

**Member Governments**

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

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

**September 11, 2013  
9:00 am**

**Committee Room  
2<sup>nd</sup> Floor Durham City Hall**

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- 1. Roll Call**
- 2. Ethics Reminder**  
In accordance with the State Government Ethics Act, it is the duty of every Board member to avoid conflicts of interest. Does any Board member have any known conflict of interest with respect to any matters coming before the Board today? If so, please identify the conflict and refrain from any participation in the particular matter involved.
- 3. Adjustments to the Agenda**
- 4. Public Comments**
- 5. Directives to Staff (Attachment 5)**

**CONSENT AGENDA (9:00-9:05)**

- 6. August 14, 2013 TAC Meeting Minutes  
Attachment 6**

A copy of the August 14, 2013 TAC meeting minutes is enclosed as Attachment 6.

**TAC Action:** Approve minutes of the August 14, 2013 TAC meeting.

- 7. FY 2013-2015 CMAQ Changes  
Attachment 7, 7A  
David Bonk, Town of Chapel Hill**

The Town of Chapel Hill is requesting changes to the FY 2013-2015 Congestion Mitigation Air Quality (CAMQ) funding approved by the TAC on August 11, 2010. The Town is requesting to reallocate \$906,000 in funding from CMAQ project C-5177, Martin Luther King Jr. Boulevard/NC86 (Homestead Road to Piney Mountain Road) shared use paths, to C-5179, North Estes Drive (Martin Luther King Jr. Boulevard/NC86 – Caswell Drive) transit, bicycle, and pedestrian improvements.

Attached is a memo providing additional information and an amended CMAQ application. In order to move forward with this request, the next steps are as follows:

- NCDOT and the interagency review team will need to review and approve the new CMAQ application.

- The DCHC MPO will need to amend the projects in the TIP and the NC Board of Transportation will need to approve a STIP amendment.

Two changes have previously been approved to the FY 2013-2015 CMAQ program. On May 9, 2012, the TAC approved funding changes requested by the Town of Hillsborough and the Durham Area Transit Authority (DATA).

**TCC Recommendation:** Recommend approval of the CMAQ program change.

**TAC Action:** Approve changes to the CMAQ program.

**8. FY 2012-2018 Transportation Improvement Program – Amendment #11  
Attachment 8  
Felix Nwoko, LPA Staff**

Amendment #11 to the FY 2012-2018 Transportation Improvement Program (TIP) is necessary to reflect modifications to DCHC-area projects. Attachment 8 is the resolution with an attached table showing the detailed changes in bold underlined font.

**TCC Recommendation:** Recommend approval of the Resolution to Modify the 2012-2018 Transportation Improvement Program for the Durham-Chapel Hill-Carrboro Urban Area.

**TAC Action:** Approve the FY 2012-2018 Transportation Improvement Program Amendment #11.

**ACTION ITEMS**

**9. TIP Update/Spot 3.0 Prioritization (9:05 – 9:30 )  
Attachment 9, 9A, 9B, 9C, 9D, 9E and 9F  
Andy Henry, LPA Staff**

In 2011 and 2012, the MPO completed the prioritization process for the FY 2014-2020 Transportation Improvement Plan (TIP) by soliciting local priorities, completing the MPO prioritization, receiving scores from the NCDOT prioritization (called SPOT 2.0), and awarding points to selected projects. New federal and pending state transportation legislation forced the cancellation of the FY14-20 TIP process.

The new TIP planning and approval process, which is based on the new Strategic Transportation Investments (STI), is shown in Attachment 9. The next major step for the MPO is to submit projects for the SPOT 3.0 prioritization process by the end of January 2014. The MPO can submit up to 14 new highway and 20 new bicycle or pedestrian projects, and an unlimited number of transit projects to NCDOT for prioritization. Bicycle, pedestrian and transit projects that were previously submitted to SPOT will be removed from the prioritization system and therefore any desired projects will need to be resubmitted. The previously submitted highway

projects will remain in the system for prioritization in SPOT 3.0 (i.e., the new prioritization process).

Staff will provide an overview on the upcoming process and schedule for the next SPOT prioritization and TIP.

Detailed information on the new SPOT 3.0 and DCHC MPO prioritization methods, as well as a comparison, are in the following attachments:

- Attachment 9A – SPOT: New SPOT Scoring Criteria (draft);
- Attachment 9B – MPO: MPO Prioritization Methodology (used for FY14-20 TIP)
- Attachment 9C – SPOT v. MPO: Comparison of draft SPOT and current MPO prioritization methods.
- Attachment 9D – MPO: MPO's Priority List for FY 14-20 TIP, but highway and transit lists has been sorted by the new STI funding categories. This list includes the MPO and SPOT priority points from the FY 14-20 TIP process (October 2012).

**TCC Action:** Received report and directed the TCC's TIP subcommittee to recommend a process and schedule for the SPOT prioritization and TIP.

**TAC Action:** Receive brief update.

## **REPORTS:**

### **10. Report from the TAC Chair** Ellen Reckhow, TAC Chair

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

### **11. Report from the TCC Chair** Mark Ahrendsen, TCC Chair

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

### **12. Report from Staff** Attachment [12](#) Felix Nwoko, LPA Staff

**TAC Action:** Receive report from staff.

### **13. NCDOT Report** Attachment [13](#) Wally Bowman, Division 5 – NCDOT Mike Mills, Division 7 – NCDOT Richard Hancock, Division 8 - NCDOT Julie Bollinger, Transportation Planning Branch – NCDOT

**Kelly Becker, Traffic Operations – NCDOT**

**TAC Action:** Receive report of NCDOT

**INFORMATIONAL ITEMS**

**14. Recent News Articles and Updates**

**Attachment 14**

**15. Letter to NCDOT regarding U-5516 (US 501/Infinity Road/Latta Road Intersection Improvement)**

**Attachment 15**

**16. New Smartphone App for Traffic-Choked Commuters**

**Attachment 16**

**17. RTA Endorses Bus Rapid Transit Approach for Wake County**

**Attachment 17**

**Adjourn**

**Next meeting: October 9, 2013**

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

**[www.dhcmpo.org](http://www.dhcmpo.org)**  
**[www.twitter.com/dhcmpo](http://www.twitter.com/dhcmpo)**

**TAC Directives to Staff**  
 Pre-12/31/11 (Pending/In Progress/On Going)  
 01/01/12 – Present (Completed/Pending/In Progress)

<b>Meeting Date</b>	<b>Directive</b>	<b>Status</b>
3/9/11	Improve public outreach and add links to other transportation organizations to the MPO website	<u>In Progress:</u> DCHC MPO is now on Twitter. RFQ for website enhancements has been issued.
11/14/2012	Provide recommendation for remaining FY 2012 STPDA projects	<u>In Progress:</u> See 12/12/2012 TAC and 3/13/2013 TAC Agenda.
12/12/2012	Investigate ways to improve the development of socio-economic data for the 2045 MTP	<u>In Progress:</u> Staff is creating updated Community Viz model.
12/12/2012	Provide a report on how the Bennett Road and Mount Carmel Church Road intersection can be improved and funded	<u>In Progress:</u> Pending NCDOT cost estimate of preferred option.
2/13/2013	Provide a presentation on the Statewide Bicycle and Pedestrian Plan	<u>Completed:</u> Draft plan released. See 4/10/2013 TAC Agenda
2/13/2013	Provide a recommendation on how to add transit operators as voting members of the TAC	<u>In Progress:</u> This issue is included in the MPO MOU update.
2/13/2013	Send letter to incoming Board of Transportation members	<u>Completed:</u> New members sworn-in April 4. LPA staff has been in contact with new members. Assignment to DCHC MPO TAC has been made.
3/13/2013	Send a letter to Governor McCrory, Speaker Tillis, and Pro Tem Berger regarding state rail funding	<u>Completed:</u> See 4/10/2013 TAC Agenda
3/13/2013 and 4/10/2013	Send a letter to the Chatham TAC representative when Chatham County issues are on the agenda	<u>On-going:</u> LPA staff will continue to reach out to Chatham County's staff and TAC member as issues arise. LPA staff presented at Chatham BOCC on 4/15/2013.
5/8/2013	Send a letter to the legislative delegation regarding the Strategic Mobility Formula	<u>Completed:</u> See 6/12/2013 TAC Agenda.
5/8/2013	Send the draft MPO Memorandum of Understanding to the member governments for review	<u>In Progress:</u> Draft MOU has been sent to member governments.

All Completed Directives since 1/1/2013 are shown.



41 **Ethics Reminder**

42

43 Mark Kleinschmidt read the Ethics Reminder for TAC members and asked board members if  
44 there are any know conflicts of interest with respect of matters coming before the board and requested  
45 that if there were any identified during the meeting for them to be announced.

46 **Adjustments to the Agenda**

47 Mark Ahrendsen recommends pulling project U-5516 from the amendment because there are  
48 issues and questions that we need to discuss further with NCDOT. Diane Catotti wants more  
49 explanation on U-5517 Farrington Road. On agenda item #9, a replacement resolution was distributed  
50 at the beginning of the meeting. It has a slight change. On agenda item #10, Dale McKeel will be  
51 providing an update on Old Durham-Chapel Hill Road project.

52 **Public Comment**

53 Terry Rekeweg, a citizen spoke regarding the Durham-Orange Light Rail Project. Mr. Rekeweg  
54 provided a handout which is attached. Mr. Kleinschmidt recommended providing a copy of his  
55 recommendations to Triangle Transit and said that a member of the MPO would contact Mr. Rekeweg.

56 **Directives to Staff (Attachment 5)**

57 The Directives to Staff are attached for review.

58 **CONSENT AGENDA:**

59 **June 12, 2013 TAC Meeting Minutes (Attachment 6)**

60 A motion was made by Damon Seils and seconded by Alice Gordon to approve the June 12, 2013  
61 TAC Meeting Minutes. The motion carried unanimously.

62 **FY 2012-2018 Transportation Improvement Program – Amendment #10 (Attachment 7)**

63 Diane Catotti asked a question about the STIP modifications. Ms. Catotti stated that both of  
64 those intersections are highly traveled. Ms. Catotti asked if the Farrington Road intersection delays are  
65 avoidable and/or what is the expected impact of waiting a year. Mark Ahrendsen stated that both of

66 these projects were programmed based upon availability of funding at the time, not on the ability to  
67 actually deliver the project on those schedules and subsequent to the initial programming, NCDOT staff  
68 has looked at both the schedules and feels that what is being recommended is a more realistic  
69 deliverable schedule; but there are still concerns with U-5516 and we want to pull it from the  
70 amendment to discuss it further with NCDOT because it has implications with the new legislation and  
71 the construction timing makes a difference.

72 A motion was made by Diane Catotti and seconded by Damon Seils to approve Amendment #10  
73 to the FY 2012-18 Transportation Improvement Plan as amended. The motion carried unanimously.

74 **TIP Administrative Amendment – Fiscally Constrained Financial Report for the 2012-18 TIP**  
75 **(Attachment 8)**

76  
77 Alice Gordon asked a question about the Summary of FY 2012-2015 TIP Operations &  
78 Maintenance Costs on page 15 and 16 of Attachment 6. Ms. Gordon stated Chatham County seems  
79 high. Andy Henry stated if you look at the size of the county, Chatham County has a lot of roads even  
80 though it doesn't have high population. It is the length of the roadways that have to be maintained by  
81 NCDOT that most notably affects costs. Ms. Gordon asked who pays for maintaining the roads and Mr.  
82 Henry stated they are State maintained roads. Mr. Henry stated when we adopted the FY 2012-18 TIP in  
83 June 2011, we did not have a report to determine fiscal constraint. The MPO always relied on the fact  
84 that NCDOT had a State TIP which was fiscally constrained. Now FHWA is saying the MPO has to have a  
85 fiscally constrained document. This document goes back to the date when we adopted it in June 2011  
86 and looks at the fiscal picture at that time to show we have the revenues to cover the cost. This does  
87 not propose to change anything in the TIP, it is a different view.

88 A motion was made by Diane Catotti and seconded by Damon Seils to approve the TIP  
89 Administrative Amendment – Fiscally Constrained Financial Report for the 2012-18 TIP. The motion  
90 carried unanimously.

91 **Section 5310 Designation Status (Attachments 9 and 9A)**

92 A motion was made by Diane Catotti and seconded by Damon Seils to approve the Resolution  
93 and the Letter of the Durham UZA Designation status. The motion carried unanimously.

94 **Update on Old Durham-Chapel Hill Road Project (TIP Project EB-4707) (Attachments 10 and 10A)**

95 Dale McKeel provided a Power Point presentation update on the Old Durham-Chapel Hill Road  
96 Project (TIP Project EB-4707), along with the attachments.

97 The project starts in Durham at Garrett Road and continues to Chapel Hill and terminates at US  
98 15-501. The project dates back to at least 1993 when it was identified in the regional bike plan and got  
99 underway about nine years ago when there was a feasibility study and the MPO adopted it. It  
100 recommended bike lanes and sidewalks on both side of the corridor. In February 2008, the City of  
101 Durham, Town of Chapel Hill and NCDOT entered into an agreement to move forward with design and  
102 construction of the project. Because the project spanned two counties, there are two NCDOT divisions  
103 involved. The NCDOT agreed to manage the project and Kimley-Horn was hired as a consultant to work  
104 on the design. There was an open house held for the preliminary design and there were meetings with a  
105 lot of individual property owners to work out issues. The cost of the project has increased quite a bit.  
106 The feasibility study estimated the cost at around \$4 million but didn't include the roundabout. The  
107 estimated cost today is around \$13M which includes about \$500,000 for the roundabout. The feasibility  
108 study underestimated the cost of right-of-way and utility relocation. There are also some changes to the  
109 project scope that had an effect on the cost.

110 Diane Catotti asked what was the proportion of the cost for right-of-way and utilities. Dale  
111 McKeel stated overall probably \$4-5 million. The cost was equally split between right-of-way and  
112 utilities. Ms. Catotti stated the cost seems high and Mark Kleinschmidt agreed.

113 Brenda Howerton stated that the Town of Chapel Hill currently doesn't have the local match and  
114 Ms. Howerton asked how that works. Mr. McKeel stated he will answer that in a minute.

115 Dale McKeel stated the funding sources we received for the project are: NCDOT Bike/Ped  
116 Division primarily for design work, the BOT approved \$250,000 of Small Construction funds for the  
117 roundabout at Pope Road, and bulk of the funding; approximately 80% will come from the MPO with a  
118 match from the local governments. The Town of Chapel Hill is currently having difficulty identifying  
119 sources for the local match. In response to the cost increase, we have tried to find other sources. At  
120 this time, the Town of Chapel Hill is exploring different designs or phasing the project. There will be  
121 public meetings and advisory meetings this fall in Chapel Hill to discuss the project. Mark Kleinschmidt  
122 stated the Town of Chapel Hill will look at their fiscal constraints and see what can be paid for and also  
123 look at a different design to lower the cost. Hopefully we will have the feedback in September. Dale  
124 McKeel stated the Town of Chapel Hill contribution changed from \$250,000 to \$844,000.

125 Mark Ahrendsen stated because of the regional nature of this item, we wanted to update  
126 everyone and let you know there is a process underway in Chapel Hill to deal with the fiscal issues; but  
127 because it is a regional project, we want to make sure the regional aspects of the project are considered.

128 Mark Kleinschmidt stated the purpose of the update today is to receive information, learn that  
129 there is a process and provide some comments.

130 Diane Catotti asked if the project has to be let as a whole or can Durham move forward with  
131 right-of-way acquisition.

132 David Bonk stated there is one other complicated factor to which we don't have an answer. In  
133 the original design, in order to preserve some of the trees along the Blue Cross/Blue Shield frontage the  
134 design was to take advantage of the path that currently exists that goes away from the road and up on  
135 the Blue Cross property that was part of a previous requirement for them. The alternative of the off  
136 road path would take advantage of that corridor. The original plan did require them to provide us with  
137 both temporary and permanent easements and right-of-way. In the interim, they have advised us they

138 want to divest themselves of that property and we are unsure what Blue Cross will be willing to allow  
139 any easements.

140 Dale McKeel stated the local match for the Durham side has been identified and the right-of-  
141 way acquisition and utility relocation are underway. Construction can begin in about 12-14 months.  
142 The project has been divided into two pieces.

143 **Update on the Watch for Me NC Bicycle and Pedestrian Safety Campaign**

144 Dale McKeel stated this presentation is in two different parts. The Watch for Me campaign that  
145 kicked off last year was primarily focused on pedestrian safety.

146 David Kub with the Durham Police Department provided a PowerPoint presentation on the  
147 campaign.

148 Alice Gordon stated the presentation needs to be made to the public schools. Officer Kub stated  
149 one of the goals was to reach out to driver's education at the schools. Ms. Gordon suggested  
150 distributing flyers at the schools. Repetition, education and awareness are key factors in making this  
151 campaign successful.

152 **REPORTS:**

153 **Report from the TAC Chair**

154 There was not a report from the Chair.

155 **Report from the TCC Chair**

156 Mark Ahrendsen stated we have done a good job focusing on impaired drivers; now we need to  
157 focus on impaired pedestrian education. The Strategic Transportation Investment law that was signed  
158 into law by the Governor in June will change project prioritization and we aren't sure how it will work  
159 yet. The prioritization 3.0 scoring criteria was approved by the board last week and will be going to the  
160 Transportation Legislation Oversight Committee tomorrow for review and a comment period. This will  
161 be the method used for scoring and prioritizing projects for funding.

162 **Report from Staff (Attachment 14)**

163 The Report from Staff is attached for review.

164 **NCDOT Report (Attachment 15)**

165 Joey Hopkins, Division 5 provided an update on projects. The Campus Drive bridge project is on  
166 schedule to be opened for the Duke University move-in date. They haven't poured the deck on the new  
167 bridge yet, but it is imminent. Part of the concern with having Campus Drive open is when the concrete  
168 is being poured on the bridge deck that it can drop through onto vehicle. They are working on a canopy  
169 system to protect it from happening. The goal is to keep it open during the day, but there will be times  
170 are night after 8:00 p.m. to finish the project.

171 Patrick Wilson, Division 7 provided an update on projects. Both lanes opened on Saturday at  
172 Columbia Street ahead of schedule. There may be intermediate lane closures through the project. The  
173 completion date is December 2014. On Weaver Dairy Road, they are putting the final layer of asphalt  
174 down. However, there are concerns regarding a retaining wall that needs to be built. The Smith Level  
175 Road project is on schedule and scheduled to be complete May 2015; but there may be some  
176 intermediate lane closures throughout the project. In Carrboro, the Main Street repaving is complete.

177 Alice Gordon asked why one lane was blocked on NC-54 going west from Chapel Hill to Carrboro  
178 yesterday. Patrick Wilson will check and get back to Ms. Gordon.

179 Darius Sturdivant, Division 8 provided an update on projects. Mr. Sturdivant also provided an  
180 update on the US 15-501 corridor study.

181 Julie Bollinger provided an update on the CTP. Orange County approved the CTP in March 2013  
182 and is scheduled to go to the RPO tomorrow for their endorsement and the Board of Transportation in  
183 September. Chatham County is showing their CTP to the locals and after that they will go through the  
184 public involvement process.

185

186 **INFORMATIONAL ITEMS:**

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

188 The recent news articles and updates are attached for review. Alice Gordon asked if some of  
189 the new ½ cent sales tax revenue will be used for planning items. Brenda Howerton stated it was a  
190 thought that was raised but it is not in discussion.

191 **2013 NC American Planning Association Planning Award Nomination (Attachment 17)**

192 The 2013 NC American Planning Association Planning Award Nomination is attached for review.

193 **Board of Transportation Recommendations – Prioritization 3.0 Scoring Criteria, Weights, and**  
194 **Normalization for All Modes (Attachment 18)**

195  
196 The Board of Transportation Recommendations – Prioritization 3.0 Scoring Criteria, Weights,  
197 and Normalization for All Modes is attached for review.

198 **Adjournment**

199 There being no further business before the Transportation Advisory Committee, the meeting  
200 was adjourned at 10:39 a.m.

## MEMORANDUM

TO: Durham Chapel Hill Carrboro Metropolitan Planning Organization, Technical Coordinating Committee

FROM: David C. Bonk, Long Range and Transportation Planning Manager

SUBJECT: Request Changes to C-5117 and C-5179, Town of Chapel Hill Congestion Mitigation and Air Quality Projects

DATE: August 28, 2013

The Town of Chapel Hill is requesting to reallocate \$906,000 in funding from Congestion Mitigation and Air Quality (CMAQ) project C-5177, Martin Luther King Jr. Boulevard/NC86 (Homestead Road to Piney Mountain Road) shared use paths to C-5179, North Estes Drive (Martin Luther King Jr. Boulevard/NC86 – Caswell Drive) transit, bicycle and pedestrian improvements. Enclosed is the amended CMAQ project proposal for North Estes Drive.

The proposed amendment being sought at this time is related to the Central West subarea planning study resulting from the Town's recent adoption of the 2020 Comprehensive Plan.. The Central West citizen's advisory group developing the small area plan for the area that includes Estes Drive has identified bicycle and pedestrian improvements on North Estes Drive as a critical priority. At the same time the Town is about to begin a transit alternatives analysis along Martin Luther King Jr. Blvd. which is expected to require 18 months to complete. The recommendations of the alternatives analysis will determine the scope of future bicycle and pedestrian improvements along this corridor.

The revised total budget for the Estes Drive project is proposed to be \$2,338,000, which includes a \$467,600 in local match. As noted in the table below, changes to the project include funding for preliminary engineering and design, where previously no funds were allocated, and an increase in construction funds for street improvements. We have made no funding changes at this time to the previous right-of-way allocation.

<b>C-5179: Estes Drive</b>	2009 CMAQ application	2013 CMAQ amendment
Planning, Engineering & Design	\$0	\$233,800
Right-of-Way (no change)	\$207,000	\$207,000
Construction	\$1,225,000	\$1,897,200
<i>Total</i>	\$1,432,000	<b>\$2,338,000</b>



# CMAQ PROJECT APPLICATION

FOR NCDOT USE ONLY	
APP ID	STIP ID

IN ORDER TO BE CONSIDERED A COMPLETE APPLICATION PACKAGE, ALL FIELDS MUST BE APPROPRIATELY COMPLETED & REQUIRED ADDITIONAL INFORMATION AS NOTED MUST BE ATTACHED. INCOMPLETE APPLICATIONS WILL BE RETURNED.

## GENERAL PROJECT INFORMATION

### 1 SELECT CMAQ PROJECT TYPE

STATEWIDE
  REGIONAL
  SUBREGIONAL

### 2 SELECT MPO/RPO(S)

<input type="checkbox"/> Burlington-Graham MPO	<input type="checkbox"/> Hickory MPO	<input type="checkbox"/> NW Piedmont RPO	<input type="checkbox"/> Unifour RPO
<input type="checkbox"/> Cabbarus-Rowan MPO	<input type="checkbox"/> High Point MPO	<input type="checkbox"/> Piedmont Triad RPO	<input type="checkbox"/> Upper Coastal Plain RPO
<input type="checkbox"/> Capital Area MPO	<input type="checkbox"/> Kerr-Tar RPO	<input type="checkbox"/> Rocky Mount MPO	<input type="checkbox"/> Winston-Salem MPO
<input checked="" type="checkbox"/> Durham-Chappel Hill-Carrboro MPO	<input type="checkbox"/> Lake Norman RPO	<input type="checkbox"/> Rocky River RPO	
<input type="checkbox"/> Gaston MPO	<input type="checkbox"/> Land of Sky RPO	<input type="checkbox"/> Southwestern RPO	
<input type="checkbox"/> Greensboro MPO	<input type="checkbox"/> Mecklenburg Union MPO	<input type="checkbox"/> Triangle RPO	

### 3 PROJECT SPONSOR INFORMATION

Agency : Town of Chapel Hill  
 Contact Name : David Bonk  
 Address : 405 Martin Luther King Jr. Blvd. Chapel Hill, NC 27514  
 Telephone : 919-968-2728  
 Email Address : dbonk@townofchapelhill.org

### 4 PROJECT INFORMATION

Title : N. Estes Dr. Bicycle and Pedestrian Improvements  
 Description : The project will provide needed bicycle and pedestrian facilities along 0.65 miles of the N. Estes Dr. corridor. Improvements include acquiring needed right of way, adding new sidewalks and bicycle lanes, and building street curbs. Please see attached form for more information.

