

# DCHC MPO Board Meeting Agenda

Wednesday, May 9, 2018 9:00 AM

Council Chambers 1st Floor Durham City Hall

101 City Hall Plaza

Durham, NC 27701

#### 1. Roll Call

#### 2. Ethics Reminder

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

<u>18-100</u>

Attachments: 2018-05-09 (18-100) MPO Board Directives to Staff.pdf

#### **CONSENT AGENDA**

#### 6. April 11, 2018 Board Meeting Minutes

18-137

A copy of the April 11, 2018 Board meeting minutes is enclosed.

**Board Action:** Approve the minutes of the April 11, 2018 Board meeting.

Attachments: 2018-05-09 (18-137) MPO Board Meeting Minutes 4.11.18 LPA2.pdf

#### **ACTION ITEMS**

### 7. <u>Managed Motorways Presentation (30 minutes)</u> Will Letchworth, WSP USA

18-138

At the request of the DCHC MPO Board at its April 2018 meeting, Will Letchworth from WSP will make a presentation on Managed Motorways. Managed Motorways is a concept that Secretary Trogdon is encouraging divisions and planning organizations to consider as they look to relieve congestion on urban highways. The Managed Motorways concept is a collection of strategies and technologies that work in concert to manage freeways and provide enhanced safety, improved reliability, decreased congestion, and traveler information. Managing a freeway can restore one or more lanes of capacity at a fraction of the cost of adding an additional lanes. WSP has performed a high level screening of corridors throughout North Carolina and identified I-40 from Wade Avenue to NC 54 as a potential corridor that could benefit from the Managed Motorways concept. This segment was submitted by NCDOT Division 5 and funded in the statewide tier in the latest round of NCDOT prioritization.

**Board Action:** No action is required at this time, this item is for informational purposes only.

Attachments: 2018-05-09 (18-138) Managed Motorways Presentation.pdf

### 8. <u>Initial Allocation of Local Input Points for Regional Impact Projects</u> (30 minutes)

18-133

#### **Aaron Cain, LPA Staff**

On March 14, 2018, the DCHC MPO Board approved the revised Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Methodology for Identifying and Ranking New Transportation Improvement Program Project Requests (see attached), which was subsequently approved by NCDOT on March 15, 2018. The Methodology directs DCHC MPO staff to apply certain criteria to all Regional projects (and Statewide projects that cascade to the Regional level) as an initial determination of which projects should receive local points.

A memo is included with this agenda item describing the process to determining the initial list of projects, and issues that could be discussed. Attached to that memo is an initial list of projects to be assigned local points. Per the DCHC MPO Public Involvement Policy, the initial list of projects for local points must be released for a 21-day public comment period.

DCHC MPO is free to deviate from the initial list for a variety of reasons, as described in the Methodology. Both the Methodology and state law require documentation of the reasons for deviation from the initial list.

LPA staff is prepared to bring the DCHC MPO Board a final recommended allocation of local input points for adoption at the Board's June meeting. However, NCDOT has pushed back its timeline for the Divisions to release their initial list of projects to receive points to May 31, and for the Divisions to hold public comment on local points allocation in June. This timetable will not allow the DCHC MPO TC to incorporate the Divisions' plans for local points into their recommendation to the Board. In order to best allow the DCHC MPO staff and TC to work with the Divisions, a final review for the TC should be scheduled in June and the Board in July. The DCHC MPO Board does not typically meet in July, so staff needs the Board to approve an additional meeting.

**TC Action:** Recommended that the MPO Board release the initial list of projects for local points for public comment.

**Board Action:** Provide input on the initial list of projects for local points and release the initial list for public comment. Provide guidance to LPA staff on scheduling for approval of local input points.

Attachments: 2018-05-09 (18-133) Initial Allocation of Local Points Memo.pdf

2018-05-09 (18-133) Initial Allocation of Local Points for Public Review.pdf

2018-05-09 (18-133) Adopted Local Input Points Methodology.pdf

#### 9. <u>Triangle Toll Study Update (10 minutes)</u>

18-135

#### Andy Henry, LPA Staff

The DCHC MPO, Capital Area MPO and NCDOT have hired the consultant WSP to conduct a tolling study in the Triangle region. The goal is to determine if toll lanes and/or managed lanes are advisable in the Triangle Region and to develop a strategy to address funding, equity and consensus building issues. The MPO Board received a pre-project presentation in November 2016 and sent a letter to the NCDOT Division 5 Engineer in March 2017 concerning equity issues related to toll lanes. The study has since produced a best practices report and conducted stakeholder meetings. LPA staff will provide a brief update on the most recently completed tasks.

A presentation is attached. The project Web site, www.TriangleTollingStudy.com, has additional information on the project including a copy of the best practices report and a more detailed copy of today's presentation.

**TC Action:** Receive presentation, provide comments and forward to MPO Board.

Board Action: Receive presentation and provide comments.

Attachments: 2018-05-09 (18-135) TriangleTollStudy.pdf

#### 10. MPO Collector Street Plan (20 minutes)

18-134

#### Andy Henry, LPA Staff

The DCHC MPO and many of its local jurisdictions have collector street plans. However, many of these plans are dated and together they only cover a portion of the MPO planning area. In addition, the LPA staff believes that some roadways that were included in the recently adopted Comprehensive Transportation Plan (CTP) and 2045 Metropolitan Transportation Plan (MTP) will be funded, built and function as collector streets, not as arterial roadways. The MPO staff is proposing that the MPO create an MPO-wide collector street plan. The attached presentation provides background on collector streets and collector street plans in the MPO.

**TC Action:** Discuss the MPO staff presentation on collector street plans and direct staff to complete an MPO-wide collector street plan

**Board Action:** Receive and discuss the MPO staff presentation on collector street plans and direct staff to complete an MPO-wide collector street plan

Attachments: 2018-05-09 (18-134) CSP.pdf

### 11. Comprehensive Transportation Plan (CTP) Amendment #1 (10 minutes)

18-136

#### Andy Henry, LPA Staff

The MPO staff has requested that the DCHC MPO and NCDOT amend the Comprehensive Transportation Plan (CTP) to change the proposed future configuration of the portion of Farrington Road between Southwest Durham Drive and the Falconbridge Road Extension from a four-lane divided to a two-lane cross-section. Staff believes that a two-lane cross-section is more appropriate for that short portion. The portion of Southwest Durham Drive that is north of the Southwest Durham Drive/Farrington Road convergence (i.e., close to where the converged roadway crosses I-40) is defined as a future four-lane divided facility. As a result, the converged section will be capable of handling the combined vehicles to/from the 2 two-lane roadways to the south. See the attached CTP close-up map and the map showing 2045 traffic volume from the Triangle Regional Model (TRM).

The MPO staff became aware that the identified portion of Farrington Road was defined as a four-lane cross-section when GoTriangle staff inquired about the future status of the roadway. GoTriangle inquired about the roadway because the agency has submitted the Durham-Orange Light Rail Transit's ROMF (Rail Operations and Maintenance Facility) for the City of Durham development review process requesting a zoning map amendment, a comprehensive plan amendment and annexation by the City of Durham. The MPO and GoTriangle do not want to wait for a future CTP amendment cycle to make this Farrington Road cross-section change because the required right-of-way for the currently defined four-lane cross-section would reduce the proposed buffering between the ROMF and the roadway. The buffering is mutually desired by GoTriangle and the neighboring community.

The MPO Public Involvement Policy (PIP) requires a 42-day public review for MTP and CTP adoption and major amendments. Staff recommends the following schedule:

- \* May 9 -- MPO Board release CTP amendment #1 for 42-day public comment period
- \* June 13 -- MPO Board conduct public hearing
- \* August 8 -- MPO Board adopt CTP amendment #1 (the MPO Board commonly does not meet in July)
- \* August/September -- North Carolina Board of Transportation (BOT) adopt CTP amendment #1

**TC Action:** Receive staff presentation and release CTP amendment #1 for 42-day public comment period.

**Board Action:** Receive and discuss staff presentation and release CTP amendment #1 for 42-day public comment period.

<u>Attachments:</u> 2018-05-09 (18-136) CTPandROMF.pdf

2018-05-09 (18-136) FarringtonRd2045Volume.pdf 2018-04-25 (18-136) FarringtonRd2034Volume.pdf

#### 12. Amendment #3 to the FY2018-2027 TIP (5 minutes)

18-132

#### Aaron Cain, LPA Staff

Federal regulation 23 CFR 450.326 (d) requires that all MPO's incorporate language regarding performance targets into their TIPs. NCDOT has advised all MPOs to adopt the following language by May 2018 into their TIP:

"The \_\_\_\_\_ MPO has established performance management targets for highway safety and for transit tier 2 providers that choose to participate in NCDOT's Group Transit Asset Management (TAM) Plan and will establish federally mandated performance management targets for infrastructure condition, congestion, system reliability, emissions, and freight movement. The \_\_\_\_ MPO anticipates meeting their identified targets with the mix of projects included in the TIP."

This language is shown in the attached resolution, which upon adoption shall be incorporated into the DCHC MPO FY2018-27 TIP.

In addition, there one locally initiated project to be amended, C-5650, South Greensboro Street Sidewalks, as well as several modifications and additions from NCDOT. These are described in the attached summary sheet and full report.

Finally, the Board should be aware that there was a recent case in federal court, South Coast Air Quality Management District v. EPA, requires amendments to MTPs and TIPs to further reviews for air quality than has been required in recent years. While this amendment can go forward, future amendments to the TIP that involve highway projects will most likely be delayed.

**TC Action:** The TC recommended approval of Amendment #3 of the FY2018-27 TIP as shown.

Board Action: Approve Amendment #3 of the FY2018-27 TIP.

Attachments: 2018-05-09 (18-132) TIP Amendment #3 Full Report.pdf

2018-05-09 (18-132) TIP Amendment #3 Summary Sheet.pdf

2018-05-09 (18-132) TIP Amendment #3 Resolution.pdf

#### REPORTS:

#### 13. Report from the Board Chair

<u>18-101</u>

Damon Seils, Board Chair

Board Action: Receive the report from the Board Chair

#### 14. Report from the Technical Committee Chair

18-102

Ellen Beckmann,TC Chair

**Board Action:** Receive the report from the TC Chair.

#### 15. Report from LPA Staff

18-103

Felix Nwoko, LPA Manager

Board Action: Receive the report from LPA Staff.

Attachments: 2018-05-09 (18-103) LPA staff report.pdf

#### 16. NCDOT Report

18-104

Joey Hopkins (David Keilson/Richard Hancock), Division 5 - NCDOT Mike Mills (Pat Wilson/Ed Lewis), Division 7 - NCDOT Brandon Jones (Bryan Kluchar, Jen Britt), Division 8 - NCDOT Julie Bogle, Transportation Planning Division - NCDOT John Grant, Traffic Operations - NCDOT

Board Action: Receive the reports from NCDOT.

Attachments: 2018-05-09 (18-104) NCDOT Progress Report.pdf

#### **INFORMATIONAL ITEMS**

#### 17. Recent News Articles and Updates

18-105

Attachments: 2018-05-09 (18-105) news\_articles.pdf

#### **Adjourn**

Next meeting: June 13, 9 a.m., Committee Room

**Dates of Upcoming Transportation-Related Meetings: None** 

#### **MPO Board Directives to Staff**

12/01/15 - Present (Completed/Pending/In Progress)

Meeting				
Date	Directive	Status		
12/9/2015	Quarterly updates on D-O LRT project.	On-going: GoTriangle will provide quarterly updates to MPO Board.		
2/15/2016	Draft Letter of Support for D-O LRT project to advance to Engineering Phase for MPO Board Chair signature	Completed: 2/18/2016.		
4/13/2016	Research and consider renaming DCHC MPO an acronym that would be easier remember and simple to say.	Completed. 6/8/2016. DCHC MPO staff and the Technical Committee researched and provided a recommendation to the MPO Board.		
4/13/2016	Provide the MPO Board with a breakdown of funding for highway program and non-highway program in the MPO TIP.	Completed. DCHC MPO staff created a summary report and distributed it during May 11, 2016 Board meeting.		
5/11/2016	Schedule presentation from NCDOT Division and City Public Works regarding flooding on Trenton Road.	Completed. DCHC MPO staff arranged to have an update at the June 8, 2016 Board meeting.		
5/11/2016	Prepare a presentation on the breakdown of funding for highway program and non-highway program in the MPO TIP.	Completed. DCHC MPO staff presented the summary report at the June 8, 2016 Board meeting.		
6/8/2016	Update the DCHC MPO's tagline on the MPO website to provide information to the public that explains the MPO does regional transportation planning for the western Triangle area.	<u>Underway.</u> DCHC MPO staff is still working on updating the tagline on the MPO website.		
6/8/2016	Conduct background study on toll roads and how they are used and affect municipalities like DCHC MPO.	Underway. Consultant selected and presentation was given at November 2016 joint DCHC/CAMPO MPO meeting. Staff is arranging for an update presentation from the consultant.		
12/14/2016	Draft letter to NCDOT regarding citizen request for "Bicycles May Use Full Lane" signs on Old NC 86 north of Carrboro, and to reiterate interest in providing bike lanes or wider shoulders to accommodate bicyclists.	Completed. DCHC MPO staff sent letter to NCDOT on January 30, 2017; response received March 15, 2017.		
1/11/2017	Draft letter to NCDOT requesting that issues of equity for low-income users be incorporated into planning for managed lanes on I-40 and NC-147.	Completed. Draft completed January 29, 2017.		

Meeting Date	Directive	Status
4-28-17	Determine the number of distance signs on freeways within the MPO's jurisdiction. Investigate the options for increasing the number of signs with NCDOT, particularly on and around the East End Connector at its completion.	Completed. MPO staff has found seven distance signs on freeways within the MPO's jurisdiction: four on I-85, one on NC-147, one on US 15-501, and one on I-85/40 in western Orange County. MPO staff has followed up with NCDOT about the opportunity for additional signs along I-40 in Durham and/or Orange counties.
4-28-17	Work with Division 7 to amend the signage plan for the East End Connector to include signs warning motorists about construction before the I-85/40 split.	Completed. MPO staff has contacted Division 7 regarding this request. Once project is completed, signage plan will be finalized.
5-10-17	Have someone from NCDOT present to the MPO Board on synchronized/super streets.	Completed. Jim Dunlop of NCDOT's Congestion Management Division presented at the August 2017 MPO Board meeting.
9-13-17	Request for staff to give a presentation on the STI framework, focusing on what provisions are directly by federal legislation, by state legislation, and those that are department policy. Invite new Deputy Secretary Julie White to meet and discuss NCDOT policy regarding prioritization with the Board.	Completed. LPA staff presented at the November 8, 2017 Board meeting. Deputy Secretary Julie White is scheduled to attend the March 14, 2018 Board meeting.
2-14-18	Work with local governments and partner agencies to identify additional funding streams for transit projects not being submitted through the SPOT 5.0 process. Report back on progress.	<u>Underway.</u> LPA staff is coordinating efforts with local transit providers and staff.

#### DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION BOARD 1 2 11 April 2018 3 4 **MINUTES OF MEETING** 5 6 The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board met on April 11, 7 2018, at 9:00 a.m. in the City Council Committee Room, located on the second floor of 8 Durham City Hall. The following people were in attendance: 9 10 Damon Seils (MPO Board Chair) Town of Carrboro Wendy Jacobs (MPO Board Vice Chair) **Durham County** 11 **Chatham County** 12 Karen Howard (Member) 13 Charlie Reece (Member) City of Durham Ellen Reckhow (Member) GoTriangle 14 15 Pam Hemminger (Member) Town of Chapel Hill Renee Price (Member) **Orange County** 16 Heidi Carter (Alternate) **Durham County** 17 Jenn Weaver (Alternate) Town of Hillsborough 18 Michael Parker (Alternate) Town of Chapel Hill 19 20 David Keilson NCDOT, Division 5 21 Richard Hancock NCDOT, Division 5 22 Patrick Wilson NCDOT, Division 7 23 24 Julie Bogle NCDOT, TPD 25 Nishith Trivedi **Orange County** Bergen Watterson Town of Chapel Hill 26 27 Tina Moon Town of Carrboro Town of Carrboro Zach Hallock 28 Kayla Seibel Town of Chapel Hill 29 Geoff Green GoTriangle 30 Terry Bellamy City of Durham/DCHC MPO 31 Ellen Beckmann City of Durham 32 Federal Highway Administration **Eddie Dancausse** 33

40 41 Quorum Count: 8 of 10 Voting Members

Felix Nwoko

Andy Henry

Meg Scully

**Aaron Cain** 

Mo Devlin

**Brian Rhodes** 

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Chair Damon Seils called the meeting to order at 9:03AM. A roll call was performed. The Voting

DCHC MPO

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Members and Alternate Voting Members of the DCHC MPO Board were identified and are indicated

above. Chair Damon Seils reminded everyone to sign-in using the sign-in sheet that was being circulated.

Pam Hemminger made a motion to grant excused absences to Vernetta Alston and Nina Szlosbeg-Landis from the MPO Board Meeting. Vice Chair Wendy Jacobs seconded the motion. The motion passed unanimously.

Chair Damon Seils recognized former Mayor Bill Bell for his contributions to the DCHC MPO Board. Chair Damon Seils announced a measure to honor William V. Bell for his service to the City of Durham. Chair Damon Seils enumerated William V. Bell's accomplishments during his tenure with the MPO Board.

Renee Price made a motion to approve the resolution honoring Mayor William V. Bell. Ellen Reckhow seconded the motion. The motion passed unanimously.

**PRELIMINARIES:** 

#### 2. Ethics Reminder

Chair Damon Seils read the Ethics Reminder and asked if there were any known conflicts of interest with respect to matters coming before the MPO Board and requested that if there were any identified during the meeting for them to be announced. There were no known conflicts identified by MPO Board members.

Chair Damon Seils reminded the MPO Board to turn in ethics forms to the Ethics Office by April 15. Ellen Reckhow stated that she was unsure if she has completed all required forms. Aaron Cain answered that he will verify whether or not Ellen Reckhow's forms had been completed.

#### 3. Adjustments to the Agenda

There were no adjustments to the agenda.

#### **4. Public Comments**

There were no public comments.

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5.	Dir	'ecti	ves	to	Staff

The Directives to Staff were included in the agenda packet for review.

#### **CONSENT AGENDA:**

- **6. Approval of February 14, 2018, Board Meeting Minutes**
- **7. Approval of the March 14, 2018, Board Meeting Minutes** 
  - 8. FY2018 Unified Planning Program (UPWP) Amendment #3
- 75 Meg Scully, LPA Staff

Pam Hemminger made a motion to pass all three items on the Consent Agenda. Ellen Reckhow seconded the motion. The motion passed unanimously.

#### **ACTION ITEMS:**

#### 9. SPOT 5.0 Update – Release of Quantitative Scores

#### Aaron Cain, LPA Staff

Aaron Cain stated that the quantitative scores for Strategic Prioritization of Transportation

(SPOT) 5.0 were released. Aaron Cain added the Technical Committee (TC) has not yet met and reviewed the scores. Aaron Cain continued that this presentation is an informational item in order to inform the MPO Board about what projects are likely to be funded, what projects have been funded at the statewide tier, and the status of certain regional projects. Aaron Cain added that North Carolina

Department of Transportation (NCDOT) already assigned the fiscal year (FY) for the projects that scored highly, which are mostly highway projects. Aaron Cain reminded the MPO Board that all projects that were committed in the first five years of the current State Transportation Improvement Program (STIP) are committed; therefore, the presented projects at this meeting are either projects that were rescored because they were sibling projects to existing projects or they were in the last five years of the STIP.

Jenn Weaver and Aaron Cain discussed the status of the bridge on I-85/NC-86 in Hillsborough.

Aaron Cain stated that the highest scoring project in DCHC at the Statewide Tier is the I-40

Managed Motorways, which is an intelligent system for traffic signals to read traffic patterns and adjust

traffic patterns accordingly. Aaron Cain added that the managed motorways project is a funded developmental project with Right-of-Way (ROW) scheduled for 2025. Ellen Reckhow and Aaron Cain discussed the potential necessity of the ROW. Vice Chair Wendy Jacobs and Aaron Cain discussed the impact on local traffic congestion. Terry Bellamy and Aaron Cain discussed the reduced cost of managed motorways compared to the cost of managed lanes.

Aaron Cain and Vice Chair Wendy Jacobs discussed the timeline of the grade separations of Farrington Road and Falconbridge Road in order to ease congestion at the I-40/NC-54 Interchange. Pam Hemminger and Aaron Cain discussed grade separation. Aaron Cain stated that NC-54 is currently proposed to go underneath Farrington Road and Falconbridge Road. Aaron Cain stated that due to the light rail project, Farrington Road would be rerouted along with various other construction projects.

Aaron Cain stated that the widening of I-85 in Orange County from Orange Grove Road to Sparger Road is a new project that was not in the previous STIP, but is projected to be in the new STIP, with ROW in 2025 and construction in 2027. Aaron Cain added that I-85 widening is scheduled for ROW in 2027. Aaron Cain added that this would also improve ramps from East of Midland Terrace. Jenn Weaver asked about reasoning for the widening of I-85. Renee Price asked about work planned for Orange Grove Road.

Chair Damon Seils reiterated that neither he nor the TC has had an opportunity to have a detailed review of the SPOT scores. Aaron Cain added that all present material discussed is subject to change pending the Regional Projects review in May 2018 and Division Projects in Fall 2018. Aaron Cain added that the MPO Board will receive a draft STIP by the end of 2018 that can still be discussed with the North Carolina Department of Transportation (NCDOT).

Ellen Reckhow asked about allocations of road improvements for Durham County. Aaron Cain responded that one tier of funding allocation does not impact the amount received from other tiers.

Aaron Cain stated that improvements in Durham County to US-15/501 are considered a developmental project, and is scheduled for ROW in 2025 and construction in 2027. Aaron Cain added that the description is to improve interchanges and intersections in southern Durham County, which means improving the interchange with I-40 and the intersections at Mount Moriah and Southwest Durham Drive. Aaron Cain and Ellen Reckhow discussed how this US-15/501 Project will interface with other projects as well as the possibility for review and change. Aaron Cain added that issues including non-vehicular traffic would be discussed in the US-15/501 Corridor Study.

Vice Chair Wendy Jacobs and Aaron Cain discussed the how the light rail project will impact different ongoing projects, including US-54 and Farrington Road.

Renee Price mentioned that that map would be useful for upcoming projects and how they relate to the light rail project. Aaron Cain agreed to create a map for the next MPO Board Meeting.

Aaron Cain stated that the US-15/501 improvements in Orange County are currently scheduled for ROW in 2024. He compared the timeline for the US-15/501 improvements in Orange County in the current STIP to the results of the SPOT 5.0 scoring. Aaron Cain added that the improvements from NC-54 to Ephesus Church are no longer funded at the statewide tier because they did not score well enough.

Aaron Cain stated that Division 5 submitted a project for an auxiliary lane on I-40 for exits 273 and 274, but it did not score well enough. Aaron Cain explained that it reached the corridor cap, which limits the amount of funding that can be spent on one interstate highway corridor. David Keilson and Aaron Cain noted that it would have to be resubmitted if it does not receive funding because this was a standalone project.

Aaron Cain stated that there are numerous projects that are funded in the current STIP, but may not be funded following the release of current SPOT scores. Aaron Cain explained that sibling projects are projects attached to a portion of the larger project, and that resubmission of sibling

projects that are attached to funded projects is not required. Aaron Cain continued that because Capital Area Metropolitan Planning Organization (CAMPO) eliminated the portion of the managed lanes project in Wake County and Durham County also eliminated a portion, there is now an orphan managed lanes project.

Charlie Reese asked about the difference between managed lanes and managed motorways.

Aaron Cain answered that managed motorways uses technology to ease traffic congestion. Aaron Cain added that managed lanes means adding additional lanes to a roadway, and those lanes are managed by creating some sort of restriction, e.g. vehicle toll, high occupancy lanes, HOT lanes, etc. Aaron Cain stated that there are some upgrades, including US-70 from Miami Boulevard to Alexander Drive, that have been put in future years, but the Miami Boulevard intersection improvements are still in the STIP. Ellen Reckhow voiced concern about the section of US-70 from Briar Creek Road to Miami Boulevard not being funded.

Renee Price asked if certain projects will be funded at the Regional or Division tier if they are not funded at the Statewide tier. Aaron Cain clarified that none of these projects were ever committed. Aaron Cain explained that projects in the first ten years of the STIP are considered funded. Those in the first five years are considered committed, however; if they are scheduled in the second five years they are considered developmental and also need to be rescored. Aaron Cain added that the projects currently being discussed were in the second five years, and therefore were rescored. Aaron Cain explained that the scores of certain projects may be lower only in respect to other projects, which is the reason they are no longer in the funding cycle. Renee Price and Aaron Cain discussed how that these projects may not be funded in the Statewide tier, but could be: funded by the Regional tier; supported and/or funded by other projects; or stay in the STIP and be rescored in the 2022-2031 cycle.

