$ amount/Funding Year)	\$4,000 (FY11) - 5307		
10. Relationship	These activities support local MPO transportation planning effort		
11. Agency	Durham Area Transit Authority (DATA)		
			<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0
13. HPR - Highway	FHWA	80%	\$0
			<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0
15. Section 104 (f) PL	FHWA	80%	\$0
			<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0
17. Section 5303	NCDOT	10%	\$0
18. Section 5303	FTA	80%	\$0
			<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$664
20. Section 5307 (planning)	NCDOT	10%	\$664
21. Section 5307 (planning)	FTA	80%	\$5,310
			<u>\$6,637 5307</u>
22. Additional Funds	Local	100%	\$0
			<u>\$0 Misc.</u>
			<b>Total Funding: <u>\$6,637</u></b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

**DURHAM AREA TRANSIT AUTHORITY (DATA)  
FTA TASK NARRATIVE TABLE  
FY2012 UPWP**

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code 442100
- 3. Task Code III-C-6
- 4. Title *Public Involvement*
  
- 5. Task Objective To seek untapped ridership through aggressive marketing tactics. Conduct market surveys and seek new advertizing medium
  
- 6. Tangible Product Expected Attitudnal survey results, opinion results.
  
- 7. Expected Completion / Date of Products Jun-12
  
- 8. Previous Work Significant marketing efforts
  
- 9. Prior FTA Funds (\$ amount/Funding Year) \$42,165 (FY11) - 5307
  
- 10. Relationship This information is used in conjunction with Task III-A.
  
- 11. Agency Durham Area Transit Authority (DATA)

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				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	\$0 HPR
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	\$0 PL
16. Section 5303	Local	10%	\$1,682	
17. Section 5303	NCDOT	10%	\$1,682	
18. Section 5303	FTA	80%	\$13,458	\$16,822 5303
19. Section 5307 (planning)	Local	10%	\$8,148	
20. Section 5307 (planning)	NCDOT	10%	\$8,148	
21. Section 5307 (planning)	FTA	80%	\$65,180	\$81,475 5307
22. Additional Funds	Local	100%	\$0	\$0 Misc.
			<b>Total Funding:</b>	<u><u>\$98,297</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.



**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Chapel Hill Transit**

	Task Description	Section 5303			Section 5307			FTA - Task Funding Summary			
		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%				
<b>II A</b>	<b>Surveillance of Change</b>										
	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	\$500	\$500	\$4,000	\$6,000	\$6,000	\$48,000	\$6,500	\$6,500	\$52,000	\$65,000
	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	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$3,000	\$3,000	\$24,000	\$0	\$0	\$0	\$3,000	\$3,000	\$24,000	\$30,000
	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
<b>II B</b>	<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	\$300	\$300	\$2,400	\$0	\$0	\$0	\$300	\$300	\$2,400	\$3,000
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$1,000	\$1,000	\$8,000	\$0	\$0	\$0	\$1,000	\$1,000	\$8,000	\$10,000
	6 Community Goals & Objectives	\$500	\$500	\$4,000	\$0	\$0	\$0	\$500	\$500	\$4,000	\$5,000
	7 Forecast of Future Travel Patterns	\$300	\$300	\$2,400	\$0	\$0	\$0	\$300	\$300	\$2,400	\$3,000
	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	\$1,000	\$1,000	\$8,000	\$0	\$0	\$0	\$1,000	\$1,000	\$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	\$300	\$300	\$2,400	\$2,000	\$2,000	\$16,000	\$2,300	\$2,300	\$18,400	\$23,000
	17 Congestion Management Strategies	\$500	\$500	\$4,000	\$0	\$0	\$0	\$500	\$500	\$4,000	\$5,000
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>II C</b>	<b>Short Range Transit Planning</b>										
	1 Short Range Transit Planning	\$0	\$0	\$0	\$5,000	\$5,000	\$40,000	\$5,000	\$5,000	\$40,000	\$50,000
<b>III-A</b>	<b>Planning Work Program</b>	\$200	\$200	\$1,600	\$1,000	\$1,000	\$8,000	\$1,200	\$1,200	\$9,600	\$12,000
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$300	\$300	\$2,400	\$1,800	\$1,800	\$14,400	\$2,100	\$2,100	\$16,800	\$21,000
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>										
	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	\$0	\$0	\$0	\$500	\$500	\$4,000	\$500	\$500	\$4,000	\$5,000
	4 Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$2,000	\$2,000	\$16,000	\$2,000	\$2,000	\$16,000	\$20,000
	6 Public Involvement	\$0	\$0	\$0	\$1,000	\$1,000	\$8,000	\$1,000	\$1,000	\$8,000	\$10,000
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>										
	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	\$2,000	\$2,000	\$16,000	\$1,825	\$1,825	\$14,600	\$3,825	\$3,825	\$30,600	\$38,250
<b>III E</b>	<b>Management &amp; Operations</b>										
	1 Management & Operations	\$3,550	\$3,550	\$28,397	\$19,500	\$19,500	\$156,000	\$23,050	\$23,050	\$184,397	\$230,496
	<b>Totals</b>	\$13,450	\$13,450	\$107,597	\$40,625	\$40,625	\$325,000	\$54,075	\$54,075	\$432,597	\$540,746

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

**CHAPEL HILL TRANSIT (CHT)  
FTA TASK NARRATIVE TABLE  
FY2011-2012 (FY 2012) UPWP**

1. MPO	Durham-Chapel Hill-Carrboro (DCHC)			
2. FTA Code	<b>442400</b>			
3. Task Code	<b>II A 5</b>			
4. Title	<b>Transit System Data</b>			
5. Task Objective	<b>Review and analyze transit system data to monitor Chapel Hill Data Book update</b>			
6. Tangible Product Expected				
7. Expected Completion / Date of Products	<b>Jun-12</b>			
8. Previous Work	<b>2010 Databook Update</b>			
9. Prior FTA Funds (\$ amount/Funding Year)	<b>\$10,000 (FY11) - 5303</b>			
10. Relationship	<b>Supports implementation of 2035 LRTP</b>			
11. Agency	Chapel Hill Planning/Transit			
				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$500	
17. Section 5303	NCDOT	10%	\$500	
18. Section 5303	FTA	80%	\$4,000	<u>\$5,000 5303</u>
19. Section 5307 (planning)	Local	10%	\$6,000	
20. Section 5307 (planning)	NCDOT	10%	\$6,000	
21. Section 5307 (planning)	FTA	80%	\$48,000	<u>\$60,000 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total:	<u><u>65,000</u></u>

Footnote: Program of activities for DATA &amp; Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

1.	MPO	Durham-Chapel Hill-Carrboro (DCHC)		
2.	FTA Code	442301		
3.	Task Code	II A 10		
4.	Title	Mapping		
5.	Task Objective	To maintain and prepare maps of the Chapel Hill transit network and related elements		
6.	Tangible Product Expected	Transit, bicycle and pedestrian network maps		
7.	Expected Completion / Date of Products	Ongoing		
8.	Previous Work			
9.	Prior FTA Funds (\$ amount/Funding Year)	\$20,000 (FY11) - 5303		
10.	Relationship	Supports implementation of 2035 L RTP and development of 2040 L RTP		
11.	Agency	Chapel Hill Planning/ Transit		
				Totals By Funding Source (100%)
12.	HPR - Highway	NCDOT	20%	\$0
13.	HPR - Highway	FHWA	80%	\$0
				<u>\$0 HPR</u>
14.	Section 104 (f) PL	Local	20%	\$2,000
15.	Section 104 (f) PL	FHWA	80%	\$8,000
				<u>\$10,000 PL</u>
16.	Section 5303	Local	10%	\$3,000
17.	Section 5303	NCDOT	10%	\$3,000
18.	Section 5303	FTA	80%	\$24,000
				<u>\$30,000 5303</u>
19.	Section 5307 (planning)	Local	10%	\$0
20.	Section 5307 (planning)	NCDOT	10%	\$0
21.	Section 5307 (planning)	FTA	80%	\$0
				<u>\$0 5307</u>
22.	Additional Funds	Local	100%	\$0
				<u>\$0 Misc.</u>
				<u><u>Total: 40,000</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 3**
- 4. Title *Travel Model Updates*
  