Include project details, proposed improvements, purpose, need, how it will provide service, who are the primary stake holders & where it will operate & serve. Attach a sketch design plan of the proposed project which shows the general location.

## PROJECT COSTS & DELIVERY SCHEDULE

### 5 APPLICABLE PROJECT PHASES, FUNDING & YEARS

- CMAQ projects are awarded by Federal Fiscal Years (FFY). FFY run from October 1st of the prior year through September 30th of the next year. For example, FFY 2016 runs from October 1, 2015 through September 30, 2016.
- Cost estimates should reflect anticipated inflation compounded annually at 5% from the current calendar year.
- Minimum 20% match is required for most projects. See 23 U.S.C. §120 paragraph (c) for listing of safety projects that may be funded at up to 100% Federal share.
- In the case of purchasing alternative fueled vehicles (AFV) for general governmental use, CMAQ funding is limited to the cost difference between standard and AFV vehicles. For example, a 2011 Ford Escape lists for \$27,000 and a 2011 Ford Escape Hybrid lists for \$33,000. The total CMAQ-eligible funding for purchase of this AFV would be: \$33,000 - \$27,000 = \$6,000 (subject to local match).

<input type="checkbox"/> Check box if this project is not typical 80/20 split					
Phases(s)	CMAQ \$	Matching \$	Total \$	FFY 2016	FFY 2017
<input checked="" type="checkbox"/> Planning, Engineering & Design	\$187,040.00	\$46,760.00	\$233,800.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Right-of-Way	\$166,000.00	\$41,000.00	\$207,000.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Construction	\$1,517,760.00	\$379,440.00	\$1,897,200.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Transit Operation				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Transit Implementation				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Non-transit Implementation				<input type="checkbox"/>	<input type="checkbox"/>
<b>Project Total</b>	<b>\$1,870,800.00</b>	<b>\$467,200.00</b>	<b>\$2,338,000.00</b>		

**6 ANTICIPATED PROJECT MILESTONE DATES**

- Milestone dates must coordinate with funding schedule in Section 5.
  - Planning & environmental document; plans, specifications & estimate package; and right of way certification must be complete prior to let date.
- |  |                   |
|--|-------------------|
|  | <b>Month/Year</b> |
| • Planning & Environmental document to be complete:  | Oct 1, 2013       |
| • Plans, Specifications & Estimate package to be complete:   | Oct 1, 2014       |
| • Right-of-Way acquisition to begin:   | Oct 1, 2014       |
| • Anticipated let date (opening of bids):  | Oct 1, 2015       |
| • Anticipated completion date of project (including project close-out & reimbursement of all eligible expenses): | Oct 1, 2016       |

**7 LIST THE SOURCE(S) OF MATCHING FUNDS:**

Town of Chapel Hill

**8 TRANSIT START-UP INFORMATION**

Operation assistance under CMAQ is intended to help start up viable new transportation services that will benefit air quality and eventually cover their own costs. This funding is limited to three years. Other funding sources should supplement & ultimately replace CMAQ funds for operation assistance. Briefly describe how funding will be secured to continue the program after year three. (ATTACH ADDITIONAL SHEET(S) IF NEEDED)

**GENERAL PROJECT INFORMATION**

**9 SELECT NC NONATTAINMENT/MAINTENANCE COUNTY(IES):**

- |                                   |                                   |                                    |                                    |                                   |                                      |  |                                 |
|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|-----------------------------------|--------------------------------------|--|---------------------------------|
| <input type="checkbox"/> Cabarrus | <input type="checkbox"/> Davidson | <input type="checkbox"/> Edgecombe | <input type="checkbox"/> Gaston    | <input type="checkbox"/> Haywood* | <input type="checkbox"/> Lincoln     | <input checked="" type="checkbox"/> orange | <input type="checkbox"/> Swain* |
| <input type="checkbox"/> Catawba  | <input type="checkbox"/> Davie    | <input type="checkbox"/> Forsyth   | <input type="checkbox"/> Granville | <input type="checkbox"/> Iredell* | <input type="checkbox"/> Mecklenburg | <input type="checkbox"/> Person            | <input type="checkbox"/> Union  |
| <input type="checkbox"/> Chatham* | <input type="checkbox"/> Durham   | <input type="checkbox"/> Franklin  | <input type="checkbox"/> Guilford  | <input type="checkbox"/> Johnston | <input type="checkbox"/> Nash        | <input type="checkbox"/> Rowan             | <input type="checkbox"/> Wake   |

\*Indicates partial county AQ designation

**10 SELECT CMAQ-ELIGIBLE IMPROVEMENT TYPE (check all that apply):**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Transportation Control Measures | <input type="checkbox"/> Extreme Low-Temperature Cold Start Programs         |
| <input type="checkbox"/> Alternative Fuels                          | <input type="checkbox"/> Congestion Relief & Traffic Flow Improvements       |
| <input type="checkbox"/> Transit Improvements                       | <input checked="" type="checkbox"/> Bicycle/Pedestrian Facilities & Programs |
| <input type="checkbox"/> Transportation Management Associations     | <input type="checkbox"/> Carpooling & Vanpooling                             |
| <input type="checkbox"/> Freight/Intermodal                         | <input type="checkbox"/> Diesel Engine Retrofits                             |
| <input type="checkbox"/> Idle Reduction                             | <input type="checkbox"/> Training  |
| <input type="checkbox"/> Travel Demand Management                   | <input type="checkbox"/> Public Education & Outreach Activities              |
| <input type="checkbox"/> I/M Programs                               | <input type="checkbox"/> Experimental Pilot Projects                         |

**11 IF TRANSPORTATION CONTROL METHOD, CHECK THE ALLOWABLE TYPE(S):**

- Programs/ordinances to facilitate non-automobile travel, provision/utilization of mass transit & general reduction of the need for
- SOV travel, as part of transportation planning & development efforts of a locality, including programs & ordinances applicable to new shopping centers, special events & other centers of vehicle activity
  - Programs for improved public transit
  - Restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or HOV

- Employer-based transportation management plans, including incentives
- Trip-reduction ordinances
- Traffic flow improvement programs that reduce emissions
- Fringe & transportation corridor parking facilities serving multiple-occupancy vehicle programs or transit services
- Multiple-occupancy vehicle programs or transit service
- Programs to limit/restrict vehicle use in downtown areas/other areas of emission concentration during peak periods
- Programs for the provision of all forms of high-occupancy, shared-ride services
- Programs to limit portions of road surfaces/certain sections of metro area to the use of non-motorized vehicles or pedestrian
- Programs for secure bicycle storage facilities & other facilities, including bicycle lanes in both public & private areas
- Programs to control extended idling of vehicles
- Reducing emissions from extreme cold-start conditions
- Employer-sponsored programs to permit flexible work schedules
- Public Education & Outreach Activities

**12 IF TRANSIT IMPROVEMENT, SPECIFY HOW SERVICE WILL BE IMPROVED:**

- New facilities associated with a service increase
- New vehicles used to expand the transit fleet
- Operating assistance for new service (limit three years)
- Fare subsidies as part of program to limit exceedances of NAAQS

**13 EMISSIONS REDUCTION CRITERIA**

**QUANTATIVE** analysis of air quality impacts is required for most project types. **QUALITATIVE** analysis is only allowable when it is not possible to accurately quantify emissions benefits, such as public education, marketing & other outreach efforts, which can include advertising alternatives to SOV travel, employer outreach & public education campaigns. The qualitative analysis should be based on a reasoned & logical determination that the project/program will decrease emissions & contribute to attainment or maintenance of NAAQS. The primary benefit of these activities enhanced communication & outreach that is expected to influence travel behavior & air quality.

• Indicate the type of analysis completed:  **QUANTITATIVE**  **QUALITATIVE**

• Describe the method used to estimate the emissions reduction and show calculations:  
(ATTACH ADDITIONAL SHEET(S) IF NEEDED)

Bicycle and pedestrian improvements along N. Estes Dr. will result in a 5% increase in ridership for Chapel Hill Transit's G bus route. These ridership increases are to be expected based on improvements made to transit accessibility in the immediate vicinity of the bicycle and pedestrian infrastructure upgrades. With N. Estes Dr. serving as a major east-west corridor for the Town, the bike lanes and sidewalks will improve transit ridership by providing better accessibility to major activity centers including Carolina North, Downtown Chapel Hill, and the University Mall. An assumption is made of an average trip length of 4.55 miles based on 2008 annual figures provided by Chapel Hill Transit. With the assumption that 90% of new transit trips will replace single occupancy vehicle trips along N. Estes Dr, we expect an average weekday decrease of 212 vehicle miles traveled.

The location of the bicycle and pedestrian infrastructure upgrades along N. Estes Dr. will serve to provide necessary access to the Carolina North development. As outlined in the 2009 draft of the Transportation Impact Analysis (TIA), an expected 1,613 walking and biking trips will be generated in the surrounding area. These trip generation rates derive from the 2015 constrained parking scenario and assume a complete sidewalk and bicycle lane network, thus making the completion of the proposed bicycle and pedestrian facilities along N. Estes Dr. a priority to accommodate these individuals. Utilizing trip distributions from the TIA report, approximately 34% of incoming bicycle and pedestrian trips will access the development along N. Estes Dr, which accounts solely for those trips entering and exiting the site. An average bicycle and pedestrian trip length of 1.5 miles is assumed based on the distance from Carolina North to major activity centers to the west (the Franklin St. corridor) along N. Estes Dr. With an estimated 548 bicycle and pedestrian trips traveling to Carolina North along N. Estes Dr., an assumption of 1.1 occupants per car, and an average trip length of 1.5 miles, it is expected that the bicycle and pedestrian infrastructure improvements will result in an average weekday decrease of 747 vehicle miles traveled.

Estes Hills Elementary School and Guy Phillips Middle School are both located along N. Estes Dr. in the immediate area of the proposed bicycle and pedestrian infrastructure improvements. With 1,250 students, teachers, and staff at the school sites, bicycle and pedestrian trips accounted for 2.5% of the total trips (ITE standard). This would account for 63 one-way trips, with an assumption of an additional 38 one-way "other" trips generated due to residential, recreational, and church trips made in the surrounding area. With 101 total trips, an assumption of 1.1 occupants per car, and an average trip length of 1.5 miles, an average weekday decrease of 138 vehicle miles traveled will occur. In addition, the promotion of biking and walking trips to both schools will decrease SOV trips, which will help alleviate congestion along N. Estes Dr. and facilitate traffic flow movement between Franklin St. and MLK Jr. Blvd. Based on annual

figures with 251 service days assumed, the N. Estes Dr. bicycle and pedestrian infrastructure improvements decrease a cumulative 2,854 kg of NOX, VOC, and CO annually.

**For QUANTATIVE analyses, list the expected daily emissions BEFORE and AFTER project implementation:**

<b>Pollutant</b>	<b>Daily Emissions Before (kg)</b>	<b>Daily Emission After (kg)</b>	<b>Daily Emissions Reduction (kg)</b>
Carbon Monoxide (CO)			7.23
Volatile Organic Compounds (VOC)			0.34
Oxides of Nitrogen (NOx)			0.25
<b>Total</b>	<input type="text"/>	<input type="text"/>	<input type="text" value="7.82"/>

#### 14 MISCELLANEOUS

- For construction of trails, has the Department of Interior been contacted?  Yes  No  N/A
- Is the fare/fee subsidy program part of a broad program to reduce emissions?  Yes  No  N/A
- Will the ITS project conform to the National ITS architecture?  Yes  No  N/A

#### 15 SUPPORTING INFORMATION CHECK LIST

**Check supporting information included as attachment(s) to this application:**

- MPO/RPO Support Resolution (Required for SUBREGIONAL proposals)
- Additional project description and/or details
- Map of general project location
- Complete emissions calculations
- Any assumptions used
- Other, please specify:

#### 16 MPO/RPO PRIORITY INFORMATION

**This project has been prioritized by the MPO/RPO and received the following ranking among all CMAQ requests (UNRANKED APPLICATIONS WILL NOT BE PROCESSED):** 6 out of 14

#### 17 SUBMIT APPLICATION

- **SAVE APPLICATION AND ALL ATTACHMENTS IN A SINGLE PDF DOCUMENT**
- **ENTER APPROPRIATE PROPOSAL DETAILS AND UPLOAD PDF APPLICATION IN PARTNER CONNECT BY OCTOBER 31, 2011**

## **Project Description**

The project will provide needed bicycle and pedestrian facilities along N. Estes Dr. The proposed improvements are located between MLK Jr. Blvd. to the west and Guy Phillips Middle School (starting at the school's bus driveway, at approximately 544 N. Estes Dr.) to the east. Presently, there is a lack of adequate bicycle and pedestrian facilities along this route. The absence of sidewalks hinders pedestrian and transit use at specific locations, causing concerns for proper access and safety. An informal walkway exists along the south side of the corridor, from MLK Jr. Blvd. to Caswell Rd., however it is not properly maintained nor ADA compliant. The corridor is also absent a dedicated bicycle lane or wide shoulders for bicycles, which forces bicyclists to share the two lane road with automobiles.

The project is proposing 5 ft. wide sidewalks, 4 ft. wide bicycle lanes, and proper curbing on both sides of the corridor between MLK Jr. Blvd. and Guy Phillips Middle School. The bicycle lanes, sidewalks, and curbing will extend along the 0.65 mile corridor and will add 1.3 miles of bicycle lanes, sidewalks, and curbing (please see attached map). The project will also replace some existing sidewalk on the south side of the street from Caswell Rd. to Guy Phillips Middle School to accommodate the needed right of way for bike lanes.



The proposed project sits adjacent to the new Carolina North development, at the corner of MLK Jr. Blvd. and N. Estes Dr. As a result, the building of these paths will better serve Carolina North, which will generate additional bicycle and pedestrian trips. Therefore, it is essential that both user groups gain the necessary access improvements in the vicinity surrounding the Carolina North site.

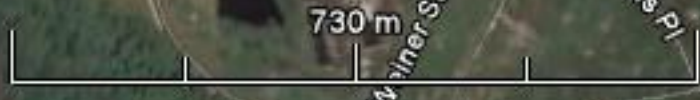
By completing the proper pedestrian and bicycling facilities, people will shift modes and use alternative transportation instead of single occupancy vehicles. With the improvements made along the corridor, there will be an expected increase in transit, bicycle, and pedestrian use. People are more willing to use alternative transportation if the options are attractive, easily accessible, and contiguous with surrounding sidewalks and pathways. The building of these facilities will help promote overall pedestrian and bicyclist connectivity. The proposed improvements made along N. Estes Dr. will decrease vehicle emissions, improve transit accessibility, and result in an increase in transit ridership. In addition, since this project is adjacent to an elementary and middle school, biking and walking to school will be encouraged rather than driving.

**Project Costs**

N. Estes Dr. Sidewalk and Bike Lane			
	Cost per mile	Quantity/Length	Price
5' Sidewalk	265,000	1.3	344,500
4' Bike Lanes	220,000	1.3	286,000
Curbing	132,000	1.3	171,600
Residential Right of Way Acres	155,000	1.1	170,500
Pathway Demolition Costs/Soil Grading	316,800*	0.65	205,920
		Project Cost	1,178,520
		Project Cost + Inflation	1,432,498
		20% Local Match	286,500
		CMAQ Funding	1,145,998
		Net Emission Reduction	2,854
		Benefit/Cost Ratio	1.99

\*Cost estimate for sidewalk removal costs per square foot comes from  
[http://www.mtc.ca.gov/planning/bicyclespedestrians/Ped\\_Districts/04-Generic-Cost-Estimating-Tool.pdf](http://www.mtc.ca.gov/planning/bicyclespedestrians/Ped_Districts/04-Generic-Cost-Estimating-Tool.pdf)

Legend	
N Estes Dr Sidewalks	
N Estes Dr Bike Lanes	
Future Carolina North Site	



## **Methodology:**

### **N. Estes Dr. Bicycle/Pedestrian Infrastructure Improvement Emissions Reductions:**

Bicycle and pedestrian improvements along N. Estes Dr. will result in a 5% increase in ridership for Chapel Hill Transit's G bus route. These ridership increases are to be expected based on improvements made to transit accessibility in the immediate vicinity of the bicycle and pedestrian infrastructure upgrades. With N. Estes Dr. serving as a major east-west corridor for the Town, the bike lanes and sidewalks will improve transit ridership by providing better accessibility to major activity centers including Carolina North, Downtown Chapel Hill, and the University Mall. An assumption is made of an average trip length of 4.55 miles based on 2008 annual figures provided by Chapel Hill Transit. With the assumption that 90% of new transit trips will replace single occupancy vehicle trips along N. Estes Dr, we expect an average weekday decrease of 212 vehicle miles traveled.

The location of the bicycle and pedestrian infrastructure upgrades along N. Estes Dr. will serve to provide necessary access to the Carolina North development. As outlined in the 2009 draft of the Transportation Impact Analysis (TIA), an expected 1,613 walking and biking trips will be generated in the surrounding area. These trip generation rates derive from the 2015 constrained parking scenario and assume a complete sidewalk and bicycle lane network, thus making the completion of the proposed bicycle and pedestrian facilities along N. Estes Dr. a priority to accommodate these individuals. Utilizing trip distributions from the TIA report, approximately 34% of incoming bicycle and pedestrian trips will access the development along N. Estes Dr, which accounts solely for those trips entering and exiting the site. An average bicycle and pedestrian trip length of 1.5 miles is assumed based on the distance from Carolina North to major activity centers to the west (the Franklin St. corridor) along N. Estes Dr. With an estimated 548 bicycle and pedestrian trips traveling to Carolina North along N. Estes Dr., an assumption of 1.1 occupants per car, and an average trip length of 1.5 miles, it is expected that the bicycle and pedestrian infrastructure improvements will result in an average weekday decrease of 747 vehicle miles traveled.

Estes Hills Elementary School and Guy Phillips Middle School are both located along N. Estes Dr. in the immediate area of the proposed bicycle and pedestrian infrastructure improvements. With 1,250 students, teachers, and staff at the school sites, bicycle and pedestrian trips accounted for 2.5% of the total trips (ITE standard). This would account for 63 one-way trips, with an assumption of an additional 38 one-way "other" trips generated due to residential, recreational, and church trips made in the surrounding area. With 101 total trips, an assumption of 1.1 occupants per car, and an average trip length of 1.5 miles, an average weekday decrease of 138 vehicle miles traveled will occur. In addition, the promotion of biking and walking trips to both schools will decrease SOV trips, which will help alleviate congestion along N. Estes Dr. and facilitate traffic flow movement between Franklin St. and MLK Jr. Blvd. Based on annual figures with 251 service days assumed, the N. Estes Dr. bicycle and pedestrian infrastructure improvements decrease a cumulative 2,854 kg of NOX, VOC, and CO annually.

**\*\*\* N. Estes Dr. Bicycle/Pedestrian Infrastructure Improvement Emissions Reductions\*\*\***

**1 - Weekday VMT reduction due to transit ridership increase resulting from bicycle/pedestrian improvements along N. Estes Dr.**

	Avg. Daily Riders	New Daily Riders	Avg. Pax Trip Length	VMT Reduction
Current G ridership	1036	-	4.55	
5% increase	1088	52	4.55	212
<b>Number of Weekdays (with Transit Service) Annually</b>				
	251			
<b>Pollutant</b>	<b>LDGV (g/mi)</b>			
NOX	0.335			
VOC	0.446			
CO	9.583			
	<b>NOX Reduction (kg)</b>	<b>Annual VOC Reduction (kg)</b>	<b>CO Reduction (kg)</b>	
	18	24	510	

\*Mobile6 data used for LDGV

\*Assuming no increased service

\*assuming 90% of new transit trips replace a SOV trip. 4.55 miles was the average passenger trip length for Chapel Hill Transit in 2008.

\*assuming 5% ridership growth on Chapel Hill Transit route G operating on Estes Dr.

**2 - Weekday VMT reduction with N. Estes Dr. bicycle/pedestrian improvements made surrounding 2015 Carolina North site development**

Pollutant	LDGV (g/mi)	Annual LDGV Reduction (kg)
NOX	0.335	62.811495
VOC	0.446	83.623662
CO	9.583	1796.783751

\*assuming 34% of walk/bike/other trips to Carolina North utilizing N. Estes Dr.

\*assuming 1.5 miles average trip length

\*assuming walk/bike/other trips = (1613\*.34) = 548 trips

\*assuming 251 service days per year

\*assuming 548 trips/1.1 occupants per car \* 1.5 average trip length = 747 vehicle miles traveled

**3 - Reduction of emissions associated with modal shift for school trips along N. Estes Dr.**

Pollutant	LDGV (g/mi)	Annual LDGV Reduction (kg)
NOX	0.335	11.60373
VOC	0.446	15.448548
CO	9.583	331.935954

\*assuming school trips = 1250 students/faculty/staff at Estes Hills Elementary school and Guy Phillips Middle School

x 2.5% bike and ped mode share = 63 one way trips

\*assuming other trips (residential, park, church) = 38 one-way trips

\*assuming average trip length = 1.5 miles (total length of N. Estes Dr.)

\*assuming 101 riders/1.1 occupants per car \* 1.5 miles average trip length = 138 vehicle miles traveled

\*assuming 251 service days per year

**Total N. Estes Dr. Bicycle/Pedestrian Infrastructure Improvement Emissions Reductions**

Pollutant	Total Reduction (kg)	Net Total (kg)
NOX	92	
VOC	123	2,854
CO	2,639	

**RESOLUTION TO MODIFY THE 2012-2018 TRANSPORTATION  
IMPROVEMENT PROGRAM FOR THE DURHAM-CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING AREA**

**AMENDMENT #11  
September 11, 2013**

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

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

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

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

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

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

**WHEREAS**, the North Carolina Department of Transportation and the Transportation Advisory Committee have determined it to be in the best interest of the Urban Area to amend the FY 2012-2018 Metropolitan Transportation Improvement Program as described in the attached sheets; and

**WHEREAS**, there has been no change in the MTIP project schedule or project design concept and scope with regard to the air quality conformity finding made by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee on May 8, 2013; and

**WHEREAS**, the DCHC MPO certifies that this MTIP amendment is consistent with the intent of the DCHC MPO 2040 Metropolitan Transportation Plan (MTP); and

**BE IT THEREFORE RESOLVED** that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Transportation Advisory Committee hereby amends the FY 2012-2018 Metropolitan Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the TAC on September 14, 2011, and as described in the “Attachments to Resolution for Amendment #11 to DCHC 2012-2018 MTIP” provided here on this, the 11th day of September, 2013.

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Ellen Reckhow, TAC Chair

Durham County, North Carolina

I certify that Ellen Reckhow personally appeared before me this day acknowledging to me that she signed the forgoing document.