Ellen Beckman and Aaron Cain discussed the ongoing National Environmental Policy Act (NEPA) study that NCDOT started for US-70 and the possibility of adding regional points to increase the likelihood of funding.

Aaron Cain stated that there were a few projects that were not funded at all, which would then be up for consideration at the Regional Tier and could be resubmitted for the next cycle of SPOT in two years. Aaron Cain added that examples of these projects include widening US-15/501 from 751 Cameron Boulevard to the Pickett Road overpass and the NC-147 Elbert Trent Interchange. Aaron Cain reminded the MPO Board that he has only 70% of the score for Regional projects, which is quantitative. He added that 15% is derived from the MPO and 15% is derived from the Division. Aaron Cain added that the best scoring project was on NC-55 from I-40 to NC-54, which included a third southbound lane and bike and pedestrian improvements.

Chair Damon Seils highlighted that there is a corridor study currently underway for NC-54.

Aaron Cain added that the DCHC MPO had a meeting with Matt Day about the likelihood of adding points to a project in that corridor. Renee Price and Aaron Cain discussed how the Triangle Area Rural Planning Organization (TARPO) would influence the widening of NC-54.

Aaron Cain listed other projects that scored highly, including improvements to Roxboro Road from Avondale Drive to Old Oxford Highway, and NC-98 from Junction Road to Lynn Road. Heidi Carter and Aaron Cain also discussed the NC-98 Corridor Study as it related to safety concerns on Holloway Street. Aaron Cain stated that the East Durham Siding project and the grade separation, including Ellis and Glover Road and Rand Street, were moved from developmental to committed.

Aaron Cain stated that Durham-Orange Light Rail (D-O LTR) is the highest scoring Regional non-highway project in Region C or D. Aaron Cain added that there were no non-highway projects at the Regional level that scored higher. Aaron Cain added that at the regional level there is 4% that is set aside for non-highway projects. Aaron Cain added that Regional point allocation for this and other

Regional projects will be discussed at the next MPO Board Meeting. Aaron Cain stated that both DCHC and CAMPO submitted a commuter rail project from Durham to Garner, differing only in the number of trains.

Aaron Cain reviewed the timeline of events for the SPOT 5.0 scores. Aaron Cain stated NCDOT released the quantitative scores on April 3. Aaron Cain added that he plans to create an initial proposal as to how DCHC MPO will allocate points by April 18 in order to allow TC members to review these numbers by their April 25 meeting. Chair Damon Seils and Aaron Cain discussed DCHC MPO's methodology, which was adopted at the previous MPO Board meeting. Aaron Cain stated he will bring a copy of the proposal to the May 9 MPO Board meeting for the 21-day public comment period from May 14 – June 4. Aaron Cain stated that the MPO Board could then approve by June 13 because the MPO Board historically does not meet in July, and the deadline to approve by NCDOT is the end of July.

This Item was informational and no further action was required by the MPO Board.

#### 10. Amendment #2 to the FY 2018-2027 TIP Aaron Cain, LPA Staff

Aaron Cain stated that TIP Amendment #2 to the FY2018-2027 TIP consists primarily of projects that NCDOT amended in the STIP, and therefore needs to be amended in the DCHC MPO TIP. He added that one project of note is the merging of EB-5720, R. Kelly Bryant Bridge Trail South, and EB-5833, R. Kelly Bryant Bridge Trail North. These two projects are being merged to increase efficiency because they are now share the same implementation timeline. Aaron Cain stated that there are a few projects to which Surface Transportation Block Grant Direct Attribution (STBG-DA) funding would be added, and those projects can be referenced in the attachment to the MPO Board Agenda.

Pam Hemminger made a motion to approve Amendment #2 to the FY 2018-2027 TIP. Vice Chair Wendy Jacobs seconded the motion. The motion passed unanimously.

210 REPORTS:

#### 11. Report from the DCHC MPO Board Chair

#### Damon Seils, DCHC MPO Board Chair

Chair Damon Seils stated that he met with CAMPO Chair Harold Weinbrect, Mayor of Cary, and Vice Chair Sig Hutchinson from Wake County. Chair Damon Seils added that CAMPO staff prepared a detailed presentation of the quantitative scores. Chair Damon Seils continued that he looks forward to collaborating with the CAMPO about how to prioritize projects and achieve the MPO Board's regional vision. Vice Chair Wendy Jacobs added that they discussed joint goals, including legislative policy goals. Vice Chair Wendy Jacobs stated that the meeting helped clarify the changes the MPO needs to discuss with their state legislators. Vice Chair Wendy Jacobs commented that after seeing a map of projected works to be done in the Triangle Area, she observed that much of it will be in Orange and Wake County, and only a smaller portion in Durham County.

Chair Damon Seils noted that the next Joint MPO Meeting will be on May 31, 2018 at 9 a.m. at RTP Headquarters, and that the MPO Board would receive the agenda for the meeting shortly. Chair Damon Seils stated that one item of importance is the shared legislative and policy goals document, which both MPOs are planning to make more easily understood for the general public.

Chair Damon Seils stated that the North Carolina Association of Metropolitan Planning

Organization (NCAMPO) conference would be held at the Durham Convention Center. Aaron Cain

added that the dates for the event are April 25 - 27. He thanked Chair Damon Seils and Vice Chair

Wendy Jacobs for participating in the event.

#### 12. Report from the DCHC MPO Technical Committee Chair

Ellen Beckmann, DCHC MPO TC Chair

Ellen Beckman stated that City of Durham hosted public meetings for the past few months, including those concerning four large bicycle/pedestrian projects. Ellen Beckmann added they will also host upcoming public meetings as well, including one for the NC-98 Corridor Study on April 25 from 5-7 p.m. at the Durham East Regional Library. There will also be another meeting for the US-15/501 Corridor Study on April 17.

Aaron Cain stated that there will be four public meetings for the NC-54 Corridor Study: May 1 at Rigmor House; May 2 in Carrboro; May 3 in Graham; and May 8 in Swepsonville. Chair Damon Seils added that the website for the NC-54 West Corridor Study is NC54west.com. Chair Damon Seils added that the study is of particular interest for those in Orange County, and he asked the MPO Board members to inform others of the study and website.

#### 13. Reports from LPA Staff

Felix Nwoko, LPA Manager

Felix Nwoko stated that there were no updates.

Aaron Cain stated that Joe Milazzo is hosting the Regional Transportation Alliance (RTA) Summit Series and the dates for that series are: May 1 at the American Tobacco Campus; May 2 in Raleigh; and May 3 is in the RTP. Aaron Cain added that he will send an email with a link, and the information is also on the website.

#### 14. NCDOT Reports:

Richard Hancock, NCDOT Division 5, stated that there is ongoing work on the Old Chapel Hill Road bicycle/pedestrian project. He added there is also ongoing work at the roundabout at Pope Road.

Richard Hancock stated that half of the culvert reconstruction on Old Chapel Hill Road near Githens Middle school is complete. He added that the Herndon-Barbee roundabout has not been completed due to waterline relocation.

Richard Hancock stated that the first-portion of the bridge reconstruction has been completed near Alston Avenue, and that the Southbound US-147 ramp to Alston will be closed on April 15 and that there will be a detour. He added in the following two weeks the ramp from Alston to Northbound US-147 will be closed. He stated that traffic will be moved to the new bridge over US-147 and the old bridge will be demolished following completion.

Richard Hancock stated that there are tentative plans to close the South Miami connection on US-147, but it has been delayed due to the condition of bridge demolition.

Pam Hemminger discussed the possibility of adding or increasing lighting and signage at the roundabout at the intersection of Erwin and Mount Moriah Roads in Chapel Hill. Richard Hancock responded that Division 5 does not usually maintain lighting on municipal streets. Ellen Reckhow added that there were other safety concerns at the roundabouts on Carver Street between Guess Street and Duke Street.

Ellen Reckhow enquired about lane closures on I-85 and the protocol for warning signs about lane closures. Richard Hancock responded that he was unsure about why there were lane closures, and stated he would follow up with her. Richard Hancock added that the protocols already exist for signage on lane closures.

Patrick Wilson, NCDOT Division 7, announced that his division is working on a project on Old Greensboro Road. He added that, due to the necessary detour route, there are temporary signals on NC-54. Patrick stated that due to equipment issues with these traffic signals, there have been delays on NC-54 toward Carrboro. Patrick Wilson added that the signals would be in operation for the next six to seven months on NC-54 West of Carrboro-Chapel Hill.

Patrick Wilson also stated that this summer his division is planning a roundabout project in Chapel Hill and another roundabout in Carrboro, and that those projects are on schedule. Patrick Wilson added that there are still some issues that need to be addressed with his consultant and staff on the Franklin/Merritt Mill Road project.

Pam Hemminger asked if the projects would be completed this summer due to the university schedule. Patrick Wilson answered that that he was unsure because the projects currently do not have the Right of Way.

There was no additional report from NCDOT Division 8.

285 Julie Bogle stated that there was no update from the NCDOT Transportation Planning Division. There was no update from NCDOT Traffic Operations. 286 287 288 **INFORMATIONAL ITEMS:** 289 15. Recent News, Articles, and Updates 290 Chair Damon Seils reminded the MPO Board that there are recent news articles and updates 291 in the DCHC MPO Board Meeting Agenda packet. 292 **ADJOURNMENT:** 293 There being no further business before the DCHC MPO Board, the meeting was adjourned at 294 10:18 a.m.

# Managed Motorways Overview

Presented to:





# Agenda

- The managed motorways concept
- How does it work
- Why do freeways fail
- Managed motorways down under
- US efforts
- NC Corridors
- Lessons learned



# The Managed Motorways Concept

A collection of strategies and technologies that work in concert with each other to provide a holistic and integrated corridor management system that increases on-road outcomes by:

- Enhancing safety
- Improving reliability
- Reducing congestion
- Providing traveler information
- Lane use management system



# In Layman's Terms



- A series of coordinated ramp meters
- Integrated sensors along freeway and surface streets collecting high resolution data
- Ramp improvements to handle additional queuing
- Command and control software
- Human intervention at Traffic Management Center
- Incident detection and CCTV surveillance
- Can include traveler inform ation
- Can include lane management (variable speed limits, lane control, shoulder running, pricing)



# How Does It Work

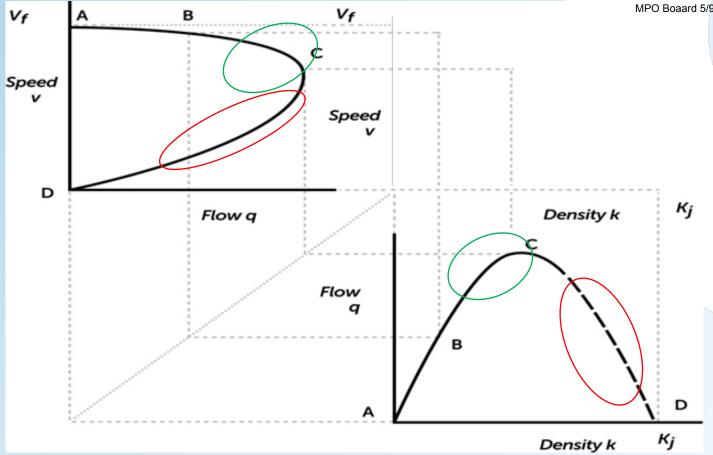
- Synchronizes flow of vehicles entering a freeway to available capacity on the freeway
- Provides real time demand management (every 20 seconds) to control traffic and optimize overall freeway efficiency
- Interchanges coordinate with one another to prevent excessive wait times and queuing for all interchanges, metering rates differ for each ramp





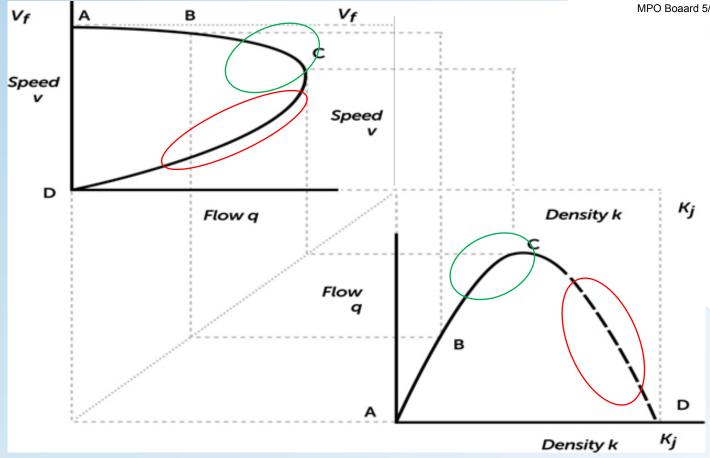






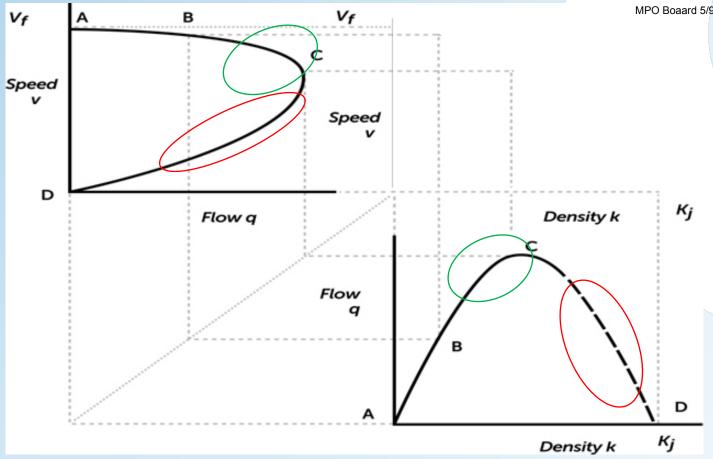






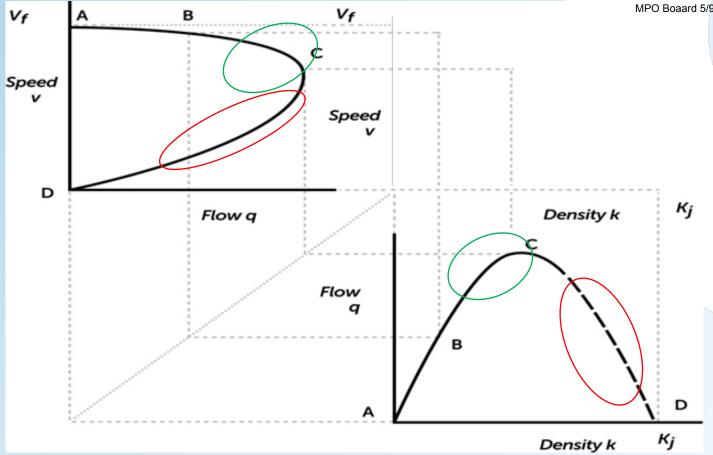






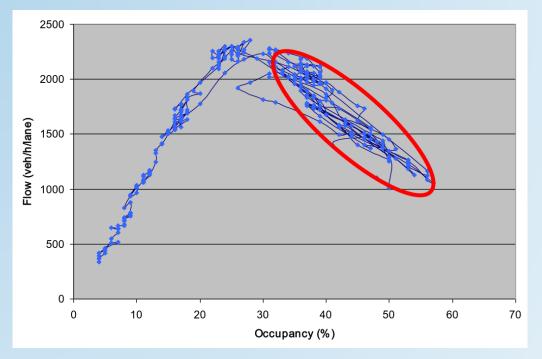






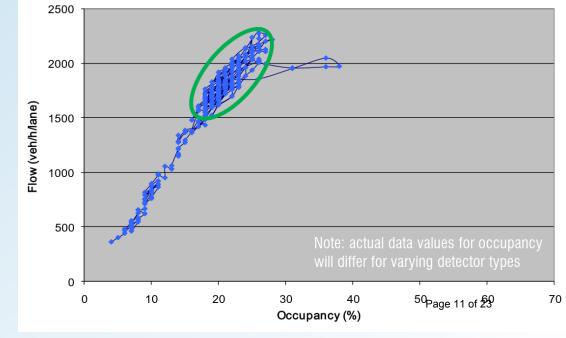


# Unmanaged vs Managed



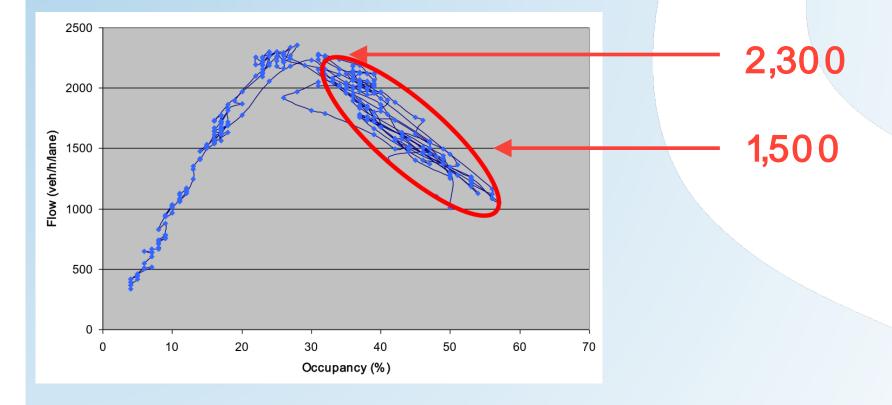
# Unmanaged

Managed





# Unmanaged vs Managed



4 lanes @ 2,300 = 9,200 4 lanes @ 1,500 = 6,000 9,200-6,000 = 3,200More than a lane worth of capacity!



# Managed Motorways Down Under

- First deployed in Melbourne in 2009 on the M1
   Freeway
- 47 miles, carrying over 160,000 vpd
- 1,100+detection, signal, and communication devices
- Coordinated dynamic metering at 62 locations
- Ramp improvements at 30 locations
- Priority ram p bypass for transit, HOV, and trucks at ram p locations



# Managed Motorways Down Under

- 5% increase in peak traffic flow rate, 25% in overall flow
- Flow rate is now sustained throughout peak periods
- Traffic speeds improved between 35% and 60% during peak periods
- Decreased crash rates while other Melbourne freeways generally increased



## **US Efforts**



- Colorado Construction starting on I-25 in Denver this fall
  - 14 miles, 14 interchanges,
  - 18 m eters, 7 ram p improvements
- Utah Feasibility study on I-15 in Salt Lake City completed. Design steps being developed
- Arizona High level feasibility study complete
- Georgia Working on pilot corridor, currently developing detection layouts

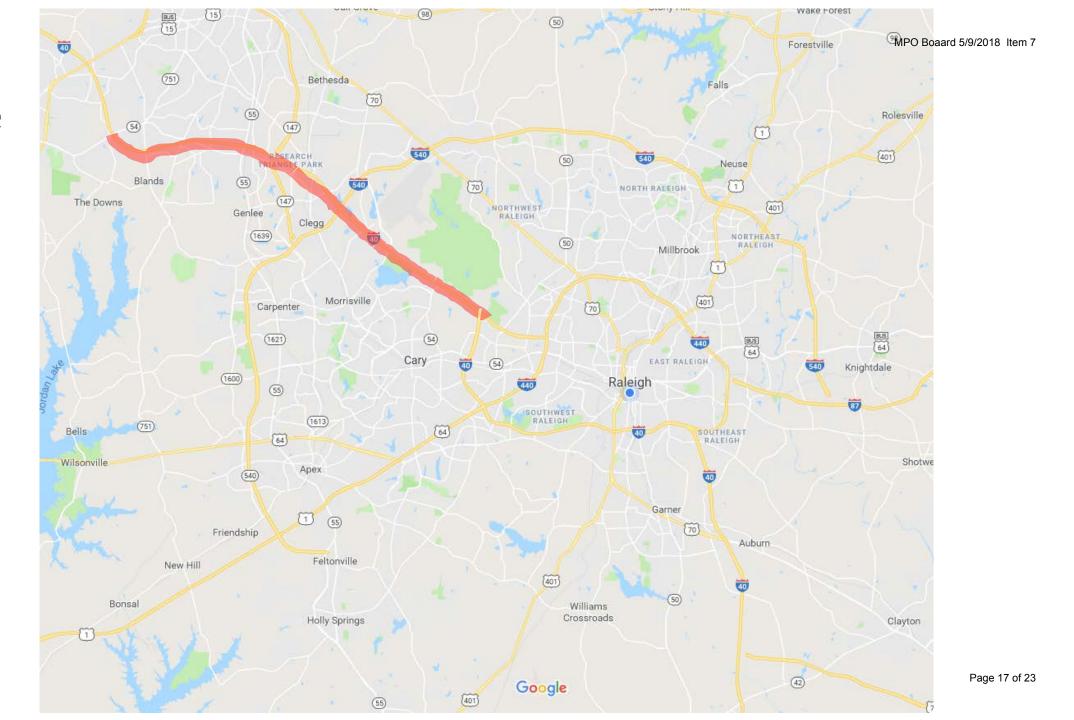


# Triangle Area Corridors

- Funded in statewide tier in latest round of SPOT
- Updated cost estimates based on lessons learned from Colorado