- 5. Task Objective **To provide input to the enhancement of the Triangle Regional Model and monitor accuracy of the model**
  
- 6. Tangible Product Expected **Update TRM**
  
- 7. Expected Completion / Date of Products **Dec-11**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year)
  
- 10. Relationship **Supports development of 2040 L RTP**
  
- 11. Agency Chapel Hill Planning/Transit

DRAFT

					Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0		
13. HPR - Highway	FHWA	80%	\$0		<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0		
15. Section 104 (f) PL	FHWA	80%	\$0		<u>\$0 PL</u>
16. Section 5303	Local	10%	\$300		
17. Section 5303	NCDOT	10%	\$300		
18. Section 5303	FTA	80%	\$2,400		<u>\$3,000 5303</u>
19. Section 5307 (planning)	Local	10%	\$0		
20. Section 5307 (planning)	NCDOT	10%	\$0		
21. Section 5307 (planning)	FTA	80%	\$0		<u>\$0 5307</u>
22. Additional Funds	Local	100%	\$0		<u>\$0 Misc.</u>
			Total:		<u><u>3,000</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 5**
- 4. Title *Forecast of Data to Horizon year*
  
- 5. Task Objective **To prepare 2040 projections of housing and employment for review and approval by Chapel Hill Town Council and use in development of 2040 LRTP**
  
- 6. Tangible Product Expected **Revised 2040 socio economic projections**
  
- 7. Expected Completion / Date of Products **December, 2011**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$5,000 (FY11) - 5303**
  
- 10. Relationship **Supports development of 2040 LRTP**
  
- 11. Agency Chapel Hill Transit (CHT)

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				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$4,000	
15. Section 104 (f) PL	FHWA	80%	\$16,000	<b>\$20,000 PL</b>
16. Section 5303	Local	10%	\$1,000	
17. Section 5303	NCDOT	10%	\$1,000	
18. Section 5303	FTA	80%	\$8,000	<b>\$10,000 5303</b>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<b>\$0 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total:	<b>30,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 6**
- 4. Title ***Community Goals and Objectives***
  
- 5. Task Objective **To coordinate the development of MPO community goals and objectives with the development of Chapel Hill goals and objectives related to revisions to the Town's comprehensive plan.**
  
- 6. Tangible Product Expected **2040 MPO Community Goals and Objectives**
  
- 7. Expected Completion / Date of Products **Dec-11**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year)
  
- 10. Relationship **Supports development of 2040 LRTP**
  
- 11. Agency Chapel Hill Planning/Transit

DRAFT

				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0 PL</b>
16. Section 5303	Local	10%	\$500	
17. Section 5303	NCDOT	10%	\$500	
18. Section 5303	FTA	80%	\$4,000	<b>\$5,000 5303</b>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<b>\$0 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total:	<b>\$ 5,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 7**
- 4. Title *Forecast Future Travel Patterns*
  
- 5. Task Objective **To review information from TRM and other sources to determine future travel patterns for LRTP design year**
  
- 6. Tangible Product Expected **Regional travel demand estimates**
  
- 7. Expected Completion / Date of Products **Jun-11**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$5,000 (FY11) - 5303**
  
- 10. Relationship **Supports development of 2040 LRTP**
  
- 11. Agency Chapel Hill Planning/Transit

DRAFT

				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0</b>
14. Section 104 (f) PL	Local	20%	\$600	
15. Section 104 (f) PL	FHWA	80%	\$2,400	<b>\$3,000</b>
16. Section 5303	Local	10%	\$300	
17. Section 5303	NCDOT	10%	\$300	
18. Section 5303	FTA	80%	\$2,400	<b>\$3,000</b>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<b>\$0</b>
22. Additional Funds	Local	100%	\$0	<b>\$0</b>
			Total:	<b>\$ 6,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 10**
- 4. Title *Transit Element of L RTP*
  
- 5. Task Objective **To prepare the transit element of the 2040 MPO L RTP**
  
- 6. Tangible Product Expected **2040 L RTP**
  
- 7. Expected Completion / Date of Products **Jun-11**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$5,000 (FY11) - 5303**

- 10. Relationship **Supports development of 2040 L RTP**
- 11. Agency Chapel Hill Transit (CHT)

D R A F T

				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0</b>
16. Section 5303	Local	10%	\$1,000	
17. Section 5303	NCDOT	10%	\$1,000	
18. Section 5303	FTA	80%	\$8,000	<b>\$10,000</b>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<b>\$0</b>
22. Additional Funds	Local	100%	\$0	<b>\$0</b>
			Total Funding Request:	<b>\$ 10,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 16**
- 4. Title ***Financial Planning***
  
- 5. Task Objective **To provide input in to the development of the 2040 LRTP**
  
- 6. Tangible Product Expected **2040 LRTP**
  
- 7. Expected Completion / Date of Products **Jun-12**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year)
  
- 10. Relationship **Supports implementation of 2035 LRTP and 2040 LRTP**
- 11. Agency Chapel Hill Transit (CHT)

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					<b>Totals By Funding Source (100%)</b>
12. HPR - Highway	NCDOT	20%	\$0		
13. HPR - Highway	FHWA	80%	\$0		<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$1,000		
15. Section 104 (f) PL	FHWA	80%	\$4,000		<b>\$5,000 PL</b>
16. Section 5303	Local	10%	\$300		
17. Section 5303	NCDOT	10%	\$300		
18. Section 5303	FTA	80%	\$2,400		<b>\$3,000 5303</b>
19. Section 5307 (planning)	Local	10%	\$2,000		
20. Section 5307 (planning)	NCDOT	10%	\$2,000		
21. Section 5307 (planning)	FTA	80%	\$16,000		<b>\$20,000 5307</b>
22. Additional Funds	Local	100%	\$0		<b>\$0 Misc.</b>
Total Funding Request:					<b>\$ 28,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II B 17**
- 4. Title ***Congestion Management Strategies***
  
- 5. Task Objective **To prepare congestion management strategies and programs for incorporation into 2040 LRTP**
  
- 6. Tangible Product Expected **TDM and TSM elements of the 2040 LRTP**
  
- 7. Expected Completion / Date of Products **Jun-12**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year)
  
- 10. Relationship **Supports development of 2040 LRTP**
  
- 11. Agency Chapel Hill Planning/Transit

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				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$1,000	
15. Section 104 (f) PL	FHWA	80%	\$4,000	<u>\$5,000 PL</u>
16. Section 5303	Local	10%	\$500	
17. Section 5303	NCDOT	10%	\$500	
18. Section 5303	FTA	80%	\$4,000	<u>\$5,000 5303</u>
19. Section 5307 (planning)	Local	10%	\$0	
20. Section 5307 (planning)	NCDOT	10%	\$0	
21. Section 5307 (planning)	FTA	80%	\$0	<u>\$0 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
Total Funding Request:			<u>\$ 10,000</u>	