Date: September 11, 2013

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

**REVISIONS TO THE 2012-2020 STIP****HIGHWAY PROGRAM****STIP ADDITIONS****STATEWIDE**

\* W-5517

STATEWIDE

**PROJ. CATEGORY**

STATEWIDE

VARIOUS, SAFETY MANAGEMENT PROGRAM,  
PROJECT IDENTIFICATION, ANALYSIS AND  
PRELIMINARY ENGINEERING.

ENGINEERING

FY 2013 - \$11,000,000 (HSIP)

FY 2016 - \$5,500,000 (HSIP)

FY 2017 - \$5,500,000 (HSIP)

FY 2018 - \$5,500,000 (HSIP)

FY 2019 - \$5,500,000 (HSIP)

FY 2020 - \$5,500,000 (HSIP)

\$38,500,000**ADD PRELIMINARY ENGINEERING IN FY 13, 16, 17, 18,  
19, AND 20 NOT PREVIOUSLY PROGRAMMED.****STIP MODIFICATIONS****DIVISION 7**

C-5177

ORANGE

**PROJ. CATEGORY**

EXEMPT

NC 86 (MARTIN LUTHER KING, JR. BOULEVARD), MLK,  
JR. SHARED PATHWAY IN CHAPEL HILL. CONSTRUCT  
PATHWAY ALONG MLK, JR. BOULEVARD, SR 1777  
(HOMESTEAD ROAD) TO PINEY MOUNTAIN ROAD.

RIGHT-OF-WAY

FY 2014 - \$180,000 (CMAQ)

FY 2014 - \$45,000 (C)

CONSTRUCTION

FY 2014 - \$545,000 (CMAQ)

FY 2014 - \$136,000 (C)

\$906,000

**DELAY RIGHT-OF-WAY FROM FY 13 TO FY 14 TO  
ALLOW TOWN ADDITIONAL TIME FOR PLANNING AND  
DESIGN.**



# BOARD OF TRANSPORTATION RECOMMENDATIONS - PRIORITIZATION 3.0 SCORING CRITERIA, WEIGHTS, AND NORMALIZATION FOR ALL MODES

August 7, 2013

**Objective:** The Board of Transportation recommends to the Joint Legislative Transportation Oversight Committee the following recommendations resulting from the Strategic Transportation Investments Law signed by Governor McCrory on June 26, 2013.

## Highway Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% Economic Competitiveness = 10% Safety = 10% <u>Multimodal [&amp; Freight + Military] = 20%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% <u>Safety = 10%</u> <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	[Travel Time] Benefit/Cost = 20% Congestion = 20% <u>Safety = 10%</u> <b>Total = 50%</b>	25%	25%

Note: Divisions 1, 2, 3, 4 have approved different criteria and weights for their respective areas

## Aviation Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 40% Local Investment Index = 10% <u>Federal Investment Index = 10%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 20% Local Investment Index = 5% <u>Federal Investment Index = 5%</u> <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	NCDOA Project Rating = 30% FAA Airport Capital Improvement Plan = 10% Local Investment Index = 5% <u>Volume/Demand Index = 5%</u> <b>Total = 50%</b>	25%	25%

## Bicycle & Pedestrian Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Division Needs</b>	Access = 10% Constructability = 5% Safety = 15% Demand Density = 10% <u>Benefit/Cost = 10%</u> <b>Total = 50%</b>	25%	25%

**Ferry Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b> <i>(Note: all vessels are excluded from this category)</i>	Safety [Route Health Index] = 15% Benefit/Cost [Travel Time] = 15% Accessibility/Connectivity = 10% Asset Efficiency = 10% Capacity/Congestion = 20% <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Safety [Route Health Index] = 15% Benefit/Cost [Travel Time] = 15% Accessibility/Connectivity = 10% Asset Efficiency = 10% <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Expansion)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Benefit/Cost = 45% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% System Operational Efficiency = 10% <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Benefit/Cost = 25% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% System Operational Efficiency = 10% <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Facilities)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 40% Benefit-Cost = 5% System Operational Efficiency = 5% Facility Capacity = 20% <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 30% Benefit-Cost = 5% System Operational Efficiency = 5% Facility Capacity = 10% <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Fixed Guideway)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Mobility = 20% Cost Effectiveness = 15% Economic Development = 20% Congestion Relief = 15% <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Mobility = 15% Cost Effectiveness = 15% Economic Development = 10% Congestion Relief = 10% <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Rail Scoring (Track and Structures)**

Funding Category	Quantitative Data			Local Input	
		Freight	Passenger	Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b> (Class I Freight Only)	Benefit/Cost = Econ. Comp. = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	20% 10% 15% 15% 10% 10% <u>20%</u> <b>Total = 100%</b>	--	--	--
<b>Regional Impact</b> (Freight & Passenger)	Benefit/Cost = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	10% 15% 15% 10% 5% <u>15%</u> <b>Total = 70%</b>	10% 25% 15% -- -- <u>20%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b> (Freight & Passenger)	Benefit/Cost = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	10% 10% 10% 5% 5% <u>10%</u> <b>Total = 50%</b>	10% 15% 10% -- -- <u>15%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Rail Scoring (Freight Intermodal Facilities / Intercity Passenger Service & Stations)**

Funding Category	Quantitative Data			Local Input	
		Freight	Passenger	Division Rank	MPO/RPO Rank
<b>Regional Impact</b> (Intercity Passenger Service Only)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	-- -- -- --	15% 25% 10% <u>20%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b> (Facilities/ Intercity Passenger Service & Stations)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	10% 15% 10% <u>15%</u> <b>Total = 50%</b>	10% 15% 10% <u>15%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Normalization – BOT Recommendation****For Prioritization 3.0 Only (Initial Implementation of Strategic Transportation Investments)**

- Statewide Mobility (only) – No normalization, scores are stand-alone for comparison (highway, aviation, freight rail)
- Regional Impact & Division Needs – Allocate funds to Highway and Non-Highway modes based on minimum floor or %s

Mode	Board of Transportation Recommendation	Historical Budgeted	Historical Expenditures
<b>Highway</b>	<b>90% (minimum)</b>	93%	96%
<b>Non-Highway</b>	<b>4% (minimum)</b>	7%	4%

*Note: Continue research with national experts  
Conduct a statistical analysis of scores by an outside agency after all quantitative scores are completed in 2014. Request other normalization recommendations.  
Incorporate research and analysis findings into Prioritization 4.0*

**DURHAM-CHAPEL HILL-CARRBORO MPO  
METHODOLOGY FOR RANKING  
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM  
PRIORITY PROJECT REQUESTS (FY 2014-2020)**

## **INTRODUCTION**

The purpose of the Regional Priority List is to facilitate determination of the region's project priorities to be used in development of a fiscally constrained Transportation Improvement Program (TIP). SAFETEA-LU calls for a TIP development process that documents a methodology for ranking project requests, reflects local and metropolitan goals, and addresses mobility, environmental and air quality goals.

## **OBJECTIVE**

The methodology outlined below is designed to address multi-modal transportation needs and to ensure regional balance through the use of specific technical criteria. The Technical Coordinating Committee (TCC) will use the methodology to develop a draft Regional Priority List. This draft Priority List is to be used as a starting point or a reference base by the Transportation Advisory Committee (TAC) for the approval of a final Regional Priority List.

The TAC may reorder projects at its discretion to promote jurisdictional and geographical balance, or based upon the TAC members' knowledge of the urban area and the policies of their communities. The TCC will make its technical recommendation on a draft Priority List based on the methodology described in this document, and the TAC will then be afforded the opportunity to make any changes it deems appropriate.

## **METHODOLOGY GOALS**

- Produce a program of projects (or project priorities) which satisfies MPO, local and state goals, and addresses SAFETEA-LU policies of system preservation, operational efficiency in the movement of people and goods, multi/inter-modalism, and air quality mandates.
- Be simple enough for project-level analysis without requiring unnecessary data collection.
- Be understandable by the general public.

## **PROCEDURE FOR RANKING PROJECTS**

### **1) Goal Setting For Regional Priority List**

Since the Regional Priority List should be a subset of the DCHC MPO Long Range Transportation Plan (LRTP), the goals for the regional priority list are the same as the DCHC MPO goals and objectives in the 2035 LRTP.

### **2) Submission of Local Priority Lists**

All MPO member jurisdictions and Triangle Transit will submit a local priority list to the MPO. The

DCHC MPO requests that the local jurisdictions apply screening criteria during the development of these lists. The screening criteria are:

- a) Regional Goals - How well does the project meet the adopted regional goals? Is the project an element of the current long-range plan? Does it implement community objectives (for the intrastate system, does it meet NCDOT mobility objectives)? Does the project have a broad base of local support?
- b) Cost Effectiveness - How much benefit does the project offer compared to the estimated cost?
- c) Timing Factor – Is the project needed within the TIP funding cycle? Is timing a critical element for the project (one-time opportunity)? Will the opportunity to do the project be lost if it is not in the current priority cycle?

Local jurisdictions may also elect to use the ranking methodology to create their local priority lists but are not required to do so. The TCC will review local priority lists for adherence to these screening criteria before applying the ranking methodology.

Local jurisdictions shall provide the DCHC MPO a list of projects. The list should be grouped by mode (highway, transit, bicycle, and pedestrian). The local jurisdictions shall provide a short description of the project, including the project limits, name, mileage, and cost. The description should note any essential elements of the project such as bike lanes, sidewalks, transit accommodations, vehicle types, etc.

### **3) Submission of Projects for the Regional Priority List**

For the 2014-2020 TIP, the DCHC MPO will submit projects to NCDOT's Strategic Planning Office of Transportation by July 2011 for the application of the NCDOT's quantitative ranking methodology. The MPO is limited to fifteen new highway projects, ten new bicycle projects, ten new pedestrian projects, and an unlimited number of transit projects. Highway, bicycle, and pedestrian projects that were submitted for the 2012-2018 TIP do not need to be resubmitted.

DCHC MPO will combine the local priority lists into a list that the MPO will submit to NCDOT. In the event that more projects are submitted to the MPO than the MPO is allowed submit to NCDOT, the TCC will select projects based on the screening criteria, the air quality horizon year in the LRTP, regional significance, geographic distribution, and local priority.

### **4) Application of the Ranking Methodology**

The NCDOT will apply a quantitative ranking methodology to the MPO's projects and provide the MPO project scores and data. DCHC MPO staff in coordination with local staff will use the project data and collect additional data to apply the MPO ranking methodology. The list of projects will then be presented to the TCC as the draft regional priority list.

The TCC first examines the consistency in which local jurisdictions and MPO staff have responded to the screening criteria and applied the methodology. If the methodology is not applied consistently, the TCC can agree to change some responses for consistency among all projects. The draft Regional Priority List is then forwarded to the TAC, as the TCC's recommended project priorities for the urban area. The TCC will also recommend a distribution of highway ranking points among projects.

## 5) Approval of Project Rankings and Points

The TAC will release the draft list for public comment and hold a public hearing at a TAC meeting. The TAC may reorder projects at its discretion to promote jurisdictional and geographical balance, or based upon the TAC members' knowledge of the urban area and the policies of their communities. After review and public comment, the TAC will approve the final Regional Priority List including the distribution of highway ranking points.

### APPLICATION OF THE METHODOLOGY

1. There are four separate ranking methodologies based on the primary mode of transportation: 1) highway; 2) bicycle; 3) pedestrian; and 4) transit. The four ranking methodologies are independent of each other. Points for different modes are on different scales and are not comparable.
2. Points are weighted and totaled for each project using the four modal ranking methodologies outlined on the last pages of this document.

### MODAL RANKING METHODOLOGIES IN DETAIL

#### Highway

There are nine criteria. All criteria are not applied to all project types and tiers, and the criteria are weighted differently based on the project type and tier.

1. *Congestion* - This category awards points to projects based on the level of congestion and travel demand. For road projects, congestion is measured by the volume to capacity (V/C) ratio and the annual average daily traffic (AADT). For new road facilities in which traffic counts are not available, volumes on a parallel existing facility may be used.

Data will be collected and provided by NCDOT's SPOT.

2. *Safety* - Safety points are awarded to projects based on the critical crash rate, crash density, and severity.

Data will be collected and provided by NCDOT's SPOT.

3. *Economic Competitiveness* – Points are awarded based on the output from the TREDIS model.

Data will be collected and provided by NCDOT's SPOT.

4. *Lane Width* – Points are awarded based on the existing width of the lane versus the standard width

Data will be collected and provided by NCDOT's SPOT.

5. *Shoulder Width* – Points are awarded based on the existing width of the shoulder versus the standard width.

Data will be collected and provided by NCDOT's SPOT.

6. *Multi-modal Benefits*– Points are awarded to projects based on if they include multi-modal options (BRT, LRT, BOSS, HOV/HOT), connections (airport, rail depot, transit terminal), or design features (sidewalks, pedestrian crossings, bicycle lanes, wide outside shoulders, bus pullouts, transit prioritization, bus shelters).

Local jurisdictions are asked to describe the benefits. Data will be collected and provided by NCDOT's SPOT.

7. *Environmental Impacts* - Points are awarded based on the impact on wetlands, streams, water supply watersheds, wildlife habitat, parks, and air quality.

The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to use the environmental impacts worksheet to assess the impact of projects based on a GIS analysis.

8. *Community Impacts* – Points are awarded based on the impact on neighborhoods, communities, schools, parks, recreation facilities, historic resources, and cemeteries.

The MPO will provide local jurisdictions a base map of community resources and 2010 population density. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

9. *Environmental Justice*- Points are awarded based on the impact on low-income and minority populations. This item is designed to penalize projects that may have negative impacts on low income areas or federally recognized disadvantaged groups.

The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

## **Pedestrian**

There are seven criteria that are weighted differently. All project types and tiers are subject to the same criteria.

1. *Right-of-Way Availability* – This category awards points to projects based on the right-of-way available for the project. Right-of-way should be estimated based on the local jurisdiction's best knowledge of the area and the NCDOT right-of-way database. Extensive research into property deeds is not required.

Data will be collected and provided by NCDOT's SPOT.

2. *Connectivity* – This category awards points to projects based on the proximity to transit, schools, central business districts, high density residential or commercial areas, parks, and other pedestrian facilities.

Data will be collected and provided by NCDOT's SPOT.

3. *Pedestrian Crashes* - Points are awarded based on if there have been three or more pedestrian crashes within the last five years.

Data will be collected and provided by NCDOT's SPOT.

4. *Demand/Density* – Points are awarded based on the population density within 0.5 miles of a pedestrian facility.

Data will be collected and provided by NCDOT's SPOT.

5. *Congestion/Traffic Volume* - This category awards points to projects based on the amount of traffic volume on the roadway. Off-road greenways are based on the parallel or alternate roadways. More points are provided for more congested or higher volume facilities to reflect the safety hazard for pedestrians on larger busier roadways. The traffic counts should be taken from the latest Annual Average Daily Traffic (AADT) maps on the NCDOT website.

Congestion data will be provided by the MPO. Traffic volume data will be collected and provided by NCDOT's SPOT.

6. *Regional Connectivity* – Points are awarded to pedestrian only projects based on if the project provides a pedestrian connection to regional and local buses. Project limits that include a bus stop for an existing Triangle Transit regional route receive three points. Project limits that include a station area for a future regional rail receive two points. Project limits that include a bus stop for a local bus route receive one point. Project limits that do not include a bus stop for a transit route receive zero points.
7. *Environmental Justice* - Points are awarded based on the impact on low-income and minority populations. Since pedestrian facilities are perceived as amenities and usually require little right-of-way acquisition, projects that serve low income and minority areas will receive more points.

The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

## **Bicycle**

There are seven criteria that are weighted differently. All project types and tiers are subject to the same criteria.

1. *Right-of-Way Availability* – This category awards points to projects based on the right-of-way available for the project. Right-of-way should be estimated based on the local jurisdiction's best knowledge of the area and the NCDOT right-of-way database. Extensive research into property deeds is not required.

Data will be collected and provided by NCDOT's SPOT.

2. *Connectivity* – This category awards points to projects based on the proximity to transit, schools, central business districts, high density residential or commercial areas, parks, and other bicycle facilities.

Data will be collected and provided by NCDOT's SPOT.

3. *Bicycle Crashes* - Points are awarded based on if there have been three or more bicycle crashes within the last five years.

Data will be collected and provided by NCDOT's SPOT.

4. *Demand/Density* – Points are awarded based on the population density within 1.5 miles of a bicycle facility.

Data will be collected and provided by NCDOT's SPOT.

5. *Congestion/Traffic Volume* - This category awards points to projects based on the amount of vehicular congestion as measured by volume/capacity ratios for bicycle projects. Off-road greenways are based on the parallel or alternate roadways. More points are provided for more congested or higher volume facilities to reflect the safety hazard for bicyclists on larger busier roadways. The volume/capacity ratio will be provided by the MPO model.

Congestion data will be provided by the MPO. Traffic volume data will be collected and provided by NCDOT's SPOT.

6. *Regional Connectivity* – Points are awarded to bicycle based on if the project is a part of the regional routes recognized in the 2035 LRTP or if it provides access to regional or local buses. Projects part of a regional bicycle route that partially exists or project limits that include a bus stop for an existing Triangle Transit regional route receive three points. Projects part of a regional bicycle route that does not currently exist or project limits that include a station area for a future regional rail receive two points. Projects not part of a regional bicycle route that connect to a regional bicycle route or project limits that include a bus stop for a local bus route receive one points. Projects that are not part of a regional bicycle route and do not connect to a regional bicycle route or project limits that do not include a bus stop for a transit route receive zero points.
7. *Environmental Justice* - Points are awarded based on the impact on low-income and minority populations. Since bicycle facilities are perceived as amenities and usually require little right-of-way acquisition, projects that serve low income and minority areas will receive more points.

The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

## **Transit**

There are seven criteria for transit projects that are weighted differently. All project types and tiers are subject to the same criteria.

1. *State of Good Repair* – This category is designed to award points to projects that are essential to maintaining the current transit service. Projects will receive more points for every percentage decrease in average age of fleet. Facilities receive more points for every percentage increase in surface area of space.

Data will be collected and provided by NCDOT's SPOT.

2. *Availability* – This category awards points based on the percentage increase in system-wide service hours.

Data will be collected and provided by NCDOT's SPOT.

3. *Connectivity* – Projects receive points based on connections to taxi stands, bicycle facilities, sidewalk facilities, demand response transit, high density housing within 0.5 miles, mixed use development, and fixed route services.

Data will be collected and provided by NCDOT's SPOT.

4. *Technology* – Projects receive points based on the percentage increase in funding on information technology.

Data will be collected and provided by NCDOT's SPOT.

5. *Environmental Impacts* - Points are awarded based on the impact on the natural environment. Since most transit projects use existing roadway facilities and thus do not require construction, projects are assessed based on their relative positive air quality impacts. Transit projects that require construction such as fixed guideway, BRT, and park and ride lots should have points deducted if significant environmental impacts may occur due to construction, including impacts on wetlands, streams, water supply watersheds, and rare species habitats.

The MPO will provide local jurisdictions a base map of environmental areas. Local jurisdictions are asked to use the environmental impacts worksheet to assess the impact of projects based on project type and a GIS analysis for construction projects.

6. *Community Impacts* – Points are awarded based on the impact on neighborhoods, communities, schools, parks, and recreation facilities. Since transit projects are community amenities and usually require little right-of-way acquisition, projects that serve more dense neighborhoods and community facilities receive more points.

The MPO will provide local jurisdictions a base map of community resources and 2010 population density. Local jurisdictions are asked to use the community impacts worksheet to assess the impact of projects based on a GIS analysis.

7. *Environmental Justice* - Points are awarded based on the impact on low-income and minority populations. Since transit projects are community amenities and usually require little right-of-way acquisition, projects that serve low income and minority areas will receive more points.

The MPO will provide local jurisdictions a base map that indicates which Traffic Analysis Zones have a high percentage of minority and low income populations. Local jurisdictions are asked to use the environmental justice worksheet to assess the impact of projects based on a GIS analysis.

## **OBSERVATIONS**

The order of transit priorities could vary significantly from year to year if anticipated funding sources are reduced or eliminated by Congress.

- Mandates (e.g., the American's with Disabilities Act) may take precedence when programming projects from the Regional Priority List in the TIP.
- The fiscal constraints of programming projects in the TIP may result in the programming of less expensive, lower ranked projects.
- Some lower ranking projects may be implemented earlier than a higher ranked, large project due to the time constraints associated with a more complex project (i.e., major investment studies, preparing environmental documents, designing the project, right-of way acquisition, etc.).
- The utility of ranking more than 25 projects is minimal due to the availability of project funds.

Criteria	Metric	Mobility			Modernization		
		% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Subregional Tier
Congestion	current volume/capacity + AADT	30%	30%	30%	5%	5%	no SPOT data
Safety	critical crash rates, crash density, severity	20%	20%	25%	15%	15%	20%
Economic Competitiveness	use TREDIS model, input change in VHT, output economic value added based on % change in Division	20%	20%	no SPOT data	no SPOT data	no SPOT data	no SPOT data
Lane Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Shoulder Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
Multi-modal	options, connection, or design features	Bonus Points: 8 for HOV/HOT, BRT, Rail, BOSS; 5 for connection to terminal; 3 for sidewalks, bike lanes, transit facilities, etc.					
Environmental Impacts	Air quality impacts and GIS analysis of wetlands, streams, species habitat, parks, and water supply watershed	10%	10%	15%	10%	10%	10%
Community Impacts	GIS analysis of population density, schools, parks, historic resources, and cemeteries	10%	10%	15%	10%	10%	10%
Environmental Justice	GIS analysis of low-income and minority areas	10%	10%	15%	10%	10%	10%

100%      100%      100%      100%      100%      100%

<b>Criteria</b>	<b>Metric</b>	<b>% of Score</b>
Right-of-Way Acquired	Amount of right-of-way available	10%
Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%
Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 1.5 miles of bicycle facility	15%
Congestion	v/c on roadway	15%
Regional Connectivity	Part of regional bicycle route or connection to Triangle Transit regional route, future rail, or local bus route	15%
Environmental Justice	GIS analysis of benefit to minority and low-income population	10%

100%

<b>Criteria</b>	<b>Metric</b>	<b>% of Score</b>
Right-of-Way Acquired	Amount of right-of-way available	10%
Connectivity	Access to transit, schools, CBD, high density residential or commercial, parks, other bike/ped facilities	20%
Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 0.5 miles of ped facility	15%
Traffic volume	AADT on roadway	15%
Regional Connectivity	Pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%
Environmental Justice	GIS analysis of benefit to minority and low-income population	10%

100%

<b>All Tiers and Types</b>		
<b>Criteria</b>	<b>Metric</b>	<b>% of Score</b>
Availability	One point for every percent increase in system-wide service hours	15%
Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
Technology	One point for every percent increase in funding spend on information technology	5%
State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
Community Impacts	Based on density, schools, parks served	5%
Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%

100%

NCDOT SPOT Prioritization 3.0					DCHC MPO Current Project Ranking Methodology							
Criteria	Metric	Mobility			Criteria	Metric	Mobility			Modernization		
		% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier			% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier
Congestion	((exist. V/C ratio x 100) x 60%) + ((exist vol./1,000) x 40%)	30%	30%	20%	Congestion	current volume/capacity + AADT	30%	30%	30%	5%	5%	no SPOT data?
Safety	Segment: (Crash Density x 33%) + (Severity Index x 33%) + (Critical Crash Rate x 33%); Intersections: (Crash Frequency x 50%) + (Severity Index x 50%)	10%	10%	10%	Safety	critical crash rates, crash density, severity	20%	20%	25%	15%	15%	20%
Benefit/Cost	Travel time savings over 30 years in \$/Project Cost to NCDOT	30%	30%	20%	Do not include. Difference in v/c should not be the sole measurement of a project's benefits. Also duplicative of congestion criteria.							
Economic Competitiveness	Primary inputs are Travel Time Savings, Location, and Freight Traffic; Output is # of long-term jobs created (50%) + Value added in \$ (50%) based on % change in NCDOT Div. Economy	10%			Economic Competitiveness	use TREDIS model, input change in VHT, output economic value added based on % change in Division	20%	20% (SPOT data?)	no SPOT data	no SPOT data	no SPOT data	no SPOT data
Multi-modal (Freight & Military)	25% - V/C Ratio on projects on Non-Interstate STRAHNET Routes; 25% - V/C Ratio on projects on routes that provide direct connection to a transportation terminal; 50% - Truck Volumes / 100	20%										
	not included				Lane Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
	not included				Shoulder Width	existing width vs. standard width	no SPOT data	no SPOT data	no SPOT data	25%	25%	25%
	not included				Multi-modal	options, connection, or design features	Bonus Points: 8 for HOV/HOT, BRT, Rail, BOSS; 5 for connection to terminal; 3 for sidewalks, bike lanes, transit facilities, etc.					
	not included				Environmental Impacts	Air quality impacts and GIS analysis of wetlands, streams, species habitat, parks, and water supply watershed	10%	10%	15%	10%	10%	10%
	not included				Community Impacts	GIS analysis of population density, schools, parks, historic resources, and cemeteries	10%	10%	15%	10%	10%	10%
	not included				Environmental Justice	GIS analysis of low-income and minority areas	10%	10%	15%	10%	10%	10%
MPO Rank	-	15%	15%	25%								
Division Rank	-	15%	15%	25%								
Total		100%	100%	100%			100%	100%	100%	100%	100%	100%

Green Font indicates that the MPO uses SPOT data for that criteria.

