



## **Technical Committee Meeting Agenda**

Wednesday, December 19, 2018

9:00 AM

Committee Room 2nd Floor  
Durham City Hall 101 City Hall Plaza  
Durham, NC 27701

1. Roll Call
2. Adjustments to the Agenda
3. Public Comment

### **CONSENT AGENDA**

4. **Approval of the November 28, 2018 TC Meeting Minutes** [18-218](#)

A copy of the November 28, 2018 minutes is enclosed.

**TC Action:** Approve the minutes of the November 28, 2018 TC meeting.

**Attachments:** [2018-12-19 \(18-218\) 11.28.2018 TC Meeting Minutes\\_LPA2.pdf](#)

### **ACTION ITEMS**

5. **Draft FY2020 Unified Planning Work Program (UPWP) (10 minutes)** [18-213](#)

**Meg Scully, LPA Staff**

The DCHC MPO is required by federal regulations to prepare an annual Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. Funding for the UPWP is provided by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The UPWP must identify MPO planning tasks to be performed with the use of federal transportation funds. Attached is the draft FY2020 UPWP. The proposed schedule for UPWP development is as follows: draft FY2020 UPWP is reviewed by the Board and released for public comment on January 9, 2019. The MPO Board will be asked to hold a public hearing and approve the plan on February 13, 2019.

**TC Action:** Review the draft FY2020 UPWP and recommend the Board release the document for public comment.

**Attachments:** [2018-12-19 \(18-213\) FY20 UPWP Draft.pdf](#)  
[2018-12-19 \(18-213\) 2020 UPWP Presentation.pdf](#)



**6. GoTriangle Annual Report for Fiscal Year 2018 (15 minutes)**[18-214](#)**Jennifer Keep, GoTriangle****Mo Devlin, SWG Administrator**

Representatives from GoTriangle and the Durham-Orange Staff Working Group (SWG) will present a summary of the transit plan annual reports for Durham and Orange counties for fiscal year 2018, highlighting both fiscal results and accomplishments resulting from the Durham and Orange County transit tax.

The Durham County and Orange County Transit Plan Annual Reports are attached.

**TC Action:** This item is for informational purposes only, no action is necessary.

**Attachments:**      [2018-12-19 \(18-214\) Durham County Transit Plan FY18 Annual Report.pdf](#)  
                                 [2018-12-19 \(18-214\) Orange County Transit Plan FY18 Annual Report.pdf](#)

**7. DCHC MPO State of the Region 2018 Report (20 minutes)**[18-205](#)**Felix Nwoko, LPA Staff**

A copy of DCHC MPO State of the Region 2018 Report.

**TC Action:** Receive DCHC MPO State of the Region 2018 Report

**Attachments:**      [2018-12-19 \(18-205\) DCHC MPO State of the Region Report.pdf](#)

**8. 2045 Metropolitan Transportation Plan (MTP) -- Amendment #1 (10 minutes)**[18-172](#)**Andy Henry, LPA Staff**

In November, the MPO Board authorized the MPO staff to release Amendment #1 (also known as the re-adoption) to the 2045 Metropolitan Transportation Plan (MTP). Staff released Amendment #1 on November 28th along with the Air Quality Conformity Determination Report (AQ CDR). These documents and the public input opportunities have been posted to the MPO Web site and advertised in local newspapers. The following Web page provides a copy of the completely amended 2045 MTP report and has a list of the sections of the 2045 MTP that have been amended as a guide to anyone who reviews the document: <http://www.dchcmpo.org/programs/transport/2045mtp.asp#tabs10>

Staff has not made any significant changes to the Amendment #1 version that was released. The public comments on Amendment #1 will be posted to the MPO Web site, however no public comments have been received so far.

The following attachments are useful for understanding the amendment:

- \* A table of the proposed changes to the highway projects
- \* A resolution is attached to adopt Amendment #1 to the 2045 MTP and TRM version 6 (which includes the socioeconomic data) -- Staff added the interim Socioeconomic Data years (i.e., 2017, 2025, 2035, 2040 and 2045) to this version of the resolution.

In terms of schedule, there are a few points to keep in mind. First, the AQ CDR needs to be adopted by February 16, 2019 to continue federal transportation actions in our area. Next, the minimum public comment period is 30 days for the AQ CDR and 42 days for the MTP. Given these factors, the review schedule will be:

- \* November 28, 2018 -- Staff released updated 2045 MTP and AQ CDR
- \* January 16, 2019 -- MPO Board conducts public hearing, and adopt 2045 MTP, TRM version 6, and AQ CDR by resolutions

**TC Action:** Recommend that the DCHC MPO Board adopt Amendment #1 to the 2045 MTP and TRM version 6 by resolution.

**Attachments:**[2018-12-19 \(18-172\) 2045MTP-Amendment#1-Projects.pdf](#)[2018-12-19 \(18-172\) 2045MTP-Amendment#1-Resolution.pdf](#)

**9. Air Quality Conformity Determination Report (10 minutes)**[18-175](#)**Andy Henry, MPO Staff****John Hodges-Copple, TJCOG**

In September, the MPO Board authorized the MPO staff to release the Air Quality Conformity Determination Report (AQ CDR) when the report is ready. Staff released the AQ CDR on November 28 and posted public input opportunities on the MPO Web page and local newspapers. The Report finds that the 2045 MTP, and any Transportation Improvement Program (TIP) that is based on the 2045 MTP, meet the air pollution emission thresholds (also known as budgets) analyzed in the AQ CDR. The adoption resolution is attached. A copy of the AQ CDR is available on the following MPO Web page: <http://www.dchcmpo.org/programs/climate/airquality.asp>

In terms of schedule, there are a few points to keep in mind. First, the AQ CDR needs to be adopted by February 16, 2019 to continue federal transportation actions in our area. Next, the minimum public comment period is 30 days for the AQ CDR and 42 days for the MTP. Given these factors, the review schedule will be:

\* November 28, 2018 -- Staff released Amendment #1 to the 2045 MTP and AQ CDR

\* January 16, 2019 -- MPO Board conducts public hearing, and adopts 2045 MTP, TRM version 6, and AQ CDR by resolutions

**TC Action:** Recommend that the DCHC MPO Board adopt the Air Quality Conformity Determination Report by resolution.

**Attachments:** [2018-12-19 \(18-175\) AQConformity-Resolution.pdf](#)

**10. SPOT 6 Pre-Submittal Process (10 minutes)**[18-217](#)**Aaron Cain, LPA Staff**

NCDOT is offering to review through a pre-submittal process potential interchange, intersection, and superstreet projects prior to formal submission into the SPOT 6 cycle. This will provide an opportunity for MPOs to receive information on the relative potential for success of projects before they are formally submitted to SPOT. Each MPO may submit up to ten projects.

The deadline for submittals to NCDOT is January 18, 2019. If you have any candidate projects, please discuss them with Aaron Cain of LPA Staff, and submit nominations by January 11, 2019. Any candidate projects that could not be considered "operational improvements" must be shown in the 2045 Metropolitan Improvement Plan (MTP). Also, NCDOT has requested that MPOs *not* submit projects for pre-submittal review that were submitted for SPOT 5; pre-submittal projects should be new projects.

Additional information on the pre-submittal process is attached.

**TC Action:** Submit candidate projects to Aaron Cain by January 11, 2019.

**Attachments:** [2018-12-19 \(18-217\) SPOT 6 Pre-Submittal Process.pdf](#)

**11. Amendment #9 to the FY2018-2027 TIP (5 minutes)**[18-215](#)**Aaron Cain, LPA Staff**

Amendment #9 to the FY2018-2027 TIP consists of requests to add funds to three projects in Chapel Hill:

- EB-5721, Orange County Bicycle Route 1 (Fordham Boulevard)
- U-4726IK, Homestead Road Sidewalks
- U-5543, Variable Message Signs in Chapel Hill

EB-5721 would receive additional state TAP funds and the requisite local match. U-4726IK and U-5543 would receive additional STBGDA funds, which includes Chapel Hill's local discretionary funding for FY19 and FY20.

In addition, there is a request from the NCDOT Public Transportation Division to add a statewide project to the TIP, which has already been approved in the STIP.

The summary sheet, full report, and resolution are attached.

**TC Action:** Recommend approval of Amendment #9 to the FY2018-2027 TIP.

**Attachments:**      [2018-12-19 \(18-215\) TIP Amendment #9 Summary Sheet.pdf](#)  
                                 [2018-12-19 \(18-215\) TIP Amendment #9 Full Report.pdf](#)  
                                 [2018-12-19 \(18-215\) TIP Amendment #9 Resolution.pdf](#)

**12. Amendment #10 to the FY2018-2027 TIP (5 minutes)**[18-216](#)**Aaron Cain, LPA Staff**

Amendment #10 consists of one request to allocate just over \$2.9M in STBGDA and STBG-Any Area funds to EB-5904, Duke Belt Line Trail. Because of the amount of funding, per the DCHC MPO Public Involvement Policy, this amendment must be released for a 21-day public comment period.

The full report is attached.

**TC Action:** Recommend that the Board release Amendment #10 to the FY2018-2027 TIP for a 21-day public comment period.

**Attachments:**      [2018-12-19 \(18-216\) TIP Amendment #10 Full Report.pdf](#)

**13. Election of TC Officers for 2019 (10 minutes)**[18-203](#)**Aaron Cain, LPA Staff**

Per the DCHC MPO TC by-laws, an election for officers shall take place at the first meeting of the calendar year. The current Chair, Ellen Beckmann, cannot be the Chair in 2019 due to having served two consecutive terms as Chair. The new Chair must come from a jurisdiction representing either Orange or Chatham County. The new Vice Chair must come from a county other than that represented by the person who is elected Chair.

The custom of the TC is to form a nominating committee to make a recommendation to the full TC for the officer positions. The nominating committee will make this recommendation next month prior to the vote.

**TC Action:** Form a committee to nominate a new Chair and Vice Chair.

**REPORTS FROM STAFF:****14. Report from Staff**[18-107](#)

**Felix Nwoko, Andy Henry, LPA Staff**

**TC Action:** Receive report from Staff.

Attachments:      [2018-12-19 \(18-107\) LPA staff report.pdf](#)

**15. Report from the Chair**[18-108](#)

**Ellen Beckmann, TC Chair**

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

**16. NCDOT Reports**[18-109](#)

**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**

**TC Action:** Receive reports from NCDOT.

Attachments:      [2018-12-19 \(18-109\) NCDOT Progress Report.pdf](#)

**INFORMATIONAL ITEMS:**

**Adjourn**

**Next meeting: January 23, 2019, 9 a.m., Committee Room**

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

**The NC Transportation Summit will be held January 9-10 at the Raleigh Convention Center. A link to the agenda and registration information is here:  
[www.nctransportationsummit.com](http://www.nctransportationsummit.com).**

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

**TECHNICAL COMMITTEE**

**November 28, 2018**

**MINUTES OF MEETING**

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Technical Committee met on November 28, 2018, at 9:01 a.m. in the City Council Committee Room, located on the second floor of Durham City Hall. The following people were in attendance:

Ellen Beckmann (Chair)	City of Durham Transportation
Nishith Trivedi (Vice Chair)	Orange County Planning
Kayla Seibel (Member)	Chapel Hill Planning
Kumar Neppalli (Member)	Chapel Hill Engineering
Bergen Watterson (Member)	Chapel Hill Planning
Tasha Johnson (Member)	City of Durham Public Works
Christina Moon (Member)	Carrboro Planning
Zach Hallock (Member)	Carrboro Planning
Evan Tenenbaum (Member)	Durham County Planning
Scott Whiteman (Member)	Durham County Planning
Tom Altieri (Member)	Orange County Planning
Chance Mullis (Member)	Chatham County Planning
Geoff Green (Member)	GoTriangle
John Hodges-Copple (Member)	TJCOG
Tim Brock (Member)	Research Triangle Foundation
Kurt Stolka (Member)	UNC
Julie Bogle (Member)	NCDOT TPD
David Keilson (Alternate)	NCDOT, Division 5
Richard Hancock (Alternate)	NCDOT, Division 5
Ed Lewis (Alternate)	NCDOT, Division 7
Bryan Kluchar (Alternate)	NCDOT, Division 8
Patrick McDonough (Alternate)	GoTriangle
Eddie Dancausse	Federal Highway Administration
Felix Nwoko	DCHC MPO
Andy Henry	DCHC MPO
Aaron Cain	DCHC MPO
Brian Rhodes	DCHC MPO
Dale McKeel	City of Durham / DCHC MPO
Lyndsay Gavin	TJCOG
Kaley Husten	TJCOG
Jenny Halsey	TJCOG

Quorum Count: 20 of 31 Voting Members

Chair Ellen Beckmann called the meeting to order at 9:01 a.m. A roll call was performed. The Voting Members and Alternate Voting Members of the DCHC MPO Technical Committee (TC) were identified and are indicated above. Chair Ellen Beckmann reminded everyone to sign-in using the sign-in sheet.

**PRELIMINARIES:**

**2. Adjustments to the Agenda**

There were no adjustments to the agenda.

**3. Public Comments**

There were no comments from the public.

**CONSENT AGENDA:**

**4. Approval of October 24, 2018, Meeting Minutes**

Geoff Green made a motion to approve the October 24, 2018, Meeting Minutes. Vice Chair Nishith Trivedi seconded the motion. The motion passed unanimously.

**ACTION ITEMS:**

**5. Commuter Rail Project Sponsorship**

**Aaron Cain, LPA Staff**

Aaron Cain stated that Wake Transit and Capital Area Metropolitan Planning Organization (CAMPO) undertook a formal process to name GoTriangle as the project sponsor for the Durham-Wake Commuter Rail Transit (CRT) project. Aaron Cain added that the memo adopted by CAMPO was used as a template for a similar memo for the DCHC MPO Board to designate GoTriangle as the project sponsor. Aaron Cain continued that DCHC MPO TC members expressed concern regarding the contents and specificity of the draft memo that was presented at its meeting on October 24.

Bergen Watterson asked if additional candidates were in consideration for sponsorships. Patrick McDonough of GoTriangle responded that there was no other local entity that was equipped to deal



with such a large scale project, and the North Carolina Department of Transportation Rail Division chose not to be placed under consideration. John Hodges-Copple agreed that GoTriangle is the logical project sponsor, however, he advocated for the language to be included into a future resolution as follows:

“That GoTriangle is committed to a collaborative partnership epitomized by the statement; everybody at the table, every step of the way. And that this commitment will be demonstrated through GoTriangle fulfilling its project sponsor role by being the facilitators and managing partner, guiding the partners through a clear concurrence process and adhering to a set of guiding principles in all facets of work with expectations that other partners will do the same. And that these guiding principles are: 1) Address collaboration, transparency and accountability 2) Clearly spell out schedules and decisions to be made 3) Be based on clear documented plans and evidence 4) Emphasize a focus on users of the investment.”

Patrick McDonough stated that any language added to the memo must be reviewed by GoTriangle’s legal team. Patrick McDonough continued that project sponsor designation is not a requirement of the Federal Transit Administration (FTA), and he warned against language that could inhibit project development. Patrick McDonough continued that significant changes from the project sponsorship resolution from CAMPO could be confusing for the process. John Hodges-Copple stated that including this language would help to avoid similar issues that the Durham-Orange Light Rail (D-O LRT) has experienced and cautioned against rushing into project development before an expectation agreement had been reached. Patrick McDonough stated that Rail Traffic Control (RTC) is crucial for partnership with the North Carolina Railroad (NCRR). Patrick McDonough shared that NCRR is also unsure about to whom concerns should be addressed in order to receive a timely and accurate response.

Chair Ellen Beckmann, Aaron Cain, and Bergen Waterson discussed the role of the Major Investment Study (MIS) process or the County Staff Working Groups in developing oversight or language framework to add to the project sponsor designation memo. Aaron Cain stated that the language that CAMPO uses should be similar to the DCHC language. John Hodges-Copple stated that agreement on expectations may be more difficult once a sponsor has already been chosen.

Felix Nwoko and Aaron Cain affirmed that language added to the sponsor designation memo ought to be sent to GoTriangle’s legal team for review, and then the document would be referred back

to the TC. Aaron Cain and Patrick McDonough discussed that there is not a required timeline for the project sponsor designation because it is not required by FTA.

Chair Ellen Beckmann stated that she prefers to separate program sponsor designation and expectations of the program sponsor. Chair Ellen Beckmann recommended that the issue ought to be referred to MPO staff in order to initiate a conversation with CAMPO before bringing the memo to the MPO Board and that the TC action would not include adding language for expectations of the project sponsor.

Evan Tenenbaum made a motion to recommend approval of GoTriangle as the project sponsor for Durham-Wake CRT. Scott Whiteman seconded the motion. The motion passed unanimously.

#### **6. Triangle Transportation Demand Management Program Update**

**Jenny Halsey, TJCOG**

Jenny Halsey stated that the goal of the Triangle Transportation Demand (TDM) Management Program is to reduce the growth of Vehicle Miles Traveled (VMT) by 25% through strategies that encourage alternative modes of travel. Jenny Halsey continued that the Triangle J Council of Governments (TJCOG) receives Congestion Mitigation/Air Quality (CMAQ) funding from DCHC MPO and CAMPO as well as other funding from NCDOT to support the TDM program. Jenny Halsey noted that there is oversight on the process in the administration of competitive grants. Jenny Halsey explained that each grantee must cover at least one of 62 possible hotspots, which are areas of high work commute trip density that provide the best opportunities for TDM services. Jenny Halsey stated that grantees are required to make a 50% funding match, despite CMAQ dollars only requiring a 20% local match.

Jenny Halsey added that information is gathered from quarterly reports and surveys from grantees. Jenny Halsey stated that surveys are distributed to each grantee, and then the grantees distributes to the individual employees or students within that entity. Jenny Halsey discussed the differences in travel mode preference among employees and students. Jenny Halsey also discussed the differences in motivations of employees and students to engage in alternate modes of transportation.

Jenny Halsey continued that the survey also included a section where employees and students could provide comments and observations.

Felix Nwoko asked about the source of the VMT data. Lindsay Galvin responded that the methodology was developed by LDH Consulting, and the numbers derive from the quarterly reports and the survey responses.

Chair Ellen Beckmann asked about which grantee is most effective and efficient with its grant funding. John Hodges-Copple and Jenny Halsey stated that there are different situations within a region of access to modes of transportation and infrastructure, so each TDM dollar spent will impact each grantee differently. John Hodges-Copple continued that TJCOG has not yet begun to calculate effectiveness or efficiency data. Jenny Halsey added that NCDOT is in the process of providing to TJCOG a set of enhanced performance metrics.

Chair Ellen Beckmann stated that CMAQ funding that can be spent on buses or bike lanes, for example, and it would be helpful to understand in what respective areas those would be most effective. Jenny Halsey responded that NCDOT funding is prohibited to be spent on capital investments and can only be spent on marketing and outreach. John Hodges-Copple added that funding spent on TDM currently has a greater impact than alternative supply-based investments. Felix Nwoko suggested adding the TDM Update to the DCHC MPO website. Jenny Halsey added that TJCOG has exceeded its goal of reducing the growth of vehicle miles traveled by 25%.

**7. DCHC MPO State of the Region 2018 Report**  
**Felix Nwoko, LPA Staff**

Felix Nwoko stated that the DCHC MPO State of the Region 2018 Report highlights the trends and underpinnings of growth. Felix Nwoko requested that TC members provide comments to him before TC meeting on December 19, so that they can be incorporated into the final report. Felix stated that he plans to take the report to the MPO Board for its meeting on January 9 with plans for them to approve in February 2018. Felix Nwoko discussed the use of performance measures. Chair Ellen Beckmann asked

if the report will be an annual occurrence. Felix Nwoko affirmed that the report is planned to be annual. Geoff Green discussed how American Community Survey (ACS) data can be problematic in highlighting trends due to its margin of error. Felix Nwoko responded that using ACS data is a requirement. John Hodges-Copple and Felix Nwoko discussed breaking the regional report into sub-regions. Andy Henry asked if there will continue to be an annual DCHC MPO report. Felix Nwoko responded that there will continue to be an annual DCHC MPO report. Felix Nwoko discussed that the mobility report card in the State of the Region Report provides the trend of the state of mobility within the region. Chair Ellen Beckmann and Felix Nwoko discussed that the intended audience are policy makers and the public. Chair Ellen Beckmann asked how this will be distributed. Felix Nwoko stated that it could be distributed to member agencies.

**8. 2045 Metropolitan Transportation Plan (MTP) -- Amendment #1**

**Andy Henry, LPA Staff**

Andy Henry stated that the MPO Board, on November 14, authorized the MPO staff to release Amendment #1 to the 2045 Metropolitan Transportation Plan (MTP) upon completion of the Air Quality Conformity Determination Report (AQ CDR). Andy Henry recommended that both the 2045 MTP and the AQ CDR are adopted at the same time because both are based on the Triangle Regional Model (TRM), therefore, it will mitigate issues when amending the 2045 MTP or the Transportation Improvement Plan (TIP).

**9. Air Quality Conformity Determination Report**

**Andy Henry, MPO Staff**

**John Hodges-Copple, TJCOG**

Andy Henry stated that, in September 2018, the MPO Board authorized the MPO staff to release the AQ CDR when the report is ready. Staff will update the Technical Committee (TC) on the release of the AQ CDR. A resolution is attached to adopt the AQ CDR.

Andy Henry added that the minimum public comment period is 30 days for the AQ CDR and 42 days for the MTP. Andy Henry stated that staff is scheduled to release the AQ CRD on or before

November 28, 2018, and Andy Henry proposed that the MPO Board conduct a public hearing on January 9, 2018, and then readopt the 2045 MTP and TRM.

**10. High Impact-Low Cost Call for Projects FY2020-2021**

**Aaron Cain, LPA Staff**

Aaron Cain stated that NCDOT Divisions 5, 7 and 8 released a call for projects for the High Impact-Low Cost (HILC) program. Aaron Cain added that HILC provides funding for small highway projects that could produce a large improvement in traffic flow or safety, but may not score well in the Strategic Planning Office of Transportation (SPOT) process. Aaron Cain stated that each Division is expected to receive from \$1.5-2M for HILC for each of the next two fiscal years. Aaron Cain continued projects are also expected to be implemented quickly, therefore no project should require extensive planning and design, right-of-way (ROW), or utility relocations. Aaron Cain listed examples of HILC projects, including: restriping, shoulder widenings, traffic signals, and small intersection improvements.

Aaron Cain requested the submittal of projects to include a detailed description, map, and cost estimate of the project. Aaron Cain added that deadlines for submitting projects for Divisions 5, 7 and 8 are December 18, December 3, and December 7, respectively. Aaron Cain recommended allowing adequate time when submitting projects.

**11. STBGDA Call for Projects for FY19 and FY20**

**Aaron Cain and Meg Scully, LPA Staff**

Aaron Cain stated that DCHC MPO issued a call for projects using the local discretionary portion of FY2019 and FY2020 State Transportation Block Grant – Direct Attributable (STBGDA) funds on September 26, 2018. Aaron Cain added that the deadline was extended to December 3. Aaron Cain continued that the City of Durham and the towns of Chapel Hill and Carrboro have yet to provide information to MPO staff.

Aaron Cain stated that NCDOT has made available to the DCHC MPO an additional \$1.195M in STBG-Any Area funds for swap for STBGDA funds due to two obligations made in FY18. Aaron Cain

added that this allows for an additional \$1.195M of STBGDA funds to be disbursed equitably within the MPO. Chair Ellen Beckmann and Aaron Cain discussed that there is no timeline for these funds to be spent, however, they would prefer to spend these funds in a timely manner.

Chair Ellen Beckmann and Aaron Cain reviewed the accompanying memo on distribution of STBG-Any Area funds and discussed that the best option is Option 1, which is the application of funds to shovel-ready bike/ped projects that need additional construction funding. Aaron Cain stated that Option 1 lists a set of possible projects for funding, but those options are able to be changed, which resulted in discussion about several possible project changes and substitutions. Chair Ellen Beckmann suggested avoiding projects that could be funded through Transportation Alternative Program (TAP) funding because historically, the NCDOT had available TAP funding for local projects. There was discussion about the eligibility of highway and highway capacity projects. Chair Ellen Beckmann and Aaron Cain discussed funding adding right-of-way to ongoing projects that need additional funding.

## **12. Amendment #8 to the FY2018-2027 TIP**

**Aaron Cain, LPA Staff**

Aaron Cain stated that Amendment #8 to the FY2018-2027 TIP includes changes to a bike/ped project in Durham (EB-5514), the flexing of Orange County STBGDA funds to transit (TP-5151), two funding changes at the request of NCDOT (P-5717 and U-5745), and an adjustment to U-4726 to ensure sufficient funding in the correct project number for various bike/ped projects within the DCHC boundary. Aaron Cain added that the funding for the sub-projects in U-4726 was previously approved.

Vice Chair Nishith Trivedi made a motion to recommend that the MPO Board adopt Amendment #8 to the FY2018-2027 TIP. Scott Whiteman seconded the motion. The motion passed unanimously.

## **13. Performance Management Agreement on Data Sharing**

**Aaron Cain, DCHC MPO**

**Julie Bogle, NCDOT**

Aaron Cain stated that Federal regulations require that MPOs and transit agencies sign an agreement with NCDOT to share data amongst agencies. Aaron Cain added that the DCHC MPO is coordinating the effort to obtain the signatures from the transit agencies within the MPO's jurisdiction.

Scott Whiteman made a motion to recommend the Board Chair sign the Performance Management Agreement on Data Sharing. Geoff Green seconded the motion. The motion passed unanimously.

#### **REPORTS:**

##### **14. Reports from the LPA Staff**

Felix Nwoko, Andy Henry, LPA Staff

Felix Nwoko discussed there is a conceptual design underway for the Triangle Bikeway. Felix Nwoko recommended that the TC create a subcommittee to discuss the Triangle Bikeway and possible issues facing it, such as connections to Chapel Hill. Felix Nwoko added that conceptual designs have been approved by CAMPO. Chair Ellen Beckmann stated that the preliminary plans have the Triangle Bikeway route from Raleigh to the Research Triangle Park (RTP), and reminded the TC that the RTP is unincorporated Durham County. Chair Ellen Beckmann also expressed concerns about the noise of I-40 along the proposed route.

##### **15. Report from the DCHC MPO TC Chair**

Ellen Beckmann, DCHC MPO TC Chair

Chair Ellen Beckmann stated that there are a variety of ongoing public input meetings and outreach.

##### **16. NCDOT Reports**

David Keilson, NCDOT Division 5, stated that there is no additional comment to the report.

Ed Lewis, NCDOT Division 7, stated that planning and design activities are continuing for the project to extend Orange Grove Road.

Bryan Kluchar, NCDOT Division 8 stated that there was no additional comment to the report.

Julie Bogle, Transportation Planning Division, stated that the NC Moves 50 survey end date will be November 30 and that an expanded public outreach effort is planned. Julie Bogle added that there is an interactive map on NCmoves50.com where residents can provide comments until April 2019.

There was no report from NCDOT Traffic Operations.

**INFORMATIONAL ITEMS:**

**17. Recent News, Articles, and Updates**

There were no informational items.

**ADJOURNMENT:**

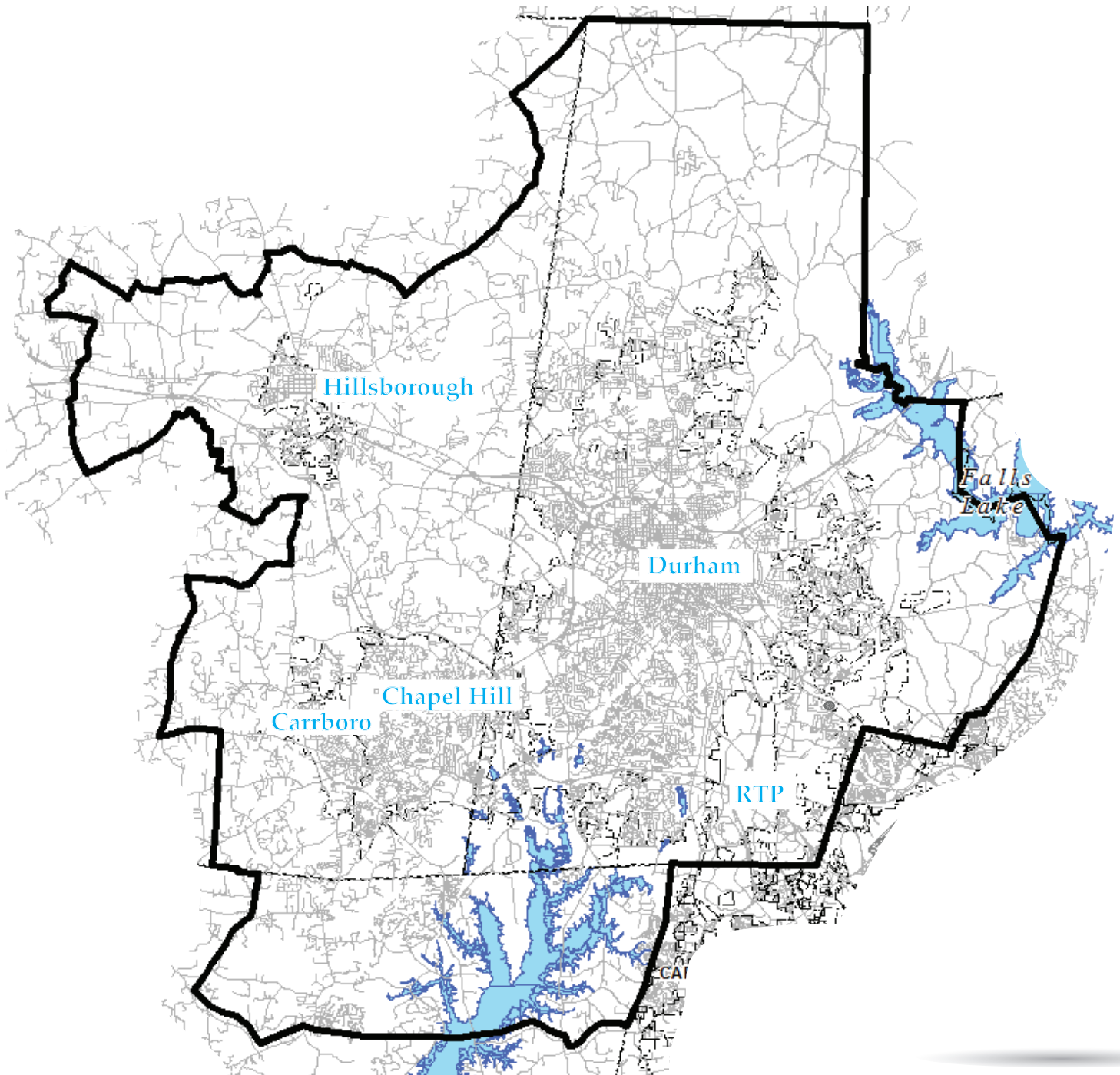
There being no further business before the DCHC MPO Technical Committee, the meeting was adjourned at 10:55 a.m.



# Durham Chapel-Hill Carrboro Metropolitan Planning Organization

## FY2020 Unified Planning Work Program

Draft 12.19.18



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Durham-Chapel Hill-Carrboro  
Metropolitan Planning Organization  
(DCHC MPO)  
**RESOLUTION** (FTA and FHWA)  
Approving the FY2020 Unified Planning Work  
Program of the DCHC MPO

February 13, 2019

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

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

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

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

**Whereas**, members of the DCHC MPO Board agree that the Unified Planning Work Program will effectively advance transportation planning for FY2020.

**Now therefore, be it resolved that the MPO Board hereby endorses the *FY2020 Unified Planning Work Program for the DCHC MPO Urban Area.***

I, Damon Seils, Chair of the MPO Board do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the DCHC MPO Board, duly held on the \_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Damon Seils, MPO Board Chair

Durham County, North Carolina

I certify that Damon Seils personally appeared before me this day acknowledging to me that he signed the forgoing document.

Date: \_\_\_\_\_, 2019

\_\_\_\_\_  
Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2020

**RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS**

**RESOLUTION CERTIFYING THE DURHAM-CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING ORGANIZATION (DCHC MPO)  
TRANSPORTATION PLANNING PROCESS FOR FY2020**

**Whereas**, the MPO Board has found that the Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner in accordance with 23 U.S.C. 134 and 49 U.S.C. 1607;

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

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

**Whereas**, the MPO Board has considered how the Transportation Planning Process will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded planning projects (Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23);

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

**Whereas**, the DCHC MPO Metropolitan Transportation Improvement Program is a subset of the currently conforming Metropolitan Transportation Plan (MTP);

**Whereas**, the Transportation Plan has a planning horizon year of 2045, and meets all the requirements for an adequate Transportation Plan,

**Now therefore, be it resolved that the DCHC Urban Area MPO Board certifies the transportation planning process for the DCHC Metropolitan Planning Organization on this the \_\_\_\_ day of \_\_\_\_, 2019.**

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Damon Seils,  
Board Chair

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Clerk/Secretary/Planner

### **Metropolitan Planning Self-Certification Process**

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

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

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

1. Is the MPO properly designated by agreement between the Governor and 75% of the urbanized area, including the central city, and in accordance in procedures set forth in state and local law (if applicable)? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (a)]. Response: Yes
2. Does the policy board include elected officials, major modes of transportation providers and appropriate state officials? [23 U.S.C. 134 (b); 49 U.S.C. 5303 (c); 23 CFR 450.306 (i)]  
Response: Yes, the policy board includes elected official/representatives of Durham City, Durham County, Town of Carrboro, Town of Chapel Hill, Town of Hillsborough, Orange County, Chatham County, NCDOT BOT and GoTriangle (regional transit representative).
3. Does the MPO boundary encompass the existing urbanized area and the contiguous area expected to become urbanized within the 20-yr forecast period? [23 U.S.C. 134 (c), 49 U.S.C. 5303 (d); 23 CFR 450.308 (a)] Response: Yes
4. Is there a currently adopted Unified Planning Work Program? [23 CFR 450.314] Response: Yes.
  - a. Is there an adopted prospectus? Yes
  - b. Are tasks and products clearly outlined? Yes
  - c. Is the UPWP consistent with the MTP? Yes
  - d. Is the work identified in the UPWP completed in a timely fashion? Yes
5. Does the area have a valid transportation planning process? Response : Yes  
[23 U.S.C. 134; 23 CFR 450]
  - a. Is the transportation planning process continuous, cooperative and comprehensive? Yes
  - b. Is there a valid MTP? Yes
  - c. Did the MTP have at least a 20-year horizon at the time of adoption? Yes
  - d. Does it address the 8-planning factors? Yes,
  - e. Does it cover all modes applicable to the area? Yes
  - f. Is it financially constrained? Yes
  - g. Does it include funding for the maintenance and operation of the system? Yes
  - h. Does it conform to the State Implementation Plan (SIP) (if applicable)? Yes
  - i. Is it updated/reevaluated in a timely fashion (at least every 4 or 5 years)? Yes

6. Is there a valid TIP? [23 CFR 450.324, 326, 328, 330, 332] Response: Yes
  - a. Is it consistent with the MTP? Yes
  - b. Is it fiscally constrained? Yes
  - c. Is it developed cooperatively with the state and local transit operators? Yes.
  - d. Is it updated at least every 4-yrs and adopted by the MPO and the Governor? Yes
  
7. Does the area have a valid CMP? (TMA only) [23 CFR 450.320] Response: Yes
  - a. Is it consistent with the MTP? Yes
  - b. Was it used for the development of the TIP? Yes
  - c. Is it monitored and reevaluated to meet the needs of the area? Yes
  
8. Does the area have a process for including environmental mitigation discussion in the planning process? Yes
  - a. How? Through periodic meeting with environmental resource agencies and involving the agencies in the MTP process.
  - b. Why not? N/A
  
9. Does the planning process meet the following requirements? Response: Yes.
  - a. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
  - b. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended 42 U.S.C. 7504, 7506 (c) and (d) and 40 CFR part 93;
  - c. Title VI of the Civil Rights Act of 1964, as amended 42 U.S.C. 2000d-1 and 49 CFR part 21;
  - d. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
  - e. MAP-21/FAST Act and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
  - f. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
  - g. The provisions of the Americans with Disabilities Act of 1990 Sections 42 U.S.C. 12101 et seq. and 49 CFR parts 27, 37, and 38;
  - h. The Older Americans Act, as amended 42 U.S.C. 6101, prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
  - i. Section 324 title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
  - j. Section 504 of the Rehabilitation Act of 1973 29 U.S.C. 794 and 49 CFR part 27 regarding discrimination against individuals with disabilities.
  - k. All other applicable provisions of Federal law. (i.e. Executive Order 12898)
  
10. Does the area have an adopted PIP/Public Participation Plan? [23 CRR 450.316 (b)(1)]? Yes
  - a. Did the public participate in the development of the PIP? Yes
  - b. Was the PIP made available for public review for at least 45-days prior to adoption? Yes.
  - c. Is adequate notice provided for public meetings? Yes.
  - d. Are meetings held at convenient times and at accessible locations? Yes.
  - e. Is public given the opportunity to provide oral/written comment on planning process? Yes.
  - f. Is the PIP periodically reviewed and updated to ensure its effectiveness? Yes.
  - g. Are plans and documents available in an electronic accessible format, i.e. MPO website? Yes
  
11. Does the area have a process for including environmental, state, other transportation, historical, local land use and economic development agencies in the planning process? Yes
  - a. How? Through inter-agency coordination, and collaboration
  - b. Why not? N/A

### **DCHC MPO Title VI Assurances**

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization –DCHC MPO (hereinafter referred to as the “Recipient”) HEREBY AGREES THAT as a condition to receiving any Federal financial assistance from the North Carolina Department of Transportation and the US Department of Transportation it will comply with the Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d-42 (hereinafter referred to as the Act), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation. Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the Regulations) and other pertinent directives, to the end that in accordance with the Act, Regulations, and other pertinent directives, no person in the United States shall, on the grounds of race, color, sex, age, national origin or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the Department of Transportation, including the Federal Highway Administration, and HEREBY GIVES ASSURANCE THAT it will promptly take any measures necessary to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

More specifically and without limiting the above general assurance, the Recipient hereby gives the following specific assurances with respect to its Federal-Aid Highway Program:

1. That the Recipient agrees that each “program” and each “facility” as defined in subsections 21.23 (b) and 21.23 (e) of the Regulations, will be (with regard to a “program”) conducted, or will be (with regard to a “facility”) operated in compliance with all requirements imposed by, or pursuant to, the Regulations.
2. That the Recipient shall insert the following notification in all solicitations for bids for work or material subject to the Regulations made in connection with the Federal-Aid Highway Program and, in adapted form in all proposals for negotiated agreements:

The DCHC MPO in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

3. That the Recipient shall insert the clauses of Appendix A of this assurance in every contract subject to the Act and the Regulations.
4. That the Recipient shall insert the clauses of Appendix B of this assurance, as a covenant running with the land, in any deed from the United States effecting a transfer of real property, structures, or improvements thereon, or interest therein.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the assurance shall extend to the entire facility and facilities operated in connection therewith.

6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the assurance shall extend to rights to space on, over or under such property.
7. That the Recipient shall include the appropriate clauses set forth in Appendix C of this assurance, as a covenant running with land, in any future deeds, leases, permits, licenses, and similar agreements entered into by the Recipient with other parties: (a) for the subsequent transfer of real property acquired or improved under the Federal-Aid Highway Program; and (b) for the construction or use of or access to space on, over or under real property acquired, or improved under the Federal-Aid Highway program.
8. That this assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property or interest therein or structures or improvements thereon, in which case the assurance obligates the Recipient or any transferee for the longer of the following periods: (a) the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or (b) the period during which the Recipient retains ownership or possession of the property.
9. The Recipient shall provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he delegates specific authority to give reasonable guarantee that it, other recipients, subgrantees, contractors, subcontractors, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Act, the Regulations and this assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Act, the Regulations, and this assurance.

THIS ASSURANCE is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts or other Federal financial assistance extended after the date hereof to the Recipient under the Federal-Aid Highway Program and is binding on it, other recipients, subgrantees, contractors, subcontractors, transferees, successors in interest and other participants in the Federal-Aid Highway Program. The person or persons whose signatures appear below are authorized to sign this assurance on behalf of the Recipient.

\_\_\_\_\_  
Damon Seils, MPO Board Chair

\_\_\_\_\_  
Date

\_\_\_\_\_  
Felix Nwoko, Ph.D.  
DCHC MPO Manager

\_\_\_\_\_  
Date



## **Introduction**

The DCHC MPO is required by federal regulations to prepare an annual Unified Planning Work Program (UPWP) that details and guides the urban area transportation planning activities. The Fixing America's Surface Transportation Act (FAST Act) is the most recent law establishing federal transportation policy and funding authorizations. Federal regulations implementing transportation policy (23 CFR §450.308) require that:

"(b) Metropolitan transportation planning activities performed with funds provided under title 23 U.S.C. and title 49 U.S.C. Chapter 53 shall be documented in a unified planning work program (UPWP)...

(c) ...each MPO, in cooperation with the State(s) and public transportation operator(s) shall develop a UPWP that includes a discussion of the planning priorities facing the MPA [metropolitan planning area]. The UPWP shall identify work proposed for the next one- or two-year period by major activity and task (including activities that address the planning factors in §450.306(a)), in sufficient detail to indicate who (e.g., MPO, State, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, the proposed funding by activity/task, and a summary of the total amounts and sources of Federal and matching funds."

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

The UPWP also contains project descriptions for special projects and Federal Transit Administration (FTA) projects. Special project descriptions are provided by the responsible agency. FTA planning project task descriptions, FTA Disadvantaged Businesses Contracting Opportunities forms, and FTA funding source tables are also included in this work program.

The funding source tables reflect available federal planning fund sources and the amounts of non-federal matching funds. The match is provided through either local or state funds or both. Section 104(f) funds are designated for MPO planning and are used by the Lead Planning Agency to support MPO planning functions. Section 133(b)(3)(7) funds are the portion of STBG-DA funds flexed to the UPWP for MPO planning. The LPA and MPO jurisdictions use these funds to support the MPO planning functions and regional special projects, such as corridor studies, the Coordinated Plan, Community Viz update, Regional Freight Plan implementation and update, data collection geo-database enterprise update, regional model update and enhancement, travel behavior surveys and onboard transit survey, etc.

The main source of funds for transit planning for Chapel Hill Transit (CHT) and GoDurham is the Federal Transit Administration's Section 5303 funds. These funds are allocated by NCDOT's Public Transportation Division (PTD). Transit agencies may also use portions of their Section 5307 funds for planning. These funds must be approved by the MPO Board as part of the UPWP approval process.

### **Proposed FY2020 UPWP Activities and Emphasis Areas**

DCHC MPO activities and emphasis areas for the FY20 UPWP are summarized as follow:

- Preparatory work on the development of the 2050 Metropolitan Transportation Plan (MTP)
- Development of the 2020-29 MTIP
- Commence work activities associated with SPOT6
- Continue to implement Fast Act Metropolitan Planning requirements
- Monitor of ADA Transition Plan and Self-Assessment
- Update and monitoring of Title VI compliance
- Update and monitoring EJ and LEP
- Monitoring of Safety Targets
- Monitoring of State of Good Repairs Targets
- Continuation of routine planning- TIP, UPWP, Data monitoring and monitoring system, GIS, Public Involvement, AQ, etc.
- Continuation of special and mandated projects/programs: transportation resilience planning, CTP update, safety/freight, modeling,
- Exploration of integrating big data into technical and modeling processes.
- Exploration of tools for evaluating impacts of technology and autonomous/connected vehicles
- TRM V7 – Exploration and analysis of future direction.
- TRM V6, maintenance, enhancement and update.
- Asset Management Plan for all modes (required for all transit agencies), etc.
- TRM estimation year data tabulation (to be aligned and streamlined with CMP Data gathering and analysis efforts)
- Update of 2045 and process amendments as necessary and required.
- Update and QC of base year data collection/inventory.
- Rolling (continuous ACS-style) surveys (household, transit onboard, cordon, etc.)
- Regional transit and implementation and update of County transit plans
- Congestion Management Process CMP- State of the System Report
- MPO-wide Mobility Report Card update
- Implementation of the Regional Freight Plan
- Continuation of the MPO website update, enhancement and application (portals) development
- Update and enhancement of the MPO geo-database enterprise
- Other 3-C planning process activities

### **Metropolitan Planning Factors & Federal Requirements**

Federal transportation regulations require MPOs to consider specific planning factors when developing transportation plans and programs in the metropolitan area. Current legislation calls for MPOs to conduct planning that:

1. Supports the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increases the safety of the transportation system for motorized and non-motorized users;
3. Increases the security of the transportation system for motorized and non-motorized users;
4. Increases the accessibility and mobility of people and for freight;
5. Protects and enhances the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

6. Enhances the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promotes efficient system management and operation;
8. Emphasizes the preservation of the existing transportation system.
9. Improves the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhances travel and tourism

In addition, the current administration is promoting livability principles that are to be considered in the metropolitan planning process activities. These principles are:

- Provide more transportation choices
- Promote equitable, affordable housing
- Enhance economic competitiveness
- Support existing communities
- Coordinate policies and leverage investments, and
- Value communities and neighborhoods.

Each of these factors is addressed through various work program tasks.

### **Public Involvement and Title VI**

Federal legislation requires MPOs to include provisions in the planning process to ensure the involvement of the public in the development of transportation plans and programs including the Metropolitan Transportation Plan, the short-term Transportation Improvement Program, and the annual Unified Planning Work Program. Emphasis is placed on broadening participation in transportation planning to include key stakeholders who have not traditionally been involved, including the business community, members of the public, community groups, and other governmental agencies. Effective public involvement will result in opportunities for the public to participate in the planning process.

### **Metropolitan Transportation Plan (MTP)**

The MPO is responsible for developing a Metropolitan Transportation Plan (MTP) for a minimum of 20-year time horizon in cooperation with the State, MPO member agencies and with local transit operators. The MTP is produced through a planning process which involves the region's local governments, the North Carolina Department of Transportation (NCDOT), local jurisdictions and citizens of the region. Additionally, representatives from the local offices of the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), North Carolina Department of Environmental Quality (NCDEQ) and the U.S. Environmental Protection Agency (US EPA) provide guidance and participate in the planning process. The Metropolitan Transportation Plan (MTP) must include the following:

- Vision, Goals, and Objectives;
- Land use impacts;
- Identification and assessment of needs;
- Identification of transportation facilities (including major roadways, transit, multimodal and intermodal facilities and intermodal connectors) that function as an integrated metropolitan transportation system;
- A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities;
- A financial plan that demonstrates how the adopted transportation plan can be implemented;
- Operations and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;
- Capital investment and other strategies to preserve the existing and projected future metropolitan

transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs; and

- Proposed transportation and transit enhancement activities.

### **Transportation Improvement Program (TIP)**

The DCHC MPO is responsible for developing a Transportation Improvement Program (TIP) for a seven-year time horizon in cooperation with the State, MPO member agencies and with local transit operators. The TIP is produced through a planning process which involves the region's local governments, the NCDOT, local jurisdictions and citizens of the metropolitan area. The TIP must include the following:

- A list of proposed federally supported projects and strategies to be implemented during TIP period;
- Proactive public involvement process;
- A financial plan that demonstrates how the TIP can be implemented; and
- Descriptions of each project in the TIP.

### **Transportation Management Area (TMA)**

Designated TMAs, such as the DCHC MPO, based on urbanized area population over 200,000 must also address the following: Transportation plans must be based on a continuing and comprehensive transportation planning process carried out by the MPO in cooperation with the State and public transportation operators. A Congestion Management Process (CMP) must be developed and implemented that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities, through use of travel demand reduction and operations management strategies.

### **Air Quality Conformity Process**

Currently, the DCHC MPO is designated as an attainment area for air quality. However, the Triangle region air quality partners have decided to continue to implement activities, including air quality analysis and conformity determination on its Metropolitan Transportation Plan (MTP) and Metropolitan Transportation Improvement Program (TIP). NCDOT and TJCOG will assist the MPOs in making a conformity determination by performing a systems level conformity analysis on the highway portion of the fiscally constrained MTP. The TIP is a subset of the MIT and is, therefore, covered by the conformity analysis.

### **FY2020 Emphasis Areas and Special Projects Descriptions**

Special emphasis projects and new initiatives for the FY2020 UPWP are described below.

#### **Triangle Regional Model (TRM) - Major Model Enhancement**

The purpose of this task is to continue to review and analyze existing travel demand and air quality models in order to determine feasible enhancements to the modeling procedures that are used in the TRM study area. DCHC MPO will continue to perform regional travel demand, and micro simulation model runs for existing and future projects as requested and needed. Upon completion of the TRM-V6, the Triangle Regional Model Service Bureau (TRM-SB) and the regional model stakeholders will commence substantial revisions and enhancements in order to better respond to the evolving needs and policies of the DCHC MPO and other model stakeholders. One of the first tasks will be to identify and select model enhancements for implementation based on the needs of the various partners, including local governments, and on the feasibility and costs of desired enhancements. Enhancements within the DCHC MPO include; enhancing model precision for small area studies, improving non-motorized models, increasing sensitivity to travel demand management policies, network quality checks, improved transit ridership forecasting, incorporating tools for policy analysis and responding to policy questions, improving HOV/HOT tools and parking sensitivity enhancements. Additional technical enhancements have also been proposed relative to trip generation, destination choice and mode choice. Integrated land use and transportation modeling is

addressed in a separate item below. Specific activities to develop model enhancements include; staff time preparing and evaluating technical proposals for model revision and developing the model, negotiating the scope of enhancements with regional model partners (NCDOT, GoTriangle, CAMPO), consultant assistance in preparing technical specifications and in developing the model, and research and peer contact aimed at assessing the technical merits and operational challenges of the various modeling strategies that will be under consideration. The TRM is a regional project, and it is possible that some enhancements sought by DCHC MPO will not be included in the regional model plan, such as the enhancement of the non-motorized trip. In that case, additional activities may include developing extensions to the regional model to meet remaining policy needs of DCHC MPO.

### **Annual Continuous Travel Behavior Survey (Household Survey)**

Work will continue on the tabulation and analysis of the household survey. Also, estimation of parameter using the household survey will be undertaken during this UPWP period. Due to the changing demographics of the region, the model stakeholders have decided to undertake annual (ACS style) continuous survey. This will improve the model by capturing changing travel behavior and patterns. The existing Triangle Regional Model was calibrated with Travel Behavior Survey (TBS) data collected in 2006. Since then, the region has undergone substantial development and demographic changes. While some of these changes are captured in updates to socio-economic data that is input to the model, including Census 2010, there is much more information from the 2006 survey that needs to be updated in order to prepare more accurate forecasts and also to meet the federal requirements for using the latest planning assumptions. The TBS will collect detailed information on personal and household travel patterns from approximately 2,000-3,000 households annually across the Triangle. The sample size for the DCHC MPO planning area will be based on the population. Information about trip purposes, mode choice, travel routes, time of day when travel is undertaken, response to road congestion, average trip distances and durations, and neighborhood and work destination characteristics will likely be gathered in these surveys.

In addition, the new TBS will allow better prediction of transit and non-motorized transportation. Despite the comprehensive character of the current TBS, it under-represents persons who travel by modes other than automobile. Consequently, in order to provide sufficient high-quality data to pursue the MPO's goal of understanding and increasing use of transit and non-motorized travel, the proposed budget includes a separate transit on-board survey bus riders, and surveys of bicycle and pedestrian activity and facilities. The benefit to the DCHC MPO will be a more accurate and reliable travel demand model that represents and captures local travel behavior and travel patterns.

### **Community Viz**

The DCHC MPO in concert with CAMPO will continue to update and enhance the Community Viz tool. The primary purpose of the project is to implement a partnering strategy and create a spatial data planning model framework and scenario planning tools using Community Viz software that will mimic development patterns and intensities and allocate future year socioeconomic data for the jurisdictions within the Triangle region. The model will be used by DCHC MPO staff to identify regional goals and community values, and explore alternatives for growth, development, and transportation investment. Results from the model will be used in developing the DCHC MPO's next socio-economic forecasts and Metropolitan Transportation Plan.

During FY2017, the DCHC MPO and CAMPO under the leadership of TJCOG joined together to update the first Community Viz0 scenario planning initiative called Connect 2045. That tool provided a platform for regional socio-economic projection and forecasting. Additionally, it provided an opportunity to explore and debate regional visions for growth, their trade-offs, and alternative development futures. Scenario planning tools, and specifically, Community Viz, will be used throughout the planning process to measure and evaluate the impacts of competing development scenarios and major investments in the

regional transportation system. Results of the scenario planning initiative will be the update and refinement of socio-economic forecasts.

### **Data Collection and Data Management**

The MPO is required by federal regulations and the 3C process to perform continuous data monitoring and maintenance. A number of transportation and traffic conditions will be continuously surveyed and compiled annually to feed into various MPO technical analyses such as modeling, Metropolitan Transportation Plan update, Congestion Management Process, project development, Title VI planning, EJ/LEP demographic profiles, TIP, project prioritization, etc. The following data collection and monitoring tasks will be conducted during this UPWP period:

- 48 hour traffic volume –hourly, bi-directional, classified and 85<sup>th</sup> percentile speed;
- Turning Movement Count during AM, Noon and PM peak periods for cars, trucks, bikes and pedestrians;
- INRIX and HERE data
- Travel time and speed survey; and
- Pedestrian and bicycle counts at mid-block and intersections (peak counts and 12-hour counts).
- Crash and safety data
- Transit APC
- Transportation Performance Measures
- Transit Performance Targets data

Transportation models, Congestion Management Programs, federally mandated performance management/targets, and prioritization are critically dependent on comprehensive, detailed, high-quality input data. In the past, such data have been gathered through an ad-hoc, short-term work effort, and have been used to produce model output for multiple years. As the region grows toward more sophisticated models and, as NCDOT and FHWA move toward detailed data-driven processes, it becomes increasingly desirable to undertake comprehensive and systematic data collection and management for the MPO. The on-going MPO data management program is intended to link the model's input directly to existing databases. More broadly, it is proposed to integrate these external data with existing and new geographic information so that they can be overlaid easily with transportation improvement projects, thoroughfare and corridor plans, updated street centerline locations and other information that will assist policy makers and the public to envision the impact of proposed projects and policies. Specific products to be output by staff and/or consultants include; design of work flow processes and data access strategies to support routine access to relevant information, continued design and update of a centralized database for information that will be used by transportation and land use models, development of presentation tools for the data (using ArcGIS Online), and adjustment of the travel demand model so that it can use directly such detailed data.

**Intelligent Transportation System** - The purpose of this task is to develop, maintain and enhance regional Intelligent Transportation System (ITS) activities to improve efficiency of the transportation network, public transit, emergency response, safety and security in the Capital Region. DCHC MPO will continue to update and maintain the regional ITS architecture, and coordinate with various stakeholders to ensure that ITS technologies are deployed in manner that will allow for communication, interoperability, and compatibility amongst various regional systems and entities.

**Title VI Planning** - The purpose of this task is to ensure that no person will, on the grounds of race, color, national origin, income, gender, age, and disability, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (PL 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. DCHC MPO will continue to monitor the Title VI program and implement Title VI Assurance.

**Safety and Security Planning** - The purpose of this task is to reduce the human and economic toll on the region's multi-modal transportation system due to traffic crashes through collaboration and an integrated Vision Zero approach including engineering, enforcement, education and emergency response. DCHC MPO will continue to analyze safety data and collaborate with NCDOT and regional safety stakeholders to monitor safety programs and continually revise and refine the planning process.

**Land Use, Socio-Economic, Environmental** - The purpose of this task is to collect, maintain and analyze regional land use, socio-economic and environmental data that will be used in regional demographic forecasting, transportation planning, land use planning, air quality planning, emergency planning, Title VI and economic development efforts. DCHC MPO will continue to participate, provide input to member jurisdictions and agencies in the development of local comprehensive plans, and provide guidance to NCDOT Project Development and NEPA on land use and zoning issues affecting project development and merger process.

**Metropolitan Transportation Plan Reappraisal** - This task addresses periodic reviews, changes, and progress on the long range planning process to foster livable and sustainable communities and transportation systems in the DCHC MPO area as required by FAST Act and the previous legislation.

### **FY2020 UPWP Funding Sources**

FY2020 UPWP funding levels as well as the descriptions of funding sources is summarized below.

### **Federal Highway Administration Funds (FHWA)**

**Planning (PL) Section 104(f)** – These funds are funds for urbanized areas, administered by NCDOT. These funds require a 20% match. The PL funding apportionment to the state is distributed to the MPOs through a population-based formula. The proposed Section 104(f) funding level is based on the FAST-ACT Section 104(f) allocation. The statewide section 104(f) funds are distributed among all MPOs based on a formula. The DCHC MPO PL fund allocation for FY2020 is below.

	<b>MPO Total</b>
Federal PL funds (80%)	\$ 353,101
Local match (20%)	\$ 88,275
<b>Total PL Funds</b>	<b>\$ 441,376</b>

**STBG-DA** – These funds are the portion of the federal Surface Transportation Block Grant Program (STBG-DA) funds provided to Transportation Management Areas (TMAs) over 200,000 in population through FHWA. By agreement with the DCHC MPO and NCDOT, a portion of these funds are used for MPO transportation planning activities. STBG-DA funds proposed to be flexed in the FY2020 UPWP are shown below:

	<b>MPO Total</b>
Federal STBG-DA funds (80%)	\$ 1,849,095
Local match (20%)	\$ 462,275
<b>Total STBG-DA Funds</b>	<b>\$ 2,311,370</b>

**Federal Transit Administration (FTA) Funds**

Two types of funds are used for transit planning purposes by the DCHC MPO; Section 5303 and Section 5307 funds administered through the Federal Transit Administration (FTA) and the NCDOT Public Transit Division (PTD).

**Section 5303** funds provide assistance to urbanized areas for transit planning. The funds are for planning and technical studies related to urban public transportation. They are provided from the FTA through the PTD to the MPO transit operators (80% from FTA, 10% from PTD, and 10% local match).

<b>5303</b>	<b>CHT</b>	<b>GoDurham</b>	<b>MPO Total</b>
<b>Federal (80%)</b>	\$137,200	\$142,800	\$280,000
<b>State (10%)</b>	\$17,150	\$17,850	\$35,000
<b>Local (10%)</b>	\$17,150	\$17,850	\$35,000
<b>Total Sect. 5303</b>	\$171,500	\$178,500	\$350,000

**Section 5307** funds may be used for planning as well as other purposes, and are distributed by formula by FTA. The GoDurham, CHT, OPT and GoTriangle are eligible to use Section 5307 funds from the FTA for assistance on a wide range of planning activities. These funds require a 20% local match, which is provided by the City of Durham, the Town of Chapel Hill, Orange County and GoTriangle.

<b>5307</b>	<b>GoDurham</b>	<b>MPO Total</b>
<b>Federal (80%)</b>	\$ 247,856	\$ 247,856
<b>Local (20%)</b>	\$ 61,964	\$ 61,964
<b>Total Sect. 5307</b>	\$ 309,820	\$ 309,820

**Summary of all Funding Sources**

	<b>Federal</b>	<b>State</b>	<b>Local</b>	<b>Total</b>
<b>PL/STBG-DA (FHWA)</b>	\$ 2,202,196		\$ 550,550	\$ 2,752,746
<b>FTA 5303</b>	\$280,000	\$35,000	\$35,000	\$350,000
<b>FTA 5307</b>	\$ 247,856		\$ 61,964	\$ 309,820
<b>Total</b>	\$ 2,730,052	\$ 35,000	\$ 647,514	\$ 3,412,566

**Summary of Federal Funding (80%) by Agency**

	<b>FHWA</b>	<b>FTA Transit Planning</b>		
<b>Agency</b>	<b>Planning</b>	<b>5303</b>	<b>5307</b>	<b>Total</b>
Lead Planning Agency	\$1,753,101			\$1,753,101
Carrboro	\$25,680			\$25,680
Chapel Hill	\$95,929	\$137,200		\$233,129
Durham City	\$215,856			\$215,856
Durham County	\$46,630			\$46,630
TJCOG	\$65,000			\$65,000
GoDurham		\$142,800	\$247,856	\$390,656
<b>Total</b>	<b>\$2,202,196</b>	<b>\$280,000</b>	<b>\$247,856</b>	<b>2,730,052</b>



### **LPA Local Match Cost Sharing**

To receive the aforementioned federal funds through FHWA, a local match of twenty percent (20%) of the total project cost must be provided. The MPO member agencies contribute to the Lead Planning Agency 20% local match. Each MPO's member agencies' proportionate share of the local match is determined on an annual basis during the development of the UPWP. The following table displays the MPO's member agencies' proportionate share of the local match for FY2020. The local match shares for member jurisdictions referenced below were determined using population and number of data collection locations/segments. GoTriangle is 7.5% of the total MPO match required for local share of federal funds minus ITRE and data collection expenses and is based on average annual percentage of funds received including 5307 and STBG-DA.

<b>Agency</b>	<b>Total FY2020</b>
Durham City	\$233,781
Durham County	\$40,225
Chapel Hill	\$58,599
Carrboro	\$20,050
Hillsborough	\$6,232
Orange County	\$35,019
Chatham County	\$14,498
GoTriangle	\$29,871
Total	\$438,275

### **Certification of MPO Transportation Planning Process**

As part of the annual UPWP adoption process, the MPO is required to certify that it adheres to a transportation planning process that is continuous, cooperative, and comprehensive (ie. the 3-C planning process). The certification resolution is included as part of this work program.

### **Summary of FY2018 and First Quarter FY2019 UPWP Accomplishments**

The main emphases of the FY2017 and first quarter of FY2018 UPWP were the development of the Comprehensive Transportation Plan, model enhancement, calibration and validation of the Triangle Regional Model, the update of the MPO GIS enterprise, Congestion Management Process, development of an interactive Mobility Report Card, MPO data collection and analysis, update of the MPO Data Management System, evaluation of performance indicators, update of Community Viz Land-use Scenario, State and Regional Coordination, collaboration on the regional transit activities, and Orange and Durham county transit initiatives. The MPO continued to fulfill State and Federal transportation mandates including the 3-C transportation process, UPWP planning, SPOT5/STI prioritization, Title VI/EJ/LEP, visualization, administration, management and oversight of grants, etc. The MPO made significant progress in these areas. Major milestones and accomplishments are summarized as follows:

**Coordinated Public Transit Human Services** - The DCHC MPO continued to address the Coordinated Public Transit Human Services Transportation Plan as required by FAST Act and foster coordination and communication among all transit providers in the region. Staff continued to meet and coordinate with the human services agencies that provide or have clients that need transportation services in the MPO, collect information on transportation services, and maintain the metropolitan transportation coordination plan.

**Routine MPO Planning Progress and UPWP** - The MPO continued to address periodic reviews, changes, and progress on the short-range planning process and changes to the Unified Planning Work Program (UPWP) as required by FAST Act and previous legislation. DCHC MPO will continue to conduct short range transportation and transportation planning activities, and coordinate with necessary local, regional and state agencies to conduct and track transportation projects in the DCHC MPO.

**Non-Motorized Planning and Complete Streets** – DCHC MPO continued to develop, support and promote plans and projects that increase and improve bicycling and walking facilities, improve safety and security of vulnerable roadway users, and create alternative transportation mode choices for all travelers. DCHC MPO continued to prepare and evaluate transportation plans so that bicycle and pedestrian facilities are integrated wherever practicable, into the network.

**Maintain Clean Air (attainment)** – DCHC MPO continued to protect and enhance the environment, and promote consistency between transportation improvements, and state and local planned growth and economic development patterns. DCHC MPO continued to monitor the transportation planning activities and ensure that such activities do not deteriorate the air quality in the region.

**Intelligent Transportation System** - The purpose of this task is to develop, maintain and enhance regional Intelligent Transportation System (ITS) activities to improve efficiency of the transportation network, public transit, emergency response, and safety and security in the region. DCHC MPO continued to update and maintain the regional ITS architecture, and coordinate with stakeholders to ensure that ITS technologies are deployed in a manner to allow communication, interoperability, and compatibility amongst various regional systems and entities.

**Title VI Planning** - The MPO continued to monitor and implement the MPO Title VI Assurance which ensures that no person will, on the grounds of race, color, national origin, income, gender, age, and disability, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (PL 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

**Americans with Disabilities Act (ADA) Transition Plan & Self-Assessment** - The MPO continued to monitor and implement the MPO's ADA Transition Plan and Self-Assessment

**Model Enhancement** – DCHC MPO continued to review and analyze existing travel demand and air quality models in order to determine feasible enhancements to the modeling procedures that are used in the TRM study area. DCHC MPO continued to perform air quality, regional travel demand, and micro simulation model runs for existing and future projects as requested and needed.

**Safety and Security Planning** - The MPO, through its planning activities, continued to strive to reduce the human and economic toll on the region's multi-modal transportation system due to traffic crashes through widespread collaboration and an integrated Vision Zero and Traffic Incident Management (TIM) program with an Engineering, Enforcement, Education and Emergency Response approach. DCHC MPO continued to analyze safety data and collaborate with regional safety stakeholders to keep them engaged in the routine monitoring of safety programs, and the revision and refinement of the planning process.

**2045 Metropolitan Transportation Plan (MTP)**- MTP and CTP are the centerpiece of the metropolitan transportation planning process. DCHC MPO has developed a number of Metropolitan Transportation Plans since ISTEA. In the summer of 2018, the MPO approved 2045 MTP, the region's current MTP which is built around the vision of a sustainable metropolitan area, and promotes the

identification of and investment in nodes and corridors of activity as well as fostering of active transportation and public transportation. Also, 2045 MTP articulates a broad set of region-wide transportation goals, policies and strategies that address transportation's role in areas such as place-making, public health, and energy use. The plan is financially constrained, reflecting only funding that is currently available or can reasonably be expected to be available during the plan's time frame, and it identifies major transportation investments through the year 2045. The plan also was assessed for and meets environmental justice requirements to ensure equitable investments are planned for the region. In addition, DCHC MPO determined that the plan conformed to the applicable state implementation plan (SIP) for air quality through a voluntary conformity process. The MTP must be completely updated at least every four years, but may be revised more frequently if necessary. DCHC-MPO anticipates the next major update of the MTP will commence in 2020.

#### **Development of Comprehensive Transportation Planning and Programs – DCHC MPO**

continued to evaluate, support, analyze and implement multi-modal transportation plans and programs that foster accessibility, mobility, safety and other FAST Act planning factors. DCHC MPO continued to coordinate with local governments and various transportation stakeholders to develop and promote new programs that will foster better multi-modal transportation options.

**MPO Data Development and Maintenance** - The MPO continued to collect, tabulate, maintain, and analyze regional information on topics including, but not limited to, census, land use, and related data that is needed for regional demographic forecasting, transportation and land use planning, air quality planning, TRM estimation, calibration and validation, CMP, MRC, transit planning, bike/pedestrian planning, emergency planning, Title VI, and economic development efforts.

**Land Use, Socio-Economic, Environmental** – DCHC MPO continued to collect, maintain and analyze regional land use, socio-economic and environmental data that will be used in regional demographic forecasting, transportation and land use planning, air quality planning, emergency planning, Title VI, and economic development efforts. DCHC MPO continued to participate, and provide input to NCDOT, in the development of local comprehensive plans, and provide guidance to NEPA/Merger/projected development on land use and zoning issues.

**Transportation Plan Reappraisal** – DCHC MPO continued to address periodic reviews, changes, and progress on the long range planning process to foster livable and sustainable communities and transportation systems in the planning area as required by FAST Act and the previous legislations.

**Technical Assistance** – DCHC MPO continued to perform service requests as well as utilize the expertise and knowledge of the staff in providing technical support services to local governments and interested citizens on transportation planning and other requests that support the planning factors in FAST Act and the previous legislation. This includes coordinating with public transit providers and local units of government in the region to create a regionally seamless transit system that improves accessibility and mobility for all citizens.

**Travel Demand Management** – Triangle J Council of Governments (TJCOG) on behalf of DCHC MPO continued to implement Travel Demand Management (TDM) strategies to influence individual travel behavior and provide expanded options to reduce the actual demand, or number of vehicles, placed on transportation facilities, and incorporate practices that focus on managing the demand side of the transportation equation rather than increasing supply by widening or building new roads. Progress continued to be made on reduction of peak VMT around the Research Triangle Park employee commute options, and Best Employer for Commute programs.

**Regional SHSP Implementation** – DCHC MPO continued to work to create a Regional Transportation Safety Coalition with the aim of reducing crashes on major roadways through widespread collaboration and an integrated approach including engineering, education, enforcement and emergency services. DCHC MPO continued to coordinate with the stakeholders and implement action items in the TIMS Plan to achieve the goal of reducing the number of fatalities within the MPO by half by the year 2045, and ultimately the vision of Destination Zero Deaths.