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II C 1**
- 4. Title ***Short Range Transit Plan***
  
- 5. Task Objective **To develop a 5-7 year transit capital and service improvement plan.**
  
- 6. Tangible Product Expected **Short Range Transit Plan**
  
- 7. Expected Completion / Date of Products **6/30/2012**
  
- 8. Previous Work **Comprehensive Operations Analysis**
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$64,000 (FY11) - 5307**
- 10. Relationship
- 11. Agency Chapel Hill Transit (CHT)

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				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0 PL</b>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<b>\$0 5303</b>
19. Section 5307 (planning)	Local	10%	\$5,000	
20. Section 5307 (planning)	NCDOT	10%	\$5,000	
21. Section 5307 (planning)	FTA	80%	\$40,000	<b>\$50,000 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total Funding Request:	<b>\$50,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

1.	MPO	Durham-Chapel Hill-Carrboro (DCHC)		
2.	FTA Code	442100		
3.	Task Code	III A 1		
4.	Title	Planning Work Program		
5.	Task Objective	To prepare the Chapel Hill element of the FY2013 PWP		
6.	Tangible Product Expected	FY2013 PWP		
7.	Expected Completion / Date of Products	Jun-12		
8.	Previous Work	Development and management of the FY2010-11 PWP		
9.	Prior FTA Funds (\$ amount/Funding Year)	\$1,288 (FY11) - 5303		
10.	Relationship	Supports implementation of adopted LRTP		
11.	Agency	Chapel Hill Planning/Transit		
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12.	HPR - Highway	NCDOT	20%	\$0
13.	HPR - Highway	FHWA	80%	\$0
				<b>\$0 HPR</b>
14.	Section 104 (f) PL	Local	20%	\$400
15.	Section 104 (f) PL	FHWA	80%	\$1,600
				<b>\$2,000 PL</b>
16.	Section 5303	Local	10%	\$200
17.	Section 5303	NCDOT	10%	\$200
18.	Section 5303	FTA	80%	\$1,600
				<b>\$2,000 5303</b>
19.	Section 5307 (planning)	Local	10%	\$1,000
20.	Section 5307 (planning)	NCDOT	10%	\$1,000
21.	Section 5307 (planning)	FTA	80%	\$8,000
				<b>\$10,000 5307</b>
22.	Additional Funds	Local	100%	\$0
				<b>\$0 Misc.</b>
Total Funding Request:				<b>\$ 14,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

1.	MPO	Durham-Chapel Hill-Carrboro (DCHC)		
2.	FTA Code	442500		
3.	Task Code	III B 1		
4.	Title	TIP		
5.	Task Objective	To monitor the adopted TIP and prepare information for amendments to TIP		
6.	Tangible Product Expected	Updated TIP		
7.	Expected Completion / Date of Products	Ongoing		
8.	Previous Work			
9.	Prior FTA Funds (\$ amount/Funding Year)	\$2,000 (FY11) - 5303		
10.	Relationship	Supports implementation of adopted LRTP		
11.	Agency	Chapel Hill Transit (CHT)		
Totals By Funding Source (100%)				
12.	HPR - Highway	NCDOT	20%	\$0
13.	HPR - Highway	FHWA	80%	\$0
				<b>\$0 HPR</b>
14.	Section 104 (f) PL	Local	20%	\$300
15.	Section 104 (f) PL	FHWA	80%	\$1,200
				<b>\$1,500 PL</b>
16.	Section 5303	Local	10%	\$300
17.	Section 5303	NCDOT	10%	\$300
18.	Section 5303	FTA	80%	\$2,400
				<b>\$3,000 5303</b>
19.	Section 5307 (planning)	Local	10%	\$1,800
20.	Section 5307 (planning)	NCDOT	10%	\$1,800
21.	Section 5307 (planning)	FTA	80%	\$14,400
				<b>\$18,000 5307</b>
22.	Additional Funds	Local	100%	\$0
				<b>\$0 Misc.</b>
Total Funding Request:				<b>\$ 22,500</b>

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Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

**CHAPEL HILL TRANSIT (CHT)  
FTA TASK NARRATIVE TABLE  
FY2011-2012 (FY 2012) UPWP**

1. MPO Durham-Chapel Hill-Carrboro (DCHC)  
 2. FTA Code **442100**  
 3. Task Code **III C 3**  
 4. Title **Minority Business Enterprise**
5. Task Objective **To assist businesses in becoming certified and enlisting needed services**
6. Tangible Product Expected
7. Expected Completion / Date of Products **Jun-12**
8. Previous Work
9. Prior FTA Funds (\$ amount/Funding Year)

10. Relationship

11. Agency

Chapel Hill Transit (CHT)

				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$500	
20. Section 5307 (planning)	NCDOT	10%	\$500	
21. Section 5307 (planning)	FTA	80%	\$4,000	<u>\$5,000 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total Funding Request:	<u><u>\$5,000</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442100**
- 3. Task Code **III C 5**
- 4. Title *Safety/Drug Control Planning*
  
- 5. Task Objective **To continue the training of employees**
  
- 6. Tangible Product Expected
  
- 7. Expected Completion / Date of Products **Jun-12**
  
- 8. Previous Work **Same**
  
- 9. Prior FTA Funds (\$ amount/Funding Year)

10. Relationship

11. Agency

Chapel Hill Transit (CHT)

DRAFT

Totals By Funding Source (100%)

12. HPR - Highway	<b>NCDOT</b>	<b>20%</b>	<b>\$0</b>	
13. HPR - Highway	<b>FHWA</b>	<b>80%</b>	<b>\$0</b>	<b>\$0 HPR</b>
<hr style="border: 0.5px solid black;"/>				
14. Section 104 (f) PL	<b>Local</b>	<b>20%</b>	<b>\$0</b>	
15. Section 104 (f) PL	<b>FHWA</b>	<b>80%</b>	<b>\$0</b>	<b>\$0 PL</b>
<hr style="border: 0.5px solid black;"/>				
16. Section 5303	<b>Local</b>	<b>10%</b>	<b>\$0</b>	
17. Section 5303	<b>NCDOT</b>	<b>10%</b>	<b>\$0</b>	
18. Section 5303	<b>FTA</b>	<b>80%</b>	<b>\$0</b>	<b>\$0 5303</b>
<hr style="border: 0.5px solid black;"/>				
19. Section 5307 (planning)	<b>Local</b>	<b>10%</b>	<b>\$2,000</b>	
20. Section 5307 (planning)	<b>NCDOT</b>	<b>10%</b>	<b>\$2,000</b>	
21. Section 5307 (planning)	<b>FTA</b>	<b>80%</b>	<b>\$16,000</b>	<b>\$20,000 5307</b>
<hr style="border: 0.5px solid black;"/>				
22. Additional Funds	<b>Local</b>	<b>100%</b>	<b>\$0</b>	<b>\$0 Misc.</b>
			<b>Total Funding Request:</b>	<b><u>\$20,000</u></b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442100**
- 3. Task Code **III C 6**
- 4. Title *Public Involvement*
  
- 5. Task Objective **To conduct marketing strategies and continue working with the public to increase ridership**
  
- 6. Tangible Product Expected **Positive customer view of the transit system.**
  
- 7. Expected Completion / Date of Products **Jun-12**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year)
  