NCDOT SPOT Prioritization 3.0			DCHC MPO Current Project Ranking Methodology					
			Bicycle			Pedestrian		
Criteria	Metric	% of Score	Criteria	Metric	% of Score	Criteria	Metric	% of Score
Benefit/Cost	(Access + Demand Scores)/Cost	10%						
Constructability	Amount of right-of-way acquired, preliminary work completed, environmental impact	5%	Right-of-Way Acquired	Amount of right-of-way available	10%	Right-of-Way Acquired	Amount of right-of-way available	10%
Access	Destination Type + Distance to Prime Destination	10%	Connectivity	Access to transit, schools, CBD, high density residential or commercial,	20%	Connectivity	Access to transit, schools, CBD, high density residential or commercial,	20%
Safety	Bike/Ped crashes + Posted speed limit	15%	Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%	Bicycle or Pedestrian Crashes	3 or more bike/ped crashes within last 5 years, variable points if greater than 3	15%
Demand/Density	Population density within 0.5 miles of ped facility or 1.5 miles of bicycle facility	10%	Demand/Density	Population density within 1.5 miles of bicycle facility	15%	Demand/Density	Population density within 0.5 miles of ped facility	15%
	not included		Congestion	v/c on roadway	15%	Traffic volume	AADT on roadway	15%
	not included		Regional Connectivity	Part of regional bicycle route or connection to Triangle Transit regional route, future rail, or local bus route	15%	Regional Connectivity	Pedestrian connection to Triangle Transit regional route, future rail, or local bus route	15%
	not included		Environmental Justice	GIS analysis of benefit to minority and low-income population	10%	Environmental Justice	GIS analysis of benefit to minority and low-income population	10%
Divison Rank		25%						
MPO Rank		25%						
Total		100%			100%			100%

Green Font indicates that the MPO uses SPOT data for that criteria.

NCDOT SPOT Prioritization 3.0					DCHC MPO Current Project Ranking Methodology		
Criteria	Metric	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier	Criteria	Metric	% of Score
Benefit/Cost	Ann. Avg. trips per vehicle x life expectancy/state match amt (Demand Response); Ridership for life of vehicle/state match amt (Fixed Route); Route ridership on the existing route for the life of the vehicle/the state match amt (Headway Reduction)		45%	25%			
Vehicle Utilization Data	Max vehicles utilized during peak hr/total fleet size (DR); # vehicles operated at max service/# vehicles available at max service (FR)		5%	5%			
System Safety	(National average reportable incidents/PMT – System reported incidents/PMT) + (National average reportable injuries/PMT – System reported injuries/PMT) + (National average reportable fatalities/PMT – System reported fatalities/PMT) = Safety Result.		5%	5%			
Connectivity	Projected increase in ridership weighted according to the types of destinations the expansion of service will serve. (20% per destination: medical, employment, commercial, education, and other transportation terminal/transfer): (Ridership Increase x Facility Destination) / System Ridership = Weighted % Increase in Ridership		5%	5%	Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
System Operational Efficiency	Annual ridership / total hours. Demand Response = Trips / Service Hours Fixed Route = Trips / Revenue Hours		10%	10%			
	not included				Availability	One point for every percent increase in system-wide service hours	15%
	not included				Technology	One point for every percent increase in funding spend on information technology	5%
	not included				State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
	not included				Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
	not included				Community Impacts	Based on density, schools, parks served	5%
	not included				Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%

Division Rank	15%	25%	
MPO Rank	15%	25%	
Total	100%	100%	100%

Green Font indicates that the MPO uses SPOT data for that criteria.

NCDOT SPOT Prioritization 3.0					DCHC MPO Current Project Ranking Methodology		
Criteria	Metric	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier	Criteria	Metric	% of Score
Age of Facility, Facility Demand, Park-n-Ride, Bus Shelters	Facility Age/Useful life ( <b>Age</b> ); Peak Service/Capacity ( <b>Demand</b> ); (Number of Spaces x Utilization) / State Match ( <b>P&amp;R</b> ); Avg. Boardings + Avg. Alightings ( <b>Shelters</b> )		40%	30%	State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
Benefit/Cost	Annual Trips/State Match		5%	5%			
System Operational Efficiency	Demand Response = Trips / Service Hour Fixed Route = Trips / Revenue Hour		5%	5%			
Facility Capacity	<b>Facility</b> (Transit & Admin) = ((proposed capacity – current usage)/existing design capacity) x 33% <b>Park &amp; Ride</b> = ((proposed capacity – current usage)/existing design capacity) x 33%; <b>Shelters</b> = ((proposed capacity – current usage)/existing design capacity) X 33%		20%	10%			
	not included				Availability	One point for every percent increase in system-wide service hours	15%
	not included				Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
	not included				Technology	One point for every percent increase in funding spend on information technology	5%
	not included				Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
	not included				Community Impacts	Based on density, schools, parks served	5%
	not included				Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%

Division Rank	15%	25%	
MPO Rank	15%	25%	
Total	100%	100%	100%

Green Font indicates that the MPO uses SPOT data for that criteria.

NCDOT SPOT Prioritization 3.0					DCHC MPO Current Project Ranking Methodology		
Criteria	Metric	% of Score - Statewide Tier	% of Score - Regional Tier	% of Score - Division Tier	Criteria	Metric	% of Score
Mobility	1 point for every 250,000 trips		20%	15%			
Cost Effectiveness	100 points for a cost of \$4.00 or less per trip; decreasing by 1 point for each \$0.11 increase per trip.		15%	15%			
Economic Development	1 point per 1,000 new employees and 1 point per 500 new residents in the fixed guideway corridor over 20 years.		20%	10%			
Congestion Relief	Travel time savings. 0-100 point scale TBD; Max points = 100 (values over 100 are capped)		15%	10%			
	not included				Availability	One point for every percent increase in system-wide service hours	15%
	not included				Connectivity	One point for connection to taxi stand, bicycle facility, sidewalk facility; demand response transit, high density housing within 1/2 mile, mixed use development; two points for connection to fixed route with 1 hour all day headway; three points for connection to fixed route with 30 minute peak headway	15%
	not included				Technology	One point for every percent increase in funding spend on information technology	5%
	not included				State of Good Repair	One point for every percent decrease in average age of fleet; Facilities: one-tenth of one point for every percent increase in surface area of space	50%
	not included				Environmental Impacts	Based on project type, vehicle type, GIS analysis	5%
	not included				Community Impacts	Based on density, schools, parks served	5%
	not included				Environmental Justice	GIS analysis of benefit to low-income and minority areas	5%
Division Rank			15%	25%			
MPO Rank			15%	25%			
Total			100%	100%			100%

Green Font indicates that the MPO uses SPOT data for that criteria.

Highway Projects

									highest state score in tier/ε		
SPOTID	STI Cat.	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	MPO Score	State Score	TAC Approved Points
1144	Statewide	Modernization	U-5304	US015, US501		NC 86 (Columbia Street)	SR 1742 (Ephesus Church Road)	(US 15/501) Fordham Boulevard (NC 86 (Columbia Street)/US 15/501 South to SR 1742 (Ephesus Church Road)) sidewalks, wide-outside lanes, and transit accommodations.	64.251	38.032	100
949	Statewide	Capacity		092 I-040		NC 147	Wade Avenue	Construct Managed Lanes	83.201	42.465	0
1305	Statewide	Modernization		019 US015, 019 US501		400 ft south of SR 1532 (Mann's Chapel Road)	North of SR 1919 (Smith Level Road) at the Orange County Line	Construct either 15' wide outside lanes or 6' bicycle lanes.	71.463	34.683	0
958	Statewide	Capacity	U-2807	US015, US501		I-40	US 15/501	I-40 to US 15/501 Bypass in Durham. Major Corridor Upgrade.	62.572	28.802	0
1100	Statewide	Capacity		032 I-040		NC 147	US 15/501	Construct 1 Managed Lane per direction (additional 16ft of pavement - 12ft lanes + 4ft pavement for separation with general purpose lanes)	60.831	42.339	0
948	Statewide	Capacity		068 US015	Fordham Boulevard	SR 1742 (Ephesus Church Road)	SR 1902 (Manning Drive)	Upgrade road to "Superstreet" with possible interchange at Manning Drive	60.356	43.627	0
408	Statewide	Capacity		068 US015	Fordham Boulevard	East Lakeview Drive	Sage Road	Upgrade road to "Superstreet"	58.878	49.924	0
953	Statewide	Capacity		092 I-540		I-40	US 64 Bypass	Convert Freeway to Tolloed Facility and widen to 8 lanes	57.87	21.993	0
365	Statewide	Capacity		032 NC147	Durham Freeway	I-40	East End Connector	Widen roadway to 6 lanes and rehabilitate pavement	56.822	25.192	0
532	Statewide	Interchange/Interse ction		US015, US501		SR 1742 (Ephesus Church Road)		Intersection Improvements	54.202	24.065	0
1103	Statewide	Capacity	I-3306A	I-040		I-85	US 15/501	I-85 in Orange County to NC 147 (Buck Dean Freeway) in Durham County. Add Additional Lanes. Section A: I-85 to US 15/501.	49.014	29.426	0
1095	Statewide	Capacity	I-0305B	I-085		East of SR 1709	Durham County Line	I-40 at Hillsborough to Durham County Line. Widen to Six Lanes and Reconstruct Interchanges and Structures. Section B: East of SR 1709 to Durham County Line.	45.827	21.122	0
652	Statewide	Modernization		032 NC147		East End Connector	US 15/501	Modernization, pavement Rehabilitation and ramp consolidations/interchange upgrades	35.862	12.671	0

Highway Projects

									highest state score in tier/ε		
SPOTID	STI Cat.	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	MPO Score	State Score	TAC Approved Points
658	Statewide	Capacity	I-0305A	I-085		SR 1006 near Hillsborough	East of SR 1709	I-40 at Hillsborough to Durham County Line. Widen to Six Lanes and Reconstruct Interchanges and Structures. Section A: SR 1006 near Hillsborough to East of SR 1709.	31.773	15.229	0
945	Regional	Capacity	U-5324C	NC054		SR 1118 (Fayetteville Road)	SR 1106 (Barbee Road)	NC 54 (I-40 east to NC 55) widen to multi-lane divided with transit accommodations, bike lanes, and sidewalks. Section C: SR 1118 (Fayetteville Road) to SR 1106 (Barbee Road).	65.369	26.746	100
1013	Regional	Capacity		NC054		I-40	Barbee Chapel Road	NC 54 (I-40 west to Barbee Chapel Rd) widen to 6-lane divided, bicycle, pedestrian, and transit facilities.	64.531	30.732	100
632	Regional	Capacity	U-5324D	NC054		SR 1106 (Barbee Road)	NC 55	NC 54 (I-40 east to NC 55) widen to multi-lane divided with transit accommodations, bike lanes, and sidewalks. Section D: SR 1106 (Barbee Road) to NC 55).	64.116	27.286	100
375	Regional	Capacity	U-5324B	NC054		NC 751	SR 1118 (Fayetteville Road)	NC 54 (I-40 east to NC 55) widen to multi-lane divided with transit accommodations, bike lanes, and sidewalks. Section B: NC 751 to SR 1118 (Fayetteville Road).	63.801	25.707	100
660	Regional	Capacity	U-5324A	NC054		I-40	NC 751	NC 54 (I-40 east to NC 55) widen to multi-lane divided with transit accommodations, bike lanes, and sidewalks. Section A: I-40 to NC 751.	56.723	21.901	100
1131	Regional	Modernization		NC086	Martin Luther King, Jr. Boulevard	I-40	North Street	Construct Bicycle Lanes and Sidewalks	68.895	27.672	0
631	Regional	Modernization		NC751	Hope Valley Road	SR 1146 (South Roxboro Road)	Martin Luther King, Jr. Parkway	Construct bike lanes and sidewalks.	66.155	26.932	0
1143	Regional	Modernization		NC054		US 15/501	SR 1110 (Barbee Chapel Road)	Construct Bicycle Lanes and Sidewalks	65.296	27.133	0
659	Regional	Capacity		NC751	Hope Valley Road	South Roxboro Road	NC 54	NC 751 (S. Roxboro Rd. to NC 54) widen to 4-lane, bike lanes, and sidewalks.	58.759	23.521	0
961	Regional	Capacity		068 NC086		US 70 Bypass	North of NC 57	Widen roadway to four lanes with a median and improve intersections at US 70 Bypass and NC 57 .	57.186	28.738	0
533	Regional	Capacity	R-3438		New Route - Hillsborough Western Bypass	US 70	NC 57	US 70 to NC 57. Two Lanes on New Location.	53.647	11.603	0
951	Regional	Capacity		032 NC751		NC 54	Renaissance Parkway	Widen roadway to four lanes with a median with bicycle, pedestrian and transit facilities as appropriate.	49.251	17.212	0
1096	Regional	Capacity			I-85/US 70 Connector	US 70		Reconstruct interchange to allow for full movements	46.314	10.528	0
952	Regional	Capacity		NC751		US 64	Durham County Line	Widen to 4 lanes with bicycle lanes on existing location.	40.588	15.643	0

Highway Projects

									highest state score in tier/ε		
SPOTID	STI Cat.	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	MPO Score	State Score	TAC Approved Points
1162	Regional	Capacity		032 NC751		Renaissance Parkway	1118 (Fayetteville Road)	Widen roadway to four lanes with a median and bicycle, pedestrian and transit facilities as appropriate.	37.648	13.147	0
641	Division/ Regional	Capacity	R-2825	SR1009	South Churton Street	I-40	Eno River	I-40 to Bridge over Southern Railroad. Widen to Multi-Lanes with landscaped median, bicycle lanes, and sidewalks, widen Bridge No. 240 over Southern Railroad.	60.961	18.809	0
946	Division	Modernization		SR1110	Barbee Chapel Road/Farrington Road	NC 54	SR 1107 (Stagecoach Road)	Construct bike lanes and sidewalks.	85.339	26.044	100
1014	Division	Modernization	U-2909	SR1780	Estes Drive	SR 1772 (Greensboro Street)	NC 86	SR 1772 (Greensboro Street) to NC 86. Widen to add bike lanes, sidewalks, and transit accommodations.	82.557	24.653	100
859	Division	Modernization		SR1666	Dearborn Drive	SR 1669 (East Club Boulevard)	SR 1004 (Old Oxford Road)	Construct Bicycle Lanes and Sidewalks	82.274	25.762	100
663	Division	Capacity		SR1118	Fayetteville Road	Woodcroft Pkwy	SR 1171 (Riddle Road)	SR 1118 (Fayetteville Road) (Woodcroft Pkwy to Riddle Road (SR 1171)) widen to 4-lane divided, bikelanes and sidewalks.	65.719	19.901	100
1033	Division	Modernization		SR1717	Jack Bennett Road	US 15/501	SR 1721 (Lystra Rd)	Jack Bennett Rd (SR 1717) (US 15/501 to Lystra Rd (SR 1721) safety improvements.	82.742	23.871	50
1036	Division	Modernization		SR1158	West Cornwallis Road	SR 1306 (Erwin Road)	SR 1127 (Chapel Hill Road)	Construct Bicycle Lanes and Sidewalks	81.307	24.653	25
997	Division	Modernization		SR1009	Old NC 86	SR 1777 (Homestead Road)	SR 1727 (Eubanks Road)	Construct bike lanes and sidewalks and transit accommodations.	81.307	24.653	25
531	Division	Modernization		SR1727	Eubanks Road	SR 1009 (Old NC 86)	Rogers Road	Construct bike lanes and sidewalks and transit accommodations.	81.307	24.653	25
649	Division	Modernization		068 SR1727	Eubanks Road	SR 1729 (Rogers Road)	NC 86	Construct bicycle lanes, sidewalks, safety and intersection improvements.	80.339	23.544	25
655	Division	Modernization		SR1008	Mount Carmel Church Road	US 15-501	Chatham County Line	Construct bike lanes.	80.057	24.653	25
937	Division	Modernization		SR1900	Old Mason Farm Road/Finley Golf Course Road	NC 54	NC 54/US 15-501 (Fordham Blvd.)	Construct bike lanes and sidewalks.	78.121	22.436	25
1005	Division	Modernization		068 SR1005	Old Greensboro Rd.	SR 2057 (Sturbridge Lane)	Alamance County Line	Add 4-foot paved shoulders	78.807	24.653	0
239	Division	Modernization		SR1006, SR1102	Orange Grove Road, Dodsons Cross Road	I-40	SR 1177 (Dairyland Road)	Add 4' Paved shoulders to accommodate bicycles. This route is designated as North Carolina Bike Route #2.	77.742	23.871	0
654	Division	Modernization		068 SR1927	Merritt Mill Road	1010 (Franklin Street)	1919 (South Greensboro Street)	Construct bicycle lanes and sidewalks.	76.307	22.153	0

Highway Projects

									highest state score in tier/ε		
SPOTID	STI Cat.	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	MPO Score	State Score	TAC Approved Points
651	Division	Modernization		SR1009	Old NC 86	SR 1009 (Hillsborough Road)	SR 1777 (Homestead Road)	Construct bike lanes and sidewalks and transit accommodations.	74.653	21.327	0
372	Division	Modernization	U-3436	SR1148, SR1192	Eno Mountain Road, Mayo Street	SR 1006 (Orange Grove Road)		SR 1148 (Eno Mountain Road) and SR 1192 (Mayo Street) at SR 1006 (Orange Grove Road). Realign Intersection and Make Safety Improvements. include bicycle lanes and sidewalks.	72.839	21.044	0
1034	Division	Modernization		SR1009	Old NC 86	I-40	SR 1727 (Eubanks Road)	Widen outside lanes.	72.557	22.153	0
326	Division	Modernization	U-2805	SR1777	Homestead Road	SR 1009 (Old NC 86)	NC 86	SR 1009 (Old NC 86) to NC 86. Widen to include bicycle lanes, sidewalks, transit accommodations, and safety improvements (design may vary along length).	71.871	19.936	0
1011	Division	Modernization		068 SR1104	Dairyland Road	SR 1111 (Union Grove Church Road)	SR 1006 (Orange Grove Road)	Construct 4-foot paved shoulders on Dairyland Road	70.339	21.044	0
10	Division	Modernization		SR1669	Club Boulevard	Ambridge Street	SR 1670 (East Geer Street)	Construct Bicycle Lanes and Sidewalks	70.057	19.653	0
487	Division	Modernization		SR1843	Seawell School Road	SR 1780 (Estes)	SR 1777 (Homestead)	Seawell School Road (Homestead to Estes) bicycle lanes, sidewalks, transit accommodations, and Intersection safety improvements (design may vary along length)	68.403	18.827	0
1056	Division	Modernization		SR1780	Estes Drive	NC 86	Caswell Road	Estes Drive (NC 86 to Caswell Road) widen existing roadway to include two 12-foot travel lanes, four-foot bicycle lanes and sidewalks.	67.557	19.653	0
558	Division	Modernization		SR1721	Lystra Road	US 15/501	SR 1008 (Farrington Point Road)	Safety improvements.	66.653	15.827	0
826	Division	Capacity		SR1006	New Route - Orange Grove Road	SR 1006 (Orange Grove Road)	US 70A	Orange Grove Road Extension (Orange Grove Road to US 70) with sidewalks and bicycle lanes	63.082	16.673	0
7	Division	Modernization		SR1102, SR 1977	Sedwick Road	SR 1100 (Grandale Drive)	SR 1945 (South Alston Avenue)	Construct bike lanes and sidewalks.	62.153	16.327	0
555	Division	Modernization		SR1734	Erwin Road	US 15/501	NC 751	US 15/501 to NC 751, bike lanes, sidewalks, and safety improvements (design may vary along length).	60.621	17.436	0
1018	Division	Modernization		086 SR2008	Carmichael Street	US 15/501	Northern Terminus of Roadway	Repave and with bicycle accommodations	59.25	15.5	0
1097	Division	Modernization		SR1113	Ephesus Church Road/Pope Road	SR 2220 (Old Durham-Chapel Hill Road)	Orange County Line	Construct bike lanes and sidewalks.	58.686	15.218	0
653	Division	Capacity		032 SR1118	Fayetteville Road	Renaissance Parkway	NC 751	Widen roadway to four lanes with a median and bicycle, pedestrian and transit facilities as appropriate.	58.106	15.588	0

Highway Projects

									highest state score in tier/ε		
SPOTID	STI Cat.	Improvement Type	TIP #	Route	Route Name	From / Cross Street	To	Description	MPO Score	State Score	TAC Approved Points
944	Division	Capacity			New Route - T.W. Alexander Drive Extension	West of Brier Creek Pkwy	Leesville Road	Extension of TW Alexander Drive (4 lanes new location)	57.337	8.0627	0
6	Division	Modernization		SR1762	Jeremiah Drive	SR 1721 (Lystra Road)	End of Road	Elevate road for flood control.	56.25	12.5	0
647	Division	Interchange/Intersection		SR1780	Estes Drive	SR 1772 (Greensboro Street)		SR 1780 (Estes Drive)/SR 1772 (Greensboro Street) construct roundabout.	55.115	17.81	0
637	Division	Capacity		032 SR1940	Glover Road	NC 147	SR 1926 (Angier Avenue)	Convert existing grade separation at NC 147 to an interchange and widen roadway to four lanes with a median and bicycle, pedestrian, and transit facilities as appropriate.	54.428	10.186	0
366	Division	Interchange/Intersection		SR1010	Franklin Street/East Main Street	Merritt Mill Road (SR 1771)/Brewer Lane		Franklin Street/Merritt Mill Road/Brewer Ln/E Main Street Intersection improvements.	52.907	14.638	0
666	Division	Capacity		SR1004	Old Oxford Highway	29000501 (Roxboro Road)	Hamlin Road	Old Oxford Highway (Roxboro Road to Hamlin Road) expand capacity, bike lanes, and sidewalks.	52.598	15.716	0
650	Division	Capacity	U-2831B		New Route - Briggs Avenue Extension	Riddle Road	SR 1951 (So-Hi Drive)	Riddle Road to SR 1951 (So-Hi Drive). Two Lanes on Multi-Lane Right of Way.	51.742	10.163	0
527	Division	Capacity		032 SR1146	S. Roxboro St.	SR 1158 (Cornwallis Rd)	Martin Luther King, Jr. Parkway	Widen existing roadway to multi-lanes and construct on new location multi-lane roadway with bicycle, pedestrian	51.217	18.02	0
950	Division	Capacity	U-2405		New Route - Martin Luther King, Jr. Parkway Extension	NC 55	Cornwallis Road	NC 55 to Cornwallis Road. Pedestrian, bicycle, and transit facilities.	50.605	16.338	0
534	Division	Capacity	U-4716D	SR1978	Hopson Street	SR 1999 (Davis Drive)	NC 54 (Miami Blvd)	Widen to multi-lanes.	48.757	10.373	0
947	Division	Interchange/Intersection		068 SR1771		1008 (Mount Carmel Church Road)	1913 (Bennett Road)	Construct roundabout and related safety improvements at the existing intersection of Mount Carmel Church Road and Bennett Road.	47.574	10.216	0
200		Modernization		NC086		US 70A	I-40	Add 4' Paved shoulders to accommodate bicycles.	72.016	30.489	100