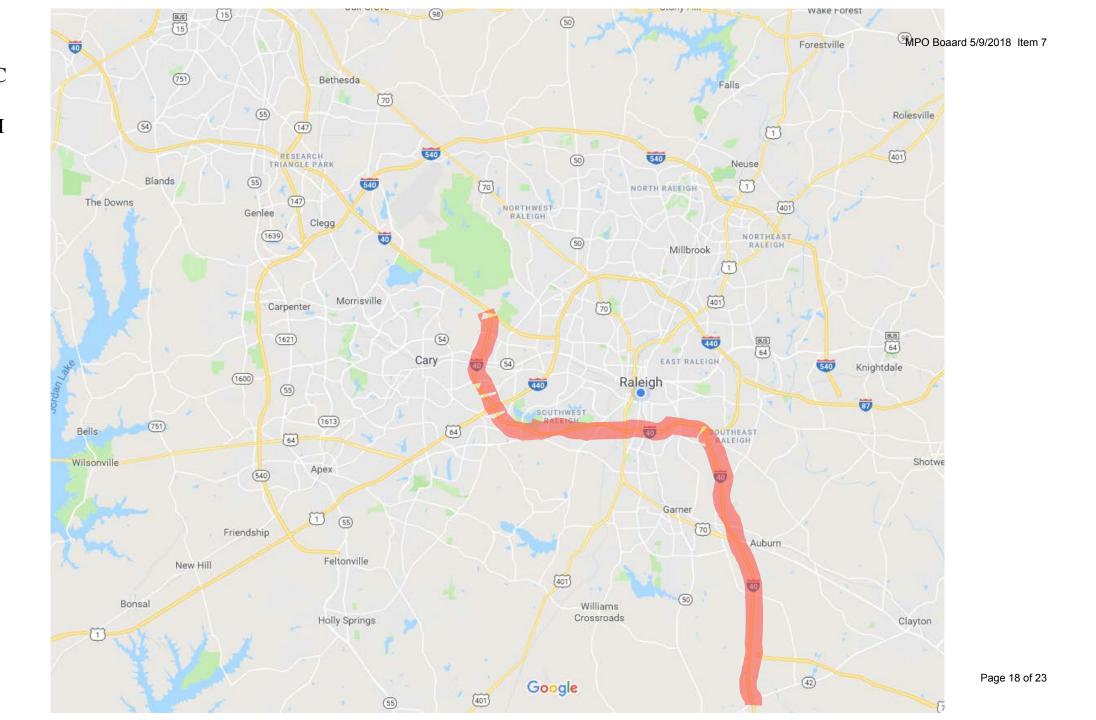


I-40 from NC 54 to Wade Ave -\$42.4M



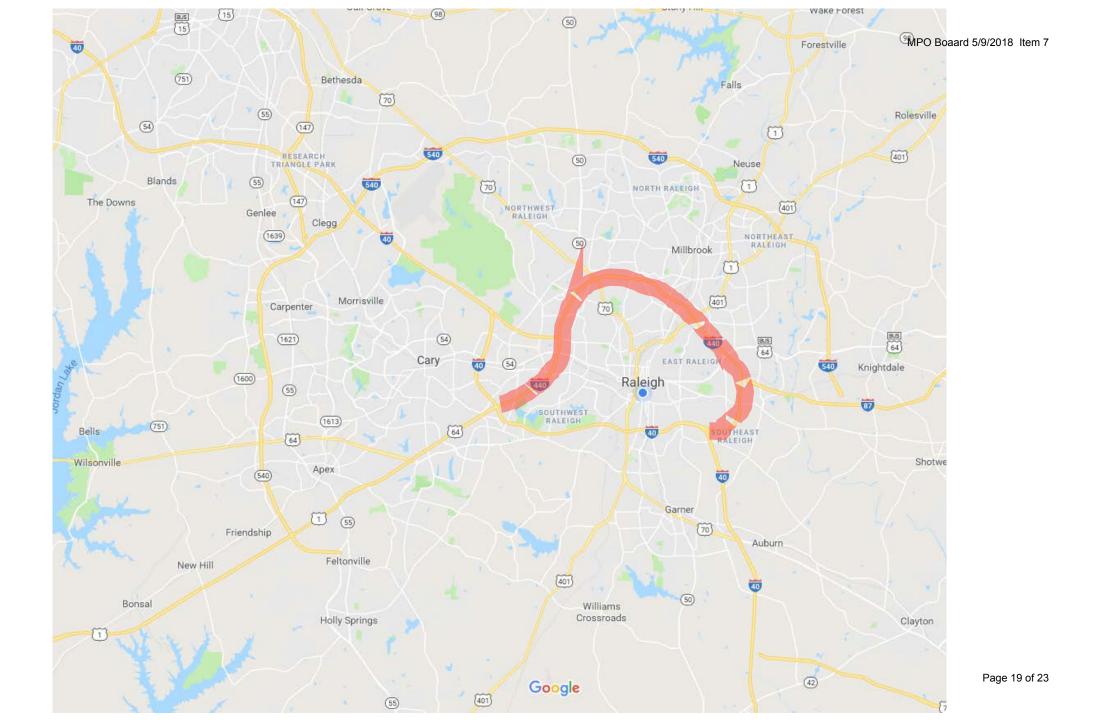


I-40 from NC42 to WadeAve - \$52.6M



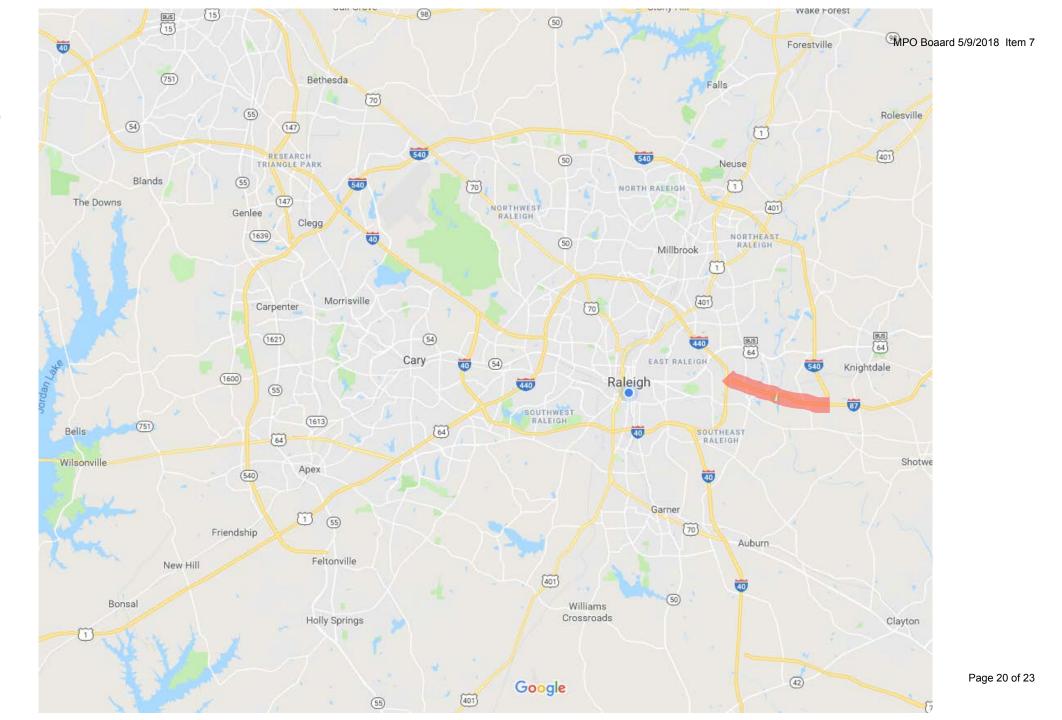


I-440 from I 40 to Wade Ave / US 1-\$46.3M



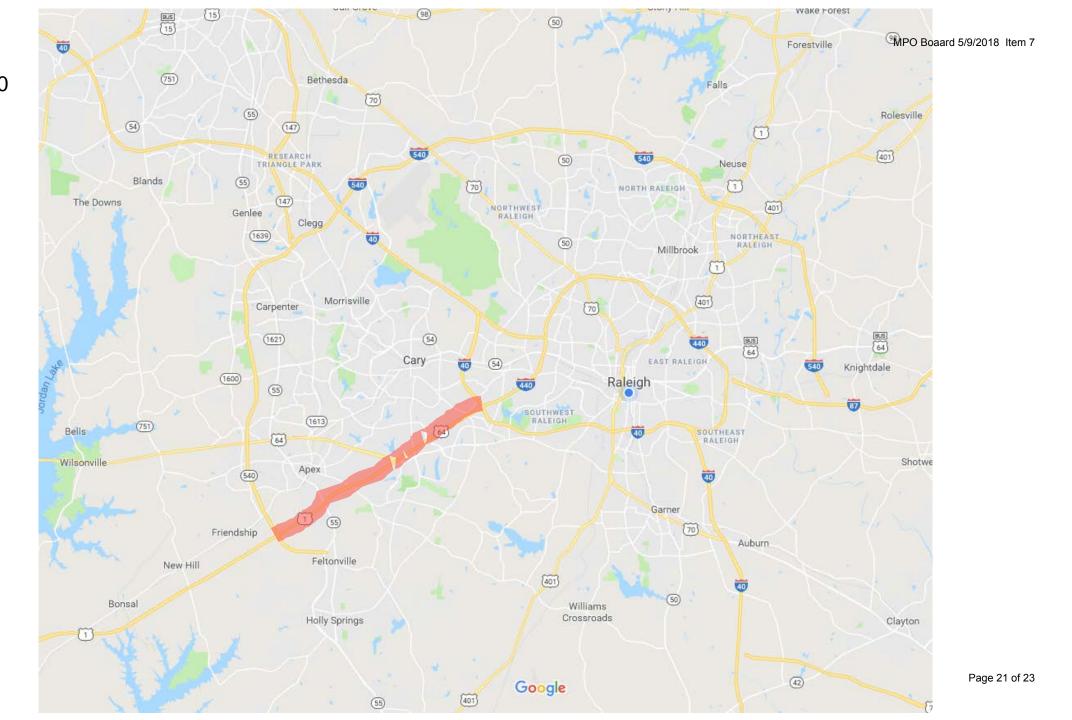


I-87 from 440 to I-540 - \$67.8M





US 1from 140 to NC 540 -\$23.6M





## Lessons Learned

- Managed motorways is a multi-faceted solution that involves new skill sets, communications systems, control engineering and systems, and optimization strategies
- It is important to control all access points
- Can significantly reduce delay and increase reliability
- Much cheaper than adding an additional lane
- Can be used in conjunction with managed lanes, toll facilities, and future widening



# Questions?

Will.Letchworth@WSP.com 919-805-4900

wsp.com





## **Durham – Chapel Hill – Carrboro Metropolitan Planning Organization**

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

#### **MEMORANDUM**

May 9, 2018

To: Durham-Chapel Hill-Carrboro MPO Board From: Aaron Cain, Senior Transportation Planner

Re: Initial Allocation of Local Input Points for Regional Impact Projects

Per the adopted DCHC MPO Methodology for Identifying and Ranking New Transportation Improvement Program Project Requests (see attached), DCHC MPO staff has compiled an initial list of projects for consideration for local points for the current round of prioritization. That list is attached. This memo describes the development of that list as well as highlights some issues for consideration for deviation from that list in the final selection.

#### Application of Methodology

The Methodology defines five criteria to be considered for highway projects, and six for non-highway. Staff applied the criteria to every project at the Regional Impact tier, including those that could cascade down from the Statewide Mobility tier. Projects that received the same score based on the established criteria were then ranked based on their overall SPOT quantitative score to determine whether or not they should be recommended for local points.

#### Potential Deviations from Methodology

State law allows for deviations from the adopted Methodology as long as those deviations are acknowledged and documented by the MPO Board. Several justifications for deviation are listed in the Methodology. MPO staff has identified several issues for the MPO Board to consider that would deviate from the formula in the Methodology:

- The initial assignment of points to highway projects only assigns points to projects located in Durham.
   However, the Methodology identifies "geographical and jurisdictional balance" as a reason to deviate from the standard criteria and assign points to a particular project.
- The Methodology states that projects should not cascade down that cost more than \$5 million.
   However, this could eliminate some projects that could be funded, based on their quantitative score, such as several rail projects.
- The Methodology states that 500 points will be assigned to transit projects (a maximum of 100 points may be assigned to any one project). However, with the removal of several transit projects by the MPO Board in March, and only one commuter rail project that could potentially be constructed, there are not enough transit projects to assign the full complement of points. Therefore, in the initial list those points have been assigned to highway projects.



## **Durham – Chapel Hill – Carrboro Metropolitan Planning Organization**

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

- DCHC MPO staff is consulting with CAMPO staff regarding which commuter rail project should receive
  local points. As a placeholder, the project with the highest quantitative score has been assigned 34
  points from DCHC (CAMPO would provide the additional 66 points). However, if another project is
  deemed more appropriate to receive points, the number of points DCHC assigns could change.
- The Methodology states that 500 points can be assigned to "any mode and project type". The only modes in which DCHC has projects at the Regional level are highway, transit, and rail. There are not enough transit projects to use any of these points, and not enough rail projects that meet the \$5 million threshold for cascading to use all 500 of these points; therefore, the points that are not assigned to rail projects have been assigned to highway projects.
- DCHC MPO staff has not at this time consulted with staff from Division 5, 7, or 8 to gauge which projects they may assign points. Since half of the local points will come from the appropriate Division, any project will have a greater chance of securing funding if it receives points from both the MPO and the Division. DCHC MPO staff will continue to engage Division staff during the public review process.

#### Attachments

DCHC MPO Methodology for Identifying and Ranking New Transportation Improvement Program Project Requests

Initial Project List for Local Input Points for P5

#### **Highway Projects**

nigiiway Pic	ightful i Tojecco					Method	ology Crite	ria						
						Local Tax	Local	Complements		-	Cascading		Points	
Route	From	<u>To</u>	Description	<u>Jurisdiction</u>	MTP Prioritization	Revenues		Non-Highway	EJ	TOTAL		SPOT Score	Assigned	<u>Notes</u>
US 501 (Roxboro Road)	US 501 Bypass (Duke Street)	Omega Road	Construct median, access management facilities, safety improvements, bicycle and pedestrian facilities, and transit stop improvements.	Durham	2	0	1	1	1	5	N	47.45	100	
US 501 Business (Roxboro Road)	NC 55 (Avondale Drive)	SR 1004 (Old Oxford Road)	Construct median along section with potential turn lanes at Lavender Avenue, Bon Air Avenue, and Murray Avenue. Fill in sidewalk gaps and provide streetscape amenities.	Durham	2	0	1	1	1	5	N	45.93	100	
NC 98 (Holloway Street)	SR 1838 (Junction Road)	SR 1919 (Lynn Road)	Construct safety improvements and widen to add median, bicycle lanes, sidewalks, transit stop improvements, and traffic signals where needed.	Durham	2	0	1	1	1	5	N	45.76	100	
US 15, US 501	US 15-501 / NC 54 interchange (Raleigh Road)	(Ephesus	Construct capacity improvements and add sidewalks, wide-outside lanes, and transit accommodations.		1	0	1	1	1	4	Y	47.70	0	Does not meet threshold for cascading project
US 501 Business (Roxboro Road)	SR 1443 (Horton Road)		Install turn lanes on US 501 Business (Roxboro Road) at Horton Road.	Durham	2	0	1	0	1	4	N	44.75	100	
NC 147 (Durham Freeway)	Elba Street/Trent Drive		Improve ramps by tying them into a roundabout with Elba Street and Trent Drive.	Durham	2	0	0	1	1	4	Y	37.94	100	Meets <\$5M threshold for cascading project
NC 54	NC 751	SR 1118 (Fayetteville Road)	Widen to Multi-Lanes with Bicycle, Pedestrian, and Transit Accommodations	Durham	1	0	1	1	0	3	N	40.30	100	
US 15, US 501	NC 147 (Durham Freeway)	US 70 Business (Hillsborough Road)	Signalize collector-distributor ramp intersections to improve safety.	Durham	2	0	0	0	1	3	Υ	37.85	100	Meets <\$5M threshold for cascading project
NC 54	I-40	NC 751	Widen to Multi-Lanes with Bicycle, Pedestrian, and Transit Accommodations	Durham	1	0	1	1	0	3	N	37.11	100	
NC 54	SR 1118 (Fayetteville Road)	SR 1106 (Barbee Road)	Widen to Multi-Lanes with Bicycle, Pedestrian, and Transit Accommodations	Durham	1	0	1	1	0	3	N	31.65	100	
NC 54	SR 1106 (Barbee Road)	NC 55	Widen to Multi-Lanes with Bicycle, Pedestrian, and Transit Accommodations	Durham	1	0	1	1	0	3	N	31.05	100	
NC 751 (Hope Valley Road)	South Roxboro Road	Woodcroft Parkway	Widen to four lanes with bike lanes and sidewalks. Improve the NC 751 & South Roxboro Road intersection.	Durham	1	0	1	1	0	3	N	25.62	100	
NC 751 (Hope Valley Road)	NC 54	Southpoint Auto Park Blvd	Widen to four lanes with a median with bicycle, pedestrian and transit facilities as appropriate.	Durham	1	0	1	1	0	3	N	25.56	66	
US 70 Business	US 15-501 Business (Roxboro Street)	US 15/501 Business (Roxboro Street)	Convert the Downtown Loop from one- way to two-way traffic	Durham	0	0	1	1	1	3	N	19.51	0	

US 15 Business (Roxboro Street)	Pettigrew Street	East Main Street	Improve the crossing at US 15/501 Business (Roxboro Street) in Downtown Durham. Make the bridge higher to reduce truck conflict, make the span wider to facilitate a future two-way of Roxboro Street, and make the bridge wider to be able to accommodate four tracks. Potentially create an intersection at Ramseur and Roxboro.	Durham	0	0	1	1	1	3	N	19.07	0
NC 55	1-40		Add third SB lane on NC 55 from Meridian to I-40 EB on-ramp and improve ramp terminals. Also add bike/ped facilities.	Durham	0	0	1	1	0	2	N	51.65	0
US 15, US 501	I-40	US 15/501 Business	I-40 to US 15/501 Bypass in Durham. Major Corridor Upgrade to Expressway	Durham	1	0	0	0	1	2	Υ	43.41	0
NC 54	SR 1937/SR 1107 Old Fayetteville Road	343111233	Improve intersection	Orange County	2	0	0	0	0	2	N	42.92	0
NC 54	Neville Road		Improve intersection	Orange County	2	0	0	0	0	2	N	32.60	0
Division 5 Non- Muncipal Divisionwide Signal System			Add cameras and fiber to signals in division 5 which are outside of municipal systems and upgrade software and add equipment to enable monitoring of signals by Division staff. Division wide project. Will provide the list of signals.	Division 5	2	0	0	0	0	2	N	22.94	0
US 70	SR 1811	Page Road Extension / New Leesville Road	Upgrade Roadway to Freeway.	Durham	1	0	0	0	0	1	Y	49.32	0
1-40	NC 147	Wade Avenue	Construct Managed Lanes.	Durham	1	0	0	0	0	1	Υ	45.37	0
US 70	Page Road Extension	Alexander Drive in Wake County	Upgrade Roadway to Freeway	Durham	1	0	0	0	0	1	Υ	38.25	0
NC 86	,.	North of NC 57	Widen to four lanes with a median and Improve intersections at US 70 Bypass and NC 57.	Orange County	0	0	0	0	1	1	N	36.02	0
NC 751	SR 1740 (Lewter Shop Road)	O'Kelly Chapel Road	Widen road to 4 Lanes with bicycle lanes on existing location.	Chatham County	0	0	0	1	0	1	N	32.77	0
NC 54	US 15-501		Improve Interchange	Chapel Hill	1	0	0	0	0	1	N	30.44	0
US 70	US 70 Connector		Reconstruct interchange to an at-grade intersection.	Orange County	0	0	0	0	1	1	N	18.43	0
I-40	NC 54	NC 751	Construct auxiliary lane between ramps	Durham	0	0	0	0	0	0	Υ	47.78	0
NC 54	SR 1006 (Orange Grove Rd)	SR 1937 / SR 1107 (Old Fayetteville Rd)	Widen to a four-lane boulevard	Orange County	0	0	0	0	0	0	N	46.80	0
US 15, US 501	NC 751	Pickett Road Overpass	Widen section of 15-501 bypass between Tower and NC 751 to 6 lanes	Durham	0	0	0	0	0	0	Υ	45.65	0
I-540	I-40	I-87	Construct managed shoulders in both directions along I-540. Managed lanes are expected to be in operation for approx 3 hours during morning and evening peak periods (6 hours total).	Wake County	0	0	0	0	0	0	Y	41.66	0

US 15, US 501		US 64 Pittsboro Bypass	Convert remaining non-synchronized sections of US 15-501 to synchronized between the Orange County Line and the US 64 Pittsboro Bypass	Chatham County	0	0	0	0	0	0	N	32.26	0
I-540	I-40	US 1	Construct managed shoulders in both directions along I-540. Managed lanes	Wake County	0	0	0	0	0	0	Y	26.60	0
TOTAL													1166

Per the adopted Methodology, a minimum of 800 points will go towards highway projects.

An additional 366 points are assigned to highway projects due to a lack of eligible non-highway projects.

#### **Non-Highway Projects**

Methodology Criteria		
	Methodo	logy Criteria

					Metr	lodology Crite	eria						
				<u>Plan</u>	·	Local Tax	Complements			<u>Statewide</u>		<u>Points</u>	
Mode	<u>Project</u>	<u>Description</u>	<u>Jurisdiction</u>	Consistency	Engineering	Revenues	Non-Highway	<u>EJ</u>	<u>TOTAL</u>	Cascade?	SPOT Score	<u>Assigned</u>	<u>Notes</u>
Transit	Durham-Orange Light Rail Transit	Construct a 17.7 mile light rail transit line from North Carolina Central University in Durham to UNC Hospitals in Chapel Hill. The entire alignment will be dedicated light rail tracks, with portions in downtown Durham and Chapel Hill that will be accessible to bus traffic (but not automobile traffic). All service provided for this project will utilize light rail vehicles. On weekdays, peak services will operate at 10 minute intervals, and off-peak at 20 minutes. Weekend services will operate at 20-30 minute intervals.	Durham, Chapel Hill	2	1	1	1	1	6	N	53.33	100	
Transit	Commuter Rail from Durham to Garner	Construct commuter rail service and infrastructure. Project includes 4 locomotives and 8 coaches.	Durham, Wake	2	1	1	1	1	6	N	46.67	34	One-third of the project is within DCHC; remainder of points to come from CAMPO
Transit	Durham to Raleigh Commuter Rail Service	Construct infrastructure and service for commuter rail service from Durham to Raleigh. Project includes 4 locomotives and 8 coaches.	Durham, Wake	2	1	1	1	1	6	N	43.89	0	Only one viable commuter rail project
Transit	Durham to Wake Forest Commuter Rail	Construct infrastructure and service for commuter rail service from Durham to Wake Forest. Project includes 6 locomotives and 12 coaches.	Durham, Wake	2	1	1	1	1	6	N	40.19	0	Only one viable commuter rail project
Transit	Durham to Raleigh to Garner/Wake Forest commuter rail	Construct infrastructure and service for 8-2,8-2 service to Raleigh and 4-1,4-1 service to Wake Forest and Garner. Project includes 6 locomotives and 12 coaches.	Durham, Wake	2	1	1	1	1	6	N	39.45	0	Only one viable commuter rail project
Transit	Commuter Rail Transit, West Durham to Garner	Construct commuter-rail transit service adjacent to and/or within the existing North Carolina Railroad Corridor extending from West Durham to Greenfield station in Garner via RTP, Cary, and Raleigh. Provide four trains each direction during the morning rush hour, four in the evening rush hour, and one train each direction in the off-peak AM and PM (a total of ten trains each direction). The peak services will operate at one-hour intervals (e.g. leave origin station at 6:00 am, 7:00 am, 8:00 am, etc.).	Durham, Wake	2	1	1	1	1	6	N	34.63	0	Only one viable commuter rail project
Transit	GoTriangle DRX Route bus service expansion FY 19	Purchase 3 additional vehicles in FY 19 to support headway reduction on DRX route.	Durham, Wake	2	1	1	1	1	6	N	29.63	100	
Transit	GoTriangle ODX Route bus service expansion FY23	Purchase one additional vehicle in FY23 to support headway reduction on the ODX route.	Durham, Hillsborough	2	1	1	1	1	6	N	20.56	100	
Transit	Mebane to Selma Commuter Rail Service	Construct infrastructure and service for commuter rail service from Mebane to Selma. Project includes 12 locomotives and 24 coaches.	Durham, Wake	2	1	0	1	1	5	N	31.48	0	Only one viable commuter rail project
Rail	NS/NCRR H Line	Construction of grade separation at SR 1954 (W. Ellis Road) and closure of existing at-grade crossing (Crossing # 735 236Y) in Durham.	Durham	2	1	0	1	0	4	Y	49.33	0	Does not meet threshold for cascading project
Rail	NS/NCRR H Line	Construction of at-grade crossing improvements at Blackwell Street (Crossing # 735 229N), US 15 (Mangum Street) (Crossing # 735 231P), and SR 1118 (Fayetteville Street) (Crossing # 910 605Y) per Durham TSS in Durham.	Durham	2	1	0	1	0	4	Y	45.78	100	Meets <\$5M threshold for cascading project
Rail	NS/NCRR H Line	Construction of grade separation at SR 1317 (Neal Road) and closure of existing at-grade crossing (Crossing # 735 202E) in Durham.	Durham	2	1	0	1	0	4	Υ	42.13	0	Does not meet threshold for cascading project
Rail	NS/NCRR H Line	Construction of second main track from East Durham Yard (MP 58.5) to Nelson (MP 63.5) in Durham.	Durham	2	1	0	1	0	4	Υ	34.22	0	Does not meet threshold for cascading project

Rail	NS/NCRR H Line	Construction of grade separation at Dimmocks Mill Road (Crossing # 735 154S) and closure of Bellvue Street existing at grade crossing (Crossing # 735 152D) and West Hill Avenue existing at-grade crossing (Crossing # 735 151W). Project includes a pedestrian tunnel at Hill Avenue.	Hillsborough	2	1	0	1	0	4	Y	33.08	0	Does not meet threshold for cascading project
Rail	I-40 Rail Bridge in Durham County	Construct triple track bridge over I-40 in Durham County.	Durham	2	0	1	1	0	4	Υ	4.91	0	Does not meet threshold for cascading project
Rail	NS/NCRR H Line	Construction of second main track from Control Point Funston (MP 49.8) to East Durham Yard (MP 56) in Durham.	Durham	2	0	0	1	0	3	Υ	8.21	0	Does not meet threshold for cascading project
Rail	NCRR/NS H line	Construction of curve radius improvements from MP H 44.5 to MP H 48 near Hillsborough.	Orange County	0	1	0	1	0	2	Υ	31.97	100	Meets <\$5M threshold for cascading project
Rail	NCRR/NS H line	Construction of curve radius improvements from MP H 38 to MP H 40.4 near Efland.	Orange County	0	1	0	1	0	2	Υ	18.90	100	Meets <\$5M threshold for cascading project
Rail	NS/NCRR H Line	Construction of new railroad bridge, or other railroad approved method, over Exchange Park Lane (Crossing #735 158U) to accommodate pedestrian traffic within the structure.	Hillsborough	0	0	0	1	1	2	Y	16.56	0	Does not meet threshold for cascading project
TOTAL		•										634	

66 points remaining from transit set aside due to lack of projects.

366 points remaining from non-highway projects due to lack of projects that meet established thresholds.

# DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION METHODOLOGY FOR IDENTIFYING AND RANKING NEW TRANSPORATION IMPROVEMENT PROGRAM PROJECT REQUESTS

#### INTRODUCTION

According to U.S. Code 23 Section 134, Metropolitan Planning Organizations (MPOs) are required to develop a Transportation Improvement Program (TIP) in cooperation with the State and public transportation providers through a performance-driven, outcome-based approach to planning. The TIP should contain projects consistent with the Metropolitan Transportation Plan (MTP) and should reflect the investment priorities established in the current MTP. There should be the opportunity for public participation in developing the TIP including consultation, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.

Furthermore, as a Transportation Management Area (TMA), according to U.S. Code 23 Section 134, all federally funded projects within the Durham-Chapel Hill-Carrboro (DCHC) MPO (excluding projects carried out on the National Highway System) shall be selected for implementation from the approved TIP by the MPO in consultation with the State and any public transportation provider or operator. Projects on the National Highway System shall be selected for implementation from the TIP by the State in cooperation with the MPO.