- 10. Relationship
  
- 11. Agency Chapel Hill Transit (CHT)

DRAFT

				<b>Totals By Funding Source (100%)</b>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0 PL</b>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<b>\$0 5303</b>
19. Section 5307 (planning)	Local	10%	\$1,000	
20. Section 5307 (planning)	NCDOT	10%	\$1,000	
21. Section 5307 (planning)	FTA	80%	\$8,000	<b>\$10,000 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total Funding Request:	<b>\$10,000</b>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

# CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442200**
- 3. Task Code **III D 4**
- 4. Title *Regional or Statewide Planning*
  
- 5. Task Objective **Participate in the ongoing development of the Triangle LRT Alternatives Analysis**
  
- 6. Tangible Product Expected **LRT Alternatives analysis**
  
- 7. Expected Completion / Date of Products **Jun-12**
  
- 8. Previous Work
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$5,000 (FY11) - 5303**
  
- 10. Relationship **Supports DCHC-MPO activities**
  
- 11. Agency Chapel Hill Transit (CHT)

DRAFT

				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$351	
15. Section 104 (f) PL	FHWA	80%	\$1,403	<u>\$1,754 PL</u>
16. Section 5303	Local	10%	\$2,000	
17. Section 5303	NCDOT	10%	\$2,000	
18. Section 5303	FTA	80%	\$16,000	<u>\$20,000 5303</u>
19. Section 5307 (planning)	Local	10%	\$1,825	
20. Section 5307 (planning)	NCDOT	10%	\$1,825	
21. Section 5307 (planning)	FTA	80%	\$14,600	<u>\$18,250 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total Funding:	<u><u>\$40,004</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

## CHAPEL HILL TRANSIT (CHT) FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442100**
- 3. Task Code **III E 1**
- 4. Title ***Management and Operations***
  
- 5. Task Objective **To assist, support and facilitate a comprehensive and coordinated process for transportation planning through participation in the DCHC MPO and related regional/statewide projects**
  
- 6. Tangible Product Expected **Ongoing**
  
- 7. Expected Completion / Date of Products **June, 2012**
  
- 8. Previous Work
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$15,224 (FY11) - 5307 / \$29,808 (FY11) - 5303**
- 10. Relationship **Supports all other planning and reporting activities**
- 11. Agency Chapel Hill Transit (CHT)

DRAFT

				<u>Totals By Funding Source (100%)</u>
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$3,000	
15. Section 104 (f) PL	FHWA	80%	\$12,000	<u>\$15,000 PL</u>
16. Section 5303	Local	10%	\$3,550	
17. Section 5303	NCDOT	10%	\$3,550	
18. Section 5303	FTA	80%	\$28,397	<u>\$35,496 5303</u>
19. Section 5307 (planning)	Local	10%	\$19,500	
20. Section 5307 (planning)	NCDOT	10%	\$19,500	
21. Section 5307 (planning)	FTA	80%	\$156,000	<u>\$195,000 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total Funding Request:	<u><u>\$245,496</u></u>

Footnote: Program of activities for DATA & Chapel Hill Transit are based on the FFY 2011 Federal appropriations.

**Durham-Chapel Hill-Carrboro Urban Area  
FY 2011-2012 Unified Planning Work Program  
Funding Distribution by Agency Funding Sources**

TCC 3/23/2011 Attachment 11A

**Triangle Transit Authority (TTA)**

	Task Description	Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary				
		Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total	
<b>II A</b>	<b>Surveillance of Change</b>											
	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	\$1,188	\$1,188	\$9,500	\$1,188	\$1,188	\$9,500	\$11,875	\$11,875
	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	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$0	\$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	\$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
<b>II B</b>	<b>Long Range Transp. Plan</b>											
	1 Collection of Base Year Data	\$0	\$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	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$11,250	\$11,250	\$90,000	\$11,250	\$11,250	\$90,000	\$112,500	\$112,500
	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 Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	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	\$2,813	\$2,813	\$22,500	\$2,813	\$2,813	\$22,500	\$28,125	\$28,125
	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
<b>II C</b>	<b>Short Range Transit Planning</b>											
	1 Short Range Transit Planning	\$0	\$0	\$0	\$41,875	\$41,875	\$335,000	\$41,875	\$41,875	\$335,000	\$418,750	\$418,750
<b>III-A</b>	<b>Planning Work Program</b>											
	Planning Work Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-B</b>	<b>Transp. Improvement Plan</b>											
	TIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>											
	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
	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
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>											
	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	\$49,250	\$49,250	\$394,000	\$49,250	\$49,250	\$394,000	\$492,500	\$492,500
	4 Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>III E</b>	<b>Management &amp; Operations</b>											
	1 Management & Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Totals</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$106,375</b>	<b>\$106,375</b>	<b>\$851,000</b>	<b>\$106,375</b>	<b>\$106,375</b>	<b>\$851,000</b>	<b>\$1,063,750</b>	<b>\$1,063,750</b>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

## TRIANGLE TRANSIT FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442400**
- 3. Task Code **II-A-5**
- 4. Title *Transit System Data*
  
- 5. Task Objective **To collect route patronage, on-time performance data, passenger amenity data and customer preferences for service improvements**
  
- 6. Tangible Product Expected **Route planning changes and recommendations from both staff and hired consultants**
  
- 7. Expected Completion / Date of Products **6/30/2012**
  
- 8. Previous Work **Regional APC data work already undertaken**
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$145,600 (FY11) - 5307**
  
- 10. Relationship **APC data can be used to calibrate the travel times in the regional model. Data will inform route planning decisions.**
  
- 11. Agency Triangle Transit

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				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$1,188	
20. Section 5307 (planning)	NCDOT	10%	\$1,188	
21. Section 5307 (planning)	FTA	80%	\$9,500	<u>\$11,875 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total	<u><u>\$11,875</u></u>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

## TRIANGLE TRANSIT FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II-B-3**
- 4. Title ***Travel Model Updates***
- 5. Task Objective **Support for Triangle Regional Model Service Bureau**
- 6. Tangible Product Expected **Updated Triangle Regional Model**
- 7. Expected Completion /  
Date of Products **6/30/2012**
- 8. Previous Work **Ongoing support of TRM service bureau**
- 9. Prior FTA Funds  
(\$ amount/Funding Year) **\$128,000 (FY11) - 5307**

10. Relationship

**Supports the regional travel model utilized for the LRTP and other transit and highway planning purposes.**

11. Agency

Service Bureau at ITRE responsible for task - Triangle Transit is a funding partner

DRAFT

Totals By Funding Source  
(100%)

12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$11,250	
20. Section 5307 (planning)	NCDOT	10%	\$11,250	
21. Section 5307 (planning)	FTA	80%	\$90,000	<u>\$112,500 5307</u>
22. Additional Funds	Local	100%	\$0	<u>\$0 Misc.</u>
			Total	<u><u>\$112,500</u></u>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

## TRIANGLE TRANSIT FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code **442301**
- 3. Task Code **II-B-10**
- 4. Title *Transit Element of the LRTP*
  
- 5. Task Objective **To provide travel market analysis and cost information for development of transit investments for the LRTP; and to acquire GIS support services from TJCOG**
  
- 6. Tangible Product Expected **Technical planning report provided to regional leaders and the MPO; other GIS service needs as required.**
  
- 7. Expected Completion / Date of Products **6/30/2012**
  
- 8. Previous Work **Continued and ongoing regional corridor analysis for LRTP and other projects**