The other accomplishments for the FY2018 and first quarter FY2019 UPWP are summarized as follows:

1. The MPO Administration program element focuses on all aspects of the MPO's personnel management, governing board support and meeting coordination, budgeting, policy development and review, annual work program development and reporting, and otherwise meeting all state and federal requirements for planning program administration. Most tasks are routine and ongoing in nature including Congestion Management Process (CMP) Comprehensive Transportation plan (CTP), Metropolitan Transportation Plan (MTP), SPOT Prioritization, data collection and analysis, development and maintenance of spatial GIS portals, Incident Management plan, update of ADA Transition Plan, enhancement and update of the regional model, development of Counties Transit Plans and LRT, etc.
2. Data management activity included collecting, analyzing, maintaining and reporting activities necessary to support the transportation planning process and work program. Various data is captured, processed and subsequently used to identify transportation issues, propose solutions, and monitor activity.
3. Trends and Big Data. All data maintained by the MPO is accessible to member agencies and the public. Certain tasks are associated with technical tools and functions necessary to support analytical work and forecasting, including computer hardware and software and licenses for travel demand modeling and traffic operations microsimulation, and for electronic hardware used in various types of traffic counting.
4. Development of the DCHC-MPO Comprehensive Transportation Plan (CTP): The LPA and NCDOT Transportation Planning Branch worked cooperatively in the development of the CTP multi-modal maps and tables. CTP is mandated by NC General Statute. It differs from the federally mandated Metropolitan Transportation Plan (MTP) in that it is not fiscally constrained and does not have a horizon year. CTP has been completed and mutually adopted by the MPO Board and the Board of Transportation. CTP was approved by the Board and subsequent to that the MPO initiated an amendment (Amendment #1) which was approved by the Board. Staff continued to re-evaluate modal elements of the CTP.
5. 2045 Metropolitan Transportation Plan (MTP): significant progress was made in the development of the 2045 MTP. The MPO approved 2045 MTP and subsequently embarked on the air quality conformity analysis and determination due to the recent court that required them to perform activities under the 1997 1-hour Ozone standard. Other 2045 MTP accomplishments include: reconciling MTP projects with TIP. Processing amendments as required and performing Moves modeling and generating travel demand forecasts. etc.
6. MPO Congestion Management Process (CMP): The MPO continued work on the update, analyses and mapping associated with the development of the federally required CMP. Tasks accomplished include summarization and analysis of data, measurement of multi-

modal transportation system performance, and implementation of CMP mapping in an interactive GIS.

7. **MPO Mobility Report Card (MRC):** Staff continued to measure and monitor multi-modal transportation system performance. Other accomplishments included a state-of-the-system report that focuses on measures of system performance for which data collected on an annual basis is used to index overall performance of the MPO transportation system from year to year. Data reported included, arterial LOS, intersection LOS, transit services, bicycle facilities, sidewalks, safety, etc.
8. **MPO ADA Transition Plan:** DCHC MPO conducted an ADA roundtable and stakeholder outreach. Continued to oversee the update of the DCHC MPO ADA Transition Plan, specifically; update of 508 compliance, preparation of ADA roundtable, assessment of MPO ADA programs, etc.
9. **Regional Freight Plan:** Staff continued to serve as the project manager for the development of the Triangle Regional Freight Plan. Work tasks accomplished included but are not limited to: collaboration in producing draft report, providing staff support for local adoption and integrating freight issues and concerns within overall metropolitan process.
10. **Public Involvement Process:** Continued to provide the public with complete information, timely notice, and full access to key decisions and opportunities for early and continuing involvement in the 3C process. Also, continued to assess the effectiveness of the DCHC MPO Public Involvement Process and to develop and enhance the process of regional involvement supporting the objectives of the DCHC MPO Public Involvement Policy (PIP) and federal regulations (such as FAST-Act). Staff continued to explore, and apply new and innovative approaches to improve MPO public participation levels and opportunities, especially for plans and programs using social media; Facebook and Twitter. Continued to oversee the update and the maintenance of the MPO website, including update and enhancement of portals, update of CivicaSoft website system application, and update of content management systems. Continued to provide management support for the MPO visualization such as reviewing current AGOL, land-use 3-D, Urban-canvas, MS2 portals and web servers, and suggested updates and enhancements.
11. **Safety Analysis:** The MPO completed analyses related to bike and pedestrian safety, transit safety, and vehicular safety. Other safety related accomplishments included participating in North Carolina safety education initiatives and regional bike and pedestrian safety programs.
12. **Environmental Justice/Title VI:** The MPO continued to update and implement EJ and Title VI program, including update of demographic profiles and incorporation of FHWA comments.
13. **Metropolitan Transportation Improvement Program (MTIP):** The MPO continued to work on TIP-related activities such as prioritization, review of the MPO methodology, Local Supplement of the STIP, and the development of the draft Metropolitan Transportation Program (MTIP).
14. **Amendments and Administrative Modifications to the MTIP:** The MPO processed several amendments and administrative modifications to the 2016-25 MTIP and forwarded to NCDOT to be included in the STIP for BOT approval.
15. **Triangle Regional Model (TRM) Update and Enhancement:** The MPO continued to

- participate in the update and enhancement of the TRM at ITRE. Work tasks accomplished included completion of generation, destination choice and mode choice models, calibration and the validation of 2013 Estimation Year TRM-V6. The MPO is a funding partner of the modeling service bureau and continued to provide .5 FTE to ITRE Model Service Bureau.
16. Bicycle lane restriping. The MPO continued to work with NCDOT Division 5 and Division 7 regarding priorities and plans for restriping roadways scheduled for resurfacing by NCDOT.
  17. Other Project Development Planning and NEPA: The MPO continued to participate in project development planning and NEPA for several on-going NCDOT projects within the MPO including; I-40 Managed Lanes Feasibility Study, US 15-501 Corridor Study, US 15-1501 Feasibility Study, Infinity-Latta intersection, NC54 widening project planning, I-40 widening (US15-501 to I-85), several bridge replacement projects, resurfacing projects, etc.
  18. Oversight, Monitoring and Administration of Transit Grants: The MPO continued to process invoices for sub-recipients reimbursements as well continued to administer and monitor transit grants.
  19. Service Requests: Staff performed numerous services requests from the public and member agencies.
  20. Management and Operations: Staff continued routine tasks that encompass the administration and support of the 3-C transportation planning process as mandated by federal regulations, Tasks have been divided into the following sub- tasks including, but not limited to:
    - Provided liaisons between DCHC MPO member agencies, transit providers, GoTriangle, CAMPO, NCDOT, NCDEQ, TJCOG, RDU and other organizations at the local, regional, state, and federal levels on transportation-related matters, issues and actions.
    - Provided technical assistance to the MPO Board, member agencies, stakeholders and citizens and other member jurisdictions policy bodies.
    - Participated in joint regional technical meetings as a means to continually improve the quality and operation of the transportation planning process and decision making in the region.
    - Reviewed and commented on federal and state transportation-related plans, programs, regulations and guidelines, including review of Notice of Proposed Rule Making (NPRM), federal register and literature review of new transportation planning procedures.
    - Provided assistance to the MPO Board and Technical Committee with meeting preparation, development of agenda and minutes, follow-up to directives to staff, and support of the agenda management system.
    - Updated and provided support for MPO planning documents as required.
    - Administration and oversight of contracts and fiscal management.
  21. Assisted with the compliance of federal and state regulations and mandates.
  22. Performed various supervisory duties.

### **City of Durham Accomplishments**

The City of Durham supported all areas of MPO work through participation in the CTP, MTP, and TIP processes as well as special studies like the NC 98 Corridor Study, US 15-501 Corridor Study, and FTA TOD Planning Grant. There are many funded TIP projects in development in the City of Durham, and City staff have been extensively coordinating with NCDOT and the MPO in the development of these projects. The City is also managing the Central Durham Transportation Study, a long-range planning study for the downtown Durham area. The project was initiated in 2018 and will be ongoing through 2019.

### **Durham County Accomplishments**

Insert updated accomplishments for FY 18 and FY 19 Q1 Durham County staff developed and updated land use data based on existing zoning, adopted plans, and aspirational scenarios to be incorporated into the development of the Triangle Regional Model. County staff also continued development of station area plans for the Patterson Place and Erwin Road Compact Neighborhoods for land use, transportation, and critical infrastructure, and outlined an initial plan for Greenway-Focused Development standards and regulations for trails within the city.

The County was active in many community impact assessments, scoping projects, traffic study, environmental planning, and other concurrence processes for several TIP projects in the area, including U-5774 (NC 54 widening), U-6021 (Fayetteville Street widening), EB-5703 (LaSalle Street sidewalk), B-5512 (Kemp Road bridge replacement), R-5825 (NC 751/O' Kelly Roundabout), W-5517 (Pleasant/Mineral Springs Roundabout) P-5706 (Railroad Grade Separation at Ellis, Wrenn, and Glover Roads), U-5518 (US 70 improvements in Wake County), and U-5720 (US 70 improvements in Durham County).

Durham County was an active participant in the GoTriangle Planning Grant, the ongoing SPOT 5.0 process, and vital in the completion of the NC 98 Corridor Study. Staff also began participation in the US 15-501 Corridor Study, and began in partnership with Wake Transit, a key role within the Technical Team for the Wake-Durham Commuter Rail.

### **Town of Carrboro Accomplishments**

The Town of Carrboro's planning activities in FY2018 covered a variety of topics, with several new initiatives beginning. The Town began a process to create a Wayfinding System (a key recommendation from the Parking Plan), utilizing the consulting firm Axia Creative to develop conceptual sketches for Automobile, Bicycle, and Pedestrian scaled signage throughout the town. The Town also having applied for and received an NCDOT Bicycle and Pedestrian Planning grant, developed an RFP and advertised it to solicit proposals from consultants to update the Town's Bike Plan.

The Town of Carrboro also worked to develop a regular procedure for performing traffic counts, data from which could be used to support the Town's Residential Traffic Management Plan and the MPO's Mobility Report Card and coordinated with Public Works, ITRE, and EcoCounter to restore the continuous Bike/Ped Counter located on the Libba Cotten Bikeway to working order. Additionally, the MPO's on-call contract was used to contract with Stantec to analyze the E Main Street corridor to determine the feasibility of providing enhanced bicycle facilities within the cross-section by coordinating the NCDOT resurfacing plan with the opportunity to develop an alternative roadway striping design.

The Town of Carrboro has been continuously involved in regional transit planning efforts including CHT's North-South BRT, CHT's Short Range Transit Plan, the Durham-Orange Light Rail, and the Orange County Transit Plan. Carrboro also assisted with upcoming NCDOT TIP projects: R-5821 (NC 54 to Orange Grove Rd, Operational Improvements), U-6070 (NC 54 & Old Fayetteville Rd, Intersection Improvements), and EB-5886A (Estes Drive Bike/Ped Improvements).

### **Town of Chapel Hill Accomplishments**

The Town of Chapel Hill participated in the DCHC MPO FY 18 Unified Planning Work Program by working on a variety of transportation planning and project management activities.

**Bike Friendly Community** - The Town of Chapel Hill applied to be designated a Bicycle Friendly Community through the League of American Bicyclists. Staff gathered data related to bicycle and pedestrian facilities in Town, writing narratives for accomplishments, and distributing a public survey.

**Bicycle and Pedestrian Counters** - Staff installed three permanent bike/ped counters on Town roads and collects continuous data. There is also a portable pedestrian counter that staff locates in various locations to conduct before and after counts when a new sidewalk is constructed. Staff created a template semi-annual report for the bike-ped counter data and produced the first round of reports, and is working to develop an online platform to display the bike/ped counts in real time.

**Regional and Statewide Planning** - Staff continued to work on the engineering and NEPA phase of the North-South Bus Rapid Transit Project, and participated in policy and technical committee meetings, funding discussions, and public input sessions. Staff also participated in Durham-Orange Light Rail planning activities, including technical committee meetings, plan review, and public meetings. Staff participated in the Orange County Transit Plan staff working group and produced project requests and invoices as required.

**US 15-501 Corridor Study** - The Town of Chapel Hill was on the study steering committee and supported the design team by reviewing consultant reports and public display boards, participated in steering committee meetings, and shared information with advisory boards and Council during the process.

**Transportation Improvement Plan - C-5179** is a locally managed bicycle and pedestrian project to construct multi-use path, raised cycle track, and sidewalks along Estes Drive. Town staff and consultant, Stewart Engineering, reached the 90% design benchmark and continue working through the right-of-way acquisition and final plans. Construction is expected to begin in 2019. **EB-4707** is the Chapel Hill portion of the Old Durham-Chapel Hill Road bike-ped project, and staff continued to work with NCDOT and consultant to finalize the plans and move towards construction, which is expected to begin in 2019.

**SPOT 5.0** - Staff identified highway, bike/ped, and transit projects for the next round of state prioritization for transportation funding. Town staff worked closely with DCHC MPO to choose important Town projects from the MTP and refine cost estimates and project scope on eligible transportation projects.

Town staff continued to attend bi-weekly MPO meetings, frequent sub-committee meetings, provide support to Town advisory boards, communicate with elected officials about transportation-related issues, and attend trainings and conferences.



**Development Schedule**

The proposed development schedule for this UPWP is below. The schedule provides for the coordination of the UPWP development with the local government budget process and NCDOT deadlines.

<b>Dates</b>	<b>DCHC MPO Activity Description</b>
October -December 2018	Development of draft FY2020 UPWP and coordination with the Oversight Committee and local agencies.
November 2, 2018	Deadline for funding request and supplemental documents to be submitted to MPO by member agencies.
December 19, 2018	TC reviews draft FY2020 UPWP and recommends Board release for public comment.
January 09, 2019	MPO Board reviews draft of FY2020 UPWP and releases draft for public comment.
January 23, 2019	TC receives draft of FY2020 UPWP and recommends Board hold public hearing and approve draft at February Board meeting.
January 31, 2019	Draft FY2020 UPWP submitted to NCDOT/PTD
February 13, 2019	MPO Board holds public hearing and approves draft FY2020 UPWP including approval of self-certification process and local match.
March 15, 2019	Deadline for final FY2020 UPWP to be submitted to NCDOT and FHWA for approval. NCDOT/PTD will submit UPWP to FTA for approval.

**MPO Funding Table - Distribution by Agency**

Receiving Agency	STBGP			Section 104(f)			Section 5303				Section 5307				Funding Summary			
	Sec. 133(b)(3)(7)			PL			Highway/Transit				Transit							
	Local	FHWA	80%	Local	FHWA	80%	Local	NCDOT	FTA	80%	Local	NCDOT	FTA	80%	Local	NCDOT	Federal	Total
LPA	\$350,000	\$1,400,000		\$88,275	\$353,101		\$0	\$0	\$0		\$0	\$0	\$0		\$438,275	\$0	\$1,753,101	\$2,191,376
Carboro	\$6,420	\$25,680		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$6,420	\$0	\$25,680	\$32,100
Chapel Hill/CHT	\$23,983	\$95,929		\$0	\$0		\$17,150	\$17,150	\$137,200		\$0	\$0	\$0		\$41,133	\$17,150	\$233,129	\$291,411
Chatham County	\$0	\$0		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	\$0
Durham/DATA	\$53,964	\$215,856		\$0	\$0		\$17,850	\$17,850	\$142,800		\$61,964	\$0	\$247,856		\$133,778	\$17,850	\$606,512	\$758,140
Durham County	\$11,658	\$46,630		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$11,658	\$0	\$46,630	\$58,288
Hillsborough	\$0	\$0		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	\$0
Orange County	\$0	\$0		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	\$0
TJCOG	\$16,250	\$65,000		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$16,250	\$0	\$65,000	\$81,250
GoTriangle	\$0	\$0		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	\$0
NCDOT	\$0	\$0		\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	\$0
Totals	\$462,275	\$1,849,095		\$88,275	\$353,101		\$35,000	\$35,000	\$280,000		\$61,964	\$0	\$247,856		\$647,514	\$35,000	\$2,730,052	\$3,412,565

MPO Wide - Detail Funding Tables - All Funding Sources

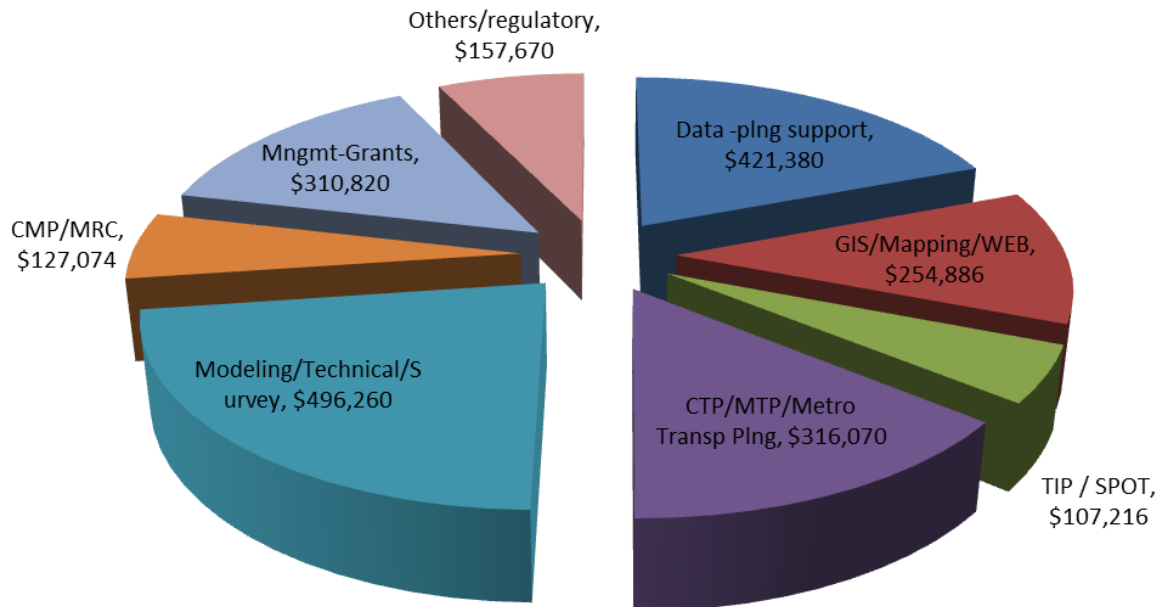
Task Description	STBGP 133(b)(3)(7)			Sec. 104(f) PL			Section 5303 Highway/Transit				Section 5307 Transit				Task Funding Summary			
	Local 20%	FHWA 80%		Local 20%	FHWA 80%		Local 10%	NCDOT 10%	FTA 80%	Local 20%	NCDOT 0	FTA 80%	Local	NCDOT	Federal	Total		
II-A Surveillance of Change	1	20,813	83,251	1,000	4,000		0	0	0	0	0	0	21,813	-	87,251	109,064		
	2	800	3,200	400	1,600		0	0	0	0	0	0	1,200	-	4,800	6,000		
	3	1,100	4,400	1,120	4,480		0	0	0	0	0	0	2,220	-	8,880	11,100		
	4	4,776	19,104	1,080	4,320		0	0	0	0	0	0	5,856	-	23,424	29,280		
	5	2,600	10,400	1,200	4,800	8,946	8,946	8,946	71,568	11,084	0	44,336	23,830	8,946	131,104	163,880		
	6	8,020	32,080	5,000	20,000		0	0	0	0	0	0	13,020	-	52,080	65,100		
	7	6,000	24,000	100	400		0	0	0	0	0	0	6,100	-	24,400	30,500		
	8	0	0	0	0		0	0	0	0	0	0	-	-	-	-		
	9	14,260	57,040	1,800	7,200		0	0	0	0	0	0	16,060	-	64,240	80,300		
	10	18,219	72,874	4,800	19,200	3,410	3,410	3,410	27,280	0	0	0	26,429	3,410	119,354	149,193		
	11	2,649	10,597	400	1,600		0	0	0	0	0	0	3,049	-	12,197	15,246		
	12	2,124	8,495	1,000	4,000	1,052	1,052	1,052	8,416	0	0	0	4,176	1,052	20,911	26,139		
	13	13,053	52,211	1,000	4,000	856	856	856	6,848	0	0	0	14,909	856	63,059	78,824		
II-B Long Range Transp. Plan (MTP)	1	6,540	26,160	0	0		0	0	0	0	0	0	6,540	-	26,160	32,700		
	2	3,900	15,600	800	3,200		0	0	0	0	0	0	4,700	-	18,800	23,500		
	3	72,080	288,320	4,072	16,288		0	0	0	0	0	0	76,152	-	304,608	380,760		
	4	8,800	35,200	3,060	12,240		0	0	0	0	0	0	11,860	-	47,440	59,300		
	5	2,526	10,104	240	960		0	0	0	0	0	0	2,766	-	11,064	13,830		
	6	200	800	1,330	5,320		0	0	0	0	0	0	1,530	-	6,120	7,650		
	7	1,920	7,680	1,100	4,400		0	0	0	0	0	0	3,020	-	12,080	15,100		
	8	5,360	21,440	2,400	9,600		0	0	0	0	0	0	7,760	-	31,040	38,800		
	9	8,029	32,116	3,800	15,200		0	0	0	0	0	0	11,829	-	47,316	59,145		
	10	15,091	60,365	3,800	15,200	1,278	1,278	1,278	10,224	1,016	0	4,064	21,185	1,278	89,853	112,316		
	11	39,198	156,793	2,878	11,512		0	0	0	0	0	0	42,076	-	168,305	210,381		
	12	1,120	4,480	200	800		0	0	0	0	0	0	1,320	-	5,280	6,600		
	13	1,914	7,656	600	2,400		0	0	0	0	0	0	2,514	-	10,056	12,570		
	14	7,420	29,680	0	0		0	0	0	0	0	0	7,420	-	29,680	37,100		
	15	3,540	14,160	200	800		0	0	0	0	0	0	3,740	-	14,960	18,700		
	16	2,206	8,822	480	1,920	979	979	979	7,832	19,668	0	78,672	23,333	979	97,246	121,558		
	17	19,411	77,643	1,139	4,555	820	820	820	6,560	0	0	0	21,370	820	88,758	110,948		
	18	1,360	5,440	1,600	6,400		0	0	0	0	0	0	2,960	-	11,840	14,800		
II-C Short Range Transit Planning																		
		660	2,640	0	0		3,490	3,490	27,920	21,124	0	84,496	25,274	3,490	115,056	143,820		
II-A Planning Work Program																		
		8,784	35,134	4,006	16,024	760	760	760	6,080	0	0	0	13,550	760	57,238	71,548		
II-B Transp. Improvement Plan																		
	TIP	20,178	80,713	5,661	22,645	3,102	3,102	3,102	24,816	2,036	0	8,144	30,977	3,102	136,318	170,397		
II-C Cvl Rgts. Cmp./Otr. Reg. Reqs.																		
	1	2,654	10,616	1,000	4,000	326	326	326	2,608	736	0	2,944	4,716	326	20,168	25,210		
	2	5,980	23,920	1,640	6,560		0	0	0	0	0	0	7,620	-	30,480	38,100		
	3	2,380	9,520	400	1,600		0	0	0	0	0	0	2,780	-	11,120	13,900		
	4	1,840	7,360	400	1,600	240	240	240	1,920	0	0	0	2,480	240	10,880	13,600		
	5	5,340	21,360	1,600	6,400		0	0	0	0	0	0	6,940	-	27,760	34,700		
	6	29,506	118,025	3,769	15,077	814	814	814	6,512	1,972	0	7,888	36,061	814	147,502	184,377		
7	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-			
II-D Incidental Png./Project Dev.																		
	1	0	0	0	0		0	0	0	0	0	0	-	-	-	-		
	2	10,361	41,444	2,600	10,400	236	236	236	1,888	0	0	0	13,197	236	53,732	67,165		
	3	12,313	49,254	4,600	18,400	820	820	820	6,560	0	0	0	17,733	820	74,214	92,767		
	4	24,332	97,329	3,600	14,400	1,040	1,040	1,040	8,320	0	0	0	28,972	1,040	120,049	150,061		
II-E Management & Operations																		
	1	42,917	171,669	12,400	49,600	6,831	6,831	6,831	54,648	4,328	0	17,312	66,476	6,831	293,229	366,536		
Totals		\$462,274	\$1,849,095	\$88,275	\$353,101	\$35,000	\$35,000	\$35,000	\$280,000	\$61,964	\$0	\$247,856	\$647,513	\$35,000	\$2,730,052	\$3,412,565		

LPA

	Task Description	STBGP 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$19,200	\$76,800	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$20,200	\$0	\$80,800	\$101,000
	2 Vehicle Miles of Travel	\$800	\$3,200	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200	\$0	\$4,800	\$6,000
	3 Street System Changes	\$1,000	\$4,000	\$1,120	\$4,480	\$0	\$0	\$0	\$0	\$0	\$0	\$2,120	\$0	\$8,480	\$10,600
	4 Traffic Crashes	\$4,776	\$19,104	\$1,080	\$4,320	\$0	\$0	\$0	\$0	\$0	\$0	\$5,856	\$0	\$23,424	\$29,280
	5 Transit System Data	\$2,600	\$10,400	\$1,200	\$4,800	\$0	\$0	\$0	\$0	\$0	\$0	\$3,800	\$0	\$15,200	\$19,000
	6 Dwelling Unit, Pop. & Emp. Change	\$7,700	\$30,800	\$5,000	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$12,700	\$0	\$50,800	\$63,500
	7 Air Travel	\$6,000	\$24,000	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$6,100	\$0	\$24,400	\$30,500
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$14,260	\$57,040	\$1,800	\$7,200	\$0	\$0	\$0	\$0	\$0	\$0	\$16,060	\$0	\$64,240	\$80,300
	10 Mapping	\$15,000	\$60,000	\$4,800	\$19,200	\$0	\$0	\$0	\$0	\$0	\$0	\$19,800	\$0	\$79,200	\$99,000
	11 Central Area Parking Inventory	\$1,800	\$7,200	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200	\$0	\$8,800	\$11,000
	12 Bike & Ped. Facilities Inventory	\$400	\$1,600	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400	\$0	\$5,600	\$7,000
	13 Bike & Ped. Counts	\$11,640	\$46,560	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$12,640	\$0	\$50,560	\$63,200
		\$0	\$0	\$0	\$0										
<b>II B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0	\$0	\$0										
	1 Collection of Base Year Data	\$6,540	\$26,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,540	\$0	\$26,160	\$32,700
	2 Collection of Network Data	\$3,900	\$15,600	\$800	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$4,700	\$0	\$18,800	\$23,500
	3 Travel Model Updates	\$72,080	\$288,320	\$4,072	\$16,288	\$0	\$0	\$0	\$0	\$0	\$0	\$76,152	\$0	\$304,608	\$380,760
	4 Travel Surveys	\$8,800	\$35,200	\$3,060	\$12,240	\$0	\$0	\$0	\$0	\$0	\$0	\$11,860	\$0	\$47,440	\$59,300
	5 Forecast of Data to Horizon year	\$526	\$2,104	\$240	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$766	\$0	\$3,064	\$3,830
	6 Community Goals & Objectives	\$200	\$800	\$1,330	\$5,320	\$0	\$0	\$0	\$0	\$0	\$0	\$1,530	\$0	\$6,120	\$7,650
	7 Forecast of Future Travel Patterns	\$1,920	\$7,680	\$1,100	\$4,400	\$0	\$0	\$0	\$0	\$0	\$0	\$3,020	\$0	\$12,080	\$15,100
	8 Capacity Deficiency Analysis	\$5,360	\$21,440	\$2,400	\$9,600	\$0	\$0	\$0	\$0	\$0	\$0	\$7,760	\$0	\$31,040	\$38,800
	9 Highway Element of th MTP	\$3,112	\$12,448	\$3,800	\$15,200	\$0	\$0	\$0	\$0	\$0	\$0	\$6,912	\$0	\$27,648	\$34,560
	10 Transit Element of the MTP	\$10,134	\$40,536	\$3,800	\$15,200	\$0	\$0	\$0	\$0	\$0	\$0	\$13,934	\$0	\$55,736	\$69,670
	11 Bicycle & Ped. Element of the MTP	\$7,200	\$28,800	\$2,878	\$11,512	\$0	\$0	\$0	\$0	\$0	\$0	\$10,078	\$0	\$40,312	\$50,390
	12 Airport/Air Travel Element of MTP	\$1,120	\$4,480	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$1,320	\$0	\$5,280	\$6,600
	13 Collector Street Element of MTP	\$1,794	\$7,176	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$2,394	\$0	\$9,576	\$11,970
	14 Rail, Water or other mode of MTP	\$7,320	\$29,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,320	\$0	\$29,280	\$36,600
	15 Freight Movement/Mobility Planning	\$3,540	\$14,160	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$3,740	\$0	\$14,960	\$18,700
	16 Financial Planning	\$1,000	\$4,000	\$480	\$1,920	\$0	\$0	\$0	\$0	\$0	\$0	\$1,480	\$0	\$5,920	\$7,400
	17 Congestion Management Strategies	\$17,336	\$69,344	\$1,139	\$4,555	\$0	\$0	\$0	\$0	\$0	\$0	\$18,475	\$0	\$73,899	\$92,374
	18 Air Qual. Planning/Conformity Anal.	\$1,360	\$5,440	\$1,600	\$6,400	\$0	\$0	\$0	\$0	\$0	\$0	\$2,960	\$0	\$11,840	\$14,800
		\$0	\$0	\$0	\$0										
<b>II C</b>	<b>Short Range Transit Planning</b>	\$0	\$0	\$0	\$0										
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0	\$0	\$0										
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0	\$0	\$0										
	Planning Work Program	\$5,958	\$23,832	\$4,006	\$16,024	\$0	\$0	\$0	\$0	\$0	\$0	\$9,964	\$0	\$39,856	\$49,820
		\$0	\$0	\$0	\$0										
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0	\$0	\$0										
	TIP	\$9,712	\$38,848	\$5,661	\$22,645	\$0	\$0	\$0	\$0	\$0	\$0	\$15,373	\$0	\$61,493	\$76,866
		\$0	\$0	\$0	\$0										
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>	\$0	\$0	\$0	\$0										
	1 Title VI	\$2,654	\$10,616	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,654	\$0	\$14,616	\$18,270
	2 Environmental Justice	\$5,900	\$23,600	\$1,640	\$6,560	\$0	\$0	\$0	\$0	\$0	\$0	\$7,540	\$0	\$30,160	\$37,700
	3 Minority Business Enterprise	\$2,380	\$9,520	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$2,780	\$0	\$11,120	\$13,900
	4 Planning for the Elderly & Disabled	\$1,760	\$7,040	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$2,160	\$0	\$8,640	\$10,800
	5 Safety/Drug Control Planning	\$5,340	\$21,360	\$1,600	\$6,400	\$0	\$0	\$0	\$0	\$0	\$0	\$6,940	\$0	\$27,760	\$34,700
	6 Public Involvement	\$27,408	\$109,632	\$3,769	\$15,077	\$0	\$0	\$0	\$0	\$0	\$0	\$31,177	\$0	\$124,709	\$155,886
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0	\$0	\$0										
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0	\$0	\$0										
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Plng.	\$3,470	\$13,880	\$2,600	\$10,400	\$0	\$0	\$0	\$0	\$0	\$0	\$6,070	\$0	\$24,280	\$30,350
	3 Special Studies	\$2,800	\$11,200	\$4,600	\$18,400	\$0	\$0	\$0	\$0	\$0	\$0	\$7,400	\$0	\$29,600	\$37,000
	4 Regional or Statewide Planning	\$4,400	\$17,600	\$3,600	\$14,400	\$0	\$0	\$0	\$0	\$0	\$0	\$8,000	\$0	\$32,000	\$40,000
		\$0	\$0	\$0	\$0										
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0	\$0	\$0										
	1 Management & Operations	\$39,800	\$159,200	\$12,400	\$49,600	\$0	\$0	\$0	\$0	\$0	\$0	\$52,200	\$0	\$208,800	\$261,000
	Totals	\$350,000	\$1,400,000	\$88,275	\$353,101	\$0	\$0	\$0	\$0	\$0	\$0	\$438,275	\$0	\$1,753,101	\$2,191,376

**Summary of LPA Tasks and Funding by Broad Categories**

<b>Summary of LPA Tasks and Funding by Broad Categories</b>		
<b>Broad Aggregated Tasks</b>	<b>FY Funding</b>	<b>Percent</b>
<b>Data-Planning Support</b>	<b>\$421,380</b>	<b>19</b>
<b>GIS/Mapping/WEB</b>	<b>\$254,886</b>	<b>12</b>
<b>TIP/SPOT</b>	<b>\$107,216</b>	<b>5</b>
<b>CTP/MTP/Metropolitan Transportation Planning</b>	<b>\$316,070</b>	<b>14</b>
<b>Modeling/Technical/Survey</b>	<b>\$496,260</b>	<b>23</b>
<b>CMP/MRC</b>	<b>\$127,074</b>	<b>6</b>
<b>Management-Grants</b>	<b>\$310,820</b>	<b>14</b>
<b>Other/Regulatory</b>	<b>\$157,670</b>	<b>7</b>
<b>Total</b>	<b>\$2,191,376</b>	<b>100</b>

**Broad Aggregated Tasks - FY funding**

**December 2018**

## DCHC MPO

### LEAD PLANNING

### AGENCY (LPA)

#### **Felix Nwoko, MPO Manager**

Administration of the MPO  
Management/Operation of MPO (3C)  
State and regional coordination  
MPO policy and programs  
Technical project management  
NEPA Project planning & Air Quality Conformity  
Civil Rights/Title VI/LEP/EJ

#### **Yangping Zhang – Model, Technical Team Lead**

Modeling  
Technical  
Special Projects  
Land use modeling  
Air Quality Analysis  
Performance Measures

#### **Andy Henry - MTP/CTP**

MTP/CTP & Collector Street planning  
Implementation of planning factors  
Land Use/SE data  
Air Quality Conformity & Public Involvement

#### **Dale McKeel – Bicycle & Pedestrian Planning & Programming**

Bike-Pedestrian planning activities  
Education, Enforcement, Engineering  
Safety, TDM, & Public Involvement  
NEPA Project Planning

#### **KoSok Chae, CMP**

CMP  
Data monitoring  
Surveillance of change  
ITS  
Traffic analysis  
Planning/Operations  
Coordination (DynSmart)

#### **Mike Bruff – Modeling/Technical**

Modeling  
Technical support  
Demographic/behavioral data  
Staff support to the TRM Service Bureau

#### **Brian Rhodes – Technician, Graphic & GIS Support**

MTP/CTP  
Collector Street planning  
Implementation of planning factors  
Land Use/SE data & Public Involvement

#### **Durmus Cesur – Database/Systems Administrator**

GIS oversight  
Database administration  
Website management and administration  
Interactive GIS

#### **Margaret Scully – Grant and Fiscal Management & Oversight**

UPWP development and management  
Grant management & program oversight  
5307/5340/5310/5339 apportionment  
Funding (CMAQ/STBG-DA)  
Financial management

#### **Interns/Temporary Part-Time**

Data Collection, mining analyses  
GIS/Geo-Spatial Analyses  
Operation coordination  
Data support & management  
Civil Rights/Title VI  
Environmental Justice/LEP  
Minutes preparation  
Board/TC meeting support

#### **Aaron Cain – MPO Board/TC**

MPO Board/TC liaison  
3-C Process & TIP/SPOT  
Mobility Funds & Public Involvement  
Project Prioritization

**Maureen Devlin – Staff Work Group Administrator**  
Administers County Transit Plans/Staff Work Group

## **DCHC MPO Task Description, Summary Narrative and Deliverables/Products**

The major products of the transportation planning process, in addition to the UPWP, are the Metropolitan Transportation Plan (MTP), Congestion Management Process (CMP), Public Participation Process, project development and the Transportation Improvement Program (TIP). Numerous special reports, corridor/subarea studies and analyses on a wide variety of transportation issues are also produced on a regular basis.

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

The MPO is required by federal regulations and the 3C process to perform continuous data monitoring and maintenance. A number of transportation and socio-economic/demographic conditions will be continuously surveyed and compiled annually to feed into MPO technical analyses such as modeling, Metropolitan Transportation Plan update, Congestion Management Process, Mobility Report Card project development, Title VI planning, EJ/LEP demographic profiles, TIP, project prioritization, etc. The following data collection and monitoring tasks will be conducted during the FY2019 UPWP period.

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

The Lead Planning Agency (LPA) will continue to collect tabulate and analyze traffic counts and turning movement counts at specified locations. This task includes maintaining ADT counts and database for model calibration on arterial, minor arterial, and collector streets. The LPA will continue routine traffic counts data collection as part of the annual count program as well as on screen lines and cut lines for model validation. These counts will augment triennial traffic counts collected by NCDOT. Traffic counts will include daily, hourly, vehicle classification, or turning movements. The MPO agencies will be responsible for supplementing counts at specified locations within their jurisdiction and for furnishing the raw daily traffic counts, count information, and location maps to the LPA. The traffic count data will feed into the MPO Congestion Management Process (CMP), Triangle Regional Model (TRM) maintenance and update, MPO GIS and safety and freight planning, TIP prioritization, and federally required performance measurement and establishment of targets. MPO staff will continue to work and collaborate with member municipalities in performing various technical duties associated with updating and maintaining the traffic volume, speed and accident data; analyze data for causes and recommend remedial action on the transportation system within the MPO boundary; and also assisting in developing long-range and short-range projects to relieve congestion by addressing roadway management, congestion management, incident management, roadway access management and traffic signal network management.

#### **Task II-A-2: Vehicle Miles of Travel (VMT) Person Miles of Travel (PMT)**

The LPA will continue to tabulate VMT by functional classification and County. As specified by the Metropolitan Transportation Plan Goals, Objectives and Targets, annual VMT growth will be monitored and compared to the MTP Targets. The MPO will continue to refine the methodology for tracking multi-modal PMT. This information will help to develop performance measures required by federal legislation and also help determine if the Plan targets are being met. This will feed into the Highway Performance Monitoring System (HPMS), CMP and the Mobility Report Card. The LPA will continue to generate VMT metric from the Triangle Regional Model.

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

The MPO will continue to support land-use mapping activities such as aerial orthoimagery, and street centerlines, names and addresses, maintained by cities and counties and integrated by MPO and TRM Service Bureau to accurately geocode buildings and employers to Transportation Analysis Zones (TAZ) and other geographic areas. DCHC MPO will update local street centerline GIS data for all DCHC MPO counties and all counties immediately adjacent to the region. DCHC MPO counties will be updated as needed, with metadata verified or created; the old layer will be archived with a

timestamp in the filename. Adjacent counties will follow the same protocol, but be done on a bi-annual basis unless a higher frequency is required. The MPO will continue to update inventory of improvements to municipal street system, and update the inventory of signalization on existing major streets, to provide accurate inputs for the Triangle Regional Model (TRM). The MPO will monitor changes in street mileage systems from previous years and summarize inventory by functional classification. The MPO will continue to update HERE (formerly NAVTEQ) street file and attribute data. The MPO municipalities (Town of Chapel Hill, the Town of Carrboro, and the City of Durham) will continue to gather from the NCDOT Division 7 and 5 offices and compile in database, improvements to the state highway system, whether planned, underway, or completed. Each municipality will compile and maintain similar records for its municipal street system. The MPO municipalities participating in the Powell Bill Program will certify street mileage maintained during this fiscal year. The product of this task will feed into the MPO GIS and data management system. The objective is that, periodically or as changes or additions to the major street system occur, street inventory will be updated and be current through the proposed data automation and management system. These data will also feed into the MPO performance measures as required by federal regulation.

#### Task II-A-4: Traffic Accidents (Crash/Safety)

The LPA will continue to collect, tabulate and analyze route traffic accident data from TEES and prepare a summary and analysis of high accident locations by mode as well as compare data analysis to previous years' results. Crash data will include auto, bike and pedestrian crashes for the latest three year period within the MPO Metropolitan Planning Boundary. This task will align, build from, and support the safety work of the NCDOT as required by federal regulations. The task will feed into the MPO Congestion Management Process (CMP), MPO MTIP ranking and project prioritization, SPOT, mobility funds and urban loop funds prioritization, etc. The LPA will update the geo-spatial application that will map, manage and analyze crash data in a way that will allow planners, engineers and the public to better understand crashes within our region. The analytical tool will also allow the MPO to formulate public policy with our entities that will reduce crashes and improve public safety.

#### Task II-A-5: Transit System Data

The LPA will continue to undertake a comprehensive transit system data collection effort. Transit data will be collected for MPO transit providers including GoDurham, Chapel Hill Transit (CHT), GoTriangle and Duke University Transit. This will include APC data to evaluate transit service performance, route productivity, and develop standards. Operators will identify strengths and weaknesses of service by route in order to assess service barriers and future options. Information will be used to monitor service and meet FTA NTD reporting requirements. APC data will be summarized and tabulated for CHT, GoDurham, Duke and GoTriangle as follows: stop level, trip level, time period (peak/nonpeak) level, segment by trip, segment by time period, spatial analysis (TAZ and census tract) and micro analysis (system level).

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

The MPO will continue to support land-use mapping activities such as aerial orthoimagery, flown metro-wide every 2 years by the region's cities and counties to provide the basis for geographically accurate local land use data; parcel-level land use file, maintained by counties and integrated by MPO planning analyses, to provide current land use; planned land use, maintained by cities and counties and integrated by CommunityViz to represent the collective future imagined by area local governments; street centerlines, names and addresses, maintained by cities and counties and integrated by MPO and TRM Service Bureau to accurately geocode buildings and employers to Transportation Analysis Zones (TAZ) and other geographic areas; economic and demographic data, maintained by a wide variety of federal, state and local agencies and aggregated by the MPO to monitor changing trends by location or characteristic. The LPA will continue to maintain inventory of dwelling units and population to track changes and to compare with assumptions used in the adopted MTP and CTP.



Changes in development will be used to determine needed changes in transportation services and how well developments compare to current and projected demands. The LPA continues to review developments to assess impacts to the 2045 Metropolitan Transportation Plan (2045 MTP), socio-economic and demographic data for MTP update, update of Community Viz land-use scenario planning, land-use model update, and transportation project development. Changes in dwelling units and employment within the MPO will be identified and evaluated to determine accuracy and consistency with the socio-economic forecast. The MPO will review and tabulate Census data, local parcel, zoning, tax data records, InfoUSA, and Employment Security Commission data as part of this monitoring task. The MPO will continue work on the update and enhancement of the MPO GIS enterprise and the Employment Analyst.

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

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

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

The MPO will continue to undertake routine travel-time runs (floating car technique) on selected links during peak period to provide accurate inputs for applications such as the travel model update and the CMP. MPO will continue evaluation of travel time field data collector, and validation using INRIX and other Bluetooth. The LPA will collect highway/auto travel time and speed along major and minor facilities. The MPO will continue to update the HERE travel time and the MS2 travel time portal.

#### Task II-A-10: Mapping

The MPO will continue to improve and expand its analytical capabilities such as Geographic Information Systems (currently ESRI's ArcGIS), specifically to maintain, integrate, and analyze the geographically-based data sets and portals; statistical analysis software to analyze geo-spatial data sets and to estimate the parameters on various models, especially the TRM and CommunityViz. The MPO will continue to update, maintain and enhance modeling and visualization software to help translate technical data inputs into meaningful measures and to visually display data for improved understanding and public awareness. This task will also include, but not be limited to, mapping of, and geo-spatial updates to, UPWP transportation planning activities such as the CMP, traffic counts, bicycle and pedestrian counts and inventory, transit routes, land use, traffic analysis zones, socio-economic and demographic trends, Title VI and environmental factors. The MPO will continue to update base maps for corridor studies and project planning. Work will continue on the development and update of the GIS online. Work will continue on the update and enhancement of mapping for the MPO website and Public Involvement planning. Work will also continue on the integration and maintenance of the Employment Analyst, community Viz and enterprise GIS. The LPA will continue to improve MPO GIS support for short and long-range transportation plans by providing visualization enhancement and as required by federal regulations, including creating and maintaining metadata and data catalog for MPO planning area. MPO transit operators will update GIS data for transit routes, stops and segments including attributes. The LPA will continue work associated with management of MPO database, ArcGIS shape files and Google KML files. Expected deliverables and work products are summarized as follows:

- Update and enhancements of GIS Online portals
- GIS online mapping
- Maintenance and development of updated MPO data collection maps
- Transit APC mapping

- Updated transit routes, stops, segments with attributes
- Maintain project geospatial and tabular data related to transit component of the CTP, MTP and TIP
- Parking inventory spatial database and mapping
- ADT mapping in support of planning needs
- Data mapping in support of planning needs
- Employment Analyst enhancements
- Base year tear socio economic and demographic maps
- LEP/EJ demographic profiles mapping
- Updated local and composite street centerline mapping
- Updated HERE street layer
- Crash and safety mapping in support of planning needs and project development.

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

The LPA will continue data collection and inventory of on- and off- street parking facilities in the Central Business Districts (CBD), major generators and universities. Parking data to be collected include number of spaces, parking fee rates (hourly daily, and monthly), average weekday costs, and demand. Parking information collected will help in the calibration and maintenance of the travel model. The LPA will update the parking inventory and usage spatial geodatabase as well as Parking Area Study Analysis.

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

The MPO will continue to conduct inventory of bicycle and pedestrian facilities as part of the CMP and development of performance measures. The inventory will provide inputs for the travel model and help identify future sidewalk projects, guide pedestrian improvement planning, and support specific projects, such as the Comprehensive Bicycle Plan, Comprehensive Pedestrian Plan and TIP/SPOT prioritization.

#### Task II-A-13: Bicycle and Pedestrian Counts

The LPA staff will continue to participate in bicycle and pedestrian planning in the region and provide technical assistance/coordination to other government units as needed. The MTP supports and encourages bicycle and pedestrian planning and staff continue to work toward achieving those goals. The primary activity in this task will be the further development of the bicycle system inventory using GIS online and Google Earth. The MPO will continue to conduct an inventory of bicycle and pedestrian facilities as part of the CMP and the development of performance measures. The proposed inventory will provide accurate inputs for the travel model update as well as help identify future sidewalk projects, guide pedestrian improvement planning, and to support specific projects, such as the Comprehensive Bicycle Plan, Comprehensive Pedestrian Plan, and TIP/SPOT prioritization. Also, inventory of bicycle and pedestrian counts will continue to be conducted as part of the Congestion Management Process and development of performance measures. The inventory will guide pedestrian improvement planning, and support specific projects, such as the Comprehensive Bicycle Plan, Comprehensive Pedestrian Plan, development of Transportation Alternatives (TA) funding allocation criteria, etc.

#### II-B: Long Range Transportation Plan/Metropolitan Transportation Plan (MTP) Activities

Federal Law and USDOT's Metropolitan Planning Regulations require the MPO to have a Metropolitan Transportation Plan (MTP) that is: multi-modal, financially constrained, has a minimum 20 year horizon, adheres to the MPO's adopted Public Involvement Policy (PIP), has growth forecasts consistent with latest planning assumptions and local land use plan, meets air quality conformity, and be approved by the MPO Board. The MTP must be updated and reaffirmed every 4 years. The DCHC will continue tasks associated with the update and reappraisal of the comprehensive transportation plan as well as commence data collection preparation for the 2020 model base year. The MPO will continue to work on the preparatory work for timely and efficient development of the 2050 MTP.

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

This task provides travel and socio-economic data for the modeling update. The data collection initiatives include processing and analysis of Census, American Community Survey (ACS) and employment/special generator. These efforts will result in the creation of several travel modeling databases that will be used in the development and update of forecasting tools. The LPA will continue to update the socio-economic and demographic data for the base year model and Title VI demographic/ Minority and Low Income (MLI) profiles. Work activities will include update, estimation and tabulation of the following data elements; population, housing, income, auto ownership, limited-english proficiency, linguistically isolated households, workers, head of household, environmental justice, linguistic demographic factors, ACS community patterns, school enrollment, etc. It is expected that these variables will be linked to the proposed data automation projects, and a GIS database and management system will be used to maintain the aforementioned socio-economic and land use information. An integral part of this task also will be continuous data verification, reconciliation, and quality and error checks.

### Task II-B-2: Collection of Network Data

The MPO will continue to update transportation/model network data. The proposed work activities will include collection and update of the following transportation network variables and attributes:

A-Highways: 1) posted speed limit; 2) number of lanes; 3) segment length; 4) turn pockets; 5) parking conditions; 6) traffic signal locations and stop conditions; 7) signal density; 8) access control and driveway conditions; 9) land use and area type; 10) free flow speeds; 11) Travel Time; 12) median condition; and 13) facility type and functional classification.

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

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

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

The purpose of this task is to continue to review and analyze existing travel demand and air quality models in order to determine feasible enhancements to the modeling procedures that are used in the TRM. DCHC MPO will continue to perform air quality, regional travel demand, and micro-simulation model runs for existing and future projects as needed. Staff will continue to be involved in the development, enhancement and update of the Triangle Regional Model (TRM). Specifically, work will focus on the development, calibration and development of Version 6.1 of the model and preparatory work for version 6.x or V7. This element provides for maintenance, improvement, and support of travel models housed at the Service Bureau. These models provide analytical tools for various transportation analyses, policy testing, and public outreach. Improvement activities involve developing new tools and techniques to enhance travel model applications in various areas. Support activities involve maintenance of the software and hardware of the modeling system, documentation, staff training, and assisting consultants who are providing service to the regional projects. This element also provides for technical communication and participation at the State and Federal (FHWA &FTA) levels to ensure travel models are developed in a coordinated manner to meet future needs and expectations. Consultants and University partnership/ assistance will be utilized in undertaking work activities under this task.

The DCHC MPO, with CAMPO, NCDOT and GoTriangle, develops and maintains a regional travel demand model for predicting the impact of transportation investments and land-use policies on travel demand and air quality. The model is used by the MPO in development of the required MTP and CTP, by NCDOT in project development, SPOT/TIP prioritization, Mobility funds ranking and loop prioritization,

by GoTriangle in new Start analysis and fixed guideway transit, and by local and state agencies for development impacts analysis and scenario planning. The main modeling work tasks include:

- Monitor and understand changes in federal requirements as they affect MPO modeling.
- Continue to improve and enhance models and make them responsive to technical and policy questions the MPO seeks to answer.
- Research ways in which the state-of-the-practice is changing and develop modification and improvements in the modeling process to meet those standards.
- Acquire and process data so work program can be accomplished to meet federal requirements.
- Estimate, calibrate and validate current TRM as an on-going activity.
- Ensure that validation focuses on improvements to link level and route level performance.
- Ensure TRM base year and future years are ready for MTP evaluation two years before hand.
- Document TRM so it can be understood and replicated.
- Document the modeling process so that its capabilities and limitations can be understood by policy makers and lay person.

Essentially, the modeling in the proposed work program involves the update, calibration and validation for the model to support the development of the TRM versions 6.1 and 6.x and MTP modeling support. Update of the TRM including improvements, enhancements and major updates.

#### Task II-B-4: Travel Surveys

The DCHC MPO, along with the other TRM stakeholders, will continue undertake an annual rolling ACS style continuous travel behavior survey (household survey) and Transit Onboard survey tabulation and analysis. The survey is being managed by the TRM Service Bureau, however LPA staff will be involved in every facet of the survey and analysis.

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

The LPA will continue to generate and update socio-economic and demographic projections and forecasts. CTP and MTP forecasts will continue to be re-evaluated and refined consistent with local land-use plans as well as State and regional land use policies.

#### Task II-B-6: Community Goals and Objectives

No activity planned during FY2020 UPWP period.

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

MPO will generate and update travel demand forecasts for future years including MTIP, SPOT, CMP, MRC, etc. The forecast of travel patterns will include a review of these factors and comparison to community goals and objectives to determine if changes in assumptions are warranted.

#### Task II-B-8: Capacity Deficiency Analysis

The MPO will continue to update capacity deficiency analysis for reappraisal activities for CTP and MTP, MRC, CMP and other project development activities. Essentially this task encompasses application of the Triangle Regional Model and other modeling tools to analyze deficiencies in the existing transportation system relative to anticipated future travel demand.

#### Task II-B-9: Highway Element of the MTP

The MPO will continue work associated with the reappraisal and evaluation of highway elements of the Comprehensive Transportation Plan and the update of the 2045 MTP. Performance measures will be established for evaluating highway performance.

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

The MPO will continue with the update and evaluation of transit elements of the Comprehensive Transportation Plan, the MTP, County transit plans, and the regional New Starts. Transit evaluation will include fixed-route bus service, fixed-guideway transit, high capacity transit and demand-response transit. Using travel behavior, ridership forecasts and other analysis, evaluation of the transit element will look at unmet needs, new service areas and potential markets. Performance measures will routinely be established for evaluating transit alternatives.

The MPO will continue to coordinate with GoTriangle and other regional partners regarding the development of the regional commuter rail and light rail. Specifically, the MPO will conduct planning and studies for D-O LRT, and high capacity transit and circulator transit (MLK BRT in Chapel Hill), and other planning work necessary for the preparation of the FTA Small-Start project. It is anticipated that this work will be accomplished with the help of consulting services.

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

The MPO will continue with the reappraisal and reevaluation of bicycle and pedestrian elements of the Comprehensive Transportation Plan and the MTP. The MPO and its member agencies will continue work on improving and enhancing bike and pedestrian investment within the MPO.

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

The MPO will continue with the evaluation of airport/air travel element of the Metropolitan Transportation Plan, including inter-modal connection and access/ground transportation. Work task will include review of RDU plans and comparison and integration as necessary with the MTP for consistency. The MPO will continue to routinely coordinate and collaborate in the integration of aviation planning into MTP update process as well as integrate aviation with other transportation modes. Also, the MPO will continue to facilitate an open, ongoing discussion of regional aviation issues among aviation professionals, regional elected leadership, and local, state, and federal officials; and effectively integrate aviation planning considerations into the overall metropolitan transportation planning process.

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

MPO will continue work on the update of the MPO Collector Street and Connectivity Plan. Work tasks will to involve the identification of future collector street connectivity needs, provisions for local street connectivity, development ordinance implementation provisions, additional local government consultation, and public involvement. The MPO will continue to involve CAMPO, City of Raleigh and Wake County regarding collector street and connectivity planning in Brier Creek and east Durham area.

Task II-B-14: Rail, Water, or Other Mode of MTP

The MPO will continue to work with NCDOT Rail Division, GoTriangle and CAMPO regarding rail transportation in the Triangle. Work includes, but is not limited to, survey of rail plans, relationship to the MPO Metropolitan Transportation Plan and Comprehensive Transportation Plan, programmatic impacts, etc. Also, this task will include planning associated with commuter and light rail efforts. The CRT MIS work will continue in FY2020. The MPO will continue to play active role in next step of the commuter rail assessment study and project development

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

MPO will continue to undertake tasks associated with urban goods movement, specifically freight accessibility and mobility. Tasks associated with the implementation of the Regional Freight Plan will continue. Other tasks to be undertaken include attending and staffing the Regional Freight Stakeholders meetings, survey of freight carriers, recommendations for improving truck mobility or train/truck

intermodal movements, and identifying acceptable truck routes. The MPO will continue the management role to the update of the Triangle Regional Freight plan.

#### Task II-B-16: Financial Planning

The MPO will continue to update and refine cost estimates and revenues for the regional transit initiatives and the 2045 MTP. As part of this task, the MPO will examine financial options for funding proposed transportation projects and programs, including review of the financial planning assumptions/ projections in the 2045 MTP and update of the Durham County and Orange County financial plans based on the latest half-cent sales tax revenue collection.

#### Task II-B-17: Congestion Management Systems Strategies

The MPO will work to implement and monitor the Congestion Management Program (CMP) in accordance with the provisions of 23 U.S.C. and 23 CFR. Specifically, the MPO will continue with the update and monitoring of CMP strategies and State of the Systems Report. Also, the MPO will continue to update the Mobility Report Card, including updating metrics, graphics and reports. The MPO will continue to participate in, and collaborate on, the update, monitoring and implementation of the Travel Demand Management (TDM) activities and program. Other proposed activities include: Acquire vehicle probe data to support update to regional congestion analysis and calculation of key performance metrics on the entire Congestion Management Network; Continue data collection, analysis and reporting in support of the CMP (ongoing); Undertake CMP Implementation, by integrating CMP with the development of planning products and activities, including the MTP, TIP, Regional ITS Architecture, planning studies, etc. (ongoing).: Incorporate Additional Transportation Modes and coordinate with stakeholders and regional transportation stakeholders to incorporate bicycle and pedestrian modes into the CMP (ongoing); and maintain CMP products and documentation as needed (ongoing).

Under this task, the MPO will continue to establish and monitor performance measurement targets in response to the FAST Act's performance-based approach to statewide and metropolitan planning; and coordinate the selection of performance targets by NCDOT, the MPO and the region's transit agencies to ensure consistency, as appropriate.

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

Although the MPO is now designated as attainment for criteria pollutants as of September 18, 2015, the MPO will continue to perform and undertake air quality planning activities. Essentially, the MPO will continue to make a determination as to whether or not transportation plans, programs, and projects (MTP and TIP) conform to air quality standards. The LPA will continue to provide technical support to the TC and Board regarding air quality planning. In addition the LPA will continue participation in the development and application of State Implementation Plans for air quality, participation in the statewide interagency consultation, and providing assistance to NCDEQ in developing and maintaining mobile source emission inventories.

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

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

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

Unified Planning Work Program (UPWP) work includes conducting metropolitan planning and implementing planning activities for the MPO. This involves responding to regulations and mandates, and reporting information on 3C planning topics, including those identified in federal legislation, and issues related to federal policies, regulations, and guidance, such as responding to federal certification

recommendations. Additionally, the LPA will provide support related to planning topics such as those highlighted in federal planning guidance, including operations and management, sustainability, health, freight, economic effects, and environmental issues.

Under this work element, the LPA will finalize the reimbursement and invoicing process for the FY2018 UPWP, administer the FY2019 UPWP, prepare and process amendments as needed, evaluate transportation planning work needs and emphasis areas and prepare the FY2020 UPWP. LPA will prepare and continually maintain UPWP that describes all transportation and transportation-related planning activities anticipated within the DCHC MPO planning area for the FY2019. Work program will include the development and maintenance of UPWP in conformance with applicable federal, state, and regional guidelines. In addition, work will include the preparation of UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year. The MPO will commence the preparatory work on the development of the FY2020 UPWP.

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

The LPA will continue work associated with the development of the 2020-29 MTIP, including prioritization work (SPOT-6) activities. Also, the MPO will continue to process TIP amendments as needed, including coordinating with the MPO member agencies and conducting public involvement/outreach, and commence work on the development of the TIP ranking and prioritization. This includes the refinement of the MPO Priority Needs and the identification of the transportation projects, programs, and services towards which the MPO will direct STBG-DA funds. As the Lead Planning Agency (LPA) of the DCHC MPO, the City of Durham Transportation Department –Planning Division is responsible for annually developing, amending, adjusting and maintaining the Transportation Improvement Program (TIP) for the metropolitan area. Under this activity, the LPA will examine any possible need to update and amend the current transportation improvement projects (MTIP) that is consistent with the 2045 Metropolitan Transportation Plan, STIP and FHWA/FTA Planning Regulations.

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

##### Task III-C-1: Title VI

The MPO will continue work on the Title VI plan and the NCDOT Civil Right compliance report. NCDOT Civil Right Division conducted a Title VI audit. As a result of the audit the MPO prepared the required Title VI Policy Statement and Assurance. That assurance will be updated accordingly. The DCHC MPO will continue work on the development of the MPO Limited English Proficiency plan as it relates to Title VI issues.

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

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

1. Develop MPO Environmental Justice Plan, including establishment of Environmental Justice Advisory Board
2. Update demographic profiles based on Census CTPP and PUMS as well as MPO SE data forecasts - maps to identify areas of low-income, minority and elderly populations, job accessibility, and overlay of major employers, fixed route transit systems, and major shopping areas.
3. Provide increased opportunities for under-served populations to be represented in the transportation

planning process.

4. Define target areas through the use of Census Block Group data from the 2010 Census.
5. Analyze the mobility of target area populations to jobs, childcare, and transit routes.
6. Review existing public outreach and involvement plan.
7. Develop a protocol for responding to issues and concerns regarding environmental justice in general and Hispanic population in particular.
8. Conduct analysis as needed regarding equitable distribution of transportation system benefits and costs among all socio-economic groups throughout the MPO area

#### Task III-C-3: Minority Business Enterprise

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

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

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

#### Task III-C-5: Safety and Drug Control Planning

The MPO will continue to update the regional safety plan and report using the data from, and analysis of, TEES data. The MPO will continue to participate in the transit operator's safety coordination meetings as well as update the multi-modal safety plan. The MPO will develop an MPO Safety Plan that incorporates elements of VISION ZERO.

#### Task III-C-6: Public Involvement

The MPO will continue to update and enhance the MPO website as well as continue to strive to provide early, proactive, and meaningful public participation and input throughout the transportation planning process, including providing for open exchange of information and ideas between the public and transportation decision-makers, to provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process, to assess the effectiveness of the current Public Involvement Process as required by the federal Certification Team, and to develop and enhance the process of public dissemination of information. It also includes providing process support, such as developing and preparing informational materials for the MPO website, conducting public outreach, managing the MPO website, preparing and distributing the MPO's newsletter, implementing other social media (Twitter, YouTube and Facebook), and maintaining mailing lists and email lists.

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

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

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



### Task III-D-3 Special Studies

The MPO will continue with wide range of studies which are being conducted to meet the transportation planning needs of the area. These studies include Mobility Report Card, Community Viz integration with RPAT, continuation of the US 15-501 Corridor Study, the regional ITS and Toll studies, MS2 Data portals, funding /E-TIP database, application and portals development, incident management plan, GIS enterprise/GIS online, non-motorized trip model update, land-use model update, bicycle-pedestrian superhighway study, etc.

### Task III-D-4: Regional or Statewide Planning

The MPO will continue to coordinate with CAMPO, GoTriangle, NCDOT, NCDEQ, FHWA, FTA, EPA, and other State and regional agencies in regional transportation. This includes participation in the DCHC-CAMPO joint Board meetings, GoTriangle Board Meetings, Durham-Chapel Hill-Orange County Work Group, and a wide range of regional transportation planning working groups and committees. Examples include the Model Team, the Executive Committee, and the regional transit planning/operation coordination. Statewide planning includes participation in various statewide planning initiatives such as CMAQ Committee, Indirect and Cumulative Impacts of Transportation Projects in North Carolina, the State Transportation Plan process, and the CTP.

### Task III-E: Management and Operations

The purpose of this work is to assist, support, and facilitate an open Comprehensive, Cooperative, and Continuing (3C) transportation planning and programming process in conformance with applicable federal and state requirements and guidelines as described in the 3C Memorandum of Understanding. This work element encompasses the administration and support of transportation planning process as mandated and required by federal regulations. The continuing transportation planning process requires considerable administrative time for attending monthly committee meetings, preparing agendas and minutes of these meetings, training, preparing quarterly progress reports, documenting expenditures for the various planning work items, and filing for reimbursement of expenditures from the PL and STBG-DA funds account and other Federal funds. In addition, this work includes consultation with other agencies involved within 3C planning activities; liaison activities between the MPO and NCDOT and ongoing coordination with CAMPO; and communication with other regional groups. Other activities include the day-to-day oversight of, and reporting on, the progress of projects listed in the UPWP, and the establishment of work priorities in light of MPO needs. Proposed tasks include, but are not limited to:

1. Provide liaisons between DCHC MPO member agencies, transit providers, CAMPO, NCDOT, NCDEQ, TJCOG, and other organizations at the local, regional, state, and federal levels on transportation related matters, issues and actions.
2. Respond to federal and State legislation and regulations.
3. Provide service request to citizens.
4. Provide service requests and technical support to MPO member agencies.
5. Provide oversight to MPO planning and transit funding policies.
6. Work with the CAMPO on regional issues. Prepare Regional Priority lists and MTIP and amend as necessary, update transportation plans, travel demand model, and monitor data changes. Evaluate transportation planning programs developed through the 3C public participation process for appropriate MPO action.
7. Provide technical assistance to the Board and other member jurisdictions policy bodies.
8. Participate in joint CAMPO/DCHC MPO TC and Board meetings to continually improve the quality and operation of the transportation planning process and decision making in the Triangle Region.
9. Review and comment on federal and state transportation-related plans, programs, regulations and guidelines.