North Carolina's Strategic Transportation Investments (STI) legislation, passed in 2013, establishes a formula and process by which transportation funding is distributed across the state and across transportation modes. The outcome of the STI process is the draft State Transportation Improvement Program (STIP). The STI legislation applies uniformly across the state regardless of the boundaries of MPOs. The STI legislation requires the identification and submittal of potential transportation projects by the North Carolina Department of Transportation (NCDOT) and the MPO, the evaluation of projects according to a NCDOT-developed quantitative scoring methodology, and the allocation of ranking points among certain projects by NCDOT and the MPO.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) *Methodology for Identifying and Ranking TIP Project Requests* describes the processes that the DCHC MPO will follow to identify projects that will be submitted for evaluation to NCDOT during the NCDOT Strategic Prioritization Office of Transportation's (SPOT) Prioritization process. When the results of the SPOT Prioritization process are made available, the DCHC MPO will follow this Methodology to rank projects and assign Local Input Points to high priority projects. This Methodology is designed to address the federal requirement that the TIP be consistent with the projects and investment priorities of the MPO's MTP while being compatible with the state's STI process.

The DCHC MPO retains the authority to develop the TIP for the MPO area as required by federal regulations. Participation in the STI process through submitting projects for evaluation and/or allocating Local Input Points to projects does not require the MPO to include these projects in the TIP.

#### **OBJECTIVE**

The Methodology described herein is designed to address multi-modal transportation needs, ensure regional balance, and prioritize projects that are needed based on technical criteria. The goal is to

produce a project priority ranking which satisfies MPO goals, is simple enough for project-level analysis without requiring unnecessary data collection, and is understandable by the general public.

The DCHC MPO's Technical Committee (TC) will use the Methodology to generate a list of priority projects to submit to the NCDOT SPOT for quantitative scoring. While the Methodology is designed to comprehensively address the DCHC MPO's transportation needs, there will always be factors that are not easily measured but should still be considered in the development of the DCHC MPO's priorities. The DCHC MPO TC will make its technical recommendation for the prioritization of projects based on the methodology described in this document, and the DCHC MPO Board will then be afforded the opportunity to make changes with appropriate documentation. All public involvement for this process will be conducted in accordance with the DCHC MPO's adopted Public Involvement Policy.

#### Steps and schedule for submission of DCHC MPO projects to NCDOT for evaluation:

Spring 2017	DCHC MPO staff work with local jurisdiction staff to develop potential new projects for Prioritization 5.0; DCHC MPO staff review projects to ensure they meet minimum requirements and are in the MTP
June 2017	DCHC MPO staff and Technical Committee reviews Carryover projects and makes recommendations to the Board to either have those projects scored in Prioritization 5.0 as is, propose changes to projects to then be scored in Prioritization 5.0, or remove projects from consideration; DCHC MPO Board reviews and provides input on potential new projects
July 2017	DCHC MPO staff performs analysis on proposed new projects; a Technical
	Committee sub-committee narrows the number of projects to a final recommended list for submittal
August 2017	DCHC MPO Board votes on any proposed changes and deletions of existing projects for Prioritization 5.0; DCHC MPO Board reviews proposed list of new projects for Prioritization 5.0; new project list is released for public comment
September 2017	Project submission deadline for Prioritization 5.0.

## Steps and schedule for updating the DCHC MPO's Methodology for Identifying and Ranking TIP Project Requests:

November 2017	DCHC MPO staff updates <i>Methodology for Identifying and Ranking TIP Project Requests</i> document
December 2017	DCHC MPO TC reviews the <i>Methodology for Identifying and Ranking TIP Project Requests</i> and forwards Methodology to the DCHC MPO Board for public release
January 2018	DCHC MPO Board releases the <i>Methodology for Identifying and Ranking TIP Project Requests</i> for public review and comment period; DCHC MPO TC makes final review and recommendation to DCHC MPO Board
February 2018	DCHC MPO holds public hearing on <i>Methodology</i> , forwards for NCDOT Review Committee review
March 2018	DCHC MPO Board approves the <i>Methodology for Identifying and Ranking TIP</i> Project Requests

#### Steps and tentative schedule for the allocation of Local Input Points:

March 2018	DCHC MPO receives results of the NCDOT SPOT scoring process for Statewide, Regional, and Division projects
April 2018	DCHC MPO ranks Regional projects for the assignment of Local Input Points; DCHC MPO Board releases initial assignment of Local Input Points for Regional projects for public comment
May 2018	DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Regional projects
June 2018	DCHC MPO Board approves assignment of Local Input Points to Regional projects
June 2018	DCHC MPO submits Regional projects, with Local Input Points assigned, to NCDOT
July 2018	DCHC MPO ranks Division projects for the assignment of Local Input Points
August 2018	DCHC MPO Board releases initial assignment of Division projects and the assignment of Local Input Points for public comment
September 2018	DCHC MPO Board holds public hearing on initial assignment of Local Input Points for Division projects
October 2018	DCHC MPO Board approves assignment of Local Input Points to Division projects
October 2018	DCHC MPO submits Division projects, with Local Input Points assigned, to NCDOT
January 2019	NCDOT releases Draft STIP

#### DCHC MPO GOALS FOR THE METHOLDOGY FOR IDENTIFYING AND RANKING TIP PROJECTS

The Methodology for Identifying and Ranking TIP Projects should result in a list of projects that are a subset of the DCHC MPO Metropolitan Transportation Plan (MTP). For this reason, the goals for the Methodology are the same as the goals of the DCHC MPO, as presented in the adopted 2040 MTP<sup>1</sup>. The goals of the 2040 MTP are as follows:

- A safe, sustainable, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility and access; protects the environment and neighborhoods; and improves the quality of life for urban area residents.
- An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.
- A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.
- A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes offroad trails
- A Transportation Plan that is integrated with local land use plans and development policies.
- A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.
- An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.
- Continue to improve transportation safety and ensure the security of the transportation system.
- Improve mobility and accessibility of freight and urban goods movement.

#### PROCEDURE FOR IDENTIFYING PROJECTS FOR SUBMISSION TO NCDOT SPOT FOR EVALUATION

#### 1) Submission of Local Priority Lists to the MPO

All MPO member jurisdictions and agencies will submit a local priority list to the MPO. The DCHC MPO requests that the MPO members apply initial screening criteria during the development of their respective lists. The initial screening criteria are listed below in this section. In addition to the initial screening criteria, MPO members may also want to consider reviewing Section 2 of this Methodology for guidance on the NCDOT's SPOT scoring criteria. The DCHC MPO will apply the NCDOT's scoring criteria when considering new project requests from DCHC MPO member jurisdictions and agencies. If a project exists in more than one jurisdiction, all jurisdictions must be in agreement on the proposed scope and details of the project.

#### **Initial Screening Criteria**

- a) Regional Goals How well does the project meet the adopted regional goals? Is the project an element of the current MTP? 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?

<sup>&</sup>lt;sup>1</sup> The 2040 MTP was in effect at the time of submission to Prioritization 5.0 and the drafting of this *Methodology*; the 2045 MTP is scheduled to be adopted in February 2018.

c) Timing – 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?

DCHC MPO staff, the TC and its subcommittee will review local priority lists for adherence to the initial screening criteria and apply the NCDOT scoring criteria listed in Section 2 of this Methodology, before recommending the submission of these projects to Prioritization 5.0.

#### 2) Submission of Projects to the STI Process

For the 2020-2029 TIP, the DCHC MPO will submit projects to NCDOT's SPOT office by September 2017 for the application of the NCDOT's quantitative ranking methodology. The MPO is limited in the number of new projects that may be submitted for each mode (highway, bicycle and pedestrian, public transportation, aviation, ferry and rail), but can submit an additional project for each existing project removed from the system. NCDOT Division Engineers can also submit projects for each of their Divisions but are also limited in the number of new projects per mode that may be submitted.

DCHC MPO will combine the local priority lists into a list that the MPO will use to prioritize projects for submission. In the event that more highway, bicycle and pedestrian, public transportation, or rail projects are submitted to the MPO than the MPO is allowed submit to NCDOT, the DCHC MPO will work with a TC subcommittee to select projects based the NCDOT scoring criteria for each mode. For Prioritization 5.0 there were no ferry or aviation projects submitted within the DCHC MPO area. DCHC MPO will request that the Division Engineers submit any additional projects that the DCHC MPO may not be able to submit because the MPO is limited in the number of projects that may be submitted.

#### **DCHC MPO Preliminary Project Ranking**

#### **Highway Projects**

Highway projects are eligible to be scored and funded in any of the three funding categories (Statewide, Regional, or Division), depending on the characteristics of the project. The P5.0 Workgroup has developed a different highway project scoring process for each of the three funding categories. The DCHC MPO will utilize the scoring processes developed by NCDOT to preliminarily rank projects to be submitted to NCDOT SPOT for evaluation. A project that is eligible for the Statewide funding category but is not funded under that category can cascade down to the Regional category for evaluation and possible funding. If the project is not funded under the Regional category, the project may cascade down to the Division category for evaluation and possible funding.

The NCDOT SPOT process limits the number of projects that MPOs may submit. In the event that more new project requests are received than the MPO can submit, the DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017. This will provide a set of preliminary scores that can be used to rank projects.

For Prioritization 5.0, Divisions 5, 7, and 8 each adopted a set of alternate criteria for highway projects (alternate criteria was not an option for non-highway projects). Those alternate criteria are shown below.

#### **NCDOT and DCHC MPO Scoring Criteria for Highway Projects**

Funding	DCHC MPO Scoring Criteria for Highway Projects		al Input
Category	Quantitative Data		MPO/RPO
Statewide Mobility	<ul> <li>Benefit/Cost = 25%</li> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> <li>Congestion = 30%</li> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway.</li> <li>60% Existing Volume/Capacity Ratio</li> <li>40 Existing Volume</li> <li>Economic Competitiveness = 10%</li> <li>Measurement of the estimated number of long-term jobs and the % change in economic activity within the county that the project is expected to provide over 10 years.</li> <li>Safety = 10%</li> <li>Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.</li> <li>Freight = 25%</li> <li>Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.</li> <li>Total = 100%</li> </ul>	Input	Input
Regional Impact	<ul> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> <li>Congestion = 20%</li> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway.</li> <li>80% Existing Volume/Capacity Ratio</li> <li>20% Existing Volume</li> <li>Safety = 10%</li> <li>Measurement of the number, severity, and density of crashes along the roadway and calculate future safety benefits.</li> <li>Accessibility/Connectivity = 10%</li> <li>Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.</li> <li>Freight = 10%</li> <li>Measurement of existing truck volume and whether or not the roadway is part of a future interstate highway.</li> <li>Total = 70% (Division Engineer and Local Input Points account for remaining 30%)</li> </ul>	15%	15%

#### NCDOT and DCHC MPO Scoring Criteria for Highway Projects - continued

Funding			al Input
Category	Quantitative Data		MPO/RPO
	D #140 + 2004	Input	Input
Division Needs – Division 5	<ul> <li>Benefit/Cost = 20%</li> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> <li>Congestion = 15%</li> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway. 100% of this indicator at the Division</li> <li>Safety = 15%</li> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%
Division Needs – Divisions 7 & 8	<ul> <li>Benefit/Cost = 15%</li> <li>Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT.</li> <li>Congestion = 15%</li> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway. 100% of this indicator at the Division</li> <li>Safety = 15%</li> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> <li>Accessibility/Connectivity = 5%</li> <li>Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%

#### **Public Transportation Projects**

Public Transportation projects may be scored and funded within the Regional or Division funding categories. Different types of public transportation projects (vehicle, passenger facility, administrative/maintenance/operations facility, and fixed guideway) have different scoring processes for the Regional and Division categories.

Four transit operators within DCHC submitted projects through DCHC MPO for Prioritization 5.0. Though DCHC MPO was allotted 23 submittal projects for Prioritization 5.0, only 20 were projects were submitted by the local transit agencies for scoring (GoTriangle 10, Chapel Hill Transit 5, GoDurham 4, and Orange Public Transit 1).

#### NCDOT and DCHC MPO Scoring Criteria for Public Transportation Projects

**Public Transit Scoring (Demand Response)** 

Funding	isit ocornig (beniana Kesponse)	Loc	cal Input
Category	Quantitative Data	Division	MPO/RPO
Category		Input	Input
Regional Impact	<ul> <li>Cost Effectiveness = 25%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Demand/Density = 20%</li> <li>Measurement of the number of service hours devoted to the project compared to the service population.</li> <li>Efficiency = 15%</li> <li>Measurement of the vehicle utilization ratio.</li> <li>Impact = 10%</li> <li>Measurement of the number trips affected by the project.</li> <li>Total = 70% (Division Engineer and Local Input Points account for remaining 30%)</li> </ul>	15%	15%
Division Needs	<ul> <li>Cost Effectiveness = 15%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Demand/Density = 15%</li> <li>Measurement of the number of service hours devoted to the project compared to the service population.</li> <li>Efficiency = 10%</li> <li>Measurement of the vehicle utilization ratio.</li> <li>Impact = 10%</li> <li>Measurement of the number trips affected by the project.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%

**Public Transit Scoring (Facilities)** 

- " Fubilic Transit Scoring (Facilities)			Local Input	
Funding	Quantitative Data	Division	MPO/RPO	
Category		Input	Input	
Regional Impact	<ul> <li>Cost Effectiveness = 25%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Impact = 20%</li> <li>Measurement of the number trips affected by the project.</li> <li>Efficiency = 15%</li> <li>Measurement of efficiency of the project.</li> <li>Demand/Density = 10%</li> <li>Measurement of the ridership growth trend for the previous five years.</li> <li>Total = 70% (Division Engineer and Local Input Points account for remaining 30%)</li> </ul>	15%	15%	
Division Needs	<ul> <li>Cost Effectiveness = 15%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Impact = 15%</li> <li>Measurement of the number trips affected by the project.</li> <li>Demand/Density = 10%</li> <li>Measurement of the ridership growth trend for the previous five years.</li> <li>Efficiency = 10%</li> <li>Measurement of efficiency of the project.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%	

**Public Transit Scoring (Mobility)** 

Funding	Quantitative Data	Loc	Local Input	
Category		Division Input	MPO/RPO Input	
Regional Impact	<ul> <li>Cost Effectiveness = 25%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Demand/Density = 20%</li> <li>Measurement of the number of total trips as a percentage of the service population.</li> <li>Impact = 15%</li> <li>Number of trips affected by the project.</li> <li>Efficiency = 10%</li> <li>Total number of trips as a ratio of the total revenue seat hours.</li> <li>Total = 70% (Division Engineer and Local Input Points account for remaining 30%)</li> </ul>	15%	15%	
Division Needs	<ul> <li>Cost Effectiveness = 20%</li> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state and lifespan of the project.</li> <li>Demand/Density = 10%</li> <li>Measurement of the number of total trips as a percentage of the service population.</li> <li>Impact = 10%</li> <li>Number of trips affected by the project.</li> <li>Efficiency = 10%</li> <li>Total number of trips as a ratio of the total revenue seat hours.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%	

#### **Bicycle and Pedestrian Projects**

Bicycle and pedestrian projects are scored and funded within the Division Needs funding category; therefore NCDOT utilizes only one scoring process for bicycle and pedestrian projects. DCHC MPO will utilize the scoring processes developed by the P5.0 Workgroup to preliminarily rank projects to be submitted to NCDOT SPOT for evaluation.

The NCDOT SPOT process limits the number of projects that MPOs may submit. In the event that more new project requests are received than the MPO can submit, the DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017. This will provide a set of preliminary scores that can be used to rank projects.

#### NCDOT and DCHC MPO Scoring Criteria for Bicycle and Pedestrian Projects

Funding Category	Quantitative Data	Local Input	
		Division	MPO/RPO
0 ,		Input	Input
Division Needs	<ul> <li>Safety = 15%</li> <li>Measurement of number of bicycle and/or pedestrian crashes, speed limit, and safety benefits to determine adequacy of safety for users of the project.</li> <li>Access = 10%</li> <li>Measurement of the quantity and significance of destinations associated with the project as well as the distance to the primary destination.</li> <li>Demand = 10%</li> <li>Measurement of the density of population and employment within a walkable or bike-able distance of the project.</li> <li>Connectivity = 10%</li> <li>Measurement of the degree of bike/ped separation from the roadway, whether or not the project is part of or a connection to a national, state, or regional bike route, and connectivity to a similar or better project type.</li> <li>Cost Effectiveness = 5%</li> <li>Measurement of combined user benefits of Safety, Access, Demand, and Connectivity criteria compared to the cost of the project to NCDOT.</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%

#### **Rail Projects**

Rail projects may be scored and funded within any of the three funding categories (Statewide, Regional, or Division). The MPO will coordinate closely with the NCDOT Rail Division on the identification, prioritization, and submission of rail projects. DCHC MPO will follow the criteria developed by the SPOT 5.0 Workgroup that were submitted to the NCDOT Board of Transportation in June 2017.

**NCDOT and DCHC MPO Scoring Criteria for Rail Projects** 

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Statewide Mobility (Class I Freight Only)	<ul> <li>Benefit-Cost = 35%</li> <li>Measurement of monetized benefits compared to the project cost to NCDOT.</li> <li>Safety = 30%</li> <li>Measurement of potentially hazardous rail crossings and other safety benefits.</li> <li>System Opportunities = 15%</li> <li>Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> <li>Capacity and Diversion = 10%</li> <li>Volume/Capacity = 75%</li> <li>Highway Diversion = 25%</li> <li>Economic Competitiveness = 10%</li> <li>Measurement of economic benefits of the project.</li> <li>Total = 100%</li> </ul>		
Regional Impact	<ul> <li>Benefit-Cost = 25%</li> <li>Measurement of monetized benefits compared to the project cost to NCDOT.</li> <li>Safety = 15%</li> <li>Measurement of potentially hazardous rail crossings and other safety benefits.</li> <li>System Opportunities = 10%</li> <li>Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> <li>Capacity and Diversion = 10%</li> <li>Volume/Capacity = 75%</li> <li>Highway Diversion = 25%</li> <li>Economic Competitiveness = 10%</li> <li>Measurement of economic benefits of the project.</li> <li>Total = 70% (Division Engineer and Local Input Points account for remaining 30%)</li> <li>Total = 100%</li> </ul>	15%	15%

#### NCDOT and DCHC MPO Scoring Criteria for Rail Projects - continued

Funding Category	Quantitative Data	Loca	al Input
Division Needs	<ul> <li>System Opportunities = 15%</li> <li>Measurement of accessibility and connectivity provided by the project, and connections to multimodal opportunities.</li> <li>Benefit-Cost = 10%</li> <li>Measurement of monetized benefits compared to the project cost to NCDOT.</li> <li>Safety = 10%</li> <li>Measurement of potentially hazardous rail crossings and other safety benefits.</li> <li>Capacity and Diversion = 10%</li> <li>Volume/Capacity = 75%</li> <li>Highway Diversion = 25%</li> <li>Economic Competitiveness = 5%</li> <li>Measurement of economic benefits of the project</li> <li>Total = 50% (Division Engineer and Local Input Points account for remaining 50%)</li> </ul>	25%	25%

#### RECOMMENDED ALLOCATION OF THE MPO'S LOCAL INPUT POINTS

#### Overview

As previously explained in this *Methodology*, DCHC MPO will utilize the NCDOT Prioritization 5.0 scoring criteria to preliminarily rank MPO projects for submission to NCDOT for quantitative evaluation. Upon submission to NCDOT, projects within the MPO will be evaluated according to NCDOT's quantitative ranking methodology.

DCHC MPO will receive the results of the NCDOT quantitative evaluation scoring process and the project data used by NCDOT to develop the scores. NCDOT's scaled quantitative scores will be reviewed by the DCHC MPO and staff of MPO member jurisdictions and agencies. The quantitative scores will inform DCHC MPO's prioritization of projects.

The allocation of the DCHC MPO's Local Input Points to high priority projects serves as the qualitative component of the prioritization process. The DCHC MPO's Local Input Points will be allocated to projects that aim to achieve the goals of the adopted Metropolitan Transportation Plan (MTP) and align with the priorities of the DCHC MPO.

The DCHC MPO's project ranking process and subsequent allocation of Local Input Points must capture the goals of DCHC MPO and not just be purely based on the results of data-driven processes. The process and results should also capture input received from citizens, elected officials, and stakeholders in the DCHC MPO area. It is important to consider the needs of all communities that are located in the DCHC MPO area in the allocation of Local Input Points to priority projects.

Collaboration with NCDOT Divisions is also an important component of DCHC MPO's allocation of Local Input Points. Projects that receive the MPO's Local Input Points *and* Division Engineer Points will have an overall better score than projects that don't receive points from both the MPO and a Division Engineer. Coordinating with NCDOT Division Engineers will ensure that priority projects in the DCHC MPO area have the best possible chance to be funded in the next NCDOT STIP and MPO TIP.

It should be noted that projects in the Statewide Mobility category are not eligible for DCHC MPO Local Input Points, and therefore will not be reviewed and prioritized by DCHC MPO as part of the process for allocation of Local Input Points. Projects that cascade down from the Statewide Mobility category are eligible for local input points and will be incorporated into the process described below. DCHC MPO will prioritize and allocate Local Input Points to eligible projects in the Regional Impact and Division Needs funding categories.

#### **Description of Criteria and Weights**

Per the guidance that was provided by the NCDOT SPOT Office, DCHC will utilize at least two qualitative criteria for the purpose of allocation of local points. The table below shows the criteria to be used to rank projects for assignment of local points. Projects will be ranked based on a six-point scale.

Criteria	Maximum Points (Highway)	Maximum Points (Non-Highway)	
MTP Prioritization <sup>2</sup>			
Project planned for near-term (by MTP 2025 Threshold)	2		
Project planned for mid-term (by MTP 2035 Threshold)	1		
Project planned for long-term (by MTP 2045 Threshold)	0		
Consistent with Adopted Regional or Local Plan		2	
Preliminary Engineering or Engineering Study Completed or		1	
Underway		1	
Allocation of local tax revenues through a DCHC-member	1	1	
jurisdiction voter supported referendum	1	1	
DCHC-member jurisdiction demonstrates local funding towards	1		
progress in project	1		
Project complements non-highway transportation facility	1	1	
Project supports Environmental Justice Community of Concern <sup>3</sup>	1	1	
TOTAL MAXIMUM	6	6	

#### **Total Score and Project Ranking Approach**

All projects will be ranked based on their score using the rubric above. The rankings will be used to inform TC and Board members regarding allocation points using the method described in the next section.

#### **Point Assignment Process**

Projects deemed to be of top priority to the MPO will be assigned the requisite amount of points necessary in order to maximize the project's chances of receiving funding through the SPOT process. NCDOT assigns the number of local prioritization points for each MPO, RPO, and Division based on the area's population. DCHC MPO has been allocated 1,800 points for both the Regional Impacts (Regional) and Division Needs (Division) categories for Prioritization 5.0. Each MPO, RPO, and Division can assign a maximum of 100 points and a minimum of 4 points to each project.

For the MPO's 1,800 Regional Impact Local Input Points, DCHC MPO will assign points to Regional projects among modes and project types according to the distribution below. The distribution below has been structured to reflect the funding goals of the MPO's adopted MTP and the number of eligible Regional category projects in each mode. Statewide projects that cascade down to the Regional category will generally not be assigned Regional Local Input Points unless the project cost is less than \$5 million. The MPO Board and TC may deviate from this policy on a case-by-case basis.

- 800 points to Highway
- 500 points to Public Transit
- 500 points could be assigned to any mode and project type

For the MPO's 1,800 Division Needs Local Input Points, DCHC MPO will assign points among modes and project types according to the distribution below. The distribution below has been structured to reflect the funding goals of the MPO's adopted MTP and the number of eligible Division category projects in each mode. Statewide and Regional projects that cascade down to the Division category will generally

<sup>&</sup>lt;sup>2</sup> Use designations in 2045 MTP as it will be adopted by the time local allocation points are assigned.

<sup>&</sup>lt;sup>3</sup> For the purposes of this Methodology, an Environmental Justice Community of Concern is an Overlapping Community of Concern as identified in the 2014 DCHC MPO Environmental Justice Report.

not be assigned Division Local Input Points unless the project cost is less than \$5 million. The MPO Board and TC may deviate from this policy on a case-by-case basis.