- 9. Prior FTA Funds (\$ amount/Funding Year) **\$36,000 (FY11) - 5307**
- 10. Relationship **This supports regional transit planning for capital**
- 11. Agency Triangle Transit (with joint sponsorship by TJCOG and I

DRAFT

				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0 PL</b>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<b>\$0 5303</b>
19. Section 5307 (planning)	Local	10%	\$2,813	
20. Section 5307 (planning)	NCDOT	10%	\$2,813	
21. Section 5307 (planning)	FTA	80%	\$22,500	<b>\$28,125 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total	<b>\$28,125</b>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

**TRIANGLE TRANSIT  
FTA TASK NARRATIVE TABLE  
FY2011-2012 (FY 2012) UPWP**

1. MPO	Durham-Chapel Hill-Carrboro (DCHC)		
2. FTA Code	442400		
3. Task Code	II-C-1		
4. Title	<i>Short Range Transit Planning</i>		
5. Task Objective	<b>This covers a portion of staff salaries in the Departments of Commuter Resources and Capital Development related to Triangle Transit's short-range transit service and facility planning; also planning and engineering to improve accessibility of Bus stops and facilities</b>		
6. Tangible Product Expected	<b>On-going staff salaries</b>		
7. Expected Completion / Date of Products	6/30/2012		
8. Previous Work	<b>Ongoing staff salaries</b>		
9. Prior FTA Funds (\$ amount/Funding Year)	<b>\$536,000 (FY11) - 5307</b>		
10. Relationship	<b>Provides staff support to carry out Triangle Transit planning</b>		
11. Agency	Triangle Transit		
<b>Totals By Funding Source (100%)</b>			
12. HPR - Highway	NCDOT	20%	\$0
13. HPR - Highway	FHWA	80%	\$0
			<u>\$0 HPR</u>
14. Section 104 (f) PL	Local	20%	\$0
15. Section 104 (f) PL	FHWA	80%	\$0
			<u>\$0 PL</u>
16. Section 5303	Local	10%	\$0
17. Section 5303	NCDOT	10%	\$0
18. Section 5303	FTA	80%	\$0
			<u>\$0 5303</u>
19. Section 5307 (planning)	Local	10%	\$41,875
20. Section 5307 (planning)	NCDOT	10%	\$41,875
21. Section 5307 (planning)	FTA	80%	\$335,000
			<u>\$418,750 5307</u>
22. Additional Funds	Local	100%	\$0
			<u>\$0 Misc.</u>
			<u>Total</u>
			<u><u>\$418,750</u></u>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

## TRIANGLE TRANSIT FTA TASK NARRATIVE TABLE FY2011-2012 (FY 2012) UPWP

- 1. MPO Durham-Chapel Hill-Carrboro (DCHC)
- 2. FTA Code 442302
- 3. Task Code III-D-3
- 4. Title *Special Studies*
  
- 5. Task Objective **Studies may be conducted for corridors that show promise during the course of the development of the transit element of the LRTP, including alternatives analysis activities, capital cost estimation, operating cost estimations, financial planning, and transit expert studies for corridors, alignments, and bus and rail service plans**
  
- 6. Tangible Product Expected **RFP and/or Technical Report**
  
- 7. Expected Completion / Date of Products **6/30/2012**
  
- 8. Previous Work **URS Reports, MAB Analyses, Jeff Parker Financial Analysis**
  
- 9. Prior FTA Funds (\$ amount/Funding Year) **\$110,400 (FY11) - 5307**
  
- 10. Relationship **This task will follow from the transit infrastructure planning conducted for the LRTP.**
  
- 11. Agency Triangle Transit

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				Totals By Funding Source (100%)
12. HPR - Highway	NCDOT	20%	\$0	
13. HPR - Highway	FHWA	80%	\$0	<b>\$0 HPR</b>
14. Section 104 (f) PL	Local	20%	\$0	
15. Section 104 (f) PL	FHWA	80%	\$0	<b>\$0 PL</b>
16. Section 5303	Local	10%	\$0	
17. Section 5303	NCDOT	10%	\$0	
18. Section 5303	FTA	80%	\$0	<b>\$0 5303</b>
19. Section 5307 (planning)	Local	10%	\$49,250	
20. Section 5307 (planning)	NCDOT	10%	\$49,250	
21. Section 5307 (planning)	FTA	80%	\$394,000	<b>\$492,500 5307</b>
22. Additional Funds	Local	100%	\$0	<b>\$0 Misc.</b>
			Total	<b>\$492,500</b>

Footnote: TTA's program of activities are based on anticipated FFY 2012 Federal appropriations.

# ***Appendices C***

## ***Disadvantaged Business Enterprise (DBE) Contracting Opportunities***

### ***FY12 Forms***

## CITY OF DURHAM Anticipated DBE Contracting Opportunities for FY12

Name of MPO: CITY OF DURHAM

Person Completing Form: Felix Nwoko

Telephone Number: 919-560-4366 ext. 36424

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

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

## CITY OF DURHAM Anticipated DBE Contracting Opportunities for FY11

Name of MPO: DURHAM AREA TRANSIT AUTHORITY (DATA)

Person Completing Form: Pierre Owusu

Telephone Number: 919-560-5343 ext. 36214

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
THERE ARE CURRENTLY NO PLANNED DBE CONTRACTING OPPORTUNITIES ASSOCIATED WITH THIS GRANT	<b>DRAFT</b>				\$0.00

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

## CHAPEL HILL Anticipated DBE Contracting Opportunities for FY12

Name of MPO: Town of Chapel Hill

Person Completing Form: Carmen Cole

Telephone Number: 919-969-4911

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
THERE ARE CURRENTLY NO ANTICIPATED DBE CONTRACTING OPPORTUNITIES.	<b>DRAFT</b>			\$0	\$0

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

## TRIANGLE TRANSIT

### Anticipated DBE Contracting Opportunities for FY12

Name of MPO/Member Agency: **Durham-Chapel Hill-Carrboro MPO**

Person Completing Form: Patrick McDonough, Triangle Transit

Telephone Number 919-485-7455

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
III-D-3	Special Studies	Triangle Transit	Consultant	\$630,400	\$788,000
II-A-5	Transit System Data	Triangle Transit	Consultant	Zero to \$15,200	Zero to \$19,000

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

## MEMORANDUM

**To:** Transportation Advisory Committee (TAC)  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** March 9, 2011

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

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

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

### **2010-2011 Unified Planning Work Program (UPWP) – Projects**

#### **Comprehensive Transportation Plan (CTP)**

- Draft CTP – September 2011 – Depends on NCDOT Schedule
- Public Input
- Recommended CTP
- Adopted CTP
- Technical report and implementation

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

- ✓ Staff study initiation meeting
- ✓ Draft scope of services
- ✓ Agency review of scope and time
- ✓ Request for Proposal notice – October 2008
- ✓ Proposal due January 2009
- ✓ Consultant selected
- ✓ Contract negotiation underway
- ✓ Council contract approval May 18, 2009
- ✓ Notice to Proceed – June 2009
- ✓ Kickoff Meeting – July 2009
- ✓ Public Outreach Plan – August 2009
- ✓ Prepare Corridor / Subarea Community Profile – Dec 2009
  - ✓ Public Workshop #1 – Fall 2009
- ✓ Development and Evaluation of Scenarios – Apr 2010
  - ✓ Public Workshop #2 – Feb 25, 2010
- ✓ Transportation/Land Use Master Plan – June 2010
  - ✓ Public Workshop #3 – May 11, 2010
- ✓ Documentation and Final Presentation – June 2010
  - Local agency review – ongoing
  - Additional study to address issues raised during public comment
  - Study completion – December 2011