Bicycle & Trail Projects

SPOT ID	Route Name	From	To	Description	Name and Short Description	Counties	Total Cost (Sum)	State Score	MPO Score	TAC Approved Rank
1493	Rocky Creek Greenway Trail Extension	Current trail terminus at NC 55	Kelly Bryant Bridge over NC 147 (Durham Freeway)	Rocky Creek Trail (NC 55 to Kelly Bryant Bridge) – Shared Use Path	Rocky Creek Greenway Trail Extension - (NC 55 to Kelly Bryant Bridge) – Shared Use Path	Durham	\$1,785,000	52	92.8	1
1501	1919 (Greensboro Street)	Weaver Street	Shelton Street	N. Greensboro St. corridor from Weaver St. to Shelton St. – bicycle lanes and pedestrian improvements (paint, median, bicycle signal detection, etc.)	1919 - N. Greensboro St. corridor from Weaver St. to Shelton St. – bicycle lanes and pedestrian improvements (paint, median, bicycle signal detection, etc.)	Orange	TBD - new cost estimate needed to reflect change in scope	52	68.9	2
1524	1008 (Mount Carmel Church Road)	US 15-501	1913 (Bennett Road)	SR 1008 (Mount Carmel Church Rd) (US 15-501 to Bennett Rd) sidewalks and bicycle lanes.	SR 1008 (Mount Carmel Church Rd) (US 15-501 to Bennett Rd) sidewalks and bicycle lanes.	Orange	\$375,000	60	65.0	3
1497	Campus to Campus Connector	Broad Street	1843 (Seawell School Road)	Campus to Campus Connector (Broad St. to Seawell School Rd.) – Construct a multi-use path between Broad St. and Village Dr. and between Village Dr. and Seawell School Rd.; install on-street bicycle facilities on Village Dr.	Campus to Campus Connector (Broad St. to Seawell School Rd.) – Construct a multi-use path between Broad St. and Village Dr. and between Village Dr. and Seawell School Rd.; install on-street bicycle facilities on Village Dr.	Orange	\$900,000	52	64.7	4
1530	Bolin Creek Greenway Trail Phase IV	Umstead Park	Carolina North	Bolin Creek Phase IV (Umstead Park to Carolina North, follow Umstead Dr to Estes Dr, then along Estes Dr to Carolina North) multi-use path.	Bolin Creek Greenway Trail Phase IV - (from Umstead Park to Carolina North, follow Umstead Dr to Estes Dr, then along Estes Dr to Carolina North) multi-use path.	Orange	\$3,100,000	52	61.4	5
2054	Morgan Creek Phase 3 in Chapel Hill	End of Phase 2	Carrboro Town Limits	Morgan Creek Phase II (from the end of Phase I to Carrboro Town line) multi-use path.	Morgan Creek Phase 3 in Chapel Hill - from the end of Phase I to Carrboro Town line - multi-use path.	Orange	\$3,700,000	35	61.7	6
1498	Horace Williams Greenway	1777 (Homestead Road) and Carolina North	Chapel Watch Village	Horace Williams Greenway: Chapel Watch Village to Homestead Road	Horace Williams Greenway - Chapel Watch Village to Homestead Road	Orange	\$3,000,000	56	60.8	7

Bicycle & Trail Projects

SPOT ID	Route Name	From	To	Description	Name and Short Description	Counties	Total Cost (Sum)	State Score	MPO Score	TAC Approved Rank
1500	Morgan Creek Greenway Trail - Carrboro Section	University Lake	Existing Trail	Morgan Creek Greenway in Carrboro - Construct a multi-use path from University Lake to the western terminus of the first phases of the greenway and a multi-use path spur to BPW Club Rd.	Morgan Creek Greenway in Carrboro - Construct a multi-use path from University Lake to the western terminus of the first phases of the greenway and a multi-use path spur to BPW Club Rd.	Orange	\$3,120,000	48	58.9	8
1494	Duke Beltline Rail-Trail	1127 (Chapel Hill Street)	Y east of NC 55 (Avondale Drive)	Duke Beltline Trail - Shared Use Path	Duke Beltline Rail-Trail - Shared Use Path	Durham	\$2,750,000	42	57.5	9
1522	NC 54 Sidepath	James Street	Anderson Park Entrance	NC 54 Sidepath (James St to Anderson Prk) multi-use path.	NC 54 Sidepath (James St to Anderson Prk) multi-use path.	Orange	\$700,000	58	56.7	10
1529	US 15-501 (Fordham Boulevard) Overpass / Underpass	1902 (Manning Drive)	Old Mason Farm Road	US 15-501 (Fordham Blvd) pedestrian and bicycle overpass/underpass across Fordham Blvd between SR 1902 (Manning Dr) and Old Mason Farm Rd.	US 15-501 (Fordham Blvd) pedestrian and bicycle overpass/underpass across Fordham Blvd between SR 1902 (Manning Dr) and Old Mason Farm Rd.	Orange	\$2,300,000	42	55.0	11
1531	Bolin Creek/Little Creek Greenway Trail	Estes Drive Extension at Chapel Hill Community Center	Pinehurst Drive	Bolin Creek/Little Creek Greenway (Chapel Hill Community Center to Pinehurst Dr) multi-use path.	Bolin Creek/Little Creek Greenway Trail (Chapel Hill Community Center to Pinehurst Dr) multi-use path.	Orange	\$3,200,000	52	54.7	12
1525	1727 (Eubanks Road)	1729 (Rogers Road)	NC 86 (Martin Luther King Boulevard)	SR 1727 (Eubanks Rd) (Rogers Rd to NC 86) bicycle lanes.	SR 1727 (Eubanks Rd) (Rogers Rd to NC 86) bicycle lanes.	Orange	\$824,000	54	51.7	13
1492	1103 (Scott King Road)	1118 (Fayetteville Road)	1100 (Grandale Road)	Scott King Road (Fayetteville Rd. to Grandale Rd.) - On-road bicycle facilities	1103 - Scott King Road (Fayetteville Rd. to Grandale Rd.) - On-road bicycle facilities	Durham	\$630,000	46	50.6	14
1495	NC 751	1307 (Erwin Road)	US 70 Business (Hillsborough Road)	NC 751 (Erwin Rd. roundabout to Hillsborough Rd./US 70) - On-road bicycle facilities	NC 751 - Erwin Rd. roundabout to Hillsborough Rd./US 70 - On-road bicycle facilities	Durham, Orange	\$860,000	48	49.7	15
1496	1401 (Cole Mill Road)	1404 (Rose of Sharon Road)	Orange County Line	Cole Mill Road (Rose of Sharon Rd. to Orange County line) - On-road bicycle facilities	1401 - Cole Mill Road (Rose of Sharon Rd. to Orange County line) - On-road bicycle facilities	Durham	\$725,000	46	43.1	16

Bicycle & Trail Projects

SPOT ID	Route Name	From	To	Description	Name and Short Description	Counties	Total Cost (Sum)	State Score	MPO Score	TAC Approved Rank
1919	SR 1006 (Orange Grove Road)	I-40	SR 1102 (Dodsons Cross Road)	Orange Grove Rd (SR1006), Orange County, Bicycle 4' Paved shoulders	SR 1006 (Orange Grove Road) - Orange County, Bicycle 4' Paved shoulders	Orange	\$40,920	50	37.5	17
1499	Dry Creek Trail Phase 1	Perry Creek Road	1734 (Erwin Road)	Dry Creek Trail: Phase 1 Perry Creek Road to Erwin Road	Dry Creek Trail Phase 1 - Perry Creek Road to Erwin Road	Orange	\$1,250,000	48	37.5	18
1885	Buckhorn Rd (SR 1114)	US 70	SR 1146 (Old Ten Road)	Buckhorn Rd Bike Lane Widening (SR 1114) 4' Paved Shoulders Tied to ORANGE-1 Regional STIP Request for overall widening	Buckhorn Rd (SR 1114) - Bike Lane Widening - (SR 1114) - 4' Paved Shoulders - Tied to ORANGE-1 Regional STIP Request for overall widening	Orange	\$470,085	35	35.8	19
1905	SR 1102 (Dodsons Cross Road)	SR 1177 (Dairyland Road)	SR 1006 (Orange Grove Road)	Dodson's Crossroads Road; add 4' paved shoulders.	SR 1102 (Dodsons Cross Road) - add 4' paved shoulders.	Orange	\$364,320	50	32.5	20

Pedestrian Projects

SPOT ID	Route Name	From	To	Description	Name and Short Description	Third Division	Counties	Total Cost (Sum)	State Score	MPO Score	TAC Approved Rank
1505	US 501 Bypass (Duke Street)	Murray Avenue	US 501 Business (Roxboro Road)	Duke Street (Murray Ave. to Roxboro Rd.) – Sidewalks	US 501 Bypass - Duke Street (Murray Ave. to Roxboro Rd.) – Sidewalks		Durham	\$1,150,000	57	85.6	1
1502	NC 54	NC 55	City Limits (Research Triangle Park)	NC 54 (NC 55 to RTP) – Sidewalks	NC 54 (NC 55 to RTP) – Sidewalks		Durham	\$380,000	57	83.9	2
1503	US 501 Business (Roxboro Road)	Murray Avenue	Pacific Avenue	Roxboro Road (Pacific Ave. to Murray Ave.) – Sidewalks	US 501 Business - Roxboro Road (Pacific Ave. to Murray Ave.) – Sidewalks		Durham	\$350,000	55	83.1	3
1514	1118 (Fayetteville Street)	1158 (Cornwallis Road)	NC 147 (Durham Freeway)	SR 1118 (Fayetteville St) (SR 1158 (W Cornwallis Rd) to NC 147) sidewalks and streetscape enhancements	SR 1118 (Fayetteville St) from SR 1158 (W Cornwallis Rd) to NC 147 sidewalks and streetscape enhancements		Durham	\$775,000	57	80.6	4
1520	NC 98 (Holloway Street)	1838 (Junction Road)	1919 (Chandler Road)	NC 98 (Holloway St) (SR 1838 (Junction Rd) to SR 1919 (Chandler Road)) sidewalk and wide outside lanes.	NC 98 (Holloway St) (SR 1838 (Junction Rd) to SR 1919 (Chandler Road)) sidewalk and wide outside lanes.		Durham	\$810,000	57	78.9	5
1506	1443 (Horton Road)	NC 157 (Guess Road)	US 501 (Roxboro Road)	Horton Road (Guess Rd. to Roxboro Rd.) – Sidewalks	1443 - Horton Road (Guess Rd. to Roxboro Rd.) – Sidewalks		Durham	\$525,000	57	77.2	6
1515	1127 (Chapel Hill Street)	1127 (Kent Street)	Buchanan Boulevard	W Chapel Hill Street (Kent St to Buchanan Blvd) sidewalks and streetscape enhancements	1127 - W Chapel Hill Street (Kent St to Buchanan Blvd) sidewalks and streetscape enhancements		Durham	\$80,000	52	75.6	7
1517	Main Street	Commerce Street	NC 55 (Alston Avenue)	E Main St (Hood St to NC 55 (Alston Ave)) sidewalks and streetscape enhancements	E Main St from Hood St to NC 55 (Alston Ave) sidewalks and streetscape enhancements		Durham	\$150,000	57	70.6	8
1504	Cook Road	1118 (Fayetteville Road), near Hillside High School	Martin Luther King Jr. Parkway	Cook Road (Fayetteville Rd. near Hillside High to Martin Luther King, Jr. Parkway) – Sidewalks	Cook Road (Fayetteville Rd. near Hillside High to Martin Luther King, Jr. Parkway) – Sidewalks		Durham	\$420,000	57	68.9	9
1523	US 15-501 (Fordham Boulevard)	1742 (Ephesus Church Road)	Elliott Road	US 15-501 (Fordham Boulevard) (SR 1742 (Ephesus Church Rd) to Elliott Rd) sidewalks.	US 15-501 (Fordham Boulevard) (SR 1742 (Ephesus Church Rd) to Elliott Rd) sidewalks.		Orange	\$175,000	60	68.3	10

Pedestrian Projects

SPOT ID	Route Name	From	To	Description	Name and Short Description	Third Division	Counties	Total Cost (Sum)	State Score	MPO Score	TAC Approved Rank
1507	1010 (Main Street)	1009 (Hillsborough Road)	1005 (Jones Ferry Road)	W. Main St. – Install improved pedestrian crossings and sidewalks from Hillsborough Rd. to Jones Ferry Rd.	1010 - W. Main St. – Install improved pedestrian crossings and sidewalks from Hillsborough Rd. to Jones Ferry Rd.		Orange	\$132,480	57	67.2	11
1527	1919 (Greensboro Street)	Old Pittsboro Road	1771 (Merritt Mill Road)	SR 1919 (S Greensboro St) (Old Pittsboro Rd to SR 1771 (Merritt Mill Rd)) sidewalk on the west side.	SR 1919 (S Greensboro St) from Old Pittsboro Rd to SR 1771 (Merritt Mill Rd) sidewalk on the west side.		Orange	\$635,000	52	62.2	12
1519	US 15-501 (Mangum Street)	Broadway Street	Miosha Street	US 15-501 Business (N Mangum St)-Corporation St intersection sidewalks and streetscape enhancements in Old Five Points area	US 15-501 Business (N Mangum St)-Corporation St intersection sidewalks and streetscape enhancements in Old Five Points area		Durham	\$80,000	52	60.6	13
1521	Main Street	Gary Street	Driver Street	E Main St (Gary St to S Driver St) sidewalks.	E Main St (Gary St to S Driver St) sidewalks.		Durham	\$275,000	52	55.6	14
1511	US 15-501	1532 (Mann's Chapel Road)	N/A	US 15-501 at Mann's Chapel Rd. - Add pedestrian refuge islands, signals, crosswalks	US 15-501 at Mann's Chapel Rd. - Add pedestrian refuge islands, signals, crosswalks		Chatham	\$300,000	43	54.2	15
1528	Cleland Drive / Burning Tree Drive	US 15-501	NC 54	Cleland Dr/Burning Tree Dr (Cleland Dr and Burning Tree Dr) sidewalks.	Cleland Drive / Burning Tree Drive - sidewalks.		Orange	\$440,000	48	50.6	16
1508	1782 (Estes Drive)	1772 (Greensboro Street)	Town Limits	Estes Dr. – Construct a sidewalk on the south side of the road from N. Greensboro St. to the Town limits.	1782 - Estes Dr. – Construct a sidewalk on the south side of the road from N. Greensboro St. to the Town limits.		Orange	\$550,000	42	49.7	17
1509	1009 (Old NC 86)	1777 (Homestead Road)	1727 (Eubanks Road)	Old NC 86 – Construct a sidewalk on the east side of the road from Homestead Rd. to Eubanks Rd.	1009 - Old NC 86 – Construct a sidewalk on the east side of the road from Homestead Rd. to Eubanks Rd.		Orange	\$520,670	42	36.4	18
1510	1006 (Orange Grove Road)	1221 (New Grady Brown School Road)	Timbers Drive	SR 1006, Orange Grove Road, at Interstate 40: Construct a pedestrian bridge over I-40. Include sidewalk from I-40 to Timbers Drive	SR 1006, Orange Grove Road, at Interstate 40: Construct a pedestrian bridge over I-40. Include sidewalk from I-40 to Timbers Drive		Orange	\$1,010,000	32	27.2	19

SPOT ID	*STI Cat.	Transit Partners and Providers	STIP#	DESCRIPTION	MPO Score	MPO Rank	State Score	TAC Approved Points
1394	Regional	TRIANGLE TRANSIT	TA-4818	Replacement Bus	40.50	4	3.1	28
1415	Regional	TRIANGLE TRANSIT	TA-5107	Replacement Van - vanpool	37.50	5	7.9	28
1385	Regional	TRIANGLE TRANSIT	TE-4903A	Fixed Guideway - Raleigh-Rtp-Durham Design Phase 1	30.67	8	5.2	22
1384	Regional	TRIANGLE TRANSIT	TE-4903B	Fixed Guideway - Chapel Hill-Durham Design Phase 1	30.06	9	5.2	44
1344	Regional	TRIANGLE TRANSIT	TA-5123	Expansion Bus	29.49	10	19.6	22
1372	Regional	TRIANGLE TRANSIT	TD-4941	Facility - Park & Ride Regional Expansion	22.57	12	4.3	15
1370	Regional	PIEDMONT AUTHORITY FOR REGIONAL TRANSPORTATION	TD-5268	Facility - Park & Ride in Buckhorn Economic Development District in Orange County	18.93	14	11.2	0
1418	Regional	TRIANGLE TRANSIT	TT-5213	Technology - Regional Fare System Upgrade	18.75	15	12.7	15
1354	Regional	TRIANGLE TRANSIT	TD-4944	Facility - I-40 Bus Bypass Shoulder Project.	13.01	17	7.3	15
1410	Division	CHAPEL HILL TRANSIT	TA-4748	Replacement Van - Paratransit	62.18	1	27.0	56
1411	Division	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-5019A	Replacement Van - Paratransit	45.79	2	5.0	56
1400	Division	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-4923	Replacement Bus - fixed route	41.70	3	26.7	56
1391	Division	CHAPEL HILL TRANSIT	TA-4726A	Replacement Bus	35.66	6	19.6	56
1342	Division	DURHAM AREA TRANSIT AUTHORITY / DATA	TA-4755	Expansion Bus	33.41	7	35.4	44
1373	Division	DURHAM AREA TRANSIT AUTHORITY / DATA	TD-5267	Facility - Park & Ride, 2 Lots	24.85	11	12.3	31
1368	Division	CHAPEL HILL TRANSIT	TD-4710	Facility - Park & Ride	22.35	13	17.8	31
1383	Division	CHAPEL HILL TRANSIT	TE-5203	Fixed Guideway - Bus Rapid Transit Operational Improvements (plan 2013, con 2014)U-5119	14.84	16	14.3	31

\* Regional = Serving two or more counties and municipalities

## DCHC MPO Project Prioritization

### Schedule

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#### Transit

October 15, 2013	Local governments and systems submit projects to MPO
October 23, 2013	TCC makes recommendation
November 13, 2013	TAC submits projects to NCDOT

Notes: Projects due at NCDOT by November 15, 2013

MPO can submit unlimited number of projects; projects in current SPOT inventory are deleted.

#### Bicycle and Pedestrian

September 20, 2013	Local staff submit projects to MPO
September 25, 2013	TCC makes recommendation for release to public
October 9, 2013	TAC releases project list for local input
December 1, 2013	Local governments provide input to MPO
December 18, 2013	TCC makes recommendation
January 8, 2013	TAC submits 20 projects to NCDOT

Notes: Projects due at NCDOT by end of January 2014

MPO can submit 20 projects; projects in current SPOT inventory are deleted.

#### Highway

December 1, 2013	Local governments provide input to MPO
December 18, 2013	TCC makes recommendation
January 8, 2013	TAC submits 14/19 projects to NCDOT

Notes: Projects due at NCDOT by end of January 2014

MPO can submit 14 projects (plus up to 5 projects if pull out same number from existing pool)

Projects in current SPOT inventory will remain in new SPOT prioritization.

## Strategic Mobility Fund (SMF)

### Estimated Budget

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	Funding Category:		
	Statewide	Regional	Division
State 5-year	\$3.4 Billion (40%)	\$2.5 Billion (30%)	\$2.5 Billion (30%)
Region/Division 5-year	--	\$552 million (Div. 5+6) \$433 million (Div. 7+9) \$507 million (Div. 8+10)	\$182 million (each Div.)
Region/Division annual	--	\$110 million (Div. 5+6) \$87 million (Div. 7+9) \$101 million (Div. 8+10)	\$36 million (each Div.)*

\*DCHC MPO and CAMPO's STP-DA and TAP funding will be deducted from Division funding category.