- 300 points to Highway
- 500 points to Public Transit
- 500 points to Bicycle and Pedestrian
- 500 points could be assigned to any mode and project type

Deviations from this methodology may be made for various reasons, including but not limited to:

- A project costs more than the funding available in that category
- A project will not be competitive within its Region or Division even with the application of Local Input Points
- Coordination with the Division Engineer or a neighboring MPO or RPO deems a project should not receive points, or will receive points from another MPO, RPO, or Division
- The DCHC MPO Board, based on a recommendation from the Technical Committee (TC), determines that a lower ranking project is of greater priority and therefore should be assigned points (or more points than assigned through application of the Methodology)
- The DCHC MPO Board determines that a higher ranking project is of lesser priority and therefore should be assigned fewer, or no, points than assigned through application of the Methodology
- The DCHC MPO Board determines that projects in another mode are of higher priority
- The DCHC MPO Board determines that points should be awarded to a particular project to support geographic equity
- Based on public input, the DCHC MPO Board decides to deviate from the project rankings

Should a project receive Local Input Points through a deviation, the Board will note the reason for the deviation and that reason shall be published after final adoption.

#### **Approval of the Allocation of Local Input Points**

The DCHC MPO Board will release the draft Project Priority Ranking and application of Local Input Points for public comment and hold a public hearing at an MPO Board meeting. The initial list of projects proposed to receive Local Input Points will be based on the process described above. After review and public comment, the MPO Board will approve the final application of Local Input Points. The MPO Board's approval will be informed by the following:

- The final score and list of initial projects using the process described above;
- The likelihood of receiving funding through STI considering the amount of funding available within each Division or Region, historical funding levels for the mode, and the normalization limitations that NCDOT has adopted;
- The number of eligible projects within the MPO within each funding mode /project type/category;
- The priorities of the current MTP including the adopted distribution of funding between modes and the air quality horizon year of projects;
- The effect that receiving funding for a project may have on the likelihood of other projects being funded in the Division or Region considering the limitations set by the STI legislation;
- If the project is located within an area of overlapping Environmental Justice Communities of Concern identified in the MPO's 2014 Environmental Justice Report;

- Geographic and jurisdictional balance;
- Coordination with the Division Engineers and neighboring MPOs and RPOs on the assignment of points;
- Public input and support as evidenced through public comments submitted to the MPO, the MPO's public hearing, public involvement efforts of local governments, and local referenda;
- The MPO Board members' knowledge of the urban area and the policies of their communities; and
- Other factors as identified. If the MPO Board varies from the recommended allocation of points, MPO staff will document the rationale and will post the documentation on the MPO's website.

After the DCHC MPO Board approves the allocation of Local Input Points to projects in the DCHC MPO area, MPO staff will submit the projects with the Local Input Points applied to NCDOT for use in Prioritization 5.0.

#### **Public Involvement**

All public involvement for this process will be conducted in accordance with the DCHC MPO's Public Involvement Policy. As is the MPO's standard practice for all DCHC MPO Board and TC agenda items, all relevant materials, documentation of this process, and TC and MPO Board meeting materials and minutes will be posted on the DCHC MPO's website, www.dchcmpo.org.

The DCHC MPO Public Involvement Policy sets a minimum 21-day public comment period for this process and requires a public hearing at an MPO Board meeting. This public comment period and public hearing will be advertised in accordance with the Public Involvement Policy. Public comments will be documented, summarized, and responses will be provided. In addition, all DCHC MPO Board and TC meetings are public meetings and include the opportunity for public comment. Comments provided at any meeting will be considered.

The DCHC MPO web site will include the following on its Local Methodology tab for the FY2020-2029 TIP web page:

- Link to the NCDOT STI Prioritization Resources web site
- Updated drafts of the Methodology as they are available
- Schedule for adoption of the Methodology and Local Points
- Schedule of milestones in the Methodology and Local Input Points adoption process
- Preliminary and final local input point assignment sheets

DCHC MPO will follow the schedule below for public comment and adoption of this Methodology:

December 2017 – Draft Methodology reviewed by the DCHC MPO TC (materials published online for public review); TC recommends that DCHC MPO Board release *Draft Methodology* for public comment

January 2018 – DCHC MPO Board reviews Draft Methodology and releases for 21-day public comment period; TC has second review and makes recommendation to the Board

February 2018 – Board holds public hearing, reviews public comments, and adopts Methodology (including any changes based on public comment); DCHC MPO staff submits the Methodology to NCDOT Review Committee; TC reviews comments from NCDOT Review Committee and recommends changes to Methodology, if necessary

March 2018 – Board adopts revised Methodology, if necessary

#### **Material Sharing**

Comments on the DCHC MPO's *Methodology for Identifying and Ranking TIP Project Requests* or any information contained within may be submitted in writing to the DCHC MPO using the contact information below. Comments may also be offered during any DCHC MPO Board or DCHC MPO TC meeting. All meetings are open to the public and meeting schedules are available on the DCHC MPO's website <a href="https://www.dchcmpo.org">www.dchcmpo.org</a>.

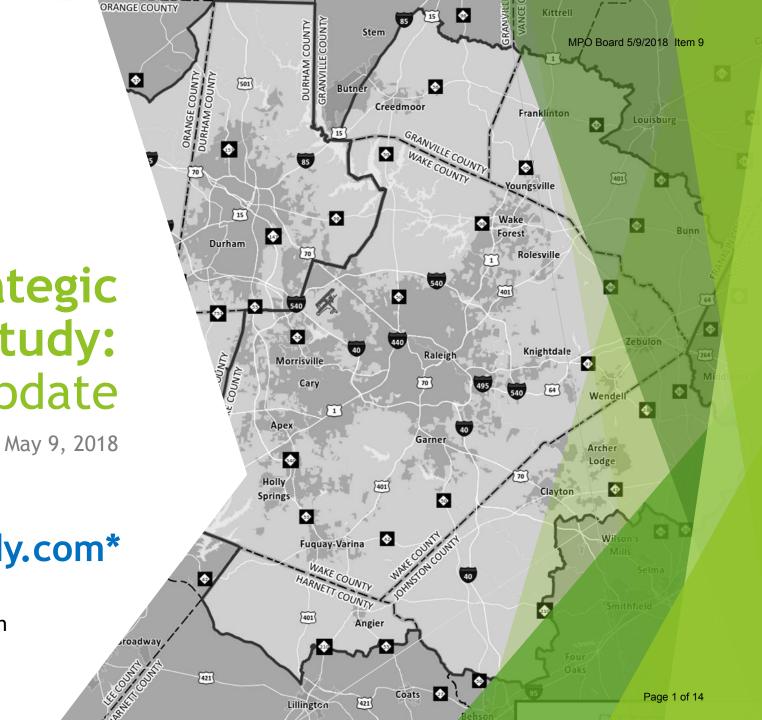
Aaron Cain, AICP Senior Transportation Planner DCHC MPO City of Durham DOT 101 City Hall Plaza Durham, NC 27701 (919) 560-4366 x36443

email: <a href="mailto:aaron.cain@durhamnc.gov">aaron.cain@durhamnc.gov</a>

Triangle Strategic
Tolling Study:
Update

www.TriangleTollingStudy.com\*

\* For more detailed copy of this presentation and copy of Best Practices report



## Study Overview

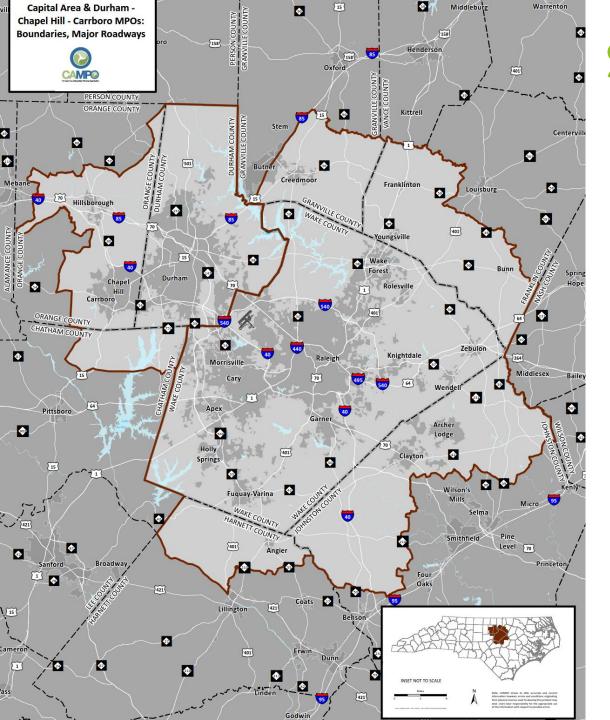
This study is a collaborative effort of:

Capital Area MPO Durham-Chapel Hill-Carrboro MPO

**NCDOT** 

TRIANGLE STRATEGIC
TOLLING STUDY

Page 2 of 14



## **Study Overview**

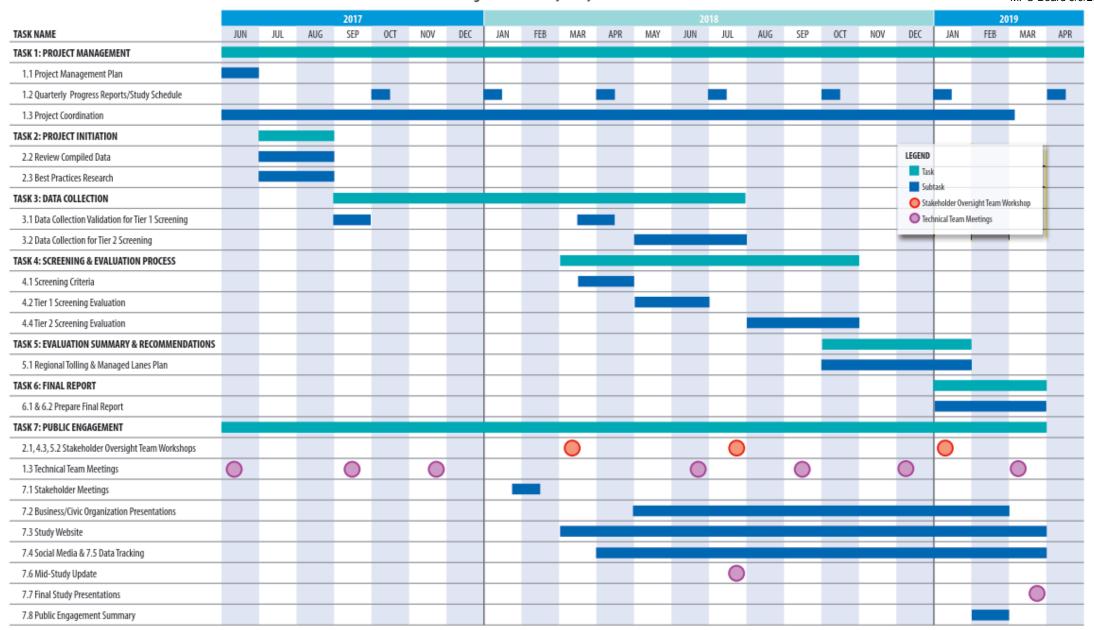
► The Triangle Region is growing rapidly and to stay competitive with other regions, a study is being conducted to:

Evaluate the regional transportation network

Determine if toll lanes and/or managed lanes are applicable to the Triangle Region

Develop a toll lane and/or managed lane strategy to address current and future capacity needs with funding deficiencies

TRIANGLE STRATEGIC
TOLLING STUDY



STRATEGIC STUDY

Revised February 14, 2018

## What About the Income Equity of Tolls?

- Using policies to address effect of tolling on low income travelers ('income equity')
  - Low income incentive programs
  - Link to transit fare discount qualifications
  - Carpool incentives
  - ▶ Enhanced / targeted investments in transit service
  - Expanded options for electronic toll participation
  - Redistribution of net revenue

Studies have shown that low income drivers use priced facilities and benefit significantly from improved travel time and travel time reliability

### Best Practice Highlights - Equity Considerations

## Common Equity Objections

- Paying for what has traditionally been "free"
- Paying twice (motor fuel taxes + tolls)
- Disproportionate distributions of costs/benefits

# Equity Analysis & Framework

- Income Equity
- Modal Equity
- Geographic Equity

## Potential Mitigation Strategies

- Revenue Allocation
- Toll Discounts
- Toll Transit Credits
- Carpool Loyalty Program

TRIANGLE STRATEGIC
TOLLING STUDY

### Best Practice Highlights - Operating Policy

- Electronic Toll Collection (ETC)
- Pricing Models
- Exemptions & Vehicle Eligibility
- Building Consensus
- Public Outreach
- Use of Revenue
- Benefits of Express Lane Bus Service
- Design Considerations



http://triangletollingstudy.com/resources/



## Stakeholder Meetings Overview

- ▶ Seven meetings involving 1, 2 or 3 interviewees
- Meeting attended by 6 elected officials and representatives of RTA and GoTriangle
- Meeting attended by 9 staff representatives of MPOs, NCDOT & other relevant groups

# QUESTION: Current Community Issues Potentially Impacting the Perception of Tolling/Express Toll Lanes in the Triangle



TRIANGLE STRATEGIC
TOLLING STUDY

### **QUESTION: Mitigating Identified Impacts or Problems**

Enhance Transit Service/Rideshare

# Free Use for Transit Vehicles to Offset Impacts Free/Reduced Price Free/Reduced Price

Different

Transparency of Impacts
Reduce Barrier by Free HOV2

Rebate/Refund for Economically Disadvantaged Populations

Transponders/Subsidies for Low Income Users

Use revenue to improve transit and bike/ped projects

TRIANGLE STRATEGIC TOLLING STUDY

# QUESTION: Views on Potential Environmental Benefits/Concerns

vehicles on roadway or not?

Will environmental impacts

decrease/increase?
Invest in transit

Less incentive to widen the road once managed lanes are added

Toll revenue provides opportunity to build larger than necessary – more destructive to the environment

Makes people more conscious of the cost of traveling

Do tolls encourage more

Natural limits of growth Water quality control?

Water quality control?

Makes the best use of limited ROW Does not promote transit

TRIANGLE STRATEGIC
TOLLING STUDY

QUESTION: Biggest Opportunities For Improving the Perception of Tolling During the Triangle Strategic Tolling Study



### Outreach & Education

• Transparency (cost of tolls, toll lane revenue, positives of Triangle Expressway, tolls based on traffic flow)



Marketing/Social Media (Reach as Many People as Possible)



Open Triangle Expressway Early to Demonstrate Value



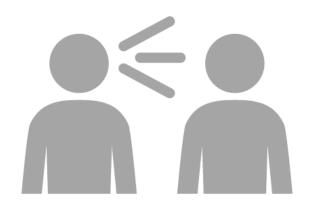
Identify Options for Beneficial Tradeoffs (Mitigation of impacts to low income populations, environmental sustainability, supporting transit)

TRIANGLE STRATEGIC
TOLLING STUDY

## Next Steps

- Develop screening criteria (performance measures)
- ► Complete Tier 1 screening evaluation
  - ► Evaluates corridors based on toll/managed lanes projects previously programmed, congestion, high crash locations, engineering considerations, transit priority corridors, etc.
  - ► Identifies corridors needing congestion intervention through tolling/managed lanes strategies
- Present update and Tier 1 screening results to MPO Boards early August
- Continue public engagement (website, social media, etc.)

### More Information?



► Andy Henry

DCHC MPO

Andrew.henry@durhamnc.gov

(919) 560-4366

► Lynn Purnell, PE, ENV SP

**WSP** 

Lynn.Purnell@wsp.com

(704) 342-5405

www.TriangleTollingStudy.com

TRIANGLE STRATEGIC
TOLLING STUDY



# Collector Street Plan

May 9, 2018



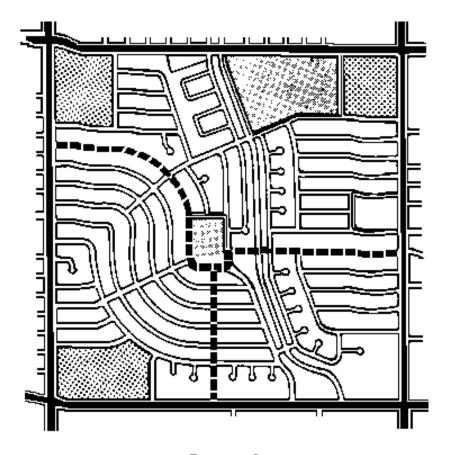
# Today's Objective

- Background on collector street planning at DCHC MPO
- Understand benefits of collector street planning
- Identify possible issues
- Get any needed direction from MPO Board



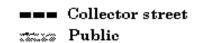
# What is a collector street?

They form the intermediate link between local streets and arterial streets in the roadway network.



Legend

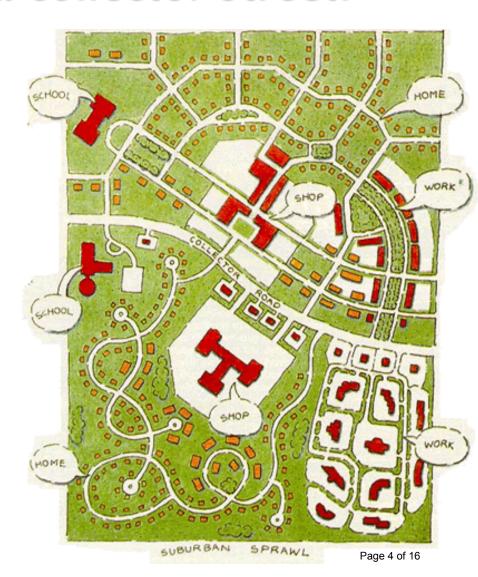






# What are the benefits of a collector street?

- Greater distribution of traffic, reducing overall traffic congestion and the concentration of traffic on major roads for short trips.
- Improved routes for pedestrians, cyclists, buses, cars, deliveries, and emergency response vehicles.
- Reduced travel times without faster speeds.
- Delay or avoidance of widening major arterials beyond four lanes.





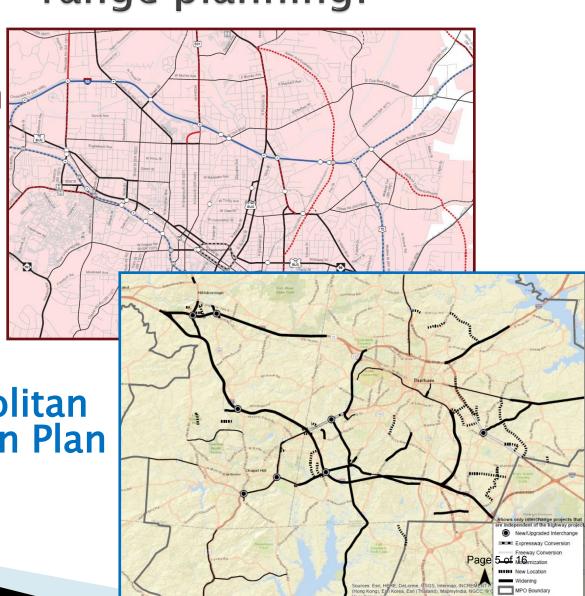
# Where is MPO in longrange planning?

### Comprehensive Transportation Plan (CTP)

Adopted June 2017

2045 Metropolitan Transportation Plan (MTP)

**Adopted March 2018** 





# Where is MPO in longrange planning?

### **Corridor Plans**

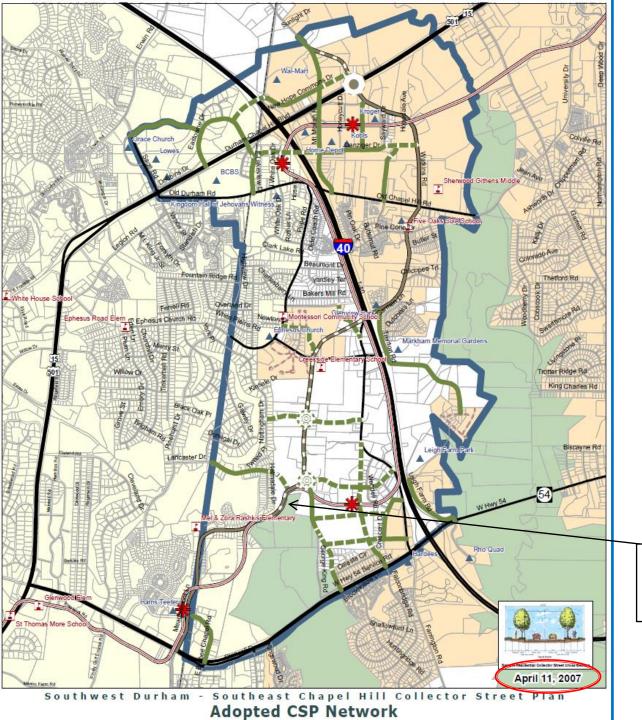
- NC 54/I–40 Corridor Study (2012)
- US 15-501Corridor Study (2014) (Chapel Hill to Pittsboro)
- NC 98 Corridor Study (2018)
- NC 54 West Corridor Study (2019)
- US 15–501 Corridor Study (2019)
- Downtown Durham Transportation Study (2019)

### **Transit**

- Durham-Orange Light Rail Transit FEIS (2016)
- North–South BRT (2016)

### **Feasibility Studies**

- I-40 Express Lanes Feasibility Study
- NC 147 Feasibility Study
- NC 54 Widening, from I–40 to NC 55
- NC 751 Widening, NC 54 to US 64
- Northern Durham Parkway



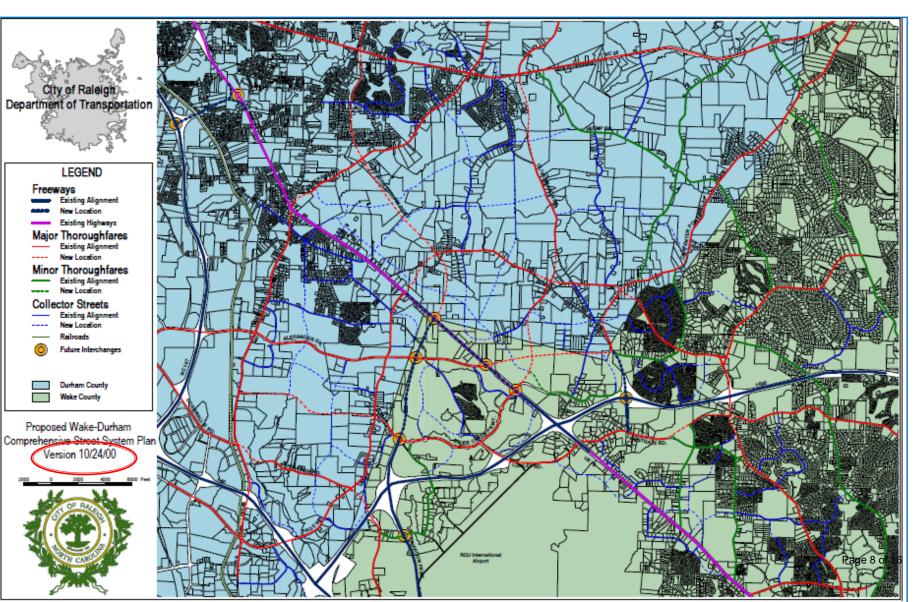
# Collector Street Plans

Southwest Durham/ Southeast Chapel Hill Collector Street Plan

Southwest Durham Drive alignment was changed in 2045 MTP

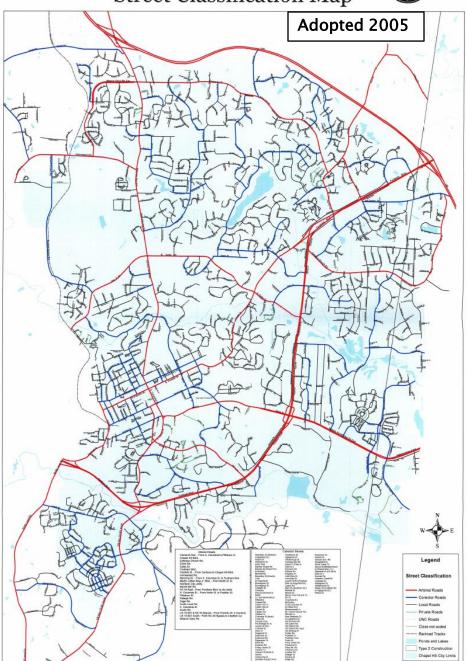
### **Collector Street Plans**

Wake-Durham Comprehensive Street System Plan

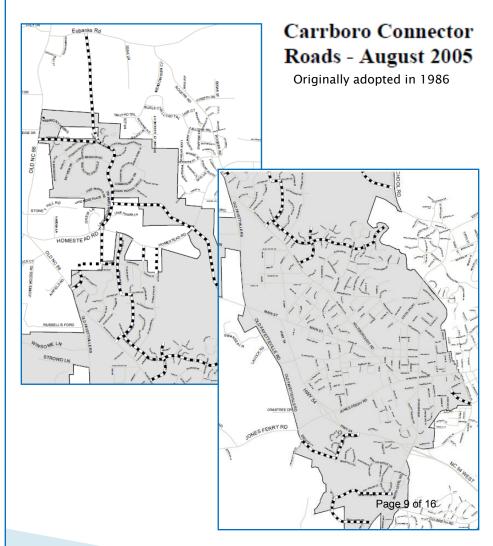


### Town of Chapel Hill Street Classification Map





# Collector Street Plans



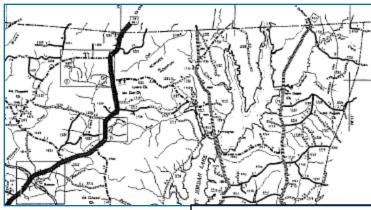
# Town of Hillsborough

ROAD CLASSIFICATION SYSTEM\*

Adopted 1998

# Collector Street **Plans**

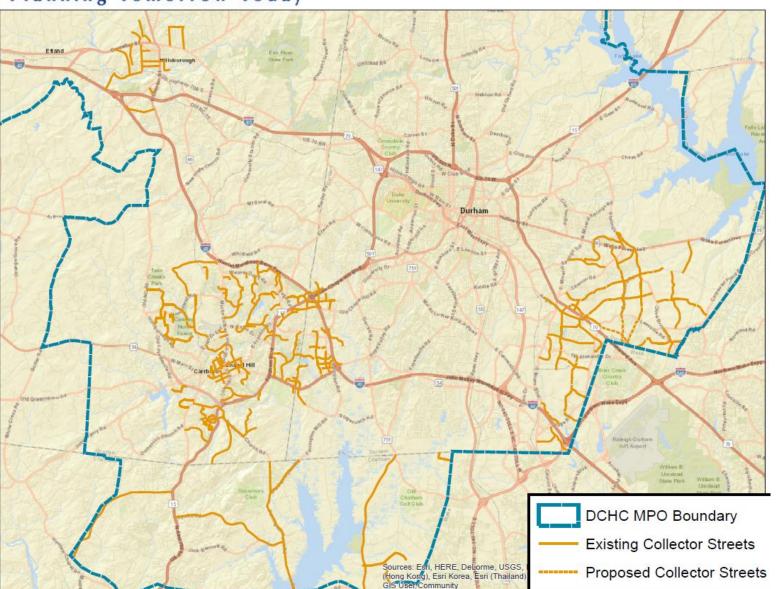
RECOMMENDED CHATHAM COUNTY THOROUGHFARE PLAN



Adopted 1983, superseded by CTP



And, when you put all those different collector street plans together, they look like this...