### **GIS/Data Integration and Automation**

- ✓ Phase I completed. Internal review and implementation in progress
- ✓ Phase I deployment
- Database development – ongoing.
- Phase 2 to commence in July 2011

### **Land-use Model Development**

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

### **Non-Motorized Model Development**

- ✓ Phase 1 completed.
- ✓ Phase 2 completed
- Sensitivity analysis and testing in progress
- White Paper on non-motorized prioritization tool

### **MPO Parking Survey and Study (postponed)**

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

### **MPO Community Viz. Scenarios Planning and Visualization**

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

<b>Contract Number:</b> C201487	<b>Route:</b> US-15
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> B-3450, U-4009, U-4012
<b>Length:</b> 1.769 miles	<b>Federal Aid Number:</b> BRSTP-1116(6)
<b>Resident Engineer:</b> Chad D. Hinnant	<b>RE Phone Number:</b> (919)220-4680
<b>Location Description:</b> BRIDGES OVER SANDY CRK & TRIBUTARY & APPROACHES ON SR-1116, SR-1126 NEAR US-15/501 & SR-1116, US-15/501 AT MT MORIAH RD.	
<b>Type of Work:</b> GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES.	
<b>Contractor Name:</b> DLB, INC DBA DLB INC (OF VA)	
<b>Contract Amount:</b> \$18,810,912.36	<b>Cost Overrun/Underrun:</b> 6.88%
<b>Availability Date:</b> 10/1/2007	<b>Letting Date:</b> 8/21/2007
<b>Completion Date:</b> 8/1/2010	<b>Work Began:</b> 10/1/2007
<b>Revised Completion Date:</b> 8/3/2010	<b>Estimated Completion:</b> 3/15/2011
<b>Last Estimate Thru:</b> 11/30/2010	<b>Scheduled Progress:</b> 100%
<b>Last Estimate Paid:</b> 3/2/2011	<b>Actual Progress:</b> 93.65%

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

<b>Contract Number:</b> C202064	<b>Route:</b> SR-2028
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> U-3309A
<b>Length:</b> 1.165 miles	<b>Federal Aid Number:</b> STP-2028(4)
<b>Resident Engineer:</b> Cadmus Capehart, PE	<b>RE Phone Number:</b> (919)840-0914
<b>Location Description:</b> SR-2028 (TW ALEXANDER DR) FROM CORNWALLIS RD TO EAST OF NC-147 IN DURHAM.	
<b>Type of Work:</b> WIDENING, GRADING, DRAINAGE, PAVING & SIGNALS.	
<b>Contractor Name:</b> THOMPSON CONTRACTING GRADING PAVING & UTILITIES INC	
<b>Contract Amount:</b> \$6,502,648.68	<b>Cost Overrun/Underrun:</b> 2.69%
<b>Availability Date:</b> 2/1/2010	<b>Letting Date:</b> 12/15/2009
<b>Completion Date:</b> 8/15/2011	<b>Work Began:</b> 2/8/2010
<b>Revised Completion Date:</b>	<b>Estimated Completion:</b> 8/15/2011
<b>Last Estimate Thru:</b> 10/31/2010	<b>Scheduled Progress:</b> 30.5%
<b>Last Estimate Paid:</b> 11/8/2010	<b>Actual Progress:</b> 36.49%

<b>Contract Number:</b> C202277	<b>Route:</b> I-40
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> R-2000AF, R-5164B
<b>Length:</b> 3.56 miles	<b>Federal Aid Number:</b> STM-540(15)
<b>Resident Engineer:</b> Jeffrey D. Allen, PE	<b>RE Phone Number:</b> (919)733-9499
<b>Location Description:</b> NORTHERN WAKE FREEWAY INTERCHANGE IMPROVEMENTS AT I-540 AND I-40, AND I-40 FROM NC-147 TO EAST OF I-540.	
<b>Type of Work:</b> WIDENING, GRADING, DRAINAGE, MILLING, PAVING, & STRUCTURE .	
<b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY	
<b>Contract Amount:</b> \$7,577,355.48	<b>Cost Overrun/Underrun:</b> -4.6%
<b>Availability Date:</b> 3/1/2010	<b>Letting Date:</b> 1/19/2010
<b>Completion Date:</b> 12/31/2010	<b>Work Began:</b> 4/1/2010
<b>Revised Completion Date:</b> 1/9/2011	<b>Estimated Completion:</b> 5/1/2011
<b>Last Estimate Thru:</b> 1/7/2011	<b>Scheduled Progress:</b> 100%
<b>Last Estimate Paid:</b> 1/12/2011	<b>Actual Progress:</b> 96.85%

<b>Contract Number:</b> C202340	<b>Route:</b> SR-1321
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> U-3804
<b>Length:</b> 1.07 miles	<b>Federal Aid Number:</b> STM-0505(50)
<b>Resident Engineer:</b> Chad D. Hinnant	<b>RE Phone Number:</b> (919)220-4680