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1	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring	Surveillance of Change/ Data monitoring
1.1	ADT count and TMC annual and seasonal, including update of count database system	ADT count and TMC annual and seasonal, including update of count database system	ADT count and TMC annual and seasonal, including update of count database system	ADT count and TMC annual and seasonal, including update of count database system	ADT count and TMC annual and seasonal, including update of count database system
1.2	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring	VMT update and monitoring
1.3	Street System Changes update. Update of INRIX/HERE Street layer	Street System Changes update. Update of INRIX/HERE Street layer	Street System Changes update. Update of INRIX/HERE Street layer	Street System Changes update. Update of INRIX/HERE Street layer	Street System Changes update. Update of INRIX/HERE Street layer
1.4	Traffic accidents data/ multi-modal safety data update and analyses	Traffic accidents data/ multi-modal safety data update and analyses	Traffic accidents data/ multi-modal safety data update and analyses	Traffic accidents data/ multi-modal safety data update and analyses	Traffic accidents data/ multi-modal safety data update and analyses
1.5	Transit system data/Continual update of APC data	Transit system data/Continual update of APC data	Transit system data/Continual update of APC data	Transit system data/Continual update of APC data	Transit system data/Continual update of APC data
1.6	Housing, POP, Emp. Data,including development review/permits, CO, Census, INFOUSA (employment & household data), etc	Housing, POP, Emp. Data,including development review/permits, CO, Census, INFOUSA (employment & household data), etc	Housing, POP, Emp. Data,including development review/permits, CO, Census, INFOUSA (employment & household data), etc	Housing, POP, Emp. Data,including development review/permits, CO, Census, INFOUSA (employment & household data), etc	Housing, POP, Emp. Data,including development review/permits, CO, Census, INFOUSA (employment & household data), etc
1.7	Air travel. Continual monitoring of RDU passenger activities and ground transportation	Air travel. Continual monitoring of RDU passenger activities and ground transportation	Air travel. Continual monitoring of RDU passenger activities and ground transportation	Air travel. Continual monitoring of RDU passenger activities and ground transportation	Air travel. Continual monitoring of RDU passenger activities and ground transportation
1.8	VOC	VOC	VOC	VOC	VOC
1.9	Travel Time, including continual gathering and update of INRIX, HERE and Travel Time database monitoring system.	Travel Time, including continual gathering and update of INRIX, HERE and Travel Time database monitoring system.	Travel Time, including continual gathering and update of INRIX, HERE and Travel Time database monitoring system.	Travel Time, including continual gathering and update of INRIX, HERE and Travel Time database monitoring system.	Travel Time, including continual gathering and update of INRIX, HERE and Travel Time database monitoring system.
1.10	Mapping and update/enhancement and maintenance of the MPO Geo-spatial database and GIS enterprise	Mapping and update/enhancement and maintenance of the MPO Geo-spatial database and GIS enterprise	Mapping and update/enhancement and maintenance of the MPO Geo-spatial database and GIS enterprise	Mapping and update/enhancement and maintenance of the MPO Geo-spatial database and GIS enterprise	Mapping and update/enhancement and maintenance of the MPO Geo-spatial database and GIS enterprise
1.11	Parking inventory	Parking inventory	Parking inventory	Parking inventory	Parking inventory
1.12	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv	Bike/Pedestrian. Facilities Inv
1.13	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts	Bike/Pedestrian. Facilities Counts
2	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>	<b>Unified Planning Work Program (UPWP)</b>
2.1	Process UPWP amendments as necessary	Process UPWP amendments as necessary	Amend UPWP as necessary	Amend UPWP as necessary	Amend UPWP as necessary
2.2	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports	Process quarterly invoices and reports
2.3	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation	Prepare annual UPWP progress report and performance evaluation
2.4	Develop FY 2021 UPWP	Develop FY 2022 UPWP	Develop FY 2023 UPWP	Develop FY 2024 UPWP	Develop FY 2025 UPWP
2.5	UPWP financial management and administration	UPWP financial management and administration	UPWP financial management and administration	UPWP financial management and administration	UPWP financial management and administration
	Grant monitoring, oversight and audit	Grant monitoring, oversight and audit	Grant monitoring, oversight and audit	Grant monitoring, oversight and audit	Grant monitoring, oversight and audit
2.6	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development	Perform annual self-certification & On-Going Process-Development
2.7	LPA Local match Cost Sharing, including preparation of annual report.	LPA Local match Cost Sharing, including preparation of annual report.	LPA Local match Cost Sharing, including preparation of annual report.	LPA Local match Cost Sharing, including preparation of annual report.	LPA Local match Cost Sharing, including preparation of annual report.
2.8	Management and Operations of the 3-C Process.	Management and Operations of the 3-C Process.	Management and Operations of the 3-C Process.	Management and Operations of the 3-C Process.	Management and Operations of the 3-C Process.
3	<b>Metropolitan Transportation Plan (MTP)/Long-Range Transportation Planning/CTP</b>	<b>Metropolitan Transportation Plan (MTP)/Long-Range Transportation Planning/CTP</b>	<b>Metropolitan Transportation Plan (MTP)/Long-Range Transportation Planning/CTP</b>	<b>Metropolitan Transportation Plan (MTP)/Long-Range Transportation Planning/CTP</b>	<b>Metropolitan Transportation Plan (MTP)/Long-Range Transportation Planning/CTP</b>

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3.1	Adoption of the 2050 MTP development process and schedule	Amendment of CTP and 2045 MTP as necessary or required. Re-adoption of the CTP if need be.	Amendment of the 2045 MTP for AQ analysis and conformity as necessary	Amendment of CTP and 2045 MTP as necessary or required. Re-adoption of the CTP if need be.	2050 MTP environmental analysis and considertaion
3.2	Refinement of SE forecast to Horizon and intermediate years.	Integration of resiliency planning.	Framework for incorporating technolog and autonomus / connecte vehiclles into the 2050 MTP	Work associated with Goals, Objectives and targets for 2050 MTP commences.	Model and technical analyses for the 2050 MTP
3.3	Model Update and improvements for 2050 MTP development commences	CTP continual update and consistency and integration with CMP and SPOT	Update of base year networks and their attributes	Deficiency analysis and needs assessment for 2050 MTP continue	Continue work on GIS and mapping for MTP base maps
3.4	Inter-Agency Consultation process	Base year SE data collection, tabulation and analysis underway; and networks and attributes development continues	Update of modeling and technical tools for 2050 MTP analyses.	Public outreach for deficiency analysis, existing conditiond snd need assessment	Selection of Preferred MTP Option.
3.5	CTP continual update and amendemnt as necessary.	Update methodology for analyzing and assessing equity and health impacts on 2050 MTP	Continue work on GIS and mapping for MTP base maps	Generation of alternatives for 2050 MTP	AQ analysis and conformity determination process
3.6	2050 MTP Visioning process and coordination kick-off	Adoption of the 2050 MTP development process and schedule	Continue work on GIS and mapping for MTP base maps	Evaluation and analysis of alternatives	Inter-Agency Consultation process
3.7	Goals, Objectives and targets for 2045 MTP	Develop 2050 MTP Public Outreach and input process, including involvement and input from MPO member agencies.	Base year SE data collection and analysis for 2050 MTP	Public outreach and input on the draft preferred plans (options).	Public outreach and involvement of the 2050 MTP.
	Work commences on MPO wide Community visioning. Product to lead into Goals and Objectives development	Update Title 6, EJ and LEP for 2050 MTP	Comm Viz Scenario planning and selction of the preferred scenario	CTP continual update and amendemnt as necessary.	Adoption of 2050 MTP and AQ comformity report
	Dvelopment of networks and update of base maps	2050 Goals, Objectives and Performance Measures	Socio-economic and demographic forecasts for 2050 MTP, including 2030 and 2040 intermediate years	Incorporation of freight, airport, safety, EJ, etc.	Initiation of 2055 MTP development and update process
	Existing conditiond analysis commences	Initiate Community Viz 3.0 model update and land-us scenario building.	Existing conditions and deficiency analyses continue	Amendment of the 2045 MTP as necessary	Amendment of the 2045 MTP as necessary
	Deficiency analysis commences	Public outreach and involvement for thr 2050 MTP	Assessment of Need for the 2050 MTP		
4	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>	<b>Travel Demand Model Development and Update</b>
4.1	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities	On-going model maintenance and enhancement activities
4.2	Collection of annual continuous household and transit on board survey. Coordination of estimation year data collection	Support MPO 2045 MTP and air quality conformity model applications	Develop TRMv7: continue estimating models for tour mode choice	Develop TRMv7: incorporate existing model components for commercial vehicles & external models	Develop TRMv7: complete model calibration and validation
4.3	Survey tabulation and analyses winter/spring 2020. Analysis and tabulation of estimation year data (traffic counts, SE data, PASA parking)	Collection of network data and development of networks	Develop TRMv7: model applications completed	Develop TRMv7: initial model calibration and validation begins	Develop TRMv7: develop application tools for plan evaluation & air quality analysis
4.4	Support MPO 2045 MTP model application and demand forecasts.	Maintain/enhance TRMv6: develop additional tools for application	Develop TRMv7: continue estimating models for tour mode choice		2020 census TAZ delineation
4.5	Maintain/enhance TRMv6.x: develop improved parking model	Develop TRMv7: begin developing/adapting application programs for population synthesizer/tour-activity scheduler/router			

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4.6	Develop TRMv7: investigate/specify tour/activity scheduler/router	Develop TRMv7: begin model estimation and calibration for usual work and school location, activity scheduler, and router			
	Develop TRMv7: begin preparing data for estimation				
	Develop TRMv7: available data will be entered in selected data structure				
4.7					
5	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>	<b>Bicycle &amp; Pedestrian Planning</b>
5.1	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy	On-going bike and pedestrian advocacy
5.2	on-going implementation of the bike and pedestrian plans	on-going implementation of the bike and pedestrian plans	on-going implementation of the bike and pedestrian plans	on-going implementation of the bike and pedestrian plans	on-going implementation of the bike and pedestrian plans
5.3	On-going bike-pedstrian programs monitoring of strategies & effectiveness	On-going bike-pedstrian programs monitoring of strategies & effectiveness	On-going bike-pedstrian programs monitoring of strategies & effectiveness	On-going bike-pedstrian programs monitoring of strategies & effectiveness	On-going bike-pedstrian programs monitoring of strategies & effectiveness
6	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>	<b>Short-Range Transit Plan</b>
6.1	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process	On-going transit planning process
6.2	Administration of the Staff Working Group (SWG) and support to the Tax districts revenues	Administration of the Staff Working Group (SWG) and support to the Tax districts revenues	Administration of the Staff Working Group (SWG) and support to the Tax districts revenues	Administration of the Staff Working Group (SWG) and support to the Tax districts revenues	Administration of the Staff Working Group (SWG) and support to the Tax districts revenues
6.3	Update, implementation and oversight of Durham and Orange Transit Plans.	Update, implementation and oversight of Durham and Orange Transit Plans.	Update, implementation and oversight of Durham and Orange Transit Plans.	Update, implementation and oversight of Durham and Orange Transit Plans.	Update, implementation and oversight of Durham and Orange Transit Plans.
7	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>	<b>Congestion Management Process (CMS/CMP)</b>
7.1	On-going update and enhancement of the MPO Mobility Report Card (MRC)	MRC report and AGOL	On-going update and enhancement of the MPO Mobility Report Card (MRC)	MRC report and AGOL	On-going update and enhancement of the MPO Mobility Report Card (MRC)
7.2	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness	On-going CMP monitoring of strategies & effectiveness
7.3		Update of area of influence and congestion networks. Application & reevaluation of definition of congestion		Update of area of influence and congestion networks. Application & reevaluation of definition of congestion	
7.4		Transportation system definition (modes & networks)		Transportation system definition (modes & networks)	
7.5		Transportation system definition (modes & networks)		Transportation system definition (modes & networks)	
7.6	Data collection & analysis for MPO CMS Update	Data collection & analysis for MPO CMS Update	Data collection & analysis for MPO CMS Update	Data collection & analysis for MPO CMS Update	Data collection & analysis for MPO CMS Update
7.7	Update Performance monitoring Plan	Develop Performance monitoring Plan	Update Performance monitoring Plan	Develop Performance monitoring Plan	Develop Performance monitoring Plan
7.8	update Identification and evaluation of strategies.	Identification and evaluation of strategies.	update Identification and evaluation of strategies.	Identification and evaluation of strategies.	Identification and evaluation of strategies continues
7.9		Action plan for monitoring effectiveness of strategies		Action plan for monitoring effectiveness of strategies	
7.10		Public comment and adoption of the MPO CMS		Public comment and adoption of the MPO CMS	Public comment and adoption of the MPO CMS
8	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>	<b>TIP</b>
	Develop 2020-2029 MTIP including public input and comment process	Submit SPOT 6 Division Needs points assignment	Develop 2022-2031 MTIP including public input and comment process	Submit SPOT 7 Division Needs points assignment	Develop 2024-2033 MTIP including public input and comment process

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	Review SPOT 6 (2022-2031) project submissions and prepare comparative analysis	One-on-one discussion between the MPO and NCDOT	Review SPOT 7 (2024-2033) project submissions and prepare comparative analysis	One-on-one discussion between the MPO and NCDOT	Review SPOT 8 (2026-2035) project submissions and prepare comparative analysis
	Develop & submit TIP Project Priority List for SPOT 6 (2022-2031 TIP)	Adopt 2022-2031 STIP	Develop & submit TIP Project Priority List for SPOT 7 (2024-2033 TIP)	Adopt 2024-2033 STIP	Develop & submit TIP Project Priority List for SPOT 8 (2024-2033 TIP)
	Update TIP ranking & project prioritization methodology as necessary		Update TIP ranking & project prioritization methodology as necessary		Update TIP ranking & project prioritization methodology as necessary
	Submit SPOT 6 Regional Impact points assignment		Submit SPOT 7 Regional Impact points assignment		Submit SPOT 8 Regional Impact points assignment
<b>9</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>	<b>Title VI/Civil Rights/EJ</b>
	Continuous update of Title VI programs, including Assurance Certification, EJ and LEP	Continuous update of Title VI programs, including Assurance Certification, EJ and LEP. Evaluate effectiveness of programs and outreach efforts	Continuous update of Title VI programs, including Assurance Certification, EJ and LEP. Evaluate effectiveness of programs and outreach efforts	Update EJ Plan and LEP program, and evaluate effectiveness of program and outreach efforts	Continuous update of Title VI programs, including Assurance Certification, EJ and LEP. Evaluate effectiveness of programs and outreach efforts
	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list	Update EJ and LEP outreach mailing list
	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program	Administer and monitor MPO EJ/LEP program
	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed	Evaluate and Perform EJ analysis, impacts as needed
	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database	Update EL/LEP demographic profile and database
<b>10</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>	<b>Public Involvement/Participation Plan (PIP/PPP)</b>
	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process	Review and evaluate effectiveness of MPO Public Involvement Process
	Social media in MPO public outreach and input process	Social media in MPO public outreach and input process	Social media in MPO public outreach and input process	Social media in MPO public outreach and input process	Social media in MPO public outreach and input process
	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management	On-going MPO website update and content management
<b>11</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>	<b>Project Development &amp; Incidental Planning</b>
	Participation in project development, environmental analysis, NEPA process and studies	Participation in project development, environmental analysis, NEPA process and studies	Participation in project development, environmental analysis, NEPA process and studies	Participation in project development, environmental analysis, NEPA process and studies	Participation in project development, environmental analysis, NEPA process and studies
	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination	Pre-TIP project planning and coordination
<b>12</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>	<b>Land-use &amp; Transportation integration</b>
	Community Viz and UrbanSim implementaion, maintenance and update	Community Viz and UrbanSim implementaion, maintenance and update	Community Viz and UrbanSim implementaion, maintenance and update	Community Viz and UrbanSim implementaion, maintenance and update	Community Viz and UrbanSim implementaion, maintenance and update
	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts	Monitoring of land use development and consistency check with SE forecasts
<b>13</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>	<b>Intelligent Transportation System Planning</b>
	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance	Turbo Architecture, IDAS and DynaSmart enhancement, update and maintenance
	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring	ITS planning, operation and monitoring
<b>14</b>	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>	<b>Safety Planning</b>

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	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.	Safety data collection and analysis, and coordination with other agencies.
14.1	Development of the MPO Safety plan to reflect State Highway Safety initiatives	Update MPO Safety plan and incorporate features of Vision Plan.	Update MPO Safety plan and incorporate features of Vision Plan.	Update MPO Safety plan and incorporate features of Vision Plan.	Update MPO Safety plan and incorporate features of Vision Plan.
	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process	Ongoing integration of safety in the MPO transportation planning process
15	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>	<b>Freight Planning</b>
	Ongoing freight planning and coordination	Ongoing freight planning and coordination	Ongoing freight planning and coordination	Ongoing freight planning and coordination	Ongoing freight planning and coordination
	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies	Outreach with freight and logistic companies
	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps	Continuous update of truck circulation maps
16	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>	<b>Transportation System Preservation</b>
	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation	Transportation System Preservation planning and operation
	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation	TDM and TSM (ITS) planning, programming, implementation, monitoring and evaluation
17	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>	<b>GIS Development</b>
	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>	<i>Maintain Databases</i>
	Maintain Databases	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software	Acquire and Maintain Data; maintain hardware and software
	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers	Maintenance of MPO GIS and data layers
	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data	Coordination with resource agencies and linkages of transportation data with environmental data
	Update green print maps	Update green print maps	Update green print maps	Update green print maps	Update green print maps
	Data development and update. Maintenance and update of spatial geodatabase applications and AGOL.	Data development and update. Maintenance and update of spatial geodatabase applications and AGOL.	Data development and update. Maintenance and update of spatial geodatabase applications and AGOL.	Data development and update. Maintenance and update of spatial geodatabase applications and AGOL.	Data development and update. Maintenance and update of spatial geodatabase applications and AGOL.
18	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>	<b>Management and Operations</b>
	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process	Management and Operations of the MPO 3-C process
	Board directives	Board directives	Board directives	Board directives	Board directives
19	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>	<b>Special Studies/State &amp; Regional Planning</b>
		NC 751 Corridor Study	NC 751 Corridor Study		

## Town of Carrboro

	Task Description	STBGP		Sec. 104(f)		Section 5303			Section 5307			Task Funding Summary			
		133(b)(3)(7)		PL		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA				
		20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
<b>II-A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$500	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$2,000	\$2,500
	2 Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Street System Changes	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$400	\$500
	4 Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Dwelling Unit, Pop. & Emp. Change	\$120	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120	\$0	\$480	\$600
	7 Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$0	\$2,400	\$3,000
	11 Central Area Parking Inventory	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$0	\$800	\$1,000
	12 Bike & Ped. Facilities Inventory	\$240	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$240	\$0	\$960	\$1,200
	13 Bike & Ped. Counts	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
		\$0	\$0												
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0												
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Highway Element of th MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Transit Element of the MTP	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
	11 Bicycle & Ped. Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12 Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	14 Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	16 Financial Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	17 Congestion Management Strategies	\$220	\$880	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220	\$0	\$880	\$1,100
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0												
	1 Short Range Transit Planning	\$660	\$2,640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$660	\$0	\$2,640	\$3,300
		\$0	\$0									\$0	\$0	\$0	\$0
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0												
	Planning Work Program	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$2,000
		\$0	\$0									\$0	\$0	\$0	\$0
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0												
	TIP	\$1,000	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$4,000	\$5,000
		\$0	\$0									\$0	\$0		
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr. Reg. Reqs.</b>	\$0	\$0												
	1 Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Environmental Justice	\$80	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80	\$0	\$320	\$400
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Planning for the Elderly & Disabled	\$80	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80	\$0	\$320	\$400
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$900	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$3,600	\$4,500
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0												
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Special Studies	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$2,000
	4 Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0												
	1 Management & Operations	\$320	\$1,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320	\$0	\$1,280	\$1,600
<b>Totals</b>		\$6,420	\$25,680	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,420	\$0	\$25,680	\$32,100

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

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

The Town will provide local traffic count data, collected for various local planning purposes, as needed for the Congestion Management Process or other MPO activities. The Town will also conduct additional traffic counts, as needed, for other plans or studies that relate to traffic congestion or safety.

**Objectives**

To collect local traffic count data relevant to the CMP, TRM model analysis, and-or local traffic studies.

**Previous Work**

Work done over previous years

**Proposed Activities**

1. Collect traffic data using Town counters and manual bike-ped counting
2. Provide traffic data and reports as needed for the previously mentioned MPO activities
3. Work with LPA staff on determining best traffic count locations for MRC and other studies
4. Continue to collect traffic data relating to local traffic calming requests
5. Collect traffic data for major proposed developments (Lloyd Farm and Old 86/Eubanks Rd FLX)

**Products**

Traffic volume data from as recent a year as possible

**Relationship to other plans and MPO activities**

Data will be used for the CMP and MRC. Counts may be helpful in determining focus areas for TDM strategies, the Triangle Regional Model (TRM), and the Town's conceptual Slow Zone plan.

**Proposed budget and level of effort**

All work to be completed by Transportation Planner. Local Staff hours: 60 hours

**Task II-A-3: Street System Mileage (STBG-DA)**

Assemble the municipality street system changes from the last reporting year and data to the LPA.

**Objectives**

To maintain a current shapefile of Carrboro's street system and provide data to the LPA.

**Previous Work**

The Town will have submitted a current shapefile of the street system to the LPA.

**Proposed Activities**

1. Track changes to Carrboro's street system and maintain shapefile of current street system
2. Submit data to LPA with 4<sup>th</sup> quarter reports

**Products**

Provide the municipality's street system data to the LPA as part the 4th quarter progress report.

**Relationship to other plans and MPO activities**

Data can be used for CMP and regional TRM, as well as for various Town studies.

**Proposed budget and level of effort**

60 percent of work to be completed by GIS Analyst, 40 percent of work to be completed by Transportation Planner. Local Staff hours: 10 hours



**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

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

The Town will review population and employment change data estimated by the Community Viz 2.0 process and-or dwelling unit, population, and employment data relevant to the next MTP and the Triangle Regional Model (TRM). The Town will also collect monthly development review activities, building permit and Certificate of Occupancy (CO) data.

**Objectives**

To review dwelling unit, population, and employment data as part of the 2045 MTP, and the Travel Behavior Survey (TBS) of the Triangle Regional Model (TRM) processes and provide local development data to LPA.

**Previous Work**

In FY 2016 and again in 2018, the Town submitted place type and development status information to the LPA and reviewed population and employment control totals for use in the 2040 and 2045 MTP.

**Proposed Activities**

1. Review data generated by the TBS household survey
2. Use CommunityViz 2.0 to further analyze future development scenarios in the subregion that includes Carrboro
3. Collect monthly development review activities, building permits, and COs and submit to LPA

**Products**

1. Tabulation of development review proposals, building permits, and Certificate of Occupancies
2. Submit monthly data to the LPA and in summarize data in the quarterly progress report

**Relationship to other plans and MPO activities**

Relates to 2045 MTP and TRM processes.

**Proposed budget and level of effort**

90 percent of work to be completed by Transportation Planner, 10 percent of work to be completed by GIS Analyst. Local staff hours: 15 hours

**II-A-10 Mapping**

Staff will update geo-spatial mapping for SE data, development proposals/permits/COs, bike-pedestrian networks and facilities, highway element of the 2045 MTP, transit element of the 2045 MTP, etc.

**Objectives**

To support mapping activities for the 2045 MTP and generate maps as needed for other MPO or Town transportation planning tasks.

**Previous Work**

The Town provided local socioeconomic data for the 2040 and 2045 MTPs. Reviewed and modified CommunityViz 2040 and 2045 MTP place type and development status categories. The Town edited employment shapefile in Employment Analyst in preparation for the 2045 MTP, analyzed residential and employment density in the vicinity of bus stops for the Orange County Bus and Rail Investment Plan, provided downtown Carrboro parking inventory maps, and regularly updated transportation shapefiles based on new developments and completed projects.

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**Proposed Activities**

1. Review results of Community Viz 2.0 and edit data as necessary
2. Review maps made for the MTP, CTP, and other MPO-related activities
3. Provide any data or maps as requested by the LPA
4. Maintain current GIS data for all transportation planning activities in Carrboro

**Products**

1. Generate the following GIS shape files, SE data, development review/proposals, permits, COs, bike-pedestrian networks and facilities, data collection location base maps, etc.
2. Update of geodatabase of transit routes and stops, highway element of the MTP, bike-pedestrian element of the MTP, etc.

**Relationship to other plans and MPO activities**

2045 MTP, Carrboro Parking Plan, CHT NS-BRT Project, 2018 Bicycle Plan Update, Town Comprehensive Plan

**Proposed budget and level of effort**

80 percent of work to be completed by the GIS Analyst, 20 percent of work to be completed by Transportation Planner. Local staff hours: 65 hours

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

Town staff will inventory on- and off-street parking facilities in the Central Business Districts (CBD) and universities. Parking data to be collected include, number of spaces, parking fee rates (hourly daily, and monthly), average weekday costs and demand/occupancy.

**Objectives**

To develop and maintain a complete inventory of public and private parking spaces in downtown Carrboro, and in other areas as needed. Parking inventory will be analyzed before, during, and after construction of the 203 South Greensboro project to determine the effectiveness of strategies aiming to partner with local businesses who have excess parking available and facilitate their use to meet current and future parking needs.

**Previous Work**

The Town maintains an inventory of all municipal parking spaces. Parking studies and inventories were conducted by UNC graduate students in 2008 and 2014. In 2015-2016 the Town enlisted a consultant to conduct a major parking inventory and study of the downtown area.

**Proposed Activities**

1. Database of parking facilities, GIS shape files containing parking data
2. Use recommendations from parking study to inform Town parking policies

**Products**

1. Shapefile and spreadsheet with parking space count data and attributes

**Relationship to other plans and MPO activities**

Carrboro Downtown Parking Study, 2045 MTP, Bicycle Plan Update, Town Comprehensive Plan

**Proposed budget and level of effort**

50 percent of work to be completed by GIS Analyst, 50 percent of work to be completed by Transportation Planner. Local staff hours: 25 hours

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**II-A-12 Bike and Pedestrian Facilities Inventory**

The Town will update mapping for bike and pedestrian facilities inventory

**Objectives**

To make current the Town's GIS data on bicycle and pedestrian facilities and to provide up-to-date bicycle and pedestrian facilities information to LPA staff.

**Previous Work**

The Town has collected bicycle and pedestrian facility data for a number of planning processes, including previous MTPs, the CTP, and the 2009 Carrboro Bicycle Transportation Plan and 2018 Bike Plan Update.

**Proposed Activities**

1. Add features to GIS shapefiles of bicycle facilities and sidewalks
2. Send data as needed to LPA staff in development of the MTP or other MPO planning processes

**Products**

1. Updated bike-pedestrian GIS maps and attributes, including trails
2. Updated geodatabase of bike-pedestrian inventory
3. Collect bike-pedestrian facility information for SPOT, CMAQ/TAP funding

**Relationship to other plans and MPO activities**

Bicycle and pedestrian facility data is an important part of the bicycle and pedestrian element of the MTP, CTP, and numerous Town plans and programs. Monitoring changes in the town bike/ped network after the adoption of the 2018 Bike Plan update will be especially important.

**Proposed budget and level of effort**

60 percent of work to be completed by Transportation Planner, 40 percent of work to be completed by GIS Analyst. Local staff hours: 30 hours

**II-A-13 Bicycle and Pedestrian Counts**

The Town will contribute existing bicycle and pedestrian traffic information for local and regional planning processes as needed. The Town will continue to conduct bike and pedestrian counts as part of the traffic calming process and Safe Routes to School program.

**Objectives**

To collect continuous, reliable pedestrian and bicycle volume data that can be averaged over time and disaggregated for independent variables such as month, time, and weather. The Town will also supply bicycle and pedestrian travel data for regional planning processes.

**Previous Work**

The Town has collected bicycle and pedestrian data for a number of planning processes, including the 2009 Comprehensive Bicycle Transportation Plan and regional Mobility Report Card. The Town participated in a pilot program with the MPO/ITRE that installed pedestrian and bicycle counters on the Libba Cotten Bikeway and on Old NC 86, just north of the intersection with Old Fayetteville Road, and assumed control of these counters in Winter of 2016. Reports on trends in the data collected from the ITRE counters is provided to the Carrboro Board of Aldermen when requested.

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**Proposed Activities**

1. Review data collected by bike-ped counters previously installed by ITRE/MPO, and use counts for Town analysis and MPO data collection
2. Continue to conduct bicycle and pedestrian counts
3. Work with LPA staff to coordinate additional data collection efforts

**Products**

Spreadsheets or tally sheets with bicycle and pedestrian counts

**Relationship to other plans and MPO activities**

2045 MTP, CTP, Mobility Report Card, 2018 Bike Plan Update, Town Comprehensive Plan

**Proposed budget and level of effort**

All work to be completed by Transportation Planner. Local staff hours: 35 hours

**II-B-10 Transit Element of the MTP**

Support of the evaluation of the transit element of the 2045 MTP, including DO-LRT, Commuter rail and BRT activities.

**Objectives**

To provide input and evaluate the transit element of the 2045 MTP and participate in regional planning efforts related to the DO-LRT, Commuter rail and Bus Rapid Transit.

**Previous Work**

Town staff has participated in regional planning efforts related to the DO-LRT, Chapel Hill Bus Rapid Transit, Orange County Bus and Rail Investment Plan, and other transit projects.

**Proposed Activities**

1. Town staff will assist in the evaluation of transit preferred options, update of the 2045 transit tables and attributes, and geodatabase of transit preferred option, and final 2045 projects
2. Assist with public outreach related to transit projects, organize/reserve meeting spaces
3. Provide updates on transit projects to the Town's Advisory Boards

**Products**

1. Evaluation of transit preferred options
2. Update 2045 transit tables and attributes
3. Update of geodatabase of transit preferred option and final 2045 projects

**Relationship to other plans and MPO activities**

2045 MTP, CTP, Orange County Transit Plan

**Proposed budget and level of effort**

70 percent of work to be completed by Transportation Planner, 30 percent of work to be completed by Planning Administrator. Local staff hours: 35 hours

**II-B-17 Congestion Management Strategies**

The MPO is maintaining a Congestion Management Process (CMP) to address congestion within the metropolitan area boundary. The Town will contribute planning resources to this process as well as the Mobility Report Card and continued analysis of downtown Carrboro congestion.

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**Objectives**

To contribute to the ongoing development of the CMP, MRC, and continue research and analysis on downtown Carrboro traffic level of service (LOS).

**Previous Work**

The Town has contributed to the CMP and previous Mobility Report Cards. The Town has also conducted a number of local studies related to traffic and congestion within Town boundaries. Town staff has also worked on Transportation Demand Management efforts as a strategy for decreasing congestion.

**Proposed Activities**

1. Evaluation of CMP and MRC networks
2. Review of products and analyses
3. Provide GIS shape files

**Products**

1. GIS shapefile of sub-areas
2. Local and transit data as needed

**Relationship to other plans and MPO activities**

CMP, 2045 MTP, Mobility Report Card, Parking Study, Town Comprehensive Plan

**Proposed budget and level of effort**

60 percent of work to be completed by Transportation Planner, 40 percent of work to be completed by Planning Administrator. Local staff hours: 25 hours

**II-C-1 Short Range Transit Planning**

The Town will participate in short-range transit planning for the region, with a focus on the Chapel Hill-Carrboro area. Through the Transit Partners Committee, the Town will provide input on Chapel Hill Transit planning initiatives, including the Bus Rapid Transit project. The Town will coordinate with Orange County, GoTriangle, and the MPO on the update and implementation of the Orange County Transit Plan and the DO-LRT.

**Objectives**

To ensure that Carrboro plays a key role in Chapel Hill Transit planning, capital investment, and operations by continuing to work with Chapel Hill Transit on the NS-BRT and other new initiatives, short range planning, public involvement, and troubleshooting. The Town will also assist as needed in implementation of the Orange County Transit Plan and the DO-LRT, coordinating with Orange County, GoTriangle, and the MPO.

**Previous Work**

Town of Carrboro elected officials, advisory board members, and staff regularly attend Chapel Hill Transit Partners Committee meetings and N-S BRT Study meetings. The Town has provided input into initiatives such as the Comprehensive Operations Analysis, Eubanks Road Park-and-Ride Feasibility Study, and others. The Town worked with GoTriangle to begin peak-hour bus service from Carrboro to Durham.

**Proposed Activities**

1. Continue to participate in Transit Partners Committee
2. Attend staff working group meetings to update the Orange County Transit Plan

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

3. Coordinate with Durham-Orange Transit Plan Staff Working Group on service improvements and capital projects as part of the DO-LRT project, including providing information on transit access and service priorities
4. Review on-board transit survey information as it pertains to Carrboro and Carrboro ridership as part of the short-range and long-range planning efforts
5. Work with LPA staff on the 5-year plan

**Products**

1. 5-Year plan, System performance report, and GIS shape files of routes and proposed changes

**Relationship to other plans and MPO activities**

Orange County Transit Plan, 2045 MTP, CHT N-S BRT, CHT SRTP, DO-LRT

**Proposed budget and level of effort**

65 percent of work to be completed by Transportation Planner , 35 percent of work to be completed by Planning Administrator. Local staff hours: 75 hours

**III-A-1 Planning Work Program**

The Town will administer the FY 2020-2021 UPWP, and prepare and process amendments as needed. Working with MPO staff, Town staff will identify transportation planning emphasis areas for the subsequent fiscal year and prepare the FY 2021-2022 UPWP. Town staff will participate in UPWP oversight meetings with MPO staff and staff from other MPO member jurisdictions.

**Objectives**

To track and report on Carrboro's 2020-2021 UPWP activities, and process amendments to the UPWP if necessary. The Town will submit Carrboro's portion of the 2020-2021 UPWP to the MPO and participate in oversight of the UPWP process.

**Previous Work**

Town staff has prepared UPWPs each year and tracked the completion of UPWP tasks with quarterly progress reports. Progress reports have made clear how much funding remains for tasks in the fiscal year, guiding whether or not amendments are necessary. Town staff has also participated in LPA oversight meetings.

**Proposed Activities**

1. Complete quarterly reports for the 2020-2021 UPWP
2. Complete amendment spreadsheets as needed
3. Prepare Carrboro's 2021-2022 UPWP documents and budget
4. Attend LPA oversight meetings and review documents

**Products**

1. Development of draft and final FY21 UPWP
2. Quarterly invoices and reports
3. Amendment of UPWP as necessary
4. Transmittal of documentation, work products/deliverable highlighted elsewhere to the LPA

**Relationship to other plans and MPO activities**

Required by federal law, the UPWP is the mechanism for regional transportation planning and coordination in the MPO. It allocates a portion of STP-DA and transit funding received by the MPO for planning activities.

**Town of Carrboro**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**Proposed budget and level of effort**

70 percent of work to be completed by Transportation Planner, 30 percent of work to be completed by Planning Administrator. Local staff hours: 50 hours

**III-B-1 TIP**

Town staff will continue to implement planning, design, and construction of TIP projects. Town staff will assist with MTIP development and SPOT 6.0 activities.

**Objectives**

To facilitate timely progress on TIP projects and process amendments when necessary. The Town will continue to participate in review and coordination regarding the SPOT 6.0 prioritization process.

**Previous Work**

The Wilson Park Multi-use Path (U-4726-DF) is a recently-completed TIP project, the Homestead-Chapel Hill High School Multi-use Path (U-4726-DE) was completed in late 2018, and Bike/Ped improvements at the Franklin St/Brewer/Merritt Mill intersection are expected to be complete by the end of 2019. Projects currently underway include Morgan Creek Greenway Phases 1 and 2 (EL-4828), the Rogers Road Sidewalk (U-4726-DD), Bicycle Loop Detectors (U-4726-DF), and Jones Creek Greenway (C-5181), Operational Improvements along NC 54 from Old Fayetteville Rd to Orange Grove Road (R-5821A), Intersection Improvements at NC 54/Old Fayetteville Road (U-6070), and Bike/Ped Improvements along Estes Drive (EB-5886A).

**Proposed Activities**

1. Continue implementation of projects currently underway
2. Process MTIP amendments as necessary
3. Assist in SPOT 6.0 process

**Products**

1. 2020-2029 MTIP local agencies' supplement and MTIP amendments
2. Summary of public involvement activities
3. STP-DA/TAP project delivery status, and STP-DA obligated projects
4. SPOT-6 local prioritization and points assignments

**Relationship to other plans and MPO activities**

2020-2029 TIP, 2045 MTP, Orange County Transit Plan

**Proposed budget and level of effort**

70 percent of work to be completed by Transportation Planner, 30 percent of work to be completed by Planning Administrator. Local staff hours: 115 hours

**III-C-2 Environmental Justice**

Assist with the implementation of the MPO Environmental Justice and Limited English Proficiency programs within the Town of Carrboro. Ensure adequate public outreach and input by low income and minorities (EJ communities) in Carrboro.

**Objectives**

To assist MPO in implementing Environmental Justice plan to ensure equity in MPO planning processes.

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**Previous Work**

MPO staff created an Environmental Justice report in 2015 as part of the federal re-certification process. In 2018, Carrboro staff developed neighborhood specific outreach plans for the Rogers Road sidewalk project, crafted inclusive stakeholder lists for the NC 54 West Corridor Study, and facilitated public outreach related to Town Code and Land Use Ordinance

**Proposed Activities**

1. Assist with the implementation of the MPO Environmental Justice and LEP programs
2. Assist with outreach and ensure inclusive representation during the Town's Comprehensive Plan development

**Products**

1. Updated EJ/LEP mailing list (address and email) - community and groups
2. Summary of EJ/LEP outreach and analysis
3. Update demographic profile based local data of EJ/LEP community in Carrboro

**Relationship to other plans and MPO activities**

MPO Environmental Justice Plan, Title VI

**Proposed budget and level of effort**

60 percent of work to be completed by Transportation Planner, 30 percent of work to be completed by Planning Administrator, 10 percent of the work to be completed by the GIS Analyst. Staff hours: 10 hours

**III-C-4 Planning for the Elderly and Disabled**

The Town will document ADA planning and outreach activities in Carrboro.

**Objectives**

To continue efforts to emphasize the planning, development, evaluation, and reevaluation of transportation facilities and services for the elderly and disabled.

**Previous Work**

Staff routinely responds to disabled and elderly citizen concerns regarding the transportation system, primarily related to paratransit and accessibility of infrastructure. Development plans are reviewed for compliance with ADA standards. Staff and residents conducted a walkability audit of the downtown as part of 2016 Parking Study. In 2018 town staff received inquiries about improving bus stop accessibility and coordinated with CHT to ensure those stops were included in their design contract with a consultant.

**Proposed Activities**

1. Update ADA mailing list and route maps showing ADA target areas
2. Continue to support sound planning and transit access for disabled and elderly residents

**Products**

1. Updated ADA mailing list, plan, or activities, and route maps showing ADA target areas

**Relationship to other plans and MPO activities**

Recognition of ADA-related needs in urban transportation is required by FHWA and FTA regulations.

**Proposed budget and level of effort**

60 percent of work to be completed by Transportation Planner, 25 percent of work to be completed by Planning Administrator, 15 percent of the work to be completed by the GIS Analyst. Staff hours: 10 hours



**Town of Carrboro**  
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### **III-C-6 Public Involvement**

Ensure an early, proactive and a meaningful public participation and input throughout the transportation planning process in Carrboro, including providing the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process. Town staff will help assess the effectiveness of the current Public Involvement Process as required by the federal certification team. The Town will work to develop and enhance of the process of public dissemination of information.

#### **Objectives**

To provide opportunities for the public to contribute to the planning of local and regional transportation facilities, and to review and assist as needed with the Public Involvement Policy.

#### **Previous Work**

The Town has held citizens' informational workshops on many of its TIP projects under development the last few years. The Town coordinates with the MPO on public involvement for the MTP and TIP and with Chapel Hill Transit on service improvements and changes. The town performed substantial public outreach in 2019 in conjunction with updating the Bike Plan.

#### **Proposed Activities**

1. Update public involvement mailing list (and email address)
2. Hold public involvement activities for transportation projects
3. Collect data from the Town's interactive web-based maps
4. Facilitate Transportation Advisory Board meetings by creating agendas, minutes, and staff reports
5. Prepare materials and present to the local elected officials related to local and regional transportation planning topics

#### **Products**

1. Update public involvement mailing list (and email address)
2. Summary of public involvement activities, including means of advertisement, attendance, and response to comments
3. Report on the analysis of the effectiveness of the local agencies' public involvement
4. ADA checklist and activities
5. Staff reports for Board of Aldermen and advisory board meetings

#### **Relationship to other plans and MPO activities**

Public Involvement Policy, MTP, Bike Plan Update, Town Comprehensive Plan

#### **Proposed budget and level of effort**

65 percent of work to be completed by Transportation Planner, 35 percent of work to be completed by Planning Administrator, Staff hours: 100 hours

### **III-D-3 Special Studies**

Town staff will continue to conduct special studies related to local transportation issues, including working towards updating the Town's bike plan. The Town will also assist MPO and other local staff in the oversight of a corridor study for NC 54 West.

#### **Objectives**

To work on implementation of the update bicycle plan, additional studies may be needed to analyze potential locations for new or improved bike facilities throughout the town. Additionally, the Town will

**Town of Carrboro**  
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support analysis of downtown parking conditions based on the recommendations made in the Parking Plan and monitor conditions in downtown after the construction of the 203 S Greensboro project.

**Previous Work**

The Town has engaged in transportation-related studies such as the Comprehensive Bicycle Master Plan, the Bolin and Morgan Creek Greenway Conceptual Master Plans, the Safe Routes to School Action Plan, the Oak-Poplar Neighborhood Traffic Circulation Study, the West Main Street Road Diet Study, and the Downtown Carrboro Parking Study. The Town assisted in with the NC 54 West Corridor Study in 2017/18.

**Proposed Activities**

1. Analyze locations for bike improvements
2. Monitor downtown parking for 203 S Greensboro project
3. Review other Town plans and studies as necessary

**Products**

1. Data for use by MPO

**Relationship to other plans and MPO activities**

2045 MTP, CMP, 2009 Comprehensive Bicycle Plan, Town Comprehensive Plan

**Proposed budget and level of effort**

75 percent of work to be completed by Transportation Planner, 15 percent of work to be completed by Planning Administrator, 10 percent of work to be completed by GIS Analyst. Staff hours: 55 hours

**III-E-1 Management and Operations**

Administrative tasks necessary to maintaining the 3C planning process will be completed.

**Objectives**

To participate in and contribute to MPO-related meetings and adhere to the goals and tasks laid out in the Unified Planning Work Program. Town staff will ensure that elected officials have adequate information to make informed decisions on local and regional transportation issues. Town staff will also ensure the local transportation advisory board has the information it needs to develop sound recommendations on local and regional transportation issues. To improve staff efficiency and knowledge through training sessions and educational materials.

**Previous Work**

Similar to proposed activities described below.

**Proposed Activities**

1. Attend and participate in MPO Board and TC meetings
2. Staff development through professional training courses, seminars, and conferences
3. Attend and participate in MPO subcommittee meetings

**Relationship to other plans and MPO activities**

This task supports all plans and MPO activities.

**Proposed budget and level of effort**

75 percent of work to be completed by Transportation Planner , 25 percent of work to be completed by Planning Administrator. Local staff hours: 120

# Town of Chapel Hill

	Task Description	STBGP 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II-A</b>	<b>Surveillance of Change</b>														
1	Traffic Volume Counts	\$1,113	\$4,451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,113	\$0	\$4,451	\$5,564
2	Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Transit System Data	\$0	\$0	\$0	\$0	\$870	\$870	\$6,960	\$0	\$0	\$0	\$870	\$870	\$6,960	\$8,700
6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Mapping	\$2,319	\$9,274	\$0	\$0	\$3,410	\$3,410	\$27,280	\$0	\$0	\$0	\$5,729	\$3,410	\$36,554	\$45,693
11	Central Area Parking Inventory	\$649	\$2,597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$649	\$0	\$2,597	\$3,246
12	Bike & Ped. Facilities Inventory	\$1,484	\$5,935	\$0	\$0	\$1,052	\$1,052	\$8,416	\$0	\$0	\$0	\$2,536	\$1,052	\$14,351	\$17,939
13	Bike & Ped. Counts	\$1,113	\$4,451	\$0	\$0	\$856	\$856	\$6,848	\$0	\$0	\$0	\$1,969	\$856	\$11,299	\$14,124
		\$0	\$0			\$0	\$0	\$0							
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0			\$0	\$0	\$0							
1	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Highway Element of the MTP	\$2,040	\$8,161	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,040	\$0	\$8,161	\$10,201
10	Transit Element of the MTP	\$0	\$0	\$0	\$0	\$952	\$952	\$7,616	\$0	\$0	\$0	\$952	\$952	\$7,616	\$9,520
11	Bicycle & Ped. Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	Financial Planning	\$1,206	\$4,822	\$0	\$0	\$653	\$653	\$5,224	\$0	\$0	\$0	\$1,859	\$653	\$10,046	\$12,558
17	Congestion Management Strategies	\$1,855	\$7,419	\$0	\$0	\$820	\$820	\$6,560	\$0	\$0	\$0	\$2,675	\$820	\$13,979	\$17,474
18	Air Qual. Planning/Conformity Ana	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0							
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0			\$0	\$0	\$0							
	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$880	\$880	\$7,040	\$0	\$0	\$0	\$880	\$880	\$7,040	\$8,800
		\$0	\$0			\$0	\$0	\$0							
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0			\$0	\$0	\$0							
	Planning Work Program	\$927	\$3,710	\$0	\$0	\$760	\$760	\$6,080	\$0	\$0	\$0	\$1,687	\$760	\$9,790	\$12,237
		\$0	\$0			\$0	\$0	\$0							
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0			\$0	\$0	\$0							
	TIP	\$4,173	\$16,694	\$0	\$0	\$2,449	\$2,449	\$19,592	\$0	\$0	\$0	\$6,622	\$2,449	\$36,286	\$45,357
		\$0	\$0			\$0	\$0	\$0							
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr .Reg. Reqs.</b>	\$0	\$0			\$0	\$0	\$0							
1	Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$240	\$240	\$1,920	\$0	\$0	\$0	\$240	\$240	\$1,920	\$2,400
5	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Public Involvement	\$0	\$0	\$0	\$0	\$488	\$488	\$3,904	\$0	\$0	\$0	\$488	\$488	\$3,904	\$4,880
7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0							
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0			\$0	\$0	\$0							
1	Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$0	\$236	\$236	\$1,888	\$0	\$0	\$0	\$236	\$236	\$1,888	\$2,360
3	Special Studies	\$3,122	\$12,490	\$0	\$0	\$820	\$820	\$6,560	\$0	\$0	\$0	\$3,942	\$820	\$19,050	\$23,812
4	Regional or Statewide Planning	\$2,782	\$11,129	\$0	\$0	\$1,040	\$1,040	\$8,320	\$0	\$0	\$0	\$3,822	\$1,040	\$19,449	\$24,311
		\$0	\$0			\$0	\$0	\$0							
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0			\$0	\$0	\$0							
1	Management & Operations	\$1,199	\$4,796	\$0	\$0	\$1,624	\$1,624	\$12,992	\$0	\$0	\$0	\$2,823	\$1,624	\$17,788	\$22,235
	Totals	\$23,983	\$95,929	\$0	\$0	\$17,150	\$17,150	\$137,200	\$0	\$0	\$0	\$41,133	\$17,150	\$233,129	\$291,411

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

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

The Town of Chapel Hill will conduct local traffic counts for planning purposes and provide data to DCHC-MPO as needed. The locations will be located in the downtown and in the Blue Hill (formerly called Ephesus-Fordham) District, and will serve to support local plans and feed into the MPO Congestion Mitigation Process and other regional studies. Town staff have formed a traffic analytics working group to collect and analyze traffic data in Town. The Town assists with and analyzes results of Transportation Impact Analyses for most developments in Town.

**Objectives**

- Collect local traffic counts
- Create plan for expanding model to rest of Town
- Gather traffic counts as components of development TIAs

**Previous Work**

- Local traffic counts for local studies/plans
- Traffic Impact Analyses related to proposed developments
- Mobility Report Cards
- Traffic model for the Blue Hill District and developed mitigation strategies

**Proposed Activities**

- Collect traffic data
- Receive training on Transmodeler software
- Manage TIA evaluation study
- Provide traffic data and reports to MPO
- Work with LPA staff to determine traffic count locations for MRC and other studies

**Products**

- Traffic volume data

**Relationship to other plans and MPO activities**

CMP, Mobility Report Card and TRM, Chapel Hill traffic analytics

**Proposed budget and level of effort**

Task will be undertaken by Transportation Planners and Division Manager. 120 hours

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

The Town of Chapel Hill will continue to undertake tasks associated with mapping and updates to UPWP transportation planning activities such as the CMP, MTP, CTP, TIP, SPOT/ Prioritization, traffic counts, bicycle and pedestrian counts and inventory, transit routes, land use, development review, socio-economic and demographic trends, and environmental factors. The Town mapping and spatial GIS products will support the MPO overall GIS and geo-spatial management system.

**Objectives:**

- Provide maps for use in various MPO planning activities
- Update base maps
- Update and maintain geo-spatial maps
- Provide mapping support for Community Viz, modeling, MTP, CTP, etc.
- Maintain GIS-Online

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Previous Work:**

- Mapping for 2040 & 2045 MTP, SPOT processes, and STIP projects
- Traffic/bike-ped count locations
- Station area planning for future transit stations

**Proposed Activities:**

- Collect updated geospatial information
- Create files and maps containing MPO transportation information

**Products:**

- Maps for various MPO planning activities
- Region-wide GIS files
- Geo-spatial mapping
- Update count maps
- ArcGIS Online

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

Triangle Regional Model, MTP, CTP, CMP, Mobility Report Card, MTIP development, SPOT, land-use scenarios, environmental layers, and others

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

Task will be undertaken by Transportation Planners and Division Manager. 250 hours

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

The Town of Chapel Hill will continue to update the model of existing parking in the downtown, which includes number of spaces, fees, and demand/occupancy data. The Town will share this data with the MPO as requested.

**Objectives:**

- Develop and maintain a complete inventory of public and private parking spaces in downtown Chapel Hill

**Previous Work:**

- Updated the inventory and model as part of the Downtown Circulation Study

**Proposed Activities:**

- Update database of downtown parking facilities
- GIS shape files containing parking data

**Products:**

- Shapefile and spreadsheet with parking space count data and attributes

**Relationship to other plans and MPO activities:**

2045 MTP, Chapel Hill Mobility and Connectivity Plan, NCDOT TIP projects

**Proposed budget and level of effort:**

Task will be undertaken by the Transportation Planners and Division Manager. 70 hours

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Task II-A-12: Bike & Ped Facilities Inventory**

The Town of Chapel Hill will maintain and update the existing inventory of bicycle and pedestrian facilities throughout the community. This inventory will assist in MPO-related projects. It will also allow the Town to identify new bike-ped projects to submit to SPOT and other funding sources.

**Objectives:**

- Provide inventories of bicycle and pedestrian facilities for use in MPO planning activities
- Update base maps of bicycle and pedestrian networks

**Previous Work:**

- Maintained a database of bicycle and pedestrian facilities

**Proposed Activities:**

- Collect updated data on bicycle and pedestrian facilities
- Monitor new construction and incorporate into base data
- Create files and maps containing MPO transportation information
- Collect bike-pedestrian facility information for SPOT, CMAQ/TAP funding

**Products:**

- Updated bike-ped GIS maps and attributes
- Updated database

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

2045 MTP, CTP, Mobility Report Card, and other MPO activities.

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

Task will be undertaken by Transportation Planners and Division Manager. 160 hours

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

The Town of Chapel Hill will conduct ongoing bike and pedestrian counts at various locations in Town, using permanent and mobile counters, and as-needed one-time counts. The Town will use the data to evaluate the effectiveness of TIP projects and determine need for future infrastructure.

**Objectives:**

- Ongoing bike and ped counts at permanent locations
- Conduct counts with mobile ped counters
- Online platform for sharing the data publicly

**Previous Work:**

- Bike-ped counts at five greenway and three permanent roadway locations
- First round of semi-annual bike-ped counter reports

**Proposed Activities:**

- Collect data regularly from counters
- Implement a schedule for the mobile ped counters
- Implement an open data platform for sharing data publicly
- Share data with MPO as needed

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Products:**

- Chapel Hill bike-ped counter online data available for public and MPO use
- Semi-annual reports for each counter

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

Town planning projects and processes, Mobility Report Card, MTP and CTP

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

Task will be undertaken by Transportation Planners and Division Manager. 120 hours

**Task II-B-9: Highway Element of MTP**

The Town of Chapel Hill will assist and support the MPO on the evaluation of highway elements of the 2045 MTP. Staff will work to evaluate and implement highway projects from the adopted 2045 MTP. Staff will participate in the CTP 2.0 process. Town of Chapel Hill will assist MPO staff in finalizing the US 15-501 Corridor Study, and NCDOT in other roadway studies as necessary.

**Objectives:**

- Work with NCDOT to develop designs for highway projects in Chapel Hill
- Design local roadway projects from adopted 2045 MTP
- Assist in development of US 15-501 Corridor Study and others

**Previous Work:**

- 2040 and 2045 MTP
- Travel demand forecast
- Capacity deficiency analysis
- Elliott Road Extension and other highway projects

**Proposed Activities:**

- Develop key data for roadway performance
- Design local roadways in 2045 MTP
- Work with NCDOT and consultants to design highways in MTP
- Attend meetings and provide data for the US 15-501 Corridor Study and others

**Products:**

- Key data for highway projects
- Roadway design for Elliott Road Extension
- Designs for NC 54, US 15-501, I-40/NC 86
- MPO Corridor Study for US 15-501 and others

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

2045 MTP and CTP, STIP/TIP.

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

Task will be undertaken by Transportation Planners and Division Manager. 220 hours

**TOWN OF CHAPEL HILL**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**Task II-B-16: Financial Planning**

The Town of Chapel Hill will participate and assist the MPO and GoTriangle in developing revenue and expenditure assumptions and data related to the Orange and Durham County Transit Plans and other MPO-related finances. Town staff will develop cost estimates and budgets for SPOT submissions, TIP projects, other projects from the 2045 MTP, and monitor budgets of projects underway.

**Objectives:**

- Provide financial information as necessary to the Orange County Transit Plan
- Monitor implementation of the Orange County Transit Plan
- Create, adopt and monitor budgets for TIP projects
- Cost estimates for SPOT submissions and internal CIP projects

**Previous Work:**

- Financial element of the 2040 & 2045 MTP
- Orange County Transit Plan financial element
- Budgets for existing TIP and MTP projects

**Proposed Activities:**

- Monitor financial reporting from GoTriangle for Orange County Transit Plan
- Submit necessary documentation to GoTriangle for OC Transit Plan projects
- Attend monthly Orange County Transit Plan Staff Working Group meetings
- Budget work for Town and regional TIP projects

**Products:**

- Orange County Transit Plan financial element
- Quarterly invoices and reports for OC Transit Plan projects
- Cost estimates and budgets for TIP and SPOT projects

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

Annual UPWP, TIP, 2045 MTP

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

Task will be undertaken primarily by the Division Manager. 130 hours

**Task II-B-17: Congestion Management Strategies**

The Town of Chapel Hill works with the MPO to refine the collection and analysis of data related to the congestion management system for the MPO. Town staff will prepare information and analysis specific to evaluating congestion in Chapel Hill and develop strategies to address these issues. Town staff also coordinate Transportation Demand Management (TDM) activities for numerous businesses in Chapel Hill as well as the general public. The Chapel Hill TDM program is part of a larger regional effort that is responsible in part to the MPO.

**Objectives:**

- To identify areas of congestion within the Town based on count information and community survey responses
- Develop strategies to address congested corridors and key intersections
- Prepare biannual report for Town Council highlighting key issues and proposed recommendations
- Coordinate with MPO staff to develop regional CMS



**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

- Promote TDM to Chapel Hill businesses, including Town Hall

**Previous Work:**

- Coordination with MPO for collection of 2016 data
- Ongoing TDM efforts

**Proposed Activities:**

- Coordinate with MPO on data collection
- Provide MPO with local congestion data
- Support MPO development of MPO CMS
- Continue TDM activities throughout Town

**Products:**

- MPO CMS Report
- Chapel Hill data for Mobility Report Card
- Results from biannual TDM survey

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

MPO CMS Report, MTP, and regional TDM

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

Task will be undertaken by Transportation Planners and Division Manager. 200 hours

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

Administer the Chapel Hill element of the FY20 UPWP that describes all transportation and transportation-related planning activities anticipated within the Town of Chapel Hill and DCHC MPO planning area. Staff will prepare and process quarterly reports and amendments as needed. Evaluate transportation planning work needs and emphasis areas and prepare the FY 21 UPWP.

**Objective:**

- Administer the FY20 UPWP
- Develop, maintain, and complete the UPWP quarterly reports and invoices
- Prepare UPWP amendments as necessary
- Prepare the FY21 UPWP

**Previous Work:**

- Previous UPWPs

**Proposed Activities:**

- Review and amend relevant portions of the FY20 UPWP
- Prepare and submit quarterly reports
- Develop the FY21 UPWP
- Attend MPO Oversight Committee meetings as required

**Products:**

- Amendments to the current UPWP as necessary
- Quarterly reports for current UPWP
- FY21 UPWP

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

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

The UPWP captures work required for all other plans and MPO activities.

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

Task will be undertaken primarily by the Division Manager. 100 hours

**Task III-B-1: Transportation Improvement Program**

The Town of Chapel Hill will assist the MPO in developing projects for consideration in the next update of the State and MPO transportation improvement program. Staff will participate in the SPOT 6.0 development, including attending meetings to develop project priorities and assign local input points. Town staff will also work to implement projects currently in the STIP, including bike-ped improvements on Old Durham Road, Estes Drive, Estes Drive Extension, and the sidepath on US -15-501.

**Objectives:**

- Develop and prioritize SPOT 6.0 projects for inclusion in the STIP
- Plan and implement projects in current and previous STIPs

**Previous Work:**

- Development of projects for SPOT 4.0 and 5.0
- TIP project planning and implementation

**Proposed Activities:**

- Prepare SPOT 6.0 projects
- Prepare TIP amendments as necessary
- Plan and implement current and past STIP projects

**Products:**

- Final project submissions for SPOT 6.0
- TIP amendments as necessary
- Budgets and plans for new STIP projects
- Status updates on existing STIP projects

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

2040/2045 MTP and CTP, Chapel Hill Mobility and Connectivity Plan

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

Task will be undertaken by Transportation Planners and Division Manager. 450 hours

**Task III-D-3 Special Studies**

Participate in ongoing special studies, including multiple US 15-501 Feasibility & Corridor Studies, NC 54 NEPA/Design, Blue Hill TIA, Chapel Hill traffic analytics, station area infrastructure study, and others.

**Objectives:**

- Provide staff support to special studies that impact the DCHC MPO

**Previous Work:**

- Staff assistance to US 15-501 Feasibility Study and Corridor Study

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

- I-40 Managed Lane Feasibility Study
- Draft Blue Hill TIA
- N-S BRT alternatives analysis

**Proposed activities:**

- Attend coordination meetings
- Prepare data on request
- Provide updates to elected officials
- Continue work on other studies that impact the DCHC MPO

**Products:**

- Completed special studies

**Relationship to Other Plans and MPO Activities**

CTP, MTP and STIP/TIP, CMP, Mobility Report Card, TRM, and others

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

Task will be undertaken by Transportation Planners and Division Manager. 330 hours

**Task III-D-4: Regional or Statewide Planning**

The Town will continue to work with GoTriangle to implement specific elements of the regional light rail project and Orange County Transit Plan, including plan review, meeting coordination, and developing station area land use plans. The Town will continue to collaborate on projects with NCDOT, the Town of Carrboro, Durham, UNC and Orange County.

**Objectives:**

- Coordinate with GoTriangle to provide input into ongoing environmental and transportation studies related to DOLRT
- Coordinate with UNC on specific alignment and station development issues
- Prepare Chapel Hill Light Rail Station Area Planning Studies
- Continue collaboration on other existing and new projects with regional/state partners

**Previous Work:**

- Coordinated with GoTriangle on the Station Area Grant application and the DEIS for DOLRT
- Collaborated with NCDOT and regional partners on numerous studies and projects

**Proposed Activities:**

- Regular participation at project scoping, environmental study and public meetings conducted by GoTriangle.
- Review and comment on various elements of the light rail design
- Prepare small area plans and other related land use changes at station area locations
- Work with regional partners on plans and projects as needed

**Products:**

- Station area planning documents
- Updated land use plans
- Attendance at light rail entitlement, joint development and design meetings

**TOWN OF CHAPEL HILL  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

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

MTP, the Orange/Durham County Transit Plans, and STIP/TIP

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

Task will be undertaken by Transportation Planners and Division Manager. 300 hours

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

The Town will assist and support the DCHC MPO efforts in complying with federal requirements. Town staff will attend DCHC MPO and other regional meetings. The continuing transportation planning process requires considerable administrative time for attending monthly committee meetings, preparing agendas and minutes to these meetings, attending trainings/conference, and performing other administrative duties related to being a MPO member jurisdiction. Town staff also manages meetings for the Transportation and Connectivity Advisory Board and frequently presents MPO-related information and plans to the Town Council.

**Objectives:**

- Perform all tasks necessary to conduct successful and forward-thinking transportation planning in the Town of Chapel Hill
- Fulfill duties of MPO member jurisdiction
- Keep advisory board and Town Council informed of transportation-related activities

**Previous Work:**

- Attend MPO TC, Board, and sub-committee meetings
- Liaise to the Transportation and Connectivity Advisory Board

**Proposed Activities:**

- Attend all MPO TC, Board and sub-committee meetings
- Provide technical assistance to the MPO
- Staff Town advisory board meetings
- Brief Town MPO Board representatives prior to each meeting
- Review and comment on federal and state transportation-related plans, programs, regulations and guidelines pertaining to the Town of Chapel Hill
- Present to Council as necessary and appropriate

**Products:**

- Attendance at MPO meetings
- Feedback and comments from Council and advisory boards as appropriate

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

This task supports all plans and MPO activities.

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

Task will be undertaken by Transportation Planners and Division Manager. 130 hours

## City of Durham &amp; GoDurham

	Task Description	STBGP		Sec. 104(f)		Section 5303			Section 5307			Task Funding Summary			
		133(b)(3)(7)		PL		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local		FTA				
		20%	80%	20%	80%	10%	10%	80%	20%		80%				
<b>II-A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$8,076	\$8,076	\$64,608	\$11,084		\$44,336	\$19,160	\$8,076	\$108,944	\$136,180
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	11 Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12 Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Highway Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,198	\$0	\$4,793	\$5,991
	10 Transit Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,016		\$4,064	\$2,540	\$326	\$11,465	\$14,331
	11 Bicycle & Ped. Element of the MTP	\$31,198	\$124,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,198	\$0	\$124,793	\$155,991
	12 Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	14 Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	16 Financial Planning	\$0	\$0	\$0	\$0	\$326	\$326	\$2,608	\$19,668		\$78,672	\$19,994	\$326	\$81,280	\$101,600
	17 Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$2,610	\$2,610	\$20,880	\$21,124		\$84,496	\$23,734	\$2,610	\$105,376	\$131,720
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	Planning Work Program	\$1,198	\$4,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,198	\$0	\$4,793	\$5,991
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	TIP	\$4,793	\$19,171	\$0	\$0	\$653	\$653	\$5,224	\$2,036		\$8,144	\$7,482	\$653	\$32,539	\$40,674
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr. Reg. Reqs.</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Title VI	\$0	\$0	\$0	\$0	\$326	\$326	\$2,608	\$736		\$2,944	\$1,062	\$326	\$5,552	\$6,940
	2 Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	4 Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,972		\$7,888	\$3,496	\$326	\$15,289	\$19,111
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Plng.	\$5,991	\$23,964	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$5,991	\$0	\$23,964	\$29,955
	3 Special Studies	\$5,991	\$23,964	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$5,991	\$0	\$23,964	\$29,955
	4 Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Management & Operations	\$1,198	\$4,793	\$0	\$0	\$5,207	\$5,207	\$41,656	\$4,328		\$17,312	\$10,733	\$5,207	\$63,761	\$79,701
<b>Totals</b>		\$53,964	\$215,856	\$0	\$0	\$17,850	\$17,850	\$142,800	\$61,964		\$247,856	#####	\$17,850	\$606,512	\$758,140

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**II-B-9: Highway Element of the MTP**

The MPO will continue maintenance of highway elements of the Comprehensive Transportation Plan and Metropolitan Transportation Plan. The City will assist and support the MPO efforts. Specifically, the City will assist in the evaluation of any needed amendments to the plans. Also, the City will identify and evaluate highway facilities to be included as part of the MPO highway component of the CTP and MTP.

**Objectives:**

1. To identify a list of highway projects based on travel demand and deficiencies;
2. To develop a series of highway alternatives (i.e., set of highway projects with a distinct objective); and,
3. To develop key data for each highway project such as capacity, length, alignment, cost, implementation year, etc.

**Previous Work:**

1. 2045 MTP;
2. Congestion Management Process;
3. Triangle Regional Model;
4. Travel demand forecast; and,
5. Capacity deficiency analysis.

**Proposed Activities:**

1. Establish evaluation criteria;
2. Develop key data for highway projects;
3. Re-evaluation of 2045 highway element;
4. Generate highway projects and alternatives;
5. Evaluate highway projects and alternatives; and,
6. City Council and MPO Board comments on alternatives.

**Products:**

1. Amendments to the CTP and 2045 MTP as needed
2. Preliminary identification of issues/concerns to address in future MTP updates

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

Before the highway element can be developed, several other tasks must be successfully completed including: TRM update; travel demand forecasts; capacity deficiency analysis. In addition, and the Congestion Management Process will be important to this task.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

**II-B-10: Transit Element of the MTP**

The City of Durham will continue maintenance of transit elements of the Comprehensive Transportation Plan and the 2045 MTP. Transit evaluation will include fixed-route bus service, fixed-guideway transit,

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highway capacity transit and demand responsive transit. Using travel behavior, ridership forecasts and other analysis, evaluation of transit element will look at unmet needs, new services areas and potential markets. Performance measures will be established for evaluating transit alternatives. An extensive roster of transit routes, projects and services will be identified based on the current routes, 2013 base year, transit feasibility studies, transit 5-year and master plans, travel demand forecast and capacity deficiency analysis. Different combinations of these services will produce a variety of transit alternatives that will be analyzed to find the alternative that best meets the CTP/MTP Goals and Objectives and targets, and meets the fiscal constraint requirement. Each alternative will characterize a one or more emphasis area such as new roadways, transit intensive, etc. The transit element of the Comprehensive Transportation Plan (CTP) will be developed in parallel with the MTP, but will likely have a different set of constraints (e.g., no fiscal constraint).

**Objectives:**

1. To identify a list of transit routes, projects and services based on completed transit studies, travel demand and deficiencies;
2. To develop a series of transit alternatives (i.e., set of transit routes, projects and services with a distinct objective); and,
3. To develop key data for each transit project such as route, ridership capacity (e.g., load capacity and headway), service hours, cost, implementation year, etc.

**Previous Work:**

1. 2045 MTP;
2. Feasibility studies (regional transit plans , STAC, US 15-501 Transit Corridor and I-40/NC 54 Transit Corridor, Chapel Hill Transit Master Plan, etc.);
3. Transit 5-year TDP and master plans;
4. Travel demand forecast; and,
5. Capacity deficiency analysis.

**Proposed Activities:**

1. Establish evaluation criteria;
2. Develop key data for transit services;
3. Generate transit projects and alternatives;
4. Evaluate transit projects and alternatives; and,
5. City Council and MPO Board comments on alternatives and draft MTP and CTP.

**Products/Deliverables:**

1. Amendments to the CTP and 2045 MTP as needed
2. Preliminary identification of issues/concerns to address in future MTP updates
3. Commuter Rail Transit MIS study.

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

Before the transit element can be developed, several other tasks must be successfully completed including: TRM update and surveys; travel demand forecasts; capacity deficiency analysis. In

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addition, transit plans and feasibility studies, the Congestion Management Process and CTP will be important input to this task.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

**Task II-B-11: Bicycle and Pedestrian Element of the MTP**

The City of Durham will continue maintenance of the bicycle and pedestrian elements of the Comprehensive Transportation Plan and the 2045 MTP. The MPO will continue work on the implementation of the Durham Bike+Walk Implementation Plan. The City is proposing the development of a new bicycle plan focused on developing a low-stress bicycle network of protected bike lanes, greenways, and neighborhood bike routes.

**Objectives:**

1. Update the MTP/CTP bicycle and pedestrian elements, project descriptions and cost information;
2. Collect public input on bicycle and pedestrian facilities and programs to be included in the CTP/2045 MTP;
3. Update the MTP ancillary planning and program information.
4. Coordinate existing local and regional plans and projects with MTP bicycle and pedestrian element;
5. Update MTP bicycle and pedestrian Element maps; and,
6. Work with local communities on Regional Priority Lists, in order to implement MTP Bicycle and Pedestrian elements through the TIP.

**Previous Work:**

1. Preparation of the bicycle and pedestrian elements of the 2040 MTP.
2. Durham Bike+Walk Implementation Plan

**Proposed Activities:**

1. Collect planned and proposed bicycle and pedestrian project information from local and regional plans and forums for inclusion in the MTP/CTP;
2. Create and update bicycle and pedestrian facility maps;
3. Create and update bicycle and pedestrian demand analysis;
4. Coordinate planning activities between local and regional agencies for bicycle, and pedestrian, trail/greenway and TDM initiatives.

**Products/Deliverables:**

1. Amendments to the CTP and 2045 MTP as needed
2. Preliminary identification of issues/concerns to address in future MTP updates
3. Durham Low-Stress Bicycle Network Plan

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

Planning activities for the CTP/MTP Bicycle and Pedestrian Element will be coordinated with local



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and regional bicycle, pedestrian, greenway and TDM Plans, in order to capture all proposed projects within the MPO.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

\$150,000 consultant fees for Durham Low-Stress Bicycle Network Plan

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

Administer the FY 2019-2020 Unified Planning Work Program (UPWP) and prepare and process amendments as needed. Evaluate transportation planning work needs and emphasis areas and prepare the FY 2021 UPWP. Prepare quarterly progress reports, document expenditures for the various planning work items, and file for reimbursement of expenditures from the PL and STP-DA funds account and other federal funds.

**Objective:**

1. To prepare and continually maintain a UPWP that describes all transportation and transportation-related planning activities anticipated within the City of Durham and DCHC MPO planning area for the FY 2019-2020 UPWP.
2. To develop, maintain, and complete the UPWP in conformance with applicable federal, state, and regional guidelines.
3. To prepare UPWP amendments as necessary and requested by member agencies, to reflect any change in programming or focus for the current fiscal year.

**Previous Work:**

1. Previous UPWPs
2. Previous Amendments to the UPWP

**Proposed Activities:**

1. Review and amend relevant portions of the UPWP to meet new planning requirements and/or circumstances pertinent to the MPO emphasis and transportation planning objectives.
2. Develop a new UPWP for the DCHC planning area covering the next program year. The development of a new UPWP will be prepared in cooperation with NCDOT and subject to the development process and public involvement endorsed by the MPO Board.

**Expected Work Products:**

1. Amendments to the current UPWP as necessary.
2. Development of the FY 2021 UPWP.

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

The Planning Work Program documents the work conducted for other plans and MPO activities and enables reimbursement for work performed.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

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**III-B-1: Transportation Improvement Plan**

Amend TIP/ STIP as needed. Finalize development of the FY 2020-2029 TIP and begin development of the FY 2022-2031 TIP. This includes the refinement of the MPO Priority Needs and the identification of the transportation projects, programs, and services towards which the MPO will direct STPBG, CMAQ, TAP, and other federal/state funds.

**Objectives:**

As the Lead Planning Agency (LPA) of the DCHC MPO, the City of Durham, Transportation Division is responsible for annually developing, amending, adjusting and maintaining the TIP for the metropolitan area. Under this activity, the LPA will update and amend the current, seven-year program of transportation improvement projects that is consistent with the 2045 Metropolitan Transportation Plan, STIP, the State Implementation Plan (SIP), EPA Air Quality Conformity Regulations and FHWA/FTA Planning Regulations.

**Previous Work:**

DCHC MPO Transportation Improvement Programs.

**Proposed Activities:**

1. Develop transportation improvement projects for consideration by the City Council.
2. Develop FY 2020-2029 TIP and FY 2022-2031 TIP
3. Refine project ranking methodology and priority system.
4. Conduct appropriate public participation for the TIP consistent with the MPO Public Involvement Policy.
5. Conduct formal amendments and adjustments as necessary.
6. Produce and distribute TIP documents for local officials.
7. Attend regular meetings with NCDOT to exchange information regarding transportation improvement projects.

**Expected Work Product:**

1. Work with the MPO in the development of STI.
2. Assist and provide support to the LPA regarding STI
3. FY 2020-2029 and FY 2022 -2031 Transportation Improvement Program
4. Develop and refine procedures necessary for TIP preparation and amendments as necessary.
5. TIP Amendments and Adjustments as necessary.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 360 hours

**III-C-6: Public Involvement**

The City of Durham will continue to provide an early, proactive and a meaningful public participation and input throughout the transportation planning process, including providing for open exchange of information and ideas between the public and transportation decision-makers.

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**Objectives:**

To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process. To assess the effectiveness of the current Public Involvement Process as required by the MPO, and to develop and enhance the process of public dissemination of information.

**Previous Work:**

1. MPO Public Involvement Process.
2. Newsletters, emails, websites, advertisements.

**Proposed activities:**

1. Administer the MPO Public Participation Process as needed.
2. Apply the Public Involvement Process to transportation programs and tasks:
3. Public meetings, workshops, and outreach programs to increase public participation, information dissemination, and education.

**Expected Work Products:**

1. Public meetings, website postings, flyers, etc.
2. Support of Citizen Advisory Committee

**Relationship to other plans and MPO activities**

Public involvement is used throughout the MPO planning process in support of all activities.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

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

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

**Objectives:**

1. To ensure that the goals, objectives and needs of the DCHC MPO are integrated in the environmental planning process of transportation projects; and,
2. To ensure the needs of the citizens in the City portion of the DCHC MPO planning area are considered in the project planning process.

**Previous Work:**

Regular project scoping, environmental study and public meetings, especially those conducted by the NCDOT and GoTriangle.

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**Proposed Activities:**

1. Regular participation at project scoping, environmental study and public meetings, especially those conducted by the NCDOT and GoTriangle;
2. Review and comment on project scoping and environmental documents;
3. The City participation in NEPA process for TIP projects.

**Products/Deliverables:**

Written comments on project scoping and environmental studies, activities and documents;

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

The activities of this task are directly related to transportation projects in the long-range transportation plan and to projects that are being considered for TIP funding.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 450 hours

**III-D-3: Special Studies**

The City will participate in MPO special studies including the US 15-501 Corridor Study and the Central Durham Study.

**Objectives**

1. To develop focused studies for US 15-501 and central Durham.

**Previous Work**

1. Special studies on various corridors and areas of the MPO.

**Proposed Activities**

1. Kickoff meeting and participation on steering committees
2. Development of a draft study and a final study
3. Website postings and public involvement

**Products**

1. Study documents

**Relationship to Other Plans and MPO Activities**

The US 15-501 corridor and central Durham study will include analysis related to the Highway and Bicycle and Pedestrian Elements of the MTP.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 450 hours

**III-E-1: Management and Operations**

The City will assist and support the DCHC MPO efforts in complying with the federal 3-C process. The

**City of Durham**  
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City of Durham staff will attend both DCHC MPO and regional meetings. The continuing transportation planning process requires considerable administrative time for attending monthly committee meetings, preparing agendas and minutes to these meetings, and attending training.

**Objective:**

To assist, support, and facilitate an open Comprehensive, Cooperative, and Continuing (3C) transportation planning and programming process at all levels of government in conformance with applicable federal and state requirements and guidelines as described in the 3C Memorandum of Understanding.

**Previous Work:**

1. Management of the 3C process using previous Unified Work Program and prospectus documents, transportation plans, and Memorandum of Understanding. Specifically, previous tasks include but not limited to preparation of Technical Committee (TC) and the MPO Board meeting agendas, providing technical assistance to the MPO Board, development of the TIP, preparation of the annual UPWP, working with other agencies, such as NC Division of Air Quality, etc.