Page 12 of 16



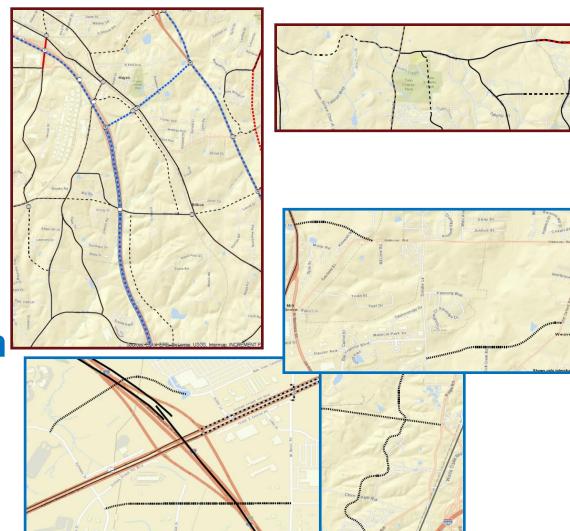
Adopted June 2017

# Collector Streets Sneaking into Long-Range Plans

### Comprehensive Transportation Plan (CTP)

2045 Metropolitan Transportation Plan (MTP)

**Adopted March 2018** 

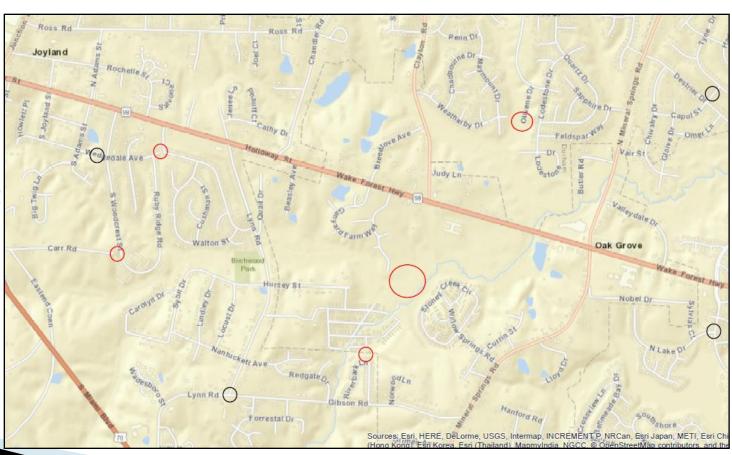




# Collector Streets Needed in Corridor Plans

Example of missing connections along NC 98 corridor.

- = connection exists
- = connection does not exist





### **MPO Collector Street Plan**

### <u>Purpose</u>

Citizens, the development community, and government staff will use the plan to encourage the construction of a collector street network.

### **How Used**

- Development professionals will know where to include collector streets in their plans for new developments
- Local governments, the NCDOT, elected officials and citizens will use the plan to evaluate submitted development plans



### Issues to Consider

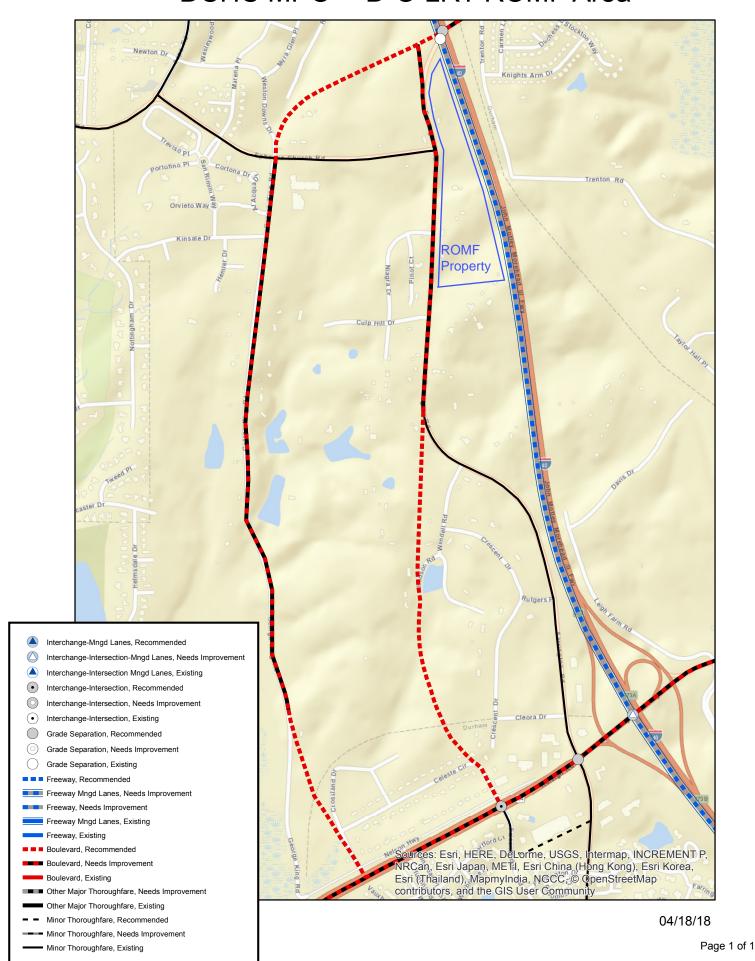
- Local government wants to continue using current collector street plan
  - OK! Can decide to not adopt MPO plan
  - Local and MPO plans can still integrate
- How collector plan relates to 2045 MTP and CTP?
  - Given road hierarchy in CTP, might be best to relate it to CTP
- Some citizens might not want their street to be a designated collector or want the connectivity
  - Educate and communicate purpose, need and vision of collector streets



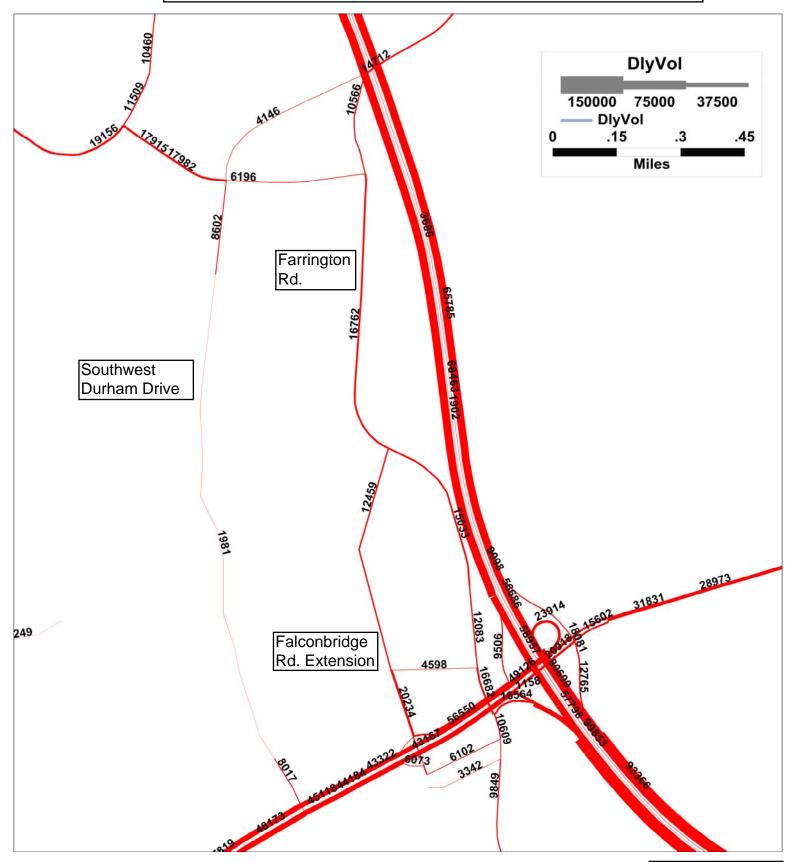
## Next Steps

- Determine level of local government participation
- Identify methodology and schedule
- Create public participation plan

# Comprehensive Transportation Plan (CTP) DCHC MPO -- D-O LRT ROMF Area

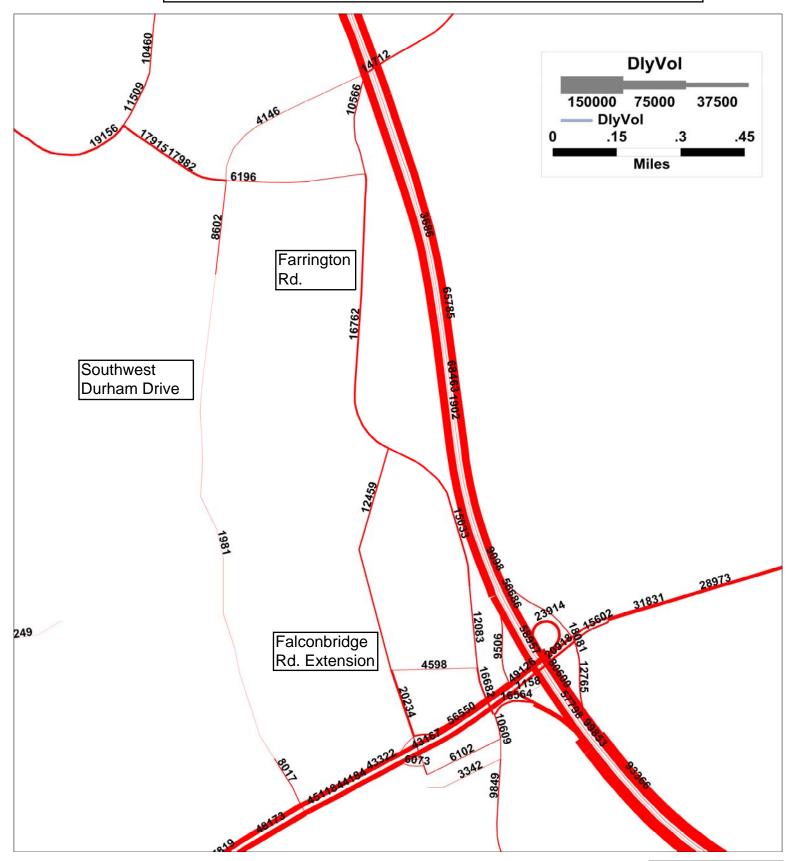


# Triangle Regional Model (TRM) Version 6.0 2045 Daily Traffic Volume



April 19, 2018

# Triangle Regional Model (TRM) Version 6.0 2045 Daily Traffic Volume



April 19, 2018



### **TIP Amendment Request - Revise An Existing Project**

### **Amendment Request Details**

(change in funding greater than \$1M)

TIP Modification (change in funding less than \$1M) There <u>are</u> previous amendments to this project.

Date: 4-20-18 Amendment Requested By: Town of Carrboro

### **Existing Project Details**

Project Name: South Greensboro Street Sidewalks

STIP/TIP #: C-5650 Jurisdiction/Agency: Carrboro

WBS or Local ID or Federal Aid #: MUNIS #:

**Existing Project Schedule and Funding:** Enter the most current project information.

Use the MPO database: bitly.com/mpoprojects

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2018	PE/Design	STBGDA	\$84,104	\$0	\$21,026	\$105,130
2018	ROW	STBGDA	\$100,000	\$0	\$25,000	\$125,000
2018	Construction	LOCAL	\$0	\$0	\$504,750	\$504,750
2018	Construction	CMAQ	\$440,000	\$0	\$110,000	\$550,000
2018	Construction	STBGDA	\$530,386	\$0	\$132,596	\$662,982
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
Funding Totals:		\$1,154,490	\$0	\$793,372	\$1,947,862	

Total Project Cost

### Proposed Project Schedule and Funding: Enter the full proposed project schedule & funding.

In many cases, the current project information from the above table will be re-entered at the top of the Proposed Table to represent FULL project information.

Proposed Table to represent FOLL project information.							
FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total	
2019	PE/Design	STBGDA	\$84,104	\$0	\$21,026	\$105,130	
2020	ROW	STBGDA	\$100,000	\$0	\$25,000	\$125,000	
2021	Construction	CMAQ	\$440,000	\$0	\$110,000	\$550,000	
2022	Construction	STBGDA	\$530,000	\$0	\$132,500	\$662,500	
			\$0	\$0	\$0	\$0	
			\$0	\$0	\$0	\$0	
			\$0	\$0	\$0	\$0	
			\$0	\$0	\$0	\$0	
			\$0	\$0	\$0	\$0	
			\$0	\$0	\$0	\$0	
Funding Totals:		\$1,154,104	\$0	\$288,526	\$1,442,630		

Total Project Cost Page 1 of 4



### **TIP Amendment Request - Revise An Existing Project**

### **Project Details - Continued**

Please provide previous STIP/TIP # or new STIP/TIP # (if applicable):

If this amendment has already been reflected in the NCDOT STIP, please provide date of STIP action and attach supporting information:

Project Description/Details/Termini/etc. to be amended (if applicable):

Please provide additional details or explanation related to this amendment request such as explanation for schedule delays, project cost changes, or other supporting information (if applicable). For example, why is this amendment being requested?

Delay PE, ROW, and construction to better reflect achievable timetable. Decrease local funding amount to 20% overall.

Please email completed form and any supporting documents to DCHC MPO TIP manager. Please follow-up with TIP manager to confirm receipt of form.

### REVISIONS TO THE 2018-2027 STIP HIGHWAY PROGRAM

STATEWIDE PROJECT

		STIP MODIFICATIONS				
* R-5753 STATEWIDE PROJ.CATEGORY EXEMPT	- STATEWIDE PROJECT	VARIOUS, FEDERAL LANDS TRANSPORTATION PROGRAM (FLTP). ROAD AND BRIDGE IMPROVEMENTS TO BE CONSTRUCTED ON TRANSPORTATION FACILITIES THAT ARE OWNED BY THE FEDERAL GOVERNMENT THAT PROVIDE ACCESS TO FEDERAL LANDS.  PROJECT MODIFIED TO REFLECT CURRENT FUNDING LEVELS.	CONSTRUCTION	FY 2018 - FY 2019 - FY 2019 - FY 2020 -	\$9,812,000 \$1,794,000 \$9,955,000 \$35,062,000 \$56,623,000	(FLTP) (ERFO) (FLTP) (FLTP)
U-4724 DURHAM PROJ.CATEGORY TRANSITION	- DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION	SR 1158 (CORNWALLIS ROAD), SR 2295 (SOUTH ROXBORO STREET) TO SR 1127 (CHAPEL HILL ROAD) IN DURHAM. BICYCLE AND PEDESTRIAN FEATURES.  TO ALLOW ADDITIONAL TIME FOR DESIGN AND RIGHT OF WAY DELAY CONSTRUCTION FROM FY 18 TO FY 20.	CONSTRUCTION	FY 2020 - FY 2020 -	\$3,854,000 \$1,124,000 \$4,978,000	(STBGDA) (L)

<sup>\*</sup> INDICATES FEDERAL AMENDMENT

### **REVISIONS TO THE 2018-2027 STIP HIGHWAY PROGRAM**

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

### STIP ADDITIONS

\* I-0305 **DURHAM ORANGE** 

- DURHAM-CHAPEL HILL-CARRBORO

I-85, WEST OF SR 1006 (ORANGE GROVE ROAD) IN METROPOLITAN PLANNING ORGANIZATION ORANGE COUNTY TO WEST OF SR 1400 (SPARGER ROAD) IN DURHAM COUNTY. ADD LANES.

**PROJ.CATEGORY** STATEWIDE

PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY TO EXPEDITE DELIVERY OF NEW STI

PROJECT.

\* I-6006 **DURHAM** WAKE

STATEWIDE

PROJ.CATEGORY

- CAPITAL AREA METROPOLITAN PLANNING I-40, NC 54 (EXIT 273) TO SR 1728 (WADE AVENUE).

ORGANIZATION

- DURHAM-CHAPEL HILL-CARRBORO

CONVERT FACILITY TO A MANAGED FREEWAY WITH RAMP METERING AND OTHER ATM / ITS COMPONENTS

METROPOLITAN PLANNING ORGANIZATION PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY TO EXPEDITE DELIVERY OF NEW STI

PROJECT.

\* I-6010 **DURHAM** PROJ.CATEGORY

**STATEWIDE** 

- DURHAM-CHAPEL HILL-CARRBORO

I-85 / US 15, EAST OF SR 1827 (MIDLAND TERRACE) TO METROPOLITAN PLANNING ORGANIZATION SR 1632 (RED MILL ROAD) IN DURHAM. ADD LANES.

PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY TO EXPEDITE DELIVERY OF NEW STI

PROJECT.

### STIP MODIFICATIONS

C-5183B DURHAM PROJ.CATEGORY

**EXEMPT** 

- DURHAM-CHAPEL HILL-CARRBORO

METROPOLITAN PLANNING ORGANIZATION CAPPS ST.

SR 1945 (S. ALSTON AVE.), SR 1171 (RIDDLE RD.) TO

TO ALLOW ADDITIONAL TIME FOR RIGHT OF WAY

DELAY CONSTRUCTION FROM FY 18 TO FY 19.

RIGHT-OF-WAY

FY 2018 -FY 2018 - \$79,000 (CMAQ) \$20.000 (L)

CONSTRUCTION FY 2019 -FY 2019 -

\$565,000 (CMAQ)

\$141,000 (L) \$805,000

<sup>\*</sup> INDICATES FEDERAL AMENDMENT



Durham - Chapel Hill - Carrboro Metropolitan Planning Organization Board May 9, 2018

### FY 2018-2027 TIP Amendment #3 Summary Sheet

See full report for additional information on each project.

- C-5183B Alston Avenue Sidewalks: Delay construction from FY18 to FY19 to allow additional time for ROW acquisition.
- C-5650 South Greensboro Street Sidewalks: Delay PE/Design to FY19, ROW to FY20, and construction to FY21. Adjust local funding to equal 20 percent of total project cost.
- **I-0305 I-85 Widening in Orange County:** Add to FY18-27 TIP to allow planning and environmental study.
- I-6006 I-40 Managed Motoways: Add to FY18-27 TIP to allow planning and environmental study.
- I-6010 I-85 Widening in Durham County: Add to FY18-27 TIP to allow planning and environmental study.
- R-5753 Federal Lands Transportation Program: Funding added to reflect current schedule.
- **U-4724 SR 1158 (Cornwallis Road):** Delay construction until 2020 to allow additional time for design and ROW.
- Language adopted into TIP to address performance measure requirement (see resolution).

# RESOLUTION TO MODIFY THE 2018-2027 TRANSPORTATION IMPROVEMENT PROGRAM FOR THE DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING AREA

# AMENDMENT #3 May 9, 2018

A motion was made by MPO Boa	ard Member		and seconded by	MPO Board
Member	for the adoptio	n of the following res	olution, and upon	being put to a
vote, was duly adopted.				

**WHEREAS**, the Transportation Improvement Program (TIP) 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 MPO Board; 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 TIP have been modified in accordance with certain provisions of the MAP-21 Federal Transportation Act, Fixing America's Surface Transportation (FAST) Act, and guidance provided by the State; and

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

**WHEREAS**, the North Carolina Department of Transportation and the MPO Board have determined it to be in the best interest of the Urban Area to amend the FY 2018-2027 Transportation Improvement Program as described in the attached sheets; and

**WHEREAS**, in the summer 2015 the United States Environmental Protection Agency designated the DCHC MPO Urbanized Area as attainment for air quality conformity; and

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

**WHEREAS**, in accordance with 23 CFR 450.326 (d), "the TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets"; and

**BE IT THEREFORE RESOLVED** that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board hereby approve the following language to be added to the FY 2018-2027 Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area:

The DCHC MPO has established performance management targets for highway safety and for transit tier 2 providers that choose to participate in NCDOT's Group Transit Asset Management (TAM) Plan and will establish federally mandated performance management targets for infrastructure condition, congestion, system reliability, emissions, and freight movement. The DCHC MPO anticipates meeting their identified targets with the mix of projects included in the TIP.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board hereby also approve the Amendment #3 to the FY 2018-2027 Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the Board on May 9, 2018, and as described in the "FY 2018-2027 TIP Amendment #3 Summary Sheet" on this, the 9th day of May, 2018.

Damon Seils, MPO Board Chair
urham County, North Carolina
certify that Damon Seils personally appeared before me this day acknowledging to me that
e signed the forgoing document.
ate: May 9, 2018
Frederick Brian Rhodes, Notary Public
My commission expires: May 10, 2020

### **MEMORANDUM**

To: DCHC MPO Board

From: DCHC MPO Lead Planning Agency

**Date:** May 9, 2018

Subject: Lead Planning Agency (LPA) Synopsis of Staff Report

This memorandum provides a summary status of tasks for major DCHC MPO projects in the Unified Planning Work Program (UPWP).