<p><b>Location Description:</b> SR-1321 (HILLANDALE RD) FROM I-85 TO NORTH OF SR-1407 (CARVER AVE).  <b>Type of Work:</b> GRADING, DRAINAGE, PAVING, AND SIGNAL.  <b>Contractor Name:</b> REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT  <b>Contract Amount:</b> \$4,222,625.78      <b>Cost Overrun/Underrun:</b> 0%  <b>Availability Date:</b> 8/30/2010      <b>Letting Date:</b> 7/20/2010  <b>Completion Date:</b> 6/15/2012      <b>Work Began:</b> 9/30/2010  <b>Revised Completion Date:</b>      <b>Estimated Completion:</b> 6/15/2012  <b>Last Estimate Thru:</b> 1/7/2011      <b>Scheduled Progress:</b> 12%  <b>Last Estimate Paid:</b> 2/1/2011      <b>Actual Progress:</b> 9.32%</p>	
<p><b>Contract Number:</b> C202493      <b>Route:</b> I-85  <b>Physical Division:</b> 5      <b>County:</b> Durham  <b>Administrative Division:</b> 5      <b>TIP Number:</b> R-5164A  <b>Length:</b> 9.6 miles      <b>Federal Aid Number:</b> STM-085-4(114)171  <b>Resident Engineer:</b> Cadmus Capehart, PE      <b>RE Phone Number:</b> (919)840-0914  <b>Location Description:</b> 1 SECTION OF I-85, 1 SECTION OF US-15/501, AND 1 SECTION OF NC-147.  <b>Type of Work:</b> MILLING, RESURFACING &amp; MILLED RUMBLE STRIPS.  <b>Contractor Name:</b> REA CONTRACTING A DIVISION OF THE LANE CONSTRUCTION CORPORAT  <b>Contract Amount:</b> \$6,088,736.11      <b>Cost Overrun/Underrun:</b> -8.96%  <b>Availability Date:</b> 3/15/2010      <b>Letting Date:</b> 1/19/2010  <b>Completion Date:</b> 12/16/2010      <b>Work Began:</b> 8/4/2010  <b>Revised Completion Date:</b>      <b>Estimated Completion:</b> 4/30/2011  <b>Last Estimate Thru:</b> 2/7/2011      <b>Scheduled Progress:</b> 100%  <b>Last Estimate Paid:</b> 2/17/2011      <b>Actual Progress:</b> 97.58%</p>	
<p><b>Contract Number:</b> C202538      <b>Route:</b> NC-55, NC-751, SR-1118  SR-1357, SR-1404, SR-1615  SR-1641, SR-1646, SR-1656  SR-1670, SR-1671, SR-1901  SR-1954, SR-1955, SR-1981  US-70  <b>Physical Division:</b> 5      <b>County:</b> Durham  <b>Administrative Division:</b> 5      <b>TIP Number:</b>  <b>Length:</b> 22.96 miles      <b>Federal Aid Number:</b>  <b>Resident Engineer:</b> Cadmus Capehart, PE      <b>RE Phone Number:</b> (919)840-0914  <b>Location Description:</b> 1 SECTION OF US-70, 1 SECTION OF NC-55, 1 SECTION OF NC-751 &amp; 13 SECTIONS  OF SECONDARY ROADS.  <b>Type of Work:</b> MILLING, RESURFACING &amp; SHOULDER RECONSTRUCTION.  <b>Contractor Name:</b> TRIANGLE GRADING &amp; PAVING, INC  <b>Contract Amount:</b> \$4,474,348.51      <b>Cost Overrun/Underrun:</b> 0%  <b>Availability Date:</b> 3/15/2010      <b>Letting Date:</b> 1/19/2010  <b>Completion Date:</b> 12/16/2010      <b>Work Began:</b> 4/5/2010  <b>Revised Completion Date:</b>      <b>Estimated Completion:</b> 4/30/2011  <b>Last Estimate Thru:</b> 2/22/2011      <b>Scheduled Progress:</b> 100%  <b>Last Estimate Paid:</b> 2/28/2011      <b>Actual Progress:</b> 91.88%</p>	
<p><b>Contract Number:</b> C202610      <b>Route:</b> NC-147  <b>Physical Division:</b> 5      <b>County:</b> Durham  <b>Administrative Division:</b> 5      <b>TIP Number:</b> R-5164D  <b>Length:</b> 6.8 miles      <b>Federal Aid Number:</b> STM-0147(3)  <b>Resident Engineer:</b> Cadmus Capehart, PE      <b>RE Phone Number:</b> (919)840-0914  <b>Location Description:</b> NC-147 FROM NORTH OF SR-1322 (BROAD ST) TO NORTH OF SR-2028 (TW  ALEXANDER BLVD).  <b>Type of Work:</b> DIAMOND GRINDING, CONC PVT SLAB REMOVAL &amp; SHOULDER RECONST.  <b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY  <b>Contract Amount:</b> \$4,274,880.20      <b>Cost Overrun/Underrun:</b>  <b>Availability Date:</b> 3/15/2011      <b>Letting Date:</b> 9/21/2010  <b>Completion Date:</b> 11/1/2011      <b>Work Began:</b>  <b>Revised Completion Date:</b>      <b>Estimated Completion:</b>  <b>Last Estimate Thru:</b>      <b>Scheduled Progress:</b>  <b>Last Estimate Paid:</b>      <b>Actual Progress:</b></p>	
<p><b>Contract Number:</b> C202613      <b>Route:</b> -  <b>Physical Division:</b> 5      <b>County:</b> Durham  <b>Administrative Division:</b> 5      <b>TIP Number:</b> R-5164E  <b>Length:</b> 7.59 miles      <b>Federal Aid Number:</b> STM-0070(140)  <b>Resident Engineer:</b> Chad D. Hinnant      <b>RE Phone Number:</b> (919)220-4680  <b>Location Description:</b> 1 SECTION OF US-70 BUS, 13 SECTIONS OF US-15/501 BUS, 1 SECTION OF NC-751  AND 4 SECTIONS OF SECONDARY ROADS.</p>	

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

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

**Contract Number:** DO00070      **Route:** NC-147  
**Physical Division:** 5      **County:** Durham  
**Administrative Division:** 5      **TIP Number:** BK-5102E  
**Length:** 0 miles      **Federal Aid Number:** BRZ-1940(2)  
**Resident Engineer:** Cadmus Capehart, PE      **RE Phone Number:** (919)840-0914  
**Location Description:** BRIDGES #194 ON SR-1940, #202 ON SR-2080, #206 ON SR-1121, AND #212 ON NC-147.  
**Type of Work:** BRIDGE PAINTING.  
**Contractor Name:** ASTRON GENERAL CONTRACTING COMPANY INC  
**Contract Amount:** \$1,079,557.80      **Cost Overrun/Underrun:**  
**Availability Date:**      **Letting Date:** 8/19/2010  
**Completion Date:**      **Work Began:**  
**Revised Completion Date:**      **Estimated Completion:**  
**Last Estimate Thru:**      **Scheduled Progress:**  
**Last Estimate Paid:**      **Actual Progress:**

**Contract Number:** DO00076      **Route:** -  
**Physical Division:** 5      **County:** Durham  
**Administrative Division:** 5      **TIP Number:** BK-5102F  
**Length:** 0 miles      **Federal Aid Number:** BRSTP-1959(5)  
**Resident Engineer:** Jeffrey D. Allen, PE      **RE Phone Number:** (919)733-9499  
**Location Description:** BRIDGES #228 ON SR-1959, #224 ON SR-1999, AND #100 ON SR-2028.  
**Type of Work:** BRIDGE PAINTING.  
**Contractor Name:** SAFFO CONTRACTORS INC  
**Contract Amount:** \$1,138,000.00      **Cost Overrun/Underrun:**  
**Availability Date:**      **Letting Date:** 9/2/2010  
**Completion Date:**      **Work Began:**  
**Revised Completion Date:**      **Estimated Completion:**  
**Last Estimate Thru:**      **Scheduled Progress:**  
**Last Estimate Paid:**      **Actual Progress:**

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO  
ARRA**

County	WBS #	Route	Location Description	Amount	Status
Orange	EL-4601	Morgan Creek Greenway	Construct Greenway	\$940,000	ARRA- Sullivan Eastern = 59.94% compl.; ARRA funds added(\$47,488)-pedestrian bridge design under review
Orange	EL-5103	Carrboro	Construct bus shelters at 4 locations	\$48,296	ARRA- WC Construction =100% compl.; M.A. compl. 7/14/10-revised to 9/14/10; Final 10/27/10; Invoice reimb. pending add'l. documentation
Orange	ER-5100 GE	US 15-501@ SR 1734 (Erwin Rd./Europa Dr.)	Plantings	\$65,000	ARRA -Plymouth Nursery and Landscaping =75% compl.; warranty period underway; final compl. 4/30/12
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.; 100% compl.; final est pending
Orange	R-5178B	NC 86 (S. Columbia St.) from SR 1010 (Franklin St.) to Cameron Ave.	Mill, resurface, and replace curb and gutter	\$200,000.00	ARRA-Eastern Services, LLC dba Raleigh Paving=100% compl.- <b>final est. paid</b>
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= 100% compl. - punchlist pending
Orange	U-3306 34913.3.ST1 STM-1733 (16)	SR 1733 (Weaver Dairy Rd.) from NC 86 to Old Sterling Road	Grading, drainage, paving, signals, curb and gutter, retaining wall	\$13.4 million	Yates Construction Co., Inc. began const. 9/710= <b>9.21% complete</b>
Orange	U-4704	Chapel Hill-Carrboro	Computerized Traffic Signal System	\$5.175 million	ARRA-Brooks Berry Haynie & Assoc., Inc.; Mableton, Ga. = <b>24.06% compl.</b> -conduit installation underway-aerial pending; cabinets to be installed March 2011