**Proposed Activities:**

1. Provide liaisons between DCHC MPO and the City of Durham elected officials and citizens.
2. Provide technical assistance to the MPO.
3. Participate in joint meetings as a means to continually improve the quality and operation of the transportation planning process and decision making within the MPO and in the Triangle Region.
4. Review and comment on federal and state transportation-related plans, programs, regulations and guidelines pertaining to the City of Durham.

**Work Product Expected:**

1. Technical assistance memoranda, reports, and public involvement meetings and workshops as needed.
2. Updates to the planning documents as required.

**Relationship to other plans and MPO activities**

Participation in MPO meetings is necessary for the function of the MPO and all plans and activities.

**Proposed Budget and Level of Effort**

Senior Transportation Planner, 90 hours

## Durham County

	Task Description	STBGP		Sec. 104(f)		Section 5303			Section 5307			Task Funding Summary			
		133(b)(3)(7)		PL		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local	NCDOT	FTA				
		20%	80%	20%	80%	10%	10%	80%	10%	10%	80%				
<b>II-A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Dwelling Unit, Pop. & Emp. Change	\$200	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$0	\$800	\$1,000
	7 Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
	11 Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12 Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0												
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$2,000	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$8,000	\$10,000
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Highway Element of th MTP	\$1,679	\$6,714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,679	\$0	\$6,714	\$8,393
	10 Transit Element of the MTP	\$3,459	\$13,836	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,459	\$0	\$13,836	\$17,295
	11 Bicycle & Ped. Element of the MTP	\$800	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$3,200	\$4,000
	12 Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of MTP	\$120	\$480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120	\$0	\$480	\$600
	14 Rail, Water or other mode of MTP	\$100	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$400	\$500
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	16 Financial Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	17 Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0												
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0									\$0	\$0	\$0	\$0
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0												
	Planning Work Program	\$300	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$1,200	\$1,500
		\$0	\$0									\$0	\$0	\$0	\$0
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0												
	TIP	\$500	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$2,000	\$2,500
		\$0	\$0									\$0	\$0		
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr. Reg. Reqs.</b>	\$0	\$0												
	1 Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0												
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0												
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Plng.	\$900	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$3,600	\$4,500
	3 Special Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Regional or Statewide Planning	\$900	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$3,600	\$4,500
		\$0	\$0												
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0												
	1 Management & Operations	\$400	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$1,600	\$2,000
<b>Totals</b>		\$11,658	\$46,630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,658	\$0	\$46,630	\$58,288

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**II-A-6. Dwelling Unit, Population, & Employment Change**

The County will review population and employment change data estimated by the Triangle Regional Model in preparation for the next MTP and for the new Comprehensive Plan for Durham. The County will also provide data on development review activities, building permits, and certificates of occupancy.

**Objective**

To review dwelling unit, population, and employment data and provide local development data to LPA.

**Previous work**

County staff provided projected growth figures for unincorporated parts of Durham County to MPO staff and assisted the TRM process.

**Proposed activities**

1. Participate in meetings discussing potential improvements to the current estimation methodology
2. Submit data relating to dwelling unit and employment change to MPO staff

**Products**

1. Input on potential improvements/changes to the current estimation methodology
2. Dwelling unit/employment-related data as needed

**Relationship to other plans and MPO activities**

MTP and TRM, Durham Comprehensive Plan

**Proposed budget and level of effort**

Majority of work to be performed by a Planner. (30 Hours)

**II-A-10. Mapping.**

County staff will assist in developing base maps, GIS layers, and databases to serve MPO-wide and local transportation mapping objectives. They will provide, as needed, GIS layers for highway, transit, bike, and pedestrian networks as well as parcel and zonal information. In addition, County staff will provide CommunityViz mapping support.

**Objective**

Update base maps, including spatial and network data, with new data and ensure high-quality mapping and analysis of transportation facilities and amenities.

**Previous Work**

Using GIS, provided local socioeconomic data for the 2045 MTP. Reviewed and modified CommunityViz 2045 MTP place type and development status categories.

**Proposed Activities**

1. Update shapefiles with new features and-or attribute data
2. Provide and-or review GIS maps for MPO projects such as the CMP and the early phases of the 2045 MTP, as needed
3. Conduct GIS network analysis as needed to address transportation issues

**Products**

1. Up-to-date GIS data
2. Network datasets and studies

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Relationship to other plans and MPO activities**

CMP, 2045 MTP, Durham Comprehensive Plan

**Proposed budget and level of effort**

Majority of work to be performed by a Planner. (30 Hours)

**II-B-5. Forecast of Data to Horizon Year**

County staff will contribute to reviewing the current estimation methodology for forecasting socioeconomic data to the MTP horizon year to determine if any improvements are needed. In addition, County staff will continue the preparation of land use models and plans that will better integrate future rail transit and land use development around those future stations.

**Objectives**

Improve the process for forecasting socioeconomic data to the MTP horizon year and create land use plans that better integrate future transit options.

**Previous work**

For the 2045 MTP, the County contributed data and review comments for countywide growth control totals and the CommunityViz allocation of growth estimates within Durham County. County staff has also produced land use plans for selected future rail stations.

**Proposed activities**

1. Communicate with MPO staff and TCC representatives regarding potential improvements to the growth modeling methodology
2. In conjunction with MPO and local transportation staff, as well as the regional transit authority, create land use plans for future rail station areas

**Products**

1. Feedback on the growth modeling methodology
2. New land use ordinances for transit-oriented development

**Relationship to other plans and MPO activities**

2045 MTP, Durham County Bus and Rail Investment Plan, Durham Comprehensive Plan

**Proposed budget and level of effort**

Majority of work to be performed by a Planner and Senior Planner. (300 Hours)

**II-B-9. Highway Element of the MTP**

County staff will participate and assist the MPO in evaluating the highway elements of the 2045 MTP. The County will also participate in the Highway 98 Corridor Study and the regional tolling study.

**Objectives**

Update the MTP highway elements and to participate in the development of other highway-related studies.

**Previous work**

Preparation of the highway element of the 2045 MTP and the CTP; Participation in the development of the Highway 98 Corridor Study



**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Proposed activities**

1. Provide data to the LPA on highway facilities as needed
2. Participate in the Central Durham Transportation Study and 15-501 Corridor Study
3. Participate in the regional tolling study

**Products**

1. Preferred highway element option
2. Key data for highway projects

**Relationship to other plans and MPO activities**

MTP, CTP, TIP

**Proposed budget and level of effort**

Majority of work to be performed by a Planner and Senior Planner. (150 Hours)

**II-B-10. Transit Element of the LRTP**

County staff is leading the effort for the Station Area Strategic Infrastructure study, which is analyzing the need for infrastructure at the local level, including road, pedestrian, and bicycle infrastructure, around future rail station sites in order to optimize use of the incoming rail system. County staff will also participate in an update of the Durham Bus and Rail Investment Plan, and the Major Investment Study Core Technical Team in conjunction with CAMPO and GoTriangle, for the Durham-Wake Commuter Rail.

**Objectives**

Develop the Station Area Strategic Infrastructure study and provide data and input for the Durham Bus and Rail Investment Plan.

**Previous work**

The County has completed existing conditions work for approximately half of the station areas and has completed an assessment of infrastructure needs for the “urban” rail stations sites. County staff has been providing input and data for many years on fixed guideway transit.

**Proposed activities**

1. Continue work on the Station Area Strategic Infrastructure study and complete work on the suburban rail station sites, as well as develop cost estimates and financing options for the necessary infrastructure improvements
2. Provide data and input for the Durham Bus and Rail Investment Plan
3. Participate in the Major Investment Study Core Technical Team in conjunction with CAMPO and GoTriangle, for the Durham-Wake Commuter Rail

**Products**

1. Development of the Station Area Strategic Infrastructure study (A1)
2. Demographic and land use data for Durham Bus and Rail Investment Plan

**Relationship to other plans and MPO activities**

2045 MTP, Durham Bus and Rail Investment Plan, Durham Comprehensive Plan

**Proposed budget and level of effort**

Majority of work to be performed by a Planner and Senior Planner. (400 Hours)

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**II-B-11. Bicycle and Pedestrian Element of the MTP**

County staff will participate and assist the MPO in evaluating the bicycle and pedestrian elements of the 2045 MTP. The County will also prepare periodic updates to the Durham Trails and Greenways (DTAG) Master Plan.

**Objectives**

Update the MTP bicycle and pedestrian elements and the Durham Trails and Greenways Master Plan.

**Previous work**

Preparation of the bicycle and pedestrian element of the 2045 MTP and the CTP.

**Proposed activities**

1. Provide data to the LPA on bike and pedestrian facilities as needs
2. Develop updates of the DTAG plan
3. Participate in the Central Durham Transportation Study
4. Develop Greenway-Focused Development standards along select trails within the County

**Products**

1. Provide data to the LPA on bike and pedestrian facilities as need.
2. Develop updates of the DTAG plan

**Relationship to other plans and MPO activities**

MTP, CTP, TIP

**Proposed budget and level of effort**

Majority of work to be performed by a Planner. (120 Hours)

**II-B-13. Collector Street Element of the MTP**

County staff will assist the MPO in updating the MPO Collector Street and Connectivity Plan.

**Objectives**

Assist the MPO in identifying new or amended collector street plans near Light Rail stations.

**Previous work**

None.

**Proposed activities**

1. Evaluation of collector street network around light rail stations and corresponding Compact Neighborhoods.

**Products**

1. New or Amended Collector Street Plans

**Relationship to other plans and MPO activities**

MTP, CTP, TIP

**Proposed budget and level of effort**

Majority of work to be performed by a Planner. (25 Hours)

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**II-B-14. Rail, Water, or other Mode of the MTP**

County staff will participate and assist the MPO in evaluating the rail elements of the 2045 MTP, including but not limited to any grade separation studies.

**Objectives**

Update the MTP rail element.

**Previous work**

Preparation of the rail element of the 2045 MTP and the CTP.

**Proposed activities**

1. Evaluation of the 2045 rail element

**Products**

1. Preferred rail element option; and

**Relationship to other plans and MPO activities**

MTP, CTP, TIP

**Proposed budget and level of effort**

Majority of work to be performed by a Planner. (25 Hours)

**III-A-1. Planning Work Program**

The County will administer the FY 2019-20 UPWP and prepare and process amendments as needed. It will evaluate transportation planning work needed and emphasis areas and prepare the FY 2019-20 UPWP. County staff will serve on the UPWP oversight committee for the MPO.

**Objectives**

Process amendments to the UPWP if necessary and provide input on UPWP oversight.

**Previous work**

County staff have been involved in previous UPWPs, providing oversight and guidance to UPWP management.

**Proposed activities**

1. Complete amendment spreadsheets as needed
2. Prepare Durham County's 2019-2020 UPWP documents and budget

**Products**

1. Amendment spreadsheets as needed
2. Durham County's previous fiscal year UPWP activities narrative and budget

**Relationship to other plans and MPO activities**

Required by federal law, the UPWP is the mechanism for regional transportation planning and coordination within the MPO.

**Proposed budget and level of effort**

Worked to be performed by a Planning Supervisor (20 Hours)

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**III-B-1. TIP**

The County will assist the MPO and NCDOT in development of the next STIP and MTIP and participate in the completion of the SPOT 5.0 process and beginning of the SPOT 6.0 process.

**Objectives**

To facilitate timely progress on TIP projects and process amendment when necessary. The County will finish participation in review and coordination regarding the SPOT 5.0 prioritization process for the next TIP, and additionally begin participation for SPOT 6.0.

**Previous work**

County staff have been involved in previous TIPs, and SPOT 4.0 and SPOT 5.0

**Proposed activities**

1. Development transportation improvement projects for consideration by the County Commission
2. Develop 2020-2029 TIP
3. Refine project ranking methodology and priority system
4. Conduct public participation for the TIP consistent with the MPO Public Involvement Policy
5. Conduct formal amendments and adjustments as necessary
6. Produce and distribute TIP document for local officials
7. Attend regular meetings with NCDOT to exchange information regarding transportation improvement projects

**Products**

1. Assist and provide support to the LPA on SPOT 5.0 and SPOT 6.0
2. 2020-2029 Transportation Improvement Program

**Relationship to other plans and MPO activities**

2045 MTP

**Proposed budget and level of effort**

Worked to be performed by a Planner (60 Hours)

**III-D-2. Environmental Analysis and Pre-TIP Planning**

The County will participate regularly in feasibility studies and NEPA-related processes for pre-TIP projects.

**Objectives**

To participate regularly in feasibility studies and NEPA-related processes for pre-TIP projects.

**Previous work**

County staff have been involved in previous feasibility studies and NEPA-related processes

**Proposed activities**

1. Regular participation at project scoping, environmental study, and public meetings, especially those conducted by the NCDOT and GoTriangle
2. Review and comment on project scoping and environmental documents
3. County participation in NEPA process for TIP projects

**Products**

Written comments on project scoping and environmental studies, activities and documents.

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Relationship to other plans and MPO activities**

2045 MTP and TIP

**Proposed budget and level of effort**

Worked to be performed by a Planner and Planning Supervisor (48 Hours)

**III-D-4. Regional or Statewide Planning**

County staff will provide input to the regional transit agency and NCDOT regarding transportation issues. Staff will also serve on various regional transportation-related committees and boards.

**Objectives**

Provide input to the regional transit agency and serve on regional transportation-related boards and committees.

**Previous work**

County staff has served on various regional committees such the Triangle J Council of Governments CORE committee, which looks at regional transportation issues. County staff also provides input and data to the regional transit agency as requested.

**Proposed activities**

1. Work with regional planners on transportation planning that crosses jurisdictional borders
2. Provide input and data to the regional transit agency as requested

**Products**

1. Provide staff to regional committees
2. Provide coordination between local governments as needed

**Relationship to other plans and MPO activities**

2045 MTP

**Proposed budget and level of effort**

Work to be performed by a Planner and a Planning Supervisor. (150 Hours)

**III-E-1. Management and Operations**

Administrative tasks necessary to maintaining the 3C planning process will be completed.

**Objectives**

- Participate and contribute to MPO-related meetings.
- Adhere to the goals and tasks laid out in the Unified Planning Work Program.
- Ensure that elected officials have adequate information to make informed decisions on local and regional transportation issues.
- Ensure the local transportation advisory board has the information it needs to develop sound recommendations on local and regional transportation issues.
- Improve staff efficiency and knowledge through training sessions and educational materials.

**Previous work**

Similar to proposed activities described below

**DURHAM COUNTY  
TASK DESCRIPTIONS & NARRATIVES  
FY 2020 UPWP**

**Proposed activities**

1. Attend and participate in MPO Board and TC meetings
2. Staff development through professional training courses, seminars, and conferences
3. Prepare materials and present to the local elected officials related to local and regional transportation planning topics
4. Attend and participate in MPO subcommittee meetings

**Products**

1. Staff reports and communication with other County officials as well as elected officials and members of advisory boards

**Relationship to other plans and MPO activities**

See objectives and proposed activities.

**Proposed budget and level of effort**

Work to be performed by a Planner and a Planning Supervisor. (100 Hours)

## Triangle J COG

		Task Description	STBGP 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
			Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II</b>	<b>A</b>	<b>Surveillance of Change</b>														
	1	Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2	Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3	Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4	Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5	Transit System Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6	Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7	Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8	Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9	Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10	Mapping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	11	Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12	Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13	Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>II</b>	<b>B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0												
	1	Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2	Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3	Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4	Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5	Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7	Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8	Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9	Highway Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10	Transit Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	11	Bicycle & Ped. Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12	Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13	Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	14	Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	15	Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	16	Financial Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	17	Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	18	Air Qual. Planning/Conformity Anal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>II</b>	<b>C</b>	<b>Short Range Transit Planning</b>	\$0	\$0												
	1	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>III-A</b>		<b>Planning Work Program</b>	\$0	\$0												
	1	Planning Work Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>III-B</b>		<b>Transp. Improvement Plan</b>	\$0	\$0												
	1	TIP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>III-C</b>		<b>Cvl Rgts. Cmp./Otr .Reg. Reqs.</b>	\$0	\$0												
	1	Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2	Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3	Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4	Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5	Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6	Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7	Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0												
<b>III-D</b>		<b>Incidental Plng./Project Dev.</b>	\$0	\$0												
	1	Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2	Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3	Special Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4	Regional or Statewide Planning	\$16,250	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,250	\$0	\$65,000	\$81,250
			\$0	\$0												
<b>III-E</b>		<b>Management &amp; Operations</b>	\$0	\$0												
	1	Management & Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Totals</b>			<b>\$16,250</b>	<b>\$65,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$16,250</b>	<b>\$0</b>	<b>\$65,000</b>	<b>\$81,250</b>

**Triangle J Council of Governments**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

**III-D-4. Regional or Statewide Planning.**

Facilitate and/or manage joint activities and undertake analysis work in land use, transportation and air quality planning that involve multiple MPO, RPO, local government, transit agency, state and federal agency and private sector partners.

**Objectives**

To ensure that activities that have a scope or scale that transcend any single MPO are done in coordinated, timely, effective and cost-efficient ways.

**Previous work**

Facilitation and preparation of Joint 2045 Metropolitan Transportation Plan; MTP and TIP air quality conformity coordination and determination report preparation, TRM executive committee support, facilitate joint MPO technical team meetings, Joint MPO Executive Committee coordination, assist with preparation and conduct of Joint MPO Policy Boards meetings, GoTriangle and county transit plan participation, MPO area plan and project participation. Assist with 2016 TRM estimation year data. Increased validation site data for CommunityViz using intern.

**Proposed activities**

Major activities will include preparation of CommunityViz 3.0 for use with the 2050 MTP, 2045 MTP follow-up and amendments; TRM executive committee support; facilitation of joint MPO technical, executive committee and policy board meetings and deliverables. Expanded activity would be: 1) continued transition of some socioeconomic data and method responsibilities from ITRE TRM team to TJCOG CommunityViz team; and 2) helping MPOs track land use, socioeconomic and housing related performance metrics in the Metropolitan Transportation Plan, county transit plans and major transit capital projects (e.g., DO LRT, Wake-Durham Commuter Rail).

**Products**

- CommunityViz 3.0 process and data activities and schedule, including incorporation of new place types from DO LRT TOD project
- 2045 MTP amendments and conformity determination reports
- joint MPO technical, executive committee and policy boards meeting support
- Triangle Regional Model Executive Committee documentation
- Transportation-land use-affordable housing data and reports, as appropriate
- Systematic performance metric tracking from 2045 MTP and county transit plans for land use, affordable housing and related socioeconomic characteristics (data in transit station areas to be coordinated with GoTriangle)
- improve validation site database, especially for urban and mixed use place types near transit, with more sites and closer integration with InfoUSA or other employment site data.

**Relationship to other plans and MPO activities**

This work is most closely tied to the DCHC 2045 MTP implementation and amendment process and refined data and methods related to version 6 of the Triangle Regional Model. Work enables the DCHC MPO to ensure consistent and seamless coordination with CAMPO and other regional transportation partners and local community planning efforts.

**Proposed budget and level of effort**

Budget largely supports staff work by Planning Director, Senior Planner, Planner II, and GIS Analyst, with some direct costs associated with travel and meeting expenses, data purchases and allocated indirect.



**Triangle J Council of Governments**  
**TASK DESCRIPTIONS & NARRATIVES**  
**FY 2020 UPWP**

<b>Task Code - Title</b>	<b>Local 20%</b>	<b>FHWA 80%</b>	<b>Total</b>
III-D-4 – Regional or Statewide Planning	\$16,250	\$65,000	\$81,250

**Funding Commitments from other Entities:**

20% local match to be provided by TJCOG; other funding participation in joint effort from CAMPO and GoTriangle as in previous years.

# Town of Chapel Hill

	Task Description	STBGP 133(b)(3)(7)		Sec. 104(f) PL		Section 5303 Highway/Transit			Section 5307 Transit			Task Funding Summary			
		Local 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local	NCDOT	Federal	Total
<b>II-A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$1,113	\$4,451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,113	\$0	\$4,451	\$5,564
	2 Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$870	\$870	\$6,960	\$0	\$0	\$0	\$870	\$870	\$6,960	\$8,700
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$2,319	\$9,274	\$0	\$0	\$3,410	\$3,410	\$27,280	\$0	\$0	\$0	\$5,729	\$3,410	\$36,554	\$45,693
	11 Central Area Parking Inventory	\$649	\$2,597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$649	\$0	\$2,597	\$3,246
	12 Bike & Ped. Facilities Inventory	\$1,484	\$5,935	\$0	\$0	\$1,052	\$1,052	\$8,416	\$0	\$0	\$0	\$2,536	\$1,052	\$14,351	\$17,939
	13 Bike & Ped. Counts	\$1,113	\$4,451	\$0	\$0	\$856	\$856	\$6,848	\$0	\$0	\$0	\$1,969	\$856	\$11,299	\$14,124
		\$0	\$0			\$0	\$0	\$0							
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0			\$0	\$0	\$0							
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	9 Highway Element of the MTP	\$2,040	\$8,161	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,040	\$0	\$8,161	\$10,201
	10 Transit Element of the MTP	\$0	\$0	\$0	\$0	\$952	\$952	\$7,616	\$0	\$0	\$0	\$952	\$952	\$7,616	\$9,520
	11 Bicycle & Ped. Element of the MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	12 Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	14 Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	15 Freight Movement/Mobility Plannin	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	16 Financial Planning	\$1,206	\$4,822	\$0	\$0	\$653	\$653	\$5,224	\$0	\$0	\$0	\$1,859	\$653	\$10,046	\$12,558
	17 Congestion Management Strategies	\$1,855	\$7,419	\$0	\$0	\$820	\$820	\$6,560	\$0	\$0	\$0	\$2,675	\$820	\$13,979	\$17,474
	18 Air Qual. Planning/Conformity Ana	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0							
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0			\$0	\$0	\$0							
	Short Range Transit Planning	\$0	\$0	\$0	\$0	\$880	\$880	\$7,040	\$0	\$0	\$0	\$880	\$880	\$7,040	\$8,800
		\$0	\$0			\$0	\$0	\$0							
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0			\$0	\$0	\$0							
	Planning Work Program	\$927	\$3,710	\$0	\$0	\$760	\$760	\$6,080	\$0	\$0	\$0	\$1,687	\$760	\$9,790	\$12,237
		\$0	\$0			\$0	\$0	\$0							
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0			\$0	\$0	\$0							
	TIP	\$4,173	\$16,694	\$0	\$0	\$2,449	\$2,449	\$19,592	\$0	\$0	\$0	\$6,622	\$2,449	\$36,286	\$45,357
		\$0	\$0			\$0	\$0	\$0							
<b>III-C</b>	<b>Cvl Rgts. Cmp/Otr .Reg. Reqs.</b>	\$0	\$0			\$0	\$0	\$0							
	1 Title VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$240	\$240	\$1,920	\$0	\$0	\$0	\$240	\$240	\$1,920	\$2,400
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$0	\$0	\$0	\$0	\$488	\$488	\$3,904	\$0	\$0	\$0	\$488	\$488	\$3,904	\$4,880
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0							
<b>III-D</b>	<b>Incidental Plng./Project Dev.</b>	\$0	\$0			\$0	\$0	\$0							
	1 Transportation Enhancement Plng.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Plng.	\$0	\$0	\$0	\$0	\$236	\$236	\$1,888	\$0	\$0	\$0	\$236	\$236	\$1,888	\$2,360
	3 Special Studies	\$3,122	\$12,490	\$0	\$0	\$820	\$820	\$6,560	\$0	\$0	\$0	\$3,942	\$820	\$19,050	\$23,812
	4 Regional or Statewide Planning	\$2,782	\$11,129	\$0	\$0	\$1,040	\$1,040	\$8,320	\$0	\$0	\$0	\$3,822	\$1,040	\$19,449	\$24,311
		\$0	\$0			\$0	\$0	\$0							
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0			\$0	\$0	\$0							
	1 Management & Operations	\$1,199	\$4,796	\$0	\$0	\$1,624	\$1,624	\$12,992	\$0	\$0	\$0	\$2,823	\$1,624	\$17,788	\$22,235
	Totals	\$23,983	\$95,929	\$0	\$0	\$17,150	\$17,150	\$137,200	\$0	\$0	\$0	\$41,133	\$17,150	\$233,129	\$291,411

Anticipated DBE Contracting Opportunities for 2020

Name of MPO: Durham-Chapel Hill-Carrboro MPO: Town of Chapel Hill        x   Check here if no anticipated DBE opportunities

Person Completing Form: <u>Bergen Watterson/Town of Chapel Hill</u>			Telephone Number: <u>919-969-5064</u>		
Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out

Sample Entry:

II-C-11	Transit Plan Evaluation	Big City Planning Department	Consultant	\$48,000	\$60,000
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**Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note “No contracting opportunities” on the table if you do not anticipate having any contracting opportunities.**

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Technical Committee 12/19/2018 Item 5

TOWN OF CHAPEL HILL  
FTA TASK NARRATIVE TABLE  
FY2020 UPWP

1-	MPO	DCHC-MPO (Chapel Hill)	DCHC-MPO (Chapel Hill)	DCHC-MPO (Chapel Hill)	
2-	FTA Code	442700	442200	442100	
3-	Task Code	III-D-3	III-D-4	III-E	
4-	Title of Planning Task	Special Studies	Regional or Statewide Planning	Management and Operations	TOTALS
5-	Task Objective	Prepare special studies to support ongoing transit operations. Conduct station area infrastructure inventory evaluation.	Support regional and statewide planning projects, including DOT Study, 15-501 Feasibility Study, NC 54 corridor design/NEPA, and NC 54 Pedestrian Safety Study	Support various transit planning activities	
6-	Tangible Product Expected	Participation in design/NEPA for BRT station area infrastructure inventory, work on other special studies as needed	LRT station area plans; participation in NCDOT 15-501/Fordham Blvd. corridor study, 15-501 Feasibility Study, NC 54 design/NEPA	Ongoing transit activities and reporting requirements	
7-	Expected Completion Date of Products	6/30/2020	6/30/2020	6/30/2020	
8-	Previous Work	Mobility and Connectivity Plan, N-S Corridor Study Alternatives Analysis	US 15-501 South Corridor Study, NC 54 Corridor Study	Management of Transit Corridor Study	
9-	Prior FTA Funds				
10-	Relationship To Other Activities	Supports implementation of adopted MTP, TIP and other state/federally funded projects	Supports the implementation of the adopted 2045 MTP, TIP, and the Chapel Hill Short Range Transit Plan.	Supports all other transit planning activities MPO-wide.	
11-	Agency Responsible for Task Completion	Town of Chapel Hill	Town of Chapel Hill	Town of Chapel Hill	
12-	11PR - Highway - NCDOT 20%				
13-	11PR - Highway - FHWA 80%				
14-	14- Section 104 (f) PL Local 20%				
15-	15- Section 104 (f) PL FHWA 80%				
16-	16- Section 5303 Local 10%	\$820	\$1,040	\$1,624	\$17,150
17-	17- Section 5303 NCDOT 10%	\$820	\$1,040	\$1,624	\$17,150
18-	18- Section 5303 FTA 80%	\$6,560	\$8,320	\$12,992	\$137,200
19-	19- Section 5307 Transit - Local 10%				\$0
20-	20- Section 5307 Transit - NCDOT 10%				\$0
21-	21- Section 5307 Transit - FTA 80%				\$0
22-	22- Section 5309 Transit - Local 10%				\$0
23-	23- Section 5309 Transit - NCDOT 10%				\$0
24-	24- Section 5309 Transit - FTA 80%				\$0
		\$8,200	\$10,400	\$16,240	\$171,500
		\$8,200	\$10,400	\$16,240	\$0

## City of Durham &amp; GoDurham

	Task Description	STBGP		Sec. 104(f)		Section 5303			Section 5307			Task Funding Summary			
		133(b)(3)(7)		PL		Highway/Transit			Transit			Local	NCDOT	Federal	Total
		Local	FHWA	Local	FHWA	Local	NCDOT	FTA	Local		FTA				
		20%	80%	20%	80%	10%	10%	80%	20%		80%				
<b>II-A</b>	<b>Surveillance of Change</b>														
	1 Traffic Volume Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2 Vehicle Miles of Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3 Street System Changes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4 Traffic Crashes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5 Transit System Data	\$0	\$0	\$0	\$0	\$8,076	\$8,076	\$64,608	\$11,084		\$44,336	\$19,160	\$8,076	\$108,944	\$136,180
	6 Dwelling Unit, Pop. & Emp. Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	7 Air Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	8 Vehicle Occupancy Rates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	9 Travel Time Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	10 Mapping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	11 Central Area Parking Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	12 Bike & Ped. Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	13 Bike & Ped. Counts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>II-B</b>	<b>Long Range Transp. Plan (MTP)</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Collection of Base Year Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	2 Collection of Network Data	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	3 Travel Model Updates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	4 Travel Surveys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	5 Forecast of Data to Horizon year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	6 Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	7 Forecast of Future Travel Patterns	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	8 Capacity Deficiency Analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	9 Highway Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$1,198	\$0	\$4,793	\$5,991
	10 Transit Element of the MTP	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,016		\$4,064	\$2,540	\$326	\$11,465	\$14,331
	11 Bicycle & Ped. Element of the MTP	\$31,198	\$124,793	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$31,198	\$0	\$124,793	\$155,991
	12 Airport/Air Travel Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	13 Collector Street Element of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	14 Rail, Water or other mode of MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	15 Freight Movement/Mobility Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	16 Financial Planning	\$0	\$0	\$0	\$0	\$326	\$326	\$2,608	\$19,668		\$78,672	\$19,994	\$326	\$81,280	\$101,600
	17 Congestion Management Strategies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	18 Air Qual. Planning/Conformity Anal.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>II-C</b>	<b>Short Range Transit Planning</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Short Range Transit Planning	\$0	\$0	\$0	\$0	\$2,610	\$2,610	\$20,880	\$21,124		\$84,496	\$23,734	\$2,610	\$105,376	\$131,720
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-A</b>	<b>Planning Work Program</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	Planning Work Program	\$1,198	\$4,793	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$1,198	\$0	\$4,793	\$5,991
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-B</b>	<b>Transp. Improvement Plan</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	TIP	\$4,793	\$19,171	\$0	\$0	\$653	\$653	\$5,224	\$2,036		\$8,144	\$7,482	\$653	\$32,539	\$40,674
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-C</b>	<b>Cvl Rgts. Cmp./Otr. Reg. Reqs.</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Title VI	\$0	\$0	\$0	\$0	\$326	\$326	\$2,608	\$736		\$2,944	\$1,062	\$326	\$5,552	\$6,940
	2 Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	3 Minority Business Enterprise	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	4 Planning for the Elderly & Disabled	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	5 Safety/Drug Control Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	6 Public Involvement	\$1,198	\$4,793	\$0	\$0	\$326	\$326	\$2,608	\$1,972		\$7,888	\$3,496	\$326	\$15,289	\$19,111
	7 Private Sector Participation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-D</b>	<b>Incidental Png./Project Dev.</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Transportation Enhancement Png.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
	2 Enviro. Analysis & Pre-TIP Png.	\$5,991	\$23,964	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$5,991	\$0	\$23,964	\$29,955
	3 Special Studies	\$5,991	\$23,964	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$5,991	\$0	\$23,964	\$29,955
	4 Regional or Statewide Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0
		\$0	\$0			\$0	\$0	\$0	\$0		\$0				
<b>III-E</b>	<b>Management &amp; Operations</b>	\$0	\$0			\$0	\$0	\$0	\$0		\$0				
	1 Management & Operations	\$1,198	\$4,793	\$0	\$0	\$5,207	\$5,207	\$41,656	\$4,328		\$17,312	\$10,733	\$5,207	\$63,761	\$79,701
<b>Totals</b>		\$53,964	\$215,856	\$0	\$0	\$17,850	\$17,850	\$142,800	\$61,964		\$247,856	#####	\$17,850	\$606,512	\$758,140

Anticipated DBE Contracting Opportunities for 2020

Name of MPO: \_\_\_Durham Chapel Hill Carrboro MPO\_(GoDurham)\_\_\_X\_\_\_ Check here if no anticipated DBE opportunities

Person Completing Form: _Neeton Nichols_		Telephone Number: 919 560-4366			
Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out

Sample Entry:

II-C-11	Transit Plan Evaluation	Big City Planning Department	Consultant	\$48,000	\$60,000
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Note: This form must be submitted to NCDOT-PTD even if you anticipate no DBE Contracting Opportunities. Note “No contracting opportunities” on the table if you do not anticipate having any contracting opportunities.









# **DRAFT FY 2020 UNIFIED PLANNING WORK PROGRAM (UPWP) FOR THE DCHC MPO**

**MPO Board Meeting  
January 09, 2019**

# FY 2020 UPWP OVERVIEW

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

# FY 2020 UPWP OVERVIEW

- Funding provided by Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)
- FHWA provides 80% of the UPWP highway funding and requires a 20% local match.
- FTA provides 80% of transit funding. NCDOT provides 10% match (for 5303) and transit agencies provide 10% match.
- In FY2014 MPO began cost sharing for the FHWA 20% local match

# FY 2020 UPWP

## LIST OF FUNDING TASKS

Funding tasks (46 of them) are derived from the *Prospectus* approved by NCDOT and MPOs statewide. Tasks are grouped in following sections:

- Surveillance of Change – (aka - data monitoring)
- Long Range Transportation Plan
- Short Range Transit Planning
- Planning Work Program
- Transportation Improvement Plan
- Civil Rights
- Incidental Planning/Project Development
- Management and Operations

# FY 2020 UPWP

## FY2018 & FY19 ACCOMPLISHMENTS

Page 17- a summary of FY2018 and FY2019 accomplishments:

- Comprehensive Transportation Plan
- Metropolitan Transportation Plan
- Regional Freight Study
- Multiple Corridor Studies
- SPOT Process/TIP Development
- Annual and State of Region Reports
- Coordinated Plan Update
- Web Application and Interactive Maps
- Data Development and Maintenance
- State and Regional Coordination
- Routine Planning and UPWP

# FY 2020 UPWP

## FY 20 EMPHASIS AREAS

### **UPWP draft contents:**

- List of federally mandated planning projects (p 10)
- List of focus areas (p 12) with descriptions including:
  - Triangle Regional Model Enhancement
  - Annual Continuous Travel Behavior Survey
  - Community Viz
  - Intelligent Transportation System
  - Data Collection and Management
  - Title VI Planning
  - Safety and Security Planning
  - Metropolitan Transportation Plan Reappraisal

# FY2020 UPWP

## FUNDING SOURCES

Technical Committee 12/19/2018 Item 5

### Summary of all funding sources (p 16)

	Federal	State	Local	Total
<b>PL/STBG-DA (FHWA)</b>	\$2,202,196		\$550,550	\$2,752,746
<b>FTA 5303</b>	\$280,000	\$35,000	\$35,000	\$350,000
<b>FTA 5307</b>	\$247,856		\$61,964	\$309,820
<b>Total</b>	\$2,730,052	\$35,000	\$647,514	\$3,412,566

FHWA federal funding includes:

Planning - Section 104(f) federal funding: \$353,101

STBG-DA - Section 133(b)(3)(7) federal funding: \$1,849,095



# FY2020 UPWP

## Summary of federal funding by agency

	FHWA	FTA Transit Planning		
Agency	Planning	5303	5307	Total
Lead Planning Agency	\$1,753,101			\$1,753,101
Carrboro	\$25,680			\$25,680
Chapel Hill	\$95,929	\$137,200		\$233,129
Chatham County	\$0			\$0
Durham City	\$215,856			\$215,856
Durham County	\$46,630			\$46,630
Hillsborough	\$0			\$0
Orange County	\$0			\$0
TJCOG	\$65,000			\$65,000
GoDurham		\$142,800	\$247,856	\$390,656
GoTriangle			\$	\$
Total	\$2,202,196	\$280,000	\$247,856	\$2,730,052

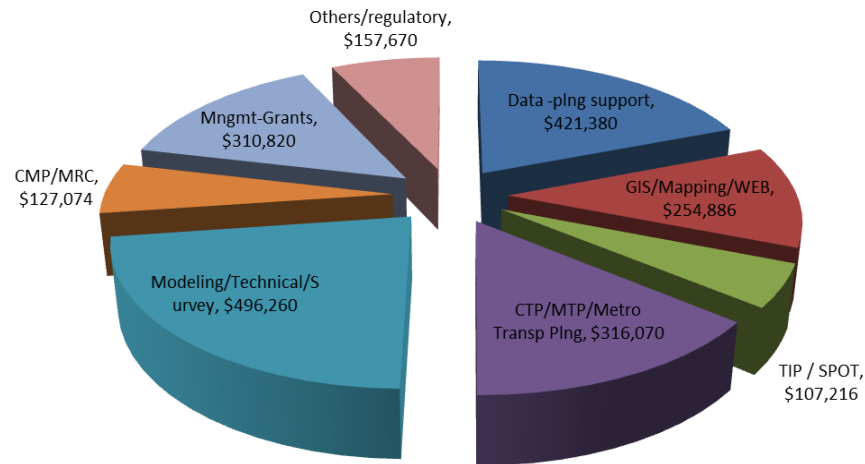
- Summary funding tables (p 26) and by task (p 27).
- Detailed funding tables and task descriptions; p 28 for LPA and p47 for sub-recipients.

## OVERVIEW OF LPA BUDGET BY TASKS

Summary of LPA Tasks and Funding by Broad Categories

Broad Aggregated Tasks	FY funding	Percent
Data -planning support	\$421,380	19%
GIS/Mapping/WEB	\$254,886	12%
TIP / SPOT	\$107,216	5%
CTP/MTP/Metro Transp Plng	\$316,070	14%
Modeling/Technical/Survey	\$496,260	23%
CMP/MRC	\$127,074	6%
Management-Grants	\$310,820	14%
Others/regulatory	\$157,670	7%
Total	\$2,191,376	100%

Broad Aggregated Tasks - FY funding



## LOCAL MATCH COST SHARING

Agency	Total FY 2020
Durham City	\$233,781
Durham County	\$40,225
Chapel Hill	\$58,599
Carrboro	\$20,050
Hillsborough	\$6,232
Orange County	\$35,019
Chatham County	\$14,498
GoTriangle	\$29,871
Total	\$438,275

- See p 17 for additional information.
- Approval of UPWP is approval of local match.

# FY 2020 UPWP DEVELOPMENT SCHEDULE

Dates	DCHC MPO Activity Description
<b>October 2018-December 2018</b>	Development of draft FY2020 UPWP and coordination with the Oversight Committee and local agencies.
<b>November 2, 2018</b>	Deadline for funding request and supplemental documents to be submitted to MPO by member agencies.
<b>December 19, 2018</b>	TC reviews draft FY2020 UPWP and recommends Board release for public comment.
<b>January 09, 2019</b>	MPO Board reviews draft of FY2020 UPWP and releases for public comment.
<b>January 23, 2019</b>	TC receives draft of FY2020 UPWP and recommends Board hold public hearing and approve draft at February Board meeting.
<b>January 31, 2019</b>	Draft FY2020 UPWP submitted to NCDOT/PTD
<b>February 13, 2019</b>	MPO Board holds public hearing and approves draft FY2020 UPWP including approval of self-certification process and local match.
<b>March 15, 2019</b>	Deadline for FY2020 UPWP to be submitted to NCDOT and FHWA for approval. NCDOT/PTD will submit UPWP to FTA for approval.

# FY 2020 UPWP COMMITTEE ACTIONS

- TC Recommendation (12/19/18):  
Recommended the Board release the Draft FY2020 UPWP for public comment.
- Board Action (1/09/19):  
Authorize release of the Draft FY2020 UPWP for public comment. Hold public hearing and approve UPWP in February.

# **DURHAM COUNTY TRANSIT PLAN**

## **ANNUAL PROGRESS REPORT**

July 1, 2017-June 30, 2018

# DURHAM COUNTY

## BACKGROUND

In November 2011, Durham County voters approved a transit-dedicated half-cent sales tax to expand and better connect the public transit network in Durham County and throughout the Triangle, one of the fastest-growing regions in the nation. In fiscal year 2018, this revenue stream added \$36,534,566 in funds to the Durham County Transit Plan. Additionally, \$17,139,881 in cash balance reserves were used to support FY18 expenditures.

In fiscal year 2018, transit plan funds were used to implement new GoDurham and GoTriangle services throughout the county as well as new demand-response and rural trips on Durham County ACCESS. New buses were purchased, and more were ordered and will be delivered throughout fiscal year 2019. Capital projects such as Durham and Orange counties' light-rail line and park-and-ride and bus stop improvements also are underway. In addition, staff from the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, Durham County, GoTriangle and the municipalities are implementing procedures to help ensure that the transit funds are spent wisely. View the Durham County Transit Plan at [goforwardnc.org/county/durham-county/the-plan/](http://goforwardnc.org/county/durham-county/the-plan/).

### Long-range goals

- Connect more residents with jobs, post-secondary and vocational educational opportunities.
- Expand bus capacity on corridors with high current bus ridership.
- Provide better regional connections to other cities and the Raleigh-Durham International Airport.

# FISCAL YEAR 2018 ACCOMPLISHMENTS

## OPERATING

### Operating service improvements implemented

- Added half-hour service Monday to Saturday until 7 p.m. on GoTriangle Routes 700 (Durham Station-Regional Transit Center) and 800 (Regional Transit Center-The Streets at Southpoint-Chapel Hill).
- Added service on Route DRX (Durham-Raleigh Express) to improve reliability.
- Continued service improvements begun in prior years, including:
  - **GoTriangle**
    - More frequent service on GoTriangle Route 400 (Durham-Patterson Place-Chapel Hill), with half-hour service Monday to Saturday until 7 p.m.
    - Peak-hour service between The Streets at Southpoint and Chapel Hill on GoTriangle Route 800S.

- Sunday service and extended Saturday service on GoTriangle core Routes 400, 700 and 800.
- Additional peak-period trips on Route DRX (Durham-Raleigh Express).
- Peak-hour service from Carrboro to Durham on GoTriangle Route 405 (Durham-Chapel Hill/Carrboro).
- Peak-hour service from Mebane to Hillsborough and Durham on new GoTriangle Route ODX.
- **GoDurham**
  - Extended Sunday evening service for all routes by two hours to 9 p.m.
  - Added peak-hour service from southern Durham to Duke University Medical Center and Durham VA Medical Center on Route 20.
  - Extended service until 12:30 a.m. on New Year's Day (service previously ended at 7:30 p.m. on New Year's Eve).
  - Expanded "Frequent Service Network" with 15-minute all-day service on popular routes including Route 10B (Durham Station-South Square) and Route 5K (Durham Station-Fayetteville St/MLK Jr. Parkway).
  - Added all-day hourly service on Route 15 (Durham Station-Brier Creek) and new Sunday service.
- **Durham County ACCESS**
  - Durham County ACCESS continued to use transit plan revenues to expand demand-response and rural trips to people who lacked transportation and those traveling to mental health facilities. In addition, Durham County ACCESS used transit plan revenues to match a federal grant providing more than 2,000 new trips for elderly and disabled residents.

### **Planning projects initiated**

- Durham County Transit Plan funds were used to hire consultants for short-range planning efforts for GoDurham and GoTriangle. During fiscal year 2018, each agency prepared drafts of its short-range plans.

Note: Transit plan funds are also used to pay a portion of the increased cost of transit services provided by GoDurham that existed before the Durham County Transit Plan was implemented.

## **CAPITAL**

### **Vehicle acquisitions**

- Acquired six GoDurham buses in FY18 using transit plan funds.
- Acquired two GoTriangle buses in FY18 with a 10 percent contribution from transit plan funds.

### **Bus Infrastructure**

- Implemented park-and-ride study in Durham County



# FISCAL YEAR 2019 NEXT STEPS

## OPERATING

### Operating service improvements

- Add peak-period trips on Route DRX (Durham-Raleigh Express) to bring the frequency of Route DRX to once every 15 to 20 minutes during the highest-use portions of the day.
- Extend Sunday service on GoTriangle core Routes 700 and 800 until 9 p.m.
- Launch a holiday calendar with service on five additional holidays. With the change, GoTriangle will provide service on all holidays except Christmas Day and Thanksgiving Day.

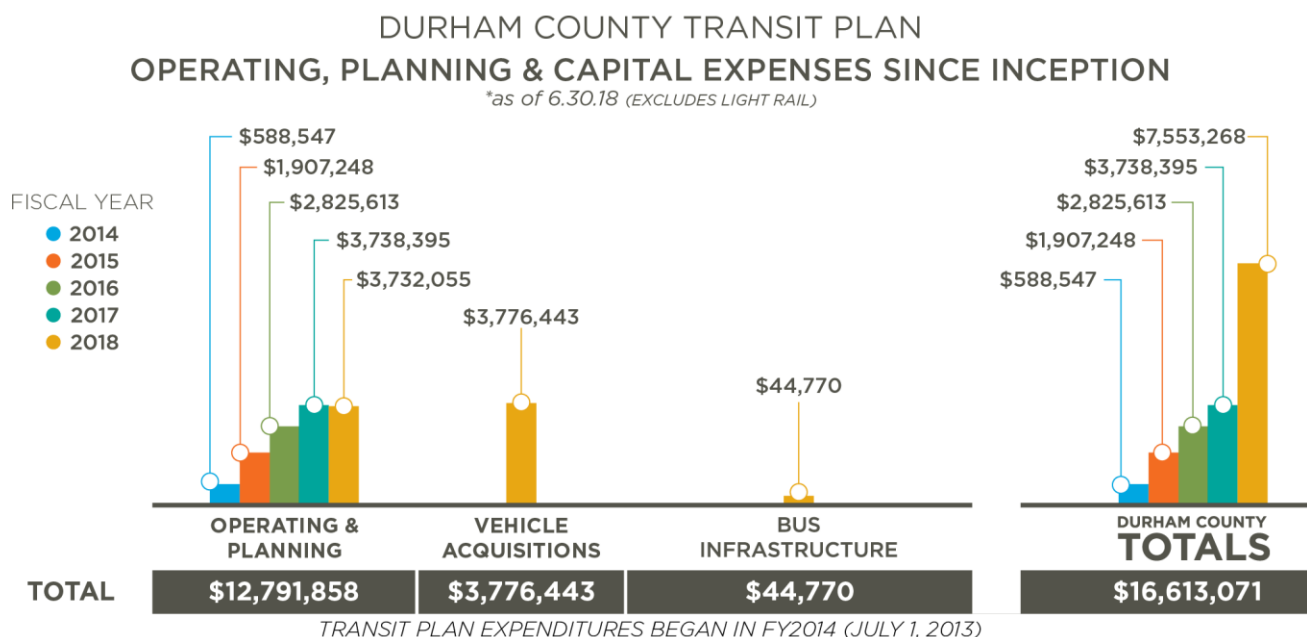
### Planning projects

- In fiscal year 2019, GoDurham and GoTriangle will present the drafts of the short-range transit plans to the public. After receiving public input, both agencies plan to finalize those plans. Beginning in fiscal year 2020, the agencies will start implementing the service modifications proposed in the plans.
- The DCHC MPO and Durham city and county staff are collaborating with GoTriangle and local and regional bodies in Wake county on a major investment study for the Commuter Rail Transit project connecting Wake and Durham counties.

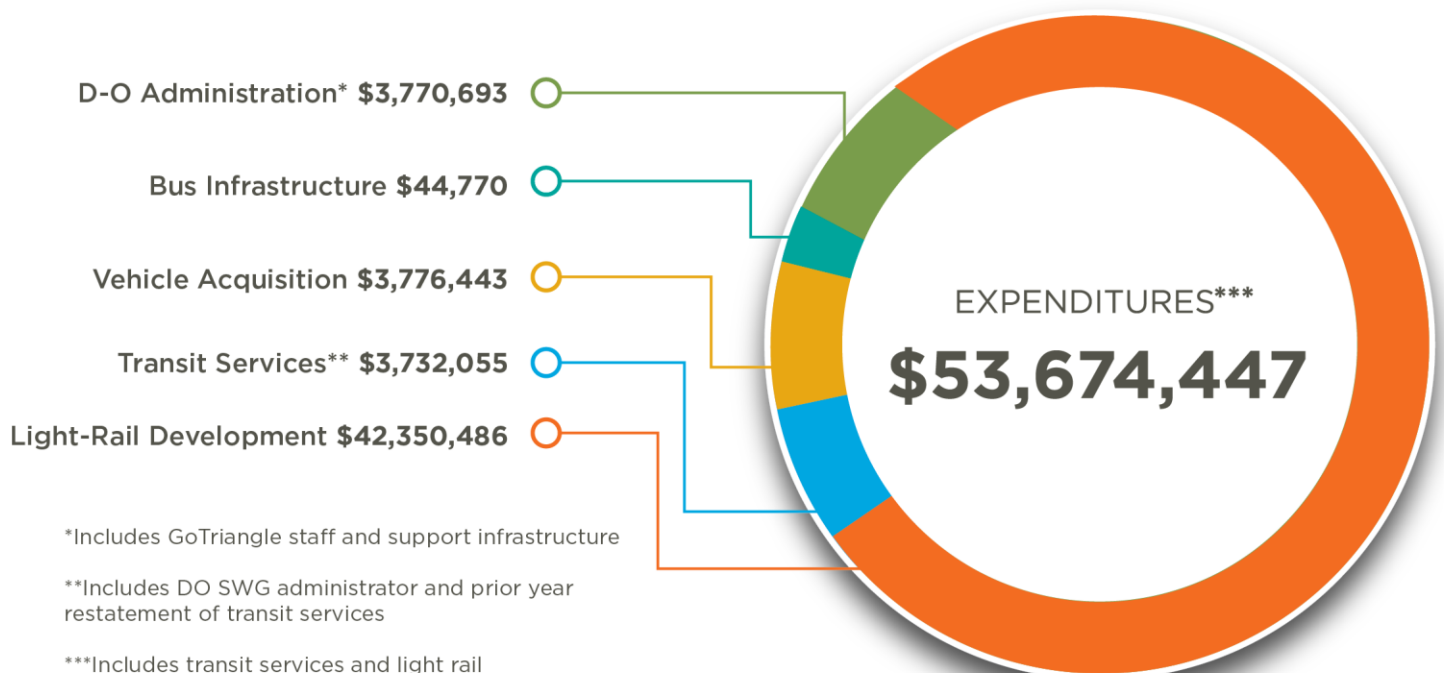
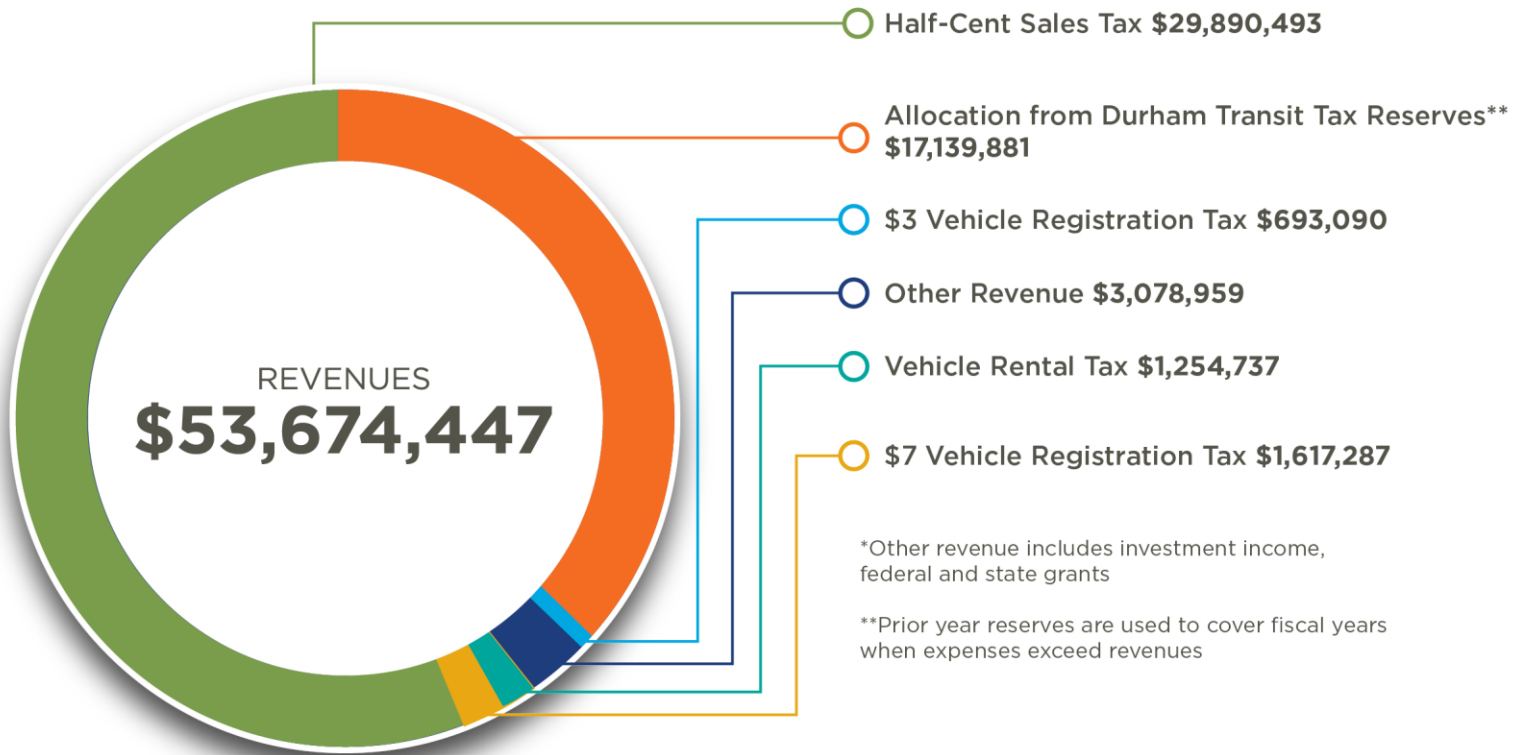
## CAPITAL

### Capital projects

- Complete and obtain approvals for 31 bus stop designs and construction permits by January 2019 and hire general contractors to start construction of bus stop improvements.
- Select 50 additional locations for GoDurham bus stop improvements.
- Install 15 benches at bus stop locations where site plans for improvements are being designed but ridership numbers warrant immediate installation of temporary seating.



# FY18 DURHAM COUNTY REVENUES & EXPENDITURES



## **Durham and Orange counties' light-rail project to connect Triangle**

Durham and Orange counties' 17.7-mile light-rail project – anticipated to begin revenue operations in 2028 – will offer a congestion-free alternative for riders commuting to jobs, education and health care in Durham and Chapel Hill.

Part of the Durham and Orange County Transit Plans, the light-rail line will be the spine for a network of expanded bus service throughout both counties and ultimately will connect with Wake County's planned 37-mile commuter rail project that will run from Durham through Raleigh to Garner. In addition, the network will link with the future bus rapid transit project in Chapel Hill, which will feature dedicated bus lanes on local roads to keep traffic rolling. The light-rail line is projected to provide more than 26,000 trips a day and to promote walkable communities where residents can live, work and play.

In fiscal year 2018, the light-rail project continued its progress toward a federal investment of over \$1.2 billion in our region. That investment is anticipated to come from a grant agreement with the Federal Transit Administration made possible by the Capital Investment Grants program. During fiscal year 2018, GoTriangle continued working closely with the FTA to prepare for the project's upcoming grant application. GoTriangle anticipates that it will execute a grant agreement with the FTA in September 2019.

The light-rail project is currently in the grant program's New Starts Engineering phase, during which GoTriangle has been ironing out the details of the light-rail's design. As part of this work in fiscal year 2018, GoTriangle has progressed the project's design beyond the important 50 percent design milestone. Over the next year, GoTriangle will continue advancing toward the 90 percent design milestone.

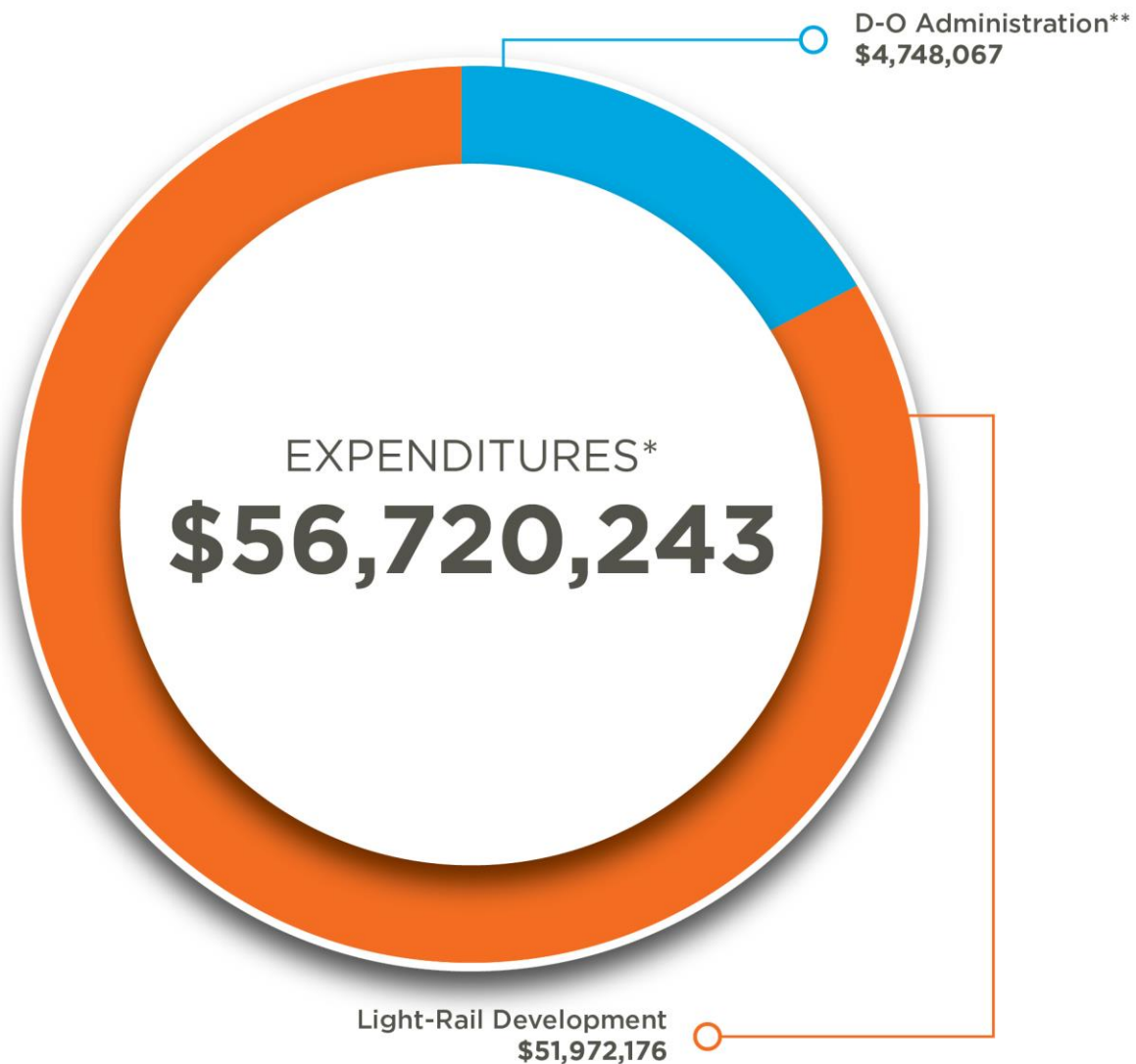
Deciding the details of the light rail's design has brought with it many important accomplishments. GoTriangle worked with its partners in fiscal year 2018 to propose several refinements to the project, including adding a 19<sup>th</sup> station between Blackwell and Mangum streets in downtown Durham. The Blackwell/Mangum station will provide immediate access to Durham's city center, which includes such important destinations as the Durham Performing Arts Center, Durham Bulls Athletic Park and American Tobacco Campus. Another proposed project refinement would move the Gateway Station closer to Orange County, increasing opportunities for economic development in the area.

In addition to other accomplishments in fiscal year 2018, GoTriangle added a construction management consultant, Gannett Fleming/WSP Joint Venture, to its consultant team. Gannett Fleming/WSP will advise and assist the project team as GoTriangle prepares the light-rail project for construction.

GoTriangle also continued the project's robust program of public involvement, which included public meetings, targeted outreach to key stakeholder groups, regular third-party coordination meetings and timely response to inquiries from property owners, residents and community members. Public meetings and online public input in February and April helped shape the look and feel of the light-rail stations so that their design is anticipated to reflect the Triangle's strengths in cultural diversity, science and innovation and natural resources.

# FY18 TOTAL

## DURHAM & ORANGE LIGHT-RAIL EXPENDITURES



\*Includes combined Durham and Orange expenditure contributions to the light-rail project

\*\*Includes GoTriangle staff and support infrastructure

# **ORANGE COUNTY TRANSIT PLAN**

## **ANNUAL PROGRESS REPORT**

July 1, 2017-June 30, 2018

# ORANGE COUNTY

## BACKGROUND

In 2012, Orange County voters approved a half-cent sales tax to support increased transit investments in the county. In fiscal year 2018, \$10,934,294, including sales-tax revenues and new vehicle registration fees, was raised to support the Orange County Transit Plan. Additionally, \$6,582,585 in cash balance reserves were used to support FY18 expenditures.

In fiscal year 2018, transit plan funds were used to implement new services throughout the county on each of the three major transit providers: Chapel Hill Transit, Orange County Public Transportation and GoTriangle. New buses were purchased, and more will be delivered throughout fiscal year 2019.

Capital projects such as the North-South BRT Project, Durham and Orange counties' light-rail line and park-and-ride lot and stop improvements are underway. In addition, staff from the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, Orange County, GoTriangle and the municipalities are implementing procedures to help ensure that the transit funds are spent wisely. View the Orange County Transit Plan at [goforwardnc.org/county/orange-county/about/](http://goforwardnc.org/county/orange-county/about/).

## Long-range goals

- Improve overall mobility and transportation options in the region.
- Provide geographic equity.
- Support improved capital facilities.
- Support transit-oriented land use.
- Provide positive impact on air quality.

# FISCAL YEAR 2018 ACCOMPLISHMENTS

## OPERATING

### Operating service improvements implemented

- Orange County Public Transportation inaugurated its Orange-Alamance connector, providing midday service throughout Hillsborough to the Cone Health facility in Mebane.
- GoTriangle added half-hour service Monday to Saturday until 7 p.m. on Route 800 (Regional Transit Center-The Streets at SouthPoint-Chapel Hill).
- GoTriangle added service on Route CRX (Chapel Hill-Raleigh Express) to improve reliability.
- The agencies continued service improvements begun in prior years, including:
  - **GoTriangle**
    - More frequent service on GoTriangle Route 400 (Durham-Patterson Place-Chapel Hill), with half-hour service Monday to Saturday until 7 p.m.

- Peak-hour service between The Streets at Southpoint and Chapel Hill on GoTriangle Route 800S.
- Sunday service and extended Saturday service on GoTriangle core Routes 400 and 800.
- Additional peak-period trips on Route CRX (Chapel Hill-Raleigh Express).
- Peak-hour service from Carrboro to Durham on GoTriangle Route 405 (Durham-Chapel Hill/Carrboro).
- Peak-hour service from Mebane to Hillsborough and Durham on new GoTriangle Route ODX.
- **Chapel Hill Transit**
  - Year-round evening service (including during University of North Carolina holidays) on Routes CM, CW, D and J.
  - Enhanced peak-hour service on Routes A, D, F, J, CW and JN.
  - Restructuring of Route HS and addition of new trips.
  - Improved midday service on Route NS and new evening service to Southern Village.
  - New Saturday service on Route V.
  - Additional Saturday service on Routes CM and CW.
  - Extended Saturday service on Routes D and FG.
- **Orange County Public Transportation**
  - Hillsborough circulator
  - Hillsborough-Chapel Hill connector

### **Planning projects initiated**

- Orange County Transit Plan funds were used to hire consultants for short-range planning efforts for Orange County Public Transportation, Chapel Hill Transit and GoTriangle. During fiscal year 2018, each agency prepared drafts of its short-range plans.

Note: Transit plan funds are also used to pay a portion of the increased cost of transit services provided by Chapel Hill Transit that existed before the Orange County Transit Plan was implemented.

## **CAPITAL**

### **Vehicle acquisitions**

- Acquired five buses for Chapel Hill Transit in fiscal year 2018.
- Acquired two GoTriangle buses in fiscal year 2018 with a 10 percent contribution from transit funds.

### **Bus infrastructure**

- Obtained environmental clearance from the Federal Transit Administration for the Hillsborough park-and-ride lot at Miller Road and US 70 and purchased the property.
- Executed a contract for professional services to include a feasibility study and design for the Hillsborough park-and-ride lot.

# FISCAL YEAR 2019 NEXT STEPS

## OPERATING

### Operating service improvements

- Extend Sunday service on GoTriangle core Routes 400 and 800 until 9 p.m.
- Launch a holiday calendar with service on five additional holidays. With the change, GoTriangle will provide service on all holidays except Christmas Day and Thanksgiving Day.
- Enhance service on Chapel Hill Transit Routes CW and D.
- Extend Saturday service on various Chapel Hill Transit routes for a total of 16 additional trips.

### Planning projects

- Orange County Public Transportation, Chapel Hill Transit and GoTriangle present proposed plans to the public, prepare final short-range transit plans and plan to implement service changes beginning in fiscal year 2020.

## CAPITAL

### Capital projects

- GoTriangle and Orange County to partner on the design for the Hillsborough park-and-ride lot.
- GoTriangle and Orange County to partner to complete site plan designs at four bus stops.
- The Hillsborough Transfer Center is expected to move forward in fiscal year 2020.
- Chapel Hill Transit plans to acquire two buses in fiscal year 2019.
- Town of Carrboro will move forward on the South Greensboro sidewalk project.
- Orange County Public Transportation will acquire light-transit vehicles in fiscal year 2020.

### **Chapel Hill North-South Bus Rapid Transit Project update**

The North-South Bus Rapid Transit project is an 8.2-mile transit, bicycle and pedestrian project along Martin Luther King Jr. Boulevard, South Columbia Street and US 15-501 South. The goals are to improve access, capacity, convenience and travel time for riders from the Eubanks Road park-and-ride lot to the Southern Village park-and-ride lot. The proposed bus rapid transit line will operate in a combination of dedicated lanes and mixed traffic providing frequent, reliable and convenient transit service. The program was accepted into the development phase of the Federal Transit Administration's competitive Small Starts program, which provides a federal match for major transit projects that cost less than \$300 million.

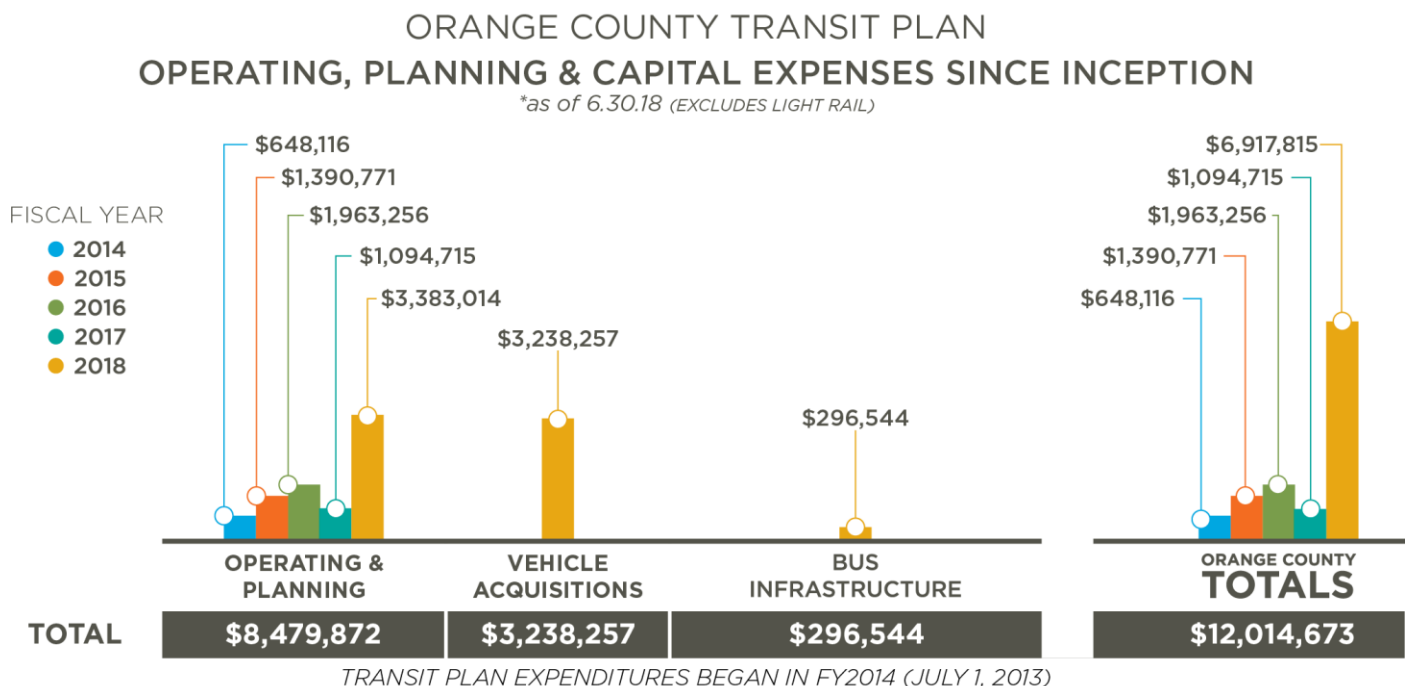
In spring 2018, after selecting consultant teams to lead the detailed design and environmental work, Chapel Hill Transit kicked off the process to develop 30 percent design of the project. The next steps are to complete 30 percent design and the environmental study required for federally funded projects under the National Environmental Policy Act. The 30 percent and NEPA efforts are anticipated to be completed by November 2019. When these milestones have been met, Chapel Hill Transit plans to apply for a Full Funding Grant Agreement for the federal share of the project.