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

# <u> Major UPWP – Projects</u>

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

- ✓ Completed
- Minor update is proposed to address ROMF

### 2045 Metropolitan Transportation Plan (MTP)

- ✓ MTP Schedule/Timeline & development process Approval January 2016
- ✓ MTP Public Involvement plan January 2016
- ✓ MTP Goals, Objectives and Performance Measures In progress
- ✓ Deficiency Analysis & Needs Assessment– May 2017
- ✓ Socioeconomic Forecasts May 2017
- ✓ Land use Scenarios May 2017
- ✓ Alternative Analysis August 2017
- ✓ Preferred Option October 2017
- ✓ Air Quality analysis and Conformity (not required)
- ✓ Adopt 2045 MTP March 2018
- ✓ Technical report and implementation December 2017

### MPO Community Viz. Scenarios Planning and Visualization -2.0 (Connect 2025)

- ✓ Field verification Complete
- ✓ Focus Groups/Delphi Process FY 2015
- ✓ Model update and testing September 2016
- ✓ Model/Scenario Building May 2017
- ✓ Adopted SE Data December 2017

# 2016/2017 MPO Data Collection & Surveillance of Change (Traffic/Travel Time/Crash/Transit)

- ✓ Data collection (Volume/Trucks/Travel Time/Speed/Bike/Ped) ongoing –continuous data collection
- ✓ Data collection (AirSage, INRIX, HERE data)
- ✓ Transit data collection ongoing –continuous data collection

### GIS Online (AGOL)/Data Management

- ✓ MPO Interactive GIS/Mapping Continuous/On-going
- ✓ Development of public portals for MPO applications Continuous/On-going
- ✓ Maintenance and updates Continuous/On-going
- ✓ Development of open data Continuous/On-going

### **MPO Website Update and Maintenance**

- ✓ Post Launch Services Continuous/On-going
- ✓ Interactive GIS Continuous/On-going
- ✓ Facebook/Twitter management Continuous/On-going
- ✓ Enhancement of Portals Continuous/On-going

# **Triangle Regional Model Update**

- ✓ Completed
- Work Commences on the Rolling Household Survey

### Prioritization 5.0/STI/FY 2020-2029 TIP Development

- ✓ Summarize MPO P4 projects not funded ("Holding Tank" for P5) –February 2017
- ✓ Board approves existing projects revisions/modifications projects to be submitted for SPOT-5 May 10, 2017 (deadline July 30, 2017)
- ✓ Preparation and ranking of new projects (23 for each mode) –February to June 2017
- ✓ Existing project revision/modification/deletion due to NCDOT for receiving extra new submittals (one out, one in) July 30, 2017
- ✓ SPOT-5 Online opens for entering new P5 projects July 5 (deadline September 29, 2017)
- ✓ Board approves new projects to be submitted for SPOT-5 September 13, 2017
- ✓ MPO submits new SPOT-5 projects to NCDOT September 29, 2017
- ✓ LPA updates local ranking methodology December 2017
- ✓ TCC makes recommendation on local ranking methodology January 2018
- ✓ Board approves local ranking methodology March 2018
- ✓ MPO applies local ranking methodology for Regional projects April 2018
- Board releases MPO initial Regional points list for local input/public comments May 9, 2018
- LPA addresses public comments and makes draft recommendation on local points for Regional category – June 2018
- Approval of Regional Impact points July 2018
- Submission of Regional Impact points to NCDOT July 2018
- MPO applies local ranking methodology for Division projects August 2018
- Board releases MPO initial Division points list for local input/public comments September 12, 2018
- LPA addresses public comments and makes draft recommendation on local points for Division category – October 2018
- Approval of Division Impact points November 14, 2018
- Submission of Regional Impact points to NCDOT November 2018
- Draft STIP Released January 2019

### **Regional Freight Plan**

- ✓ Consultant Selection/Contract Approval Complete
- ✓ Kick-Off Meeting Conducted in July 2015
- ✓ Stakeholder outreach and engagement October 2015

- ✓ Formation of the freight advisory committee October 2015
- ✓ Data collection, analysis and assessment November 2015
- ✓ Freight goals & objectives and performance measures February 2016
- ✓ Analysis of freight existing conditions and trends TBD
- ✓ Forecasts of future demands (2035 and 2045) TBD
- ✓ Evaluation of future conditions TBD
- ✓ Strategic freight corridors and zones TBD
- ✓ Recommendation & implementation strategies TBD
- Final report and presentation TBD

### **MPO ADA Transition Plan**

- ✓ Update self-assessment Underway
- ✓ Draft MPO Transition Plan August 2015
- ✓ Local reviews September 2015
- ✓ FHWA review September 2015
- ✓ Public comments October-December 2015
- ✓ Stakeholder outreach February 2017
- ✓ Roundtable discussion May 11, 2017
- ✓ Self-assessment Data Analysis July 2017-December 2017
- ✓ FHWA/NCDOT Final Review February 2018
- ✓ Final approval December 2017
- Implementation and self-evaluation Ongoing

### NC 98 Corridor Study

- ✓ Project kick-off and initial public engagement February 2017
- ✓ Transportation analysis (and public engagement) June 2017
- ✓ Conceptual designs and options (and public engagement) September/October 2017
- ✓ Draft Final plan February 2018
- ✓ Recommendation/Public workshop Underway

# NC 54 West Corridor Study

- ✓ Select consultant February 2017
- ✓ Project kick-off and initial public engagement September 2017
- ✓ Inventory and Existing Conditions November 2017
- ✓ Transportation analysis (and public engagement) January 2018
- ✓ Conceptual designs and options (and public engagement) May 2018
- Final plan September 2018

## **US 15-501 Corridor Study**

- ✓ Funding approved by NCDOT
- ✓ Project Management Plan
- Public engagement plan
- Technical Kick-off meeting
- Development of corridor vision goals and performance measures
- Development of corridor profile
- Prepare summary of existing plans
- Prepare community profile report
- Develop and forecast travel profile/multi modal analysis
- ITS Screening

- Accessibility evaluation
- Evaluation of alternative strategies
- Implementation plan and final report
- Plan adoption
- SPOT submittal

### **Regional Intelligent Transportation System**

- ✓ Project management plan
- Development of public involvement strategy and communication plan
- Conduct stakeholder workshops
- Analysis of existing conditions
- Assessment of need and gaps
- Review existing deployments and evaluate technologies
- Identification of ITS strategies
- Update Triangle Regional Architecture
- Develop Regional Architecture Use and maintenance
- Develop project prioritization methodology
- Prepare Regional ITS Deployment Plan and Recommendation

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### **Regional Toll Study**

- ✓ Prepare project management and coordination plan
- ✓ Project initiation
- Survey and questionnaire/education
- Data preparation /data collection/screening
- Review state of the practice
- Analysis of market characteristics
- Screening
- Tolling and managed lane strategies
- Recommendations
- Project prioritization

### **Project Development/NEPA**

- US 70 Freeway Conversion
- NC 54 Widening
- NC 147 Interchange Reconstruction
- I-85
- I-40

# **DOLRT-Engineering**

- Administration of the Staff Working Group
- Review of engineering plans
- Stakeholder participation

# **Safety Performance Measures Target Setting**

- ✓ Data mining and analysis
- ✓ Development of rolling averages and baseline

- ✓ Development of targets setting framework✓ Estimates of achievements
- Forecast of data and measures

# **Up Coming Projects**

- Mobility Report Card
- Congestion Management Process (CMP)
- State of Systems Report

Route: I-885, NC-147, NC-98 Contract Number: C203394

US-70 Division: 5 County: Durham TIP Number: U-0071

Lenath: 4.009 miles Federal Aid Number:

NCDOT Contact: Cameron D. Richards NCDOT Contact No: (919)835-8200

**Location Description:** EAST END CONNECTOR FROM NORTH OF NC-98 TO NC-147 (BUCK DEAN FREEWAY) IN DURHAM.

Contractor Name: DRAGADOS USA INC

Contract Amount: \$141,949,500.00 Cost Overrun/Underrun: 7.28% Work Began: 02/26/2015 Letting Date: 11/18/2014

Original Completion Date: 05/10/2020 **Revised Completion Date:** Latest Payment Thru: 04/22/2018 Scheduled Progress: 62.4% **Latest Payment Date:** Actual Progress: 64.4%

Contract Number: C203492 Route: SR-2220 County: Durham Division: 5

TIP Number: EB-4707B

Federal Aid Number: STPDA-0505(64) Length: 1.756 miles NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

**Location Description:** SR-2220 (OLD CHAPEL HILL ROAD) FROM SR-1113 (POPE ROAD) TO SR-1116 (GARRETT ROAD).

Contractor Name: FSC II LLC DBA FRED SMITH COMPANY

Contract Amount: \$7,295,544.75 Cost Overrun/Underrun: 3.2% Work Began: 06/26/2017 Letting Date: 05/16/2017

Original Completion Date: 05/14/2019 **Revised Completion Date:** Latest Payment Thru: 03/31/2018 Scheduled Progress: 35.5% Latest Payment Date: 04/12/2018 Actual Progress: 40.1%

Contract Number: C203567 Route: NC-55 Division: 5 County: Durham

TIP Number: U-3308

Federal Aid Number: STP-55(20) Length: 1.134 miles NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: NC-55 (ALSTON AVE) FROM NC-147 (BUCK DEAN FREEWAY) TO NORTH OF US-70BUS/NC-98 (HOLLOWAY ST).

Contractor Name: ZACHRY CONSTRUCTION CORPORATION

Contract Amount: \$39,756,916.81 Cost Overrun/Underrun: 2.59% Work Began: 10/05/2016 Letting Date: 07/19/2016 Original Completion Date: 03/30/2020 Revised Completion Date: 07/16/2020 Latest Payment Thru: 04/15/2018 Scheduled Progress: 22.8% Latest Payment Date: 04/23/2018 Actual Progress: 24.48%

Contract Number: C203987 Route: -Division: 5 County: Durham

TIP Number: B-4943

Length: 0.18 miles Federal Aid Number: BRZ-1616(10) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: BRIDGE #20 OVER DIAL CREEK ON SR-1616. Contractor Name: FSC II LLC DBA FRED SMITH COMPANY

Contract Amount: \$0.00 Cost Overrun/Underrun: 0% Work Began: 05/07/2018 Letting Date: 01/16/2018

Original Completion Date: 04/30/2019 **Revised Completion Date:** Scheduled Progress: 0% Latest Payment Thru: **Latest Payment Date:** Actual Progress: 0%

Contract Number: C204087 Route: US-70 Division: 5 County: Durham

TIP Number:

Length: 44.124 miles Federal Aid Number:

NCDOT Contact: Cameron D. Richards NCDOT Contact No: (919)835-8200 Location Description: 1 SECTION OF US-70 AND 106 SECTIONS OF SECONDARY ROADS.

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$7,054,264.20 Cost Overrun/Underrun: 0.21% Work Began: 01/16/2018 Letting Date: 09/19/2017

**Revised Completion Date:** Original Completion Date: 11/15/2018 Latest Payment Thru: 03/31/2018 Scheduled Progress: 23% Latest Payment Date: 04/09/2018 Actual Progress: 16.36% Contract Number: DE00173 Route: SR-1104 Division: 5 County: Durham TIP Number: W-5205V

Length: 0 miles Federal Aid Number: HSIP-1104(19) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: SR 1104/SR 1105 (HERNDON RD) AT SR 1106 (MASSEY CHAPEL/ BARBEE RD) IN DURHAM COUNTY

Contractor Name: TRIANGLE GRADING & PAVING INC

Contract Amount: \$1,046,988.75 Cost Overrun/Underrun: 9.58% Work Began: 05/01/2017 Letting Date: 11/09/2016 Original Completion Date: 08/18/2017 Revised Completion Date: 10/31/2017 Latest Payment Thru: 04/15/2018 Scheduled Progress: 100% Latest Payment Date: 04/20/2018 Actual Progress: 69.04%

Contract Number: DE00206 Route: SR-1308 Division: 5 County: Durham

TIP Number:

Length: 0.23 miles Federal Aid Number:

NCDOT Contact: Cameron D. Richards NCDOT Contact No: (919)835-8200 Location Description: BRIDGE #117 OVER MUD CREEK SR 1308 (CORNWALLIS ROAD)

Contractor Name: DANE CONSTRUCTION INC

Contract Amount: \$0.00 Cost Overrun/Underrun: 0% Letting Date: 12/13/2017 Work Began:

**Original Completion Date: Revised Completion Date: Latest Payment Thru:** Scheduled Progress: 0% Actual Progress: 0% **Latest Payment Date:** 

Contract Number: DE00213 Route: NC-55 Division: 5 County: Durham

TIP Number:

Length: 0 miles Federal Aid Number:

NCDOT Contact: Cameron D. Richards NCDOT Contact No: (919)835-8200 Location Description: VARIOUS PRIMARY AND SECONDARY ROUTES IN DURHAM COUNTY

Contractor Name: CAROLINA SUNROCK LLC

Contract Amount: \$4,169,878.04 Cost Overrun/Underrun: 7.1% Work Began: 10/18/2017 Letting Date: 06/28/2017

Original Completion Date: 06/01/2018 **Revised Completion Date:** Latest Payment Thru: 03/31/2018 Scheduled Progress: 34.1% Latest Payment Date: 04/10/2018 Actual Progress: 46.88%

Contract Number: DE00214 Route: SR-XXX Division: 5 County: Durham

**TIP Number:** 

Length: 0 miles Federal Aid Number:

NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680 Location Description: VARIOUS SECONDARY ROUTES IN DURHAM AND PERSON COUNTIES

Contractor Name: WHITEHURST PAVING CO INC

Contract Amount: \$0.00 Cost Overrun/Underrun: 0%

Work Began: 05/08/2018 Letting Date: 06/14/2017

Original Completion Date: 07/01/2018 **Revised Completion Date:** Latest Payment Thru: Scheduled Progress: 0% **Latest Payment Date:** Actual Progress: 0%

Contract Number: DE00216 Route: SR-1361 Division: 5 County: Durham

TIP Number: W-5601GD, W-5601GG,

W-5601HX W-5601HY

Length: 0 miles Federal Aid Number: HSIP-1361(010) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680 Location Description: SR 1361 (VICKERS AVE) AT LAKEWOOD AVENUE IN DURHAM COUNTY

Contractor Name: BRENTWOOD DISPLAY SERVICES INC.

Contract Amount: \$211.982.82 Cost Overrun/Underrun: 8.23% Work Began: 07/05/2017 Letting Date: 05/24/2017

Original Completion Date: 12/05/2017 **Revised Completion Date:** Scheduled Progress: 100% Latest Payment Thru: 12/31/2017 Latest Payment Date: 01/11/2018 Actual Progress: 68.27% Contract Number: DE00228 Route: I-85 Division: 5 County: Durham TIP Number: I-5729

Length: 5.61 miles Federal Aid Number: NHPP-0085(013) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: I-85 FROM US-15/501 TO EAST OF SR-1827 (MIDLAND TERRACE RD) IN DURHAM

Contractor Name: INTERSTATE IMPROVEMENT INC

Contract Amount: \$4,168,265.78 Cost Overrun/Underrun: 2.02% Work Began: 03/13/2018 Letting Date: 10/11/2017 Original Completion Date: 11/01/2018 **Revised Completion Date:** 

Latest Payment Thru: 03/22/2018 Scheduled Progress: 5.6% Latest Payment Date: 04/02/2018 Actual Progress: 10.61%

Contract Number: DE00230 Route: SR-1118 Division: 5 County: Durham

TIP Number: W-5601EH Length: 0 miles Federal Aid Number: HSIP-1118(007) NCDOT Contact: James M. Nordan, PE NCDOT Contact No: (919)220-4680

Location Description: SR 1118 (FAYETTEVILLE ROAD) AT COOK ROAD (SOUTHERN INTERSECTION) IN DURHAM

Contractor Name: FULCHER ELECTRIC OF FAYETTEVILLE INC

**Contract Amount:** \$70,660.50 Cost Overrun/Underrun: 1.08% Work Began: 02/15/2018 Letting Date: 12/13/2017 **Revised Completion Date:** 

Original Completion Date: 04/15/2018 Latest Payment Thru: 03/31/2018 Scheduled Progress: 96.5% Latest Payment Date: 04/11/2018 Actual Progress: 77.96%

Project ID	<u>Description</u>	R/W Plans Complete	R/W Acqu Begins	<u>Let Type</u>	<u>Let Date</u>	Project Manager	Con Est	Comments
W-5705C	US 501 AT GARRETT ROAD, US 501 BUSINESS AT WESTGATE DRIVE,US 501 BUSINESS AT TOWER BOULEVARD, AND US 501 BUSINESS AT SHANNON ROAD SAFETY IMPROVEMENTS			Division POC Let (DPOC)	Division POC Let (DPOC) 2/28/2018		\$375,000	
U-4726HJ	CONSTRUCTION OF SIDEWALKS ON NC 751 BETWEEN GARRETT RD AND NC 54, AND ON NC 54 BETWEEN NC 751 AND DRESDEN DRIVE			NON - DOT LET (LAP)	NON - DOT LET (LAP) 4/30/2018 JENNIFER A. EVANS			
W-5705M	I-40 WESTBOUND AT NC 147 SAFETY IMPROVEMENTS (MP: 9.359 - 9.359)			On Call Contract (OCC)	5/3/2018	MICHAEL KNEIS	\$80,000	
W-5705N	I-85 AT CLUB BOULEVARD, GLEN SCHOOL ROAD, RED MILL ROAD, REDWOOD ROAD INTERCHANGE RAMPS, SAFETY IMPROVEMENTS (MP: 5.474- 12.304)			On Call Contract (OCC)	5/3/2018	ROGER KLUCKMAN	\$322,000	Planning and design 50% complete.
15005.1032011				Division POC Let (DPOC)	5/23/2018	Lisa Gilchrist		
C-5605E	CITY OF DURHAM BICYCLE LANE STRIPING: 8 MILE OF BIKE LANES.		11/1/2017	NON - DOT LET (LAP)	6/1/2018	JENNIFER A. EVANS	\$504,000	
EB-4707A	SR 1838/ SR 2220 FROM US 15/501 IN ORANGE COUNTY TO SR 1113(POPE ROAD) IN DURHAM COUNTY BICYCLE, PEDESTRIAN AND TRANSIT IMPROVEMENTS	8/20/2015	8/20/2015	Division POC Let (DPOC)	6/21/2018	MICHAEL KNEIS	\$2,844,000	
U-5745	NC 751 (HOPE VALLEY ROAD) AT SR 1183 (UNIVERSITY DRIVE) INTERSECTION IN DURHAM. CONSTRUCT ROUNDABOUT.	8/21/2017	7/6/2017	Division POC Let (DPOC) 6/27/2018 RC		ROGER KLUCKMAN	\$1,300,000	R/W acquisition in progress
W-5705K	SR 1327(GREGSON STREET)AT LAMOND AVENUE(MP:0.386-0.386); AND SR 1445(DUKE STREET)AT WEST CORPORATION STREET (MP:1.230-1.230) SAFETY IMPROVEMENTS			Division POC Let (DPOC)	6/28/2018	MICHAEL KNEIS	\$65,000	
EB-5514	NC 751 / SR 1183 (UNIVERSITY DRIVE) / SR 2220 (CHAPEL HILL ROAD) / NON-SYSTEM (UNIVERSITY DRIVE) FROM SR 1116 (GARRETT ROAD) TO SR 1158 (CORNWALLIS ROAD)IN DURHAM. ADD BICYCLE LANES AND PEDESTRIAN IMPROVEMENTS.			NON - DOT LET (LAP)	7/5/2018	JENNIFER A. EVANS	\$1,025,000	
C-5183B	SR 1945 (S ALSTON AVENUE) FROM SR 1171 (RIDDLE ROAD) TO CAPPS STREET. CONSTRUCT SIDEWALKS IN DURHAM	9/30/2017	9/30/2017	NON - DOT LET (LAP)	9/28/2018	JENNIFER A. EVANS	\$706,000	
17BP.5.C.02	Pipe Replacement on University Drive			Division POC Let (DPOC)	Division POC Let (DPOC) 12/7/2018 Lie		\$300,000	City request to add sidewalk and curb and gutter
W-5601EM	SR 1118 (FAYETTEVILLE ROAD) AT PILOT STREET AND CECIL STREET. SAFETY IMPROVEMENTS.			Division POC Let (DPOC)	12/12/2018	MICHAEL KNEIS	\$14,000	
44932.3.1				On Call Contract (OCC)	12/28/2018	Roger Kluckman		
C-5605I	DURHAM NEIGHBORHOOD BIKE ROUTE:~7 MILES OF SIGNED AND MARKED NEIGHBORHOOD BIKE ROUTES IN CENTRAL DURHAM.		8/30/2018	NON - DOT LET (LAP)	3/29/2019	JENNIFER A. EVANS	\$540,883	
U-5968	CITY OF DURHAM UPGRADE ITS / SIGNAL SYSTEM			Raleigh Letting (LET)	4/16/2019	SHERRY C. YOW	\$21,865,000	
U-4726HO	CARPENTER - FLETCHER ROAD BIKE - PED; CONSTRUCT BIKE LANES / SIDEWALKS (CITY MAINTAINED) FROM WOODCROFT PARKWAY (CITY MAINTAINED ) TO ALSTON AVENUE (SR 1945).		6/30/2018	NON - DOT LET (LAP)	6/30/2019	JENNIFER A. EVANS		

Project ID	<u>Description</u>	R/W Plans Complete	R/W Acqu Begins	<u>Let Type</u>	Let Date	Project Manager	Con Est	Comments
C-5605H	DOWNTOWN DURHAM WAYFINDING PROGRAM SIGNS/KIOSKS TO FACILITATE NAVIGATION AND PARKING.	9/30/2018	9/30/2018	NON - DOT LET (LAP)	7/1/2019	JENNIFER A. EVANS	\$605,000	
47451.3.1	NC 98 ( Holloway Street) - Traffic Signal at Adams Street and channelization at S. Woodcrest Street			On Call Contract (OCC)	7/15/2019	Roger Kluckman	\$144,000	Planning and design in progress.
EB-5703	DURHAM - LASALLE STREET FROM KANGAROO DRIVE TO SPRUNT AVENUE IN DURHAM. CONSTRUCT SIDEWALKS ON BOTH SIDES FROM KANGAROODRIVE TO US 70 BUSINESS (HILLSBOROUGH ROAD) AND ON ONE SIDEFROM HILLSBOROUGH ROAD TO SPRUNT AVENUE.			NON - DOT LET (LAP)	9/29/2019	JENNIFER A. EVANS	\$578,000	
EB-5704	DURHAM - RAYNOR STREET FROM NORTH MIAMI BOULEVARD TO NORTH HARDEE STREET			NON - DOT LET (LAP)	9/29/2019	JENNIFER A. EVANS	\$250,000	
EB-5708	NC 54 FROM NC 55 TO RESEARCH TRIANGLE PARK WESTERN LIMIT INDURHAM CONSTRUCT SECTIONS OF SIDEWALK ON SOUTH SIDE			NON - DOT LET (LAP)	9/29/2019	JENNIFER A. EVANS	\$275,000	
EB-5715	US 501 BYPASS (NORTH DUKE STREET) FROM MURRAY AVENUE TO US 501 BUSINESS (NORTH ROXBORO ROAD) IN DURHAM CONSTRUCT SIDEWALK ON EAST SIDE TO FILL IN EXISTING GAPS	NON - DOT LET (LAP) 9/29/2019 JENNIFE		JENNIFER A. EVANS	\$1,269,000			
17BP.5.R.97				Division POC Let (DPOC)	10/15/2019	Lisa Gilchrist		
U-4726HN	CONSTRUCT BIKE LANES/SIDEWALKS IN DURHAM - HILLANDALE ROAD	10/30/2018	10/30/2018	NON - DOT LET (LAP) 1/30/2020		JENNIFER A. EVANS		
C-4928	SR 1317 (MORREENE ROAD) FROM NEAL ROAD TO SR 1320 (ERWIN ROAD) IN DURHAM. CONSTRUCT BIKE LANES AND SIDEWALKS.	11/1/2018	11/1/2018	NON - DOT LET (LAP)	2/28/2020	JENNIFER A. EVANS	\$5,783,000	
U-5717	US 15/US 501 @ SR 1116 (GARRETT ROAD) IN DURHAM CONVERT AT-GRADE INTERSECTION TO INTERCHANGE	4/21/2019	4/21/2019	Division Design Raleigh Let (DDRL)	4/21/2020	BENJAMIN J. UPSHAW	\$26,300,000	Addressing public comments and selecting preferred alternative.
17BP.5.R.83				Division POC Let (DPOC)	4/22/2020	Lisa Gilchrist		
U-5516	AT US 501 (ROXBORO ROAD) TO SR 1448 (LATTA ROAD) / SR 1639 (INFINITY ROAD) INTERSECTION IN DURHAM. INTERSECTION IMPROVEMENTS.	5/17/2019	5/17/2019	Division Design Raleigh Let (DDRL)			\$5,500,000	Developing alternatives in response to public comments.
I-5707	I-40 - FROM NC 55 (ALSTON AVENUE) TO NC 147 (DURHAM FREEWAY/TRIANGLE EXPRESSWAY) IN DURHAM	6/18/2019	6/18/2019	Raleigh Letting (LET) 6/16/2020 TATIA L. WHITE		TATIA L. WHITE	\$3,550,000	
P-5717	NORFOLK SOUTHER H LINE CROSSING 734742W AT SR 1121 (CORNWALLIS ROAD) IN DURHAM. CONSTRUCT GRADE SEPARATION.	6/28/2019	6/30/2019	Raleigh Letting (LET)	6/23/2020	KUMAR TRIVEDI	\$10,000,000	
U-4724	DURHAM - CORNWALLIS RD (SR 1158) FROM SR 2295 (SOUTH ROXBORO STREET) TO SR 1127 (CHAPEL HILL ROAD) IN DURHAM. BIKE AND PEDESTRIAN FEATURES.			NON - DOT LET (LAP)	6/30/2020	JENNIFER A. EVANS	\$4,978,000	
EB-5904	DUKE BELT LINE TRAIL - PETTIGREW STREET TO AVONDALE STREET IN DURHAM, CONSTRUCT A MULTI-USE TRAIL ON FORMER RAIL CORRIDOR	3/30/2018	3/30/2018	NON - DOT LET (LAP)	9/1/2020	JENNIFER A. EVANS	\$3,750,000	