**Workgroup Representation (2012-2013):**

Name	Organization	Voting Member	Non-Voting Member
Paul Black	French Broad River MPO	X	
Tyler Meyer	Greensboro Urban Area MPO	X	
Mike Kozlosky	Wilmington Urban Area MPO	X	
Matt Day	Triangle Area RPO	X	
Patrick Flanagan	Eastern Carolina RPO	X	
Bjorn Hansen	*Lake Norman RPO	X	
Stephanie Ayers	NC Ports Authority	X	
Charlie Diehl	NC Global Transpark	X	
Betty Huskins	NC Regional Councils of Government	X	
Johanna Reese	NC Association of County Commissioners	X	
Chris Nida	NC League of Municipalities	X	
Julie White	NC Metro Mayors Coalition	X	
Wally Bowman	NCDOT Division 5	X	
Mike Holder	NCDOT Division 12	X	
Neil Lassiter	NCDOT Division 2	X	
Bobby Walston	NCDOT Aviation Division	X	
John Vine-Hodge	NCDOT Bicycle and Pedestrian Division	X	
Tanya Neeland	NCDOT Ferry Division	X	
Cheryl Leonard	NCDOT Public Transportation	X	
Shirley Williams	NCDOT Rail Division	X	
Van Argabright	NCDOT Program Development Branch	X	
Elena Talenkar	NCDOT Transportation Planning Branch	X	
Mary Scro	NCDOT IT P3.0 Project Manager (advisory role)		X
Uwanna Dabney	Federal Highway Administration (advisory role)		X
Alpesh Patel	NCDOT Strategic Prioritization Office	X	
Don Voelker	NCDOT Strategic Prioritization Office	X	
David Wasserman	NCDOT Strategic Prioritization Office	X	
Kristin Bunn	NC Department of Commerce (advisory role)		X
Hugh Johnson	Governor's Office		X
John Nicholson	Governor's Office (Military Affairs Advisor)		X
Amna Cameron	NC General Assembly – Fiscal Research Division (advisory role)		X
Bryce Ball	NC General Assembly – Fiscal Research Division (advisory role)		X
Beau Memory	NC General Assembly – Staff to Senate President Pro Tempore's Office (advisory role)		X
Mary Jennings	NC General Assembly – Staff to Speaker of the House's Office (advisory role)		X

*\*Note: In July 2013 Lake Norman RPO became part of a newly expanded Gaston-Cleveland-Lincoln County MPO as a result of boundary changes from the 2010 Census.*



# Strategic Transportation Investments

August 7, 2013



## **Strategic Transportation Investment (STI)**

**House Bill 817 signed into Law June 26, 2013**

**Overwhelming support in both House and Senate**

**Most significant NC transportation legislation since 1989 Highway Trust Fund**

**Prioritization 3.0 Workgroup charged with providing recommendations to NCDOT on weights and criteria**



## Prioritization 3.0 Work Group

Work Group members provide input & act as liaisons to respective organizations

### Representation:

- Local Partners - MPOs, RPOs
- Advocacy Groups – Metro Mayors Coalition, Assoc. of County Commissioners, NC League of Municipalities, NC Regional Councils of Gov't
- Internal NCDOT Staff – Transportation Planning Branch, Program Development, 5 Non-Hwy Modes, Ports Authority, 3 Division Engineers.
- FHWA (advisory)
- Legislative Research staff (advisory)



## How the STI Works

**40% of Funds = \$6B**

**30% of Funds = \$4.5B**

**30% of Funds = \$4.5B**

Estimated \$15B in Funds for SFY 2016-2025

### Statewide Mobility

**Focus → Address Significant Congestion and Bottlenecks**

Eligible Projects

- Statewide type Projects (such as Interstates)
- Selection based on 100% Data
- Projects Programmed prior to Local Input Ranking

### Regional Impact

**Focus → Improve Connectivity within Regions**

Eligible Projects

- Projects Not Selected in Statewide Mobility Category
- Regional Projects
- Selection based on 70% Data & 30% Local Input
- Funding based on population within Region

### Division Needs

**Focus → Address Local Needs**

Eligible Projects

- Projects Not Selected in Statewide or Regional Categories
- Division Projects
- Selection based on 50% Data & 50% Local Input
- Funding based on equal share for each Division = ~\$34M per yr





## STI Legislation

**Combines traditional Equity-eligible funds, Urban Loop funds, Mobility Funds, Powell Bill, and Secondary Roads paving**

**Funds obligated for projects scheduled for construction by July 1, 2015 are not subject to formula**

**Bicycle-Pedestrian projects authorized for construction as of Oct. 1, 2013 are not included in limitation on State funding**

**All capital expenditures, regardless of mode, will be funded from Highway Trust Fund. All modes must compete for the same funds**

**Local Input will be part of the scoring criteria for all Regional Impact and Division Needs projects**



## STI Legislation

**Projects (regardless of mode) will be scored on a 0-100 point scale**

**Incentive For Local funding (highway projects only)**

- 50% of local commitment of non-State/Federal funds will be returned to local area for other high scoring projects in that area

**Operations and Maintenance expenditures will be funded from Highway Fund**

**Project Cap – No more than 10% of Statewide Mobility funds over 5 years (~\$300M) may be assigned to a single project or contiguous projects in the same corridor in a single Division or adjoining Divisions**

**No more than 10% of Regional Impact funds shall be expenditure on Public Transportation projects**



## STI Legislation

**Projects funded from these categories will be excluded and will be evaluated through separate prioritization processes**

- Congestion Mitigation and Air Quality (CMAQ)
- Competitive/Discretionary grants
- Appalachian Development Highway System projects

**Funds included in the applicable category (Statewide, Regional, Division) but not subject to prioritization criteria:**

- Bridge Replacement
- Interstate Maintenance
- Highway Safety Improvements

**Funds included in the computation of Division equal share but will be evaluated through separate prioritization processes:**

- STP-DA (if funds used on Regional category eligible project, funds come from Regional)
- Transportation Alternatives
- Rail-highway crossing program



## Eligibility Definitions - Highways

	Statewide	Regional	Division
<b>Highway</b>	<ul style="list-style-type: none"> <li>• Interstates and Future Interstates</li> <li>• Routes on the NHS as of July 1, 2012</li> <li>• Routes on Department of Defense Strategic Highway Network (STRAHNET)</li> <li>• Appalachian Development Highway System Routes</li> <li>• Uncompleted Intrastate projects</li> <li>• Designated Toll Facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Other US and NC Routes</li> </ul>	<ul style="list-style-type: none"> <li>• All SR Routes</li> </ul>



## Eligibility Definitions – Non Highways

	Statewide	Regional	Division
<b>Aviation</b>	Large Commercial Service Airports. Funding not to exceed \$500K per airport project per year	Other Commercial Service Airports not in Statewide. Funding not to exceed \$300K per airport project per year	All Airports without Commercial Service. Funding not to exceed \$18.5M for airports within this category
<b>Bicycle-Pedestrian</b>	N/A	N/A	All routes
<b>Public Transportation</b>	N/A	Service spanning two or more counties and serving more than one municipality. Funding amounts not to exceed 10% of regional allocation.	Service not included on Regional. Multimodal terminals and stations serving passenger transit systems
<b>Ferry</b>	N/A	State maintained routes, excluding replacement vessels	Replacement of vessels
<b>Rail</b>	Freight Capacity Service on Class I Railroad Corridors	Rail service spanning two or more counties not included on Statewide	Rail service not included on Statewide or Regional



## Highway Project Scoring Overview

	Statewide Mobility	Regional Impact	Division Needs
<b>Eligible Projects:</b>	<ul style="list-style-type: none"> <li>Statewide</li> </ul>	<ul style="list-style-type: none"> <li>Statewide</li> <li>Regional</li> </ul>	<ul style="list-style-type: none"> <li>Statewide</li> <li>Regional</li> <li>Division</li> </ul>
<b>Overall Weights:</b>	100% Quantitative Data	70% Quantitative Data / 30% Local Input	50% Quantitative Data / 50% Local Input
<b>Quant. Criteria</b>	<ul style="list-style-type: none"> <li>Benefit-Cost</li> <li>Congestion</li> <li>Economic Comp.</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> </ul>	<ul style="list-style-type: none"> <li>Benefit-cost</li> <li>Congestion</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> <li>Accessibility and connectivity to employment centers, tourist destinations, or military installations</li> </ul>	<ul style="list-style-type: none"> <li>Benefit-cost</li> <li>Congestion.</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> <li>Accessibility and connectivity to employment centers, tourist destinations, or military installations</li> </ul>
<b>Notes:</b>	Projects Selected Prior to Local Input	Quant. Criteria can be different for each Region	Quant. Criteria can be different for each Division



## Highway Scoring Criteria and Weights

Funding Category	<u>QUANTITATIVE</u>	<u>LOCAL INPUT</u>	
	Data	Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% Economic Competitiveness = 10% Safety = 10% <u>Multimodal [&amp; Freight + Military] = 20%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% <u>Safety = 10%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Benefit/Cost = 20% Congestion = 20% <u>Safety = 10%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>



## Highway Scoring Criteria and Weights – Div 1 & 4

Funding Category	<u>QUANTITATIVE</u>	<u>LOCAL INPUT</u>	
	Data	Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% Economic Competitiveness = 10% Safety = 10% <u>Multimodal [&amp; Freight + Military] = 20%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	[Travel Time] Benefit/Cost = 20% Congestion = 15% Safety = 15% Lane Width = 10% <u>Shoulder Width = 10%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	[Travel Time] Benefit/Cost = 10% Congestion = 10% Safety = 10% Lane Width = 10% <u>Shoulder Width = 10%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>



## Highway Scoring Criteria and Weights – Div 2 & 3

Funding Category	<u>QUANTITATIVE</u>	<u>LOCAL INPUT</u>	
	Data	Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% Economic Competitiveness = 10% Safety = 10% <u>Multimodal (&amp; Freight + Military) = 20%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	[Travel Time] Benefit/Cost = 20% Safety = 25% <u>Multimodal (&amp; Freight + Military) = 25%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	Congestion = 20% Safety = 20% <u>Multimodal (&amp; Freight + Military) = 10%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>



## STI – Non-Highway Criteria

### Strategic Statewide, Regional Impact and Division Needs Category's

#### Separate prioritization processes for each mode

- Must have minimum of 4 quantitative criteria (no menu of criteria like highways)
- Local input is from Division's, MPO's and RPO's
- Criteria based on 100 point scale with no bonus points and not favoring any particular mode of transportation



## Normalization – Workgroup Discussion

**Definition – Methodology for comparing quantitative scores across all modes together**



### Challenges:

- Different criteria and weights used for evaluating projects in each mode
- No easy solution → conducted review of methodologies across country
- No other state has successfully implemented such a comparison
- Evaluated several potential options including:
  - Qualitative value judgment
  - Weighted benefit/cost
  - Statistical analysis



## Normalization Approach

### For Prioritization 3.0 Only (Initial Implementation of STI)

- Statewide Mobility (only) – No normalization, scores are stand-alone for comparison (highway, aviation, freight rail)
- Regional Impact & Division Needs – Allocate funds to Highway and Non-Highway modes based on minimum floor or %s

Mode	Workgroup Recommendation	Historical Budgeted	Historical Expenditures
Highway	90% (min.)	93%	96%
Non-Highway	4% (min.)	7%	4%

- Continue research with national experts
- Conduct a statistical analysis of scores by an outside agency after all quantitative scores are completed in 2014. Request a recommendation on how to normalize.
- Incorporate research and analysis findings into Prioritization 4.0



## Local Input Points

**Use in Regional Impact and Division Needs categories only**

**# of Points = 1000 points + additional points based on population**

**Separate Allocation of Points for Regional Impact Category and Division Needs Category**

- Point allocation is the same for each

**100 point cap for any one project; points can also be donated across Regions/Divisions**

**MPOs/RPOs need to have a NCDOT approved process for assigning local input points based on combination of quantitative and qualitative data (per S.L. 2012-84)**

- Needs to be finalized by May 1, 2014



## **New Project Submittals (Maximum #)**

**Highway = minimum of 10; areas receives additional submittal for every 100,000 in population, up to a maximum up 20 new submittals.**

- Option to swap up to 5 existing projects in the Prioritization system for 5 new highway projects (in addition to the maximum of new projects)

**Bicycle & Pedestrian = 20 (all existing projects in system removed)**

- Combined total of both bicycle and pedestrian projects

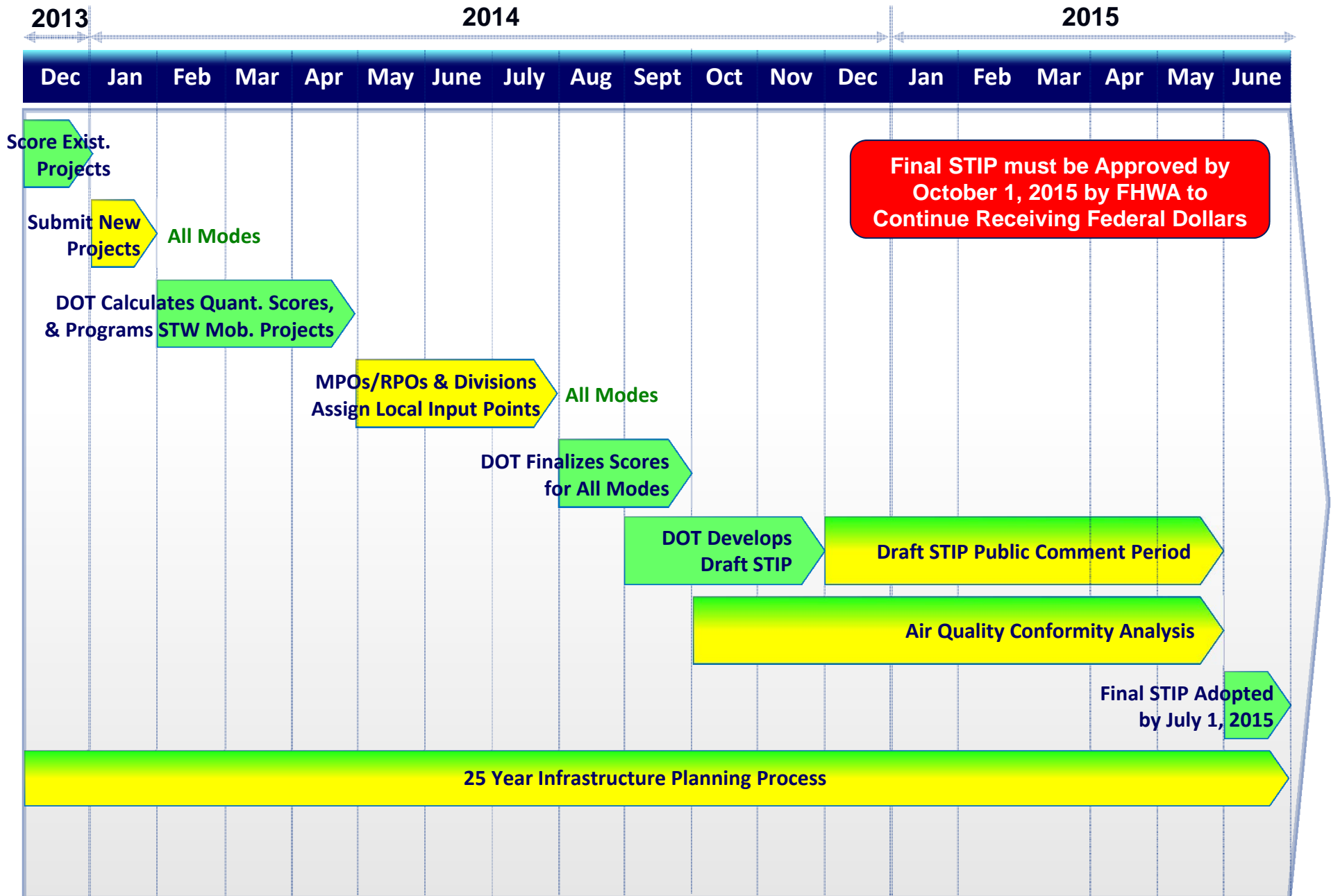
**Aviation = No limit**

**Ferry = 10**

**Public Trans. = No limit (all existing projects in system removed)**

**Rail = 5**

# Prioritization 3.0 Schedule





## Key Dates

**August 7<sup>th</sup> – BOT approves recommendations to submit to JLTOC**

**By August 15<sup>th</sup> – DOT presents recommendations to JLTOC (30 day review period)**

**October 1 – If JLTOC wishes for additional changes, DOT provides requested changes**

## MEMORANDUM

**To:** Transportation Advisory Committee (TAC)  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** September 11, 2013

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

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This memorandum provides a summary status of tasks for projects in the FY 2013-2014 Unified Planning Work Program.

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

### **FY 2013-2014 Unified Planning Work Program (UPWP) – Projects**

#### **Comprehensive Transportation Plan (CTP)**

- ✓ Draft CTP –December 2012
- CTP Report and Maps – December 2013
- MPO Adopt CTP – June 2014
- NCDOT BOT – December 2014

#### **MPO Community Viz. Scenarios Planning and Visualization -2.0**

- ✓ Funding for local Community Viz 2.0 preparatory work – July 2013
- Work Plan for Community Viz 2.0 – 2014
- Community Viz 2.0 completed – 2015

#### **Update of the MPO Public Involvement Policy**

- Update of the MPO Public Involvement to reflect Map 21

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

- Update of Title VI/ LEP/EJ plans

#### **SE Data Update – Employment /Housing/Population Verification**

- 2013 Base Year Population and Employment – January 2014
- SE Data Forecasts – 2014

#### **Base Year Data Collection (Traffic/Travel Time/Crash/Transit)**

#### **GIS Online/Data Management**

#### **MPO Congestion Management Process CMP**

**MPO Website Update**

**Triangle Regional Model Update**

**Map-21 Performance Measurement**

<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> C202436	<b>Route:</b> US-70, SR-1322
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> B-3638, R-5164F
<b>Length:</b> 1.233 miles	<b>Federal Aid Number:</b> BRSTP-70B(2)
<b>Resident Engineer:</b> Mark W. Luther, PE	<b>RE Phone Number:</b> (919)220-4680
<b>Location Description:</b> BRIDGE OVER CAMPUS DR AND APPROACHES ON US-70 BUS AND US-70 BUS (MAIN ST) FROM NINTH ST TO BUCHANAN ST.	
<b>Type of Work:</b> GRADING, DRAINAGE, PAVING, SIGNALS AND STRUCTURE.	
<b>Contractor Name:</b> DEVERE CONSTRUCTION COMPANY, INC	
<b>Contract Amount:</b> \$1,969,734.20	<b>Cost Overrun/Underrun:</b> 5.31%
<b>Availability Date:</b> 7/30/2012	<b>Letting Date:</b> 6/19/2012
<b>Completion Date:</b> 3/18/2014	<b>Work Began:</b> 9/17/2012
<b>Revised Completion Date:</b>	<b>Estimated Completion:</b> 3/18/2014
<b>Last Estimate Thru:</b> 7/31/2013	<b>Scheduled Progress:</b> 64%
<b>Last Estimate Paid:</b> 8/6/2013	<b>Actual Progress:</b> 67.61%

<b>Contract Number:</b> C202507	<b>Route:</b> I-540
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 15	<b>TIP Number:</b> R-2635, U-4763B
<b>Length:</b> 18.8 miles	<b>Federal Aid Number:</b> TIFIA-540(2)
<b>Resident Engineer:</b> George C. Gibson, PE	<b>RE Phone Number:</b> (919)836-4873
<b>Location Description:</b> NC-540 FROM NC-55 NEAR APEX TO NC-54 NEAR RTP AND NC-147 FROM I-40 TO NC-540.	
<b>Type of Work:</b> DESIGN-BUILD LANDSCAPING.	
<b>Contractor Name:</b> SOUTHERN GARDEN, INC.	
<b>Contract Amount:</b> \$4,800,000.00	<b>Cost Overrun/Underrun:</b>
<b>Availability Date:</b> 8/15/2011	<b>Letting Date:</b> 4/21/2011
<b>Completion Date:</b> 7/1/2015	<b>Work Began:</b> 8/15/2011
<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> C202875	<b>Route:</b> I-540
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b> I-5307, I-5310
<b>Length:</b> 17.133 miles	<b>Federal Aid Number:</b> IM-0540(23)
<b>Resident Engineer:</b> Michelle H. Gaddy	<b>RE Phone Number:</b> (919)840-0914
<b>Location Description:</b> I-540 FROM I-40 OVERPASS TO TRIANGLE TOWN BLVD, AND TRIANGLE TOWN BLVD FROM I-540 TO NEW ASPHALT PAVEMENT JOINT.	
<b>Type of Work:</b> MILLING, RESURFACING, SHOULDER RECONST, AND STR REHAB.	
<b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY	
<b>Contract Amount:</b> \$8,384,157.45	<b>Cost Overrun/Underrun:</b> -3.82%
<b>Availability Date:</b> 2/27/2012	<b>Letting Date:</b> 1/17/2012
<b>Completion Date:</b> 11/15/2012	<b>Work Began:</b> 2/27/2012
<b>Revised Completion Date:</b> 4/4/2013	<b>Estimated Completion:</b> 6/30/2013
<b>Last Estimate Thru:</b> 6/22/2013	<b>Scheduled Progress:</b> 100%
<b>Last Estimate Paid:</b> 6/27/2013	<b>Actual Progress:</b> 98.14%

<b>Contract Number:</b> C202995	<b>Route:</b> NC-56, NC-96, US-15 US-158, SR-1103, SR-1127 SR-1135, SR-1192, SR-1671 SR-1675
<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b>

**Length:** 0 miles  
**Federal Aid Number:**  
**Resident Engineer:** Mark W. Luther, PE  
**RE Phone Number:** (919)220-4680  
**Location Description:** BRG# 195 SR-1675, 16 US-15, 35 US-158, 43 SR-1103, 44 NC-96, 45 NC-56, 50 SR-1127, 54 SR-1135, 57 SR-1192 & 193 SR-1671.  
**Type of Work:** BRIDGE PRESERVATION  
**Contractor Name:** NHM CONSTRUCTORS, LLC  
**Contract Amount:** \$3,034,500.45  
**Cost Overrun/Underrun:** 3.47%  
**Availability Date:** 10/1/2012  
**Letting Date:** 4/17/2012  
**Completion Date:** 7/21/2013  
**Work Began:** 10/1/2012  
**Revised Completion Date:**  
**Estimated Completion:** 9/21/2013  
**Last Estimate Thru:** 8/15/2013  
**Scheduled Progress:** 98%  
**Last Estimate Paid:** 8/21/2013  
**Actual Progress:** 96.62%

**Contract Number:** C203128  
**Route:** SR-1978  
**Physical Division:** 5  
**County:** Durham  
**Administrative Division:** 5  
**TIP Number:** U-4716, U-4716A, U-4716B, U-4716C  
**Length:** 4.203 miles  
**Federal Aid Number:** FRA-FR-HSR-0006-10-01-00  
**Resident Engineer:** Michelle H. Gaddy  
**RE Phone Number:** (919)840-0914  
**Location Description:** CLEGG PASSING SIDING & HOPSON RD GRADE SEPARATION AND CLOSING OF AT-GRADE RR CROSSINGS.  
**Type of Work:** GRADING, DRAINAGE, PAVING, STRUCTURE & TRACKBED.  
**Contractor Name:** FSC II LLC DBA FRED SMITH COMPANY  
**Contract Amount:** \$10,900,447.15  
**Cost Overrun/Underrun:** 3.06%  
**Availability Date:** 12/31/2012  
**Letting Date:** 11/20/2012  
**Completion Date:** 12/28/2015  
**Work Began:** 1/30/2013  
**Revised Completion Date:**  
**Estimated Completion:** 12/28/2015  
**Last Estimate Thru:** 8/7/2013  
**Scheduled Progress:** 47.5%  
**Last Estimate Paid:** 8/15/2013  
**Actual Progress:** 30.1%

**Contract Number:** C203188  
**Route:** US-158, SR-1318, SR-1333, SR-1336, SR-1504, SR-1542, SR-1556, SR-1605, SR-1729, SR-1737  
**Physical Division:** 5  
**County:** Durham  
**Administrative Division:** 5  
**TIP Number:**  
**Length:** 30.21 miles  
**Federal Aid Number:**  
**Resident Engineer:** Mark W. Luther, PE  
**RE Phone Number:** (919)220-4680  
**Location Description:** US-158 FROM OLD DURHAM RD TO SR-1576, AND 10 SECTIONS OF SECONDARY ROADS.  
**Type of Work:** MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION.  
**Contractor Name:** CAROLINA SUNROCK LLC  
**Contract Amount:** \$3,899,875.03  
**Cost Overrun/Underrun:** 7.91%  
**Availability Date:** 3/11/2013  
**Letting Date:** 11/20/2012  
**Completion Date:** 8/12/2013  
**Work Began:** 3/18/2013  
**Revised Completion Date:**  
**Estimated Completion:** 8/12/2013  
**Last Estimate Thru:** 7/31/2013  
**Scheduled Progress:** 96%  
**Last Estimate Paid:** 8/6/2013  
**Actual Progress:** 99.03%

**Contract Number:** C203220  
**Route:** NC-54, US-70, SR-1002, SR-1101, SR-1445, SR-1451, SR-1453, SR-1628, SR-1670, SR-1940, SR-1954, SR-2028  
**Physical Division:** 5  
**County:** Durham  
**Administrative Division:** 5  
**TIP Number:**  
**Length:** 21.88 miles  
**Federal Aid Number:**  
**Resident Engineer:** Michelle H. Gaddy  
**RE Phone Number:** (919)840-0914  
**Location Description:** US-70 FROM SR-1815 TO SR-1959, NC-54 FROM I-40 TO ORANGE COUNTY LINE AND 11 SECTIONS OF SECONDARY ROADS.  
**Type of Work:** MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION.  
**Contractor Name:** CAROLINA SUNROCK LLC  
**Contract Amount:** \$4,789,367.50  
**Cost Overrun/Underrun:** 0.02%  
**Availability Date:** 3/18/2013  
**Letting Date:** 12/18/2012  
**Completion Date:** 10/18/2013  
**Work Began:** 7/12/2013  
**Revised Completion Date:**  
**Estimated Completion:** 10/18/2013  
**Last Estimate Thru:** 7/31/2013  
**Scheduled Progress:** 17%  
**Last Estimate Paid:** 8/6/2013  
**Actual Progress:** 18.53%