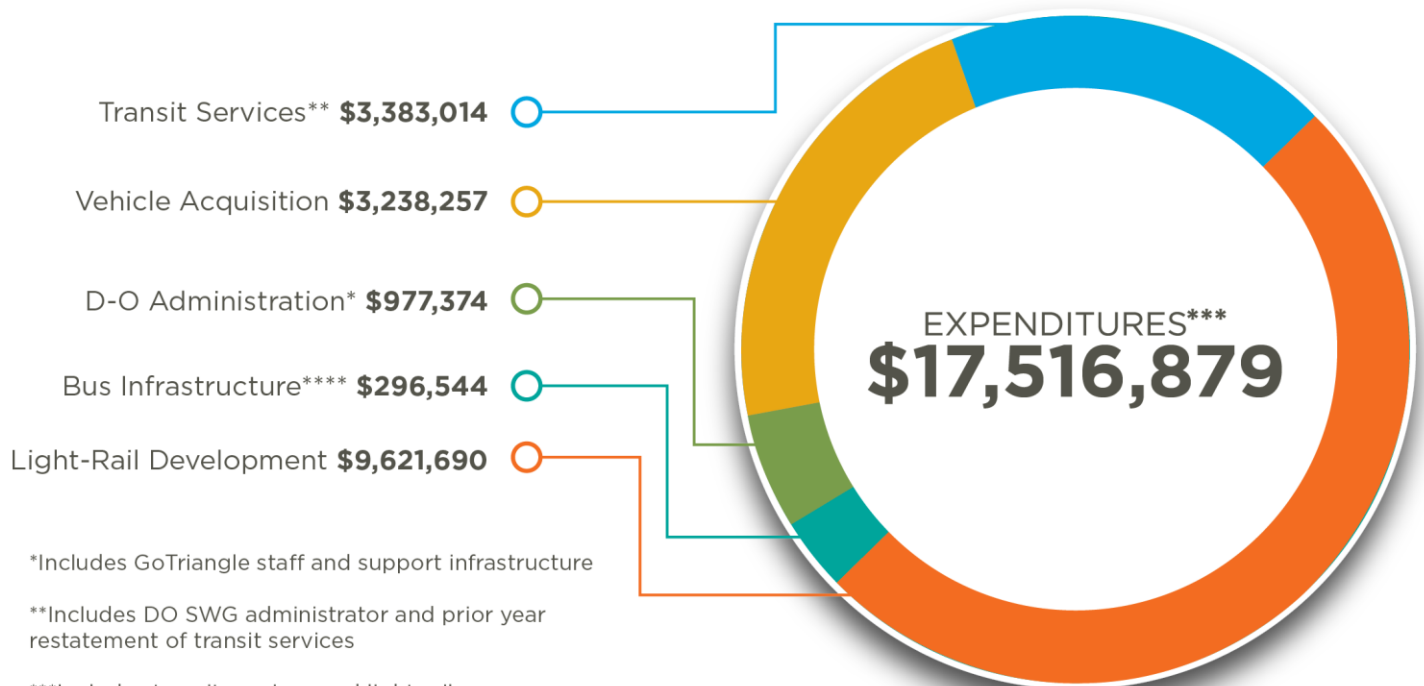
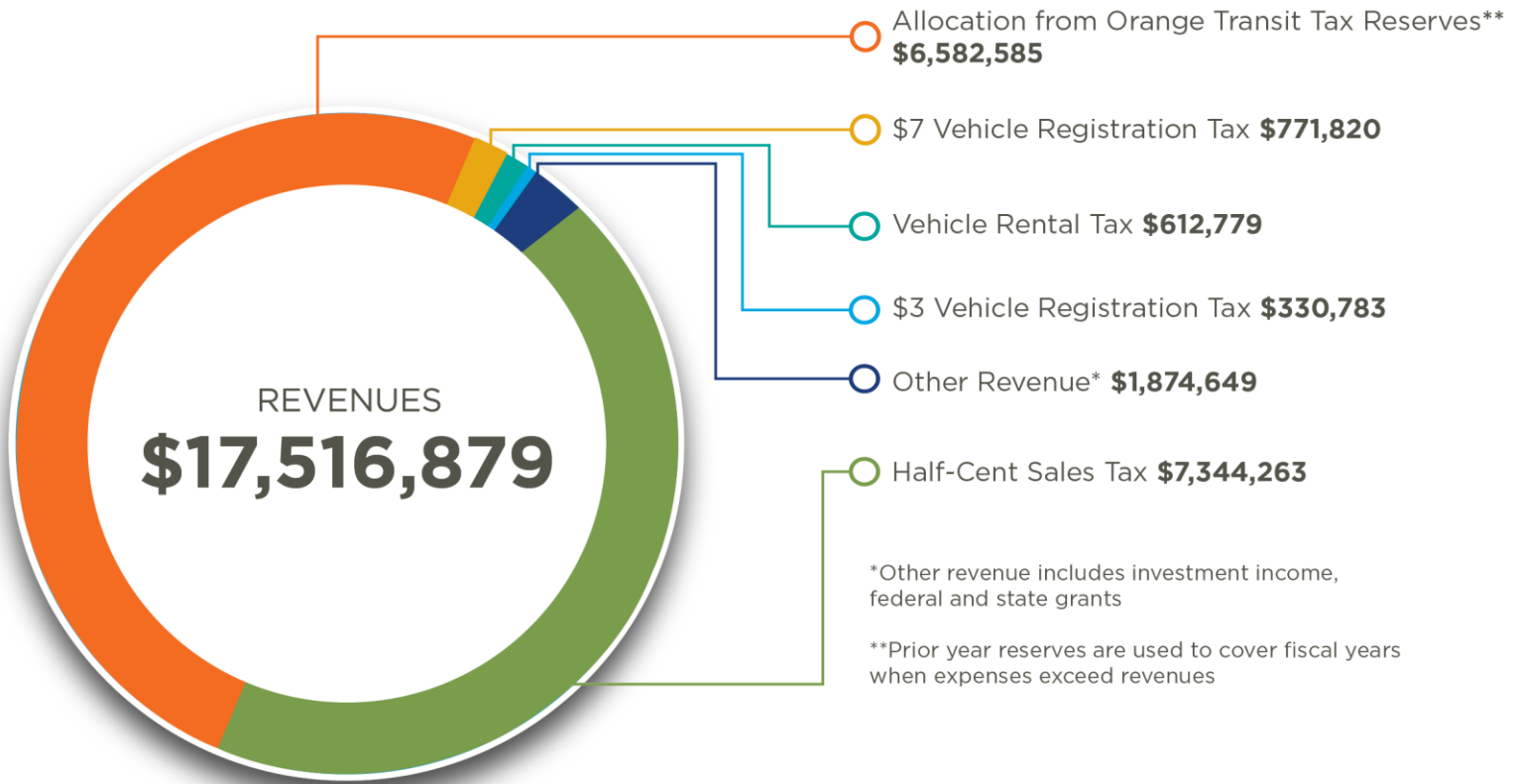
### Hillsborough Train Station update

The NC Department of Transportation, the Town of Hillsborough and the Orange County Transit Plan have contributed \$8.1 million for design and construction for the Hillsborough Amtrak station. The station will be served by two Amtrak passenger routes that together will provide eight daily departures: the Carolinian, which travels between Charlotte and New York twice daily (once in each direction), and the Piedmont, which travels between Charlotte and Raleigh six times daily (three times in each direction).

Environmental documentation is complete. Station design is expected to begin in fiscal year 2019, as coordination with North Carolina Railroad (owner of the rail tracks) and Norfolk Southern (freight railroad operator) continues.



# FY18 ORANGE COUNTY REVENUES & EXPENDITURES



## **Durham and Orange counties' light-rail project to connect Triangle**

Durham and Orange counties' 17.7-mile light-rail project – anticipated to begin revenue operations in 2028 – will offer a congestion-free alternative for riders commuting to jobs, education and health care in Durham and Chapel Hill.

Part of the Durham and Orange County Transit Plans, the light-rail line will be the spine for a network of expanded bus service throughout both counties and ultimately will connect with Wake County's planned 37-mile commuter rail project that will run from Durham through Raleigh to Garner. In addition, the network will link with the future bus rapid transit project in Chapel Hill, which will feature dedicated bus lanes on local roads to keep traffic rolling. The light-rail line is projected to provide more than 26,000 trips a day and to promote walkable communities where residents can live, work and play.

In fiscal year 2018, the light-rail project continued its progress toward a federal investment of over \$1.2 billion in our region. That investment is anticipated to come from a grant agreement with the Federal Transit Administration made possible by the Capital Investment Grants program. During fiscal year 2018, GoTriangle continued working closely with the FTA to prepare for the project's upcoming grant application. GoTriangle anticipates that it will execute a grant agreement with the FTA in September 2019.

The light-rail project is currently in the grant program's New Starts Engineering phase, during which GoTriangle has been ironing out the details of the light-rail's design. As part of this work in fiscal year 2018, GoTriangle has progressed the project's design beyond the important 50 percent design milestone. Over the next year, GoTriangle will continue advancing toward the 90 percent design milestone.

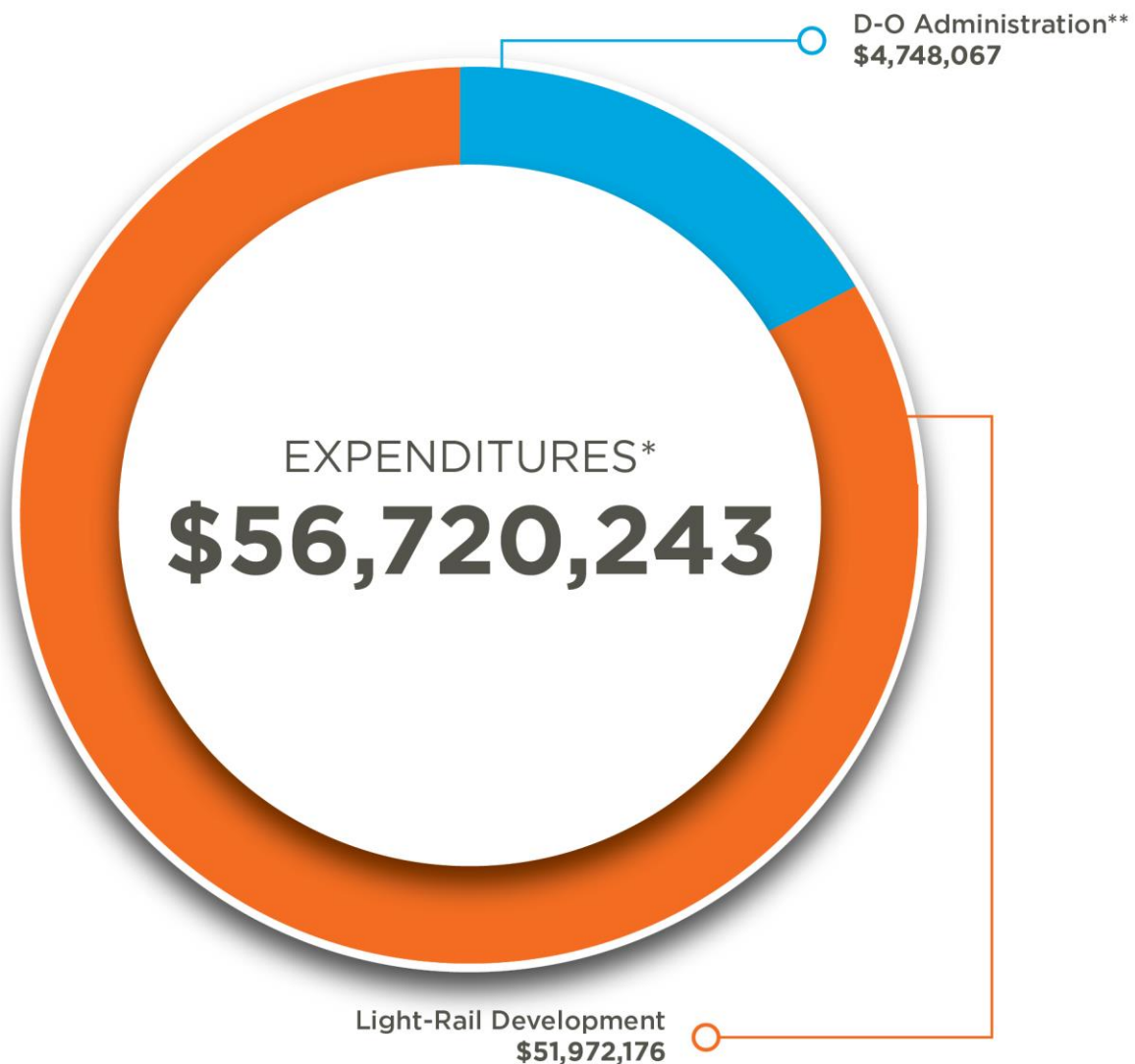
Deciding the details of the light rail's design has brought with it many important accomplishments. GoTriangle worked with its partners in fiscal year 2018 to propose several refinements to the project, including adding a 19<sup>th</sup> station between Blackwell and Mangum streets in downtown Durham. The Blackwell/Mangum station will provide immediate access to Durham's city center, which includes such important destinations as the Durham Performing Arts Center, Durham Bulls Athletic Park and American Tobacco Campus. Another proposed project refinement would move the Gateway Station closer to Orange County, increasing opportunities for economic development in the area.

In addition to other accomplishments in fiscal year 2018, GoTriangle added a construction management consultant, Gannett Fleming/WSP Joint Venture, to its consultant team. Gannett Fleming/WSP will advise and assist the project team as GoTriangle prepares the light-rail project for construction.

GoTriangle also continued the project's robust program of public involvement, which included public meetings, targeted outreach to key stakeholder groups, regular third-party coordination meetings and timely response to inquiries from property owners, residents and community members. Public meetings and online public input in February and April helped shape the look and feel of the light-rail stations so that their design is anticipated to reflect the Triangle's strengths in cultural diversity, science and innovation and natural resources.

# FY18 TOTAL

## DURHAM & ORANGE LIGHT-RAIL EXPENDITURES



\*Includes combined Durham and Orange expenditure contributions to the light-rail project

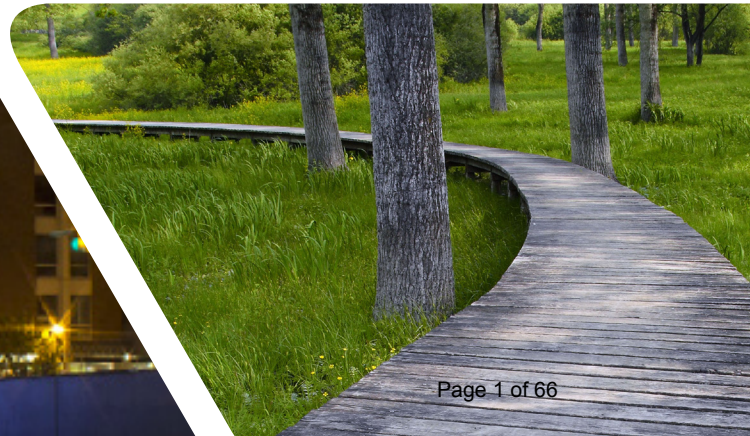
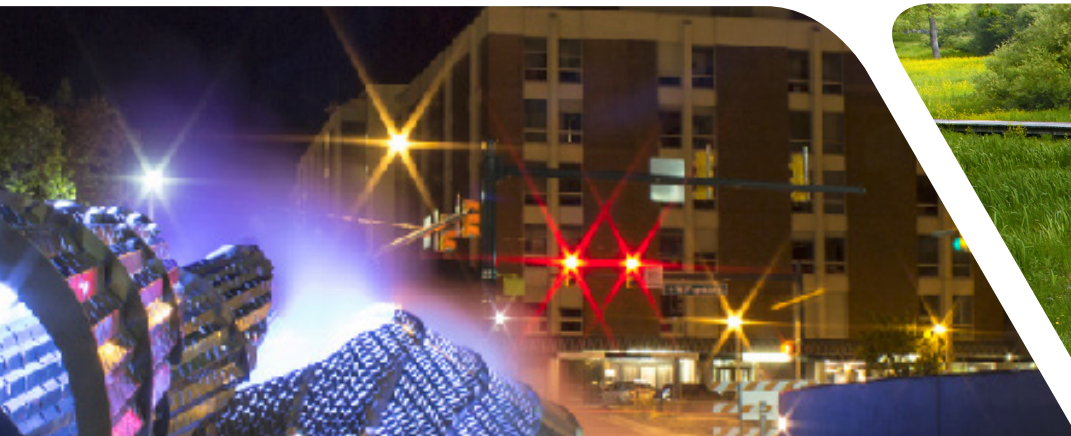
\*\*Includes GoTriangle staff and support infrastructure



# DCHC MPO

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION

# STATE OF THE REGION 2018







**DCHC**  
Metropolitan Planning Organization  
Planning Tomorrow Today



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# EXECUTIVE SUMMARY

## WHAT IS STATE OF THE REGION?

The State of the Region Report is a snapshot of the Durham-Chapel-Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO) region's transportation system, and the issues, trends, opportunities and challenges we face in providing effective and efficient transportation for all users.

Historically, State of the Region reports focused exclusively on mobility, particularly how cars, trucks, buses, and people moved through the transportation network. In recent years, it has become increasingly clear that understanding the transportation system requires a more comprehensive approach. This State of the Region Report identifies five key focus areas to guide policy and investment for the DCHC transportation network.

## FOCUS AREAS



### MOBILITY



### SAFETY



### LAND USE & DEMOGRAPHICS



### ECONOMIC DEVELOPMENT



### MULTIMODAL ACCESSIBILITY

## WHY DOES IT MATTER?

This report sheds light on how the transportation system fits into DCHC's goals of providing great quality of life, economic viability, and environmental sustainability through transportation. A robust, data-focused evaluation of the issues that affect and are affected by transportation is critical to meeting those goals. The State of the Region Report is designed to provide insight into how each part of the transportation system is performing relative to these goals.

## WHAT ARE THE KEY FINDINGS?

The DCHC region is a growing hub of activity in the southeast United States. A complex transportation network connects the major growth centers within the region (including downtown Durham and Chapel Hill), and connects the region to nearby activity centers, including the city of Raleigh and the broader Southeast United States. The major highways that serve as these connectors are increasingly busy, carrying more trips than ever. Daily traffic and VMT are on the rise, including a rise in annual truck traffic. The value of freight cargo is also rising, indicating a shifting economy towards advanced manufacturing and technology. These trends contribute to rising congestion and commute times, and lead to safety concerns. In particular, vehicular and pedestrian crash rates are on the rise. The DCHC MPO set incident targets to monitor crashes and fatalities; incidents across the region have surpassed desired targets each year since 2012. While the region is dominated by vehicular travel, transit use is slowly rising, as are alternate modes of commuting such as ride sharing and working from home. These trends also reflect the changing dynamics of the knowledge economy, indicating the interrelationship between mobility and safety, and broader dynamics of land use, economics, and accessibility.

## WHAT ARE THE DRIVERS OF CHANGE?

Dynamics at the national and regional scale have a strong influence on travel choice and transportation patterns in the DCHC region. Some of the most powerful forces in the region include steadily growing trends in population, employment, and development. The nature of this growth is tied to changing dynamics in the economy – a shift towards a knowledge based economy changes industrial location and the resulting commute patterns.



## OUR REGION

The MPO region includes: the larger municipalities of Durham and Chapel Hill; the growing small towns of Hillsborough and Carrboro; all of Durham County; and portions of Orange and Chatham County. Other member agencies include the North Carolina Department of Transportation (NCDOT) and Triangle Transit. Collectively, the region is one of the strongest, fastest growing economies in the United States. This growth has improved quality of life for many residents and continues to attract new residents.

## PEOPLE

Between 2016 and 2017, the Durham-Chapel Hill Metropolitan Area grew by approximately 22 people every day. The larger Triangle area (which includes DCHC and Raleigh Metro areas) grew by 100 people per day in that same period. The Triangle area is attractive to residents of all ages – from millennials to seniors. It is critical that a wide range of transportation options are provided to meet a variety of needs. By 2040, the MPO region is expected to add over 230,000 new residents. Twenty percent of Triangle residents will be 65 or older in 2030, compared to 10% in 2000.

## JOB

The Durham-Chapel Hill metro area, and greater Triangle metro area, consistently rank as areas in the United States with the high job growth and quality of life. In 2016, the DCHC Metro hosted approximately 297,000 jobs - a 14% increase from 2010 employment. The larger Triangle area hosted approximately 970,000 jobs in 2016, representing a 17% increase since 2010.

## TRAVEL

From 2010 to 2016, the DCHC regional population increased by roughly 48,000 (or 10%). Approximately two thirds of that growth occurred in the region's five cities and towns. Population growth contributes, in part, to increases in vehicle travel. However, daily vehicle miles traveled (VMT) in the region increased by approximately 2,900 VMT (or 19%). VMT is therefore growing almost twice as fast as population. This increase could be attributed to a rise in employment within the three counties, but also demonstrates the auto-dependency of residents in the region. The MPO anticipates that VMT will double between 2010 and 2040.

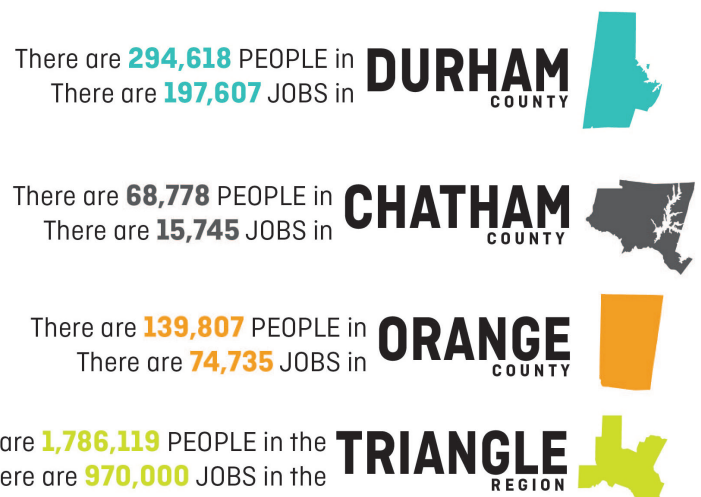
The **DCHC REGION** is home to **3** major universities including North Carolina Central University (**NCCU**), The University of North Carolina at Chapel Hill (**UNC**), and **Duke University**.

**RESEARCH TRIANGLE PARK (RTP)** is a national hub of innovation and entrepreneurship and is home to **200** companies and **50,000** jobs



Between 2016 and 2017  
The **DCHC REGION** grew by **22** people per day  
The **TRIANGLE REGION** grew by **100** people per day

Source: 2012-2016 American Community Survey (ACS) 5-Year Estimate



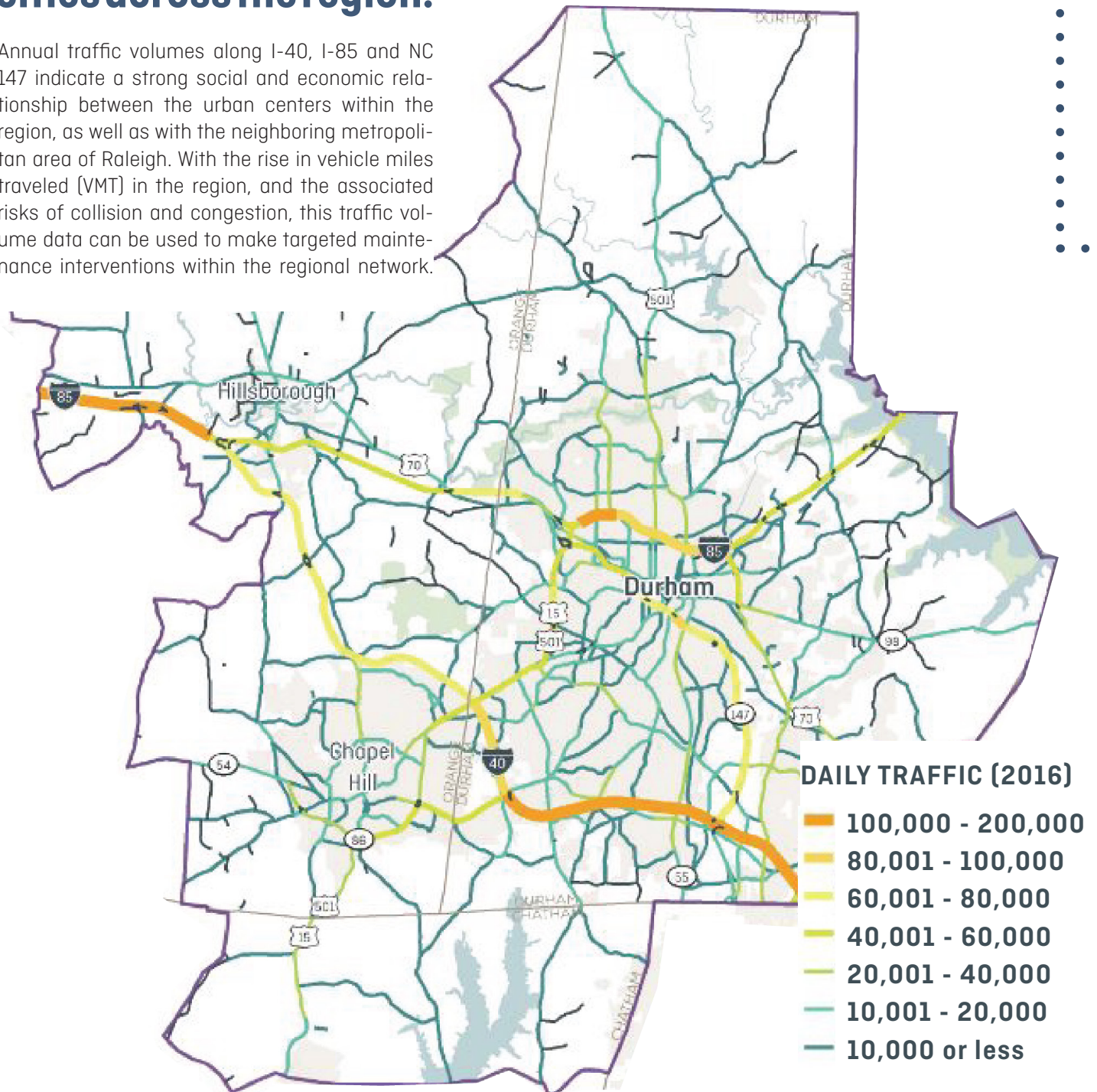
Source: 2012-2016 ACS 5-Year Estimate



# KEY FINDINGS

## Busy roads connect cities across the region.

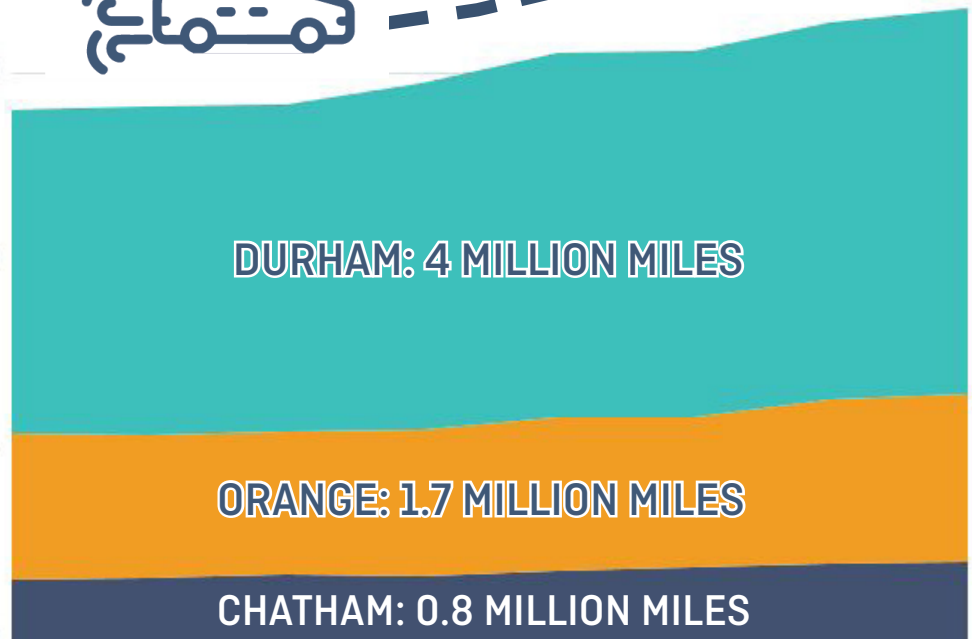
Annual traffic volumes along I-40, I-85 and NC 147 indicate a strong social and economic relationship between the urban centers within the region, as well as with the neighboring metropolitan area of Raleigh. With the rise in vehicle miles traveled (VMT) in the region, and the associated risks of collision and congestion, this traffic volume data can be used to make targeted maintenance interventions within the regional network.



Source: NCDOT Traffic Survey Group, Average Annual Daily Traffic 2016

## Those roads are carrying more trips every year.

Between 2010 and 2017, annual VMT rose across the region. Chatham County had the largest growth in VMT at 27%, followed by Durham County (19%) and Orange County (15%). The continued increase in vehicle travel, paired with population increases, suggests that regional demand for travel is as high as ever. This can lead to increased congestion and crashes, requiring the MPO to continue advancing policy and investment solutions.



2017

Source: Federal Highway Administration (FHWA) Annual VMT, 2010-2017, by county

## It's not just cars, it's trucks too.

The value and tonnage of freight cargo are increasing, and will continue to rise.

Source: FHWA Freight Management and Operations, Freight Analysis Framework (FAF)



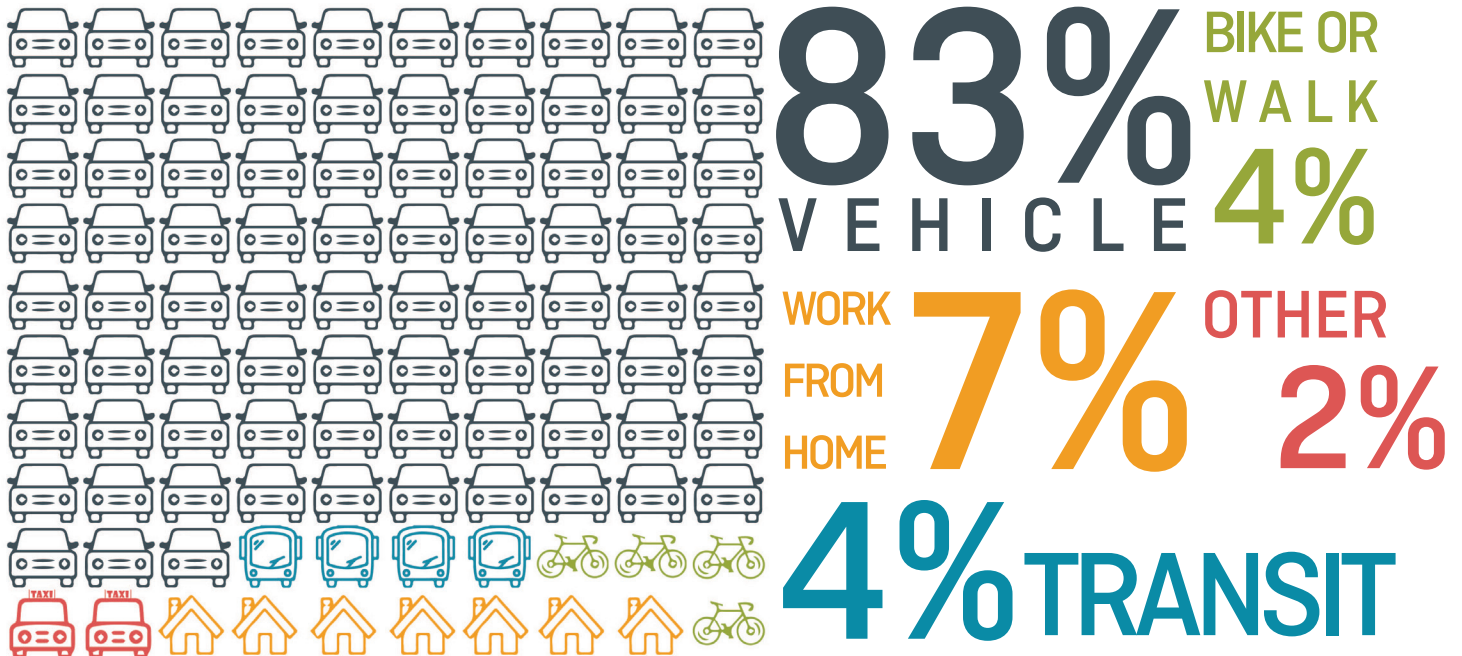
The amount and value of truck freight has increased slowly every year. Interestingly, forecasts for 2020 show a larger increase in the value of goods carried than the tonnage of goods carried. This reflects a changing economy in the area. National forecasts project that freight in the region will be less reliant on raw materials such as agriculture and livestock, and more focused on downstream materials such as advanced manufacturing or biopharmaceuticals. This change does not affect freight traffic greatly, but implies that any degradation of the transportation network will concern those who have a financial stake in the higher-value goods on our roadways.



## KEY FINDINGS

## But not everyone uses a car.

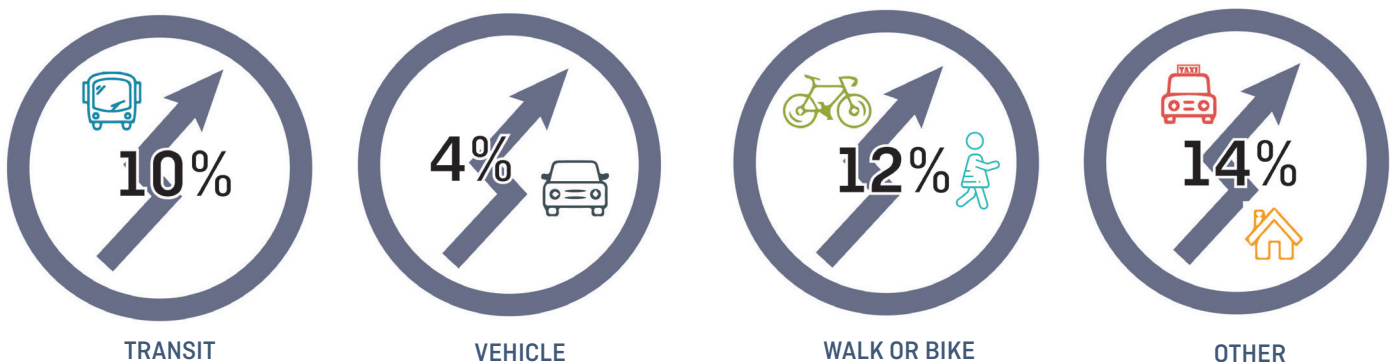
According to commuter data, the region is dominated by vehicular travel. In 2015, 83% of commuters opted for vehicular travel. Only 4% used public transit, and 4% cycled or walked. In addition, 7% of employees worked from home. The future of the region's transportation network will likely remain dominated by vehicles, but non-vehicular modes may play an increasingly important role.



Source: 2011-2015 American Community Survey (ACS) 5-Year Estimate

## Transit use is on the rise.

Between 2013 and 2015, transit ridership amongst commuters increased by 10% across the three counties in the region, while vehicular travel rose by just 4%. Some growth is expected across all modes in response to rising population and employment, but the growth in transit and non-motorized travel relative to vehicular travel suggests commuters may be opting for alternative modes.

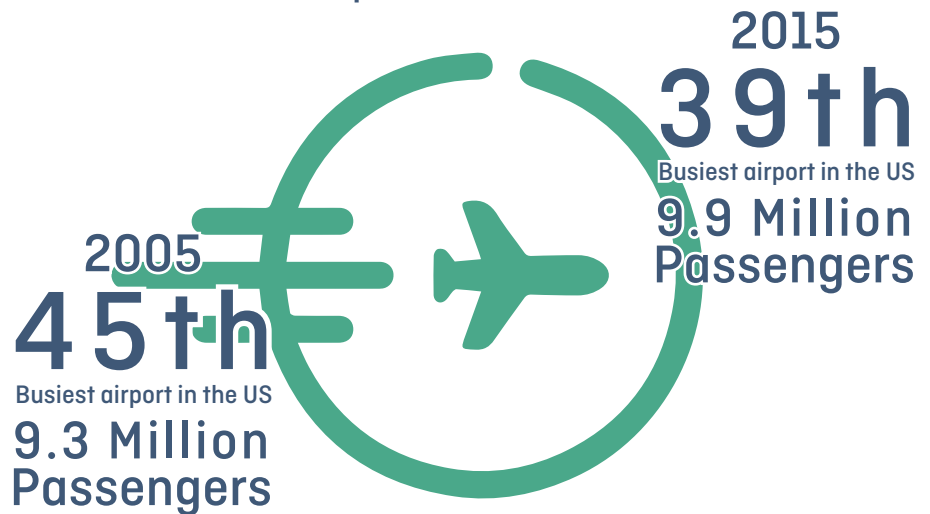


Source: 2009-2013 and 2011-2015 ACS 5-Year Estimates

## Air travel is also increasing.

A healthy increase in passenger volumes suggests increased economic activity in the Triangle region, and provides a clear example of how travel behavior and economic activity are strongly linked. Increased air travel can have multimodal impacts, as vehicular and truck traffic to and from the airport is likely to increase. Additionally, larger volumes of air travelers increases the possibility of a financially-viable commuter rail connection to the airport.

More passengers use Raleigh-Durham International Airport than ever before

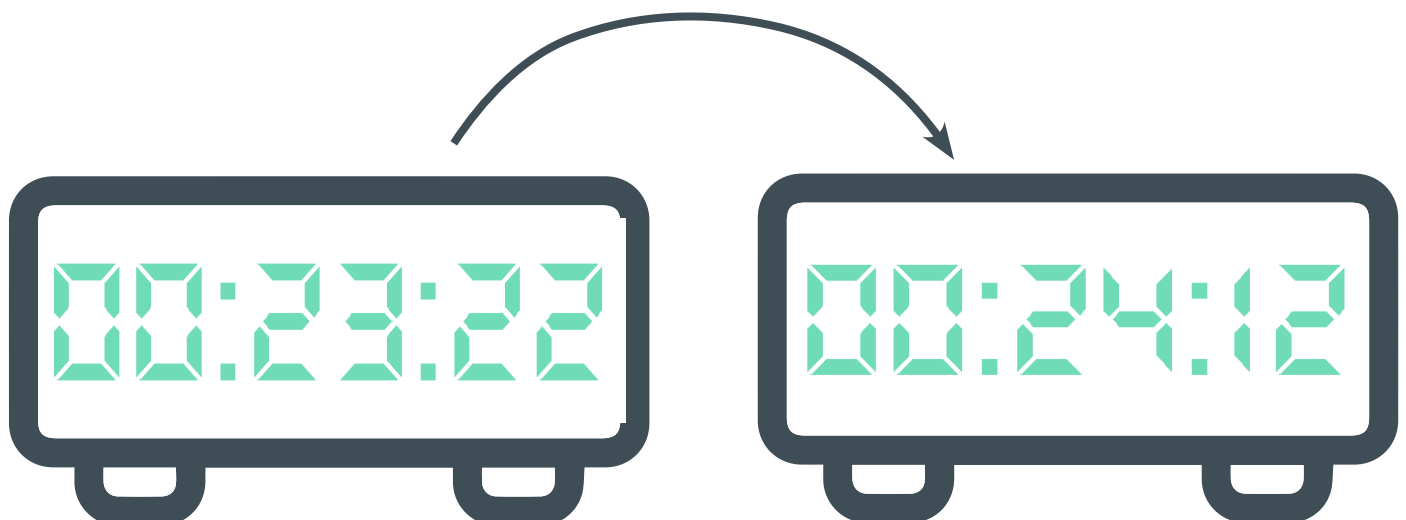


Source: Raleigh-Durham Airport Authority

.....

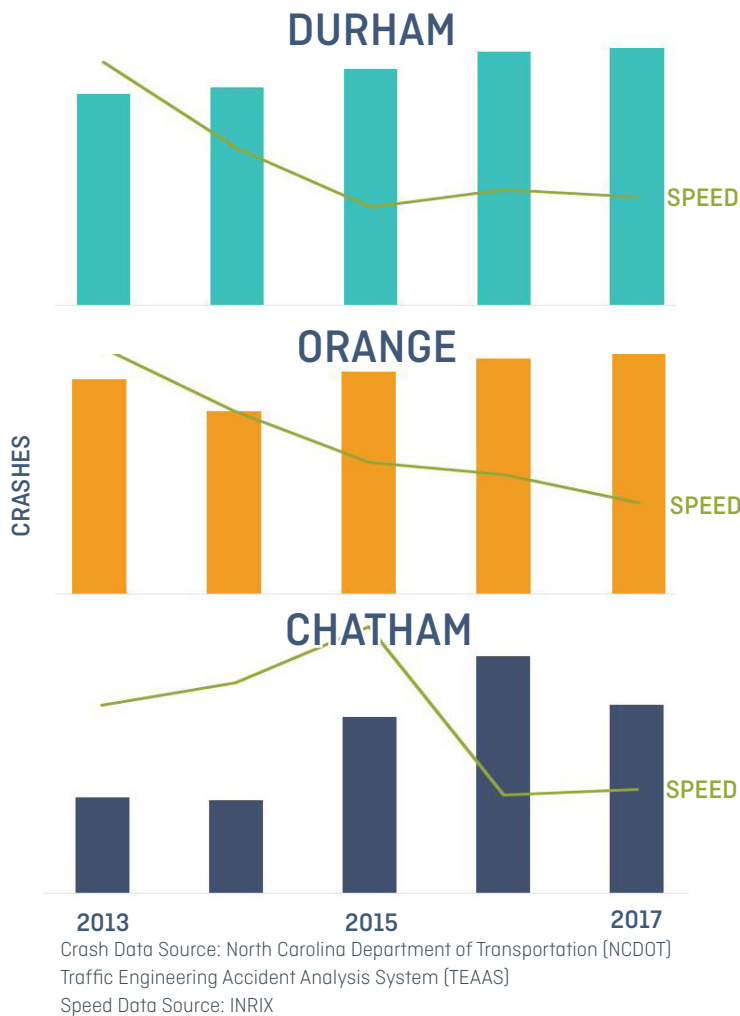
## All of this travel creates longer commute times...

In 2015, the average travel time for commuters was 24 minutes and 12 seconds. Across the region, average travel time increased by 50 seconds, between 2013 and 2015. Congestion is likely the dominant driver of this change given that on average 83% of commuters in the region drive to work.



Source: 2009-2013 and 2011-2015 ACS 5-Year Estimates

## KEY FINDINGS

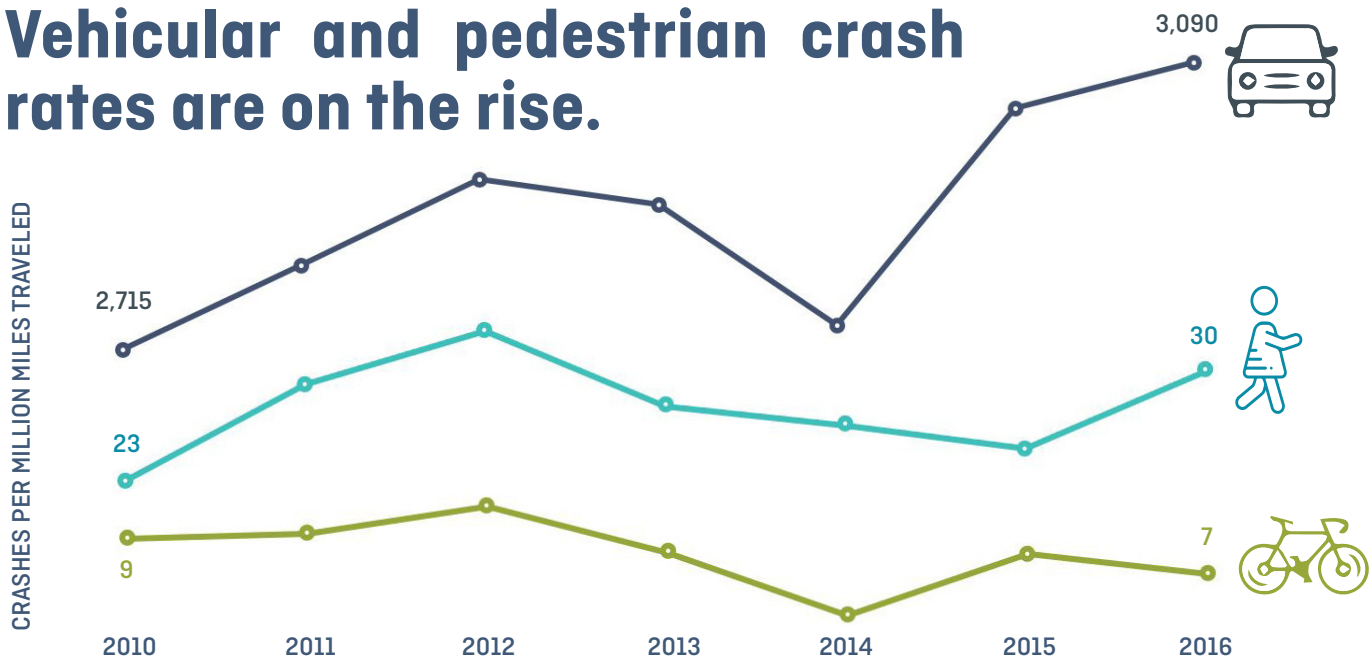


## ...and it leads to safety concerns.

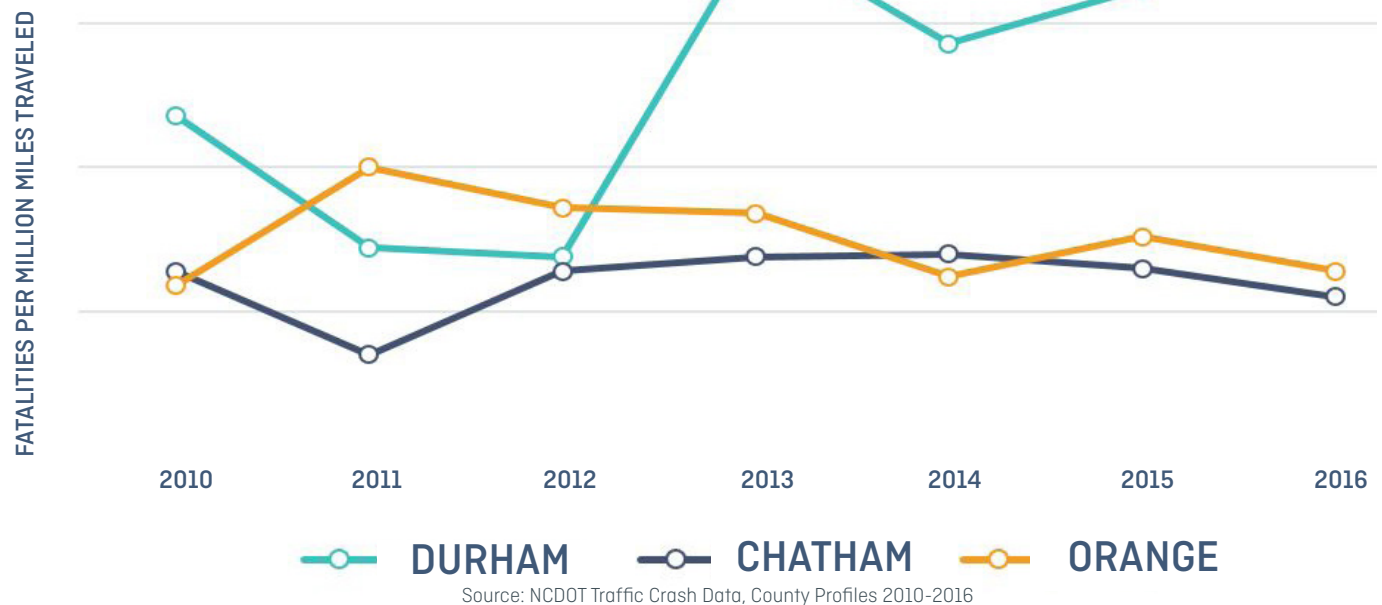
Average speed fell in all three counties between 2013 and 2017. In contrast, the number of crashes has generally increased. Reduced speeds that are accompanied by higher rates of vehicular crashes can be an indicator of increased congestion. This finding suggests that effective intervention will require improvements to safety infrastructure coupled with speed regulation.

## The region suffers from congestion.

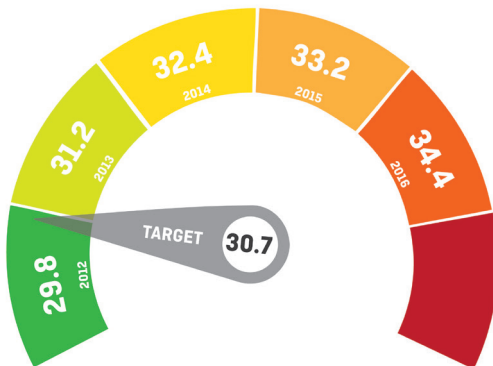
## Vehicular and pedestrian crash rates are on the rise.



## The fatality rate in Durham County has increased since 2010...



## ...and fatalities and injuries are above desired targets throughout the region.



ANNUAL FATALITIES VS TARGETS



ANNUAL SERIOUS INJURIES VS TARGETS

Source: NCDOT Traffic Crash Data, County Profiles 2012-2016

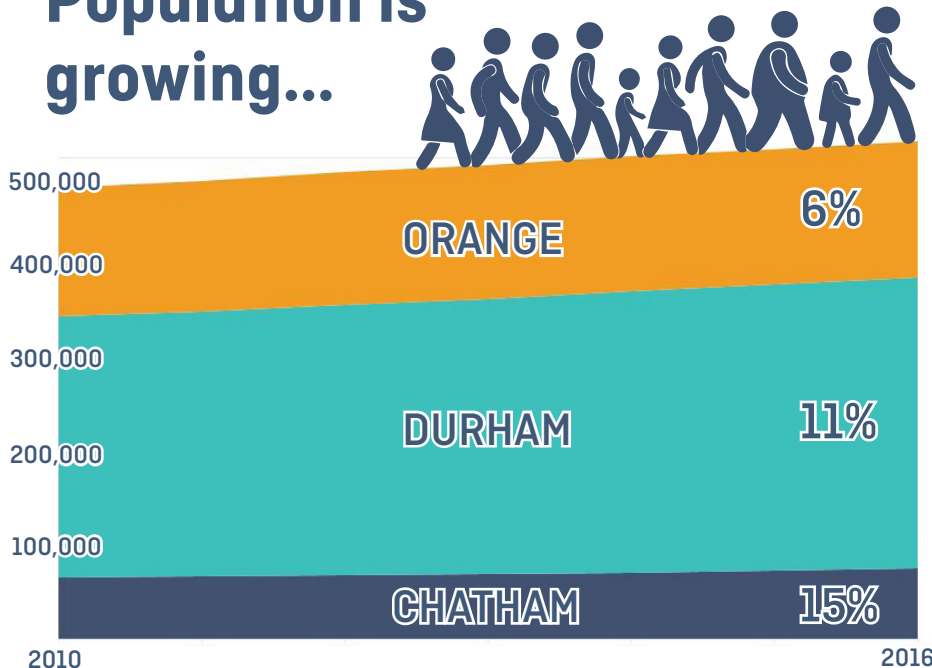
Between 2010 and 2016, the average crash rates across the region for vehicles and pedestrians rose. The vehicular crash rate rose by 14%. But of the three counties, only Durham saw a rise in the rate of fatalities.

The MPO sets targets for reducing vehicular fatalities and non-motorized fatalities and serious injuries. Despite a small decline in the number of non-motorized fatalities and injuries between 2012 and 2013, the overall average number of motorized and non-motorized fatalities has increased steadily each year beyond the DCHC safety targets. According to this metric, the region is not meeting its standards for safety, and interventions will be required to reduce fatalities for drivers, pedestrians and cyclists.



# DRIVERS OF CHANGE

## Population is growing...



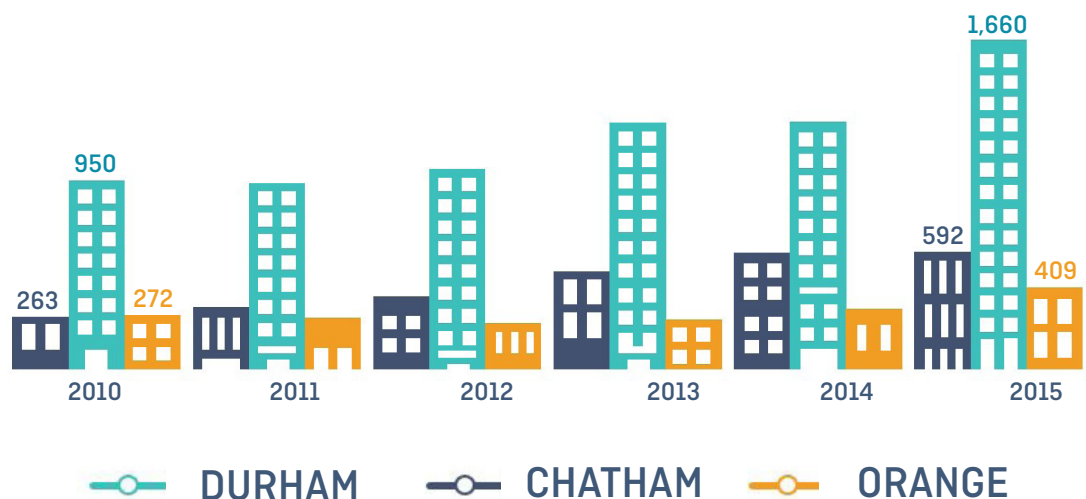
Source: 2006-2010 and 2012-2016 ACS 5-Year Estimate

Since 2010, the population in the DCHC region has grown by 10%, reaching over 500,000 residents. The majority of these residents (almost 60%) live in Durham County. Population trends reflect land use trends, as evidenced by the age distribution. The presence of two major universities, as well as key employment centers such as Research Triangle Park (RTP), explains the high concentration of working-age adults (20 - 54 years) in Durham and Orange Counties. Travel patterns are likely to reflect this population distribution in the form of home-to-work trips along major highways, connecting employment hubs across the region.

## ...and development is on the rise.

### Residential Building Permits Increased Every Year Since 2010

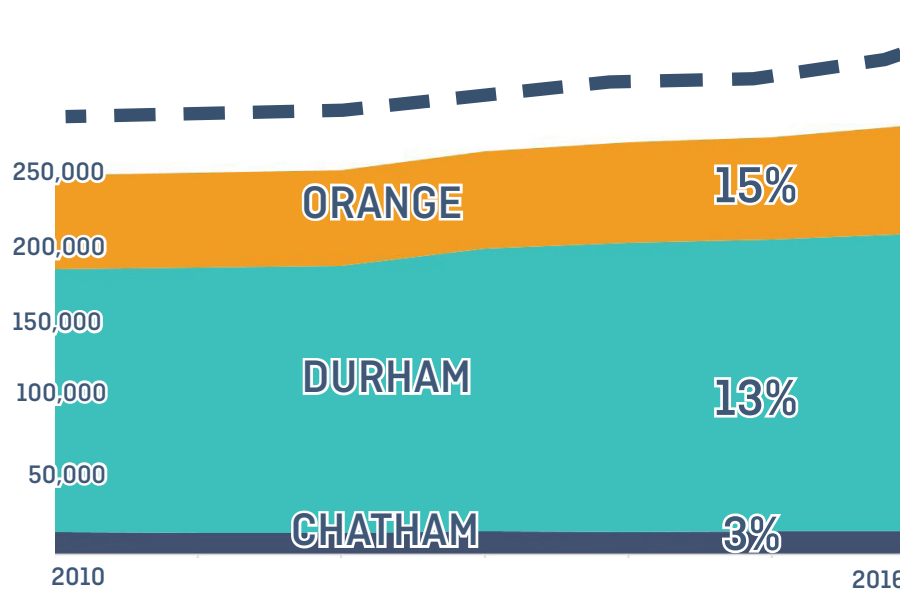
The data show a steady increase in residential building permits since 2010, with all three DCHC counties seeing their highest rate of approved permits in 2015. This residential growth is inextricably linked to the growth of the regional transportation network. If residential development continues to increase, so too will traffic volumes. The distribution and location of development also has a strong influence on the pattern of travel throughout the region.



Source: U.S. Census Building Permit Survey, 2010-2015

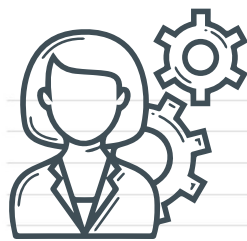


## Employment is growing,

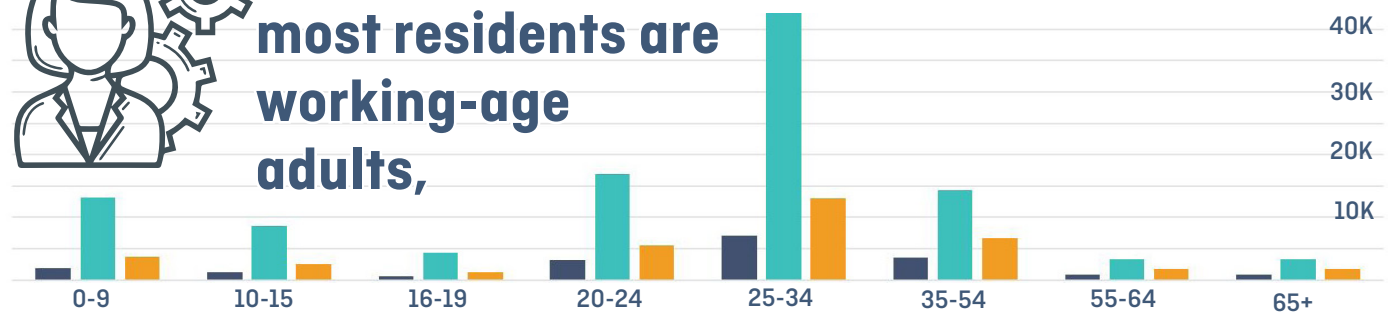


Source: Longitudinal Employer-Household Dynamics (LEHD), 2010-2016

The DCHC region is growing steadily - adding roughly 30,000 new jobs since 2010 (the equivalent of 12 jobs per day). The majority of those jobs (70%) are located in Durham County, but Orange County is growing too - adding almost 10,000 new jobs since 2010. This growth - coupled with the concentration of working-age adults and the geographic distribution of key employment centers - may affect transportation patterns across the region.



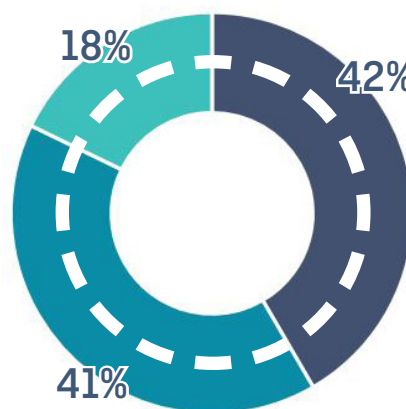
**most residents are working-age adults,**



Source: 2012-2016 ACS 5-Year Estimate

## and jobs in the region create all-day travel.

Different types of jobs use transportation networks differently. For the DCHC region, more than 80% of all jobs are in the Peak Hour or All Day categories, and these industries have grown considerably in the last 5 years. A surge in peak hour trips can lead to major congestion challenges. In addition, the types of jobs that are thriving in this region generally locate in denser, urban areas. These development patterns allow for more multimodal transportation options such as transit, biking, and walking.



**PEAK TRAVEL JOBS**

e.g. Technology, Consulting

**ALL-DAY TRAVEL JOBS**

e.g. Retail, Healthcare

**INDUSTRIAL TRAVEL JOBS**

e.g. Manufacturing, Warehousing

Source: Longitudinal Employer-Household Dynamics (LEHD), 2016





Image: Historic Downtown Hillsborough  
Photo Credit: Renaissance Planning



# MOBILITY

## What Is It?

This section includes indicators for four key types of travel in the region:

- » Vehicular Travel;
- » Transit, Bicycle and Pedestrian Travel;
- » Air and Freight Travel; and
- » Commuter Travel.

## Why Does It Matter?

The DCHC region is a diverse, complex network of cities, towns, and activity centers. The region plays an important role in the southeast United States and in the national economy. The ways that people and goods move throughout the region, and across its borders, depends on a strong, multi-modal transportation network. To develop a robust understanding of this network, it is essential to monitor levels of activity for all modes of travel, changes over time, and the relationship between different travel indicators. In doing so, the DCHC MPO can effectively respond to shifting travel patterns in a way that best serves all residents.

## Key Findings

The DCHC region is dominated by a number of key activity centers, including downtown Durham, downtown Chapel Hill, downtown Hillsborough, Duke University, UNC Chapel Hill, Research Triangle Park (RTP), and Raleigh-Durham International Airport (RDU). Travel between the activity hubs is facilitated by a network of highways that support much of the vehicular, freight and commuter traffic in the region. Levels of traffic and congestion have increased over the past decade, due in part to rising population and economic growth. While most commuters choose vehicular travel, the region is increasingly multimodal, with slowly rising levels of transit, bicycle, and pedestrian traffic, especially in downtowns and on bicycle- and pedestrian-friendly infrastructure, such as the popular American Tobacco Trail.



# VEHICULAR TRAVEL

## What Is It?

Travel by car is still the backbone of travel in America and the DCHC region. The indicators in this section are focused on vehicular travel, and include average annual daily traffic on the region's roads, changes in vehicle miles traveled (VMT) over time, and the cost of fuel.

## Why Does It Matter?

The Census Bureau estimates that approximately 85% of all trips to work are made by car, and it is likely that non-work trips are even more auto-dependent. By understanding the trends affecting - and affected by - vehicular travel, the MPO will be able to spot problems early on and act decisively on emerging opportunities.

## Key Findings

While VMT patterns are cyclical throughout the course of each year, overall VMT rose steadily between 2010 and 2017. This is true for all three counties in the region - Durham, Chatham, and Orange. The roadways that carry most of the region's vehicular traffic include Interstate 40 (I-40), Interstate 85 (I-85), and NC Highway 147 (NC 147), indicating an inter-connected region in which people are traveling across city and county boundaries for work and for leisure.





# VEHICULAR TRAVEL

## DAILY TRAFFIC

This indicator shows the number of vehicles using particular roads within the regional transportation network each year.

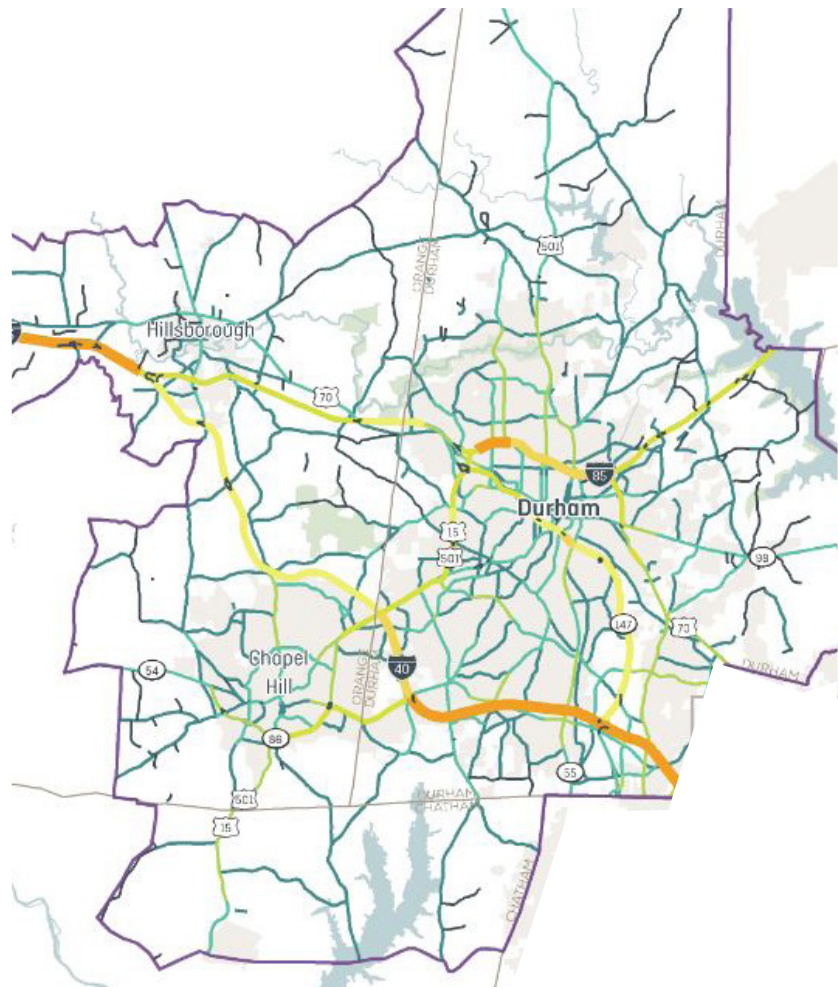
### WHY THIS INDICATOR MATTERS

Daily vehicular traffic patterns are a strong indicator of regional economic activity. High volume along particular roads indicates a pattern of origins and destinations, both within the region and beyond. Understanding the relationship between places is essential for maintaining strong regional connectivity.

### WHAT'S HAPPENING

NCDOT and the DCHC MPO collect information about traffic volume throughout the region. Traffic volume is measured as annual average daily traffic (AADT).

This map shows the AADT for all vehicles in 2016. The highest volume of traffic appears along I-40 between Chapel Hill and Raleigh and along I-40/I-85 between Hillsborough and north west to Burlington (not shown). More than 100,000 vehicles use these stretches of highway annually. There is also substantial vehicular traffic on the I-85 and NC 147.

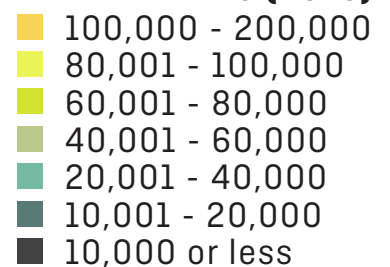


Source: NCDOT Traffic Survey Group, Annual Average Daily Traffic (AADT) 2016

### FINDINGS

Annual traffic volume along I-40, I-85 and NC 147 indicate a strong social and economic relationship between the urban centers within the region, as well as with the neighboring metropolitan area of Raleigh. With the rise in vehicle miles traveled (VMT) in the region, and the associated risks of collision and congestion, this traffic volume data can be used to make targeted maintenance interventions within the regional network.

### DAILY TRAFFIC (2016)





# VEHICULAR TRAVEL

## VEHICLE MILES TRAVELED

This indicator shows the annual miles traveled by all vehicles on the region's roadways in Orange, Durham, and Chatham counties between 2010 and 2017. Data for Wake, Johnston, Franklin, Granville, and Harnett Counties is provided for comparison.

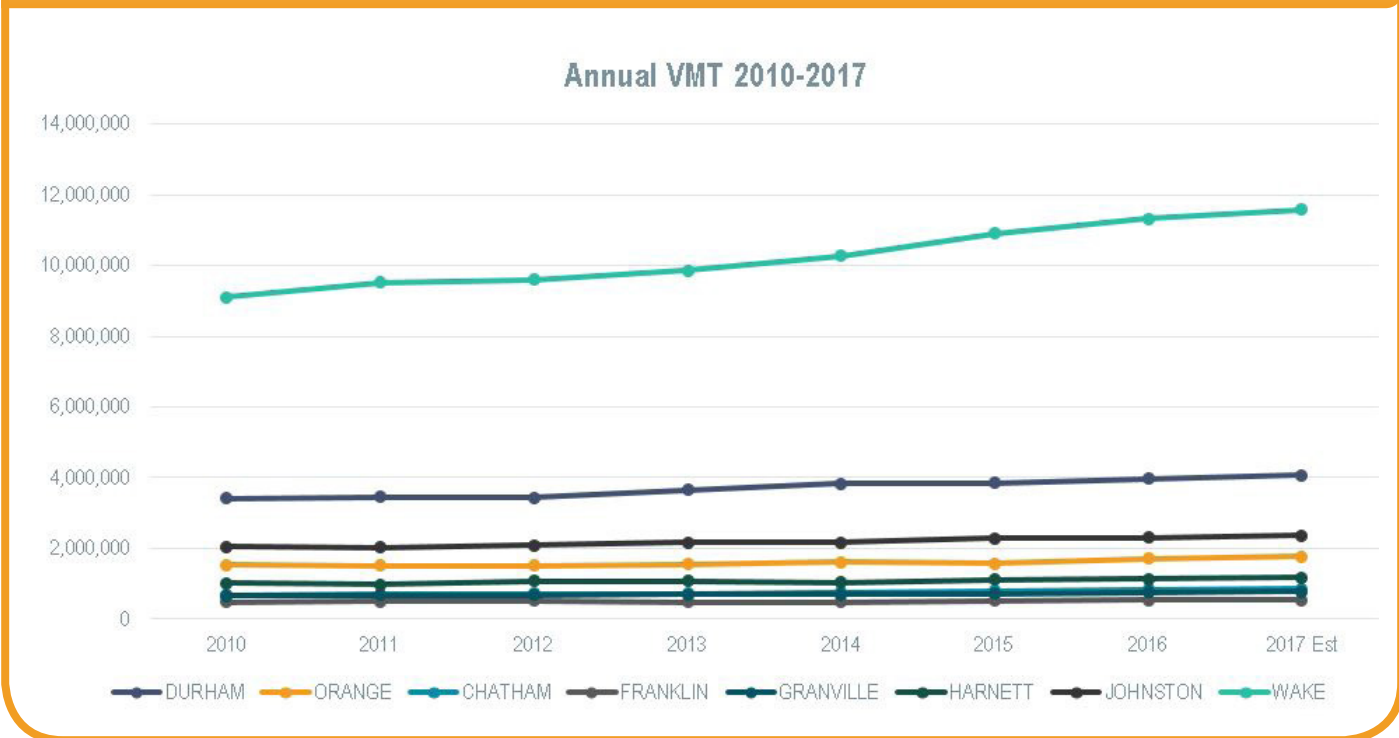
### WHY THIS INDICATOR MATTERS

Vehicle miles traveled (VMT) is a cornerstone indicator of transportation network utilization and efficiency. This region, like nearly all others in the U.S., is predominantly auto-oriented. VMT measures the amount of total vehicular travel on a region's roadways per year. Significant increases indicate the need for MPO intervention through demand management or increased capacity.