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO  
ARRA**

Orange	U-4726 DA	Carrboro	Construct sidewalk on Ashe St. from W. Main St. to Shelton St.	\$284,176.00	ARRA- Centurion Construction Co.=100% compl. ; M.A. compl. rev. to 9/2/10; Final 10/27/10; Final invoice to be revised
Orange	U-4726 DB	Carrboro	Construct sidewalk on Bim St. from SR 1005 (Jones Ferry Rd.) to Fidelity St.	Combined w/ U-4726 DA	ARRA-Centurion Construction Co; =100% compl.; M.A. compl. rev. to 9/2/10; Final 10/27/10; Final invoice to be revised
Orange	U-4726 GA	Twin Creeks Park Greenway	Linear park: 10' multi-use asphalt trail including bridge over Jones Creek	\$429,457.00	ARRA- McQueen Construction =56% compl.-const. of pedestrian bridge & 100' greenway pending; inv. reimbursed; Suppl. Const. Agree. for bridge approved; Suppl. Agreement to extend compl. date to 6/30/11
Orange	U-4726 JA	Hillsborough	Construct sidewalks	\$1,034,110.00	ARRA, STP-DA, & Contingency - S.T. Wooten Corp.= 50 +% compl.; M.A. compl. 7/24/11-rev. to 9/17/11; Const. Suppl. for drainage app. by JMM; <b>Inv. reimb. for pay appl. #3-#7 compl.</b>
<b>NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST</b>					
<b>County</b>	<b>TIP #</b>	<b>Route</b>	<b>Location Description</b>	<b>TIP Est.</b>	<b>Est. Let Date</b>
			NONE		

**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	\$140,000.00	ALS of N.C., Inc. avail. 12/1/10 for compl. 6/1/11; additional funds approved 12/9/10
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)	See U-4726 JA (ARRA)
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. =100% compl. pending final pavement markings
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 sent to Town for execution 3/9/10-resent 9/30/10; Const. FY '10-'11
Orange	43030	SR 1843 (Seawell School Rd.)	Safety improvements near railroad crossing #736157R (signing, tree removal, grading for visibility, paved shoulders, wedging, short overlay & snow-plowable pavement markers)	\$45,000	F.A. construction - est. compl. 5/30/11
Orange	43114	SR 1005 (Jones Ferry Road) at SR 1937 (Old Fayetteville Road)	Install a pedestrian countdown signal and crosswalk	\$20,000	Project to be installed by Traffic Services
Orange	7CR.10681.22 7CR.20681.22 7.106812 7.206812	US 15 from Morgan Creek Rd. to E. Franklin St. and 3 secondary roads	Widening, milling and resurfacing	\$2.258 million \$1.3 million	S.T. Wooten Corp.- Let 11/16/10 Avail. 4/4/11 Int. compl. Maps 1-5 8/12/11 Map 7 8/19/11 Final 9/5/11
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., Napoleon, Ohio - =100% compl.; Final 11/2/10; observation period for markings underway; <b>claim pending</b>

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO**

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	\$8.60 million	FSC II, LLC dba Fred Smith Co.(C.C. Mangum Co., LLC)=15.2% compl.; Work began 8/9/10 on WB; <b>work to resume late March 2011</b> -seasonal limitations in effect
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	Barrett, Irvin & Jordan, Contractors, Inc.(DG00048) Avail. 4/15/11 for compl. by 9/1/11
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	Final plans complete; utility relocation and right of way acquisition pending-staking underway; est. Let date = 6/21/11
Orange	42423.3 42423.1 SS -4907 V	SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	Realign intersection	\$165,000	Survey compl.& Design pending; est. Let =12/20/11; flasher has been installed by separate project
Orange	SR-5000 S 40922.1.18 PE	Carrboro Elementary School	Safe Routes to Schools- Education, encouragement, evaluation, and neighborhood outreach	\$12,865	Municipal Agreement with Town
Orange	SS-4907 AC 43040.1.1 PE 07-10-727	SR 1734 (Erwin Rd.) and SR 1791 (Mt. Moriah Rd.) near Chapel Hill	Installation of a left turn lane on Erwin Rd. and a traffic signal	\$10,000 PE \$1000 R/W \$239,000 C	Roundabout requested by MPO- est. cost = \$426,559
<b>NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST</b>					
<b>County</b>	<b>TIP #</b>	<b>Route</b>	<b>Location Description</b>	<b>TIP Est.</b>	<b>Est. Let Date</b>

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO**

Durham/ Orange	EB-4707	DURHAM/ CHAPEL HILL (SR 1838/SR 2220) FROM SR 1116 (GARRETT ROAD) IN DURHAM COUNTY TO US 15-501 IN ORANGE COUNTY	Bicycle improvements(Bikeway and signals)	\$5.45 million	<b>Delayed</b>
Orange	U-0624	NC 86 (S. Columbia St.)	Corridor upgrade including Bicycle lanes from SR 1906 (Purefoy Rd.) to SR 1902 (Manning Dr.)	\$4.85 million	Nov. 15, 2011



**\*\*MEETING NOTICE\*\***

**Third Round of Workshops on Expanded Bus and Rail Options Begin March 22**  
*Triangle Citizens Invited to Share Feedback Following Evaluation of Transit Corridors*

- WHAT:** The last series of public workshops providing Triangle citizens with an opportunity to share input on the alternative analysis process as part of the Triangle Regional Transit Program (TRTP) will start on March 22. The TRTP includes proposed options for rail and expanded bus service in the region. The series of seven workshops in Wake, Durham and Orange counties will be held from 4 p.m. to 7 p.m. Note time change: The session scheduled for Monday, March 28, in Raleigh will be from 6 p.m.-9 p.m. The workshops are part of a federally prescribed alternatives analysis required by the Federal Transit Administration.
- WHO:** Triangle Transit and the region's two planning organizations and bus service providers are leading the Triangle Regional Transit Program.
- WHEN:**
- Raleigh- Tuesday, March 22  
Triangle Town Center, First Floor (Next to Dillard's)  
4 p.m.-7p.m.
  - Durham- Wednesday, March 23  
Durham Station Transportation Center, 515 W. Pettigrew St.  
4 p.m.-7 p.m.
  - Chapel Hill- Thursday, March 24  
Friday Center, 100 Friday Center Dr. (Redbud Room)  
4 p.m.-7 p.m.
  - Raleigh- Monday, March 28  
Mt. Peace Baptist Church, 1601 MLK Jr. Blvd.  
6 p.m.-9 p.m. (NOTE TIME CHANGE)
  - Cary- Tuesday, March 29  
Bond Park Senior Center, 120 Maury O'Dell Pl. off High House Road  
4 p.m.-7p.m.
  - Raleigh- Thursday, March 30  
McKimmon Conference Center, NC State University, 1101 Gorman St.  
4 p.m.-7 p.m.
  - Research Triangle Park- Wednesday, March 31  
Research Triangle Park Foundation, 6 Davis Dr.  
4 p.m.-7p.m.

-more-



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\*\*For more information, please visit [www.ourtransitfuture.com](http://www.ourtransitfuture.com), and interact with the Triangle Regional Transit Program on Facebook [www.facebook.com/ourtransitfuture](http://www.facebook.com/ourtransitfuture) and Twitter <http://twitter.com/TheTRTP>.\*\*

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