**Contract Number:** C203273  
**Route:**

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<b>Physical Division:</b> 5	<b>County:</b> Durham
<b>Administrative Division:</b> 5	<b>TIP Number:</b>
<b>Length:</b> 1.189 miles	<b>Federal Aid Number:</b>
<b>Resident Engineer:</b> E. Boyd Tharrington, PE	<b>RE Phone Number:</b> (919)562-7000
<b>Location Description:</b> REPLACEMENT OF 4 BRIDGES IN DURHAM CO, 3 BRIDGES IN GRANVILLE CO AND 1 BRIDGE IN VANCE CO.	
<b>Type of Work:</b> DESIGN BUILD.	
<b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY	
<b>Contract Amount:</b> \$8,800,000.00	<b>Cost Overrun/Underrun:</b> 0%
<b>Availability Date:</b> 4/29/2013	<b>Letting Date:</b> 3/19/2013
<b>Completion Date:</b> 9/30/2016	<b>Work Began:</b> 4/29/2013
<b>Revised Completion Date:</b>	<b>Estimated Completion:</b> 9/30/2013
<b>Last Estimate Thru:</b> 7/31/2013	<b>Scheduled Progress:</b> 2.95%
<b>Last Estimate Paid:</b> 8/14/2013	<b>Actual Progress:</b> 2.95%

<u>Let (B)</u>	<u>TIP Sub No.</u>	<u>Div</u>	<u>County</u>	<u>Let Type</u>	<u>Description</u>
09/13	U-4726HL	5	DURHAM	NON - DOT LET (Local)	DURHAM - SIDEWALK ON BARBEE STREET BETWEEN THE EXISTING SIDEWALK AT PEARSONTOWN ELEMENTARY SCHOOL AND ORINDO DRIVE; ANDSIDEWALK IN FORMER FAYETTEVILLE STREET RIGHT OF WAY TO CONNECT THE DURHAM AREA TRANSIT AUTHORITY (DATA) ADMINISTRATIVEOFFICES WITH GEER STREET
04/14	U-0071	5	DURHAM	Raleigh Letting (LET)	DURHAM - EAST END CONNECTOR FROM NC 147 (BUCK DEAN FREEWAY)TO NORTH OF NC 98
06/14	W-5205N	5	DURHAM	Division POC Let (DPOC)	US 15/501 (UNIVERSITY DRIVE) AT SUMMIT STREET/FORESTWOOD DRIVE
09/14	C-4928	5	DURHAM	NON - DOT LET (Congestion Mitigation)	DURHAM - MORREENE ROAD FROM NEAL ROAD TO ERWIN ROAD
09/14	C-5178	5	DURHAM	NON - DOT LET (Congestion Mitigation)	DURHAM - CAMPUS WALK AVENUE, MORREENE ROAD TO LASALLE STREET AND LASALLE STREET, KANGAROO DRIVE TO ERWIN ROAD CONSTRUCTSIDEWALKS
09/14	EB-4707A	5	DURHAM	Division Design Raleigh Let (DDRL)	DURHAM/CHAPEL HILL FROM US 15/501 IN ORANGE COUNTY TO SR 1113 (POPE ROAD) IN DURHAM COUNTY BICYCLE, PEDESTRIAN AND TRANSIT IMPROVEMENTS
09/14	EB-4707B	5	DURHAM	Division Design Raleigh Let (DDRL)	DURHAM/CHAPEL HILL - SR 2220 (OLD DURHAM CHAPEL HILL ROAD) FROM SR 1113 (POPE ROAD) TO SR 1116 (GARRETT ROAD)
09/14	U-4724	5	DURHAM	NON - DOT LET (Bicycle and Pedestrian)	DURHAM - CORNWALLIS RD FROM SOUTH ROXBORO RD TO UNIVERSITY DR
01/15	EB-5514	5	DURHAM	NON - DOT LET (Bicycle and Pedestrian)	NC 751 /SR 1183-2220/ NON-SYSTEM (UNIVERSITY DRIVE) FROM SR1116 (GARRETT ROAD) TO SR 1158 (CORNWALLIS ROAD)
04/15	U-3308	5	DURHAM	Raleigh Letting (LET)	DURHAM - NC 55 (ALSTON AVENUE) FROM NC 147 (I. L. "BUCK" DEAN FREEWAY) TO US 70 BUSINESS - NC 98 (HOLLOWAY STREET)
06/15	U-5517	5	DURHAM	Raleigh Letting (LET)	NC 54 FROM SR 1110 (FARRINGTON ROAD) TO I-40 EASTBOUND ENTRANCE RAMP IN DURHAM
09/15	C-5182	5	DURHAM	NON - DOT LET (Congestion Mitigation)	DURHAM - HOPE VALLEY ROAD CONSTRUCT SIDEWALKS AND BIKE LANES BETWEEN MARTIN LUTHER KING, JR. BOULEVARD PARKWAY AND US 15-501 BUSINESS
09/15	C-5183A	5	DURHAM	NON - DOT LET (Congestion Mitigation)	DURHAM - CONSTRUCT SIDEWALKS
09/15	C-5183B	5	DURHAM	NON - DOT LET (Congestion Mitigation)	DURHAM - CONSTRUCT SIDEWALKS
11/15	U-5516	5	DURHAM	Raleigh Letting (LET)	FROM US 501 (ROXBORO ROAD) TO SR 1448 (LATTA ROAD) / SR 1639 (INFINITY ROAD) IN DURHAM
08/16	I-5331	5	DURHAM	Division POC Let (DPOC)	INTERSTATE PREVENTATIVE MAINTENANCE (IPPM) I-85 FROM NORTH OF MP 183 TO THE GRANVILLE COUNTY LINE
03/17	I-5334	5	DURHAM	Division Design Raleigh Let (DDRL)	I-85 FROM SOUTH OF US 15-501 TO NORTH OF US 70
06/17	B-4943	5	DURHAM	Raleigh Letting (LET)	RELPACE BRIDGE 20 OVER DIAL CREEK ON SR 1616
05/14	Small Constr.	5	DURHAM	Division POC Let (DPOC)	Barbee Rd at Herndon Rd - RBT
10/14	SS-4905BI	5	DURHAM	Division POC Let (DPOC)	SR 1004 (Old Oxford Road) at SR 1648 (Danube Lane)
11/14	SS-4905BM	5	DURHAM	Division POC Let (DPOC)	Carver St. (SR 1407) at Broad St./Kenan Rd. - Mini-Roundabout
07/14	EB-4411D	5	DURHAM	Division POC Let (DPOC)	Paved Shoulders on Barbee Chapel Rd, Farrington Rd, & Stagecoach Rd w/ left-turn lane at Farrington Mill Rd.
	SS 4906BP 43696.1.1 43696.3.1	5	DURHAM	Division annual needs contract	Upgrade SR 1327 (Gregson St) at Club Blvd replace existing ped heads, add flashing yellow arrows, remove concrete island in NW quadrant, cut back islands on north and west legs

<u>Let (B)</u>	<u>TIP Sub No.</u>	<u>Div</u>	<u>County</u>	<u>Let Type</u>	<u>Description</u>
	SS 4905BR 43781.1.1 43781.3.1	5	DURHAM	Division annual needs contract	Upgrade NC 55 (Alston Ave) at NC 147 NB Off Ramp/Gann St with flashing yellow arrows for NBLT onto Gann St and SBLT from NC 55 onto NC 147 SB on ramp
	SS 4905BI 43567.1.1 43567.3.1	5	DURHAM	Division annual needs contract	Install traffic signal and construct left turn lanes on SR 1004 (Old Oxford Rd)
	SS 4905BT 43783.1.1 43783.3.1	5	DURHAM	Division annual needs contract	Upgrade traffic signal to flashing yellow arrow on EB Club Blvd and install pedestrian accommodations on all legs of the intersection

**NCDOT DIV 7 ACTIVE PROJECTS LOCATED IN DCHCMPO**

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TIP/WBS #	Description	Let Date	Completion Date	Contractor	Status	Cost	Comments
U-0624 C203175 34762.3.4	Widening , Grading, Drainage, Paving & Signals on NC 86 (S. Columbia St.) From SR -1906 (Purefoy Rd) to SR 1902 (Manning Dr) in <b>Chapel Hill</b> .	10/16/2012	12/28/2014	Triangle Grading and Paving	58% Complete 33% Schedule	\$4,565,147	TIP
U-2803 C203028 34860.3.1	Widening of SR 1919 (Smith Level Road) from Rock Haven Road to Bridge # 88 over Morgan Creek in <b>Carrboro</b>	12/18/2012	5/14/2015	Yates Construction	27% Complete 27% Schedule	\$4,946,197	TIP
U-3306 C202266 34913.3.ST1	Grading, Drainage, Paving, Signals, Curb, and Gutter and Retaining Walls on SR 1733 (Weaver Dairy Road) From NC 86 to Old Sterling Road in <b>Chapel Hill</b>	7/20/2010	Anticipated 11/30/13	Yates Construction	91% Complete 100% Schedule	\$9,584,886	ARRA / TIP
W-5318 C203193	Geometric Improvement, Paved Shoulders, Resurfacing and Rumble Strips on NC 86 from NC 57 to Caswell Co. line	2/19/2013	10/31//13	Carolina Sunrock	Contract Awarded; Start July 15, 4% complete	\$4,750,000	High Hazard Safety
43745	Installation of a traffic signal on SR 1750 (Estes Drive) at Library Drive (non system) in <b>Chapel Hill</b>		4/1/13	NCDOT forces	<b>Complete except Ped. Movements - provided by comp. of SW project 3607.3.09</b>	\$75,000	Small Construction Funds

**NCDOT DIV 7 FUTURE PROJECTS LOCATED IN DCHCMPO**

TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
I-5312	Mill & Resurface I-85 from east of I-40 to the Durham County Line.	10/15/2013	9/1/2014	Contract documents pending	\$4,300,000	TIP
W-5207E 45337.1.5	Installation of a roundabout on SR 1734 (Erwin Rd.) and SR 1791 (Mt. Moriah Rd.) near <b>Chapel Hill</b>	10/17/2013	TBD	R/W acquisition in progress	\$450,000	High Hazard Safety
W-5207I 45337.1.9	Funds for preliminary engineering on SR 1005 (Jones Ferry Road) and Davie Street) in <b>Carrboro</b>	Spring 2014	TBD	Design in progress. Addressing town comments.	\$50,000	High Hazard Safety
SS -4907V 42423.3 42423.1	Realign intersection of SR 1005 (Old Greensboro Rd.) @ SR 1951 (White Cross Rd.)	6/15/2014	TBD	Alternate Design in progress	\$198,000	Spot Safety-State

**NCDOT DIV 7 FUTURE PROJECTS LOCATED IN DCHCMPO**

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TIP/WBS #	Description	Let Date	Completion Date		Status	Cost	Comments
SS-4907AP 43640.1.1 43640.2.1 43640.3.1	SS-4907AP - Orange - NC 86 (Martin Luther King Jr., Blvd.) and SR 1750 (Estes Drive) in <b>Chapel Hill</b> . Improve sight distance by cutting back the bank in the northeast quadrant of the intersection. Cyclists cannot see the cars at the stop bar and the motorists cannot see the cyclists.		8/30/2013		District Design / Construction by NCDOT Work Forces, Started July 29	\$25,600	Spot Safety
43687	Town of Carrboro - Radius improvements, high visibility crosswalks and pedestrian refuge island at the intersection of SR 1009 (Hillsborough Road), James Street (non system) & Quail Roost Drive (non system) in <b>Carrboro</b> .		8/15/2013		District Design / Construction by NCDOT Work Forces, Started July 30	\$40,000	Small Construction Funds

**ACTIVE NCDOT PROJECTS IN DCHCMPO**

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Map #	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Contractor	Comments
	W-5208G/ 4 5338.3.7	SR-1717 (Jack Bennett Rd), Chatham Co. Realign horizontal curve	<b>April 2014</b>	Not Available	Awaiting plans from DDC; RW is being acquired	\$803K	Not Available	Let date revised from 6/13 to 4/14
	C-5176	American Tobacco Trail (Chatham Co.) - New Hope Church Road Trail Head Park & Ride Lot	September 2013	Not Available	Funding agreement between NCDOT & Town of Cary has been signed; Project on schedule to be let in September	\$1.2M	Holmes Contracting, INC	Congestion Mitigation & Air Quality Project administered by the Town of Cary.

## SURFACE TREATMENT PROJECTS IN DCHCMPO

Map#	TIP/WBS #	Description	Let Date	Completion Date	Status	Cost	Comments
<b>SURFACE TREATMENT</b>							
<b>RESURFACING</b>							
24	8C.20191.20	SR 1730 Wake Rd/Grandale Dr From Durham County Line to Wake County Line (0.494 miles) - Asphalt Surface Course	7/1/13	6/30/14	Work to begin 9/3/13	\$2.9M	Patch resurfacing Chatham resurfacing package

## N.C. 54 plan not much help in zoning, officials say

The Herald-Sun By Ray Gronberg Aug. 07, 2013 @ 07:27 PM

DURHAM —The strategy that elected officials from Durham and Orange counties laid down in 2012 to address congestion in the N.C. 54 corridor isn't detailed enough to help them make up-or-down votes on zoning applications, city/county planners say.

But administrators nonetheless will make sure the City Council or the County Commissioners know how well an application squares with the study, Planning Supervisor Aaron Cain said.

That way, "you can use that information as part of your decision-making," he told council members and commissioners who sit on Durham's Joint City/County Planning Committee.

Cain and other planners addressed the matter Wednesday, in response to complaints that surfaced after department staffers downplayed the study during a recent Durham Planning Commission hearing on a project that would displace the present Farrington Road Baptist Church.

If the project gains City Council approval, the church would move to make way for a pair of medical office buildings.

The Planning Commission has advised against approval in part because the corridor study suggests that the land would be best used for multi-family development.

The study, led by the city Transportation Department at a cost of about \$250,000, is supposed to set the stage for a series of road and transit improvements to ease future congestion along N.C. 54.

It calls for, among other things, locating one of the key stations on a future Durham-to-Chapel Hill rail link off Farrington Road near Creekside Elementary School, and clustering future development around it.

The study quite clearly recommends that the land farther south on Farrington – including the site of the office project – be used for residential development.

But Cain and Assistant Planning Directors Keith Luck and Pat Young said that the study's land-use advice is subject to change after Triangle Transit engineers hone in on where they will actually place the station.

The study itself "is very much a general step" that was supposed to shape a future iteration of the separate, county wide land-use policy that the city and county governments last voted on in 2005, Luck said.

The thrust of the comments from the three administrators appeared to vary with the commentary included in the study itself. Its authors said it was "intended to guide each of the local governments in modifying" their adopted policies and "development regulations to implement the plan."

The countywide land-use policy that Luck alluded to is itself a non-binding document, one that elected officials have ignored on a number of occasions. The zoning-application review process by contrast gives city and county elected officials a direct opportunity to regulate private-sector development.

Participants in Wednesday's discussion also questioned how much buy-in the N.C. 54 study has from elected officials. It emerged from an inter-governmental Transportation Advisory Committee that includes representation from both the council and the commissioners, but never went through the full council and commissioners for approval.

Without such buy-in, the study is “a plan we spent a lot of money on that doesn’t carry much weight,” Durham Planning Commission representative Barbara Beechwood said. “That’s a problem for us and we need to get it resolved.”

But Cain said administrators haven’t submitted the document to the two boards because “there was no request” from elected officials that they do so, and because Durham - unlike neighboring Chapel Hill - doesn’t as a “standard operating procedure” require a full-council signoff.

County Commissioner Brenda Howerton said that the majority of her five fellow commissioners “have no clue” about what’s in the study. The exception would be Commissioner Ellen Reckhow, who sits on the inter-governmental transportation committee, she said.

City Councilwoman Diane Catotti – likewise a member of the transportation committee – said the study nonetheless should be “used as a tool.”

“We don’t want to be [approving] development or construction that’s then going to undermine future plans, or put in road improvement that are going to have to be torn up later,” she said. “Taxpayers don’t like to see that kind of waste.”

## **Road Worrier: The gas tax is running out of gas**

The News and Observer By Bruce Siceoff Published: August 26, 2013

RALEIGH — North Carolina leaders came together with surprising ease this spring – Democrat and Republican, rural and urban – to agree on a new formula for making smarter use of state road-building dollars.

Next comes the hard part: Agreeing on new ways to raise the transportation dollars we’ll need to keep up with North Carolina’s relentless growth. This is a conversation that will start, eventually, with a brave soul proposing some kind of tax hike, or some kind of new tax.

Mark Foster, the state Department of Transportation’s chief financial officer, recently gave Board of Transportation members a sober briefing on transportation revenue prospects.

Tax collections generally rise as the population grows and the economy expands. So, with North Carolina’s head count expected to climb 35 percent higher between 2001 and 2025, state personal income tax collections will more than double, growing by 143 percent, according to the legislature’s fiscal forecasters.

But our chief source of transportation funding – the tax collected on every gallon of gas and diesel fuel – is heading the other way. That’s because motor fuel use peaked in North Carolina at 5.6 billion gallons in fiscal year 2006-07, and it has fallen since then to 5.1 billion gallons this year.

Blame it on the Prius. For good reasons, of course, we’re trading our old gas guzzlers for newer models that burn less gas per mile – and for plug-in cars that don’t burn any gas at all.

But good fuel economy is bad for a transportation system that needs the gas tax for 70 percent of its funding (\$1.87 billion in state gas taxes for the fiscal year that ended June 30).

"If you were thinking of this as your stock portfolio," Foster told transportation board members, many of them developers and business executives, "you would essentially have 70 percent of your portfolio invested in one stock. If I've got 70 percent of my stock in a company that I think is not going to do well, then I've got problems."

How poorly will the gas tax perform? The forecasters at DOT and the legislature are counting on a slight upturn in the next five years, as a recovering economy puts more trucks on the road.

"But by 2018, fuel efficiency will have finally taken its last turn, and we'll be on a downward slide," Foster said.

Drivers pay higher gas taxes in North Carolina (37.5 cents a gallon) than in nearby states, Foster acknowledged. But most of our neighbor states collect a higher highway use tax on car sales – the state's second-highest source for road money (\$555 million last year).

Our car tax has remained for years at 3 percent of the sale price, minus the value of a trade-in car. That's a testament to the political clout of North Carolina's car dealers. Tennessee's tax is 7 percent, with no trade-in allowance, and Georgia's is 6.5 percent. South Carolina has a higher nominal rate, 4 percent without a trade-in allowance, but the state caps its tax bill at \$300 per car.

A number of states, including Virginia, are increasing general sales taxes to help pay for transportation. In Washington, where the federal gas tax has held steady at 18.2 cents since 1992, Congress has taken money from other parts of the budget to help cover transportation needs.

That's the opposite tack from the trend in North Carolina, where \$261 million of the \$2 billion Highway Fund is being diverted this year to the General Fund, to cover non-transportation expenses.

A few states are experimenting with some kind of odometer fee – also known as a VMT or vehicle-miles-traveled tax – that charges drivers by the miles they travel. A VMT tax involves unproven technology and raises privacy questions, and it carries its own issues of fairness.

Our legislature empanels a study commission every couple of years to explore these issues rather than act on them. There are occasional mutterings in Raleigh that North Carolina's cities and counties should volunteer to help out with state transportation costs, but our governors and legislators have avoided unpleasant discussion about the declining gas tax.

Transportation board members said they hope that will change in the coming year.

"This needs to be pounded home to the folks that are making decisions," board member John Collett of Charlotte told Foster.

"This is a big problem, and we need to educate the citizens that a change has to take place," board member Cheryl McQueary of Greensboro said.

The legislature this year enacted the Strategic Mobility Formula, a new way of setting priorities for transportation construction spending at state, regional and local levels. It will be the subject of a daylong meeting planned Sept. 10 for members of a joint House-Senate committee that oversees transportation.

Maybe they'll plan a future meeting for what Foster calls "rebalancing the stock portfolio."

## Americans driving less as car culture wanes

WRAL.com By JOAN LOWY, Associated Press Posted August 29, 2013 11:45 a.m.

WASHINGTON — Driving in America has stalled, leading researchers to ask: Is the national love affair with the automobile over?

After rising for decades, total vehicle use in the U.S. — the collective miles people drive — peaked in August 2007. It then dropped sharply during the Great Recession and has largely plateaued since, even though the economy is recovering and the population growing. Just this week, the Federal Highway Administration reported vehicle miles traveled during the first half of 2013 were down slightly, continuing the trend.

Even more telling, the average number of miles drivers individually rack up peaked in July 2004 at just over 900 per month, according to a study by Transportation Department economists Don Pickrell and David Pace. By July of last year, that had fallen to 820 miles per month, down about 9 percent. Per capita automobile use is now back at the same levels as in the late 1990s.

Until the mid-1990s, driving levels largely tracked economic growth, according to Pickrell and Pace, who said their conclusions are their own and not the government's. Since then, the economy has grown more rapidly than auto use. Gross domestic product declined for a while during the recession but reversed course in 2009. Auto use has yet to recover.

Meanwhile, the share of people in their teens, 20s and 30s with driver's licenses has been dropping significantly, suggesting that getting a driver's license is no longer the teenage rite of passage it once was.

Researchers are divided on the reasons behind the trends. One camp says the changes are almost entirely linked to the economy. In a few years, as the economy continues to recover, driving will probably bounce back, they reason. At the same time, they acknowledge there could be long-term structural changes in the economy that would prevent a return to the levels of driving growth seen in the past; it's just too soon to know.

The other camp acknowledges that economic factors are important but says the decline in driving also reflects fundamental changes in the way Americans view the automobile. For commuters stuck in traffic, getting into a car no longer correlates with fun. It's also becoming more of a headache to own a car in central cities and downright difficult to park.

"The idea that the car means freedom, I think, is over," said travel behavior analyst Nancy McGuckin.

Gone are the days of the car culture as immortalized in songs like "Hot Rod Lincoln," "Little Deuce Coupe" and "Pink Cadillac."

"The car as a fetish of masculinity is probably over for certain age groups," McGuckin said. "I don't think young men care as much about the car they drive as they use to."

That's partly because cars have morphed into computers on wheels that few people dare tinker with, she said. "You can't open the hood and get to know it the way you used to," she said.

Lifestyles are also changing. People are doing more of their shopping online. More people are taking public transit than ever before. And biking and walking to work and for recreation are on the rise.

Social networking online may also be substituting for some trips. A study by University of Michigan transportation researcher Michael Sivak found that the decline in teens and young adults with driver's licenses in the U.S. was mirrored in other wealthy countries with a high proportion of Internet users.

Demographic changes are also a factor. The peak driving years for most people are between ages 45 and 55 when they are the height of their careers and have more money to spend, said transportation analyst Alan Pisarski, author of "Commuting in America." Now, the last of the baby boomers — the giant cohort born between 1946 and 1964 — are moving out of their peak driving years.

"They are still the dominant players, and they are moving toward a quieter transportation lifestyle," he said.

There's also a driving gender gap. In a role reversal, there are now more women than men in the U.S. with driver's licenses. And the declines in miles driven over the past decade were more widespread among men than women, according to Pickrell and Pace. Driving by men has declined in every age group except those 65 or older, where it increased slightly. Among women, driving declined only among young adults and teenagers.

There are several economic factors that help explain the trends. Driving declines exactly mirror job losses among men during the recession, when male-dominated industries like manufacturing and construction were especially hard hit, researchers said. But average automobile use has declined recently even among those who have remained employed.

Economists say many Americans, especially teens and young adults, are finding that buying and owning a car stretches their financial resources. The average price of a new car is \$31,000, according to the industry-aligned Center for Automotive Research in Ann Arbor, Mich.