### WHAT'S HAPPENING

The Federal Highway Administration (FHWA) collects VMT data throughout the country, and has updated their statistics through the first half of 2017. Since 2010, annual VMT has risen in Durham, Chatham and Orange Counties, as well as in the counties that comprise the larger Triangle region. Chatham County had the largest growth in VMT within the DCHC region from 2010 to 2017 at 27%, followed by Durham County (19%) and Orange County (15%).

Despite the increase in vehicle travel, DCHC is still dwarfed by Wake County, where annual VMT is approaching 12 million. In contrast, annual VMT in Durham, Orange, and Chatham Counties combined is just above 6 million.



### FINDINGS

The continued increase in vehicular travel, paired with population increases, suggests that regional demand for travel is as high as ever. This can lead to increased congestion and crashes, requiring DCHC to continue advancing their policy and investment solutions to address such issues.





# VEHICULAR TRAVEL

## VEHICLE MILES TRAVELED

This indicator shows the monthly vehicular travel for each of the three MPO counties, and for the MPO region overall in 2016 (from January to December).

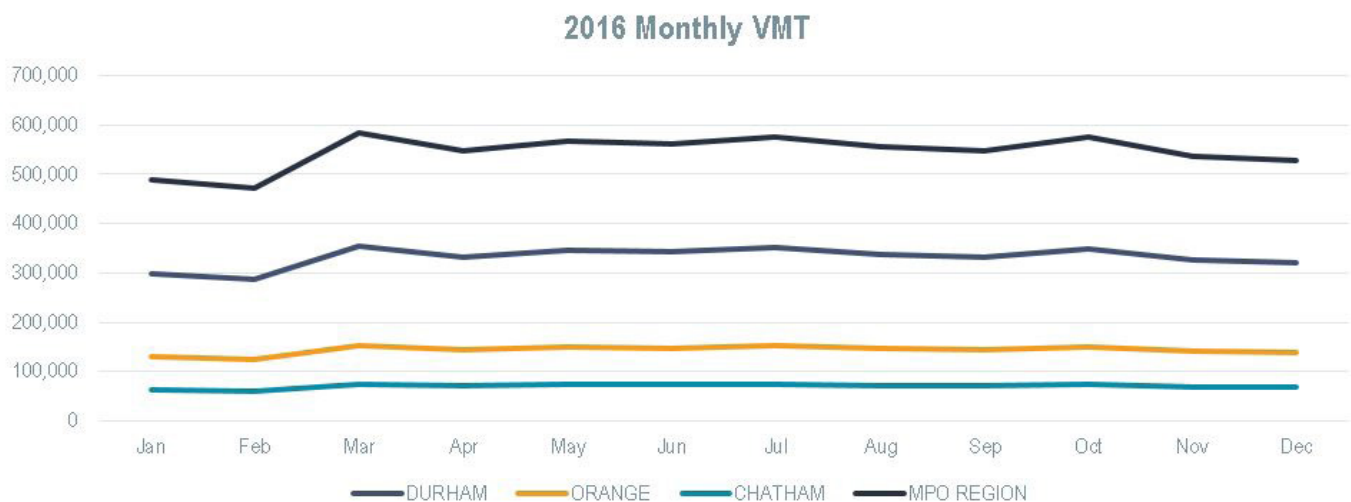
### WHY THIS INDICATOR MATTERS

Vehicle miles traveled (VMT) is a cornerstone indicator of transportation network utilization and efficiency. In addition to looking at annual VMT trends over time, it is also valuable to look at a one-year snapshot of VMT by month. Understanding the cycle of VMT each year can provide necessary insight for maintenance and upgrade schedules.

### WHAT'S HAPPENING

The Federal Highway Administration (FHWA) collects VMT data throughout the country, and has updated their statistics through the first half of 2017. The graph shows January to December VMT data for 2016 - the most recent year with 12 months of data available.

VMT in 2016 was cyclical. Total VMT in the region rose and fell month to month. All three counties experienced their lowest VMT in February, a 24% increase to peak VMT of 582,681 in March, remained generally stable from April to October, and then declined again towards the end of the year.



### FINDINGS

The month-to-month cyclical nature of VMT can be attributed to the number of days for which data is collected each month (for example February is consistently the lowest). The seasonal nature of VMT in 2016 is mirrored in data trends since 2010 and in the 2017 estimated data. Since 2010, VMT in the region has been lowest over the winter months (November to February). VMT is also higher in summer months, with peak months in March and October. These trends are generally mirrored in nationwide VMT statistics.



# VEHICULAR TRAVEL

## MOTOR FUEL PRICES

This indicator looks at gasoline prices and trends over the last 5 years, as well as at the effect of gas prices on VMT.

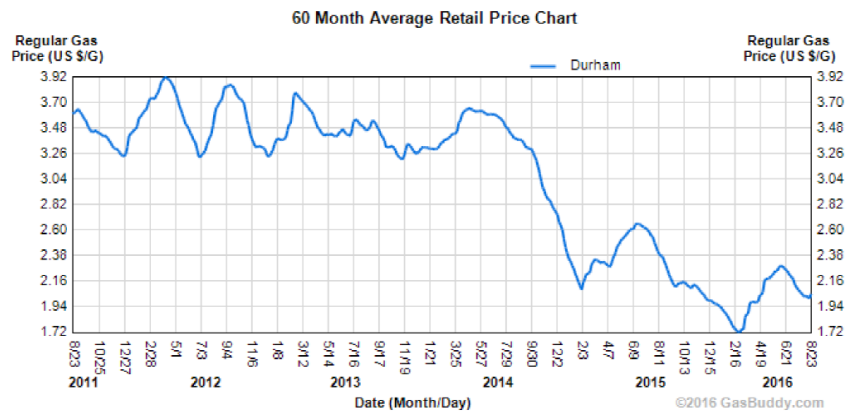
### WHY THIS INDICATOR MATTERS

Gas prices can influence travel patterns and travel behavior and prices can also be highly volatile. Knowing the impact that this volatility has on how people travel can provide important insights for transportation planning.

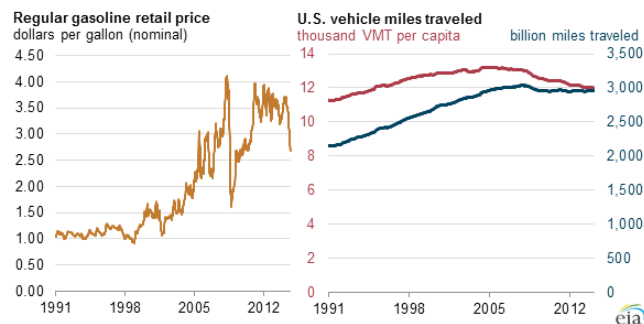
### WHAT'S HAPPENING

The top chart to the right shows gas prices fell dramatically during 2014, following a three-year period where prices hovered around \$3.50 per gallon. By the start of 2015, prices were down close to \$2.00, and by the start of 2016 had fallen to less than half of the peak five-year price. Seasonal fluctuations continue to make prices somewhat volatile in the short-term, but there is little to suggest that any long-term pattern is emerging in prices.

These major fluctuations could be expected to influence travel behavior, but several studies suggest otherwise. One example, in the bottom chart to the right, shows that price changes in the long term are much more volatile than changes in vehicle miles traveled (VMT), though there is definitely a small link between gas prices and VMT.



### Gasoline prices tend to have little effect on demand for car travel



Source: U.S. Energy Information Administration, based on Federal Reserve Bank of St. Louis  
 Note: VMT is vehicle miles traveled. Per capita figures reflect U.S. population age 16 and over. Vehicle miles traveled figures are 12-month rolling averages.

Republished December 17, 2014, 2:00 p.m. to correct an error in the graph.

### FINDINGS

The relative stability of VMT compared to the drastic changes in fuel prices provides some confirmation of larger national studies that are finding only weak connections between fuel price and vehicle travel. Rather than observing fuel prices influence behavior, it seems that the introduction of fuel-efficient cars has allowed for drivers to continue their travel patterns without concern for fuel price fluctuations.



## TRANSIT, BICYCLE & PEDESTRIAN TRAVEL

### What Is It?

Despite the dominance of vehicular travel in the region, many residents still rely on public and non-motorized transit to reach their places of work and essential services. The indicators in this section present ridership for the four transit services in the region and the associated costs of providing service. Indicators also show pedestrian and bicycle traffic at key locations in the region.

### Why Does It Matter?

A thriving multi-modal transportation network is essential for the region to best serve its residents, and to attract new business, investment, and visitors. Monitoring the level of use for transit, bicycle, and pedestrian infrastructure can help the MPO identify opportunities and make targeted interventions.

### Key Findings

In the 2015-2016 fiscal year, average annual daily ridership on the four transit agencies in the region was approximately 35,000. Duke Transit had the highest ridership - almost 18,000 riders - but the service is available only to students, staff and faculty associated with Duke University. Publicly available transit services have lower ridership statistics and as a result, higher costs per passenger. GoTriangle - the only agency providing inter-city connections had just over 2,000 riders in the same year, and the highest costs per passenger. In a region dominated by inter-city and cross-county daily travel, GoTriangle provides essential access to resources and opportunities, and requires continued monitoring and investment.





# TRANSIT TRAVEL

## TRANSIT RIDERSHIP

This indicator shows the average annual ridership for each of the four transit service providers in the region, from 2013 to 2016. It also shows the operating cost per passenger for each transit service provider.

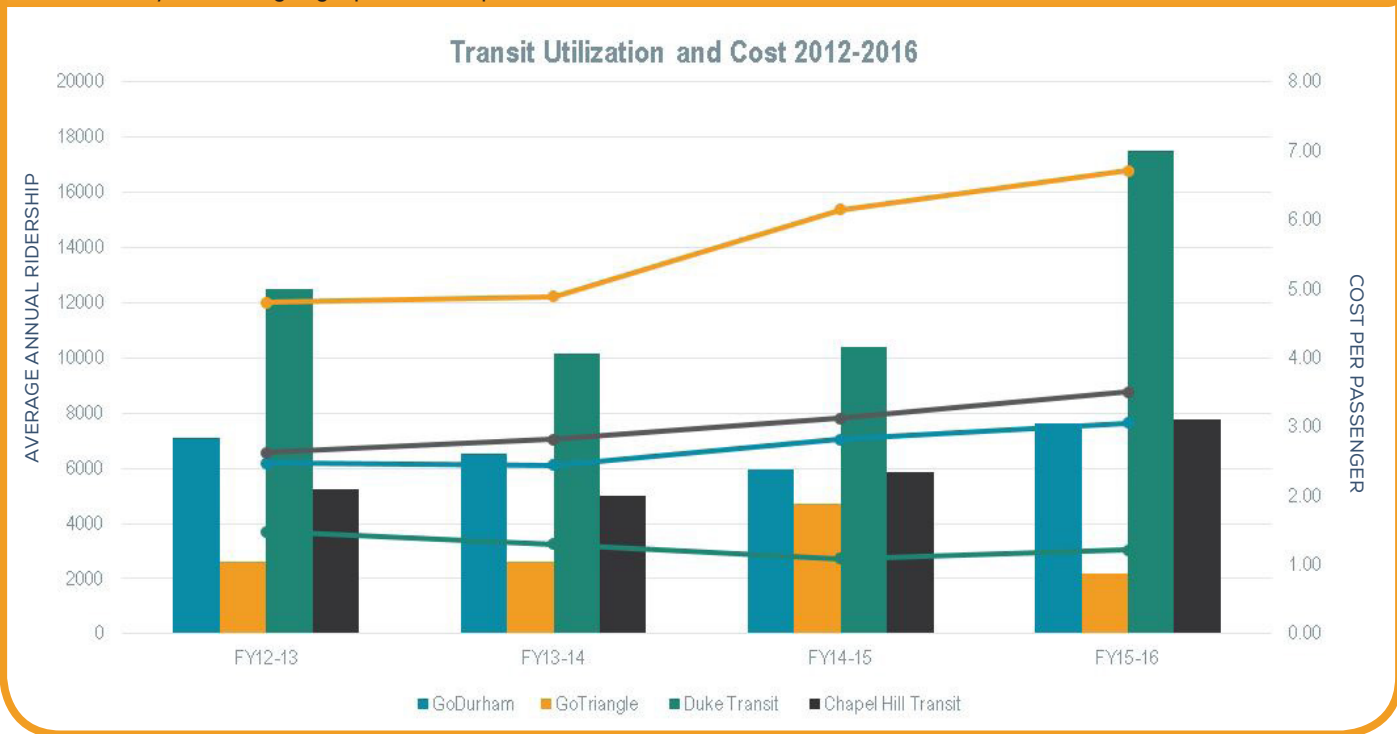
### WHY THIS INDICATOR MATTERS

In a region dominated by vehicular and highway travel, residents without cars rely heavily on the local transit services. In addition, nationwide trends suggest that consumers and workers increasingly value access to a strong public transit network. To best serve all residents of the region, and to ensure the region remains competitive in connectivity and quality of life indicators, it is important to monitor transit ridership and the costs associated with providing those services.

### WHAT'S HAPPENING

In the graph below, bars represent average annual ridership for each transit agency over time and lines represent operating cost per passenger over time. There is an inverse relationship between the two indicators, due to economies of scale. However, the cost of providing GoTriangle service - the greatest of the four agencies - is higher due to their inter-city routes, which are longer and therefore more expensive to provide.

Duke Transit maintained the highest ridership since 2013, followed by GoDurham, Chapel Hill Transit, and finally GoTriangle. Duke Transit and GoDurham follow similar trends over time - falling from 2013 to 2015 and rising again in 2016 - likely due to a geographic overlap of their service areas.



Source: Annualized Average Daily Ridership and Operating Cost per Passenger by Agency, FY12-13 through FY15-16. Collected by DCHC MPO.

### FINDINGS

While there is no consistent trend between the four transit agencies, it is important to continue to monitor ridership, and work to increase ridership as cost saving mechanism. Monitoring, increasing and supporting ridership on inter-city routes is especially important in a region dominated by three distinct economic hubs and a large commuter population. A strong public transit network is essential for many residents, especially low income, disabled, elderly, or otherwise vulnerable populations. It is also an important factor in ensuring the region remains a competitive economic center and attractive destination.



# BIKE-PED TRAVEL

## DAILY TRAFFIC

This indicator estimates 2015 average annual daily bicycle traffic (AADBT) and average annual daily pedestrian traffic (AADPT) by showing bike and pedestrian counts at key locations in Durham and Orange Counties.

### WHY THIS INDICATOR MATTERS

It is important to monitor not only vehicular and transit statistics, but also bicycle and pedestrian travel. The relationship between facility type and bike and pedestrian activity can provide insight into how the built environment influences travel behavior. This information can be used to make policy and infrastructure decisions.

### WHAT'S HAPPENING

In 2015, bicycle and pedestrian counts were collected at five key locations in Orange and Durham Counties as part of a NCDOT pilot study to assess seasonal variation. The Libba Cotten Bikeway in Carrboro (Orange County) had the highest count of average daily bicycle traffic at 558, and Martin Luther King Boulevard in Chapel Hill (also Orange County) had the highest count of average daily pedestrian traffic (670). Both facilities are major commuting routes between residential neighborhoods and the UNC campus. The American Tobacco Trail and Old NC Hwy 86 function more as a recreational facilities. Longitudinal data from all three counties is needed to determine bicycle and pedestrian traffic trends in the region.

Municipality	Site Name	Installation Type	AADBT 2015	AADPT 2015
Chapel Hill	Martin Luther King Blvd	Roadway & Sidewalk	100	670
Carrboro	Old NC Hwy 86	Bike Lane	162	69
Carrboro	Libba Cotten Bikeway	Shared Use Path	558	440
Durham	American Tobacco Trail - Bridge	Shared Use Path	260	349
Durham	American Tobacco Trail - Downtown	Shared Use Path	186	146

### FINDINGS

This snapshot of bicycle and pedestrian traffic at five locations does not provide insight into broader trends across the region. However, the relationship between facility type and the number of cyclists and pedestrians can provide clues to user preferences. The bike lane on Old NC Highway 86 has more than twice the amount of cyclists than pedestrians. The shared use paths with no vehicular access have similar numbers of cyclists and pedestrians. The Martin Luther King roadway, which has a sidewalk and no designated bike lane, has almost 7 times the number of pedestrians as cyclists. Continuing to understand the relationship between facility type and user behavior will be important moving forward. It will also be essential to understand longitudinal bike-ped trends, in relationship to bicycle and pedestrian related crashes, injuries, and fatalities. The MPO will continue this pilot study in future years to acquire longitudinal data and determine long term trends.



# AIR & FREIGHT TRAVEL

## What Is It?

This section looks at air travel at the region's major airport, Raleigh-Durham International (RDU), as well as freight travel - the transportation of goods by truck, train, or aircraft.

## Why Does It Matter?

The DCHC region is a major economic hub in the southeast United States, as well as a destination for visitors from across the country and transnational migration. Air and freight travel patterns play an important role in connecting the region to the rest of the country (and the world) and have major impacts on the local transportation system.

Freight movement in particular is an essential part of both the region's economy and the region's transportation. Freight transports billions of dollars worth of goods to and through the region, but can also take a toll on local infrastructure. Monitoring freight activity and freight impacts can help identify opportunities for investment and mitigation to help freight and non-freight activities move safely and efficiently.

## Key Findings

Between 2005 and 2015, RDU rose to the 39th busiest airport in the nation. The number of annual passengers has been climbing steadily since 2009, reaching almost 10 million in 2015. Freight travel is also increasing - both truck tonnage and overall value of cargo are expected to continue to rise through 2020. The increase of travelers to region, as well as cargo transported across its roads will have a strong effect on the transportation network. Major highways including I-40 and I-85 will support much of this increased activity and will require continued investment and maintenance.





# AIR TRAVEL

## RDU PASSENGERS

This indicator looks at passenger travel at RDU Airport from 2006 to 2015.

### WHY THIS INDICATOR MATTERS

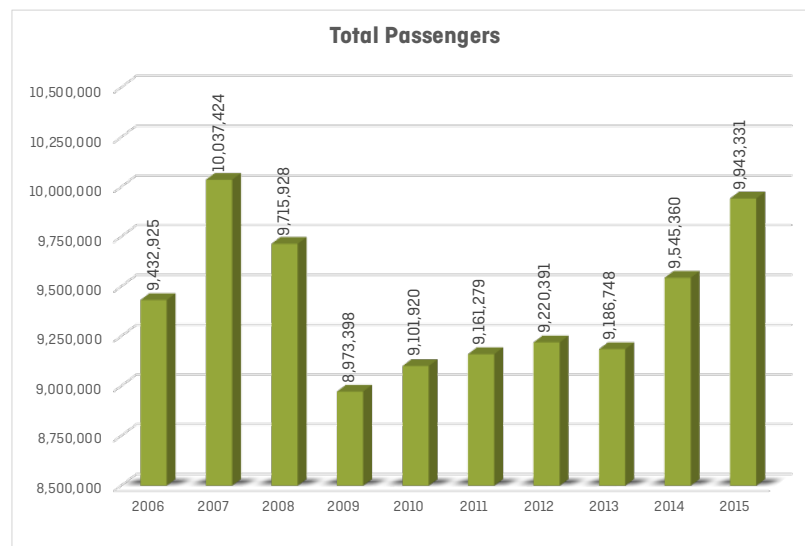
Air travel is a strong barometer for economic activity in a region, and can help spot trends in travel demand from visitors, businesses, and trucking.

### WHAT'S HAPPENING

RDU Airport served nearly 10 million passenger trips in 2015, counting both enplanements (on-boarding) and deplanements (off-boarding). Passenger totals increased by nearly 400,000 between 2014 and 2015, and there has been a clear upward trend in passenger trips since 2009. As a result, RDU now has the 39th highest passenger volume in the U.S., up from 45th in 2005.

Some of the recent increase in passengers may reflect a drop in average air fares, as year-end fares at RDU in 2015 were about \$35 less than 2014 prices, at an inflation-adjusted \$362. However, 2015 prices are nearly identical to 2011 and 2012 numbers, so price is clearly not the only thing contributing to increased passenger air travel.

No data was identified on the number of flights in and out of RDU over the analyzed period, but RDU has clearly grown in the last half-decade.



### Largest U.S. Airports (Passenger Travel)

2005

45th



2015

39th

Source: Raleigh-Durham Airport Authority

### FINDINGS

The healthy increase in passenger volumes suggest increased economic activity in the Triangle region, and provide a clear example of how travel behavior and economic activity are strongly linked. Increased air travel can have multi-modal impacts, as vehicular and truck traffic to and from the airport is sure to increase. Additionally, larger volumes of air travelers increases the possibility of a financially-viable commuter rail connection to the airport.



# FREIGHT

## DAILY TRUCK TRAFFIC

This indicator looks at the annual average daily truck travel throughout the regional transportation network in 2016.

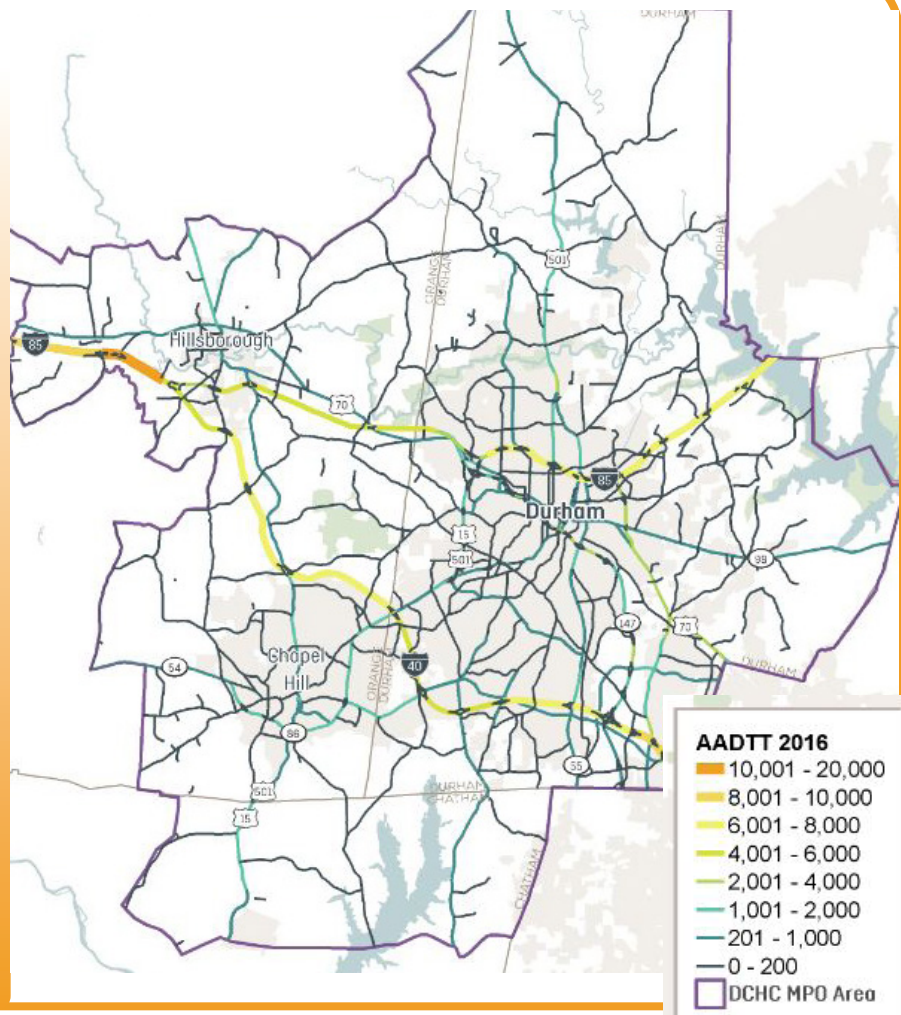
### WHY THIS INDICATOR MATTERS

Freight trucks routinely use the largest roads in our network - interstates, state highways, and major arterials. As such, changes in volume of truck traffic should be closely monitored. In conjunction with truck tonnage and cargo value, this indicator helps to understand the role that truck-based freight is playing in the region.

### WHAT'S HAPPENING

The North Carolina Department of Transportation (NCDOT) collects information about traffic volume throughout the region. Traffic volume is measured as annual average daily traffic (AADT). Traffic volume is also available for annual average daily truck travel (AADTT), including the number of Single Unit and Multi Unit Trucks on the roads.

This map shows AADTT for all trucks in 2016. The highest volume of truck traffic (indicated by wide orange and yellow lines) appears along the major interstates and highways. Between 4,000 and 8,000 trucks used I-85 and I-40 in 2016. In particular, a segment of the I-85 between Hillsborough and Burlington (to the northwest - not shown on the map) was traveled by over 10,000 trucks in 2016. On average, between 1,000 and 4,000 trucks traveled on US 15-501 and NC 147 in 2016.



### FINDINGS

I-85 and I-40 carry the greatest burden of freight traffic to - and through - the region. A high-quality transportation network, particularly interstates and highways, will ensure that the region continues to function as a node for trans-national freight.





# FREIGHT

## TRUCK TONNAGE AND CARGO VALUE

This indicator looks at the amount of goods being transported by truck, both in terms of weight and monetary value.

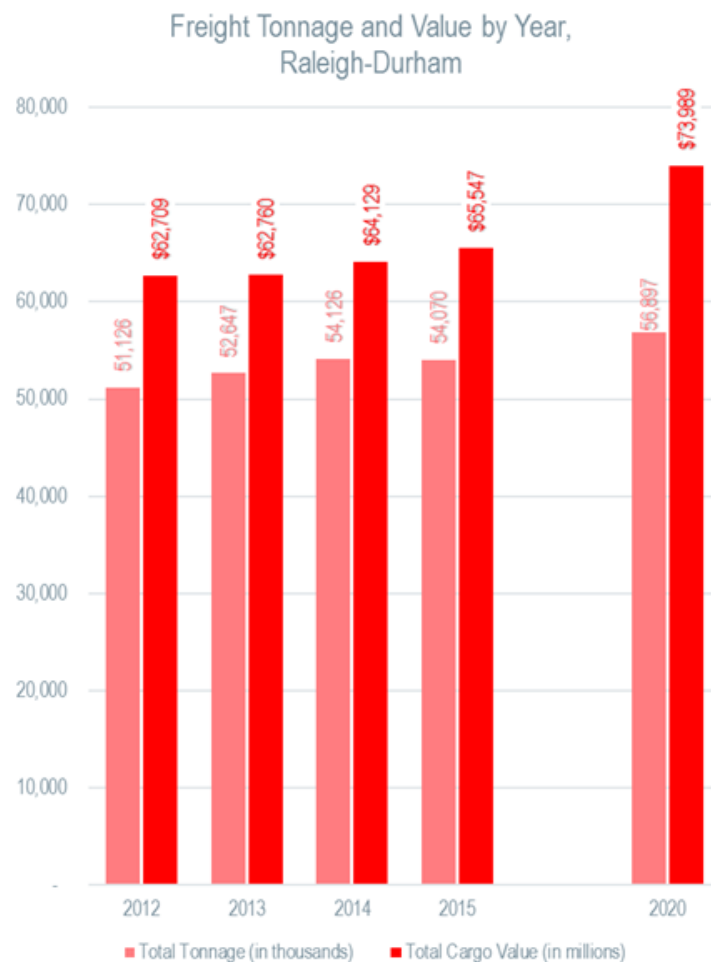
### WHY THIS INDICATOR MATTERS

In conjunction with truck volumes, this indicator helps to understand the role of truck-based freight in the region. Because trucks routinely use the largest roads in our network - interstates, state highways, and major arterials - changes in volume of truck traffic and the "value" of that traffic should be closely monitored.

### WHAT'S HAPPENING

The Federal Highway Administration (FHWA) has created the Freight Analysis Framework (FAF) to help quantify freight movement throughout the United States. The fourth version of the FAF, FAF4, is currently being released. At this stage, regional freight information is only provided for Raleigh-Durham combined, but can still be useful for DCHC, particularly as FAF4 provides both historical data and forecasted future change.

The chart to the right shows annual truck-based tonnage carried and the value of that cargo. In general, the amount and value of truck freight has increased slowly every year. Interestingly, FHWA forecasts for 2020 show a larger increase in the value of goods carried than the tonnage of goods carried.



### FINDINGS

The projected change in value of goods reflects a changing economy in the area. National forecasts expect that freight in the region will be less reliant on raw materials such as agriculture and livestock, and more focused on downstream materials such as advanced manufacturing or biopharmaceuticals. This change does not affect freight traffic greatly, but implies that any degradation of the transportation network will concern those who have a financial stake in the higher-value goods on our roadways.



# COMMUTER TRAVEL

## What Is It?

Commuter travel indicators present travel choices and patterns for home-to-work trips in the region. These include modal breakdowns, how those change over time for each county, as well as average annual travel time.

## Why Does It Matter?

The DCHC region is home to a number of key employment hubs including Duke University, the University of North Carolina at Chapel Hill, and Research Triangle Park. A large proportion of the population is made up of working-aged adults. Commuter trips to and from the major economic centers therefore makes up a large part of all trips in the region. How residents choose to make those trips, and how long they take, can provide essential insight into travel demand and decision-making, as well as the potential impacts for transit agencies, bicycle and pedestrian infrastructure and the regional transportation network.

## Key Findings

Commuters in the region overwhelmingly choose to drive to work. Almost 90% of workers in Chatham and Durham Counties use vehicles as their primary mode of transportation to work. In Orange County, 15% of workers choose a transit, walk or bike commute. Changes in mode share between 2013 and 2015 suggest that driving to work may be slowly declining in all three counties. During the same period, commute times slightly increased, possibly due to mode shifts and increased congestion in the region.





# COMMUTER TRAVEL

## TRAVEL MODE

This indicator shows the mode share of all commutes in the region in 2015 by four key travel modes: vehicle, transit, biking or walking, and other.

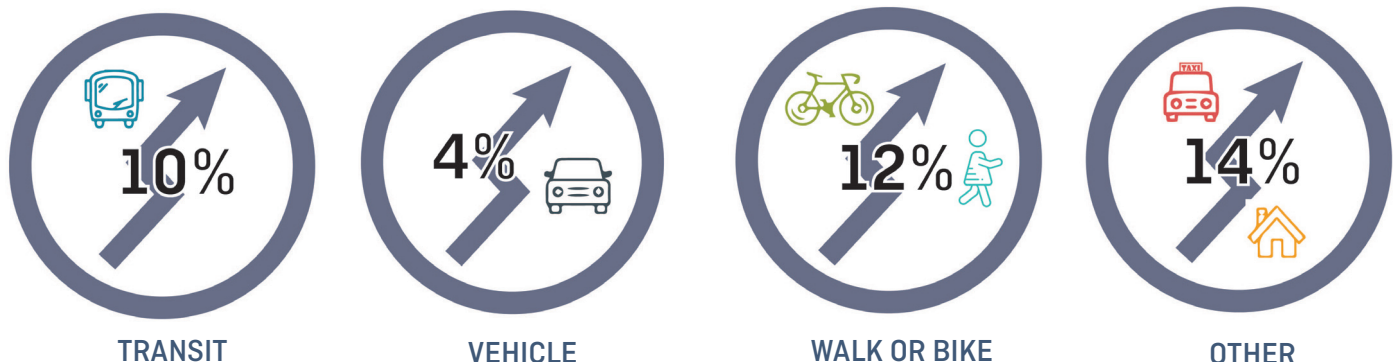
Mobility

### WHY THIS INDICATOR MATTERS

In a region dominated by strong economic centers and a population of predominantly working-aged adults, commuter trips to and from work are a major part of overall travel. Understanding the modal distribution of these trips, and how that distribution is changing over time, is important for maintaining a transportation network that best serves the region's working population.

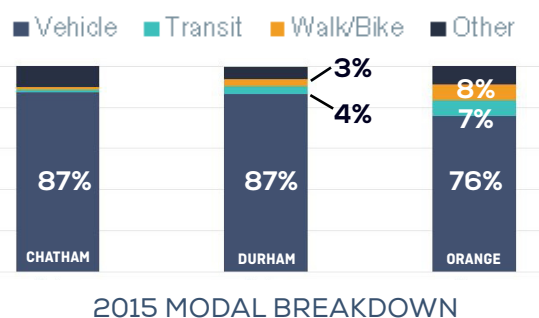
### WHAT'S HAPPENING

Between 2013 and 2015, transit ridership amongst commuters increased by 10% across the 3 counties in the region, while vehicular travel rose by just 4%. Some growth is expected across all modes in response to rising population and employment, but the growth in transit and non-motorized travel relative to vehicular travel suggests commuters may be opting for alternative modes.



PERCENT CHANGE IN MODAL TRAVEL  
2013 - 2015

Source: 2009-2013 and 2011-2015 ACS 5-Year Estimate



2015 MODAL BREAKDOWN

Source: 2011-2015 ACS 5-Year Estimate

### FINDINGS

According to commuter data, the region is dominated by vehicular travel. However, there seems to be a slow increase in the number of workers opting for non-vehicular modes, including transit, walking or biking. The future of the region's transportation network will likely remain dominated by vehicles, but non-vehicular modes may play an increasingly important role.



# COMMUTER TRAVEL

## TRAVEL TIME

This indicator looks at the average travel time for commute trips in 2013 and 2015, as well as the change over time, for all three counties in the region.

### WHY THIS INDICATOR MATTERS

Commute times affect a large portion of the population and can impact quality of life indicators, the environment, and other transportation indicators such as mode share and VMT. An increase in travel time can also indicate increased congestion.

### WHAT'S HAPPENING

Travel time in all three counties marginally increased between 2013 and 2015. Durham County experienced the largest increase (6%) from 26.6 to 28.3 minutes. Orange County saw a 2.3% increase from 21.5 to 22 minutes. Chatham County had the smallest increase from 22 to 22.3 minutes, a 1.3% increase.

### TRAVEL TIME (IN MINUTES)

	2013	2015	2013-2015 percent change
Durham County	26.6	28.3	6%
Orange County	21.5	22	2.3%
Chatham County	22	22.3	1.3%

### FINDINGS

It is important to assess travel time in relation to other transportation indicators including VMT, crash statistics, and mode share. The region experienced an increase in VMT between 2010 and 2016. In addition, all three counties crashes increase, while average speeds decrease. This suggests that congestion is the primary driver of longer travel times. A small percent of the change may be due to some commuters shifting to transit and non-motorized travel, but congestion is likely the dominant driver of this change given that on average 83% of commuters in the region drive to work.



# SAFETY

## What Is It?

This section examines safety indicators including crashes, speeds, injuries and fatalities for drivers, cyclists, and pedestrians.

## Why Does It Matter?

Safety indicators directly link transportation infrastructure to the people who use it. An unsafe transportation network with high rates of crashes, fatalities, and injuries comes at a high cost for individuals and for the region as a whole. Creating a safer built environment, and reducing the harm experienced by users, is a top priority for the DCHC MPO.

## Key Findings

As the largest county by population and VMT, Durham has the highest rates of crashes and fatalities in the region. The county is also experiencing a consistent upward trend in incidents. Orange County is generally experiencing a decline in incidents, except for vehicular crashes which continue to rise across the region. This region-wide increase in vehicular crashes is occurring alongside a downward trend in average annual speeds, which suggests the regional transportation network is more congested overall. The region is also missing its targets for reducing fatalities. Higher rates of bicycle and pedestrian incidents suggest that walking and biking may be on the rise, yet the infrastructure to support these mode choices may be insufficient.





## VEHICULAR CRASHES

This indicator shows reported crashes involving vehicles from 2010 - 2016. It is provided for the three counties in the DCHC region and for four municipalities.

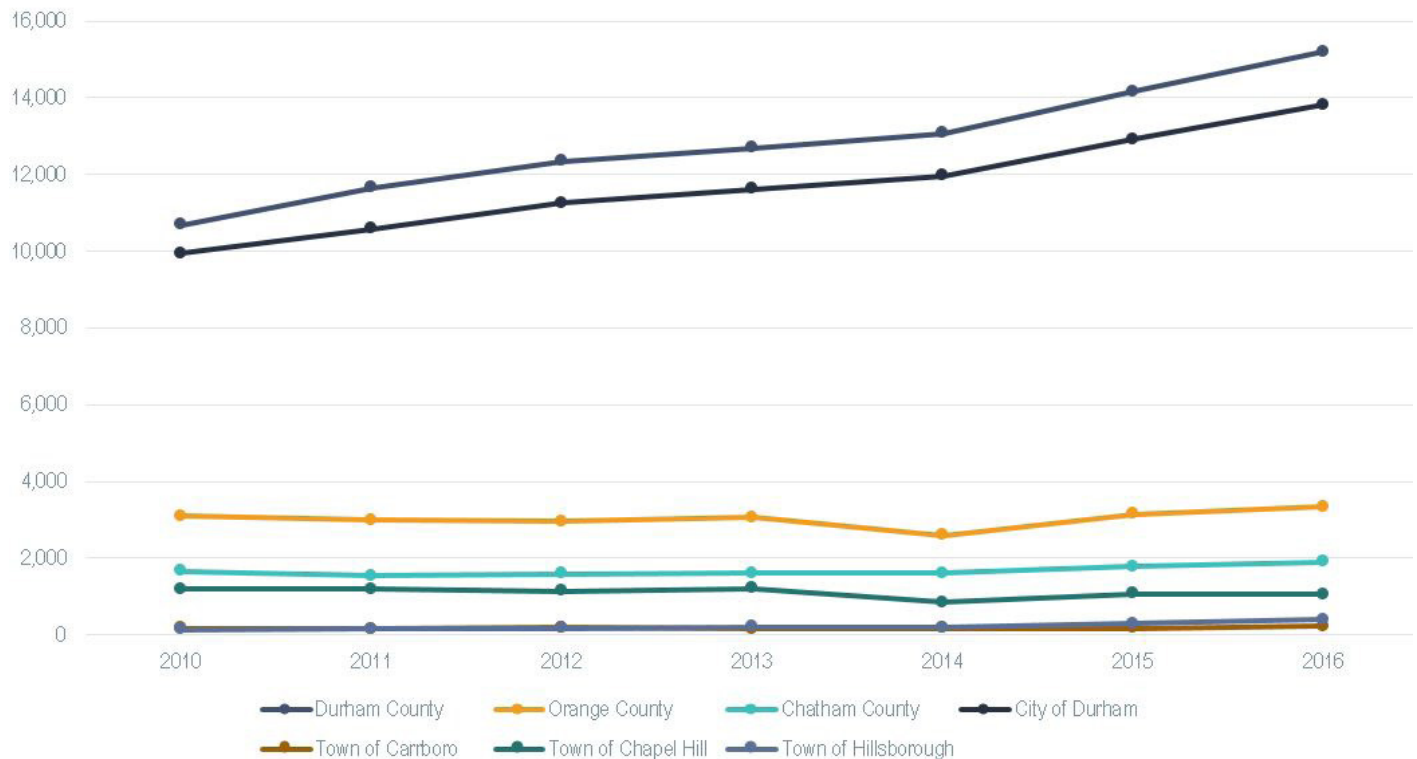
### WHY THIS INDICATOR MATTERS

Crash rates, and trends in crash rates in particular, must be recorded and monitored for traveler safety.

### WHAT'S HAPPENING

The North Carolina Department of Transportation (NCDOT) keeps track of crashes throughout North Carolina with its Traffic Engineering Accident Analysis System (TEAAS). Crash data from 2010 to 2016 was collected. There were more than 5,000 more crashes throughout the DCHC region in 2016 than in 2010, 90% of which were in Durham County. Crashes in Durham County rose by 42% and in the City of Durham by 40%. Orange and Chatham Counties and their cities had only small increases over the same period. Crashes in the Town of Chapel Hill declined between 2010 and 2016.

Reported Vehicular Crashes 2010-2016



Source: NCDOT TEAAS Crash Data, 2010-2016

### FINDINGS

The overall 33% increase in crashes throughout the three counties is high relative to the 11% increase in VMT across the region. Most of this change can be attributed to the increase in crashes in Durham County and City of Durham. When compared against VMT, the rate of crashes per vehicle mile in Durham County (0.0039) is double the rate in Orange County (0.0019). The upward trend is a cause for concern, and should be evaluated further, as should the disproportionate number of vehicular crashes in Durham. Durham vehicular safety overall needs to be closely monitored for root causes.



# PEDESTRIAN AND BICYCLE CRASHES

This indicator shows reported crashes involving bicycles and pedestrians from 2010 to 2016. It is provided for the three counties in the DCHC region and for four municipalities.

## WHY THIS INDICATOR MATTERS

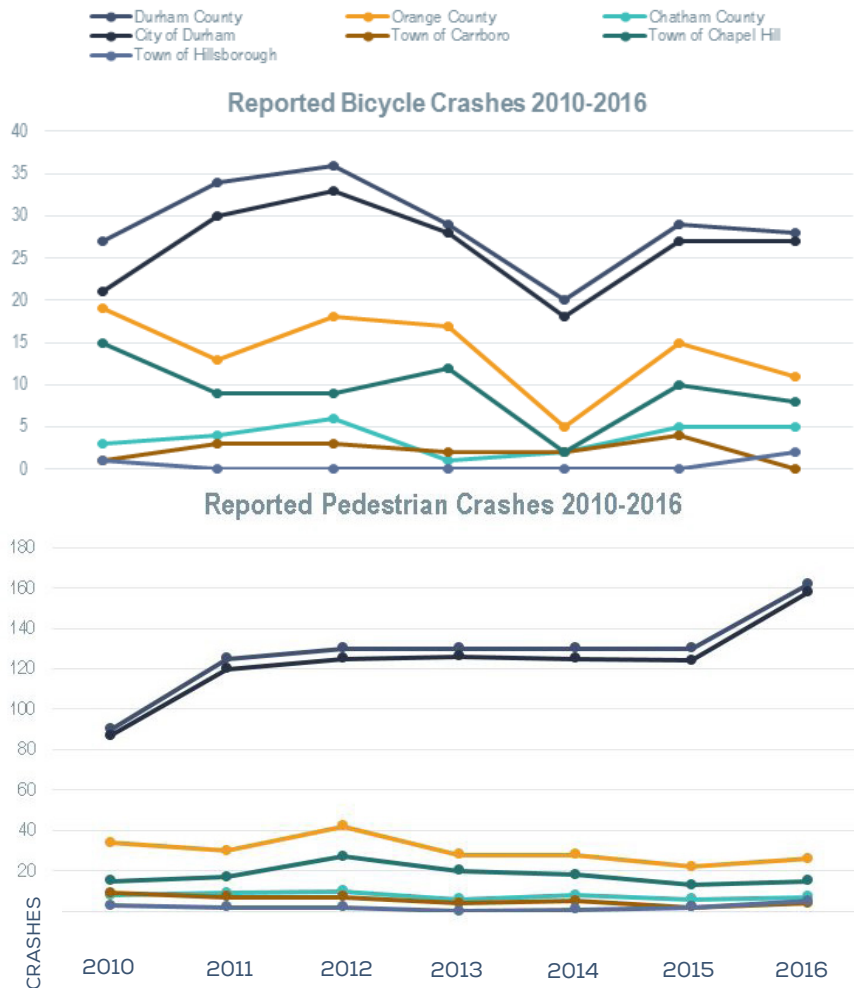
Crash rates, and trends in crash rates in particular, need to be monitored for traveler safety. Cyclists and pedestrians are particularly vulnerable during crashes, and upward trends in bicycle and pedestrian crashes can signify an urgent need for intervention.

## WHAT'S HAPPENING

Pedestrian crashes declined slightly in Orange and Chatham Counties between 2010 and 2016, but increased in Durham County by 80%, from 90 crashes to 162 crashes. 36% of this increase occurred between 2015 and 2016, despite remaining stable from 2011 to 2015.

Bicycle crash trends have been more erratic. Despite a decline in bicycle crashes between 2012 and 2014 (44% in Durham and 72% in Orange), they increased again between 2014 and 2016. In Durham, bicycle crashes in 2016 returned to the same level as 2010.

It is important to note that there is no available data on total bicycle or pedestrian trips, making comparisons across jurisdictions difficult. However, it is notable that the City of Durham reported roughly six times as many pedestrian crashes as Chapel Hill but only three times as many bicycle crashes.



Source: NCDOT TEAAS Crash Data, 2010-2016

## FINDINGS

The overall reduction in pedestrian and bicycle crashes in Orange County is a positive indicator, and could reflect the significant increase in bicycle and pedestrian infrastructure, such as dedicated bicycle lanes, sidewalks, trails, and crosswalks. The uptick in cycling accidents from 2014 to 2015 was followed by a steady decline between 2015 and 2016 and should be monitored to ensure that it continues to decline in the future. The recent increase in pedestrian accidents in Durham County should also be monitored to understand if this is a short-term change or representative of a larger problem.

# SPEED AND CRASHES

This indicator looks at the relationship between average annual vehicular speeds and annual vehicular crashes in each county of the DCHC region from 2013 to 2017.

## WHY THIS INDICATOR MATTERS

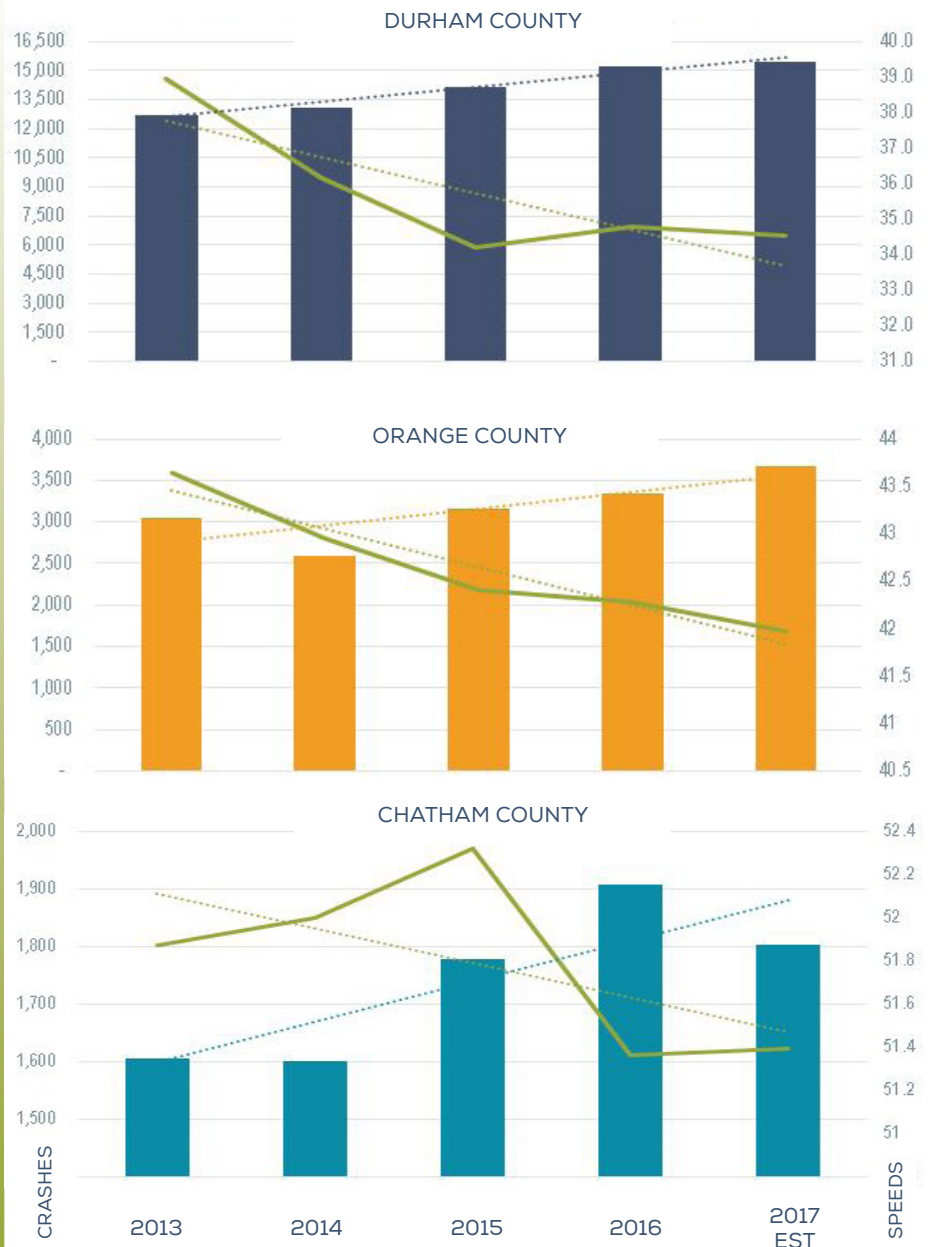
Understanding the relationship between vehicular crashes and speeds can help guide meaningful policy interventions that improve safety in region.

## WHAT'S HAPPENING

The North Carolina Department of Transportation (NCDOT) keeps track of crashes throughout North Carolina. Crash data from 2013 to 2017 was collected and visualized with average annual vehicular speeds.

On all three graphs the solid green line indicates the year-to-year average speed, and the dotted green line shows the overall trend. The trend lines for speed show that speed has, on average, fallen in all three counties between 2013 and 2017.

In contrast, the number of crashes has generally increased in all three counties from 2013 to 2017. The trendline analysis indicates that vehicular crashes increased by 21% in Durham County and Orange County and 12% in Chatham.



Source: NCDOT TEAS Crash Data, 2013-2017, INRIX Speed Data

## FINDINGS

Reduced speeds that are accompanied by higher rates of vehicular crashes can be an indicator of increased congestion. This finding suggests that effective intervention will require improvements to safety infrastructure coupled with speed regulation.



# VEHICULAR FATALITIES

This indicator shows reported vehicular fatalities for each of the three DCHC counties, from 2010 to 2016.

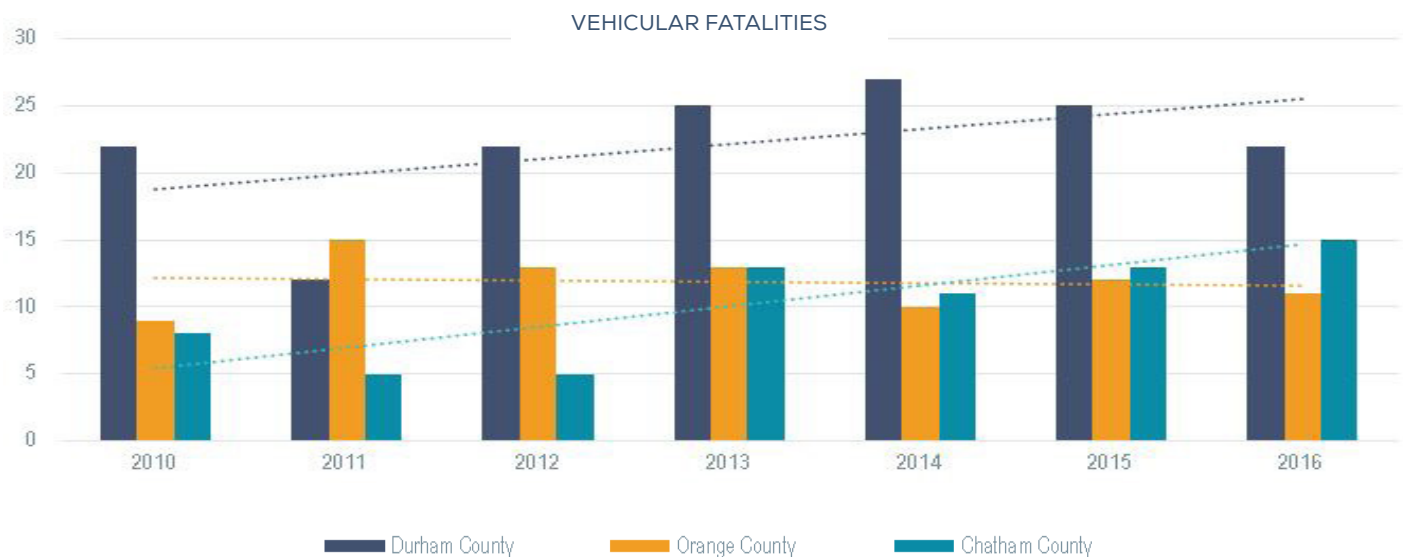
## WHY THIS INDICATOR MATTERS

Fatality rates, and trends in fatality rates in particular, need to be monitored to protect the lives of residents across the region.

## WHAT'S HAPPENING

Durham, the county with the largest population of the three DCHC jurisdictions (approx. 300,000), has both the highest rate of VMT and the highest rate of vehicular fatalities. Orange County (population 140,000) has seen fatalities decline between 2011 and 2016, while Chatham (population 70,000) has seen fatalities increase over the same period. In 2016, Chatham surpassed Orange County in fatalities by 36%, despite being the least populous county with the lowest VMT in the region.

Between 2010 and 2016, vehicular fatalities increased by 22% in Orange County and 88% in Chatham County. Despite variability over the seven-year time period, the number of vehicular fatalities in Durham County was the same in 2016 as in 2010. However, trend lines indicate that vehicular fatalities may continue to fall in Orange County and rise in Chatham and Durham.



Source: NCDOT TEAAS Crash Data, 2010-2016

## FINDINGS

Between 2010 and 2016 there was a downward trend in vehicular fatalities in Orange County and an upward trend in Durham and Chatham County. Most concerning is the increase in fatalities in Chatham County, which surpassed Orange County every year since 2014, despite being smaller both in population and VMT. Targeted intervention is required to reduce fatalities in Chatham to a rate that is proportional with its size and levels of VMT.

## BIKE & PEDESTRIAN FATALITIES

This indicator shows reported pedestrian and bicycle fatalities for each of the three DCHC counties from 2010 to 2016.

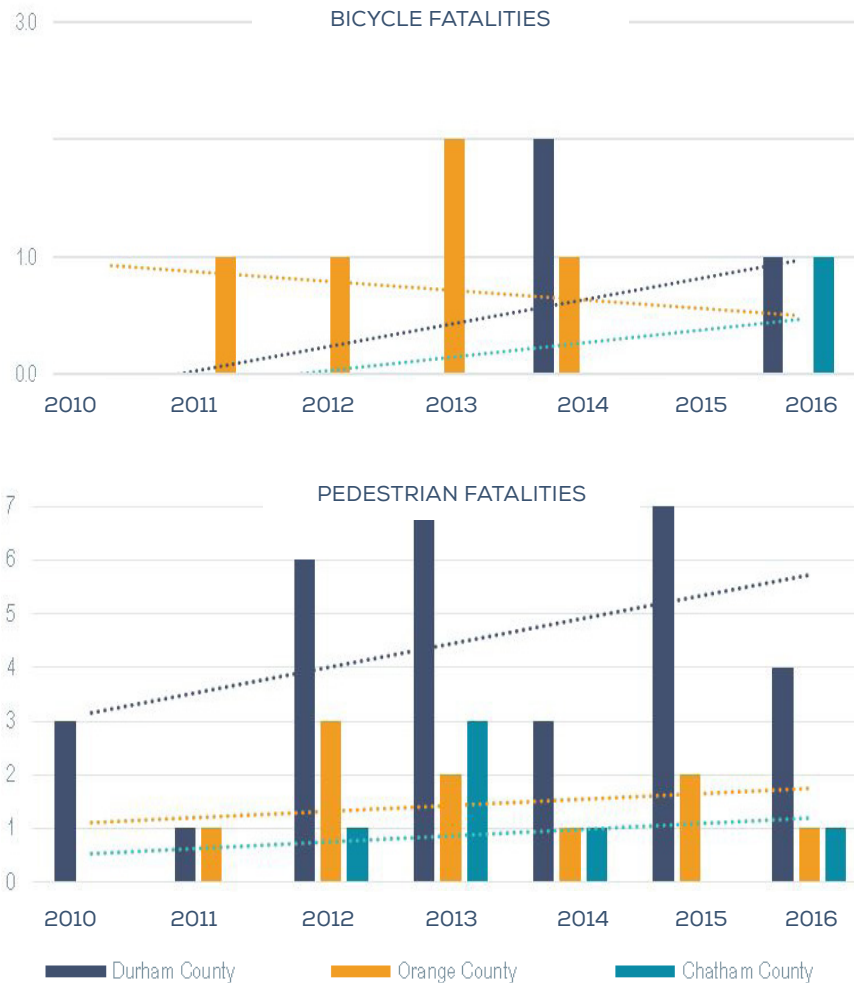
### WHY THIS INDICATOR MATTERS

Fatality rates need to be monitored to protect the lives of residents across the region. Cyclists and pedestrians are particularly vulnerable during crashes, and trends in bicycle and pedestrian fatalities can signify an urgent need for intervention.

### WHAT'S HAPPENING

There were 5 reported bicycle fatalities in Orange County between 2010 and 2016, compared to 3 in Durham County and 1 in Chatham County. This is likely due to higher rates of cycling in Orange County. Overall, Orange County shows a downward trend since 2010, while Durham and Chatham saw spikes in bicycle fatalities in 2014 and 2016, perhaps indicating an upward trend for those counties.

Durham has the highest number of pedestrian fatalities from 2010 to 2016 and generally exhibits an upward trend. Orange and Chatham Counties also show slight upwards trends in pedestrian fatalities, despite the fact that the number of pedestrian fatalities was the same for Orange County in 2016 as in 2011.



Source: NCDOT TEAAS Crash Data, 2010-2016

### FINDINGS

It is likely that there are more bicycle fatalities in Orange County because the county has a higher rate of cycling in general. Whatever the cause, the data indicates that safety interventions may be working and that cycling fatalities in Orange County are declining. Meanwhile, an increase in cycling in Durham and Chatham is likely the cause of increased fatalities and requires safety interventions. Pedestrian fatalities tend to be on the rise across the region, suggesting a need for additional pedestrian safety interventions.

# FATALITY REDUCTION TARGETS

This indicator shows the relationship between regional fatality counts by mode over time (using five-year averages in one-year intervals) and the DCHC safety target for reducing fatalities.

## WHY THIS INDICATOR MATTERS

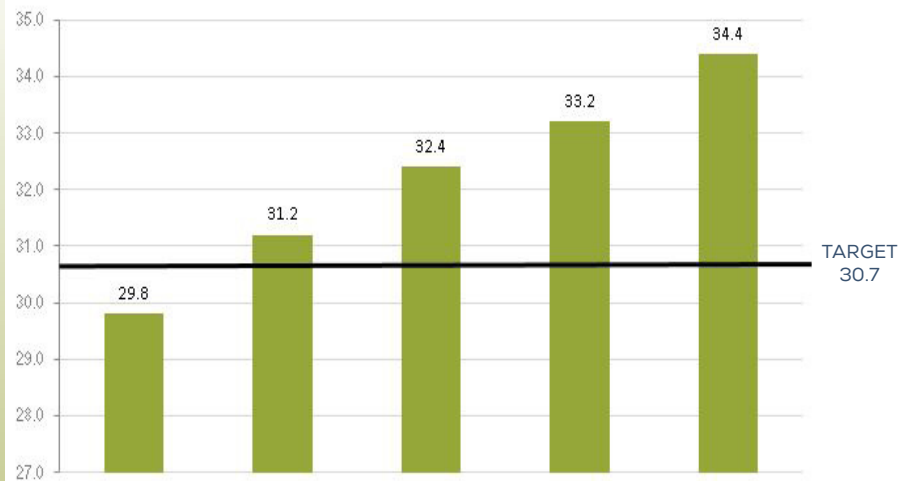
The DCHC MPO is dedicated to reducing crashes and fatalities throughout the region. Setting targets for reducing fatalities, and comparing them against fatalities each year, helps the MPO visualize its progress towards its goals for a safer regional transportation network for all residents.

## WHAT'S HAPPENING

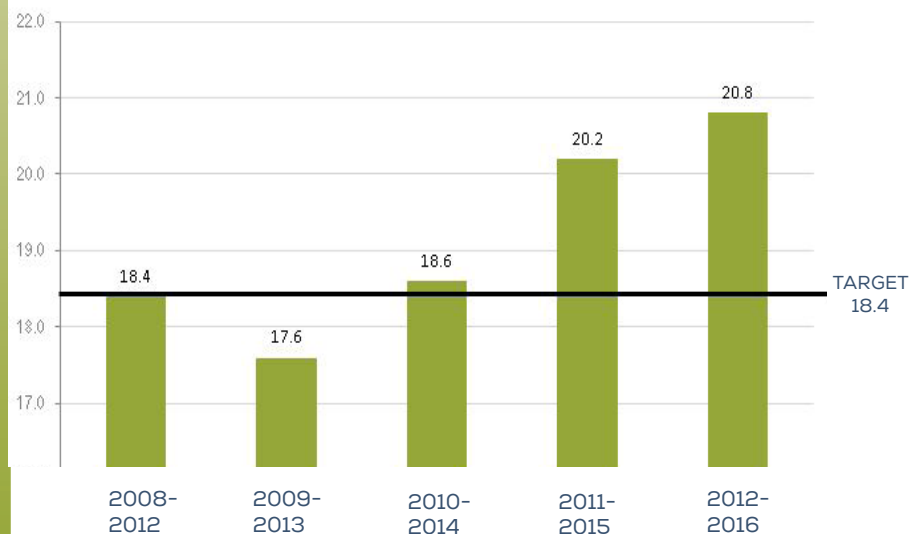
The motorized fatalities target set by the DCHC MPO is a five-year average of 30.7 fatalities. Average motorized fatalities from 2008 to 2012 were below the target at 29.8. Since 2012, the number has increased steadily, surpassing the target every year. The average number of motorized fatalities from 2009 to 2016 was 34.4, which is 12% above the DCHC target.

The non-motorized fatalities and serious injuries target is a five-year average of 18.4 fatalities. The target was set using the 2008 to 2012 average. In 2013, the number of non-motorized fatalities and serious injuries fell below the target to 17.6. However, the number has steadily increased each year, surpassing the target. The average number of non-motorized fatalities and serious injuries from 2009 to 2016 was 20.8, which is 13% above the DCHC target.

MOTORIZED FATALITIES



NON-MOTORIZED FATALITIES AND SERIOUS INJURIES



Source: NCDOT TEAAS Crash Data, 2008-2016

## FINDINGS

Despite a small decline in the average number of non-motorized fatalities and injuries from 2009 to 2013, the overall average number of motorized and non-motorized fatalities has increased steadily each year beyond the DCHC safety targets. According to this indicator, the region is not meeting its standards for safety, and interventions will be required to reduce fatalities for drivers, pedestrians and cyclists.



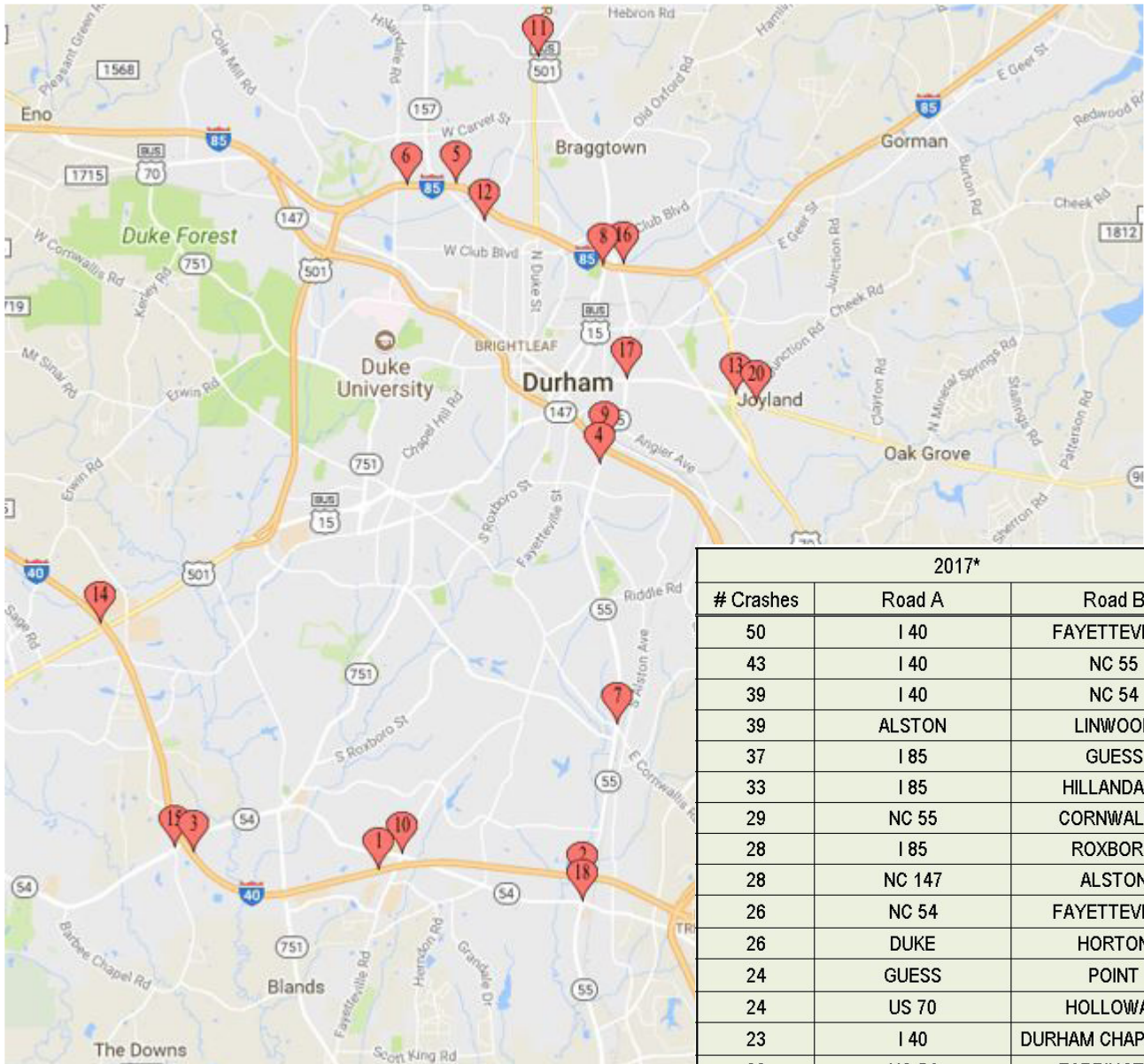
## DURHAM COUNTY INTERSECTION ACCIDENT RANK-

This indicator shows the geographic distribution of the 20 highest-crash intersections in Durham County, ranked by number of crashes. Data is estimated for January - October 2017.

### WHY THIS INDICATOR MATTERS

Understanding the geographic distribution of high crash intersections, as well as the number of crashes at each, can help guide targeted infrastructure and policy interventions to improve safety in Durham County.

### WHAT'S HAPPENING



Source: NCDOT TEAS Crash Data, 2017

2017*		
# Crashes	Road A	Road B
50	I 40	FAYETTEVILLE
43	I 40	NC 55
39	I 40	NC 54
39	ALSTON	LINWOOD
37	I 85	GUESS
33	I 85	HILLANDALE
29	NC 55	CORNWALLIS
28	I 85	ROXBORO
28	NC 147	ALSTON
26	NC 54	FAYETTEVILLE
26	DUKE	HORTON
24	GUESS	POINT
24	US 70	HOLLOWAY
23	I 40	DURHAM CHAPEL HILL
23	NC 54	FARRINGTON
23	I 85	AVONDALE
22	ALSTON	HOLLOWAY
22	NC 54	NC 55
21	I 40	I 540
21	HOLLOWAY	JUNCTION

\*Estimated data from Jan to Oct for 2017

### FINDINGS

Crashes in 2017 were concentrated along major highways, including I-40, I-85, and NC 147. The three intersections with the highest number of crashes are all located along I-40 with 132 crashes combined and represent 23% of all crashes in the top 20 list.