Project ID	<u>Description</u>	R/W Plans Complete	R/W Acqu Begins	<u>Let Type</u>	Let Date	Project Manager	Con Est	Comments
EB-5837	THIRD FORK CREEK TRAIL FROM SOUTHERN BOUNDARIES PARK TO AMERICAN TOBACCO TRAIL IN DURHAM. CONSTRUCT SHARED USE PATH ANDSIDEWALKS, AND INSTALL BEACON AT SR 1158 (CORNWALLIS RD.) CROSSING.	6/1/2020	6/30/2020	NON - DOT LET (LAP) 6/30/2021 JENNIFER A. EVANS		\$2,546,000		
U-5823	WOODCROFT PARKWAY EXTENSION. FROM SR 1116 (GARRETT ROAD) TONC 751 (HOPE VALLEY ROAD) IN DURHAM. CONSTRUCT ROADWAY ON NEW ALIGNMENT.	1/27/2020	1/27/2020	NON - DOT LET (LAP)	8/30/2021	JENNIFER A. EVANS	\$1,798,000	
EB-5720	BRYANT BRIDGE NORTH/GOOSE CREEK WEST TRAIL, NC 55 TO DREW-GRANBY PARK IN DURHAM. CONSTRUCT SHARED-USE PAHT AND CONNECTING SIDEWALKS.	9/30/2020	9/30/2020	NON - DOT LET (LAP)	9/30/2021	JENNIFER A. EVANS	\$4,432,000	
U-5934	NC 147 FROM I-40 TO FUTURE I-885(EAST END CONNECTOR)IN DURHAM ADD LANES AND REHABILITATE PAVEMENT		2/15/2022	Design Build Let (DBL)	2/15/2022	TATIA L. WHITE	\$177,100,000	
U-5720A	US 70 (MIAMI BLVD) FROM LYNN ROAD TO SR 1959 (SOUTH MIAMI BOULEVARD/SR 1811 (SHERRON ROAD)		3/15/2022	Design Build Let (DBL)	3/15/2022	TATIA L. WHITE	\$57,000,000	
U-5720B	US 70 (MIAMI BLVD) AT SR 1959 (SOUTH MIAMI BOULEVARD)/SR 1811 (SHERRON ROAD)INTERSECTION		3/15/2022	Design Build Let (DBL)	3/15/2022	TATIA L. WHITE	\$25,300,000	
U-5720C	US 70 (MIAMI BLVD) FROM SR 1959 (SOUTH MIAMI BLVD)/SR 1811 (SHERRON ROAD) TO SR 2095 (PAGE ROAD EXTENSIONS). UPGRADE TOCONTROLLED-ACCESS FACILITY AND CONVERT AT-GRADE INTERSECTION TO INTERCHANGE.		3/15/2022	Design Build Let (DBL)	3/15/2022	TATIA L. WHITE	\$110,800,000	
EB-5834	NC 157 / SR 1322 (GUESS RD.) FROM HILLCREST DRIVETO SR 1407(WEST CARVER STREET) IN DURHAM. CONSTRUCT SIDEWALKS ON BOTHSIDES.		6/30/2021	NON - DOT LET (LAP)	9/20/2022	JENNIFER A. EVANS	\$589,000	
U-6021	SR 1118 (FAYETTEVILLE ROAD), FROM WOODCROFT PARKWAY TO BARBEE ROAD IN DURHAM. WIDEN TO 4-LANE DIVIDED FACILITY WITH BICYCLE / PEDESTRIAN ACCOMMODATIONS.	2/19/2021	2/19/2021	Division Design Raleigh Let (DDRL)	2/21/2023	BENJAMIN J. UPSHAW	\$13,770,000	Kimley Horn selected to perform planning work.
U-5937	NC 147 DURHAM FREEWAY, DURHAM COUNTY FROM SR 1445(SOUTH DUKE STREET)TO BRIGGS AVENUE IN DURHAM. CONSTRUCT AULILIARY LANES AND OPERATIONAL IMPROVEMENTS.	3/19/2021	3/19/2021	Raleigh Letting (LET)	3/21/2023	TATIA L. WHITE	\$47,001,000	
EB-5835	NC 55 (ALSTON AVE.) FROM SR 1171 (RIDDLE RD.) TO CECIL STREET IN DURHAM. CONSTRUCT SIDEWALK ON EAST SIDE TO FILL IN MISSING GAPS.		6/20/2022	NON - DOT LET (LAP)	9/20/2023	JENNIFER A. EVANS	\$525,000	
I-5941	I-85 FROM ORANGE COUNTY LINE TO US 15 /US 501 IN DURHAM PAVEMENT REHABILITATION	9/5/2023		Division Design Raleigh Let (DDRL)	12/19/2023	MICHAEL KNEIS	\$2,973,000	
I-5942	I-85 /US 15 FROM NORTH OF SR 1827 (MIDLAND TERRACE) IN DURHAM COUNTY TO NORTH OF NC 56 IN GRANVILLE COUNTY PAVEMENT REHABILITATION	9/5/2023		Division Design Raleigh Let (DDRL)	12/19/2023	MICHAEL KNEIS	\$8,357,000	
B-5674	REPLACE BRIDGE 80 OVER SR 1308 IN DURHAM ON US 15-501 NORTHBOUND	1/20/2023	1/20/2023	Raleigh Letting (LET)	1/16/2024	KEVIN FISCHER	\$2,209,000	
U-5774B	NC 54 FROM US 15/US 501 IN ORANGE COUNTY TO SR 1110 (BARBEECHAPEL ROAD) IN DURHAM COUNTY	6/16/2022	6/16/2022	Raleigh Letting (LET)	6/18/2024	TATIA L. WHITE	\$30,900,000	
U-5774C	NC 54 FROM SR 1110 (BARBEE CHAPEL ROAD) TO I-40	6/16/2022	6/16/2022	Raleigh Letting (LET)	6/18/2024	TATIA L. WHITE	\$23,700,000	
U-5774H	NC 54 FROM NC 751 TO SR 1118 (FAYETTEVILLE ROAD)	7/15/2022	7/15/2022	Raleigh Letting (LET)	10/15/2024	TATIA L. WHITE	\$13,200,000	

Project ID	<u>Description</u>	R/W Plans Complete	R/W Acqu Begins	<u>Let Type</u>	Let Date	Project Manager	Con Est	Comments
I-5982	I-540 DURHAM & WAKE COUNTY FROM I-40 IN DURHAM TO I- 495/US 64/US 264 IN KNIGHTDALE. CONSTRUCT MANAGED SHOULDERS.		1/21/2025	Design Build Let (DBL)	1/21/2025	RODGER ROCHELLE	\$109,970,000	
P-5706	EAST DURHAM SAFETY AND TRACK IMPROVEMENTS. CONSTRUCT EXTENSION, TO INCLUDE COMBINATION GRADE SEPARATIONS AND CLOSURESAT ELLIS ROAD SOUTH END CROSSING (734737A), GLOVER ROAD CROSSING (734735L), AND WRENN ROAD CROSSING (734736T) IN DURHAM.	2/1/2023	2/1/2023	NON - DOT LET (Rail)	1/31/2025	MATTHEW SIMMONS	\$42,400,000	
P-5716	NORFOLK SOUTHERN H LINE CROSSING 735236Y AT SR 1171 (ELLIS ROAD) IN DURHAM. CONSTRUCT GRADE SEPARATION.	6/30/2023	6/30/2023	Raleigh Letting (LET)	6/23/2026	MATTHEW SIMMONS	\$3,700,000	
P-5728	NS H LINE DURHAM COUNTY CONSTRUCT GRADE SEPARATION AT NEAL ROAD. COST INFORMATION DOES NOT EXIST AT THIS TIME AND A PLACEHOLDER VALUE OF \$1 WAS USED IN THE COST ESTIMATING SCREEN.	12/20/2024	1/21/2025	Raleigh Letting (LET)	12/15/2026	MATTHEW SIMMONS	\$4,000,000	
U-6067	US 15/US 501 DURHAM COUNTY FROM I-40 TO US 15/US 501 BUSINESS IN DURHAM UPGRADE CORRIDOR TO EXPRESSWAY.	2/21/2025	2/21/2025	Raleigh Letting (LET)	2/17/2027	TATIA L. WHITE	\$140,300,000	

# NCDOT DIV 7 PROJECTS LOCATED IN DCHCMPO - UNDER DEVELOPMENT

TIP/WBS#	Description	Let/Start Date	Completion Date	Cost	Status	Project Lead
B-4962 40174.1.1 40174.2.1 40174.3.1	Replace Bridge #46 over Eno river on US 70 Bypass	2/19/2019	FY 2021	\$5,012,000	Planning and Design activities underway	Kevin Fischer
I-3306AC 34178.1.6 34178.2.5 434178.3.9	Interchange improvements at I-40 and NC86 in Chapel Hill	3/21/2023	FY 2025	\$16,500,000	Planning and Design activities underway	Laura Sutton
P-5701 46395.1.1 46395.3.1	Construct Platform, Passenger Rail Station Building at Milepost 41.7 Norfolk Southern H-line in <b>Hillsborough</b>	6/30/2021	FY2022	\$7,200,000	PE funding scheduled 7/1/2020	Matthew Simmons
SS-4907BS 44894.2.1 44894.3.1	Installation of traffic signal at the intersection of US70 and SR 1114 (Buckhorn Road) East of <b>Mebane</b> .	5/31/2017	Jan. 2018	\$40,500 R/W \$43,200 CON	Utility relocations complete , R/W acquisition pending	Dawn McPherson
SS-4907BW 47356.1.1 47356.3.1	Intersection improvements at SR 1114 (Buckhorn Road) and SR 1146 (West Ten Road) east of Mebane. Convert two way stop to ALL WAY STOP. Construct radius improvements to accommodate turning traffic	9/1/2017	Dec. 2017	\$3000 PE \$55,000 CON	Installation 4-way stop complete, radius improvements completed by resurfacing -Spring 2018, RTE final inspection pending	Dawn McPherson
U-5846 50236.1.1 50236.2.1 50236.3.1	Construct a Roundabout at SR 1772 (Greensboro Street) and SR 1780 (Estes Drive) in <b>Carrboro</b> .	4/19/2018	Mar. 2019	\$775,000	Planning and design activities underway, R/W acquisition - 25% complete	Chris Smitherman
U-5847 50238.1.1 50238.2.1 50238.3.1	Intersection improvements at SR 1010 (West Franklin St.) and SR 1771 (Merritt Mill Rd)/SR1927 (Brewer Lane) in Chapel Hill / Carrboro.	Jan. 2019	Mar. 2019	\$775,000	Planning and design activities underway	Chris Smitherman
U-5854 46382.1.1 46328.2.1 46382.3.1	Construct a roundabout at SR 1008 (Mt. Carmel Church Road) and SR 1913 (Bennett Road) in <b>Chapel Hill</b>	Jun. 2018	FY 2019	\$775,000	Planning and design activities underway, Utility coordination underway, R/W acquisition - 40% complete	Chris Smitherman

# NCDOT DIV 7 PROJECTS LOCATED IN DCHCMPO - UNDER DEVELOPMENT

TIP/WBS#	Description	Let/Start Date	Completion Date	Cost	Status	Project Lead
U-6071 47496.1.1 47496.2.1 47496.3.1	Intersection improvements at NC 54 and SR 1007 (Old Fayetteville Rd) in <b>Carrboro</b>	1/15/2026	FY 2027	\$1,216,000	Planning and design activities underway	Chris Smitherman
W-5707A 44853.1.1	Curb ramp improvements at the following intersections: SR 2048 (South Road) at Raleigh Street; SR 2048 (South Road) at Country Club Road, SR 1902 (Manning Drive) at Paul Hardin Drive, and SR 1902 (Manning Drive) at Ridge Road / Skipper Bowles Road in <b>Chapel Hill</b>	Mar. 2018	Aug. 2018	\$80,000	Planning and design activities underway. Signal pedestrian improvements complete. Project let, Bid exceeded engineer's estimate, Re-let with upcoming TAP contract	Chris Smitherman
W-5707C 44853.1.3 44853.3.3 47490	Revise pavement markings and overhead lane use signs for removal of inside lane drop configuration on I-40 Westbound in vicinity of US 15-501 interchange. Resurfacing I-40 WB by use of contingency funds	Mar. 2018	Aug. 2018	\$395,000	Planning and design activities underway, re-let due to bids exceeded engineers estimate, new let date pending - tentative Mar. 2018	Chris Smitherman
47798	Increase length of existing turn lane / slip ramp and improve existing radius in the SE quadrant of US 70 Business/ NC 86 at US 70 Bypass in <b>Hillsborough</b>	Dec. 2018	Jun. 2019	\$189,000	Funding approved Feb. 2018	Chad Reimakoski



# **North Carolina Department of Transportation**

# **Active Projects Under Construction - Orange Co.**

Contract Number	<u>TIP</u> Number	Location Description	Contractor Name	Resident Engineer	Contract Bid Amount	Availability Date	Work Start Date	Completion Date	Progress Schedule	Completion Percent
C203640		REPLACEMENT OF 4 BRIDGES IN GUILFORD COUNTY AND 3 BRIDGES IN ORANGE COUNTY.	HAYMES BROTHERS, INC.	Lorenz, PE, Kris	\$3,124,500.00	06/01/2015	09/02/2015	11/01/2017	93.20	86.93
C203641		REPLACEMENT OF 5 BRIDGES IN GUILFORD COUNTY AND 5 BRIDGES IN ORANGE COUNTY.	R.E. BURNS & SONS CO., INC.	Kirkman, PE, Christopher D	\$5,940,323.00	06/01/2015	06/01/2015	11/01/2018	73.90	93.56
C203946	B-5348	REPLACE BRIDGE #85 OVER PHIL'S CRK ON SR-1005 (OLD G'BORO RD)	DANE CONSTRUCTION INC	Kirkman, PE, Christopher D	\$984,596.98	02/01/2018	02/01/2018	12/27/2018		
C204025	I-5954	PAVEMENT REHAB ON I-40/I-85 FROM EAST OF NC-54 IN GRAHAM IN ALAMANCE COUNTY TO WEST OF SR-1114 (BUCKHORN RD) IN ORANGE COUNTY.	APAC - ATLANTIC INC THOMPSON ARTHUR DIVISION	Kirkman, PE, Christopher D	\$9,699,053.68					
DG00302	P-4405K	EXTEND BRYDSVILLE ROAD TO NC 86 AND REMOVE RAIL CROSSING	TRIANGLE GRADING & PAVING INC	Kirkman, PE, Christopher D	\$1,683,900.00	07/01/2016	09/29/2016	12/30/2017	100.00	74.62
DG00321		GRADE IMPROVEMENTS ON SR 1004 (EFLAND-CEDAR GROVE RD)	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,711,133.05	04/02/2018		04/02/2019		
DG00323	C-5600F	INSTALLATION OF FIBER-OPTIC COMMUNICATION NETWORK AND RELATED WORK FOR CENTER TO CENTER CONNECTION	ALS OF NORTH CAROLINA LLC	Kirkman, PE, Christopher D	\$885,605.60	11/14/2016	02/27/2017	09/09/2017	100.00	99.87
DG00332	W-5601 IF	GUARDRAIL END TERMINAL UPGRADES ON I-85	NICKELSTON INDUSTRIES INC	Kirkman, PE, Christopher D	\$494,243.00	12/05/2016	05/01/2017	09/05/2017		
DG00341		REPLACE BRIDGE NO. 18 ON SR 1421 (LIB ROAD) EAST BACK CREEK TRIBUTARY WITH CULVERT	SMITH-ROWE, LLC	Kirkman, PE, Christopher D	\$310,294.00	03/15/2017	04/17/2017	01/15/2018	100.00	98.60
DG00345	U-3306(L)	LANDSCAPING ON SR 1733 (WEAVER DAIRY ROAD)	MOTS LANDSCAPING & LAWNS LLC	Kirkman, PE, Christopher D	\$73,101.80	01/23/2017	04/05/2017	06/15/2018	92.00	89.70
DG00346		REPLACE BRIDGE #209 OVER FRANK CREEK ON SR 1366 (ATKINS ROAD)	APPLE TUCK & ASSOCIATES INC	Kirkman, PE, Christopher D	\$363,834.19	05/01/2017	05/24/2017	02/07/2018	100.00	96.39
DG00371		RESURFACE 9 SECONDARY ROADS IN ORANGE CO.	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,688,750.33	07/05/2017	08/30/2017	11/01/2018	13.30	21.76
DG00372	R-5787B	ADA CURB RAMPS AT INTERSECTIONS IN BURLINGTON, GIBSONVILLE, GRAHAM, MEBANE, CARRBORO & CHAPEL HILL	ATLANTIC CONTRACTING COMPANY, INC.	Kirkman, PE, Christopher D	\$128,910.00	07/24/2017		03/28/2019		
DG00383		REPLACE BRIDGE # 84 OVER COLLINS CRK ON SR 1005 (OLD GREENSBORO RD)	DANE CONSTRUCTION INC	Kirkman, PE, Christopher D	\$1,290,279.37	07/24/2017	07/24/2017	05/15/2018	99.00	99.92
DG00391		REPLACE BRIDGE # 104 OVER STONEY CRK ON SR 1712 (UNIV. STATION RD)	R.E. BURNS & SONS CO., INC.	Kirkman, PE, Christopher D	\$561,562.02					
DG00393		RESURFACING ON SR 1101, SR 1118, SR 1119, SR 1124, SR 1125, SR 1127, SR 1128 SR 1130, SR 1134, SR 1135, ETC.	RILEY PAVING INC	Kirkman, PE, Christopher D	\$1,084,520.40	04/02/2018		10/12/2018		
DG00395		REPLACE BRIDGE #189 ON SR 1114 (BUCKHORN ROAD) OVER CANE CREEK	ST WOOTEN CORPORATION	Kirkman, PE, Christopher D	\$723,924.13	04/01/2018		01/01/2019		
DG00403		INSTALL PED. FENCE ON BRIDGE #262, SR 1006 (ORANGE GROVE ROAD) OVER I-40	BAXLEY CORPORATION	Kirkman, PE, Christopher D	\$94,400.00	01/08/2018		04/01/2018	Page	10 of 11

	Chatham County - DCHC MPO - Upcoming Projects - Division 8April 2018									
Contract # or	Route	ute Description		Let Date Completion Co		Proiect Admin.	Proiect Cost	Notes		
WBS # or TIP #	Noute	Description	Let Date	Date	Contractor	Project Admin.	Project Cost	Notes		
R-5825	NC 751 at SR 1731	Upgrade and Realign Intersection	1/22/2019	TBD	TBD	Greg Davis (910)	TBD	Right of Way in progress		
	(O'Kelly Chapel Road)					944-2344				

# Planned southern Durham roundabout riles neighbors

The Herald-Sun By Matt Riley April 20, 2018

DURHAM – A new roundabout coming to the intersection of Hope Valley Road and University Drive is generating complaints months before the state even starts building it.

Officials say that the roundabout will improve traffic flow and safety at the intersection, but locals say that it will disrupt the area and hurt property values.

"The idea has come up quite a few times," said Jim Dunlop, a congestion management engineer at the N.C. Department of Transportation. "Ultimately the city submitted a project request for a roundabout there, and it scored high for prioritization and got funded."

The NCDOT estimates traffic at the intersection — nearly 19,000 cars a day now — will increase by 16 percent over the next 25 years.

The city first asked the NCDOT to look at a roundabout in 2000 and received approval in 2015. The project is expected to cost \$1.5 million and take 18 months.

Ben Upshaw, the design engineer, said the roundabout will handle higher traffic in the future and alleviate congestion at rush hour.

"Durham is growing, and in this case that means more traffic coming through that area," he said. "We need to do something to prepare for that traffic."

Roundabouts move traffic efficiently, as cars mostly flow freely in the same direction and at a slow speed, Dunlop said. At a signal intersection, cars stop, which can lead to backups.

Roundabouts are also safer than traffic-signal intersections, where drivers sometimes disregard the signal and cause accidents.

In 2018, the NCDOT reported that roundabouts reduced total crashes by 48 percent and reduced fatal crashes in urban areas by 60 percent, compared to signal intersections. When drivers do get into an accident at a roundabout, they are more likely to rear-end someone rather than cause a head-on or T-bone collision at a signal intersection, Upshaw said.

But landowners say construction will impede traffic and cost them money.

"We have 150 children in our preschool, so during the school year we have those parents coming in five days a week," said Karen Whitaker, pastor at Epworth United Methodist Church. Construction will make it difficult for parents to enter and exit the church grounds.

"If you can't get into the place, you do away with our congregation," said Thomas Biggs, chairman of Epworth United Methodist Church's board. "And we can't afford that."

Biggs and Whitaker are also concerned the roundabout will require the church to build a 200-foot retaining wall and remove 35 pine trees on the property, and that the church won't be fairly compensated.

"The Department of Transportation just values square footage, but they don't value what impact it does to your property," Biggs said. "You can value square footage, but you can't value accessibility."

The law firm Maxwell, Freeman & Bowman, which will lose some land on property it has leased since 1982, also opposes the project. (CONTINUED...)

"[T]raffic incidents occurring at the intersection have been few and far between," it wrote in a letter to NCDOT. The construction of a turn lane greatly eased congestion, the letter said, adding the roundabout "will not 'enhance' the aesthetics at the intersection" and property values of affected owners will be "significantly diminished."

"It's a colossal mess," said Chris Crenshaw, who owns Crenshaw Financial Services. NCDOT is planning taking a small part of his property, valued at \$1,100, as part of the project. "I think a [traffic] light is doing just fine."

The NCDOT built the state's first roundabout in Winston-Salem in 1999. Since then, 323 roundabouts have been constructed by counties, municipalities, and the state. According to Kittleson & Associates, Inc., a transportation engineering and planning firm, North Carolina is ranked third in the nation for number of roundabouts, behind Washington and Florida.

#### New roundabout meeting

The N.C. Department of Transportation will hold a public meeting from 5 to 7 p.m. Monday, April 23, regarding a proposed roundabout on Mineral Springs Road at Pleasant Drive in Durham. A map of the proposed design of the roundabout can be found at <a href="https://www.ncdot.gov/projects/publicmeetings">www.ncdot.gov/projects/publicmeetings</a>.

The meeting will take place at Story Church, 100 Pleasant Drive in Durham. Interested residents may attend at any time during the meeting hours, as no formal presentation will be made. NCDOT representatives will be available to answer questions and listen to comments regarding the project.

Comments may also be submitted via phone, email, or mail by May 8. For additional information or to submit a comment after the meeting, contact NCDOT Capital Region Traffic Engineer John H. Grant, P.E., at jhgrant@ncdot.gov, (919) 814-4952, or 1561 Mail Service Center, Raleigh, NC, 27699-1561.

# As Durham grows, another call to unravel the Downtown Loop

The Herald-Sun By Dawn Baumgartner April 9, 2018

DURHAM – Over the past decade, downtown Durham has gained 1,000 more residential units, 529 more hotel rooms, 300,000 more square feet of commercial space, 60 restaurants and 30 shops.

Those numbers are since Downtown Durham Inc.'s last master-plan update, and a new one just came out.

Downtown development isn't slowing down.

What else is in the the works:

- More than 1.2 million square feet of office space.
- More than 1,500 housing units.
- More than 100,000 square feet of retail space.

DDI was formed in 1993 to be the catalyst for downtown revitalization and is funded by city and county governments and other sources.

The nonprofit group's update wants to make downtown walkable and vibrant for the people who live, work and visit. DDI held three focus groups, four public meetings and interviewed 36 stakeholders. It also had a steering committee of city and county department heads, property owners and residents. They presented the (CONTINUED...)

final report to the Durham City Council last week.

Matt Gladdek, director of policy and planning for DDI, said this update, unlike previous plans, was primarily fueled by public input. He said they sought diversity for gender and race but that there is very little Latino community representation downtown right now.

Downtown is a living room for Durham and they want to make it welcoming for everyone, Gladdek said.

### What the plan calls for:

- Retail clusters
- · High quality, diverse retailers
- A sense of place
- Discouraging non-retail at street level
- Racial and cultural diversity
- Embracing density
- Downtown-wide parking solution

#### What the plan wants to get rid of:

The downtown loop and one-way streets.

One-way streets kill retail, Gladdek said, because it's harder to get in and out of businesses.

Durham was not among the 41 cities to receive the most recent round of U.S. Department of Transportation Transportation Investment Generating Economic Recovery (TIGER) grantsannounced in March.

Mayor Steve Schewel told Gladdek he's not offering city money, but hopes another TIGER grant could fund turning the downtown loop back into two-way streets.

Schewel also reminded Gladdek that there will be retail space in the new city-owned parking garage being built at Mangum and Morgan streets. That's inside the loop.

#### New mixed use parking garage

Gladdek said because the new mixed use parking garage is on the loop, new retail will be in a really difficult retail situation. The garage will open in 2019.

City Manager Tom Bonfield said the city is engaging a broker sometime soon for the mixed use garage space.

Council member Mark-Anthony Middleton, who is on DDI's board, asked about the impact of new apartment buildings going up downtown instead of office space, and how that will affect job growth.

Gladdek said the market right now is pushing development that way because timber multi-family units are inexpensive and profitable compared to office buildings. But for the city, that means lower tax value and fewer jobs.

There have to be incentives if the city wants offices downtown, he said.