"We're not selling to everyone. We're selling to upper-middle class to upper class," said Sean McAlinden, the center's chief economist. The rest of the public, he said, buys used cars or takes the bus.

Then there's the cost of insurance, maintenance and parking. The price of gas has gone up dramatically over the past decade.

The share of younger workers who can find jobs is at an especially low ebb, while the cost of a college education — and with it student loans — is soaring. Many schools have stopped offering free driver's education to students. Owning a car is increasingly beyond the reach of many young drivers, researchers said.

Research by the AAA Foundation for Traffic Safety found that 18- to 20-year-olds were three times more likely to have a driver's license if they lived in a household with an annual income above \$100,000 than if they lived in a household with an income below \$20,000.

"I don't think it's a change in people's preferences. I think it's all economics," McAlinden said. "It might last if the economics stay the same. But if they improve, I think people will come back to driving more. ... Give a person a good job 25 miles away and they'll be at the dealership the next morning."

The decline in driving has important public policy implications. Among the potential benefits are less pollution, less dependence on foreign oil, reduced greenhouse gas emissions and fewer fatalities and injuries. But less driving also means less federal and state gas tax revenues, further reducing funds already in short supply for both highway and transit improvements. On the other hand, less driving may also mean less traffic congestion, although the impact on congestion may vary regionally.

Phineas Baxandall, senior analyst for the liberal U.S. Public Interest Research Group, says driving declines mean transportation dollars could be put to other uses.

"You just don't want to spend money you don't have for highways you don't need," he said.

## **Tobacco Trail bridge construction in home stretch**

The Herald-Sun.com By Ray Gronberg Posted Sep. 02, 2013 @ 03:51 PM

DURHAM — Builders say the American Tobacco Trail's new bridge over Interstate 40 will be ready for the opening ceremony the city has scheduled for Oct. 12.

A key milestone passed last week when workers finished pouring the bridge's concrete deck. Another comes this week when a subcontractor arrives to pull and "tension" the 12 internal cables that will give the span much of its strength.

"There are a lot of moving parts on this job," said Eric Norton, project manager for Blythe Construction, the contractor the city hired to erect the 268-foot crossing.

The \$7.5 million project is completing the Durham portion of the tobacco trail, tying in with existing sections north of N.C. 54 and south to the Chatham County line.

About 80 percent of the cost is going toward the bridge itself, with the rest going toward the installation and paving of several trail sections.

The trail itself is all but complete, save for a couple of stretches adjacent to the bridge that's doing double duty at the moment as an access road for Blythe and its subcontractors.

Residents are already using the trail sections Blythe placed south of Renaissance Parkway.

The bridge proper has been by far the most challenging in addition to being the most expensive part of the project. City officials for appearance reasons opted for an arch-type design that helped make the new span one of the few of its type in the country.

"Everything here is hand-crafted," Norton told members of the Durham Engineers Club who toured the site last Wednesday. "There were a lot of challenges. It's the reason nobody [else] bid this job."

Norton was alluding to the fact that Blythe was the only contractor that responded early in 2012 to the city's request for bids.

The twin arches that soar over the interstate proved the project's biggest headache, as federal regulations forced the city, design firm Parsons Brinckerhoff and Blythe to find a made-in-America source for the steel that went into them. That wasn't as simple as it sounds. "They don't make 30-inch [diameter] inch-and-a half wall pipe in the U.S. anymore," said Tim Hayes, supervising engineer for Parsons.

Eventually, builders turned to a Houston firm that crafted the arches out of plate steel. It took 10- and 20-foot-long plates, rolled them, pieced them together and sent them to another company to bend into shape. It wound up delivering four pieces, two for each arch. Workers for Blythe finished the assembly on site.

That took 48 consecutive hours of welding and inspections, a job finished mere hours before crane crews lifted the arches into place over I-40, said Hayes and Clif Aldrich, Blythe's bridge superintendent.

"It was all hand-welded," as automated welding machines were out thanks to some of the detailing on the finished steel, Aldrich said. "Two guys, just steady burning. And we barely made it. We made it four hours before we had to

shut the road.”

The lift of the arches occurred early April 28, and was also preceded by some corrective work to the piers supporting them on one side of the road. Thanks to a survey error, they were initially a couple of feet too tall, but it proved easy to pare them down to the right size, Hayes said.

The piers themselves were drilled 50 feet into the ground, the last 20 feet into solid rock, Aldrich said.

Weather and a couple of metals thefts have provided additional challenges.

The rain by itself has cost Blythe 72 days of work, Norton said.

The theft of about \$28,000 worth of aluminum parts also helped put the project behind, as they'd been custom-crafted and had to be replaced for work to continue, Aldrich said.

Aldrich had the satisfaction of catching a couple of other would-be thieves red-handed in August as they were taking some steel from the project site.

“I guess they didn't expect us to be out here working at 8:30 in the morning” on a Saturday, he quipped, adding he summoned police who wound up charging the men involved.

## **Wake commissioners consider outside advice on transit plan**

Wral.com Posted: September 3, 2013 @ 10:11 a.m. today

The Wake County Board of Commissioners will talk Tuesday about ways to improve the county's transit system, including an option that would create an independent panel of experts to advise the board on the best path forward.

Tuesday's meeting is scheduled to begin at 2 p.m.

The ongoing debate about how best to serve the county's growing population has centered recently on whether or not to build a light rail system similar to what Charlotte offers its commuters.

Proponents of light rail say it could help Wake County roadways deal with huge growth expected in the next 10 to 20 years. Others have questioned a light rail's efficiency because of Wake County's "sprawled metropolitan area."

Wake Up Wake County, a transit advocacy group, says they have been waiting about two years for county commissioners to publicly discuss the issue.

"The current Wake County plan, the first phase is just bus and commuter rail," Karen Rindge said. "But the light rail is certainly the vision for the future."

Commission Chairman Joe Bryan said the board's goal is to address the issue this year. The possible creation of an independent transportation panel could help leaders make sure they're heading down the right track. Commissioner Paul Coble suggested the formation of the independent panel during the board's Aug. 19 meeting.

"This is making a decision for the long-term," Bryan said. "Let's make sure we get it right."

Rindge said the current draft plan, which includes a light-rail system stretching from Cary Parkway up Capital Boulevard into north Raleigh, needs to be reviewed fully.

"How much more money are we going to spend?" Rindge said. "How much more time are we going to spend? Triangle Transit looked at this and provided input, and they even hired local consultants to look at bus and rail needs."

Recently, the Regional Transportation Alliance, a group that serves as the business voice for transportation initiatives across the Triangle, took a position saying the current draft plan for Wake County is not the most effective or viable option.

"You have got to have a good plan to start with before you can go to the public and say, 'Are you willing to support it?'"

John Pucher, a professor in the Bloustein School of Planning and Public Policy at Rutgers University in New Jersey, said in March that the county is not suited for a light rail system.

## **Planning expert: Raleigh not suited for light rail**

Wral.com Posted: March 15, 2013 Updated: March 16, 2013

An urban transportation expert on Friday advised Triangle officials to rethink the push to create a regional transit system, saying it wouldn't work in Raleigh.

Triangle Transit wants to combine 14 miles of light rail, 17 miles of commuter rail and a beefed-up bus service to handle Wake County's growing traffic congestion.

"The commuter rail plan and the light rail plan just don't make sense to me," said John Pucher, a professor in the Bloustein School of Planning and Public Policy at Rutgers University in New Jersey. He is a visiting professor this semester at the University of North Carolina-Chapel Hill in the Department of City and Regional Planning.

Pucher has more than 40 years of experience in transportation planning. He supports alternative modes of transportation, but he said planners often underestimate cost and overestimate ridership projections.

"It's just so difficult in this very decentralized, very sprawled metropolitan area," he said.

David King, general manger of Triangle Transit, said that the region is expected to grow by 1.5 million people over the next 20 years.

"Where are they going to go?" King asked. "The road system can't support it."

He said rail stations could help manage that growth, concentrating "as much as one-third" of the new residents near transit hubs.

Pucher said King and other local transit advocates are "assuming a lot."

"I'm not convinced," he said.

Light rail and commuter rail are more justified in Orange and Durham counties, where there are more walkers and bicyclists, he said. Other factors that support more transit there are a favorable route between the cities and tight

parking around the University of North Carolina at Chapel Hill, Duke University and North Carolina Central University campuses, he said.

Durham and Orange counties plan to start collecting a half-cent sales tax for transit projects next month. Voters in Durham County approved the tax in November 2011, and Orange County voters approved theirs last fall.

Wake County commissioners have balked at putting a transit tax on the ballot, saying the area has other, more pressing issues. Advocates are frustrated, saying all they want is for a chance to vote on it.

"The county commissioners of Wake County, in a way, have done the right thing," Pucher said. "I don't think you can expect the voters to understand all the details and analysis."

A better option for Wake County would be a "bus rapid transit system," he said. The system essentially allows buses to use high-occupancy vehicle lanes on area highways, which he said is more efficient, flexible and cost-effective than rail systems.

## **Wake to get outside advice on transit**

The News and Observer By Martha Quillin Published: September 3, 2013

RALEIGH — Wake County Commissioners sparred again Tuesday over why it has taken so long to make a move on transit planning, but they came together to vote for bringing in outside experts to get a fresh discussion started.

The board voted unanimously to assemble a panel of three or four experts to look at the county's transportation issues and to help commissioners decide whether they should revise a draft plan that has been gathering dust since November 2011, or to craft a new one.

County Manager David Cooke said panelists likely would be paid a stipend and traveling expenses to come to Wake County. The board did not set a specific amount of money to be spent.

The expert panel was the suggestion of Commissioner Paul Coble, a Republican, who brought it up at the board's last meeting in August, to the surprise of the board's Democratic members.

Since the draft transit plan was presented to commissioners during a work session 22 months ago, Democrats have been frustrated by the Republican majority's failure to discuss it during regular meetings. Commissioners Chairman Joe Bryan, a Republican, has repeatedly said the board's first priority is education.

Commissioner Betty Lou Ward again expressed her frustration over the fact that Durham and Orange counties have been moving forward with transit projects based in part on the regional blueprint while Wake has done nothing.

Commissioner James West said he feared that the move to discuss transit now might be just a political maneuver but that the group would have to trust one another and move forward in good faith.

Coble pointed out that the draft plan had many detractors, and that the county has grown and changed since it was put together. He said the costly infrastructure the plan would require might no longer be appropriate, especially by the time money is raised for it and the work is completed.

"I don't think we should spend billions in taxpayer money on something if we don't know how it's going to work," Coble said. "It never hurts to get advice from experts."

The existing plan calls for expanding local and commuter bus service and the construction of a commuter rail line from Garner to Durham, with park-and-ride lots, sidewalks, bus shelters, benches and other amenities. It also includes a plan for light rail service from downtown Cary through downtown Raleigh and north to Millbrook Road.

Critics of the plan have said it needs to reach more beyond Raleigh. Some have said it should abandon light rail in favor of expanded bus service.

A half-dozen people spoke on the plan during the board's public comment period, including Karen Ringe, executive director of WakeUP Wake County; former Raleigh City Council member Anne Franklin, and Carley Ruff, policy director for the N.C. Housing Coalition.

Those three asked the board to build on the draft plan, which cost the county millions of dollars. Ruff also asked that the board consider the needs of the county's lowest-income residents and those with disabilities, who are high users of transit.

Frank Eagles, mayor of Rolesville, said the draft is "a poor plan," which he said disregards the needs of his fast-growing town.

The next step will be for the county to select the panelists, who might be university professors, transit consultants or from the Urban Land Institute, Reason Foundation, Urban Institute or Brookings Institution.



**DURHAM - CHAPEL HILL - CARRBORO  
METROPOLITAN PLANNING ORGANIZATION**

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

September 5, 2013

Mr. Anthony J. Tata  
Secretary of Transportation  
N.C. Department of Transportation  
1501 Mail Service Center  
Raleigh, NC 27699-1501

RE: Project U-5516 (US 501/Latta Rd/Infinity Rd Intersection Improvement)

Dear Secretary Tata:

TIP project U-5516 makes needed improvements to the intersection of US 501 (Roxboro Rd) with SR 1448 (Latta Road) / SR 1639 (Infinity Road), one of the most congested intersections in Durham. The funding for this project was approved in the summer of 2012 through the N.C. Mobility Fund competitive project selection process. It was the seventh highest ranked project statewide of dozens of submitted projects.

Originally scheduled for right of way acquisition in FY13 and construction in FY14, the NC Board of Transportation recently amended the STIP to delay both right of way acquisition and construction by two years. By delaying construction of this project to FY 2016, it is our understanding the project will have to compete through the new SPOT 3.0 prioritization process. Projects programmed for construction before July 1, 2015 do not have to compete through the new prioritization process.

I don't believe the Board of Transportation was aware of this unintended impact of the TIP amendment when it was adopted. In addition, to our knowledge this schedule change was not discussed with the City of Durham or the Durham-Chapel Hill-Carrboro MPO prior to placing the amendment on the Board of Transportation agenda.

For these reasons, I respectfully request that STIP be amended to include project U-5516 for ROW acquisition in FY 2014 and Construction in 2015 and that a schedule be developed to deliver the project on this timetable or that the project remain on the amended schedule but be exempted from the SPOT 3.0 prioritization process.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in cursive script that reads "Mark Ahrendsen".

Mark Ahrendsen  
Director of Transportation, City of Durham  
Chair, DCHC MPO Technical Coordinating Committee

cc: Jim Crawford, N.C. Board of Transportation  
Michael C. Smith, N.C. Board of Transportation  
Wally Bowman, PE, Division Engineer  
DCHC MPO TAC Members



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## When You're Stuck In Traffic, This App Will Make Your Voice Heard (Fastcompany.com)

By Zac Stone

Have a commuting horror story? Rather than fume on your own, a new app allows you to vent directly to Congress, to help advocate for sorely needed transportation investments.

A new smartphone app for traffic-choked commuters won't part the seas of cars on the freeway, but it will at least get your annoyed voice heard by elected officials.

"I'm Stuck" was created by Building America's Future, a political coalition dedicated to encouraging more investment in roads, bridges, and other infrastructure. (Its powerful co-chairs include New York City mayor Michael Bloomberg, former Pennsylvania governor Edward Rendell, and former California governor Arnold Schwarzenegger.)

In a week since its release, the app has been downloaded almost 10,000 times, sending out around 1,700 letters to elected officials from people in 37 states.

Commuters who find themselves trapped in traffic, airplane passengers who are stuck on a tarmac, bus riders stranded at the bus stop: All are encouraged to report their problem via "I'm Stuck," which will shoot a quick, pre-written complaint to the appropriate U.S. representative or senator, tailored to their specific mode of transit and current situation.

In a test on the app, the letter I would send to my senators in California includes the following text: "I'm stuck in traffic wasting time, fuel, and money. All around me are trucks, commuters, and families delayed and frustrated. Please pay attention to America's ailing and inadequate infrastructure."

"Usually commuters think traffic is like weather--it is something that happens to them and they have no control over it. But that isn't the case at all," writes Rendell on the group's website. "The policies we put in place, or the lack of a coherent long-term infrastructure plan, directly impacts the daily experience of

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Americans trying to get around their communities. This app gives commuters and passengers a tool to voice their frustrations to Congress."

Or you can fight traffic on a more personal level, using this car counter to map traffic patters on your street.

The app joins a crowded field of other citizen-reporting apps used to voice complaints about municipal problems, like SeeClickFix. But "I'm Stuck" aims to do something different-- rather than attempting to get citizen complaints heard among local representatives, like department of public works or city councilmen, the app's creators have national ambitions, and view the aggregate of on-the-ground frustrations as a powerful tool to lobby at the highest levels of government.

BAF cites 66,000 structurally deficient bridges in the U.S. and an estimated \$121 billion that congestion costs the economy according to a press release in its argument that the country needs more investment in its roadways through new, long-term legislation.

It's unclear if California Senators Diane Feinstein and Barbara Boxer actually care if I'm personally stuck in Los Angeles traffic, but "I'm Stuck" is determined to leverage my daily schleps into political change. Let's see if it works.

## Contact Information

The North Carolina Metropolitan Mayors Coalition, founded in 2001, is comprised of the mayors of the state's larger cities, with more than three million citizens. The Coalition is a non-partisan, mayor-driven organization that focuses on issues of special interest to our large cities in a fast-growing and urbanizing state. The Coalition has worked successfully with federal and state elected officials to promote job creation, protect local revenues, invest in public infrastructure, and keep our cities safe.

**Julie White**  
**Executive Director and Lobbyist**  
**N.C. Metropolitan Mayors Coalition**

[jwhite@metromayors.com](mailto:jwhite@metromayors.com)

<http://ncmetromayors.com/>

919-787-8880 office

919-539-7871 cell

**From:** Milazzo II, Joe [<mailto:Joe@letsgetmoving.org>]  
**Sent:** Monday, August 19, 2013 5:47 PM  
**Cc:** RTA 2012-13 Chair Clymer Cease; RTA Vice Chair Tom Looney  
**Subject:** RTA endorses bus rapid transit-based approach for Wake County

RTA members,

During the past year, RTA has reviewed the draft Wake County Transit Plan and its component elements: buses, commuter rail, and light rail. We have reached out to every mayor and county commissioner in Wake County, to identify their overall goals for transit and enhanced travel options. In addition, RTA members and staff have researched a wide range of transit options and alternatives in other markets, including visits within the past two years to Washington, D.C., suburban Maryland, northern Virginia, Pittsburgh, Cleveland, Austin, Minneapolis, Atlanta, and Nashville.

Last week the RTA Steering Committee discussed the results of our research including benefits, concerns, and observations about opportunity costs associated with the draft Wake County plan. The Steering Committee has come to the conclusion that many of the benefits of the current draft plan are uncertain, delayed, and narrowly focused geographically, while committing our community to a series of infrastructure choices and potentially irrevocable capital and operating funding commitments that would crowd out other important public investments for a decade or more.

Over the past few years, RTA has become familiar with an approach that addresses many of these concerns. Bus rapid transit (BRT) is an attractive, frequent, and reliable public transit service that minimizes or eliminates delay for transit and other roadway users. BRT has a series of elements that can be implemented in a scalable, flexible, and strategic manner. By utilizing our existing freeway and street infrastructure, it can be implemented more quickly, more cost-effectively, and more broadly, with less risk.

The RTA Steering Committee fully supports accelerating enhanced regional transit investment with a much broader distribution of those investments across Wake County than the current proposal allows. As a result of our study and review, **the RTA Steering Committee endorses a bus rapid transit-based approach for Wake County as more effective and viable than the framework of the current draft plan.**

A few comments from RTA Steering Committee members are included **below**.

**The RTA will provide our recommendation for pursuing the development of a bus rapid transit-based alternative tailored for our community to the leadership of member chambers and our area transit partners, including the Board of County Commissioners.**

To learn more about this proposed approach, you can review the **attached** draft one-page summary. You can also download a background overview document [here](#).

We will provide additional information over time along with multiple outreach and engagement opportunities.

Thank you for your continued support and your ongoing focus on mobility options that will meet the needs of our growing community both now and in the future.

Let's get moving,  
Joe

cc Clymer Cease, RTA chair  
Tom Looney, RTA regional transit chair

**Comments from RTA Steering Committee members concerning their unanimous endorsement of a BRT-based approach for Wake County:**

*"Learning first-hand about existing and emerging bus rapid transit projects in Cleveland, Pittsburgh, and suburban Maryland during recent RTA Leadership Briefings and Tours, and hearing of the experiences of other markets in the US and abroad that are implementing BRT, it is clear that a BRT-based approach can provide a more robust level of service across a broadly distributed system well suited for our community, while having the potential to catalyze economic activity throughout the County."* **Clymer Cease, RTA chair**

*"A bus rapid transit approach would leverage our existing road infrastructure and provide tremendous flexibility for future growth. We have long supported accelerating enhanced transit in this market, and we are convinced a BRT-based approach is the best way to make that a reality sooner rather than later, particularly for Research Triangle Park, RDU International Airport, and other major regional destinations."* **Tom Looney, RTA regional transit chair**

*"BRT is emerging as a far more practical, flexible and economical alternative to light rail. I have been an unwavering supporter of transit but have always been concerned about the price tag for light rail and how it would be funded. It's prudent to consider alternatives, which is why I enthusiastically joined a unanimous RTA steering committee vote to develop this alternative approach for Wake County."* **Jim Captain, RTA immediate past chair**

*"As our region continues to grow, providing effective transit options for more people as quickly as possible is critical. Bus rapid transit has proven itself to be a sustainable, fiscally responsible and effective approach to quickly scaling a mass transit option that people like and use."* **Ed Paradise, RTA chair-elect**

# A **FASTER** transit network for Wake County from an optimized bus rapid transit-based approach

## Bus rapid transit

Bus rapid transit (BRT) is one of the fastest and most cost-effective ways to expand and modernize public transit, according to The Rockefeller Foundation. BRT-based investments can avoid unnecessary infrastructure costs and offer a competitive alternative to rail transit.

Various forms of bus rapid transit are open or under development in several competitive regions including Nashville, Austin, Pittsburgh, Montgomery County, Md., Boston, Cleveland, Miami, Los Angeles, Chicago, Eugene, Kansas City, Las Vegas, and other cities in the U.S. and abroad.

BRT is an attractive, frequent, and reliable public transit service that minimizes or eliminates delay for transit and other roadway users. BRT has a series of elements that can be implemented in a scalable and flexible manner to improve mobility options for all users of the transportation system. Elements could include level boarding and signal priority for buses, as well as complementary highway improvements such as superstreets, roundabouts, and selected road widening to keep buses on schedule and reduce overall travel delay.



Level boarding example  
courtesy MVTA

### A BRT-based approach optimized to meet a community's needs can:

- Leverage existing and future road infrastructure
- Accelerate transit improvements in a scalable manner
- Deliver robust service across a broad system
- Provide flexibility for community growth
- Catalyze or focus economic development

The reasons for implementing BRT-based options will vary. However, they can include reducing the timeline for implementation, broadening the distribution of benefits, mitigating funding uncertainty, providing a cost-effective solution, and accelerating economic development.



Bus lane and signal priority in Cleveland

## A “FASTER” transit network for Wake County

An optimized bus rapid transit-based approach in Wake County would allow our area to leverage its existing and proposed freeway network and turnpike system, future express lanes and potential transitways, as well as our arterial roadways and street system to strengthen mobility across the County.

A bus rapid transit-based “FASTER” transit network for Wake County would be a **Freeway And Street-based Extended Rapid** transit network, involving the ongoing, strategic application of bus rapid transit-based investments and complementary highway improvements tailored to the needs of our community. Each application of BRT would be optimized for the specific condition of a particular area and provide investments exactly when and where needed. Together, the scaled investments would maximize the user experience and network benefits of the entire system while providing flexibility for continued improvements over time.



Cleveland Healthline station  
courtesy Greater Cleveland RTA

### A FASTER transit network for Wake County could include (illustrative examples):

- Freeway bus rapid transit stations along I-40 and 540
- Reconstruction of Capital Blvd. as a transit gateway corridor to Downtown Raleigh
- Transit station/corridor development: examples might include Blue Ridge, New Bern/Knightdale, Six Forks/Midtown, Wilmington/Hammond/Timber, Kildaire Farm, Chatham, NC 54 west, US 70, and/or others across the County
- Bus lanes or transitways serving all NC State campuses directly
- Transit priority measures in Downtown Raleigh and other congested locations to reduce intersection delays
- Transitways or bikeways along the Atlantic and Hillsborough corridors
- Express lanes or transit lanes along parts of I-40, 540, 440 Beltline, and other freeways