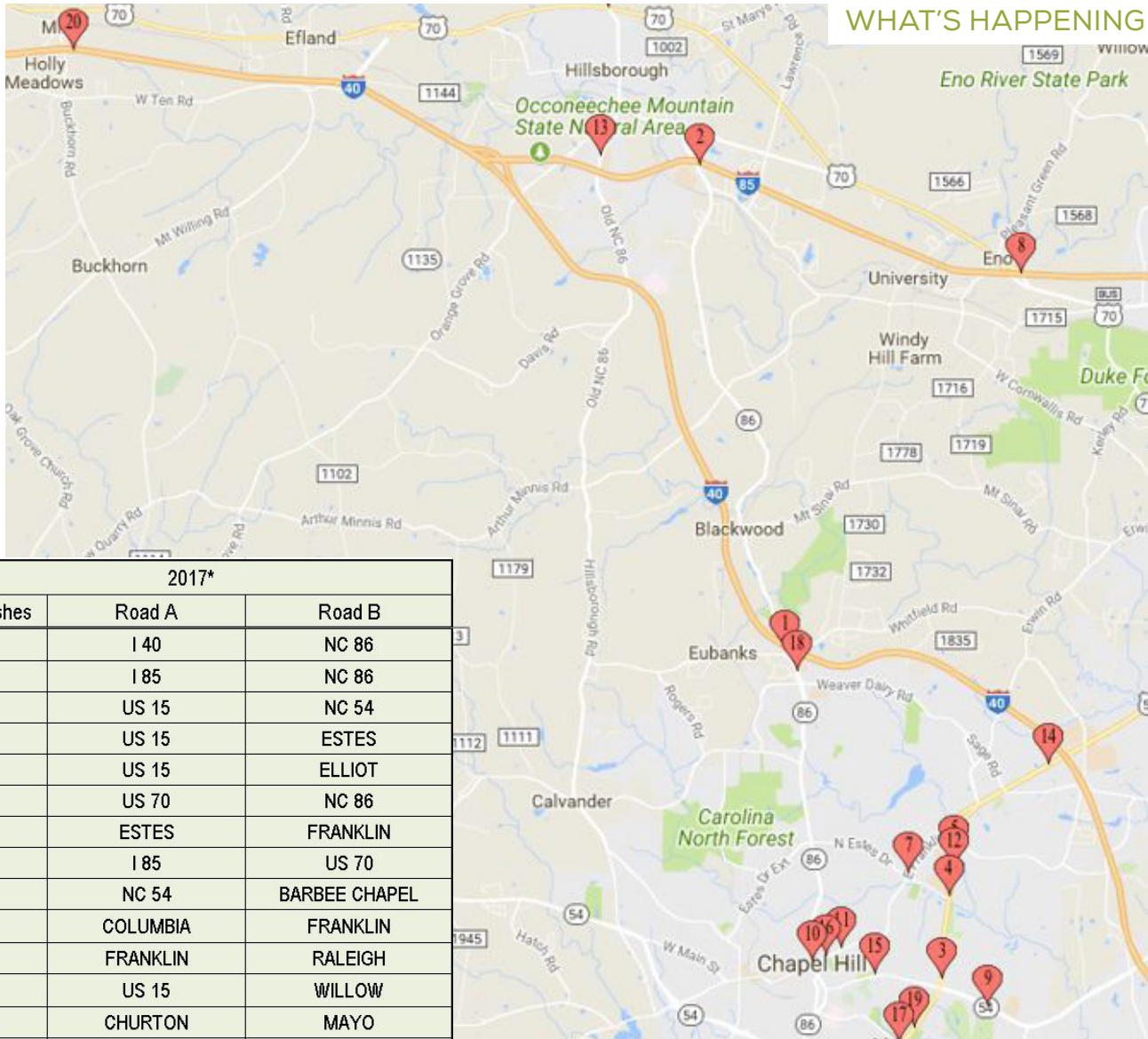
## ORANGE COUNTY INTERSECTION ACCIDENT RANK-

This indicator shows the geographic distribution of the 20 highest-crash intersections in Orange County, ranked by number of crashes. Data is estimated for January - October 2017.

### WHY THIS INDICATOR MATTERS

Understanding the geographic distribution of high crash intersections, as well as the number of crashes at each can help guide targeted infrastructure and policy interventions to improve safety in Orange County.

### WHAT'S HAPPENING



2017*		
# Crashes	Road A	Road B
21	I 40	NC 86
13	I 85	NC 86
13	US 15	NC 54
13	US 15	ESTES
12	US 15	ELLIOT
11	US 70	NC 86
10	ESTES	FRANKLIN
10	I 85	US 70
10	NC 54	BARBEE CHAPEL
9	COLUMBIA	FRANKLIN
9	FRANKLIN	RALEIGH
8	US 15	WILLOW
8	CHURTON	MAYO
7	US 15	EASTOWNE
7	COUNTRY CLUB	RALEIGH
7	FRANKLIN	HENDERSON
7	US 15	MANNING
7	NC 86	PERKINS
7	US 15	OLD MASON FARM
7	I 40	SR 1114

Source: NCDOT TEAAS Crash Data, 2017

### FINDINGS

Crashes in 2017 were concentrated along I-85 and I-40, as well as in central Chapel Hill. Crashes in and around downtown Chapel Hill made up 67% of the total 196 crashes of the top 20-highest crash intersections in the county.



## CHATHAM COUNTY INTERSECTION ACCIDENT

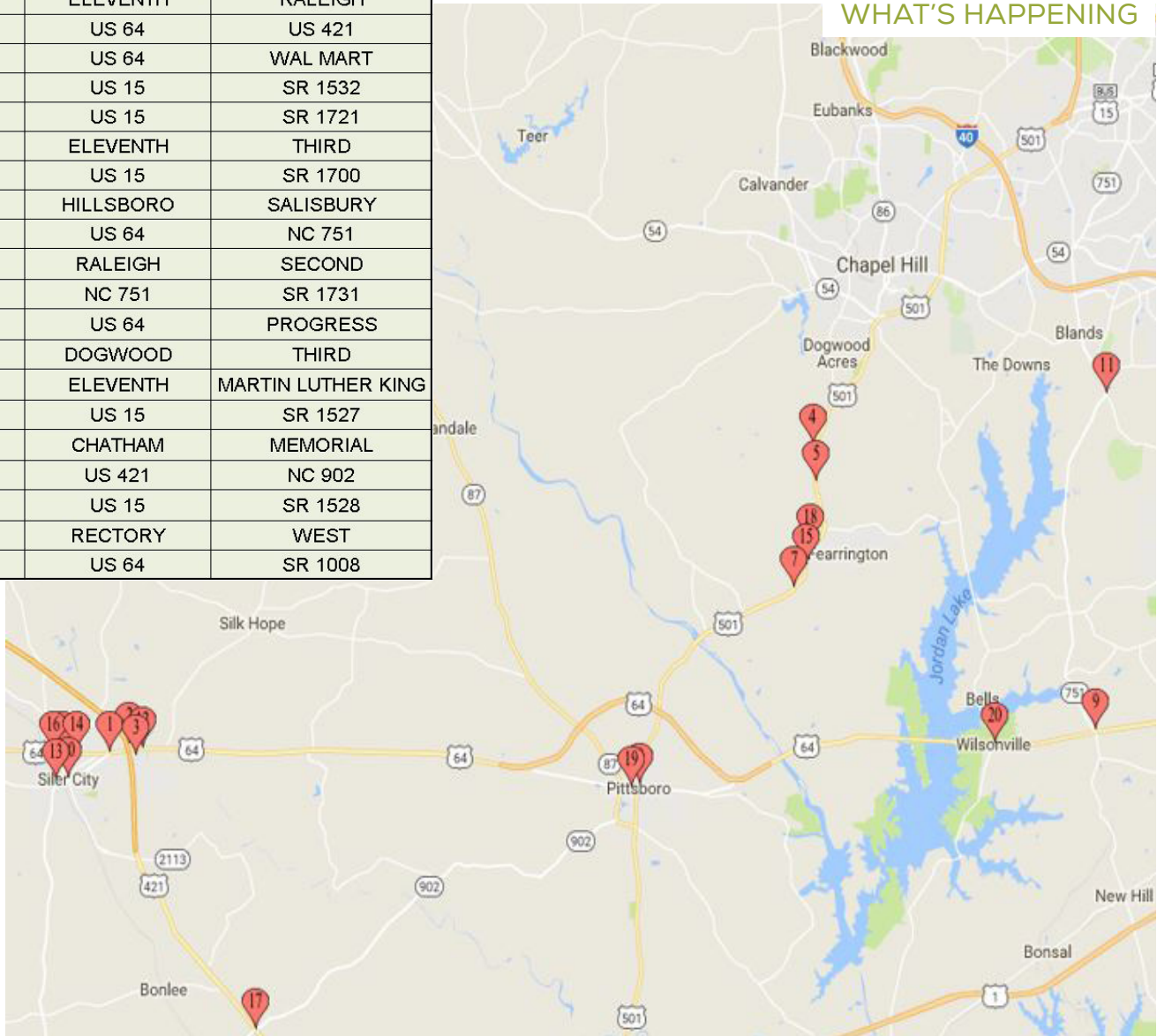
This indicator shows the geographic distribution of the 20 highest-crash intersections in Chatham County, ranked by number of crashes. Data is estimated for January - October 2017.

### WHY THIS INDICATOR MATTERS

Understanding the geographic distribution of high crash intersections, as well as the number of crashes at each can help guide targeted infrastructure and policy interventions to improve safety in Chatham County.

2017*		
# Crashes	Road A	Road B
11	ELEVENTH	RALEIGH
10	US 64	US 421
9	US 64	WAL MART
8	US 15	SR 1532
8	US 15	SR 1721
8	ELEVENTH	THIRD
7	US 15	SR 1700
7	HILLSBORO	SALISBURY
7	US 64	NC 751
7	RALEIGH	SECOND
7	NC 751	SR 1731
6	US 64	PROGRESS
6	DOGWOOD	THIRD
5	ELEVENTH	MARTIN LUTHER KING
5	US 15	SR 1527
5	CHATHAM	MEMORIAL
5	US 421	NC 902
5	US 15	SR 1528
4	RECTORY	WEST
4	US 64	SR 1008

### WHAT'S HAPPENING



Source: NCDOT TEAAS Crash Data, 2017

### FINDINGS

Crashes in 2017 were concentrated along US 15-501 between Chapel Hill and Pittsboro; in the Town of Pittsboro; and in Siler City along US 64. Eleven of the top 20 intersections for crashes in the county are located in Siler City - making up 49% of the total 134 crashes. This site specific information, and disproportionate rate of crashes in one place, can be used to make targeted interventions in Siler City.







# ECONOMIC DEVELOPMENT

## What Is It?

Economic development indicators are meant to inform the MPO about the economic trends and conditions that may influence transportation needs in the coming years. Relevant indicators include construction and private development trends (both residential and non-residential), which help to identify the scale, location, and pattern of growth. Other indicators such as quality of life, which is harder to estimate but depends on multimodal transportation networks, will also be considered.

## Why Does It Matter?

Economic development is a driver of transportation. A good economy is dependent upon its transportation network to move workers, visitors, goods, and services. And as an economy grows, the transportation network is increasingly expected to deliver quality of life benefits. Understanding economic development trends can help identify smart transportation policy and investment.

## Key Findings

The Research Triangle and the DCHC region are consistently ranked high on 'quality of life' scales compared to other regions in the United States. To continue this success, the region will need to provide competitive work, travel, and housing opportunities to residents. The continued dominance of knowledge sector employment in the region has a direct impact on travel and development patterns. Jobs such as professional, scientific and technical services generate "peak hour traffic": employees arriving in the morning, and leaving in the afternoon. 80% of all jobs in the region generate peak hour traffic. These kinds of jobs gravitate to denser urban environments, close to multimodal infrastructure for biking, walking, and transit. Residential development patterns have followed; in the last five years, Durham and Chapel Hill have seen a boom in multifamily buildings, as well as multi-use, higher intensity developments downtown. Firms and their employees are increasingly opting for dense, multimodal locations. These economic shifts will strongly influence the region's transportation priorities and investment in the coming years.





## REGIONAL JOB TRENDS

This indicator looks at the types of jobs located in the region and the changing trends in the region's job market over the past five years.

### WHY THIS INDICATOR MATTERS

Job trends can help identify transportation solutions. Different types of jobs use transportation networks differently. For instance, industrial jobs (i.e. warehousing, manufacturing) can generate round-the-clock truck traffic, and these sectors often need ample space and lower density locations which requires their employees to drive to get to work. In contrast, knowledge sector jobs (i.e. education, finance) generate mostly commuting trips and are often situated in higher density, heavily populated locations which allows employees a wider set of transportation options for their commute. Knowing more about how jobs in the region are changing can provide insight into the best transportation investments to support the region's economy.

### WHAT'S HAPPENING

For years, the DCHC region has been a national leader in the health care and education sectors. The job data confirms this. Moreover, these occupations are growing and may comprise an even larger portion of the job market in the future. But the economy is certainly more diverse than just these two job types, as the table to the right shows.

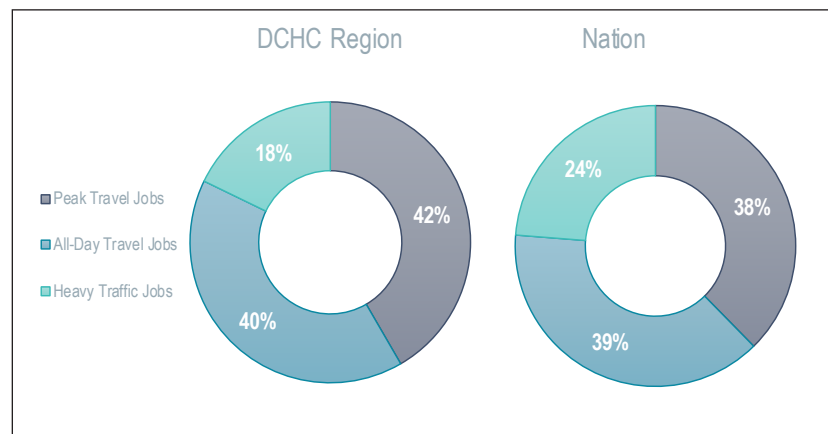
As stated earlier, different jobs use transportation differently. Jobs have been sorted by the type of traffic they generate: jobs that generate primarily worker arrival and departure trips and have few, if any, visitors or customers are considered 'Peak Hour Travel' jobs; jobs that rely on customers coming to them are considered 'All Day Travel' jobs; and jobs that send out additional trips by truck or other heavy vehicles are considered 'Heavy Traffic' jobs. For the DCHC region, more than 80% of all jobs are in the Peak Hour or All Day categories, and these industries have grown considerably in the last 5 years, while the Heavy Traffic jobs have decreased. These patterns are markedly different than those of the nation as a whole.

5 Largest Industry Sectors in the DCHC Region

Industry	Job Trends		
	Share of Total Jobs	Change 2010 -2015	Percent Change
Health Care and Social Assistance	21%	6,966	13%
Educational Services	16%	7,664	20%
Manufacturing	11%	-2,529	-8%
Professional, Scientific and Technical Services	9%	4,632	20%
Retail Trade	9%	2,701	11%

Source: Longitudinal Employer-Household Dynamics (LEHD), 2010-2015

Share of Total Jobs



Source: Longitudinal Employer-Household Dynamics (LEHD), 2016

### FINDINGS

Higher-than-average proportion of peak hour trips can lead to major congestion problems in a more suburban landscape like the DCHC region. The types of jobs that are thriving in this region generally locate in denser, urban areas. These development patterns allow for more multimodal transportation options such as transit, biking, and walking. Finally, a decrease in truck-oriented jobs may lead to lower demand for inter-regional travel and the major highways and interstates those trips require.



# BUILDING PERMITS

This indicator looks at the rate of approved new residential development being built in the region over the last five years.

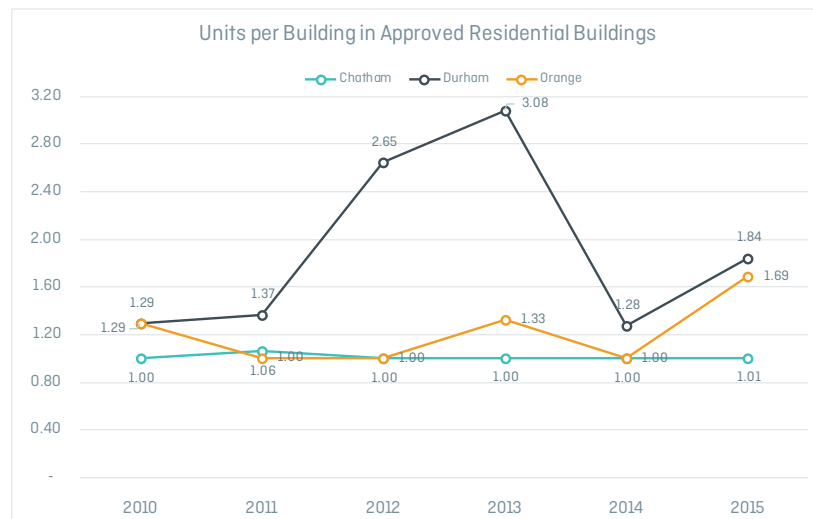
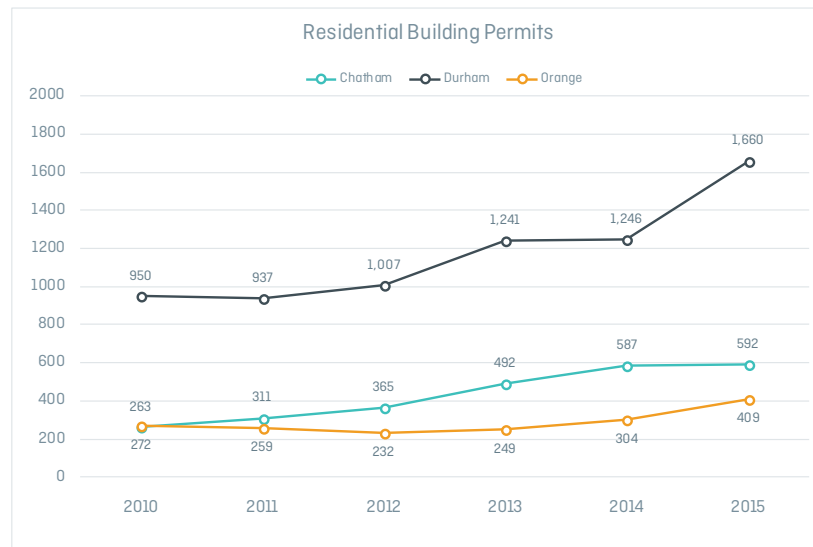
## WHY THIS INDICATOR MATTERS

Building permit data can provide insight on both the amount and spatial pattern of residential growth, both of which can inform future transportation demand.

## WHAT'S HAPPENING

The Census Bureau provides residential building permit data at the county level. The data shows a steady increase in residential building permits since 2010, with all three DCHC counties seeing their highest rate of approved permits in 2015. Permit rates are still below mid 2000s rates, though.

Notably, the type of residential permits is different in each county. Chatham County permits have been almost exclusively single-family buildings - the 2,610 buildings that have been issued have included 2,633 units. Orange County has recently begun to see a higher proportion of multi-family units, particularly in 2015. Durham County has had the highest ratio of units per building of the three counties each year of this analysis, including 2013 where more than 50 multi-family buildings were approved, constituting more than two-thirds of all approved units in the county. While the rate of multi-family approvals has dropped since then, there still appears to be a general upward trend in a more diverse set of residential uses.



Source: US Census Building Permit Survey

## FINDINGS

The general increase in issued permits confirms that residential growth continues in the region, and there is nothing in this data to suggest that this will change in the near term (though permitting rates do drop during periods of national or regional economic recession). The units per building data suggests, however, that the spatial pattern of development may be shifting. New multi-family units are more likely than single-family units to be located in denser areas where multimodal transportation infrastructure exists, such as sidewalks, bike lanes, and transit. This shift to more multimodal locations could have major impacts on the region's transportation priorities.

# DEVELOPMENT PATTERNS

This indicator looks at spatial development patterns in downtown Durham and Chapel Hill.

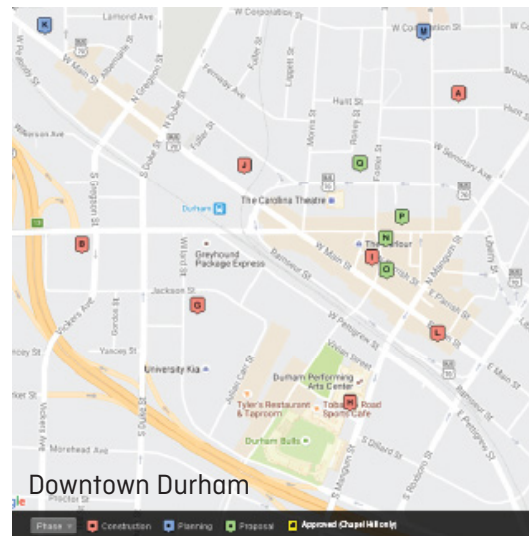
## WHY THIS INDICATOR MATTERS

Similar to building permit data, development patterns can provide insight on both the amount and spatial pattern of growth, providing clues about future transportation demand. Unlike residential development data from building permits, this measure includes all development types, but does not have a unified data source that allows for long-term trend analysis.

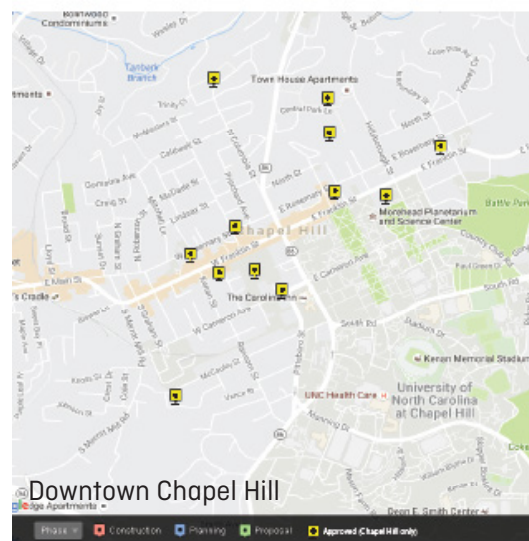
## WHAT'S HAPPENING

The four urban areas of the DCHC region - Durham, Chapel Hill, Carrboro, and Hillsborough - have all experienced significant development pressures over the last half decade. Development has been particularly notable in their respective downtowns, where large multi-use projects have sprung up in each city. Durham and Chapel Hill local governments keep track of the location of development applications, and recent downtown development applications and approvals are shown in the maps to the right. Both downtowns have seen a mix of residential, commercial, office, and hotel development, and in many instances at higher densities than the surrounding buildings.

Unfortunately, no detailed data was found to quantify the intensity of development relative to previous years, though there is no question that downtown development is occurring at a faster pace than has been seen in years, particularly in downtown Durham.



Source: <http://batchgeo.com/map/downtown-durham-development>



Source: Town of Chapel Hill and Renaissance Planning

## FINDINGS

Increased development pressure is occurring throughout the DCHC region, in rural, suburban, and urban places. But in the region's downtowns, there is a clear increase in activity and density. These areas often have space constraints, with traffic congestion and parking needs that need to be addressed. But these areas also provide opportunities for transit and non-motorized travel, particularly as the rate of downtown residential development increases.



## QUALITY OF LIFE

This indicator looks at independent rankings of the region as a desirable place to live.

### WHY THIS INDICATOR MATTERS

The perceived quality of life in a region is a major influencer of how a region grows over time. Knowing more about how the region is viewed relative to the rest of the country can provide clues about possible growth trends, and can also identify transportation investments that can improve quality of life and economic outcomes.

### WHAT'S HAPPENING

Five organizations were identified as having released a 'best places to live' index for the country. Each organization used different criteria to evaluate a community's quality of life. In all five, either Durham, Chapel Hill, or the Triangle appeared in their list.



Durham (#48)



Best cities for families

Durham (#42)



Raleigh-Durham (#4)



Chapel Hill (#36)



Raleigh-Durham (#4)

### FINDINGS

The public consensus that the Triangle and the DCHC region is one of the best places to live in America is a strong indication of the high quality of life that is achieved here. Notably, many of the communities that routinely appear on these lists with the Triangle are either: (1) slightly bigger and provide high-end transit amenities (such as Madison, WI, or Austin, TX); or (2) they are slightly smaller and offer small-town walkable amenities with lower costs of living and/or good access to nearby metro areas. This suggests that transportation investments may be needed to continue to compete with other high-end quality of life communities for jobs and residents.



# LAND USE & DEMOGRAPHICS

## What Is It?

Land use and demographics are the driving force behind many transportation patterns. This section explores the transportation implications of land use, including the spatial distribution of population, jobs, and overall activity. It also looks at the transportation implications of certain demographic patterns in the region.

## Why Does It Matter?

Transportation networks including roads, bus routes, bicycle paths, and sidewalks are designed to get people from one place to another. The location of a traveler's origin (for example, their home) and their destination (such as their workplace) strongly influences how people travel. The more we know about these locations, the better we can make decisions about what transportation network solutions will work best for all travelers. It is also vital to know who uses the transportation network in order to provide appropriate services for all.

## Key Findings

In the DCHC region, activity (including households, population and jobs) is concentrated in the urban centers and along major highways. Duke University, UNC Chapel Hill and Research Triangle Park continue to serve as key destinations, while suburban residential neighborhoods act as key points of origin for trip generation. Most of the people living in the region are working-age adults, ensuring continued demand for home-to-work trips. Land use and demographic patterns continue to produce inter-city and inter-county movement.







## POPULATION DISTRIBUTION

This indicator provides a snapshot of the spatial distribution of population in 2015. The map shows the 5-year estimates for population density per block group.

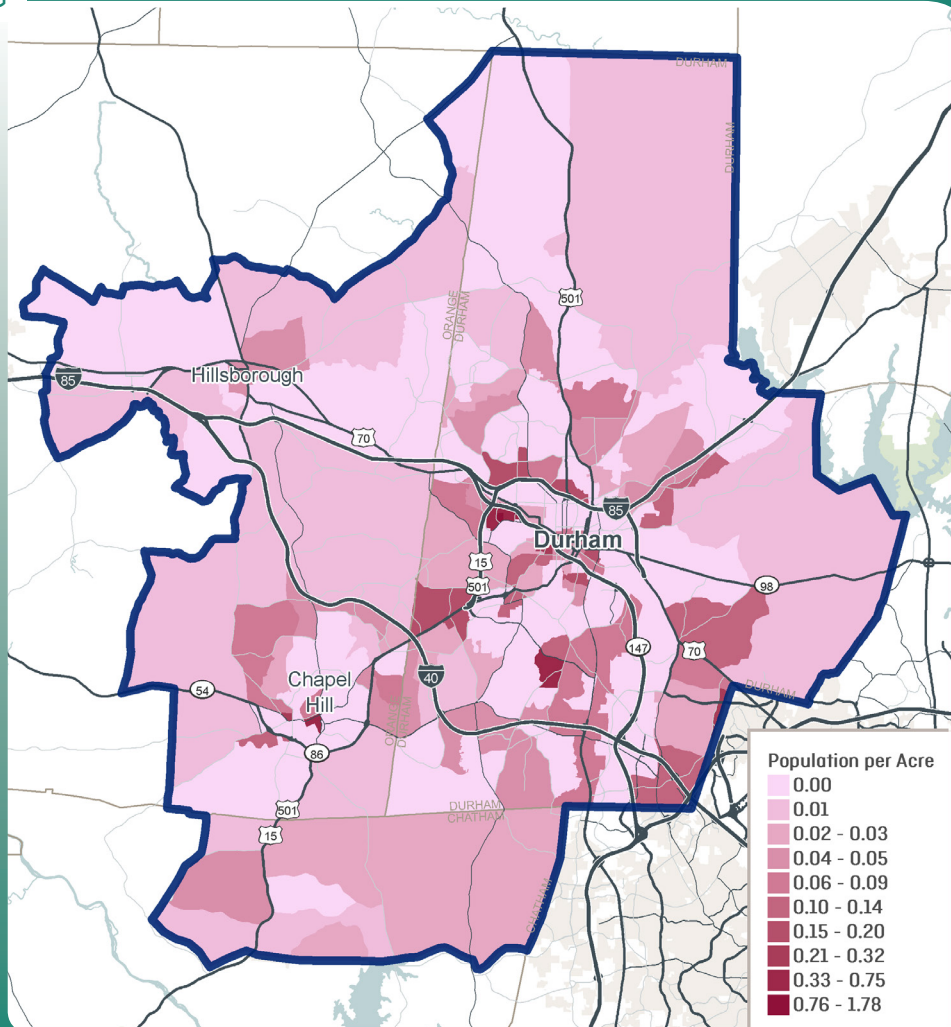
### WHY THIS INDICATOR MATTERS

Demographic distribution across the region strongly influences travel behavior. Population centers in particular are the primary origin for travel. Understanding existing population distribution provides context for other key indicators, including population change over time, and employment and activity distribution. The geographic distribution of population should be considered in relation to other demographic trends, such as age distribution across the region.

### WHAT'S HAPPENING

The US Census American Community Survey (ACS) provides population estimates at the block group level. Note that the 2015 ACS is combined with the previous four years to provide a large enough sample for statistical analysis, thus this 2015 estimate reflects what is actually a 2011-2015 average estimate. This is still a useful gauge for current population estimates, and is updated every year.

In this map, the darker pink areas contain higher population density than lighter pink areas. Pockets of high population density are found in downtown Chapel Hill, and downtown Durham, but also on the outskirts of both cities and along major highway routes.



### FINDINGS

Population in the DCHC region is spread throughout the three counties. Some of the larger population centers are adjacent to major highways, including US 70, I-85 and I-40. Pockets of population density in downtown Chapel Hill and northwest of downtown Durham could represent student housing for UNC Chapel Hill and Duke University respectively. Travel patterns can be expected to reflect highway oriented trends, as people move to and from the suburban and exurban population centers.



## POPULATION CHANGE

This indicator reflects population change in the region over five years, from 2010 to 2015.

### WHY THIS INDICATOR MATTERS

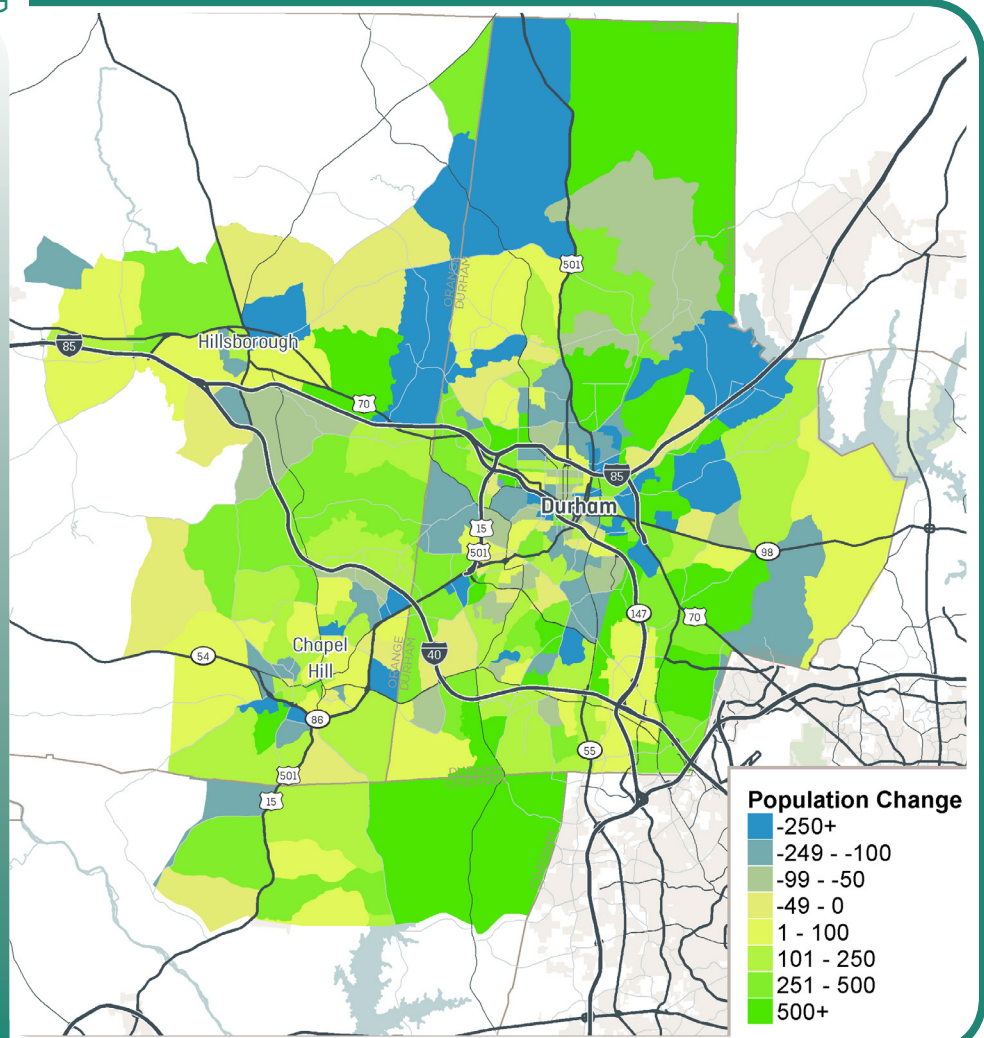
Population growth and contraction have strong impacts on the region's transportation network. Recent trends can provide insight into how the region may evolve in the future. However, transportation planners must take care when considering recent trends for investment decisions. Some population changes are cyclical, rather than long-lasting. This distinction needs to be considered when evaluating the extent to which recent change is an indicator of future growth patterns.

### WHAT'S HAPPENING

The US Census American Community Survey provides population estimates at the block group level. Comparing their 2006-2010 population estimate to their 2011-2015 population estimate (the most up to date estimate available) shows where population has been rising and falling.

Areas in blue and light yellow lost population from 2010 to 2015, while areas in darker yellow and green gained population. The region is estimated to have increased by slightly more than 20,000 people during this time, though not all block groups have experienced population increases as a result.

Pockets of population increase can be seen in downtown Chapel Hill, but more significant population increases have occurred in the suburban and exurban periphery of the region's major cities.



### FINDINGS

The pattern of change shows that, in general, the periphery of the DCHC region continues to grow, further spreading out the population and potentially increasing distance between home and other activities. However, the residential areas in and around downtowns also seemed to thrive, particularly downtown Chapel Hill, and the neighborhoods to the east and west of Downtown Durham. This suggests that the national "back to the city" phenomenon is also present in the DCHC region. Overall, the combination of increased suburban development and downtown development means that DCHC may be tasked with solving different kinds of transportation problems for different communities - some interested in faster speeds from the suburbs to job centers, others looking for more non-auto based travel in their shorter commutes to nearby downtowns. Additionally, secondary roads may start experiencing congestion as some areas with increasing population do not have immediate access to major roads.



## POPULATION AGE

This indicator shows the distribution of population across all age groups in 2016.

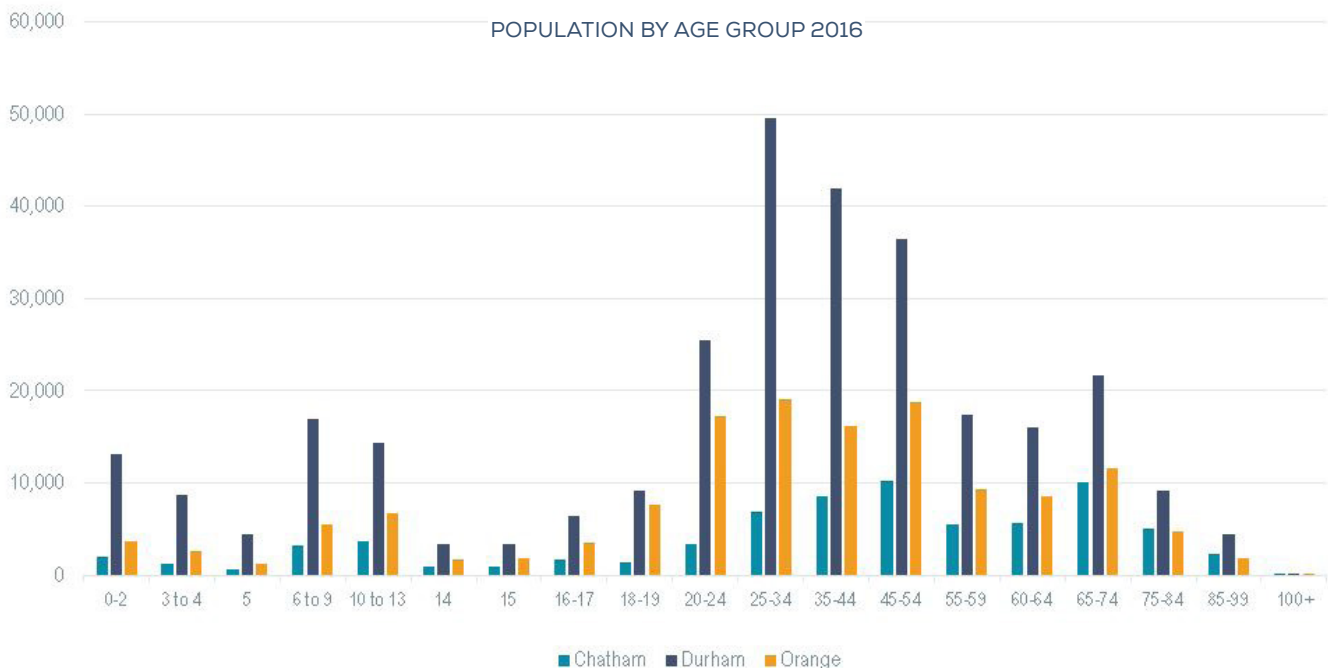
### WHY THIS INDICATOR MATTERS

Demographic trends provide insight into who lives in the region and therefore who uses the transportation network. Population age is a vital indicator to understand which age group - each with its own lifestyle preferences - will most heavily influence travel demand and transportation trends in the coming years. Concentration of certain age groups, such as seniors, or young families with children, require targeted interventions.

### WHAT'S HAPPENING

The DCHC MPO collects demographic data for the three counties in the DCHC region. This graph shows the age breakdown of the population for Chatham, Durham, and Orange Counties in 2016. Overall, Durham County has the largest population, followed by Orange and then Chatham Counties.

Durham has the most young people aged 25 - 34 (approx. 50,000) relative to other age groups. Durham's population also clusters in the young age groups - babies (0 - 2 years old) and school-age children (6 - 13 years). In contrast, the Chatham population is predominantly older age groups, with most of the population falling in the 45-54 and 65-74 age groups. Orange County has a more even distribution across the adult age groups from 20 to 64 years old.



### FINDINGS

Population trends in the region reflect land use trends. The presence of two major universities, as well as key employment centers such as Research Triangle Park (RTP) explains the high concentration of college-age students (20-24 years) in Durham and Orange Counties, as well as working-age adults (25 - 54 years). Travel patterns are likely to reflect this population distribution in the form of home-to-work trips along major highways, connecting employment hubs across the region.



## POPULATION CHANGE - AGE

This indicator shows the distribution of population across four major age groups, and how the distribution changed between 2010 and 2016 for each of the three counties.

### WHY THIS INDICATOR MATTERS

Population age is a vital indicator to understand which age group will most heavily influence travel demand and transportation trends in the coming years. How certain age groups, such as seniors, or young families with children, are growing or shrinking relative to overall population can inform targeted interventions.

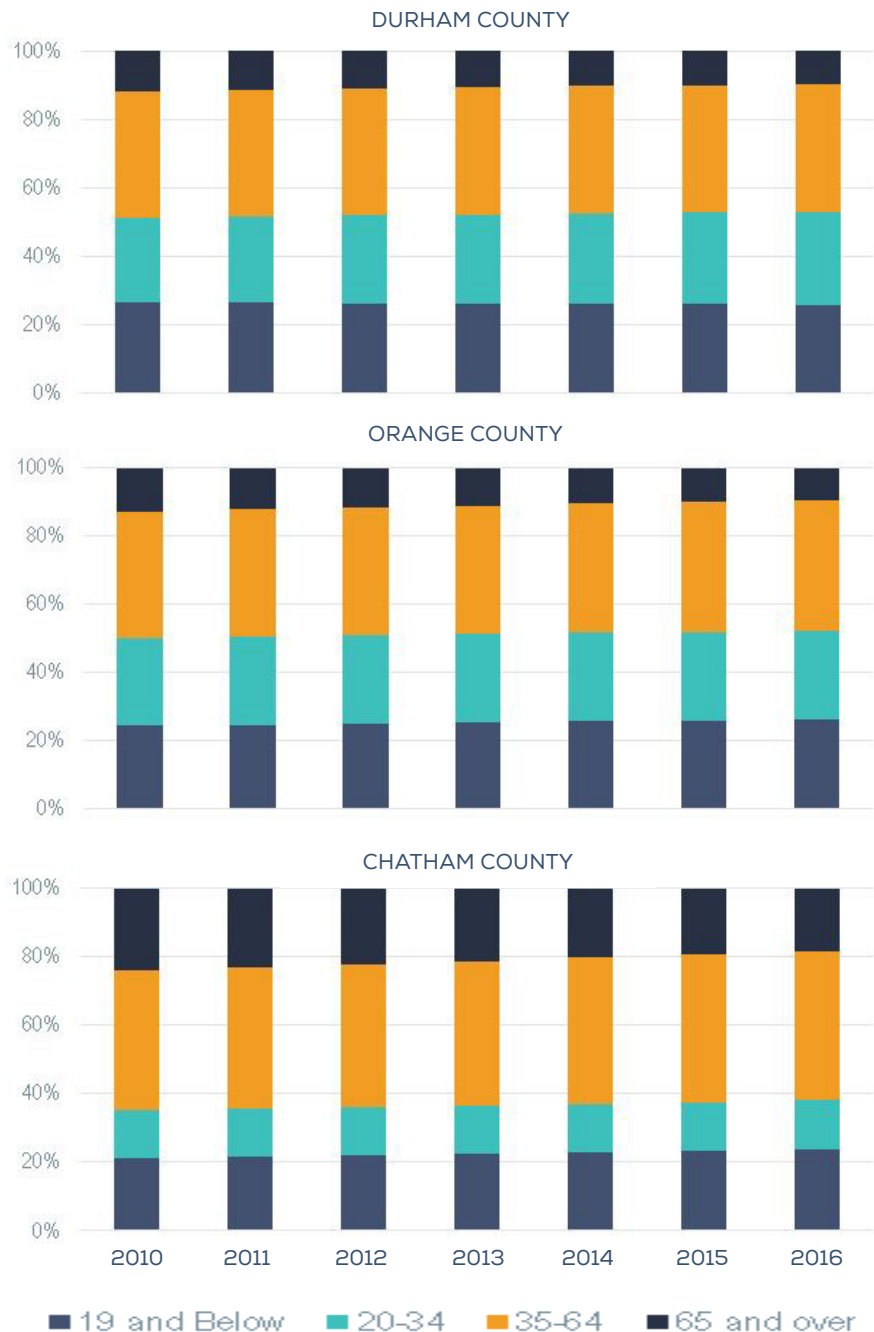
### WHAT'S HAPPENING

The DCHC MPO collects demographic data for the three counties in the DCHC region. These three graphs show what proportion of each county's population is made up by each of four major age groups (19 and below, 20 - 34 years, 35 - 64 years, and 65 and over) from 2010 to 2016.

Proportional trends across all three counties are similar, with a few notable differences. Chatham has a higher proportion (roughly 20%) of seniors (65+), but this percent is shrinking along with the region overall.

Durham and Orange Counties show very similar trends: the proportion of seniors declined slightly since 2010, while the proportion of younger age groups increased slightly.

All three counties experienced an increase in the number of people aged 35 - 64, relative to all other age groups.



### FINDINGS

Population across all three counties is aging slightly, but overall is dominated by working-age adults (35 - 64 years old) that make up roughly 40% of the population. Transportation demand will likely reflect this trend with trip generation focused on home origins and work destinations.

## EMPLOYMENT DENSITY

This indicator provides a snapshot of the spatial distribution of employment in 2015. The map shows the 5-year estimates for employment density per block group.

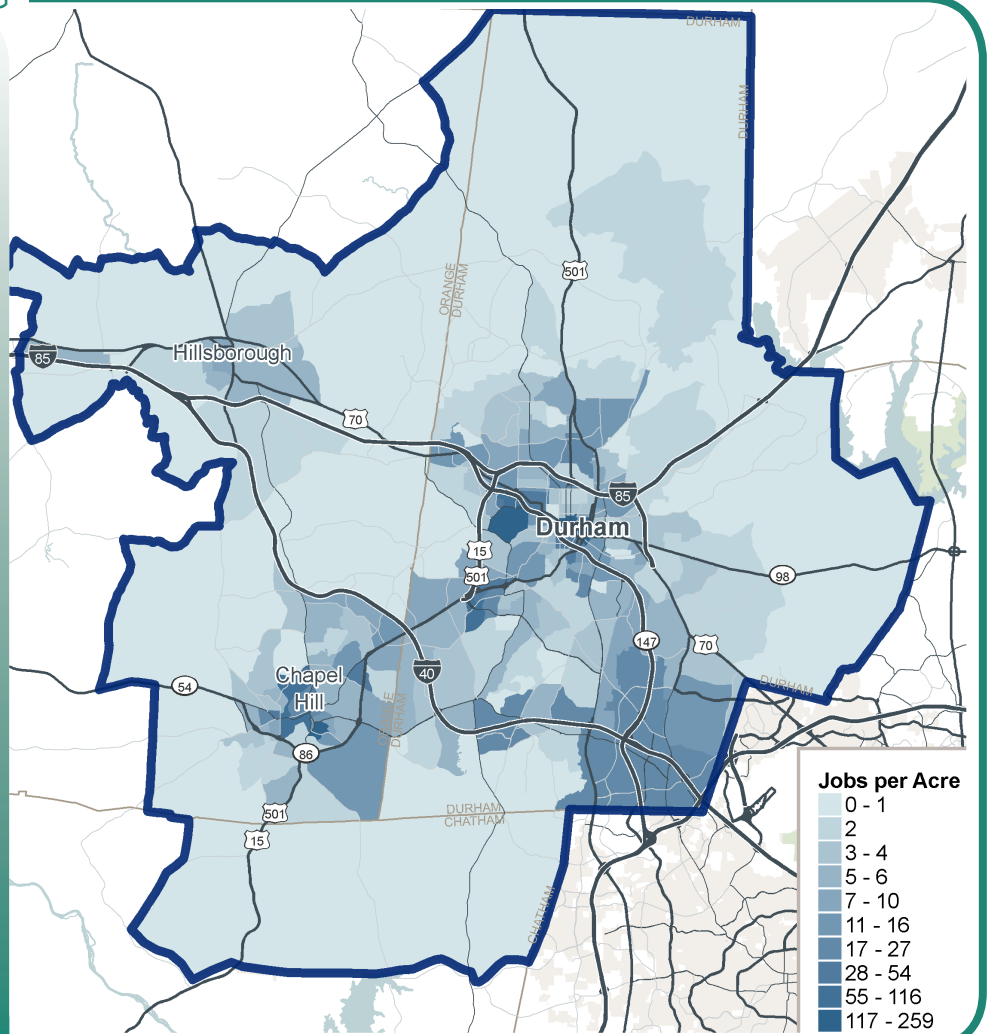
### WHY THIS INDICATOR MATTERS

Demographic distribution across the region strongly influences travel behavior. Employment centers are the primary destination for travel in the region. Understanding existing employment distribution provides context for other key indicators, including activity density.

### WHAT'S HAPPENING

The US Census American Community Survey provides population estimates at the block group level. Note that the 2015 ACS is combined with the previous four years to provide a large enough sample for statistical analysis, thus this 2015 estimate reflects what is actually a 2011-2015 average estimate. This is still a useful gauge for current employment estimates, and is updated every year.

In this map, the darker blue areas contain higher employment density than lighter blue areas. Pockets of high employment density are found in downtown Durham and Chapel Hill, but also along the major highway routes and southeast towards neighboring Raleigh.



### FINDINGS

Employment in the DCHC region is concentrated in Orange and Durham Counties. Employment tends to be concentrated adjacent to major highways, including US 70, I-85 and I-40. Particular hubs of employment density exist in downtown Chapel Hill (including the UNC campus) and Durham, but also at the sites of Duke University and Research Triangle Park (RTP) along Highway 147. Employment-driven transportation patterns can be expected to reflect this distribution, with commuters traveling from their suburban and exurban homes to job centers at Duke, UNC, and RTP, among others.





## ACTIVITY DENSITY

This indicator provides a snapshot of the spatial distribution of activity (households and jobs) in 2015. The map shows the 5-year estimates for activity density per block group.

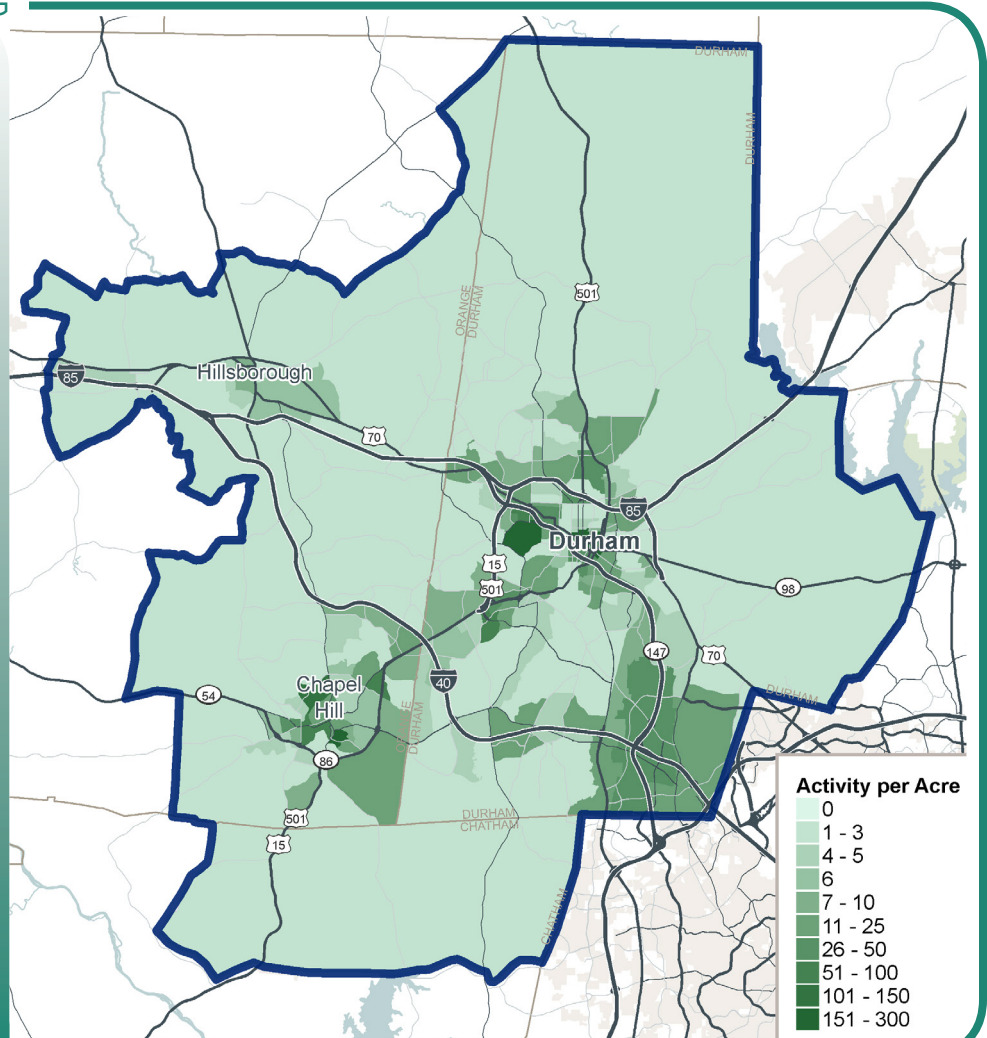
### WHY THIS INDICATOR MATTERS

Activity distribution across the region strongly influences travel behavior. Households and job centers are the primary origins and destinations for travel in the region. Understanding existing activity distribution provides context for other key indicators, and helps inform transportation infrastructure investment decisions.

### WHAT'S HAPPENING

The US Census American Community Survey provides household and job estimates at the block group level. Note that the 2015 ACS is combined with the previous four years to provide a large enough sample for statistical analysis, thus this 2015 estimate reflects what is actually a 2011-2015 average estimate. This is still a useful gauge for current employment estimates, and is updated every year.

In this map, the darker green areas contain higher activity density than lighter green areas. Pockets of high activity density are concentrated in and around Durham and Chapel Hill, but also along the major highway routes and southeast towards neighboring Raleigh.



### FINDINGS

Activity (households and jobs) in the DCHC region is concentrated in downtown Chapel Hill, downtown Durham, and Hillsborough, as well as Research Triangle Park and the major transportation corridors that offer access to RTP. Transportation patterns and travel demand will likely continue to reflect this cross-region distribution in the form of inter-city commutes and increased development along the major corridors of I-40, I-85, NC 147, NC 70, and US 15-501 between Durham and Chapel Hill.



# MULTIMODAL ACCESSIBILITY

## What Is It?

Multimodal accessibility is the measurement of how many destinations can be reached from any origin in a given amount of time using a particular mode of transportation. As such, it is an excellent way to measure the true impact of a transportation network.

## Why Does It Matter?

Multimodal accessibility has emerged as an innovative new way to analyze how people and goods move through a region. Because it is based on both land uses (utilizing information on both origins and destinations) and transportation (utilizing information both on transportation speeds and modes), multimodal accessibility can help determine the efficacy of our region's transportation network for all travelers across all modes.

## Key Findings

Residents who live in the Triangle – Durham, Chapel Hill, and neighboring Raleigh - have strong access to jobs in the region, but depend heavily on cars. Each day, employees are driving across city and county lines to reach their places of work. Roads like I-40 are congested, and transit investment is needed to relieve the pressure of induced demand. Those who live in Chapel Hill have higher access to jobs via transit than Durham residents. Access to jobs is an essential piece of the long term success of the region, and multimodal accessibility is particularly attractive to young professionals and families considering moving to the area.









## REGIONAL JOB ACCESS BY CAR

This indicator summarizes the relative number of jobs accessible by car within 45 minutes from every block group in the region.

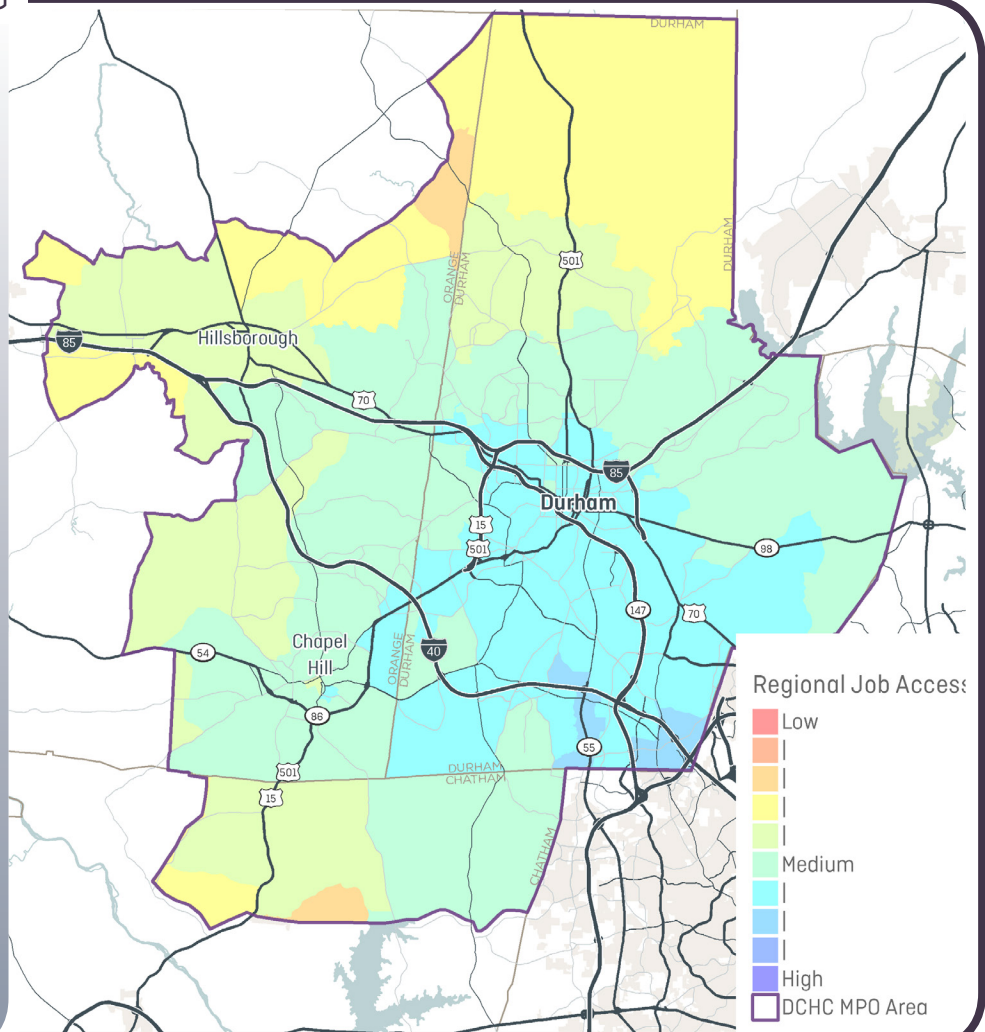
### WHY THIS INDICATOR MATTERS

Only about one-sixth of all trips are commuting trips, but nearly all trips involve a work-related destination. Measuring regional job access within a 45-minute drive is a powerful indicator for identifying the likely destinations for any given origin. These accessibility indicators weigh the "value" of each job by the time it takes to reach it, which also helps to make predictions about travel behavior.

### WHAT'S HAPPENING

The EPA Smart Location Database provides regional job accessibility data from 2010. This is the first nationwide accessibility dataset available.

Job accessibility is provided as a "score" that sums the total jobs reachable in 45 minutes. Areas with low to medium auto-based job accessibility are illustrated in reds and yellows, and areas with medium to high auto-based job accessibility are indicated in greens and blues. The scale is based on a national dataset, so areas with high auto-based job accessibility are in larger major metropolitan areas and therefore do not appear on this map.



### FINDINGS

In general, accessibility in the DCHC region is highest in those places that can easily reach Durham, Chapel Hill, and Raleigh (the latter of which has much higher accessibility than the DCHC region). Additionally, downtown Durham and Chapel Hill see small but important benefits in regional job access, meaning that access to jobs within just a few minutes is very valuable.



## REGIONAL JOB ACCESS BY TRANSIT

This indicator summarizes the relative number of jobs accessible by transit within 45 minutes from every block group in the region.

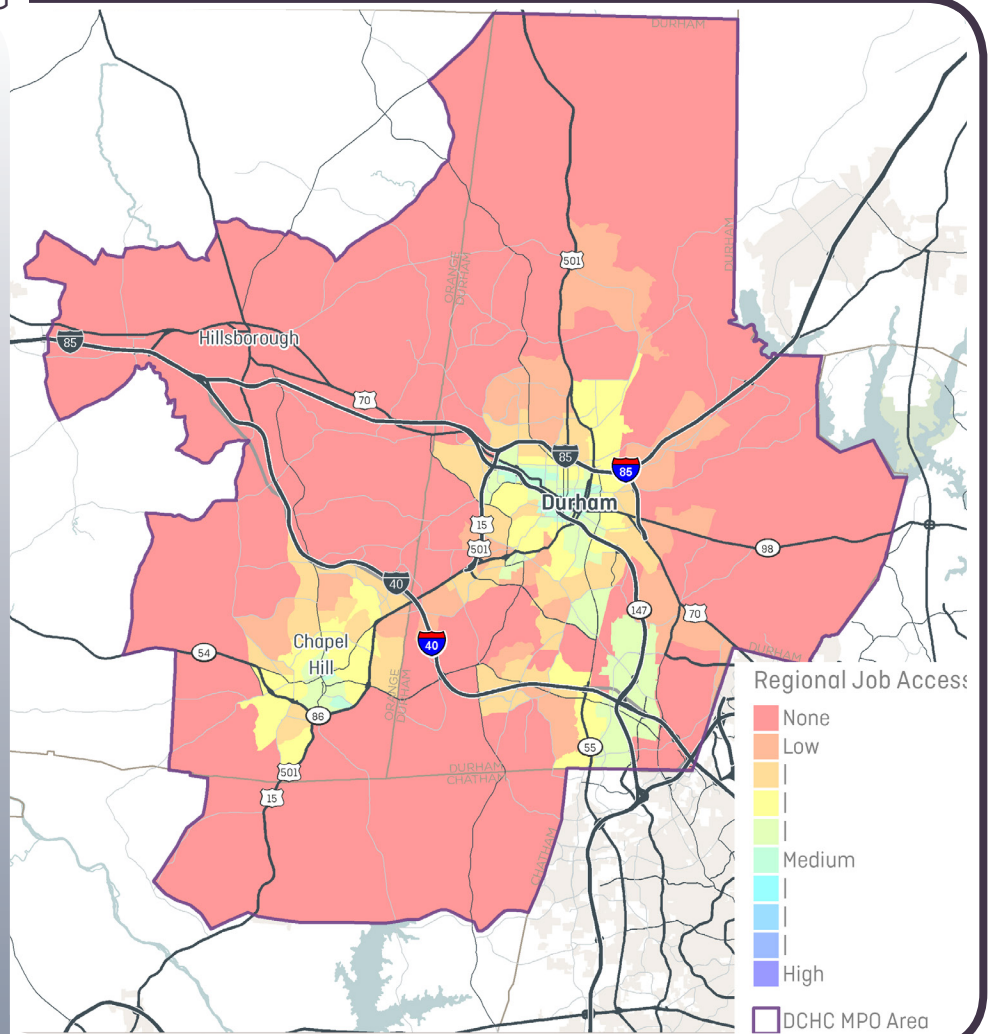
### WHY THIS INDICATOR MATTERS

Public transportation in many places around the country is an important part of regional travel, particularly for trips to work. This is true in the DCHC region as well, but there are many places where public transportation - at least fixed route public transportation - is totally unavailable. Measuring regional job access by transit demonstrates what parts of the region are benefiting most from transit provision.

### WHAT'S HAPPENING

The EPA Smart Location Database provides regional job accessibility data from 2010. This is the first nationwide accessibility dataset available.

Job accessibility is provided as a "score" that sums the total jobs reachable in 45 minutes. Areas with low to medium transit-based job accessibility are illustrated in reds and yellows, and areas with medium to high transit-based job accessibility are indicated in greens and blues. The scale is based on a national dataset, so areas with high transit-based job accessibility are in larger major metropolitan areas and therefore do not appear on this map.



### FINDINGS

Job access by transit looks very different than job access by car. First, much of the region has no fixed route transit access (though this map does not account for demand-response transit). Next, Chapel Hill is much more prominent here, as their robust system and clustered job centers allow for very good transit-based access relative to the region. Finally, several of the places with highest transit accessibility had very low populations in 2010. These places include Research Triangle Park and the hospitals at Duke and UNC, indicating that while people may not live in these areas they are utilizing transit to access work from surrounding suburban and exurban locations.





## LINK GRAVITY

This indicator collects all of the best paths between origins and destinations created during an accessibility analysis and aggregates them. This creates a network desirability map for travel.

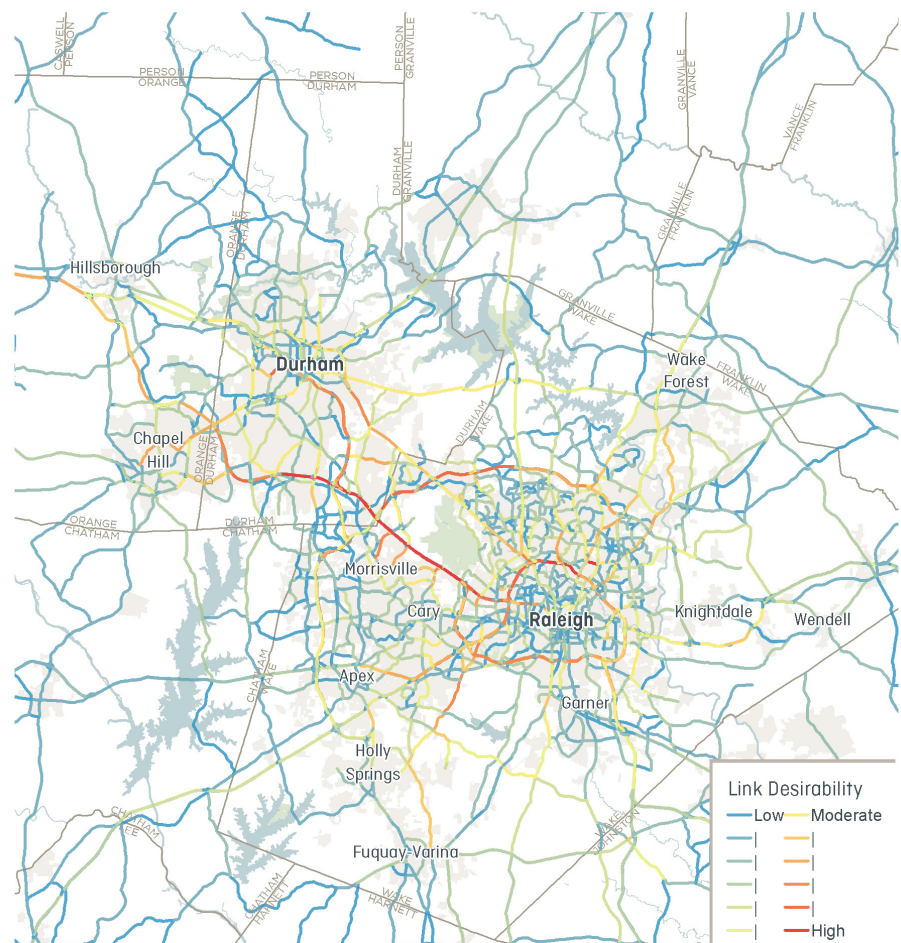
### WHY THIS INDICATOR MATTERS

Using the assumption that people will take the most direct route from home to work, link gravity analysis highlights the roadways under most pressure to serve travelers. This particular version of link gravity analysis is focused on commute trips.

### WHAT'S HAPPENING

The link gravity map on the right shows the critical role of I-40 in people's desired commute routes. Additionally, the other major roadways - I-85, I-440, I-540, US 15-501, US 70, and NC 147 - are heavily utilized for commute trips.

This map of desirability looks very similar to regional levels of service and emphasizes how commute travel relies on an inter-city and inter-county transportation network.



### FINDINGS

An important finding from link gravity analysis is that it can identify the likelihood of induced demand resulting from transportation improvements. For instance, desirability for I-40 is high enough to suggest that it will be nearly impossible to build our way out of congestion on that roadway. Thus, other options must be considered to relieve I-40 congestion.





# Transportation Policy Priorities FOR THE TRIANGLE METRO REGION

## KEYS TO A MOBILE FUTURE

Transportation is big. But it is always part of something bigger: economic development opportunities or healthy, active neighborhoods or greater access to jobs and education. The Triangle Metro Region – urban, suburban and rural – was home to 37% of the state's growth from 2010-17, and is expected to add another million people over the next generation. A transportation policy that enables North Carolina to continue to compete effectively must focus on 3 key areas:



**Economic Development  
& the Attraction of  
Diverse Talent**



**Healthy, Complete  
Communities Accessible  
to All Residents**



**Safety for All  
Travelers, From  
Youth to Seniors**

## REGIONAL POLICY PRIORITIES

Seven key priorities can result in fast-growing regions staying ahead of the growth curve, rural areas and small towns taking advantage of economic opportunities and every community providing complete streets and safe solutions tailored to local conditions.



### INVEST FOR SUCCESS



Enable critical transportation infrastructure across all modes to be addressed sooner with a statewide transportation bond.



Create a new funding source for multi-modal mobility investments tied to economic development projects in small towns, rural areas, and along major corridors in metro regions.

The BuildNC bond is a good start, but it needs to support major multi-modal investments, not just highways. While the bond would let us invest faster, it does not increase total investment; it lets us spend tomorrow's revenue today. The state needs an economic development-focused revenue source for investments that are not well suited to the long and constrained process of the Strategic Transportation Investments (STI) program.



- Minnesota's Transportation Economic Development Program could be a model for a nimble, economic-based effort -



### MAKE INVESTMENTS RELIABLE AND PREDICTABLE



Remove caps and constraints on rail transit funding

The STI program distributes state and federal transportation dollars in a reasonable way with one exception: the caps and constraints on rail transit. Rail transit should be held to the same standards as other investments. Caps on state allocations and handcuffs on receiving state funding should be removed so that projects can compete on a level playing field and be funded on their merits. Businesses tell us that risks, uncertainties and changing rules stifle success - transportation investment is a key business for the state and its communities.



- \$1 million invested in transit generates 4,200 job-hours; \$1 million in roadway investment generates 2,400 job-hours -





## ENABLE CRITICAL CORRIDOR INVESTMENTS TO BE MORE COST EFFECTIVE

→ Relax the cap on statewide tier funding within a corridor.

While the reasoning behind a cap is sound, its application can lead to inefficient, piece-meal spending which costs more in the long run and affects travelers throughout the state. The cap can also prevent investments on parallel reliever roadways that could be cost-effective and complimentary investments.

- 31% of vehicles on the Triangle's busiest stretch of I-40 - which is hampered by the corridor cap - are from areas outside Wake and Durham counties -



## REMOVE FUNDING BARRIERS FOR SMALL TOWNS AND RURAL AREAS IN DIVISIONS WITH LARGE MPOS

→ Exempt Surface Transportation Block Grant-Direct Allocation Funding from the STI Allocation.

These funds are allocated from the federal government to MPOs to address additional mobility challenges of congested urban areas. Exempting these funds from the STI formula at the Division Tier would allow funding to be more evenly distributed and let small towns and rural counties better compete for funds.

- STI already exempts 8 other categories of transportation revenues -



## MAKE NC A LEADER IN ACTIVE TRANSPORTATION INVESTMENTS

→ Reinstate funds for economically beneficial and safety-focused bicycle and pedestrian projects.

Whether its a critical link to attract tourism on the East Coast Greenway, an important sidewalk connection to make travel to school safer, or a Main Street bike and pedestrian project to serve businesses, state funding provides crucial leverage for federal funds and local contributions.

- 16% of crash fatalities are pedestrian or cyclists; the state is a necessary partner in solutions -



## STRENGTHEN SUPPORT FOR DEMAND-MANAGEMENT AND TECHNOLOGY

→ Grow the state's investment in Transportation Demand Management (TDM) and technology applications such as ramp-metering and managed motorways.

The most cost-effective dollar spent is on efficiently managing the demand for the supply of roads we already have. Working with employers on ways to offer workers alternatives to peak-hour, drive-alone commuting and deploying technologies to maximize the roadway supply are key elements of the smart city movement.

- The Triangle TDM program has reduced vehicle miles traveled by nearly 280 million miles over the past 5 years -



## RECOGNIZE STATEWIDE PROJECTS IN OTHER MODES, NOT SOLELY ROADWAYS AND FREIGHT RAIL

→ Establish standards and scoring criteria for designated statewide passenger rail and trail investments.

Just as major highways serve statewide interests, so do other modes. Passenger rail from Charlotte to Raleigh serves 5 NCDOT divisions and 3 NCDOT regions. Great trails also traverse the state - the East Coast Greenway stretches from VA to SC and the Mountains-to-Sea Trail runs 1,175 miles from the Great Smokey Mountains to the Outer Banks.

- Passenger rail between Charlotte and Raleigh contributes \$60 million to business output and \$30 million to GSP annually-



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2045 Metropolitan Transportation Plan (MTP)  
Amendment #1 (January 16, 2019)

Changes to Appendix 1: Roadway Project List      Sorted by Project Name.    **Bold font** denotes additions.      ~~Strikethrough~~ denotes deletions.

MTP ID	Highway Project	From	To	Existing Lanes	Proposed Lanes	Improvement Type(a)	Length (miles)	Estimated Cost	STI	Reg. Sig.(b)	Exempt (c)	TIP#
2025 MTP												
15	East End Connector (EEC)	NC 147	<del>US-70 to north of NC 98 in Durham</del>	-	4	New Location	<del>3.6</del> <b>3.2</b>	35,175,000	St	Yes	No	U-0071
23	Fayetteville Rd	Barbee Rd	Cornwallis Rd	2	4	Widening	1	3,374,000	Div	<del>No</del> <b>Yes</b>	No	N/A
23.1	Fayetteville Rd	Woodcroft Pkwy	Barbee Rd	2	4	Widening	<del>1.3</del> <b>1.4</b>	4,661,000	Div	<del>No</del> <b>Yes</b>	No	U-6021
111	Fordham Blvd (US 15-501)	I-40	<del>Franklin St</del> <b>Ephesus Ch Rd</b>	4	4	Modernization	1.6	2,052,000	St	Yes	No	<del>U-5304B</del> <b>U-5304F</b>
240	Fordham Blvd (US 15-501)	NC 54	<del>Franklin Street</del> <b>Ephesus Ch Rd</b>	4	4	Modernization	2.1	45,498,000	St	Yes	No	<del>U-5304A</del> <b>U-5304D</b>
73	Fordham Blvd (US 15-501)	NC 54	<del>US 15-501</del> <b>NC 86 (S Columbia St)</b>	4	4	Modernization	<del>2.2</del> <b>2.3</b>	49,832,000	St	Yes	No	<del>U-5304A</del> <b>U-5304B</b>
204	Fordham Blvd/Raleigh Rd	Interchange	--	-	-	Upgrade	N/A	14,800,000	St	<del>Yes</del> <b>No</b>	93.127	U-5774A
626	Fordham Blvd/S Columbia St	Interchange	--	-	-	Upgrade	N/A	35,000,000	St	Yes	No	<del>U-5304E</del> <b>U-5304A</b>
638	I-40/NC 86	Interchange	--	-	-	<del>Upgrade</del> <b>Improvements</b>	N/A	16,500,000	St	<del>No</del> <b>Yes</b>	No	I-3306AC
64.12	NC 147 (Operational Improvements)	<del>East End Connector</del> <b>W Chapel Hill St</b>	<del>Swift Av</del> <b>Briggs Av</b>	4	4	Modernization	<del>1.7</del> <b>3.0</b>	58,400,000	ST	Yes	No	U-5937
64.13	NC 147 (possible Managed Lanes)	East End Conn	I-40	4	8	Widening	<del>4.9</del> <b>3.9</b>	179,248,000	St	Yes	No	U-5934
428	NC 54	Old Fayetteville Rd	MPO Boundary	2	2	Modernization	2.9	14,457,000	Reg	<del>No</del> <b>Yes</b>	No	R-5821A



MTP ID	Highway Project	From	To	Existing Lanes	Proposed Lanes	Improvement Type	Length (miles)	Estimated Cost	STI	Reg. Sig.	Exempt	TIP#
69.21	NC 54	Highgate Dr	Fayetteville Rd	4	4	Modernization	<del>1.5</del> 0.4	(see #69.2)	Reg	<del>Yes</del> No	93.126	U-5774H
75.2	NC 55 (Alston Ave)	Main St	NC 98	2	2	Modernization	<del>0.5</del> 0.6	-	Reg	No	No	U-3308
87	S Churton St	<del>US 70 Business</del> Eno River in Hillsborough	I-40	2	4	Widening	<del>2.4</del> 2.2	31,825,000	Div	No	No	U-5845
485	US 70 (freeway conversion)	<del>Pleasant Dr</del> Lynn Rd	S Miami Blvd	4	6	Freeway	1.6	111,020,000	St	Yes	No	U-5720A
116.1	US 70/Miami Blvd/Sherron Rd	Interchange	--	-	-	New	N/A	46,621,000	St	Yes	No	U-5720B
123.11	Woodcroft Pkwy Ext	Garrett Rd	Hope Valley Rd	-	2	New Location	<del>0.2</del> 0.0	2,219,000	Div	No	No	U-5823
<b>2035 MTP</b>												
43	I-40	<del>US 15-501</del> Durham County Line	NC 86	4	6	Widening	3.9	29,316,000	St	Yes	No	I-3306AB
45	I-40 Managed Lanes	Wake County Line	NC 147	8	10	Widening	<del>7.0</del> 3.4	446,464,000	St	Yes	No	I-5702B
70.4	I-40/ NC 54 ramp	Farrington Rd.	I-40	-	1	New Location	0.2	1,600,000	St	Yes	No	<del>U-5517</del> N/A
113	US 15-501 (expressway conversion)	US 15-501 Bypass	I-40	6	6	Expressway	<del>2.2</del> 2.0	195,300,000	St	Yes	No	U-6067
116	US 70 (freeway conversion)	S Miami Blvd	<del>Northern Durham Parkway</del> MPO Boundary	4	6	Freeway	2.5	173,469,000	St	Yes	No	U-5720C
<b>2045 MTP</b>												
364	Eno Mountain Rd realignment	Mayo St	Eno Mountain Rd	<del>0</del> 2	2	New Location	0.3	2,015,000	Div	No	93.126	N/A
48	I-85	<del>US 70</del> Mt Herman Ch Rd	I-40	4	6	Widening	<del>7.1</del> 6.0	197,378,000	St	Yes	No	<del>I-5983</del> N/A
48.1	I-85	<del>Sparger Rd</del> Mt Herman Ch Rd	<del>US 70</del> Durham County Line	4	6	Widening	<del>3.0</del> 2.5	39,118,000	St	Yes	No	I-5983

MTP ID	Highway Project	From	To	Existing Lanes	Proposed Lanes	Improvement Type	Length (miles)	Estimated Cost	STI	Reg. Sig.	Exempt	TIP#
81	NC 86 (and US 70 intersection)	US 70 Bypass	NC 57	2	4	Widening	0.3	4,742,000	Reg	No	No	<del>1-5984</del> N/A
81.1	Wake Forest Hwy (NC 98)	Nichols Farm Dr	Wake County Line	2	4	Widening	6.0	48,474,000	Reg	<del>No</del> Yes	No	N/A

These footnotes are to clarify the table data and will not be part of Amendment #1.

- (a) There is no difference between intersection upgrade and intersection improvement. A text change to improvement is recommended so the MTP and TIP match.
- (b) Reg. Sig. means Regionally Significant. Changes to these projects, e.g., deletion from the plan, could require a new air quality conformity determination
- (c) Projects that are exempt may continue to move forward in the case of a plan lapse whereas non-exempt projects will not receive federal action until there is an approved MTP. In this column, exempt projects are indicated by the regulation section that provides the exemption, e.g., 93.126.

**DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING  
ORGANIZATION (DCHC MPO)**

**RESOLUTION ADOPTING THE AMENDED DCHC MPO  
2045 METROPOLITAN TRANSPORTATION PLAN (2045 MTP)**

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

**WHEREAS**, the Fixing America's Surface Transportation Act (FAST Act) requires all Metropolitan Planning Organizations to develop and maintain a Metropolitan Transportation Plan; and

**WHEREAS**, the Metropolitan Transportation Plan must address all modes of transportation in an urban area, have a horizon year of at least 20 years, and be fiscally constrained; and

**WHEREAS**, the Durham-Chapel Hill-Carrboro Metropolitan Transportation Plan (DCHC MPO) Board is the duly recognized transportation decision-making body for the 3-C transportation planning process (i.e., continuous, cooperative and comprehensive) of the DCHC MPO; and

**WHEREAS**, the local land use plans and socioeconomic forecasts (i.e., for years 2017, 2025, 2035, 2040 and 2045) were depicted in the Connect 2045 process, and were consulted and incorporated into the 2045 MTP, and thereby become the adopted socioeconomic forecasts of the DCHC MPO; and

**WHEREAS**, the Triangle Regional Model, version 6, was consulted and incorporated into the 2045 MTP; and thereby becomes the adopted travel demand model of the DCHC MPO; and

**WHEREAS**, the DCHC MPO Board has found the transportation planning process to be in full compliance with Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794; and

**WHEREAS**, the DCHC MPO Board has considered how the Metropolitan Transportation Plan will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded planning projects (Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23); and

**WHEREAS**, the DCHC MPO Board has considered how the Transportation Planning Process will affect the elderly and the disabled per the provision of the Americans With Disabilities Act of 1990 (Pub.L. 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulations.

**BE IT THEREFORE RESOLVED**, by the Board of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) that the amended 2045 Metropolitan Transportation Plan, dated January 16, 2019, be adopted for the DCHC MPO on this the 16<sup>th</sup> day of January, 2019.

(continued)

(Continued – Resolution Adopting DCHC 2045 MTP)

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Damon Seils, DCHC MPO Board Chair

Durham County, North Carolina

I certify that Damon Seils personally appeared before me this day acknowledging to me that he signed the forgoing document.

Date: January 16, 2019

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2020

**RESOLUTION FINDING**  
**THE AMENDED 2045 METROPOLITAN TRANSPORTATION PLAN (MTP) AND**  
**THE AMENDED 2018-2027 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**  
**FOR THE DURHAM CHAPEL HILL CARRBORO METROPOLITAN PLANNING**  
**ORGANIZATION (DCHC MPO)**  
**IN CONFORMITY WITH THE NORTH CAROLINA STATE IMPLEMENTATION PLAN**

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

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

**WHEREAS**, the DCHC MPO Board is the duly recognized transportation decision making body for the DCHC MPO as required by 23 CFR Part 134; and

**WHEREAS**, the Fixing of America's Surface Transportation Act (FAST Act) requires all Metropolitan Planning Organizations to develop and maintain a Metropolitan Transportation Plan and Transportation Improvement Program; and

**WHEREAS**, the DCHC MPO 2045 Metropolitan Transportation Plan and the FY 2018- 2027 Transportation Improvement Program meet the planning requirements of 23 CFR Part 134; and

**WHEREAS**, the United States Environmental Protection Agency (USEPA) designated the Raleigh-Durham Chapel Hill Area as nonattainment area for the prior 1997 8-hour ozone standard on June 15, 2004, and due to improved air quality in the region the area was re-designated from nonattainment to attainment on December 26, 2007; and

**WHEREAS**, the conformity analysis report dated [insert date] used the latest planning assumptions approved by the DCHC MPO for population, employment, travel and congestion as required in 40 CFR Part 93.110; and

**WHEREAS**, the conformity determination used the latest emissions model approved by the USEPA; and

**WHEREAS**, interagency consultation has been made in accordance with the established interagency consultation procedures for North Carolina and the DCHC MPO; and

**WHEREAS**, there are no transportation control measures listed in North Carolina's State Implementation Plan; and

**WHEREAS**, the programs and projects included in the amended 2045 Metropolitan Transportation Plan are consistent with the North Carolina State Implementation Plan emissions budgets based on a regional emissions analysis; and

(Continued)



(Continued – Resolution Adopting Air Quality Conformity for the DCHC MPO 2045 MTP and 2018-27 TIP)

**WHEREAS**, the donut area projects were included in the conformity regional emissions analysis; and

**WHEREAS**, the programs and projects included in the DCHC MPO Transportation Improvement Program for FY 2018-2027 are financially constrained in accordance with State and Federal law; and

**WHEREAS**, the programs and projects included in the DCHC MPO Transportation Improvement Program for FY 2018-2027 are a direct subset of the 2045 Metropolitan Transportation Plan.

**NOW, THEREFORE BE IT RESOLVED** that the DCHC MPO's amended 2045 Metropolitan Transportation Plan and the amended 2018-2027 Transportation Improvement Program conforms to the intent of the North Carolina State Implementation Plan in accordance with the Clean Air Act as Amended on this, the 16<sup>th</sup> day of January, 2018.

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Damon Seils, DCHC MPO Board Chair

Durham County, North Carolina

I certify that Damon Seils personally appeared before me this day acknowledging to me that he signed the forgoing document.

Date: January 16, 2019

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2020

## P6.0 PRE-SUBMITTAL COORDINATION PROCESS

*November 7, 2018*

NCDOT desires to continue assisting MPOs, RPOs, and Divisions in submitting competitive projects in the STI prioritization process. Similar to P5.0, NCDOT Central Unit staff will dedicate time and resources to discuss potential P6.0 highway submittals via a series of webinars in early 2019. During these webinars, Central Unit staff will provide feedback on potential scoring, cost, comments on scope, and other pertinent information. This pre-submittal coordination effort will also allow MPOs, RPOs, and Divisions to increase their collaboration on potential project submittals.

The process is described below:

**Late-November 2018** – NCDOT Central Unit staff will hold a webinar(s) with all MPOs, RPOs, and Divisions describing the pre-submittal coordination process and schedule.

Also discussed will be the Primary Route Designation policy and procedure for P6.0 scoring.

**By January 18<sup>th</sup>, 2019** – MPOs, RPOs, and Division staff will submit up to 10 Highway intersection/interchange/superstreet projects into SPOT Online as Draft projects for the pre-submittal evaluation. Once entered, please send the list of SPOTIDs for these projects to Jason Schronce in SPOT ([jschronce@ncdot.gov](mailto:jschronce@ncdot.gov)). This will allow Central Unit staff to review the project locations and be prepared to discuss them at the next individual webinar, which will be project specific discussions per agency.

**Note, for P6.0, the official pre-submittal process is only for intersection/interchange/superstreet projects that require evaluation by NCDOT Congestion Management staff.** The SPOT Office has provided a testing spreadsheet (with referenced P5.0 scaling) that can be used to get a preliminary score for corridor highway projects at any time with exported project data from SPOT Online. Please use this resource along with communication with the applicable Division (DPE/CDE) or SPOT staff member for detailed questions about your corridor projects. As any changes are confirmed by the P6.0 Workgroup, an updated testing spreadsheet will be released.

**February to Mid-March 2019** – Central Unit staff will hold an individual planned webinar (up to 1 hour) with the Division/MPO or Division/RPO to discuss the submitted project lists. SPOT will set up the individual webinars with each Division, associated MPO or RPO, and appropriate Central Staff (Congestion Management, SPOT, and Feasibility Studies).

SPOT will report scoring details and other relevant information back to the Divisions/MPOs/RPOs prior to the P6.0 project submittal window opening in July 2019.

MPOs and RPOs are not required to participate in the aforementioned process, although it is highly encouraged. The outcome of this effort is expected to result in better projects being submitted for P6.0 with improved project data entry and clarity on the project's original intent/design.



Durham - Chapel Hill - Carrboro  
Metropolitan Planning Organization Technical Committee  
December 19, 2018

**FY 2018-2027 TIP Amendment #9 Summary Sheet**

*See full report for additional information on each project.*

- **EB-5721 Orange County Bicycle Route 1:** Add TAP funds for PE/Design and Construction in FY19.
- **U-4726 DCHC Bike/Ped:** Add STBGDA funding for Construction in FY19.
- **U-5543 Variable Message Signs in Chapel Hill:** Add STBGDA funding for Construction in FY19.
- **TA 6712 Replacement of Transit Vehicles:** Create new project and add statewide CMAQ funding in FY19.

## TIP Amendment Request - Revise An Existing Project

### Amendment Request Details



**TIP Amendment**  
(change in funding  
greater than \$1M)



**TIP Modification**  
(change in funding  
less than \$1M)



There are previous  
amendments to  
this project.

Date: 12-11-18

Amendment Requested By: Town of Chapel Hill

### Existing Project Details

Project Name: Orange County Bicycle Route 1 (Fordham Boulevard)

STIP/TIP #: EB-5721

Jurisdiction/Agency: Chapel Hill

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](http://bitly.com/mpoprojects)

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2017	PE/Design	STBG	\$71,200	\$0	\$17,800	\$89,000
2019	Construction	TAP	\$375,200	\$0	\$93,800	\$469,000
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$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:			\$446,400	\$0	\$111,600	\$558,000

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.

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2017	PE/Design	STBG	\$71,200	\$0	\$17,800	\$89,000
2019	PE/Design	TAP	\$8,000	\$0	\$2,000	\$10,000
2019	Construction	TAP	\$767,200	\$0	\$191,800	\$959,000
			\$0	\$0	\$0	\$0
			\$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:			\$846,400	\$0	\$211,600	\$1,058,000

Total Project  
Cost

## **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?

Add TAP funding in FY19 for PE/Design and Construction.

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



## TIP Amendment Request - Revise An Existing Project

### Amendment Request Details



**TIP Amendment**  
(change in funding  
greater than \$1M)



**TIP Modification**  
(change in funding  
less than \$1M)



There are previous  
amendments to  
this project.

Date: 12-5-18

Amendment Requested By: Town of Chapel Hill

### Existing Project Details

Project Name: DCHC MPO Bike/Ped

STIP/TIP #: U-4726

Jurisdiction/Agency: Chapel Hill

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](http://bitly.com/mpoprojects)*

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2019	Construction	STBGDA	\$428,750	\$0	\$107,188	\$535,938
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$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:			\$428,750	\$0	\$107,188	\$535,938

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.*

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2019	Construction	STBGDA	\$1,040,000	\$0	\$260,000	\$1,300,000
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0
			\$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:			\$1,040,000	\$0	\$260,000	\$1,300,000

Total Project  
Cost

## **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?

Add local discretionary STBGDA funds for Construction.

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

## TIP Amendment Request - Revise An Existing Project

### Amendment Request Details



**TIP Amendment**  
(change in funding  
greater than \$1M)



**TIP Modification**  
(change in funding  
less than \$1M)



There are previous  
amendments to  
this project.

Date: 12-5-18

Amendment Requested By: Town of Chapel Hill

### Existing Project Details

Project Name: Variable Message Signs in Chapel Hill

STIP/TIP #: U-5543

Jurisdiction/Agency: Chapel Hill

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](http://bitly.com/mpoprojects)*

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2016	PE/Design	STBGDA	\$75,200	\$0	\$18,800	\$94,000
2017	PE/Design	STBGDA	\$32,800	\$0	\$8,200	\$41,000
2019	Construction	STBGDA	\$786,200	\$0	\$196,550	\$982,750
			\$0	\$0	\$0	\$0
			\$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:			\$894,200	\$0	\$223,550	\$1,117,750

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.*

FY	Phase/Work	Funding Source	Federal Share	State Share	Local Share	Total
2016	PE/Design	STBGDA	\$75,200	\$0	\$18,800	\$94,000
2017	PE/Design	STBGDA	\$32,800	\$0	\$8,200	\$41,000
2019	Construction	STBGDA	\$1,193,000	\$0	\$298,250	\$1,491,250
			\$0	\$0	\$0	\$0
			\$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:			\$1,301,000	\$0	\$325,250	\$1,626,250

Total Project  
Cost

## **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?

Add STBGDA funds for Construction in FY19.

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



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

November 28, 2018

Mr. Keith Melton  
Director of Planning and Program Development  
Federal Transit Administration  
230 Peachtree St NW Suite 1400  
Atlanta, Georgia 30303

**Subject: REQUEST FEDERAL TRANSIT ADMINISTRATION (FTA) APPROVAL OF  
AMENDMENT NUMBER #10 OF THE NORTH CAROLINA 2018-2027 STATE  
TRANSPORTATION IMPROVEMENT PROGRAM (STIP)**

The North Carolina Department of Transportation requests FTA approval to add the following projects to the 2018-2027 STIP. None of the STIP amendments in this letter reflect any change in the distribution of Governor's Apportionment Section 5307 funds.

**LEGEND FOR THE TABLES:**

- **STIP#:** identifying unique number for the project in the STIP
- **FUND:** Type of federal, state, and local fund source used to pay for the project. The federal types include 5307 (FUZ), 5316 (JARC), FNF (5317 New Freedom), Congestion Mitigation and Air Quality (CMAQ), FNU (5311), FEDP (5310 Elderly and Persons with Disabilities, and 5339 (FBUS).
- **MATCH:** Indicates the funding breakdown between federal (US), state (S), and local (L) funds
- **FY 18-FY 27:** This table shows the amount of funding to be programmed for each fiscal year. All funding amounts shown are in thousands (000's).

The following STIP amendments were approved at the November 8, 2018 BOT Meeting:

**Additions to the Transit 2018-2027 STIP**

STIP #	TRANSIT PARTNER	DESCRIPTION	MATCH	FUND	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)	FY26 (000)	FY27 (000)
TA-6712	NCDOT-PTD	Replacement of Transit Vehicles meeting useful life	CMAQ	CMAQ		6332								

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
PUBLIC TRANSPORTATION DIVISION  
1550 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1550

*Telephone:* (919) 707-4670  
*Fax:* (919) 733-1391  
*Customer Service:* 1-877-368-4968  
*Website:* www.ncdot.gov

*Location:*  
1 SOUTH WILMINGTON STREET  
RALEIGH, NC 27601



			Local	L		1583								
TP-5157	Chapel Hill Transit	ADA Bus Stop Review and Design		FEDP		20								
			Local	L		20								
TA-6710	Go Durham	Replacement Vehicles	CMAQ	CMAQ		400								
			Local	L		100								

**Modifications to the Transit 2018-2027 STIP**

STIP #	TRANSIT PARTNER	DESCRIPTION	MATCH	FUND	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)	FY26 (000)	FY27 (000)
TQ-7002	DCHC MPO/City of Durham	Admin of 5310 Program		FEDP		43								
			Local	L										

TQ-5104	Chapel Hill Transit	EZ Rider Senior Shuttle		FEDP		120								
			Local	L		120								
TG-6178 A	GoDurham	Purchase of Service		FEDP		100								
			Local	L		25								
TQ-3001	Durham County Access	Purchase of Service		FEDP		100								
			Local	L		25								
TQ-3002	Orange County	Mobility Management				110								
			Local	L		28								

TQ-7008	Western Piedmont Regional Transit Authority	Program Administration	FEDP	5310		23								
TG-6797	Western Piedmont Regional Transit Authority	Preventive Maintenance	FUZ	STBGDA		334								
			L	Local		83								

**Administrative Modifications to the Transit 2018-2027 STIP**

STIP #	TRANSIT PARTNER	DESCRIPTION	MATCH	FUND	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)	FY26 (000)	FY27 (000)
TQ-7010	Asheville Redefines Transit	Asheville Redefines Transit. 5310 Administrative Oversight.	FEPD	5310			33							

**Item I-1A, (11) Projects, Total Federal and State funds \$7,615,000**

Metropolitan Planning Organization	Transit Partners	Added to the STIP	Added to MTIP
Greater Hickory Area MPO	Western Piedmont Regional Transit Authority	11/8/2018	July
French Broad River MPO	Asheville Redefines Transit	10/11/2018	September 27, 2018
Durham, Chapel Hill, Carrboro	Durham County Access	11/8/2018	September 12, 2018
Durham, Chapel Hill, Carrboro	Go Durham	11/8/2018	October 10, 2018
Durham, Chapel Hill, Carrboro	Chapel Hill Transit	11/8/2018`	October 10, 2018
Durham, Chapel Hill, Carrboro	Orange County Transit	11/8/2018	August 8, 2018

These additions and modifications were made according to requirements established in SAFETEA-LU, MAP-21 and FAST Act. The additions and modifications are consistent with the transit strategy in the fiscally constrained Long-Range Transportation Plans of the respective MPO's. Administration of the changes conforms to procedures delineated in the MPO public participation plans. The changes do not adversely impact air quality conformity determination currently in place and meets fiscal constraint requirements.

Please address any questions concerning this matter to Jason Wimmer, [ajwimmer@ncdot.gov](mailto:ajwimmer@ncdot.gov), 919-707-4686. Please endorse and return the request. Upon receipt, NCDOT will distribute copies of the endorsement to all the interested parties with a reminder that this document and the endorsement date below are the references needed to complete a TrAMS application.

Sincerely,



Debbie Collins, Director  
NCDOT Public Transportation Division

Date: November 28, 2018

Endorsement:

\_\_\_\_\_ Date \_\_\_\_\_  
Keith Melton  
Director of Planning and Program Development, Federal Transit Administration

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

**AMENDMENT #9  
January 16, 2019**

A motion was made by MPO Board Member \_\_\_\_\_ and seconded by MPO Board Member \_\_\_\_\_ for the adoption of the following resolution, 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**, the United States Environmental Protection Agency Designated the DCHC MPO from nonattainment to attainment under the prior 1997 Ozone Standard on December 26, 2007; 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 approves Amendment #9 to the FY 2018-2027 Transportation Improvement Program of the Durham-Chapel Hill-Carrboro Urban Area, as approved by the Board on January 16, 2019, and as described in the “FY 2018-2027 TIP Amendment #9 Summary Sheet” on this, the 16th day of January, 2019.

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Damon Seils, MPO Board Chair

Durham County, North Carolina

I certify that Damon Seils personally appeared before me this day acknowledging to me that he signed the forgoing document.

Date: January 16, 2019

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Frederick Brian Rhodes, Notary Public  
My commission expires: May 10, 2020



## **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?

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

## MEMORANDUM

**To:** DCHC MPO Board

**From:** DCHC MPO Lead Planning Agency

**Date:** December 12, 2018

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

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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.

### **Major UPWP – Projects**

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

- ✓ Completed
- Farrington Road Amendment likely to be adopted – September 2018

#### **2045 Metropolitan Transportation Plan (MTP)**

- 2045 MTP amendment related to Air Quality Conformity Determination will be released for public comment– September 2018
- Adopt 2045 MTP Amendment #1 – November 2018

#### **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 – June-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 – August 2018
- ✓ LPA addresses public comments and makes draft recommendation on local points for Division category – September 2018
- ✓ Approval of Division Needs points – November 2018
- ✓ Submission of Division Needs 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 – September 2018



- ✓ Release formal report for public comment – September 2018
- ✓ Approve final report – November 2018

#### **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
- ✓ Release final report for comment – August 2018
- ✓ Approve formal report – October 2018

#### **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
- ✓ Draft plan – September 2018
- ✓ Public input – October-November 2018
- Revisions and additional data collection – January 2019
- Public input – February 2019
- Final draft – March 2019

#### **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

#### **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 and presentation to MPO Boards at joint MPO Board Meeting – October 2018
- 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

<b>Contract Number:</b> C203394		<b>Route:</b> I-885, NC-147, NC-98 US-70	
<b>Division:</b> 5		<b>County:</b> Durham	
<b>TIP Number:</b> U-0071			
<b>Length:</b> 4.009 miles		<b>Federal Aid Number:</b>	
<b>NCDOT Contact:</b> Cameron D. Richards		<b>NCDOT Contact No:</b> (919)835-8200	
<b>Location Description:</b> EAST END CONNECTOR FROM NORTH OF NC-98 TO NC-147 (BUCK DEAN FREEWAY) IN DURHAM.			
<b>Contractor Name:</b> DRAGADOS USA INC			
<b>Contract Amount:</b> \$141,949,500.00		<b>Cost Overrun/Underrun:</b> 9.9%	
<b>Work Began:</b> 02/26/2015		<b>Letting Date:</b> 11/18/2014	
<b>Original Completion Date:</b> 05/10/2020		<b>Revised Completion Date:</b>	
<b>Latest Payment Thru:</b> 11/22/2018		<b>Scheduled Progress:</b> 74.27%	
<b>Latest Payment Date:</b>		<b>Actual Progress:</b> 72.49%	

<b>Contract Number:</b> C203492		<b>Route:</b> SR-2220	
<b>Division:</b> 5		<b>County:</b> Durham	
<b>TIP Number:</b> EB-4707B			
<b>Length:</b> 1.756 miles		<b>Federal Aid Number:</b> STPDA-0505(64)	
<b>NCDOT Contact:</b> James M. Nordan, PE		<b>NCDOT Contact No:</b> (919)220-4680	
<b>Location Description:</b> SR-2220 (OLD CHAPEL HILL ROAD) FROM SR-1113 (POPE ROAD) TO SR-1116 (GARRETT ROAD).			
<b>Contractor Name:</b> FSC II LLC DBA FRED SMITH COMPANY			
<b>Contract Amount:</b> \$7,295,544.75		<b>Cost Overrun/Underrun:</b> 5.76%	
<b>Work Began:</b> 06/26/2017		<b>Letting Date:</b> 05/16/2017	
<b>Original Completion Date:</b> 05/14/2019		<b>Revised Completion Date:</b>	
<b>Latest Payment Thru:</b> 10/31/2018		<b>Scheduled Progress:</b> 97%	
<b>Latest Payment Date:</b> 11/14/2018		<b>Actual Progress:</b> 79.38%	

<b>Contract Number:</b> C203567		<b>Route:</b> NC-55	
<b>Division:</b> 5		<b>County:</b> Durham	
<b>TIP Number:</b> U-3308			
<b>Length:</b> 1.134 miles		<b>Federal Aid Number:</b> STP-55(20)	
<b>NCDOT Contact:</b> James M. Nordan, PE		<b>NCDOT Contact No:</b> (919)220-4680	
<b>Location Description:</b> NC-55 (ALSTON AVE) FROM NC-147 (BUCK DEAN FREEWAY) TO NORTH OF US-70BUS/NC-98 (HOLLOWAY ST).			
<b>Contractor Name:</b> ZACHRY CONSTRUCTION CORPORATION			
<b>Contract Amount:</b> \$39,756,916.81		<b>Cost Overrun/Underrun:</b> 2.99%	
<b>Work Began:</b> 10/05/2016		<b>Letting Date:</b> 07/19/2016	
<b>Original Completion Date:</b> 03/30/2020		<b>Revised Completion Date:</b> 07/16/2020	
<b>Latest Payment Thru:</b> 11/15/2018		<b>Scheduled Progress:</b> 48.1%	
<b>Latest Payment Date:</b> 11/27/2018		<b>Actual Progress:</b> 37.93%	

<b>Contract Number:</b> C204087		<b>Route:</b> US-70	
<b>Division:</b> 5		<b>County:</b> Durham	
<b>TIP Number:</b>			
<b>Length:</b> 44.124 miles		<b>Federal Aid Number:</b>	
<b>NCDOT Contact:</b> Cameron D. Richards		<b>NCDOT Contact No:</b> (919)835-8200	
<b>Location Description:</b> 1 SECTION OF US-70 AND 106 SECTIONS OF SECONDARY ROADS.			
<b>Contractor Name:</b> CAROLINA SUNROCK LLC			
<b>Contract Amount:</b> \$7,054,264.20		<b>Cost Overrun/Underrun:</b> 27.16%	
<b>Work Began:</b> 01/16/2018		<b>Letting Date:</b> 09/19/2017	
<b>Original Completion Date:</b> 11/15/2018		<b>Revised Completion Date:</b>	
<b>Latest Payment Thru:</b> 11/02/2018		<b>Scheduled Progress:</b> 75%	
<b>Latest Payment Date:</b> 11/09/2018		<b>Actual Progress:</b> 60.78%	

<b>Contract Number:</b> C204167		<b>Route:</b> SR-1118, SR-1407, SR-1648 SR-1794, SR-1811, SR-1906 SR-1966, SR-1973, SR-2095	
<b>Division:</b> 5		<b>County:</b> Durham	
<b>TIP Number:</b>			
<b>Length:</b> 24.77 miles		<b>Federal Aid Number:</b> STATE FUNDED	
<b>NCDOT Contact:</b> James M. Nordan, PE		<b>NCDOT Contact No:</b> (919)220-4680	
<b>Location Description:</b> 51 SECTIONS OF SECONDARY ROADS.			
<b>Contractor Name:</b> CAROLINA SUNROCK LLC			
<b>Contract Amount:</b> \$4,355,108.47		<b>Cost Overrun/Underrun:</b> 0.46%	
<b>Work Began:</b> 08/01/2018		<b>Letting Date:</b> 05/15/2018	
<b>Original Completion Date:</b> 11/30/2019		<b>Revised Completion Date:</b>	

<b>Latest Payment Thru:</b> 10/31/2018 <b>Latest Payment Date:</b> 11/09/2018		<b>Scheduled Progress:</b> 4.25% <b>Actual Progress:</b> 4.23%
<b>Contract Number:</b> C204168 <b>Division:</b> 5 <b>TIP Number:</b> <b>Length:</b> 15.188 miles <b>NCDOT Contact:</b> Cameron D. Richards <b>Location Description:</b> 14 SECTIONS OF SECONDARY ROADS. <b>Contractor Name:</b> CAROLINA SUNROCK LLC <b>Contract Amount:</b> \$5,334,770.46 <b>Work Began:</b> 07/02/2018 <b>Original Completion Date:</b> 11/30/2019 <b>Latest Payment Thru:</b> 10/31/2018 <b>Latest Payment Date:</b> 11/07/2018		<b>Route:</b> - <b>County:</b> Durham <b>Federal Aid Number:</b> STATE FUNDED <b>NCDOT Contact No:</b> (919)835-8200 <b>Cost Overrun/Underrun:</b> 0.9% <b>Letting Date:</b> 05/15/2018 <b>Revised Completion Date:</b> <b>Scheduled Progress:</b> 21% <b>Actual Progress:</b> 20.85%
<b>Contract Number:</b> C204256 <b>Division:</b> 5 <b>TIP Number:</b> <b>Length:</b> 15.89 miles <b>NCDOT Contact:</b> James M. Nordan, PE <b>Location Description:</b> 1 SECTION OF US-70, 1 SECTION OF NC-98, AND 3 SECTIONS OF SECONDARY ROADS. <b>Contractor Name:</b> CAROLINA SUNROCK LLC <b>Contract Amount:</b> \$0.00 <b>Work Began:</b> 03/15/2019 <b>Original Completion Date:</b> 11/30/2019 <b>Latest Payment Thru:</b> <b>Latest Payment Date:</b>		<b>Route:</b> -, NC-98, SR-1800 SR-1811, US-70 <b>County:</b> Durham <b>Federal Aid Number:</b> STATE FUNDED <b>NCDOT Contact No:</b> (919)220-4680 <b>Cost Overrun/Underrun:</b> 0% <b>Letting Date:</b> 10/16/2018 <b>Revised Completion Date:</b> <b>Scheduled Progress:</b> 0% <b>Actual Progress:</b> 0%
<b>Contract Number:</b> DE00228 <b>Division:</b> 5 <b>TIP Number:</b> I-5729 <b>Length:</b> 5.61 miles <b>NCDOT Contact:</b> James M. Nordan, PE <b>Location Description:</b> I-85 FROM US-15/501 TO EAST OF SR-1827 (MIDLAND TERRACE RD) IN DURHAM <b>Contractor Name:</b> INTERSTATE IMPROVEMENT INC <b>Contract Amount:</b> \$4,168,265.78 <b>Work Began:</b> 03/13/2018 <b>Original Completion Date:</b> 11/01/2018 <b>Latest Payment Thru:</b> 11/22/2018 <b>Latest Payment Date:</b> 12/03/2018		<b>Route:</b> I-85 <b>County:</b> Durham <b>Federal Aid Number:</b> NHPP-0085(013) <b>NCDOT Contact No:</b> (919)220-4680 <b>Cost Overrun/Underrun:</b> 57.41% <b>Letting Date:</b> 10/11/2017 <b>Revised Completion Date:</b> <b>Scheduled Progress:</b> 100% <b>Actual Progress:</b> 86.93%
<b>Contract Number:</b> DE00253 <b>Division:</b> 5 <b>TIP Number:</b> W-5705K <b>Length:</b> 0 miles <b>NCDOT Contact:</b> James M. Nordan, PE <b>Location Description:</b> SR 1327 (GREGSON ST) AND LAMOND AVE <b>Contractor Name:</b> TRAFFIC CONTROL DEVICES INC <b>Contract Amount:</b> \$0.00 <b>Work Began:</b> 09/01/2018 <b>Original Completion Date:</b> 02/28/2019 <b>Latest Payment Thru:</b> <b>Latest Payment Date:</b>		<b>Route:</b> - <b>County:</b> Durham <b>Federal Aid Number:</b> HSIP-1327(006) <b>NCDOT Contact No:</b> (919)220-4680 <b>Cost Overrun/Underrun:</b> 0% <b>Letting Date:</b> 07/25/2018 <b>Revised Completion Date:</b> <b>Scheduled Progress:</b> 0% <b>Actual Progress:</b> 0%
<b>Contract Number:</b> DE00255 <b>Division:</b> 5 <b>TIP Number:</b> W-5705C <b>Length:</b> 0 miles <b>NCDOT Contact:</b> James M. Nordan, PE <b>Location Description:</b> US 15-501 AT SR 1116 (GARRETT RD) US 15-501 BUS AT WESTGATE DR <b>Contractor Name:</b> ALS OF NORTH CAROLINA LLC <b>Contract Amount:</b> \$540,904.71 <b>Work Began:</b> 08/06/2018 <b>Original Completion Date:</b> 12/21/2018 <b>Latest Payment Thru:</b> 11/07/2018		<b>Route:</b> US-501 <b>County:</b> Durham <b>Federal Aid Number:</b> HSIP-0501(046) <b>NCDOT Contact No:</b> (919)220-4680 <b>Cost Overrun/Underrun:</b> 0.99% <b>Letting Date:</b> 05/23/2018 <b>Revised Completion Date:</b> <b>Scheduled Progress:</b> 64.3%



**Latest Payment Date:** 11/14/2018

**Actual Progress:** 16.38%

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
17BP.5.R.116				Division POC Let (DPOC)	2/22/2023	Lisa Gilchrist			
17BP.5.R.117				Division POC Let (DPOC)	2/22/2023	Lisa Gilchrist			
17BP.5.R.84				Division POC Let (DPOC)	1/26/2022	Lisa Gilchrist			
17BP.5.R.83	BRIDGE 84 OVER CHUNKY PIE CREEK ON SR 1815			Division POC Let (DPOC)	4/22/2020	Lisa Gilchrist			
17BP.5.R.97	BRIDGE 89 OVER LICK CREEK ON SR 1902			Division POC Let (DPOC)	10/15/2019	Lisa Gilchrist			
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	Stephen Davidson			
17BP.5.C.02	REMOVE 50 FEET OF EXISTING DUAL 48" CMP REPLACE WITH SINGLE 9'-11", 6' x 8" ALUMINUM BOX DURHAM COUNTY			Division Design Raleigh Let (DDRL)	1/15/2019	Lisa Gilchrist			
I-5702B	I-40 FROM NC 147 (DURHAM FREEWAY/TRIANGLE EXPRESSWAY) IN DURHAM COUNTY TO SR 1728 (WADE AVENUE) IN WAKE COUNTY - COORDINATE WITH I-5506 AND I-5700		1/1/2030	Design Build Let (DBL)	1/1/2030	PAM R. WILLIAMS	\$82,480,000.00	\$670,140,000.00	
U-5774A	NC 54 FROM US 15/US 501			Raleigh Letting (LET)	1/1/2030	PAM R. WILLIAMS	\$3,800,000.00	\$11,000,000.00	
I-6010	I-85/US 15 DURHAM COUNTY FROM EAST OF SR 1827 (MIDLAND TERRACE) TO SR 1632 (RED MILL ROAD) IN DURHAM. ADD LANES.	1/15/2027	1/15/2027	Raleigh Letting (LET)	1/16/2029	PAM R. WILLIAMS	\$8,400,000.00	\$94,400,000.00	
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)	2/16/2027	PAM R. WILLIAMS	\$55,000,000.00	\$140,300,000.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
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.	1/21/2025	1/21/2025	Raleigh Letting (LET)	12/15/2026	MATTHEW SIMMONS	\$1,500,000.00	\$4,000,000.00	
P-5716	NORFOLK SOUTHERN H LINE CROSSING 735236Y AT SR 1171 (ELLIS ROAD) IN DURHAM. CONSTRUCT GRADE SEPARATION.	6/16/2023	6/16/2023	Raleigh Letting (LET)	6/16/2026	MATTHEW SIMMONS	\$1,000,000.00	\$3,700,000.00	
P-5706	NORFOLK SOUTHERN H LINE, EAST DURHAM RAILROAD SAFETY PROJECT. PROJECT WILL STRAIGHTEN EXISTING RAILROAD CURVATURE BETWEEN CP NELSON AND CP EAST DURHAM AND INCLUDES A COMBINATION OF GRADE SEPARATIONS AND CLOSURES AT ELLIS ROAD SOUTH END CROSSING (734737A), GLOVER ROAD (734735L), AND WRENN ROAD (734736	2/1/2023	2/1/2023	NON - DOT LET (Rail)	1/31/2025	MATTHEW SIMMONS	\$9,000,000.00	\$42,400,000.00	
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		\$109,970,000.00	
I-6006	I-40 DURHAM/WAKE COUNTIES FROM NC 54 (EXIT 273) TO SR 1728 (WADE AVENUE). CONVERT FACILITY TO A MANAGED FREEWAY WITH RAMP METERING AND OTHER ATM / ITS COMPONENTS.		1/21/2025	Design Build Let (DBL)	1/21/2025	PAM R. WILLIAMS	\$20,000.00	\$54,530,000.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
U-5774H	NC 54 FROM NC 751 TO SR 1118 (FAYETTEVILLE ROAD)	7/15/2022	7/15/2022	Raleigh Letting (LET)	10/15/2024	PAM R. WILLIAMS	\$8,400,000.00	\$13,200,000.00	
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	PAM R. WILLIAMS	\$11,000,000.00	\$30,900,000.00	
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	PAM R. WILLIAMS	\$3,000,000.00	\$23,700,000.00	
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	DOUGLAS R. MCNEAL		\$2,973,000.00	
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	DOUGLAS R. MCNEAL		\$8,357,000.00	
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	RAYMOND JOSEPH H.	\$50,000.00	\$525,000.00	
U-5937	NC 147 DURHAM FREEWAY, DURHAM COUNTY FROM SR 1127 (WEST CHAPEL HILL STREET) TO BRIGGS AVENUE IN DURHAM. CONSTRUCT AUXILIARY LANES AND OPERATIONAL IMPROVEMENTS.	3/19/2021	3/19/2021	Raleigh Letting (LET)	3/21/2023	PAM R. WILLIAMS	\$10,202,000.00	\$47,001,000.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
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	\$5,769,000.00	\$13,770,000.00	Public meeting held in December 2018
I-5998	I-540 - DURHAM/WAKE COUNTIES FROM I-40 IN DURHAM TO US 70 IN RALEIGH. PAVEMENT REHABILITATION. COORDINATE WITH I-5999 & I-6000.	10/21/2022		Division POC Let (DPOC)	1/25/2023	DOUGLAS R. MCNEAL		\$3,800,000.00	
EB-5834	NC 157 / SR 1322 (GUESS RD.) FROM HILLCREST DRIVE TO SR 1407(WEST CARVER STREET) IN DURHAM. CONSTRUCT SIDEWALKS ON BOTH SIDES.		6/30/2021	NON - DOT LET (LAP)	9/20/2022	RAYMOND JOSEPH H.	\$204,000.00	\$589,000.00	
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	PAM R. WILLIAMS	\$35,800,000.00	\$57,000,000.00	
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	PAM R. WILLIAMS	\$17,321,000.00	\$25,300,000.00	
U-5720C	US 70 (MIAMI BLVD) FROM SR 1959 (SOUTH MIAMI BLVD)/SR 1811 (SHERRON ROAD) TO SR 2095 (PAGE ROAD EXTENSIONS). UPGRADE TO CONTROLLED-ACCESS FACILITY AND CONVERT AT-GRADE INTERSECTION TO INTERCHANGE.		3/15/2022	Design Build Let (DBL)	3/15/2022	PAM R. WILLIAMS	\$40,400,000.00	\$110,800,000.00	



Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
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	PAM R. WILLIAMS	\$2,148,000.00	\$177,100,000.00	
I-6000	I-540 - DURHAM/WAKE COUNTIES FROM I-40 IN DURHAM TO US 1 IN RALEIGH. BRIDGE PRESERVATION/REHABILITATION. COORDINATE WITH I-5998 & I-5999.	10/22/2021		Division POC Let (DPOC)	1/26/2022	DOUGLAS R. MCNEAL		\$4,541,000.00	
EB-5720	BRYANT BRIDGE NORTH/GOOSE CREEK WEST TRAIL, NC 55 TO DREW-GRANBY PARK IN DURHAM. CONSTRUCT SHARED-USE PATH AND CONNECTING SIDEWALKS.	9/30/2020	9/30/2020	NON - DOT LET (LAP)	9/30/2021	RAYMOND JOSEPH H	\$14,000.00	\$4,432,000.00	
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	RAYMOND JOSEPH H	\$421,000.00	\$1,798,000.00	
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	RAYMOND JOSEPH H	\$161,000.00	\$2,546,000.00	
W-5705T	SR 1815/1917 (MINERAL SPRINGS ROAD) AT PLEASANT DRIVE CONSTRUCT ROUNDABOUT	4/1/2020	4/1/2020	Division POC Let (DPOC)	4/21/2021	JOHN EDWARD SAND	\$85,000.00	\$800,000.00	
B-5674	REPLACE BRIDGE 80 OVER SR 1308 IN DURHAM ON US 15-501 NORTHBOUND	9/16/2019	9/16/2019	Raleigh Letting (LET)	12/15/2020	KEVIN FISCHER	\$110,000.00	\$2,209,000.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
W-5705S	US 15/501 AT NC 751 SOUTHBOUND ON RAMP - EXTEND RAMP	9/1/2019		Division POC Let (DPOC)	9/23/2020	JOHN EDWARD SANDOR		\$460,000.00	
EB-5904	DUKE BELT LINE TRAIL - PETTIGREW STREET TO AVONDALE STREET IN DURHAM, CONSTRUCT A MULTI-USE TRAIL ON FORMER RAIL CORRIDOR	8/30/2018	9/30/2018	NON - DOT LET (LAP)	9/1/2020	RAYMOND JOSEPH HAYES	\$7,100,000.00	\$3,750,000.00	
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)	7/15/2020	RAYMOND JOSEPH HAYES		\$1,269,000.00	
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	RAYMOND JOSEPH HAYES		\$4,978,000.00	
P-5717	NORFOLK SOUTHERN 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	\$4,377,600.00	\$16,100,000.00	
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	PAM R. WILLIAMS	\$323,000.00	\$3,550,000.00	
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)	5/20/2020	BENJAMIN J. UPSHAW	\$6,501,430.00	\$5,500,000.00	Quadrant alternative selected. Final design work to begin.

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
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	\$53,500,000.00	\$27,700,000.00	Design work and coordination with Go Triangle ongoing.
C-4928	SR 1317 (MORRENE ROAD) FROM NEAL ROAD TO SR 1320 (ERWIN ROAD) IN DURHAM. CONSTRUCT BIKE LANES AND SIDEWALKS.	2/25/2019	2/26/2019	NON - DOT LET (LAP)	4/15/2020	RAYMOND JOSEPH HAYES	\$7,000.00	\$5,783,000.00	
EB-5708	NC 54 FROM NC 55 TO RESEARCH TRIANGLE PARK WESTERN LIMIT IN DURHAM CONSTRUCT SECTIONS OF SIDEWALK ON SOUTH SIDE			NON - DOT LET (LAP)	4/15/2020	RAYMOND JOSEPH HAYES		\$275,000.00	
U-4726HN	CONSTRUCT BIKE LANES/SIDEWALKS IN DURHAM - HILLANDALE ROAD	12/31/2018	1/1/2019	NON - DOT LET (LAP)	3/17/2020	RAYMOND JOSEPH HAYES			
I-5993	I-40 - DURHAM COUNTY FROM US 15/US 501 TO EAST OF NC 147. PAVEMENT REHABILITATION. COORDINATE WITH I-5994. PROJECT CREATED PER THE DRAFT 2020-2029 STIP.	10/18/2019		Division Design Raleigh Let (DDRL)	1/21/2020	DOUGLAS R. MCNEAL		\$4,900,000.00	
C-5605E	CITY OF DURHAM BICYCLE LANE STRIPING: 8 MILE OF BIKE LANES.			NON - DOT LET (LAP)	9/30/2019	RAYMOND JOSEPH HAYES		\$504,000.00	
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 SIDE FROM HILLSBOROUGH ROAD TO SPRUNT AVENUE.			NON - DOT LET (LAP)	9/29/2019	RAYMOND JOSEPH HAYES		\$578,000.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
I-5994	I-40 - DURHAM COUNTY FROM US 15/US 501 TO EAST OF NC 147. BRIDGE REHABILITATION. MULTIPLE STRUCTURES. COORDINATE WITH I-5993.	5/31/2019		Division Design Raleigh Let (DDRL)	8/20/2019	DOUGLAS R. MCNEAL		\$6,652,000.00	
I-5995	I-40 - DURHAM/WAKE COUNTIES FROM EAST OF NC 147 TO SR 3015(AIRPORT BOULEVARD). PAVEMENT REHABILITATION.	5/31/2019		Division Design Raleigh Let (DDRL)	8/20/2019	DOUGLAS R. MCNEAL		\$5,272,000.00	
C-5183B	SR 1945 (S ALSTON AVENUE) FROM SR 1171 (RIDDLE ROAD) TO CAPPS STREET. CONSTRUCT SIDEWALKS IN DURHAM			NON - DOT LET (LAP)	7/31/2019	RAYMOND JOSEPH HAYES	\$99,000.00	\$706,000.00	
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	RAYMOND JOSEPH HAYES		\$605,000.00	
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	RAYMOND JOSEPH HAYES			
U-5968	CITY OF DURHAM UPGRADE ITS / SIGNAL SYSTEM			Raleigh Letting (LET)	4/16/2019	JASON P. GALLOWAY	\$750,000.00	\$21,865,000.00	
C-5605I	DURHAM NEIGHBORHOOD BIKE ROUTE:~7 MILES OF SIGNED AND MARKED NEIGHBORHOOD BIKE ROUTES IN CENTRAL DURHAM.	12/28/2018		NON - DOT LET (LAP)	3/29/2019	RAYMOND JOSEPH HAYES		\$540,883.00	

Project ID	Description	R/W Plans Complete	R/W Acq Begins	Let Type	Let Date	Project Manager	RW Estimate(200)	CONST \$	COMMENTS
EB-4707A	SR 1838 / SR 2220 (OLD DURHAM ROAD) FROM US 15 / US 501 IN ORANGE COUNTY TO SR 1113 (POPE ROAD) IN DURHAM COUNTY	8/20/2015	8/20/2015	Division Design Raleigh Let (DDRL)	2/19/2019	BENJAMIN J. UPSHAW		\$3,500,000.00	Ongoing coordination with Town of Chapel Hill and developer.
W-5705M	I-40 WESTBOUND AT NC 147 SAFETY IMPROVEMENTS (MP: 9.359-9.359)	11/1/2018		Division POC Let (DPOC)	1/23/2019	JOHN EDWARD SANDOR		\$80,000.00	
W-5705U	US 70 BUSINESS (MORGAN STREET) AT CAROLINA THREATRE			Division POC Let (DPOC)	1/16/2019	JOHN EDWARD SANDOR		\$20,000.00	
W-5705V	NC 54 AT HUNTINGRIDGE ROAD			Division POC Let (DPOC)	1/16/2019	JOHN EDWARD SANDOR		\$80,000.00	
U-5745	NC 751 (HOPE VALLEY ROAD) AT SR 1183 (UNIVERSITY DRIVE) INTERSECTION IN DURHAM. CONSTRUCT ROUNDABOUT. (COMB W/17BP.5.C.02)	8/21/2017	7/6/2017	Division Design Raleigh Let (DDRL)	1/15/2019	STEPHEN REID DAVIDSON		\$1,300,000.00	Scheduled to let in January. Construction to be completed in about one year.
W-5601EM	SR 1118 (FAYETTEVILLE ROAD) AT PILOT STREET AND CECIL STREET. SAFETY IMPROVEMENTS.			Division POC Let (DPOC)	12/12/2018	JOHN EDWARD SANDOR		\$14,000.00	



## NCDOT DIV 7 PROJECTS LOCATED IN DCHCMPO - UNDER DEVELOPMENT

TIP/WBS #	Description	Let/Start Date	Completion Date	Cost	Status	Project Lead
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	Dec. 2018	\$40,500 R/W \$43,200 CON	Utility relocations complete, Right of entry complete, R/W acquisition 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> .	9/6/2018	FY2021	\$775,000	1st bid opening received no bids, Re-let 9/6/18 bids exceeded engineers estimate, project cost evaluation being performed	Chad Reimakoski
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	11/1/2018	Aug. 2019	\$395,000	Planning and design activities underway, re-let due to bids exceeded engineers estimate, new let date 11/1/18	Chad Reimakoski
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>	1/17/2019	Jun. 2019	\$189,000	Planning and design activities complete, R/W certified 9/18/18	Chad Reimakoski
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 <b>Chapel Hill / Carrboro</b> .	1/17/2019	FY 2020	\$775,000	Planning and design activities underway, bike/ped improvements to be completed under project 48283	Chris Smitherman
48283	Remove and replace existing curb & gutter and sidewalk, add pedestrian signals, concrete island, and signal modifications on SR 1010 (E. Main St / W. Franklin St) from Brewer Ln to Graham St. in <b>Chapel Hill and Carrboro</b>	5/31/2019	Sept. 2019	\$250,000	Funds approved 9/6/18, Construction May 2019	Chris Smitherman
B-4962 40174.1.1 40174.2.1 40174.3.1	Replace Bridge #46 over Eno river on US 70 Bypass	4/16/2019	FY 2021	\$5,826,000	Planning and Design activities underway, ROW acquisition - 15% complete	Kevin Fischer

## NCDOT DIV 7 PROJECTS LOCATED IN DCHCMPO - UNDER DEVELOPMENT

TIP/WBS #	Description	Let/Start Date	Completion Date	Cost	Status	Project Lead
SS-4907CD 47936.1.1 47936.2.1 47936.3.1	Horizontal curve improvements on SR 1710 (Old NC 10) west of SR 1561/SR 1709 (Lawrence Road) east of Hillsborough. Improvements consist of wedging pavement and grading shoulders.	12/5/2019	Spring 2020	\$261,000	Planning and design activities underway	Chad Reimakoski
I-3306A 34178.1.3 34178.2.2 34178.3.3	Wideing I-40 from I-85 in Orange Co. to Durham Co. line (US 15/501 Interchange)	TBD	TBD	\$98,800,000	Planning and design activities underway, No schedule at this time other than CE document scheduled for 12/28/2018	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, Coordinate with U-5848	Matthew Simmons
R-5821A 47093.1.2 47093.2.2 47093.3.2	Construct operational improvements including Bicycle/Pedestrian accommodations on NC 54 from SR 1006 (Orange Grove Road) to SR 1107 /SR 1937 (Old Fayetteville Road).	6/21/2022	FY2024	\$3,924,000	Planning and design activities underway, coordinating with NC54 West Corridor Study	Jennifer Evans
U-5848 50237.1.1 50237.2.1 50237.3.1	Extend SR 1006 (Orange Grove Road) on new location with Sidewalks and bike lanes from existing SR 1006 (Orange Grove Road) to US 70 Business in <b>Hillsborough</b> .	3/21/2023	FY 2025	\$5,326,000	Planning and Design activities underway, Coordinate with P-5701 and U-5845	Laura Sutton
I-3306AC 34178.1.6 34178.2.5 434178.3.9	Interchange improvements at I-40 and NC86 in <b>Chapel Hill</b>	3/21/2023	FY 2025	\$16,500,000	Planning and Design activities underway	Laura Sutton
I-5959 45911.1.1 45911.3.1	Pavement Rehabilitation on I-85 from West of SR 1006 (Orange Grove Road) to Durham County line	11/21/2023	FY 2025	\$11,155,000	Funding approved 10/10/17	Chris Smitherman
I-5967 45917.1.1 45917.2.1 45917.3.1	Interchange improvements at I-85 and SR 1009 (South Churton Street) in <b>Hillsborough</b>	1/16/2024	FY 2027	\$20,700,000	Planning and Design activities underway	Laura Sutton

## NCDOT DIV 7 PROJECTS LOCATED IN DCHCMPO - UNDER DEVELOPMENT

TIP/WBS #	Description	Let/Start Date	Completion Date	Cost	Status	Project Lead
U-5845 50235.1.1 50235.2.1 50235.3.1	Widen SR 1009 (South Churton Street) to multi-lanes from I-40 to Eno River in <b>Hillsborough</b>	1/16/2024	FY 2027	\$49,751,000	Planning and Design activities underway, Coordinate with U-5848 and I-5984	Laura Sutton
I-5984 47530.1.1 47530.2.1 47530.3.1	Interchange improvements at I-85 and NC 86 in <b>Hillsborough</b>	11/18/2025	FY 2027	\$16,488,000	Funding approved 10/10/17, Coordinate with U-5845 and I-5959	Laura Sutton
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	Jennifer Evans



# North Carolina Department of Transportation

## Active Projects Under Construction - Orange Co.

<u>Contract Number</u>	<u>TIP Number</u>	<u>Location Description</u>	<u>Contractor Name</u>	<u>Resident Engineer</u>	<u>Contract Bid Amount</u>	<u>Availability Date</u>	<u>Completion Date</u>	<u>Work Start Date</u>	<u>Estimated Completion</u>	<u>Progress Schedule</u>	<u>Completion Percent</u>
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	11/01/2017	09/02/2015	12/01/2018	100.00	87.93
C203946	B-5348	REPLACE BRIDGE #85 OVER PHILS CRK ON SR-1005(OLD G'BORO RD)	DANE CONSTRUCTION INC	Kirkman, PE, Christopher D	\$984,596.98	02/01/2018	12/27/2018	02/01/2018	01/30/2019	99.00	92.33
C204025	I-5954	PAVEMENT REHABI-40/I-85 FROM EAST OF NC-54 IN GRAHAM IN ALAMANCE CO. TO WEST OF SR-1114 DIVISION (BUCKHORN RD) IN ORANGE CO.	APAC - ATLANTIC INC THOMPSON ARTHUR	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	12/30/2017	09/29/2016	10/31/2018	100.00	89.87
DG00321	W-5143	IMPROVEMENTS ONSR 1004 (EFLAND CEDAR GROVE RD)	CAROLINA SUNROCK,LLC	Kirkman, PE, Christopher D	\$1,711,133.05	04/02/2018	04/02/2019	04/02/2018	04/02/2019	85.20	69.86
DG00332	W-5601 IF	I-85 GUARDRAIL END TERMINAL UPGRADES	NICKELSTON INDUSTRIES INC	Kirkman, PE, Christopher D	\$494,243.00	12/05/2016	09/05/2017	05/01/2017	08/22/2018	100.00	100.00
DG00371		RESURFACE 9 SECONDARY ROADS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,688,750.33	07/05/2017	11/01/2018	08/30/2017	11/01/2018	62.00	96.08
DG00372	R-5787B	ADA CURB RAMPS IN BURLINGTON, GIBSONVILLE, GRAHAM, MEBANE IN ALAMANCE CO., CARRBORO & CHAPEL HILL IN ORANGE COUNTY	ATLANTIC CONTRACTING COMPANY, INC.	Kirkman, PE, Christopher D	\$128,910.00	07/24/2017	03/28/2019	02/26/2018	08/31/2018	89.81	98.29
DG00391		REPLACE BRIDGE # 104 OVER STONEY CREEK ON SR 1712 (UNIVERSITY STATION RD)	R.E. BURNS & SONS CO., INC.	Kirkman, PE, Christopher D	\$561,562.02	01/30/2018	10/26/2018	03/01/2018	05/02/2019	99.00	63.09
DG00393		RESURFACE SR 1101, SR 1118, SR 1119, SR 1124, SR 1125, SR 1127,SR 1128 SR 1130, SR 1134, SR 1135, SR 1137, SR 1141, SR 1143, ETC.	RILEY PAVING INC	Kirkman, PE, Christopher D	\$1,084,520.40	04/02/2018	10/12/2018	06/18/2018	10/12/2018	60.00	63.83
DG00395		REPLACE BRIDGE #189 ON SR 1114 (BUCKHORN ROAD) OVER CANE CREEK	S T WOOTEN CORPORATION	Kirkman, PE, Christopher D	\$723,924.13	04/01/2018	01/01/2019	05/07/2018	02/07/2019	97.00	99.75
DG00413		RESURFACE US 70 BUS, SR 1009, SR 1102 , SR 1129, SR 1239, SR 1352, SR 1716 AND SR 1841	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$3,562,232.66	05/28/2018	11/01/2019	05/29/2018	11/01/2019	32.00	38.14
DG00419		RESURFACE NC 86 AND 17 SECONDARY ROADS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$3,764,001.64	05/14/2018	11/01/2019	05/14/2018	11/01/2019	40.00	23.23
DG00427		REPLACE BRIDGE #51 ON SR 1534 (MCKEE ROAD) OVER BUFFALO CRK	NATIONAL BRIDGE BUILDERS LLC	Kirkman, PE, Christopher D	\$521,443.82	05/07/2018	03/04/2019	07/30/2018	04/29/2019	23.00	24.84
DG00435		RESURFACE 22 SECONDARY ROADS	WHITEHURST PAVING CO INC	Kirkman, PE, Christopher D	\$846,340.66	04/01/2019	10/11/2019				
DG00444	R-5821B	INTERSECTION IMPORVEMENTS AT THE INTERSECTION OF NC 54 AND SR 1006 (ORANGE GROVE ROAD)	FSC II LLC DBA FRED SMITH COMPANY	Kirkman, PE, Christopher D	\$1,039,900.00	07/16/2018	05/16/2019	08/13/2018	05/16/2019	14.21	4.85
DG00445	R-5787BB	INSTALLATION OF ADA COMPLIANT CURB RAMPS AT VARIOUS INTERSECTIONS	LITTLE MOUNTAIN BUILDERS OF CATAWBA COUNTY INC	Kirkman, PE, Christopher D	\$319,319.80	06/25/2018	02/15/2020	08/06/2018	02/15/2020	10.00	22.75



## North Carolina Department of Transportation

### Active Projects Under Construction - Orange Co.

<u>Contract Number</u>	<u>TIP Number</u>	<u>Location Description</u>	<u>Contractor Name</u>	<u>Resident Engineer</u>	<u>Contract Bid Amount</u>	<u>Availability Date</u>	<u>Completion Date</u>	<u>Work Start Date</u>	<u>Estimated Completion</u>	<u>Progress Schedule</u>	<u>Completion Percent</u>
DG00445	W-5707A	INSTALLATION OF ADA COMPLIANT CURB RAMPS AT VARIOUS INTERSECTIONS	LITTLE MOUNTAIN BUILDERS OF CATAWBA COUNTY INC	Kirkman, PE, Christopher D	\$319,319.80	06/25/2018	02/15/2020	08/06/2018	02/15/2020	10.00	22.75
DG00451	U-5854	SR 1008 (MT. CARMEL CHURCH ROAD) AND SR 1913 (BENNETT ROAD) ROUNDABOUT AND RELATED SAFETY IMPROVEMENTS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,833,468.84	08/15/2018	04/30/2020				





## North Carolina Department of Transportation

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<u>Contract Number</u>	<u>TIP Number</u>	<u>Location Description</u>	<u>Contractor Name</u>	<u>Resident Engineer</u>	<u>Contract Bid Amount</u>	<u>Availability Date</u>	<u>Completion Date</u>	<u>Work Start Date</u>	<u>Estimated Completion</u>	<u>Progress Schedule</u>	<u>Completion Percent</u>
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	11/01/2017	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	11/01/2018	06/01/2015	08/31/2018	100.00	99.40
C203946	B-5348	REPLACE BRIDGE #85 OVER PHILS CRK ON SR-1005(OLD G'BORO RD)	DANE CONSTRUCTION INC	Kirkman, PE, Christopher D	\$984,596.98	02/01/2018	12/27/2018	02/01/2018	01/30/2019	99.00	85.05
C204025	I-5954	PAVEMENT REHAB ON I-40/I-85 FROM EAST OF NC-54 IN GRAHAM 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	12/30/2017	09/29/2016	10/31/2018	100.00	89.87
DG00321	W-5143	SR 1004 (EFLAND-CEDAR GROVE RD)	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,711,133.05	04/02/2018	04/02/2019	04/02/2018	04/02/2019	25.00	49.86
DG00332	W-5601 IF	I-85 GUARDRAIL END TERMINAL UPGRADES	NICKELSTON INDUSTRIES INC	Kirkman, PE, Christopher D	\$494,243.00	12/05/2016	09/05/2017	05/01/2017	09/05/2018	100.00	100.00
DG00371		RESURFACE 9 SECONDARY ROADS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,688,750.33	07/05/2017	11/01/2018	08/30/2017	11/01/2018	42.40	92.43
DG00372	R-5787B	ADA CURB RAMPS IN BURLINGTON, GIBSONVILLE, GRAHAM, MEBANE IN ALAMANCE CO., CARRBORO & CHAPEL HILL IN ORANGE COUNTY	ATLANTIC CONTRACTING COMPANY, INC.	Kirkman, PE, Christopher D	\$128,910.00	07/24/2017	03/28/2019	02/26/2018	03/28/2019	40.95	54.52
DG00391		REPLACE BRIDGE # 104 OVER STONEY CREEK ON SR 1712 (UNIVERSITY STATION RD)	R.E. BURNS & SONS CO., INC.	Kirkman, PE, Christopher D	\$561,562.02	01/30/2018	10/26/2018	03/01/2018	05/02/2019	60.07	72.05
DG00393		RESURFACE SR 1101, SR 1118, SR 1119, SR 1124, SR 1125, SR 1127, SR 1128 SR 1130, SR 1134, SR 1135, SR 1137, SR 1141, SR 1143, ETC.	RILEY PAVING INC	Kirkman, PE, Christopher D	\$1,084,520.40	04/02/2018	10/12/2018	06/18/2018	10/12/2018	24.00	25.98
DG00395		REPLACE BRIDGE #189 ON SR 1114 (BUCKHORN ROAD) OVER CANE CREEK	S T WOOTEN CORPORATION	Kirkman, PE, Christopher D	\$723,924.13	04/01/2018	01/01/2019	05/07/2018	02/07/2019	95.25	69.47
DG00413		RESURFACE US 70 BUS, SR 1009, SR 1102 , SR 1129, SR 1239, SR 1352, SR 1716 AND SR 1841	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$3,562,232.66	05/28/2018	11/01/2019	05/29/2018	11/01/2019	23.00	24.53
DG00419		RESURFACE NC 86 AND 17 SECONDARY ROADS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$3,764,001.64	05/14/2018	11/01/2019	05/14/2018	11/01/2019	26.00	7.32
DG00427		REPLACE BRIDGE #51 ON SR 1534 (MCKEE ROAD) OVER BUFFALO CRK	NATIONAL BRIDGE BUILDERS LLC	Kirkman, PE, Christopher D	\$521,443.82	05/07/2018	03/04/2019	07/30/2018			
DG00435		AST RETREATMENT ON 22 SECONDARY ROADS	WHITEHURST PAVING CO INC	Kirkman, PE, Christopher D	\$846,340.66	04/01/2019	10/11/2019				
DG00444	R-5821B	INTERSECTION IMPORVEMENTS AT THE INTERSECTION OF NC 54 AND SR 1006 (ORANGE GROVE ROAD)	FSC II LLC DBA FRED SMITH COMPANY	Kirkman, PE, Christopher D	\$1,039,900.00	07/16/2018	05/16/2019				



## North Carolina Department of Transportation

### Active Projects Under Construction - Orange Co.

<u>Contract Number</u>	<u>TIP Number</u>	<u>Location Description</u>	<u>Contractor Name</u>	<u>Resident Engineer</u>	<u>Contract Bid Amount</u>	<u>Availability Date</u>	<u>Completion Date</u>	<u>Work Start Date</u>	<u>Estimated Completion</u>	<u>Progress Schedule</u>	<u>Completion Percent</u>
DG00445	R-5787BB	INSTALLATION OF ADA COMPLIANT CURB RAMPS AT VARIOUS INTERSECTIONS	LITTLE MOUNTAIN BUILDERS OF CATAWBA COUNTY INC	Kirkman, PE, Christopher D	\$319,319.80	06/25/2018	02/15/2020				
	W-5707A	INSTALLATION OF ADA COMPLIANT CURB RAMPS AT VARIOUS INTERSECTIONS	LITTLE MOUNTAIN BUILDERS OF CATAWBA COUNTY INC	Kirkman, PE, Christopher D	\$319,319.80	06/25/2018	02/15/2020				
DG00451	U-5854	SR 1008 (MT. CARMEL CHURCH ROAD) AND SR 1913 (BENNETT ROAD) ROUNDABOUT AND RELATED SAFETY IMPROVEMENTS	CAROLINA SUNROCK LLC	Kirkman, PE, Christopher D	\$1,833,468.84	08/15/2018	04/30/2020				

Chatham County - DCHC MPO - Upcoming Projects - Division 8--December 2018								
Contract # or WBS # or TIP #	Route	Description	Let Date	Completion Date	Contractor	Project Admin.	Project Cost	Notes
R-5825	NC 751 at SR 1731 (O'Kelly Chapel Road)	Upgrade and Realign Intersection	4/9/2019	TBD	TBD	Greg Davis (910) 773-8022	TBD	Right of Way in progress